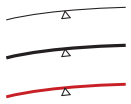
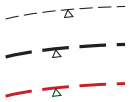
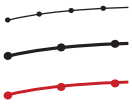
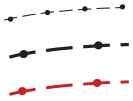
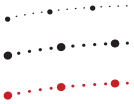
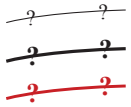
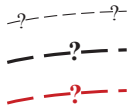
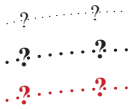
NMBGMR Geologic Map Symbols

LINES:

Confidence	Exposure: Exposed	Exposure: Intermittent/Obscured	Exposure: Concealed
Certain (or unspecified)	 Geologic contact, fault, or fold, exposed with high positional accuracy. Triangle shows location of superior exposure. Contact line=0.4 pt., 0/0/0/100 Fault line=1.2 pt., 0/0/0/100 Fold line=1.1 pt., 15/100/100/5	 Geologic contact, fault, or fold, intermittent or obscured with relatively high positional accuracy. Triangle shows location of superior exposure. Contact line=0.4 pt; dash length= 5 pt., gap=2 pt., 0/0/0/100 Fault line=1.2 pt; dash length= 10 pt., gap=4 pt., 0/0/0/100 Fold line=1.1 pt; dash length=10 pt., gap=4 pt., 15/100/100/5	 Geologic contact, fault, or fold, concealed. Contact line=0.4 pt; dash round cap, length = 0.2 pt., gap = 2 pt., 0/0/0/100 Fault line=1.2 pt; dash round cap, length = 0.1 pt., gap = 4 pt., 0/0/0/100 Fold line=1.2 pt; dash round cap, length = 0.1 pt., gap = 4 pt., 15/100/100/5
Probable	 Probable geologic contact, fault, or fold, exposed with high positional accuracy. Scientific nature is less certain (i.e. revised stratigraphy, unusual nomenclature etc.). Contact line=0.4 pt.; dot=2 pt., dash round cap=0.05 pt., gap=12 pt., 0/0/0/100 Fault line=1.2 pt.; dot=3 pt., dash round cap=0.25 pt., gap=20 pt., 0/0/0/100 Fold line=1.1 pt.; dot=3 pt., dash round cap=0.25 pt., gap=20 pt., 15/100/100/5	 Probable geologic contact, fault, or fold, intermittent or obscured. Scientific nature is less certain (i.e. revised stratigraphy, unusual nomenclature etc.). Contact line=0.4 pt., dash length = 5 pt., gap=2 pt.; dot=2 pt., dash round cap=0.05 pt., gap=14 pt., 0/0/0/100 Fault line=1.2 pt., dash length=10 pt., gap=4 pt.; dot=3 pt., dash round cap=0.25 pt., gap=28 pt., 0/0/0/100 Fold line=1.1 pt.pt., dash length=10 pt., gap=4 pt.; dot=3 pt., dash round cap=0.25 pt., gap=28 pt., 15/100/100/5	 Probable geologic contact, fault, or fold, concealed, typically determined by inference using supporting data. Contact line=0.4 pt., dash round cap= 2 pt., gap=2 pt.; dot=2 pt., dash round cap=0.05 pt., gap=16 pt., 0/0/0/100 Fault line=1.2 pt., dash round cap=0.1 pt., gap=4 pt.; dot=3 pt., dash round cap=0.25 pt., gap=20 pt., 0/0/0/100 Fold line=1.1 pt.pt., dash round cap=0.1 pt., gap=4 pt.; dot=3 pt., dash round cap=0.25 pt., gap=20 pt., 15/100/100/5
Uncertain	 Queried or uncertain geologic contact, fault, or fold, exposed with high positional accuracy. Scientific nature of contact is uncertain (i.e., revised stratigraphy, unusual nomenclature etc.). Contact line=0.4 pt.; question marks = Times New Roman (TNR) 8 pt., 0/0/0/100 Fault line=1.2 pt.; question marks = TNR Bold 10 pt., 0/0/0/100 Fold line=1.1 pt.; question marks = TNR Bold 10 pt., 15/100/100/5	 Queried or uncertain geologic contact, fault, or fold, intermittent or obscured. Scientific nature is uncertain (i.e., revised stratigraphy, unusual nomenclature etc.). Contact line=0.4 pt.; dash length = 5 pt., gap = 3 pt; question marks = TNR 8 pt, every fifth gap, 0/0/0/100 Fault line=1.2 pt.; dash length = 10 pt., gap = 4 pt; question marks = TNR Bold 8 pt, every forth gap, 0/0/0/100 Fold line=1.1 pt.; dash length = 10 pt., gap = 4 pt; question marks = TNR Bold 8 pt, every forth gap, 15/100/100/5	 Queried or uncertain geologic contact, fault, or fold, concealed. Contact line=0.4 pt., dash round cap, length=0.2 pt., gap=3 pt.; question marks = TNR 8 pt, every 10th gap, 0/0/0/100 Fault line=1.2 pt., dash round cap, length=0.1 pt., gap=4 pt.; question marks = TNR Bold 10 pt, every 8th gap, 0/0/0/100 Fold line=1.1 pt.pt., dash round cap=0.1 pt., gap=4 pt.; question marks = TNR Bold 10 pt, every 8th gap,15/100/100/5

