

APPENDIX J

GEOMECHANICAL INSTRUMENTATION DATA PLOTS

M

## CONTENTS

<u>Table No.</u>	<u>Title/Description</u>
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J-2	Schematic Symbols for Data Plots
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### Figures

See Table J-1 for listing of enclosed figures.



Table J-1

GEOMECHANICAL INSTRUMENTATION DATA

Figure No.	Title
J-1	Piezometer 31X-PE-00201 - Waste Shaft
J-2	Piezometer 31X-PE-00202 - Waste Shaft
J-3	Piezometer 31X-PE-00203 - Waste Shaft
J-4	Piezometer 31X-PE-00204 - Waste Shaft
J-5	Piezometer 31X-PE-00205 - Waste Shaft
J-6	Piezometer 31X-PE-00206 - Waste Shaft
J-7	Piezometer 31X-PE-00207 - Waste Shaft
J-8	Piezometer 31X-PE-00208 - Waste Shaft
J-9	Piezometer 31X-PE-00209 - Waste Shaft
J-10	Piezometer 31X-PE-00210 - Waste Shaft
J-11	Piezometer 31X-PE-00211 - Waste Shaft
J-12	Piezometer 31X-PE-00212 - Waste Shaft
J-13	Piezometer 35X-PE-00201 - Exhaust Shaft
J-14	Piezometer 35X-PE-00202 - Exhaust Shaft
J-15	Piezometer 35X-PE-00203 - Exhaust Shaft
J-16	Piezometer 35X-PE-00204 - Exhaust Shaft
J-17	Piezometer 35X-PE-00205 - Exhaust Shaft
J-18	Piezometer 35X-PE-00206 - Exhaust Shaft
J-19	Piezometer 35X-PE-00207 - Exhaust Shaft
J-20	Piezometer 35X-PE-00208 - Exhaust Shaft
J-21	Piezometer 35X-PE-00209 - Exhaust Shaft
J-22	Piezometer 35X-PE-00210 - Exhaust Shaft
J-23	Piezometer 35X-PE-00211 - Exhaust Shaft
J-24	Piezometer 35X-PE-00212 - Exhaust Shaft
J-25	Piezometer 35X-PE-00213 - Exhaust Shaft
J-26	Piezometer 35X-PE-00214 - Exhaust Shaft
J-27	Piezometer 35X-PE-00215 - Exhaust Shaft
J-28	Piezometer 35X-PE-00216 - Exhaust Shaft
J-29	Piezometer 35X-PE-00217 - Exhaust Shaft
J-30	Piezometer 35X-PE-00218 - Exhaust Shaft
J-31	Piezometer 35X-PE-00219 - Exhaust Shaft
J-32	Piezometer 35X-PE-00220 - Exhaust Shaft
J-33	Piezometer 35X-PE-00221 - Exhaust Shaft
J-34	Piezometer 37X-PE-00201 - C & SH Shaft
J-35	Piezometer 37X-PE-00202 - C & SH Shaft
J-36	Piezometer 37X-PE-00203 - C & SH Shaft
J-37	Piezometer 37X-PE-00204 - C & SH Shaft
J-38	Piezometer 37X-PE-00205 - C & SH Shaft
J-39	Piezometer 37X-PE-00206 - C & SH Shaft
J-40	Piezometer 37X-PE-00207 - C & SH Shaft
J-41	Piezometer 37X-PE-00208 - C & SH Shaft
J-42	Piezometer 37X-PE-00209 - C & SH Shaft
J-43	Piezometer 37X-PE-00210 - C & SH Shaft
J-44	Piezometer 37X-PE-00211 - C & SH Shaft



Table J-1 (continued)

J-45	Piezometer 37X-PE-00212 - C & SH Shaft
J-46	Pressure Cell 31X-WE-00201 - Waste Shaft
J-47	Pressure Cell 31X-WE-00202 - Waste Shaft
J-48	Pressure Cell 31X-WE-00203 - Waste Shaft
J-49	Pressure Cell 31X-WE-00204 - Waste Shaft
J-50	Pressure Cell 35X-WE-00201 - Exhaust Shaft
J-51	Pressure Cell 35X-WE-00202 - Exhaust Shaft
J-52	Pressure Cell 35X-WE-00203 - Exhaust Shaft
J-53	Pressure Cell 35X-WE-00204 - Exhaust Shaft
J-54	Pressure Cell 37X-WE-00201 - C & SH Shaft
J-55	Pressure Cell 37X-WE-00202 - C & SH Shaft
J-56	Pressure Cell 37X-WE-00203 - C & SH Shaft
J-57	Pressure Cell 37X-WE-00204 - C & SH Shaft
J-58	Welded Strain Gauge 37X-ZE-00201 - C & SH Shaft
J-59	Welded Strain Gauge 37X-ZE-00202 - C & SH Shaft
J-60	Welded Strain Gauge 37X-ZE-00203 - C & SH Shaft
J-61	Welded Strain Gauge 37X-ZE-00204 - C & SH Shaft
J-62	Welded Strain Gauge 37X-ZE-00205 - C & SH Shaft
J-63	Welded Strain Gauge 37X-ZE-00206 - C & SH Shaft
J-64	Welded Strain Gauge 37X-ZE-00207 - C & SH Shaft
J-65	Welded Strain Gauge 37X-ZE-00208 - C & SH Shaft
J-66	Embedment Strain Gauge 37X-ZE-00209 - C & SH Shaft
J-67	Embedment Strain Gauge 37X-ZE-00210 - C & SH Shaft
J-68	Embedment Strain Gauge 37X-ZE-00211 - C & SH Shaft
J-69	Embedment Strain Gauge 37X-ZE-00212 - C & SH Shaft
J-70	Embedment Strain Gauge 37X-ZE-00213 - C & SH Shaft
J-71	Embedment Strain Gauge 37X-ZE-00214 - C & SH Shaft
J-72	Embedment Strain Gauge 37X-ZE-00215 - C & SH Shaft
J-73	Embedment Strain Gauge 37X-ZE-00216 - C & SH Shaft
J-74	Welded Strain Gauge 37X-ZE-00217 - C & SH Shaft
J-75	Welded Strain Gauge 37X-ZE-00218 - C & SH Shaft
J-76	Welded Strain Gauge 37X-ZE-00219 - C & SH Shaft
J-77	Welded Strain Gauge 37X-ZE-00220 - C & SH Shaft
J-78	Welded Strain Gauge 37X-ZE-00221 - C & SH Shaft
J-79	Welded Strain Gauge 37X-ZE-00222 - C & SH Shaft
J-80	Welded Strain Gauge 37X-ZE-00223 - C & SH Shaft
J-81	Welded Strain Gauge 37X-ZE-00224 - C & SH Shaft
J-82	Embedment Strain Gauge 37X-ZE-00225 - C & SH Shaft
J-83	Embedment Strain Gauge 37X-ZE-00226 - C & SH Shaft
J-84	Embedment Strain Gauge 37X-ZE-00227 - C & SH Shaft
J-85	Embedment Strain Gauge 37X-ZE-00228 - C & SH Shaft
J-86	Embedment Strain Gauge 37X-ZE-00229 - C & SH Shaft
J-87	Embedment Strain Gauge 37X-ZE-00230 - C & SH Shaft
J-88	Embedment Strain Gauge 37X-ZE-00231 - C & SH Shaft
J-89	Embedment Strain Gauge 37X-ZE-00232 - C & SH Shaft
J-90	Embedment Strain Gauge 37X-ZE-00233 - C & SH Shaft
J-91	Embedment Strain Gauge 37X-ZE-00234 - C & SH Shaft
J-92	Embedment Strain Gauge 37X-ZE-00235 - C & SH Shaft
J-93	Embedment Strain Gauge 37X-ZE-00236 - C & SH Shaft
J-94	Embedment Strain Gauge 37X-ZE-00237 - C & SH Shaft
J-95	Embedment Strain Gauge 37X-ZE-00238 - C & SH Shaft
J-96	Embedment Strain Gauge 37X-ZE-00239 - C & SH Shaft
J-97	Embedment Strain Gauge 37X-ZE-00240 - C & SH Shaft
J-98	Embedment Strain Gauge 37X-ZE-00241 - C & SH Shaft
J-99	Embedment Strain Gauge 37X-ZE-00242 - C & SH Shaft



Table J-1 (continued)

J-98	Multiple-Point Extensometer	31X-GE-00201	- Waste Shaft
J-99	Multiple-Point Extensometer	31X-GE-00202	- Waste Shaft
J-100	Multiple-Point Extensometer	31X-GE-00203	- Waste Shaft
J-101	Multiple-Point Extensometer	31X-GE-00204	- Waste Shaft
J-102	Multiple-Point Extensometer	31X-GE-00205	- Waste Shaft
J-103	Multiple-Point Extensometer	31X-GE-00206	- Waste Shaft
J-104	Multiple-Point Extensometer	31X-GE-00207	- Waste Shaft
J-105	Multiple-Point Extensometer	31X-GE-00208	- Waste Shaft
J-106	Multiple-Point Extensometer	31X-GE-00209	- Waste Shaft
J-107	Multiple-Point Extensometer	35X-GE-00201	- Exhaust Shaft
J-108	Multiple-Point Extensometer	35X-GE-00202	- Exhaust Shaft
J-109	Multiple-Point Extensometer	35X-GE-00203	- Exhaust Shaft
J-110	Multiple-Point Extensometer	35X-GE-00204	- Exhaust Shaft
J-111	Multiple-Point Extensometer	35X-GE-00205	- Exhaust Shaft
J-112	Multiple-Point Extensometer	35X-GE-00206	- Exhaust Shaft
J-113	Multiple-Point Extensometer	35X-GE-00207	- Exhaust Shaft
J-114	Multiple-Point Extensometer	35X-GE-00208	- Exhaust Shaft
J-115	Multiple-Point Extensometer	35X-GE-00209	- Exhaust Shaft
J-116	Multiple-Point Extensometer	37X-GE-00201	- C & SH Shaft
J-117	Multiple-Point Extensometer	37X-GE-00202	- C & SH Shaft
J-118	Multiple-Point Extensometer	37X-GE-00203	- C & SH Shaft
J-119	Multiple-Point Extensometer	37X-GE-00204	- C & SH Shaft
J-120	Multiple-Point Extensometer	37X-GE-00205	- C & SH Shaft
J-121	Multiple-Point Extensometer	37X-GE-00206	- C & SH Shaft
J-122	Multiple-Point Extensometer	37X-GE-00207	- C & SH Shaft
J-123	Multiple-Point Extensometer	37X-GE-00208	- C & SH Shaft
J-124	Multiple-Point Extensometer	37X-GE-00209	- C & SH Shaft
J-125	Double-Point Extensometer	51X-GE-00206	
J-126	Double-Point Extensometer	51X-GE-00207	
J-127	Double-Point Extensometer	51X-GE-00208	
J-128	Double-Point Extensometer	51X-GE-00209	
J-129	Double-Point Extensometer	51X-GE-00210	
J-130	Double-Point Extensometer	51X-GE-00211	
J-131	Double-Point Extensometer	51X-GE-00212	
J-132	Multiple-Point Extensometer	51X-GE-00213	
J-133	Multiple-Point Extensometer	51X-GE-00214	
J-134	Multiple-Point Extensometer	51X-GE-00215	
J-135	Multiple-Point Extensometer	51X-GE-00216	
J-136	Multiple-Point Extensometer	51X-GE-00217	
J-137	Multiple-Point Extensometer	51X-GE-00218	
J-138	Multiple-Point Extensometer	51X-GE-00219	
J-139	Multiple-Point Extensometer	51X-GE-00220	
J-140	Double-Point Extensometer	51X-GE-00221	
J-141	Multiple-Point Extensometer	51X-GE-00222	
J-142	Multiple-Point Extensometer	51X-GE-00223	
J-143	Multiple-Point Extensometer	51X-GE-00224	
J-144	Multiple-Point Extensometer	51X-GE-00225	
J-145	Multiple-Point Extensometer	51X-GE-00226	
J-146	Multiple-Point Extensometer	51X-GE-00227	
J-147	Multiple-Point Extensometer	51X-GE-00228	
J-148	Multiple-Point Extensometer	51X-GE-00229	
J-149	Multiple-Point Extensometer	51X-GE-00230	
J-150	Multiple-Point Extensometer	51X-GE-00231	
J-151	Multiple-Point Extensometer	51X-GE-00232	

Table J-1 (continued)

J-152	Double-Point Extensometer 51X-GE-00233
J-153	Double-Point Extensometer 51X-GE-00234
J-154	Double-Point Extensometer 51X-GE-00235
J-155	Double-Point Extensometer 51X-GE-00236
J-156	Multiple-Point Extensometer 51X-GE-00237
J-157	Multiple-Point Extensometer 51X-GE-00238
J-158	Multiple-Point Extensometer 51X-GE-00239
J-159	Multiple-Point Extensometer 51X-GE-00240
J-160	Multiple-Point Extensometer 51X-GE-00241
J-161	Multiple-Point Extensometer 51X-GE-00242
J-162	Multiple-Point Extensometer 51X-GE-00243
J-163	Single-Point Extensometer 51X-GE-00244
J-164	Multiple-Point Extensometer 51X-GE-00245
J-165	Multiple-Point Extensometer 51X-GE-00246
J-166	Multiple-Point Extensometer 51X-GE-00247
J-167	Multiple-Point Extensometer 51X-GE-00248
J-168	Multiple-Point Extensometer 51X-GE-00249
J-169	Multiple-Point Extensometer 51X-GE-00250
J-170	Multiple-Point Extensometer 51X-GE-00251
J-171	Double-Point Extensometer 51X-GE-00252
J-172	Double-Point Extensometer 51X-GE-00253
J-173	Single-Point Extensometer 51X-GE-00254
J-174	Multiple-Point Extensometer 51X-GE-00255
J-175	Multiple-Point Extensometer 51X-GE-00256
J-176	Multiple-Point Extensometer 51X-GE-00257
J-177	Multiple-Point Extensometer 51X-GE-00258
J-178	Multiple-Point Extensometer 51X-GE-00259
J-179	Multiple-Point Extensometer 51X-GE-00260
J-180	Multiple-Point Extensometer 51X-GE-00261
J-181	Multiple-Point Extensometer 51X-GE-00262
J-182	Multiple-Point Extensometer 51X-GE-00263
J-183	Multiple-Point Extensometer 51X-GE-00264
J-184	Multiple-Point Extensometer 51X-GE-00265
J-185	Multiple-Point Extensometer 51X-GE-00267
J-186	Multiple-Point Extensometer 51X-GE-00268
J-187	Multiple-Point Extensometer 51X-GE-00269
J-188	Multiple-Point Extensometer 51X-GE-00270
J-189	Double-Point Extensometer 51X-GE-00271
J-190	Convergence Meter 51X-CE-00201
J-191	Convergence Meter 51X-CE-00202
J-192	Rockbolt Load Cell 51X-WG-00201
J-193	Rockbolt Load Cell 51X-WG-00202
J-194	Rockbolt Load Cell 51X-WG-00203
J-195	Rockbolt Load Cell 51X-WG-00204
J-196	Rockbolt Load Cell 37X-WG-00206
J-197	Rockbolt Load Cell 37X-WG-00207
J-198	Rigid Stressmeter 51X-NG-00252
J-199	Rigid Stressmeter 51X-NG-00254
J-200	Rigid Stressmeter 51X-NG-00255
J-201	Rigid Stressmeter 51X-NG-00256
J-202	Convergence Points - Waste Shaft - El. 2338



Table J-1 (continued)

J-203	Convergence Points - Waste Shaft - El. 1843
J-204	Convergence Points - Waste Shaft - El. 1350
J-205	Convergence Points - C & SH Shaft - El. 3114
J-206	Convergence Points - C & SH Shaft - El. 2956
J-207	Convergence Points - C & SH Shaft - El. 2825
J-208	Convergence Points - C & SH Shaft - El. 2680
J-209	Convergence Points - C & SH Shaft - El. 2596
J-210	Convergence Points - C & SH Shaft - El. 2470
J-211	Convergence Points - C & SH Shaft - El. 2337
J-212	Convergence Points - C & SH Shaft - El. 2135
J-213	Convergence Points - C & SH Shaft - El. 1846
J-214	Convergence Points - C & SH Shaft - El. 1353
J-215	Convergence Points - E0 Drift, North 1266 Ft
J-216	Convergence Points - E0 Drift - N1100 Drift Intersection
J-217	Convergence Points - E0 Drift, North 940 Ft
J-218	Convergence Points - E0 Drift, North 626 Ft
J-219	Convergence Points - E0 Drift, North 290 Ft
J-220	Convergence Points - E0 Drift - N140 Crosscut Intersection
J-221	Convergence Points - 39 Ft North of C & SH Shaft
J-222	Convergence Points - 15 Ft North of C & SH Shaft
J-223	Convergence Points - 12 Ft West of C & SH Shaft
J-224	Convergence Points - 18 Ft South of C & SH Shaft
J-225	Convergence Points - 18.5 Ft South of C & SH Shaft
J-226	Convergence Points - 30 Ft South of C & SH Shaft
J-227	Convergence Points - 65 Ft South of C & SH Shaft
J-228	Convergence Points - W30 Drift, South 250 Ft
J-229	Convergence Points - W30 Drift, South 500 Ft
J-230	Convergence Points - W30 Drift - S700 Crosscut Intersection
J-231	Convergence Points - W30 Drift, South 850 Ft
J-232	Convergence Points - W30 Drift - S1000 Crosscut Intersection
J-233	Convergence Points - W30 Drift, South 1141 Ft
J-234	Convergence Points - E140 Drift, North 1266 Ft
J-235	Convergence Points - E140 Drift, North 626 Ft
J-236	Convergence Points - E140 Drift, North 240 Ft
J-237	Convergence Points - E140 Drift, North 5 Ft
J-238	Convergence Points - E140 Drift - S400 Crosscut Intersection
J-239	Convergence Points - E140 Drift, South 460 Ft
J-240	Convergence Points - E140 Drift, South 550 Ft
J-241	Convergence Points - E140 Drift, South 850 Ft
J-242	Convergence Points - E140 Drift, South 1150 Ft
J-243	Convergence Points - E140 Drift, South 1246 Ft
J-244	Convergence Points - E140 Drift, South 1450 Ft
J-245	Convergence Points - E140 Drift, South 1879 Ft
J-246	Convergence Points - E140 Drift, South 2066 Ft
J-247	Convergence Points - E140 Drift, South 2350 Ft
J-248	Convergence Points - E140 Drift, South 2625 Ft
J-249	Convergence Points - E140 Drift, South 2950 Ft
J-250	Convergence Points - E140 Drift, South 3250 Ft
J-251	Convergence Points - E140 Drift, South 3614 Ft
J-252	Convergence Points - E140 Drift, South 3639 Ft
J-253	Convergence Points - E140 Drift, South 3664 Ft
J-254	Convergence Points - E300 Drift - S700 Crosscut Intersection
J-255	Convergence Points - E300 Drift, South 850 Ft
J-256	Convergence Points - E300 Drift - S1000 Crosscut Intersection

Table J-1 (continued)

J-257	Convergence Points - E300 Drift, South 1150 Ft
J-258	Convergence Points - E520 Drift, South 1775 Ft
J-259	Convergence Points - W170 Drift - S700 Crosscut Intersection
J-260	Convergence Points - W170 Drift, South 850 Ft
J-261	Convergence Points - W170 Drift - S1000 Crosscut Intersection
J-262	Convergence Points - W170 Drift, South 1150 Ft
J-263	Convergence Points - N1100 Drift, West 1347 Ft
J-264	Convergence Points - N1100 Drift, West 1159 Ft
J-265	Convergence Points - N1100 Drift, West 951 Ft
J-266	Convergence Points - N1100 Drift, West 783 Ft
J-267	Convergence Points - N1100 Drift - Test Room 2 Intersection
J-268	Convergence Points - N1100 Drift, East 80 Ft
J-269	Convergence Points - N1100 Drift, East 319 Ft
J-270	Convergence Points - N1100 Drift, East 691 Ft
J-271	Convergence Points - N1100 Drift, East 846 Ft
J-272	Convergence Points - N1100 Drift, East 1135 Ft
J-273	Convergence Points - N1100 Drift, East 1582 Ft
J-274	Convergence Points - N1420 Drift, West 391 Ft
J-275	Convergence Points - N1420 Drift - Test Room 2 Intersection
J-276	Convergence Points - N1420 Drift, West 258 Ft
J-277	Convergence Points - N1420 Drift - Test Room 1 Intersection
J-278	Convergence Points - N1420 Drift, East 304 Ft
J-279	Convergence Points - N1420 Drift, East 716 Ft
J-280	Convergence Points - N1420 Drift, East 1106 Ft
J-281	Convergence Points - N1420 Drift, East 1547 Ft
J-282	Convergence Points - Substation 2A
J-283	Convergence Points - Test Room 1
J-284	Convergence Points - Test Room 2
J-285	Convergence Points - Test Room 3
J-286	Convergence Points - Test Room 4
J-287	Convergence Points - Room L1, North 1455 Ft
J-288	Convergence Points - Room L2, North 1455 Ft
J-289	Convergence Points - S90 Crosscut, East 91 Ft
J-290	Convergence Points - 17 Ft East of Waste Shaft
J-291	Convergence Points - 20 Ft West of Waste Shaft
J-292	Convergence Points - S700 Crosscut, East 205 Ft
J-293	Convergence Points - S1600 Drift, East 311 Ft
J-294	Convergence Points - S1600 Drift, East 332 Ft
J-295	Convergence Points - S1600 Drift, East 357 Ft
J-296	Convergence Points - S1600 Drift, East 382 Ft
J-297	Convergence Points - S1600 Drift, East 407 Ft
J-298	Convergence Points - S1600 Drift, East 432 Ft
J-299	Convergence Points - S1600 Drift, East 457 Ft
J-300	Convergence Points - S1600 Drift, East 482 Ft
J-301	Convergence Points - S1600 Drift, East 507 Ft
J-302	Convergence Points - S1600 Drift, East 520 Ft
J-303	Convergence Points - S1950 Drift, East 311 Ft
J-304	Convergence Points - S1950 Drift, East 332 Ft
J-305	Convergence Points - S1950 Drift, East 357 Ft
J-306	Convergence Points - S1950 Drift, East 382 Ft
J-307	Convergence Points - S1950 Drift, East 407 Ft
J-308	Convergence Points - S1950 Drift, East 432 Ft
J-309	Convergence Points - S1950 Drift, East 457 Ft
J-310	Convergence Points - S1950 Drift, East 482 Ft
J-311	Convergence Points - S1950 Drift, East 503 Ft





Table J-1 (continued)

J-312	Convergence Points - S1950 Drift, East 523 Ft
J-313	Convergence Points - S1950 Drift, East 586 Ft
J-314	Inclinometer 51X-IG-00201
J-315	Inclinometer 51X-IG-00202
J-316	Inclinometer 51X-IG-00203
J-317	Inclinometer 51X-IG-00204
J-318	Inclinometer 51X-IG-00205
J-319	Inclinometer 51X-IG-00206
J-320	Inclinometer 51X-IG-00211
J-321	Inclinometer 51X-IG-00212
J-322	Inclinometer 51X-IG-00213
J-323	Inclinometer 51X-IG-00214
J-324	Inclinometer 51X-IG-00215
J-325	Inclinometer 51X-IG-00216
J-326	Inclinometer 51X-IG-00217
J-327	Inclinometer 51X-IG-00218
J-328	Inclinometer 51X-IG-00219
J-329	Inclinometer 51X-IG-00220
J-330	Inclinometer 51X-IG-00221
J-331	Inclinometer 51X-IG-00222
J-332	Inclinometer 51X-IG-00223
J-333	Inclinometer 51X-IG-00224
J-334	Inclinometer 51X-IG-00225
J-335	Inclinometer 51X-IG-00226

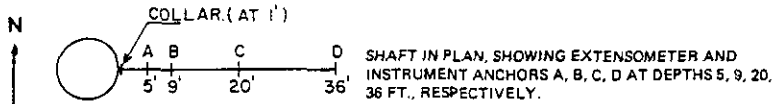
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Table J-2

SCHEMATIC SYMBOLS FOR DATA PLOTS

NOT TO SCALE



SHAFT IN PLAN, SHOWING EXTENSOMETER AND INSTRUMENT ANCHORS A, B, C, D AT DEPTHS 5, 9, 20, 36 FT., RESPECTIVELY.



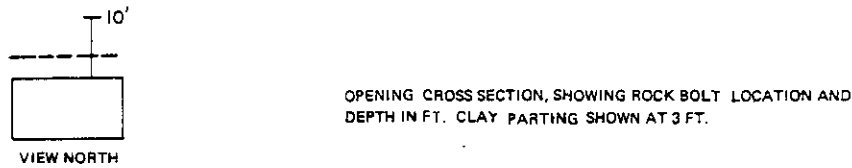
SHAFT IN PLAN, SHOWING LOCATION OF STRAIN GAUGE.



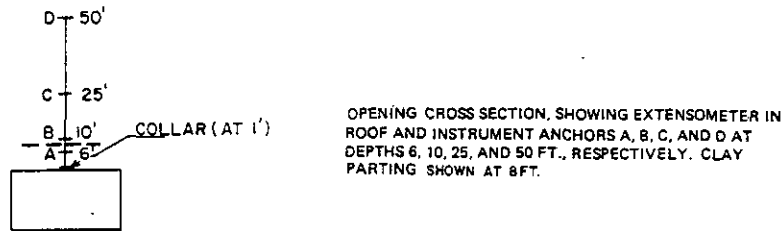
SHAFT IN PLAN, SHOWING PRESSURE CELL LOCATION.



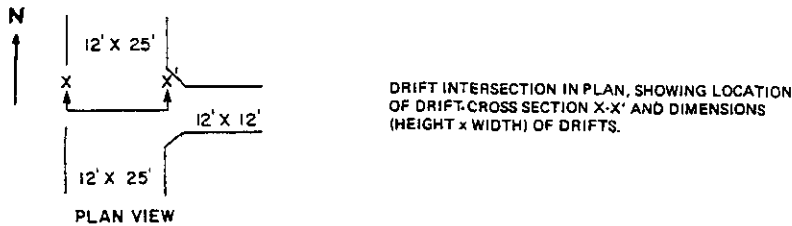
OPENING CROSS SECTION, SHOWING CONVERGENCE POINTS.



OPENING CROSS SECTION, SHOWING ROCK BOLT LOCATION AND DEPTH IN FT. CLAY PARTING SHOWN AT 3 FT.



OPENING CROSS SECTION, SHOWING EXTENSOMETER IN ROOF AND INSTRUMENT ANCHORS A, B, C, AND D AT DEPTHS 6, 10, 25, AND 50 FT., RESPECTIVELY. CLAY PARTING SHOWN AT 8 FT.



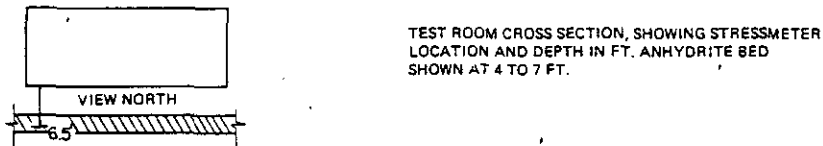
DRIFT INTERSECTION IN PLAN, SHOWING LOCATION OF DRIFT CROSS SECTION X-X' AND DIMENSIONS (HEIGHT x WIDTH) OF DRIFTS.



TEST ROOM CROSS SECTION, SHOWING LOCATION OF CONVERGENCE METER.



TEST ROOM CROSS SECTION, SHOWING INCLINOMETER LOCATION AND DEPTH IN FT. POSITIVE VALUE ON PLOT DENOTES UPWARD MOVEMENT.



TEST ROOM CROSS SECTION, SHOWING STRESSMETER LOCATION AND DEPTH IN FT. ANHYDRITE BED SHOWN AT 4 TO 7 FT.



Table J-3

DESCRIPTION OF INSTRUMENT IDENTIFICATION

Field Designation (assigned in Bechtel contract packages)

<u>IJX</u>	-	<u>AB</u>	-	<u>002</u>	<u>NO</u>	
>		>		>	>	
>		>		>	>	
>		>		>	>	Instrument number (01, 02, ...)
>		>		>	>	
>		>		>	>	Bechtel Drawing No. for contractors which illustrates item (37X-002, 51X-002, ...)
>		>		>	>	
>		>		>	>	Notation for type of instrument (PE, GE, ...) listed below
>		>		>	>	
>		>		>	>	General instrument location (31X, ...)

