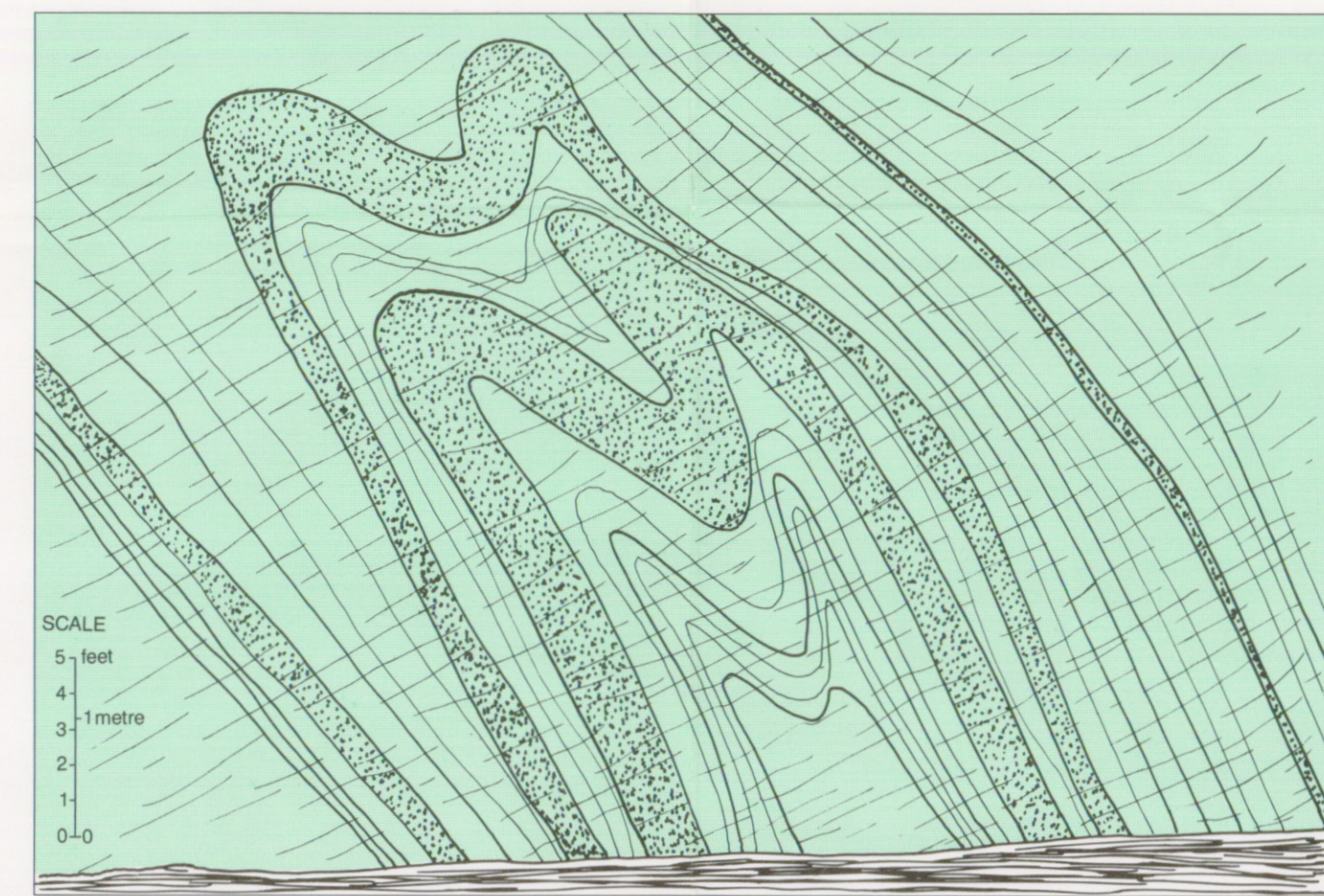


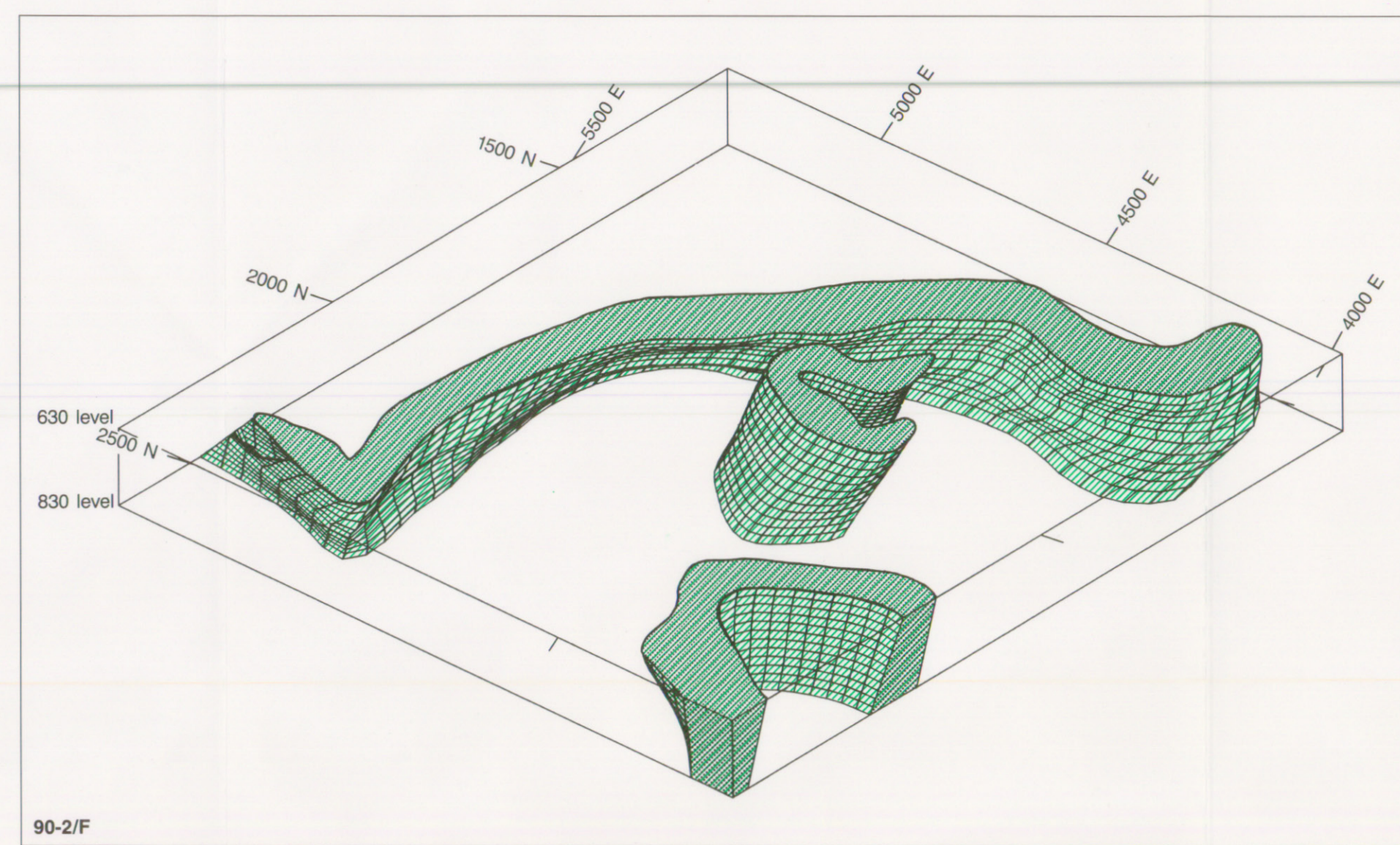
90-2/H - Sketch of a portion of the Brown Halite Member, note the variation in deformation within a short interval which is characteristic of the member and assumed to be the result of passive deformation relative to the Grey Halite Member; scale bar is 5 feet; location on 830 level, 2000N, 4550E, grid north to the left, type section Brown Halite Member.



