COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT

HENRY WARD
COMMISSIONER OF HIGHWAYS

ADDRESS REPLY TO
DEPARTMENT OF HIGHWAYS
DIVISION OF RESEARCH
132 GRAHAM AVENUE
LEXINGTON, KENTUCKY 40506

September 30, 1966

H-2-13

MEMORANDUM

TO: W. B. Drake, Assistant Projects Management Engineer; Chairman, Kentucky Highway Research Committee

SUBJECT: Research Report, "Engineering Properties of Kentucky Soils," KYHPR-67-52, HPR-1(2) and KYHPR-64-13, HPR-1(1)

The report furnished herewith embraces more than ten years of soil testing for mapping purposes. Major portions of this program were conducted cooperatively with the local office of the US Soil Conservation Service--which provided samples and which has separate responsibilities for mapping. The supporting tests are of engineering significance and impart side benefits to a mapping program otherwise dedicated to agricultural and related uses of land. The mapping system employed by SCS is basically pedological--overlaid on air-photos. By superpositioning engineering descriptions over soil-series map bases or by other cross-referencing, field explorations for engineering reconnaissance may thus be minimized. In many respects it appears that surface-geology maps on quadrangle, topographic bases, as are now issuing from a joint USGS-Kentucky Geological Survey program, are more amenable to engineering uses than soil-series bases. In areas so mapped, soil-series bases may serve in a subordinate or supporting manner inasmuch as pedological series may sub-differentiate soils within a geological exposure. Geologic maps provide information concerning bedrock conditions and structural and stratagraphic features not usually available from soils-surveys reports.

Prior to 1960, the testing was conducted primarily by the Bureau of Public Roads Laboratory in Washington, D.C., while other testing and studies were made somewhat independently by the Division of Research. By agreement then, the Division of Research assumed full responsibility for testing; the data were forwarded to the Bureau for review and thence to SCS. The Division of Research has also assisted SCS in the preparation of descriptive texts. Approximately 31 counties have been or are being mapped by SCS.

On July 1, 1963, the testing was authorized for federal participation under KYHPR-64-13, HPS-HPR-1(25), and this arrangement continued through HPS-HPR-1(26) and HPR-1(1). By Circular Memorandum dated October 27, 1965, the Bureau announced its decision to phase out their participation--to be effective June 30, 1966, and requiring a final, summary report. Only the reporting phase has been continued into HPR-1(2)--under KYHPR-67-52. The testing program is continuing, however, under bilateral arrangements between the SCS and the Division of Research.

A unique feature of the data print-outs (Appendices II and III) is the dual indexing--i.e. by soil-series names and by counties using spherical coordinates.

Updating reports will follow as time permits.

Respectfully submitted,

Jas. H. Havens
Director of Research
Secretary, Research Committee

JHH:jl
Attachment
cc: Research Committee
A. O. Neiser
R. O. Beauchamp
R. A. Johnson
T. J. Hopgood
H. G. Mays

Research Report

ENGINEERING PROPERTIES OF KENTUCKY SOILS
KYHPR-64-13, HPR-1(2), Part II

by
R. C. Deen
Assistant Director

Division of Research
DEPARTMENT OF HIGHWAYS
Commonwealth of Kentucky

In cooperation with the
BUREAU OF PUBLIC ROADS
U. S. Department of Commerce

August, 1966

INTRODUCTION

Soils maps, and particularly engineering soil maps, are proving to be desirable in the planning and design stages of many types of structures and land developments. Engineers and community planners, and even administrators, are becoming increasingly appreciative of such information during the very earliest stages of planning and site selection. Problems associated with foundations, drainage, and soil behavior may be recognized early through the use of adequate soil maps.

At present there is no single source of information which presents the engineering characteristics of the soils of Kentucky. When such information is desired, detailed on-site investigations are made. When such data are not available for preliminary reconnaissance, explorations are often conducted after the site has been selected. Engineering soil surveys and maps, if available, can be used to great advantage in four major ways by engineers and planners:

1) To make soil-reconnaissance surveys,
2) To locate construction material deposits,
3) To organize and check field surveys, and
4) To correlate performances with soil type.

To a pedologist, soil is a natural body of materials and organic constituents, differentiated into natural horizons--usually unconsolidated--ranging in thickness from a mere film to a maximum of somewhat less than 10 feet, which differs from the material beneath it--also unconsolidated--in morphology, physical properties and consitution, chemical properties and composition, and biological characteristics. This definition follows that of pedologists Marbut and Joffe* and limits the soils to the surface or near-surface materials which are natural media for the growth of plants.

To the geologist, soil is the relatively thin layer of disintegrated rock laying on or near the surface of the earth, mixed with the organic matter which is the product of decaying vegetation. Thus, soil is the result of the residual concentration of the alteration products of rocks, which in turn have been changed by the influences of chemical and physical processes and living and dead organisms. It is underlain by the subsoil, which is made up of rock fragments and contains little organic matter.

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*Joffe, J. S. Pedology, Pedology Publications, 1949.

To the engineer, soil includes everything--gravel, sand, silt, clay, badly shattered and soft rock--from the earth's surface to solid rock. Thus the engineer engaged in the design and construction of structures encounters problems which lie within the realms of both of the sciences of pedology and geology. The engineer must understand and be familiar with the entire soil profile down to and, in many cases, even into the bedrock.

The need for information on soils by the engineer is evident. Field and laboratory methods used to gather such information are many and varied--and often too expensive for use in preliminary reconnaissance surveys. There is, therefore, a need for the development and use of short-cut methods. When information on soil conditions is desired for large areas where detailed studies are not available or would be uneconomical to conduct, these conditions can be inferred from aerial photographs and pedologic and geologic maps and surveys. Much has been done in the past years to develop engineering data to supplement the other information contained in these sources.

PHYSIOGRAPHY AND GEOLOGY
OF
KENTUCKY

Since climate and biological activity may be considered essentially uniform over the state of Kentucky, the parent material, topography, and age thus become the important factors in determining the distinguishing characteristics of a Kentucky soil. A knowledge of the physiography and geology is therefore an important part of the background necessary to make an intelligent classification and interpretation of soils in Kentucky.

GEOLOGY

The geology of Central Kentucky is largely controlled by the Cincinnati Anticline, a broad arch that stretches north and south through the central portion of the state, reaching a peak in Jessamine County. To the west the strata dip into the broad syncline of the Western Coal Field. The dips of the strata on the flanks of the Cincinnati Arch are quite gentle and can not be detected by the eye. This arching, however, has been sufficient to allow erosion to be active, exposing on the surface of the dome the oldest formations in the state. Proceeding outward from the Jessamine Dome, the younger formations are exposed in a concentric arrangement.

An examination of the physiographic and geologic maps (see Figures 1 and 2) shows the concentric arrangement of the oldest formations, Ordovician, at the center, with the successively younger formations appearing as retreating circles of plateaus. The outer circle of Pennsylvanian age has been broken into two separate areas, the Eastern and Western Coal Fields, by the erosional action along the axis of the Cincinnati Arch.

To the west of the Tennessee River lies an area that was not raised above sea level until late geologic time. This area, the Jackson Purchase, was at the head of an embayment of the Gulf of Mexico during the Late Cretaceous and Tertiary Periods, and received deposits of sand, gravel and clay.

Very little of the state has felt the effects of glaciation. A small area along the Ohio River from Oldham County to Bracken County has deposits that can be ascribed to glacial activity. The deposits are imperfectly consolidated loess with pebbles and occasional boulders of northern origin. Glacial outwash deposits are also recognizable from Trimble to Jefferson Counties.

Where the parent material has not been moved, the soils are known as residual. The soils consist primarily

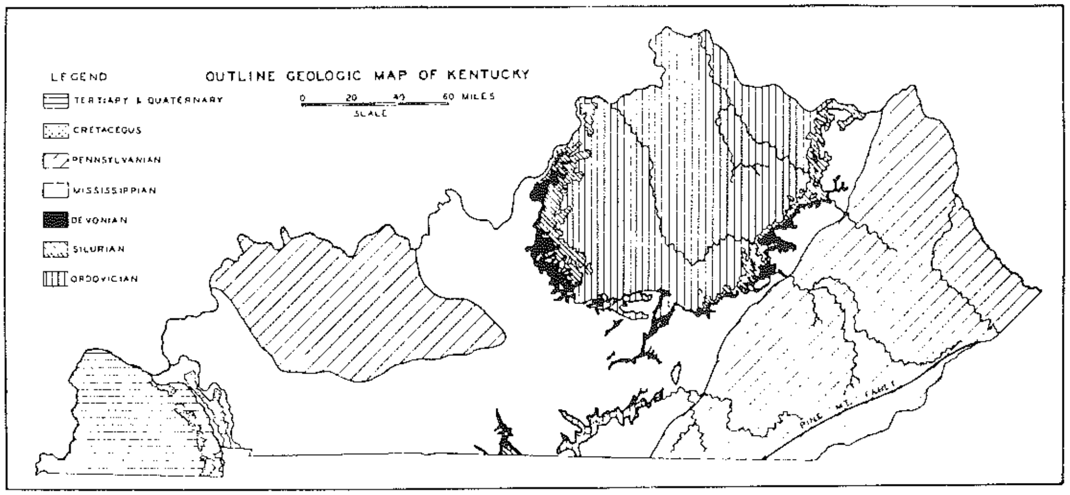


Figure 1 - Geologic Map of Kentucky.

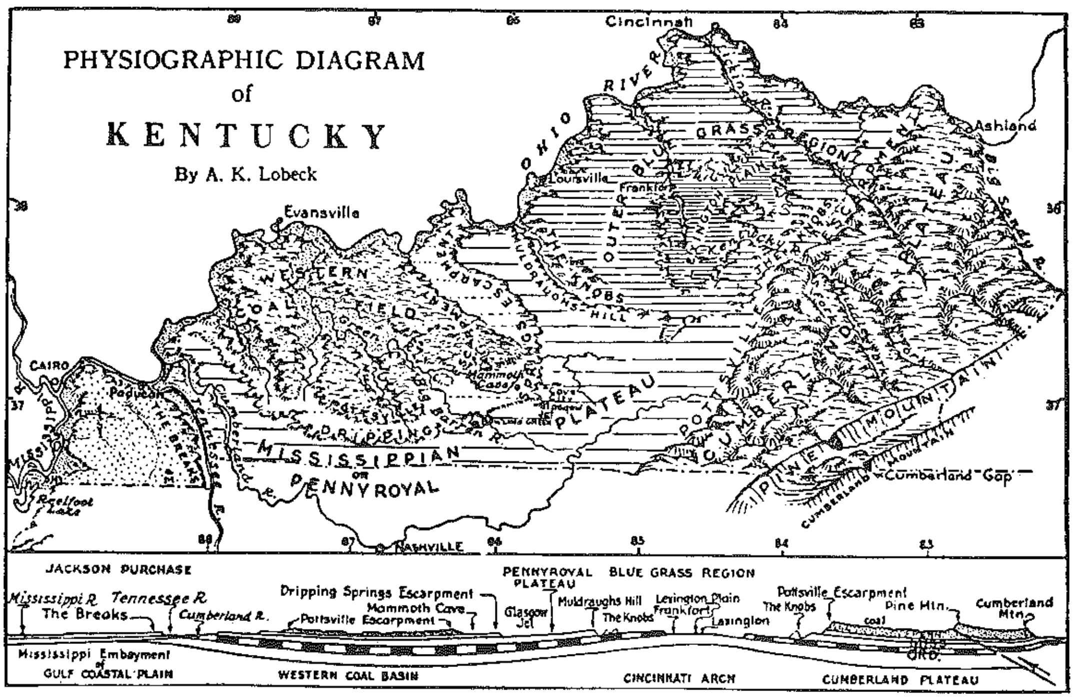


Figure 2 - Physiographic Diagram of Kentucky.

of the insoluble residue of the rock material after the soluble materials have been removed by leaching and erosion. Residual soils are widely distributed throughout Kentucky and were derived from sandstone, shale, and limestone rocks, either singly or in various combinations. Where the parent material has been removed and redeposited by water, the soils are known as alluvial; where the moving and deposition has been by wind, as aeolian; and by moving ice sheets, glacial.

Most of the upland soils in Kentucky have been formed from residual materials. Bottomland soils, which are extensive in many parts of the state, were derived from alluvial materials. A fine wind-blown material known as loess covers a considerable portion of the Jackson Purchase area as well as other parts of the state, principally along the Ohio River. A small area along the Ohio River from Oldham County to Bracken County has been affected by glaciation.

Soils form from the weathering and alteration of the underlying bedrock. The mineralogical composition of the parent material determines--perhaps as a dominating factor--the composition of many soils. The most abundant types of bedrock or parent material (at least in Kentucky) are sandstones, limestones and shales.

Sandstones are composed of quartz grains usually cemented with clay-like minerals and (or) carbonates and iron oxides. Soils formed from sandstones thus consist of quartz sands and clays. Sandstone conglomerates yield gravelly soils. The gravel portion of the soil consists primarily of frosted quartz and chert (predominately hard silica particles). Shales are richer in clay-like minerals and perhaps the most dominant clay mineral in most shales is illite. Chloritic mica is frequently present and montmorillonite is a common component in many shales of Mesozoic or younger age. Kaolinite is a common component of some shales but is usually present in minor amounts. Soils derived from shales thus tend to be much more plastic than sandstone-derived soils. An analysis of many limestones have shown illite to be the predominant clay mineral. Thus soils derived from limestones and dolomites contain illitic clays. Kaolinite is present in small amounts in some of the limestone-derived soils and montmorillonite is essentially missing from such soils. However, the red soils derived from the cherty Mississippian limestones contain significant amounts of nontronite, the iron-rich end member of the montmorillonite group.

Many coal beds of the Carboniferous age are underlain by a nonbedded carbonaceous clay containing either kaolinite or illite or a mixture of the two.

During the development of soils from limestones, the carbonates are dissolved and leached from the material. Often as much as 25 feet of limestone may have to decompose in order to yield one foot of soil. In contrast, for example, one foot of sandstone might yield a foot of soil. Clay-rich shales may even swell and produce more than a foot of soil per foot of parent material.

Sufficient information concerning the relationship between the composition of soils and the environmental conditions is not available for positive generalizations concerning the formation and occurrence of clay minerals during the weathering process. However, there is adequate data upon which to base some generalizations which appear to be reasonably well established. A significant condition in the weathering process is the presence of alkalies and alkaline earths, particularly potassium and magnesium, in the alteration environment and the length of time they remain in the environment after their liberation from the parent materials. The kind of alkalies or alkaline earths is also important since potash lends to the formation of illite, magnesium to the formation of montmorillonite, and calcium probably to the formation of montmorillonite with an added tendency to block the formation of kaolinite. Carbonates tend to retard the disintegration of the primary silicates.

When a parent material containing considerable magnesium weathers under conditions which, because of poor drainage or low rainfall, permit the magnesium to remain in the weathering zone for a considerable period, montmorillonite will be the alteration product. If, however, the magnesium is removed as soon as it is released from the parent material by high rainfall and good drainage, kaolinite is the weathering product. If leaching of the magnesium is moderate, montmorillonite may be an initial stage of weathering with kaolinite being a later stage. Under extremely long-continued weathering by processes removing the magnesium in an acid-leaching environment, the clay minerals will ultimately be broken down with the aluminum and iron carried downward and silica concentrated near the surface. In long-continued weathering environments of a neutral or slightly alkaline nature, silica is carried away and the iron and aluminum are concentrated at or near the surface.

Where the parent rock contains considerable quantities of potassium, as well as magnesium, the alteration products will be illite and montmorillonite where the environmental conditions permit the potash and magnesium to remain in the weathering zone. If the content of magnesium is low, illite will be the only product, and if the content of potash is low, montmorillonite will be the only product. A rapid removal of the potash and magnesium leads to the formation of kaolinite clays.

PHYSIOGRAPHY

The topography of Kentucky has been divided into six definite regions, each reflecting the character of the underlying geologic formations. The six physiographical regions of Kentucky are: 1) the Blue Grass, 2) the Knobs, 3) the Eastern Kentucky Mountains, 4) the Mississippian Plateaus, 5) the Western Coal Fields, and 6) the Jackson Purchase.

The Inner Blue Grass region, or Lexington Plain, includes most of Fayette, Scott, Woodford, Jessamine, and Mercer Counties. This is a lowland with a gently rolling terrain. Rivers in this area have entrenched themselves to depths of 400 and 500 feet. Since many of the constituents of limestones are soluble, solution channels, as well as caves and sinkholes, are common; and much of the drainage is through these.

The level uplands have developed deep residual soils derived from limestone. Physical tests show that such soils are relatively plastic; yet these are well drained internally because the bedrock allows the water to escape through cracks, joints and solution channels and because the soils develop a fragmentary structure. However, when the natural soil structure is destroyed in earthwork operations for engineering purposes, the soils become plastic and react in much the same way as other clay-like materials.

The area encircling the Lexington Plain is known as the Outer Blue Grass, including the Eden Hill Country. The comparatively impervious and easily eroded shale has produced a rough, hilly terrain (see Figure 3). The soils of the Eden Hills have been formed by the decomposition of limestones and shales. The valleys are narrow and winding, entered by numerous streams which require many culverts and bridges. The soil is highly plastic and provides poor pavement support at normal moisture contents, while cut slopes frequently produce landslides and are a major engineering problem.

Proceeding outward from the Jessamine Dome, the soils of the Outer Blue Grass become more similar to those of the Inner Blue Grass. The upper horizons are more suited as

Figure 3 - Topography of the Eden Hill Country.

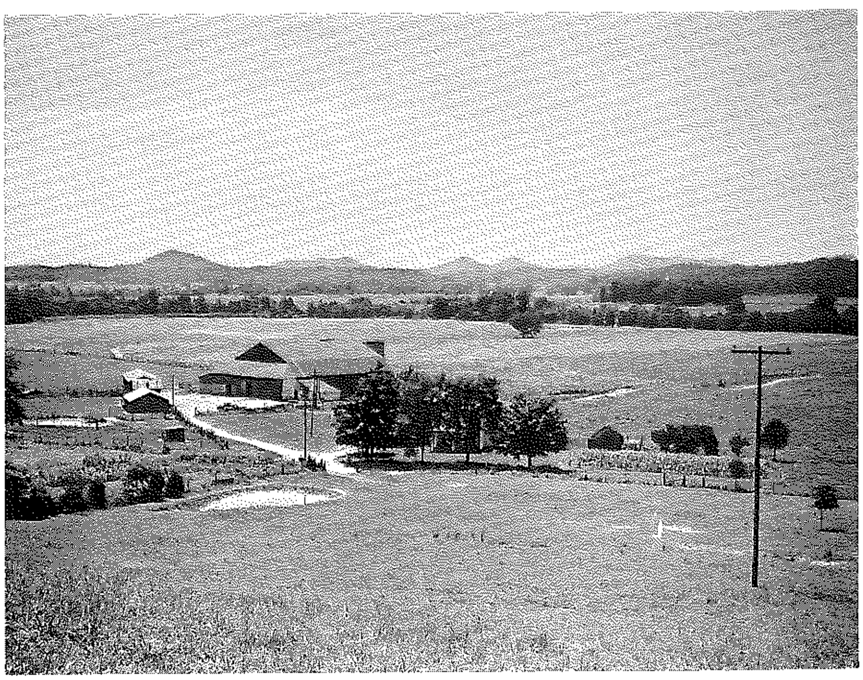


Figure 4 - The Gently Rolling Terrain of the Outer Blue Grass. In the background are the conical knobs that encircle the Blue Grass Region.

subgrade material than the Eden Shales, although the parent material is very similar to that of the Eden. It is fortunate that the gently rolling nature of the terrain (see Figure 4) requires lighter cuts, so that little of the undesirable clay finds its way into the subgrade.

Surrounding the Blue Grass limestone country is a narrow belt of land known as the Knobs area, characterized by the conical knobs (see Figure 4) that are the erosional remnants of former uplands to the south and west. This is a narrow shale area with the Mississippian Plateaus to its west and wouth, and the Cumberland Plateau of the Eastern Mountain area to the east. It is a region of rough topography but with the major stream beds flat and wide.

The Mississippian Plateaus form a broad belt to the west and south of the Blue Grass, encircling the Western Coal Field. This belt is a rolling upland plain formed from limestone, with small local relief (see Figure 5). Except for the larger rivers, the drainage is underground. The gently rolling topography and lack of surface drainage favor the development of thick, residual soils, similar to those of the Blue Grass area. These soils are usually good in highway construction. In deep cuts, however, a great deal of plastic, unstable clay is frequently encountered.

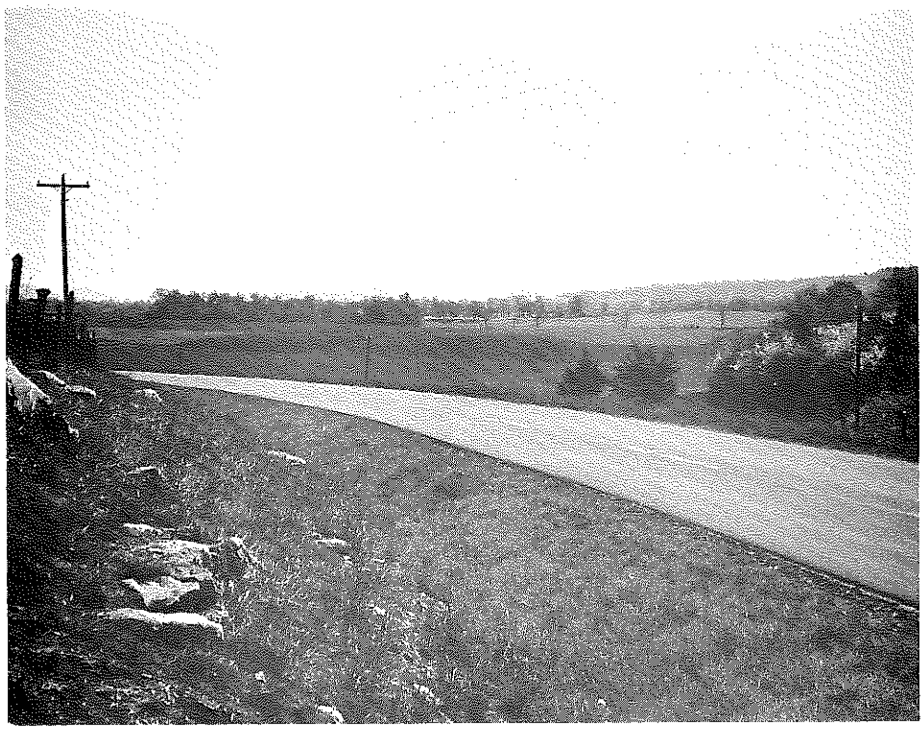


Figure 5 - The Gently Rolling Terrain of the Mississippian Plateaus. The Pottsville Escarpment rises in the background to the Cumberland Plateau of Eastern Kentucky.

Figure 6 - The Rugged Terrain of the Eastern Coal Field. The photograph shows the deep cuts and high fills required in highway construction.

Many of these soils are red in color and have developed from the cherty Mississippian limestones. They contain large amounts of nontronite, an iron-rich montmorillonite clay.

The region centered around Madisonville is the Western Coal Field, a topographic as well as a structural basin. The country is a dissected plateau with rolling hills and moderately wide valleys. An outstanding feature of this region, as well as of the Jackson Purchase, is the broad alluvial bottoms of the larger rivers. The soils of this area, formed by the weathering of sandstones and shales, are similar to those of the Eastern Coal Field.

The Eastern Coal Field, a region characterized by a rough topography with narrow ridges and deep, narrow valleys, includes all of the state east of the Pottsville Escarpment. Flat lands are at a minimum; but locally, in areas of shale outcrop, numerous bottomlands have developed. Massive sandstones have given rise to local upland flats.

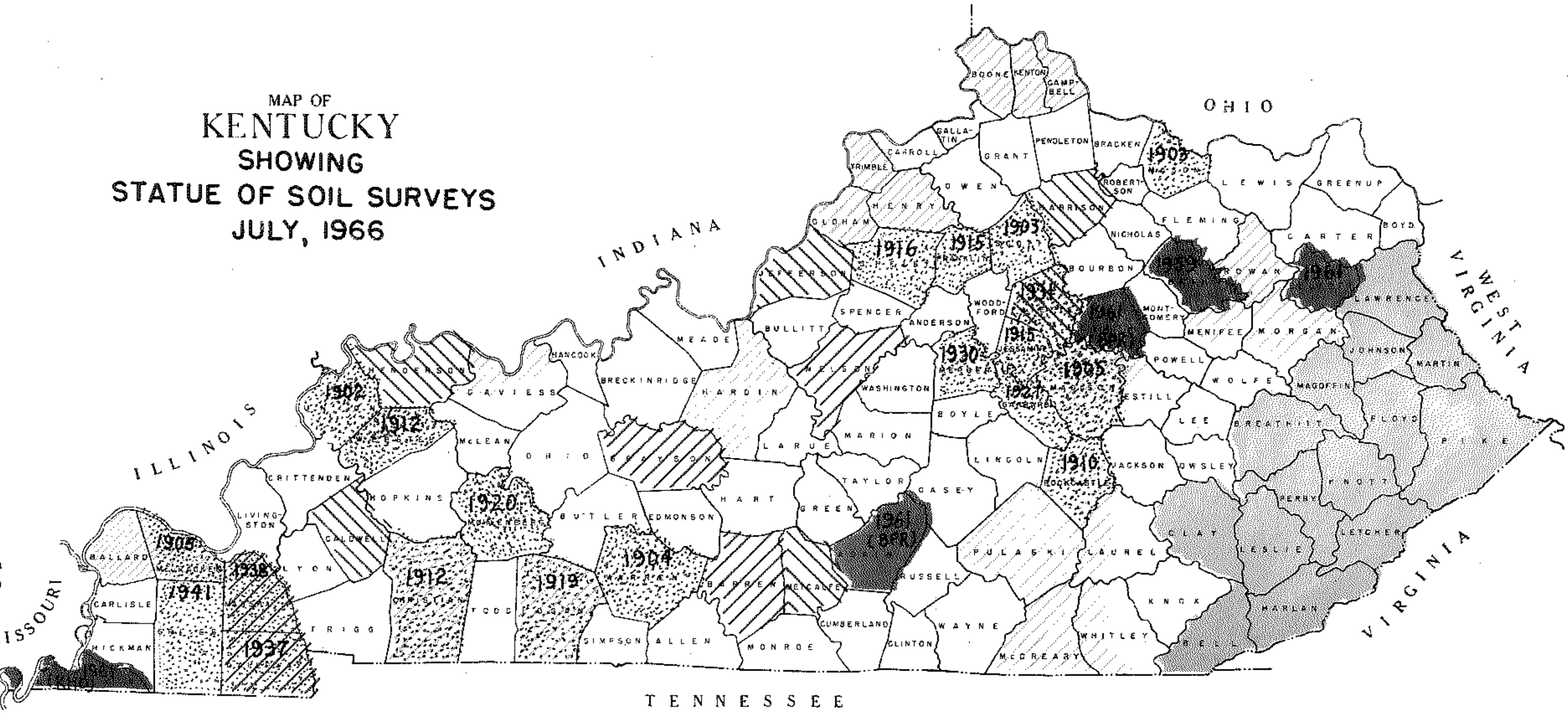
The soils derived from these sandstones and shales are usually quite good subgrade material. Because of the rugged terrain, the deep cuts and high fills required in highway construction consist predominantly of sandstones and shales (see Figure 6). The bedrock in this area thus becomes of great engineering significance.

The Jackson Purchase, an undulating plain with very little local relief, lies in the Gulf Embayment, a coastal plain region. The area has been covered and the soils are greatly influenced by the wind-blown loess, which overlays all older materials. Floodplains of large extent have formed along the Mississippi, Ohio and Tennessee Rivers.

ENGINEERING SOIL PROFILE DATA

There are two general approaches to making engineering soil surveys and (or) maps. Both approaches have been used extensively by various agencies throughout the United States. One approach, and the only recourse in cases where no prior information is available, is to prepare engineering maps from actual field explorations. Pedological and geologic maps are sometimes used as a guide in selecting areas for detailed exploration. Generally, in this approach only "origin-texture" maps are prepared wherein each origin-texture classification gives some indication of the engineering characteristics of the soil. A second approach to obtaining engineering soil maps is to utilize the pedological maps and discriptions and to add the necessary engineering data. This approach has an advantage in that the mapping work has already been done. All that is needed is to obtain samples from the various soils and perform engineering tests.

Many areas have been mapped by pedologists and many more are in the process of being mapped (see Figure 7). In this mapping, the pedologists have made use of the soil series, a group of soils having horizons similar in



Early Published Maps and Year Mapped

Published Maps with Engineering Chapters and Year Mapped. Engineering Test Data Supplied by:
BPR - Bureau of Public Roads
KHD - Kentucky Highway Dept.

Fourteen-County Reconnaissance Survey, 1962

Field Work Completed Engineering Test Data Supplied by BPR

Field Work Completed Engineering Test Data Supplied by KHD

Field Work in Progress

Figure 7 - Status of Soil Surveys in Kentucky.

differentiating characteristics and arrangement, developing from the same kind of parent material, and differing only in the texture of the top horizon. There are 204 soil series presently recognized and used in Kentucky. Appendix I to this report gives a list of those approved soil series used in Kentucky. The principal soil units used by pedologists in mapping is an even more refined one, the soil type. This unit is similar to the soil series, except that within a soil type the texture of the top horizon does not vary significantly.

An engineering appraisal of the same soil profiles would, however, minimize such factors as color and chemical composition, thus allowing a regrouping into less refined classes for engineering purposes. Investigations in Indiana* indicate the advisability of combining as many as 15 or 20 soils into one group for engineering purposes.

In 1955, the Research Division of the Kentucky Department of Highways began a program of adapting the existing U.S. Department of Agriculture soil maps for engineering

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*Belcher, D. J.; Gregg, L. E.; Woods, K. B. "The Formation, Distribution and Engineering Characteristics of Soils," Highway Research Bulletin No. 10, Engineering Experiment Station, Purdue University, January, 1943.

purposes by adding engineering data to the pedological soil series classifications. An outgrowth of this work has been the preparation of three departmental reports. The first* was made in August, 1957, and contained a summary of basic information on soils and their classification as well as specific engineering data pertaining to the pedologically mapped soils in Fayette County. The second report** contained similar types of engineering data for Mercer County soils. The third report*** prepared in 1962 contained all available engineering data for soils series mapped in Kentucky.

From 1955 to the present, additional soil profile data have been obtained by the Research Division during the performance of its regularly assigned projects. Since 1958 the Division has also obtained engineering soils data from numerous samples submitted by the Soil Conservation Service of the U.S. Department of Agriculture. These samples were obtained by SCS personnel and submitted

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*Deen, R. C. "A Method of Developing Engineering Soil Surveys for Kentucky," August, 1957.

**Deen, R. C. "An Engineering Soil Survey of Mercer County, Kentucky," July, 1958.

***Deen, R. C. "Engineering Properties for Soil Series Mapped in Kentucky," March, 1962.

to the Research Division for testing as a part of a co-operative soil mapping program undertaken by the SCS, the Bureau of Public Roads, and the Kentucky Department of Highways. Beginning in July, 1963, this activity was financed in cooperation with the Bureau of Public Roads with HPR funds.

As a result of many years work, soil profile data have accumulated in the files of the Research Division. This information can be of value to various design engineers and others within and without the Department if it were properly indexed and readily available. Accordingly, a continuing effort has been made to assemble this data and to tabulate them by soil series. Soil profile data currently available in the Research Division are contained in punched card form. This makes for easy retrieval and up dating of tabulations. Appendices II and III of this report contain a summary of all of the soil profile data currently available in the Research Division files.

Plans have been made to continue to cooperate with the Soil Conservation Service in providing engineering data for soil series sampled by SCS personnel. Additional assistance will be offered in the preparation of the engineering chapters in the soil survey reports.

The Soil Conservation Service, in connection with its watershed and reservoir development program, has assembled in Kentucky a significant amount of soil profile data with engineering test values known. Arrangements are being made to place this information on punch cards so that it may be easily included in tabulations of soil profile data such as contained in the appendices to this report.

Appendix I - List of Approved Soil Series

APPROVED SOIL SERIES OF KENTUCKY AND
ESTIMATED ACREAGE
July, 1966

Adler	5000
Allegheny	75000
Allen	3500
Alligator	3500
Armagh	200
Armour	20000
Ashton	75000
Ashwood	25000
Atkins	30000
Avonburg	1000
Barbourville	65000
Bartle	5000
Baxter	700000
Beasley	140000
Beason	1000
Bedford	60000
Belknap	150000
Berks	390000
Beulah	600
Bibb	500
*Bigbone	300
Birds	6000
Blago	500
Bodine	112000
Bonnie	100000
Bosket	500
Bowdre	200
Brandon	300000
Brashear	85000
Brassfield	60000
Braxton	5000
Bruno	80000
Burgin	500
Calloway	175000
Canneyville	300000
Capshaw	500
Captina	102000
Cavode	2000
Chagrin	5000
*Chavles	90000
Chilo	4000
Christian	110000
Cincinnati	2000
Clarksville	153000
Clermont	2000
Clymer	30000
Colbert	5000
Collins	52000
Colyer	220000
Commerce	8000
Corydon	75000
Cotaco	25000
Crevasse	3200
Crider	1045000
Cruze	11000
Cuba	31000
Culleoka	55000
Cumberland	300000
Cynthiana	110000
Dekalb	800000
Dekoven	45000
Dewey	15000
Dexter	500
Dickson	150000
Donerail	25000
Dowellton	1000
Dunning	12000
Eden	575000
Egam	100000
Elk	160000
Elkins	500
Ennis	3000
Etowah	12000
Fairmount	150000
Falaya	165000
Faywood	500000
Fleming	5000

Forestdale	1300
Fredonia	30000
Freeland	800
Garmon	505000
Genesee	1000
Gilpin	1340000
Ginat	80000
Grenada	585000
Guin	4000
Guthrie	15000
Hagerstown	15000
Hamblen	10000
Haymond	10000
Heitt	80000
Henry	16000
Henshaw	25000
Hollywood	500
Humphreys	30000
Hunington	85000
Huntsville	5000
Iola	6000
Iuka	300
Johnsburg	100000
*Kenton	2000
Kings	300
Lakin	30000
Lanton	2000
Lawrence	28000
Lax	200000
Lexington	40000
Lickdale	3500
*Licking	1500
Lindside	100000
Linker	7500
Litz	85000
Loradale	105000
Loring	510000
Loudon	8000
Lowell	485000

Mantachie	700
Markland	17000
Maury	300000
McAfee	130000
McGary	17000
Melvin	40000
Memphis	190000
Mercer	42000
Monongahela	25000
Montgomery	2000
Moorefield	15000
Morganfield	1000
Mountview	165000
Mullins	3500
Murrill	35000
Muse	85000
Muskingum	115000
Needmore	40000
Negley	1500
Newark	150000
Nicholson	73000
Nolichucky	5000
Ochlockonee	500
Otway	80000
Patton	8000
Pearman	20000
Pekin	50000
Pembroke	200000
Petrolia	50000
Philo	40000
Pope	60000
*Poplar	15000
Providence	20000
Purdy	23000
Ramsey	1140000
Rarden	15000
*Reelfoot	1200
*Renox	3500
Robertsville	30000
Robinsonville	11000
Rockcastle	350000

Roellen	2000
Ross	2000
Rossmoyne	3000
Russellville	190000
Ruston	65000
Saffell	3000
Salvisa	170000
Sango	90000
Sciotoville	125000
Sees	8000
Sharkey	10000
Sharon	50600
Shelbyville	125000
Shelocta	1608000
Shrouts	35000
Staser	8000
Stendal	140000
Swaim	3000
Taft	60000
Talbott	100000
Tarklin	65000
Tate	1250000
Tilsit	300000
*Tiptonville	1500
Trappist	145000
Tunica	10000
Tupelo	2000
Tygart	3000
Tyler	3500
Uniontown	35000
Upshur	1000
Vicksburg	5000
Wakeland	107500
Waverly	95000
Waynesboro	45000
Weikert	1280000
Weinbach	155000
Wellston	305000
Wharton	2000
Wheeling	210000
Whitley	19000
Wolftever	10000
Woolper	20000
Wynoose	1700
Zanesville	365000
Zipp	5500
Zoar	2600
	23,474,000

River banks	40000
Strip mines	160000
Rock land	315000
Gullied land	65000
Made land	75000
Rock outcrop	36000
Water	1120547
Urban	175000
Miscellaneous	51773

TOTAL AREA
OF KENTUCKY 25,512,320

DROPPED OR INACTIVE
SOIL SERIES OF KENTUCKY

Dropped or Inactive Series	Recommended Reclassification
Albertville	Muse, Trappist
Almo	Henry
Alva	Vicksburg and Ochlockonee, local alluvium phase
Apison	Wellston and Gilpin
*Artemus	Allegheny
*Ashburn	Cumberland cherty
Atwood	Ruston
Beechy	Waverly and Bibb
*Bellevue	Lakin
*Berea muck	Blago
Bewleyville	Crider, some others
*Bordley	Henshaw
Briensburg	Falaya
Brooke	Colbert, Rarden
*Bybee	Allen
Calhoun	Henry
Carroll	Waynoose
*Caseyville	Birds
Caylor	Crider, Pembroke, Allen, Allegheny
*Chilesburg	Loudon
Clack	Crevasse
Cleburne	Hartsells
*Cleveland	Atkins
Cookeville	Dewey
*Craintown	Lowell, acid shale variant
*Crocus	Captina
Crossville	Clymer
Dandridge	Garmon
*Dawkins	Hagerstown, very rocky phases, Rock land, Corydon,
Decatur	Cumberland
*Dodds	Monongahela
Dubbs	*Tiptonville
Dulac	Grenada, Providence
Dundee	*Reelfoot
Dyer	Waverly
Edenton	Eden and Jessup
*Elbridge	*Dekoven

Dropped or Inactive Series	Recommended Reclassification
Elkinsville	Elk
Ellsberry	Little or no acreage
*Eminence	Dickson
Emory	Huntington, Etowah
Enders	Muse, Trappist
Eupora	Collins and Iuke
Faceville	Ruston, Lexington
Fairfax	Whitley
*Falmouth	Ashton
Fawcett	Cavode
Foltz	Waverly and Bibb
Frankstown	Clarksville
*Gilmore	Tarklin
Godwin	Huntington and Egam
*Geohagen	Markland
*Goffton	Christian
*Goodloe	Whitley
Greendale	Ennis, Humphreys
Hampshire	Lowell
Hanceville	Nolichuchy, Allen
Hartsells	Clymer
Hayter	Allegheny
Hecter	Ramsey
Hermitage	Etowah
*Hilham	Needmore
*Hitesville	Adler, some Wakeland
*Hodgenville	Dewey, Allen, Wellston, others
Holston	Whitley
*Hooten	*Roellen, overwash phase
Hymon	Collins and Iuka
Ina	Falaya and Mantachie
Inglefield	Wakeland
Jefferson	Tate
*Larue	Zanesville, possibly some Dickson
Lee	Melvin, Atkins
Lintonia	Memphis

