

APPENDIX
CANDE ANALYSES AND COMPARATIVE DATA FOR CONCRETE, PLASTIC,
AND METAL PIPE – ALL FIELD TESTS

This appendix contains detailed results from the finite element model of each of the field tests using the computer program CANDE. One figure is presented with deflections, interface pressures, bending moments, thrusts, and shears for each type of pipe and each field test; a total of 42 analyses. Details of the procedures used for the analyses were presented in chapter 5. For comparison purposes, field data have been added whenever available. The keys and formatting of all figures is the same, even if no field data were available.

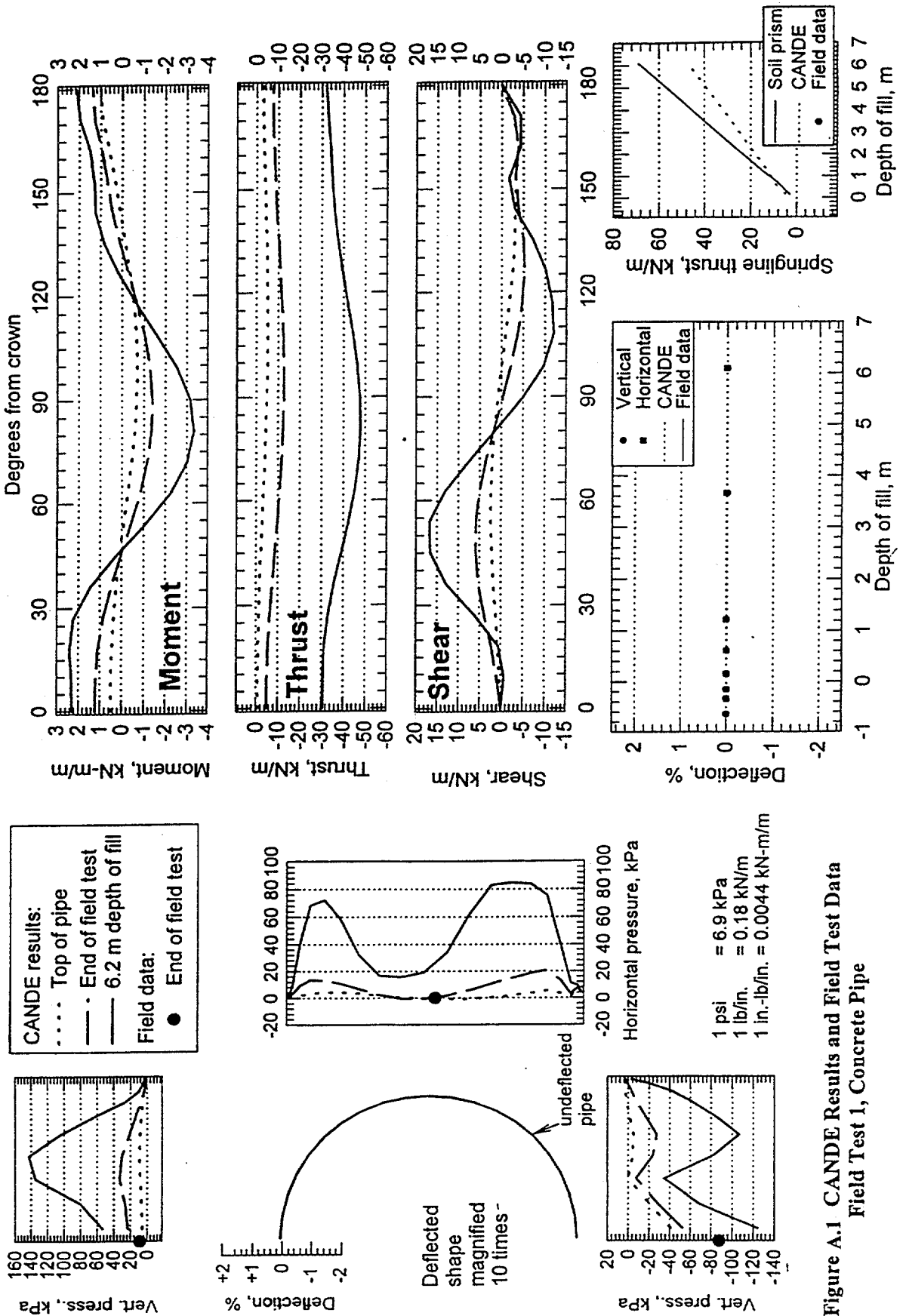


Figure A.1 CANDE Results and Field Test Data