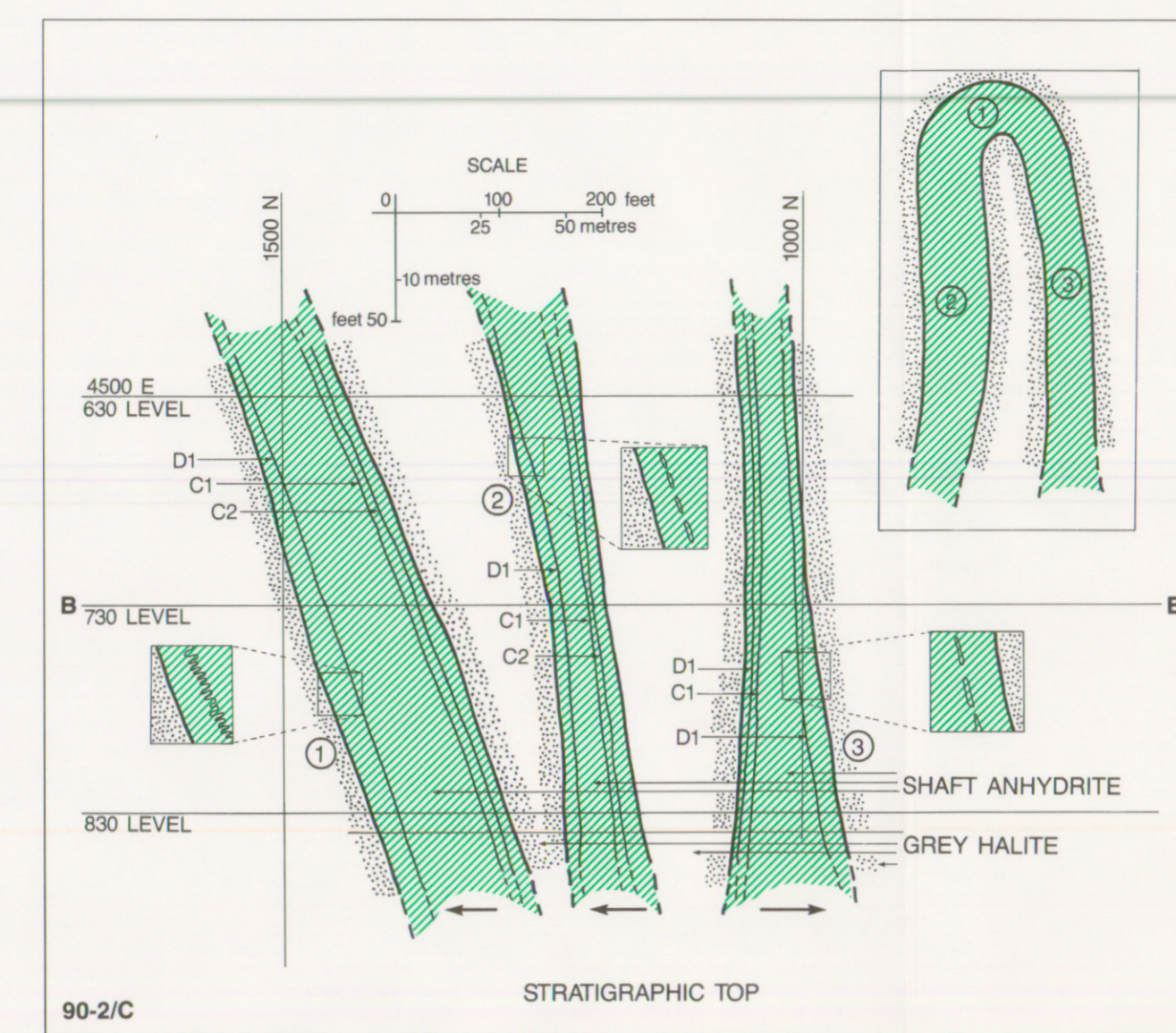
90-2/I - Sketch of a portion of the Shaft Anhydrite Member; detail of C-2 clay marker truncated by grey halite, indicates that the anhydrite unit has been disrupted and is a fragment of an original bed; note flow lineation within the grey halite unit; scale bar is 5 feet; location on 830 level, 2650E and 1550N.



