

<i>Data Set Name</i>	SGPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	SGPG
<i>Unique Identifier</i>	
<i>Abstract</i>	Surficial geology of Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	June 1999
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Surficial geology, Hastings quad, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	SGPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	poly cover, no topological problems
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	Surficial geology linework was compiled by appending previous digital linework of adjacent counties and clipped to the quadrangle study area. Linework was adjusted to eliminate "edgematch" problems and reflect the new mapping units. Unit codes were updated to reflect the newer mapping style with emphasis on formation names and diachronic units.
<i>Source Scale Denominator</i>	1:100000

Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	poly

<i>Data Set Name</i>	SGPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	poly
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	
<i>Altitude Units</i>	
<i>Depth Datum</i>	
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	SGPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	Surficial geology given as polygons
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<i>Entity and Attribute Detailed Citation</i>	Each polygon has attributes containing an internal unique code, a unit_label code and a brief character field description. More detailed descriptions are given in the unit key of Misc. Map Series M-96.
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Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	SGPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	SGPGE
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	SGPGE
<i>Unique Identifier</i>	
<i>Abstract</i>	Surficial geology of Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	June 1999
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Eolian, surficial eolian geology, Hastings 30 x 60 minute Quadrangle, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	SGPGE
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	poly cover, no topological problems
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	Polygons selected and modified from previously digitized surficial geology linework from published County Atlases.

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	poly

<i>Data Set Name</i>	SGPGE
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	poly
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	
<i>Altitude Units</i>	
<i>Depth Datum</i>	
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	SGPGE
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	Surficial eolian geology given as polygons
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<i>Entity and Attribute Detailed Citation</i>	Each polygon has attributes containing an internal unique code, a unit_label code and a brief character field description. More detailed descriptions are given in the unit key of Misc. Map Series M-96.
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Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	SGPGE
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	SGLNLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	SGLNLS
<i>Unique Identifier</i>	
<i>Abstract</i>	Surficial geomorphic line symbols of Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	June 1999
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Geomorphology, line symbols, Hastings 30 x 60 minute Quadrangle, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	SGLNLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	line cover, all linear elements display dangle nodes
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	Linework was digitized from registered stable base linework. Some lines were digitized directly in the cover with the surficial geology serving as the backdrop for reference. All lines built with line option and coded to our internal attribute standard.
<i>Source Scale Denominator</i>	1:100000

Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	line

<i>Data Set Name</i>	SGLNLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	line
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	
<i>Altitude Units</i>	
<i>Depth Datum</i>	
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	SGLNLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	geomorpholy line symbols given as arcs
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<i>Entity and Attribute Detailed Citation</i>	Each line has attributes containing an internal unique code, a unit_label code and a brief character field description. A more detailed description of the line symbols is given in the unit key of Misc. Map Series M-96.
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Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	SGLNLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	SGANCT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	SGANCT
<i>Unique Identifier</i>	
<i>Abstract</i>	Annotation and cartographic cover associated with the surficial geology cover (SGPG)
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	June 1999
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Surficial geology annotation, Hastings 30 x 60 minute Quadrangle, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	SGANCT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	annotation and line cover, all linear elements display dangle nodes
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	cartographic unit label flags and annotation labels digitized on the screen

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	line

<i>Data Set Name</i>	SGANCT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	line
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	
<i>Altitude Units</i>	
<i>Depth Datum</i>	
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	SGANCT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	The short lines present serve to cartographically connect unit_labels to the correct rock unit where the polygons are too small to include a label. Annotation placed to be cartographically pleasing.
<i>Entity and Attribute Detailed Citation</i>	More detailed description of surficial units is given in the unit key of Misc. Map Series M-96.

Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	SGANCT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	TPLN90M
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	TPLN90M
<i>Unique Identifier</i>	
<i>Abstract</i>	Topographic contours in 15 meter increments
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	June 1999
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Surface topography, elevation, Hastings 30 x 60 minute Quadrangle, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	TPLN90M
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	line cover, linear elements where cut by study area boundary display dangle nodes
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	Linework was derived from contouring gridded data (USGS DEM 30 meter, resampled to 90 meter) via latticecontour program from ARC/INFO Unix software. The elevation lines are in 15 meter intervals and were smoothed somewhat to remove obvious jagginess from contouring method.
<i>Source Scale Denominator</i>	1:100000

Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	line

<i>Data Set Name</i>	TPLN90M
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	line
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	meters
<i>Altitude Units</i>	meters
<i>Depth Datum</i>	
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	TPLN90M
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	surface elevation contours in 15 meter increments given as arcs
<i>Entity and Attribute Detailed Citation</i>	Each line an attribute (clev) which contains contour elevation in meters.

Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	TPLN90M
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	PAPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	PAPG
<i>Unique Identifier</i>	
<i>Abstract</i>	Project area boundary, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	September, 1998
<i>Currentness Reference</i>	July 1998-June 1999 recompilation and data entry
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned to date
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	Project area, Hastings 30 x 60 minute Quadrangle, Minnesota
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	PAPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	poly cover, no topological problems
<i>Completeness</i>	complete to currently available data
<i>Horizontal Positional Accuracy</i>	approx. 50 meters
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	Linework derived from LMIC generated 1:100000 quadrangles and state outline.

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	poly

<i>Data Set Name</i>	PAPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	poly
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx 50 meters
<i>Altitude Datum</i>	msl
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	PAPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

<i>Map Projection Name</i>	Universal Transverse Mercator
<i>Map Projection Parameters</i>	Zone 15

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

<i>Entity and Attribute Overview</i>	Project area boundary polygon.
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Entity and Attribute Detailed Citation

Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	June 30, 1999
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	PAPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	PLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	PLS
<i>Unique Identifier</i>	
<i>Abstract</i>	public land survey sections, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	1990
<i>Currentness Reference</i>	
<i>Progress</i>	

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	public land survey, Census, TIGER
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	see U.S. Bureau of the Census Customer Services Office
<i>Use Constraints</i>	Credit Given to U.S. Bureau of the Census

<i>Data Set Name</i>	PLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	
<i>Contact Organization</i>	U.S. Bureau of the Census Customer Services Office
<i>Contact Person Position</i>	
<i>Contact Street Address</i>	
<i>Contact City</i>	
<i>Contact State or Province</i>	
<i>Contact Postal Code</i>	
<i>Contact Voice Phone</i>	301-457-4100
<i>Contact Fax Phone</i>	
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://www.census.gov
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	net

<i>Data Set Name</i>	PLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	arc and poly
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	PLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview public land survey of 1 mile square sections given as net cover, Hastings 30 x 60 minute Quadrangle.

Entity and Attribute Detailed Citation data was modified slightly by addition fields in the .aat or .pat for cartographic display.

Section 6. Distribution Information

<i>Publisher</i>	U.S. Bureau of the Census
<i>Publication Date</i>	
<i>Online Linkage</i>	http://www.census.gov
<i>Distributor Contact Person</i>	Suzanne Maeder
<i>Distributor Organization</i>	Land Management Information Center
<i>Distributor Position</i>	
<i>Distributor Street address</i>	658 Cedar St.
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55155
<i>Distributor Voice Phone</i>	(651) 297-4986
<i>Distributor Fax Phone</i>	
<i>Distributor E-mail Address</i>	
<i>Distributors Data Set Identifier</i>	
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	PLS
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	RDLN1
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	RDLN1
<i>Unique Identifier</i>	
<i>Abstract</i>	Major highways and roads, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	1990
<i>Currentness Reference</i>	
<i>Progress</i>	

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	major highways and roads, Census, TIGER
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	see U.S. Bureau of the Census Customer Services Office
<i>Use Constraints</i>	Credit Given to U.S. Bureau of the Census

<i>Data Set Name</i>	RDLN1
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	
<i>Contact Organization</i>	U.S. Bureau of the Census Customer Services Office
<i>Contact Person Position</i>	
<i>Contact Street Address</i>	
<i>Contact City</i>	
<i>Contact State or Province</i>	
<i>Contact Postal Code</i>	
<i>Contact Voice Phone</i>	301-457-4100
<i>Contact Fax Phone</i>	
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://www.census.gov
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	vector

<i>Data Set Name</i>	RDLN1
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	arc
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	RDLN1
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview major highways and roads given as line cover, Mower County.

Entity and Attribute Detailed Citation data was modified slightly by addition fields in the .aat for cartographic display.