Dropped or Inactive Series	Recommended Reclassification
Maddox	Lowell
*Malt	Allen, Nolichuchy
Manitou	Zanesville
*Manse	Ashton
Meigs	Upshur-Muskingum soils
Minvale	Etowah, Baxter
*Mobley	Tarklin, Capitna
Montevallo	Weikert
*Nail	Stendal
Nebo	Dark surface phases of Tilsit and/or Johnsburg
Nixa	Tarklin
Olivier	Calloway
Ooltewah	Newark or Lindside, some overwash phases of Guthrie or Lawrence
Pace	Humphreys, Clarksville
Parke	Negley
Pickwick	Brandon, Crider
Pride	Uniontown
*Raywick	Baxter, acid shale variant
Richland	Loring and Grenada
*Rodney	*Morganfield or Adler
Routon	Not found
Rowan	Trappist
Saffell	Iola
St. Catherine	Birds of Wakeland
Sequatchie	Chavies
Sequola	Christian
Shannon	Vicksburg and Ochlockonee
Shubuta	Not found
*Stalcup	Staser or Huntington, shaly phases
*Siberia	Chiefly Tilsit
Silerton	Not found
Sturgis	Chavies, Wheeling
Tigrett	Vicksburg

Dropped or Inactive Series	Recommended Reclassification
Tumbez	Fairmount
Weinbach	Avonburg
*Weon	Baxter, Christian, Talbott
Westmoreland	Garmon
Zaleski	Cotaco

*Tentative

Appendix II - Summary of Soil Profile Data by County

Soil Name: Series	Type	County No.	Site No.	Latitude Deg	Min	Sec	Longitude Deg	Min	Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches) Top	Bottom	Compaction Data: Dry Unit Wt. (PCF)	Opt MC	CBR Data: Unsoaked	Soaked	Gradation, Percent Finer Than: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	Classification: AASHO Class	GI	Unified
CHRISTIAN	SIL	1	2	36	57	46	85	16	08	INTBEDSH,LS,SS	3		35+	AP	0	6	110	15							100	99	95	90	66	60	46	27	20	26	6		A-4	06	ML-CL
														B2	12	27	98	22								100	99	98	78	74	70	61	53	66	37		A-7-6	20	MH-CH
														C3		35+	95	25								100	99	99	97	93	82	64	52	75	39		A-7-5	20	MH-CH
CHRISTIAN	CHSIL	1	3	37	05	41	85	30	41	ARG CHLS,SS,SH	6		48+	AP	0	8	114	12			100	97	92	64	76	71	69	67	42	30	20	11	7	NP	NP		A-4	01	SM
														B22	17	31	108	18			98	98	96	94	92	90	88	86	53	48	42	37	34	47	27		A-7-6	11	CL
														C		48+	102	19			100	97	94	86	81	77	75	74	62	61	57	44	38	56	30		A-7-6	16	CH
CHRISTIAN	CHSIL	1	4							ARG CHLS,CSH,SS	7		33+	AP	0	7	113	12			100	99	92	83	75	68	66	63	48	45	35	16	11	21	2		A-4	03	SM
														B2	11	33	101	21				100	99	98	98	97	96	94	83	81	74	60	52	57	33		A-7-6	19	CH
														C		33+	107	18								100	99	94	73	69	59	47	41	50	28		A-7-6	17	CL-CH
CHRISTIAN	FSL	1	9								10		36+	AP	0	6	115	11			100	99	99	98	97	95	93	92	50	44	32	17	10	18	0		A-4	03	SM
														B2	6	15	119	13								100	99	98	54	49	38	26	20	23	7		A-4	04	ML-CL
														C		36+	90	28								100	99	98	89	87	78	70	63	86	49		A-7-5	20	MH-CH
NEEDMORE	SIL	1	7	37	05	32	85	12	15	SOFT SH	3		24	A2	2	7	106	17							100	99	96	95	93	92	74	32	22	27	4		A-4	08	ML-CL
														B2	7	17	102	21								100	99	99	98	97	84	55	42	44	18		A-7-6	12	ML-CL
														C	17	24	98	23								100	99	99	98	98	86	62	50	53	25		A-7-6	17	MH-CH
NEEDMORE	SIL	1	8	37	00	59	85	13	48		7		26	A1	0	2									100	94	90	86	84	82	61	28	13						
														A2	2	8									100	94	90	89	87	86	66	28	15						
NEEDMORE	SIL	1	11	37	08	47	85	15	27	SOFT SH	4		26	AP	0	7	107	18			100	99	99	99	99	98	94	92	84	80	65	39	29	33	11		A-6	08	ML-CL
														B2	7	15	93	26								100	99	99	98	98	91	74	61	69	36		A-7-5	20	MH-CH
														C	18	26	99	22										100	99	99	90	70	56	62	33		A-7-6	20	MH-CH
ROCKCASTLE	SIL	1	10	37	14	27	85	04	11	C SH	10		15+	A2	1	6	106	18					100	99	99	98	95	94	91	90	77	40	29	38	12		A-6	09	ML-CL
														C	6	15	105	20								100	99	99	98	98	89	53	41	47	21		A-7-6	14	ML-CL
														DR		15+	111	17								100	99	99	98	98	85	46	36	39	15		A-6	10	ML-CL
ROCKCASTLE	SIL	1	12							C SH	4		18+	AP	0	7	102	21										100	99	99	96	70	50	50	21		A-7-6	15	ML-CL
														C	7	18	109	17										100	99	99	95	63	43	46	20		A-7-6	13	ML-CL
														DR		18+	115	15								100	99	99	98	98	88	51	32	38	13		A-6	09	ML-CL
WESTMORELAND	SHSIL	1	5	37	07	44	85	17	35	FISSILE LS,SH	9		20	A2	2	8	100	18			100	98	96	93	91	84	77	75	69	66	54	31	18	28	3		A-4	07	ML
														C	8	20	100	19			87	64	81	73	62	53	49	47	43	41	34	21	14	29	3		A-4	02	GM
WESTMORELAND	SHSIL	1	6	37	00	03	85	12	38	FISSILE LS,SH	14		18+	A2	3	11	102	19						100	98	92	86	84	79	76	61	39	26	28	4		A-4	08	CL
														C	11	18	99	21			99	97	97	96	96	96	91	89	84	80	70	52	41	38	12		A-6	09	ML-CL
														DR		18+	99	22			81	75	70	63	51	39	37	35	32	31	26	19	15	43	16		A-2-7	01	GM-GC

Soil Name: Series	Soil Name: Type	County No.	Soil No.	Latitude (D M S)	Longitude (D M S)	Parent Material / Slope / Topography	Depth to Bedrock (in)	Horizon	Depth (inches) Top	Depth (inches) Bottom	Compaction: Dry Unit Wt. (PCF)	Compaction: Opt MC	CBR: Unsoaked	CBR: Soaked	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
ASHBURN	CHSIL	5	1	37 04 53	85 58 05	LS	68+	AP	0	6	105	17			94	91	89	86	85	83	80	78	74	72	53	19	10	32	6		A-4	08	ML
								B21	16	28	92	28			98	94	92	90	89	88	87	87	86	85	78	64	60	72	39		A-7-5	20	MH-CH
								C	43	68+	94	27			49	44	41	37	35	33	32	32	31	31	28	23	20	68	37		A-2-7	03	GC
ASHBURN	CHSIL	5	2	37 04 29	85 53 27	LS	68	AP	0	6	109	15			96	94	93	92	92	91	89	88	84	83	66	24	13	29	6		A-4	08	ML-CL
								B21	11	22	112	15			89	85	83	77	74	72	70	69	66	65	51	26	18	37	14		A-6	09	ML-CL
								C	52	68	89	29			43	41	41	39	38	37	37	37	35	34	31	27	24	73	36		A-2-7	04	GC
BAXTER	CHSIL	5	3	37 01 02	85 59 15	LS	58+	AP	0	8	109	16					100	99	98	92	86	85	80	76	52	20	11	28	5	2.60	A-4	08	ML-CL
								B3	22	40	102	21					98	97	96	95	92	91	87	84	73	51	41	54	24		A-7-5	16	MH-CH
								C	40	58+	105	19			70	66	64	60	58	56	54	52	47	46	36	24	18	42	17	2.61	A-7-6	08	ML-CL
BAXTER	CHSIL	5	4	37 59 13	86 01 09	CHLS	50+	AP	0	8	108	15			96	95	94	92	90	88	84	82	76	73	51	21	11	27	5	2.61	A-4	08	ML-CL
								B3	23	42	103	22			97	96	95	95	95	94	93	91	87	85	76	60	48	52	26	2.64	A-7-6	17	CH
								C	42	50+	96	27					100	99	97	95	91	90	88	86	81	64	54	70	36	2.60	A-7-5	20	MH-CH
BODINE	CHSIL	5	5	36 53 21	85 47 51	CHLS	30	AP	0	8	108	16			98	98	97	92	87	81	72	70	67	66	52	24	16	31	8		A-4	06	ML-CL
								B	12	20	110	17			69	66	64	59	56	54	48	48	45	43	34	18	12	32	10		A-4	06	ML-CL
								C2	24	30	110	16			56	52	47	38	33	31	28	27	25	24	19	10	6	28	6		A-4	01	GM-GC
BODINE	CHSIL	5	6	36 52 14	85 50 55	CHLS	19	AP	0	6	102	18			94	91	89	84	80	78	72	70	67	65	51	24	16	33	7		A-4	07	ML
								B	6	15	108	18			97	96	96	93	90	86	80	79	77	75	60	36	24	32	10		A-4	08	ML-CL
								C1	15	19	101	20								50	45	44	42	41	34	20	13	33	7		A-4	08	ML
DICKSON	SIL	5	7	37 02 41	86 03 08	CH LS	72	A2	1	8	112	14								100	99	97	86	84	63	23	16	25	5		A-4	08	ML-CL
								B2	12	24	114	15								100	99	97	87	85	66	30	22	31	10		A-4	08	ML-CL
								B3M	24	46	115	14								100	98	96	82	80	63	27	18	28	7		A-4	08	ML-CL
								C	46	72	113	16								100	98	94	74	72	60	38	30	37	15		A-6	10	CL
DICKSON	CHSIL	5	8	36 50 50	85 50 11	CH LS	44	AP	0	7	108	15			96	94	92	90	89	83	76	74	69	68	52	22	15	30	5		A-4	07	ML
								B2	12	22	108	18								100	96	95	92	90	75	50	35	41	17		A-7-6	11	ML-CL
								B3M	22	32	102	22								100	99	99	97	95	84	56	42	45	19		A-7-6	13	ML-CL
								C	32	44	99	23								80	78	78	77	75	69	51	36	47	16		A-7-5	12	ML
SANGO	SIL	5	9	37 05 48	85 49 10	CHLS	55+	A2	1	8	112	13						100	99	97	93	92	78	76	53	18	11	21	2		A-4	08	ML
								B2	14	24	115	14					100	99	98	97	93	92	80	78	59	28	20	29	9		A-4	08	CL
								B3M	24	40	112	16			100	98	97	94	92	90	86	85	75	72	58	30	20	32	10		A-4	08	ML-CL
								C	40	55+	105	19			97	96	95	93	91	89	84	83	67	62	53	39	32	48	20		A-7-6	12	ML-CL
SANGO	SIL	5	10	36 54 42	85 49 17	CHLS	31	A2	2	8	106	16								100	94	93	90	87	63	22	12	25	3		A-4	08	ML
								B2	8	15	109	16								100	94	93	90	88	68	30	20	26	5		A-4	08	ML-CL
								B3M2	20	31	105	20								100	93	92	88	86	72	47	35	40	16		A-6	10	ML-CL

Soil name: Series	Type	Co. No.	Site No.	Latitude (D M S)	Longitude (D M S)	Parent material	Slope	Topography	Depth to bedrock (in)	Horizon	Depth (inches) Top	Depth (inches) Bottom	Compaction: Dry unit wt. (PCF)	Compaction: OPT MC	CBR: Unsoaked	CBR: Soaked	11/2	1	3/4	3/8	4	10	40	60	200	.05 mm	.02 mm	.005 mm	.002 mm	LL	PI	Specific gravity	AASHO class	GI	Unified
ALLEGHENY		6	5	38 09 57	83 40 35		2		72	A1	0	10										100	93	82	58	50	35	17	8						
										A2	10	15										100	98	89	75	69	41	22	16						
										B1	15	21										100	97	93	80	71	55	38	23						
										B2	21	41										100	98	92	70	62	45	29	26						
										C	41	72										100	90	61	36	32	29	26	24						
ALLEGHENY		6	6	38 09 37	83 38 32		4		55+	A1	0	5										100	91	78	54	49	34	18	7						
										A2	5	9										100	92	81	57	54	41	20	9						
										B1	9	16										100	96	85	69	66	52	28	18						
										B2	16	27										94	88	84	70	66	56	41	25						
										B3	27	42										100	94	90	74	71	61	42	32						
										C	42	55+										100	95	80	41	36	33	22	18						
ALLEGHENY		6	7	38 04 23	83 28 31		9		57+	A1	0	5										100	98	93	64	56	39	23	12						
										A2	5	13										100	97	92	60	50	36	23	12						
										B1	13	18										100	98	94	57	48	32	23	14						
										B2	18	45										100	99	96	59	51	40	30	19						
										C	45	57+										100	96	90	31	26	20	15	13						
ALLEGHENY		6	8	38 10 24	83 37 05		6		51+	A	0	12										100	99	96	81	65	41	23	11						
										B1	12	24										100	99	96	81	73	53	30	22						
										B2	24	34										100	99	97	80	73	56	31	14						
										B3	34	41										100	99	98	71	56	45	40	34						
										C	41	51+										100	99	94	56	40	30	26	22						
COLYER	SIL	6	9	38 02 47	83 45 35	BL FISSLE SH	9		21	A1	0	5	101	20						100	96	80	69	67	65	63	54	35	22	39	9		A-4	06	ML
										B2	5	12	99	23					100	98	96	90	85	84	82	80	71	50	32	42	11		A-7-5	09	ML
										C	18	21	98	24				100	97	85	76	69	66	66	65	65	61	48	35	52	20		A-7-5	12	MH
COLYER	SIL	6	10	38 03 05	83 45 22	FISSLE SH	13		26	A2	5	11	97	23							100	96	90	88	86	85	76	49	31	40	9		A-4	08	ML
										B2	11	19	100	23					100	95	91	85	83	82	82	82	73	54	35	41	13		A-7-6	09	ML
										C	19	26	98	24			100	99	99	98	94	88	86	85	84	84	76	57	40	45	15		A-7-5	11	ML
JOHNSBURG	SIL	6	13	38 06 18	83 42 24	PLATY C SH	3		47	A2	3	8	107	17							100	99	97	96	95	95	80	40	24	32	9		A-4	08	ML-CL
										B2	13	18	107	18								100	99	99	98	98	89	52	32	38	14		A-6	10	ML-CL
										B3M2	25	40	108	18								100	99	99	98	98	89	53	34	40	16		A-6	10	ML-CL
										C	40	47	109	18							100	97	96	96	95	95	89	60	41	42	18		A-7-6	12	ML-CL
JOHNSBURG	SIL	6	14	38 04 07	83 38 52	C SH	3		38	AP	0	5	102	19						100	99	97	94	93	92	91	75	34	19	36	8	2.69	A-4	08	ML
										B2	9	14	110	17							100	97	94	93	92	90	76	40	23	31	9	2.76	A-4	08	ML-CL
										B3M1	21	30	106	20							100	98	96	96	95	95	83	46	27	39	14		A-6	10	ML-CL
										C	30	38	105	19							100	98	97	97	96	96	85	51	32	40	15		A-6	10	ML-CL
LEADVALE		6	1	38 01 26	83 40 50		3		53+	A1	0	6										100	99	99	98	98	66	29	18						
										A2	6	10										100	99	99	99	99	66	30	19						
										B1	10	16										100	99	99	99	98	66	30	18						
										B2	16	29										100	99	99	98	97	65	31	19						
										B3	29	53										90	88	88	87	87	61	28	18						
										C		53+										83	79	78	76	74	49	22	14						
LEADVALE		6	2	38 01 27	83 42 45		4		30+	A1	0	6										93	91	90	88	88	57	25	15						
										A2	6	11										100	99	99	98	96	64	32	20						
										B1	11	14										100	99	99	97	95	62	30	18						
										B2	14	25										100	98	98	97	94	59	29	18						
										B3	25	30										90	87	86	83	91	54	24	15						
										C		30+										54	45	44	43	42	31	17	12						
LOWELL	SIL	6	11	38 10 18	83 56 19	FG SS OVER SH	10			A1	0	8	101	21								100	96	95	93	88	69	38	26	36	10		A-4	08	ML-CL
										B2	12	22	107	20			100	98	98	98	98	97	94	93	91	86	69	44	32	37	12		A-6	09	ML-CL
										C	22	25	102	19			96	96	96	96	95	89	86	84	82	78	66	49	39	48	23		A-7-6	15	CL
LOWELL	SIL	6	12	38 13 43	83 51 31	FG SS OVER SH	15			A2	3	17	105	18								100	98	97	95	89	67	38	27	35	11	2.69	A-6	08	ML-CL
										B1	17	25	108	17								100	99	98	92	83	58	37	27	31	9	2.71	A-4	08	ML-CL
										C	25	65	109	18								100	98	97	95	90	68	42	33	36	14		A-6	10	CL
LOWELL	SIL	6	15	38 12 57	83 49 46	ARG THIN BED LS	3		39	A2	3	12	102	22								100	99	98	96	95	80	46	32	40	14		A-6	10	ML-CL
										B2	18	23	101	22								100	99	98	96	96	87	60	50	56	29		A-7-6	19	CH
										C	30	39	99	23										100	99	99	92	72	61	67	38		A-7-6	20	CH
LOWELL	SIL	6	16	38 13 37	83 51 29	SI STONE,FGR SS	9		61	A2	4	9	104	20								100	97	96	95	91	72	41	30	38	13		A-6	09	ML-CL
										B2	16	31	100	23								100	99	99	98	95	82	61	51	54	27		A-7-6	18	CH
										C	31	61	100	23										100	99	97	82	59	48	52	24		A-7-6	16	MH-CH
OTWAY		6	3				8		20+	A	0	5										100	98	97	94	92	82	58	44						
										B1	5	8										100	98	97	93	90	77	54	44						
										B2	8	15										100	98	96	96	90	68	49	38						
										B3	15	20										100	98	97	91	88	62	42	36						
										C		20+										100	96	95	90	79	52	34	27						
OTWAY		6	4				7		16+	A	0	4										100	96	95	93	93	81	52	41						
										B1	4	10										100	97	96	94	93	83	54	41						
										B2	10	13										100	98	98	96	95	87	69	54						
										B3	13	16										100	96	95	90	87	79	64	52						
										C		16+										94	88	86	76	70	55	43	37						

SOIL NAME: SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	COMPACTION DATA: OPT MC	CBR DATA: UNSOAKED	CBR DATA: SOAKED
RARDEN	SIL	6	17	38	03	42	83	40	42	WAVERLY C SH	5		35	A2	3	10	104	19		
														B2	10	15	104	20		
														C	22	35	111	16		
RARDEN	SIL	6	18	38	09	12	83	38	21	SOFT C SH	6		34	AP	0	8	106	18		
														B3	12	22	107	18		
														C	22	34	110	17		
SHELBYVILLE	SIL	6	19	38	12	32	83	53	00	ARG THIN BED LS	3		52	AP	0	11	106	19		
														B22	24	31	108	19		
														B3CN	31	37	95	26		
														C	37	52	99	23		
SHELBYVILLE	SIL	6	20	38	12	18	83	53	07	SI ST,FSS	4		68	A2	5	14	106	18		
														B2	21	28	107	19		
														C1	28	68	100	23		

SERIES	HORIZON	GRADATION: PERCENT FINER THAN 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
RARDEN	A2					100	99	96	95	93	91	69	36	22	33	6		A-4	08	ML
	B2									100	99	93	62	42	45	19		A-7-6	13	ML-CL
	C										100	92	59	42	45	20		A-7-6	13	ML-CL
RARDEN	AP						100	99	98	97	97	87	48	30	36	12		A-6	09	ML-CL
	B3						100	99	99	98	98	90	55	37	44	19		A-7-6	12	ML-CL
	C									100	99	96	70	46	50	22		A-7-6	15	ML-CL
SHELBYVILLE	AP						100	97	96	95	94	82	46	32	37	14		A-6	10	ML-CL
	B22						100	94	92	90	89	77	48	35	40	18		A-6	11	CL
	B3CN						100	97	96	94	94	87	70	60	74	42		A-7-5	20	CH
	C					100	99	95	94	92	91	86	66	54	61	34		A-7-6	20	CH
SHELBYVILLE	A2						100	96	95	94	91	72	37	24	33	9		A-4	08	ML-CL
	B2						100	98	98	97	95	79	53	42	44	20		A-7-6	13	CL
	C1								100	99	98	85	63	54	59	31		A-7-6	20	CH

Soil name: Series	Type	County No.	Site No.	Latitude (Deg Min Sec)	Longitude (Deg Min Sec)	Parent material	Slope	Topography	Depth to bedrock (in)	Horizon	Depth (inches): Top	Depth (inches): Bottom	Compaction data: Dry unit wt. (PCF)	Compaction data: Opt MC	CBR data: Unsoaked	CBR data: Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific gravity	AASHO class	AASHO GI	Unified
CINCINNATI	SIL	8	3	39 01 06	84 41 53	LSS OVR C GLA MT	7	SLOPING	186	AP	0	7	97	20	99	29						100	99	98	96	95	80	32	20	26	4	2.63	A-4	08	ML
										B21T	7	19	94	25	5	5						100	99	98	96	95	80	32	20	32	9	2.70	A-4	08	ML-CL
										IIC	29	84	87	28	3	2						100	96	90	75	72	62	46	38	42	20	2.74	A-7-6	12	CL
CINCINNATI	SIL	8	4	39 03 40	84 39 44	LSS, C GLA TILL	5	SLOPING	318	AP	0	8	97	19	17	6						100	99	98	88	84	56	26	15	28	5	2.62	A-4	08	ML
										B21T	19	27	94	25	4	7						100	99	97	94	90	68	33	26	33	13	2.69	A-6	09	CL
										IIC1X	42	72	107	20	3	4						100	96	90	71	65	54	28	22	30	4	2.69	A-4	07	ML
										C3		96+	98	24	6	4						100	97	93	78	73	60	46	38	43	19	2.69	A-7-6	13	CL
ROSSMOYNE	SIL	8	1	38 56 31	84 37 23	LSS OVR C GLA MT	2	LEVEL	180	A2	4	9	99	23	12	8						100	97	96	87	81	64	32	20	28	5	2.63	A-4	08	ML
										B2T	14	22	95	25	4	3						100	98	97	94	90	74	36	29	38	15	2.69	A-6	10	ML-CL
										BX	22	36	97	24	6	5						100	98	97	93	88	72	35	28	38	11	2.70	A-6	08	ML-CL
										IIC2	54	90	88	23	6	2						100	99	98	94	93	86	62	52	50	24	2.71	A-7-6	15	ML-CL
ROSSMOYNE	SIL	8	2	39 01 05	84 41 58	LSS OVR C GLA MT	4	SLOPING	102	AP	0	8	99	22	14	11						100	99	96	92	87	56	30	20	28	6	2.65	A-4	08	ML-CL
										B21T	15	22	102	20	6	2						100	99	98	95	92	76	36	26	50	17	2.68	A-7-5	13	ML
										BX	28	35	92	28	14	10						100	99	98	95	92	76	35	32	37	14	2.73	A-6	10	ML-CL
										IIC2	51	72	90	29								100	99	98	93	90	82	68	58	68	29	2.74	A-7-5	20	MH

SOIL NAME SERIES	TYPE	COUNTY NO.	LOC. NO.	LAT. DEG	LAT. MIN	LAT. SEC	LONG. DEG	LONG. MIN	LONG. SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	DRY UNIT WT. (PCF)	OPT MC	CBR UNSOAKED	CBR SOAKED	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
BEWLEYVILLE	SIL	17	1	37	58	13	87	52	25	SS			78+	AP	0	7	104	16								100	99	98	98	96	66	22	15	27	4		A-4	08	ML-CL
														B21	7	30	108	18											100	98	75	36	30	43	20		A-7-6	13	CL
														B28	50	78+	101	22			83	79	79	78	78	77	75	74	71	68	59	42	35	56	32		A-7-6	18	CH
BEWLEYVILLE	SIL	17	2	37	03	06	87	55	13	LOESS OVER LS			62+	A2	0	11	107	16										100	99	98	68	24	16	26	4		A-4	08	ML-CL
														B2	11	32	105	19										100	99	98	75	39	31	46	21		A-7-6	14	ML-CL
														B3N	32	40	109	17								100	99	99	95	92		34	26	37	14		A-6	10	ML-CL
														B28	40	62+	103	21			81	77	76	76	76	75	74	73	59	56	46	37	33	43	23		A-7-6	11	CL
CRIDER	SIL	17	3	37	09	33	87	59	37	LOESS OVER LS			60+	A2	1	8	105	17										100	99	97	70	25	16	28	4		A-4	08	ML-CL
														B21	12	31	104	20											100	98	77	39	32	51	25		A-7-6	16	CH
														B28	42	60	110	17								100	99	98	94	92	71	35	29	41	18		A-7-6	11	CL
CRIDER	SIL	17	4	37	05	45	87	51	25	LOESS OVER LS			42+	AP	0	7	105	16										100	99	98	71	26	19	28	6		A-4	08	ML-CL
														B21	7	20	109	18										100	99	98	77	38	29	41	18		A-7-6	11	CL
														B28	28	42+	110	17								100	99	98	96	94	71	38	30	41	19		A-7-6	12	CL
MUSKINGUM	SIL	17	7	37	05	45	87	51	23	SS			25+	A2	1	9	116	11				85	85	85	85	85	84	43	42	29	12	7	17	2		A-4	02	SM
														C	9	25+	119	10				58	57	56	55	55	54	54	31	31	22	8	5	15	1		A-2-4	00	GM
MUSKINGUM	SIL	17	8	37	13	37	87	51	44	SS SH			56+	A2	1	14	108	16				64	63	62	62	60	59	58	55	53	39	13	9	26	5		A-4	06	ML-CL
														C1	14	30	119	13				73	68	67	46	38	33	33	28	27	20	12	8	31	11		A-2-6	00	GC
														C2	30	56+	99	21								100	97	96	93	91	81	71	60	62	34		A-7-6	20	CH
PEMBROKE	SIL	17	9	36	59	42	87	47	43	LS			76+	A2	1	8	105	15										100	97	97	66	21	15	25	3		A-4	08	ML
														B21	10	24	102	21										100	99	98	77	44	39	52	27		A-7-6	17	CH
														C	54	76+	100	22								100	99	99	94	92	77	53	47	60	36		A-7-6	20	CH
PEMBROKE	SIL	17	10	37	05	45	87	51	23	LS			61+	A2	1	7	109	19										100	99	97	69	32	26	35	12		A-7-6	09	CL
														B2	7	40	104	19										100	99	98	76	42	35	50	25		A-7-6	16	CL
														C	46	61+	98	23							100	97	94	93	88	86	70	51	46	65	41		A-7-6	20	CH
RUSSELVILLE	SIL	17	11							LS			68+	A2	2	8	105	17										100	98	98	74	28	20	31	7		A-4	08	ML-CL
														B2	11	26	104	20										100	99	98	79	38	30	43	18		A-7-6	12	ML-CL
														B3M2	29	46	106	18										100	99	98	74	32	25	39	15		A-6	10	ML-CL
														B28	46	68+	97	24				64	61	60	59	57	56	56	55	54	46	34	29	64	41		A-7-6	16	CH
RUSSELVILLE	SIL	17	12	37	05	45	87	51	23	LS			60+	AP	0	6	104	17										100	97	95	68	23	17	30	6		A-4	08	ML-CL
														B2	6	25	107	18										100	98	97	75	38	30	42	19		A-7-6	12	CL
														B3M2	29	44	112	16									100	99	88	86	64	31	23	36	16		A-6	10	CL
														C8	44	60+	100	23			100	98	97	95	93	91	90	89	76	74	63	50	45	58	37		A-7-6	20	CH
TILSIT	SIL	17	13	37	05	45	87	51	23	LOESS OVER LS			54+	A2	4	9	105	18								100	99	98	94	93	70	28	20	31	8		A-4	08	ML-CL
														B22	14	21	105	18								100	98	97	96	95	74	38	29	42	18		A-7-6	12	ML-CL
														B3M2	25	40	104	19								100	99	99	97	96	76	36	30	45	21		A-7-6	13	CL
														C1G	40	54+	110	17								100	99	98	91	89	66	30	23	34	14		A-6	10	CL
TILSIT	SIL	17	14							LOESS OVER LS			58+	AP	0	8	105	17								100	97	96	93	92	66	23	16	29	6		A-4	08	ML-CL
														B2	8	16	108	17								100	98	97	95	94	72	31	23	35	11		A-6	08	ML-CL
														B3M2	20	30	102	19								100	99	99	98	98	76	39	32	46	23		A-7-6	14	CL
														C1G	30	58+	108	17										100	96	95	71	31	25	38	18		A-6	11	CL
ZANESVILLE	SIL	17	5	37	05	45	87	51	25	LOESS OVER SS			56+	A2	1	7	103	17										100	98	97	71	25	16	25	3		A-4	08	ML
														B21	11	19	105	19										100	99	97	78	41	33	42	18		A-7-6	12	ML-CL
														B3M2	29	35	108	17								100	99	99	95	93	70	28	23	36	13		A-6	09	ML-CL
														C	35	56+	111	16									100	99	89	87	65	30	25	35	16		A-6	10	CL
ZANESVILLE	SIL	17	6	37	13	35	87	51	44	LOESS OVER SS			80+	AP	0	9	107	17									100	99	95	93	67	21	16	28	5		A-4	08	ML-CL
														B21	9	22	108	18										100	98	98	75	37	29	40	17		A-6	11	CL
														B3M2	31	37	106	18										100	97	96	73	34	28	42	19		A-7-6	12	CL
														C	37	80+	115	15										100	86	84	61	27	22	31	12		A-6	09	CL

Soil Name: Series	Soil Name: Type	Location: County No.	Location: Site No.	Location: Latitude (Deg Min Sec)	Location: Longitude (Deg Min Sec)	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches): Top	Depth (Inches): Bottom	Compaction Data: Dry Unit Wt. (PCF)	Compaction Data: Opt MC	C-B-R Data: Unsoaked	C-B-R Data: Soaked	Gradation, Percent Finer Than: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	Classification: AASHO Class	GI	Classification: Unified
GRENADA	SIL	18	1	38 18 25	86 31 18	LOESS	2.5	SLOPING	72+	AP	0	7	102	17	42	8						100	98	93	91	68	34	14	12	24	2	2.64	A-4	8	ML
										B21	9	17	103	19	20	14						100	98	96	95	90	71	33	26	37	13	2.66	A-6	9	ML-CL
										BTX	26	47	101	20	22	8						100	99	98	96	86	58	28	22	33	10	2.72	A-4	8	ML-CL
										C	47	72	106	17	49	13						100	99	98	96	70	41	23	18	29	6	2.71	A-4	8	ML-CL
HENRY	SIL	18	2	38 15 59	86 31 29	LOESS	.5	SLOPING	72+	AP	0	8	102	14	40	9						100	99	97	95	88	61	16	11	NP		2.63	A-4	8	ML
										B1G	13	26	107	16	32	7						100	99	99	97	75	45	25	22	25	4	2.70	A-4	8	ML-CL
										B2TGX	26	48	104	18	14	5						100	100	99	98	92	76	40	27	29	10	2.67	A-4	8	CL
										CG	48	72	107	17	22	3						100	90	83	81	73	51	30	27	33	4	2.69	A-4	8	ML
HENRY	SIL	18	3	38 16 07	86 30 07	LOESS	0	LEVEL	72+	A2G	0	9	105	16	25	7						100	99	98	95	70	40	17	11	24	3	2.63	A-4	8	ML
										B1G	13	23	106	17	26	4						100	99	98	98	76	44	25	19	24	3	2.66	A-4	8	ML
										B21TGX	23	39	102	19	36	5						100	99	98	97	78	66	33	24	33	14	2.67	A-6	9	CL
										CXG	66	72	112	16	10	9						100	99	98	91	77	44	23	21	25	6	2.64	A-4	8	ML-CL
GUIN	GSIL	18	7	38 8 00	86 32 20	G PLNS WITH LES	15.0	SLOPING	72+	A2	1	12	109	16	99	43	93	87	80	68	60	56	51	46	42	39	27	8	4	NP		2.64	A-4	1	ML
										B	18	40	123	11	99	79	84	58	49	35	28	18	13	10	9	8	7	5	4	24	8	2.67	A-1-A	0	CL
										C	40	72	122	12	99	66	77	55	44	36	31	31	24	17	11	7	5	4	3	NP		2.69	A-1-A	0	ML
BRANDON	SIL	18	10	38 7 50	86 32 04	LES OVER G PLNS	18.0	SLOPING	48+	A2	3	9	105	17	33	13						100	97	96	94	71	45	21	17	25	4	2.61	A-4	8	ML-CL
										B21T	12	19	105	19	18	11						100	96	95	94	74	51	31	26	36	6	2.67	A-4	0	ML
										IIC2	32	48	113	15	99	45	93	81	72	59	52	42	34	32	31	29	24	15	13	29	10	2.67	A-2-5	0	ML-CL
GRENADA	SIL	18	11	38 16 51	86 36 56	LOESS	4.0	SLOPING	50+	AP	0	9	103	18	37	11						100	99	97	96	88	58	21	12	NP		2.65	A-4	8	ML
										B2T	11	24	104	20	17	13						100	96	94	93	90	72	32	26	32	10	2.67	A-4	8	ML-CL
										BTX	27	38	113	15	32	27						100	97	92	84	62	37	22	19	27	5	2.68	A-4	8	ML-CL
										CX	38	50	114	15	28	22						100	95	88	78	68	48	21	13			2.63			
GUIN	GSIL	18	12	38 7 44	86 32 02	LES OVER PLNS G	18.0	SLOPING	72+	A2	6	14	114	14	52	10	99	90	84	68	55	54	54	53	52	34	15	7	5	NP		2.64	A-4	3	ML
										B2	25	36	118	12	99	55	90	70	57	40	31	24	16	13	12	12	9	6	5	32	10	2.66	A-2-6	0	CL
										C	36	72	123	11			89	69	56	35	28	19	13	6	1	1	1	1	1	NP		2.67	A-3	8	ML
HENRY	SIL	18	13	38 19 24	86 31 05	LOESS ALLUVIUM	0	LEVEL	60+	A2G	1	7	100	18	43	16						100	98	95	81	71	41	19	12	23	2	2.61	A-4	7	ML
										BG	7	25	105	18	31	11						100	96	94	93	84	67	29	18	27	5	2.65	A-4	8	ML-CL
										BTGX	25	43	101	20	36	15						100	58	97	55	88	67	40	31	33	11	2.67	A-6	9	ML-CL
										CG	43	60	102	19	18	3						100	98	96	93	73	46	28	26	35	13	2.65	A-6	9	ML-CL
BRANDON	SIL	18	14	38 4 22	86 35 47	LES OVER CH LS	15.0	SLOPING	42+	A2	2	8	100	19	29	11						100	99	98	97	80	57	21	11	NP		2.66	A-4	8	ML
										B21T	8	17	103	19								100	99	99	98	72	50	31	26	37	5	2.68	A-4	8	ML
										IIC2	29	39	111	16	99	51	89	81	76	67	60	53	51	50	49	45	35	18	13	28	9	2.68	A-4	3	CL

Soil Name: Series	Type	County No.	Site No.	Latitude Deg	Latitude Min	Latitude Sec	Longitude Deg	Longitude Min	Longitude Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data: Dry Unit Wt. (PCF)	Compaction Data: Opt MC	CBR Data: Unsoaked	CBR Data: Soaked	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
MARKLAND	SIL	19	1	38	54	33	84	23	17	ALKALINE SLW C	4	SLOPING	660+	AP2	1	7	100	20	54	11						100	99	98	97	89	68	31	17	26	8	2.62	A-4	08	ML-CL
														B21T	10	18	94	26	7	4						100	99	99	96	94	88	52	37	35	14	2.68	A-6	10	CL
														B22T	18	27	89	29	5	2								100	98	98	95	81	63	59	32	2.75	A-7-6	20	CH
														C2	50	96	98	24	7	1									100	99	96	82	60	50	24	2.76	A-7-6	14	ML-CL
MARKLAND	SIL	19	2	38	53	01	84	22	30	ALKALINE SLW C	5	SLOPING	100+	B3T	21	36	88	32										100	99	98	93	82	74	65	28	2.77	A-7-5	19	MH
														C2	47	64	88	29	4									100	99	99	98	87	78	68	32	2.72	A-7-5	20	MH-CH
														IIC4	72	100	116	14	25	26						100	96	64	36	30	22	19	17	25	9	2.66	A-4	00	CL