General instrument location:

31X	Waste shaft
35X	Exhaust shaft
37X	C & SH shaft
51X	Drift level

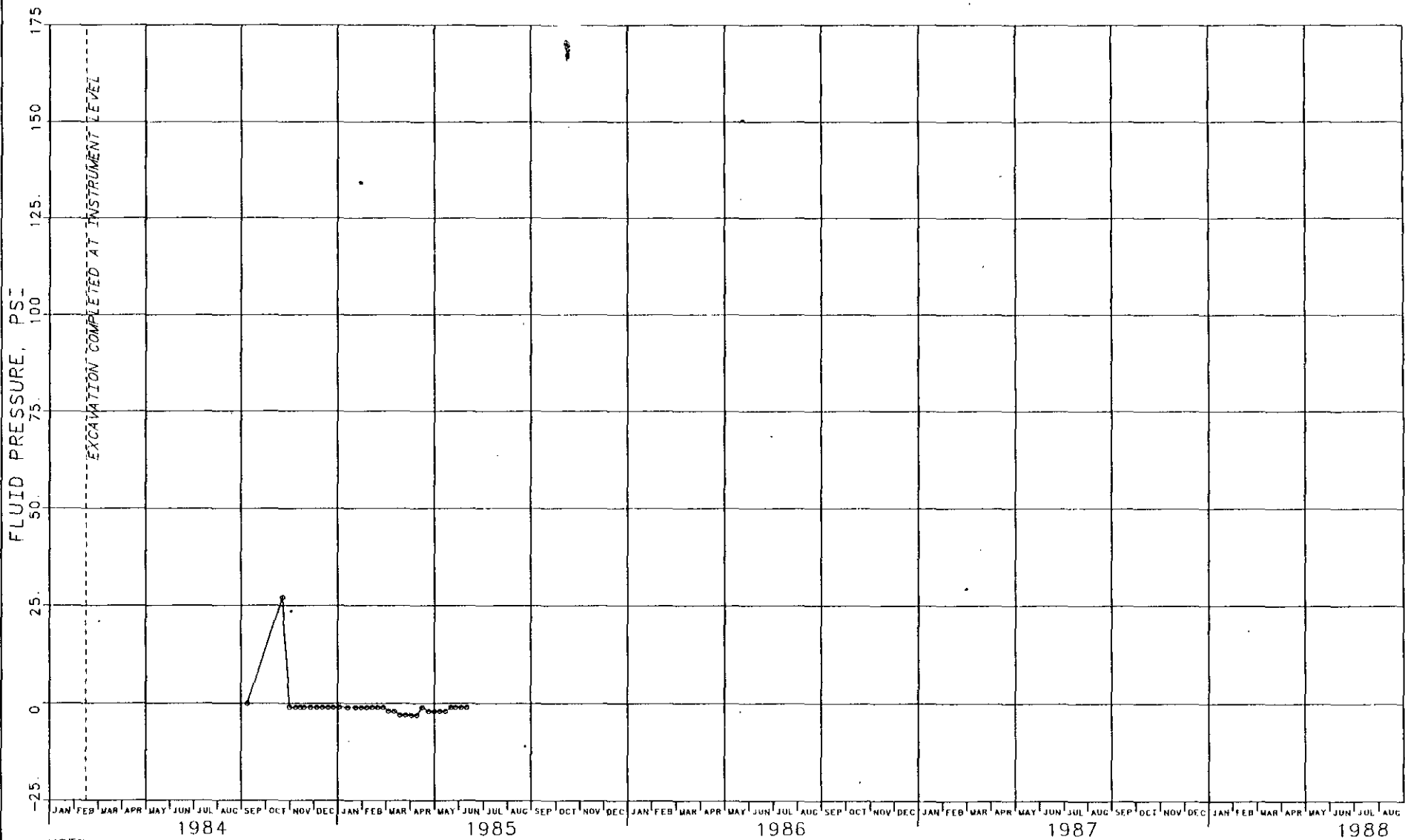
Type of instrument:

CE	Convergence meter
GE	Extensometer
IG	Inclinometer
NG	Rigid-inclusion stressmeter
PE	Piezometer
RC	Permanent convergence points
TC	Temporary convergence points
RS	Wall shortening points
WE	Pressure cell
WG	Rockbolt load cell
ZE	Strain gauge

Example Field Designation

51X-GE-00246 is a drift level (51X) extensometer (GE) which may also be referred to as GE-246 on figures and tables in this report. However, convergence points are designated by approximate shaft depth or drift station.

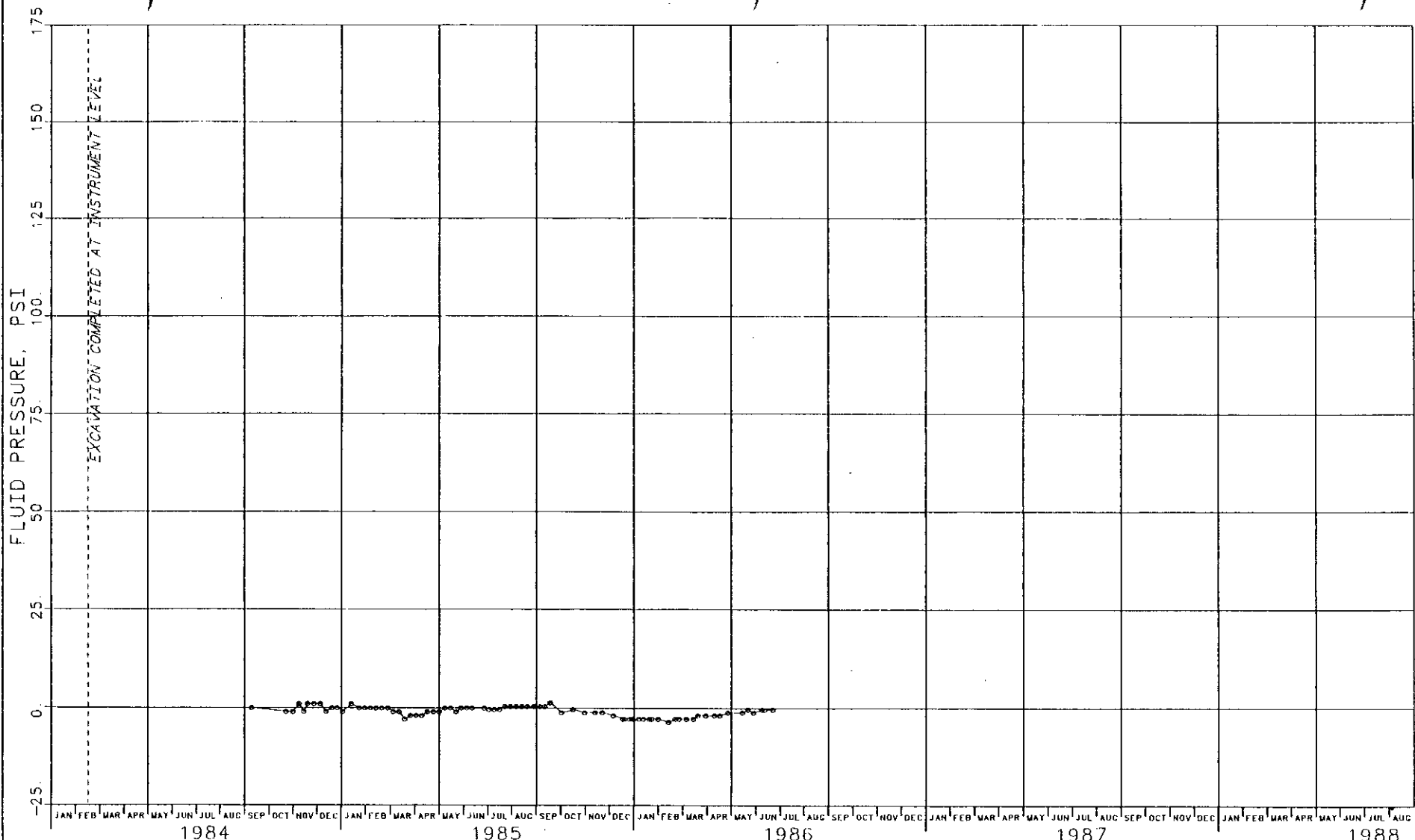




NOTES

- 1 CONCRETE LINER WAS PLACED NOV 1983 THROUGH APR 3, 1984
- 2 INSTRUMENT IS CURRENTLY NOT ACCESSIBLE FOR REPAIR

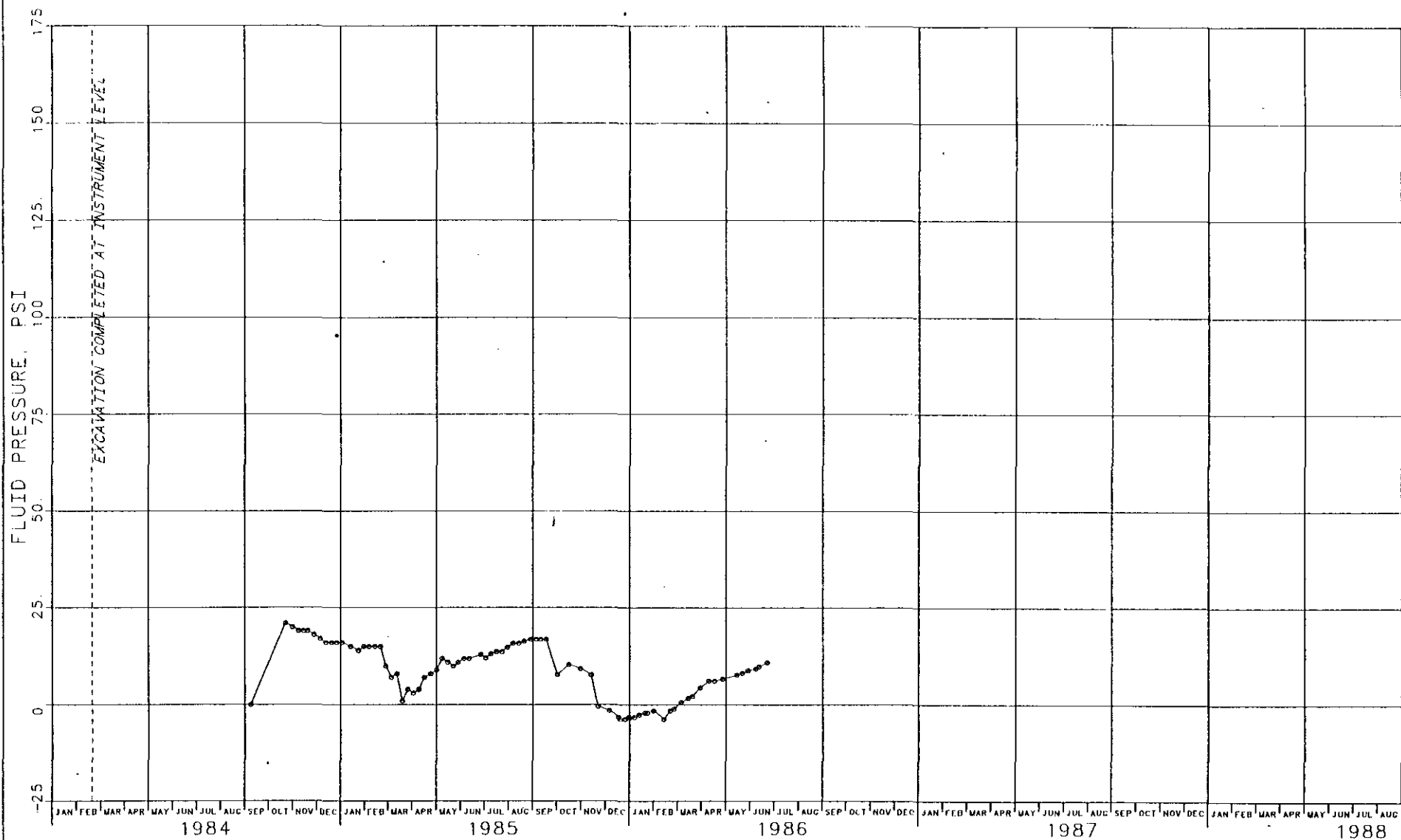
FIGURE J-1  
 PIEZOMETER 31X-PE-00201  
 WASTE SHAFT - EL 2877  
 PRESSURE VS. CALENDAR MONTH



NOTES

1) CONCRETE LINER WAS PLACED NOV 1983 THROUGH APR 3, 1984

FIGURE J-2  
 PIEZOMETER 31X-PE-00202  
 WASTE SHAFT - EL 2877  
 PRESSURE VS. CALENDAR MONTH

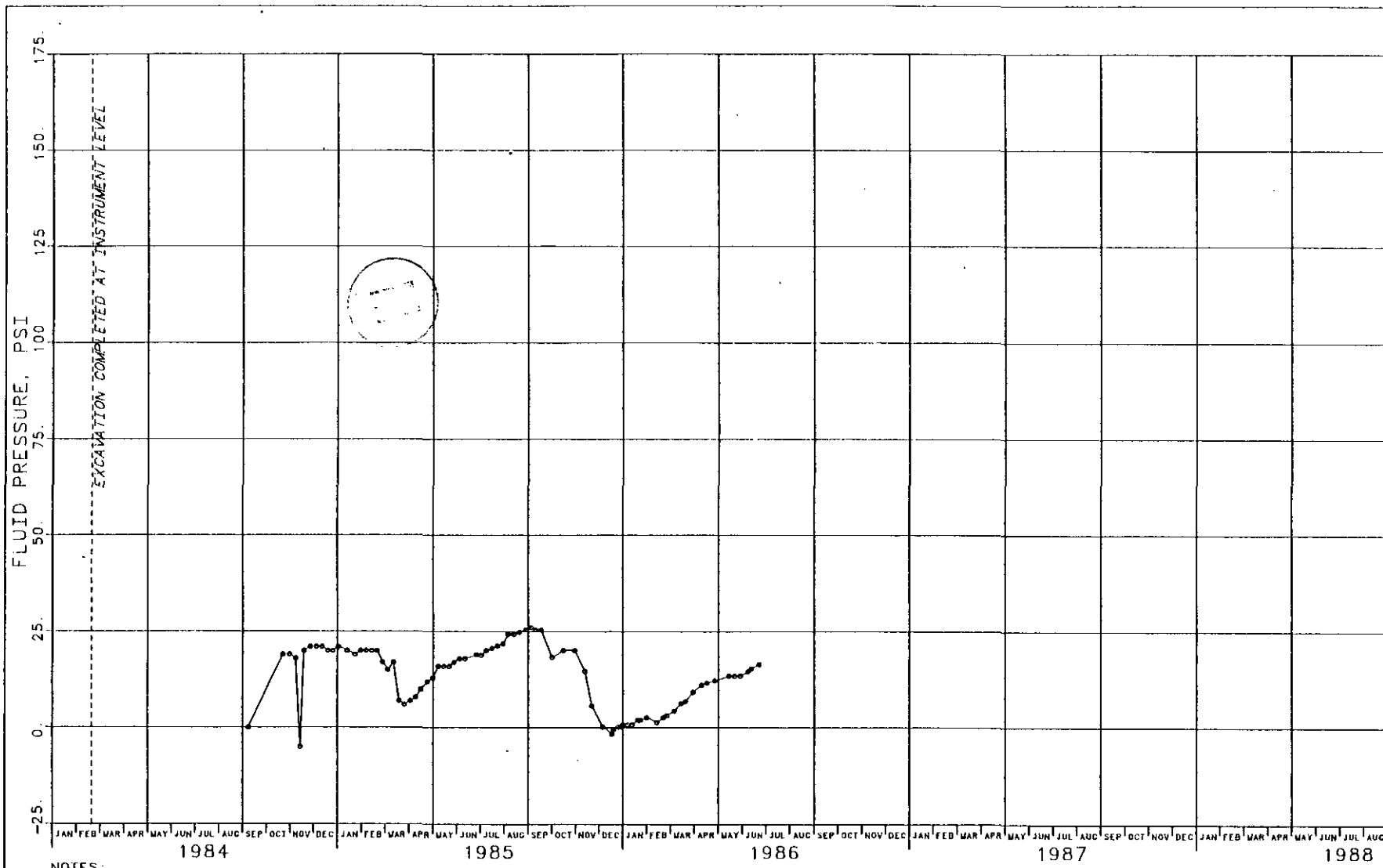


NOTES

1 CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR. 5, 1984

FIGURE J-3  
 PIEZOMETER 31X-PE-00203  
 WASTE SHAFT - EL 2798 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH

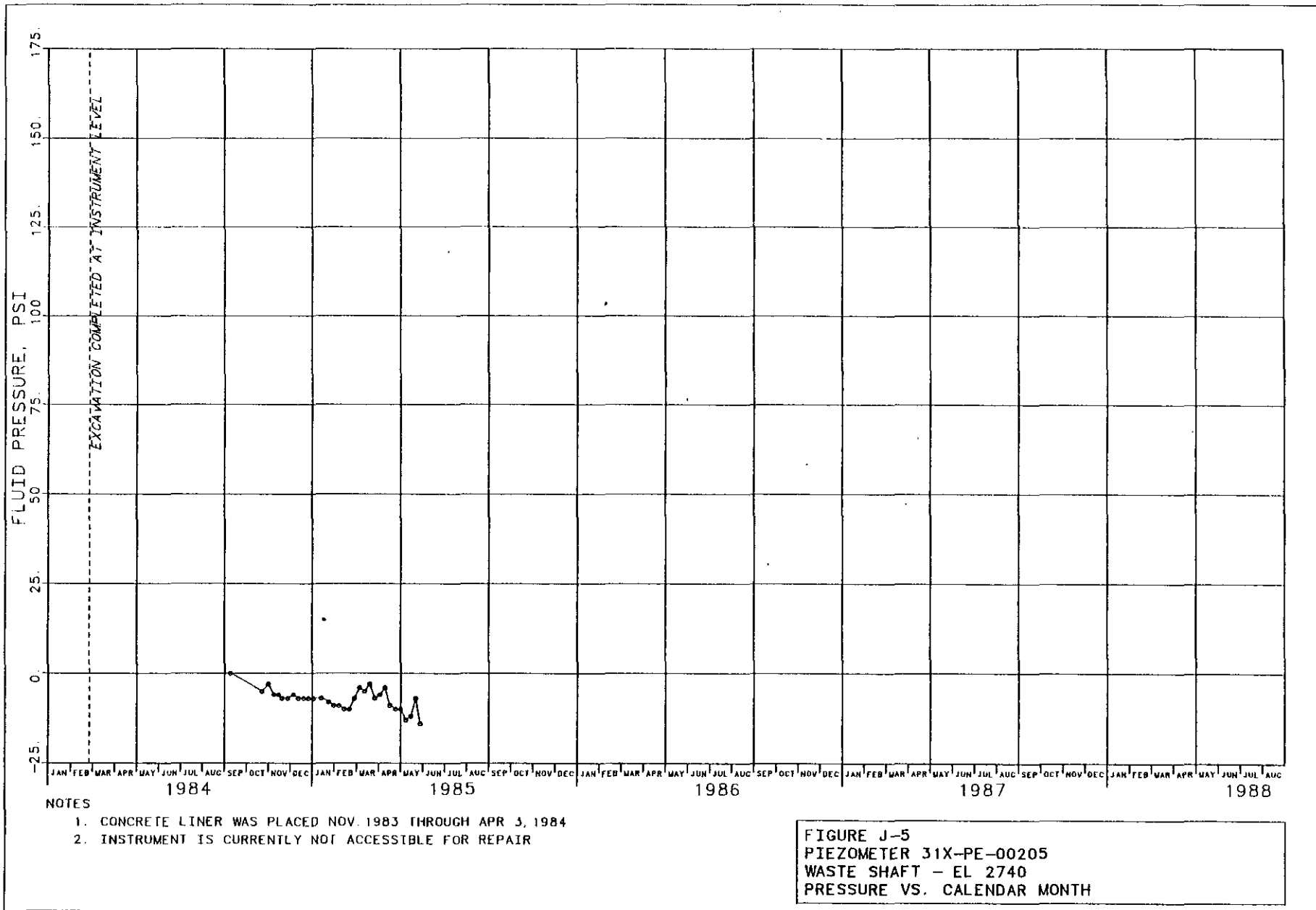




NOTES:

1. CONCRETE LINER WAS PLACED NOV 1983 THROUGH APR. 3, 1984.

FIGURE J-4  
 PIEZOMETER 31X-PE-00204  
 WASTE SHAFT - EL 2798 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH



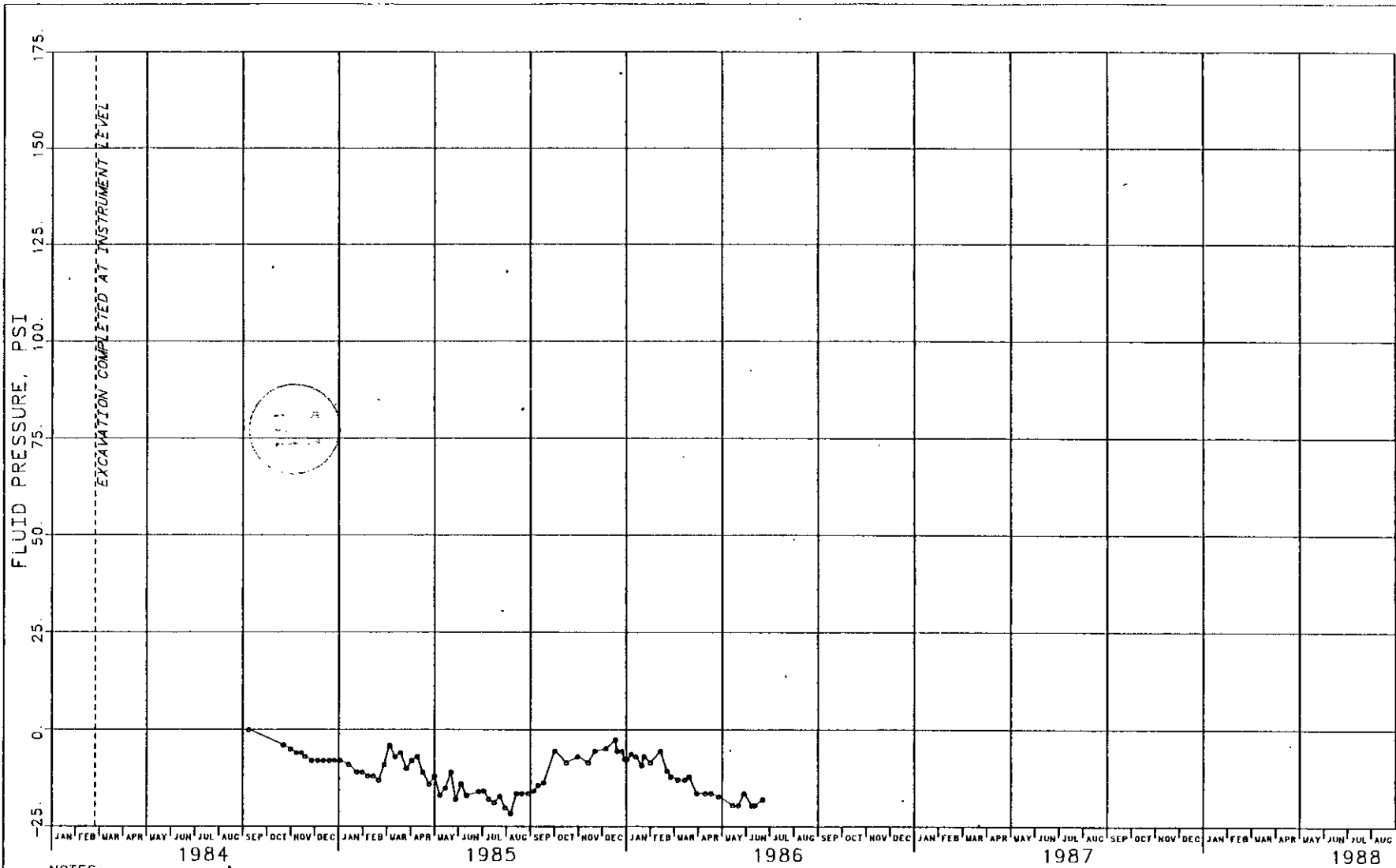
NOTES

- 1. CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR 3, 1984
- 2. INSTRUMENT IS CURRENTLY NOT ACCESSIBLE FOR REPAIR

FIGURE J-5  
 PIEZOMETER 31X-PE-00205  
 WASTE SHAFT - EL 2740  
 PRESSURE VS. CALENDAR MONTH



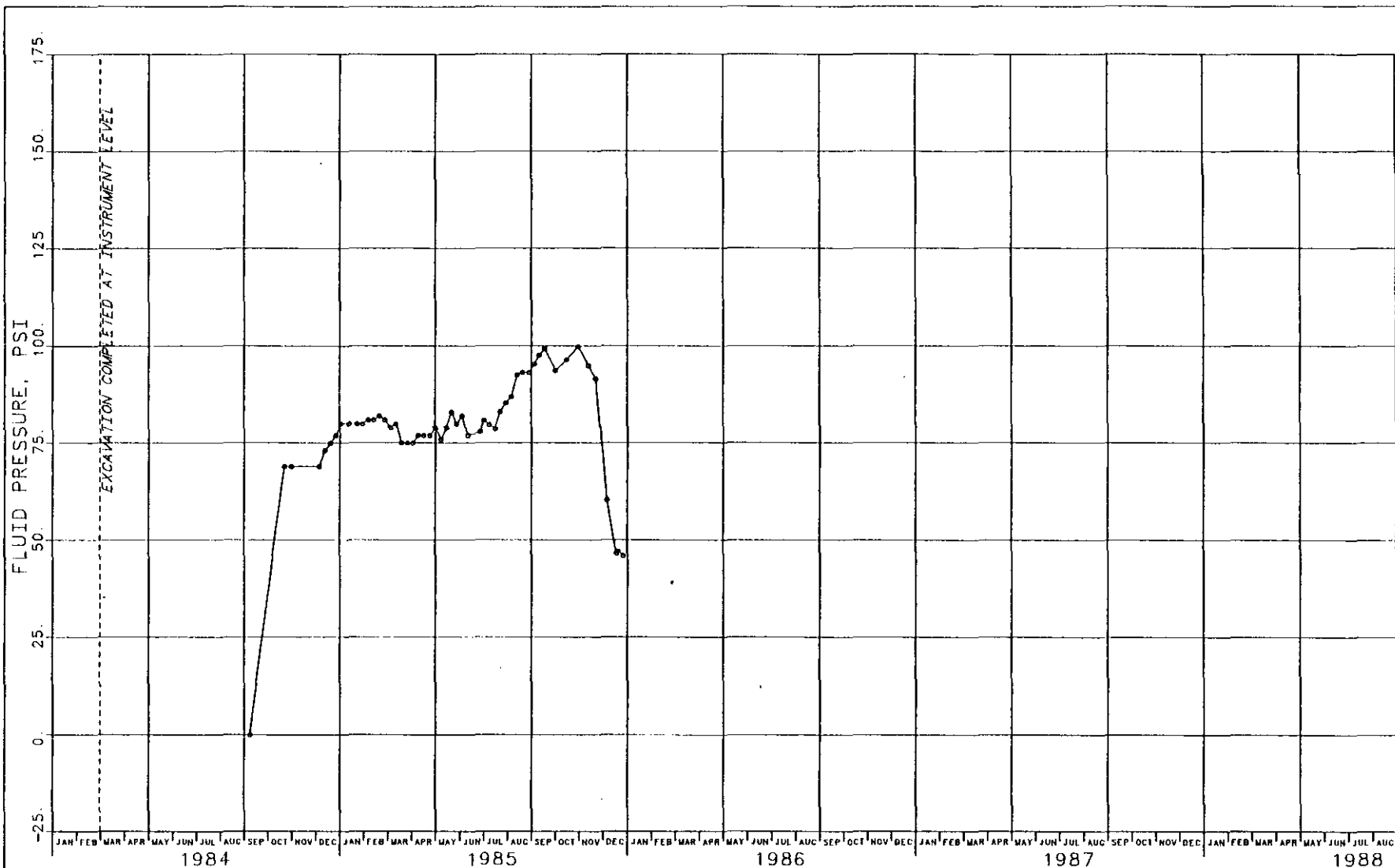




NOTES:

1. CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR. 3, 1984.

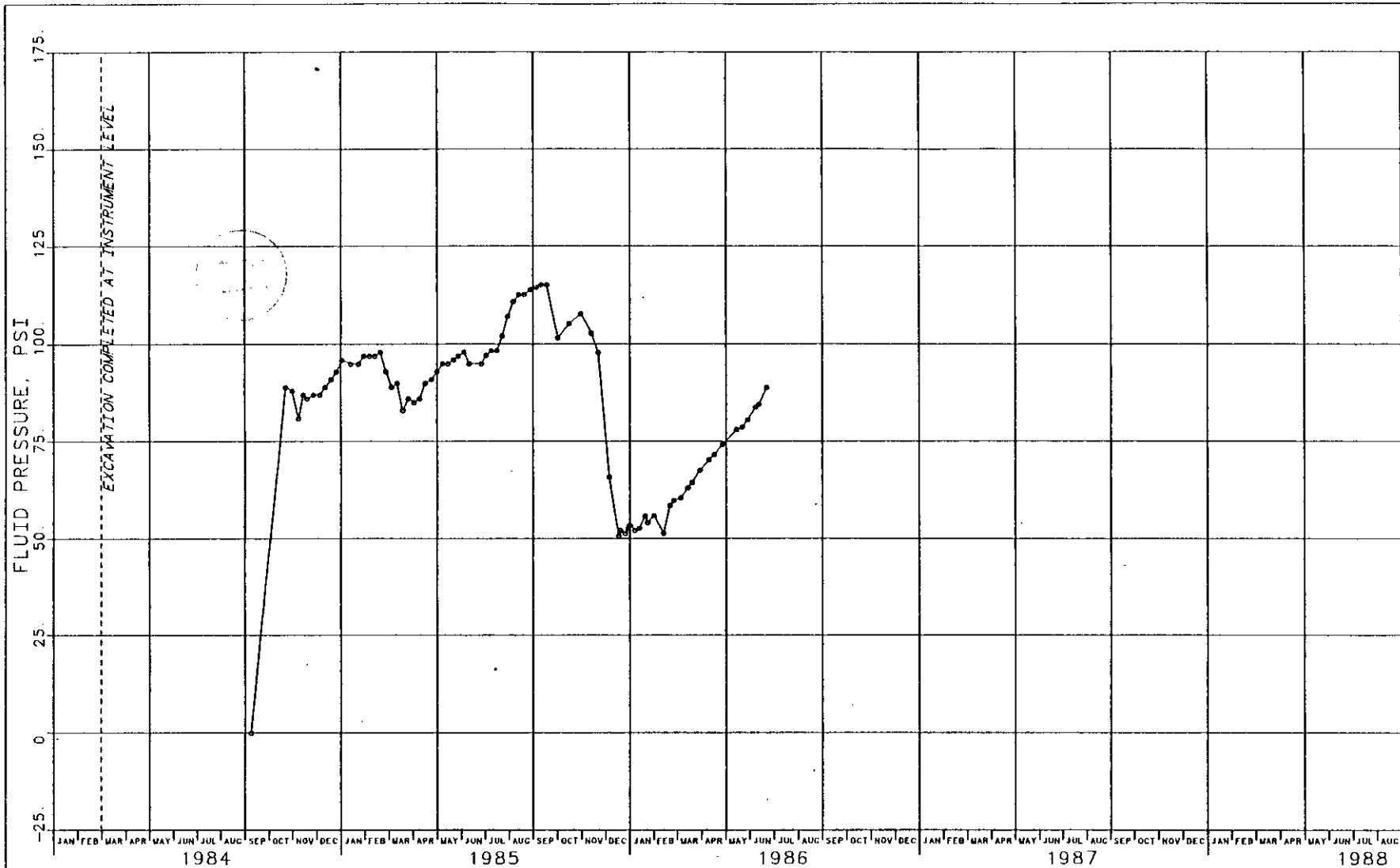
FIGURE J-6  
 PIEZOMETER 31X-PE-00206  
 WASTE SHAFT - EL 2740  
 PRESSURE VS. CALENDAR MONTH



NOTES:

1. CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR. 3, 1984.
2. INSTRUMENT IS CURRENTLY NOT ACCESSIBLE FOR REPAIR.