Field Test I, Concrete Pipe

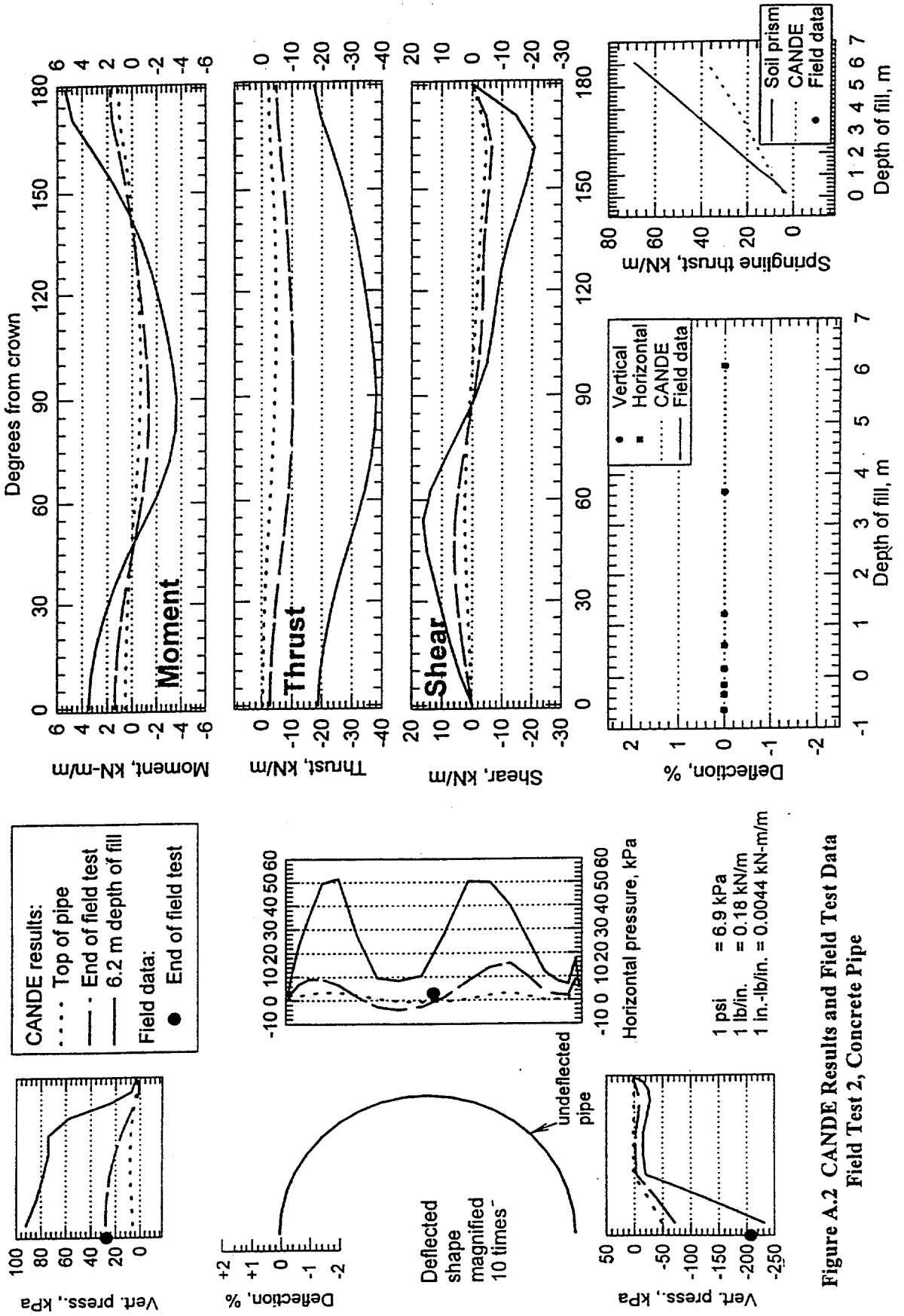


Figure A.2 CANDE Results and Field Test Data
 Field Test 2, Concrete Pipe

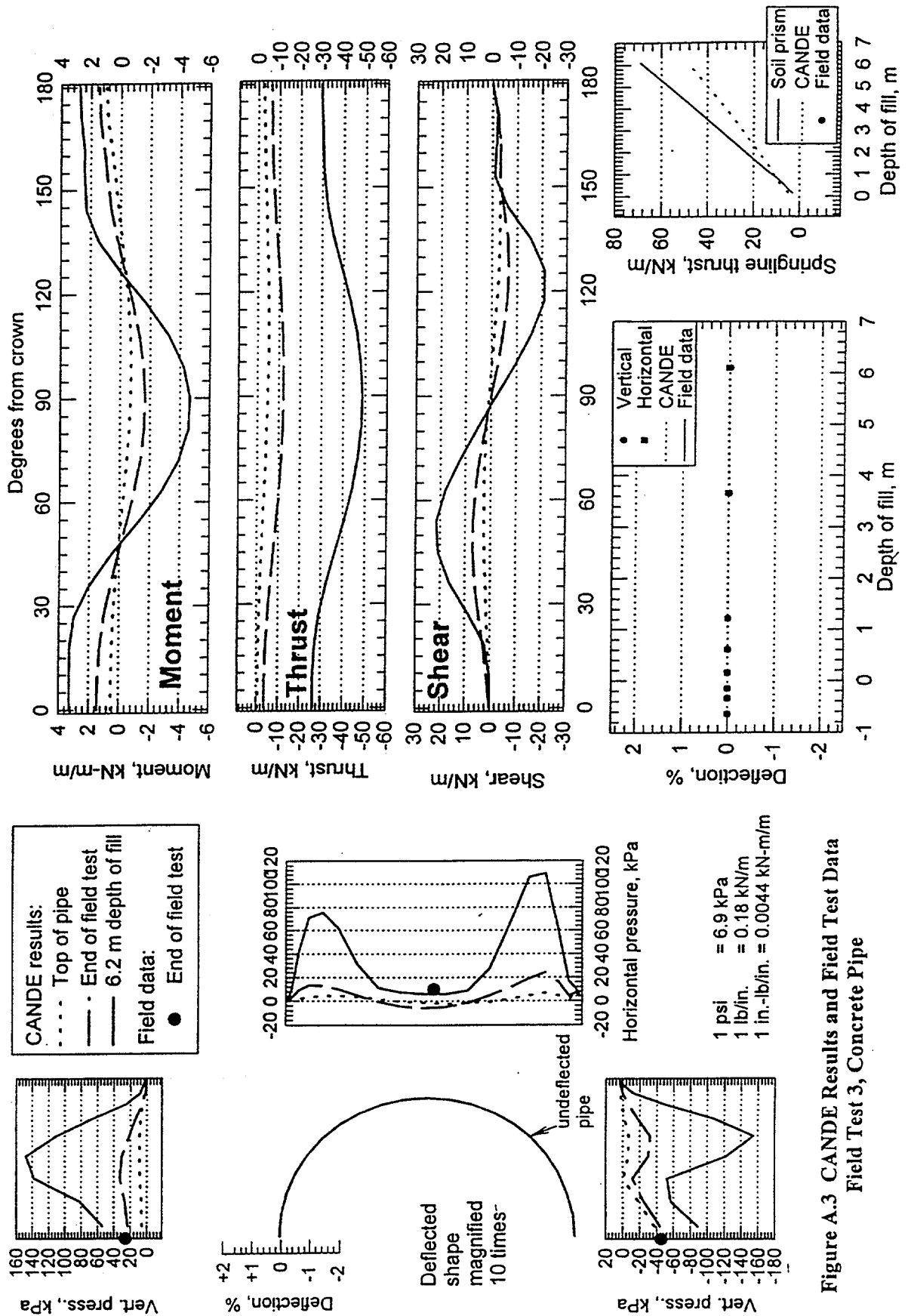


Figure A.3 CANDE Results and Field Test Data
 Field Test 3, Concrete Pipe

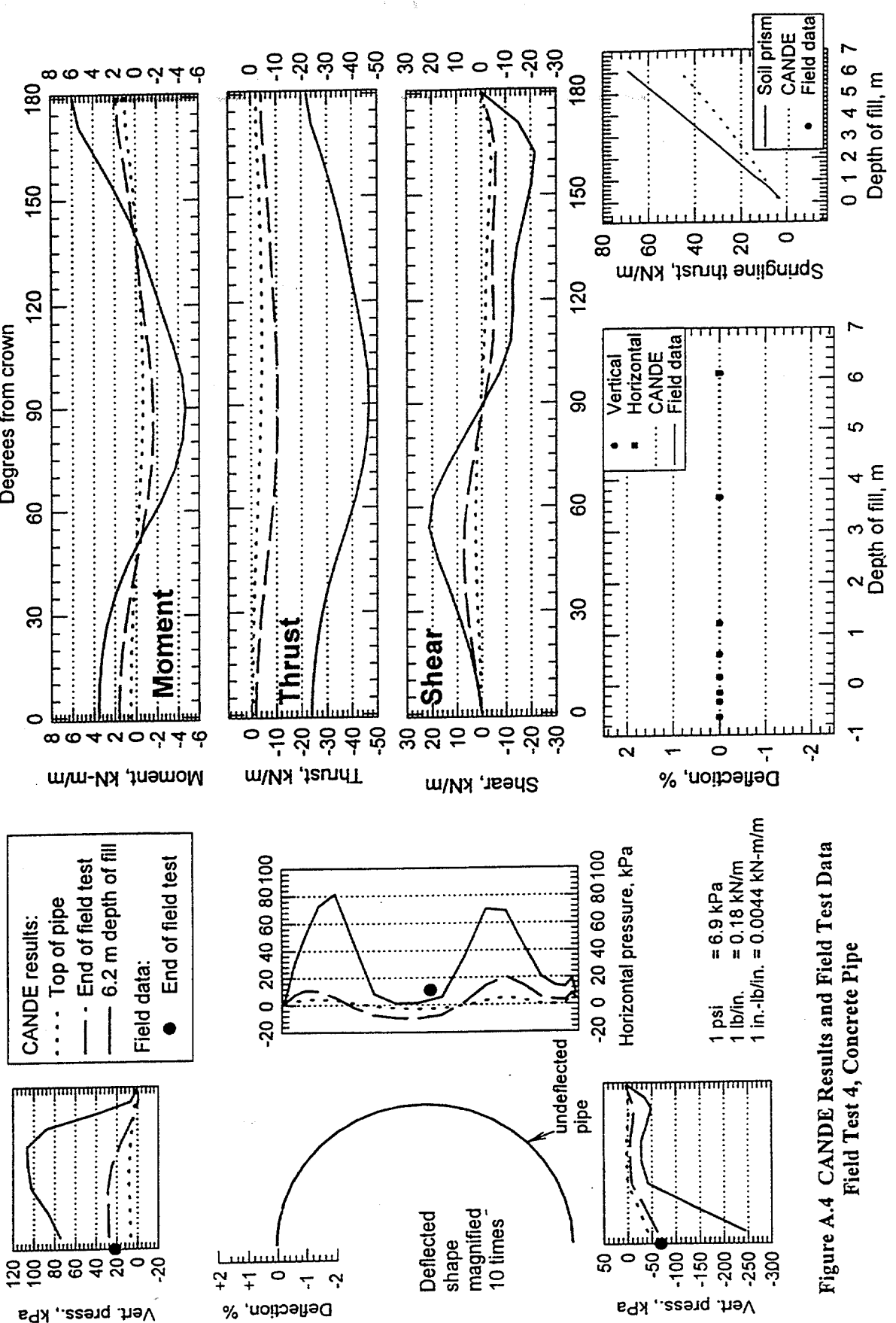


Figure A.4 CANDE Results and Field Test Data
Field Test 4, Concrete Pipe

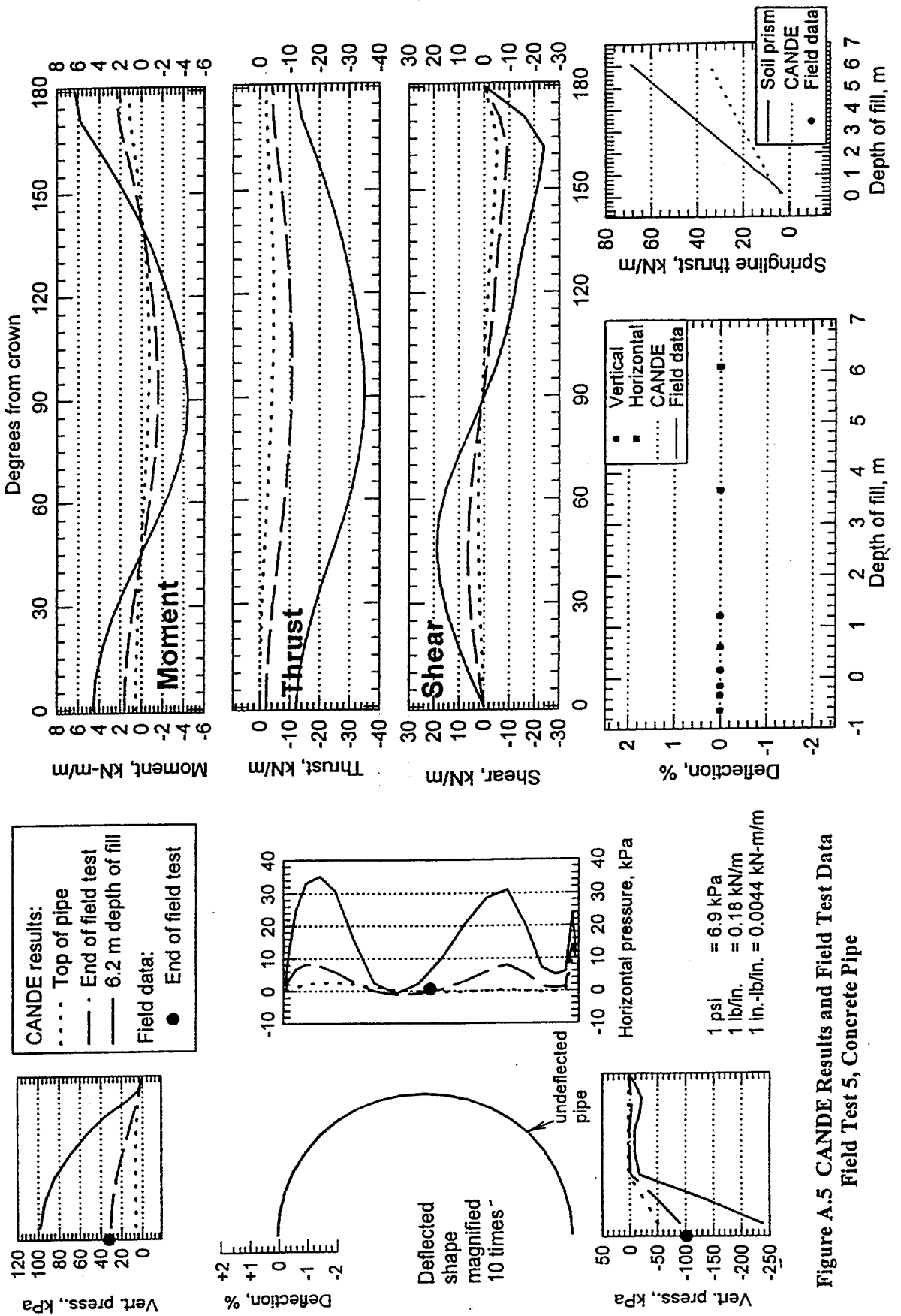


Figure A.5 CANDE Results and Field Test Data
 Field Test 5, Concrete Pipe

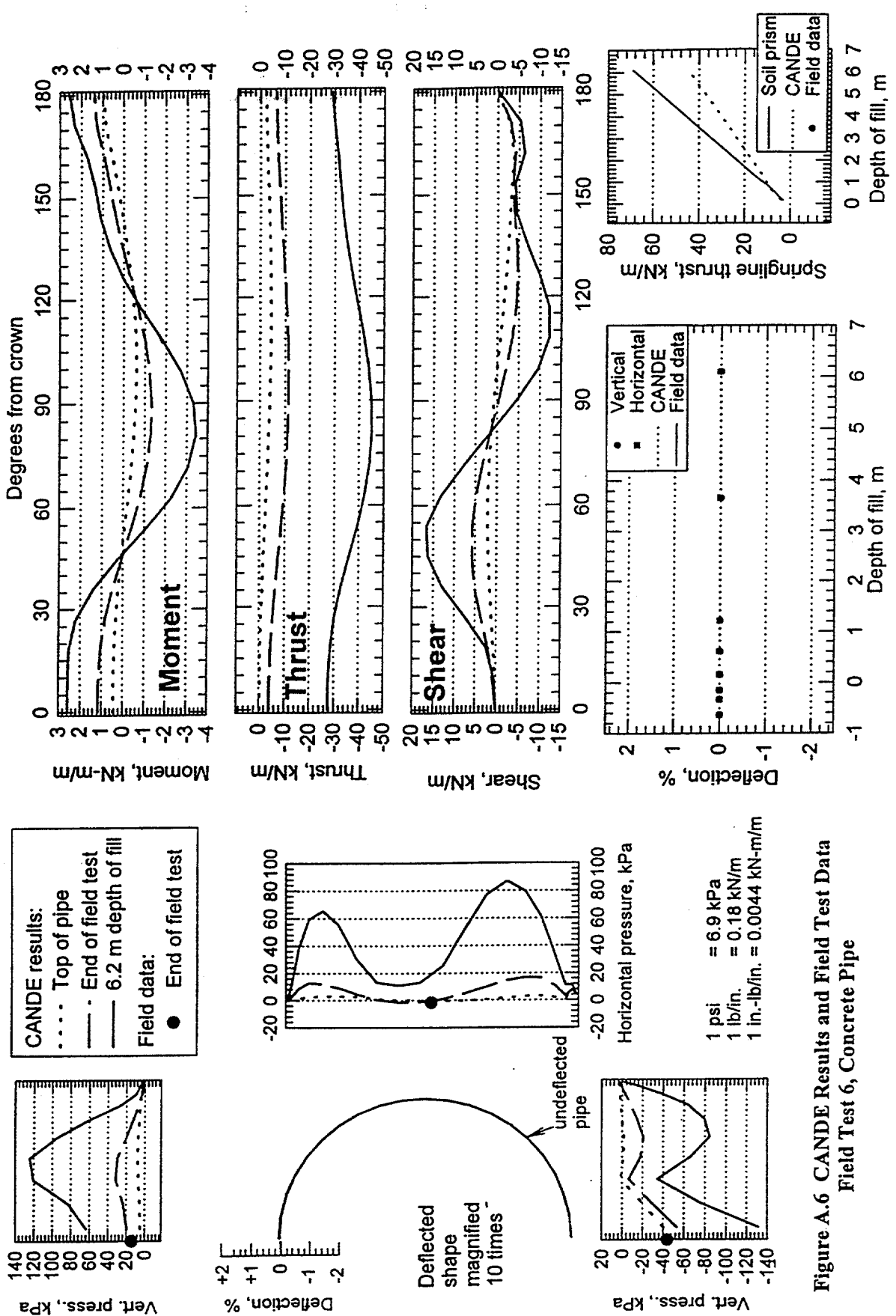


Figure A.6 CANDE Results and Field Test Data
 Field Test 6, Concrete Pipe

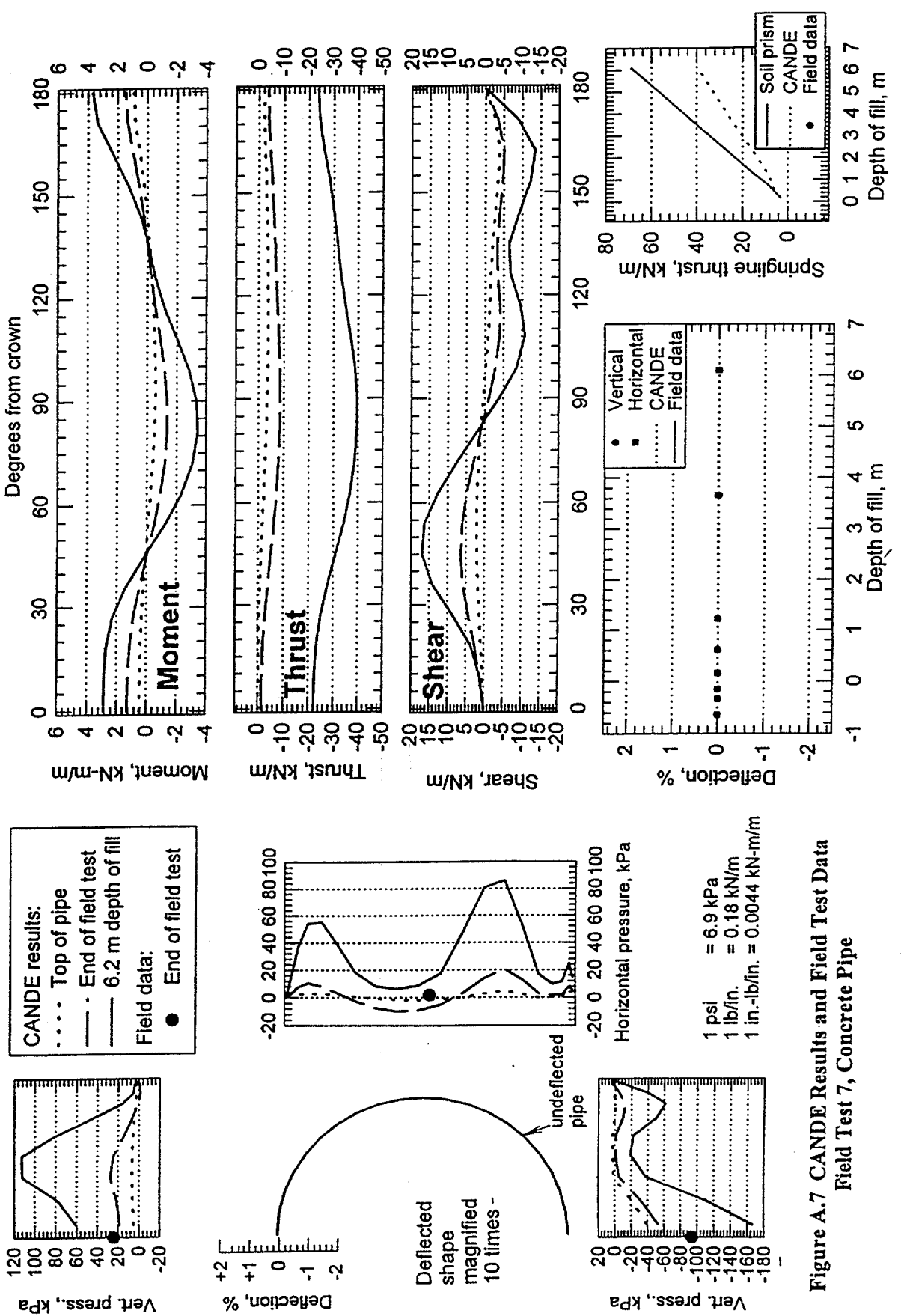


Figure A.7 CANDE Results and Field Test Data
 Field Test 7, Concrete Pipe