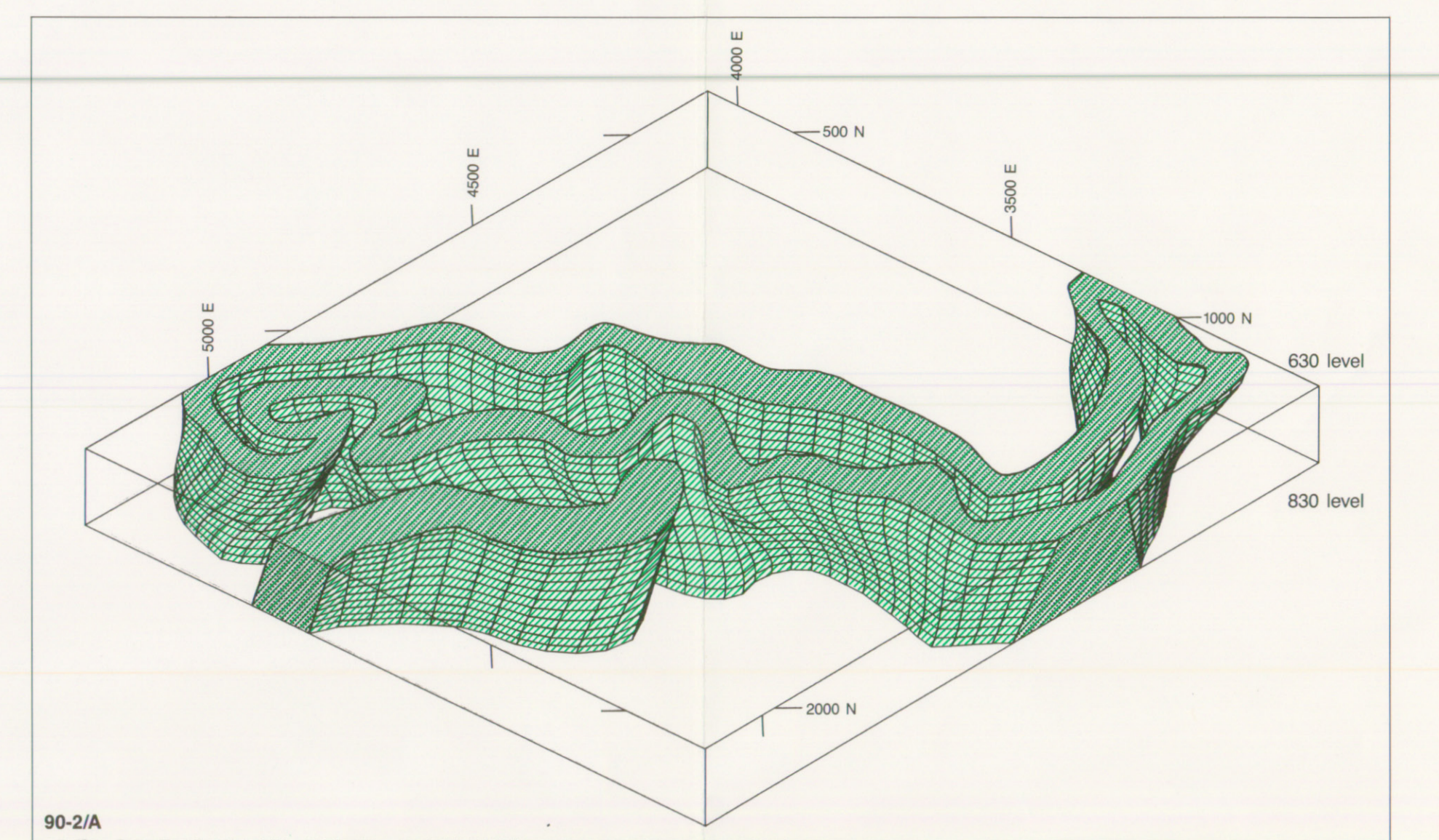
90-2/J - Sketch of a portion of the Brown Halite Member (opposite drift wall to figure 90-2/H); large scale refolded fold, passive deformation typical of the Brown Halite Member (see also 90-2/A); the member shows evidence of being passively "pushed" and folded by halokinetic deformation of the Grey Halite Member; scale bar is 5 feet; location on 830 level, 2000N, 4550E, grid south to the left, type section, Brown Halite Member.