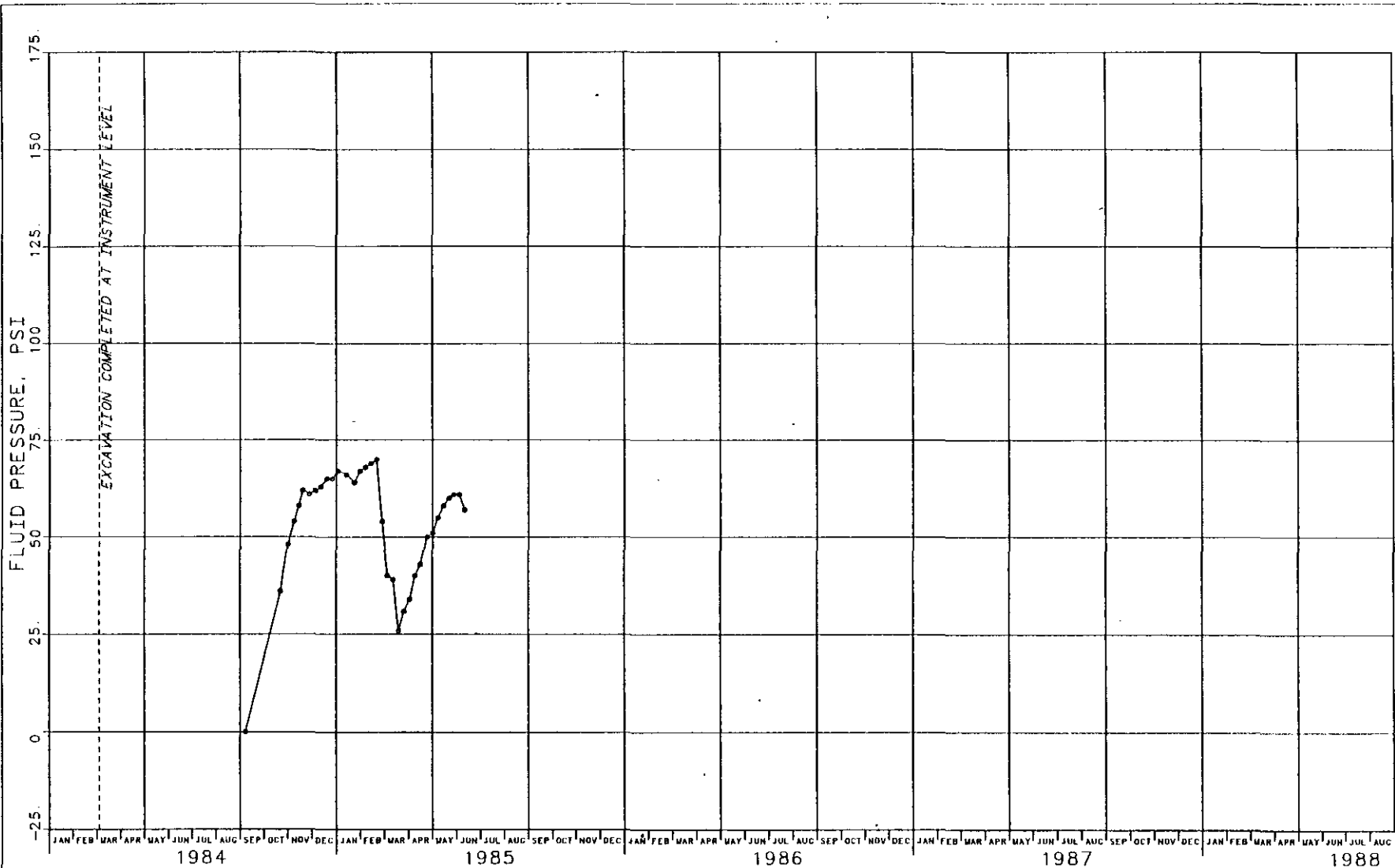
FIGURE J-7  
 PIEZOMETER 31X-PE-00207  
 WASTE SHAFT - EL 2692 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH



NOTES

1. CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR. 3, 1984.

FIGURE J-8  
 PIEZOMETER 31X-PE-00208  
 WASTE SHAFT - EL 2692 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH

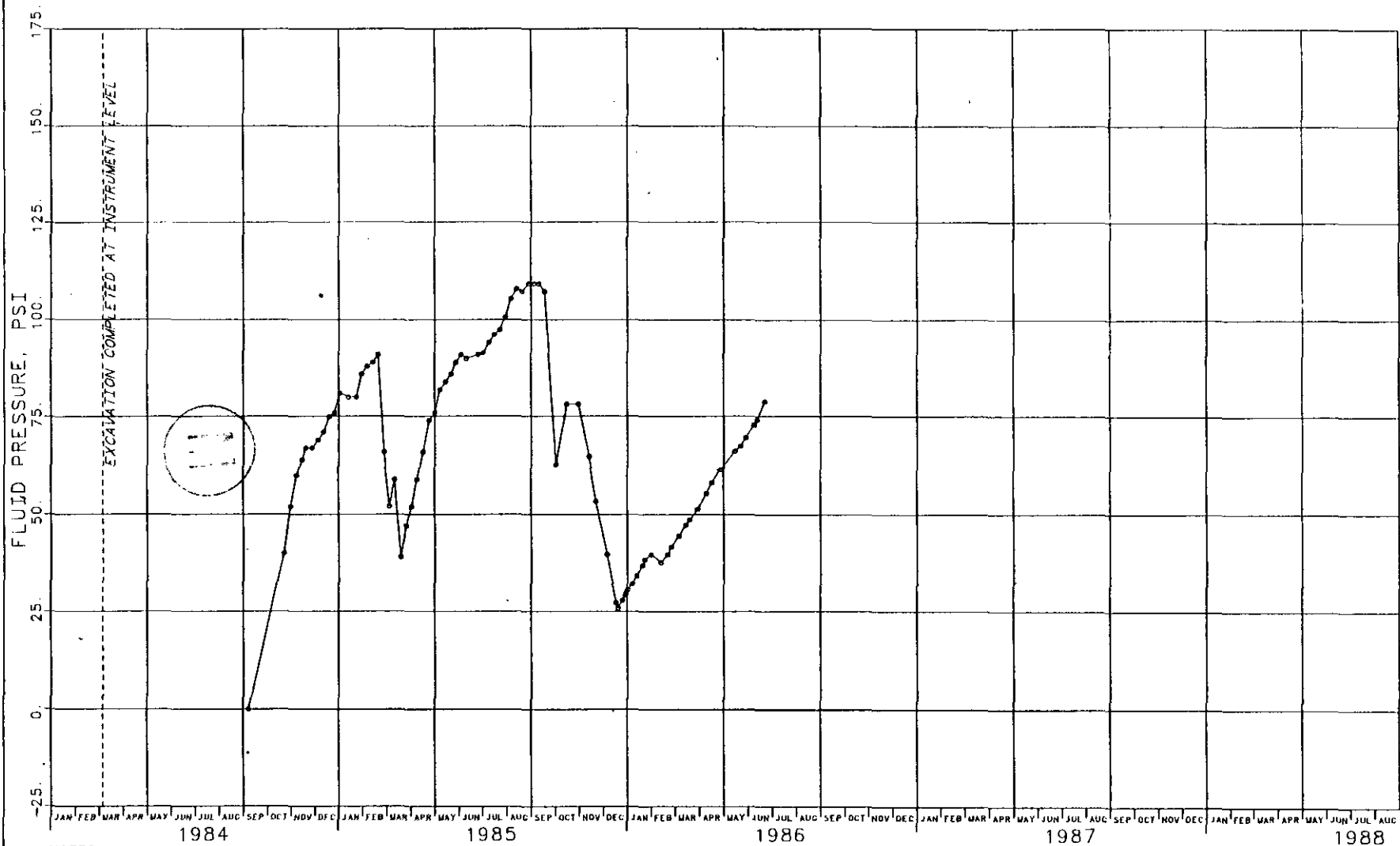


NOTES

- 1 CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR 3, 1984
- 2 INSTRUMENT IS CURRENTLY NOT ACCESSIBLE FOR REPAIR

FIGURE J-9  
 PIEZOMETER 31X-PE-00209  
 WASTE SHAFT - EL 2651  
 PRESSURE VS. CALENDAR MONTH

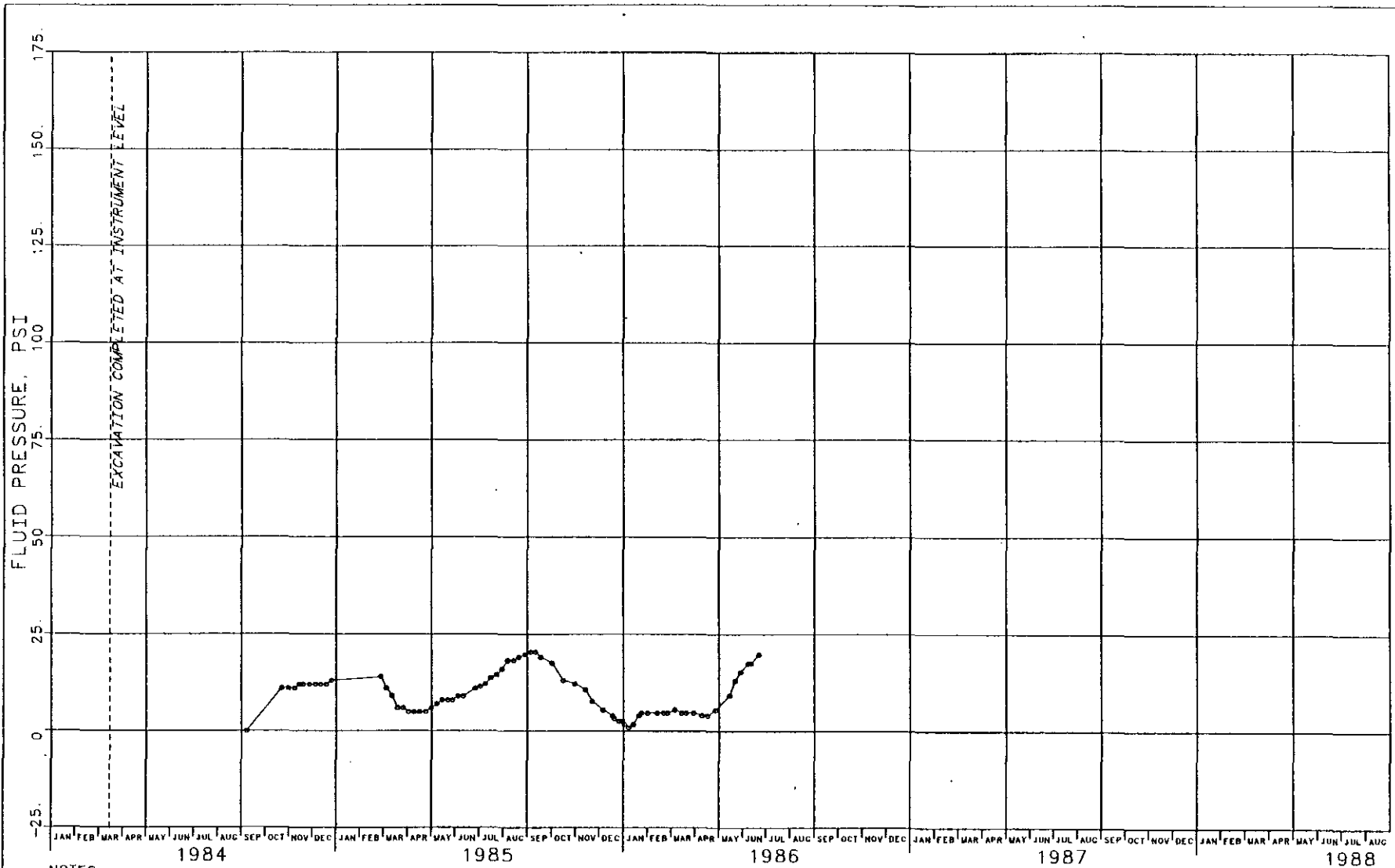




NOTES

1 CONCRETE LINER WAS PLACED NOV. 1983 THROUGH APR. 3, 1984

FIGURE J-10  
 PIEZOMETER 31X-PE-00210  
 WASTE SHAFT - EL 2651  
 PRESSURE VS. CALENDAR MONTH

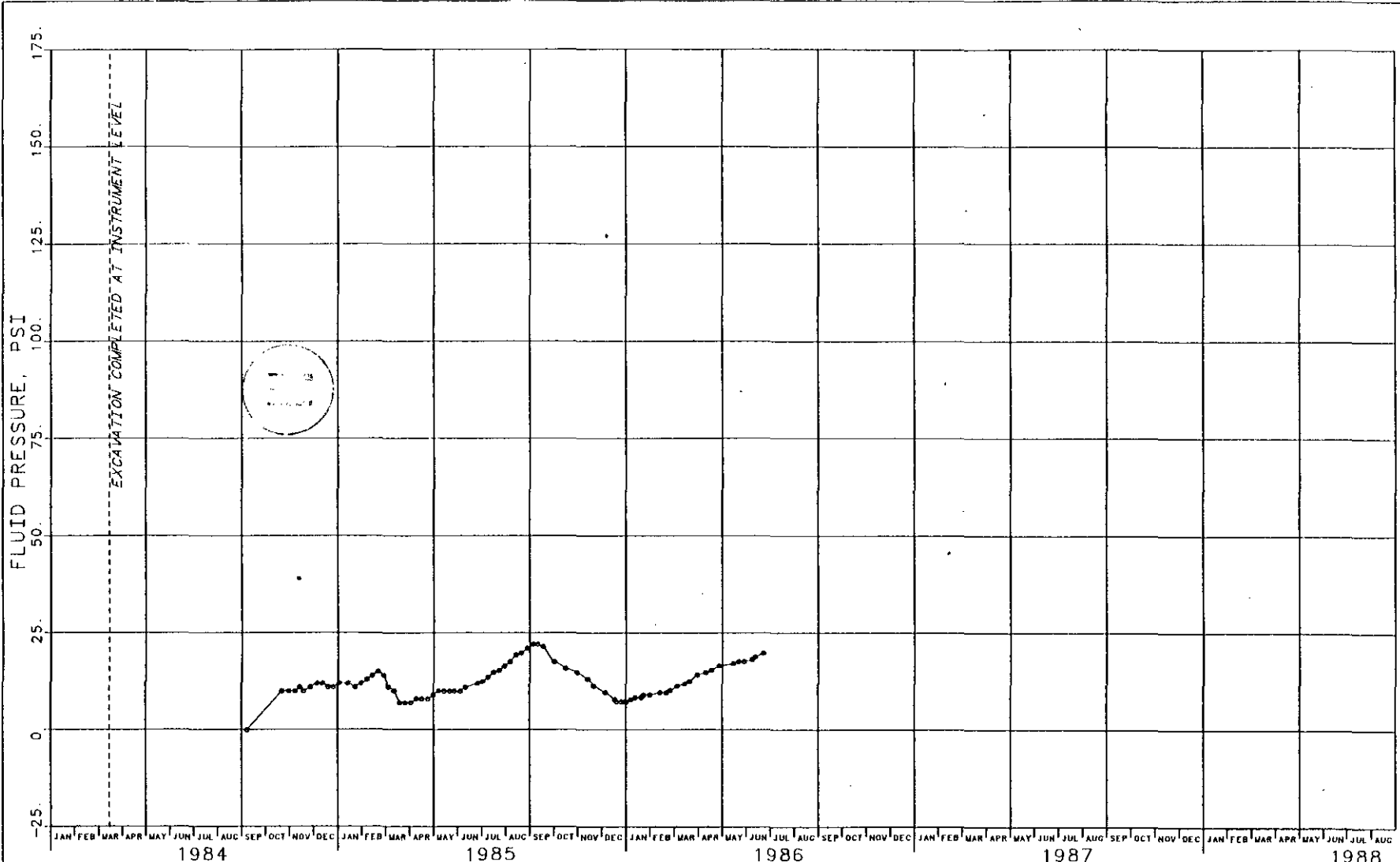


NOTES

1. CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 3, 1984.

FIGURE J-11  
 PIEZOMETER 31X-PE-00211  
 WASTE SHAFT KEY - EL 2564  
 PRESSURE VS. CALENDAR MONTH

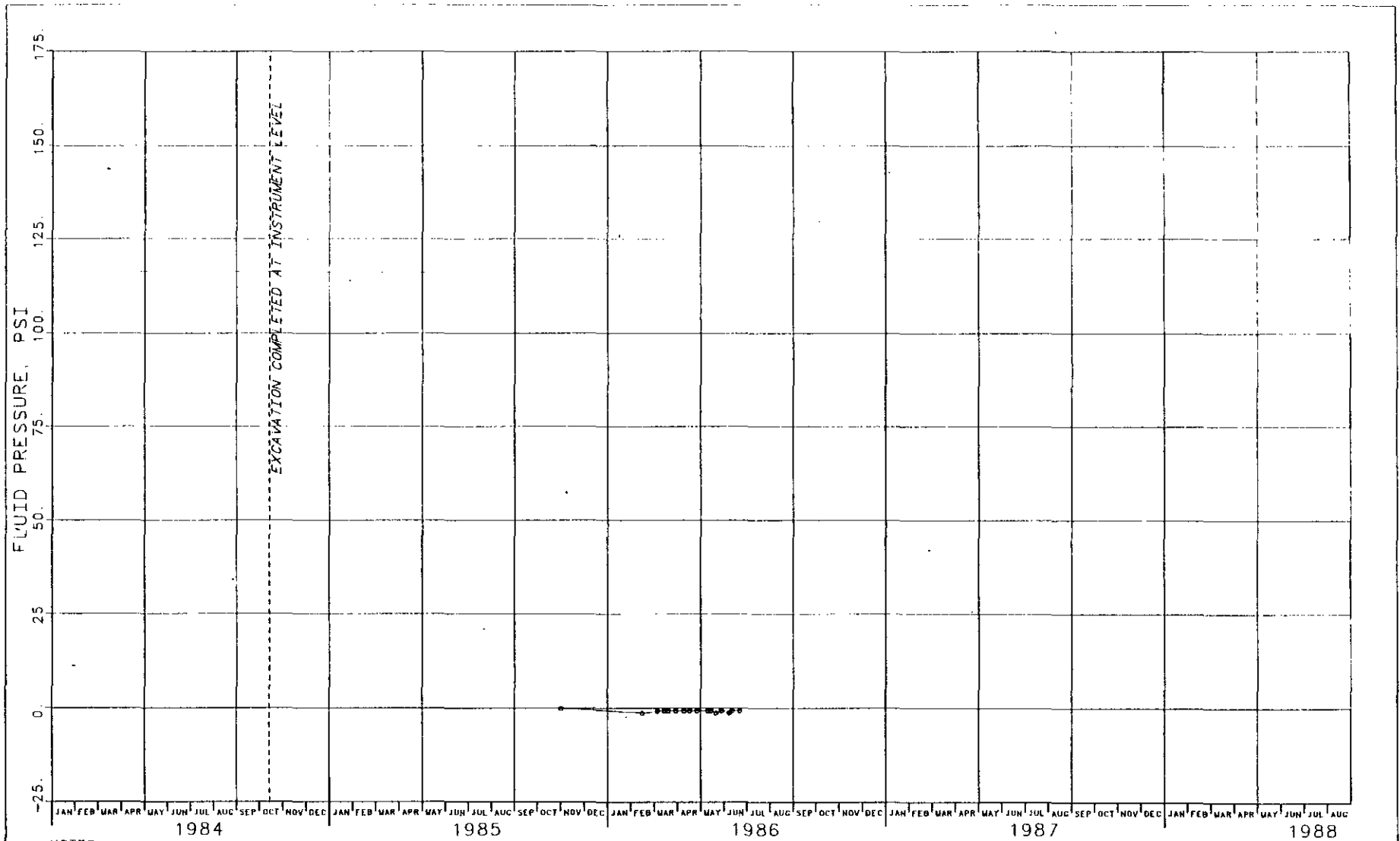




NOTES:

1. CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 3, 1984.

FIGURE J-12  
 PIEZOMETER 31X-PE-00212  
 WASTE SHAFT KEY - EL 2564  
 PRESSURE VS. CALENDAR MONTH



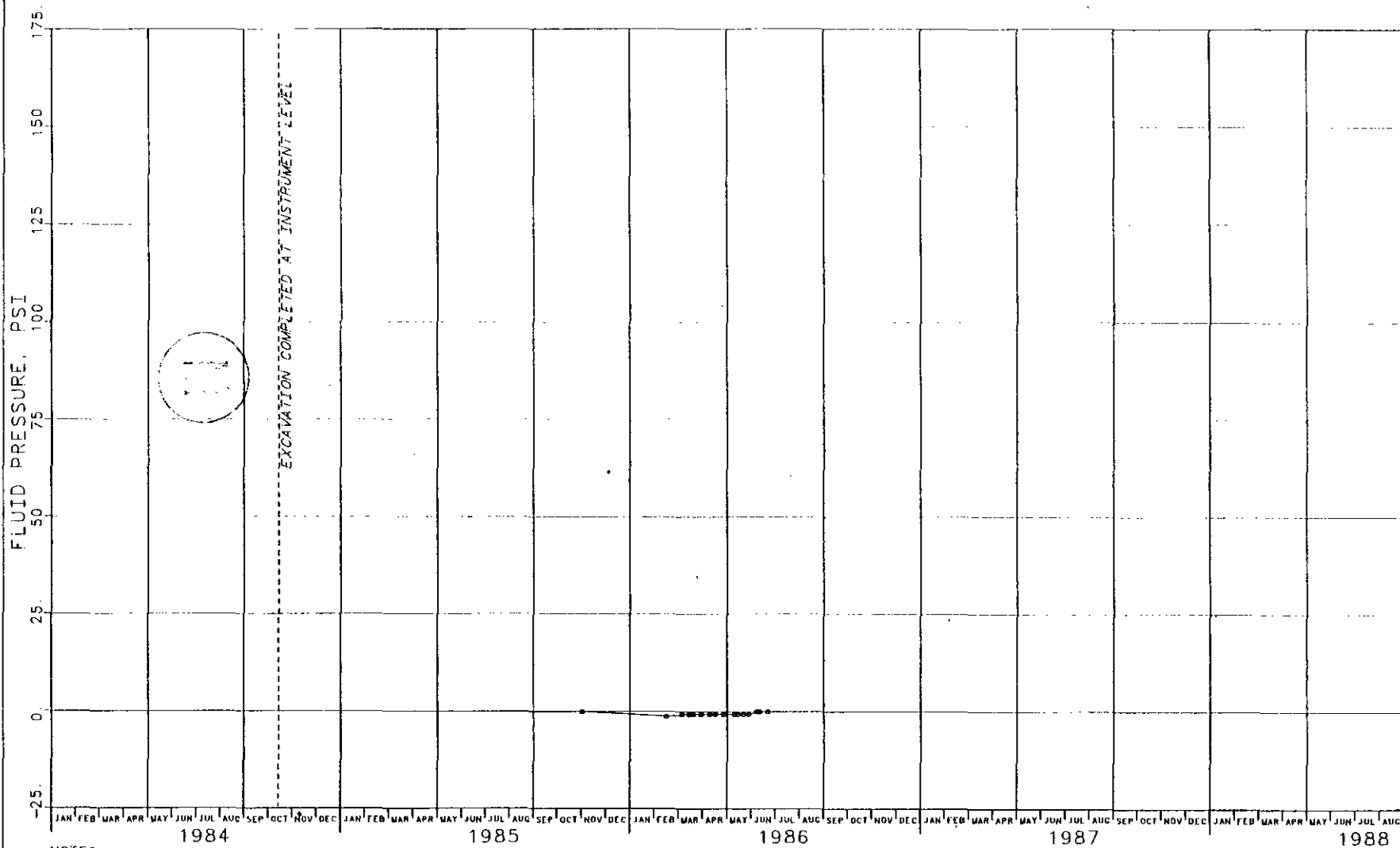
NOTES:

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984

FIGURE J-13  
 PIEZOMETER 35X-PE-00201  
 EXHAUST SHAFT - EL 2865  
 PRESSURE VS. CALENDAR MONTH



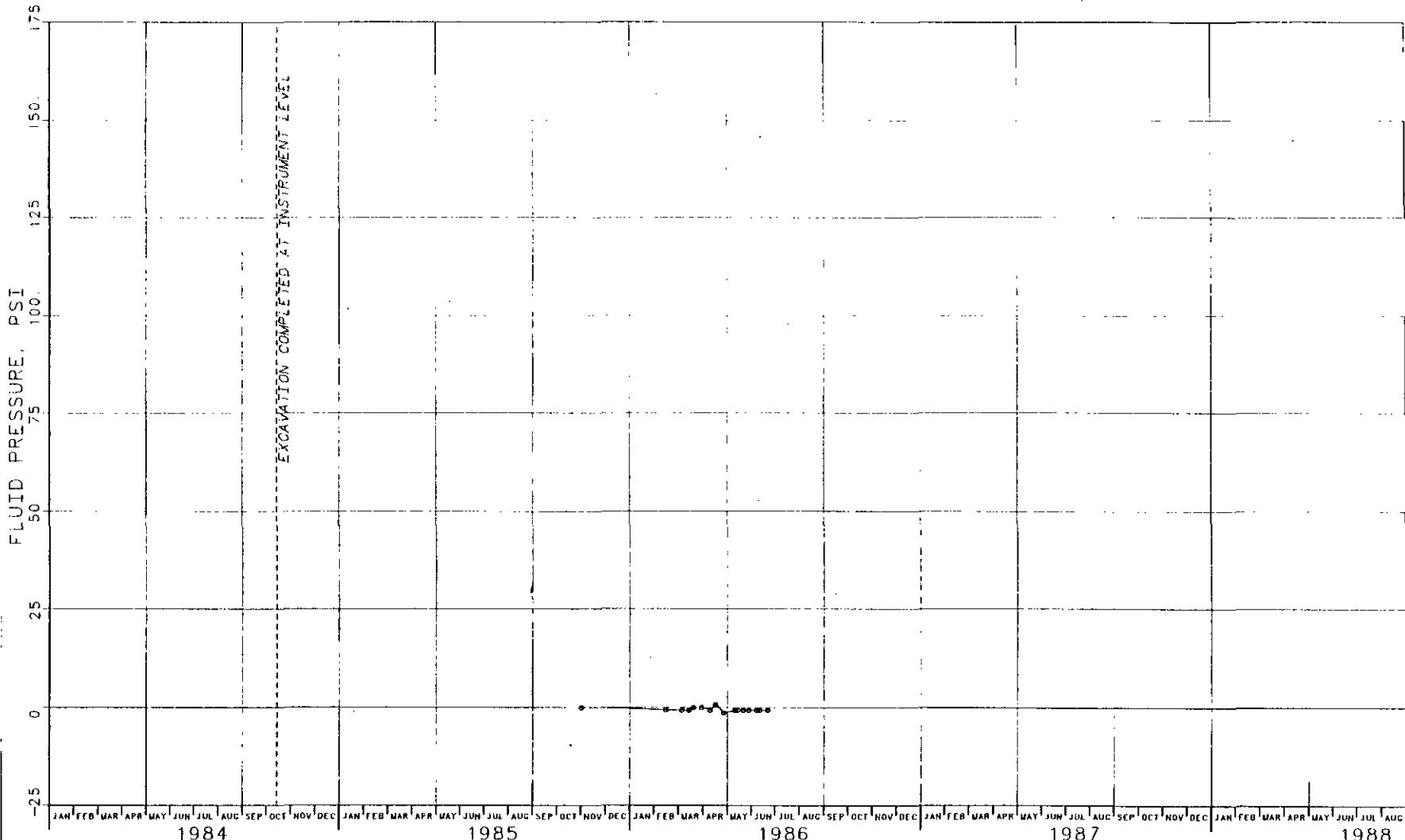




NOTES:

1. CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984

FIGURE J-14  
 PIEZOMETER 35X-PE-00202  
 EXHAUST SHAFT - EL 2865  
 PRESSURE VS. CALENDAR MONTH

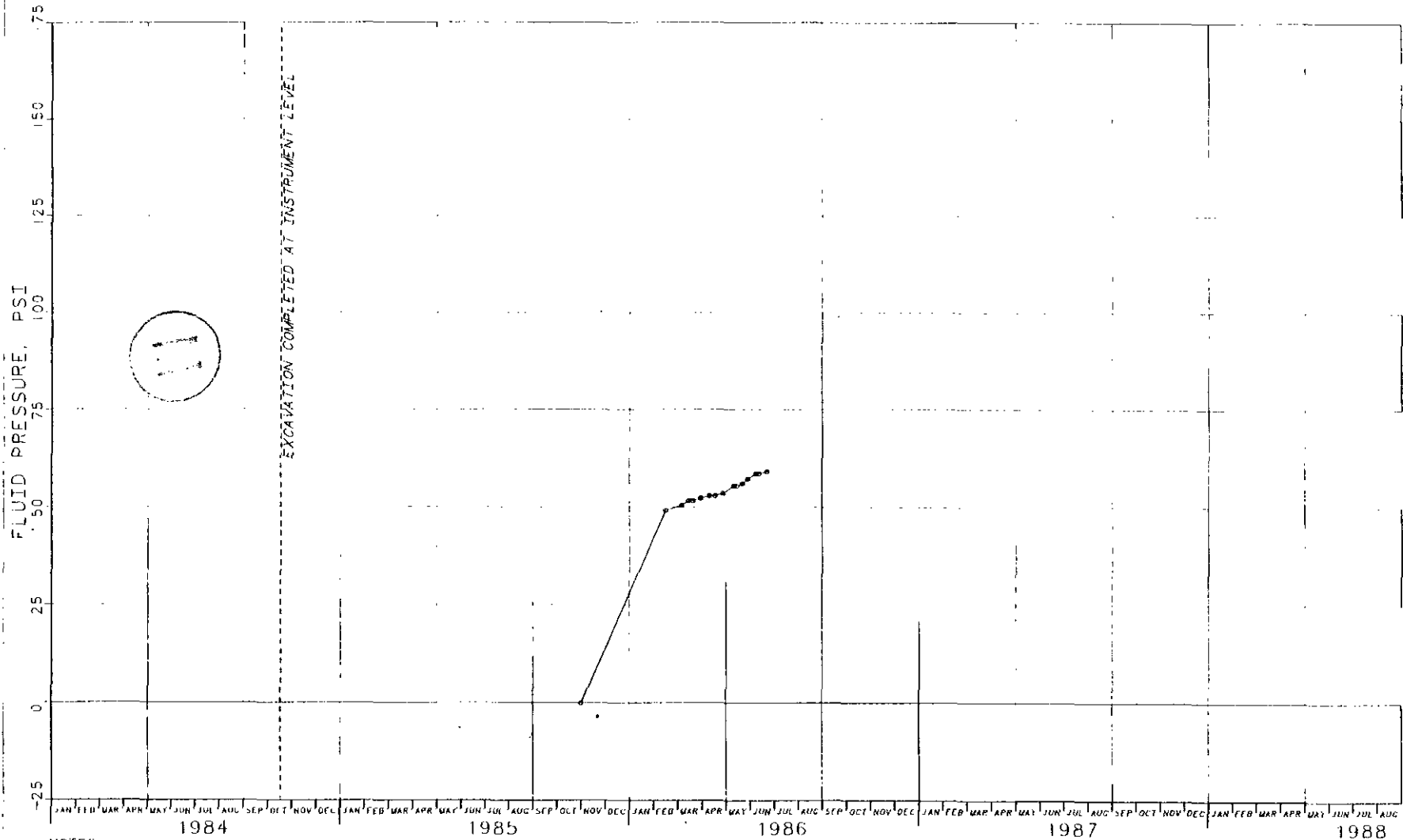


NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984.