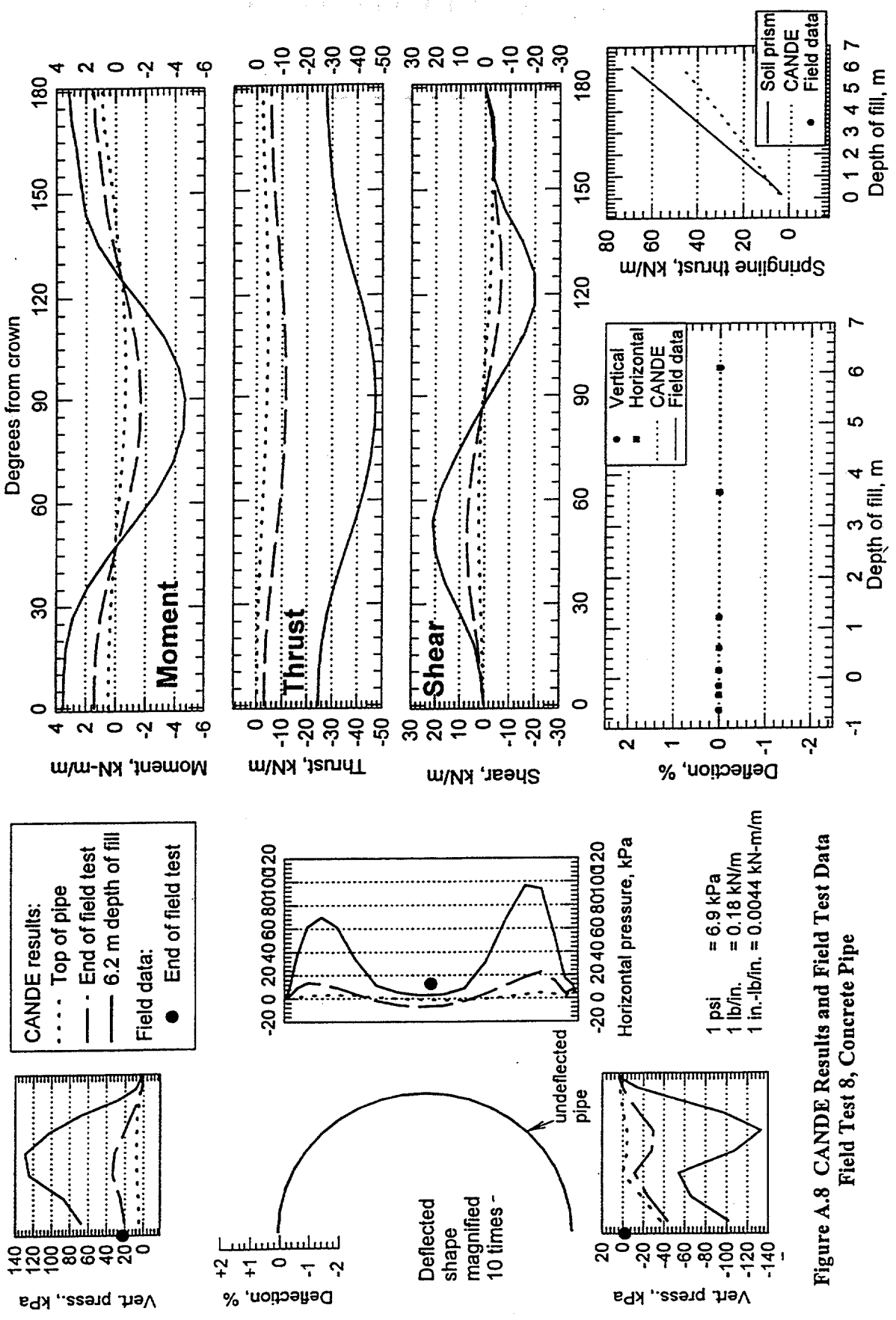


Figure A.8 CANDE Results and Field Test Data
 Field Test 8, Concrete Pipe

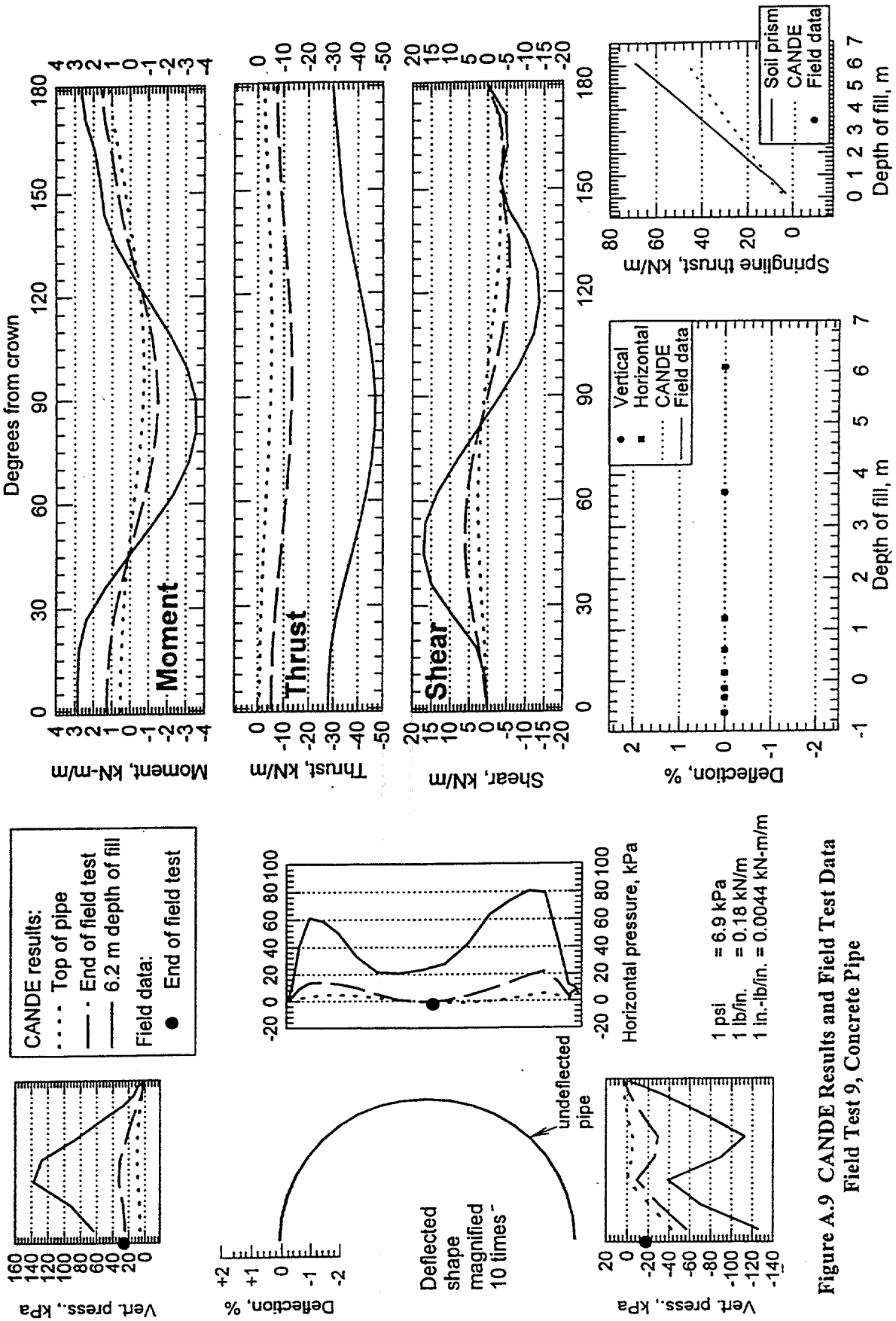


Figure A.9 CANDE Results and Field Test Data
 Field Test 9, Concrete Pipe

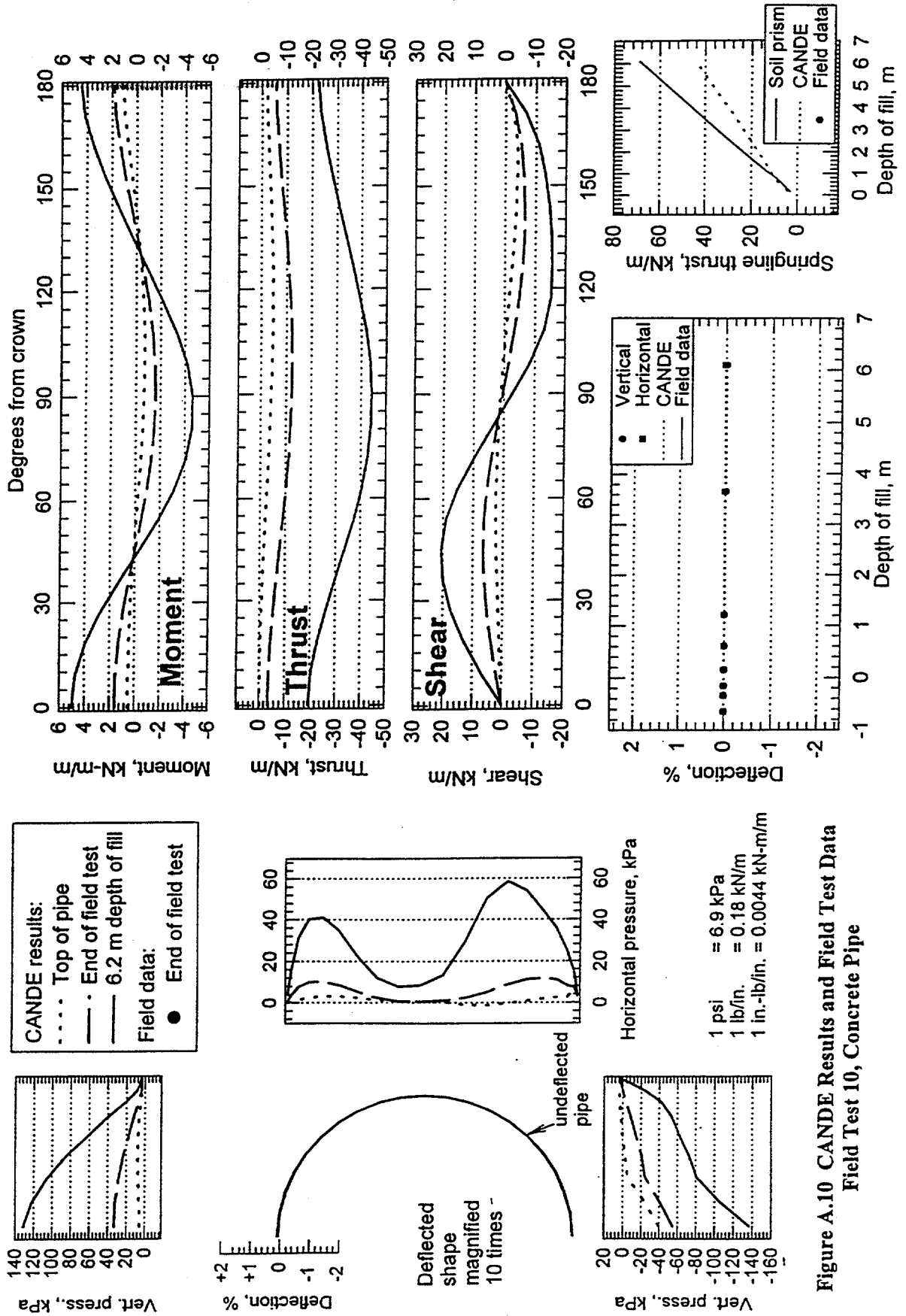


Figure A.10 CANDE Results and Field Test Data
Field Test 10, Concrete Pipe

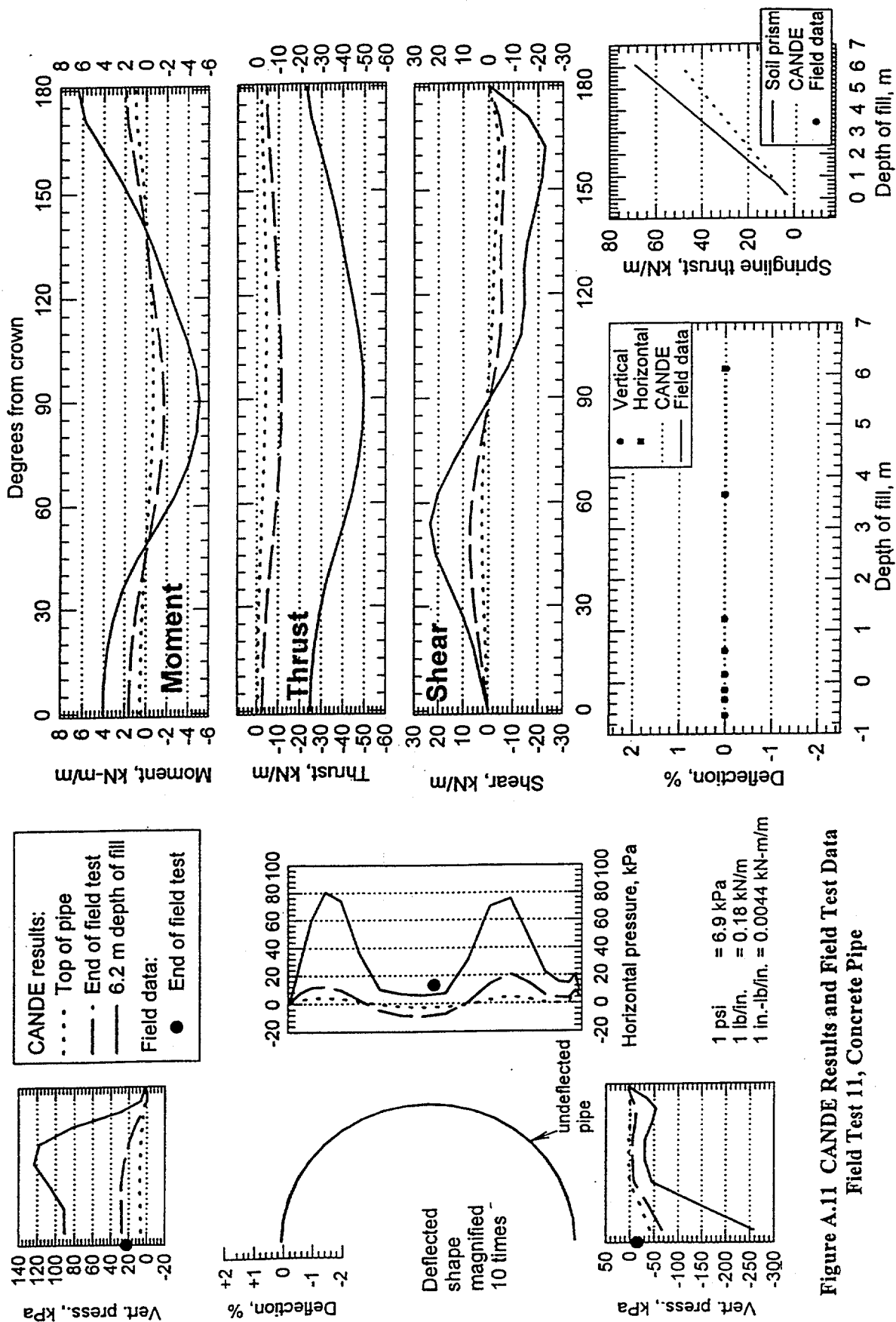


Figure A.11 CANDE Results and Field Test Data
 Field Test 11, Concrete Pipe

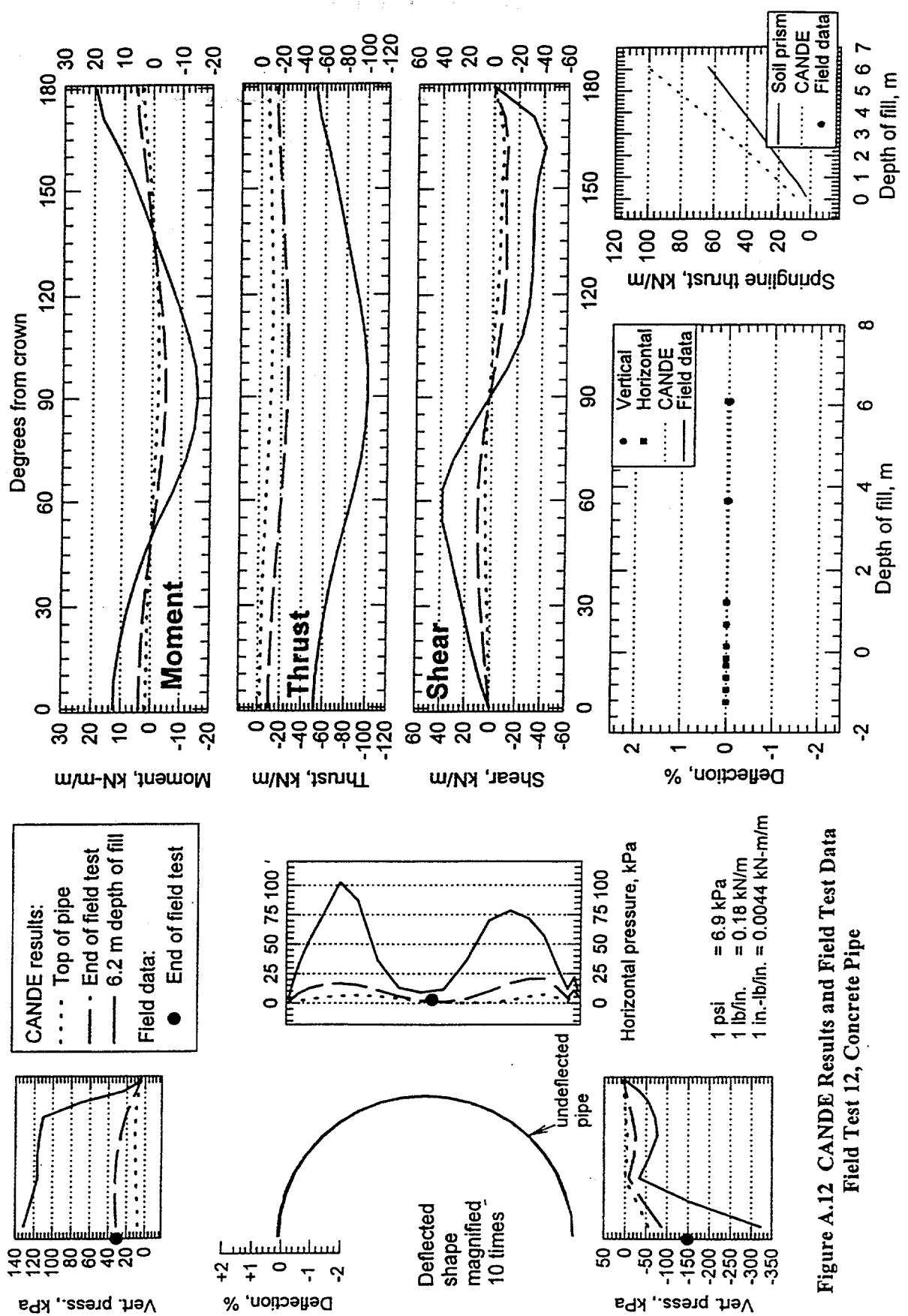


Figure A.12 CANDE Results and Field Test Data
 Field Test 12, Concrete Pipe

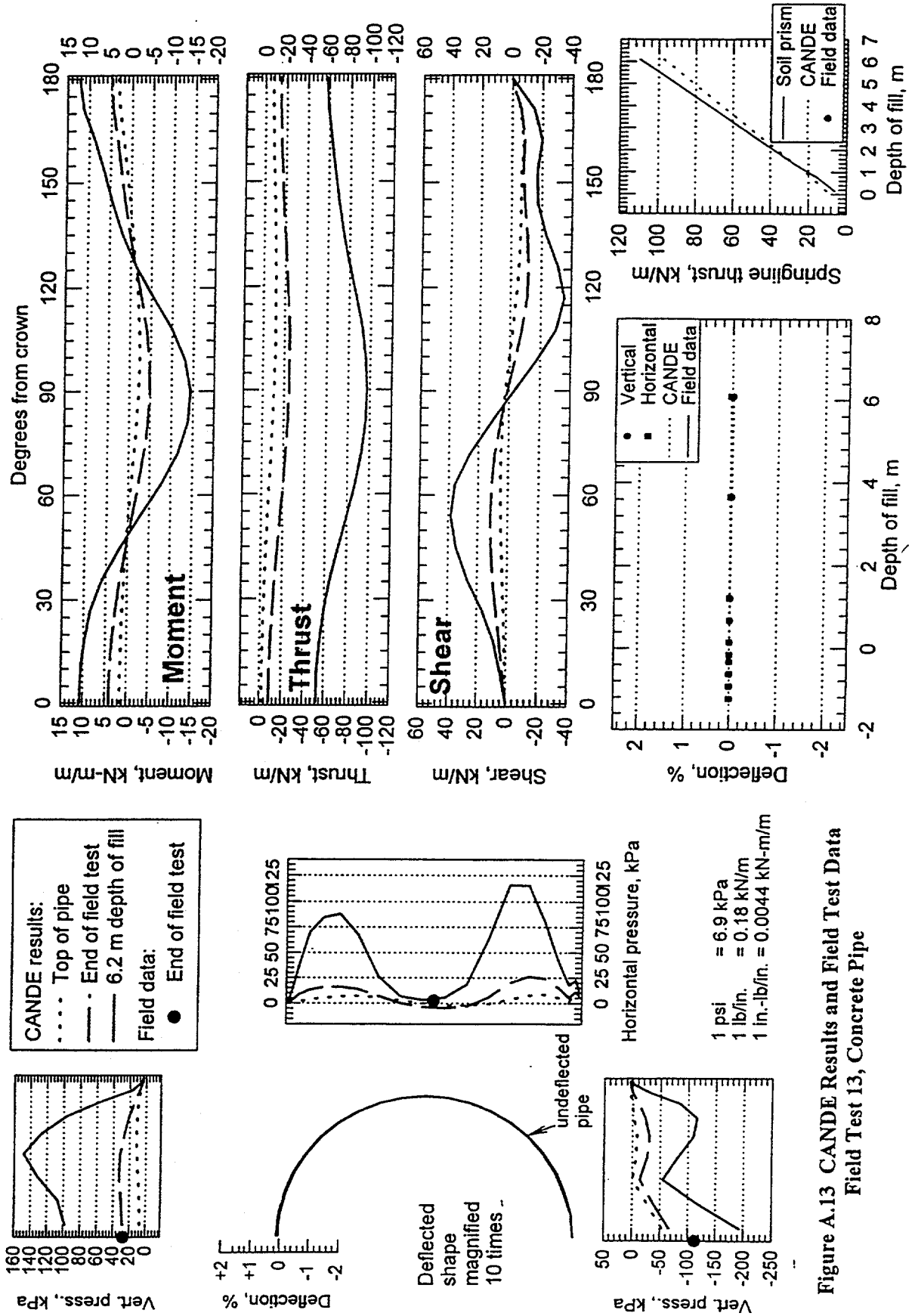


Figure A.13 CANDE Results and Field Test Data
 Field Test 13, Concrete Pipe

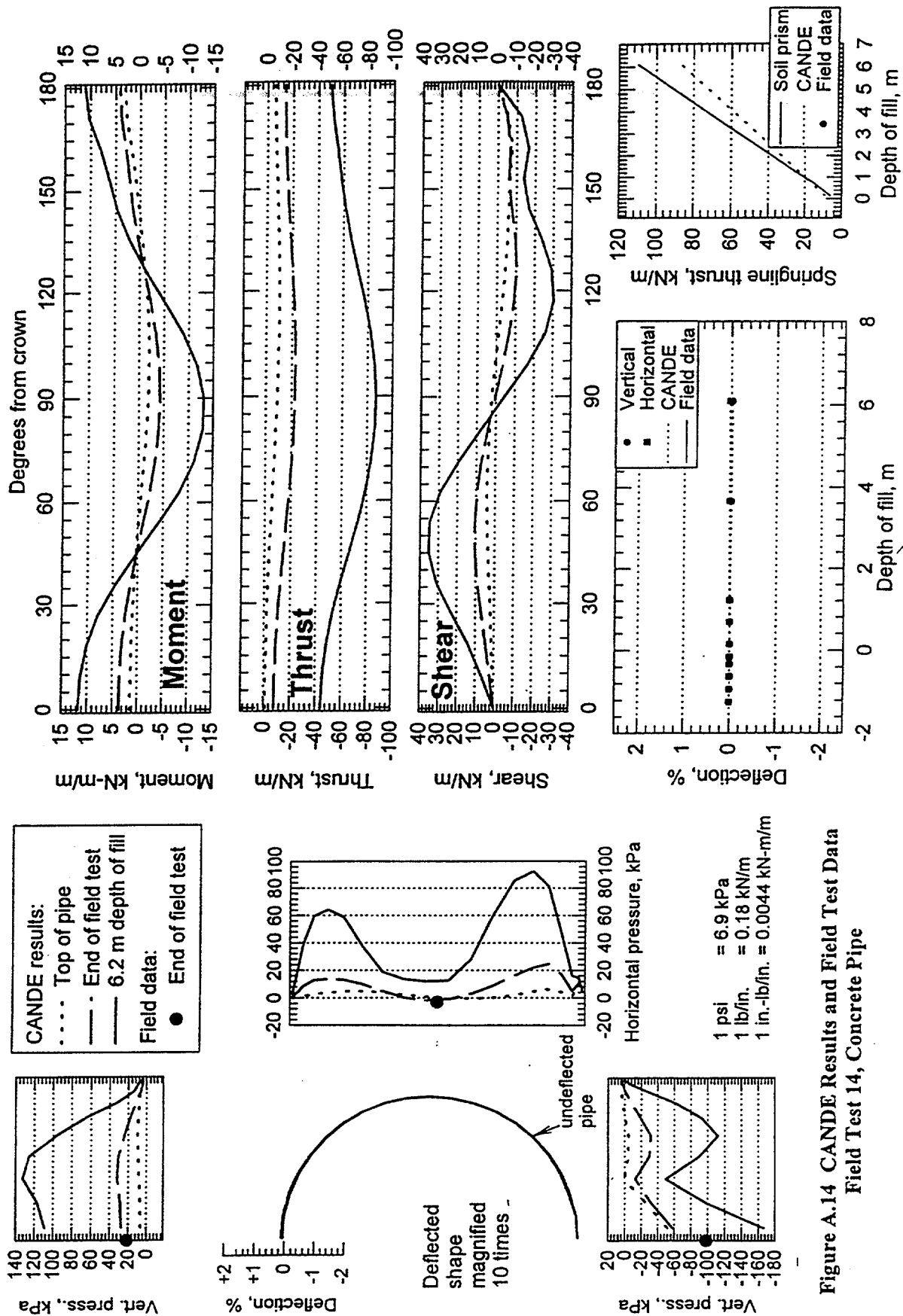