90-2/F

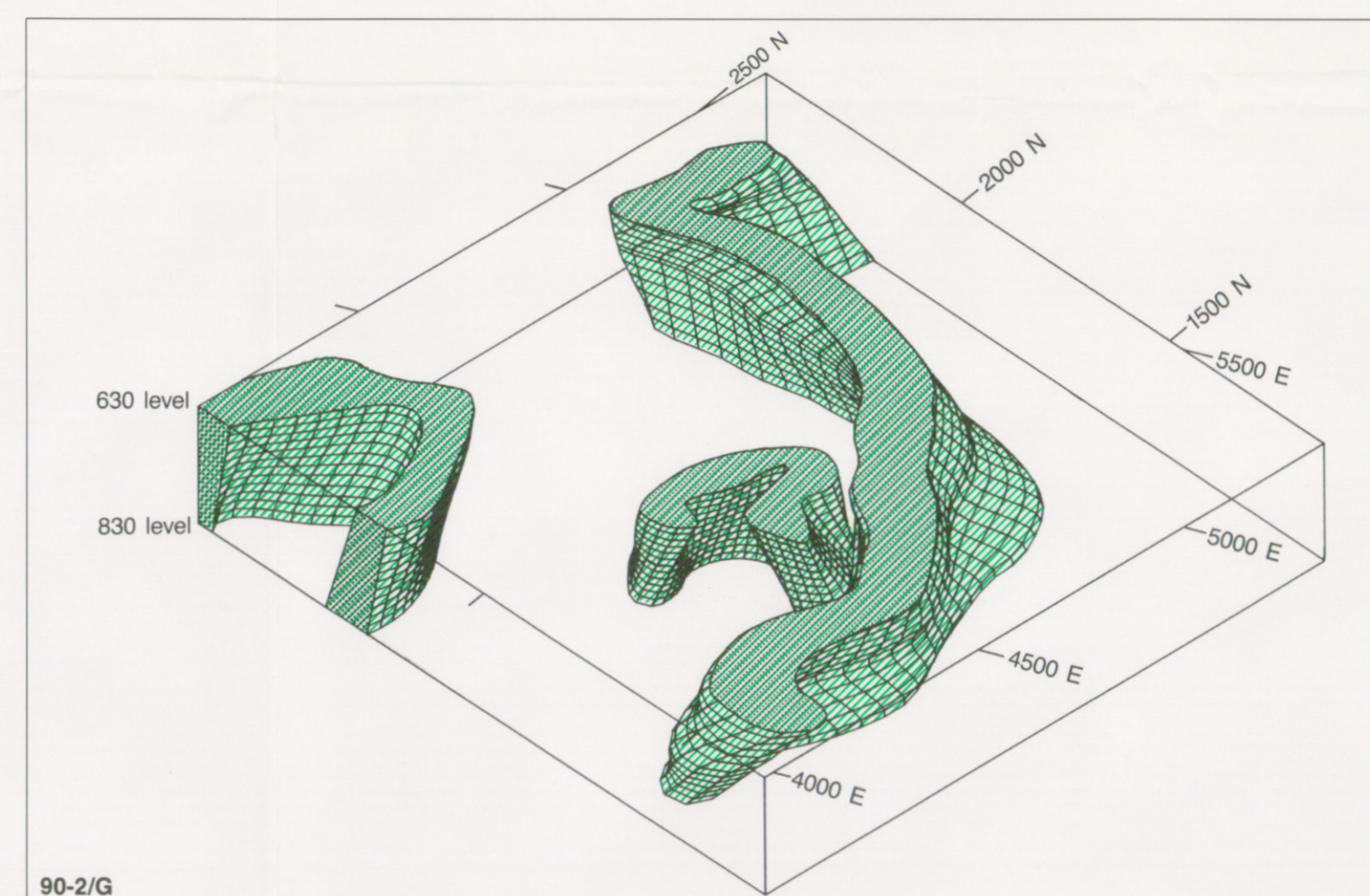


90-2/C

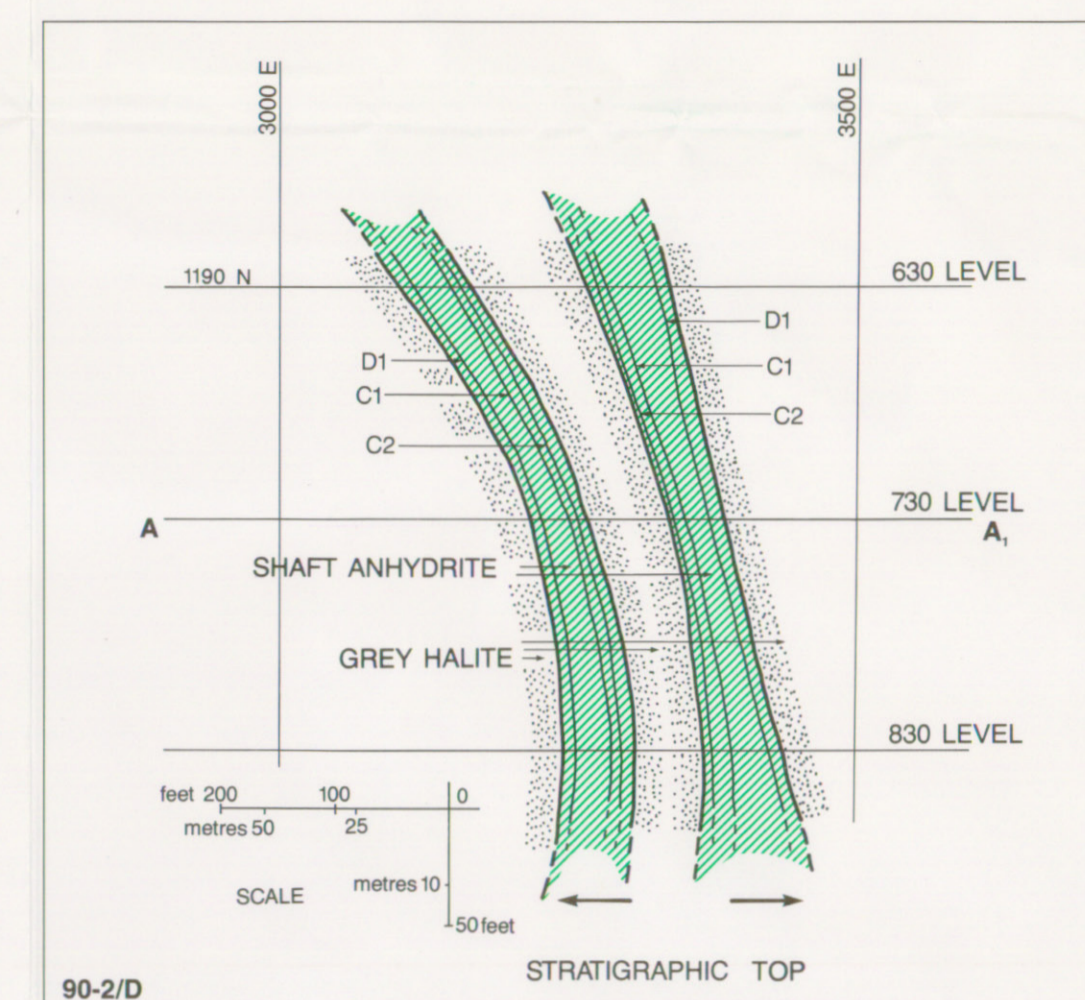


90-2/A

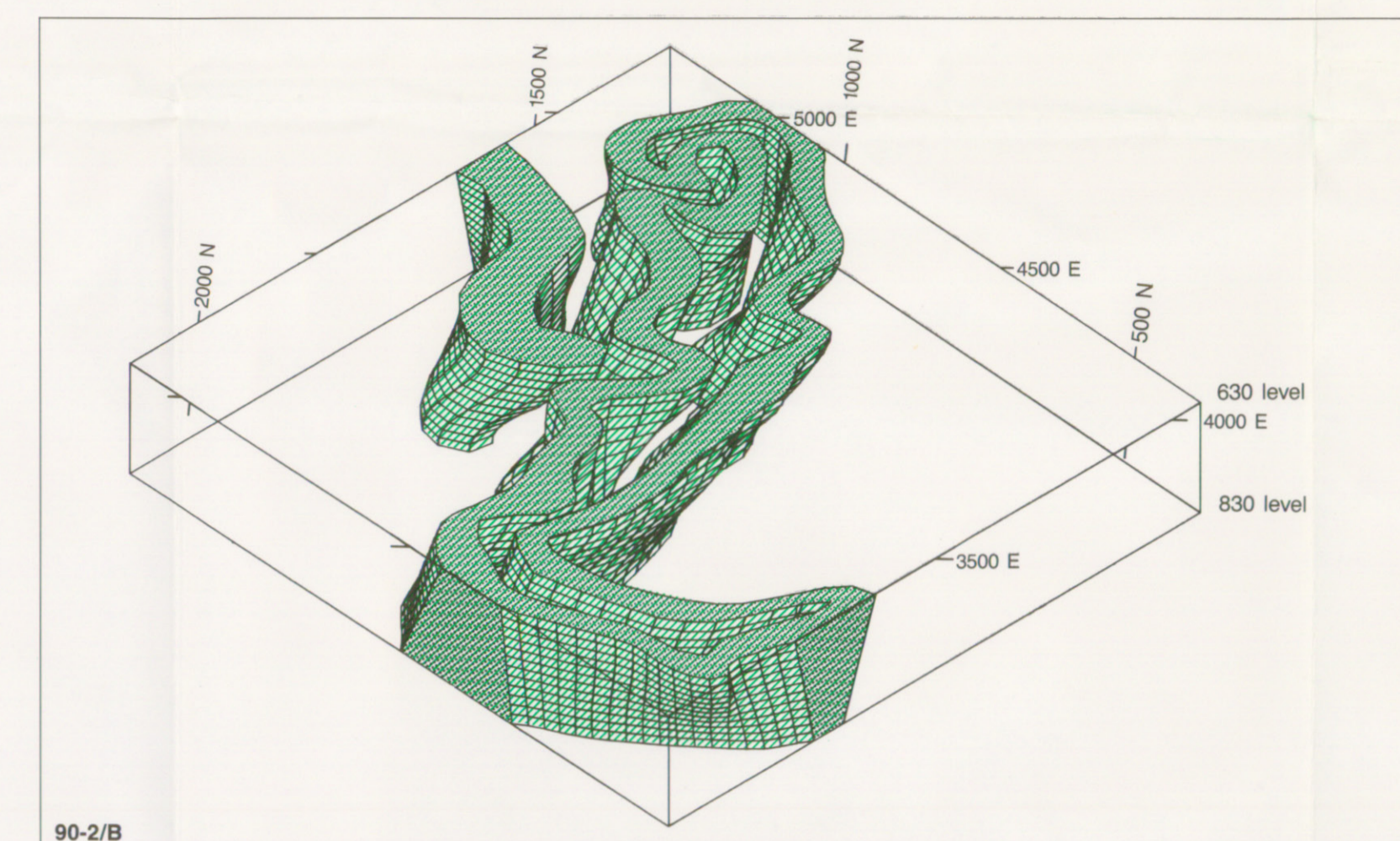
90-2/A and B - Three-dimensional block diagram showing selected units of the Shaft Anhydrite Member to demonstrate the mode of occurrence of the member and style of deformation typical of the unit which is representative of the deformation of the deposit; top of block is 630 level, base is 830 level; 90-2A is viewed from north to south, view angle is 28 degrees above 630 level; 90-2B is viewed from west to east, view angle is 45 degrees above 630 level; see location block on 730 level map.