				LOCATION									COMPACTION DATA				GRADATION																CLASSIFICATION		
SOIL NAME											DEPTH (INCHES)				CBR DATA		PERCENT FINER THAN																AASHO		UNIFIED
SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	TOP	BOTTOM	DRY UNIT WT. (PCF)	OPT MC	UNSOAKED	SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASS	GI	
BYINGTON	SIL	25	1	37 55 37	84 00 27	BL SH			29+	A2	4	11	102	20							100	99	95	94	93	92	78	42	25	33	8		A-4	08	ML-CL
										B2	14	21	106	18							100	99	95	94	93	91	77	43	27	30	7		A-4	08	ML-CL
										B3M	21	29	106	20						100	98	94	91	90	89	88	76	52	36	40	16		A-6	10	ML-CL
										C1		29+	105	19					100	96	89	77	71	70	68	67	56	42	32	44	17		A-7-6	10	ML-CL
BYINGTON	SIL	25	2			BL SH			30+	AP	0	5	99	22							100	99	95	94	91	87	71	39	25	38	11		A-6	08	ML
										B2	10	18	108	18								100	95	94	91	88	71	43	32	36	14		A-6	10	CL
										B3M	18	26	105	20							100	99	92	91	87	83	66	46	35	44	21		A-7-6	13	CL
										C1	26	30+	97	24								100	99	98	94	90	81	65	56	70	43		A-7-6	20	CH
EDEN	SICL	25	3	37 59 36	84 08 28	SOFT SH AND LS				B1	2	6	93	23			97	97	97	97	97	97	97	96	94	90	76	53	43	56	24		A-7-5	17	MH
										C1	6	28	93	27							100	98	98	98	97	96	88	74	66	78	46		A-7-5	20	CH
EDEN	SICL	25	4	37 56 22	84 09 52	SOFT SH AND LS				B2	2	10	95	23										100	99	98	89	70	59	66	36		A-7-5	20	CH
										C1		10+	97	24				90	89	88	87	86	86	85	85	84	79	65	56	72	43		A-7-6	20	CH
HAGERSTOWN	SIL	25	5	37 56 18	84 01 49	LS			50	AP	0	4	104	19							100	99	94	92	83	85	70	39	25	35	11		A-6	08	ML-CL
										B21-22	9	26	105	20							100	98	91	89	86	84	74	54	43	47	25		A-7-6	15	CL
										C1	48	50+	96	26							100	99	92	89	82	79	70	55	47	60	28		A-7-5	19	MH-CH
HAGERSTOWN	SIL	25	6	37 55 36	84 02 50	LS			50	AP	0	4	94	24							100	97	90	88	86	84	71	41	26	48	16		A-7-5	12	ML
										B21-22	10	24	107	20							100	94	85	84	82	81	68	45	34	46	20		A-7-6	13	ML-CL
										C1	40	50+	95	26				100	99	98	95	90	85	84	83	82	74	61	51	78	41		A-7-5	20	MH-CH
HAMPSHIRE	SIL	25	7	38 02 27	84 10 30	LS	3		60	AP	0	6	96	23								100	96	94	92	91	77	41	26	44	14		A-7-5	10	ML
										B3	19	36	103	22								100	96	94	91	90	78	55	43	50	25		A-7-6	16	CL
										C1	13	60+	94	26								100	99	98	95	94	88	75	65	74	42		A-7-5	20	CH
HAMPSHIRE	SIL	25	8	37 59 49	84 08 49	LS	4		60	AP	0	4	97	22							100	99	97	96	93	91	75	42	29	42	14		A-7-6	10	ML
										B3	10	24	96	25										100	99	98	86	66	56	66	38		A-7-6	20	CH
										C1	24	60+	101	21										100	99	98	86	68	55	61	32		A-7-6	20	MH-CH
LOWELL	SIL	25	9	37 57 19	84 03 30	SI STONE AND LS			33+	AP	0	10	132	20								100	97	96	94	90	74	42	28	38	12		A-6	09	ML-CL
										B3	21	33	100	23								100	98	97	95	93	82	58	48	57	28		A-7-6	19	MH-CH
										CG		33+	95	25								100	99	98	96	94	85	66	56	67	34		A-7-5	20	MH-CH
LOWELL	SIL	25	10	37 58 36	84 00 39	SI STONE AND LS			60+	A2	4	12	103	20								100	98	97	96	92	73	39	25	34	12		A-6	09	ML-CL
										B21822	17	32	109	18								100	95	93	91	85	67	41	29	37	12		A-6	09	ML-CL
										CG	32	60+	91	25										100	98	93	76	65	60	74	41		A-7-5	20	MH-CH
MERCER	SIL	25	11	38 01 47	84 16 33	LS			60+	AP	0	7	107	19								100	96	95	94	92	75	37	24	34	10		A-4	08	ML-CL
										B2	12	18	110	17								100	93	92	91	89	74	42	29	36	13		A-6	09	ML-CL
										B3M	18	39	107	19							100	97	86	85	84	83	72	46	34	41	17		A-7-6	11	ML-CL
										C1		39+	90	26								100	97	96	94	93	85	72	62	60	42		A-7-5	20	MH-CH
MERCER	SIL	25	12	38 01 07	84 15 00	LS				AP	0	6	100	21								100	96	94	92	91	76	41	26	38	11		A-6	08	ML
										B2	12	18	108	19								100	95	93	91	90	77	46	31	38	15		A-6	10	ML-CL
										B3M	18	40	106	19							100	99	92	90	87	87	77	50	37	41	18		A-7-6	11	CL
										C1	40	60+	97	25								100	99	98	95	94	87	70	59	68	38		A-7-5	20	CH
SALVISA	SICL	25	13	37 54 51	84 15 38	LS			30	B1	2	9	91	25					100	99	98	96	92	90	84	82	69	48	38	58	24		A-7-5	17	MH
										C1	9	26	94	25							100	99	95	93	87	85	74	59	52	60	31		A-7-6	20	MH-CH
SALVISA	SICL	25	14	37 55 35	84 17 06	LS C			21	A1	0	5	87	27								100	96	95	93	90	76	46	33	54	17		A-7-5	14	MH
										B1	5	13	89	28								100	97	96	94	93	78	52	43	57	21		A-7-5	16	MH
										C1	15	21	94	25							100	96	93	92	89	86	74	54	46	61	32		A-7-6	20	MH-CH
TRAPPIST	SIL	25	15	37 53 46	84 02 12	BLACK SH			34	AP	0	4	97	22							100	97	92	90	88	87	71	40	26	40	10		A-4	08	ML
										B2	8	16	104	20						100	99	97	94	93	92	91	81	52	38	44	17		A-7-6	12	ML-CL
										C1	22	34	104	20			100	98	95	90	83	71	69	68	67	66	60	40	28	44	16		A-7-6	09	ML-CL
TRAPPIST	SIL	25	16	37 55 48	84 00 18	BLACK SH			36	AP	0	5	99	21					100	98	94	90	79	76	72	69	58	34	22	43	12		A-7-5	09	ML
										B2	14	24	101	23							100	99	96	95	94	93	84	63	46	47	20		A-7-6	13	ML-CL
										DR	27	36	95	26		10	94	93	90	84	77	70	68	67	66	66	60	43	33	50	20		A-7-5	12	ML-CL

SERIES	TYPE	COUNTY NO.	NO.	LAT. DEG	MIN	SEC	LONG. DEG	MIN	SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
ASHTON	SIL	34	43	38	09	32	84	28	04		0-3	UNDULATING	37	A	0	6	88	28	12	5						100	96	93	86	81	60	20	5	37	3	2.62	A-4	08	CL
														B	6	22	96	23	23	5						100	99	98	96	92	75	19	9	38	13	2.67	A-6	09	CL
														C	22	37	94	25								100	92	89	82	77	59	20	11	36	6	2.70	A-4	08	CL
BURGIN	SICL	34	9	38	00	53	84	31	22		0-3	LEVEL	18+	A	0	18	99	23							100	94	89	88	83	80	66	22	11	35	13	2.67	A-6	09	CL
														B		18+	95	24						100	99	93	80	75	63	60	52	28	17	38	12	2.80	A-6	06	CL
BURGIN	SICL	34	35	38	00	53	84	31	22		0-3	LEVEL		A			95	26	16	8						100	93	91	85	83	67	21	8	47	20	2.67	A-7-6	13	CL
BURGIN	SICL	34	46	38	06	13	84	27	27		0-3	LEVEL	78+	A	0	27	88	27	16	4						100	98	97	95	91	75	29	13	47	17	2.63	A-7-6	12	CL
														B	27	54	101	21								100	90	86	77	74	60	26	14	45	21	2.78	A-7-6	13	CL
														C	54	78+	108	21	14	8						100	71	64	53	51	36	12	8	45	19	2.97	A-7-6	07	CL
BURGIN	SICL	34	47	38	06	05	84	37	38		0-3	LEVEL	60+	A	0	23	98	21	25	5						100	98	96	90	86	73	22	19	37	10	2.66	A-4	08	CL
														B	23	37	92	27								100	94	92	83	78	51	15	9	48	14	2.73	A-7-5	11	CL
														C	37	60+	98	24								100	84	76	67	62	46	20	12	47	20	2.73	A-7-6	11	CL
CAPTINA	SIL	34	32	37	51	25	84	23	57		0-3	LEVEL	68	A	0	18	87	24	11	5						100	99	98	93	90	75	43	25	43	17	2.75	A-7-6	11	CL
														B	18	68	94	24	16	7						100	99	98	96	93	81	48	28	53	27	2.74	A-7-6	17	CH
CULLEOKA	SIL	34	27	37	52	03	84	22	58		+25	MOUNTAINOUS	45	A	0	28	96	23	15	6						100	96	95	91	89	75	34	18	44	26	2.69	A-7-6	15	CL
														B	28	45	99	23	11	4						100	97	95	92	90	88	50	34	39	18	2.75	A-6	11	CL
CULLEOKA	SIL	34	29	37	51	54	84	22	34		8-15	ROLLING	14	A	0	2																							
														B	2	14	98	23	10	2						100	99	98	94	90	77	54	35	46	22	2.79	A-7-6	14	CL
DONERAIL	SIL	34	8	38	00	55	84	31	26		0-3	LEVEL	13+	A	0	13																		34	11		A-6	--	CL
														B		13+	106	18						100	99	96	93	91	85	81	68	26	13	30	8	2.73	A-4	08	CL
EDEN	SIC	34	3	37	59	38	84	27	47		8-15	ROLLING	62	A	0	22	103	20	16	9						100	98	96	95	94	82	40	23	37	14	2.73	A-6	10	CL
														B	22	38	98	25	12	3						100	97	96	90	88	76	48	30	46	20	2.76	A-7-6	13	CL
														C	38	62	99	25	8	2						100	99	99	95	92	82	57	39	59	27	2.81	A-7-5	19	CH
EDEN	SIC	34	31	37	52	05	84	23	51		8-15	ROLLING	19	A	0	7	89	29	7	4						100	99	98	97	94	83	56	36	57	24	2.72	A-7-5	17	CH
														B	7	13	93	26	4	5										100	90	64	45	57	29	2.75	A-7-6	19	MH-CH
														C	13	19	93	26	4	5										100	90	64	45	57	29	2.75	A-7-6	19	MH-CH
EDEN	SIC	34	36	37	58	20	84	28	22		8-15	ROLLING	34	A	0	8	88	28	9	5						100	94	91	83	78	61	29	17	54	21	2.66	A-7-5	15	CH
														B	8	26	93	27	7	2						100	99	98	95	93	82	56	36	55	26	2.75	A-7-6	17	CH
														C	26	34	100	20	21	3						100	99	98	96	95	89	61	40	48	24	2.68	A-7-6	15	CL
ELK	SIL	34	28	37	51	37	84	22	06		0-3	LEVEL	107+	A	0	9	110	16	40	6						100	99	99	76	52	34	19	10	24	2	2.67	A-4	08	CL
														B	9	107+	110	16	27	10								100	72	62	44	28	18	25	6	2.69	A-4	07	CL
ELK	SIL	34	33	37	51	23	84	23	50		0-3	LEVEL	174+	A	0	22	109	14	25	29							100	86	24	19	13	7	4	NL	NP	2.68	A-2-4	00	SM
														B	22	152	111	15	14	10							100	97	46	38	26	15	10	NL	NP	2.68	A-4	02	SM
														C	152	174+	109	16	8	13							100	95	42	34	22	10	6	NL	NP	2.67	A-4	02	
ELK	SIL	34	40	37	51	17	84	22	30		0-3	LEVEL	122+	A	0	42	102	16	11	13						100	98	76	13	11	9	4	2	NL	NP	2.68	A-2-4	00	SM
														B	42	78	109	17	70	12						100	99	92	41	34	26	14	8	NL	NP	2.68	A-4	02	SM
														C	78	122+	106	17	53	11							100	92	51	47	32	20	10	NL	NP	2.67	A-4	03	SM
HAGERSTOWN	SIL	34	20	38	04	52	84	20	02		0-3	UNDULATING	121+	A	0	29	101	21	23	8						100	96	95	93	92	84	34	15	33	12	2.68	A-6	09	CL
														B	29	101	103	21	13	10						100	92	89	87	86	73	32	20	38	17	2.74	A-6	11	CL
														C	101	121+	105	22								100	76	73	68	64	54	32	22	37	13	2.87	A-6	08	CL

Soil Name Series	Type	County No.	Site No.	Latitude (D M S)	Longitude (D M S)	Parent Material	Slope	Topography	Depth to Bed-Rock (IN)	Hori-zon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data Dry Unit Wt. (PCF)	Compaction Data Opt MC	CBR Data Unsoaked	CBR Data Soaked	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
HAGERSTOWN	SIL	34	24	38 11 53	84 23 47		0-3	UNDULATING	84	A	0	13										100	93	90	86	85	69	29	15	36	11	2.63	A-6	08	CL
										B	13	55	100	23	8	6						100	93	91	86	83	64	26	14	41	20	2.74	A-7-6	12	CL
										C	55	84	89	30	7	3						100	94	91	80	76	68	47	30	53	28	2.89	A-7-6	18	OH
HAGERSTOWN	SIL	34	26	37 59 13	84 31 30		0-3	UNDULATING	109+	A	0	20	101	22	14	7						100	95	93	90	88	76	37	22	37	13	2.72	A-6	09	CL
										B	20	44	99	24	11	10						100	91	88	84	82	70	45	31	43	17	2.77	A-7-6	12	CL
										C1	44	80	91	27	13	3						100	96	93	86	84	75	55	41	52	21	2.80	A-7-6	16	CH
										C2	80	109+	97	25	15	2						100	99	97	92	89	79	56	39	48	22	2.81	A-7-6	14	CL
HAMPSHIRE	SIL	34	1	38 01 51	84 17 57		0-3	UNDULATING	80+	A	0	22	103	19	48	4					100	99	87	84	81	79	68	36	19	35	9	2.68	A-4	08	CL
										B	22	48	109	18	22	14					100	97	83	80	75	72	64	38	24	35	17	2.75	A-6	11	CL
										C	48	80+	103	23	12	8														40	18	2.70	A-6	11	CL
HAMPSHIRE	SIL	34	15	38 00 35	84 23 20		0-3	UNDULATING	99	A	0	18	88	23	9	9						100	92	89	83	81	66	21	8	39	9	2.54	A-4	08	CL
										B	18	65	104	21	11	12						100	90	89	87	83	69	34	21	38	13	2.75	A-6	09	CL
										C	65	99	104	21	20	16						100	81	76	69	66	56	32	22	35	10	2.87	A-6	08	CL
HUNTINGTON	SIL	34	44	38 09 35	84 28 05		0-3	LEVEL	30+	A	0	9	98	22	27	4						100	99	99	94	90	71	32	15	36	10	2.68	A-4	08	CL
										C	9	30+	103	20									100	99	97	95	77	36	20	37	15	2.72	A-6	10	CL
HUNTINGTON	SIL	34	45	38 07 47	84 25 51		0-3	LEVEL	63	A	0	16	90	27	13	5						100	99	98	91	87	60	25	13	35	10	2.67	A-4	08	CL
										C1	16	50	103	22								100	90	71	49	47	40	16	10	47	16	2.79	A-7-5	06	CL
										C2	50	63	103	24								100	64	53	45	44	37	20	14	40	13	2.78	A-7-6	03	CL
LORADALE	SIL	34	2	38 01 45	84 20 49		0-3	UNDULATING	72+	A	0	22	98	20	38	3						100	95	94	93	92	81	36	15	37	11	2.64	A-6	09	CL
										B	22	46	104	22	8	5						100	96	93	84	83	78	44	28	42	23	2.75	A-7-6	14	CL
										C	46	72+	84	30	11	6					100	99	95	93	88	86	77	57	43	59	29	2.82	A-7-6	20	MH-CH
LORADALE	SIL	34	10	38 00 13	84 31 34		0-3	UNDULATING	41	A	0	18	107	20						100	97	85	74	72	70	70	56	24	15	37	16	2.71	A-6	10	CL
										B	18	41																							
LORADALE	SIL	34	18	38 00 29	84 18 56		0-3	UNDULATING	80	A	0	22	101	21	22	9						100	94	92	90	87	68	23	11	34	11	2.71	A-6	18	CL
										B	22	71	93	26								100	96	93	82	78	69	51	39	37	16	2.91	A-7-5	09	CL
										C	71	80	86	33								100	94	87	64	60	53	38	27	52	21	2.82	A-7-5	15	CH
LORADALE	SIL	34	21	38 02 55	84 21 13		0-3	UNDULATING	75	A	0	18	104	20	12	8						100	94	92	90	87	67	26	12	32	11	2.70	A-6	08	CL
										B	18	52	100	25	6	5						100	90	87	83	80	65	34	20	38	17	2.76	A-6	11	CL
										C	52	75	90	30	7	6						100	91	87	79	77	70	56	42	54	19	2.75	A-7-5	14	CH
LORADALE	SIL	34	25	38 07 54	84 29 05		0-3	UNDULATING	88	A	0	23	97	24	18	6						100	96	94	90	88	74	28	12	42	14	2.66	A-7-6	10	CL
										B	23	60	103	22	13	10						100	86	82	76	74	60	29	16	38	16	2.75	A-7	10	CL
										C	60	88	90	29								100	97	94	81	78	70	52	40	57	30	2.88	A-7-6	19	MH-CH
LORADALE	SIL	34	34	37 54 17	84 25 32		0-3	UNDULATING	56+	A	0	32	98	22	37	10						100	93	91	91	96	75	29	13	33	13	2.67	A-6	09	CL
										B	32	56+	105	20	23	20						100	85	82	79	76	64	32	17	30	10	2.73	A-4	08	CL
MAURY	SICL	34	16	38 01 03	84 35 45		8-15	ROLLING	53	B	0	42	93	24	28	5						100	89	67	83	80	64	23	13	37	11	2.67	A-6	08	CL
										C	42	53	95	26								100	89	86	79	76	64	36	23	42	19	2.77	A-7-6	12	CL
MAURY	SICL	34	17	37 56 16	84 20 56		0-3	UNDULATING	72	A	0	18	98	24	29	19						100	94	91	85	82	66	27	14	39	13	2.70	A-6	09	CL
										B	18	58	98	25	7	7						100	92	87	70	68	57	28	17	38	15	2.80	A-6	09	CL
										C	68	72																							
MAURY	SIL	34	4	38 06 09	84 34 18					A													100	98	95	94	80	34	20	38	9	2.68	A-4	08	CL
										B1			100	22								100	98	96	92	90	84	44	29	42	17	2.76	A-7-6	11	CL
										B2			95	27								100	97	94	89	87	81	51	39	51	21	2.84	A-7-6	14	CH
										C										100	95	93	86	84	78	75	65	40	27	47	20	2.80	A-7-6	13	CL
MAURY	SIL	34	5	38 07 06	84 26 41					A																				40	15		A-7-6	--	CL

Soil Name Series	Type	County No.	Site No.	Latitude Deg	Latitude Min	Latitude Sec	Longitude Deg	Longitude Min	Longitude Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data Dry Unit Wt. (PCF)	Compaction Data Opt MC	CBR Data Unsoaked	CBR Data Soaked	Percent Finer Than 1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
MAURY	SIL	34	6	37	58	38	84	20	28					A													100	98	95	94	82	37	21	36	15	2.69	A-6	10	CL
														B1			103	21																44	23	2.76	A-7-6	--	CL
														B2			98	24																49	26		A-7-6	--	ML-CL
														C			102	36																67	38		A-7-6	--	MH
MAURY	SIL	34	7	38	00	07	84	34	16					A																				32	9		A-4	--	CL
														B1			103	21																44	19		A-7-6	--	CL
														B2			98	25																52	20		A-7-5	--	CH
														C			90	30																52	18		A-7-5	--	CH
MAURY	SIL	34	11	38	07	11	84	26	12					A																				37	13		A-6	--	CL
														B1			99	23																38	16	2.74	A-6	--	CL
														B2			91	29																47	20		A-7-6	--	CL
														C			94	25																47	20	2.76	A-7-6	--	CL
MAURY	SIL	34	12	38	00	54	84	32	14		0-3	UNDULATING	108+	A	0	16	101	21	23	9						100	94	92	91	89	70	29	16	37	14	2.72	A-6	10	CL
														B1	16	48	103	21	13	11						100	90	88	86	84	73	35	19	36	15	2.74	A-6	10	CL
														B2	48	70	97	24	15	8						100	91	88	83	79	60	40	29	46	17	2.79	A-7-6	12	CL
														C	70	108+	92	25	14	3						100	98	96	89	87	79	58	47	63	32	2.82	A-7-5	20	MH-CH
MAURY	SIL	34	13	38	00	50	84	32	05		8-15	ROLLING	125+	A	0	10	102	21	16	9						100	94	93	90	87	70	29	16	33	11	2.74	A-6	08	CL
														B1	10	75	104	21	16	11						100	91	89	87	85	73	36	23	41	17	2.73	A-7-6	11	CL
														B2	75	125+	89	32	8	6						100	93	91	86	83	76	58	48	59	21	2.84	A-7-5	16	CH
MAURY	SIL	34	14	38	00	13	84	37	01		0-3	UNDULATING	117+	A	0	48	92	25	32	5						100	99	99	97	96	86	42	17	38	12	2.72	A-6	09	CL
														B1	48	102	103	22	12	11						100	95	93	91	88	74	39	23	39	19	2.74	A-6	11	CL
														B2	102	117+																							
MERCER	SICL	34	19	38	04	48	84	19	50		0-3	LEVEL	38	A	0	23	99	24	18	7						100	84	82	80	77	64	26	10	40	11	2.68	A-6	09	CL
														B	23	38	101	23	28	6						100	93	90	83	80	69	42	27	41	17	2.79	A-7-6	11	CL
MERCER	SICL	34	23	38	11	42	84	22	11		0-3	LEVEL	80+	A	0	4										100	96	95	93	91	76	31	15	42	14	2.62	A-7-6	10	CL
														B	4	32	102	20								100	94	92	89	87	72	32	18	39	18	2.77	A-6	11	CL
														C	32	80+	95	25	12	2						100	94	92	89	87	77	54	39	51	29	2.80	A-7-6	18	MH-CH
NICHOLSON	LOAM	34	30	37	52	13	84	22	36		0-3	ROLLING	47	A	0	8										100	97	95	90	85	64	25	14	25	3	2.64	A-4	08	CL
														B	8	31	106	19	16	14						100	97	95	91	86	66	34	26	31	12	2.71	A-6	09	CL
														C	31	47	94	26	13	7						100	94	92	83	75	57	36	25	39	13	2.73	A-6	09	CL
NICHOLSON	LOAM	34	39	37	52	02	84	23	48		+25	MOUNTAINOU	25	A	0	10	92	26	13	6						100	99	98	96	92	76	46	28	46	18	2.79	A-7-6	13	CL
														B	10	25	94	25	14	2						100	99	99	97	96	84	59	38	52	24	2.72	A-7-6	16	CH
NICHOLSON	LOAM	34	41	37	51	41	84	22	32		8-15	ROLLING	13	A	0	4										100	96	92	87	82	60	25	13	30	8	2.65	A-4	08	CL
														B	4	13	101	22	15	8						100	94	92	87	83	64	33	18	33	11	2.71	A-6	09	CL
NICHOLSON	LOAM	34	42	37	51	52	84	22	34		0-3	ROLLING	61	A	0	14	98	22	25	8						100	95	93	90	86	65	23	13	36	11	2.68	A-6	08	CL
														B1	14	29	101	21	14	10						100	97	95	92	87	71	41	25	36	15	2.74	A-6	10	CL
														B2	29	50	100	23	10	9						100	97	94	88	83	67	40	27	42	18	2.75	A-7-6	11	CL
														C	50	61										100	94	91	85	81	69	40	29	38	16	2.79	A-6	10	CL
SALVISA	SICL	34	22	37	52	47	84	26	00		8-15	ROLLING	31	A	0	8										100	90	87	83	80	60	19	9	29	7	2.64	A-4	08	CL
														B	8	24	97	23	5	9						100	92	90	85	82	65	29	17	39	14	2.69	A-6	10	CL
														C	24	31	85	29	6	3						100	95	93	86	82	69	44	29	62	33	2.77	A-7-6	20	MH-CH
SALVISA	SICL	34	37	37	53	28	84	26	08		8-15	ROLLING	55	A	0	6										100	90	87	81	77	55	18	8	35	10	2.63	A-6	08	CL
														B	6	23	96	24	16	7						100	96	94	92	90	75	30	14	43	15	2.66	A-7-6	11	CL
														C	23	55	101	22	11	8						100	97	95	88	84	69	27	14	41	18	2.71	A-7-6	11	CL
SALVISA	SICL	34	38	37	53	23	84	25	25		8-15	ROLLING	73	A	0	30	101	22	11	7						100	91	88	86	83	69	30	15	35	8	2.68	A-4	08	CL
														B	30	47	103	21	11	14						100	95	93	91	88	73	31	16	31	11	2.70	A-6	08	CL
														C	47	73	98	24	14	5						100	95	93	89	87	75	43	28	37	18	2.72	A-6	11	CL

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
BEULAH	SL	38	2	36	32	56	89	16	32				42+	C1	18	42										100	98	89	33	18	10	9	7						
														C2		42+										100	93	65	4	3	2	1	1						
BEULAH	FSL	38	3	36	34	17	89	19	42				57	A1P	0	9	104	16	13	11						100	99	92	69	45	14	7	5	NP	NP	2.66	A-4	06	ML
														C2	44	57	102	19	14	8							100	98	89	81	39	15	13	30	2	2.66	A-4	08	ML
BEULAH	FSL	38	4	36	31	41	89	16	45				60+	AP	0	6	115	12	13	13						100	99	76	35	22	19	9	7	NP	NP	2.65	A-2	00	SM
														BC	11	16	120	12	23	19						100	99	82	38	27	20	15	14	NP	NP	2.65	A-4	01	SM
														C3	28	60+	100	18	7	10						100	99	84	7	4	3	1	1	NP	NP	2.67	A-3	00	SW-SM
CALLOWAY	SIL	38	9	36	32	33	89	03	51				58+	AP	0	8	102	18	24	8						100	99	99	98	89	70	20	13	NP	NP	2.63	A-4	08	ML
														B22G	15	29	101	22	11	7						100	99	99	98	92	69	33	26	39	23	2.67	A-6	10	ML-CL
														B3M	29	46	108	17	45	4							100	99	99	95	70	29	24	37	14	2.70	A-6	10	ML-CL
														C	46	58+	107	17	51	7							100	99	99	95	68	27	21	34	11	2.67	A-6	08	ML-CL
CALLOWAY	SIL	38	10	36	31	01	88	59	22				64	AP	0	9	105	17	28	14						100	97	97	96	85	59	17	12	24	NP	2.65	A-4	08	ML
														B2	9	15	106	17	33	17						100	97	97	96	89	61	23	18	29	23	2.69	A-4	08	ML-CL
														B3M2	21	29	102	20	26	6						100	98	98	97	92	69	34	27	35	13	2.69	A-6	09	CL
														C	46	64	103	19	24	6						100	99	99	98	88	59	22	18	33	9	2.70	A-4	08	ML-CL
DUNDEE	SICL	38	7	36	30	15	89	15	37				59	A1P	0	6	94	25	13	5						100	99	99	96	95	89	57	36	44	16	2.65	A-7-6	11	ML-CL
														B21	12	25	94	22	24	3						100	99	99	94	87	80	64	50	51	28	2.74	A-7-6	15	MH-CH
														D1	42	59	114	14	9	9						100	99	82	29	17	12	9	8	NP	NP	2.67	A-2	00	SM
DUNDEE	SICL	38	8	36	32	49	89	20	43				72+	AP	0	6	94	24	13	6							100	100	99	93	81	51	35	49	18	2.67	A-7-5	13	ML
														B2	6	19	91	26	10	5						100	99	99	96	95	86	60	46	56	22	2.70	A-7-5	16	MH
														D	45	60+	112	15	11	9							100	99	51	37	22	15	11	NP	NP	2.68	A-4	03	ML
FREELAND	SIL	38	1										19+	B	8	19											100	99	89	64	40	28	26						
PATTON	SIL	38	5	36	32	02	89	07	32				70+	AP	0	7	101	19	24	5						100	99	99	99	85	60	22	16	32	NP	2.66	A-4	08	ML
														A13	13	35	100	22	6	6						100	99	99	98	78	59	42	32	44	23	2.70	A-7-6	14	CL
														CG2	53	70+	103	19	16	6						100	99	99	98	91	58	29	21	33	10	2.72	A-4	08	MC-CL
PATTON	SIL	38	6	36	30	11	89	01	02				63	A1P	0	8	106	18	32	9						100	98	98	97	88	60	22	18	30	5	2.65	A-4	08	ML
														A13	17	23	106	18	11	4						100	98	98	98	95	70	28	22	31	8	2.61	A-4	08	ML-CL
														BG	23	37	102	20	10	7						100	99	99	99	93	70	36	29	45	23	2.72	A-7-6	14	CL
														CG2	50	53	105	18	22	7						100	98	98	97	93	64	25	18	36	11	2.71	A-6	08	ML-CL
SHARKEY	SIC	38	11	36	32	25	89	14	52				30	A1P	0	5	97	24	11	6						100	100	99	98	97	88	52	36	44	18	2.63	A-7-6	12	ML-CL
														CG1	11	30	99	22	9	6						100	99	99	98	87	68	50	40	41	25	2.74	A-7-6	10	ML-CL
SHARKEY	SIC	38	12	36	31	43	89	15	31				49	A1P1	0	4	97	22	14	7						100	99	99	98	95	88	58	36	37	12	2.69	A-6	09	ML-CL
														CG3	31	49	93	23	12	3						100	99	98	97	96	88	64	48	61	34	2.55	A-7-6	20	CH

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	C B R DATA UNSOAKED	C B R DATA SOAKED	GRADATION PERCENT FINER THAN 1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION AASHO CLASS	GI	UNIFIED
CULLEOKA	SIL	41	1	38	46	03	84	36	17				24	B1	6	13									100	98	97	95	94	69	37	29						
														B2	17	24									100	99	98	96	94	88	54	44						

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LAT. DEG	LAT. MIN	LAT. SEC	LONG. DEG	LONG. MIN	LONG. SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
GRENADA	SIL	42	1	36	41	52	88	37	57		0-4		131	A	0	23	104	17	40	16
														B	23	95	107	17	21	5
														C	95	131+	110	16	12	5

HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
A						100	98	96	95	89	53	14	8	26	5	2.65	A-4	08	CL
B						100	99	98	95	90	50	16	10	28	10	2.66	A-6	08	CL
C			100	97	95	94	85	75	62	57	39	14	8	30	13	2.71	A-6	06	CL

SOIL NAME: SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	COMPACTION DATA: OPT MC	CBR DATA: UNSOAKED	CBR DATA: SOAKED	PERCENT FINER THAN: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION: AASHO CLASS	GI	UNIFIED
CANNEYVILLE	SIL	43	15	37	31	42	86	19	54	MIXED LS SS	16	UNIFORM	24	B22T	9	18	81	26	20	2					100	99	98	97	97	96	90	74	67	70	35	2.81	A-7-5	20	MH-CH
														C	18	24	84	25	12	2						100	99	99	97	96	91	74	63	72	32	2.75	A-7-5	20	MH
CANNEYVILLE	SIL	43	21	37	26	40	86	04	25	MIXED LS SS	15	SLOPE	30	B22	9	16	84	24	16	1							100	99	99	99	96	86	77	67	34	2.73	A-7-5	20	MH-CH
														C	21	30	87	31	1	1								100	98	97	93	83	72	73	36	2.74	A-7-5	20	MH
ENDERS	L	43	4	37	25	00	86	28	53	ACID SH	15	SLY CONVEX	69+	A2	1	6	109	16	47	27	100	99	97	91	85	84	81	80	51	50	37	19	13	23	1	2.66	A-4	03	ML
														B2T	9	19	91	24	16	2					100	98	96	96	90	89	84	70	56	50	19	2.75	A-7-5	14	ML
														C2	31	42	107	20	6	2				100	97	95	84	82	81	80	72	43	32	40	13	2.72	A-6	09	ML-CL
ENDERS	SIL	43	11	37	23	47	86	28	53	AC C SH	24	SLOPING	55+	B21T	9	18	96	26	11	6			100	99	98	94	85	84	81	80	74	50	38	52	23	2.80	A-7-6	15	MH-CH
														C	41	49	101	23	22	4	96	96	95	93	92	90	85	84	81	78	71	48	42	51	23	2.78	A-7-6	15	MH-CH
TILSIT	SIL	43	8	37	24	51	86	28	41	LOE OV SS SH RES	2	LOW RD	84+	B22	13	23	106	18	16	16					100	99	97	96	95	95	76	39	31	33	11	2.66	A-6	08	ML-CL
														IIBX2TB42		54	110	18	23	7	99	98	96	92	90	86	82	82	76	75	62	35	26	33	15	2.75	A-6	08	CL
														III3TB	54	70	93	24	5	3			100	98	97	96	94	94	91	88	79	59	50	47	20	2.78	A-7-6	14	ML-CL
TILSIT	SIL	43	13	37	23	43	86	28	50	LOE OV SS SH RES	2	WDE RD TOP	94+	B2T	13	20	106	18	38	18						100	99	98	93	88	68	33	23	29	6	2.73	A-4	08	ML-CL
														BX1T	24	38	109	18	15	10						100	99	99	91	84	61	31	23	27	7	2.70	A-4	08	ML-CL
														IIC1	62	76	106	18	12	4								100	90	77	58	38	32	35	19	2.69	A-6	11	CL
WELLSTON	SIL	43	5	37	24	58	86	28	47	MIXED SH SIST	24	SLY CONVEX	112+	A2	1	8	100	22	41	6	100	99	99	97	96	93	88	87	75	66	45	16	8	NP	NP	2.62	A-4	08	ML
														B22T	18	28	105	20	15	7			100	99	99	98	98	98	88	83	72	41	30	35	18	2.72	A-6	11	CL
														B31	42	73	102	22	15	14						100	99	98	96	94	77	36	28	34	12	2.73	A-6	09	ML-CL
WELLSTON	SIL	43	6	37	24	55	86	28	43	LOE MTL OV AC SH	6	SLY CONVEX	58+	B21T	3	14	101	22	18	11						100	99	99	97	97	81	43	37	37	14	2.73	A-6	10	CL
														II21B	30	38	94	25	36	2			100	99	98	96	95	94	91	91	86	69	57	56	27	2.78	A-7-6	18	MH-CH
														IIC	48	58	98	23	7	2		100	98	94	92	91	87	86	84	84	82	63	46	57	28	2.77	A-7-6	18	MH-CH
ZANESVILLE	SIL	43	7	37	24	53	86	28	46	LOE OV AC C SH	7	SLY CONVEX	83+	B22T	12	23	100	22	12	10					100	98	97	96	94	94	78	42	33	37	12	2.70	A-6	09	ML-CL
														IIBX2	32	38	105	20	25	9			100	98	97	92	88	88	81	76	63	37	27	36	15	2.72	A-6	10	CL
														IIC1	58	71	106	20	5	2					100	99	98	98	96	93	84	63	49	48	22	2.79	A-7-6	14	ML-CL
ZANESVILLE	SIL	43	9	37	23	44	86	28	55	LOE OV SS SH RES	2	BRO RD TOP	50+	B21T	11	18	104	20	23	12						100	98	97	96	96	78	35	29	32	11	2.74	A-6	08	CL
														IIBX2T	36	48	114	15	43	13	100	99	97	93	91	85	83	82	76	71	54	31	21	28	12	2.71	A-6	09	CL

Soil Name Series	Type	County No.	Site No.	Location Latitude	Location Longitude	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data Dry Unit Wt. (PCF)	Compaction Data Opt MC	CBR Data Unsoaked	CBR Data Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
HENSHAW	SIL	51	3	37 48 43	87 42 08			LEVEL	50+	A1	0	9										100	98	97	96	96	48	18	9						
										A2	9	13										100	98	98	97	97	56	28	18						
										B1	13	21										100	99	99	98	98	64	38	30						
										B2	21	34										100	99	99	99	98	62	41	33						
										B3	34	38										100	99	99	99	98	46	21	15						
										C	38	50+										100	99	99	99	98	44	21	15						
HENSHAW	SIL	51	4				1	LEVEL	48+	A1	0	10										100	99	99	98	98	44	18	8						
										A2	10	18										100	98	98	96	96	48	20	11						
										B1	18	22										100	99	99	98	97	80	41	26						
										B2	22	34										100	99	98	98	97	80	45	31						
										B3	34	40										100	99	99	99	98	61	37	28						
										C	40	48+										100	99	98	98	97	79	35	20						
MCGARY	SIL	51	7	37 40 34	87 27 30			LEVEL	61+	A	0	8										100	99	98	98	97	81	53	44						
										B1	8	13										100	98	98	97	96	78	45	36						
										B2	13	26										100	99	99	98	98	85	60	54						
										C	26	61+										100	99	98	98	97	81	54	44						
MCGARY	SIL	51	8				1	LEVEL	60+	A	0	7										100	94	92	91	90	55	24	17						
										B1	7	14										100	98	97	96	95	65	40	33						
										B2	14	26										100	99	99	98	98	78	54	47						
										C	26	60										100	99	98	98	98	77	52	45						
UNIONTOWN	SIL	51	5				1	LEVEL	48+	A	0	8										100	99	99	99	98	76	31	14						
										B1	8	12										100	99	99	99	99	50	34	31						
										B2	12	21											100	99	99	98	63	40	33						
										B3	21	25											100	99	99	98	55	34	26						
										C	25	48+										100	98	98	98	98	89	33	18						
UNIONTOWN	SIL	51	6	37 47 43	87 22 58			LEVEL	74+	A	0	9										100	99	98	98	98	50	21	12						
										B1	9	14										100	99	99	98	98	60	29	19						
										B2	14	18										100	99	99	99	98	67	40	31						
										B3	18	25										100	99	99	99	98	67	42	35						
										B4	25	35										100	99	99	99	98	62	36	27						
										C	35	74+										100	99	99	98	97	48	20	11						
UNIONTOWN	SIL	51	10							B2	15	25											100	99	99	98	70	44	35						
WHEELING	FSL	51	1					LEVEL	48+	A	0	10										100	98	92	61	54	36	18	11						
										B1	10	15										100	96	87	55	50	36	22	14						
										B2	15	25										100	95	82	47	42	32	20	16						
										C	25	48+										100	98	87	26	20	15	12	7						
WHEELING	FSL	51	2	37 51 40	87 47 03			LEVEL	48+	A1	0	7										100	92	72	58	54	42	23	15						
										A2	7	11										100	92	72	58	55	44	26	16						
										B1	11	16										100	92	71	54	50	39	24	18						
										B2	16	34										100	92	72	54	50	42	30	22						
										C	34	48+										100	84	34	11	11	10	9	7						
WHEELING	SIL	51	9						52	C	27	52											100	99	88	62	24	8	6						

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
BEASLEY	SIL	56	1	38 11 17	85 25 27	SHMR,LS			60	AP	0	7	108	16		
										B22	13	18	102	23		
										C	36	60	100	24		
BEASLEY	SIL	56	2	38 13 37	85 28 40	SH,LS			37	AP	0	7	106	18		
										B21	15	21	97	25		
										B3	26	32	100	22		
										C	32	37	110	18		
LAKIN	LFS	56	3	38 06 25	85 51 57				78+	AP	0	7	120	10		
										C11	16	41	110	14		
										C4		78+	115	12		
LAKIN	LFS	56	4	38 02 56	85 51 51				84+	AP	0	9	111	13		
										B1	9	29	114	13		
										C1	43	66	107	19		
										C2	66	84+	113	13		
MCGARY	SIL	56	5	38 07 49	85 47 56				50+	AP	0	10	105	20		
										B22G	13	27	107	19		
										C	38	50+	107	20		
MCGARY	SIL	56	6	38 07 41	85 45 19				48+	AP	0	9	103	18		
										B22G	15	24	106	20		
										C	37	48+	106	21		
WHEELING	SIL	56	7	38 11 13	85 51 28	ALLUVIUM			72	AP	0	8	109	16		
										B22	16	23	114	16		
										C	54	72	115	13		
WHEELING	FSL	56	8			ALLUVIUM			67	AP	0	7	117	12		
										B22	18	26	118	13		
										C	53	67	117	14		

SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
BEASLEY	AP							100	99	98	98	76	31	24	31	8		A-4	08	ML-CL
	B22						100	99	98	97	96	82	55	45	53	27		A-7-6	17	CH
	C		93	91	88	83	78	74	73	70	69	62	52	45	63	32		A-7-5	19	MH-CH
BEASLEY	AP						100	99	98	96	94	72	34	24	34	11		A-6	08	ML-CL
	B21						100	99	99	97	97	88	68	61	71	42		A-7-6	20	CH
	B3								100	98	97	85	66	59	66	39		A-7-6	20	CH
	C						100	99	98	90	82	54	33	29	35	14		A-7	10	CL
LAKIN	AP						100	97	68	33	30	19	10	6	NP	NP		A-2-4	00	SM
	C11						100	98	75	18	15	9	6	6	NP	NP		A-2-4	00	SM
	C4						100	99	87	29	21	15	11	9	NP	NP		A-2-4	00	SM
LAKIN	AP								100	49	36	21	11	9	NP	NP		A-4	03	SM
	B1								100	67	56	34	16	10	20	3		A-4	06	ML
	C1							100	99	96	93	66	33	27	38	17		A-6	11	CL
	C2							100	98	38	27	20	13	10	NP	NP		A-4	01	SM
MCGARY	AP						100	98	97	95	93	73	43	29	38	14		A-6	10	ML-CL
	B22G								100	99	97	85	62	47	50	25		A-7-6	16	CL
	C							100	99	98	98	85	63	50	51	28		A-7-6	17	CH
MCGARY	AP			100	99	99	99	96	95	92	90	67	30	19	32	8		A-4	08	ML-CL
	B22G								100	99	97	77	46	34	42	19		A-7-6	12	CL
	C									100	98	87	56	42	45	22		A-7-6	14	CL
WHEELING	AP						100	99	96	77	71	52	27	17	28	6		A-4	08	ML-CL
	B22							100	99	83	76	59	36	28	34	14		A-6	10	CL
	C							100	96	32	25	17	11	8	NP	NP		A-2-4	00	SM
WHEELING	AP							100	98	51	44	31	17	11	19	2		A-4	03	ML
	B22							100	98	51	44	32	20	15	22	4		A-4	03	ML-CL
	C							100	99	47	39	29	18	14	23	4		A-4	02	SM-SC