Figure A.14 CANDE Results and Field Test Data
Field Test 14, Concrete Pipe

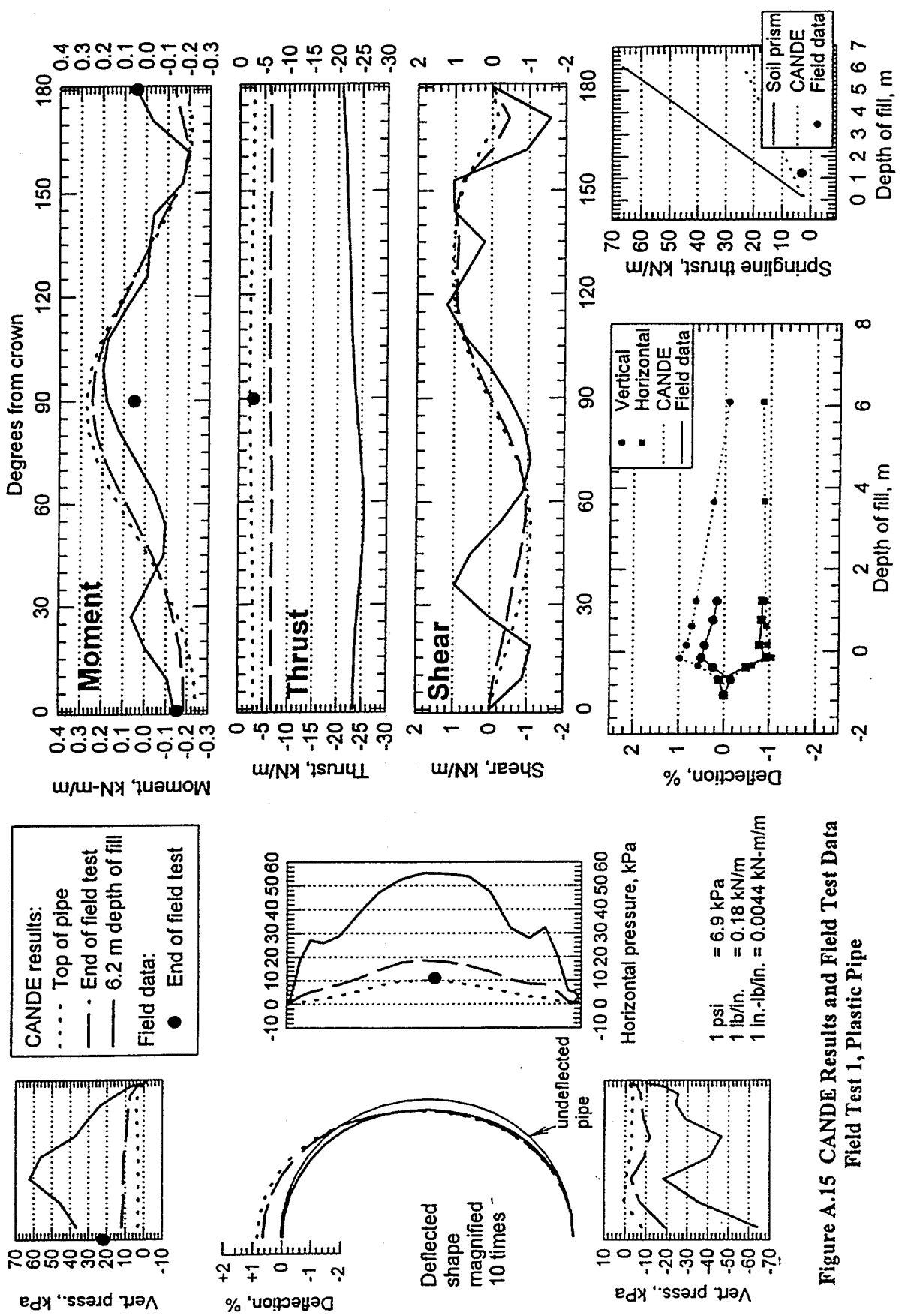


Figure A.15 CANDE Results and Field Test Data
 Field Test 1, Plastic Pipe

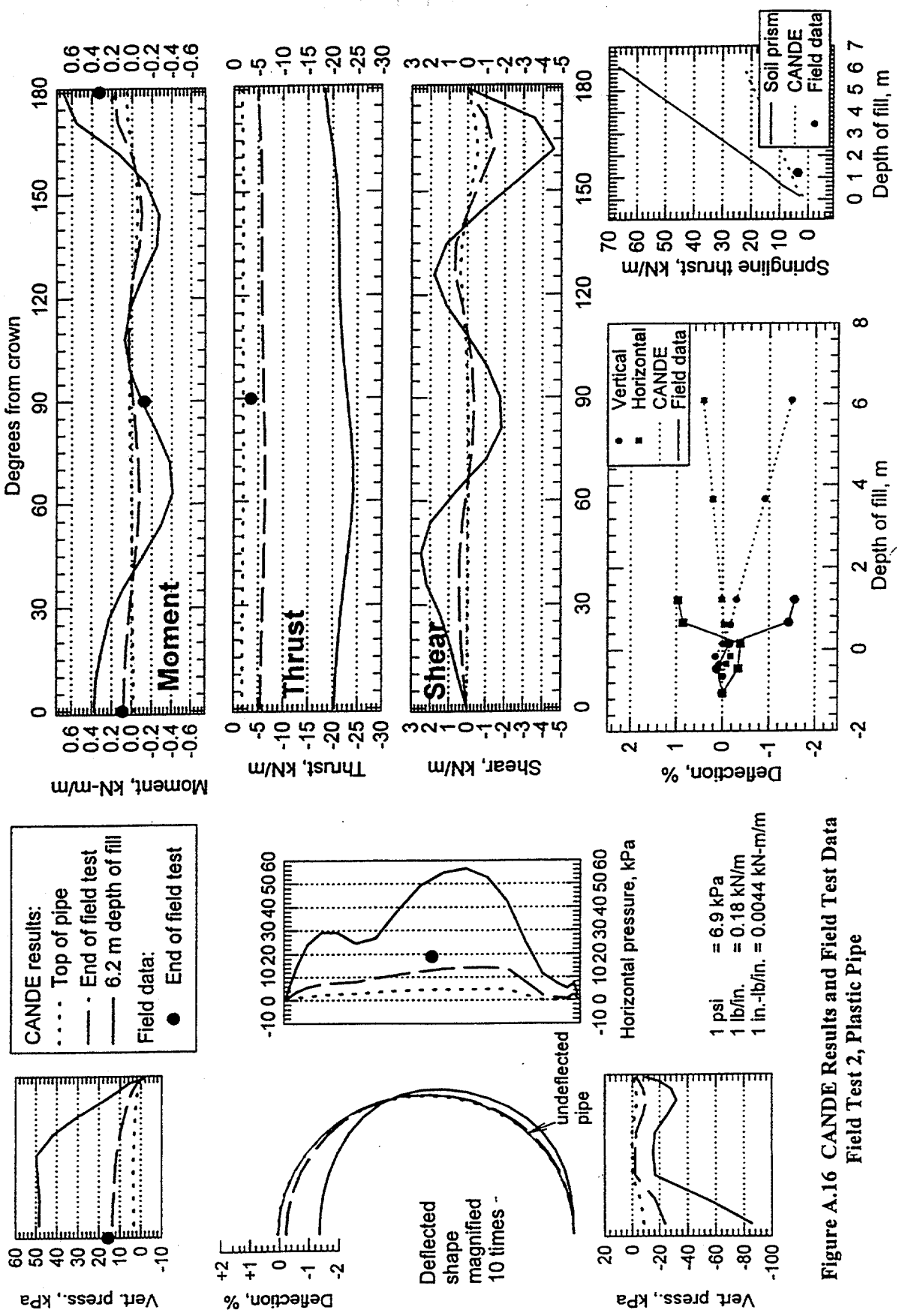


Figure A.16 CANDE Results and Field Test Data
 Field Test 2, Plastic Pipe

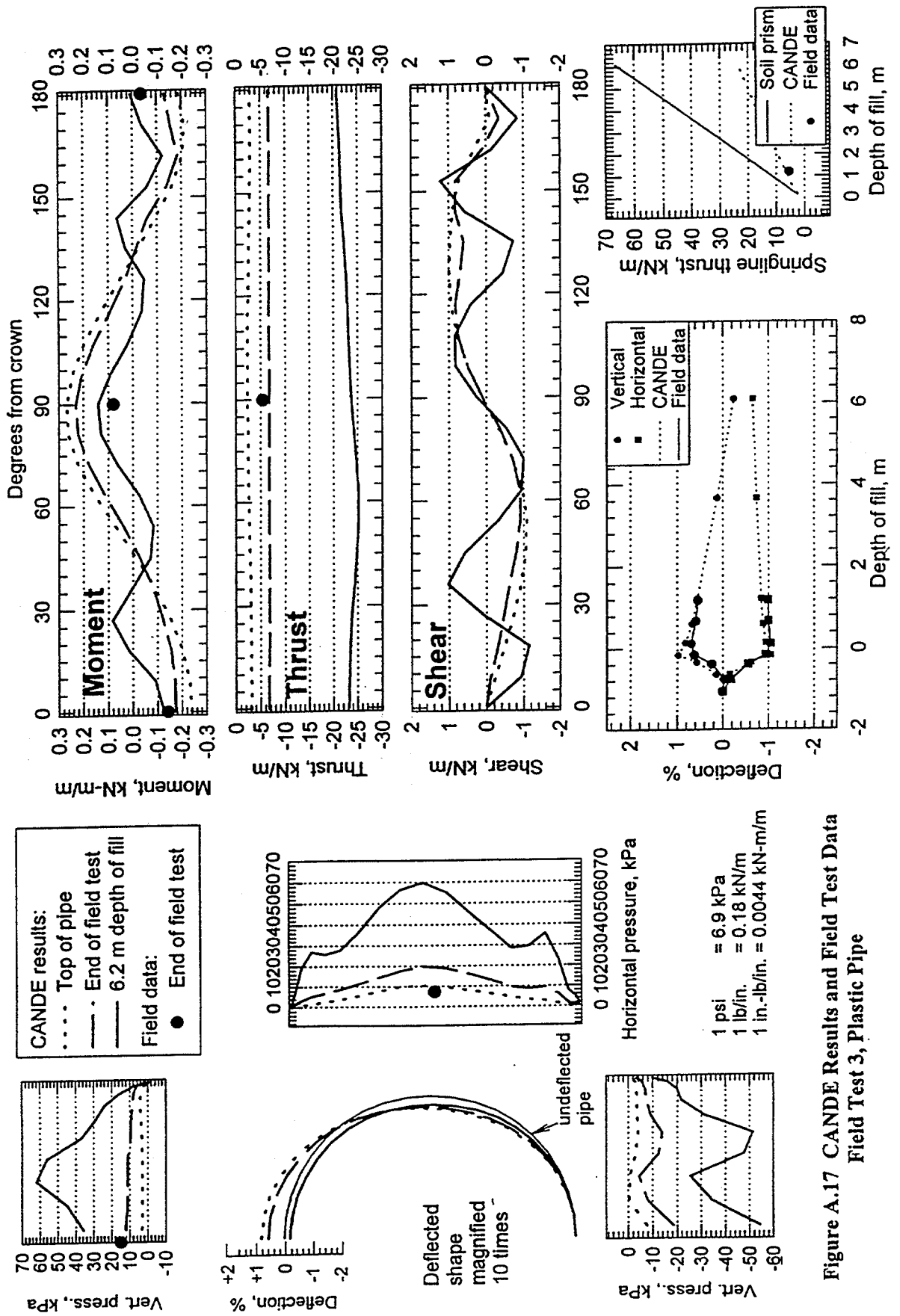


Figure A.17 CANDE Results and Field Test Data
 Field Test 3, Plastic Pipe

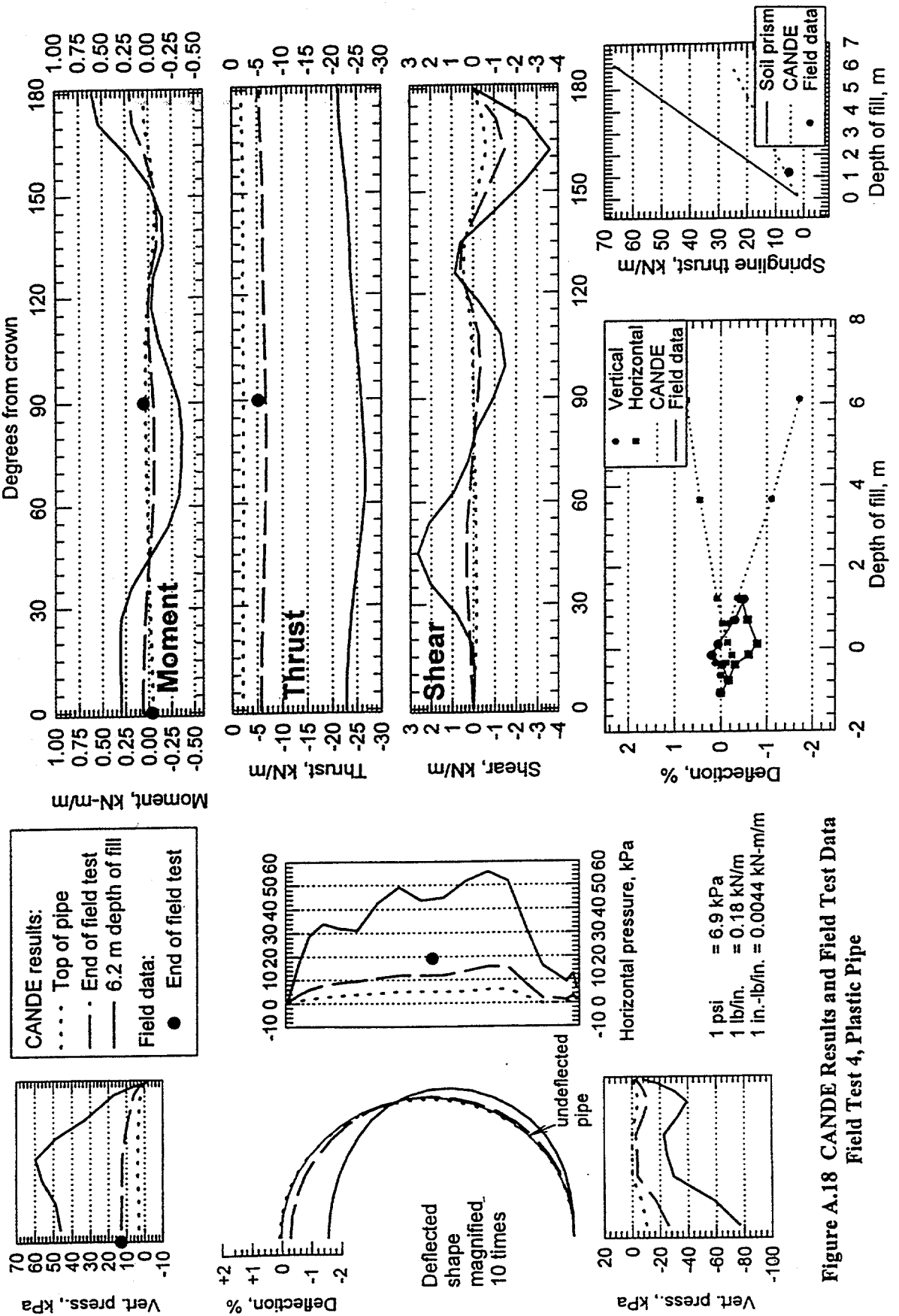


Figure A.18 CANDE Results and Field Test Data
 Field Test 4, Plastic Pipe

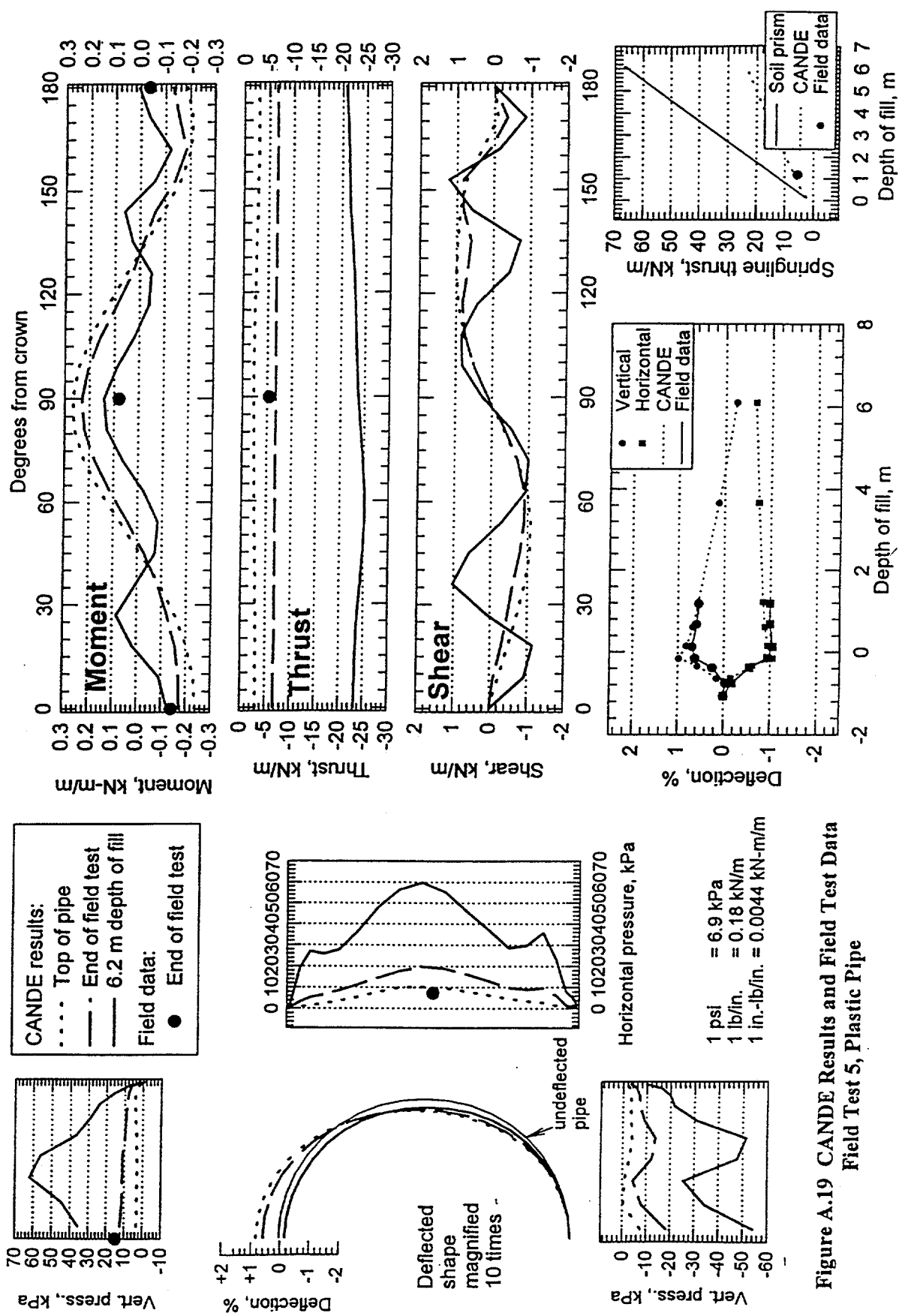


Figure A.19 CANDE Results and Field Test Data
 Field Test 5, Plastic Pipe

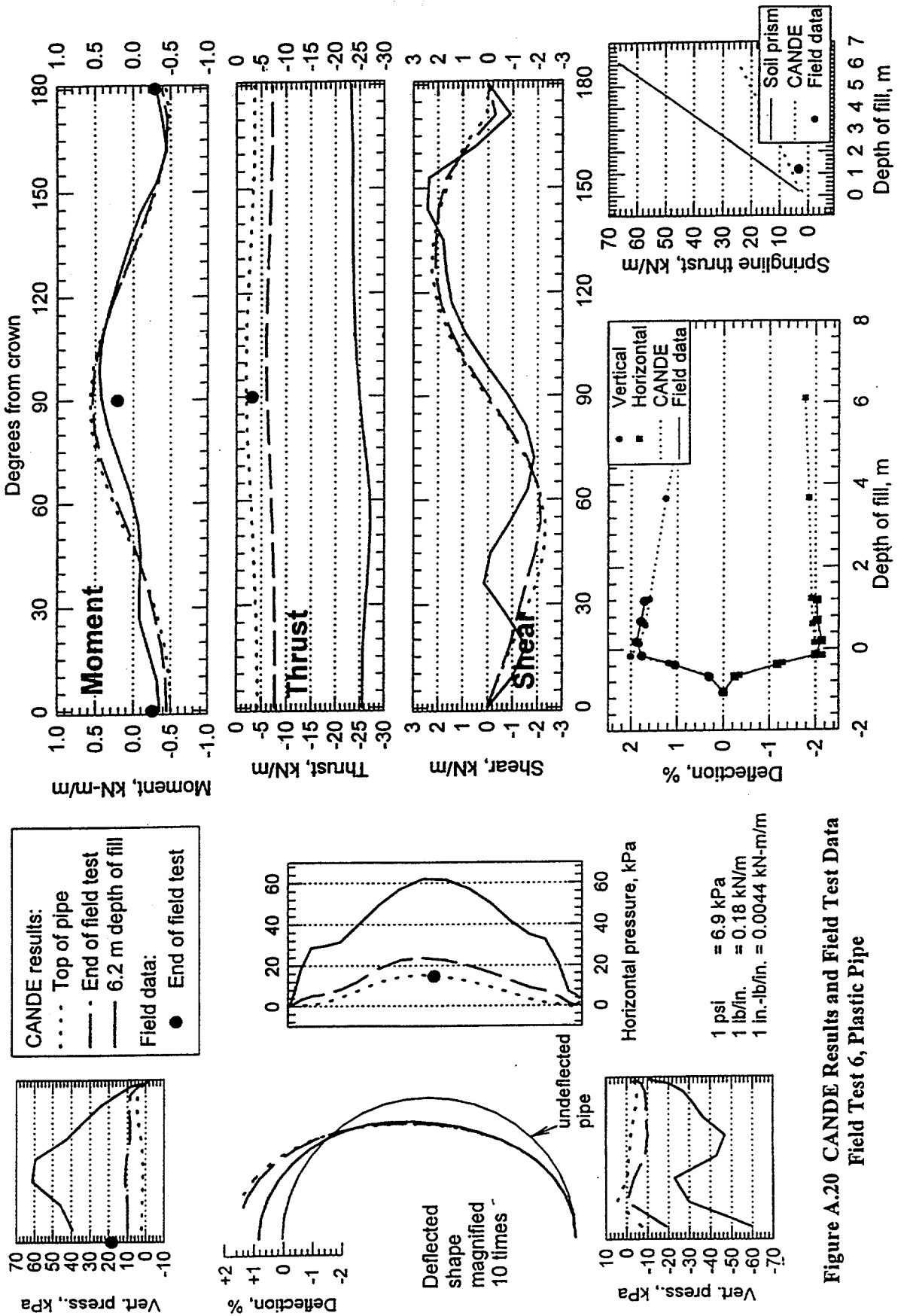
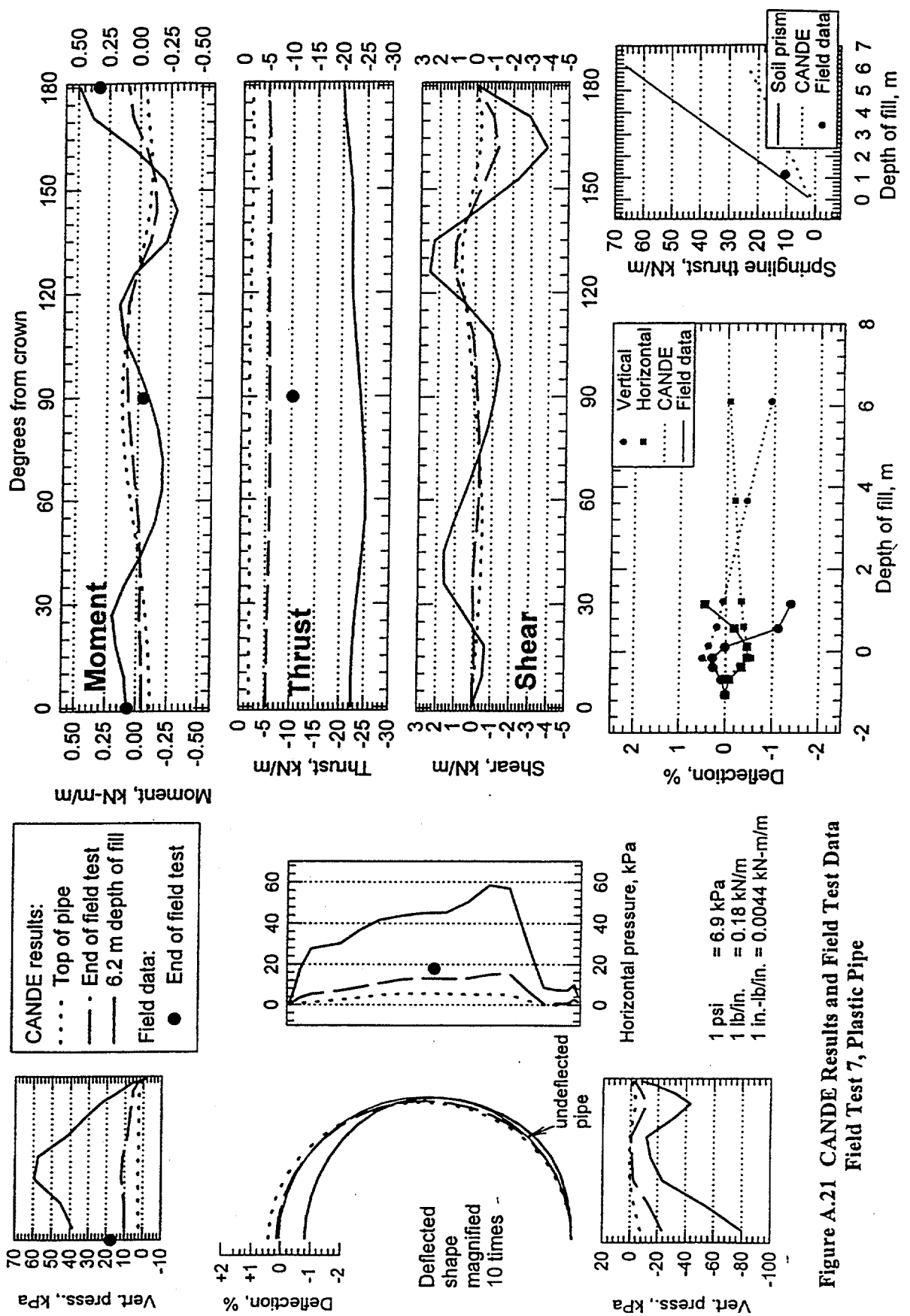