90-2/G



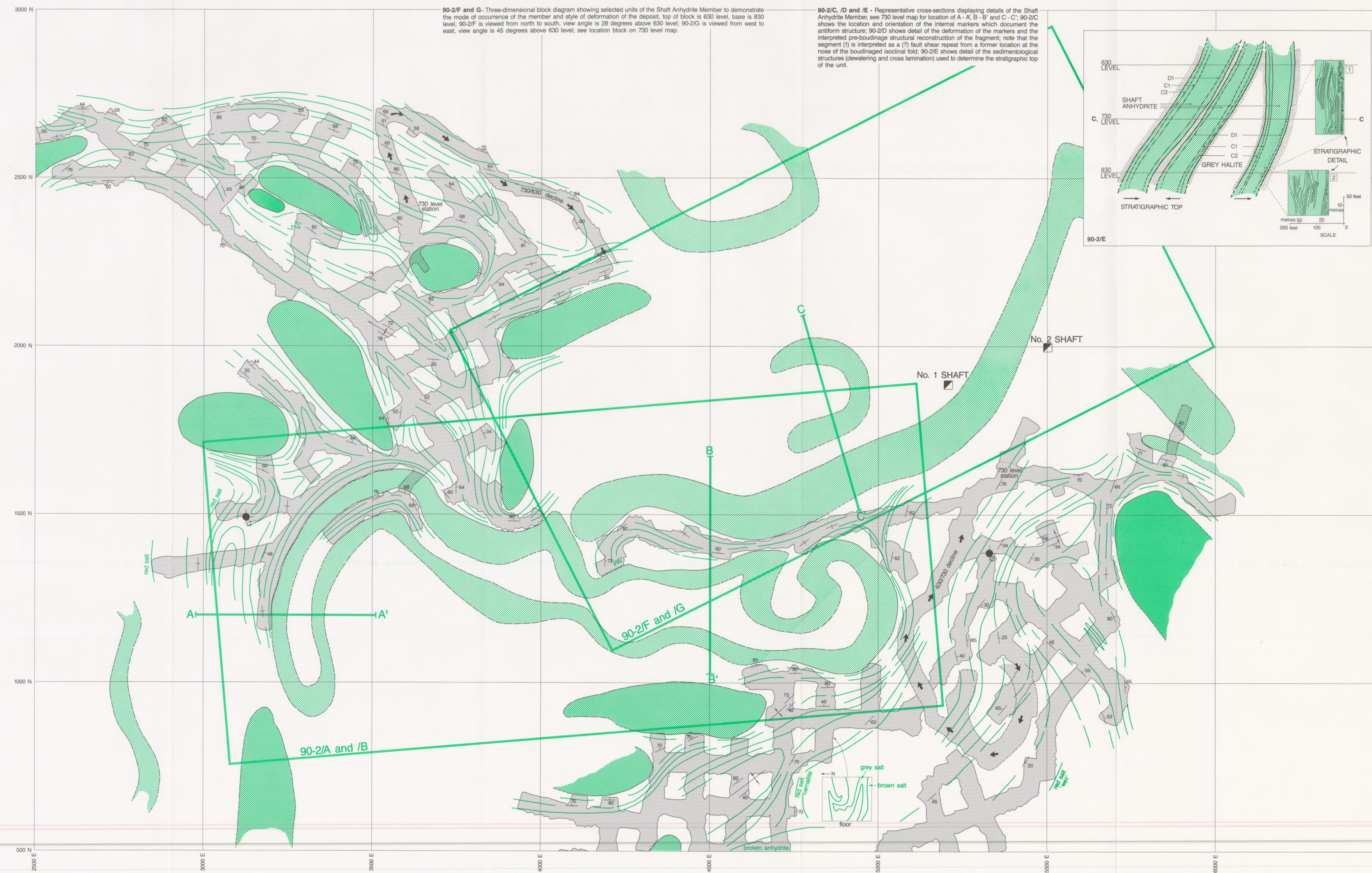
90-2/D



90-2/B

90-2/F and G - Three-dimensional block diagram showing selected units of the Shaft Anhydrite Member to demonstrate the mode of occurrence of the member and style of deformation of the deposit; top of block is 630 level, base is 830 level; 90-2F is viewed from north to south, view angle is 28 degrees above 630 level; 90-2G is viewed from west to east, view angle is 45 degrees above 630 level; see location block on 730 level map.

90-2/C, D and E - Representative cross-sections displaying details of the Shaft Anhydrite Member; see 730 level map for location of A, B, C and D; 90-2C shows the location and orientation of the internal markers which document the anhydrite structure; 90-2D shows detail of the deformation of the markers and the interpreted pre-boudinage structural reconstruction of the fragment; note that the segment (1) is interpreted as a (7) foot shear repeat from a former location at the nose of the boudinaged isoclinal fold; 90-2E shows detail of the sedimentological structure (swelling and cross lamination) used to determine the stratigraphic top of the unit.