Section 6. Distribution Information

<i>Publisher</i>	U.S. Bureau of the Census
<i>Publication Date</i>	
<i>Online Linkage</i>	http://www.census.gov
<i>Distributor Contact Person</i>	Suzanne Maeder
<i>Distributor Organization</i>	Land Management Information Center
<i>Distributor Position</i>	
<i>Distributor Street address</i>	658 Cedar St.
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55155
<i>Distributor Voice Phone</i>	(651) 297-4986
<i>Distributor Fax Phone</i>	
<i>Distributor E-mail Address</i>	
<i>Distributors Data Set Identifier</i>	
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	RDLN1
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	RDLN2
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	RDLN2
<i>Unique Identifier</i>	
<i>Abstract</i>	Minor roads, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	1990
<i>Currentness Reference</i>	
<i>Progress</i>	

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	minor roads, Census, TIGER
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	see U.S. Bureau of the Census Customer Services Office
<i>Use Constraints</i>	Credit Given to U.S. Bureau of the Census

<i>Data Set Name</i>	RDLN2
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	
<i>Contact Organization</i>	U.S. Bureau of the Census Customer Services Office
<i>Contact Person Position</i>	
<i>Contact Street Address</i>	
<i>Contact City</i>	
<i>Contact State or Province</i>	
<i>Contact Postal Code</i>	
<i>Contact Voice Phone</i>	301-457-4100
<i>Contact Fax Phone</i>	
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://www.census.gov
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	vector

<i>Data Set Name</i>	RDLN2
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	arc
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	RDLN2
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview minor roads given as line cover, Hastings 30 x 60 minute Quadrangle.

Entity and Attribute Detailed Citation data was modified slightly by addition fields in the .aat for cartographic display.

Section 6. Distribution Information

<i>Publisher</i>	U.S. Bureau of the Census
<i>Publication Date</i>	
<i>Online Linkage</i>	http://www.census.gov
<i>Distributor Contact Person</i>	Suzanne Maeder
<i>Distributor Organization</i>	Land Management Information Center
<i>Distributor Position</i>	
<i>Distributor Street address</i>	658 Cedar St.
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55155
<i>Distributor Voice Phone</i>	(651) 297-4986
<i>Distributor Fax Phone</i>	
<i>Distributor E-mail Address</i>	
<i>Distributors Data Set Identifier</i>	
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	RDLN2
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	RDPT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	RDPT
<i>Unique Identifier</i>	
<i>Abstract</i>	highway symbol point cover, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	July 1998
<i>Currentness Reference</i>	July 1998
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	highway symbol s, Hastings 30 x 60 minute Quadrangle, geographic base layer
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	RDPT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext.214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	point

<i>Data Set Name</i>	RDPT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	point
<i>Tiling Scheme</i>	1:100,000 quadrangle

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	approx. 50 meters
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	RDPT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview Point cover containing major highway and county road symbols, Hastings 30 x 60 minute Quadrangle.

Entity and Attribute Detailed Citation

Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	
<i>Online Linkage</i>	ftp:// 156.98.153.1 /pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	RDPT
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext.214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	HYLN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	HYLN
<i>Unique Identifier</i>	
<i>Abstract</i>	hydrography lines, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	1990
<i>Currentness Reference</i>	
<i>Progress</i>	

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	streams, hydrography, Census, TIGER
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	see U.S. Bureau of the Census Customer Services Office
<i>Use Constraints</i>	Credit Given to U.S. Bureau of the Census

<i>Data Set Name</i>	HYLN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	
<i>Contact Organization</i>	U.S. Bureau of the Census Customer Services Office
<i>Contact Person Position</i>	
<i>Contact Street Address</i>	
<i>Contact City</i>	
<i>Contact State or Province</i>	
<i>Contact Postal Code</i>	
<i>Contact Voice Phone</i>	301-457-4100
<i>Contact Fax Phone</i>	
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://www.census.gov
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	vector

<i>Data Set Name</i>	HYLN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	arc
<i>Tiling Scheme</i>	

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	HYLN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview hydrography line cover, Mower County.

Entity and Attribute Detailed Citation data was modified slightly by deleting line segments and possible addition of fields in the .aat for cartographic display.