Figure A.20 CANDE Results and Field Test Data
 Field Test 6, Plastic Pipe



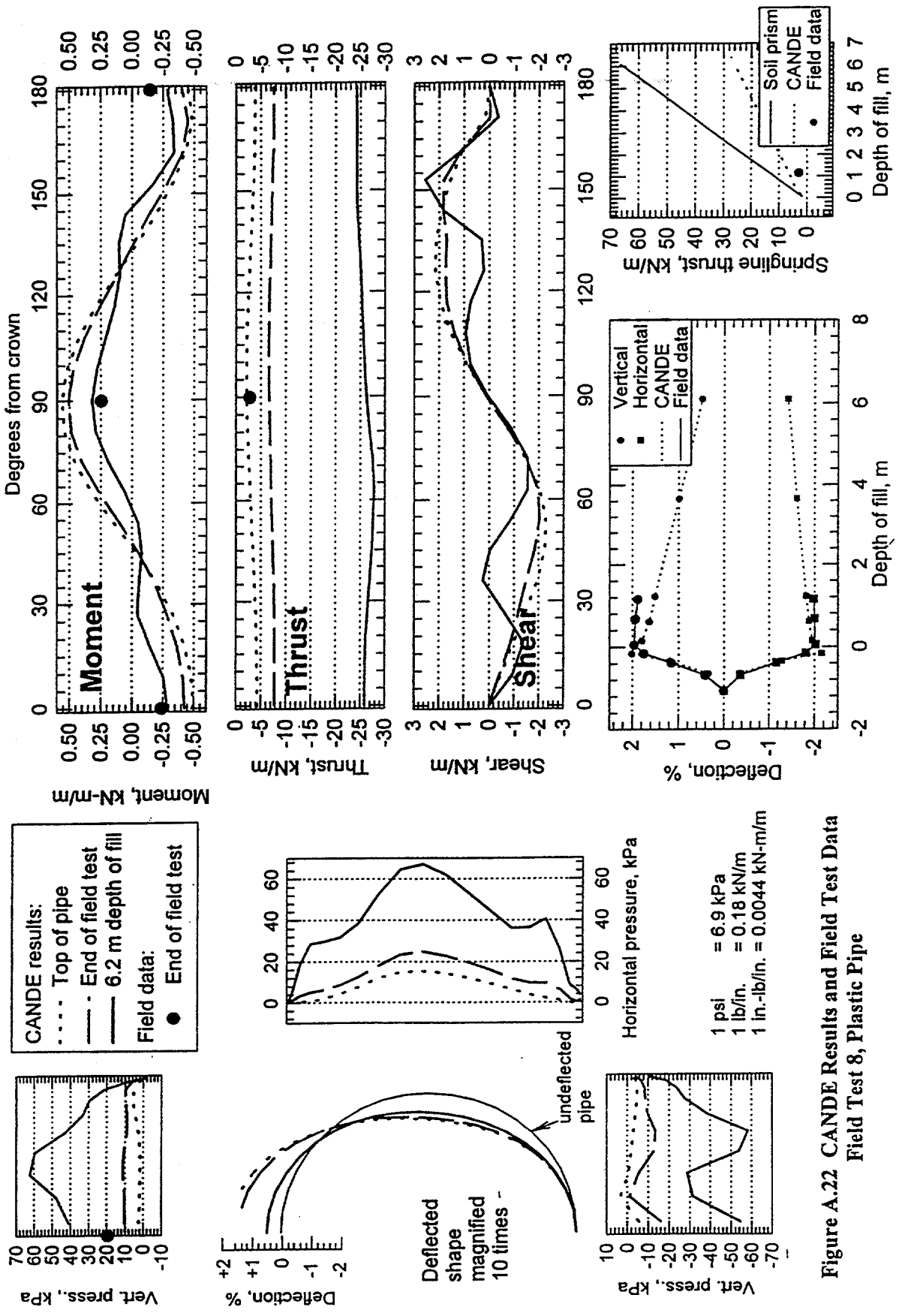


Figure A.22 CANDE Results and Field Test Data
 Field Test 8, Plastic Pipe

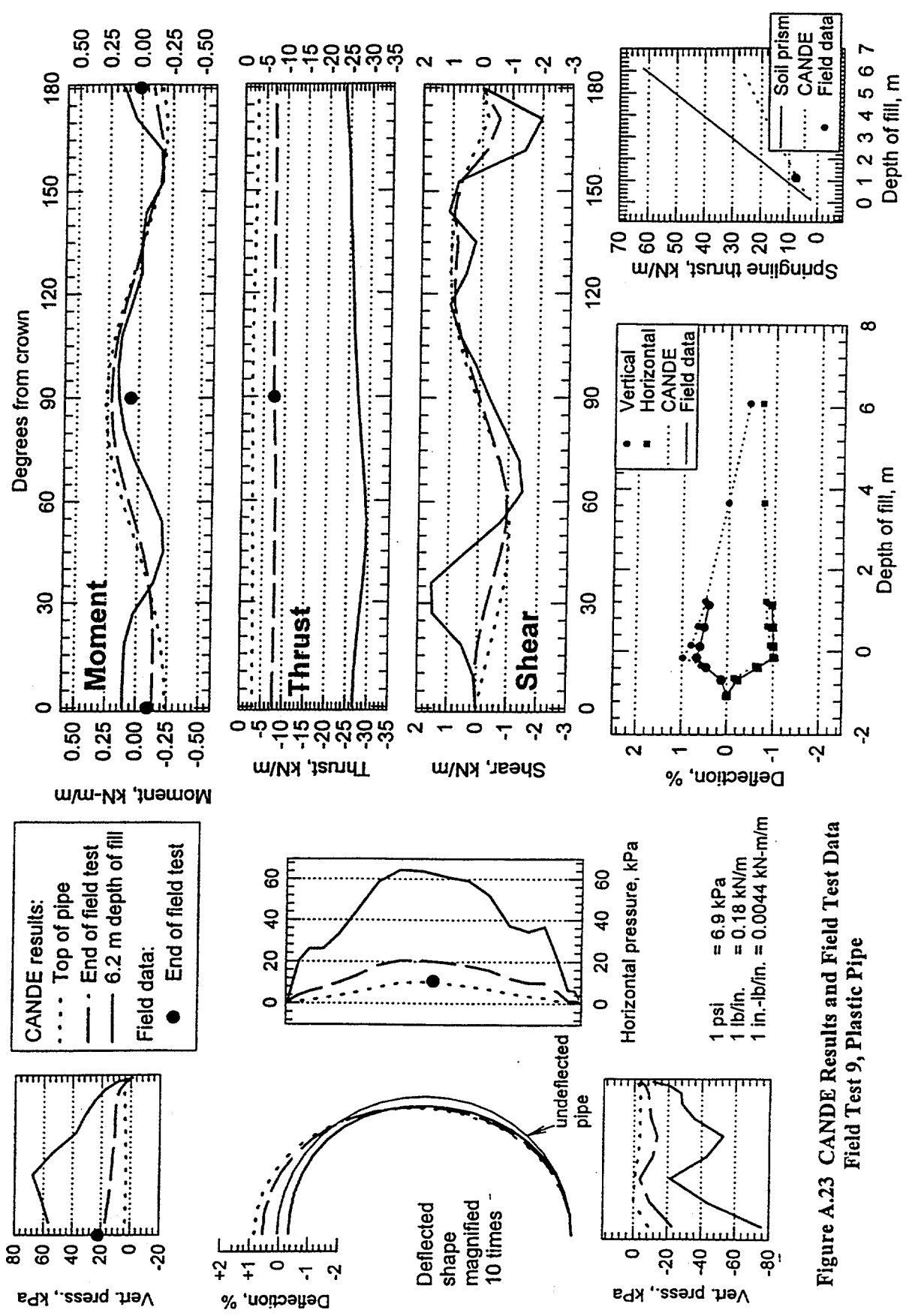


Figure A.23 CANDE Results and Field Test Data
 Field Test 9, Plastic Pipe

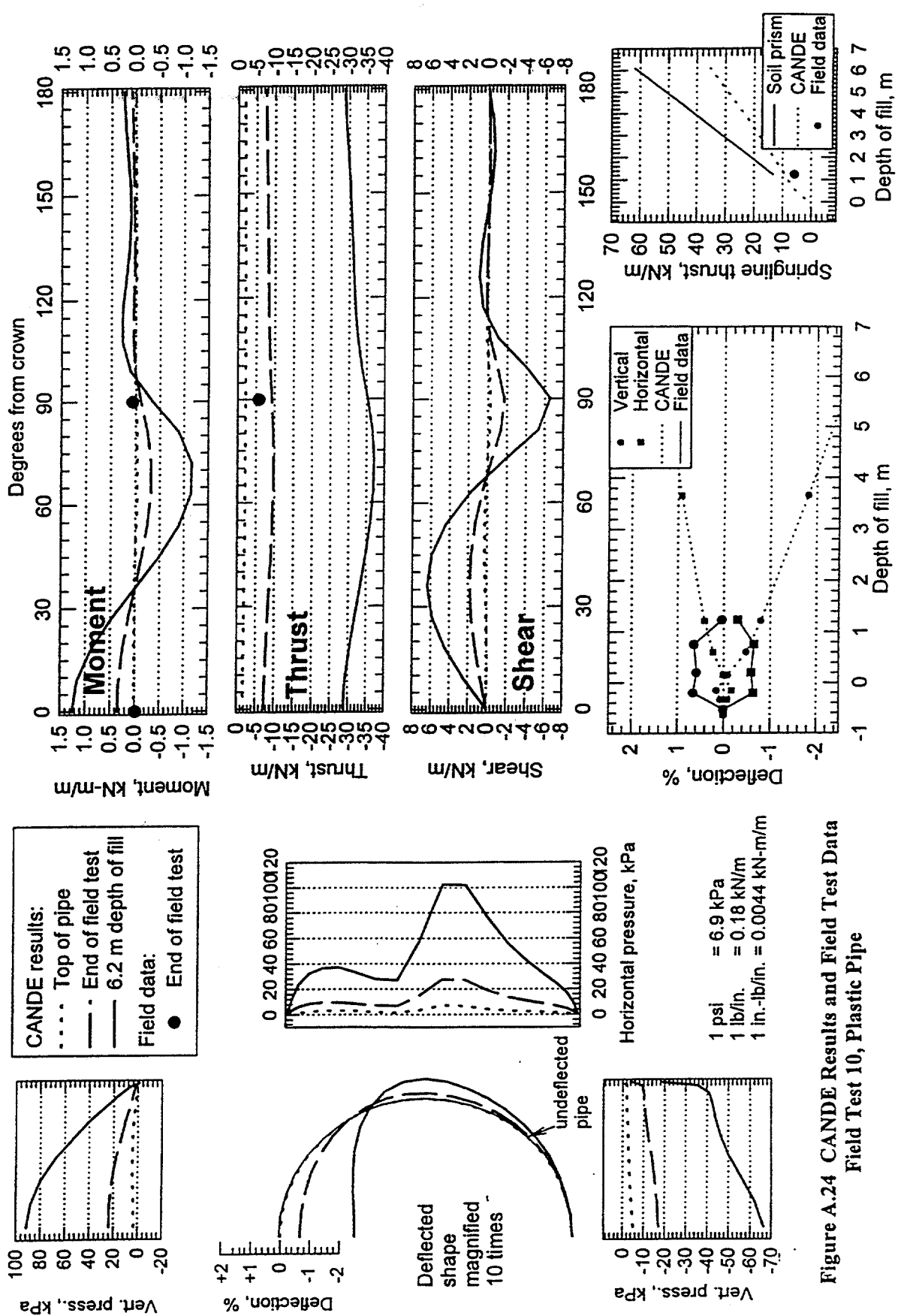


Figure A.24 CANDE Results and Field Test Data
 Field Test 10, Plastic Pipe

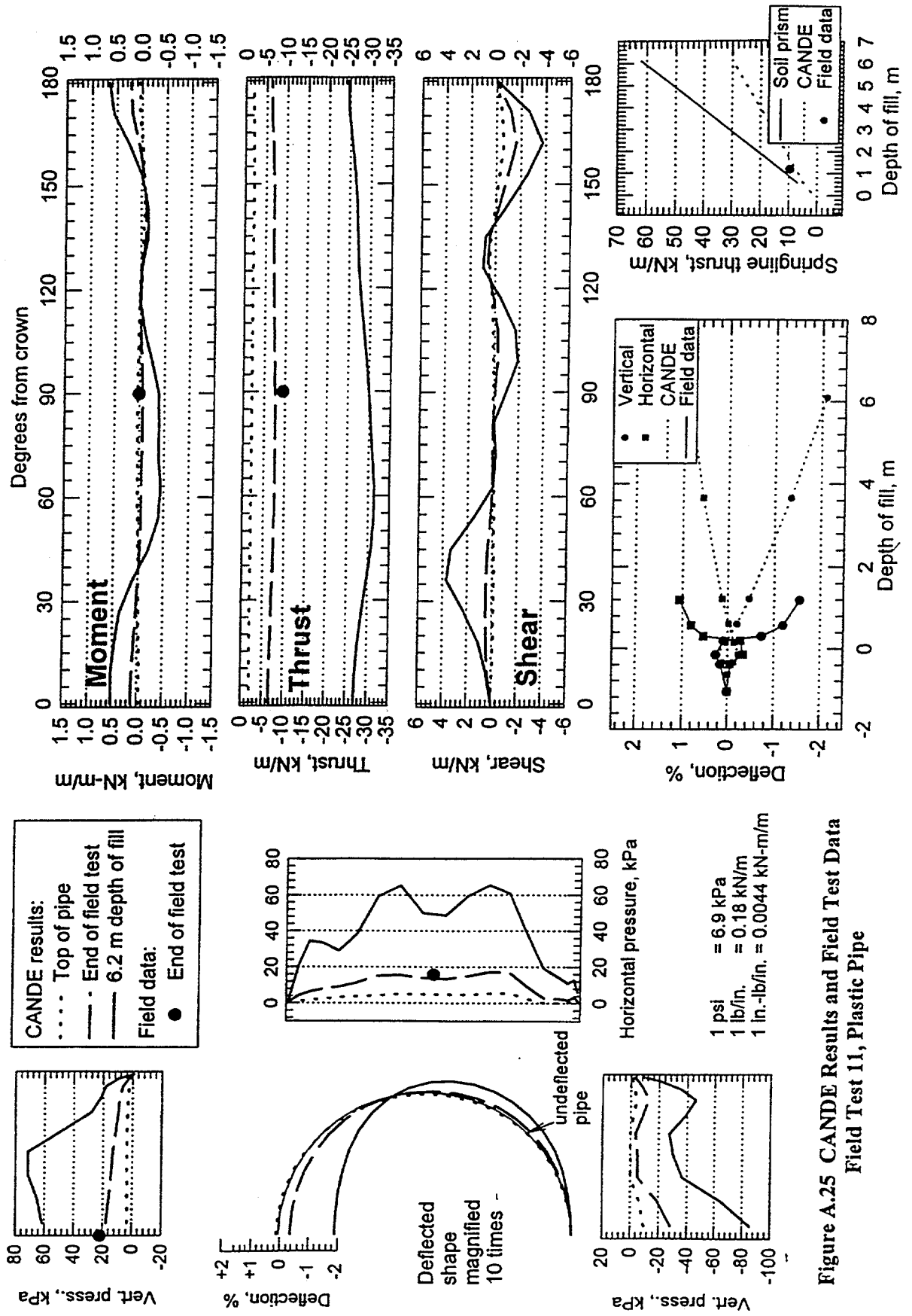


Figure A.25 CANDE Results and Field Test Data
 Field Test 11, Plastic Pipe

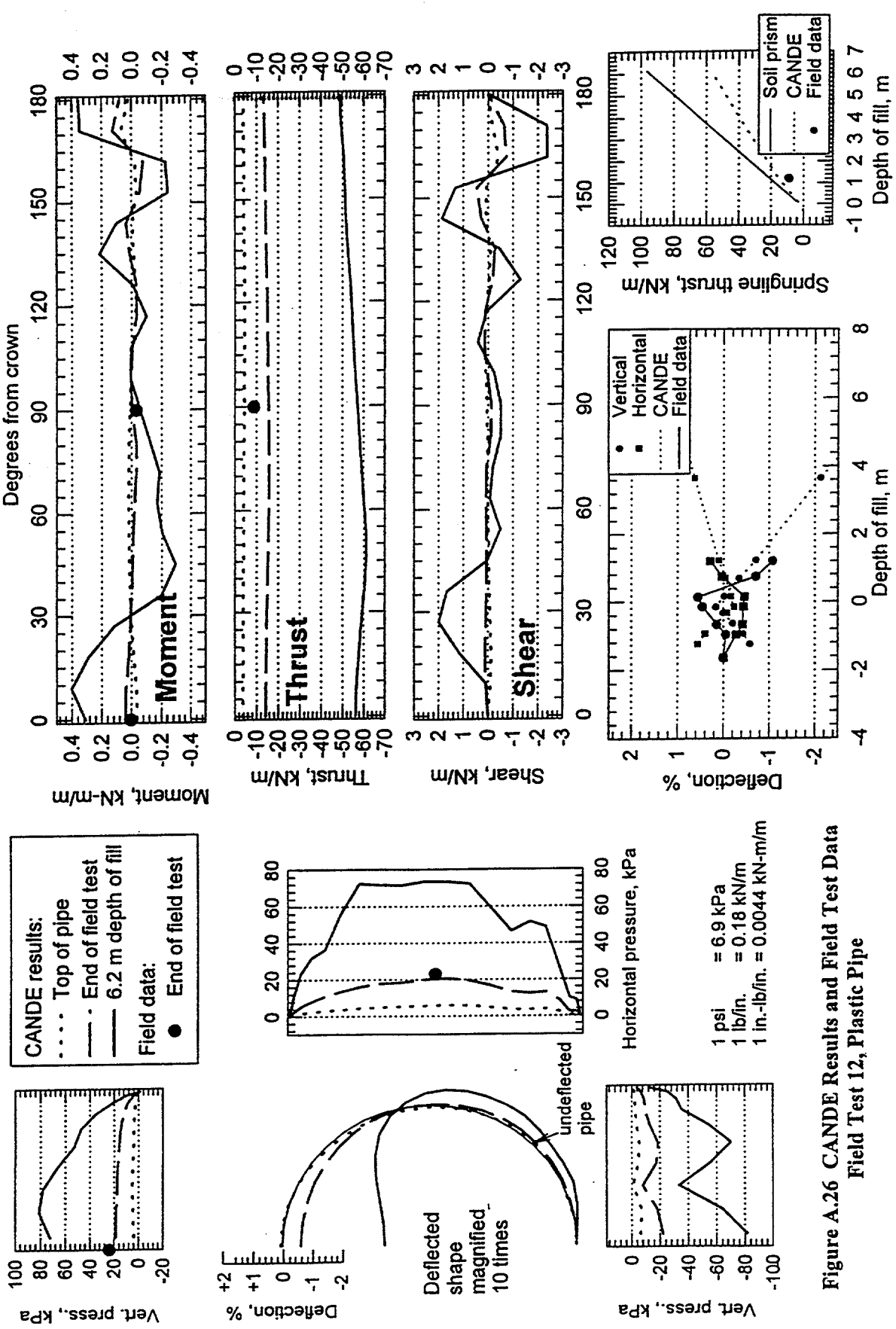


Figure A.26 CANDE Results and Field Test Data
 Field Test 12, Plastic Pipe