LINES gradational contacts:

Exposed, sub-horizontal, gradational geologic contact. Solid line = 0.8 pt., 0/0/0/30; dash line = 6 pt., dash length = 0.4 pt, gap = 4 pt., 0/0/0/100

Intermittent or obscured, probable, sub-horizontal, gradational geologic contact. Solid line = 0.8 pt., 0/0/0/30; dash line = 6 pt., dash length = 0.4 pt, gap = 4 pt.; dot - dash round cap = 2 pt., dash lenth = 0.2 pt., gap = 13 pt. 0/0/0/100

Uncertain, sub-horizontal, gradational geologic contact. Solid line = 0.8 pt., 0/0/0/30; dash line = 6 pt., dash length = 0.4 pt, gap = 4 pt.; question marks = AN Bold 8 pt., located every 8th gap, 0/0/0/100

Exposed, sub-vertical, gradational geologic contact. Line wt. = 6 pt., dash length = 0.4 pt, gap = 4 pt., 0/0/0/100; double gray line = 0.8 pt. each, 0/0/0/30

Intermittent or obscured, probable, sub-vertical, gradational geologic contact. Line wt. = 6 pt., dash length = 0.4 pt, gap = 4 pt.; dot - dash round cap = 2 pt., dash lenth = 0.2 pt., gap = 13 pt. 0/0/0/100; double gray line = 0.8 pt. each, 0/0/0/30

Uncertain, sub-vertical, gradational geologic contact. Line wt. = 6 pt., dash length = 0.4 pt, gap = 4 pt.; question marks = AN Bold 8 pt., located every 8th gap, 0/0/0/100; double gray line = 0.8 pt. each, 0/0/0/30

LINES fault types (gray line types vary according to exposure and confidence as defined on page 1):

Normal fault showing dip and dip direction of the fault plane and trend and plunge of linear feature: Ball-and-bar on downthrown side (N = normal, R = reverse, D = dextral, S = sinistral; lower case indicates minor component). Triangle shows location of superior exposure. Line wt. = 0.4 pt; type = AN italic 6 pt.

Reverse fault showing dip and dip direction of the fault plane and trend and plunge of linear feature. Teeth on upthrown side (N = normal, R = reverse, D=dextral, S=sinistral; lower case indicates minor component). Triangle shows location of superior exposure. Line wt. = 0.4 pt; type = AN italic 6 pt.