Section 6. Distribution Information

<i>Publisher</i>	U.S. Bureau of the Census
<i>Publication Date</i>	
<i>Online Linkage</i>	http://www.census.gov
<i>Distributor Contact Person</i>	Suzanne Maeder
<i>Distributor Organization</i>	Land Management Information Center
<i>Distributor Position</i>	
<i>Distributor Street address</i>	658 Cedar St.
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55155
<i>Distributor Voice Phone</i>	(651) 297-4986
<i>Distributor Fax Phone</i>	
<i>Distributor E-mail Address</i>	
<i>Distributors Data Set Identifier</i>	
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	HYLN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext.214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	LKPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	U.S. Bureau of the Census
<i>Title</i>	LKPG
<i>Unique Identifier</i>	
<i>Abstract</i>	lake outlines, Hastings 30 x 60 minute Quadrangle
<i>Purpose</i>	TIGER census data
<i>Time Period of Content</i>	1990
<i>Currentness Reference</i>	
<i>Progress</i>	

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	lake outlines, Census, TIGER
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	see U.S. Bureau of the Census Customer Services Office
<i>Use Constraints</i>	Credit Given to U.S. Bureau of the Census

<i>Data Set Name</i>	LKPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	
<i>Contact Street Address</i>	
<i>Contact City</i>	
<i>Contact State or Province</i>	
<i>Contact Postal Code</i>	
<i>Contact Voice Phone</i>	301-457-4100
<i>Contact Fax Phone</i>	
<i>Contact E-mail Address</i>	
<i>Browse Graphic</i>	http://www.census.gov
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	ask U.S. Bureau of the Census Customer Services Office
<i>Logical Consistency</i>	
<i>Completeness</i>	
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	polygon

<i>Data Set Name</i>	LKPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	polygon
<i>Tiling Scheme</i>	

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	LKPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview lake polygon cover, Mower County.

Entity and Attribute Detailed Citation data was modified slightly by deleting polygons of a certain area for cartographic display.

Section 6. Distribution Information

<i>Publisher</i>	U.S. Bureau of the Census
<i>Publication Date</i>	
<i>Online Linkage</i>	http://www.census.gov
<i>Distributor Contact Person</i>	Suzanne Maeder
<i>Distributor Organization</i>	Land Management Information Center
<i>Distributor Position</i>	
<i>Distributor Street address</i>	658 Cedar St.
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55155
<i>Distributor Voice Phone</i>	(651) 297-4986
<i>Distributor Fax Phone</i>	
<i>Distributor E-mail Address</i>	
<i>Distributors Data Set Identifier</i>	
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	LKPG
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
<i>Metadata Contact Street Address</i>	2642 University Avenue
<i>Metadata Contact City</i>	St. Paul
<i>Metadata Contact State or Province</i>	MN
<i>Metadata Contact Postal Code</i>	55114
<i>Metadata Contact Voice Phone</i>	612-627-4780, ext.214
<i>Metadata Contact Fax Phone</i>	612-627-4778
<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm

<i>Data Set Name</i>	BSAN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

Section 1. Identification Information

CITATION

<i>Originator</i>	Minnesota Geological Survey
<i>Title</i>	BSAN
<i>Unique Identifier</i>	
<i>Abstract</i>	annotation for township-range-section, lat. long. cities, rivers, and point cover for lat. lon. tics, Hastings 30 x 60 minute Quad.
<i>Purpose</i>	Recompilation of 1:100,000 surficial geology
<i>Time Period of Content</i>	July 1998
<i>Currentness Reference</i>	July 1998
<i>Progress</i>	complete

SPATIAL DOMAIN

<i>Maintenance and Update Frequency</i>	none planned
<i>Spatial Extent of Data</i>	Hastings 30 x 60 minute Quadrangle
<i>West Bounding Coordinate</i>	-93.0000000
<i>East Bounding Coordinate</i>	-92.3017861
<i>North Bounding Coordinate</i>	45.0000000
<i>South Bounding Coordinate</i>	44.5000000

KEYWORDS

<i>Place Keywords</i>	Hastings 30 x 60 minute Quadrangle, Southeastern Minnesota
<i>Theme Keywords</i>	geographic base annotation, Hastings 30 x 60 minute Quadrangle
<i>Theme Keyword Thesaurus</i>	

CONSTRAINTS

<i>Access Constraints</i>	ESRI ARC/INFO and ARCVIEW software
<i>Use Constraints</i>	Credit Given to Minnesota Geological Survey

<i>Data Set Name</i>	BSAN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

OTHER

<i>Contact Person</i>	Joyce Meints
<i>Contact Organization</i>	Minnesota Geological Survey
<i>Contact Person Position</i>	GIS Staff
<i>Contact Street Address</i>	2642 University Avenue
<i>Contact City</i>	St. Paul
<i>Contact State or Province</i>	MN
<i>Contact Postal Code</i>	55114
<i>Contact Voice Phone</i>	612-627-4780, ext. 214
<i>Contact Fax Phone</i>	612-627-4778
<i>Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Browse Graphic</i>	http://geolab.geo.umn.edu/mgs
<i>Associated Data Sets</i>	other related covers in Misc. Map Series M-96

