Identification_Information:
  Description:
    Abstract: This map shows the surficial geology of Kent County, Delaware, at a scale of 1:100,000. Maps at this scale are useful for viewing general geologic framework on a county-wide basis, determining the geology of watersheds, and recognizing the relationship of geology to regional or county-wide environmental or land-use issues. The map was compiled from topographic and geologic maps, aerial photographs, geologists' and drillers' logs, geophysical logs, soils maps, and sample descriptions. Samples from drill holes and outcrops were examined for comparison with previous descriptions. Descriptions of geologic units, unless otherwise referenced, were generated by the author after examination of cores, outcrops, and samples from the Delaware Geological Survey Core and Sample Repository.
    Purpose: This map, when combined with subsurface geologic information, provides a basis for locating water supplies, mapping ground-water recharge areas, and protecting ground and surface water. Geologic maps are also used to identify geologic hazards such as sinkholes and flood prone areas, to identify sand and gravel resources, and for supporting state, county, and local land-use and planning decisions.
  Citation:
    Citation_Information:
      Originator: Delaware Geological Survey, University of Delaware
      Publication_Date: 2007
      Title: Digital Geology Layer for DGS Geologic Map No. 14 (Geologic Map of Kent County, Delaware)
      Geospatial_Data_Presentation_Form: vector digital data
      Publication_Information:
        Publisher: Delaware Geological Survey, University of Delaware
        Publication_Place: Newark, Delaware
      Online_Linkage: http://www.dgs.udel.edu/data
  Time_Period_of_Content:
    Currentness_Reference: Publication Date
    Time_Period_Information:
      Single_Date/Time:
        Calendar_Date: 2007
  Status:
    Progress: complete
    Maintenance_and_Update_Frequency: none planned
  Spatial_Domain:
    Bounding_Coordinates:
      West_Bounding_Coordinate: -75.760350
      East_Bounding_Coordinate: -75.310083
      North_Bounding_Coordinate: 39.365799
      South_Bounding_Coordinate: 38.829757
  Keywords:
    Theme:
      Theme_Keyword_Thesaurus: none
      Theme_Keyword: geoscientificInformation
      Theme_Keyword: Delaware geology
      Theme_Keyword: coastal plain
    Place:
      Place_Keyword_Thesaurus: USGS GNIS

Place_Keyword: Delaware
Place_Keyword: Kent County
Place_Keyword: Bowers
Place_Keyword: Camden
Place_Keyword: Cheswold
Place_Keyword: Clayton
Place_Keyword: Dover
Place_Keyword: Farmington
Place_Keyword: Felton
Place_Keyword: Frederica
Place_Keyword: Harrington
Place_Keyword: Hartly
Place_Keyword: Houston
Place_Keyword: Kenton
Place_Keyword: Leipsic
Place_Keyword: Little Creek
Place_Keyword: Magnolia
Place_Keyword: Milford
Place_Keyword: Smyrna
Place_Keyword: Viola
Place_Keyword: Woodside
Place_Keyword: Wyoming
Access_Constraints: None - Please give proper credit to the Delaware Geological Survey. Please reference as follows: Ramsey, K. W., 2007, Geologic Map of Kent County, Delaware: Delaware Geological Survey Geologic Map Series No. 14.
Use_Constraints: The Delaware Geological Survey (DGS) is constantly gathering data from multiple sources, interpreting the data, and reflecting its interpretations on maps. DGS's interpretations of multiple data sources are reflected in these polygons for Geologic Map No.14. Reasonable efforts have been made by DGS to verify that this map and the digital data provided hereon accurately interpret the source data used in its preparation; however, this map may contain omissions and errors in scale, resolution, rectification, positional accuracy, development methodology, interpretations of source data and other circumstatnces. This map is also date specific and as additional data become available and as verification of source data continues, this map may be reinterpreted and updated by DGS without notification. This map was prepared for a scale of 1:100,000 and should not be used at larger scales for denotation of rock unit boundaries. This map should not be used for navigational, engineering, legal, or any other site-specific use. Nothing contained herein shall be deemed an expressed or implied waiver of the sovereign immunity of the State of Delaware or its duly authorized representatives, agents, or employees.