Thrust fault showing dip and dip direction of the fault plane and trend and plunge of linear feature. Teeth on upthrown side (N = normal, R = reverse, D = dextral, S = sinistral; lower case indicates minor component). Triangle shows location of superior exposure. Line wt. = 0.4 pt; type = AN italic 6 pt.

Strike-slip fault showing slip sense (sinistral). Also shown are dip and dip direction of the fault plane and trend and plunge of linear feature (N = normal, R = reverse, D = dextral, S = sinistral; lower case indicates minor component). Triangle shows location of superior exposure. Line wt. = 0.4 pt; type = AN italic 6 pt.

Detachment fault showing dip and dip direction of the fault plane and trend and plunge of linear feature and showing semi-circle on downthrown side (N = normal, R = reverse, D = dextral, S = sinistral; lower case indicates minor component). Triangle shows location of superior exposure. Line wt. = 0.4 pt; type = AN italic 6 pt.

Concealed dominately dip-slip fault: concealed fault showing relative sense of movement. Line wt. = 1.2 pt; dash round cap, length = 0.1 pt., gap = 4 pt; uppercase U/D = AN bold 10 pt.

Concealed dominately strike-slip fault: concealed fault showing relative sense of movement. Line wt. = 1.2 pt; dash round cap, length = 0.1 pt., gap = 4 pt.

LINES fold types (gray line types vary according to exposure and confidence as defined on page 1):

Trace of syncline axial plane showing direction of plunge.

Trace of synform axial plane showing direction of plunge.

Trace of overturned syncline axial plane showing direction of plunge.

Trace of anticline axial plane showing direction of plunge.

Trace of antiform axial plane showing direction of plunge.

LINES fold types (cont.):

Trace of overturned anticline axial plane showing direction of plunge.

Trace of monocline showing direction of plunge.

Trace of synclinal bend of monocline showing direction of plunge.

Trace of anticlinal bend of monocline showing direction of plunge.

LINES miscellaneous faults:

Complex fault: fault with inferred complex fault history. Older sense of slip listed first.

Fault trace: inferred from degraded topographic scarp. Line wt. = 1.2 pt; dash length = 10 pt., gap = 4 pt.

Zone of sheared rock (brittle); Line wt. = 1.2 pt; random triangles 0.25 pt.

Zone of sheared rock (ductile shear zone); Line wt. = 0.5 pt.

LINES miscellaneous igneous:

Dike: Cenozoic mafic intrusive rocks, occasionally radiating from a diatreme, e.g., Shiprock (polygon). Line color = 100% red; line wt. = 1.2 pt, tick showing dip, type = AN italic 6 pt.

Dike: Paleozoic or Proterozoic pegmatites. Line color = 10/100/0/0; line wt. = 1.2 pt, tick showing dip, type = AN italic 6 pt.

Caldera Margin, certain. Line color = 100% red; line wt. = 0.4 pt, hatchures point into the caldera.

Caldera Margin, intermittent and/or obscured. Line color = 100% red; line wt. = 0.4 pt, hatchures point into the caldera; dash length = 11 pt., gap = 4 pt;

Caldera Margin, concealed. Line color = 100% red; line wt. = 0.4 pt, hatchures point into the caldera; dash length = 1 pt., gap = 4 pt.

Caldera Margin, concealed queried. Line color = 100% red; line wt. = 0.4 pt, hatchures point into the caldera; dash length = 1 pt., gap = 4 pt; type = AN italic 6 pt.

Lava tube. Line color = 100% red; line wt. = 0.4 pt, dash length = 8 pt., gap = 4 pt, small open circles in every gap.

Volcanic Fissure. Line color = 100% red; line wt. = 0.4 pt, hatchures = 6 pt., dash length = 0.5 pt., gap = 2 pt.

LINES miscellaneous landslide, mass wasting:

Landslide scarp or slump block, hatchures point toward landslide; line wt. = 0.6 pt.