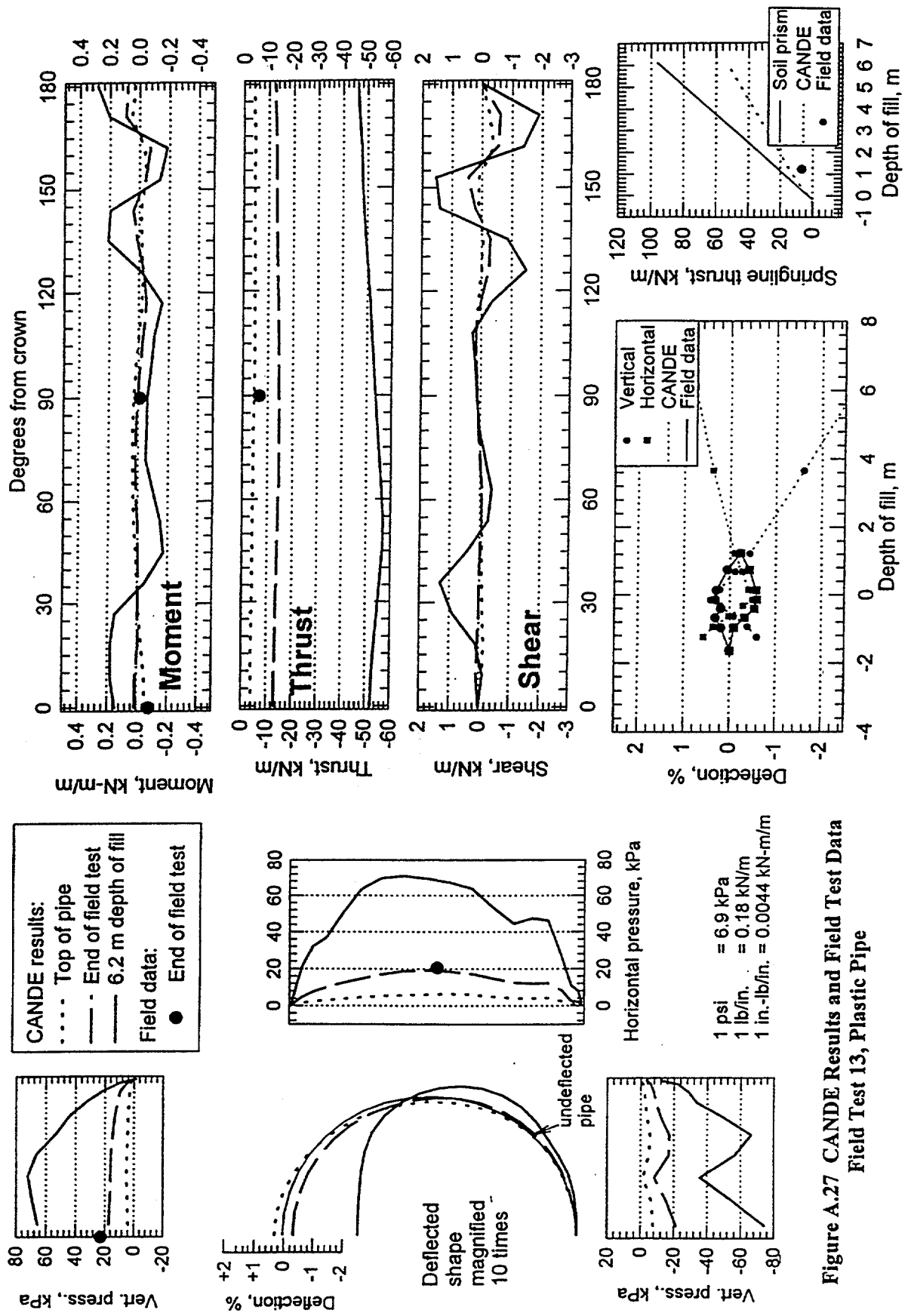


Figure A.27 CANDE Results and Field Test Data
 Field Test 13, Plastic Pipe

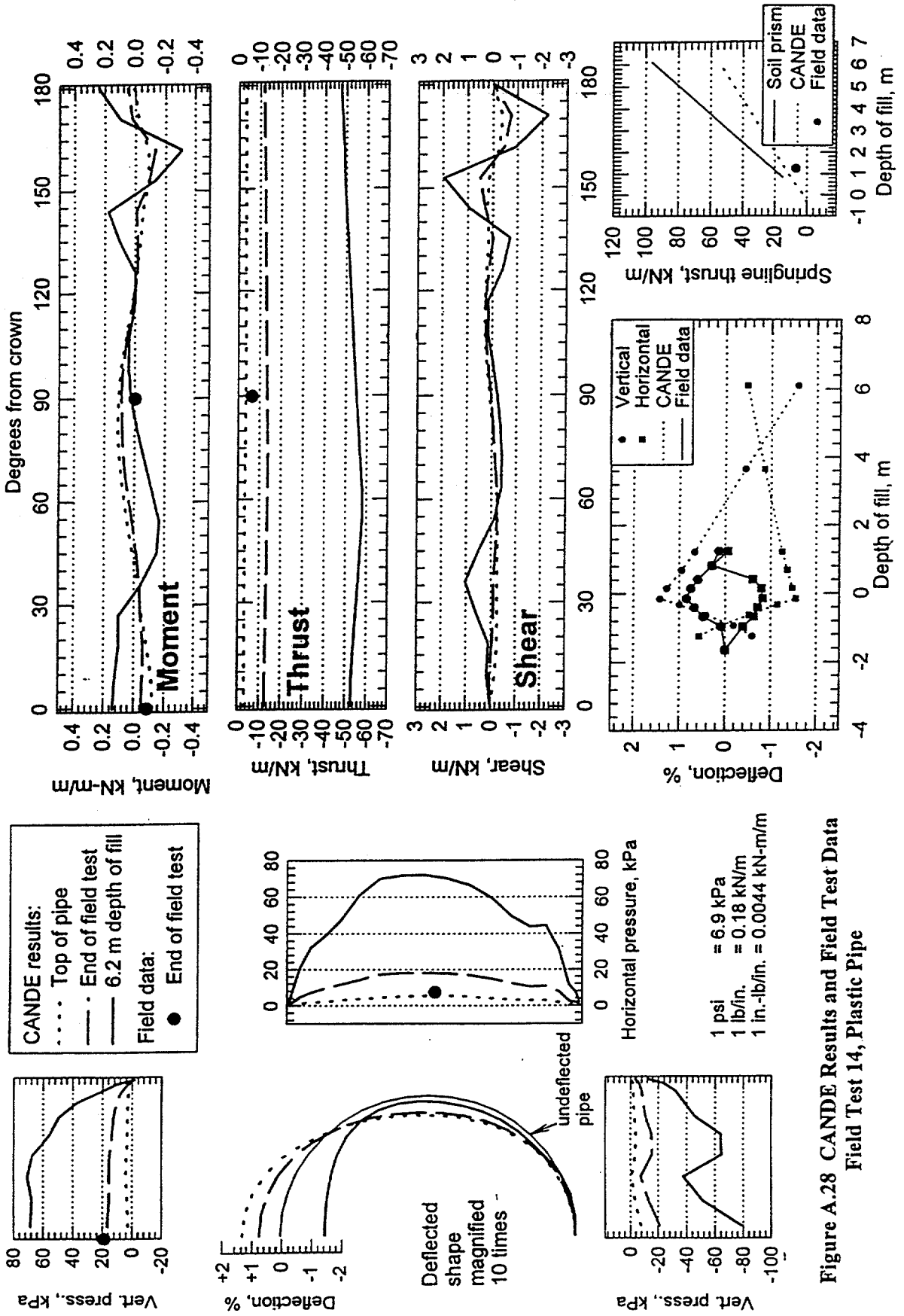


Figure A.28 CANDE Results and Field Test Data
 Field Test 14, Plastic Pipe

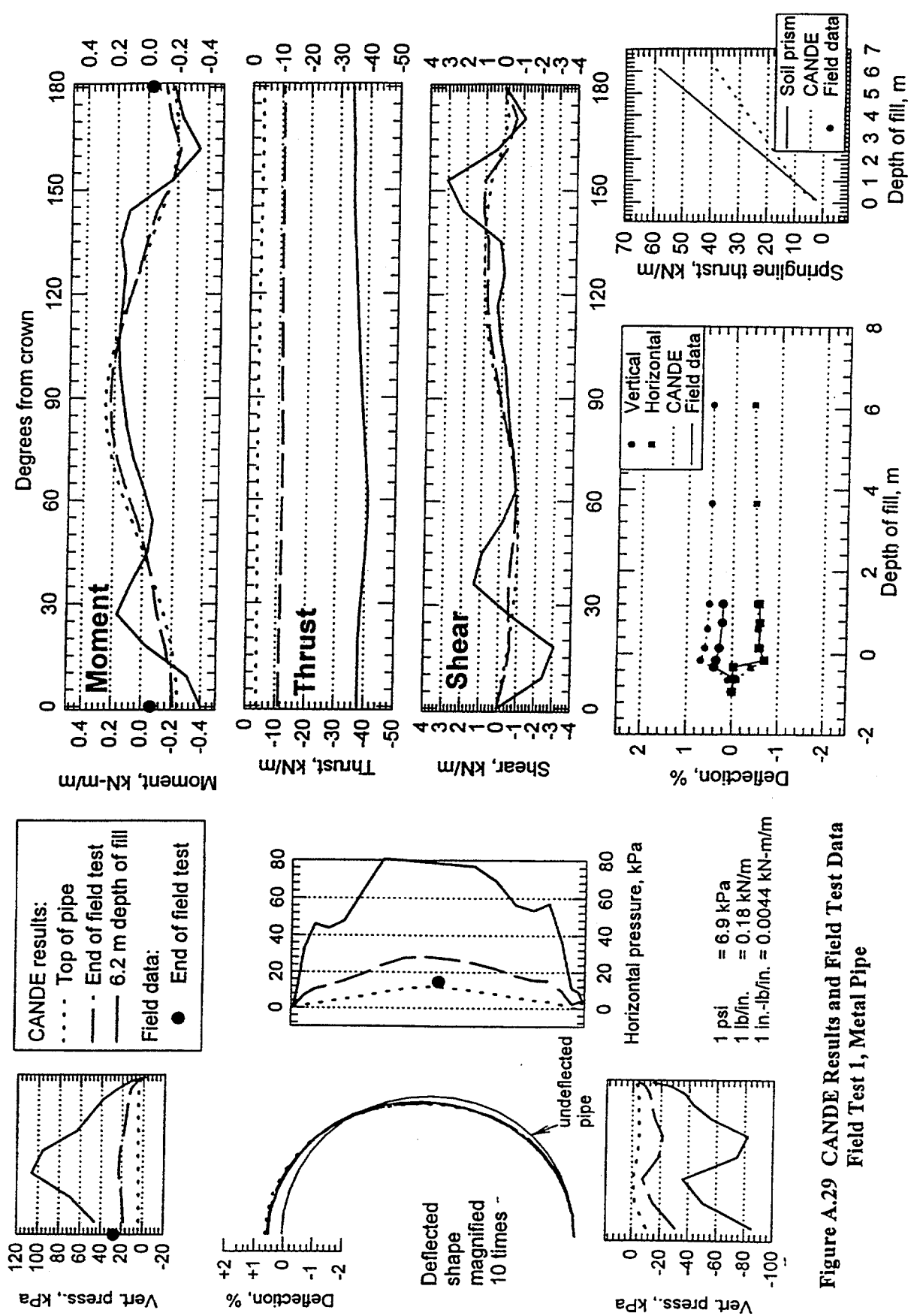


Figure A.29 CANDE Results and Field Test Data
 Field Test 1, Metal Pipe

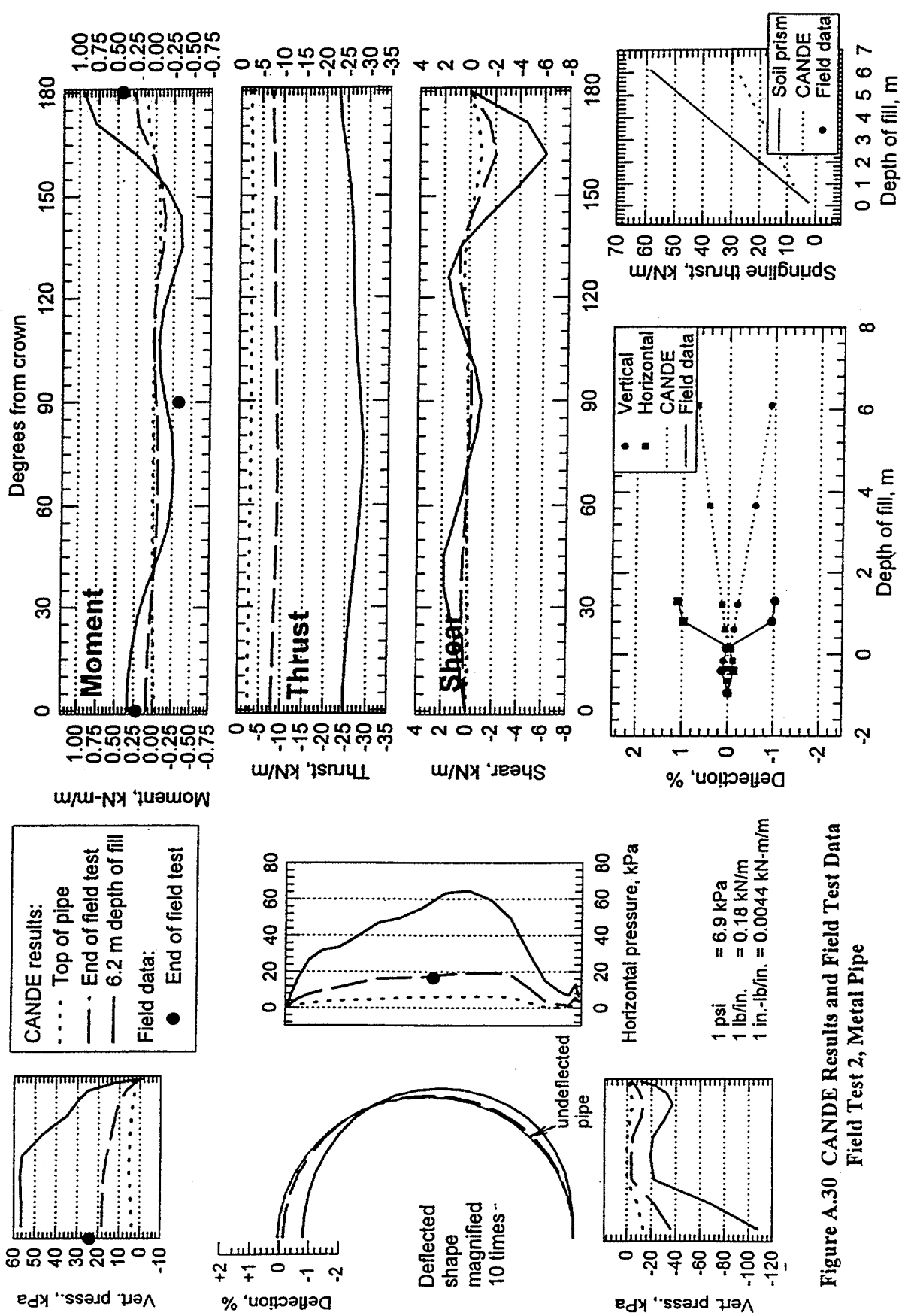


Figure A.30 CANDE Results and Field Test Data
 Field Test 2, Metal Pipe

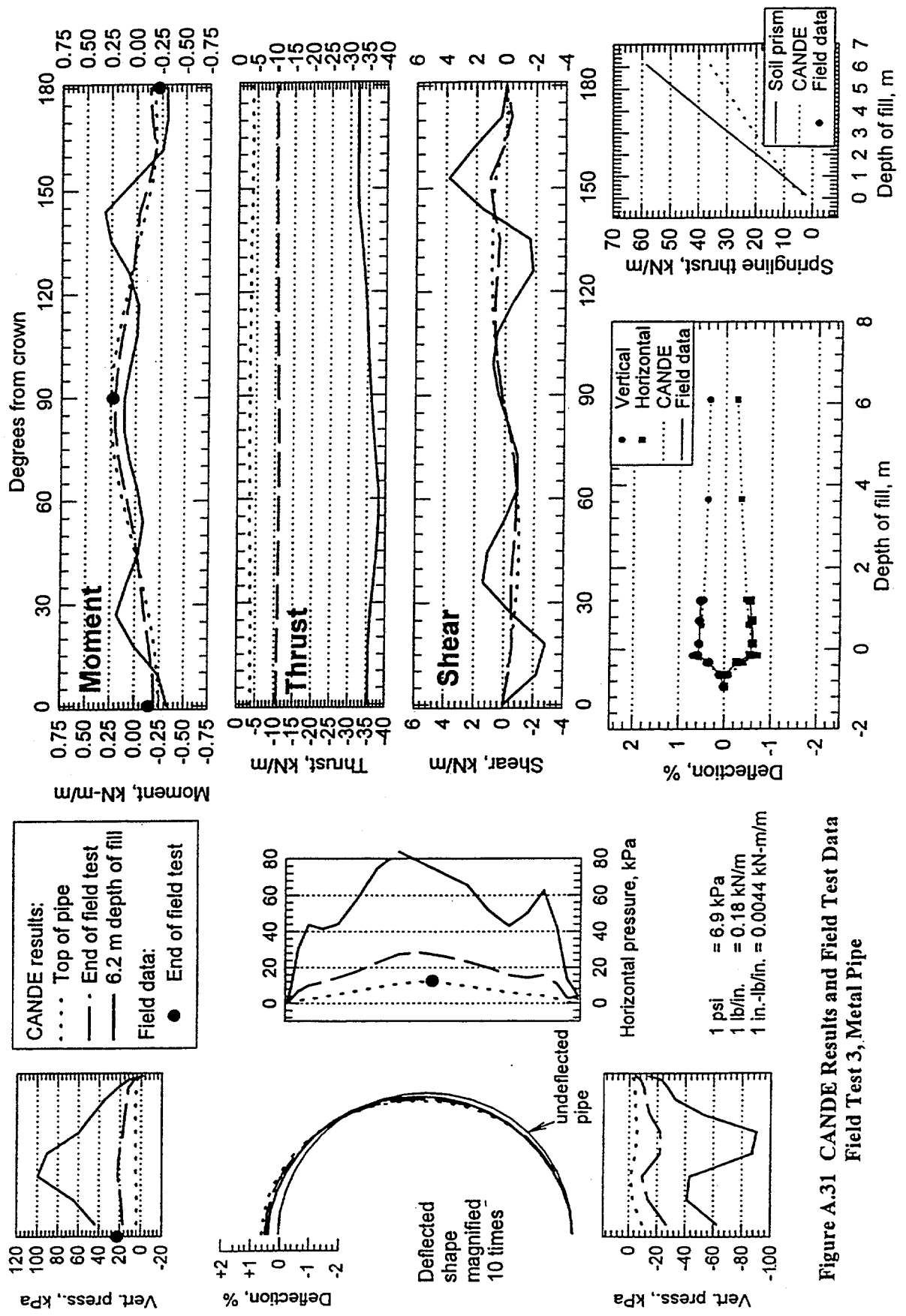


Figure A.31 CANDE Results and Field Test Data
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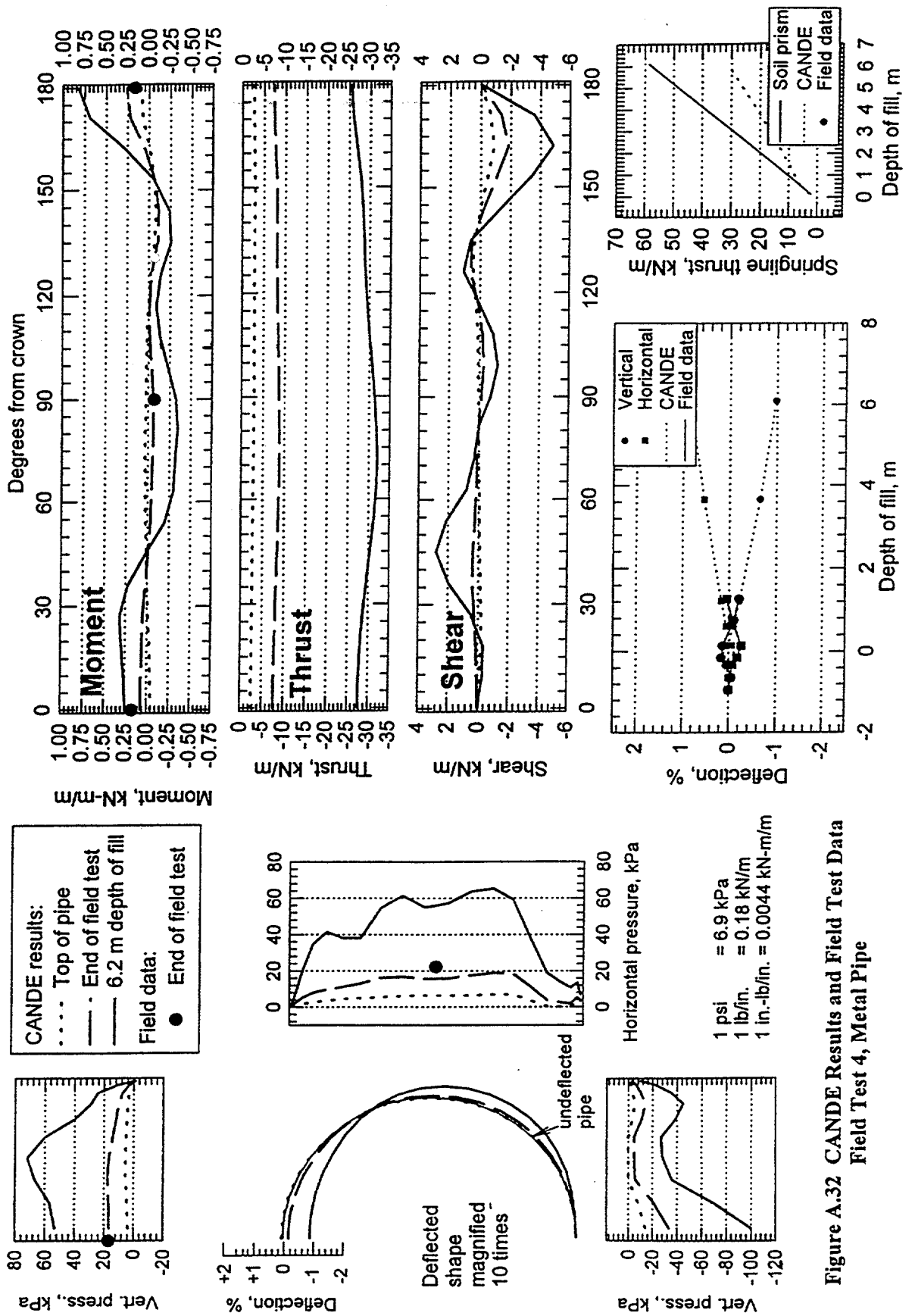