FIGURE J-15  
 PIEZOMETER 35X-PE-00203  
 EXHAUST SHAFT - EL 2865  
 PRESSURE VS. CALENDAR MONTH

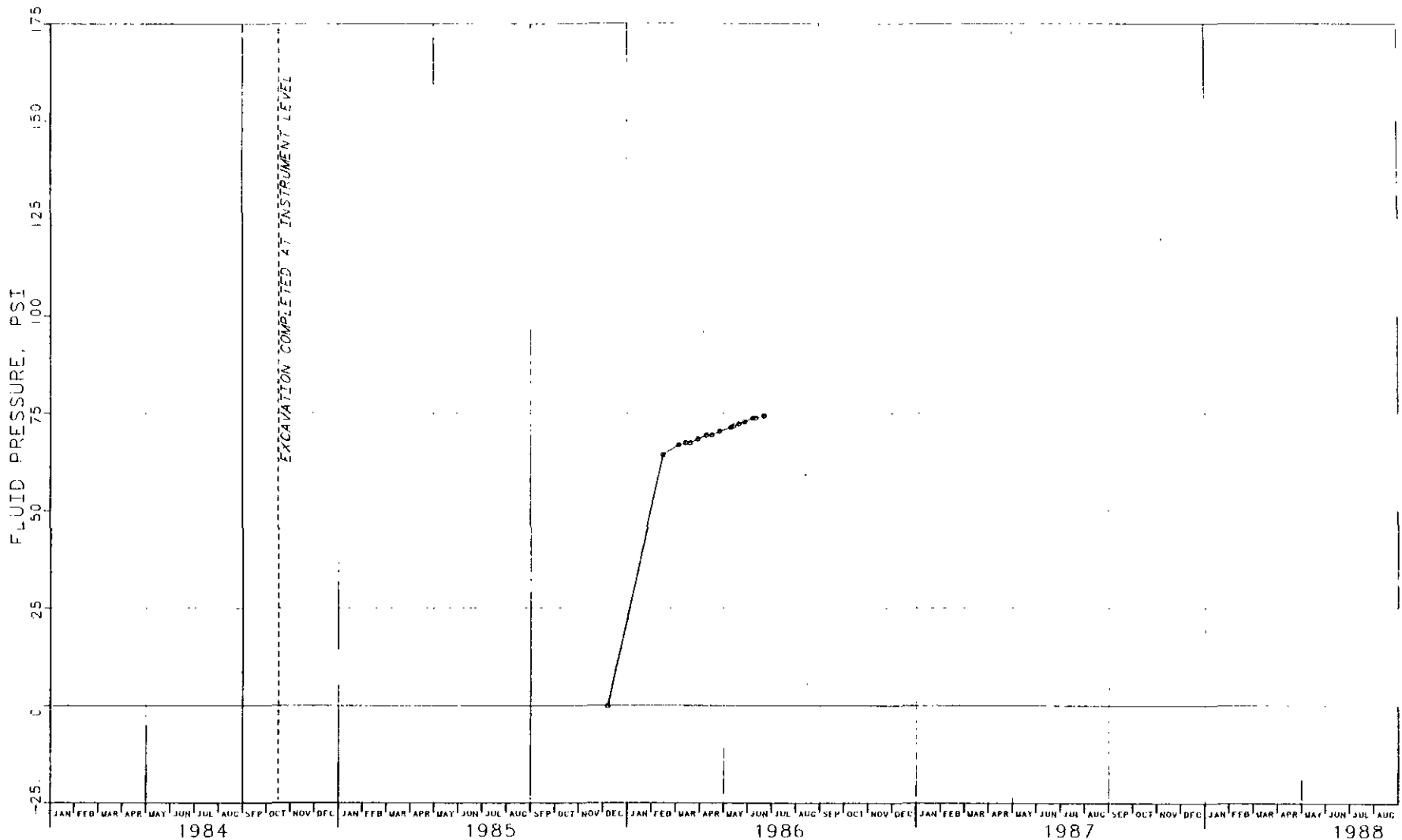




NOTES

1 CONCRTE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984

FIGURE J-16  
 PIEZOMETER 35X-PE-00204  
 EXHAUST SHAFT - EL 2794 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH

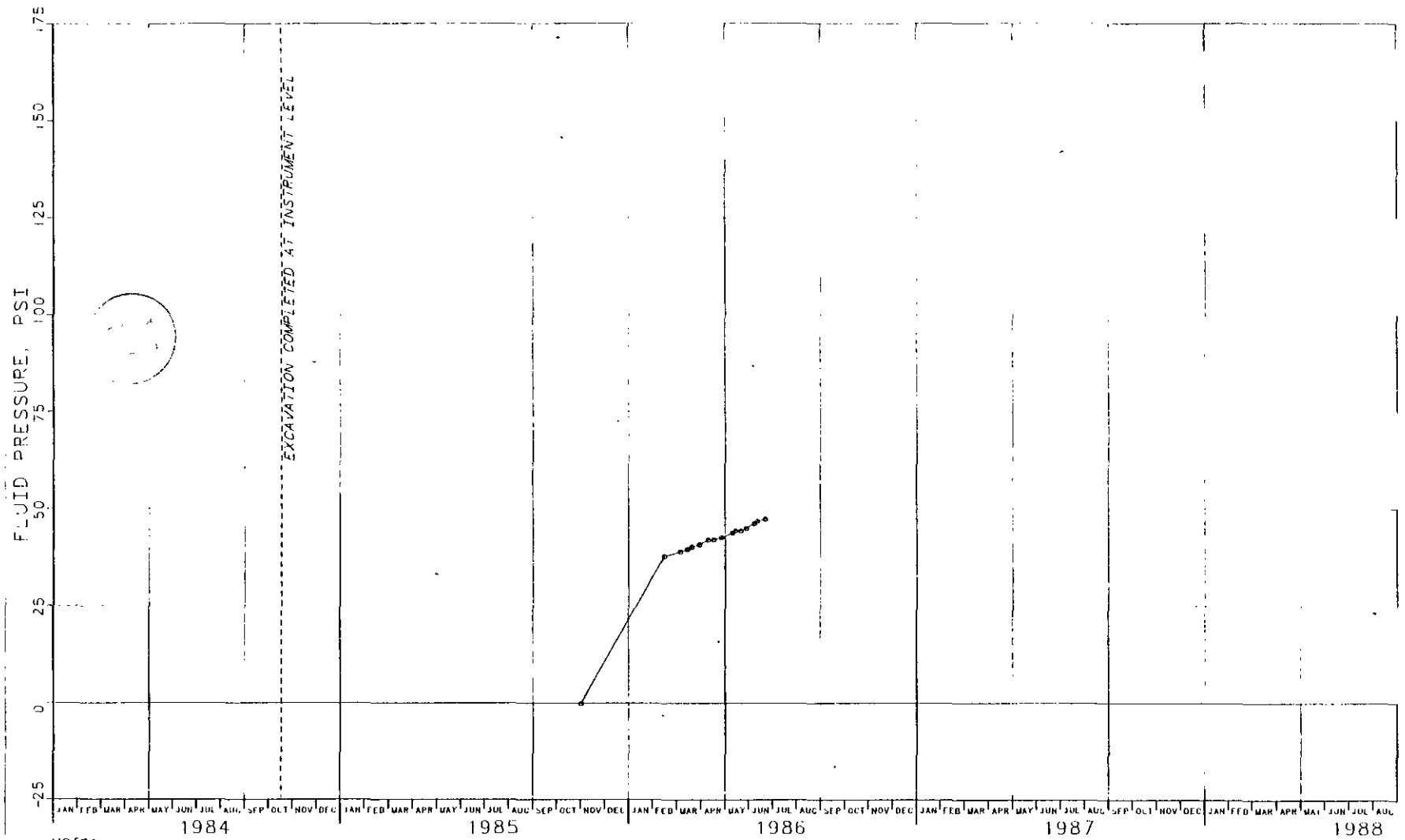


NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984

FIGURE J-17  
 PIEZOMETER 35X-PE-00205  
 EXHAUST SHAFT - EL 2794 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH

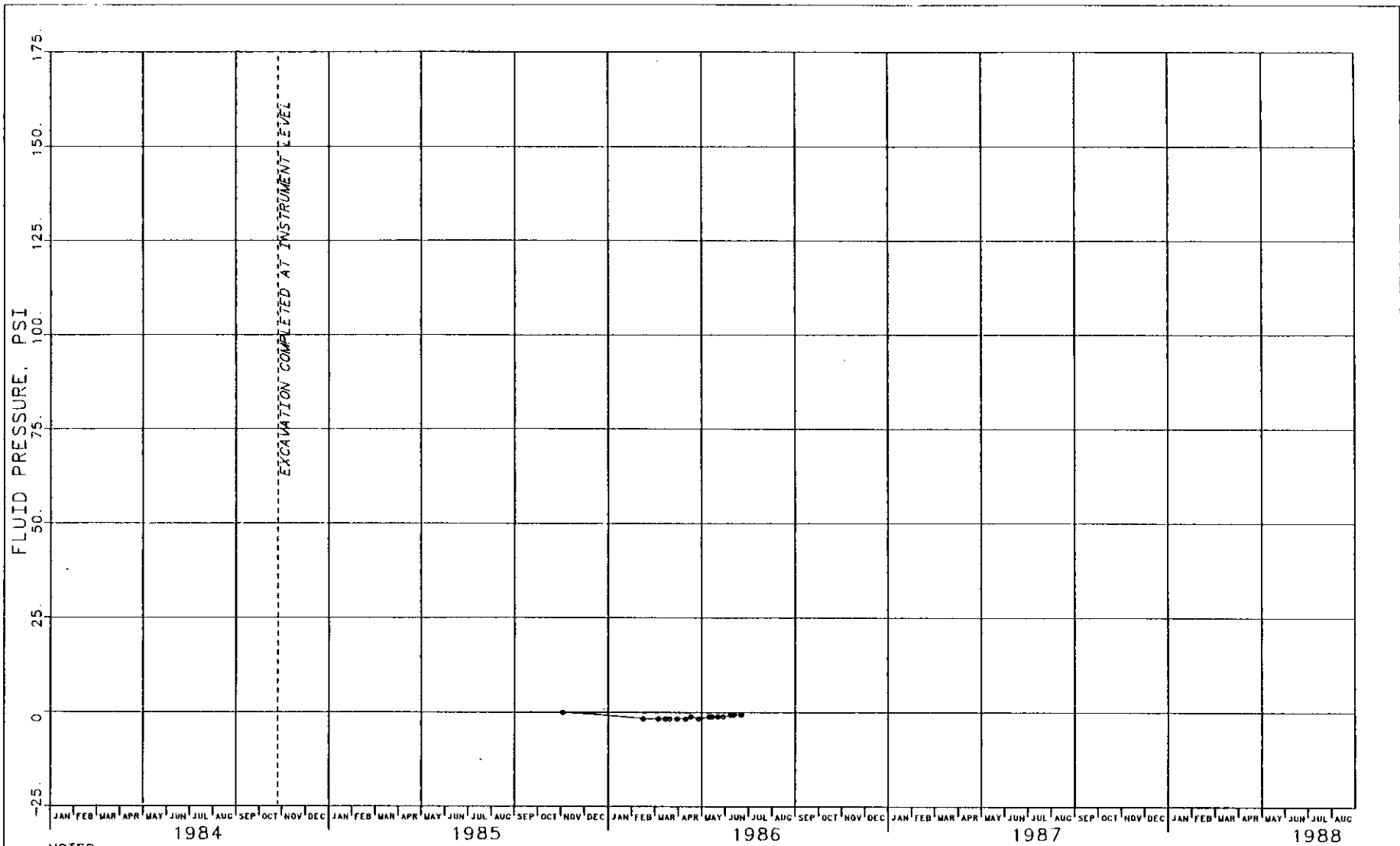




NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984

FIGURE J-18  
 PIEZOMETER 35X-PE-00206  
 EXHAUST SHAFT - EL 2794 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH

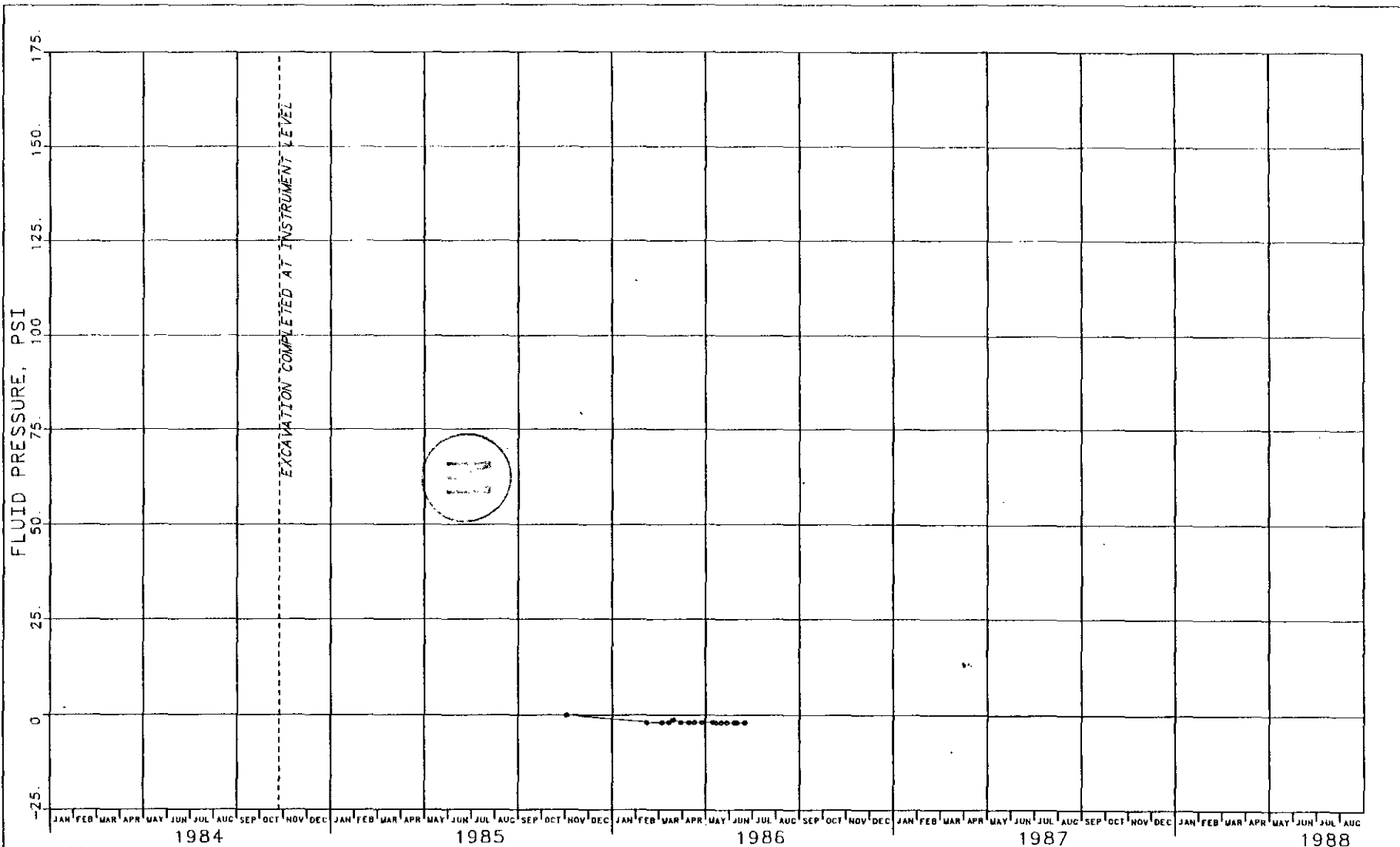


NOTES:

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984.

FIGURE J--19  
 PIEZOMETER 35X-PE-00207  
 EXHAUST SHAFT - EL 2736  
 PRESSURE VS. CALENDAR MONTH

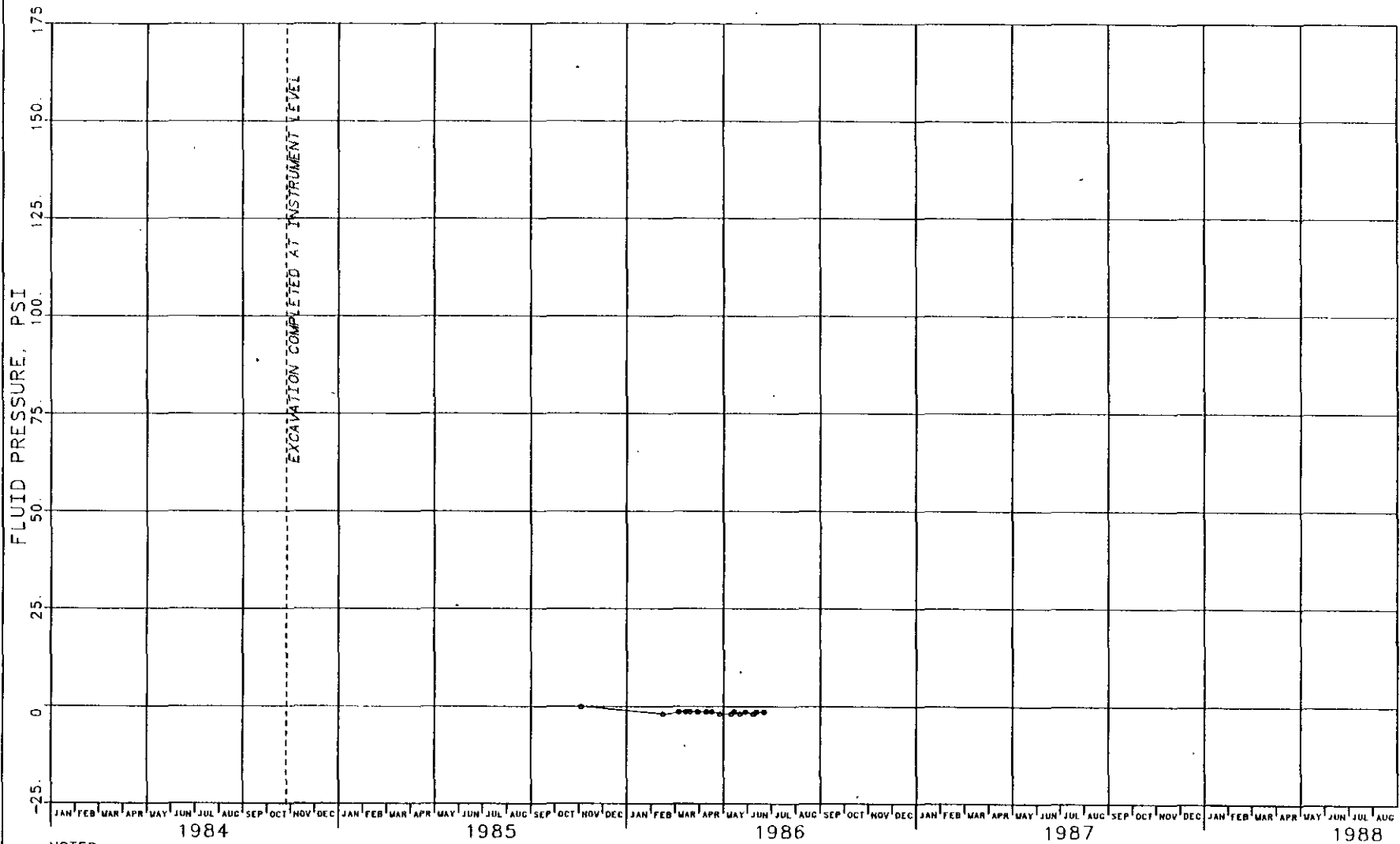
11



NOTES:

1) CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984

FIGURE J-20  
 PIEZOMETER 35X-PE-00208  
 EXHAUST SHAFT - EL 2736  
 PRESSURE VS. CALENDAR MONTH



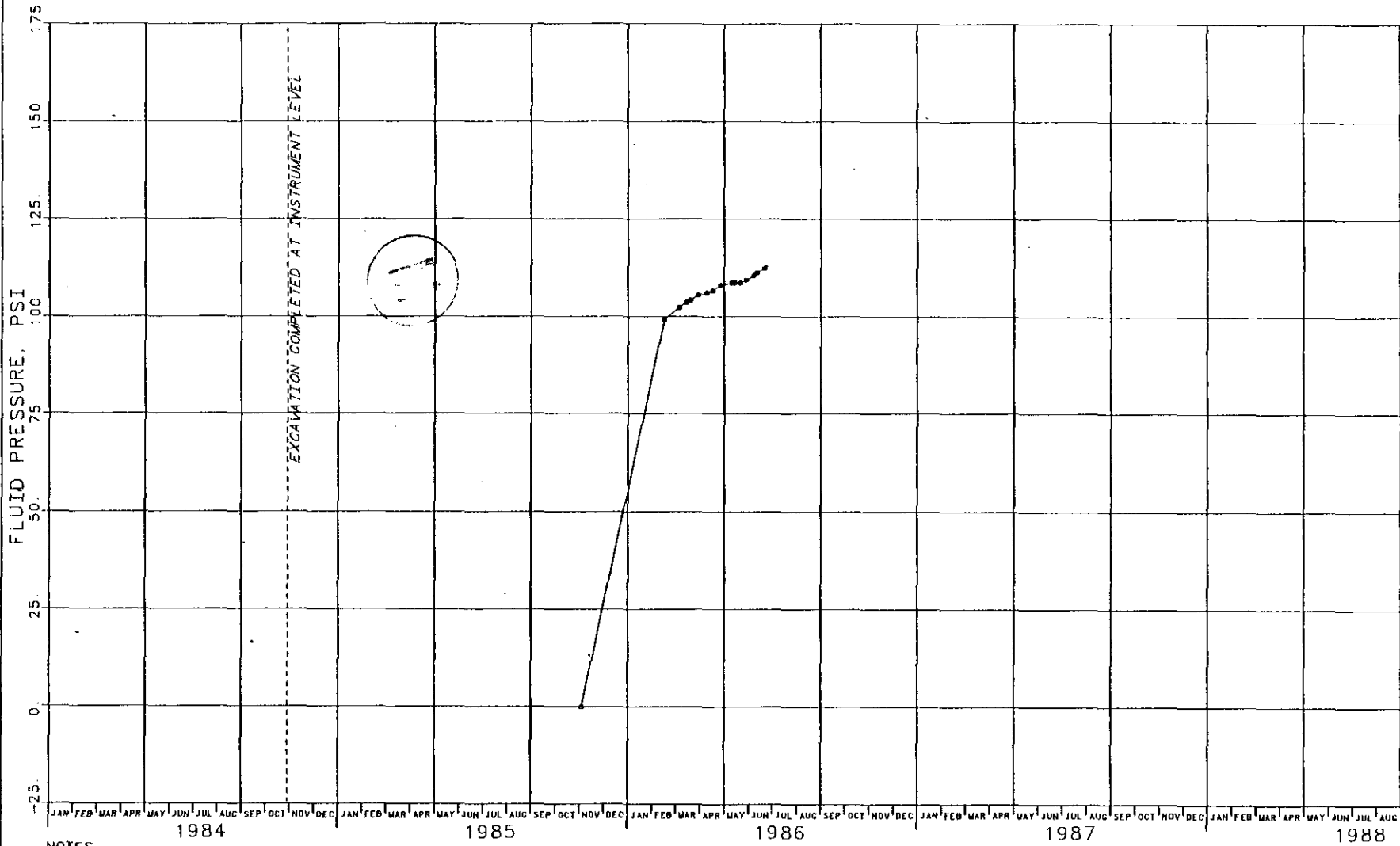
NOTES

1. CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984.

FIGURE J-21  
 PIEZOMETER 35X-PE-00209  
 EXHAUST SHAFT - EL 2736  
 PRESSURE VS. CALENDAR MONTH







NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984

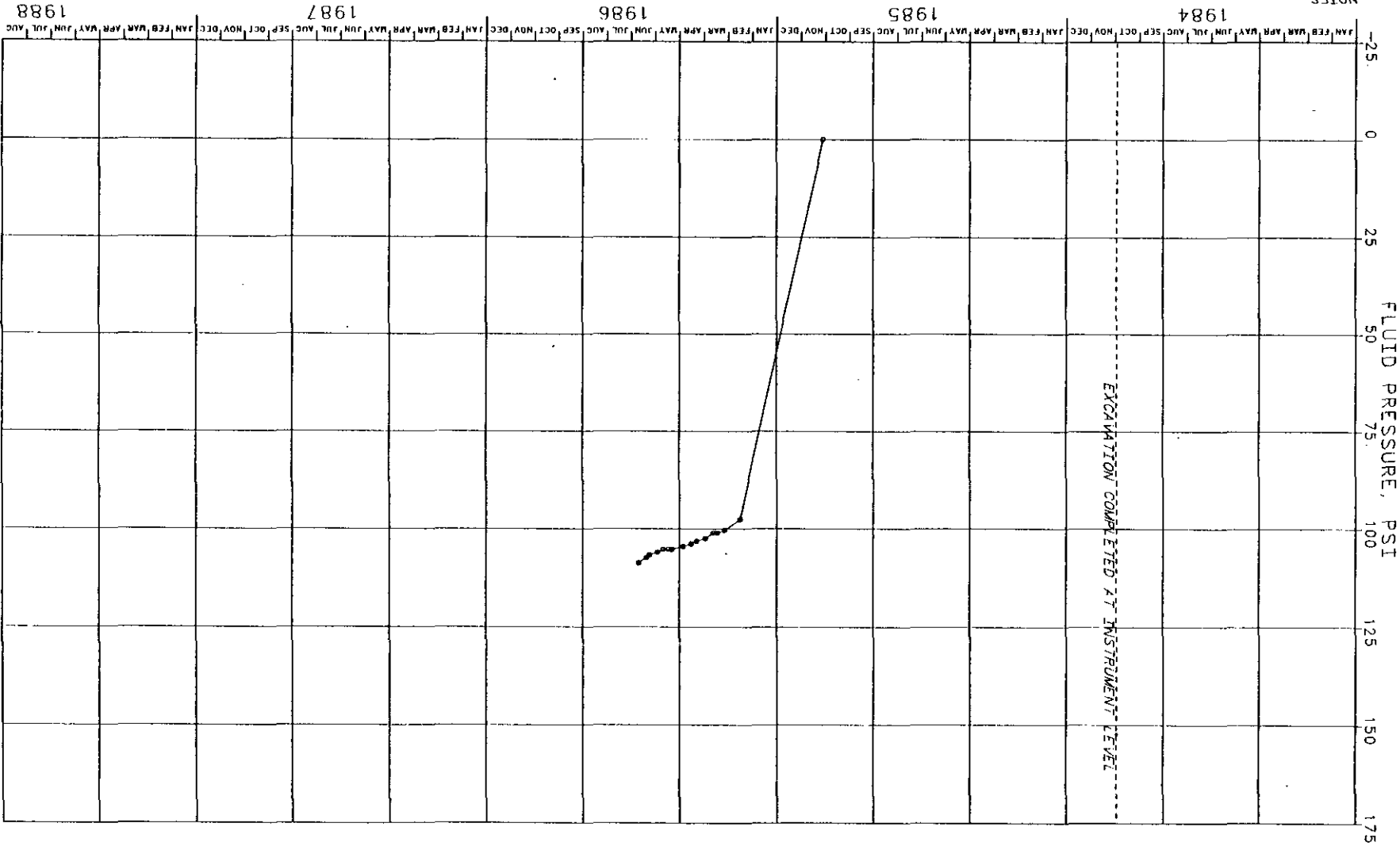
FIGURE J-22  
 PIEZOMETER 35X-PE-00210  
 EXHAUST SHAFT - EL 2688 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH

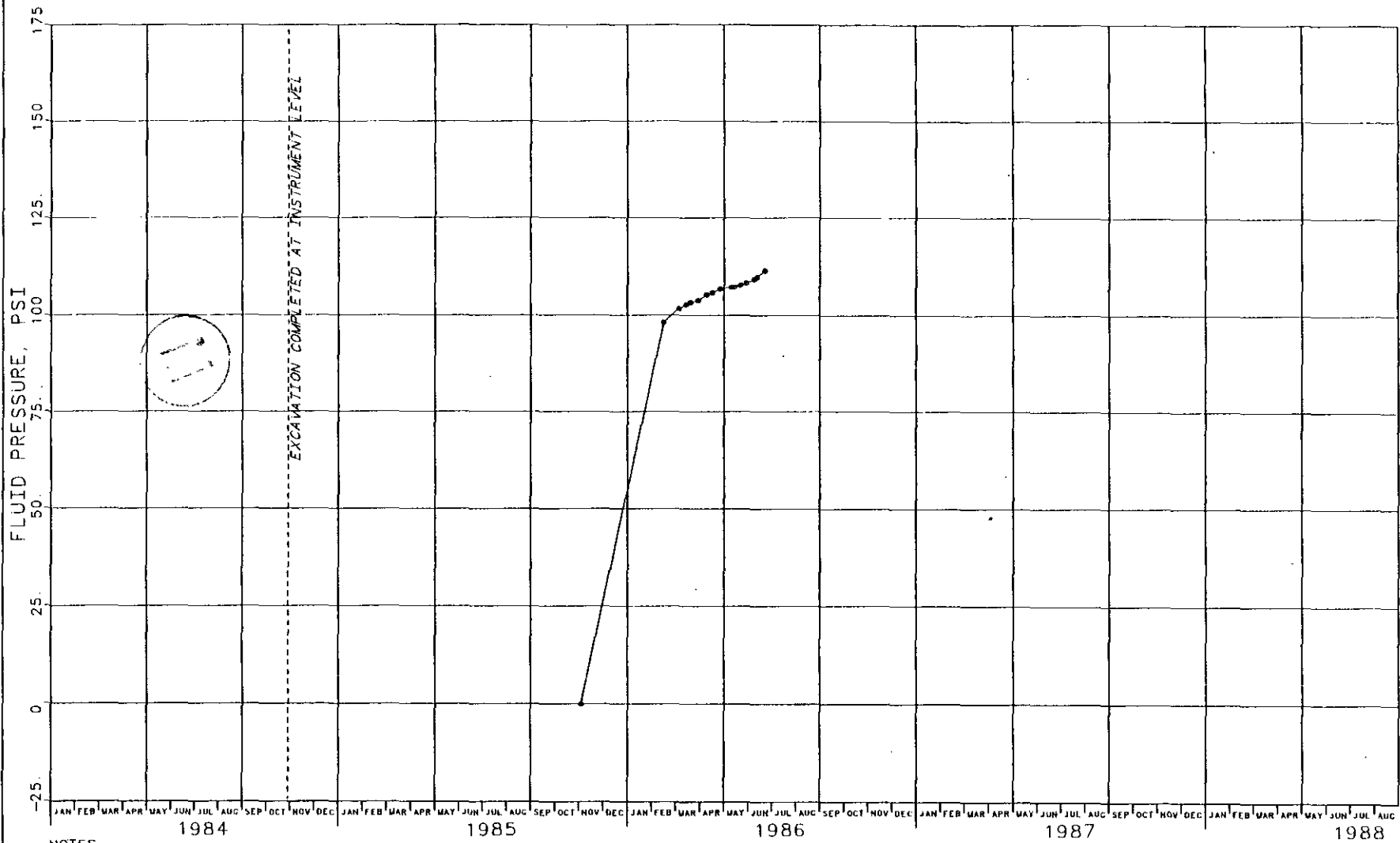


FIGURE J-23  
PIEZOMETER 35X-PE-00211  
EXHAUST SHAFT - EL 2688 (CULEBRA)  
PRESSURE VS. CALENDAR MONTH

1. CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984

NOTES

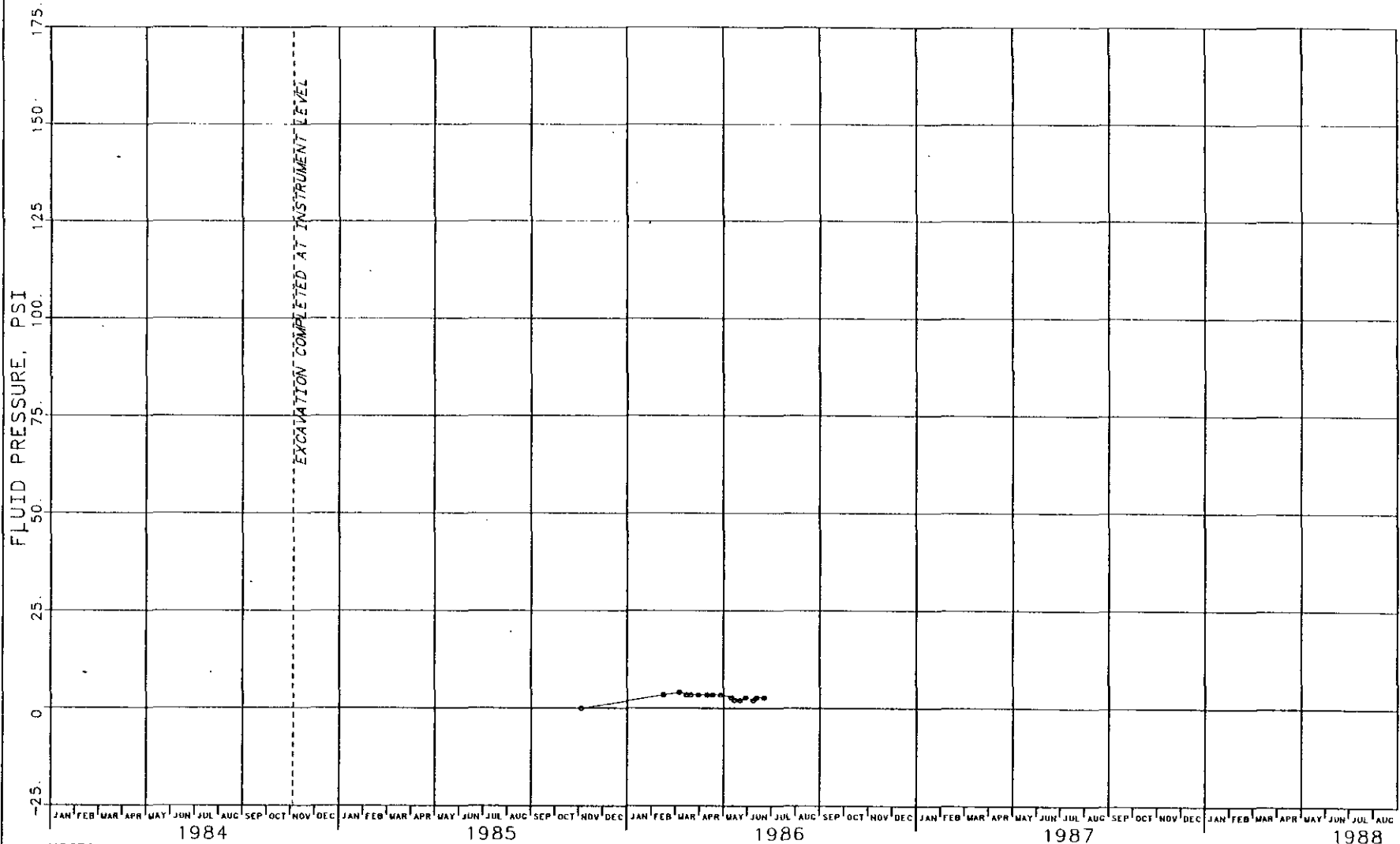




NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984

FIGURE J-24  
 PIEZOMETER 35X-PE-00212  
 EXHAUST SHAFT - EL 2688 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH

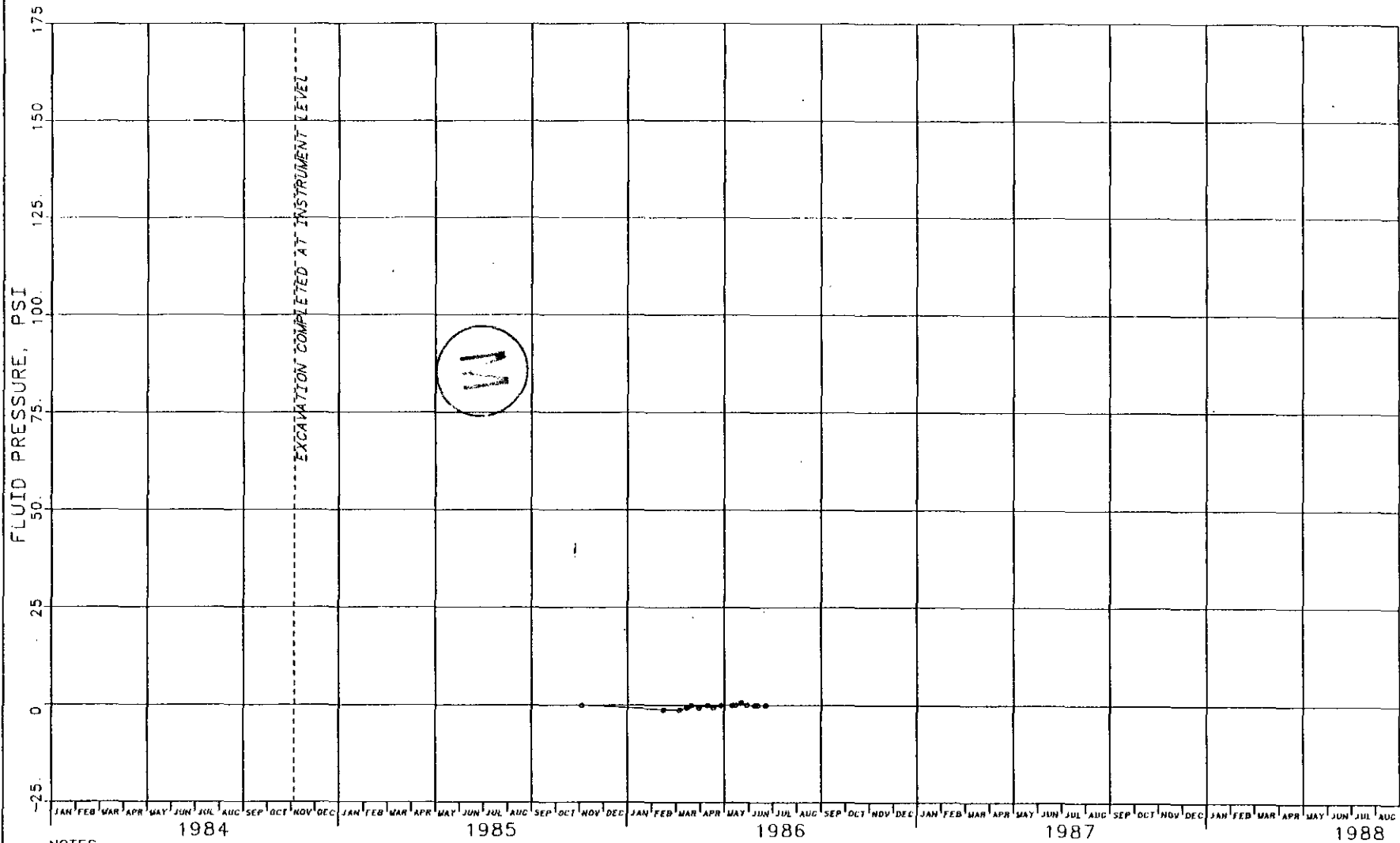


NOTES

1. CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV 29, 1984.

FIGURE J-25  
 PIEZOMETER 35X-PE-00213  
 EXHAUST SHAFT - EL 2641  
 PRESSURE VS. CALENDAR MONTH

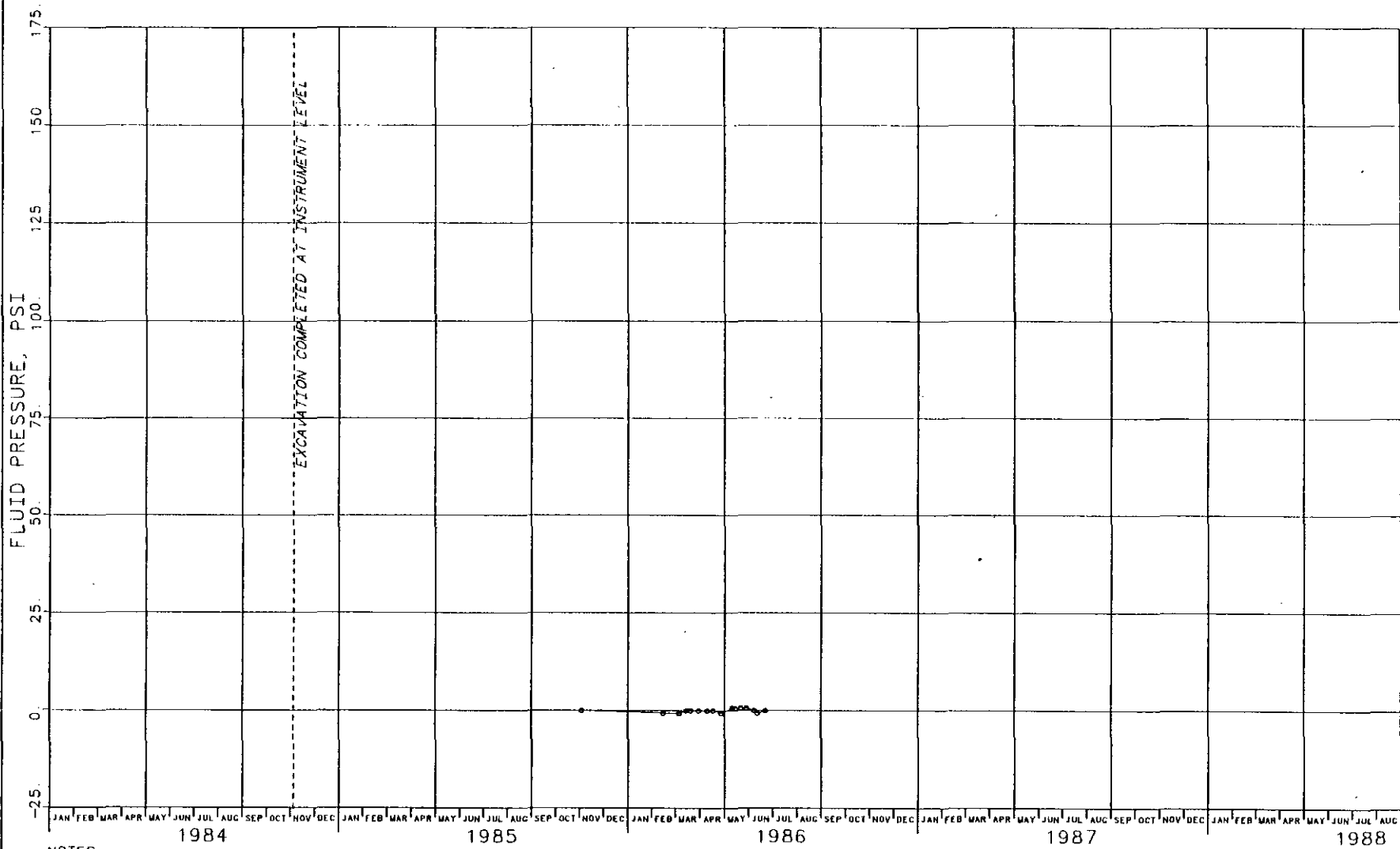




NOTES

1 CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984.

FIGURE J-26  
 PIEZOMETER 35X-PE-00214  
 EXHAUST SHAFT - EL 2641  
 PRESSURE VS. CALENDAR MONTH

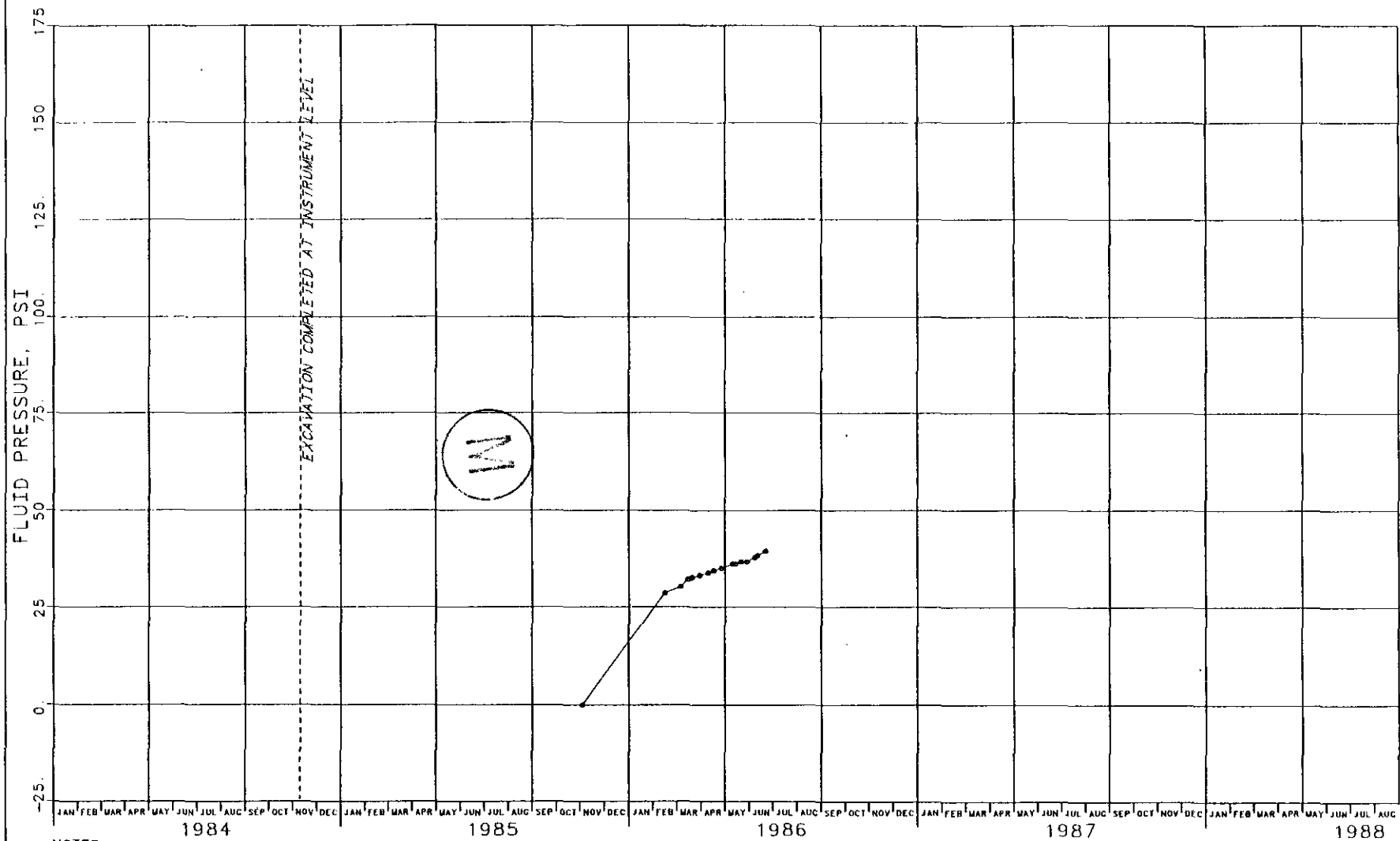


NOTES

1. CONCRETE LINER WAS PLACED JULY 1984 THROUGH NOV. 29, 1984.

FIGURE J-27  
 PIEZOMETER 35X-PE-00215  
 EXHAUST SHAFT - EL. 2641  
 PRESSURE VS. CALENDAR MONTH

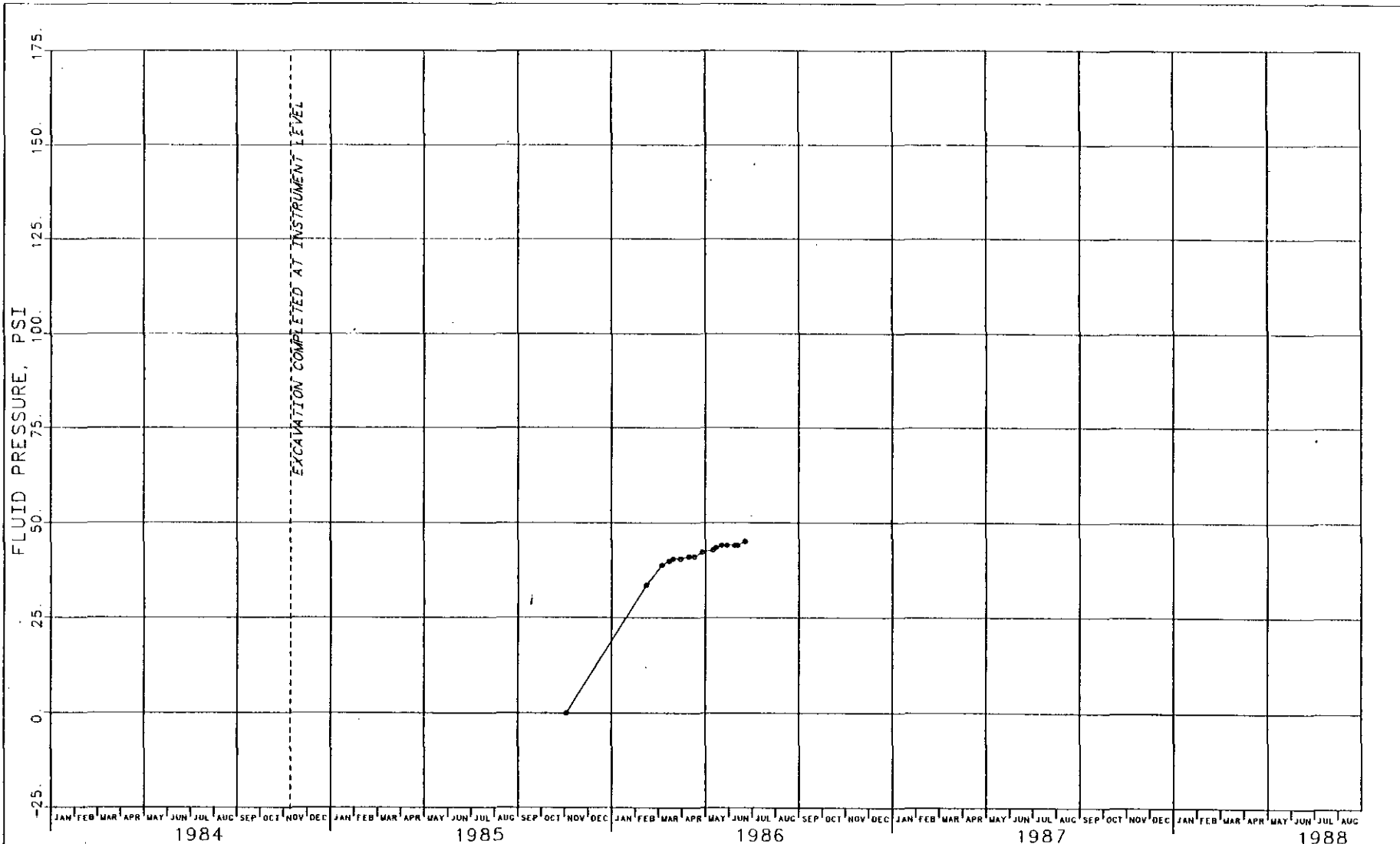




NOTES:

1. CONCRETE FOR KEY WAS PLACED NOV. 19 THROUGH NOV. 29, 1984

FIGURE J-28  
 PIEZOMETER 35X-PE-00216  
 EXHAUST SHAFT KEY - EL 2559  
 PRESSURE VS. CALENDAR MONTH



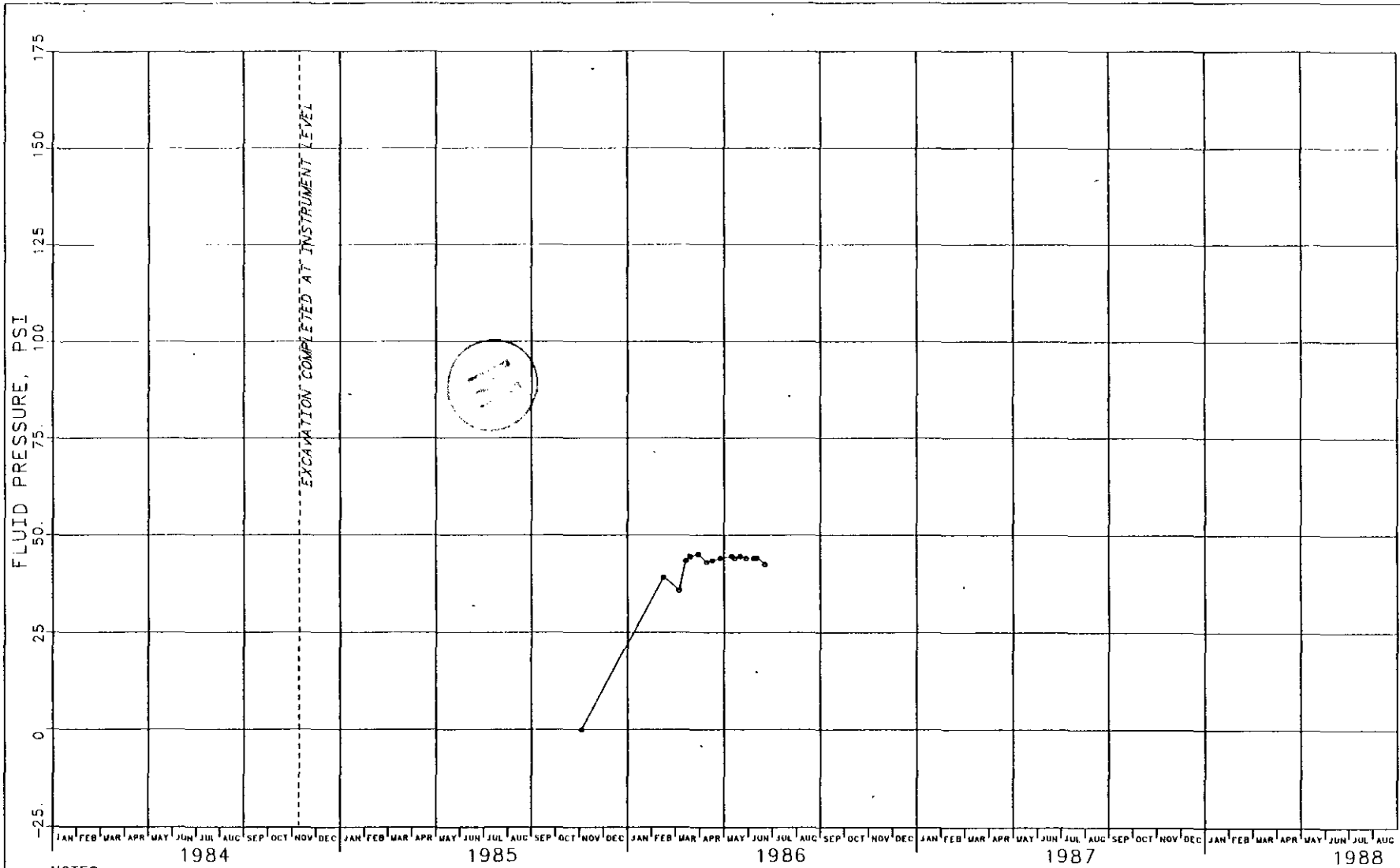
NOTES

1 CONCRETE FOR KEY WAS PLACED NOV. 19 THROUGH NOV. 29, 1984

FIGURE J-29  
 PIEZOMETER 35X-PE-00217  
 EXHAUST SHAFT KEY - EL 2559  
 PRESSURE VS. CALENDAR MONTH

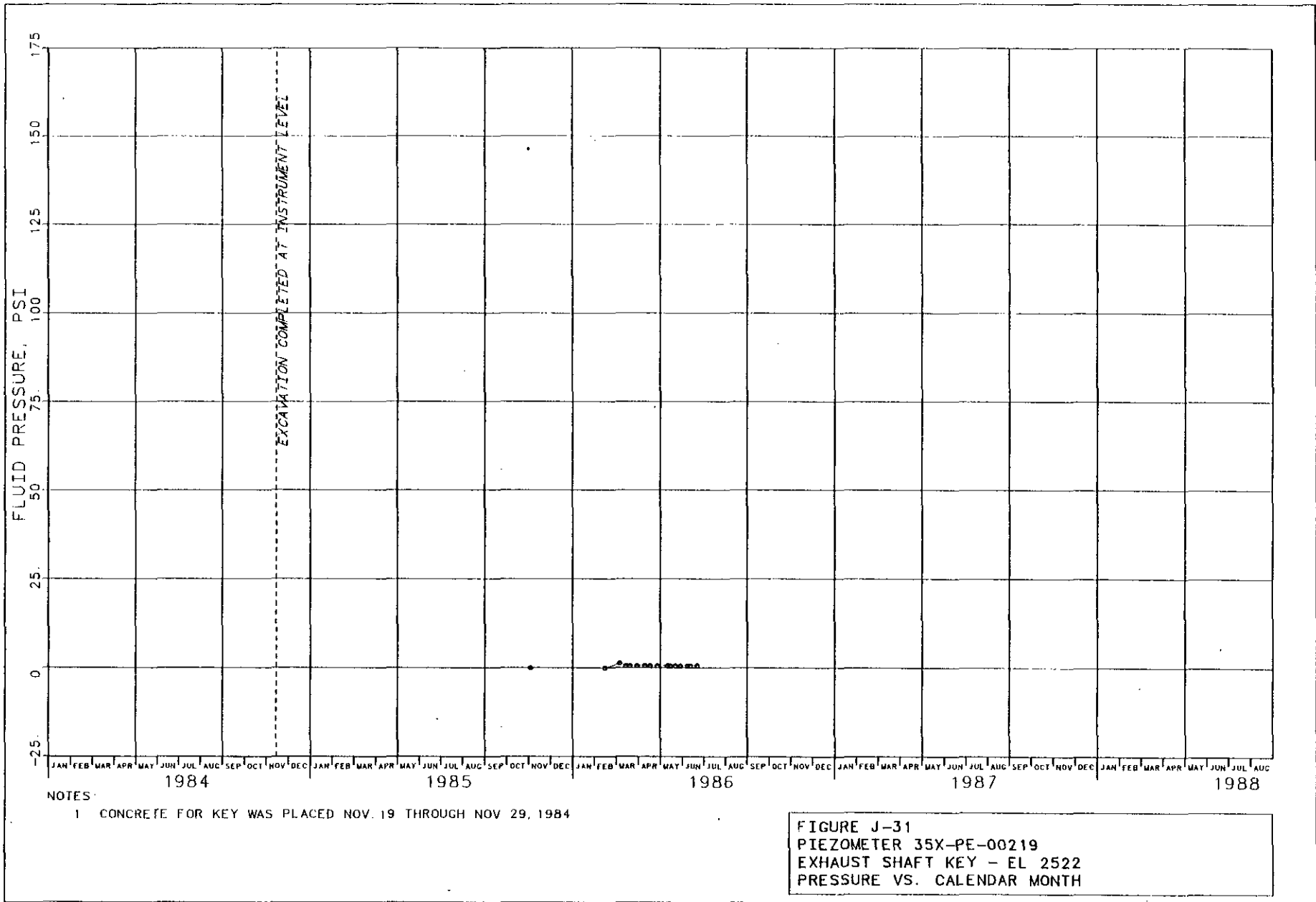


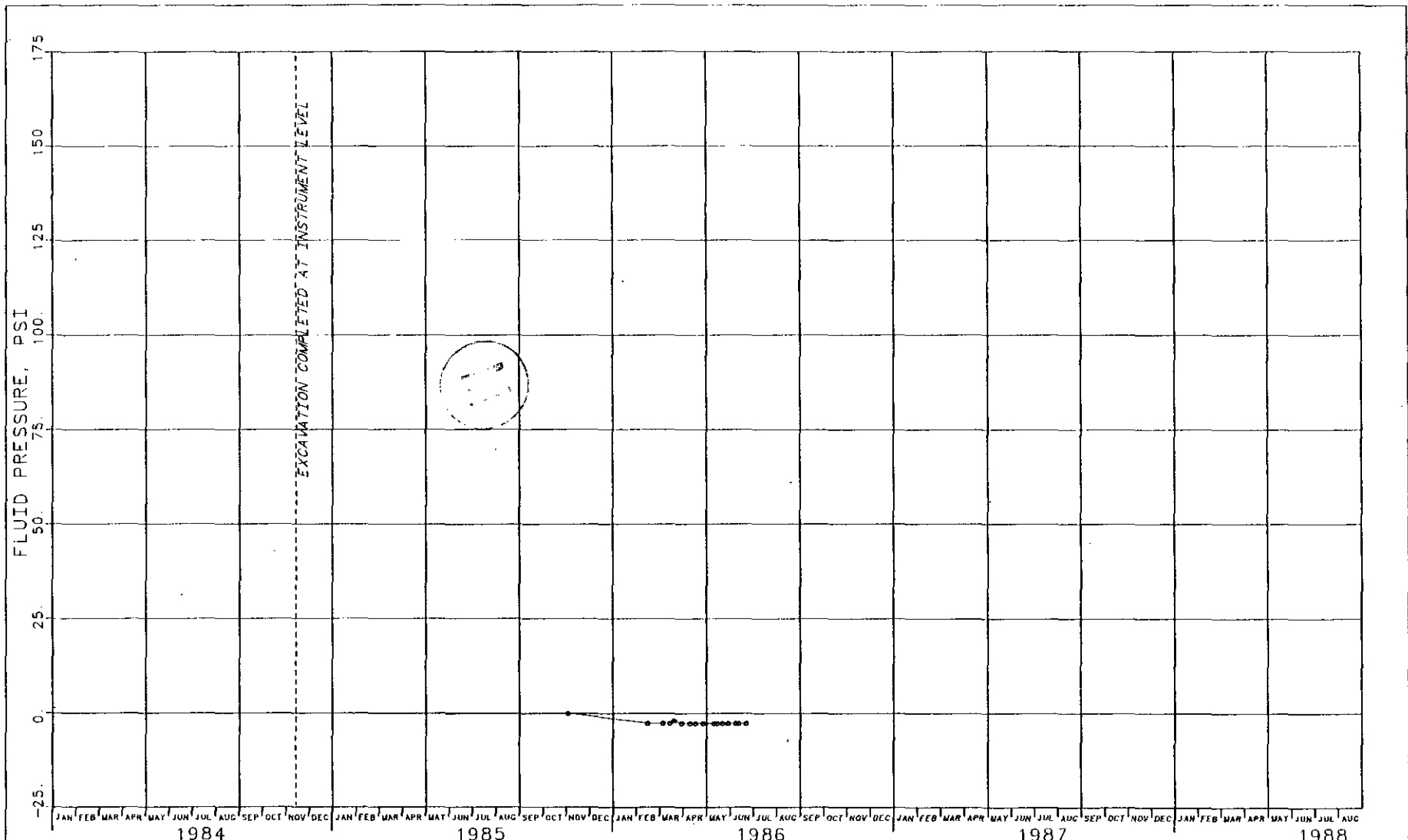




NOTES  
 1 CONCRETE FOR KEY WAS PLACED NOV. 19 THROUGH NOV 29, 1984

FIGURE J-30  
 PIEZOMETER 35X-PE-00218  
 EXHAUST SHAFT KEY - EL 2559.  
 PRESSURE VS. CALENDAR MONTH

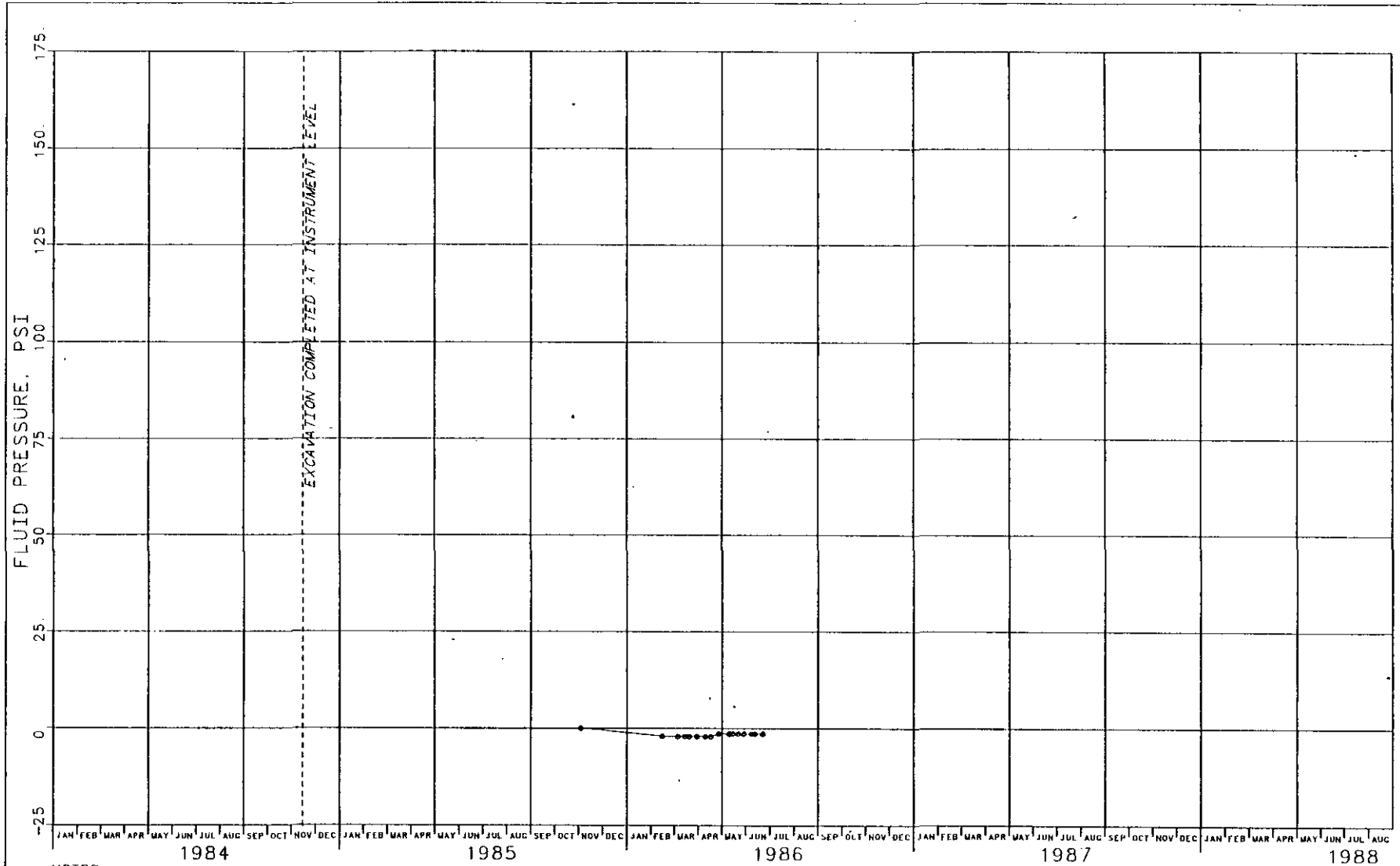




NOTES

1. CONCRETE FOR KEY WAS PLACED NOV 19 THROUGH NOV 29, 1984

FIGURE J-32  
 PIEZOMETER 35X-PE-00220  
 EXHAUST SHAFT KEY - EL 2522  
 PRESSURE VS. CALENDAR MONTH

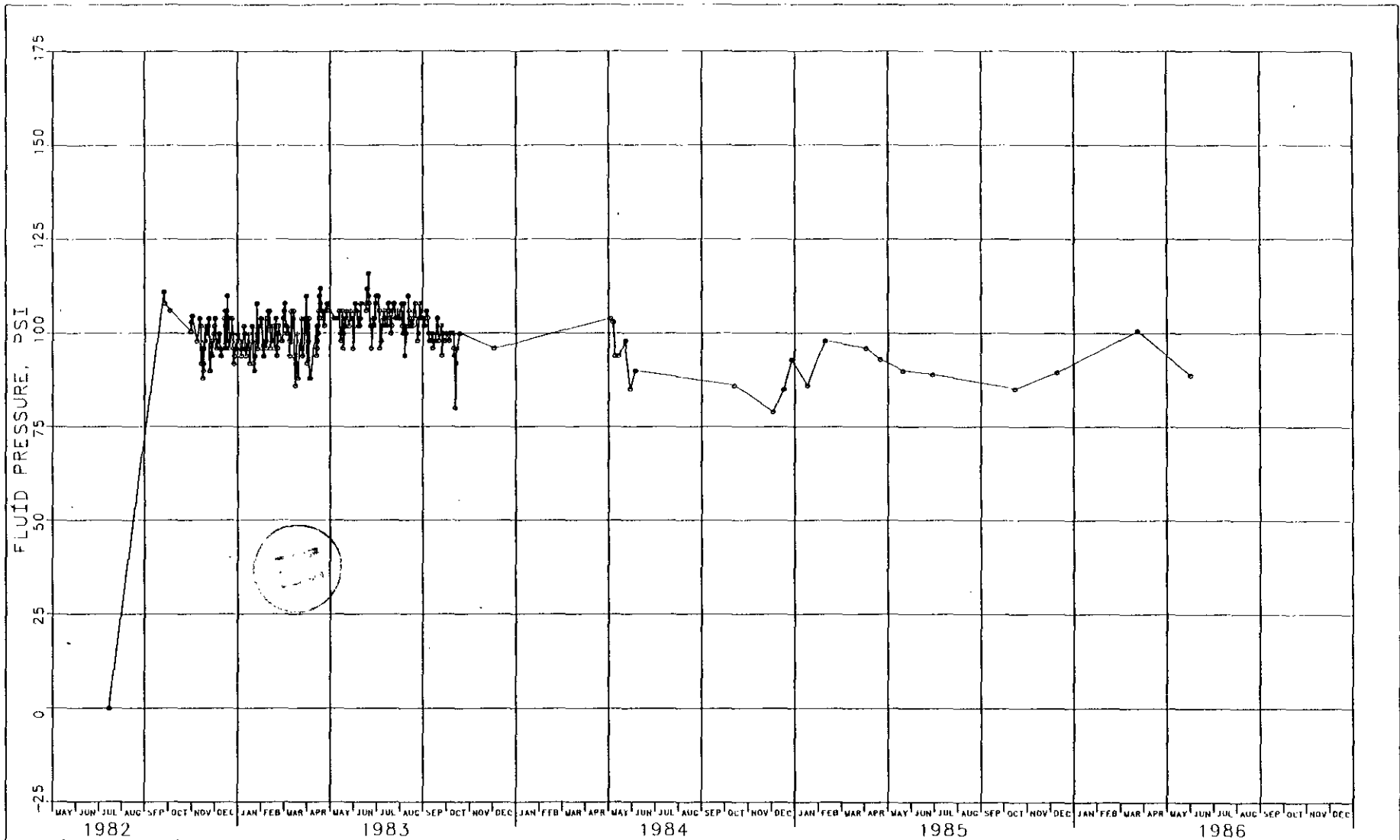


NOTES

1 CONCRETE FOR KEY WAS PLACED NOV. 19 THROUGH NOV. 29, 1984

FIGURE J-33  
 PIEZOMETER 35X-PE-00221  
 EXHAUST SHAFT KEY - EL 2522  
 PRESSURE VS. CALENDAR MONTH

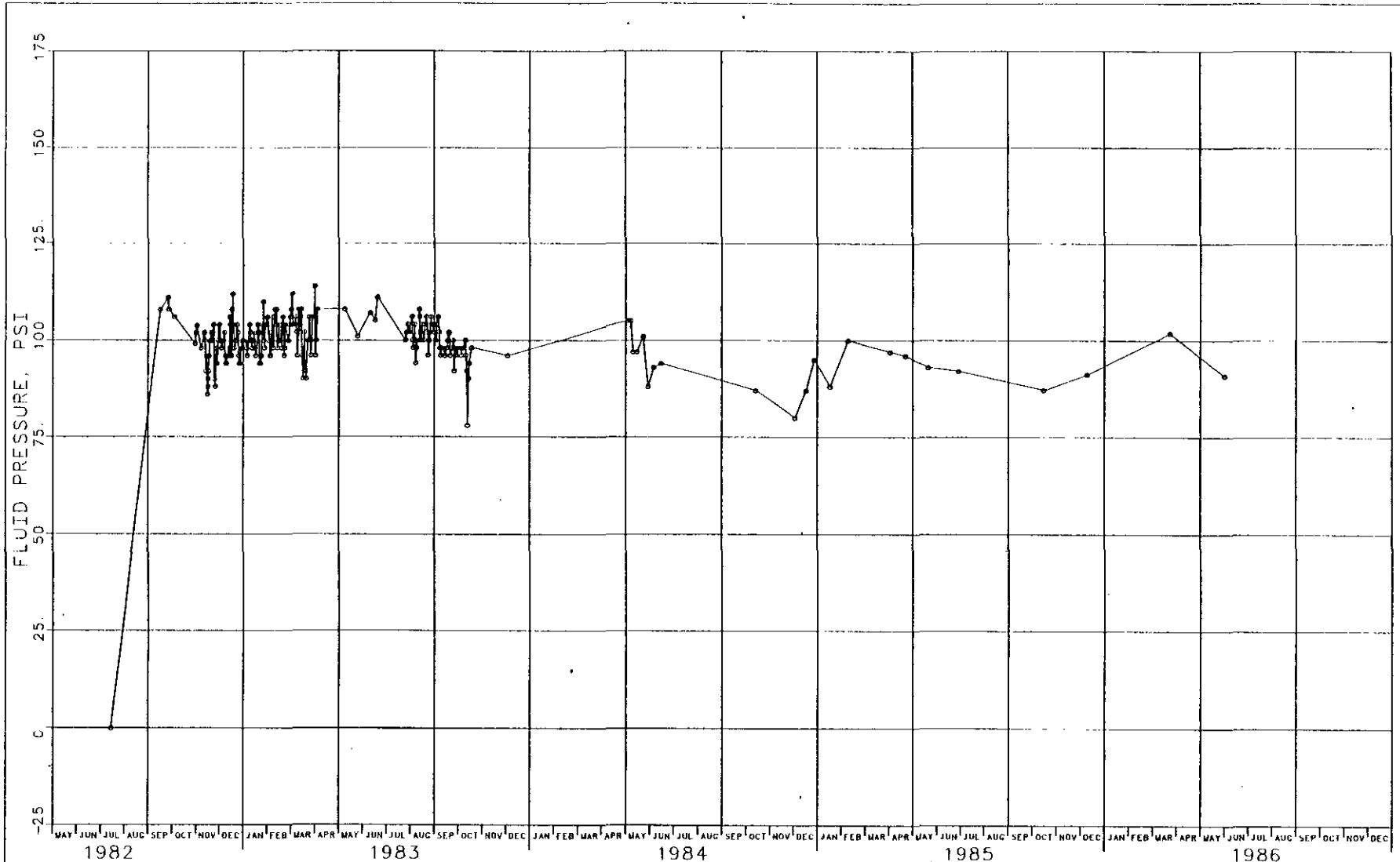




NOTES

1. STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981

FIGURE J-34  
 PIEZOMETER 37X-PE-00201  
 C & SH SHAFT - EL 2830  
 PRESSURE VS. CALENDAR MONTH

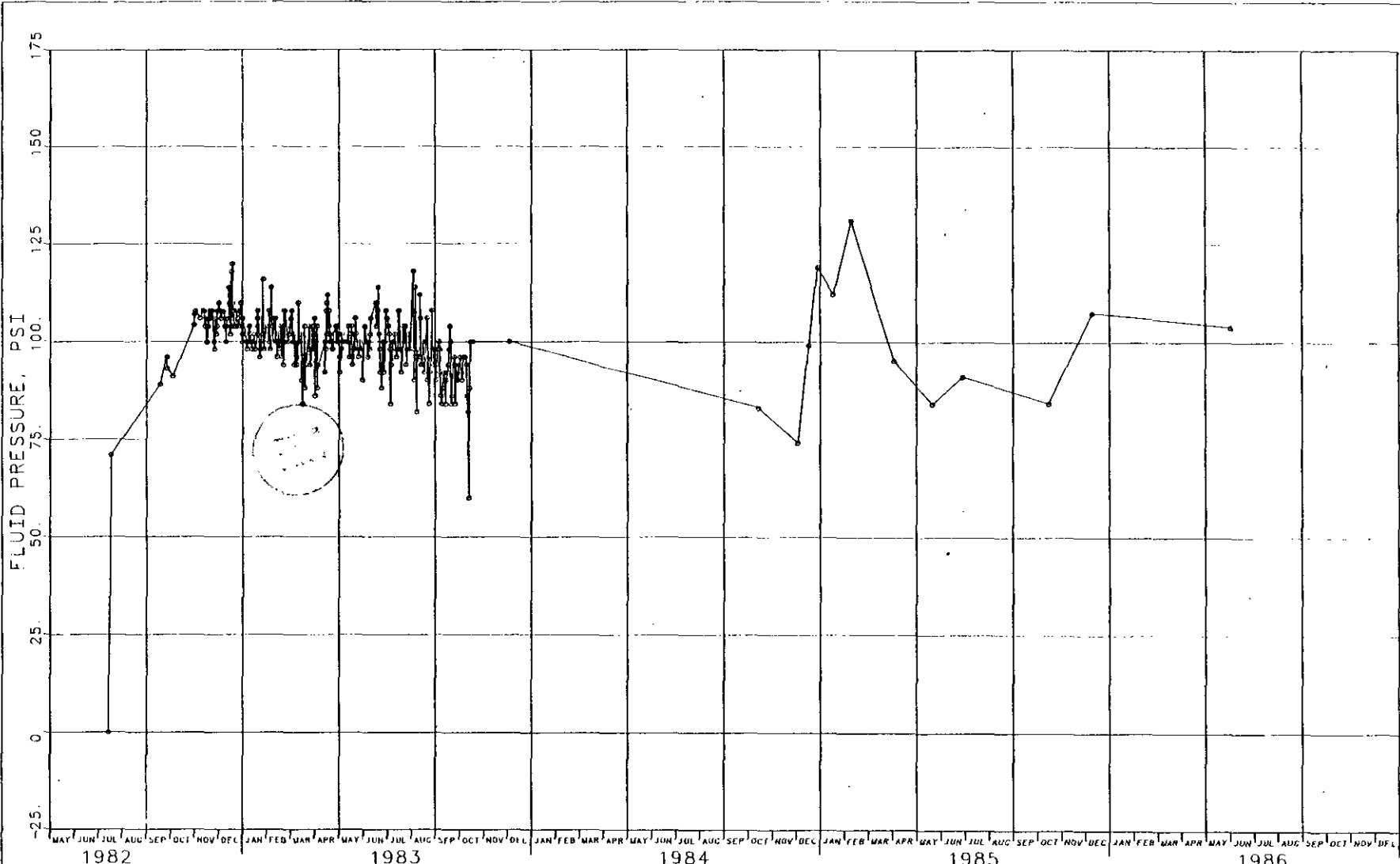


NOTES

STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981

FIGURE J-35  
 PIEZOMETER 37X-PE-00202  
 C & SH SHAFT - EL 2830  
 PRESSURE VS. CALENDAR MONTH





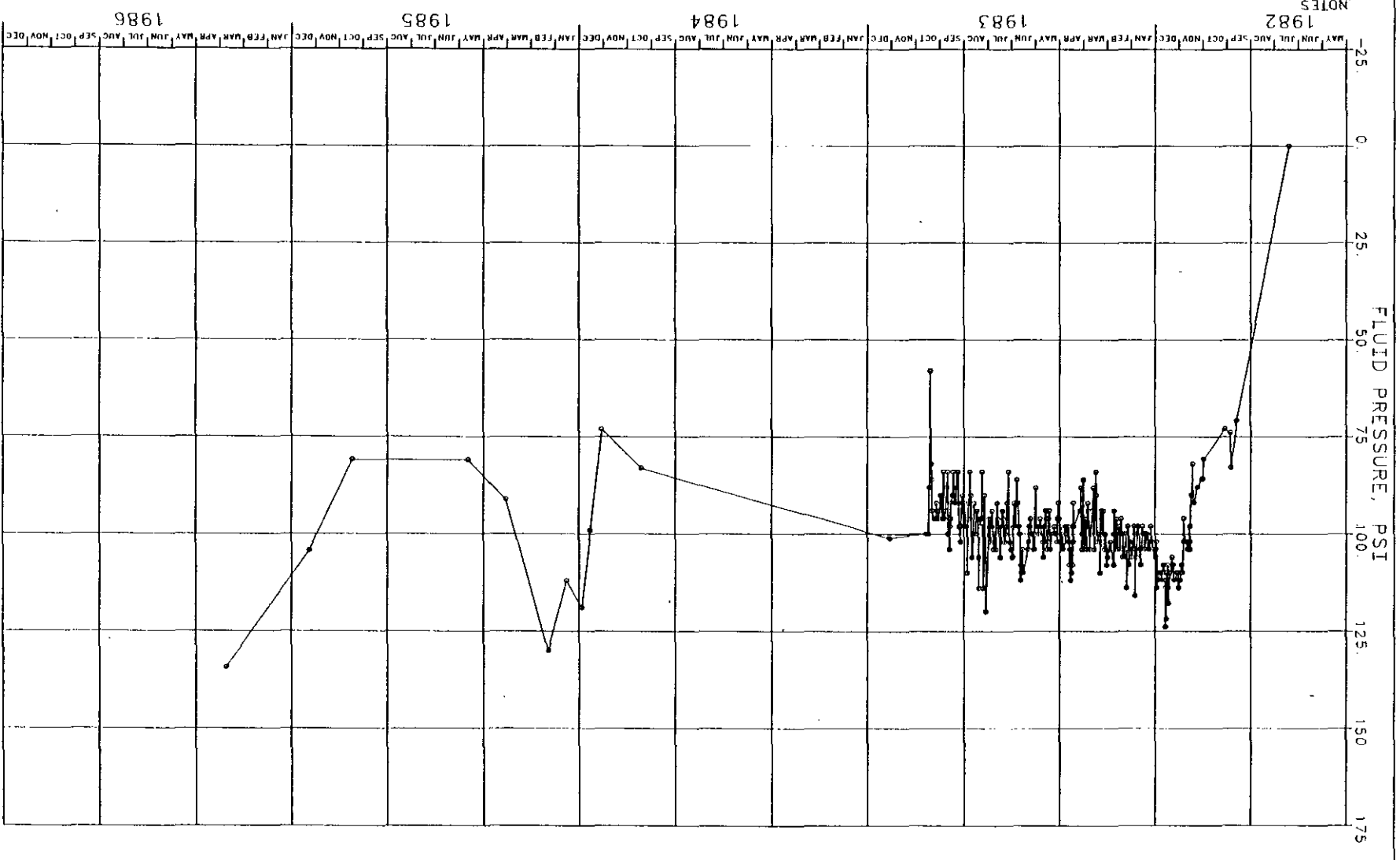
NOTES  
 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981

FIGURE J-36  
 PIEZOMETER 37X-PE-00203  
 C & SH SHAFT - EL 2790 (MAGENTA)  
 PRESSURE VS. CALENDAR MONTH

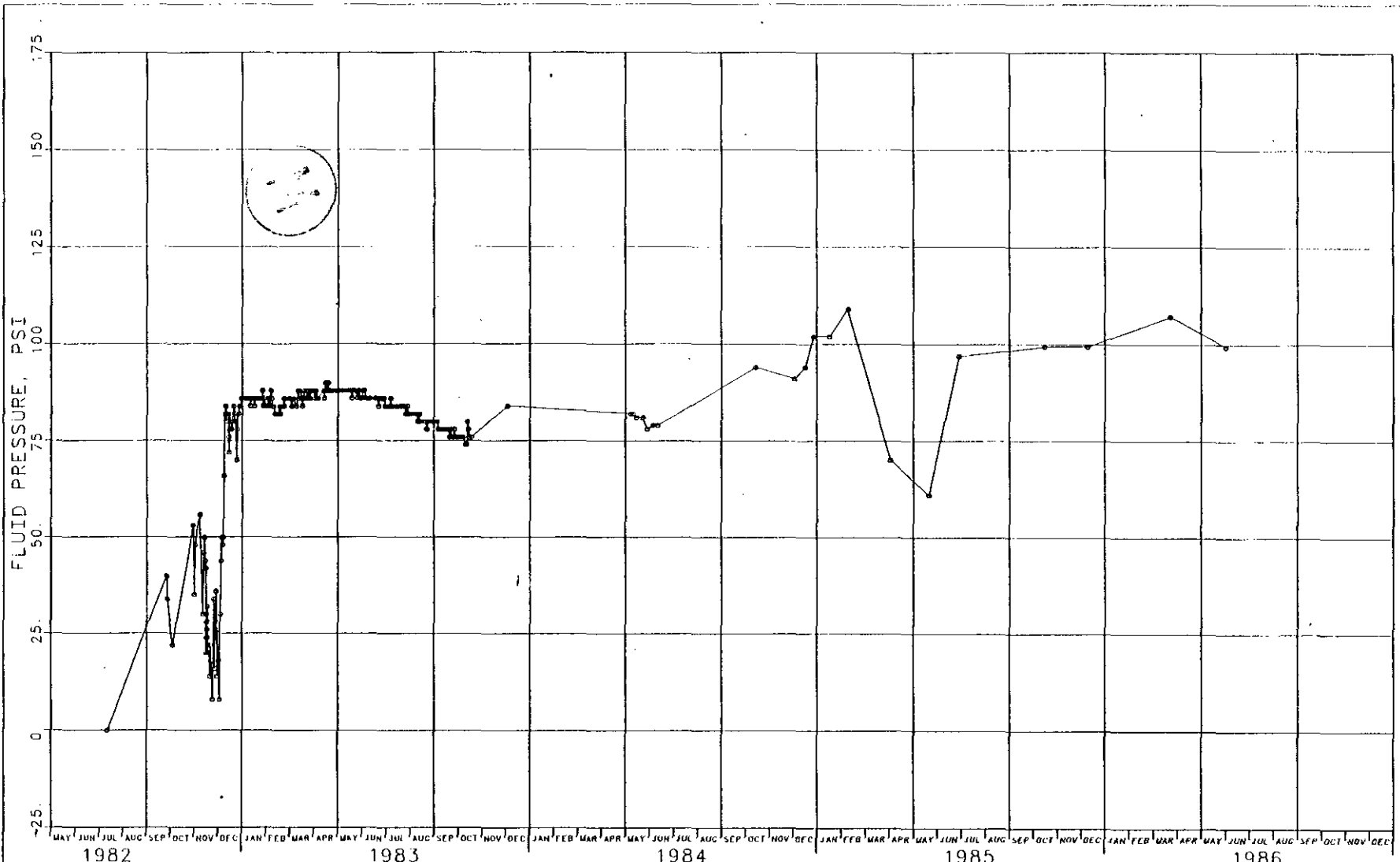
11

FIGURE J-37  
PIEZOMETER 37X-PE-00204  
C & SH SHAFT - EL 2790 (MAGENTA)  
PRESSURE VS. CALENDAR MONTH

1. STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981  
2. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

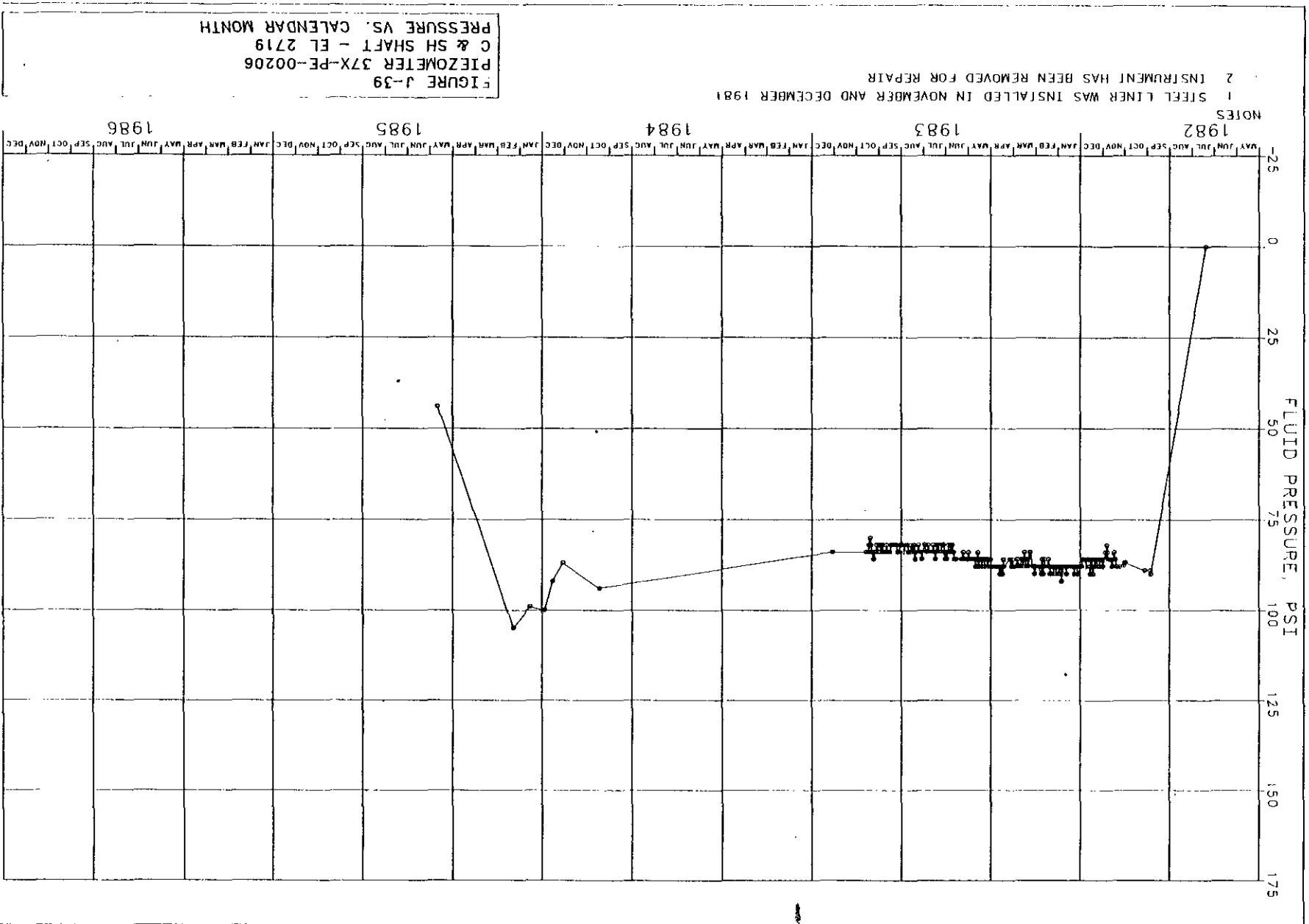






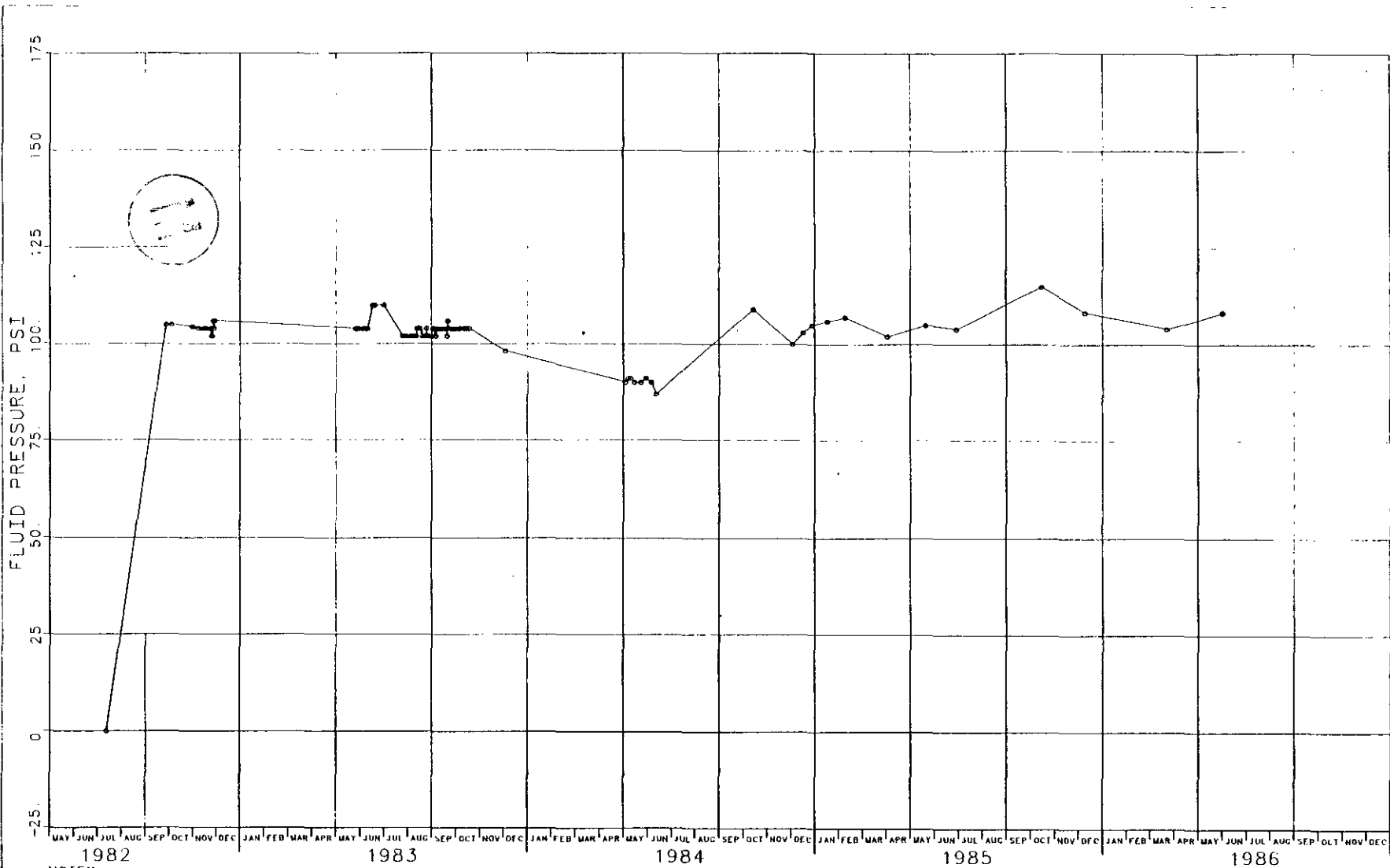
NOTES  
 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981