Landslide scarp or slump block, approximately located, hatchures point down scarp; line wt. = 0.6 pt.; dash = 4, gap = 3.

Landslide scarp or slump block, concealed, hatchures point down scarp; line wt. = 0.6 pt.; dash = 0.25, gap = 3.

Landslide scarp or slump block, concealed queried, hatchures point down scarp; line wt. = 0.6 pt.; dash = 0.25, gap = 3; text = AN 6 pt.

Landslide or slump block deposit, arrows show direction of down slope movement; line wt. = 0.6 pt.

LINES miscellaneous metamorphic boundaries:

Andalusite Sillimanite (white) — Metamorphic facies, showing boundary between diagnostic mineral assemblages. Line and type color = 0/0/0/0 (white); line wt. = 1.2 pt., dash length = 0.2 pt., gap = 4 pt, type = AN 6 pt.

(white) — Metamorphic core complex, hatchures point toward metamorphic core; line wt. = 0.6 pt.

(white) — Metamorphic core complex, approximately located, hatchures point toward metamorphic core; line wt. = 0.6 pt; dash = 4.75, gap = 2.

(white) — Metamorphic core complex, approximately located queried, hatchures point toward metamorphic core; line wt. = 0.6 pt; dash = 4.75, gap = 2; text = AN 6 pt.

LINES miscellaneous fluvial, glacial, and lacustrine:

Fluvial terrace scarp. Line color = 100/50/0/0; line wt. = 0.4 pt, hatchures point down scarp.

Glacial limit or terminous. Line color = 100/50/0/0; line wt. = 0.8 pt.

Approximate glacial limit or terminous. Line color = 100/50/0/0; line wt. = 0.8 pt; dash length = 6 pt., gap = 3 pt.

Concealed glacial limit or terminous. Line color = 100/50/0/0; line wt. = 0.8 pt; dash length = 1 pt., gap = 4 pt.

Lacustrine beach ridge. Line color = 100/50/0/0; line wt. = 1.5 pt; dash length = 0.4 pt., gap = 3 pt.

Former lacustrine shoreline. Line color = 100/50/0/0; line wt. = 1.5 pt.

Approximate location of former lacustrine shoreline. Line color = 100/50/0/0; line wt. = 1.5 pt; dash length = 10 pt., gap = 5 pt.

LINES geologic cross sections:

A **A'** — Location of geologic cross section. Line wt. = 1 pt; type = Times New Roman (TNR) Bold, 14 pt.

LINES miscellaneous:

	Exposed	Intermittent	Concealed
Marker Bed	Certain marker bed: exposed contact with high positional accuracy. Triangle shows location of superior exposure. Line wt.=0.75 pt; line color = 30/50/100/0.	Intermittent or obscured marker bed. Triangle shows location of superior exposure. Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; line color = 30/50/100/0.	Concealed marker bed: concealed contact Line wt. = 0.75 pt; dash round cap, length = 0.2 pt., gap = 1.5 pt; line color = 30/50/100/0.
Ash Bed	(white) Certain ash bed: exposed contact with high positional accuracy. Triangle shows location of superior exposure. Line wt.= 1 pt; line color = 0/0/0/0.	(white) Intermittent or obscured ash bed. Triangle shows location of superior exposure. Line wt. = 1 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; line color = 0/0/0/0.	(white) Concealed ash bed: concealed contact Line wt. = 1 pt; dash round cap, length = 0.2 pt., gap = 1.5 pt; line color = 0/0/0/0.
Coal Bed	c c Certain coal bed: exposed contact with high positional accuracy. Triangle shows location of superior exposure. Line wt. = 0.75 pt; lowercase c's = AN 8 pt.	c c Intermittent or obscured coal bed Triangle shows location of superior exposure. Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; lowercase c's = AN 8 pt.	c c Concealed coal bed: concealed contact Line wt. = 0.75 pt; dash round cap, length = 0.2 pt., gap = 1.5 pt; lowercase c's = AN 8 pt. every 10 gaps.