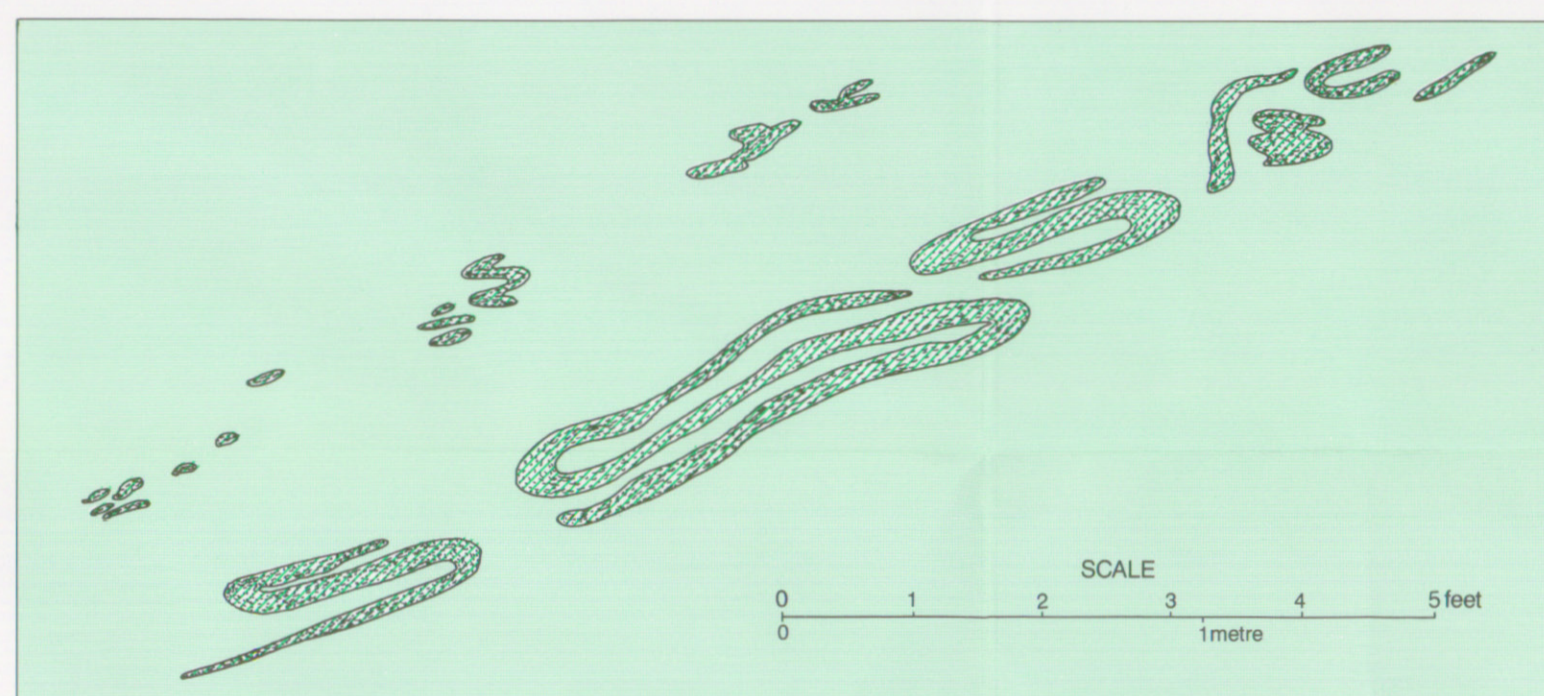


LEGEND

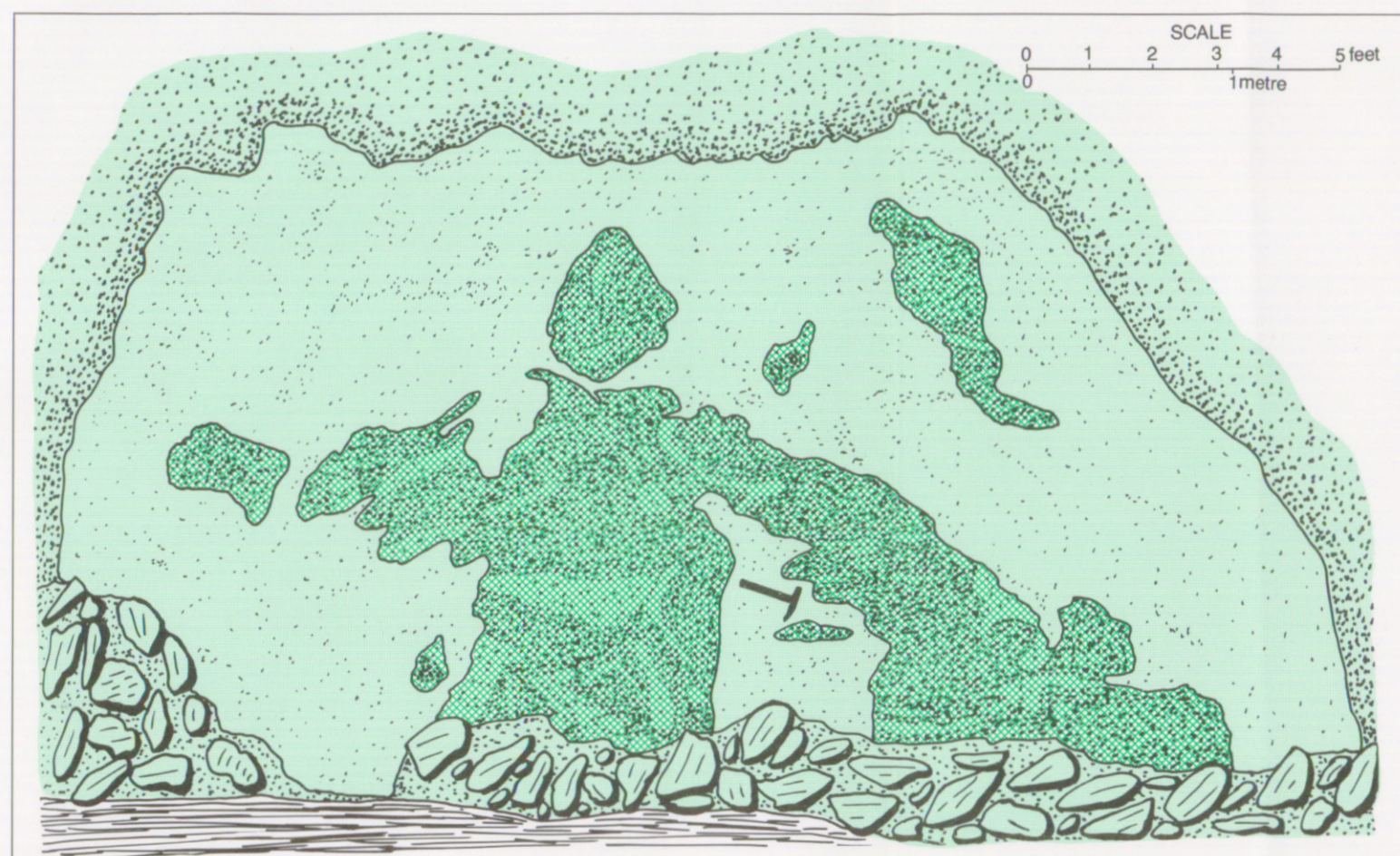
- SHAFT ANHYDRITE MEMBER: laminated with lesser nodular and stylitic, defined by the occurrence of internal clay and shale markers.
- BORATE ANHYDRITE MEMBER: nodular and stylitic to massive with minor laminated, clear to white halite infilling voids, defined by the occurrence of porous white detritate (CaS, SO₄) nodules.
- CAP ANHYDRITE MEMBER: nodular to stylitic and massive with very minor brownish yellow nodular rims composed of biogenic calcite and native sulphur.
- UNDIFFERENTIATED ANHYDRITE: due to incomplete exposure or drillhole intersection.
- GREY HALITE/BROWN HALITE MEMBERS: undifferentiated (except where noted); contacts are commonly obscured by internal diversity of the Brown Halite Member and halokinetic deformation; pattern shows bedding, flow lineation.
- Anhydrite - Halite boundary: known, inferred.
- Bedding/flow lineation: vertical, horizontal; tops unknown except in SHAFT ANHYDRITE MEMBER.
- Antiform: defined, inferred, plunging.
- Synform: defined, inferred, plunging.
- Underground development drillhole: horizontal; angled: showing end of hole and label.
- Drillhole: vertical underground development, vertical surface exploration.
- Mineral occurrence: carnallite (KMgCl₃·6H₂O)/sylvite (KCl), blue halite (NaCl), chamberite (Mn, B, O, Cl), native sulphur (S).
- Hydrocarbon occurrence: oil show, oil stain, petroliferous odor, gas show.
- SHAFT - NO. 1 - 710 feet deep, rectangular - 65 feet x 15.25 feet; used for exhaust ventilation and escapeway.
- SHAFT - NO. 2 - 930 feet deep, circular - 16 feet in diameter; used for mine ventilation, production and transport.
- MINE WORKINGS: 630 level - first cut - 18 feet x 30 feet x 30 feet x 50 feet - second cut - 60 feet x 50 feet; 730 level - first cut - 30 feet x 50 feet; 830 level - first cut - 30 feet x 55 feet - second cut - 60 feet x 55 feet.

NOTE: Base maps derived from underground survey maps prepared by the Canadian Salt Co. Ltd. (updated to July 1985). Grid north is 19 minutes west of astronomic true north. Grid reference point is the center of the number 2 shaft placed at 5500 East E, 2000 North N to position the map reference away from the mine area and to establish positive values for grid locations and drift labels. Previous 630 level grid has been shifted (from 60 at number 2 shaft) to coincide with the other working levels. All measurements are reported in English units to be consistent with the Canadian Salt Co. Ltd. policy.