FIGURE J-38  
 PIEZOMETER 37X-PE-00205  
 C & SH SHAFT - EL 2719  
 PRESSURE VS. CALENDAR MONTH



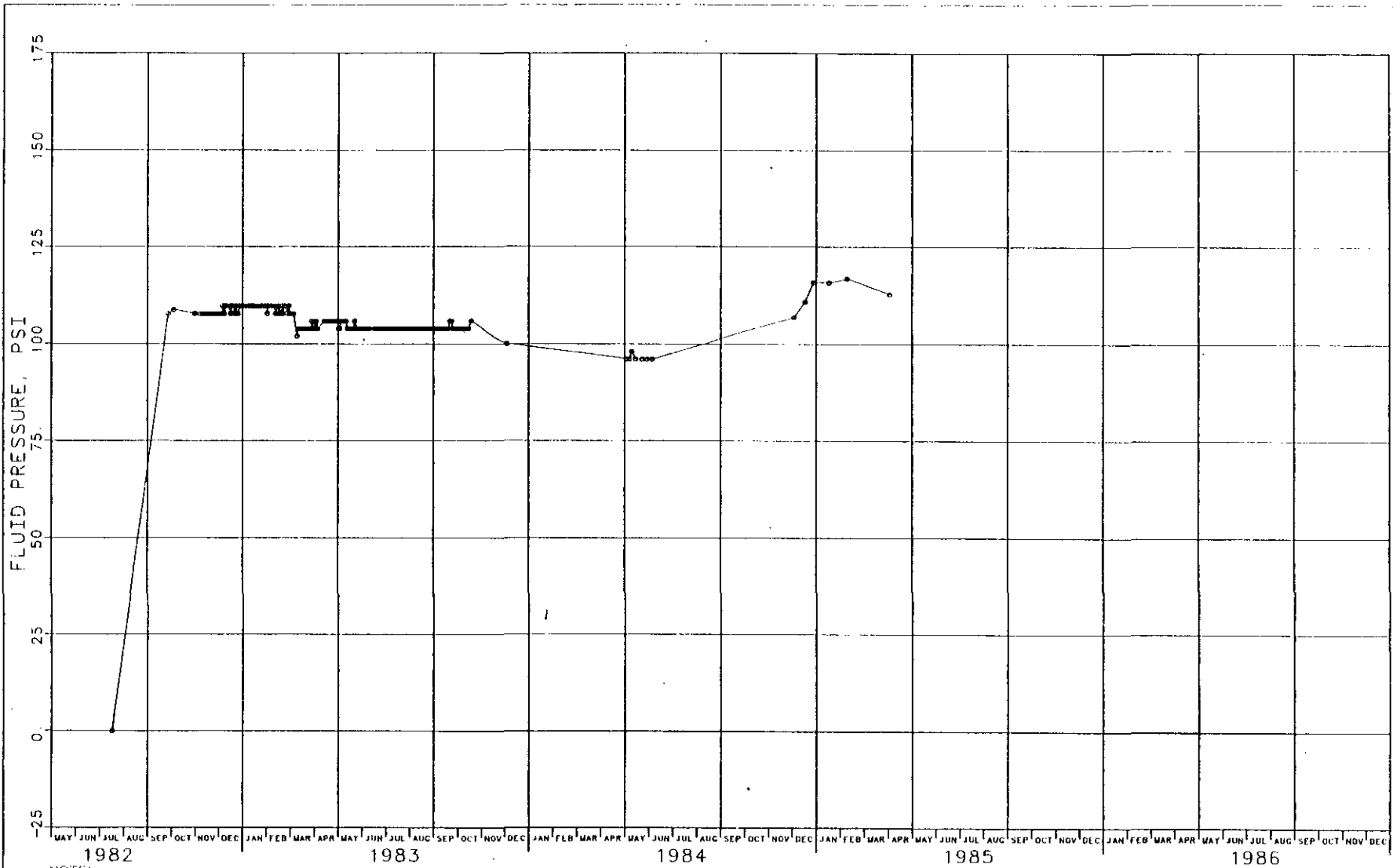
NOTES  
1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981  
2 INSTRUMENT HAS BEEN REMOVED FOR REPAIR

FIGURE J-39  
PIEZOMETER 37X-PE-00206  
C & SH SHAFT - EL 2719  
PRESSURE VS. CALENDAR MONTH



NOTES  
 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981

FIGURE J-40  
 PIEZOMETER 37X-PE-00207  
 C & SH SHAFT - EL 2684 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH

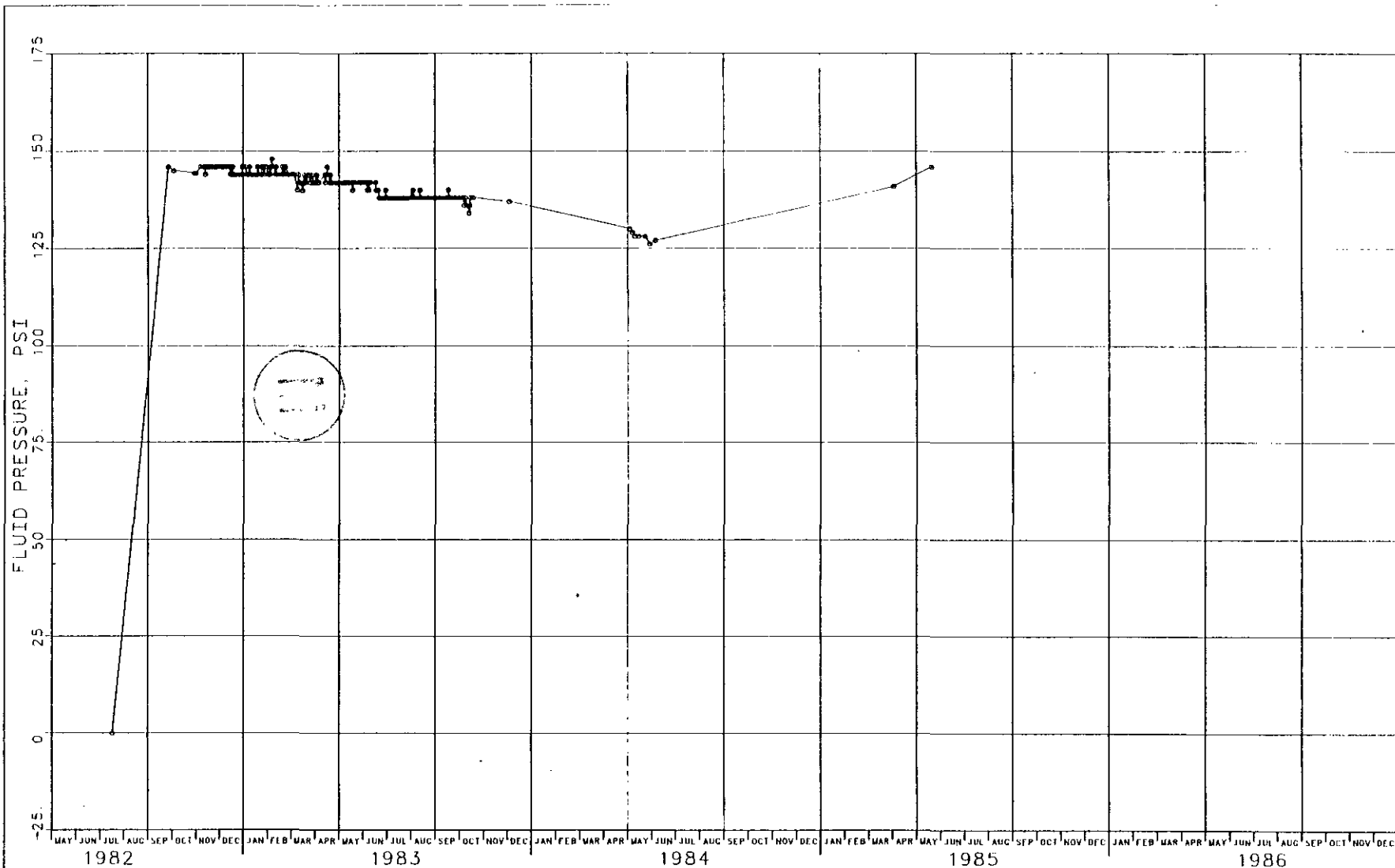


NOTES

- 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981
- 2 INSTRUMENT HAS BEEN REMOVED FOR REPAIR

FIGURE J-41  
 PIEZOMETER 37X-PE-00208  
 C & SH SHAFT - EL 2684 (CULEBRA)  
 PRESSURE VS. CALENDAR MONTH

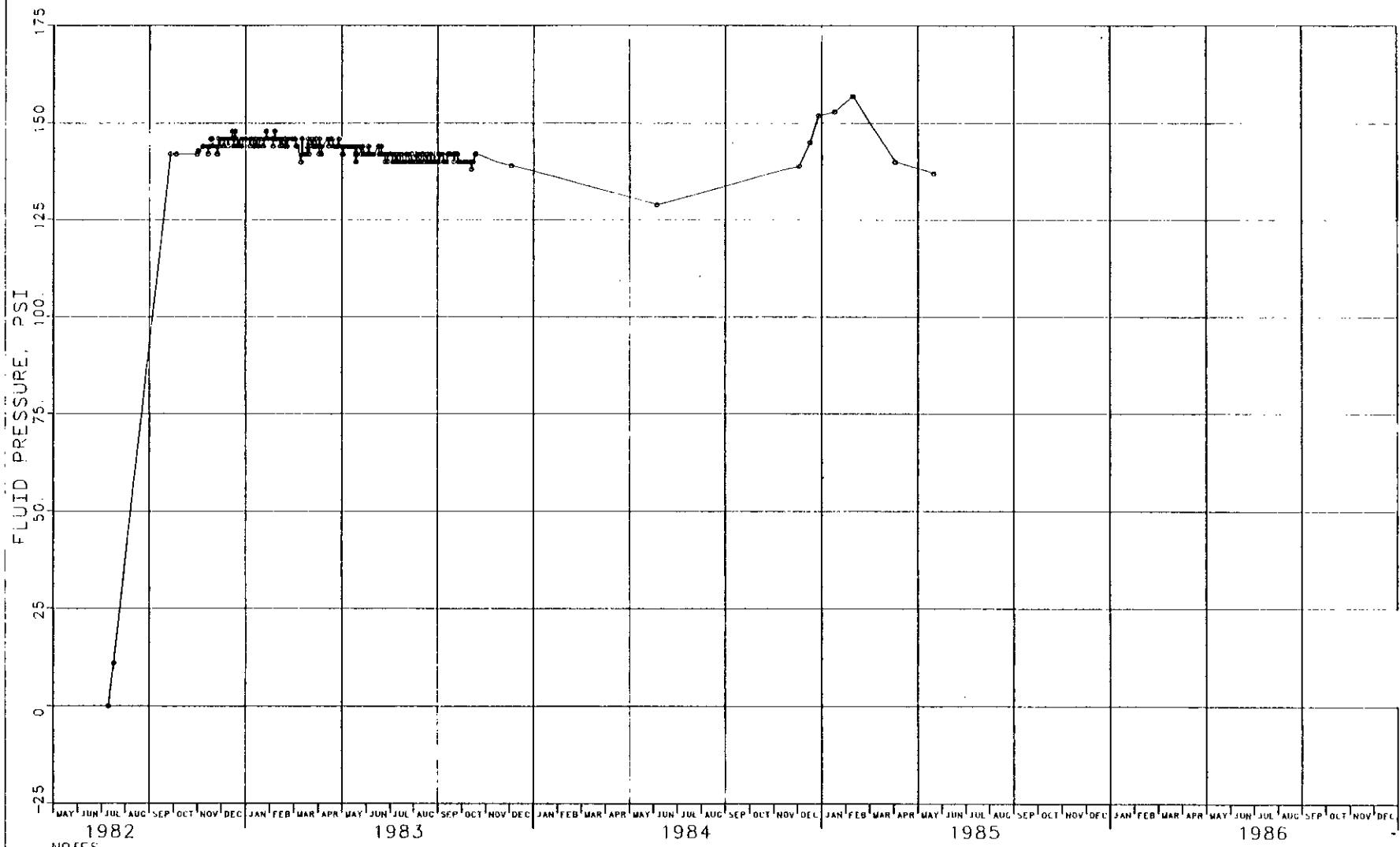




NOTES

- 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981
- 2 INSTRUMENT HAS BEEN REMOVED FOR REPAIR

FIGURE J-42  
 PIEZOMETER 37X-PE-00209  
 C & SH SHAFT - EL 2608  
 PRESSURE VS. CALENDAR MONTH

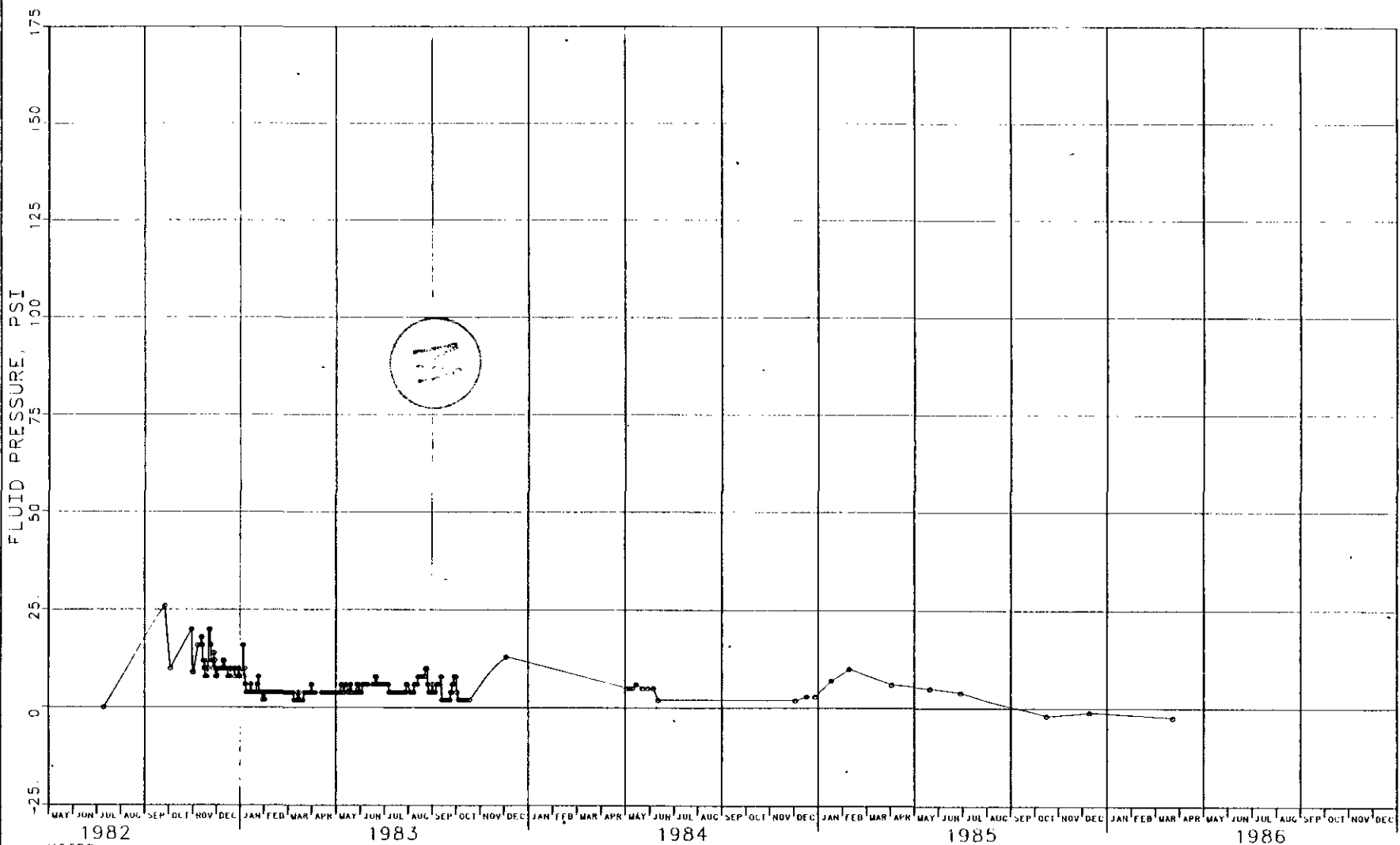


NOTES

- 1 STEEL LINER WAS INSTALLED IN NOVEMBER AND DECEMBER 1981
- 2 INSTRUMENT HAS BEEN REMOVED FOR REPAIR

FIGURE J-43  
 PIEZOMETER 37X-PE-00210  
 C & SH SHAFT - EL 2608  
 PRESSURE VS. CALENDAR MONTH

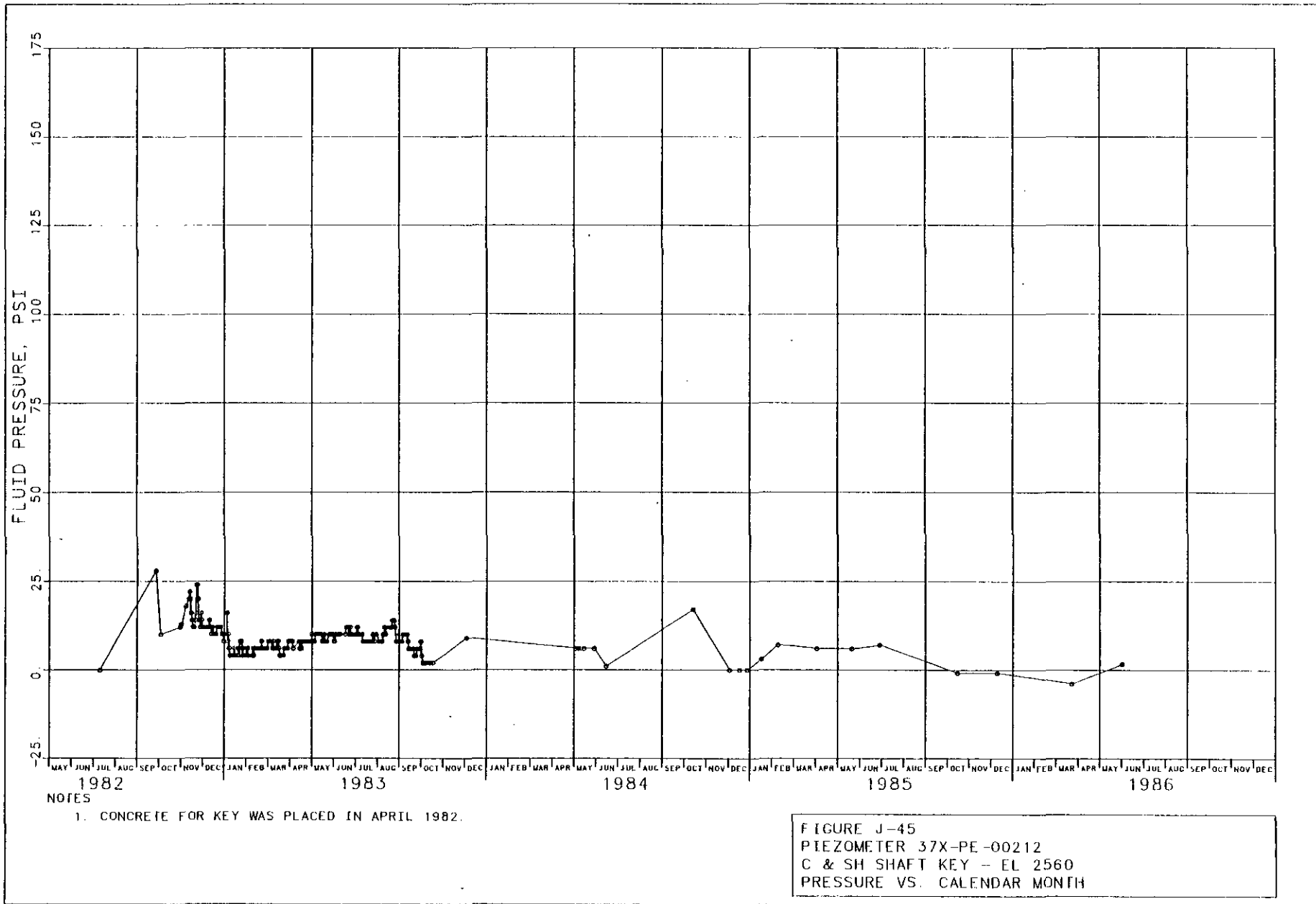




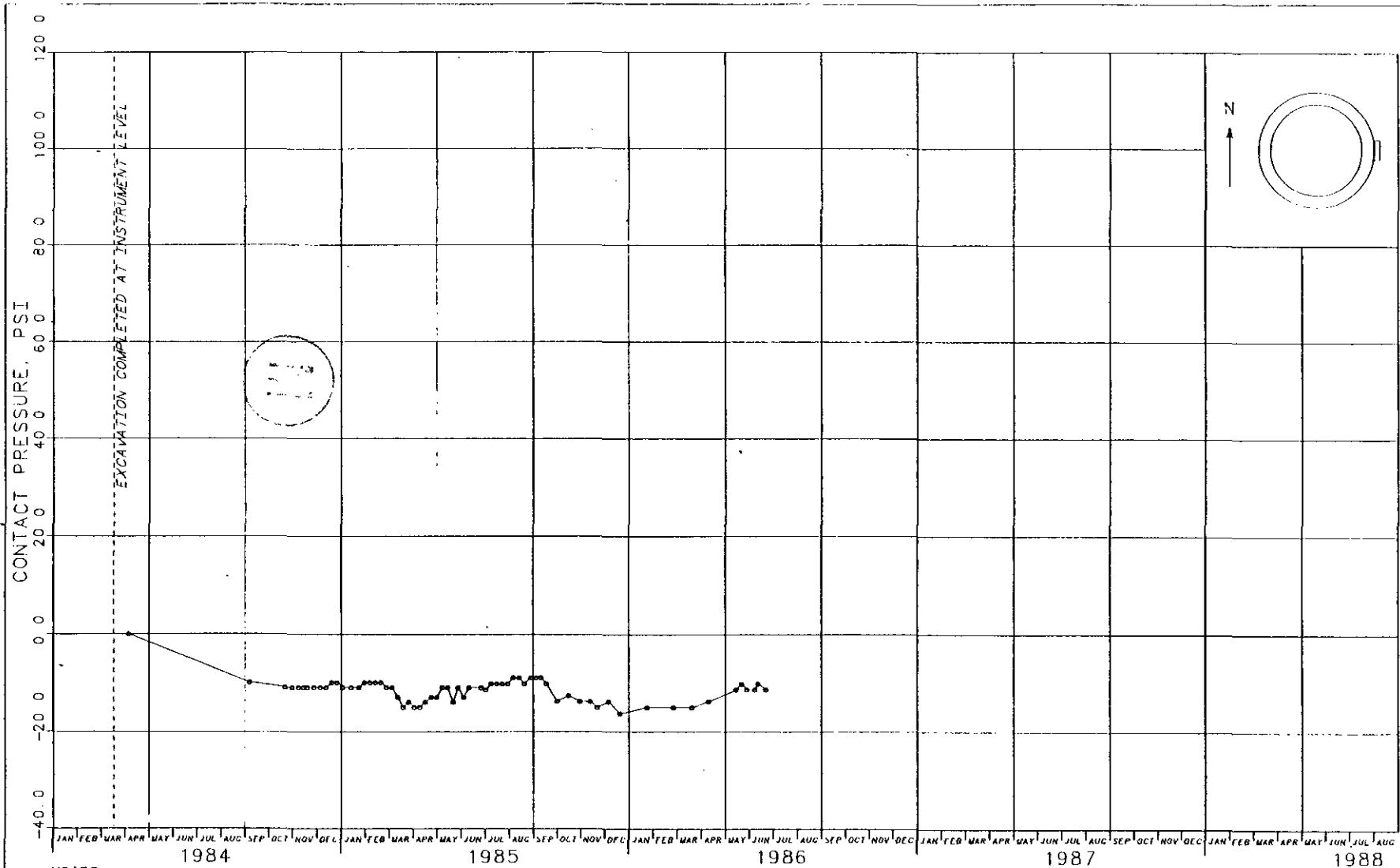
NOTES

- 1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
- 2. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

FIGURE J-44  
 PIEZOMETER 37X-PE-00211  
 C & SH SHAFT KEY - EL 2560  
 PRESSURE VS. CALENDAR MONTH



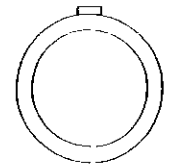
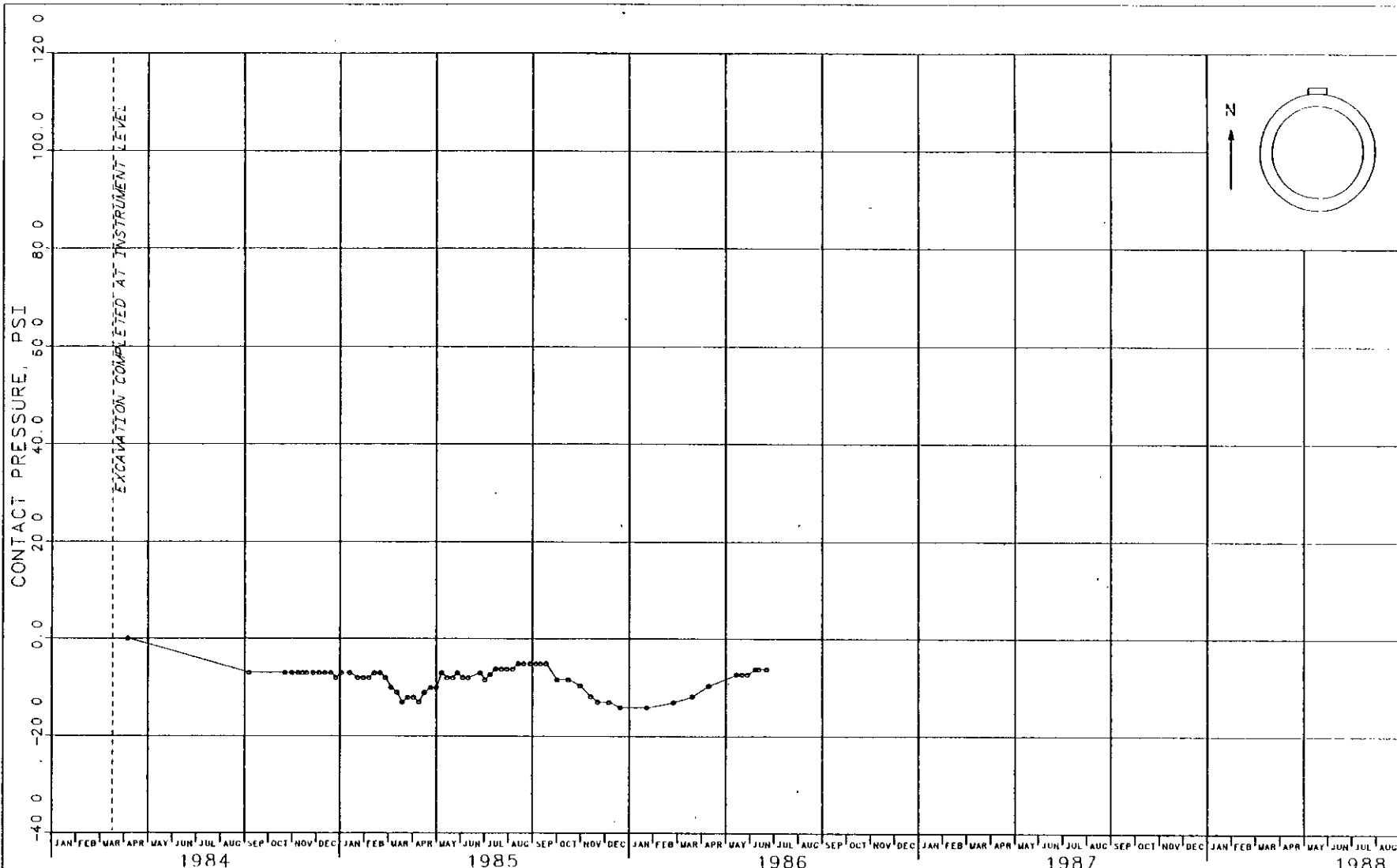