	Geophysical boundary	Geophysical fault
Located by geophysical methods (default).	Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; 100% magenta.	Line wt. = 1.5 pt; dash length = 5 pt., gap = 4 pt; dash round cap = 0.2 pt., gap = 4 pt.; 100% magenta.
Located by aeromagnetic survey	AM Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; upper case AM = 8 pt.;100% magenta.	AM Line wt. = 1.5 pt; dash length = 5 pt., gap = 4 pt; dash round cap = 0.2 pt., gap = 4 pt.; upper case AM = 8 pt.; 100% magenta.
Located by ground magnetic survey	M Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; upper case M = 8 pt.;100% magenta.	M Line wt. = 1.5 pt; dash length = 5 pt., gap = 4 pt; dash round cap = 0.2 pt., gap = 4 pt.; upper case M = 8 pt.; 100% magenta.
Located by gravity survey	G Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; upper case G = 8 pt.;100% magenta.	G Line wt. = 1.5 pt; dash length = 5 pt., gap = 4 pt; dash round cap = 0.2 pt., gap = 4 pt.; upper case G = 8 pt.; 100% magenta.
Located by radiometric survey	R Line wt. = 0.75 pt; dash length = 5 pt., gap = 2 pt; dash round cap = 0.2 pt., gap = 2 pt.; upper case R = 8 pt.;100% magenta.	R Line wt. = 1.5 pt; dash length = 5 pt., gap = 4 pt; dash round cap = 0.2 pt., gap = 4 pt.; upper case R = 8 pt.; 100% magenta.

POLYGONS (non-map units) surfaces:

Pediment surface. Hatchured line color = 0/100/100/5; line wt. = 0.75 pt.

Geomorphic surface. Diagonal line color = 55/0/20/0; line wt. = 0.75 pt.

POINT DATA bedding:

Horizontal bedding.

30 - 320 30 - 320 Inclined bedding. Ball indicates younging is known. First value = degrees of dip, second value = azimuth of dip direction. Type = AN italic 6t pt.; line wt. = 0.4 pt.

060 060 Vertical bedding. Ball indicates younging is known. Value = azimuth of strike. Type = AN italic 6 pt.; line wt. = 0.4 pt.

34 - 320 34 - 320 Overturned bedding. Ball indicates younging is known. First value = degrees of dip second value = azimuth of dip direction. Type = AN italic 6 pt.; line wt. = 0.4 pt.

55 - 315 Crenulated or warped bedding. First value = degrees of dip second value = azimuth of dip direction. Type = AN italic 6 pt.; line wt = 0.4 pt.

30 - 320 Inclined graded bedding. First value = degrees of dip second value = azimuth of dip direction. Type = AN italic 6 pt.; line wt. = 0.4 pt.; 2nd line wt. = 0.4 pt.; dash length = 1 pt.; gap = 1 pt.

060 Vertical graded bedding, ball on younger side Value = azimuth of strike. Type = AN italic 6 pt.; line wt. = 0.4 pt.; 2nd line wt. = 0.4 pt.; dash length = 1 pt.; gap = 1 pt.

34 - 320 Overturned graded bedding. First value = degrees of dip second value = azimuth of dip direction. Type = AN italic 6 pt.; line wt. = 0.4 pt.; 2nd line wt. = 0.4 pt.; dash length = 1 pt.; gap = 1 pt.

Horizontal bedding determined from aerial photographs; line wt. = 0.4 pt.; dash = 2.5 pt., gap = 2 pt.

Gently inclined (1 - 30°) bedding determined from aerial photographs; line wt. = 0.4 pt.; dash = 1.5 pt., gap = 1.5 pt.

Moderately inclined (30 - 60°) bedding determined from aerial photographs; line wt. = 0.4 pt.; dash = 1.5 pt., gap = 1.5 pt.