Figure A.32 CANDE Results and Field Test Data
 Field Test 4, Metal Pipe

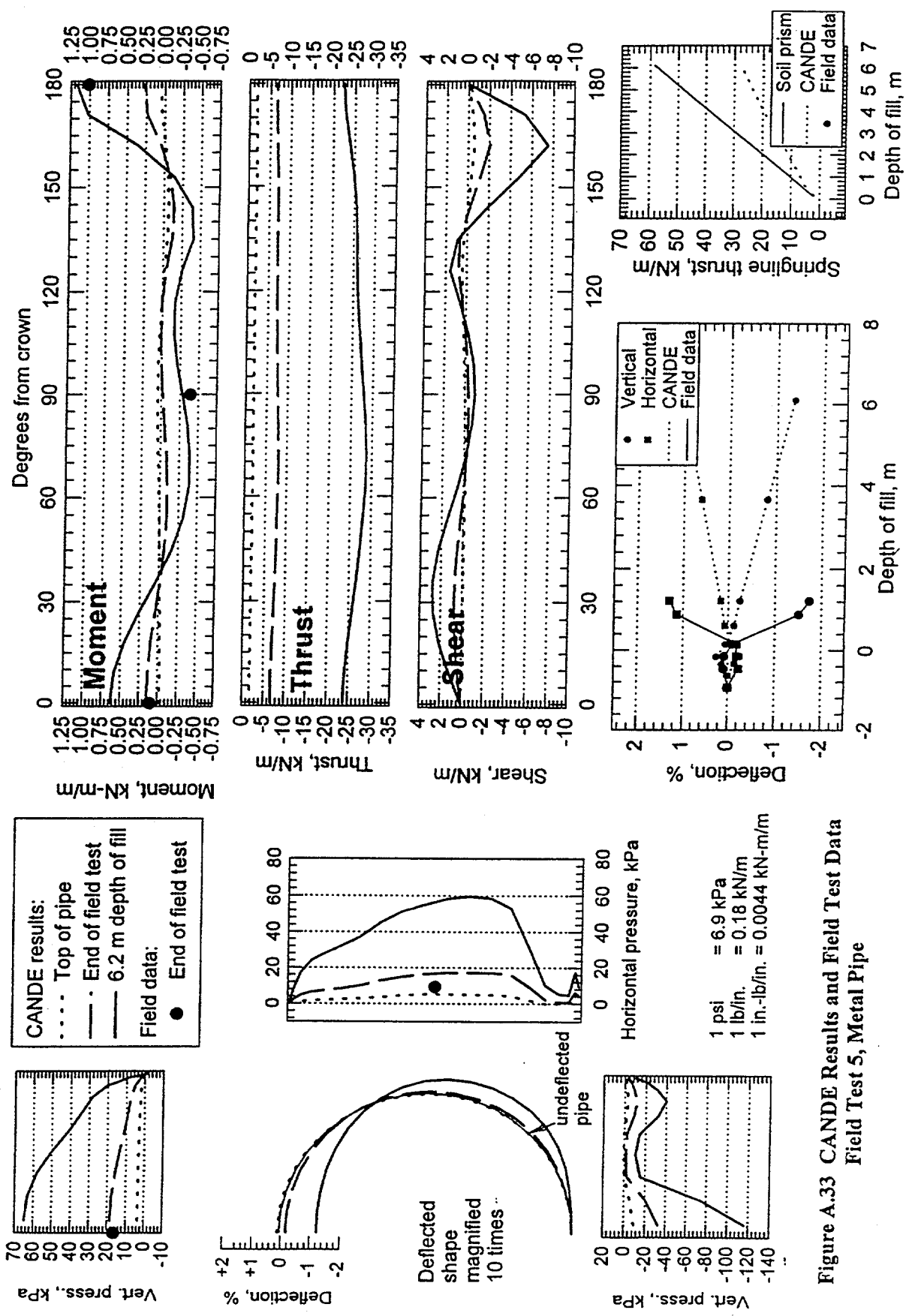


Figure A.33 CANDE Results and Field Test Data
 Field Test 5, Metal Pipe

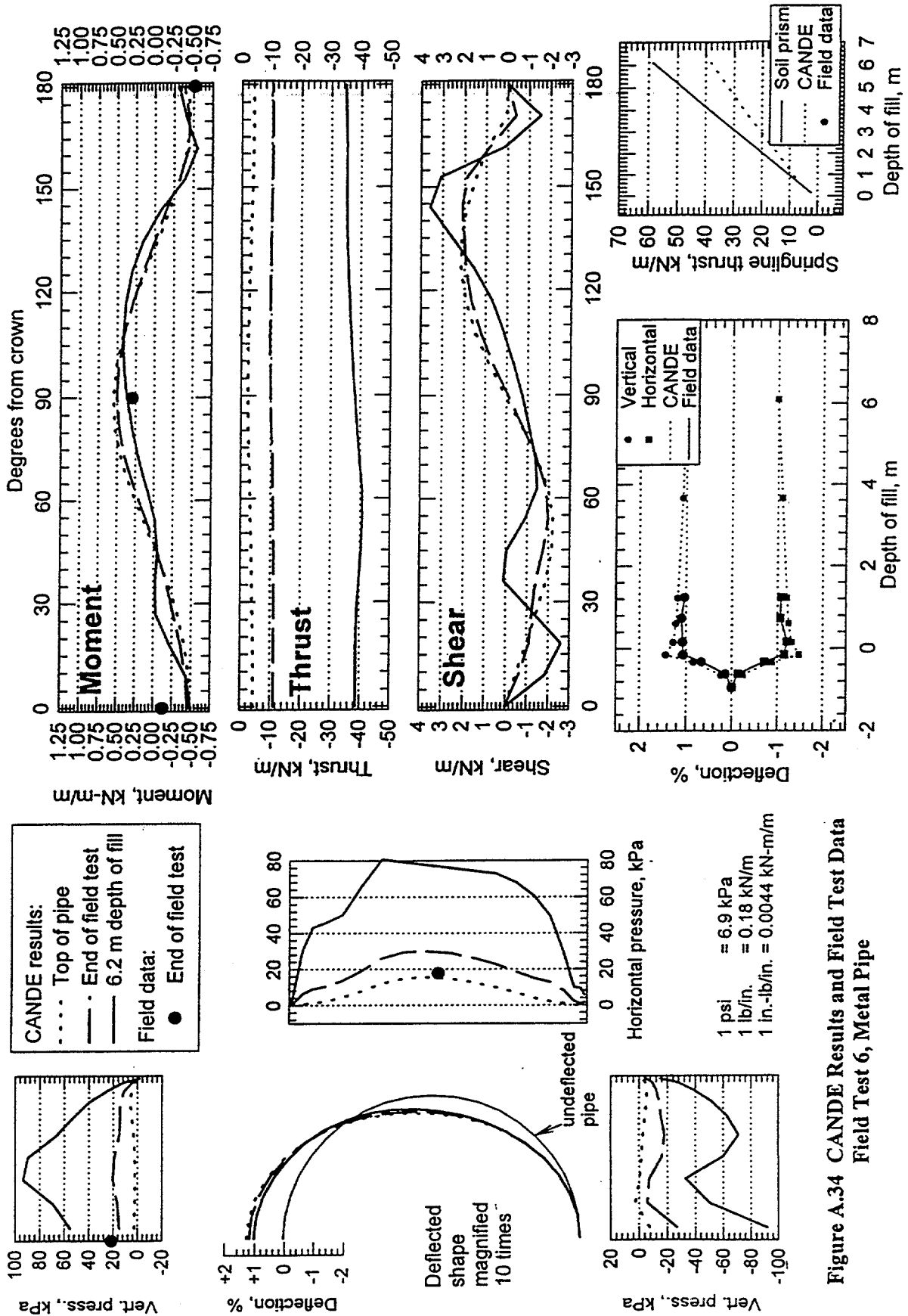


Figure A.34 CANDE Results and Field Test Data
 Field Test 6, Metal Pipe

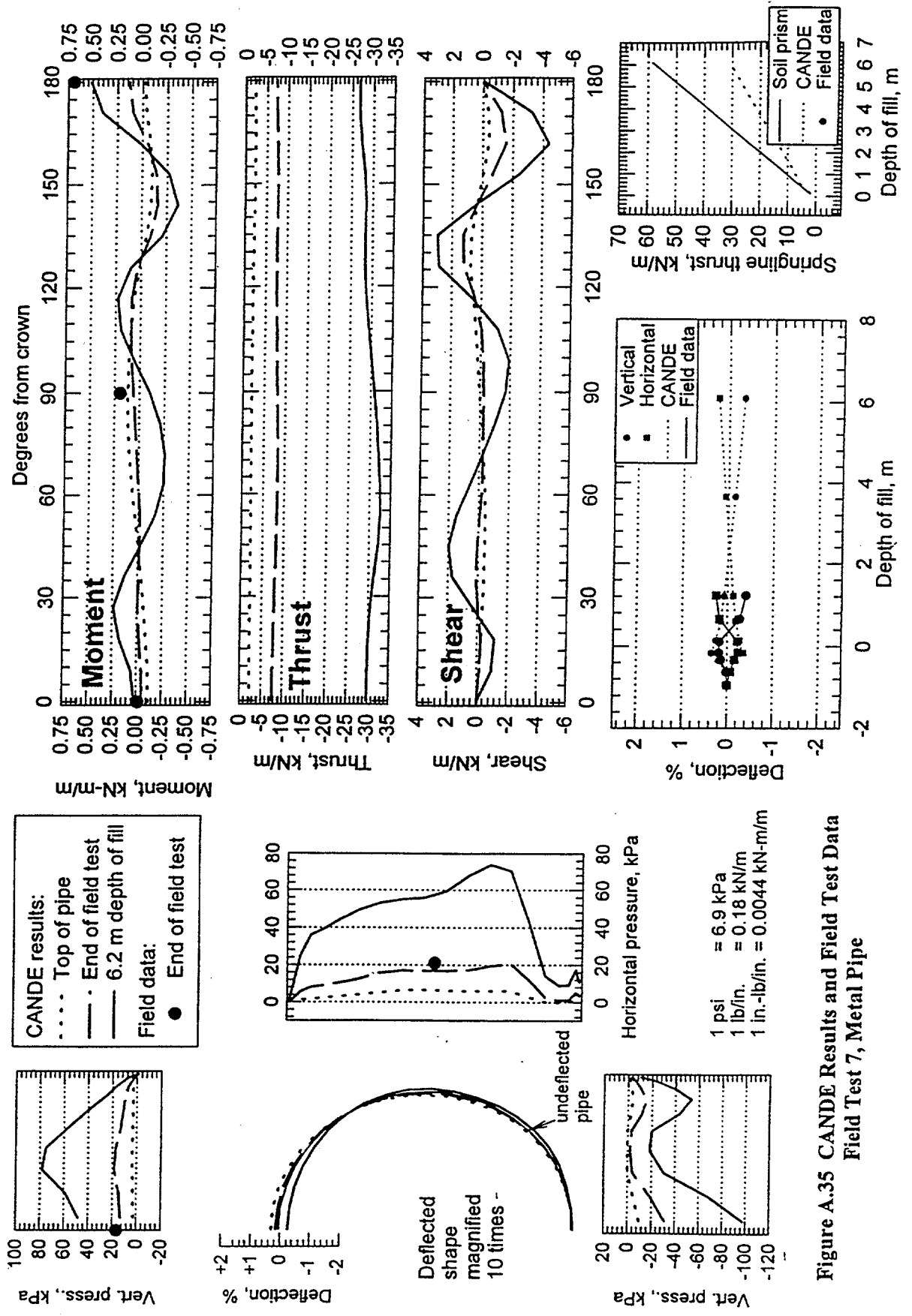


Figure A.35 CANDE Results and Field Test Data
 Field Test 7, Metal Pipe

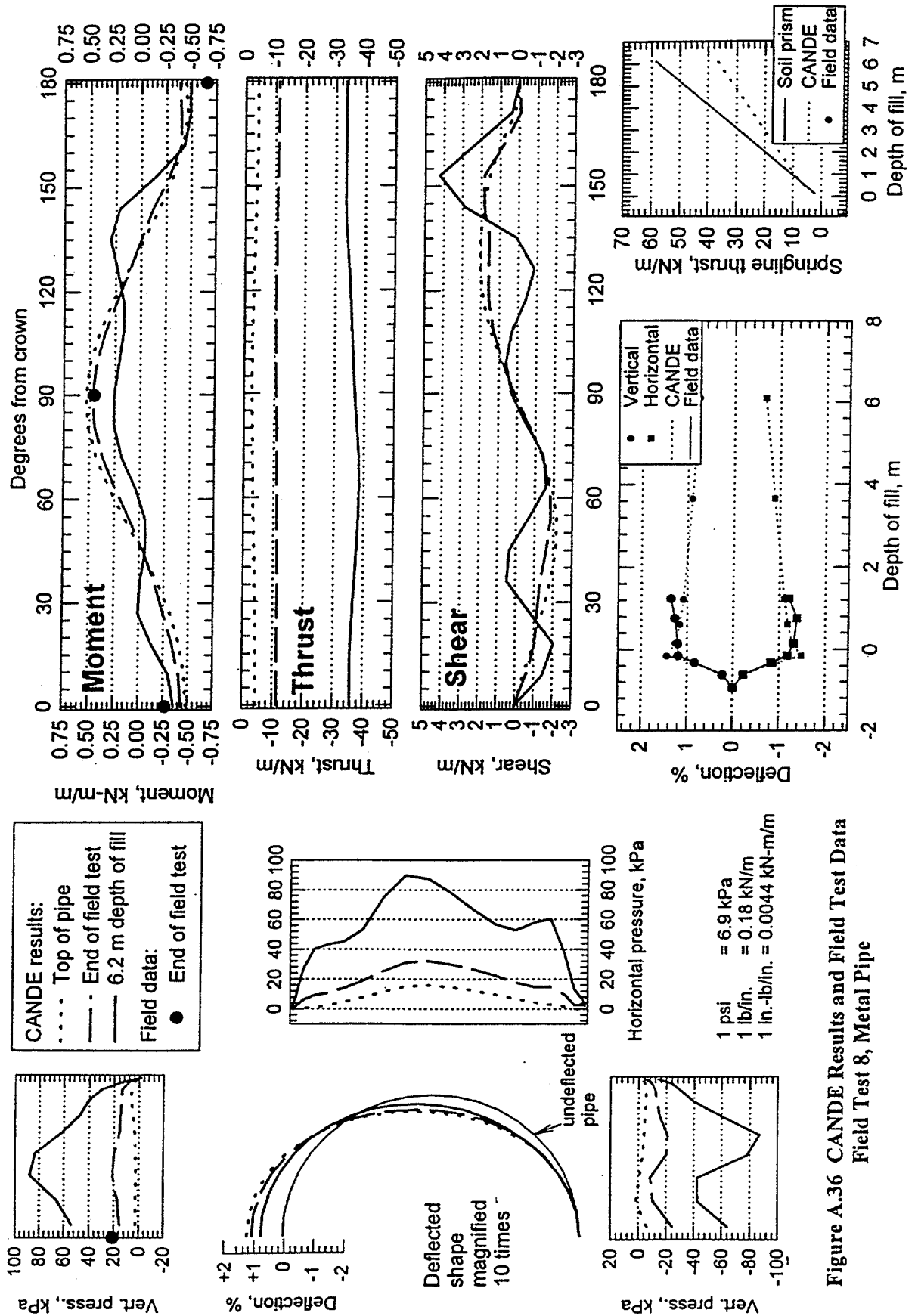


Figure A.36 CANDE Results and Field Test Data
Field Test 8, Metal Pipe

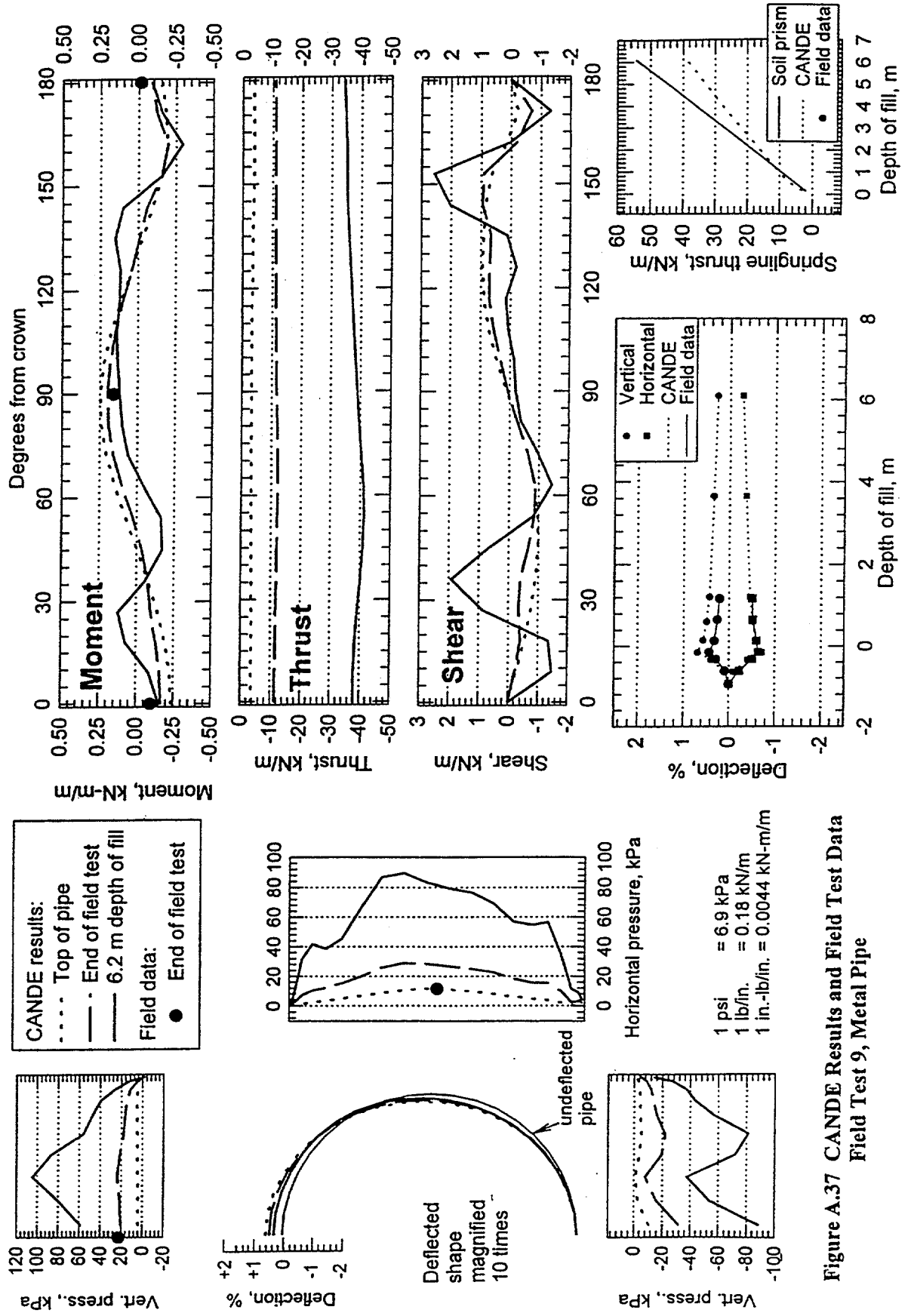


Figure A.37 CANDE Results and Field Test Data
 Field Test 9, Metal Pipe