SOIL NAME SERIES	SOIL NAME TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	C B R DATA UNSOAKED	C B R DATA SOAKED
EDEN	SIL	59	1	38	56	48	84	31	49	CAL SH,LS,SI	18	UPLAND	44+	AP2	2	7	95	24	11	4
														BT	7	12	92	26	7	3
														C1	12	30	92	24	9	2
EDEN	SICL	59	2	38	49	05	84	27	12	CAL SH,LS,SI	18	SLOPING	15+	BT	4	15	92	28	6	2
														C		15+	95	26		

SOIL NAME SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
EDEN	AP2						100	97	96	91	86	66	40	32	36	13	2.63	A-6	09	ML-CL
	BT						100	99	97	95	93	72	58	47	40	10	2.75	A-5	08	ML
	C1						100	99	99	97	95	90	70	54	49	23	2.80	A-7-6	15	ML-CL
EDEN	BT							100	99	99	98	93	73	58	51	22	2.76	A-7-6	15	MH-CH
	C						100	98	97	95	94	88	64	46	49	25	2.77	A-7-6	16	CL

SOIL NAME SERIES	TYPE	COUNTY NO.	S NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
JEFFERSON	SL	63	1	37 08 19	84 13 07	SS COLLUVIUM	34	SSL LO TH	51+	A3	6	11	117	12	56	46		100	99	99	98	96	84	54	28	26	22	11	5	NP	NP	2.61	A-2-4	00	SM
										B22T	26	31	117	13	23	16			100	99	98	98	81	55	33	32	29	21	16	20	4	2.64	A-2-4	00	SM-SC
										C	40	51	126	10	7	12			100	99	97	79	45	27	15	13	12	9	6	NP	NP	2.62	A-1-A	00	SM
JEFFERSON	SL	63	2	37 00 28	84 15 28	SS COLLUVIUM	25	CVX ND SSL	60+	AP	1	7	117	12	40	40	100	99	98	96	95	93	91	67	30	25	18	9	5	NP	NP	2.60	A-2-4	00	SM
										B22T	28	40	120	12	6	12						100	94	75	41	37	35	22	17	22	7	2.63	A-4	01	SM-SC
										B23T	40	60	119	12	23	19					100	82	77	61	38	34	27	18	14	22	8	2.66	A-4	01	SC
JEFFERSON	L	63	3	37 02 28	84 13 17	ACID SS COL	45	NOSE	54+	B1T	4	8	106	17	54	24	98	97	96	94	90	86	79	77	65	60	44	24	14	23	3	2.65	A-4	06	ML
										B22T	14	22	113	16	55	34	100	99	98	93	87	80	74	72	62	57	44	22	14	25	5	2.67	A-4	05	ML-CL
										B23T	22	32	114	14	68	20	100	98	96	90	82	75	56	53	47	46	38	21	14	25	6	2.71	A-4	02	SM-SC
JEFFERSON	L	63	4	37 05 29	84 14 33	ACID SS AND SH	35	SP SIDSL	60+	AP	0	6	100	20	76	58	100	98	96	89	79	69	64	63	52	45	29	11	6	32	1	2.56	A-4	03	ML
										B22T	21	31	115	15	10	17	99	96	94	86	79	70	61	59	54	49	40	22	15	28	9	2.69	A-4	04	CL
										B23T	31	40	112	15	77	26	96	91	87	74	65	57	47	45	40	37	30	15	9	30	7	2.70	A-4	01	SM-SC
JEFFERSCN	SL	63	1	37 08 19	84 13 07	SS COLLUVIUM	34	SSL LO TH	51+	A3	6	11	117	12	56	46		100	99	99	98	96	84	54	28	26	22	11	5	NP	NP	2.61	A-2-4	00	SM
										B22T	26	31	117	13	23	16			100	99	98	98	81	55	33	32	29	21	16	20	4	2.64	A-2-4	00	SM-SC
										C	40	51	126	10	7	12			100	99	97	79	45	27	15	13	12	9	6	NP	NP	2.62	A-1-A	00	SM
JEFFERSCN	SL	63	2	37 00 28	84 15 28	SS COLLUVIUM	25	CVX ND SSL	60+	AP	1	7	117	12	40	40	100	99	98	96	95	93	91	67	30	25	18	9	5	NP	NP	2.60	A-2-4	00	SM
										B22T	28	40	120	12	6	12						100	94	75	41	37	35	22	17	22	7	2.63	A-4	01	SM-SC
										B23T	40	60	119	12	23	19					100	82	77	61	38	34	27	18	14	22	8	2.66	A-4	01	SC
JEFFERSCN	L	63	3	37 02 28	84 13 17	ACID SS COL	45	NOSE	54+	B1T	4	8	106	17	54	24	98	97	96	94	90	86	79	77	65	60	44	24	14	23	3	2.65	A-4	06	ML
										B22T	14	22	113	16	55	34	100	99	98	93	87	80	74	72	62	57	44	22	14	25	5	2.67	A-4	05	ML-CL
										B23T	22	32	114	14	68	20	100	98	96	90	82	75	56	53	47	46	38	21	14	25	6	2.71	A-4	02	SM-SC
JEFFERSCN	L	63	4	37 05 25	84 14 33	ACID SS AND SH	35	SP SIDSL	60+	AP	0	6	100	20	76	58	100	98	96	89	79	69	64	63	52	45	29	11	6	32	1	2.56	A-4	03	ML
										B22T	21	31	115	15	10	17	99	96	94	86	79	70	61	59	54	49	40	22	15	28	9	2.69	A-4	04	CL
										B23T	31	40	112	15	77	26	96	91	87	74	65	57	47	45	40	37	30	15	9	30	7	2.70	A-4	01	SM-SC
CLYMER	SL	63	5							A2	3	10	118	12	42	25						100	99	95	48	39	26	12	7	NP		2.65	A-4	3	ML
										B2T	13	26	110	19	34	17						100	99	95	45	41	34	28	26	NP		2.67	A-4	2	ML
										C	30	32	113	15	23	17						100	99	95	38	23	14	8	7	NP		2.70	A-4	1	ML
ALBERTVILLE	SI	63	9							A2	1	6	108	14	66	17		100	99	99	98	94	93	92	70	60	41	19	12	NP		2.65	A-4	8	ML
										B22T	15	24	102	21	29	5		100	99	98	98	90	88	87	78	73	59	43	35	43	18	2.75	A-7-5	11	ML-CL
										C	36	50	103	21	17	9		100	99	93	82	74	69	68	66	64	55	35	27	46	18	2.76	A-7-5	9	ML
WELLSTON	SIL	63	18							B1	7	12	109	13	50	13				100	99	99	98	95	81	71	21	14	7	NP		2.64	A-4	8	ML
										B22T	16	21	106	18	21	10							100	98	82	73	56	37	29	30	11	2.69	A-6	9	CL
										B3T	26	31	97	24	7	8				100	98	98	98	97	79	71	60	48	43	38	9	2.76	A-4	8	ML
SHELOCTA	SIL	63	19	37 06 05	84 13 14	COL				B1T	7	12	111	16	60	24	98	98	96	92	87	79	71	70	61	56	41	23	17	23	3	2.73	A-4	6	ML
										B22T	19	29	117	13	66	30	98	96	94	87	77	64	56	55	48	43	29	16	11	26	7	2.69	A-4	3	ML-CL
										B31T	35	45	110	17	36	6			100	99	99	85	75	72	57	53	39	24	17	29	8	2.74	A-4	7	ML-CL
TATE	L	63	22	37 04 22	84 13 28	COL				A3	2	7	104	18	97	57	100	98	97	91	87	86	77	72	55	49	33	17	12	27	3	2.63	A-4	3	ML
										B22T	17	28	115	14	51	13	100	99	97	90	84	77	61	55	45	42	33	20	13	26	6	2.72	A-4	3	ML-CL
										B3T	40	50	110	18	20	9	100	99	98	98	94	91	76	69	62	59	46	25	17	29	8	2.69	A-4	7	ML-CL

SOIL NAME SERIES	SOIL NAME TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
ALLEN	LOAM	64	1	38	05	01	82	36	58				30	B1	12	16										100	89	79	63	57	45	26	19						
														B2	16	30										100	89	82	67	64	51	31	22						

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
ALBERTVILLE	SIL	74	36	36 47 59	84 25 41	ACID SH	17	SH FINGER	44+	A1	0	3	101	17	45	14
										B22T	18	27	100	23	14	6
										C	39	44	94	26	18	3
BROOKE	SICL	74	12	36 44 39	84 39 18	CAL SH	24	SH RD NOSE	40+	AP	0	3	95	21	15	4
										B2T	3	11	103	19	11	4
										C1	20	32	109	17	23	3
BROOKE	SIL	74	38	36 44 39	84 39 18	CAL SH	21	RD TP SIDE	46+	AP1	0	3	101	19	31	6
										B2T	6	11	107	18	15	7
										C	26	46	107	18	3	2
DEKALB	FSL	74	8	36 51 22	84 29 12	ACID SS	12	NOSE BENCH	43+	A22	6	13	122	11	23	22
										B2	23	30	119	10	16	11
										C	30	43	121	12	24	32
DEKALB	SL	74	10	36 49 43	84 21 08	ACID SS COL	55	SIDE SLOPE	40+	A22	3	11	117	13	33	22
										B21	11	22	119	12	20	20
										B22	22	40	120	13	44	31
ENDERS	SIL	74	3	36 36 59	84 23 57	RES FROM SH	37	HILLY	60+	B21T	9	21	92	29	11	6
										B22T	21	35	95	28	11	4
										R	35	60	103	20	17	6
HARTSELLS	FSL	74	13	36 41 34	84 23 50	CORBIN SS ACID	4	BD UPLD RD	37	AP	0	6	107	16	37	25
										B2T	21	31	109	17	18	16
										B3	31	37	113	15	28	27
HARTSELLS	L	74	34	36 53 00	84 29 23	INTBED SS AND SH	4	FLAT RD	44	AP	0	7	110	15	39	24
										B2	18	26	114	15	22	19
										C	36	44	99	23	7	6
HAYTER	SIL	74	6	36 37 01	84 23 58	COL FROM SS SH	50	SLOPING	60	B21	10	19	104	18		15
										B23T	34	48	104	21	3	1
JEFFERSON	SL	74	9	36 48 44	84 21 44	COL FROM ACID SH	43	SIDE SLOPE	40+	A12	3	7	109	16	36	32
										B21	15	23	112	15	7	10
										B3	33	40	119	12	47	61
JEFFERSON	SL	74	19	36 50 09	84 31 51	COL FROM ACID SH	35	UNDR CLIFF	46	A3	4	13	106	18	35	35
										B2T	18	30	115	13	72	60
										B3	30	46	117	12	54	27
MUSE	SIL	74	1	36 36 55	84 23 55	COL FROM SH	36	VERY STEEP	48	AP2	1	7	104	18	44	14
										B22T	19	29	104	21	93	6
										C	42	48	99	24	16	5
MUSE	SIL	74	15	36 36 57	84 23 52	COL FROM SH	50	UPPER HILS	51+	B21T	11	21	104	20	27	7
										B22T	21	28	101	23	24	7
										C	28	51	108	18	43	7
SHELOCTA	SIL	74	2	36 36 57	84 23 56	COL FROM SH	48	HILLY	58+	B21	16	28	111	17	60	17
										B3	44	58	108	19	17	12
SHELOCTA	SIL	74	5	36 36 57	84 23 52	COL FROM SH	50	MD TH SLPE	67+	B22T	18	32	113	16	82	16
										B23T	32	41	106	18	45	5
										C	41	67	109	19	43	4
TILSIT	SIL	74	7	36 54 04	84 24 51	RES FROM SIST SH	1	LVL RD TOP		B	9	19	113	15	29	28
										BTX	19	28	97	23	6	5
										IIB22T	32	38	92	27		7

SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
ALBERTVILLE	A1			100	94	86	77	70	69	60	48	28	14	8	NP	NP	2.58	A-4	00	SM
	B22T		100	99	97	96	96	95	94	85	77	66	54	45	53	29	2.71	A-7-6	19	CH
	C					100	99	99	98	96	94	86	67	56	58	31	2.74	A-7-6	20	CH
BROOKE	AP			100	99	99	98	95	95	92	91	76	41	27	40	16	2.66	A-6	10	ML-CL
	B2T			100	99	98	96	94	94	92	88	75	49	38	46	24	2.72	A-7-6	15	CL
	C1	100	99	98	92	84	77	74	74	71	68	58	32	22	43	21	2.76	A-7-6	13	CL
BROOKE	AP1	97	96	94	88	84	84	79	78	69	64	50	25	14	27	6	2.68	A-4	07	ML-CL
	B2T		100	98	95	93	91	89	88	84	81	70	43	31	30	12	2.70	A-6	09	CL
	C				100	97	96	88	84	78	73	57	34	23	40	17	2.73	A-6	10	ML-CL
DEKALB	A22			100	99	98	98	93	71	30	27	20	11	6	NP	NP	2.63	A-2-4	00	SM
	B2			100	99	98	96	92	90	35	28	17	10	7	NP	NP	2.64	A-2-4	00	SM
	C			100	96	90	86	81	63	24	21	18	15	10	NP	NP	2.66	A-1-B	00	SM
DEKALB	A22		100	99	97	96	95	94	69	32	27	20	10	3	NP	NP	2.62	A-2-4	00	SM
	B21		100	99	96	95	94	92	65	32	30	24	12	5	NP	NP	2.63	A-2-4	00	SM
	B22		100	99	95	94	94	91	68	38	35	31	20	15	NP	NP	2.64	A-4	00	SM
ENDERS	B21T					100	86	83	82	81	81	78	56	36	63	17	2.75	A-7-5	15	MH
	B22T					100	93	91	91	90	90	86	57	42	61	26	2.74	A-7-5	18	MH
	R		100	99	93	82	76	72	72	72	71	61	34	23	40	13	2.78	A-6	08	ML-CL
HARTSELLS	AP			100	99	99	99	98	72	42	39	28	16	10	NP	NP	2.60	A-4	01	SM
	B2T			100	99	99	99	99	95	47	44	40	33	28	28	9	2.62	A-4	02	SC
	B3	99	98	98	98	98	98	98	91	32	26	23	17	13	NP	NP	2.67	A-2-4	00	SM
HARTSELLS	AP			100	99	97	95	94	90	71	65	48	20	10	21	2	2.61	A-4	07	ML
	B2		100	99	99	98	96	94	91	69	62	50	30	21	23	6	2.67	A-4	07	ML-CL
	C						100	99	98	83	75	63	47	39	36	10	2.64	A-4	08	ML-CL
HAYTER	B21		100	100	95	88	79	71	70	67	64	54	32	22	32	9	2.73	A-4	06	ML-CL
	B23T		100	91	86	81	70	63	62	60	57	49	32	22	40	14	2.77	A-6	07	ML-CL
JEFFERSON	A12	100	99	98	95	93	92	89	75	40	38	30	12	4	NP	NP	2.60	A-4	01	SM
	B21	100	99	98	96	95	94	91	89	59	52	41	21	14	22	8	2.70	A-4	05	CL
	B3	97	95	93	87	84	82	78	66	35	33	28	16	10	19	5	2.63	A-2-4	00	SM-SC
JEFFERSON	A3	98	96	95	92	89	86	73	61	42	38	29	13	7	23	3	2.62	A-4	01	SM
	B2T	98	95	92	86	80	74	64	56	38	33	26	14	9	21	6	2.67	A-4	01	SM-SC
	B3	99	98	97	90	82	71	71	70	59	53	44	35	27	22	4	2.69	A-4	05	ML-CL
MUSE	AP2		100	98	92	87	84	78	77	68	67	49	24	14	29	6	2.66	A-4	07	ML-CL
	B22T		100	99	98	95	84	78	77	70	66	54	38	27	38	13	2.73	A-6	08	ML-CL
	C		100	95	84	81	65	58	57	55	54	48	26	16.	50	20	2.76	A-7-5	09	MH-CH
MUSE	B21T						100	85	83	80	79	71	42	30	40	15	2.73	A-6	10	CL
	B22T			100	99	95	89	79	77	72	70	61	34	23	39	12	2.74	A-6	08	ML-CL
	C			100	98	94	81	68	65	62	61	54	30	19	37	13	2.76	A-6	06	ML-CL
SHELOCTA	B21		100	93	87	83	70	62	62	58	56	46	26	16	27	7	2.70	A-4	05	ML-CL
	B3														36	10	2.73			ML-CL
SHELOCTA	B22T	100	97	87	70	60	47	42	39	36	34	28	16	11	30	6	2.73	A-2-4	00	SM-SC
	B23T	100	99	98	91	80	71	63	62	58	56	50	27	15	34	9	2.73	A-4	06	ML-CL
	C		100	97	86	76	65	55	53	51	50	44	24	13	35	11	2.77	A-6	05	ML-CL
TILSIT	B					100	100	98	97	89	83	66	30	21	27	6	2.68	A-4	08	ML-CL
	BTX					100	98	95	93	88	86	77	54	50	44	28	2.70	A-7-6	11	ML-CL
	IIB22T					100	99	90	83	61	59	58	57	45	48	16	2.75	A-7-5	09	ML

Series	Type	County No.	Site No.	Lat. Deg	Lat. Min	Lat. Sec	Long. Deg	Long. Min	Long. Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth Top (Inches)	Depth Bottom (Inches)	Dry Unit Wt. (PCF)	Opt MC	CBR Unsoaked	CBR Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
WYNOOSE	SIL	79	4	38	27	26	86	56	53	CLAYEYALLUVIUM	0	ALMOSTLEV	72+	AP	0	5	104	19	19	8						100	95	94	87	84	71	28	19	24	5	2.78	A-4	8	ML
														B21TG	6	33	97	22	14	2						100	99	99	92	88	76	58	49	61	37	2.67	A-7-5	16	CH
														C1G	46	72	104	20	13	6						100	99	99	96	90	66	42	32	41	19	2.70	A-7-5	12	CL
WYNOOSE	SIL	79	5	38	27	23	86	56	49	LESCLAYEYALV	0	LOWTERRACE	90+	AP	0	7	104	18	36	10						100	93	91	81	79	59	22	14	29	7	2.62	A-4	8	ML-CL
														B1G	11	19	108	18	15	9						100	95	94	85	82	62	36	27	31	13	2.68	A-6	9	CL
														B2TG	19	48	103	22	23	3						100	99	98	94	90	77	57	47	59	37	2.65	A-7-5	16	CH
														C1G	48	72	104	19	35	36						100	98	98	89	83	65	47	39	37	15	2.70	A-6	11	CL
HENRY	SIL	79	6	38	27	34	86	57	58	LESCLAYEYALV	0	LOWTERRACE	72+	A2	5	11	103	16								100	98	97	92	87	54	20	13	23	0	2.64	A-4	8	ML
														B1G	11	20	107	16	37	15						100	98	97	93	88	62	23	17	24	3	2.68	A-4	8	ML
														BGX	20	32	107	17	25	9						100	98	97	93	79	61	28	20	27	7	2.62	A-4	8	ML-CL
														IIC1GX	32	48	105	19	12	3					100	99	98	97	95	89	69	37	31	33	5	2.65	A-4	8	ML
EGAM	SICL	79	8	38	17	35	87	03	58	ALLUVIUM	0	LEVFDPLNS	72+	AP	0	9	97	24	20	4						100	98	97	90	85	52	32	22	37	12	2.69	A-6	9	CL
														IIC3	23	56	98	22	35	5						100	99	98	94	90	73	48	39	39	15	2.71	A-6	11	ML-CL
														IIC4	56	72	97	22	26	8							100	99	98	97	78	50	38	40	2	2.70	A-4	8	ML
EGAM	SICL	79	9	38	17	58	87	03	53	ALLUVIUM	0	LEVFDPLNS	72+	AP	0	12	99	21	14	5								100	96	93	83	43	27	36	14	2.67	A-6	9	CL
														C1	12	27	96	24	7	4								100	99	98	92	41	28	39	15	2.55	A-6	11	CL
														C3B	40	72	96	23	23	7						100	97	97	92	84	51	34	26	39	12	2.68	A-6	9	ML-CL

SOIL NAME: SERIES	SOIL NAME: TYPE	LOCATION: COUNTY NO.	LOCATION: SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	COMPACTION DATA: OPT MC	C B R DATA: UNSOAKED	C B R DATA: SOAKED	PERCENT FINER THAN: 1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
BRAXTON	SIL	84	3	37 56 08	84 49 47		0-3	UNDULATING	81	A	0	18	101	20	24	5						100	92	89	80	75	54	14	5	37	14	2.65	A-6	10	CL
										B	18	20																							
										C	20	81	105	19	21	13						100	96	94	90	86	64	22	12	33	6	2.70	A-4	08	ML-CL
BRAXTON	SIL	84	6	37 52 51	84 46 12		0-3	UNDULATING	60	A	0	12	103	18	37	9						100	96	95	91	88	73	21	6	29	8	2.68	A-4	08	CL
										B	12	30	106	19	17	13						100	94	93	91	91	78	39	26	36	13	2.73	A-6	09	CL
										C	30	60	95	25	11	5						100	94	93	88	85	70	43	30	48	25	2.75	A-7-6	16	CL
BRAXTON	SIL	84	8	37 50 49	84 47 37		0-3	UNDULATING	60	A	0	25	104	18	32	6						100	89	84	79	78	53	15	7	35	13	2.61	A-6	09	CL
										B	25	40	110	17								100	98	95	88	85	66	18	5	31	14	2.69	A-6	10	CL
										C	40	60	110	18	16	11						100	95	93	90	87	70	33	18	31	19	2.72	A-6	11	CL
BRAXTON	SIL	84	24	37 53 06	84 48 36		0-3	UNDULATING	70	A	0	14	105	17	47	5						100	95	93	91	88	72	27	9	29	5	2.66	A-4	08	ML-CL
										B	14	33	109	16								100	95	93	90	89	70	26	14	33	10	2.68	A-4	08	CL
										C	33	70																							
BURGIN	CL	84	12	37 48 09	84 48 17		0-3	LEVEL	60+	A	0	10	96	24		6						100	99	98	96	94	77	32	17	41	14	2.62	A-7-6	10	CL
										B1	10	18	103	20		6						100	99	99	98	97	80	32	19	47	26	2.64	A-7-6	16	CL
										B2	18	36	98	22		6						100	98	96	87	83	66	32	15	52	38	2.71	A-7-6	19	CH
										C	36	60+	102	22								100	94	91	81	77	64	30	15	45	23	2.84	A-7-6	14	CL
CULLEOKA	LOAM	84	16	38 56 45	84 51 03		0-3	ROLLING	33	A	0	2	94	25	10	7						100	97	95	88	83	62	32	19	41	13	2.66	A-7-6	09	CL
										B	2	14	96	25	14	4							100	99	95	92	75	48	36	55	33	2.75	A-7-6	19	CH
										C	14	33	102	21	33	4						100	97	96	91	87	72	44	30	49	25	2.81	A-7-6	16	CL
CUMBERLAND	SIL	84	4	37 56 13	84 48 53		0-3	LEVEL	37	A	0	10	101	20	55	7						100	97	94	88	84	64	19	9	33	11	2.65	A-6	09	CL
										B	10	35	114	15	23	13						100	94	89	74	69	54	21	14	25	7	2.70	A-4	08	ML-CL
										C	35	37																							
CUMBERLAND	SIL	84	7	37 53 02	84 46 38		0-3	LEVEL	90+	A	0	37	117	13	18	19						100	86	70	51	47	33	7	4	21	4	2.63	A-4	03	ML-CL
										B	37	60	114	15	32	24						100	94	83	74	71	53	18	8	26	11	2.69	A-6	08	CL
										C	60	90+	112	16	8	8				100	99	97	88	70	59	55	40	16	9	28	14	2.72	A-6	07	CL
CUMBERLAND	SIL	84	10	37 45 08	84 42 39		0-3	LEVEL	74	A	0	7	96	22	68	6						100	95	93	89	86	68	20	6	39	10	2.62	A-6	08	CL
										B	7	45	137	19	16	14						100	89	87	84	81	66	30	14	32	12	2.70	A-6	09	CL
										C	45	74	107	18								100	91	89	84	79	59	25	14	35	16	2.72	A-6	10	CL
CUMBERLAND	SIL	84	19	37 41 35	84 57 18		0-3	LEVEL	24+	A	0	4	100	21	12	3						100	97	95	88	82	60	26	13	45	19	2.63	A-7-6	12	CL
										B	4	24+	101	23	15	1						100	99	97	92	90	76	45	30	54	23	2.81	A-7-6	19	CH
EDEN	SICL	84	2	37 57 05	84 51 17		8-15	ROLLING	13	A	0	4	90	27	11	4						100	98	96	87	80	60	32	17	59	27	2.72	A-7-5	19	CH
										B	4	10	97	23	20	4						100	93	92	86	82	66	36	22	63	31	2.79	A-7-5	20	MH-CH
										C	10	13	103	20	11	2						100	86	83	78	75	63	33	19	40	20	2.76	A-7-6	12	CL
EDEN	SICL	84	13	37 52 52	84 57 13		8-15	ROLLING	29	A	0	7	99	22	17	5								100	96	91	72	34	18	37	13	2.69	A-6	09	CL
										B	7	21	96	25								100	99	99	95	91	76	53	41	58	36	2.79	A-7-6	20	MH
										C	21	29	100	23								100	99	98	95	91	76	50	34	46	23	2.87	A-7-6	14	CL
EDEN	SICL	84	14	37 48 34	84 55 37		8-15	ROLLING	36	A	0	12	95	24	13	5						100	95	92	88	85	68	35	19	40	16	2.72	A-6	10	CL
										B	12	14																							
										C	14	36	105	20	17	2						100	93	91	87	84	70	46	28	42	19	2.80	A-7-6	12	CL
HAMPSHIRE	SIL	84	11	37 52 13	84 53 27		0-3	UNDULATING	46	A	0	12	100	23	5	6						100	97	95	88	85	60	20	8	35	10	2.71	A-6	08	CL
										B	12	40										100	97	96	93	89	78	50	26	52	26	2.84	A-7-6	17	CH
										C	40	46										100	98	97	92	88	72	40	27	50	27	2.87	A-7-6	17	ML-CL
HAMPSHIRE	SIL	84	17	37 45 18	84 53 13		0-3	UNDULATING	36	A	0	13	98	19	27	3						100	95	93	88	84	60	18	7	30	7	2.64	A-4	08	CL
										B	13	27	107	19	23	8						100	97	95	92	88	70	32	18	36	15	2.72	A-6	10	CL
										C	27	36																							
HUNTINGTON	SIL	84	15	37 43 14	84 56 46		0-3	LEVEL	180	A	0	12	100	21	17	5						100	97	95	92	88	60	22	10	37	12	2.68	A-6	09	CL
										C1	12	50	102	22	23	9						100	99	98	91	83	56	25	13	39	15	2.74	A-6	10	CL
										C2	50	180	101	21	18	8						100	99	98	92	87	64	28	16	38	16	2.74	A-6	10	CL

SOIL NAME: SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	COMPACTION DATA: OPT MC	CBR DATA: UNSOAKED	CBR DATA: SOAKED	GRADATION, PERCENT FINER THAN: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION: AASHO CLASS	GI	UNIFIED
HUNTINGTON	SIL	84	18	37 48 09	84 59 57		0-3	LEVEL	144	A	0	11	108	17	42	5						100	95	93	87	80	52	19	9	26	5	2.73	A-4	08	CL
										C1	11	20+	110	17	45	22						100	95	93	89	83	55	23	13	28	9	2.75	A-4	08	CL
MAURY	SICL	84	23	37 47 20	84 42 27		0-3	LEVEL	35	A	0	10	92	25	32	4						100	98	97	93	90	70	18	8	40	10	2.64	A-4	08	CL
										B	10	13																							
										C	13	35	101	21	15	6						100	97	94	83	80	64	30	16	49	29	2.72	A-7-6	18	ML-CL
MAURY	SIL	84	1	37 43 17	84 45 20		0-3	LEVEL	84	A	0	13	99	21								100	83	68	42	37	34	14	6	42	10	2.69	A-5	08	CL
										B	13	65	10	7 1								100	94	91	84	80	64	27	16	38	8	2.74	A-4	08	CL
										C	65	84	96	26							100	98	93	90	82	78	67	44	30	48	27	2.85	A-7-6	16	ML-CL
MAURY	SIL	84	9	37 47 01	84 45 18		0-3	LEVEL	100+	A	0	25	101	19	55	8						100	95	93	89	85	56	13	5	33	13	2.64	A-6	09	CL
										B1	25	59	109	18	20	12						100	93	91	87	83	65	28	16	34	18	2.71	A-6	11	CL
										B2	59	100+	94	27								100	93	91	85	83	75	54	37	56	34	2.76	A-7-6	19	MH
MAURY	SIL	84	21	37 44 09	84 44 31		0-3	LEVEL	67	A	0	10	99	23	14	7						100	93	92	86	84	59	16	8	37	13	2.71	A-6	09	CL
										B	10	39	102	22	18	15						100	92	90	86	84	71	36	21	39	14	2.80	A-6	09	CL
										C	39	67	93	28	9	2						100	95	91	80	76	64	41	26	58	33	2.90	A-7-6	19	MH
MAURY	SIL	84	22	37 47 24	84 43 13		0-3	LEVEL	80	A	0	13	99	23	21	7						100	94	92	86	82	54	18	7	34	8	2.71	A-4	08	CL
										B	13	43	108	18	39	20						100	96	93	87	80	62	28	14	37	16	2.77	A-6	10	CL
										C	43	80	95	27	18	7						100	99	93	76	66	49	32	23	53	23	2.95	A-7-6	16	CH
SALVISA	SICL	84	5	37 56 11	84 51 59		0-3	LEVEL	40	A	0	12	98	20	24	6						100	94	91	89	84	60	18	10	37	12	2.69	A-6	09	CL
										B	12	22	101	23	6	5						100	96	93	90	87	70	32	19	40	13	2.75	A-7-6	09	CL
										C	22	40	97	24								100	99	98	94	91	80	48	27	65	43	2.78	A-7-6	20	CH
SALVISA	SICL	84	20	37 44 16	84 52 19		0-3	LEVEL	45	A	0	10	99	20	51	6						100	97	96	92	86	59	13	6	37	10	2.66	A-4	08	CL
										B	10	36	111	15	87	12						100	92	90	85	82	66	40	28	45	22	2.81	A-7-6	14	CL
										C	36	45																							

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
HUMPHREYS	CHSIL	90	14	35	38	08	87	43	28	ALV FROM CH LS	10	SLOPING	108+	AP	0	6	100	16		
														B22T	17	27	103	21	23	3
														C	37	108+	101	21		
HUMPHREYS	CHSIL	90	19	35	38	50	87	45	26	CH ALV OVN BL SH	11	SLOPING	35+	AP	0	5	101	19		
														B2T	8	16	105	21	92	14
														IIC	24	35	100	23	13	5
HUNTINGTON	SIL	90	20	35	27	39	87	46	23	ALV FROM LS	1-0	ALMOST LEV	45+	AP	0	9	101	20		
														C1	9	31	105	19	20	3
HUNTINGTON	SIL	90	21	35	28	18	87	58	30	ALV FROM LS	1-0	ALMOST LEV	28+	AP	0	10	108	20	40	31
														C2	18	28	98	22	15	7
LOWELL	SIL	90	2	37	52	22	85	18	04	LS	5	GNTLY SLOP	57+	AP	0	8	108	20	31	4
														B2T	15	27	98	24	8	4
														C	36	57	99	19	19	1
LOWELL	L	90	11	37	57	38	85	11	31	THNBD LS SIST SH	7	SLOPING	50+	AP	0	7	100	18	34	5
														B22T	19	25	93	25	15	3
														IIC3	37	50	101	20	15	2
NEWARK	SIL	90	22	35	34	50	87	38	40	ALV FROM LS	0-1	ALMOST LEV	68+	AP	0	12	104	18	55	5
														C2G	24	38	107	19	27	5
NEWARK	SIL	90	23	35	36	29	87	33	23	ALV FROM LS	0-1	ALMOST LEV	52+	AP	0	11	98	19		
														C2G	22	32	102	18	33	5
OTWAY	SICL	90	8	37	45	54	85	27	10	SOFT CAL SH	10	SLOPING	42+	AP	0	9	99	27	23	7
														C1	17	30	106	19	22	1
OTWAY	CL	90	9	37	44	00	85	30	54	CAL SH	7	SLOPING	40+	AP	0	7	102	18	32	5
														C2	13	40	113	15	30	2
PEMBROKE	SIL	90	1	37	46	37	85	23	45	LES AND SILR LS	4	GNTLY SLOP	76+	AP	0	8	95	21	33	3
														B22T	26	33	104	19	17	14
														B32T	40	76	101	22	24	14
PEMBROKE	SIL	90	7	37	51	08	85	25	38	LES AND SILR LS	3	GNTLY SLOP	93+	AP	0	7	98	22	26	5
														IIB22T	20	33	100	22	12	3
														IIIC	42	93	95	30	5	2
ROCKCASTLE	SIL	90	15	35	29	32	87	40	06	GRAY C ACID SH	19	STR SLOPIN	24+	A2	3	7	102	22		
														C1	7	15	101	19	27	2
ROCKCASTLE	SIL	90	17	35	34	21	87	40	58	GRAY CLAY SHALE	30	MOD STEEP	27+	A2	1	8	98	21		
														C	11	27	107	19	25	4
SHELBYVILLE	SIL	90	3	37	51	26	85	20	21	LES THINBED LS	3	GNTLY SLOP	72+	AP	0	10	101	17	35	8
														B2T	15	25	104	19	24	15
														C	32	72	94	26	22	2
SHELBYVILLE	SIL	90	10	37	52	41	85	16	27	LES AND LS	3	SLOPING	68+	AP	0	8	97	21	43	8
														B21T	12	21	107	19	19	12
														B3CV	29	37	104	21	27	13
														C	37	68	94	27	12	4

SOIL NAME	HORIZON	1172	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
HUMPHREYS	AP						96	91	87	75	70	39	16	11			2.63	A-4	8	
	B22T	98	95	94	92	91	90	87	84	74	69	54	35	29	43	17	2.76	A-7-5	11	ML-CL
	C	100	99	95	81	76	74	68	66	55	50	38	25	21	44	20	2.77	A-7-5	9	CL
HUMPHREYS	AP														28	8	2.65	A-4	8	ML
	B2T	90	77	72	63	59	58	54	53	44	42	32	18	15	36	13	2.68	A-4	4	CL
	IIC						96	88	85	76	68	50	33	27	41	15	2.80	A-7-5	10	ML-CL
HUNTINGTON	AP						100	99	98	86	71	39	19	11			2.61			
	C1						100	99	99	98	95	70	20	10	30	8	2.65	A-4	8	ML-CL
HUNTINGTON	AP	99	96	94	87	77	60	29	23	15	13	9	6	5	36	12	2.81	A-2-6	1	CL
	C2						100	95	89	80	79	41	12	9	32	6	2.67			ML
LOWELL	AP						100	96	95	93	89	71	28	17	33	7	2.58	A-4	08	ML
	B2T					100	99	94	93	90	90	86	65	55	48	23	2.67	A-7	15	CL
	C						100	99	99	97	95	86	59	50	58	30	2.73	A-7-6	20	CH
LOWELL	AP						100	96	95	94	94	75	41	32	31	9	2.64	A-4	08	ML-CL
	B22T						100	99	98	97	96	90	70	58	46	17	2.74	A-7-5	12	ML
	IIC3						100	99	98	96	94	86	57	44	43	17	2.79	A-7-6	12	ML-CL
NEWARK	AP						100	96	95	92	91	77	28	12	33	9	2.67	A-4	8	ML-CL
	C2G						98	95	93	85	80	61	31	21	33	9	2.72	A-4	8	ML-CL
NEWARK	AP						100	99	98	94	91	60	28	14	34	8	2.65	A-4	8	ML-CL
	C2G						100	98	96	94	93	82	42	26	33	8	2.68	A-4	8	CL
OTWAY	AP						100	98	98	93	88	70	44	31	50	20	2.58	A-7-5	14	ML
	C1						100	97	96	92	90	79	56	44	50	24	2.72	A-7-6	16	CL
OTWAY	AP				100	99	98	97	97	96	92	56	30	25	30	6	2.76	A-4	08	ML-CL
	C2						100	94	92	90	86	67	34	25	34	13	2.78	A-5	09	CL
PEMBROKE	AP						100	99	99	98	93	70	28	16	33	10	2.61	A-4	08	ML-CL
	B22T						100	96	95	92	90	71	41	30	36	18	2.70	A-6	11	CL
	B32T						100	95	94	93	92	81	49	40	44	9	2.72	A-5	09	ML
PEMBROKE	AP					100	99	98	97	95	90	64	30	20	30	8	2.63	A-4	08	ML-CL
	IIB22T						100	94	93	91	91	80	48	39	44	18	2.72	A-7-6	12	ML-CL
	IIIC						100	97	96	92	88	84	73	66	88	50	2.77	A-7-5	20	CH
ROCKCASTLE	A2						100	99	98	91	90	79	40	26	39	13	2.77			
	C1						100	99	99	99	99	95	62	40	53	25	2.75	A-7-5	17	MH-CH
ROCKCASTLE	A2						100	97	94	84	79	47	17	8	29	4	2.64	A-4	8	ML
	C	100	99	99	98	97	95	94	94	89	79	54	32	21	32	5	2.74		8	ML
SHELBYVILLE	AP						100	95	94	88	84	63	25	16	26	4	2.63	A-4	08	ML
	B2T						100	94	92	89	84	66	36	28	32	11	2.70	A-6	08	CL
	C				100	99	99	95	94	91	89	79	61	54	72	40	2.75	A-7-5	20	MH
SHELBYVILLE	AP						100	95	94	90	87	64	30	19	27	4	2.63	A-4	08	ML
	B21T						100	96	95	93	90	76	40	32	37	15	2.70	A-6	10	CL
	B3CV				100	99	98	91	89	87	86	71	46	37	40	18	2.72	A-6	11	CL
	C					100	96	92	91	89	87	80	62	55	60	30	2.78	A-7-5	20	MH-CH