Steeply inclined (60 - 90°) bedding determined from aerial photographs; line wt. = 0.4 pt.; dash = 1.5 pt., gap = 1.5 pt.

Vertical bedding determined from aerial photographs; line wt. = 0.4 pt.; dash = 1.5 pt., gap = 1.5 pt.

POINT DATA joints and fractures (gray represents linear data presented elsewhere):

Horizontal joints or fractures.

80 - 310 Strike and dip of inclined joints or fractures.First value = degrees of dip, second value = azimuth of dip direction. Type = AN italic 6 pt.

066 Vertical joints or fractures. Value = azimuth of strike (right-hand rule). Type = AN italic 6 pt.

70-310 50/020 R, s Minor fault plane showing dip of the fault plane and trend and plunge of linear feature (slickenlines, striations, etc.). 1st value = degrees of dip, 2nd value = azimuth of dip direction, 3rd value = plunge of line, and 4th value = trend of line (N = normal, R = reverse, D=dextral, S=sinistral; lower case indicates minor component). Fault line = 1.2 pt, tick = 0.5 pt, type = AN italic 6 pt.; Lineation wt. = 0.5.

80-315 5/264 S, n Minor fault plane showing dip of the fault plane and trend and plunge of linear feature (slickenlines, striations, etc.). 1st value = degrees of dip, 2nd value = azimuth of dip direction, 3rd value = plunge of line, and 4th value = trend of line (N = normal, R = reverse, D=dextral, S=sinistral; lower case indicates minor component). Numbers separated by a dash show dip - dip; those separated by a backslash show plunge and trend. Fault line = 1.2 pt, tick = 0.5 pt, type = AN italic 6 pt.; Lineation wt. = 0.5.

70-310 50/030 R, s Trend and plunge of linear feature (slickenlines, striations, etc.). 1st value = plunge, 2nd value = plunge direction; line = 0.5 pt, type = AN italic 6 pt.

85-310 50 R, s Rake of linear feature (slickenlines, striations, etc.). Value = rake; line = 0.5 pt, arc = 0.25 pt. type = AN italic 6 pt.

Breccia or gouge zones along faults. Line wt. of open triangles = 0.6 pt.

34-300 Minor dike showing dip of the dike plane; 1st value = degrees of dip, 2nd value = azimuth of dip direction, line = 1.2 pt.; Type = AN italic 6 pt.

50-302 Minor vein showing dip of the plane; 1st value = degrees of dip, 2nd value = azimuth of dip direction, mineral assemblages are added as lower case letters (i.e. q = quartz, f = flourite, etc.); line = 1.2 pt.; Type = AN italic 6 pt.

POINT DATA fluvial and eolian features:

Younging determined by unambiguous cross bedding; the longer line represents the truncation surface and stratigraphic top.

Fluvial transport direction; line color = 100/50/0/0; line wt. = 0.4 pt.

Fluvial transport direction determined from imbicated clasts; line color = 100/50/0/0; line wt. = 0.4 pt

Fluvial transport direction determined from cross beds; line color = 100/50/0/0; line wt. = 0.4 pt.

Fluvial transport direction determined from flute casts; line color = 100/50/0/0; line wt. = 0.4 pt.

Eolian sediment transport direction determined from cross beds; line color = 0/0/0/100; line wt. = 0.4 pt., slash line wt. = 0.8 pt., dash length = 0.5 pt., gap = 1.0 pt.

POINT DATA foliations, lineations and folds (gray = planes):

Horizontal flow foliation or layering in igneous rock; line wt. = 0.4 pt.; diamond line wt. = 0.25 pt.

40-310

Inclined flow foliation or layering in igneous rocks, 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt., text = AN italic 6 pt.

070

Vertical flow foliation or layering in igneous rocks, 1st number = strike azimuth, line wt. = 0.4 pt., text = AN italic 6 pt.

