GeMS Fields Checklist

Geodatabase name:

Required layers are present:

- ❏ GeologicMap
  - ❏ MapUnitPolys
  - ❏ ContactsAndFaults
- ❏ DescriptionOfMapUnits
- ❏ Glossary
- ❏ DataSources
- ❏ GeoMaterialDict

Optional layers:

- ❏ MiscellaneousMapInformation
- ❏ GeologicLines
- ❏ GeologicPoints
- ❏ OrientationPoints
- ❏ DirectionPoints
- ❏ MapUnitPoints

MiscellaneousMapInformation (non-spatial table)

	MiscellaneousMapInformation_ID	prefix MMI

MapProperty and MapPropertyValue:

	Report Title	If applicable
	Map Title	Exactly as printed on the map
	Publication Date	
	Scale	
	Authors	
	Cartography by	
	Publisher	
	Series	
	Series Number	

MapUnitPolys (polygon feature class)

	MapUnit	❏ No Null values ❏ All units on the PDF are in this field (in addition to w for water if applicable)
	IdentityConfidence	❏ No Null values
	Label	❏ Label matches MapUnit
	Symbol	
	Notes	
	DataSourceID	❏ No Null values
	MapUnitPolys_ID	prefix MUP
	RuleID	

MapUnitPolys topology rules:

	Polygons must not overlap	
	No gaps between polygons	
	Boundaries must be overlain by lines in ContactsAndFaults (with some exceptions)	

ContactsAndFaults (line feature class)

	Type	❏ No Null values ❏ Look for line types that seem unusual or uncommon
	MapText	Matches the PDF
	IsConcealed	❏ No Null values
	LocationConfidenceMeters	
	ExistenceConfidence	
	IdentityConfidence	
	Label	Probably null

	Symbol	
	DataSourceID	
	Notes	
	ContactsAndFaults_ID	prefix CAF

ContactsAndFaults Topology rules:

	Must not overlap.	
	Must not self-overlap.	
	Must not self-intersect.	
	Must not have dangles, with certain exceptions. Most dangling-line exceptions should be Type='fault' or be Type='contact' and IsConcealed = 'Y'.	

GeologicLines (line feature class)

	Type	
	IsConcealed	
	LocationConfidenceMeters	
	ExistenceConfidence	
	IdentityConfidence	
	Label	
	Symbol	
	DataSourceID	
	MapText	
	Notes	
	GeologicLines_ID	prefix GEL

GeologicLines topology rules:

	Check line direction Directional decorated lines obey the right-hand rule	

Glossary (non-spatial table)

	Term	❑ Check paragraphStyles against original map ❑ Terms are in the master glossary ❑ Master glossary has the map listed in the 'Maps' column
	Definition	Look for truncated definitions
	DefinitionSourceID	
	❖ SeeAlso	
	TermSrcFld	
	TermSrcFC	
	Glossary_ID	prefix GLO

DataSources (non-spatial table)

	DataSources_ID	Unique and readable abbreviations of the citations
	Source	❑ Cite the entire publication instead of the plate itself. ❑ Citations follow USGS format
	Notes	
	URL	If referencing a past Survey publication, the URL directs to the overall publication, not just the plate.

DescriptionOfMapUnits (non-spatial table)

	MapUnit	
	Name	
	FullName	
	Description	Look for truncated descriptions
	DescriptionSourceID	
	HierarchyKey	
	Age	Each map unit should have a value for age
	GeoMaterial	
	GeoMaterialConfidence	
	ParagraphStyle	
	Label	❏ All map units have their abbreviations here. ❏ Water row has <Null> for label
	Symbol	All null if we aren't using a style file
	AreaFillRGB	
	AreaFillCMYK	optional
	AreaFillPatternDescription	
	DescriptionOfMapUnits_ID	❏ prefix DMU

GeologicPoints (point feature class)

	Type	
	Label	
	Symbol	
	LocationConfidenceMeters	
	IdentityConfidence	
	PlotAtScale	Should be 0
	StationID	Probably null
	MapUnit	Not null
	DataSourceID	
	MapText	
	Notes	
	GeologicPoints_ID	prefix GEP

OrientationPoints (point feature class)

	Type	
	Azimuth	
	Inclination	
	OrientationConfidenceDegrees	
	Label	
	Symbol	
	LocationConfidenceMeters	
	IdentityConfidence	
	PlotAtScale	
	StationID	
	MapUnit	

	DataSourceID	
	MapText	
	Notes	
	OrientationPoints_ID	prefix ORP

DirectionPoints (point feature class)

	Type	
	Azimuth	
	OrientationConfidenceDegrees	
	Label	
	Symbol	
	DataSourceID	
	MapText	
	Notes	
	DirectionPoints_ID	prefix DRP