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE D	M	S	LONGITUDE D	M	S	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	OPT MC	CBR DATA UNSOAKED	SOAKED	GRADATION PERCENT FINER THAN 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION AASHO CLASS	GI	UNIFIED
TAFT	SIL	90	4	37	44	10	85	40	12	ALV FROM LS	1	ALM LEVEL	50+	AP	0	6	96	22	32	2						100	94	93	89	87	63	25	16	32	7	2.62	A-4	08	ML-CL
														B2G	11	20	101	21	17	8						100	98	97	96	94	82	48	35	28	5	2.66	A-4	08	ML-CL
														BX2	34	48	101	22	12	5						100	99	98	96	94	78	48	38	35	12	2.76	A-6	09	ML-CL
														CG	48	60	100	20	22	3				100	99	96	94	93	91	91	78	50	42	39	15	2.76	A-6	10	ML-CL
TAFT	SIL	90	5	37	44	52	85	40	19	ALV FROM LS	1	ALM LEVEL	60+	AP	0	7	98	20	50	3						100	94	93	92	90	76	32	19	30	4	2.62	A-4	08	ML
														B2G	11	18	104	18	17	3						100	99	98	97	96	86	46	32	28	8	2.67	A-4	08	CL
														BX2	24	45	97	21	11	2						100	99	98	96	95	84	55	45	40	18	2.70	A-6	11	CL
														CG	45	60	102	22	5	2						100	99	98	97	97	80	38	28	35	14	2.72	A-6	10	CL
TILSIT	SIL	90	12	37	41	43	85	29	09	LES - BLK AC SH	3	GNTLY SLOP	40+	AP	0	8	95	21	20	3						100	95	94	89	85	70	27	15	28	5	2.62	A-4	08	ML-CL
														B2	13	25	103	20	24	11						100	96	95	94	91	79	35	30	38	15	2.70	A-6	10	ML-CL
														BX	25	34	102	22	25	7				100	99	98	95	94	93	92	84	52	37	38	15	2.75	A-6	10	ML-CL
TILGIT	SIL	90	13	37	49	05	85	37	06	LES AND F SS	3	GNTLY SLOP	44+	AP	0	8	100	18	72	19						100	99	98	96	92	77	29	21	24	1	2.63	A-4	08	ML
														B2	11	23	100	21	12	10						100	99	99	99	95	74	36	28	35	14	2.68	A-6	09	CL
														BX	23	36	102	19	13	10						100	98	98	96	94	66	30	22	32	10	2.68	A-4	08	ML-CL
														C	36	44	108	14	95	5		100	99	98	96	92	90	90	88	77	56	26	18	26	5	2.69	A-4	08	ML-CL
TRAPPIST	SIL	90	16	35	33	46	87	41	21	ACID SHALE	8	SLOPING	42+	A2	1	7	102	18	45	4						100	98	97	84	75	48	18	13	24	5	2.64	A-4	8	ML-CL
														B2T	11	25	104	20	21	12					100	98	95	94	92	90	72	42	34	37	14	2.67	A-6	10	ML-CL
														C1	32	38	101	24								100	97	96	94	93	89	60	45	44	17	2.74	A-7-5	11	CL
TRAPPIST	SIL	90	18	35	33	19	87	52	02		17	STR SLOPIN	49+	A2	1	7	105	18	57	11	100	98	98	94	92	91	90	89	84	79	50	19	9	28	5	2.63	A-4	8	ML
														B2T	13	27	103	21	21	9						100	98	98	97	95	84	47	38	37	16	2.70			CL
														C	36	49	105	20	51	9		100	100	98	94	91								32	4				ML

Soil name: Series	Type	County No.	State No.	Location: Latitude (D M S)	Longitude (D M S)	Parent material	Slope	Topography	Depth to bedrock (in)	Horizon	Depth (inches) Top	Depth (inches) Bottom	Compaction data: Dry unit wt. (PCF)	Opt. MC	CBR data: Unsoaked	CBR data: Soaked	Gradation, percent finer than: 1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific gravity	Classification: AASHO class	GI	Unified
ALBERTVILLE	SIL	100	8							A2	4	10	115	12				100	97	95	91	88	87	86	67	59	39	17	9	19	2	2.62	A-4	7	ML
																			100	98	97	94	93	92	83	75	60	42	35	40	9	2.72	A-4	8	ML
													103	20	26	10	100	99	99	97	95	93	90	89	81	60	39	32	22	34	9	2.71	A-4	8	ML-CL
CLYMER	SL	100	16							A2	6	11	111	13	20	17	96	92	91	88	87	86	83	80	40	25	18	11	9	NP	NP	2.64	A-2-4	1	ML
										B2	15	22	116	14	26	20				100	99	99	98	98	50	40	28	18	15	NP	NP	2.63	A-4	2	ML
										C	28	34	110	15		12								100	25	19	14	9	7	NP	NP	2.69	A-2-4	0	ML
MONONGAHELA	SIL	100	6							B1	4	14	111	15	46	31						100	95	92	71	62	46	27	18	23	3	2.61	A-4	7	ML
										BX2	28	40	112	16	52	27	100	99	99	98	97	96	93	90	71	64	49	32	26	25	5	2.65	A-4	7	ML-CL
										IIB3	40	52	102	23	23	14			100	99	99	98	97	95	78	71	57	42	37	40	12	2.69	A-6	9	ML
MUSE	SIL	100	10										103	19	31	15	100	99	98	95	89	81	78	76	63	59	44	19	8	40	10	2.65	A-4	5	ML
													105	17	23	21	98	97	96	93	91	88	80	76	68	64	54	32	22	34	9	2.72	A-4	7	ML-CL
										C	59	72+	114	15	34	4				100	99	93	86	85	79	71	45	29	23	34	10	2.68	A-4	8	ML-CL
MUSE	SIL	100	11							B1T	5	10	113	15	41	8	100	99	98	96	93	88	84	84	71	61	45	28	20	25	7	2.70	A-4	7	ML-CL
										B23T	28	41	107	19	26	7						100	92	90	55	45	32	20	14	38	15	2.67	A-6	7	CL
										B32T	56	70	111	15	99	5			100	98	97	95	88	86	67	55	42	30	25	34	10	2.54	A-4	7	ML-CL
WELLSTON	SIL	100	7							B11	6	12	114	12	99	7			100	99	96	92	90	89	79	70	45	19	12	22	4	2.64	A-4	8	ML-CL
										B23T	31	41	102	22	28	4				100	99	99	97	97	88	85	69	47	40	43	13	2.71	A-7-5	9	ML
										C	56	65	110	17	34	5			100	99	98	94	91	90	87	80	55	34	26	35	19	2.56	A-6	11	CL
WELLSTON	SIL	100	17							A22	4	9	108	16	29	10						100	92	90	84	77	57	32	21	20	2	2.63	A-4	8	ML
										B21T	13	20	113	15	28	27					100	99	98	96	82	76	59	31	22	26	5	2.66	A-4	8	ML-CL
																						100	99	98	86	80	62	36	29	34	8	2.67	A-4	8	ML-CL
										B22TB	32	42+	94	25	22	19						100	99	97	80	71	59	49	43	NP	NP	2.73	A-4	8	ML
	SIL	100	14							A3	5	15	105	18	42	25	97	94	91	84	77	70	66	65	60	53	37	20	11	33	8	2.68	A-4	5	ML-CL
										B21T	23	52	113	15	92	13	99	93	88	82	75	66	59	57	47	43	32	18	13	27	7	2.72	A-4	3	ML-CL
										B32	63	84	110	16					100	99	98	98	95	94	88	83	62	36	26	31	7	2.65	A-4	8	ML-CL

SOIL NAME SERIES	TYPE	COUNTY NO.	STATE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
SWAIM	SIL	102	13										75+	B21T	10	17	101	22	7	5
														B23T	26	34	107	23	28	2
														B32T	40	75+	108	20	22	11
CHRISTIAN	SIL	102	20	37	24	35	84	17	18	LIMESTONE	7	BRDRDTOP	52	B1	6	12	109	17	21	15
														B22T	20	32	97	24	15	6
														B3	52	65	88	27	10	2
SWAIM	L	102	21	37	28	08	84	14	28	COL FROM LS	48		60	B1T	11	17	111	16	23	10
														B22T	28	37	110	17	16	5
														C	48	60	109	19	7	6

SOIL NAME SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
SWAIM	B21T						100	98	97	51	88	70	42	34	35	12	2.75	A-6	9	ML-CL
	B23T	100	98	98	97	97	97	94	93	85	80	64	47	39	51	25	2.73	A-7-6	15	CH
	B32T	100	59	93	89	86	86	81	79	68	63	46	24	15	33	8	2.73	A-4	8	ML-CL
CHRISTIAN	B1						100	97	95	88	86	71	36	25	35	14	2.68	A-6	10	CL
	B22T						100	98	98	93	89	73	55	48	42	17	2.66	A-7-6	11	ML-CL
	B3						100	99	98	90	86	72	46	32	45	16	2.70	A-7-5	12	ML-CL
SWAIM	B1T	100	99	99	99	98	98	97	92	72	68	58	35	25	30	11	2.65	A-6	9	CL
	B22T						100	97	91	64	59	48	36	29	29	12	2.69	A-6	7	CL
	C						100	98	94	75	67	49	28	20	32	13	2.70	A-6	9	CL

Soil Name: Series	Type	County No.	Site No.	Latitude (D M S)	Longitude (D M S)	Parent Material	Slope	Topography	Depth to Bedrock (in)	Horizon	Depth (in) Top	Depth (in) Bottom	Compaction: Dry Unit Wt. (PCF)	Compaction: OPT MC	CBR Unsoaked	CBR Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
BEASLEY	SIL	106	1 L90	38 12 33	85 21 12		0-4	ROLLING	124	A	0	86										100	94	93	89	85	66	37	24	51	30	2.80	A-7-6	18	CH
										B	86	122																		38	17	2.74	A-6	11	CL
										C	122	124																							
BEASLEY	SIL	106	1 L60	38 12 33	85 21 12		0-4	ROLLING	96	A	0	56										100	97	96	93	89	68	26	16						
										B	56	94																							
										C	94	96																							
BEASLEY	SIL	106	1 L30	38 12 32	85 21 12		0-4	ROLLING	107	A	0	33										100	95	93	86	81	65	35	19	51	27	2.69	A-7-6	17	CH
										B	33	73										100	93	91	84	80	68	36	22	38	19	2.74	A-6	12	CL
										C	73	107																							
BEASLEY	SIL	106	1 CL	38 12 32	85 21 12		0-4	ROLLING	105+	A	0	18										100	98	96	91	89	69	25	11	38	16	2.66	A-6	10	CL
										B1	18	50	95	26	13	1						100	94	92	85	82	71	42	24	51	29	2.90	A-7-6	18	CH
										B2	50	60										100	93	91	86	82	70	36	22	45	23	2.81	A-7-6	14	CL
										C	60	105+	100	24								100	94	92	85	81	68	37	20			2.75			
BEASLEY	SIL	106	1 R60	38 12 32	85 21 12		0-4	ROLLING	78	A	0	30										100	95	93	87	83	63	35	21	49	24	2.68	A-7-6	16	CL
										B1	30	54										100	99	99	90	86	74	46	30	83	49	2.87	A-7-5	20	CH
										B2	54	66										100	99	97	87	83	69	40	27	72	40	2.85	A-7-5	20	MH-CH
										C	66	78										100	94	90	82	78	66	38	22	28	12	2.75	A-6	09	CL
BEASLEY	SIL	106	1 R110	38 12 30	85 21 12		0-4	ROLLING	49	A	0	23										100	99	98	92	88	75	48	32	66	37	2.86	A-7-6	20	CH
										B	23	43																							
										C	43	49																							
HUNTINGTON	SIL	106	8 R95	38 12 21	85 20 13		0-4	LEVEL	42	A	0	26										100	91	89	85	81	61	24	11	33	11	2.73	A-6	08	ML-CL
										C	26	42										100	87	84	76	72	59	33	20			2.80			
HUNTINGTON	SIL	106	8 R50	38 12 22	85 20 13		0-4	LEVEL	31	A	0	13										100	89	87	80	74	52	22	11	30	8	2.79	A-4	08	ML-CL
										C1	13	30																							
										C2	30	31																							
HUNTINGTON	SIL	106	8 L50	38 12 23	85 20 13		0-4	LEVEL	35	A	0	12										100	89	86	81	77	62	28	14	31	9	2.78	A-4	08	ML-CL
										C1	12	22										100	95	93	85	81	72	44	24	46	20	2.31	A-7-6	13	ML-CL
										C2	22	35																							
HUNTINGTON	SIL	106	8 L91	38 12 23	85 20 13		0-4	LEVEL	33	A	0	28										100	94	92	87	82	57	24	12	31	10	2.76	A-6	06	ML-CL
										C	28	33																							
HUNTINGTON	SIL	106	10 R110	38 12 18	85 19 53		0-4	LEVEL	76	A	0	30										100	95	94	89	85	65	32	21	36	11	2.74	A-6	08	ML-CL
										C1	30	40										100	94	92	87	84	74	52	38			2.81			
										C2	40	70										100	97	95	89	85	75	58	51	64	31	2.84	A-7-5	20	MH-CH
										C3	70	76										100	96	94	87	83	75	58	45	49	25	2.75	A-7-6	15	CL
LOWELL		106	2 L110	38 12 26	85 20 52		0-4	UNDULATING	96	A	0	39										100	98	97	96	92	73	39	25	62	37	2.82	A-7-6	20	CH
										B1	39	62										100	99	99	95	91	77	43	26	49	27	2.79	A-7-6	17	CL
										B2	62	85										100	95	94	89	86	75	47	31	36	19	2.73	A-6	12	CL
										C	85	96																							
LOWELL		106	2 L55	38 12 26	85 20 53		0-4	UNDULATING	56	A	0	36										100	99	99	95	91	76	44	26	61	37	2.79	A-7-6	20	CH
										BC	36	56																							
LOWELL		106	2 CL	38 12 26	85 20 53		0-4	UNDULATING	105	A	0	12										100	99	98	95	97	73	34	22	45	21	2.75	A-7-6	13	CL
										B1	12	28										100	99	99	97	94	74	35	24	41	22	2.76	A-7-6	13	CL
										B2	28	41	102	22								100	99	99	96	93	76	38	24	51	28	2.79	A-7-6	17	CH
										C1	41	95	113	22	9	5						100	97	96	92	87	64	37	24	29	12	2.80	A-6	09	CL
										C2	95	105																							
LOWELL		106	4 R110	38 12 26	85 20 50		0-4	UNDULATING	60	A	0	36											100	99	94	91	77	49	33	59	32	2.84	A-7-6	20	CH
										B	36	52																							
										C	52	60																							
LOWELL		106	4 R55	38 12 27	85 20 50		0-4	UNDULATING	77	A	0	38										100	96	95	90	87	74	44	27	54	30	2.83	A-7-6	19	CH
										B	38	60										100	91	89	83	81	69	37	21	37	19	2.79	A-6	12	CL
										C	60	77																							

SOIL NAME SERIES	TYPE	LOCATION COUNTY NO.	NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	C B R DATA UNSOAKED	C B R DATA SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
LOWELL	L3	106	4	38	12	27	85	20	50		0-4	UNDULATING	40	A	0	14										100	99	99	95	93	82	57	42	63	34	2.78	A-7-6	20	CH
														B	14	31	99	23	6	3						100	99	98	91	87	74	46	27	61	33	2.86	A-7-6	20	CH
														C	31	40	108	18	18	1						100	92	90	84	80	68	40	23	40	21	2.81	A-6	12	CL
LOWELL	L55	106	4	38	12	28	85	20	50		0-4	UNDULATING	68	A	0	6																							
														B	6	54										100	99	97	93	90	69	26	14	35	14	2.73	A-6	10	CL
														C	54	68										100	95	94	88	84	65	33	21	42	20	2.80	A-7-6	12	CL
LOWELL	CL	106	6	35	12	31	85	20	51		0-4	UNDULATING	73	A	0	40										100	97	96	92	87	57	21	13	35	13	2.70	A-6	09	CL
														B	40	66										100	98	97	92	88	66	28	16	41	21	2.76	A-7-6	12	CL
														C	66	73																							
LOWELL	R17	106	6	35	12	31	85	20	51		0-4	UNDULATING	51	A	0	18																							
														B1	18	24	104	18	47	11																2.81			
														B2	24	31	112	22	8	3						100	97	96	89	86	73	42	26	66	33	2.85	A-7-5	20	MH-CH
														C	31	51																							
LOWELL	R55	106	6	35	12	31	85	20	52		0-4	UNDULATING	44	A	0	20																							
														B1	20	26										100	99	99	91	87	74	48	30	79	45	2.88	A-7-5	20	MH-CH
														B2	26	40										100	99	98	93	90	81	64	56	67	39	2.84	A-7-6	20	CH
														C	40	44																							
LOWELL	R110	106	6	35	12	31	85	20	53		0-4	UNDULATING	48	A	0	10																							
														B1	10	28																							
														B2	28	40										100	99	98	93	90	76	40	24	45	24	2.74	A-7-6	15	CL
														C	40	48										100	99	98	93	88	74	44	28	56	29	2.83	A-7-6	19	CH
LOWELL	L55	106	7	38	12	31	85	20	52		0-4	UNDULATING	28	A	0	8																							
														B	8	20										100	99	99	93	89	76	46	34	65	37	2.83	A-7-6	20	CH
														C	20	28										100	94	92	88	85	76	50	32	46	26	2.78	A-7-6	15	CL
LOWELL	L110	106	7	38	12	31	85	20	53		0-4	UNDULATING	33	A	0	10																							
														B1	10	22										100	99	98	92	88	77	53	35	69	42	2.87	A-7-6	20	CH
														B2	22	29																							
														C	29	33																		54	20				
LOWELL	CL	106	11	38	12	31	85	20	49		0-4	UNDULATING	58	A	0	20																							
														B	20	30	110	17	35	7						100	97	95	92	88	66	28	16	30	9	2.72	A-4	08	ML-CL
														C	30	58	110	18	21	8						100	95	93	91	88	70	34	23	29	9	2.73	A-4	08	CL
																										100	91	90	89	86	69	40	29	36	15	2.75	A-6	10	CL
LOWELL	R30	106	11	38	12	32	85	20	49		0-4	UNDULATING	54	A	0	10																							
														B	10	23										100	99	98	96	94	79	41	29			2.66			
														C1	23	45										100	98	98	97	94	80	50	38			2.76			
														C2	45	54										100	99	99	97	96	84	58	46	42	22	2.73	A-7-6	13	CL
																										100	92	89	83	79	64	40	30	35	15	2.86	A-6	11	CL
LOWELL	R100	106	13	38	12	26	85	20	58		0-4	UNDULATING	29	A	0	10																							
														B	10	27																							
														C	27	29										100	99	99	93	90	79	54	35	72	42	2.87	A-7	20	CH
LOWELL	R50	106	13	38	12	27	85	20	58		0-4	UNDULATING	54	A	0	18																							
														B	18	35																							
														C1	35	51										100	99	99	95	92	80	54	36	70	41	2.83	A-7-6	20	CH
														C2	51	54										100	99	99	94	92	80	54	37	59	31	2.80	A-7-6	20	CH
																										100	95	92	85	80	60	26	14			2.80			
LOWELL	L50	106	13	38	12	27	85	20	58		0-4	UNDULATING	27	A	0	12																							
														B	12	24																							
														C	24	27										100	98	96	93	91	83	59	40	80	46	2.84	A-7-5	20	MH-CH
LOWELL	L100	106	13	38	12	28	85	20	58		0-4	UNDULATING	22	A	0	13																							
														B	13	21																							
														C	21	22										100	99	99	94	91	78	50	33	69	39	2.84	A-7	20	CH
MELVIN	L110	106	5	38	12	29	85	20	50		0-4	UNDULATING	89	A	0	36																							
														C1	36	80										100	99	98	95	93	67	18	9	34	12	2.71	A-6	09	ML-CL
														C2	80	89										100	94	92	87	83	65	26	15	38	18	2.77	A-6	11	CL
																										100	96	95	91	86	68	34	22	32	14	2.79	A-6	10	CL
MELVIN	L75	106	12	38	12	30	85	20	48		0-4	UNDULATING	47	A	0	6																							
														C1	6	28																							
														C2	28	47										100	98	97	95	91	69	23	17	33	12	2.70	A-6	09	CL
																										100	91	88	84	80	67	41	31	37	15	2.78	A-6	10	CL

SOIL NAME SERIES	TYPE	COUNTY NO.	UNIT NO.	LAT DEG	LAT MIN	LAT SEC	LONG DEG	LONG MIN	LONG SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
MELVIN		106	12	38	12	31	85	20	48		0-4	UNDULATING	59	A	0	4																							
			L35											C1	4	26										100	93	91	86	82	64	29	18	31	8	2.77	A-4	08	ML-CL
														C2	26	59										100	93	91	88	86	64	35	26	34	13	2.73	A-6	09	CL
MELVIN		106	12	38	12	32	85	20	48		0-4	UNDULATING	34	A	0	14										100	95	94	90	86	72	43	31			2.73			
			R64											C1	14	30										100	96	94	88	85	76	30	19	33	9	2.69	A-4	08	ML-CL
														C2	30	34										100	95	94	92	89	68	33	23	32	11	2.71	A-6	09	CL
NEWARK		106	3	38	12	25	85	20	53		0-4	ROLLING	101	A	0	22										100	99	98	95	92	74	33	21	48	28	2.74	A-7-6	17	CL
			R55											C1	22	42										100	99	99	98	93	76	40	24	54	34	2.80	A-7-6	19	CH
														C2	42	75										100	98	97	93	89	76	44	28	58	33	2.85	A-7-6	20	CH
														C3	75	101																							
NEWARK		106	3	38	12	25	85	20	54		0-4	ROLLING	116	A	0	24																							
			R110											C1	24	42										100	99	98	95	90	67	22	9	34	15	2.69	A-6	10	CL
														C2	42	96										100	97	95	91	87	64	24	11	40	20	2.73	A-7-6	12	CL
														C3	96	116										100	94	92	85	81	60	31	19	28	11	2.80	A-6	09	CL
NEWARK		106	9	38	12	18	85	19	55		0-4	ROLLING	77	A	0	54										100	97	95	91	80	61	25	15	30	11	2.68	A-6	09	ML-CL
			R50											C1	54	63										100	93	90	85	80	62	30	27	41	18	2.73	A-7-6	11	CL
														C2	63	77										100	87	83	76	72	58	36	26			2.85			
NEWARK		106	9	38	12	19	85	19	55		0-4	ROLLING	80	A	0	21										100	95	92	87	84	63	29	19	34	11	2.77	A-6	09	ML-CL
			CL											C1	21	46	95	24	32	6						100	93	91	88	84	64	29	19	35	10	2.69	A-6	08	ML-CL
														C2	46	80	103	20								100	93	91	89	86	66	38	26	32	14	2.72	A-6	10	CL
NEWARK		106	9	38	12	19	85	19	5		0-4	ROLLING	95	A	0	35										100	97	96	92	89	76	42	31	30	11	2.71	A-6	08	CL
			L50											C1	35	70										100	96	94	91	88	65	33	22	30	14	2.67	A-6	10	CL
														C2	70	95										100	92	91	87	83	72	52	41	47	24	2.70	A-7-6	15	CL
NEWARK		106	9	38	12	20	85	19	55		0-4	ROLLING	91	A	0	52										100	90	95	91	86	66	28	19	32	10	2.69	A-4	08	ML-CL
			L100											C1	52	80										100	91	89	86	83	69	39	27	35	13	2.73	A-6	09	ML-CL
														C2	80	91										100	93	91	85	81	70	53	42	49	25	2.83	A-7-6	16	CL

Soil Name: Series	Type	County No.	State No.	Latitude Deg	Latitude Min	Latitude Sec	Longitude Deg	Longitude Min	Longitude Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data: Dry Unit Wt. (PCF)	Compaction Data: Opt MC	CBR Data: Unsoaked	CBR Data: Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	AASHO GI	Unified
ALBERTVILLE	SIL	118	17	36	51	30	84	14	40	ACID SH OVR SS	4	RIDGETOP	34+	AP	0	7	105	17	31	13			100	99	96	92	89	88	81	75	58	27	18	21	3	2.65	A-4	08	ML
														B2T	15	22	101	22	15	9			100	99	98	96	95	94	88	81	65	46	36	34	10	2.73	A-6	08	ML-CL
														B3T	22	34	95	26	17	11		100	99	95	91	88	86	85	75	67	55	41	33	45	19	2.76	A-7-6	13	ML-CL

Appendix III - Summary of Soil Profile Data by Soil Series

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORI-ZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOT-TOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	C B R DATA UNSOAKED	C B R DATA SOAKED
ALBERTVILLE	SIL	74	36	36	47	59	84	25	41	ACID SH	17	SH FINGER	44+	A1	0	3	101	17	45	14
														B22T	18	27	100	23	14	6
														C	39	44	94	26	18	3
ALBERTVILLE	SIL	118	17	36	51	30	84	14	40	ACID SH OVR SS	4	RIDGETOP	34+	AP	0	7	105	17	31	13
														B2T	15	22	101	22	15	9
														B3T	22	34	95	26	17	11
ALLEGHENY		6	5	38	09	57	83	40	35		2		72	A1	0	10				
														A2	10	15				
														B1	15	21				
														B2	21	41				
														C	41	72				
ALLEGHENY		6	6	38	09	37	83	38	32		4		55+	A1	0	5				
														A2	5	9				
														B1	9	16				
														B2	16	27				
														B3	27	42				
														C	42	55+				
ALLEGHENY		6	7	38	04	23	83	28	31		9		57+	A1	0	5				
														A2	5	13				
														B1	13	18				
														B2	18	45				
														C	45	57+				
ALLEGHENY		6	8	38	10	24	83	37	05		6		51+	A	0	12				
														B1	12	24				
														B2	24	34				
														B3	34	41				
														C	41	51+				
ALLEN	LCAM	64	1	38	05	01	82	36	58				30	B1	12	16				
														B2	16	30				
ASHBURN	CHSIL	5	1	37	04	53	85	58	05	LS			68+	AP	0	6	105	17		
														B21	16	28	92	28		
														C	43	68+	94	27		
ASHBURN	CHSIL	5	2	37	04	29	85	53	27	LS			68	AP	0	6	109	15		
														B21	11	22	112	15		
														C	52	68	89	29		
ASHTON	SIL	34	43	38	09	32	84	28	04		C-3	UNDULATING	37	A	0	6	88	28	12	5
														B	6	22	96	23	23	5
														C	22	37	94	25		
BAXTER	CHSIL	5	3	37	01	02	85	59	15	LS			58+	AP	0	8	109	16		
														B3	22	40	102	21		
														C	40	58+	105	19		
BAXTER	CHSIL	5	4	37	59	13	86	01	09	CHLS			50+	AP	0	8	108	15		
														B3	23	42	103	22		
														C	42	50+	96	27		
BEASLEY	SIL	56	1	38	11	17	85	25	27	SHMR,LS			60	AP	0	7	108	16		
														B22	13	18	102	23		
														C	36	60	100	24		
BEASLEY	SIL	56	2	38	13	37	85	28	40	SH,LS			37	AP	0	7	106	18		
														B21	15	21	97	25		
														B3	26	32	100	22		
														C	32	37	110	18		
BEASLEY	SIL	106	1	38	12	33	85	21	12		C-4	ROLLING	124	A	0	86				
		L90												B	86	122				
														C	122	124				
BEASLEY	SIL	106	1	38	12	33	85	21	12		C-4	ROLLING	96	A	0	56				
		L60												B	56	94				
														C	94	96				

SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
ALBERTVILLE	A1			100	94	86	77	70	69	60	48	28	14	8	NP	NP	2.58	A-4	00	SP
	B22T		100	99	97	96	96	95	94	85	77	66	54	45	53	29	2.71	A-7-6	19	CH
	C					100	99	99	98	96	94	86	67	56	58	31	2.74	A-7-6	20	CH
ALBERTVILLE	AP			100	99	96	92	89	88	81	75	58	27	18	21	3	2.65	A-4	08	ML
	B2T			100	99	98	96	95	94	88	81	65	46	36	34	10	2.73	A-6	08	ML-CL
	B3T		100	99	99	91	88	86	85	75	67	55	41	33	45	19	2.76	A-7-6	13	ML-CL
ALLEGHENY	A1						100	93	82	58	50	35	17	8						
	A2						100	98	89	75	69	41	22	16						
	B1						100	97	93	80	71	55	38	23						
	B2						100	98	92	70	62	45	29	26						
	C						100	90	61	36	32	29	26	24						
ALLEGHENY	A1						100	91	78	54	45	34	18	7						
	A2						100	92	81	57	54	41	20	9						
	B1						100	96	85	69	66	52	28	18						
	B2						94	88	84	70	66	56	41	25						
	B3						100	94	90	74	71	61	42	32						
	C						100	99	80	41	38	33	22	18						
ALLEGHENY	A1						100	98	93	64	56	39	23	12						
	A2						100	97	92	60	50	36	23	12						
	B1						100	96	94	57	48	32	23	14						
	B2						100	99	96	59	51	40	30	19						
	C						100	96	90	31	26	20	15	13						
ALLEGHENY	A						100	99	96	81	65	41	23	11						
	B1						100	99	96	61	73	53	30	22						
	B2						100	99	97	80	73	56	31	14						
	B3						100	99	98	71	56	45	40	34						
	C						100	99	94	56	40	30	26	22						
ALLEN	B1						100	89	79	63	57	45	26	19						
	B2						100	89	82	67	64	51	31	22						
ASHBURN	AP	94	91	89	86	85	83	80	78	74	72	53	19	10	32	6		A-4	08	ML
	B21	98	94	92	90	89	88	87	87	86	85	78	64	60	72	39		A-7-5	20	MH-CH
	C	49	44	41	37	35	33	32	32	31	31	28	23	20	68	37		A-2-7	03	GC
ASHBURN	AP	96	94	93	92	92	91	89	88	84	83	66	24	13	29	6		A-4	08	ML-CL
	B21	89	85	83	77	74	72	70	69	66	65	51	26	18	37	14		A-6	09	ML-CL
	C	43	41	41	39	38	37	37	37	35	34	31	27	24	73	36		A-2-7	04	GC
ASHTON	A						100	96	93	86	81	60	20	5	37	3	2.62	A-4	08	CL
	B						100	99	98	96	92	75	15	5	38	13	2.67	A-6	09	CL
	C						100	92	89	82	77	59	20	11	36	6	2.70	A-4	08	CL
BAXTER	AP			100	99	98	92	86	85	80	76	52	20	11	28	5	2.60	A-4	08	ML-CL
	B3			98	97	96	95	92	91	87	84	73	51	41	54	24		A-7-5	16	MH-CH
	C	70	66	64	60	58	56	54	52	47	46	36	24	18	42	17	2.61	A-7-6	08	ML-CL
BAXTER	AP	96	95	94	92	90	88	84	82	76	73	51	21	11	27	5	2.61	A-4	08	ML-CL
	B3	97	96	95	95	95	94	93	91	87	85	76	60	48	52	26	2.64	A-7-6	17	CH
	C			100	99	97	95	91	90	88	86	81	64	54	70	36	2.60	A-7-5	20	MH-CH
BEASLEY	AP							100	99	98	98	76	31	24	31	8		A-4	08	ML-CL
	B22						100	99	98	97	96	82	55	45	53	27		A-7-6	17	CH
	C		93	91	88	83	78	74	73	70	69	62	52	45	63	32		A-7-5	19	MH-CH
BEASLEY	AP						100	99	98	96	94	72	34	24	34	11		A-6	08	ML-CL
	B21						100	99	99	97	97	88	66	61	71	42		A-7-6	20	CH
	B3								100	98	97	85	66	59	66	39		A-7-6	20	CH
	C						100	99	98	90	82	54	33	29	35	14		A-7	10	CL
BEASLEY	A																			
	B						100	94	93	69	85	66	37	24	51	30	2.80	A-7-6	18	CH
	C														38	17	2.74	A-6	11	CL
BEASLEY	A						100	97	96	93	89	68	26	16						
	B																			
	C																			

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
BEASLEY	SIL	106	1	38 12 32	85 21 12		0-4	ROLLING	107	A	0	33										1CC	95	93	86	81	65	35	19	51	27	2.69	A-7-6	17	CH
		L30								B	33	73										100	93	91	84	80	68	36	22	38	19	2.74	A-6	12	CL
										C	73	107																							
BEASLEY	SIL	106	1	38 12 32	85 21 12		0-4	ROLLING	105+	A	0	18										100	98	96	91	89	69	25	11	38	16	2.66	A-6	10	CL
		CL								B1	18	50	95	26	13	1						100	94	92	85	82	71	42	24	51	29	2.90	A-7-6	18	CH
										B2	50	60										100	93	91	86	82	70	36	22	45	23	2.81	A-7-6	14	CL
										C	60	105+	100	24								1C0	94	92	85	81	68	37	2C			2.75			
BEASLEY	SIL	1C6	1	38 12 32	85 21 12		0-4	ROLLING	78	A	0	30										1CC	95	93	87	83	63	35	21	49	24	2.68	A-7-6	16	CL
										B1	30	54										1CO	99	99	9C	86	74	46	3C	83	49	2.87	A-7-5	20	CH
		R60								B2	54	66										1CC	99	97	87	83	69	4C	27	72	4C	2.85	A-7-5	20	MH-CH
										C	66	78										1CC	94	9C	82	78	66	38	22	28	12	2.75	A-6	09	CL
BEASLEY	SIL	1C6	1	38 12 30	85 21 12		C-4	ROLLING	49	A	0	23										1C0	99	98	92	88	75	48	32						
		R110								B	23	43																		66	37	2.86	A-7-6	20	CH
										C	43	49																							
BELLAH	SL	38	2	36 32 56	89 16 32				42+	C1	18	42										1CC	98	89	33	18	1C	9	7						
										C2		42+										1CC	93	65	4	3	2	1	1						
BELLAH	FSL	38	3	36 34 17	89 19 42				57	A1P	0	9	104	16	13	11						1CC	99	92	69	45	14	7	5	NP	NP	2.66	A-4	06	ML
										C2	44	57	102	19	14	8							10C	98	89	81	39	15	13	30	2	2.66	A-4	08	ML
BELLAH	FSL	38	4	36 31 41	89 16 45				60+	AP	0	6	115	12	13	13						1CC	99	76	35	22	19	9	7	NP	NP	2.65	A-2	00	SP
										BC	11	16	120	12	23	19						1CC	99	82	38	27	20	15	14	NP	NP	2.65	A-4	01	SP
										C3	28	60+	100	18	7	10						1CC	99	84	7	4	3	1	1	NP	NP	2.67	A-3	00	SW-SM
BEWLEYVILLE	SIL	17	1	37 58 13	87 52 25	SS			78+	AP	0	7	104	16								1CC	99	98	98	96	66	22	15	27	4		A-4	08	ML-CL
										B21	7	30	108	18											1CC	98	75	36	3C	43	2C		A-7-6	13	CL
										B28	50	78+	101	22			83	79	79	78	78	77	75	74	71	68	59	42	35	56	32		A-7-6	18	CH
BEWLEYVILLE	SIL	17	2	37 C3 06	87 55 13	LOESS OVER LS			62+	A2	0	11	107	16										100	99	98	68	24	16	26	4		A-4	08	ML-CL
										B2	11	32	105	19										100	99	98	75	39	31	46	21		A-7-6	14	ML-CL
										B3N	32	40	109	17								1CO	99	99	95	92		34	26	37	14		A-6	10	ML-CL
										B28	40	62+	103	21			81	77	76	76	76	75	74	73	59	56	46	37	33	43	23		A-7-6	11	CL
BOONE	CHSIL	5	5	36 53 21	85 47 51	CHLS			30	AP	0	8	108	16			98	98	97	92	87	81	72	7C	67	66	52	24	16	31	8		A-4	06	ML-CL
										B	12	20	110	17			69	66	64	59	56	54	48	48	45	43	34	18	12	32	1C		A-4	06	ML-CL
										C2	24	30	110	16			56	52	47	38	33	31	28	27	25	24	19	10	6	28	6		A-4	01	GM-GC
BOONE	CHSIL	5	6	36 52 14	85 50 55	CHLS			19	AP	0	6	102	18			94	91	89	84	8C	78	72	7C	67	65	51	24	16	33	7		A-4	07	ML
										B	6	15	108	18			97	96	96	93	90	86	80	75	77	75	6C	36	24	32	1C		A-4	08	ML-CL
										C1	15	19	101	20								5C	45	44	42	41	34	2C	13	33	7		A-4	08	ML
BRANDON	SIL	18	1C	38 7 5C	86 32 C4	LES OVER G PLNS	18.0	SLOPING	48+	A2	3	9	105	17	33	13						100	97	96	94	71	45	21	17	25	4	2.61	A-4	8	ML-CL
										B21T	12	19	105	19	18	11						1CC	96	95	94	74	51	31	26	36	6	2.67	A-4	0	ML
										IIC2	32	48	113	15	99	45	93	81	72	59	52	42	34	32	31	29	24	15	13	25	1C	2.67	A-2-5	0	ML-CL
BRANDON	SIL	18	14	38 4 22	86 35 47	LES OVER CH LS	15.0	SLOPING	42+	A2	2	8	100	19	29	11						10C	99	98	97	8C	57	21	11	NP		2.66	A-4	8	ML
										B21T	8	17	103	19								1CC	99	99	98	72	50	31	26	37	5	2.68	A-4	8	ML
										IIC2	29	39	111	16	99	51	89	81	76	67	6C	53	51	50	49	45	35	18	13	28	9	2.68	A-4	3	CL
BRAXTON	SIL	84	3	37 56 08	84 49 47		C-3	UNDULATING	81	A	0	18	101	20	24	5						1CC	92	89	8C	75	54	14	5	37	14	2.65	A-6	10	CL
										B	18	20																							
										C	20	81	105	19	21	13						1CC	96	94	9C	86	64	22	12	33	6	2.70	A-4	08	ML-CL
BRAXTON	SIL	84	6	37 52 51	84 46 12		C-3	UNDULATING	60	A	0	12	103	18	37	9						1C0	96	95	91	88	73	21	6	29	8	2.68	A-4	08	CL
										B	12	30	106	19	17	13						1C0	94	93	91	91	78	39	26	36	13	2.73	A-6	09	CL
										C	30	60	95	25	11	5						1C0	94	93	88	85	70	43	30	48	25	2.75	A-7-6	16	CL
BRAXTON	SIL	84	8	37 50 49	84 47 37		C-3	UNDULATING	60	A	0	25	104	18	32	6						1CC	89	84	79	78	53	15	7	35	13	2.61	A-6	09	CL
										B	25	40	110	17								1CC	98	95	88	85	66	18	5	31	14	2.69	A-6	10	CL
										C	40	60	110	18	16	11						1C0	95	93	9C	87	70	33	18	31	19	2.72	A-6	11	CL