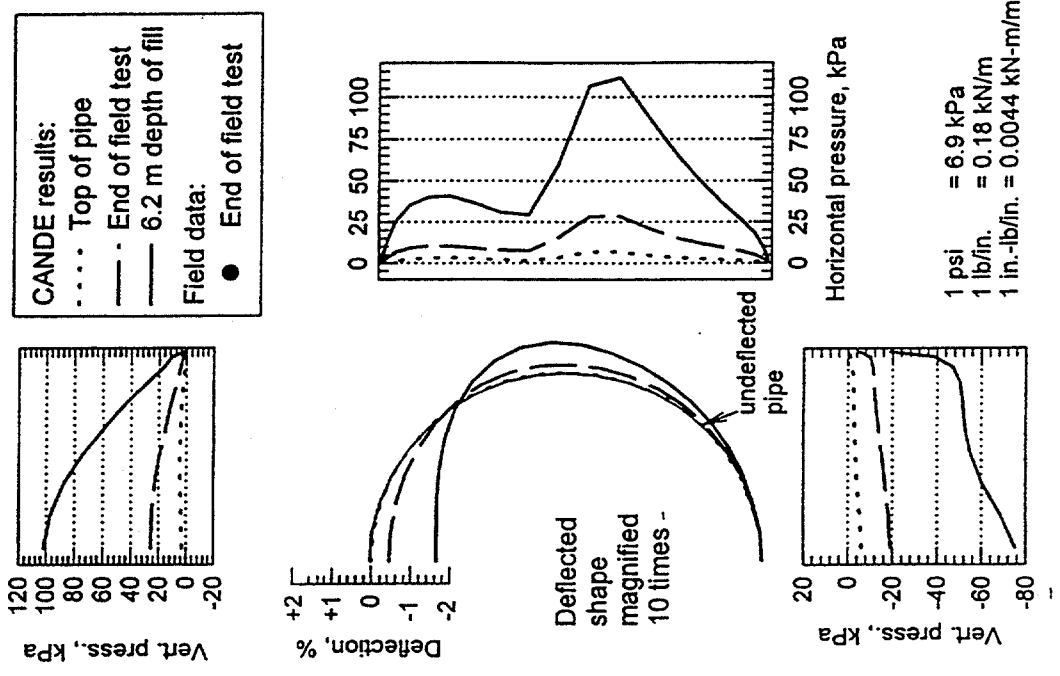
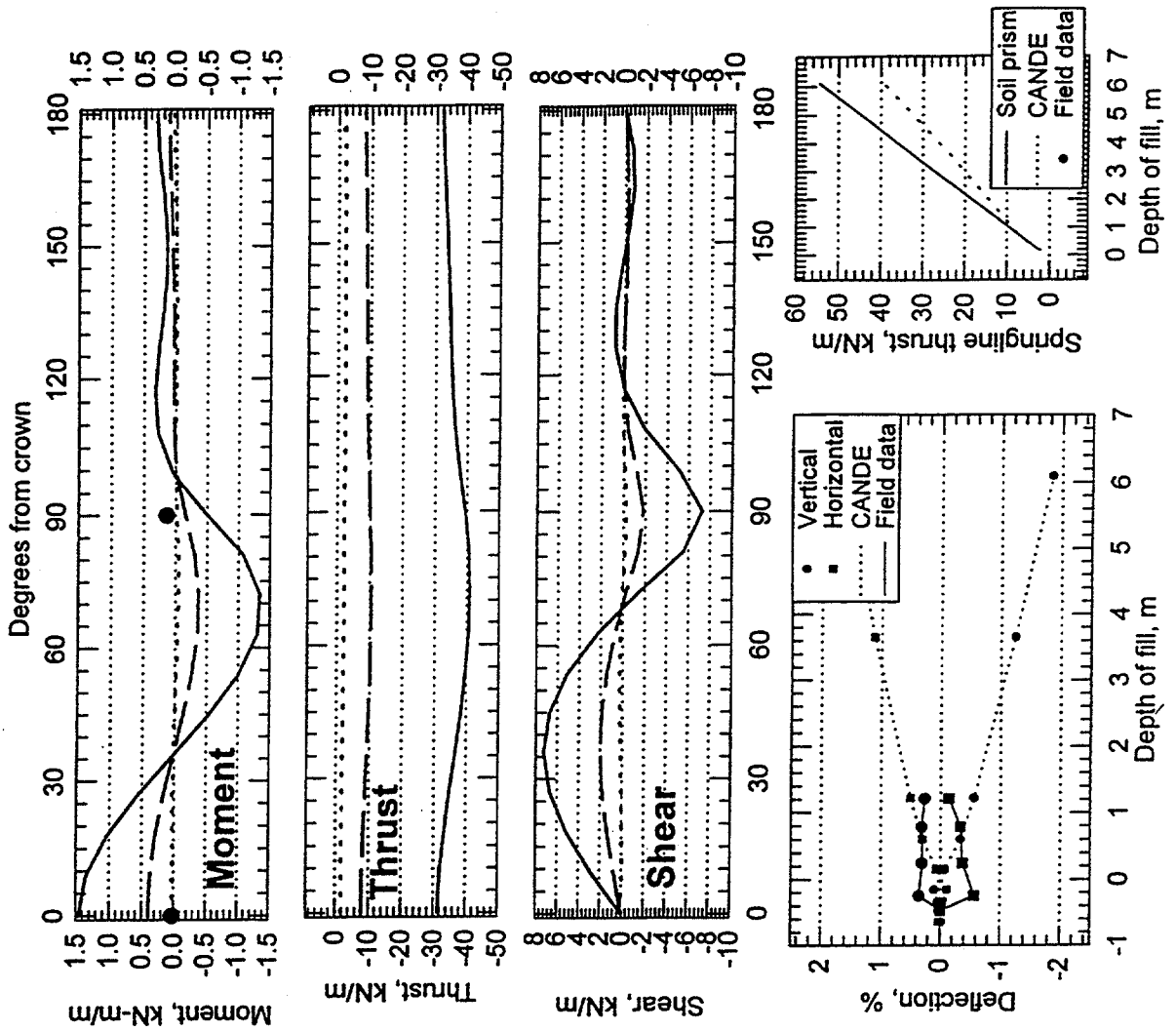


Figure A.38 CANDE Results and Field Test Data
 Field Test 10, Metal Pipe

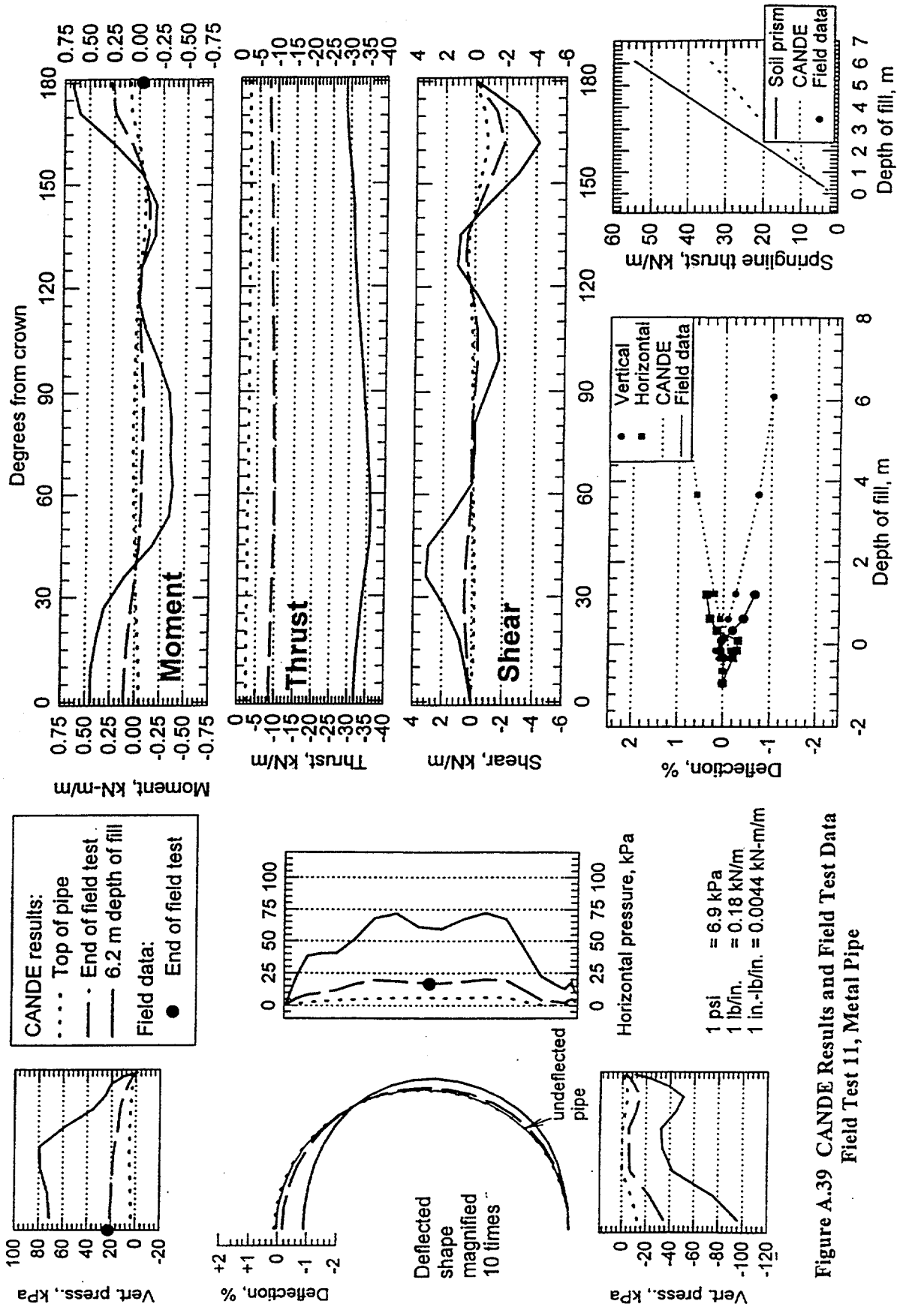


Figure A.39 CANDE Results and Field Test Data
 Field Test 11, Metal Pipe

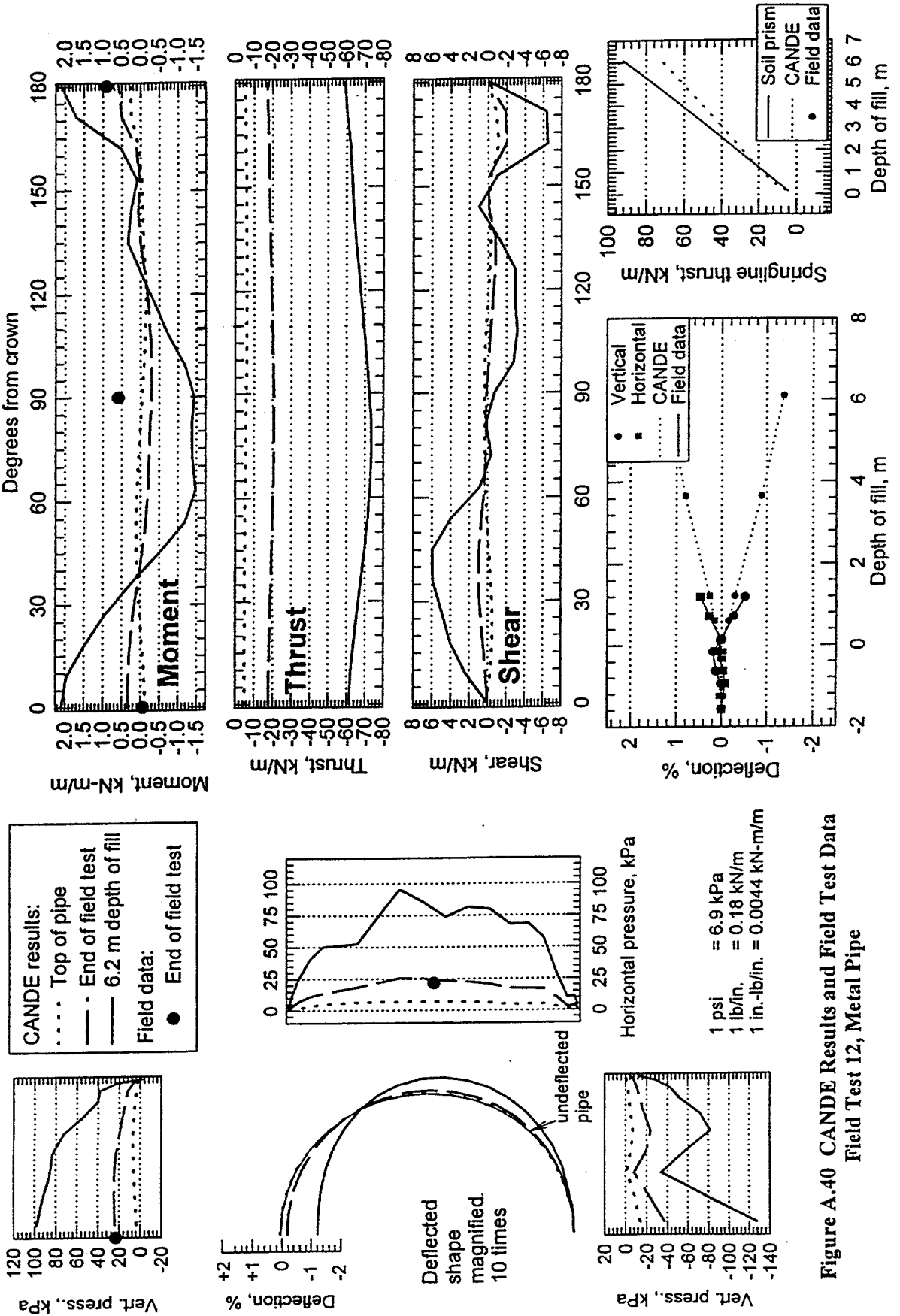


Figure A.40 CANDE Results and Field Test Data
 Field Test 12, Metal Pipe

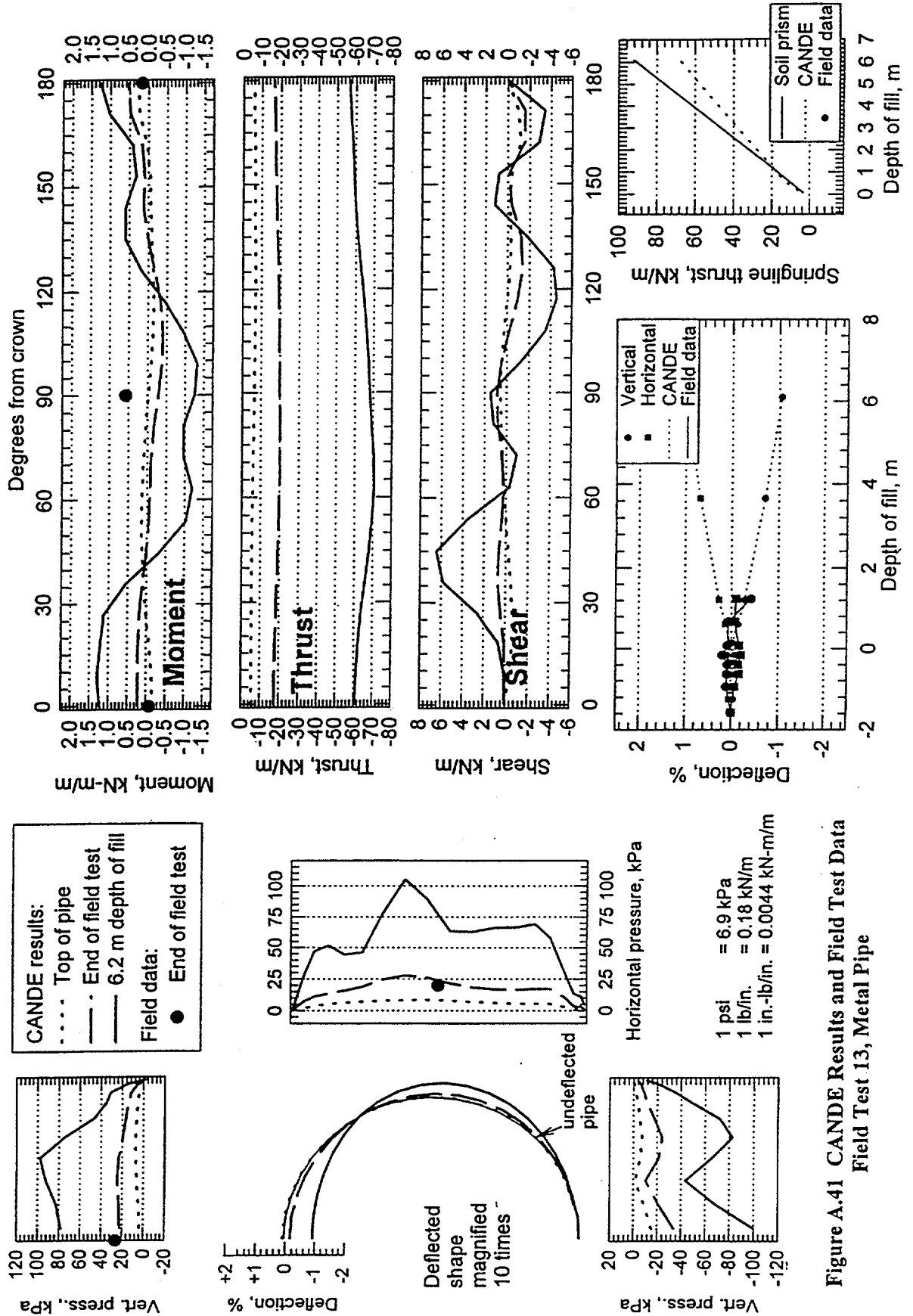


Figure A.41 CANDE Results and Field Test Data
 Field Test 13, Metal Pipe

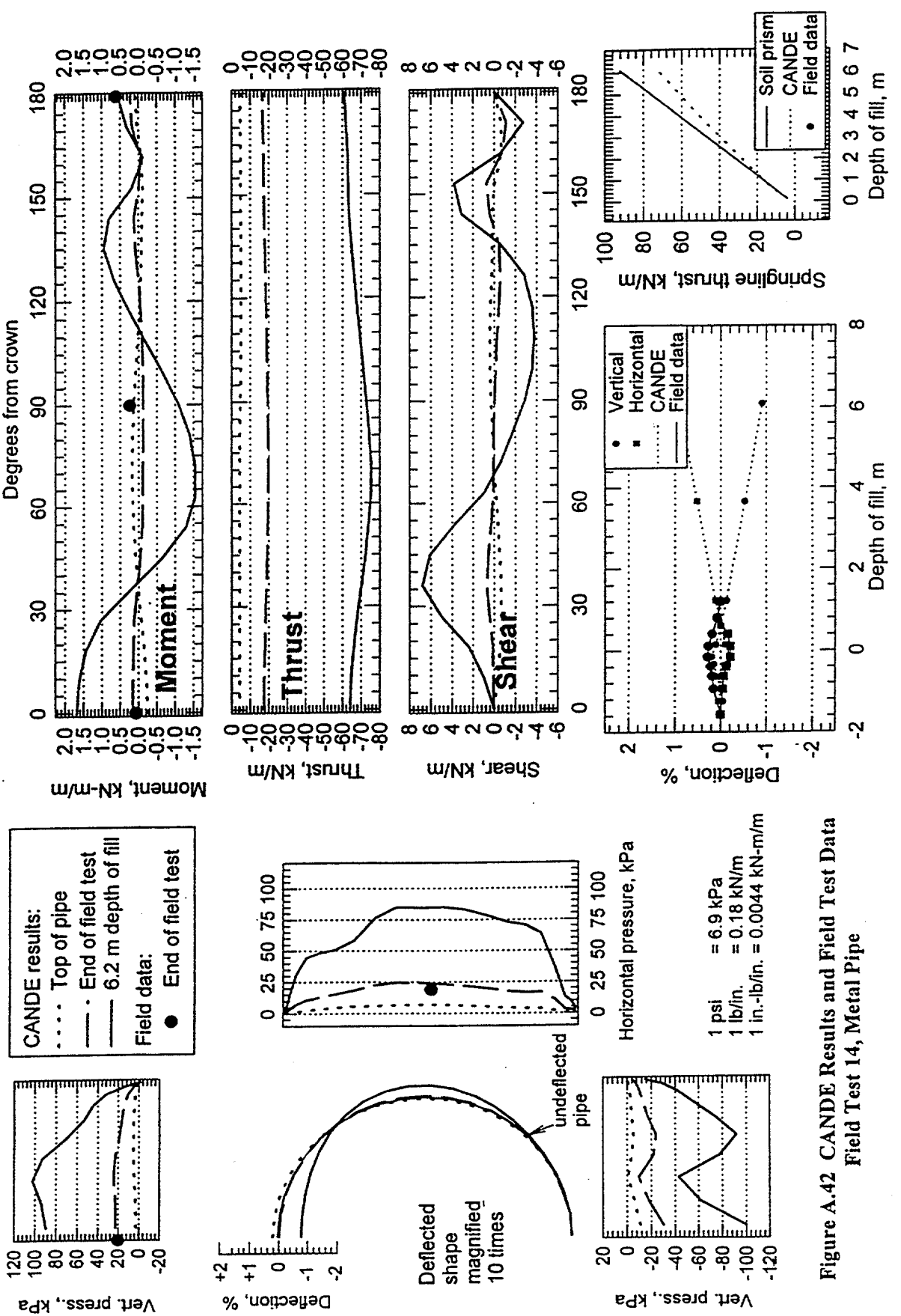


Figure A.42 CANDE Results and Field Test Data
 Field Test 14, Metal Pipe

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