Section 2. Data Quality Information

<i>Attribute Accuracy</i>	visually checked
<i>Logical Consistency</i>	point data built
<i>Completeness</i>	complete to date
<i>Horizontal Positional Accuracy</i>	
<i>Vertical Positional Accuracy</i>	
<i>Lineage</i>	

<i>Source Scale Denominator</i>	1:100000
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Section 3. Spatial Data Organization Information

<i>Native Data Set Environment</i>	ARC/INFO 7.04
<i>Geographic Reference for Tabular Data</i>	UTM Coordinates
<i>Spatial Object Type</i>	annotation and point

<i>Data Set Name</i>	BSAN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Vendor Specific Object Types</i>	point
<i>Tiling Scheme</i>	

Section 4. Spatial Reference Information

<i>Horizontal Coordinate Scheme</i>	UTM
<i>Ellipsoid</i>	GRS 1980
<i>Horizontal Datum</i>	NAD83
<i>Horizontal Units</i>	meters
<i>Horizontal Distance Resolution</i>	
<i>Altitude Datum</i>	mean sea level
<i>Altitude Units</i>	
<i>Depth Datum</i>	msl
<i>Depth Units</i>	
<i>Cell Width</i>	
<i>Cell Height</i>	

IF GEOGRAPHIC

<i>Latitude Resolution</i>	
<i>Longitude Resolution</i>	

IF UTM

<i>UTM Zone Number</i>	15 (expanded)
<i>UTM Coordinate Offsets or Adjustments</i>	
<i>UTM Distance Resolution</i>	

IF STATE PLANE

<i>SPCS Zone Identifier</i>	
<i>SPCS Coordinate Offsets or Adjustments</i>	
<i>SPCS Distance Resolution</i>	

<i>Data Set Name</i>	BSAN
<i>Date</i>	4-13-99
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IF USER SPECIFIED PROJECTION

Map Projection Name

Map Projection Parameters

IF OTHER

Other Coordinate System's Definition

Section 5. Entity and Attribute Information

Entity and Attribute Overview annotation and lat. lon. point cover, Mower County.

Entity and Attribute Detailed Citation

Section 6. Distribution Information

<i>Publisher</i>	Minnesota Geological Survey
<i>Publication Date</i>	
<i>Online Linkage</i>	ftp://156.98.153.1/pub2/m-96
<i>Distributor Contact Person</i>	Lori day
<i>Distributor Organization</i>	Minnesota Geological Survey – Map Sales
<i>Distributor Position</i>	Map Sales Manager
<i>Distributor Street address</i>	2642 University Avenue
<i>Distributor City</i>	St. Paul
<i>Distributor State or Province</i>	MN
<i>Distributor Postal Code</i>	55114
<i>Distributor Voice Phone</i>	612-627-4780 ex. 238
<i>Distributor Fax Phone</i>	612-627-4778
<i>Distributor E-mail Address</i>	dayxx006@maroon.tc.umn.edu
<i>Distributors Data Set Identifier</i>	Misc. Map Series M-96
<i>Distribution Liability</i>	
<i>Transfer Format Name</i>	ARC export format (.e00)

<i>Data Set Name</i>	BSAN
<i>Date</i>	4-13-99
<i>Metadata Entered By</i>	J. Meints

<i>Transfer Format Version Number</i>	ARC/INFO 7.04
<i>Transfer Size</i>	
<i>Ordering Instructions</i>	Contact MGS Map Sales

Section 7. Metadata Reference Information

<i>Metadata Date</i>	4-13-99
<i>Metadata Contact Person</i>	Joyce Meints
<i>Metadata Contact Organization</i>	Minnesota Geological Survey
<i>Metadata Contact Position</i>	GIS Staff
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<i>Metadata Contact E-mail Address</i>	meint002@maroon.tc.umn.edu
<i>Metadata Standard Name</i>	Minnesota Geographic Metadata Guidelines
<i>Metadata Standard Version</i>	v. 1.1
<i>Metadata Standard Online Linkage</i>	http://www.lmic.state.mn.us/gc/stds/metadata.htm