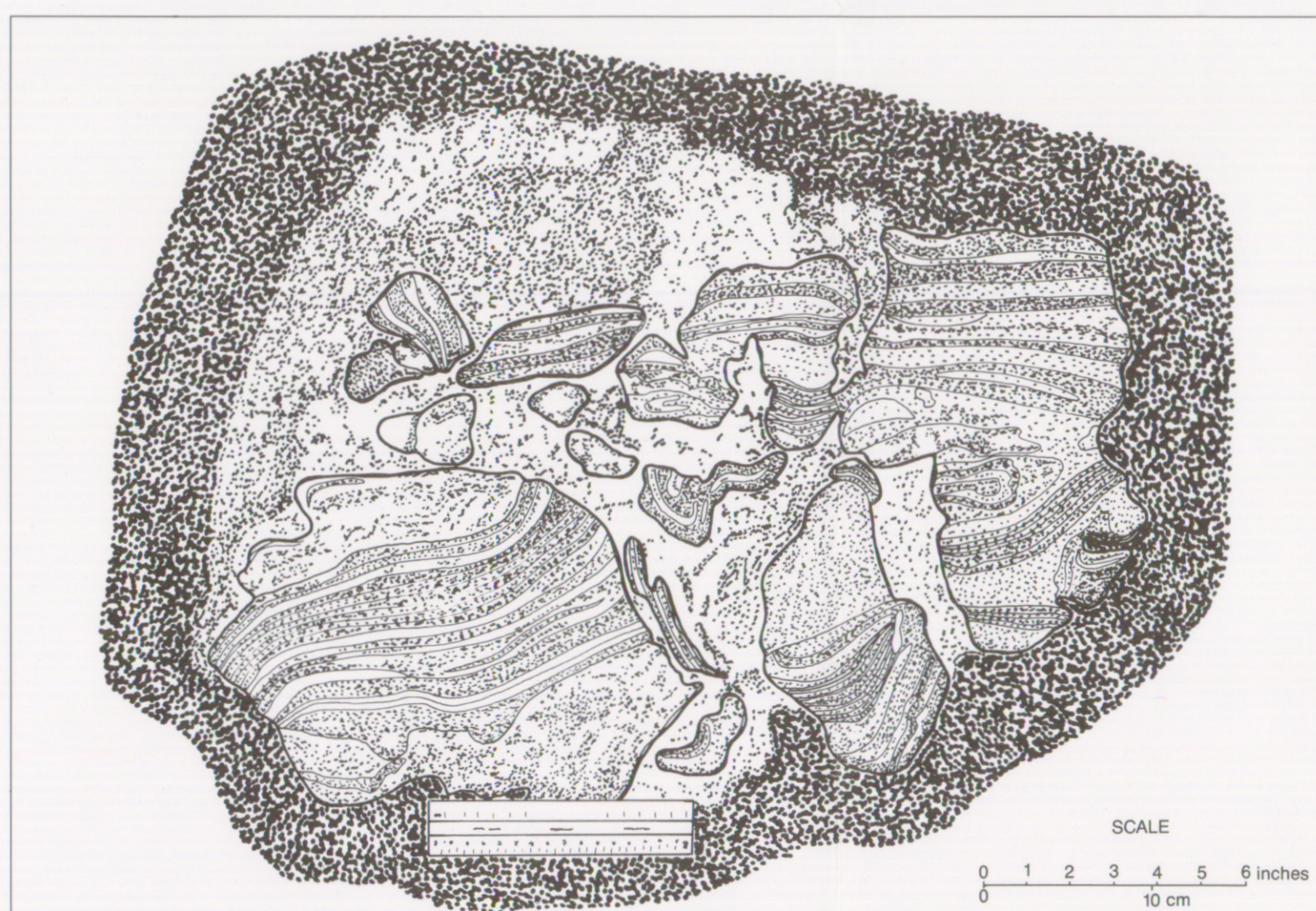
ACKNOWLEDGMENTS: Access to the underground workings and permission to undertake the project were provided by the Canadian Salt Co. Ltd. and facilitated by Mr. William McCormick (mine manager), Mr. Mike Waterfield (mine engineer) and Mr. Doug Walker (mine captain). Underground mapping assistance was provided by P. Lake (1985), G. Howells (1988) and P. Rose (1987). The ongoing contribution of Mr. Peter Lake (Canadian Salt Co. Ltd.) in providing accurate base map discussions, critical review and comments has been invaluable to the preparation of these maps and is gratefully acknowledged. Additional critical review and discussion regarding the geology and history of the Pugwash deposit were provided by Dr. Robert Evans (Mobil Research and Development Corp., Dallas, Texas).



90-2/K - Sketch of an anhydrite interbed within the Grey Halite Member; the anhydrite bed has been completely folded and boudinaged by halokinetic flowage of the surrounding grey halite; scale bar is 5 feet; diagram top to the left, location on 630 level, 1960N, 5020E, near 830 level core storage room.



90-2/L - Sketch of a portion of the Borate Anhydrite Member exposed in a drift wall; clear to white, medium to coarse grained, equigranular to slightly acicular recrystallized halite, underlying (?) the borate anhydrite unit; represents a pressure-deformation shadow(?) ; 30 cm hammer for scale; location on 830 level, 3200E, 1000N grid west to the left, type area, Borate Anhydrite Member.



90-2/M - Detail sketch of a portion of the Grey Halite Member exposed in a drift floor; large size fragments of grey halite with anhydrite laminae in a matrix of clear to white, medium to coarse grained, equigranular, recrystallized halite, surrounded by fine grained, acicular to aciculate grey halite; boudinaged (?) fragment; scale bar is 5 feet; location on 830 level, 2850E, 1250N type section, Grey Halite Member.

NOVA SCOTIA DEPARTMENT OF MINES AND ENERGY
 MAP 90-2
 GEOLOGY
 OF THE
 CANADIAN SALT COMPANY LIMITED
PUGWASH MINE
 730 LEVEL
 PUGWASH, NOVA SCOTIA
 D.C. CARTER
 SCALE 1:1600
 Feet 0 100 200 300 400
 Metres 0 100 200 300 400
 NOVA SCOTIA DEPARTMENT OF MINES AND ENERGY
 JACK BURNHAM, MINISTER JOHN J. LAFRANCE, DEPUTY MINISTER
 HALIFAX, NOVA SCOTIA
 1980