Point_of_Contact:
Contact_Information:
Contact_Address:
Address_Type: mailing and physical address
City: Newark
State_or_Province: Delaware
Postal_Code: 19716-7501
Country: USA
Address: Delaware Geological Survey, University of Delaware
Address: 257 Academy Street

```
      Contact_Voice_Telephone: 302-831-2833
      Contact_Organization_Primary:
        Contact_Organization: Delaware Geological Survey
        Contact_Person: Digital Data Coordinator
      Contact_Position: Digital Data Coordinator
      Contact_Facsimile_Telephone: 302-831-3579
      Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu
      Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST
  Native_Data_Set_Environment: Microsoft Windows XP Version 5.1 (Build
2600) Service Pack 2; ESRI ArcCatalog 9.2.4.1420
Metadata_Reference_Information:
  Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
Metadata
  Metadata_Standard_Version: FGDC-STD-001-1998
  Metadata_Time_Convention: local time
  Metadata_Contact:
    Contact_Information:
      Contact_Organization_Primary:
        Contact_Person: Digital Data Coordinator
        Contact_Organization: Delaware Geological Survey, University of
Delaware
      Contact_Address:
        Address_Type: mailing and physical address
        City: Newark
        State_or_Province: Delaware
        Postal_Code: 19716-7501
        Country: USA
        Address: Delaware Geological Survey, University of Delaware
        Address: University of Delaware
      Contact_Voice_Telephone: 302-831-2833
      Contact_Position: Digital Data Coordinator
      Contact_Facsimile_Telephone: 302-831-3579
      Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu
      Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST
  Metadata_Date: 20080523
  Metadata_Extensions:
    Online_Linkage: http://www.esri.com/metadata/esriprof80.html
    Profile_Name: ESRI Metadata Profile
Distribution_Information:
  Resource_Description: Offline Data
  Standard_Order_Process:
    Digital_Form:
      Digital_Transfer_Information:
        Transfer_Size: 2.652
  Distributor:
    Contact_Information:
      Contact_Address:
        Address_Type: mailing and physical address
        City: Newark
        State_or_Province: Delaware
        Postal_Code: 19716-7501
        Country: USA
        Address: Delaware Geological Survey, University of Delaware
        Address: University of Delaware
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Delaware
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      Contact_Electronic_Mail_Address: DelGeoSurvey@udel.edu
      Hours_of_Service: Mon - Fri; 8:00am to 4:30pm EST
Spatial_Data_Organization_Information:
  Direct_Spatial_Reference_Method: Vector
  Point_and_Vector_Object_Information:
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: G-polygon
      Point_and_Vector_Object_Count: 587
Entity_and_Attribute_Information:
  Detailed_Description:
    Entity_Type:
      Entity_Type_Label: geomap14
    Attribute:
      Attribute_Label: Shape
      Attribute_Definition: Feature geometry.
      Attribute_Definition_Source: ESRI
      Attribute_Domain_Values:
        Unrepresentable_Domain: Coordinates defining the features.
    Attribute:
      Attribute_Label: FID
      Attribute_Definition: Internal feature number.
      Attribute_Definition_Source: ESRI
      Attribute_Domain_Values:
        Unrepresentable_Domain: Sequential unique whole numbers that are
automatically generated.
    Attribute:
      Attribute_Label: GEO_UNIT_S
      Attribute_Definition: Geologic Unit Symbol. The Geologic Unit
Symbol for Delaware geologic units. Symbols are documented in DGS
Stratigraphy web page.
    Attribute:
      Attribute_Label: GEO_UNIT_N
      Attribute_Definition: Geologic Unit Name. The Geologic Unit Name
for Delaware geologic units. Geologic Unit Names are documented in DGS
Stratigraphic web page.
    Attribute:
      Attribute_Label: GEO_UNIT_A
      Attribute_Definition: Geologic Unit Age. The ages have been
assigned to each geologic unit based on a variety of geologic
interpretations including: stratigraphic position and relationship; macro
and mircofossil content, and radiogenic analyses.
Data_Quality_Information:
  Lineage:
    Process_Step:
      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation: D\ARCHIVE\GEOMAP13\geomap13.mdb
      Time_of_Day: 09034100
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      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation:
C:\00\ai\kwr\statemap\ncc_distribute\geology_ncc
      Time_of_Day: 15041600
    Process_Step:
      Process_Description: Metadata imported.
      Source_Used_Citation_Abbreviation:
C:\00\data\geology\geomap_pubs\geomap13.shp.xml
      Time_of_Day: 16150600
    Process_Step:
      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation:
C:\00\data\geology\geomap_pubs\geomap14
      Time_of_Day: 15570500
    Process_Step:
      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation: T:\lil\geomap14
      Time_of_Day: 16084500
    Process_Step:
      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation:
C:\00\data\geology\geomap_pubs\geomap14
      Time_of_Day: 16104500
    Process_Step:
      Process_Description: Dataset copied.
      Source_Used_Citation_Abbreviation: T:\lil\geomap14
      Time_of_Day: 09160200
  Positional_Accuracy:
    Vertical_Positional_Accuracy:
      Quantitative_Vertical_Positional_Accuracy_Assessment:
        Vertical_Positional_Accuracy_Value: N/A
        Vertical_Positional_Accuracy_Explanation: These are geologic unit
polygons and have no vertical accuracy associated with these data.
    Horizontal_Positional_Accuracy:
      Quantitative_Horizontal_Positional_Accuracy_Assessment:
        Horizontal_Positional_Accuracy_Value: +/- 166 feet
        Horizontal_Positional_Accuracy_Explanation: This map was produced
at a scale of 1:100,000 and meets the National Map Accuracy Standards for
small scale mapping.  Please see Use Constraints for further details
pertaining to the correct usage of these data.
Spatial_Reference_Information:
  Horizontal_Coordinate_System_Definition:
    Planar:
      Planar_Coordinate_Information:
        Planar_Coordinate_Encoding_Method: coordinate pair
        Planar_Distance_Units: meters
        Coordinate_Representation:
          Abscissa_Resolution: 0.000000
          Ordinate_Resolution: 0.000000
      Map_Projection:
        Map_Projection_Name: Transverse Mercator
        Transverse_Mercator:
          Scale_Factor_at_Central_Meridian: 0.999995
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      Longitude_of_Central_Meridian: -75.416667
      Latitude_of_Projection_Origin: 38.000000
      False_Easting: 200000.000000
      False_Northing: 0.000000
Geodetic_Model:
  Horizontal_Datum_Name: D_North_American_1983_HARN
  Ellipsoid_Name: Geodetic Reference System 80
  Semi-major_Axis: 6378137.000000
  Denominator_of_Flattening_Ratio: 298.257222
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