Soil Name: Series	Type	Location (County No., No., Latitude, Longitude)	Parent Material	Slope	Topography	Depth to Bedrock (in)	Horizon	Depth (inches) Top	Depth (inches) Bottom	Compaction Data: Dry Unit Wt. (PCF)	Compaction Data: Opt MC	CBR Data: Unsoaked	CBR Data: Soaked	Gradation, Percent Finer Than: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
BRAXTON	SIL	84 24 37 53 06 84 48 36		0-3	UNDULATING	70	A	0	14	105	17	47	5						100	95	93	91	88	72	27	9	29	5	2.66	A-4	08	ML-CL
							B	14	33	109	16								100	95	93	90	89	70	26	14	33	10	2.68	A-4	08	CL
							C	33	70																							
BROOKE	SICL	74 12 36 44 39 84 39 18	CAL SH	24	SH RD NOSE	40+	AP	0	3	95	21	15	4			100	99	99	98	95	95	92	91	76	41	27	40	16	2.66	A-6	10	ML-CL
							B2T	3	11	103	19	11	4			100	99	98	96	94	94	92	88	75	49	38	46	24	2.72	A-7-6	15	CL
							C1	20	32	109	17	23	3	100	99	98	92	84	77	74	74	71	68	58	32	22	43	21	2.76	A-7-6	13	CL
BROOKE	SIL	74 38 36 44 39 84 39 18	CAL SH	21	RD TP SIDE	46+	AP1	0	3	101	19	31	6	97	96	94	88	84	84	75	78	69	64	50	25	14	27	6	2.68	A-4	07	ML-CL
							B2T	6	11	107	18	15	7		100	98	95	93	91	89	88	84	81	70	43	31	30	12	2.70	A-6	09	CL
							C	26	46	107	18	3	2				100	97	96	88	84	78	73	57	34	23	40	17	2.73	A-6	10	ML-CL
BURGIN	SICL	34 9 38 00 53 84 31 22		0-3	LEVEL	18+	A	0	18	99	23							100	94	89	88	83	80	66	22	11	35	13	2.67	A-6	09	CL
							B		18+	95	24						100	99	93	80	75	63	60	52	28	17	38	12	2.80	A-6	06	CL
BURGIN	SICL	34 35 38 00 53 84 31 22		0-3	LEVEL		A			95	26	16	8						100	93	91	85	83	67	21	8	47	20	2.67	A-7-6	13	CL
BURGIN	SICL	34 46 38 06 13 84 27 27		0-3	LEVEL	78+	A	0	27	88	27	16	4						100	98	97	95	91	75	29	13	47	17	2.63	A-7-6	12	CL
							B	27	54	101	21								100	90	86	77	74	60	26	14	45	21	2.78	A-7-6	13	CL
							C	54	78+	108	21	14	8						100	71	64	53	51	36	12	8	45	19	2.97	A-7-6	07	CL
BURGIN	SICL	34 47 38 06 05 84 37 38		0-3	LEVEL	60+	A	0	23	98	21	25	5						100	98	96	90	86	73	22	19	37	10	2.66	A-4	08	CL
							B	23	37	92	27								100	94	92	83	78	51	15	9	48	14	2.73	A-7-5	11	CL
							C	37	60+	98	24								100	84	76	67	62	46	20	12	47	20	2.73	A-7-6	11	CL
BURGIN	CL	84 12 37 48 09 84 48 17		0-3	LEVEL	60+	A	0	10	96	24		6						100	99	98	96	94	77	32	17	41	14	2.62	A-7-6	10	CL
							B1	10	18	103	20		6						100	99	99	98	97	80	32	15	47	26	2.64	A-7-6	16	CL
							B2	18	36	98	22		6						100	98	96	87	83	66	32	15	52	38	2.71	A-7-6	19	CH
							C	36	60+	102	22								100	94	91	81	77	64	30	15	45	23	2.84	A-7-6	14	CL
BYINGTON	SIL	25 1 37 55 37 84 00 27	BL SH			29+	A2	4	11	102	20							100	99	95	94	93	92	78	42	25	33	6		A-4	08	ML-CL
							B2	14	21	106	18							100	99	95	94	93	91	77	43	27	30	7		A-4	08	ML-CL
							B3M	21	29	106	20						100	98	94	91	90	89	88	76	52	36	40	16		A-6	10	ML-CL
							C1		29+	105	19					100	96	89	77	71	70	68	67	56	42	32	44	17		A-7-6	10	ML-CL
BYINGTON	SIL	25 2	BL SH			30+	AP	0	5	99	22							100	99	95	94	91	87	71	39	25	38	11		A-6	08	ML
							B2	10	18	108	18								100	99	94	91	88	71	43	32	36	14		A-6	10	CL
							B3M	18	26	105	20							100	99	92	91	87	83	66	46	35	44	21		A-7-6	13	CL
							C1	26	30+	97	24								100	99	98	94	90	81	65	56	70	43		A-7-6	20	CH
CALLOWAY	SIL	38 9 36 32 33 85 03 51				58+	AP	0	8	102	18	24	8						100	99	99	98	89	70	20	13	NP	NP	2.63	A-4	08	ML
							B22G	15	29	101	22	11	7						100	99	99	98	92	69	33	26	39	23	2.67	A-6	10	ML-CL
							B3M	29	46	108	17	45	4							100	99	99	95	70	29	24	37	14	2.70	A-6	10	ML-CL
							C	46	58+	107	17	51	7							100	99	99	95	68	27	21	34	11	2.67	A-6	08	ML-CL
CALLOWAY	SIL	38 10 36 31 01 86 59 22				64	AP	0	9	105	17	28	14						100	97	97	96	85	59	17	12	24	NP	2.65	A-4	08	ML
							B2	9	15	106	17	33	17						100	97	97	96	89	61	23	18	29	23	2.69	A-4	08	ML-CL
							B3M2	21	29	102	20	26	6						100	98	98	97	92	69	34	27	35	13	2.69	A-6	09	CL
							C	46	64	103	19	24	6						100	99	99	98	88	59	22	18	33	9	2.70	A-4	08	ML-CL
CANNEYVILLE	SIL	43 15 37 31 42 86 19 54	MIXED LS SS	16	UNIFORM	24	B22T	9	18	81	26	20	2					100	99	98	97	97	96	90	74	67	70	35	2.81	A-7-5	20	MH-CH
							C	18	24	84	25	12	2						100	99	99	97	96	91	74	63	72	32	2.75	A-7-5	20	MH
CANNEYVILLE	SIL	43 21 37 26 40 86 04 25	MIXED LS SS	15	SLOPE	30	B22	9	16	84	24	16	1							100	99	99	99	96	86	77	67	34	2.73	A-7-5	20	MH-CH
							C	21	30	87	31	1	1								100	98	97	93	83	72	73	36	2.74	A-7-5	20	MH
CAPTINA	SIL	34 32 37 51 25 84 23 57		0-3	LEVEL	68	A	0	18	87	24	11	5						100	99	98	93	90	75	43	25	43	17	2.75	A-7-6	11	CL
							B	18	68	94	24	16	7						100	99	98	96	93	81	48	28	53	27	2.74	A-7-6	17	CH
CHRISTIAN	SIL	1 2 36 57 46 85 16 08	INTBEDSH,LS,SS	3		35+	AP	0	6	110	15							100	99	95	90	66	60	46	27	20	26	6		A-4	06	ML-CL
							B2	12	27	98	22								100	99	98	78	74	70	61	53	66	37		A-7-6	20	MH-CH
							C3		35+	95	25								100	99	95	97	93	82	64	52	75	39		A-7-5	20	MH-CH

SOIL NAME: SERIES	TYPE	COUNTY NO.	SITE NO.	LAT. DEG	LAT. MIN	LAT. SEC	LONG. DEG	LONG. MIN	LONG. SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION: DRY UNIT WT. (PCF)	COMPACTION: OPT MC	CBR UNSOAKED	CBR SOAKED
CHRISTIAN	CHSIL	1	3	37	05	41	85	30	41	ARG CHLS,SS,SH	6		48+	AP	0	8	114	12		
														B22	17	31	108	18		
														C		48+	102	19		
CHRISTIAN	CHSIL	1	4							ARG CHLS,CSH,SS	7		33+	AP	0	7	113	12		
														B2	11	33	101	21		
														C		33+	107	18		
CHRISTIAN	FSL	1	9								10		36+	AP	0	6	115	11		
														B2	6	15	119	13		
														C		36+	90	28		
CINCINNATI	SIL	8	3	39	01	06	84	41	53	LSS OVR C GLA MT	7	SLOPING	186	AP	0	7	97	20	99	29
														B21T	7	19	94	25	5	5
														IIC	29	84	87	28	3	2
CINCINNATI	SIL	8	4	39	03	40	84	39	44	LSS, C GLA TILL	5	SLOPING	318	AP	0	8	97	19	17	6
														B21T	19	27	94	25	4	7
														IIC1X	42	72	107	20	3	4
														C3		96+	98	24	6	4
COLYER	SIL	6	9	38	02	47	83	45	35	BL FISSLE SH	9		21	A1	0	5	101	20		
														B2	5	12	99	23		
														C	18	21	98	24		
COLYER	SIL	6	10	38	03	05	83	45	22	FISSLE SH	13		26	A2	5	11	97	23		
														B2	11	19	100	23		
														C	19	26	98	24		
CRIDER	SIL	17	3	37	09	33	87	59	37	LOESS OVER LS			60+	A2	1	8	105	17		
														B21	12	31	104	20		
														B28	42	60	110	17		
CRIDER	SIL	17	4	37	05	45	87	51	25	LOESS OVER LS			42+	AP	0	7	105	16		
														B21	7	20	109	18		
														B28	28	42+	110	17		
CULLEOKA	SIL	34	27	37	52	03	84	22	58		+25	MOUNTAINOU	S45	A	0	28	96	23	15	6
														B	28	45	99	23	11	4
CULLEOKA	SIL	34	29	37	51	54	84	22	34		8-15	ROLLING	14	A	0	2				
														B	2	14	98	23	10	2
CULLEOKA	SIL	41	1	38	46	03	84	36	17				24	B1	6	13				
														B2	17	24				
CULLEOKA	LCAP	84	16	38	56	45	84	51	03		C-3	ROLLING	33	A	0	2	94	25	10	7
														B	2	14	96	25	14	4
														C	14	33	102	21	33	4
CUMBERLAND	SIL	84	4	37	56	13	84	48	53		0-3	LEVEL	37	A	0	10	101	20	55	7
														B	10	35	114	15	23	13
														C	35	37				
CUMBERLAND	SIL	84	7	37	53	02	84	46	38		0-3	LEVEL	90+	A	0	37	117	13	18	19
														B	37	60	114	15	32	24
														C	60	90+	112	16	8	8
CUMBERLAND	SIL	84	10	37	45	08	84	42	39		0-3	LEVEL	74	A	0	7	96	22	68	6
														B	7	45	107	19	16	14
														C	45	74	107	18		

SERIES	HORIZON	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
CHRISTIAN	AP	100	97	92	84	76	71	69	67	42	30	20	11	7	NP	NP		A-4	01	SM
	B22	98	98	96	94	92	90	88	86	53	48	42	37	34	47	27		A-7-6	11	CL
	C	100	97	94	86	81	77	75	74	62	61	57	44	38	56	30		A-7-6	16	CH
CHRISTIAN	AP	100	99	92	83	75	68	66	63	48	45	35	16	11	21	2		A-4	03	SM
	B2		100	99	98	98	97	96	94	83	81	74	60	52	57	33		A-7-6	19	CH
	C						100	99	94	73	69	59	47	41	50	28		A-7-6	17	CL-CH
CHRISTIAN	AP	100	99	99	98	97	95	93	92	50	44	32	17	10	18	0		A-4	03	SM
	B2						100	99	98	54	49	38	26	20	23	7		A-4	04	ML-CL
	C						100	99	98	89	87	78	70	63	86	49		A-7-5	20	MH-CH
CINCINNATI	AP						100	99	98	96	95	80	32	20	26	4	2.63	A-4	08	ML
	B21T						100	99	98	96	95	80	32	20	32	9	2.70	A-4	08	ML-CL
	IIC						100	96	90	75	72	62	46	38	42	20	2.74	A-7-6	12	CL
CINCINNATI	AP						100	99	98	88	84	56	26	15	28	5	2.62	A-4	08	ML
	B21T						100	99	97	94	90	68	33	26	33	13	2.69	A-6	09	CL
	IIC1X						100	96	90	71	65	54	28	22	30	4	2.69	A-4	07	ML
	C3						100	97	93	78	73	60	46	38	43	19	2.69	A-7-6	13	CL
COLYER	A1				100	96	80	69	67	65	63	54	35	22	39	9		A-4	06	ML
	B2			100	98	96	90	85	84	82	80	71	50	32	42	11		A-7-5	09	ML
	C		100	97	85	76	69	66	66	65	65	61	48	35	52	20		A-7-5	12	MH
COLYER	A2					100	96	90	88	86	85	76	49	31	40	9		A-4	08	ML
	B2			100	95	91	85	83	82	82	82	73	54	35	41	13		A-7-6	09	ML
	C	100	99	99	98	94	88	86	85	84	84	76	57	40	45	15		A-7-5	11	ML
CRIDER	A2								100	99	97	70	25	16	28	4		A-4	08	ML-CL
	B21									100	98	77	39	32	51	25		A-7-6	16	CH
	B28						100	99	98	94	92	71	35	29	41	18		A-7-6	11	CL
CRIDER	AP								100	99	98	71	26	19	28	6		A-4	08	ML-CL
	B21								100	99	98	77	38	29	41	18		A-7-6	11	CL
	B28						100	95	98	96	94	71	38	30	41	19		A-7-6	12	CL
CULLEOKA	A						100	96	95	91	89	75	34	18	44	26	2.69	A-7-6	15	CL
	B						100	97	95	92	90	88	50	34	39	18	2.75	A-6	11	CL
CULLEOKA	A																			
	B						100	99	98	94	90	77	54	35	46	22	2.79	A-7-6	14	CL
CULLEOKA	B1						100	98	97	95	94	69	37	29						
	B2						100	99	98	96	94	88	54	44						
CULLEOKA	A						100	97	95	88	83	62	32	19	41	13	2.66	A-7-6	09	CL
	B							100	99	95	92	75	48	36	55	33	2.75	A-7-6	19	CH
	C						100	97	96	91	87	72	44	30	49	25	2.81	A-7-6	16	CL
CUMBERLAND	A						100	97	94	88	84	64	19	9	33	11	2.65	A-6	09	CL
	B						100	94	89	74	69	54	21	14	25	7	2.70	A-4	08	ML-CL
	C																			
CUMBERLAND	A						100	86	70	51	47	33	7	4	21	4	2.63	A-4	03	ML-CL
	B						100	94	83	74	71	53	18	8	26	11	2.69	A-6	08	CL
	C				100	59	97	88	70	59	55	40	16	9	28	14	2.72	A-6	07	CL
CUMBERLAND	A						100	95	93	89	86	68	20	6	35	10	2.62	A-6	08	CL
	B						100	89	87	84	81	66	30	14	32	12	2.70	A-6	09	CL
	C						100	91	89	84	79	59	25	14	35	16	2.72	A-6	10	CL

Series	Type	County No.	Set No.	Latitude Deg Min Sec	Longitude Deg Min Sec	Parent Material	Slope	Topography	Depth to Bedrock (IN)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Dry Unit Wt. (PCF)	Compaction Opt MC	CBR Unsoaked	CBR Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
CUMBERLAND	SIL	84	15	37 41 35	84 57 18		0-3	LEVEL	24+	A	0	4	100	21	12	3						100	97	95	88	82	60	26	13	45	19	2.63	A-7-6	12	CL
										B	4	24+	101	23	15	1						100	99	97	92	90	76	45	30	54	23	2.81	A-7-6	19	CH
DEKALB	FSL	74	8	36 51 22	84 29 12	ACID SS	12	NOSE BENCH	43+	A22	6	13	122	11	23	22			100	99	98	98	93	71	30	27	20	11	6	NP	NP	2.63	A-2-4	00	SM
										B2	23	30	119	10	16	11			100	99	98	96	92	90	35	28	17	10	7	NP	NP	2.64	A-2-4	00	SM
										C	30	43	121	12	24	32			100	96	90	86	81	63	24	21	18	15	10	NP	NP	2.66	A-1-B	00	SM
DEKALB	SL	74	10	36 49 43	84 21 08	ACID SS COL	55	SIDE SLOPE	40+	A22	3	11	117	13	33	22		100	99	97	96	95	94	69	32	27	20	10	3	NP	NP	2.62	A-2-4	00	SM
										B21	11	22	119	12	20	20		100	99	96	95	94	92	65	32	30	24	12	5	NP	NP	2.63	A-2-4	00	SM
										B22	22	40	120	13	44	31		100	99	95	94	94	91	68	38	35	31	20	15	NP	NP	2.64	A-4	00	SM
DICKSON	SIL	5	7	37 02 41	86 03 08	CH LS			72	A2	1	8	112	14								100	99	97	86	84	63	23	16	25	5		A-4	08	ML-CL
										B2	12	24	114	15								100	99	97	87	85	66	30	22	31	10		A-4	08	ML-CL
										B3M	24	46	115	14								100	98	96	82	80	63	27	18	28	7		A-4	08	ML-CL
										C	46	72	113	16								100	98	94	74	72	60	38	30	37	15		A-6	10	CL
DICKSON	CHSIL	5	8	36 50 50	85 50 11	CH LS			44	AP	0	7	108	15			96	94	92	90	89	83	76	74	69	68	52	22	15	30	5		A-4	07	ML
										B2	12	22	108	18								100	96	95	92	90	75	50	35	41	17		A-7-6	11	ML-CL
										B3M	22	32	102	22								100	99	99	97	95	84	56	42	45	19		A-7-6	13	ML-CL
										C	32	44	99	23								90	78	78	77	75	69	51	36	47	16		A-7-5	12	ML
CONERAIL	SIL	34	8	38 00 55	84 31 26		0-3	LEVEL	13+	A	0	13																		34	11		A-6	--	CL
										B		13+	106	18						100	99	96	93	91	85	81	68	26	13	30	8	2.73	A-4	08	CL
DUNDEE	SICL	38	7	36 30 15	89 15 37				59	A1P	0	6	94	25	13	5						100	99	99	96	95	89	57	36	44	16	2.65	A-7-6	11	ML-CL
										B21	12	25	94	22	24	3						100	99	99	94	87	80	64	50	51	28	2.74	A-7-6	15	MH-CH
										D1	42	59	114	14	9	9						100	99	82	29	17	12	9	8	NP	NP	2.67	A-2	00	SM
DUNDEE	SICL	38	8	36 32 45	89 20 43				72+	AP	0	6	94	24	10	6							100	100	99	93	81	51	35	49	18	2.67	A-7-5	13	ML
										B2	6	19	91	26	10	5						100	99	99	96	95	86	60	46	56	22	2.70	A-7-5	16	MH
										D	45	60+	112	15	11	9							100	99	51	37	22	15	11	NP	NP	2.68	A-4	03	ML
EDEN	SICL	25	3	37 59 36	84 08 28	SOFT SH AND LS				B1	2	6	93	23			97	97	97	97	97	97	97	96	94	90	76	53	43	56	24		A-7-5	17	MH
										C1	6	28	93	27							100	98	98	98	97	96	88	74	66	78	46		A-7-5	20	CH
EDEN	SICL	25	4	37 56 22	84 09 52	SOFT SH AND LS				B2	2	10	95	23										100	99	98	89	70	59	66	36		A-7-5	20	CH
										C1		10+	97	24				90	89	88	87	86	86	85	85	84	79	65	56	72	43		A-7-6	20	CH
EDEN	SIC	34	3	37 59 38	84 27 47		8-15	ROLLING	62	A	0	22	103	20	16	9						100	98	96	95	94	82	40	23	37	14	2.73	A-6	10	CL
										B	22	38	98	25	12	3						100	97	96	90	88	76	48	30	46	20	2.76	A-7-6	13	CL
										C	38	62	99	25	8	2						100	99	99	95	92	82	57	39	59	27	2.81	A-7-5	19	CH
EDEN	SIC	34	31	37 52 05	84 23 51		8-15	ROLLING	19	A	0	7	89	29	7	4						100	99	98	97	94	83	56	36	57	24	2.72	A-7-5	17	CH
										B	7	13	93	26	4	5										100	90	64	45	57	29	2.75	A-7-6	19	MH-CH
										C	13	19	93	26	4	5										100	90	64	45	57	29	2.75	A-7-6	19	MH-CH
EDEN	SIC	34	36	37 58 20	84 28 22		8-15	ROLLING	34	A	0	8	88	28	9	5						100	94	91	83	78	61	29	17	54	21	2.66	A-7-5	15	CH
										B	8	26	93	27	7	2						100	99	98	95	93	82	56	36	55	26	2.75	A-7-6	17	CH
										C	26	34	100	20	21	3						100	99	98	96	95	89	61	40	48	24	2.68	A-7-6	15	CL
EDEN	SIL	59	1	38 56 48	84 31 49	CAL SH,LS,SI	18	UPLAND	44+	AP2	2	7	95	24	11	4						100	97	96	91	86	66	40	32	36	13	2.63	A-6	09	ML-CL
										BT	7	12	92	26	7	3						100	99	97	95	93	72	58	47	40	10	2.75	A-5	08	ML
										CT	12	30	92	24	9	2						100	99	99	97	95	90	70	54	49	23	2.80	A-7-6	15	ML-CL
EDEN	SICL	55	2	38 49 05	84 27 12	CAL SH,LS,SI	18	SLOPING	15+	BT	4	15	92	28	6	2							100	99	99	98	93	73	58	51	22	2.76	A-7-6	15	MH-CH
										C		15+	95	26								100	98	97	95	94	88	64	46	49	25	2.77	A-7-6	16	CL
EDEN	SICL	84	2	37 57 05	84 51 17		8-15	ROLLING	13	A	0	4	90	27	11	4						100	98	96	87	80	60	32	17	59	27	2.72	A-7-5	19	CH
										B	4	10	97	23	20	4						100	93	92	86	82	66	36	22	63	31	2.79	A-7-5	20	MH-CH
										C	10	13	103	20	11	2						100	86	83	78	75	63	33	15	40	20	2.76	A-7-6	12	CL

SOIL NAME: SERIES	TYPE	LOCATION: CO. NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BEDROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	OPT MC	CBR DATA: UNSOAKED	CBR DATA: SOAKED
EDEN	SICL	84	13	37	52	52	84	57	13		8-15	ROLLING	29	A	0	7	99	22	17	5
														B	7	21	96	25		
														C	21	29	100	23		
EDEN	SICL	84	14	37	48	34	84	55	37		8-15	ROLLING	36	A	0	12	95	24	13	5
														B	12	14				
														C	14	36	105	20	17	2
EGAM	SICL	79	8	38	17	35	87	03	58	ALLUVIUM	0	LEVFDPLNS	72+	AP	0	9	97	24	20	4
														IIC3	23	56	98	22	35	5
														IIC4	56	72	97	22	26	8
EGAM	SICL	79	9	38	17	58	87	03	53	ALLUVIUM	0	LEVFDPLNS	72+	AP	0	12	99	21	14	5
														C1	12	27	96	24	7	4
														C3B	40	72	96	23	23	7
ELK	SIL	34	28	37	51	37	84	22	06		0-3	LEVEL	107+	A	0	9	110	16	40	6
														B	9	107+	110	16	27	10
ELK	SIL	34	33	37	51	23	84	23	50		0-3	LEVEL	174+	A	0	22	109	14	25	29
														B	22	152	111	15	14	10
														C	152	174+	109	16	8	13
ELK	SIL	34	40	37	51	17	84	22	30		0-3	LEVEL	122+	A	0	42	102	16	11	13
														B	42	78	109	17	70	12
														C	78	122+	106	17	53	11
ENDERS	L	43	4	37	25	00	86	28	53	ACID SH	15	SLY CONVEX	69+	A2	1	6	109	16	47	27
														B2T	9	19	91	24	16	2
														C2	31	42	107	20	6	2
ENDERS	SIL	43	11	37	23	47	86	28	53	AC C SH	24	SLOPING	55+	B21T	9	18	96	26	11	6
														C	41	49	101	23	22	4
ENDERS	SIL	74	3	36	36	59	84	23	57	RES FROM SH	37	HILLY	60+	B21T	9	21	92	29	11	6
														B22T	21	35	95	28	11	4
														R	35	60	103	20	17	6
FREELAND	SIL	38	1										19+	B	8	19				
GRENADA	SIL	18	1	38	18	25	86	31	18	LOESS	2.5	SLOPING	72+	AP	0	7	102	17	42	8
														B21	9	17	103	19	20	14
														BTX	26	47	101	20	22	8
														C	47	72	106	17	49	13
GRENADA	SIL	18	11	38	16	51	86	36	56	LOESS	4.0	SLOPING	50+	AP	0	9	103	18	37	11
														B2T	11	24	104	20	17	13
														BTX	27	38	113	15	32	27
														CX	38	50	114	15	28	22
GRENADA	SIL	42	1	36	41	52	88	37	57		0-4		131	A	0	23	104	17	40	16
														B	23	95	107	17	21	5
														C	95	131+	110	16	12	5
GUIN	GSIL	18	7	38	8	00	86	32	20	G PLNS WITH LES	15.0	SLOPING	72+	A2	1	12	109	16	99	43
														B	18	40	123	11	99	79
														C	40	72	122	12	99	66
GUIN	GSIL	18	12	38	7	44	86	32	02	LES OVER PLNS G	18.0	SLOPING	72+	A2	6	14	114	14	52	10
														B2	25	36	118	12	99	55
														C	36	72	123	11		

SERIES	HORIZON	GRADATION, PERCENT FINER THAN: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION: AASHO CLASS	GI	UNIFIED
EDEN	A								100	96	91	72	34	18	37	13	2.69	A-6	09	CL
	B						100	99	99	95	91	76	53	41	58	36	2.79	A-7-6	20	MH
	C						100	99	98	95	91	76	50	34	46	23	2.87	A-7-6	14	CL
EDEN	A						100	95	92	88	85	68	35	19	40	16	2.72	A-6	10	CL
	B																			
	C						100	93	91	87	84	70	46	28	42	19	2.80	A-7-6	12	CL
EGAM	AP						100	98	97	90	85	52	32	22	37	12	2.69	A-6	9	CL
	IIC3						100	99	98	94	90	73	48	39	39	15	2.71	A-6	11	ML-CL
	IIC4							100	99	98	97	78	50	38	40	2	2.70	A-4	8	ML
EGAM	AP								100	96	93	83	43	27	36	14	2.67	A-6	9	CL
	C1								100	99	98	92	41	28	39	15	2.55	A-6	11	CL
	C3B						100	97	97	92	84	51	34	26	39	12	2.68	A-6	9	ML-CL
ELK	A						100	99	99	76	52	34	19	10	24	2	2.67	A-4	08	CL
	B								100	72	62	44	28	18	25	6	2.69	A-4	07	CL
ELK	A							100	86	24	19	13	7	4	NL	NP	2.68	A-2-4	00	SM
	B							100	97	46	38	26	15	10	NL	NP	2.68	A-4	02	SM
	C							100	95	42	34	22	10	6	NL	NP	2.67	A-4	02	
ELK	A						100	98	76	13	11	9	4	2	NL	NP	2.68	A-2-4	00	SM
	B						100	99	92	41	34	26	14	8	NL	NP	2.68	A-4	02	SM
	C							100	92	51	47	32	20	10	NL	NP	2.67	A-4	03	SM
ENDERS	A2	100	99	97	91	85	84	81	80	51	50	37	19	13	23	1	2.66	A-4	03	ML
	B2T					100	98	96	96	90	89	84	70	56	50	19	2.75	A-7-5	14	ML
	C2				100	97	95	84	82	81	80	72	43	32	40	13	2.72	A-6	09	ML-CL
ENDERS	B21T			100	99	98	94	85	84	81	80	74	50	38	52	23	2.80	A-7-6	15	MH-CH
	C	96	96	95	93	92	90	85	84	81	78	71	48	42	51	23	2.78	A-7-6	15	MH-CH
ENDERS	B21T					100	86	83	82	81	81	78	56	36	63	17	2.75	A-7-5	15	MH
	B22T					100	93	91	91	90	90	86	57	42	61	26	2.74	A-7-5	18	MH
	R		100	99	93	82	76	72	72	72	71	61	34	23	40	13	2.78	A-6	08	ML-CL
FREELAND	B							100	99	89	64	40	28	26						
GRENADA	AP						100	98	93	91	68	34	14	12	24	2	2.64	A-4	8	ML
	B21						100	98	96	95	90	71	33	26	37	13	2.66	A-6	9	ML-CL
	BTX						100	99	98	96	86	58	28	22	33	10	2.72	A-4	8	ML-CL
	C						100	99	98	96	70	41	23	18	29	6	2.71	A-4	8	ML-CL
GRENADA	AP						100	99	97	96	88	58	21	12	NP		2.65	A-4	8	ML
	B2T						100	96	94	93	90	72	32	26	32	10	2.67	A-4	8	ML-CL
	BTX						100	97	92	84	62	37	22	15	27	5	2.68	A-4	8	ML-CL
	CX						100	99	88	78	68	48	21	13			2.63			
GRENADA	A						100	98	96	95	89	53	14	8	26	5	2.65	A-4	08	CL
	B						100	99	98	95	90	50	16	10	28	10	2.66	A-6	08	CL
	C			100	97	95	94	85	75	62	57	39	14	8	30	13	2.71	A-6	06	CL
GUIN	A2	93	87	80	68	60	56	51	46	42	39	27	8	4	NP		2.64	A-4	1	ML
	B	84	58	49	35	28	18	13	10	9	8	7	5	4	24	8	2.67	A-1-A	0	CL
	C	77	55	44	36	31	31	24	17	11	7	5	4	3	NP		2.69	A-1-A	0	ML
GUIN	A2	99	90	84	68	55	54	54	53	52	34	15	7	5	NP		2.64	A-4	3	ML
	B2	90	70	57	40	31	24	16	13	12	12	9	6	5	32	10	2.66	A-2-6	0	CL
	C	89	69	56	35	28	19	13	6	1	1	1	1	1	NP		2.67	A-3	8	ML

SOIL NAME SERIES	TYPE	CNTY NO.	SITE NO.	LATITUDE DEG	MIN	SEC	LONGITUDE DEG	MIN	SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	OPT MC	CBR DATA UNSOAKED	SOAKED
HAGERSTOWN	SIL	25	5	37	56	18	84	01	49	LS			50	AP	0	4	104	19		
														B21-22	9	26	105	20		
														C1	48	50+	96	26		
HAGERSTOWN	SIL	25	6	37	55	36	84	02	50	LS			50	AP	0	4	94	24		
														B21-22	10	24	107	20		
														C1	40	50+	95	26		
HAGERSTOWN	SIL	34	20	38	04	52	84	20	02		0-3	UNDULATING	121+	A	0	29	101	21	23	8
														B	29	101	103	21	13	10
														C	101	121+	105	22		
HAGERSTOWN	SIL	34	24	38	11	53	84	23	47		0-3	UNDULATING	84	A	0	13				
														B	13	55	100	23	8	6
														C	55	84	89	30	7	3
HAGERSTOWN	SIL	34	26	37	59	13	84	31	30		0-3	UNDULATING	109+	A	0	20	101	22	14	7
														B	20	44	99	24	11	10
														C1	44	80	91	27	13	3
														C2	80	109+	97	25	15	2
HAMPSHIRE	SIL	25	7	38	02	27	84	10	30	LS	3		60	AP	0	6	96	23		
														B3	19	36	103	22		
														C1	13	60+	94	26		
HAMPSHIRE	SIL	25	8	37	59	49	84	08	49	LS	4		60	AP	0	4	97	22		
														B3	10	24	96	25		
														C1	24	60+	101	21		
HAMPSHIRE	SIL	34	1	38	01	51	84	17	57		0-3	UNDULATING	80+	A	0	22	103	19	48	4
														B	22	48	109	18	22	14
														C	48	80+	103	23	12	8
HAMPSHIRE	SIL	34	15	38	00	35	84	23	20		0-3	UNDULATING	99	A	0	18	88	23	9	9
														B	18	65	104	21	11	12
														C	65	99	104	21	20	16
HAMPSHIRE	SIL	84	11	37	52	13	84	53	27		0-3	UNDULATING	46	A	0	12	100	23	5	6
														B	12	40				
														C	40	46				
HAMPSHIRE	SIL	84	17	37	45	18	84	53	13		0-3	UNDULATING	36	A	0	13	98	19	27	3
														B	13	27	107	19	23	8
														C	27	36				
HARTSELLS	FSL	74	13	36	41	34	84	23	50	CORBIN SS ACID	4	BD UPLD RD	37	AP	0	6	107	16	37	25
														B2T	21	31	109	17	18	16
														B3	31	37	113	15	28	27
HARTSELLS	L	74	34	36	53	00	84	29	23	INTBED SS AND SH	4	FLAT RD	44	AP	0	7	110	15	39	24
														B2	18	26	114	15	22	19
														C	36	44	99	23	7	6
HAYTER	SIL	74	6	36	37	01	84	23	58	COL FROM SS SH	50	SLOPING	60	B21	10	19	104	18		15
														B23T	34	48	104	21	3	1
HENRY	SIL	18	2	38	15	59	86	31	29	LOESS	.5	SLOPING	72+	AP	0	8	102	14	40	9
														B1G	13	26	107	16	32	7
														B2TGX	26	48	104	18	14	5
														CG	48	72	107	17	22	3
HENRY	SIL	18	3	38	16	07	86	30	07	LOESS	0	LEVEL	72+	A2G	0	9	105	16	25	7
														B1G	13	23	106	17	26	4
														B21TGX	23	39	102	19	36	5
														CXG	66	72	112	16	10	9

SERIES	HORIZON	GRADATION – PERCENT FINER THAN 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION AASHO CLASS	GI	UNIFIED
HAGERSTOWN	AP					100	99	94	92	88	85	70	39	25	35	11		A-4	08	ML-CL
	B21-22					100	98	91	89	86	84	74	54	43	47	25		A-7-6	15	CL
	C1					100	99	92	89	82	79	70	55	47	60	28		A-7-5	19	MH-CH
HAGERSTOWN	AP					100	97	90	88	86	84	71	41	26	48	16		A-7-5	12	ML
	B21-22					100	94	85	84	82	81	68	45	34	46	20		A-7-6	13	ML-CL
	C1		100	99	98	95	90	85	84	83	82	74	61	51	78	41		A-7-5	20	MH-CH
HAGERSTOWN	A						100	96	95	93	92	84	34	15	33	12	2.68	A-6	09	CL
	B						100	92	89	87	86	73	32	20	38	17	2.74	A-6	11	CL
	C						100	76	73	68	64	54	32	22	37	13	2.87	A-6	08	CL
HAGERSTOWN	A						100	93	90	86	85	69	29	15	36	11	2.63	A-6	08	CL
	B						100	93	91	86	83	64	26	14	41	20	2.74	A-7-6	12	CL
	C						100	94	91	80	76	68	47	30	53	28	2.89	A-7-6	18	OH
HAGERSTOWN	A						100	95	93	90	88	76	37	22	37	13	2.72	A-6	09	CL
	B						100	91	88	84	82	70	45	31	43	17	2.77	A-7-6	12	CL
	C1						100	96	93	86	84	75	55	41	52	21	2.80	A-7-6	16	CH
	C2						100	99	97	92	89	79	56	39	48	22	2.81	A-7-6	14	CL
HAMPSHIRE	AP						100	96	94	92	91	77	41	26	44	14		A-7-5	10	ML
	B3						100	96	94	91	90	78	59	43	50	25		A-7-6	16	CL
	C1						100	99	98	95	94	88	75	65	74	42		A-7-5	20	CH
HAMPSHIRE	AP					100	99	97	96	93	91	75	42	29	42	14		A-7-6	10	ML
	B3								100	99	98	86	66	56	66	38		A-7-6	20	CH
	C1								100	99	98	86	68	55	61	32		A-7-6	20	MH-CH
HAMPSHIRE	A					100	99	87	84	81	79	68	36	19	35	9	2.68	A-4	08	CL
	B					100	97	83	80	75	72	64	38	24	35	17	2.75	A-6	11	CL
	C														40	18	2.70	A-6	11	CL
HAMPSHIRE	A						100	92	85	83	81	66	21	8	39	9	2.54	A-4	08	CL
	B						100	90	85	87	83	69	34	21	38	13	2.75	A-6	09	CL
	C						100	81	76	69	66	56	32	22	35	10	2.87	A-6	08	CL
HAMPSHIRE	A						100	97	95	88	85	60	20	8	35	10	2.71	A-6	08	CL
	B						100	97	96	93	89	78	50	26	52	26	2.84	A-7-6	17	CH
	C						100	98	97	92	88	72	40	27	50	27	2.87	A-7-6	17	ML-CL
HAMPSHIRE	A						100	99	93	88	84	60	18	7	30	7	2.64	A-4	08	CL
	B						100	97	95	92	88	70	32	18	36	15	2.72	A-6	10	CL
HARTSELLS	AP			100	99	99	99	98	72	42	39	28	16	10	NP	NP	2.60	A-4	01	SM
	B2T			100	99	99	99	99	95	47	44	40	33	28	28	9	2.62	A-4	02	SC
	B3	99	98	98	98	98	98	98	91	32	26	23	17	13	NP	NP	2.67	A-2-4	00	SM
HARTSELLS	AP			100	99	97	95	94	90	71	65	48	20	10	21	2	2.61	A-4	07	ML
	B2		100	99	99	98	96	94	91	69	62	50	30	21	23	6	2.67	A-4	07	ML-CL
	C						100	99	98	83	75	63	47	39	36	10	2.64	A-4	08	ML-CL
HAYTER	B21		100	100	99	88	79	71	70	67	64	54	32	22	32	9	2.73	A-4	06	ML-CL
	B23T		100	91	86	81	70	63	62	60	57	49	32	22	40	14	2.77	A-6	07	ML-CL
HENRY	AP						100	99	97	95	88	61	16	11	NP		2.63	A-4	8	ML
	B1G						100	99	99	97	75	45	25	22	25	4	2.70	A-4	8	ML-CL
	B2TGX						100	100	99	98	92	76	40	27	29	10	2.67	A-4	8	CL
	CG						100	90	83	81	73	51	30	27	33	4	2.69	A-4	8	ML
HENRY	A2G						100	99	98	95	70	40	17	11	24	3	2.63	A-4	8	ML
	B1G						100	99	98	98	76	44	25	19	24	3	2.66	A-4	8	ML
	B21TGX						100	99	98	97	78	66	33	24	33	14	2.67	A-6	9	CL
	CXG						100	99	98	91	77	44	23	21	25	6	2.64	A-4	8	ML-CL