Horizontal foliation or layering in metamorphic rock; line wt. = 0.4 pt.; diamond line wt. = 0.25 pt.

20/280 40-325

Inclined S1 foliation metamorphic rocks, 1st number = dip, 2nd number = dip direction; barbs on strike line indicate horizontal component of shear (sinestral), lineation indicates relative dip slip component of shear; line wt. = 0.4 pt., text = AN italic 6 pt.

20 070

Vertical S1 foliation metamorphic rocks showing rake angle (plunge in this case) of lineation, 1st number = strike azimuth, line wt. = 0.4 pt., text = AN italic 6 pt.

20/280 75-308

Inclined S2 foliation metamorphic rocks, 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt., text = AN italic 6 pt.

20/280 65-302

Inclined S3 foliation metamorphic rocks, 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt., text = AN italic 6 pt.

65-110

Shear zone, tick shows dip. 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

72-330

Strike and dip of magmatic foliation in granite defined by alignment of megacrysts. 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

56-340

Strike and dip of magmatic foliation in granite defined by alignment of mafic enclaves. 1st number = dip, 2nd number = dip direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

20/030 20/025 20/022

Trend and plunge of metamorphic lineation (single barb = L1, double barb = L2, triple barb = L3). 1st number = plunge, 2nd number = plunge direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

20/072

Trend and plunge of boudinage long axis (assumed to be perpendicular to the stretching direction) . Type = AN italic 6 pt.

45 85/308

Rake of metamorphic lineation (single barb = L1, double barb = L2, triple barb = L3). 1st number = rake , line wt. = 0.4 pt.Type = AN italic 6 pt.

Vertical minor fold axis; map view fold asymmetry can be shown.

Horizontal minor fold axis; line = 0.4 pt. 100/0/100/70

20/072

Minor syncline with plunging fold axis. 1st number = plunge, 2nd number = plunge direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

20/072

Minor anticline with plunging fold axis. 1st number = plunge, 2nd number = plunge direction, line wt. = 0.4 pt.Type = AN italic 6 pt.

40/090 30/092

Minor asymmetrical folds with plunging axis and map view sketch of asymmetry. 1st number = plunge, 2nd number = plunge direction, line wt. = 0.4 pt.Type = AN italic 6 pt. 100/0/100/70

20 30 40

Mesoscopic fold showing map-view sketch of fold and bearing and plunge of fold hinge line (single barb = F1, double barb = F2, triple barb = F3). Type = AN italic 6 pt. 100/0/100/70

20/072

Many minor folds with average plunging axes. Common in evaporite facies. 1st number = average plunge, 2nd number = average plunge direction, line wt. = 0.4 pt.Type = AN italic 6 pt. 100/0/100/70

POINT DATA localities, miscellaneous:

1 ★	Selected locality; location of radiometrically dated sample.Type = TNR bold 9 pt.
1	Selected locality; location of field photo.Type = TNR bold 9 pt.
	Mine or quarry, adit, shaft.
✳	Volcanic vent.
	Spring.
BLL 1	Water-supply well, including number assigned by the New Mexico Office of the State Engineer. Type = TNR 8 pt.
Mo5A	Groundwater monitoring wells.Type = TNR 8 pt.
■ SHD2	Exploratory geotechnical borings.Type = TNR 8 pt.
■ MW2	Exploratory soil pits. Type = TNR 8 pt.
NM5784	Fossil locality, showing sample identification number. Type = AN 6 pt.

The preceeding symbols list represents the most commonly used symbols in the NMBGMR STATEMAP program and is not exhaustive. It also portrays how symbols will be displayed on maps employing NMBGMR's Geologic Map Data Model (*http://www.geoinfo.nmt.edu/statemap/datamodel/home.html*). For other symbols not found here, geologic mappers should use the USGS FGDC Digital Cartographic Standard for Geologic Map Symbolization (*http://ngmdb.usgs.gov/fgdc_gds/*).