Series	Type	County No.	Site No.	Lat. Deg	Lat. Min	Lat. Sec	Long. Deg	Long. Min	Long. Sec	Parent Material	Slope	Topography	Depth to Bedrock (in)	Horizon	Depth Top (in)	Depth Bottom (in)	Dry Unit Wt. (PCF)	Opt MC	CBR Unsoaked	CBR Soaked
HENRY	SIL	18	13	38	19	24	86	31	05	LOESS ALLUVIUM	C	LEVEL	60+	A2G	1	7	100	18	43	16
														BG	7	25	105	18	31	11
														BTGX	25	43	101	20	36	15
														CG	43	60	102	19	18	3
HENRY	SIL	79	6	38	27	34	86	57	58	LESCLAVEYALV	0	LOWTERRACE	72+	A2	5	11	103	16		
														B1G	11	20	107	16	37	15
														BGX	20	32	107	17	25	9
														IIC1GX	32	48	105	19	12	3
HENSHAW	SIL	51	3	37	48	43	87	42	08			LEVEL	50+	A1	0	9				
														A2	9	13				
														B1	13	21				
														B2	21	34				
														B3	34	38				
														C	38	50+				
HENSHAW	SIL	51	4								1	LEVEL	48+	A1	0	10				
														A2	10	18				
														B1	18	22				
														B2	22	34				
														B3	34	40				
														C	40	48+				
HUMPHREYS	CHSIL	9C	14	35	38	C8	87	43	28	ALV FROM CH LS	10	SLOPING	108+	AP	0	6	100	16		
														B22T	17	27	103	21	23	8
														C	37	108+	101	21		
HUMPHREYS	CHSIL	9C	19	35	38	5C	87	45	26	CH ALV CVN BL SH	11	SLOPING	35+	AP	0	5	101	19		
														B2T	8	16	105	21	92	14
														IIC	24	35	100	23	13	5
HUNTINGTON	SIL	34	44	38	C9	35	84	28	05		C-3	LEVEL	30+	A	0	9	98	22	27	4
														C	9	30+	103	20		
HUNTINGTON	SIL	34	45	38	C7	47	84	25	51		0-3	LEVEL	63	A	0	16	90	27	13	5
														C1	16	50	103	22		
														C2	50	63	103	24		
HUNTINGTON	SIL	84	15	37	43	14	84	56	46		C-3	LEVEL	180	A	0	12	100	21	17	5
														C1	12	50	102	22	23	9
														C2	50	180	101	21	18	8
HUNTINGTON	SIL	84	18	37	48	C5	84	59	57		C-3	LEVEL	144	A	0	11	108	17	42	5
														C1	11	20+	110	17	45	22
HUNTINGTON	SIL	9C	2C	35	27	39	87	46	23	ALV FROM LS	1-C	ALMOST LEV	45+	AP	0	9	101	20		
														C1	9	31	105	19	20	8
HUNTINGTON	SIL	9C	21	35	28	18	87	58	30	ALV FROM LS	1-C	ALMOST LEV	28+	AP	0	10	108	20	40	31
														C2	18	28	98	22	15	7
HUNTINGTON	SIL	106 R95	8	38	12	21	85	20	13		C-4	LEVEL	42	A	0	26				
														C	26	42				
HUNTINGTON	SIL	106 R50	8	38	12	22	85	20	13		C-4	LEVEL	31	A	0	13				
														C1	13	30				
														C2	30	31				
HUNTINGTON	SIL	106 L50	8	38	12	23	85	20	13		C-4	LEVEL	35	A	0	12				
														C1	12	22				
														C2	22	35				
HUNTINGTON	SIL	106 L81	8	38	12	23	85	20	13		C-4	LEVEL	33	A	0	28				
														C	28	33				

Series	Horizon	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
HENRY	A2G						100	98	95	81	71	41	19	12	23	2	2.61	A-4	7	ML
	BG						100	96	94	93	84	67	29	18	27	5	2.65	A-4	8	ML-CL
	BTGX						100	98	97	95	88	67	40	31	33	11	2.67	A-6	9	ML-CL
	CG						100	98	96	93	73	46	28	26	35	13	2.65	A-6	9	ML-CL
HENRY	A2						100	98	97	92	87	54	20	13	23	0	2.64	A-4	8	ML
	B1G						100	98	97	93	88	62	23	17	24	3	2.68	A-4	8	ML
	BGX						100	98	97	93	79	61	28	20	27	7	2.62	A-4	8	ML-CL
	IIC1GX					100	99	98	97	95	89	69	37	31	33	5	2.65	A-4	8	ML
HENSHAW	A1						100	98	97	96	96	48	18	9						
	A2						100	98	98	97	97	56	28	18						
	B1						100	99	99	98	98	64	38	30						
	B2						100	99	99	99	98	62	41	33						
	B3						100	99	99	99	98	46	21	15						
	C						100	99	99	99	98	44	21	15						
HENSHAW	A1						100	99	99	98	98	44	18	8						
	A2						100	98	98	96	96	48	20	11						
	B1						100	99	99	96	97	80	41	26						
	B2						100	99	98	98	97	80	45	31						
	B3						100	99	99	99	98	61	37	28						
	C						100	99	98	98	97	79	35	20						
HUMPHREYS	AP						96	91	87	75	70	39	16	11			2.63	A-4	8	
	B22T	98	95	94	92	91	90	87	84	74	69	54	35	29	43	17	2.76	A-7-5	11	ML-CL
	C	100	99	95	81	76	74	68	66	55	50	38	25	21	44	20	2.77	A-7-5	9	CL
HUMPHREYS	AP														28	8	2.65	A-4	8	ML
	B2T	90	77	72	63	59	58	54	53	44	42	32	18	15	36	13	2.68	A-4	4	CL
	IIC						96	88	85	76	68	50	33	27	41	16	2.80	A-7-5	10	ML-CL
HUNTINGTON	A						100	99	99	94	90	71	32	15	36	10	2.68	A-4	08	CL
	C							100	99	97	95	77	36	20	37	15	2.72	A-6	10	CL
HUNTINGTON	A						100	99	98	91	87	60	25	13	35	10	2.67	A-4	08	CL
	C1						100	90	71	49	47	40	16	10	47	16	2.79	A-7-5	06	CL
	C2						100	64	53	45	44	37	20	14	40	13	2.78	A-7-6	03	CL
HUNTINGTON	A						100	97	95	92	88	60	22	10	37	12	2.68	A-6	09	CL
	C1						100	99	98	91	83	56	25	13	39	15	2.74	A-6	10	CL
	C2						100	99	98	92	87	64	28	16	38	16	2.74	A-6	10	CL
HUNTINGTON	A						100	95	93	87	80	52	19	9	26	5	2.73	A-4	08	CL
	C1						100	95	93	89	83	55	23	13	28	9	2.75	A-4	08	CL
HUNTINGTON	AP						100	99	98	86	71	39	19	11			2.61			
	C1						100	99	99	98	95	70	20	10	30	8	2.65	A-4	8	ML-CL
HUNTINGTON	AP	99	96	94	87	77	60	29	23	15	13	9	6	5	36	12	2.81	A-2-6	1	CL
	C2						100	95	89	80	79	41	12	9	32	6	2.67			ML
HUNTINGTON	A						100	91	89	65	81	61	24	11	33	11	2.73	A-6	08	ML-CL
	C						100	87	84	76	72	59	33	20			2.80			
HUNTINGTON	A/C1/C2						100	89	87	80	74	52	22	11	30	8	2.79	A-4	08	ML-CL
HUNTINGTON	C1						100	89	86	81	77	62	28	14	31	9	2.78	A-4	08	ML-CL
	C2						100	95	93	65	81	72	44	24	46	20	2.81	A-7-6	13	ML-CL
HUNTINGTON	A/C						100	94	92	87	82	57	24	12	31	10	2.76	A-6	08	ML-CL

Soil Name Series	Type	Cnty No.	Site No.	Latitude	Longitude	Parent Material	Slope	Topography	Depth to Bedrock (in)	Horizon	Depth Top (in)	Depth Bot-tom (in)	Dry Unit Wt. (PCF)	Opt MC	CBR Unsoaked	CBR Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 mm	.02 mm	.005 mm	.002 mm	LL	PI	Specific Gravity	AASHO Class	GI	Unified
HUNTINGTON	SIL	106	10	38 12 18	85 19 53		C-4	LEVEL	76	A	0	30										100	95	94	89	85	65	32	21	36	11	2.74	A-6	08	ML-CL
		R100								C1	30	40										100	94	92	87	84	74	52	38			2.81			
										C2	40	70										100	97	95	89	85	75	58	51	64	31	2.84	A-7-5	20	MH-CH
										C3	70	76										100	96	94	87	83	75	58	45	49	25	2.75	A-7-6	15	CL
JEFFERSON	SL	74	9	36 48 44	84 21 44	CCL FROM ACID SH	43	SIDE SLOPE	40+	A12	3	7	109	16	36	32	100	99	98	95	93	92	89	75	40	38	30	12	4	NP	NP	2.60	A-4	01	SM
										B21	15	23	112	15	7	10	100	99	98	96	95	94	91	89	59	52	41	21	14	22	8	2.70	A-4	05	CL
										B3	33	40	119	12	47	61	97	95	93	87	84	82	78	66	35	33	28	16	10	15	5	2.63	A-2-4	00	SM-SC
JEFFERSON	SL	74	19	36 50 09	84 31 51	CCL FROM ACID SH	35	UNDR CLIFF	46	A3	4	13	106	18	35	35	98	96	95	92	89	86	73	61	42	38	25	13	7	23	3	2.62	A-4	01	SM
										B2T	18	30	115	13	72	60	98	95	92	86	80	74	64	56	38	33	26	14	9	21	6	2.67	A-4	01	SM-SC
										B3	30	46	117	12	54	27	99	98	97	90	82	71	71	70	59	53	44	35	27	22	4	2.69	A-4	05	ML-CL
JOHNSBURG	SIL	6	13	38 06 18	83 42 24	PLATY C SH	3		47	A2	3	8	107	17							100	99	97	96	95	95	80	40	24	32	9		A-4	08	ML-CL
										B2	13	18	107	18								100	99	99	98	98	89	52	32	38	14		A-6	10	ML-CL
										B3M2	25	40	108	18								100	99	99	98	98	89	53	34	40	16		A-6	10	ML-CL
										C	40	47	109	18							100	97	96	96	95	95	89	60	41	42	18		A-7-6	12	ML-CL
JOHNSBURG	SIL	6	14	38 04 07	83 38 52	C SH	3		38	AP	0	5	102	19						100	99	97	94	93	92	91	75	34	19	36	8	2.69	A-4	08	ML
										B2	9	14	110	17							100	97	94	93	92	90	76	40	23	31	9	2.76	A-4	08	ML-CL
										B3M1	21	30	106	20							100	98	96	96	95	95	83	46	27	39	14		A-6	10	ML-CL
										C	30	38	105	19							100	98	97	97	96	96	85	51	32	40	15		A-6	10	ML-CL
LAKIN	LFS	56	3	38 06 25	85 51 57				78+	AP	0	7	120	10								100	97	68	23	30	19	10	6	NP	NP		A-2-4	00	SM
										C11	16	41	110	14								100	98	75	18	15	9	6	6	NP	NP		A-2-4	00	SM
										C4		78+	115	12								100	99	87	29	21	15	11	9	NP	NP		A-2-4	00	SM
LAKIN	LFS	56	4	38 02 56	85 51 51				84+	AP	0	9	111	13										100	49	36	21	11	9	NP	NP		A-4	03	SM
										B1	9	29	114	13										100	67	56	34	16	10	20	3		A-4	06	ML
										C1	43	66	107	19									100	99	96	93	66	33	27	38	17		A-6	11	CL
										C2	66	84+	113	13									100	98	38	27	20	13	10	NP	NP		A-4	01	SM
LEADVALE		6	1	38 01 26	83 40 50		3		53+	A1	0	6										100	99	99	98	98	66	29	18						
										A2	6	10										100	99	99	99	99	66	30	19						
										B1	10	16										100	99	99	99	98	66	30	18						
										B2	16	29										100	99	99	98	97	65	31	19						
										B3	29	53										90	88	88	87	87	61	28	18						
										C		53+										83	79	78	76	74	49	22	14						
LEADVALE		6	2	38 01 27	83 42 45		4		30+	A1	0	6										93	91	90	88	88	57	25	15						
										A2	6	11										100	99	99	98	96	64	32	20						
										B1	11	14										100	99	99	97	95	62	30	18						
										B2	14	25										100	98	98	97	94	59	29	18						
										B3	25	30										90	87	86	83	81	54	24	15						
										C		30+										54	45	44	43	42	31	17	12						
LORADALE	SIL	34	2	38 01 45	84 20 49		C-3	UNDULATING	72+	A	0	22	98	20	38	3						100	99	94	93	92	81	36	15	37	11	2.64	A-6	09	CL
										B	22	46	104	22	8	5						100	96	93	84	83	78	44	28	42	23	2.75	A-7-6	14	CL
										C	46	72+	84	30	11	6					100	99	95	93	88	86	77	57	43	59	29	2.82	A-7-6	20	MH-CH
LORADALE	SIL	34	10	38 00 13	84 31 34		C-3	UNDULATING	41	A	0	18	107	20						100	97	85	74	72	70	70	56	24	15	37	16	2.71	A-6	10	CL
										B	18	41																							
LORADALE	SIL	34	18	38 00 29	84 18 56		C-3	UNDULATING	80	A	0	22	101	21	22	9						100	94	92	90	87	68	23	11	34	11	2.71	A-6	18	CL
										B	22	71	93	26								100	96	93	82	78	69	51	39	37	16	2.91	A-7-5	09	CI
										C	71	80	86	33								100	94	87	64	60	53	38	27	52	21	2.82	A-7-5	15	CH
LORADALE	SIL	34	21	38 02 55	84 21 13		C-3	UNDULATING	75	A	0	18	104	20	12	8						100	94	92	90	87	67	26	12	32	11	2.70	A-6	08	CL
										B	18	52	100	25	6	5						100	90	87	83	80	65	34	20	38	17	2.76	A-6	11	CL
										C	52	75	90	30	7	6						100	91	87	79	77	70	56	42	54	19	2.75	A-7-5	14	CH
LORADALE	SIL	34	25	38 07 54	84 29 05		C-3	UNDULATING	88	A	0	23	97	24	18	6						100	96	94	90	88	74	28	12	42	14	2.66	A-7-6	10	CL
										B	23	60	103	22	13	10						100	86	82	76	74	60	29	16	38	16	2.75	A-7	10	CL
										C	60	88	90	29								100	97	94	81	78	70	52	40	57	30	2.88	A-7-6	19	MH-CH
LORADALE	SIL	34	34	37 54 17	84 25 32		C-3	UNDULATING	56+	A	0	32	98	22	37	10						100	93	91	91	96	75	29	13	33	13	2.67	A-6	09	CL
										B	32	56+	105	20	23	20						100	85	82	79	76	64	32	17	30	10	2.73	A-4	08	CL
LOWELL	SIL	6	11	38 10 18	83 56 19	FC SS OVER SH	10			A1	0	8	101	21								100	96	95	93	88	69	38	26	36	10		A-4	08	ML-CL
										B2	12	22	107	20			100	98	98	98	98	97	94	93	91	86	65	44	32	37	12		A-6	09	ML-CL
										C	22	25	102	19			96	96	96	96	95	89	86	84	82	78	66	45	39	48	23		A-7-6	15	CL

SOIL NAME: SERIES	TYPE	LOCATION: COUNTY NO.	SITE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA: DRY UNIT WT. (PCF)	COMPACTION DATA: OPT MC	CBR DATA: UNSOAKED	CBR DATA: SOAKED	GRADATION, PERCENT FINER THAN: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION: AASHO CLASS	GI	UNIFIED
LCWELL	SIL	6	12	38	13	43	83	51	31	FG SS OVER SH	15			A2	3	17	105	18								100	98	97	95	89	67	38	27	35	11	2.69	A-6	08	ML-CL
														B1	17	25	108	17								100	99	98	92	83	58	37	27	31	9	2.71	A-4	08	ML-CL
														C	25	65	109	18								100	98	97	95	90	68	42	33	36	14		A-6	10	CL
LCWELL	SIL	6	15	38	12	57	83	49	46	ARG THIN BED LS	3		39	A2	3	12	102	22								100	99	98	96	95	80	46	32	40	14		A-6	10	ML-CL
														B2	18	23	101	22								100	99	98	96	96	87	60	50	56	29		A-7-6	19	CH
														C	30	39	99	23										100	99	99	92	72	61	67	38		A-7-6	20	CH
LCWELL	SIL	6	16	38	13	37	83	51	29	SI STONE,FGR SS	9		61	A2	4	9	104	20								100	97	96	95	91	72	41	30	38	13		A-6	09	ML-CL
														B2	16	31	100	23								100	99	99	98	95	82	61	51	54	27		A-7-6	18	CH
														C	31	61	100	23										100	99	97	82	59	48	52	24		A-7-6	16	MH-CH
LCWELL	SIL	25	9	37	57	19	84	03	30	SI STONE AND LS			33+	AP	0	10	102	20								100	97	96	94	90	74	42	28	38	12		A-6	09	ML-CL
														B3	21	33	100	23								100	98	97	95	93	82	58	48	57	28		A-7-6	19	MH-CH
														CG		33+	95	25								100	99	98	96	94	85	66	56	67	34		A-7-5	20	MH-CH
LCWELL	SIL	25	10	37	58	36	84	00	39	SI STONE AND LS			60+	A2	4	12	103	20								100	98	97	96	92	73	39	25	34	12		A-6	09	ML-CL
														B21B22	17	32	109	18								100	95	93	91	85	67	41	29	37	12		A-6	09	ML-CL
														CG	32	60+	91	25										100	98	93	76	65	60	74	41		A-7-5	20	MH-CH
LCWELL	SIL	90	2	37	52	22	85	18	04	LS	5	GNTLY SLOP	57+	AP	0	8	108	20	31	4						100	96	95	93	89	71	28	17	33	7	2.58	A-4	08	ML
														B2T	15	27	98	24	8	4					100	99	94	93	90	90	86	65	55	48	23	2.67	A-7	15	CL
														C	36	57	99	19	19	1						100	99	99	97	95	86	59	50	58	30	2.73	A-7-6	20	CH
LCWELL	L	90	11	37	57	38	85	11	31	THNBD LS SIST SH	7	SLOPING	50+	AP	0	7	100	18	34	5						100	96	95	94	94	75	41	32	31	9	2.64	A-4	08	ML-CL
														B22T	19	25	93	25	15	3						100	99	98	97	96	90	70	58	46	17	2.74	A-7-5	12	ML
														IIC3	37	50	101	20	16	2						100	99	98	96	94	86	57	44	43	17	2.79	A-7-6	12	ML-CL
LCWELL		106	2	38	12	26	85	20	52		0-4	UNDULATING	96	A	0	39										100	98	97	96	92	73	39	25	62	37	2.82	A-7-6	20	CH
														B1	39	62										100	99	99	95	91	77	43	26	49	27	2.79	A-7-6	17	CL
		L110												B2	62	85										100	95	94	89	86	75	47	31	36	19	2.73	A-6	12	CL
														C	85	96																							
LCWELL		106	2	38	12	26	85	20	53		0-4	UNDULATING	56	A	0	36										100	99	99	95	91	76	44	26	61	37	2.79	A-7-6	20	CH
		L55												BC	36	56																							
LCWELL		106	2	38	12	26	85	20	53		0-4	UNDULATING	105	A	0	12										100	99	98	95	92	73	34	22	45	21	2.75	A-7-6	13	CL
														B1	12	28										100	99	99	97	94	74	35	24	41	22	2.76	A-7-6	13	CL
		CL												B2	28	41	102	22								100	99	99	96	93	76	38	24	51	28	2.79	A-7-6	17	CH
														C1	41	95	113	22	9	5						100	97	96	92	87	64	37	24	29	12	2.80	A-6	09	CL
														C2	95	105																							
LCWELL		106	4	38	12	26	85	20	50		0-4	UNDULATING	60	A	0	36																							
														B	36	52																							
		R110												C	52	60											100	99	94	91	77	49	33	59	32	2.84	A-7-6	20	CH
LCWELL		106	4	38	12	27	85	20	50		0-4	UNDULATING	77	A	0	38										100	96	95	90	87	74	44	27	54	30	2.83	A-7-6	19	CH
														B	38	60										100	91	89	83	81	69	37	21	37	19	2.79	A-6	12	CL
		R55												C	60	77																							
LCWELL		106	4	38	12	27	85	20	50		0-4	UNDULATING	40	A	0	14										100	99	99	95	93	82	57	42	63	34	2.78	A-7-6	20	CH
														B	14	31	99	23	6	3						100	99	98	91	87	74	46	27	61	33	2.86	A-7-6	20	CH
		L3												C	31	40	108	18	18	1						100	92	90	84	80	68	40	23	40	21	2.81	A-6	12	CL
LCWELL		106	4	38	12	28	85	20	50		0-4	UNDULATING	68	A	0	6										100	99	97	93	90	69	26	14	35	14	2.73	A-6	10	CL
														B	6	54										100	95	94	88	84	65	33	21	42	20	2.80	A-7-6	12	CL
		L55												C	54	68																							
LCWELL		106	6	35	12	31	85	20	51		0-4	UNDULATING	73	A	0	40										100	97	96	92	87	57	21	13	35	13	2.70	A-6	09	CL
														B	40	66										100	98	97	92	88	66	28	16	41	21	2.76	A-7-6	12	CL
		CL												C	66	73																							
LCWELL		106	6	35	12	31	85	20	51		0-4	UNDULATING	51	A	0	18																							
														B1	18	24	104	18	47	11																2.81			
		R17												B2	24	31	112	22	8	3						100	97	96	99	86	73	42	26	66	33	2.85	A-7-5	20	MH-CH
														C	31	51																							

Soil Name: Series	Type	County No.	Sample No.	Location: Latitude / Longitude (Deg Min Sec)	Parent Material	Slope	Topography	Depth to Bedrock (in)	Horizon	Depth (inches) Top	Depth (inches) Bottom	Compaction: Dry Unit Wt. (PCF)	Compaction: Opt MC	CBR Unsoaked	CBR Soaked	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 mm	.02 mm	.005 mm	.002 mm	LL	PI	Specific Gravity	AASHO Class	GI	Unified
LOWELL		106	R17	6 35 12 31 85 20 52		C-4	UNDULATING	44	A	0	20										100	99	95	51	87	74	48	30	79	45	2.88	A-7-5	20	MH-CH
									B1	20	26										100	99	98	93	90	81	64	56	67	39	2.84	A-7-6	20	CH
									B2	26	40																							
									C	40	44																							
LOWELL		106	R110	6 35 12 31 85 20 53		C-4	UNDULATING	48	A	0	10										100	99	98	93	90	76	40	24	45	24	2.74	A-7-6	15	CL
									B1	10	28										100	99	98	93	88	74	44	28	56	29	2.83	A-7-6	19	CH
									B2	28	40																							
									C	40	48																							
LOWELL		106	L55	7 38 12 31 85 20 52		C-4	UNDULATING	28	A	0	8										100	99	99	93	89	76	46	34	65	37	2.83	A-7-6	20	CH
									B	8	20										100	94	92	88	85	76	50	32	46	26	2.78	A-7-6	15	CL
									C	20	28																							
LOWELL		106	L110	7 38 12 31 85 20 53		C-4	UNDULATING	33	A	0	10										100	99	98	92	88	77	53	35	69	42	2.87	A-7-6	20	CH
									B1	10	22																		54	20				
									B2	22	29																							
									C	29	33																							
LOWELL		106	CL	11 38 12 31 85 20 49		C-4	UNDULATING	58	A	0	20										100	97	95	92	88	66	28	16	30	9	2.72	A-4	08	ML-CL
									B	20	30	110	17	35	7						100	95	93	91	88	70	34	23	29	9	2.73	A-4	08	CL
									C	30	58	110	18	21	8						100	91	90	89	86	69	40	29	36	15	2.75	A-6	10	CL
LOWELL		106	R30	11 38 12 32 85 20 49		C-4	UNDULATING	54	A	0	10										100	99	98	96	94	79	41	29			2.66			
									B	10	23										100	98	98	97	94	80	50	38			2.76			
									C1	23	45										100	99	99	97	96	84	58	46	42	22	2.73	A-7-6	13	CL
									C2	45	54										100	92	89	83	79	64	40	30	35	15	2.86	A-6	11	CL
LOWELL		106	R100	13 38 12 26 85 20 58		C-4	UNDULATING	29	A	0	10										100	99	99	93	90	79	54	35	72	42	2.87	A-7	20	CH
									B	10	27																							
									C	27	29																							
LOWELL		106	R50	13 38 12 27 85 20 58		C-4	UNDULATING	54	A	0	18										100	99	99	95	92	80	54	36	70	41	2.83	A-7-6	20	CH
									B	18	35										100	99	99	94	92	80	54	37	59	31	2.80	A-7-6	20	CH
									C1	35	51										100	95	92	85	80	60	26	14			2.80			
									C2	51	54																							
LOWELL		106	L50	13 38 12 27 85 20 58		C-4	UNDULATING	27	A	0	12										100	98	96	93	91	83	59	40	80	46	2.84	A-7-5	20	MH-CH
									B	12	24																							
									C	24	27																							
LOWELL		106	L100	13 38 12 28 85 20 58		C-4	UNDULATING	22	A	0	13										100	99	99	94	91	78	50	33	69	39	2.84	A-7	20	CH
									B	13	21																							
									C	21	22																							
MARKLAND	SIL	19		1 38 54 33 84 23 17	ALKALINE SLW C	4	SLOPING	660+	AP2	1	7	100	20	54	11						100	99	98	97	89	68	31	17	26	8	2.62	A-4	08	ML-CL
									B21T	10	18	94	26	7	4						100	99	99	96	94	88	52	37	35	14	2.68	A-6	10	CL
									B22T	18	27	89	29	5	2								100	98	98	95	81	63	55	32	2.75	A-7-6	20	CH
									C2	50	96	98	24	7	1									100	99	96	82	60	50	24	2.76	A-7-6	14	ML-CL
MARKLAND	SIL	19		2 38 53 01 84 22 30	ALKALINE SLW C	5	SLOPING	100+	B3T	21	36	88	32										100	99	98	93	82	74	65	28	2.77	A-7-5	19	MH
									C2	47	64	88	29	4									100	99	99	98	87	78	68	32	2.72	A-7-5	20	MH-CH
									IIC4	72	100	116	14	25	26						100	96	64	36	30	22	19	17	25	9	2.66	A-4	00	CL
MALRY	SICL	34		16 38 01 03 84 35 45		B-15	ROLLING	53	B	0	42	93	24	28	5						100	89	67	83	80	64	23	13	37	11	2.67	A-6	08	CL
									C	42	53	95	26								100	85	86	79	76	64	36	23	42	19	2.77	A-7-6	12	CL
MALRY	SICL	34		17 37 56 16 84 20 56		C-3	UNDULATING	72	A	0	18	98	24	29	19						100	94	91	85	82	66	27	14	39	13	2.70	A-6	09	CL
									B	18	68	98	25	7	7						100	92	87	70	68	57	28	17	38	15	2.80	A-6	09	CL
									C	68	72																							
MALRY	SIL	34		4 38 06 09 84 34 18					A													100	98	95	94	80	34	20	38	9	2.68	A-4	08	CL
									B1			100	22								100	98	96	92	90	84	44	29	42	17	2.76	A-7-6	11	CL
									B2			95	27								100	97	94	89	87	81	51	39	51	21	2.84	A-7-6	14	CH
									C										100	95	93	86	84	78	75	65	40	27	47	20	2.80	A-7-6	13	CL
MALRY	SIL	34		5 38 07 06 84 26 41					A																				40	15		A-7-6	--	CL

Series	Type	County No.	Soil Unit No.	Lat. Deg.	Lat. Min.	Lat. Sec.	Long. Deg.	Long. Min.	Long. Sec.	Parent Material	Slope	Topography	Depth to Bed-Rock (IN)	Horizon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data Dry Unit Wt. (PCF)	Compaction Data Opt MC	CBR Data Unsoaked	CBR Data Soaked	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
MAURY	SIL	34	6	37	58	38	84	20	28					A													100	98	95	94	82	37	21	36	15	2.69	A-6	10	CL
														B1			103	21																44	23	2.76	A-7-6	--	CL
														B2			98	24																49	26		A-7-6	--	ML-CL
														C			102	36																67	38		A-7-6	--	MH
MAURY	SIL	34	7	38	00	07	84	34	16					A																				32	9		A-4	--	CL
														B1			103	21																44	19		A-7-6	--	CL
														B2			98	25																52	20		A-7-5	--	CH
														C			90	30																52	18		A-7-5	--	CH
MAURY	SIL	34	11	38	07	11	84	26	12					A																				37	13		A-6	--	CL
														B1			99	23																38	16	2.74	A-6	--	CL
														B2			91	29																47	20		A-7-6	--	CL
														C			94	25																47	20	2.76	A-7-6	--	CL
MAURY	SIL	34	12	38	00	54	84	32	14		0-3	UNDULATING	108+	A	0	16	101	21	23	9						100	94	92	91	89	70	29	16	37	14	2.72	A-6	10	CL
														B1	16	48	103	21	13	11						100	90	86	86	84	73	35	19	36	15	2.74	A-6	10	CL
														B2	48	70	97	24	15	8						100	91	88	83	79	60	40	29	46	17	2.79	A-7-6	12	CL
														C	70	108+	92	25	14	3						100	98	96	89	87	79	58	47	63	32	2.82	A-7-5	20	MH-CH
MAURY	SIL	34	13	38	00	50	84	32	05		8-15	ROLLING	125+	A	0	10	102	21	16	9						100	94	93	90	87	70	29	16	33	11	2.74	A-6	08	CL
														B1	10	75	104	21	16	11						100	91	89	87	85	73	36	23	41	17	2.73	A-7-6	11	CL
														B2	75	125+	89	32	8	6						100	93	91	86	83	76	58	48	59	21	2.84	A-7-5	16	CH
MAURY	SIL	34	14	38	00	13	84	37	01		0-3	UNDULATING	117+	A	0	48	92	25	32	5						100	99	99	97	96	86	42	17	38	12	2.72	A-6	09	CL
														B1	48	102	103	22	12	11						100	95	93	91	88	74	39	23	39	19	2.74	A-6	11	CL
														B2	102	117+																							
MAURY	SICL	84	23	37	47	20	84	42	27		0-3	LEVEL	35	A	0	10	92	25	32	4						100	98	97	93	90	70	18	8	40	10	2.64	A-4	08	CL
														B	10	13																							
														C	13	35	101	21	15	6						100	97	94	83	80	64	30	16	49	29	2.72	A-7-6	18	ML-CL
MAURY	SIL	84	1	37	43	17	84	45	20		0-3	LEVEL	84	A	0	13	99	21								100	83	68	42	37	34	14	6	42	10	2.69	A-5	08	CL
														B	13	65	10	7 1								100	94	91	84	80	64	27	16	38	8	2.74	A-4	08	CL
														C	65	84	96	26							100	98	93	90	82	78	67	44	30	48	27	2.85	A-7-6	16	ML-CL
MAURY	SIL	84	9	37	47	01	84	45	18		0-3	LEVEL	100+	A	0	25	101	19	55	8						100	95	93	89	85	56	13	5	33	13	2.64	A-6	09	CL
														B1	25	59	109	18	20	12						100	93	91	87	83	65	28	16	34	18	2.71	A-6	11	CL
														B2	59	100+	94	27								100	93	91	85	83	75	54	37	56	34	2.76	A-7-6	19	MH
MAURY	SIL	84	21	37	44	09	84	44	31		0-3	LEVEL	67	A	0	10	99	23	14	7						100	93	92	86	84	59	16	8	37	13	2.71	A-6	09	CL
														B	10	39	102	22	18	15						100	92	90	86	84	71	36	21	39	14	2.80	A-6	09	CL
														C	39	67	93	28	9	2						100	95	91	80	76	64	41	26	58	33	2.90	A-7-6	19	MH
MAURY	SIL	84	22	37	47	24	84	43	13		0-3	LEVEL	80	A	0	13	99	23	21	7						100	94	92	86	82	54	18	7	34	8	2.71	A-4	08	CL
														B	13	43	108	18	39	20						100	96	93	87	80	62	28	14	37	16	2.77	A-6	10	CL
														C	43	80	95	27	18	7						100	99	93	76	66	49	32	23	53	23	2.95	A-7-6	16	CH
MCGARY	SIL	51	7	37	40	34	87	27	30			LEVEL	61+	A	0	8										100	99	98	98	97	81	53	44						
														B1	8	13										100	98	98	97	96	78	45	36						
														B2	13	26										100	99	99	98	98	85	60	54						
														C	26	61+										100	99	98	98	97	81	54	44						
MCGARY	SIL	51	8	3			8				1	LEVEL	60+	A	0	7										100	94	92	91	90	55	24	17						
														B1	7	14										100	98	97	96	95	65	40	33						
														B2	14	26										100	99	95	98	98	78	54	47						
														C	26	60										100	99	98	98	98	77	52	45						
MCGARY	SIL	56	5	38	07	49	85	47	56				50+	AP	0	10	105	20								100	98	97	95	93	73	43	29	38	14		A-6	10	ML-CL
														B22G	13	27	107	19										100	99	97	85	62	47	50	25		A-7-6	16	CL
														C	38	50+	107	20									100	99	98	98	85	63	50	51	28		A-7-6	17	CH
MCGARY	SIL	56	6	38	07	41	85	45	19				48+	AP	0	9	103	18					100	99	99	99	96	95	92	90	67	30	19	32	8		A-4	08	ML-CL
														B22G	15	24	106	20										100	99	97	77	46	34	42	19		A-7-6	12	CL
														C	37	48+	106	21											100	98	87	56	42	45	22		A-7-6	14	CL
MELVIN		106	5	38	12	29	85	20	50		0-4	UNDULATING	89	A	0	36										100	99	98	95	93	67	18	9	34	12	2.71	A-6	09	ML-CL
		1100												C1	36	80										100	94	92	87	83	65	26	15	38	18	2.77	A-6	11	CL
														C2	80	89										100	96	95	91	86	68	34	22	32	14	2.79	A-6	10	CL

Soil Name Series	Type	Location County No.	Site No.	Latitude Deg	Min	Sec	Longitude Deg	Min	Sec	Parent Material	Slope	Topography	Depth to Bed-rock (In)	Hori-zon	Depth (Inches) Top	Depth (Inches) Bottom	Compaction Data Dry Unit Wt. (PCF)	Compaction Data Opt MC	CBR Data Unsoaked	CBR Data Soaked	Percent Finer Than 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	AASHO Class	GI	Unified
MELVIN		106	12	38	12	30	85	20	48		0-4	UNDULATING	47	A	0	6																							
														C1	6	28										100	98	97	95	91	69	23	17	33	12	2.70	A-6	09	CL
		L76												C2	28	47										100	91	88	84	80	67	41	31	37	15	2.78	A-6	10	CL
MELVIN		106	12	38	12	31	85	20	48		0-4	UNDULATING	59	A	0	4																							
		L35												C1	4	26										100	93	91	86	82	64	29	18	31	8	2.77	A-4	08	ML-CL
														C2	26	59										100	93	91	88	86	64	35	26	34	13	2.73	A-6	09	CL
MELVIN		106	12	38	12	32	85	20	48		0-4	UNDULATING	34	A	0	14										100	95	94	90	86	72	43	31			2.73			
														C1	14	30										100	96	94	88	85	76	30	19	33	9	2.69	A-4	08	ML-CL
		R64												C2	30	34										100	95	94	92	89	68	33	23	32	11	2.71	A-6	09	CL
MERCER	SIL	25	11	38	01	47	84	16	33	LS			60+	AP	0	7	107	19								100	96	95	94	92	75	37	24	34	10		A-4	08	ML-CL
														B2	12	18	110	17								100	93	92	91	89	74	42	29	36	13		A-6	09	ML-CL
														B3M	18	39	107	19							100	97	86	85	84	83	72	46	34	41	17		A-7-6	11	ML-CL
														C1		39+	90	26								100	97	96	94	93	85	72	62	80	42		A-7-5	20	MH-CH
MERCER	SIL	25	12	38	01	07	84	15	00	LS				AP	0	6	100	21								100	96	94	92	91	76	41	26	38	11		A-6	08	ML
														B2	12	18	108	19								100	95	93	91	90	77	46	31	38	15		A-6	10	ML-CL
														B3M	18	40	106	19							100	99	92	90	87	87	77	50	37	41	18		A-7-6	11	CL
														C1	40	60+	97	25								100	99	98	95	94	87	70	59	68	38		A-7-5	20	CH
MERCER	SICL	34	19	38	04	48	84	19	50		0-3	LEVEL	38	A	0	23	99	24	18	7						100	84	82	80	77	64	26	10	40	11	2.68	A-6	09	CL
														B	23	38	101	23	28	6						100	93	90	83	80	69	42	27	41	17	2.79	A-7-6	11	CL
MERCER	SICL	34	23	38	11	42	84	22	11		0-3	LEVEL	80+	A	0	4										100	96	95	93	91	76	31	15	42	14	2.62	A-7-6	10	CL
														B	4	32	102	20								100	94	92	89	87	72	32	18	39	18	2.77	A-6	11	CL
														C	32	80+	95	25	12	2						100	94	92	89	87	77	54	39	51	29	2.80	A-7-6	18	MH-CH
MUSE	SIL	74	1	36	36	55	84	23	55	COL FROM SH	36	VERY STEEP	48	AP2	1	7	104	18	44	14		100	98	92	87	84	78	77	68	67	49	24	14	29	6	2.66	A-4	07	ML-CL
														B22T	19	29	104	21	93	6		100	99	98	95	84	78	77	70	66	54	38	27	38	13	2.73	A-6	08	ML-CL
														C	42	48	99	24	16	5		100	95	84	81	65	58	57	55	54	48	26	16	50	20	2.76	A-7-5	09	MH-CH
MUSE	SIL	74	15	36	36	57	84	23	52	COL FROM SH	50	UPPER HILS	51+	B21T	11	21	104	20	27	7						100	85	83	80	79	71	42	30	40	15	2.73	A-6	10	CL
														B22T	21	28	101	23	24	7			100	99	95	89	79	77	72	70	61	34	23	39	12	2.74	A-6	08	ML-CL
														C	28	51	108	18	43	7			100	98	94	81	68	65	62	61	54	30	19	37	13	2.76	A-6	06	ML-CL
MUSKINGUM	SIL	17	7	37	05	45	87	51	23	SS			25+	A2	1	9	116	11				85	85	85	85	85	85	84	43	42	29	12	7	17	2		A-4	02	SM
														C	9	25+	119	10				58	57	56	55	55	54	54	31	31	22	8	5	15	1		A-2-4	00	GM
MUSKINGUM	SIL	17	8	37	13	37	87	51	44	SS SH			56+	A2	1	14	108	16				64	63	62	62	60	59	58	55	53	39	13	9	26	5		A-4	06	ML-CL
														C1	14	30	119	13				73	68	67	46	38	33	33	28	27	20	12	8	31	11		A-2-6	00	GC
														C2	30	56+	99	21								100	97	96	93	91	81	71	60	62	34		A-7-6	20	CH
NEEDMORE	SIL	1	7	37	05	32	85	12	15	SOFT SH	3		24	A2	2	7	106	17							100	99	96	95	93	92	74	32	22	27	4		A-4	08	ML-CL
														B2	7	17	102	21								100	99	99	98	97	84	55	42	44	18		A-7-6	12	ML-CL
														C	17	24	98	23								100	99	99	98	98	86	62	50	53	25		A-7-6	17	MH-CH
NEEDMORE	SIL	1	8	37	00	59	85	13	48		7		26	A1	0	2									100	94	90	86	84	82	61	28	13						
														A2	2	8									100	94	90	89	87	86	66	28	15						
NEEDMORE	SIL	1	11	37	08	47	85	15	27	SOFT SH	4		26	AP	0	7	107	18			100	99	99	99	99	98	94	92	84	80	65	39	29	33	11		A-6	08	ML-CL
														B2	7	15	93	26								100	99	99	98	98	91	74	61	69	36		A-7-5	20	MH-CH
														C	18	26	99	22										100	99	99	90	70	56	62	33		A-7-6	20	MH-CH
NEWARK	SIL	90	22	35	34	50	87	38	40	ALV FROM LS	0-1	ALMOST LEV	68+	AP	0	12	104	18	56	5						100	96	95	92	91	77	28	12	33	9	2.67	A-4	8	ML-CL
														C2G	24	38	107	19	27	5						98	95	93	85	80	61	31	21	33	9	2.72	A-4	8	ML-CL
NEWARK	SIL	90	23	35	36	29	87	33	23	ALV FROM LS	0-1	ALMOST LEV	52+	AP	0	11	98	19								100	99	98	94	91	60	28	14	34	8	2.65	A-4	8	ML-CL
														C2G	22	32	102	18	33	5						100	98	96	94	93	82	42	26	33	8	2.68	A-4	8	CL

SOIL NAME: SERIES	TYPE	LOCATION: COUNTY NO.	LOCATION: SOIL NO.	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	11/2	1	3/4	3/8	4	1C	40	6C	2CC	.05 MM	.02 MM	.CC5 MM	.CO2 MM	LL	PI	SPECIFIC GRAVITY	AASHC CLASS	AASHC GI	UNIFIED
NEWARK		106	3	38 12 25	85 20 53		0-4	ROLLING	101	A	0	22										1CO	99	98	95	92	74	33	21	48	28	2.74	A-7-6	17	CL
		R55								C1	22	42										1CC	99	99	98	92	76	40	24	54	34	2.80	A-7-6	19	CH
										C2	42	75										1CC	98	97	93	89	76	44	28	58	33	2.85	A-7-6	20	CH
										C3	75	101																							
NEWARK		106	3	38 12 25	85 20 54		C-4	ROLLING	116	A	0	24										1CO	99	98	95	9C	67	22	9	34	15	2.69	A-6	10	CL
		R110								C1	24	42										1CO	97	95	91	87	64	24	11	40	20	2.73	A-7-6	12	CL
										C2	42	96										1CO	94	92	85	81	6C	31	19	28	11	2.80	A-6	09	CL
										C3	96	116																							
NEWARK		106	9	38 12 18	85 19 55		0-4	ROLLING	77	A	0	54										1CO	97	95	91	80	61	25	15	3C	11	2.68	A-6	09	ML-CL
		R50								C1	54	63										1CO	93	9C	85	8C	62	3C	27	41	18	2.73	A-7-6	11	CL
										C2	63	77										1CC	87	83	76	72	58	36	26			2.85			
NEWARK		106	9	38 12 19	85 19 55		0-4	ROLLING	80	A	0	21										1CC	95	92	87	84	63	29	19	34	11	2.77	A-6	09	ML-CL
		CL								C1	21	46	95	24	32	6						1CC	93	91	88	84	64	29	19	35	1C	2.69	A-6	08	ML-CL
										C2	46	80	103	20								1CO	93	91	89	86	66	38	26	32	14	2.72	A-6	10	CL
NEWARK		106	9	38 12 19	85 19 55		C-4	ROLLING	95	A	0	35										1CC	97	96	92	89	76	42	31	3C	11	2.71	A-6	08	CL
		L50								C1	35	70										1CC	96	94	91	88	65	33	22	30	14	2.67	A-6	10	CL
										C2	70	95										1CO	92	91	87	83	72	52	41	47	24	2.70	A-7-6	15	CL
NEWARK		1C6	9	38 12 2C	85 19 55		C-4	ROLLING	91	A	0	52										1CO	90	95	91	86	66	28	19	32	1C	2.69	A-4	08	ML-CL
		L100								C1	52	80										100	91	89	86	83	69	39	27	35	13	2.73	A-6	09	ML-CL
										C2	80	91										1CC	93	91	85	81	7C	53	42	49	25	2.83	A-7-6	16	CL
NICHCLSCN	LCAM	34	3C	37 52 13	84 22 36		C-3	ROLLING	47	A	0	8										1CC	97	95	9C	89	64	25	14	25	3	2.64	A-4	08	CL
										B	8	31	106	19	16	14						1CC	97	95	91	86	66	34	26	31	12	2.71	A-6	09	CL
										C	31	47	94	26	13	7						1CC	94	92	83	75	57	36	25	39	13	2.73	A-6	09	CL
NICHCLSCN	LCAM	34	39	37 52 02	84 23 48		+25	MOUNTAINOU	25	A	0	10	92	26	13	6						1CC	99	98	96	92	76	46	28	46	18	2.79	A-7-6	13	CL
										B	10	25	94	25	14	2						1CC	99	99	97	96	84	59	38	52	24	2.72	A-7-6	16	CH
NICHCLSCN	LCAM	34	41	37 51 41	84 22 32		8-15	ROLLING	13	A	0	4										1CO	96	92	87	82	6C	25	13	3C	8	2.65	A-4	08	CL
										B	4	13	101	22	15	6						1CO	94	92	87	83	64	33	18	33	11	2.71	A-6	09	CL
NICHCLSCN	LCAM	34	42	37 51 52	84 22 34		0-3	ROLLING	61	A	0	14	98	22	25	8						1CC	95	93	9C	86	65	23	13	36	11	2.68	A-6	08	CL
										B1	14	29	101	21	14	10						1CC	97	95	92	87	71	41	25	36	15	2.74	A-6	10	CL
										B2	29	50	100	23	10	9						1CC	97	94	88	83	67	4C	27	42	18	2.75	A-7-6	11	CL
										C	50	61										1CO	94	91	85	81	69	4C	29	38	16	2.79	A-6	10	CL
CTWAY		6	3				8		20+	A	0	5										1CC	98	97	94	92	82	58	44						
										B1	5	8										1CC	98	97	93	9C	77	54	44						
										B2	8	15										1CC	98	98	96	9C	68	49	38						
										B3	15	20										1CC	98	97	91	88	62	42	36						
										C		20+										1CC	96	95	9C	79	52	34	27						
CTWAY		6	4				7		16+	A	0	4										1CC	96	95	93	93	81	52	41						
										B1	4	10										1CO	97	96	94	93	83	54	41						
										B2	10	13										1CO	98	98	96	95	87	69	54						
										B3	13	16										1CO	96	95	9C	87	79	64	52						
										C		16+										94	88	86	76	7C	55	43	37						
CTWAY	SICL	90	8	37 45 54	85 27 1C	SCFT CAL SH	10	SLOPING	42+	AP	0	9	89	27	23	7						1CC	98	98	93	88	7C	44	31	5C	2C	2.58	A-7-5	14	ML
										C1	17	30	106	19	22	1						1CC	97	96	92	9C	79	56	44	50	24	2.72	A-7-6	16	CL
CTWAY	CL	9C	9	37 44 CC	85 30 54	CAL SH	7	SLOPING	40+	AP	0	7	102	18	32	6				1CC	99	98	97	97	96	92	56	30	25	3C	6	2.76	A-4	08	ML-CL
										C2	13	40	113	15	30	2						1CC	94	92	9C	86	67	34	25	34	13	2.78	A-6	09	CL
PATTCN	SIL	38	5	36 32 02	85 07 32				70+	AP	0	7	101	19	24	5						1CC	99	99	99	85	6C	22	16	32	NP	2.66	A-4	08	ML
										A13	13	35	100	22	6	6						1CC	99	99	98	78	59	42	32	44	23	2.70	A-7-6	14	CL
										CG2	53	70+	103	19	16	6						1CC	99	99	98	91	58	29	21	33	1C	2.72	A-4	08	MC-CL
PATTCN	SIL	38	6	36 3C 11	85 01 02				63	A1P	0	8	106	18	32	9						1CC	98	98	97	88	6C	22	18	3C	5	2.65	A-4	08	ML
										A13	17	23	106	18	11	4						1CC	98	98	98	95	7C	28	22	31	8	2.61	A-4	08	ML-CL
										BG	23	37	102	20	10	7						100	99	99	99	93	70	36	29	45	23	2.72	A-7-6	14	CL
										CG2	50	63	105	18	22	7						1CO	98	98	97	93	64	25	18	36	11	2.71	A-6	08	ML-CL

GRADATION — PERCENT FINER THAN / CLASSIFICATION

SERIES	TYPE	COUNTY NO.	SITE NO.	LAT DEG	LAT MIN	LAT SEC	LONG DEG	LONG MIN	LONG SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	OPT MC	CBR UNSOAKED	CBR SOAKED	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
PEMBROKE	SIL	17	9	36	59	42	87	47	43	LS			76+	A2	1	8	105	15										100	97	97	66	21	15	25	3		A-4	08	ML
														B21	10	24	102	21										100	99	98	77	44	39	52	27		A-7-6	17	CH
														C	54	76+	100	22								100	99	99	94	92	77	53	47	60	36		A-7-6	20	CH
PEMBROKE	SIL	17	10	37	05	45	87	51	23	LS			61+	A2	1	7	109	19										100	99	97	69	32	26	35	12		A-7-6	09	CL
														B2	7	40	104	19										100	99	98	76	42	35	50	25		A-7-6	16	CL
														C	46	61+	98	23							100	97	94	93	88	86	70	51	46	65	41		A-7-6	20	CH
PEMBROKE	SIL	90	1	37	46	37	85	23	45	LES AND SILR LS	4	GNTLY SLOP	76+	AP	0	8	95	21	33	3						100	99	99	98	93	70	28	16	33	10	2.61	A-4	08	ML-CL
														B22T	26	33	104	19	17	14						100	96	95	92	90	71	41	30	36	18	2.70	A-6	11	CL
														B32T	40	76	101	22	24	14						100	95	94	93	92	81	49	40	44	9	2.72	A-5	09	ML
PEMBROKE	SIL	90	7	37	51	08	85	25	38	LES AND SILR LS	3	GNTLY SLOP	93+	AP	0	7	98	22	26	5					100	99	98	97	95	90	64	30	20	30	8	2.63	A-4	08	ML-CL
														IIB22T	20	33	100	22	12	8						100	94	93	91	91	80	48	39	44	18	2.72	A-7-6	12	ML-CL
														IIIC	42	93	95	30	5	2						100	97	96	92	88	84	73	66	88	50	2.77	A-7-5	20	CH
RARDEN	SIL	6	17	38	03	42	83	40	42	WAVERLY C SH	5		35	A2	3	10	104	19							100	99	96	95	93	91	69	36	22	33	6		A-4	08	ML
														B2	10	15	104	20											100	99	93	62	42	45	19		A-7-6	13	ML-CL
														C	22	35	111	16												100	92	59	42	45	20		A-7-6	13	ML-CL
RARDEN	SIL	6	18	38	09	12	83	38	21	SOFT C SH	6		34	AP	0	8	106	18								100	99	98	97	97	87	48	30	36	12		A-6	09	ML-CL
														B3	12	22	107	18								100	99	99	98	98	90	55	37	44	19		A-7-6	12	ML-CL
														C	22	34	110	17											100	99	96	70	46	50	22		A-7-6	15	ML-CL
ROCKCASTLE	SIL	1	10	37	14	27	85	04	11	C SH	10		15+	A2	1	6	106	18					100	99	99	98	95	94	91	90	77	40	29	38	12		A-6	09	ML-CL
														C	6	15	105	20								100	99	99	98	98	89	53	41	47	21		A-7-6	14	ML-CL
														DR		15+	111	17								100	99	99	98	98	85	46	36	39	15		A-6	10	ML-CL
ROCKCASTLE	SIL	1	12							C SH	4		18+	AP	0	7	102	21										100	99	99	96	70	50	50	21		A-7-6	15	ML-CL
														C	7	18	109	17										100	99	99	95	63	43	46	20		A-7-6	13	ML-CL
														DR		18+	115	15								100	99	99	98	98	88	51	32	38	13		A-6	09	ML-CL
ROCKCASTLE	SIL	90	15	35	29	32	87	40	06	GRAY C ACID SH	19	STR SLOPIN	24+	A2	3	7	102	22								100	99	98	91	90	79	40	26	39	13	2.77			
														C1	7	15	101	19	27	2						100	99	99	99	99	95	62	40	53	25	2.75	A-7-5	17	MH-CH
ROCKCASTLE	SIL	90	17	35	34	21	87	40	58	GRAY CLAY SHALE	30	MOD STEEP	27+	A2	1	8	98	21								100	97	94	84	79	47	17	8	29	4	2.64	A-4	8	ML
														C	11	27	107	19	25	4	100	99	99	98	97	95	94	94	89	79	54	32	21	32	5	2.74		8	ML
ROSSMOYNE	SIL	8	1	38	56	31	84	37	23	LSS OVR C GLA MT	2	LEVEL	180	A2	4	9	99	23	12	8						100	97	96	87	81	64	32	20	28	5	2.63	A-4	08	ML
														B2T	14	22	95	25	4	3						100	98	97	94	90	74	36	29	38	15	2.69	A-6	10	ML-CL
														BX	22	36	97	24	6	5						100	98	97	93	88	72	35	28	38	11	2.70	A-6	08	ML-CL
														IIC2	54	90	88	23	6	2						100	99	98	94	93	86	62	52	50	24	2.71	A-7-6	15	ML-CL
ROSSMOYNE	SIL	8	2	39	01	05	84	41	58	LSS OVR C GLA MT	4	SLOPING	102	AP	0	8	99	22	14	11						100	99	96	92	87	56	30	20	28	6	2.65	A-4	08	ML-CL
														B21T	15	22	102	20	6	2						100	99	98	95	92	76	36	26	50	17	2.68	A-7-5	13	ML
														BX	28	35	92	28	14	10						100	99	98	95	92	76	35	32	37	14	2.73	A-6	10	ML-CL
														IIC2	51	72	90	29								100	99	98	93	90	82	68	58	68	29	2.74	A-7-5	20	MH
RUSSELVILLE	SIL	17	11							LS			68+	A2	2	8	105	17										100	98	98	74	28	20	31	7		A-4	08	ML-CL
														B2	11	26	104	20										100	99	98	79	38	30	43	18		A-7-6	12	ML-CL
														B3M2	29	46	106	18										100	99	98	74	32	25	39	15		A-6	10	ML-CL
														B2B	46	68+	97	24				64	61	60	59	57	56	56	55	54	46	34	29	64	41		A-7-6	16	CH
RUSSELVILLE	SIL	17	12	37	05	45	87	51	23	LS			60+	AP	0	6	104	17										100	97	95	68	23	17	30	6		A-4	08	ML-CL
														B2	6	25	107	18										100	98	97	75	38	30	42	19		A-7-6	12	CL
														B3M2	29	44	112	16									100	99	88	86	64	31	23	36	16		A-6	10	CL
														CB	44	60+	100	23			100	98	97	95	93	91	90	89	76	74	63	50	45	58	37		A-7-6	20	CH
SALVISA	SICL	25	13	37	54	51	84	15	38	LS			30	B1	2	9	91	25					100	99	98	96	92	90	84	82	69	48	38	58	24		A-7-5	17	MH
														C1	9	26	94	25							100	99	95	93	87	85	74	59	52	60	31		A-7-6	20	MH-CH
SALVISA	SICL	25	14	37	55	35	84	17	06	LS C			21	A1	0	5	87	27								100	96	95	93	90	76	46	33	54	17		A-7-5	14	MH
														B1	5	13	89	28								100	97	96	94	93	78	52	43	57	21		A-7-5	16	MH
														C1	15	21	94	25							100	96	93	92	89	86	74	54	46	61	32		A-7-6	20	MH-CH

SOIL NAME SERIES	TYPE	COUNTY NO.	SITE NO.	LOCATION LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	GRADATION PERCENT FINER THAN 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	CLASSIFICATION AASHO CLASS	GI	UNIFIED
SALVISA	SICL	34	22	37	52	47	84	26	00		8-15	ROLLING	31	A	0	8										100	90	87	83	80	60	19	9	29	7	2.64	A-4	08	CL
														B	8	24	97	23	5	9						100	92	90	85	82	65	29	17	39	14	2.69	A-6	10	CL
														C	24	31	85	29	6	3						100	95	93	86	82	69	44	29	62	33	2.77	A-7-6	20	MH-CH
SALVISA	SICL	34	37	37	53	28	84	26	08		8-15	ROLLING	55	A	0	6										100	90	87	81	77	55	18	8	35	10	2.63	A-6	08	CL
														B	6	23	96	24	16	7						100	96	94	92	90	75	30	14	43	19	2.66	A-7-6	11	CL
														C	23	55	101	22	11	8						100	97	95	88	84	69	27	14	41	18	2.71	A-7-6	11	CL
SALVISA	SICL	34	38	37	53	23	84	25	25		8-15	ROLLING	73	A	0	30	101	22	11	7						100	91	88	86	83	69	30	15	35	8	2.68	A-4	08	CL
														B	30	47	103	21	11	14						100	95	93	91	88	73	31	16	31	11	2.70	A-6	08	CL
														C	47	73	98	24	14	5						100	95	93	89	87	75	43	28	37	18	2.72	A-6	11	CL
SALVISA	SICL	84	5	37	56	11	84	51	59		0-3	LEVEL	40	A	0	12	98	20	24	6						100	94	91	89	84	60	18	10	37	12	2.69	A-6	09	CL
														B	12	22	101	23	6	5						100	96	93	90	87	70	32	19	40	13	2.75	A-7-6	09	CL
														C	22	40	97	24								100	99	98	94	91	80	48	27	65	43	2.78	A-7-6	20	CH
SALVISA	SICL	84	20	37	44	16	84	52	19		0-3	LEVEL	45	A	0	10	99	20	51	6						100	97	96	92	86	55	13	6	37	10	2.66	A-4	08	CL
														B	10	36	111	15	87	12						100	92	90	85	82	66	40	28	45	22	2.81	A-7-6	14	CL
														C	36	45																							
SANGO	SIL	5	9	37	05	48	85	49	10	CFLS			55+	A2	1	8	112	13						100	99	97	93	92	78	76	53	18	11	21	2		A-4	08	ML
														B2	14	24	115	14					100	99	98	97	93	92	80	78	59	28	20	29	9		A-4	08	CL
														B3M	24	40	112	16			100	98	97	94	92	90	86	85	75	72	58	30	20	32	10		A-4	08	ML-CL
														C	40	55+	105	19			97	96	95	93	91	89	84	83	67	62	53	39	32	48	20		A-7-6	12	ML-CL
SANGO	SIL	5	10	36	54	42	85	45	17	CFLS			31	A2	2	8	106	16								100	94	93	90	87	63	22	12	25	3		A-4	08	ML
														B2	8	15	109	16								100	94	93	90	88	68	30	20	26	5		A-4	08	ML-CL
														B3M2	20	31	105	20								100	93	92	88	86	72	47	35	40	16		A-6	10	ML-CL
SHARKEY	SIC	38	11	36	32	25	89	14	52				30	A1P	0	5	97	24	11	6						100	100	99	98	97	88	52	36	44	18	2.63	A-7-6	12	ML-CL
														CG1	11	30	99	22	9	6						100	99	99	98	87	68	50	40	41	25	2.74	A-7-6	10	ML-CL
SHARKEY	SIC	38	12	36	31	43	89	15	31				49	A1P1	0	4	97	22	14	7						100	99	99	98	95	88	58	36	37	12	2.69	A-6	09	ML-CL
														CG3	31	49	93	23	12	3						100	99	98	97	96	88	64	48	61	34	2.55	A-7-6	20	CH
SHELBYVILLE	SIL	6	19	38	12	32	83	53	00	ARG THIN BED LS	3		52	AP	0	11	106	19								100	97	96	95	94	82	46	32	37	14		A-6	10	ML-CL
														B22	24	31	108	19								100	94	92	90	89	77	48	35	40	18		A-6	11	CL
														B3CN	31	37	95	26								100	97	96	94	94	87	70	60	74	42		A-7-5	20	CH
														C	37	52	99	23							100	99	95	94	92	91	86	66	54	61	34		A-7-6	20	CH
SHELBYVILLE	SIL	6	20	38	12	18	83	53	07	SI ST,FSS	4		68	A2	5	14	106	18								100	96	95	94	91	72	37	24	33	9		A-4	08	ML-CL
														B2	21	28	107	19								100	98	98	97	95	79	53	42	44	20		A-7-6	13	CL
														C1	28	68	100	23										100	99	98	85	63	54	59	31		A-7-6	20	CH
SHELBYVILLE	SIL	90	3	37	51	26	85	20	21	LES THINBED LS	3	GNTLY SLOP	72+	AP	0	10	101	17	35	8						100	95	94	88	84	63	25	16	26	4	2.63	A-4	08	ML
														B2T	15	25	104	19	24	15						100	94	92	89	84	66	36	28	32	11	2.70	A-6	08	CL
														C	32	72	94	26	22	2				100	99	99	95	94	91	89	79	61	54	72	40	2.75	A-7-5	20	MH
SHELBYVILLE	SIL	90	10	37	52	41	85	16	27	LES AND LS	3	SLOPING	68+	AP	0	8	97	21	43	8						100	95	94	90	87	64	30	19	27	4	2.63	A-4	08	ML
														B21T	12	21	107	19	19	12						100	96	95	93	90	76	40	32	37	15	2.70	A-6	10	CL
														B3CN	29	37	104	21	27	10				100	99	98	91	89	87	86	71	46	37	40	18	2.72	A-6	11	CL
														C	37	68	94	27	12	4					100	96	92	91	89	87	80	62	55	60	30	2.78	A-7-5	20	MH-CH
SHELOCTA	SIL	74	2	36	36	57	84	23	56	CCL FROM SH	48	HILLY	58+	B21	16	28	111	17	60	17		100	93	87	83	70	62	62	58	56	46	26	16	27	7	2.70	A-4	05	ML-CL
														B3	44	58	108	19	17	12														36	10	2.73			ML-CL
SHELOCTA	SIL	74	5	36	36	57	84	23	52	CCL FROM SH	50	MD TH SLPE	67+	B22T	18	32	113	16	82	16	100	97	87	70	60	47	42	39	36	34	28	16	11	30	6	2.73	A-2-4	00	SM-SC
														B23T	32	41	106	18	45	5	100	99	98	91	80	71	63	62	58	56	50	27	15	34	9	2.73	A-4	06	ML-CL
														C	41	67	109	19	43	4		100	97	86	76	65	55	53	51	50	44	24	13	35	11	2.77	A-6	05	ML-CL
TAFT	SIL	90	4	37	44	10	85	40	12	ALV FROM LS	1	ALM LEVEL	60+	AP	0	6	96	22	32	2						100	94	93	89	87	63	25	16	32	7	2.62	A-4	08	ML-CL
														B2G	11	20	101	21	17	8						100	98	97	96	94	82	48	35	28	5	2.66	A-4	08	ML-CL
														BX2	34	48	101	22	12	5						100	99	98	96	94	78	48	38	35	12	2.76	A-6	09	ML-CL
														CG	48	60	100	20	22	3				100	99	96	94	93	91	91	78	50	42	39	15	2.76	A-6	10	ML-CL

SOIL NAME SERIES	TYPE	CO. NO.	SOIL NO.	LAT. DEG	LAT. MIN	LAT. SEC	LONG. DEG	LONG. MIN	LONG. SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED
TAFT	SIL	90	5	37	44	52	85	40	19	ALV FROM LS	1	ALM LEVEL	60+	AP	0	7	98	20	50	3
														B2G	11	18	104	18	17	3
														BX2	24	46	97	21	11	2
														CG	46	60	102	22	5	2
TILSIT	SIL	17	13	37	05	45	87	51	23	LOESS OVER LS			54+	A2	4	9	105	18		
														B22	14	21	105	18		
														B3M2	25	40	104	19		
														C1G	40	54+	110	17		
TILSIT	SIL	17	14							LOESS OVER LS			58+	AP	0	8	105	17		
														B2	8	16	108	17		
														B3M2	20	30	102	19		
														C1G	30	58+	108	17		
TILSIT	SIL	43	8	37	24	51	86	28	41	LOE OV SS SH RES	2	LOW RD	84+	B22	13	23	106	18	16	16
														IIBX2TB	42	54	110	18	23	7
														III3TB	54	70	93	24	5	3
TILSIT	SIL	43	13	37	23	43	86	28	50	LOE OV SS SH RES	2	WDE RD TOP	94+	B2T	13	20	106	18	38	18
														BX1T	24	38	109	18	15	10
														IIC1	62	76	106	18	12	4
TILSIT	SIL	74	7	36	54	04	84	24	51	RES FROM SIST SH	1	LVL RD TOP		B	9	19	113	15	29	28
														BTX	19	28	97	23	6	5
														IIB22T	32	38	92	27		7
TILSIT	SIL	90	12	37	41	43	85	29	09	LES - BLK AC SH	3	GNTLY SLOP	40+	AP	0	8	95	21	20	3
														B2	13	25	103	20	24	11
														BX	25	34	102	22	25	7
TILSIT	SIL	90	13	37	49	05	85	37	06	LES AND F SS	3	GNTLY SLOP	44+	AP	0	8	100	18	72	19
														B2	11	23	100	21	12	10
														BX	23	36	102	19	13	10
														C	36	44	108	14	95	6
TRAPPIST	SIL	25	15	37	53	46	84	02	12	BLACK SH			34	AP	0	4	97	22		
														B2	8	16	104	20		
														C1	22	34	104	20		
TRAPPIST	SIL	25	16	37	55	48	84	00	18	BLACK SH			36	AP	0	5	99	21		
														B2	14	24	101	23		
														DR	27	36	95	26		10
TRAPPIST	SIL	90	16	35	33	46	87	41	21	ACID SHALE	8	SLOPING	42+	A2	1	7	102	18	45	4
														B2T	11	25	104	20	21	12
														C1	32	38	101	24		
TRAPPIST	SIL	90	18	35	33	19	87	52	02		17	STR SLOPIN	49+	A2	1	7	105	18	57	11
														B2T	13	27	103	21	21	9
														C	36	49	105	20	51	9
UNIONTOWN	SIL	51	5								1	LEVEL	48+	A	0	8				
														B1	8	12				
														B2	12	21				
														B3	21	25				
														C	25	48+				
UNIONTOWN	SIL	51	6	37	47	43	87	22	58			LEVEL	74+	A	0	9				
														B1	9	14				
														B2	14	18				
														B3	18	25				
														B4	25	35				
														C	35	74+				
UNIONTOWN	SIL	51	10											B2	15	25				
UPSHUR	SICL	74	11	36	44	20	84	39	16	CAL SH	26	BENCH	42	AP	0	4	[illegible]	25	7	5
														B21T	4	11	95	26	5	3
														B3	25	35	[illegible]	22	4	3

SERIES	HORIZON	11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	GI	UNIFIED
TAFT	AP						100	94	93	92	90	76	32	19	30	4	2.62	A-4	08	ML
	B2G						100	99	98	97	96	86	46	32	28	8	2.67	A-4	08	CL
	BX2						100	99	98	96	95	84	55	45	40	18	2.70	A-6	11	CL
	CG						100	99	98	97	97	80	38	28	35	14	2.72	A-6	10	CL
TILSIT	A2						100	99	98	94	93	70	28	20	31	8		A-4	08	ML-CL
	B22						100	98	97	96	95	74	38	29	42	18		A-7-6	12	ML-CL
	B3M2						100	99	99	97	96	76	36	30	45	21		A-7-6	13	CL
	C1G						100	99	98	91	89	66	30	23	34	14		A-6	10	CL
TILSIT	AP						100	97	96	93	92	66	23	16	29	6		A-4	08	ML-CL
	B2						100	98	97	95	94	72	31	23	35	11		A-6	08	ML-CL
	B3M2						100	99	99	98	98	76	39	32	46	23		A-7-6	14	CL
	C1G								100	96	95	71	31	25	38	18		A-6	11	CL
TILSIT	B22					100	99	97	96	95	95	76	39	31	33	11	2.66	A-6	08	ML-CL
	IIBX2TB	99	98	96	92	90	86	82	82	76	75	62	35	26	33	15	2.75	A-6	08	CL
	III3TB			100	98	97	96	94	94	91	88	79	59	50	47	20	2.78	A-7-6	14	ML-CL
TILSIT	B2T						100	99	98	93	88	68	33	23	29	6	2.73	A-4	08	ML-CL
	BX1T						100	99	99	91	84	61	31	23	27	7	2.70	A-4	08	ML-CL
	IIC1								100	90	77	58	38	32	35	15	2.69	A-6	11	CL
TILSIT	B					100	100	98	97	89	83	66	30	21	27	6	2.68	A-4	08	ML-CL
	BTX					100	98	95	93	88	86	77	54	50	44	28	2.70	A-7-6	11	ML-CL
	IIB22T					100	99	90	83	61	59	58	57	45	48	16	2.75	A-7-5	09	ML
TILSIT	AP						100	95	94	89	85	70	27	15	28	5	2.62	A-4	08	ML-CL
	B2						100	96	95	94	91	79	35	30	38	15	2.70	A-6	10	ML-CL
	BX				100	99	98	95	94	93	92	84	52	37	38	15	2.75	A-6	10	ML-CL
TILSIT	AP						100	99	98	96	92	77	29	21	24	1	2.63	A-4	08	ML
	B2						100	99	99	99	95	74	36	28	35	14	2.68	A-6	09	CL
	BX						100	98	98	96	94	66	30	22	32	10	2.68	A-4	08	ML-CL
	C		100	99	98	96	92	90	90	88	77	56	26	18	26	6	2.69	A-4	08	ML-CL
TRAPPIST	AP					100	97	92	90	88	87	71	40	26	40	10		A-4	08	ML
	B2				100	99	97	94	93	92	91	81	52	38	44	17		A-7-6	12	ML-CL
	C1	100	98	95	90	83	71	69	68	67	66	60	40	28	44	16		A-7-6	09	ML-CL
TRAPPIST	AP			100	98	94	90	79	76	72	69	58	34	22	43	12		A-7-5	09	ML
	B2					100	99	96	95	94	93	84	63	46	47	20		A-7-6	13	ML-CL
	DR	94	93	90	84	77	70	68	67	66	66	60	43	33	50	20		A-7-5	12	ML-CL
TRAPPIST	A2						100	98	97	84	75	48	18	13	24	5	2.64	A-4	8	ML-CL
	B2T					100	98	95	94	92	90	72	42	34	37	14	2.67	A-6	10	ML-CL
	C1						100	97	96	94	93	89	60	45	44	17	2.74	A-7-5	11	CL
TRAPPIST	A2	100	98	98	94	92	91	90	89	84	79	50	19	9	28	5	2.63	A-4	8	ML
	B2T						100	98	98	97	95	84	47	38	37	16	2.70			CL
	C		100	100	98	94	91								32	4				ML
UNIONTOWN	A						100	99	99	99	98	76	31	14						
	B1						100	99	99	99	99	50	34	31						
	B2							100	99	99	98	63	40	33						
	B3							100	99	99	98	55	34	26						
	C						100	98	98	98	98	89	33	18						
UNIONTOWN	A						100	99	98	98	98	50	21	12						
	B1						100	99	99	98	98	60	29	19						
	B2						100	99	99	99	98	67	40	31						
	B3						100	99	99	99	98	67	42	35						
	B4						100	99	99	99	98	62	36	27						
	C						100	99	99	98	97	48	20	11						
UNIONTOWN	B2							100	99	99	98	70	44	35						
UPSHUR	AP	100	99	99	96	95	93	89	88	84	80	69	44	30	53	22	2.65	A-7-5	16	MH-CH
	B21T								100	99	97	92	75	62	58	32	2.71	A-7-6	20	CH
	B3						100	95	88	74	69	60	40	31	38	14	2.76	A-6	10	ML-CL

Soil Name: Series	Soil Name: Type	Location: County No.	Location: Site No.	Latitude: Deg	Latitude: Min	Latitude: Sec	Longitude: Deg	Longitude: Min	Longitude: Sec	Parent Material	Slope	Topography	Depth to Bedrock (In)	Horizon	Depth (Inches): Top	Depth (Inches): Bottom	Compaction Data: Dry Unit Wt. (PCF)	Compaction Data: Opt MC	CBR Data: Unsoaked	CBR Data: Soaked	Gradation, Percent Finer Than: 11/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	Specific Gravity	Classification: AASHO Class	GI	Unified
UPSHUR	SICL	74	37	36	40	06	84	41	28	CAL RED SH	22	BENCH TH	32+	A1	0	3	94	23	19	5			100	98	98	96	94	92	85	82	69	42	28	36	16	2.66	A-6	10	CL
														B2T	8	16	98	22	17	5								100	99	99	99	80	66	50	27	2.76	A-7-6	17	CH
														C	22	32	99	19	20	2		100	99	98	98	97	93	90	84	82	75	58	45	49	21	2.81	A-7-6	14	ML-CL
WELLSTON	SIL	43	5	37	24	58	86	28	47	MIXED SH SIST	24	SLY CONVEX	112+	A2	1	8	100	22	41	6	100	99	99	97	96	93	88	87	75	66	45	16	8	NP	NP	2.62	A-4	08	ML
														B22T	18	28	105	20	15	7			100	99	99	98	98	98	88	83	72	41	30	35	18	2.72	A-6	11	CL
														B31	42	73	102	22	15	14						100	99	98	96	94	77	36	28	34	12	2.73	A-6	09	ML-CL
WELLSTON	SIL	43	6	37	24	55	86	28	43	LOE MTL OV AC SH	6	SLY CONVEX	58+	B21T	3	14	101	22	18	11						100	95	99	97	97	81	43	37	37	14	2.73	A-6	10	CL
														II21B	30	38	94	25	36	2			100	99	98	96	95	94	91	91	86	69	57	56	27	2.78	A-7-6	18	MH-CH
														IIC	48	58	98	23	7	2		100	98	94	92	91	87	86	84	84	82	63	46	57	28	2.77	A-7-6	18	MH-CH
WELLSTON	SIL	74	4	36	52	58	84	29	32	SH AND SS	6	TOP LOW RD	46+	A2	0	7	104	17	47	19	100	99	99	97	95	94	94	93	85	78	56	19	11	20	3	2.59	A-4	08	ML
														B21T	12	21																							
														II83	29	36	102	22	21	9				100	98	97	95	95	85	80	67	46	33	38	16	2.73	A-6	10	CL
WELLSTON	SIL	74	39	36	53	49	84	29	47	ACID SH	8	FLT RD TOP	42+	A2	3	8	111	15	51	12				100	99	98	96	95	82	74	56	22	12	16	2	2.64	A-4	08	ML
														B22T	18	28	115	14	59	5	100	99	99	96	93	90	89	88	74	66	50	24	18	25	8	2.62	A-4	08	CL
														B3	31	42	109	18	51	27			100	99	98	98	96	95	80	75	58	38	28	20	10	2.70	A-4	08	CL
WESTMORELAND	SHSIL	1	5	37	07	44	85	17	35	FISSILE LS,SH	9		20	A2	2	8	100	18			100	98	96	93	91	84	77	75	69	66	54	31	18	28	3		A-4	07	ML
														C	8	20	100	19			87	84	81	73	62	53	49	47	43	41	34	21	14	29	3		A-4	02	GM
WESTMORELAND	SHSIL	1	6	37	00	03	85	12	38	FISSILE LS,SH	14		18+	A2	3	11	102	19						100	98	92	86	84	79	76	61	39	26	28	4		A-4	08	CL
														C	11	18	99	21			99	97	97	96	96	96	91	89	84	80	70	52	41	38	12		A-6	09	ML-CL
														DR		18+	99	22			81	75	70	63	51	39	37	35	32	31	26	19	15	43	16		A-2-7	01	GM-GC
WHEELING	FSL	51	1									LEVEL	48+	A	0	10										100	98	92	61	54	36	18	11						
														B1	10	15										100	96	87	55	50	36	22	14						
														B2	15	25										100	95	82	47	42	32	20	16						
														C	25	48+										100	98	87	26	20	15	12	7						
WHEELING	FSL	51	2	37	51	40	87	47	03			LEVEL	48+	A1	0	7										100	92	72	58	54	42	23	15						
														A2	7	11										100	92	72	58	55	44	26	16						
														B1	11	16										100	92	71	54	50	39	24	18						
														B2	16	34										100	92	72	54	50	42	30	22						
														C	34	46+										100	84	34	11	11	10	9	7						
WHEELING	SIL	51	9										52	C	27	52											100	95	88	62	24	8	6						
WHEELING	SIL	56	7	38	11	13	85	51	28	ALLUVIUM			72	AP	0	8	109	16								100	99	96	77	71	52	27	17	28	6		A-4	08	ML-CL
														B22	16	23	114	16									100	99	83	76	59	36	28	34	14		A-6	10	CL
														C	54	72	115	13									100	96	32	25	17	11	8	NP	NP		A-2-4	00	SM
WHEELING	FSL	56	8							ALLUVIUM			67	AP	0	7	117	12									100	98	51	44	31	17	11	19	2		A-4	03	ML
														B22	18	26	118	13									100	98	51	44	32	20	15	22	4		A-4	03	ML-CL
														C	53	67	117	14									100	95	47	39	29	18	14	23+	4		A-4	02	SM-SC
WYNCOSE	SIL	79	4	38	27	26	86	56	53	CLAYEYALLUVIUM	0	ALMOSTLEV	72+	AP	0	5	104	19	19	8						100	95	94	87	84	71	28	19	24	5	2.78	A-4	8	ML
														B21TG	8	33	97	22	14	2						100	99	99	92	88	76	58	49	61	37	2.67	A-7-5	16	CH
														C1G	46	72	104	20	13	6						100	99	99	96	90	66	42	32	41	19	2.70	A-7-5	12	CL
WYNCOSE	SIL	79	5	38	27	23	86	56	49	LESCLAYEYALV	0	LOWTERRACE	90+	AP	0	7	104	18	36	10						100	93	91	81	79	59	22	14	29	7	2.62	A-4	8	ML-CL
														B1G	11	19	108	18	15	9						100	95	94	85	82	62	36	27	31	13	2.68	A-6	9	CL
														B2TG	19	48	103	22	23	3						100	99	98	94	90	77	57	47	59	37	2.65	A-7-5	16	CH
														C1G	48	72	104	19	35	36						100	98	98	89	83	65	47	39	37	15	2.70	A-6	11	CL
ZANESVILLE	SIL	17	5	37	05	45	87	51	25	LOESS OVER SS			56+	A2	1	7	103	17										100	98	97	71	25	16	25	3		A-4	08	ML
														B21	11	19	105	19										100	99	97	78	41	33	42	18		A-7-6	12	ML-CL
														B3M2	29	35	108	17								100	99	95	95	93	70	28	23	36	13		A-6	09	ML-CL
														C	35	56+	111	16									100	99	89	87	65	30	25	35	16		A-6	10	CL
ZANESVILLE	SIL	17	6	37	13	35	87	51	44	LOESS OVER SS			80+	AP	0	9	107	17									100	99	95	93	67	21	16	28	5		A-4	08	ML-CL
														B21	9	22	108	18										100	98	98	75	37	29	40	17		A-6	11	CL
														B3M2	31	37	106	18										100	97	96	73	34	28	42	19		A-7-6	12	CL
														C	37	80+	115	15										100	86	84	61	27	22	31	12		A-6	09	CL

SOIL NAME SERIES	TYPE	COUNTY NO.	STATE NO.	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	PARENT MATERIAL	SLOPE	TOPOGRAPHY	DEPTH TO BED-ROCK (IN)	HORIZON	DEPTH (INCHES) TOP	DEPTH (INCHES) BOTTOM	COMPACTION DATA DRY UNIT WT. (PCF)	COMPACTION DATA OPT MC	CBR DATA UNSOAKED	CBR DATA SOAKED	1 1/2	1	3/4	3/8	4	10	40	60	200	.05 MM	.02 MM	.005 MM	.002 MM	LL	PI	SPECIFIC GRAVITY	AASHO CLASS	AASHO GI	UNIFIED
ZANESVILLE	SIL	43	7	37	24	53	86	28	46	LCE OV AC C SH	7	SLY CONVEX	83+	B22T	12	23	100	22	12	10					100	98	97	96	94	94	78	42	33	37	12	2.70	A-6	09	ML-CL
														IIBX2	32	38	105	20	25	9			100	98	97	92	88	88	81	76	63	37	27	36	15	2.72	A-6	10	CL
														IIC1	58	71	106	20	5	2					100	99	98	98	96	93	84	63	49	48	22	2.79	A-7-6	14	ML-CL
ZANESVILLE	SIL	43	9	37	23	44	86	28	55	LCE OV SS SH RES	2	BRD RD TOP	50+	B21T	11	18	104	20	23	12						100	98	97	96	96	78	35	29	32	11	2.74	A-6	08	CL
														IIBX2T	36	48	114	15	43	13	100	99	97	93	91	85	83	82	76	71	54	31	21	28	12	2.71	A-6	09	CL

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