NOTES

- 1 CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 3, 1984.
- 2 SIZE OF EXCAVATION 24 FT DIAM

FIGURE J-46  
 PRESSURE CELL 31X-WE-00201  
 WASTE SHAFT - EL 2543 - EAST SIDE  
 PRESSURE VS. CALENDAR MONTH

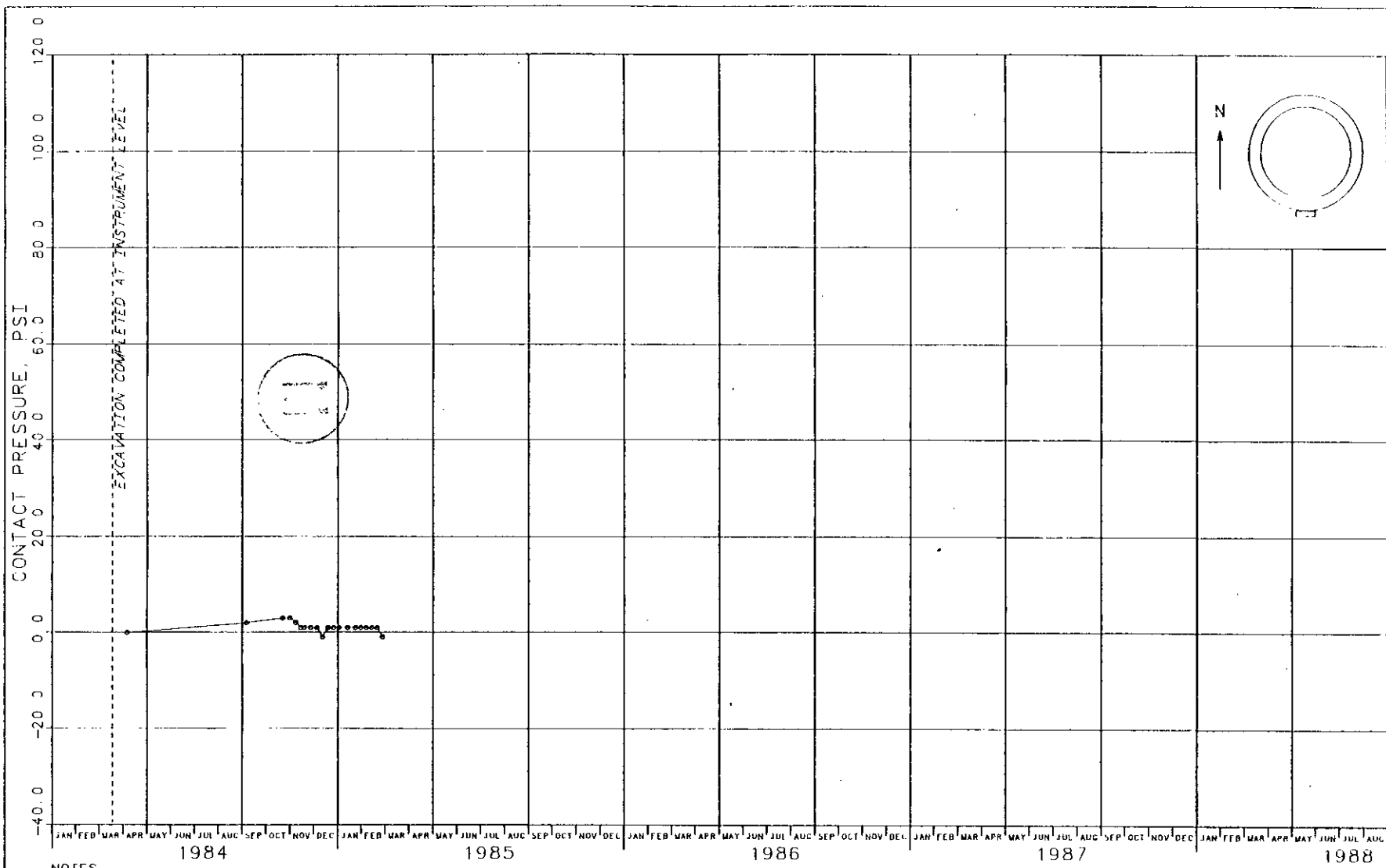


NOTES

- 1 CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 5, 1984
- 2 SIZE OF EXCAVATION 24 FT DIAM

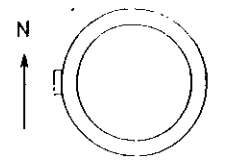
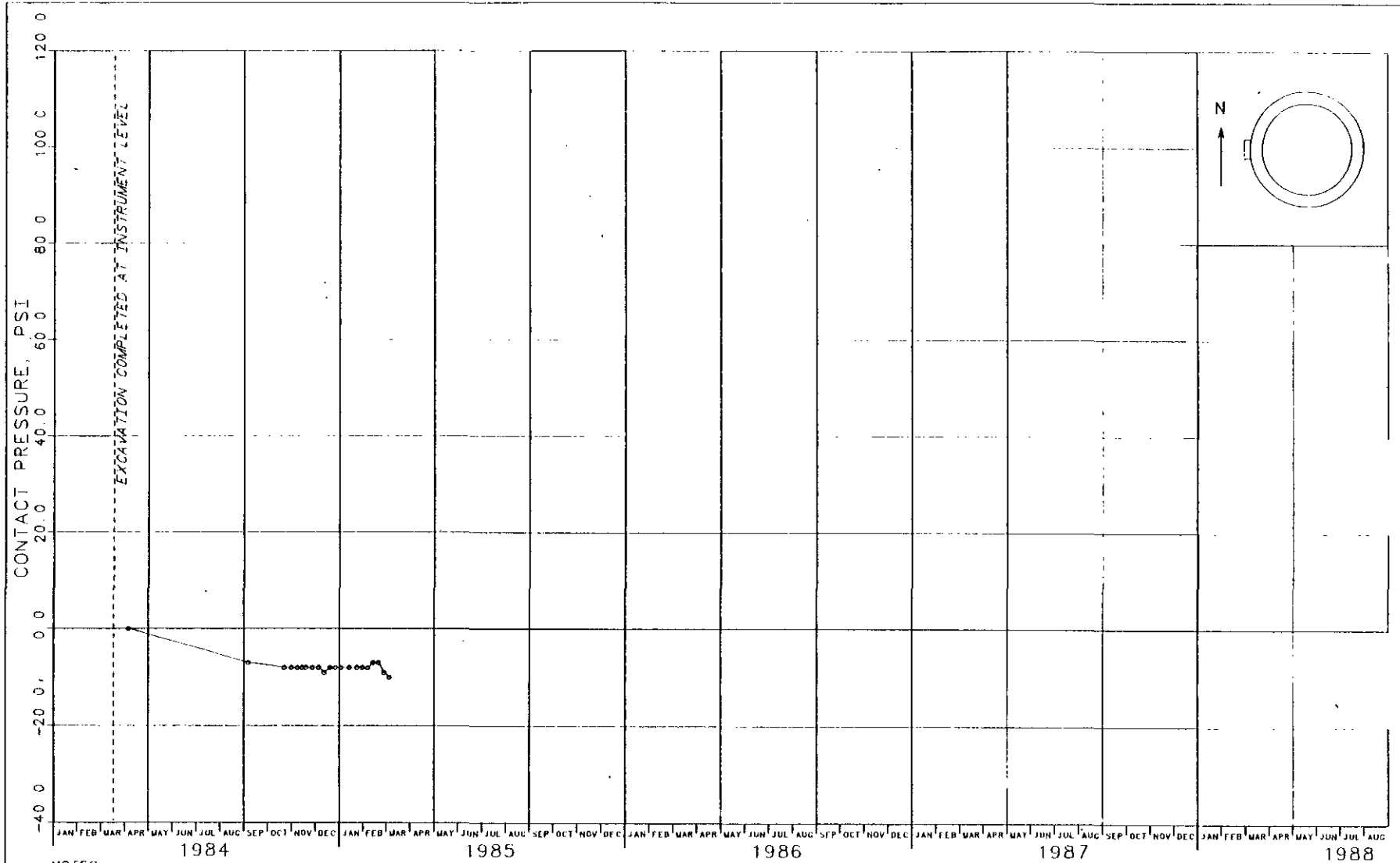
FIGURE J-47  
 PRESSURE CELL 31X-WE-00202  
 WASTE SHAFT - EL 2543 - NORTH SIDE  
 PRESSURE VS. CALENDAR MONTH





- NOTES
1. CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 3, 1984
  2. SIZE OF EXCAVATION 24 FT DIAM
  3. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

FIGURE J-48  
 PRESSURE CELL 31X-WE-00203  
 WASTE SHAFT - EL 2543 - SOUTH SIDE  
 PRESSURE VS. CALENDAR MONTH

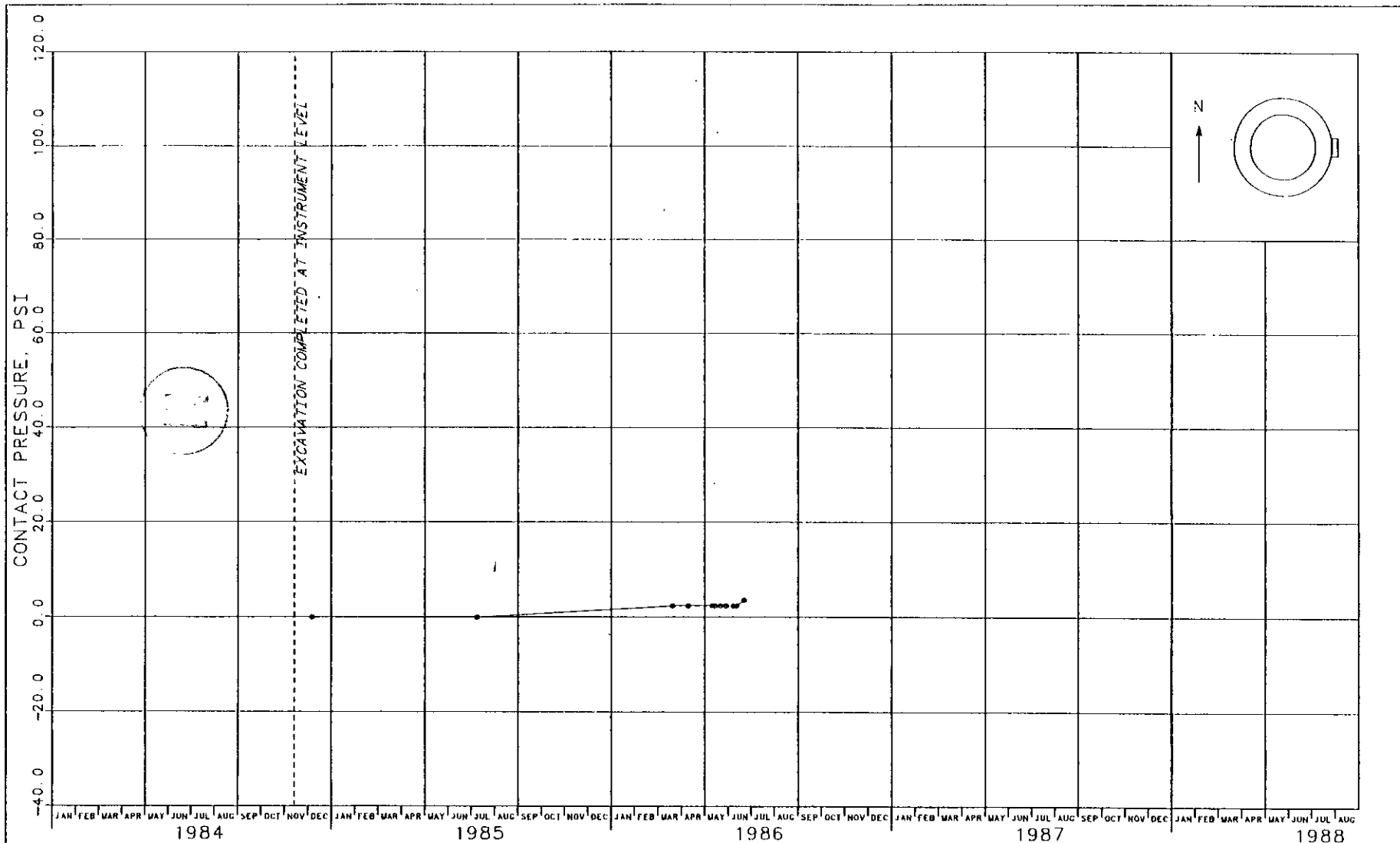


NOTES

- 1 CONCRETE FOR KEY WAS PLACED MARCH 23 THROUGH APRIL 3, 1984
- 2 SIZE OF EXCAVATION 24 FT DIAM
- 3 INSTRUMENT IS CURRENTLY NOT FUNCTIONING

FIGURE J-49  
 PRESSURE CELL 31X-WE-00204  
 WASTE SHAFT - EL 2543 - WEST SIDE  
 PRESSURE VS. CALENDAR MONTH

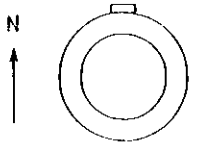
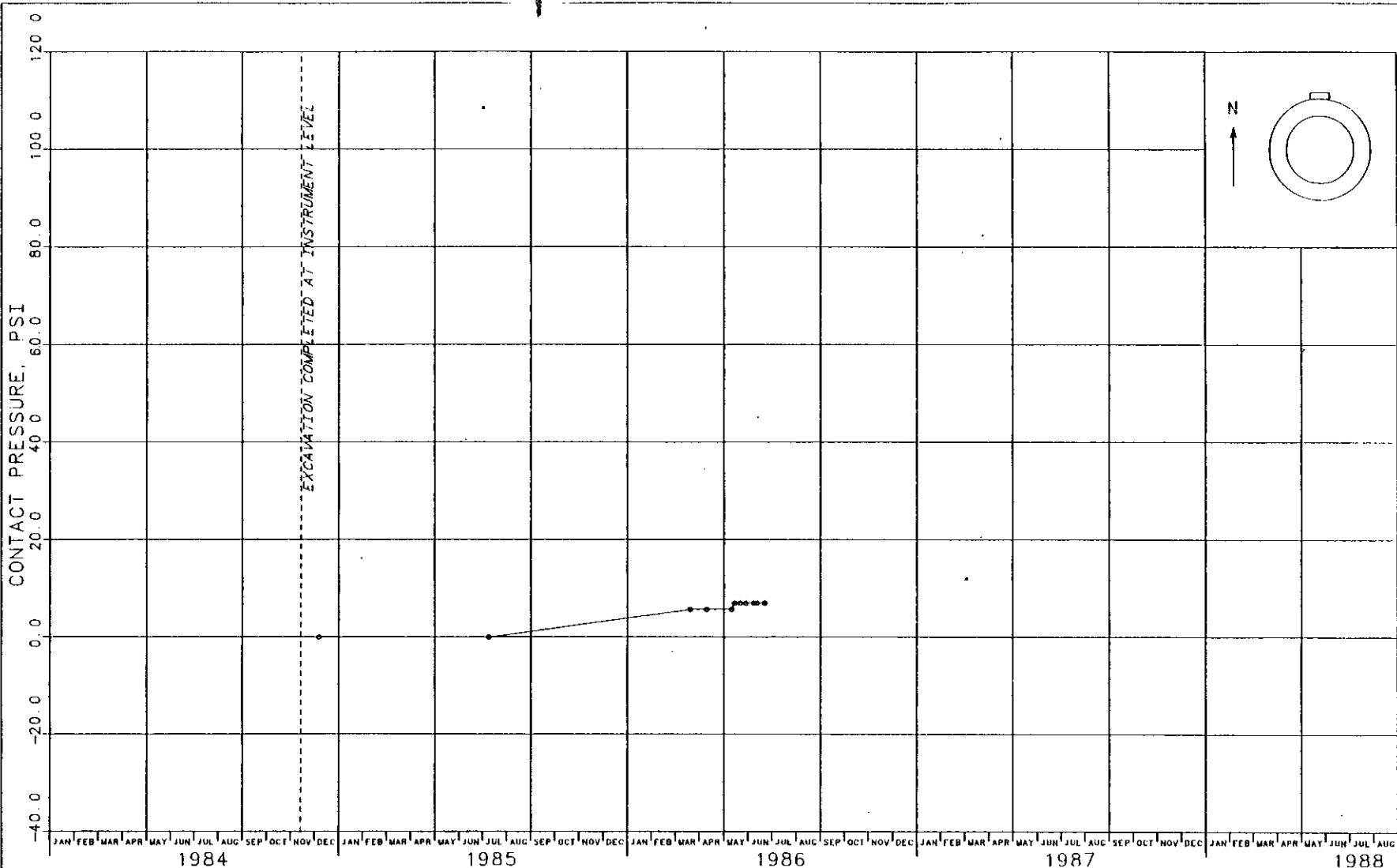




NOTES:

1. CONCRETE FOR KEY WAS PLACED NOV. 19 THROUGH NOV. 29, 1984
2. SIZE OF EXCAVATION: 21 FT DIAM

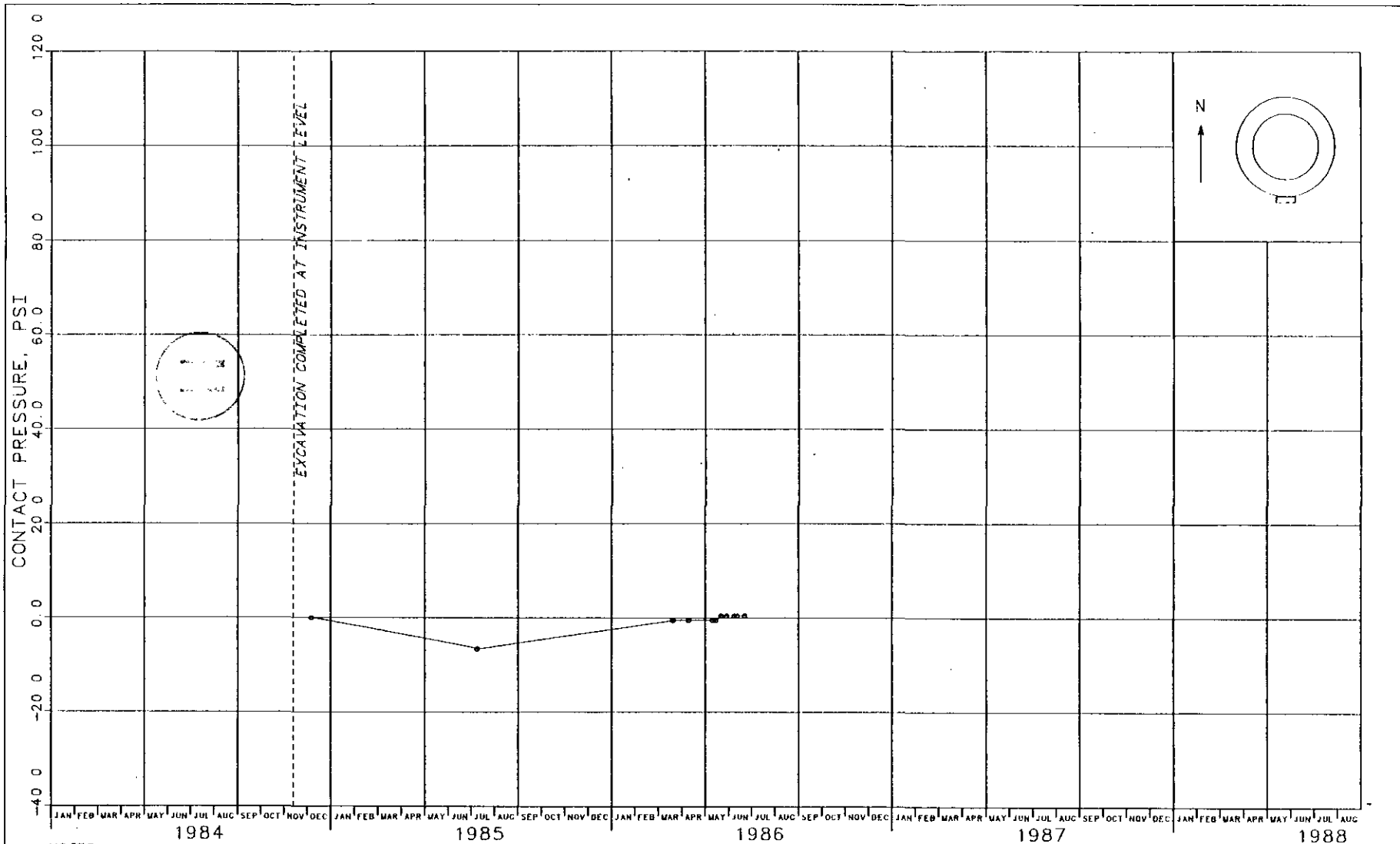
FIGURE J-50  
 PRESSURE CELL 35X-WE-00201  
 EXHAUST SHAFT KEY - EL 2535 - EAST SIDE  
 PRESSURE VS. CALENDAR MONTH



- NOTES
- 1 CONCRETE FOR KEY WAS PLACED NOV 19 THROUGH NOV 29, 1984
  - 2 SIZE OF EXCAVATION 21 FT DIAM

FIGURE J-51  
 PRESSURE CELL 35X-WE-00202  
 EXHAUST SHAFT KEY - EL 2535 - NORTH SIDE  
 PRESSURE VS. CALENDAR MONTH

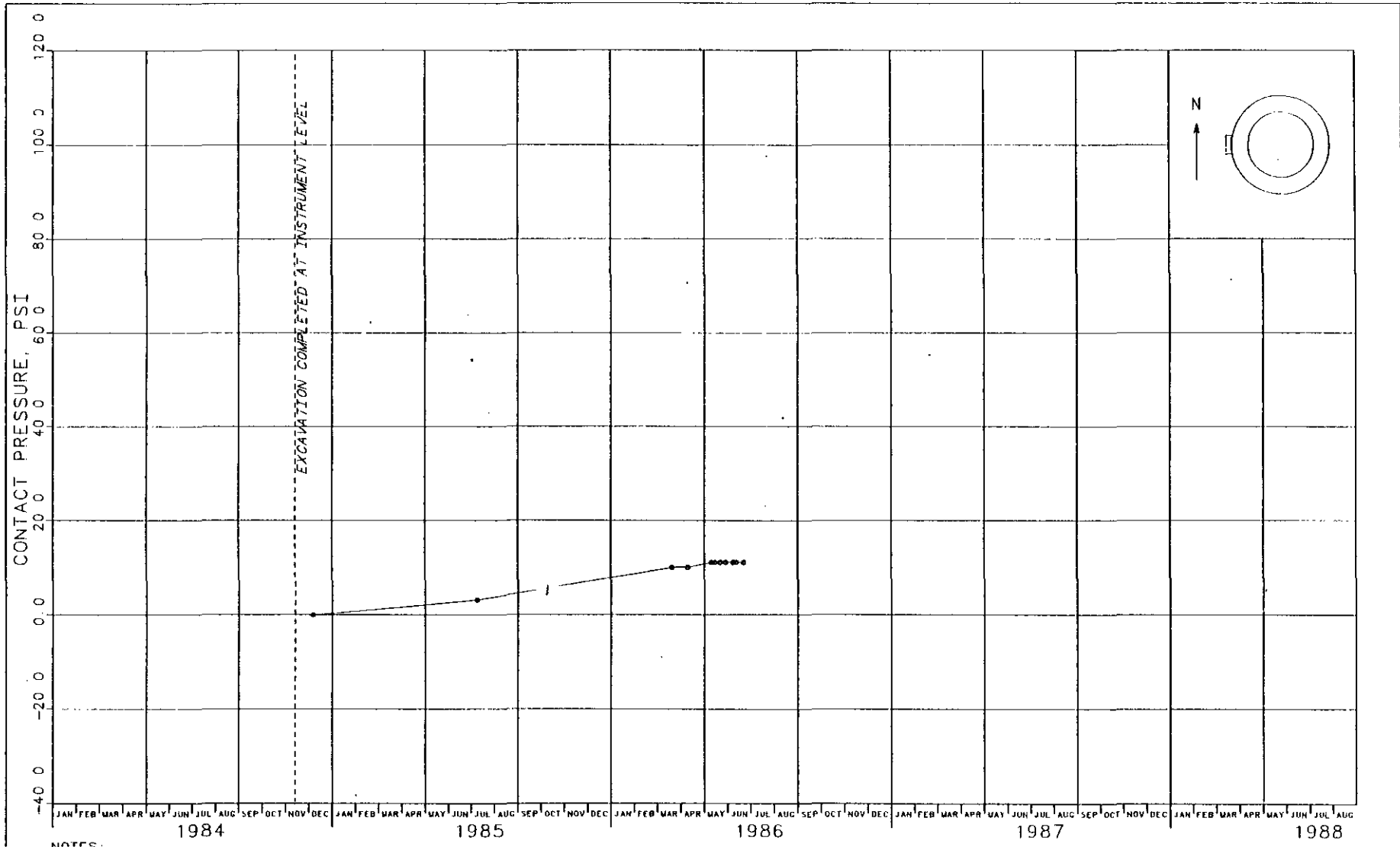




NOTES

1. CONCRETE FOR KEY WAS PLACED NOV 19 THROUGH NOV. 29, 1984.
2. SIZE OF EXCAVATION: 21 FT DIAM.

FIGURE J-52  
 PRESSURE CELL 35X-WE-00203  
 EXHAUST SHAFT KEY - EL 2535 - SOUTH SIDE  
 PRESSURE VS. CALENDAR MONTH



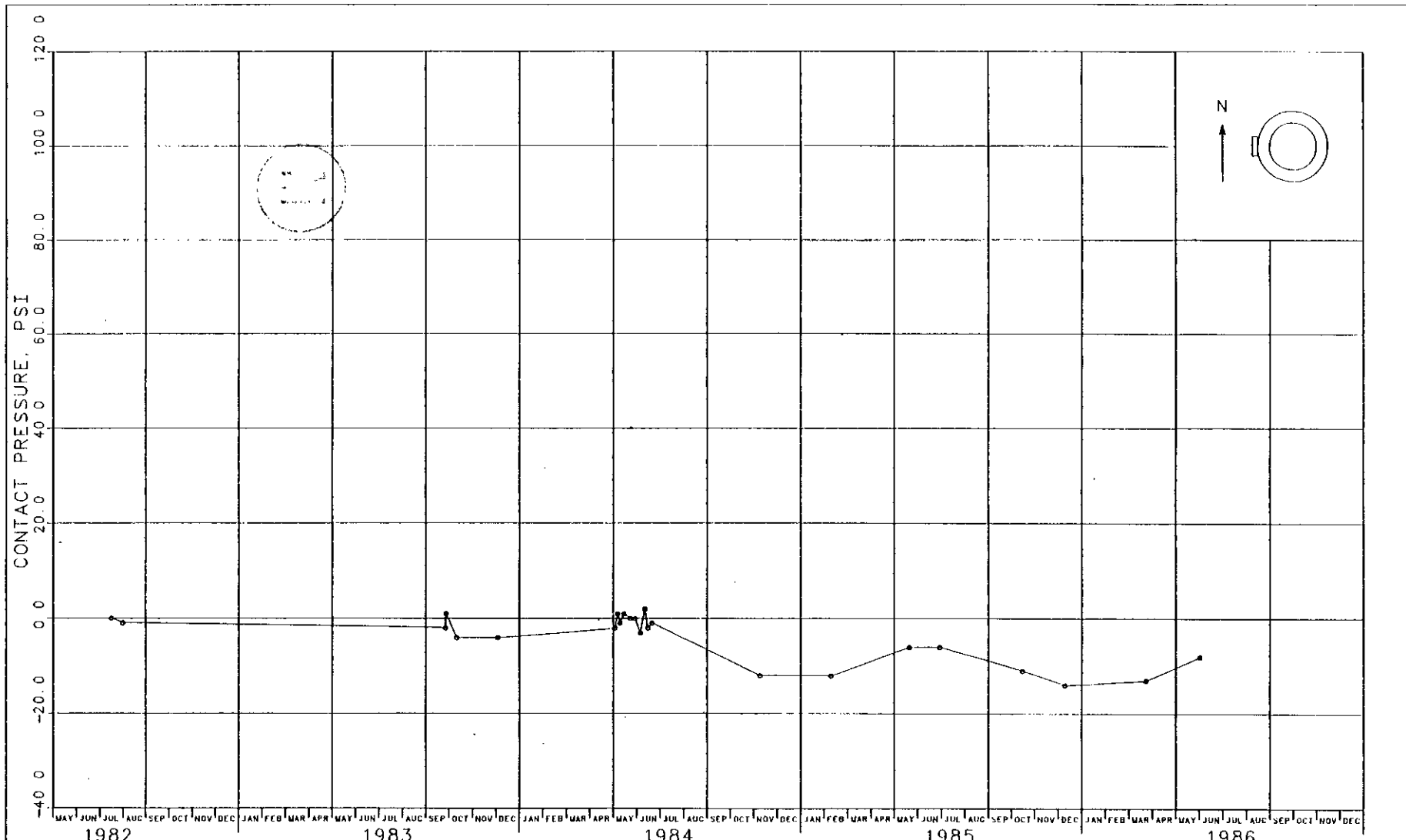
NOTES:

- 1 CONCRETE FOR KEY WAS PLACED NOV 19 THROUGH NOV 29, 1984
- 2 SIZE OF EXCAVATION: 21 FF DIAM

FIGURE J-53  
 PRESSURE CELL 35X-WE-00204  
 EXHAUST SHAFT KEY - EL 2535 - WEST SIDE  
 PRESSURE VS. CALENDAR MONTH



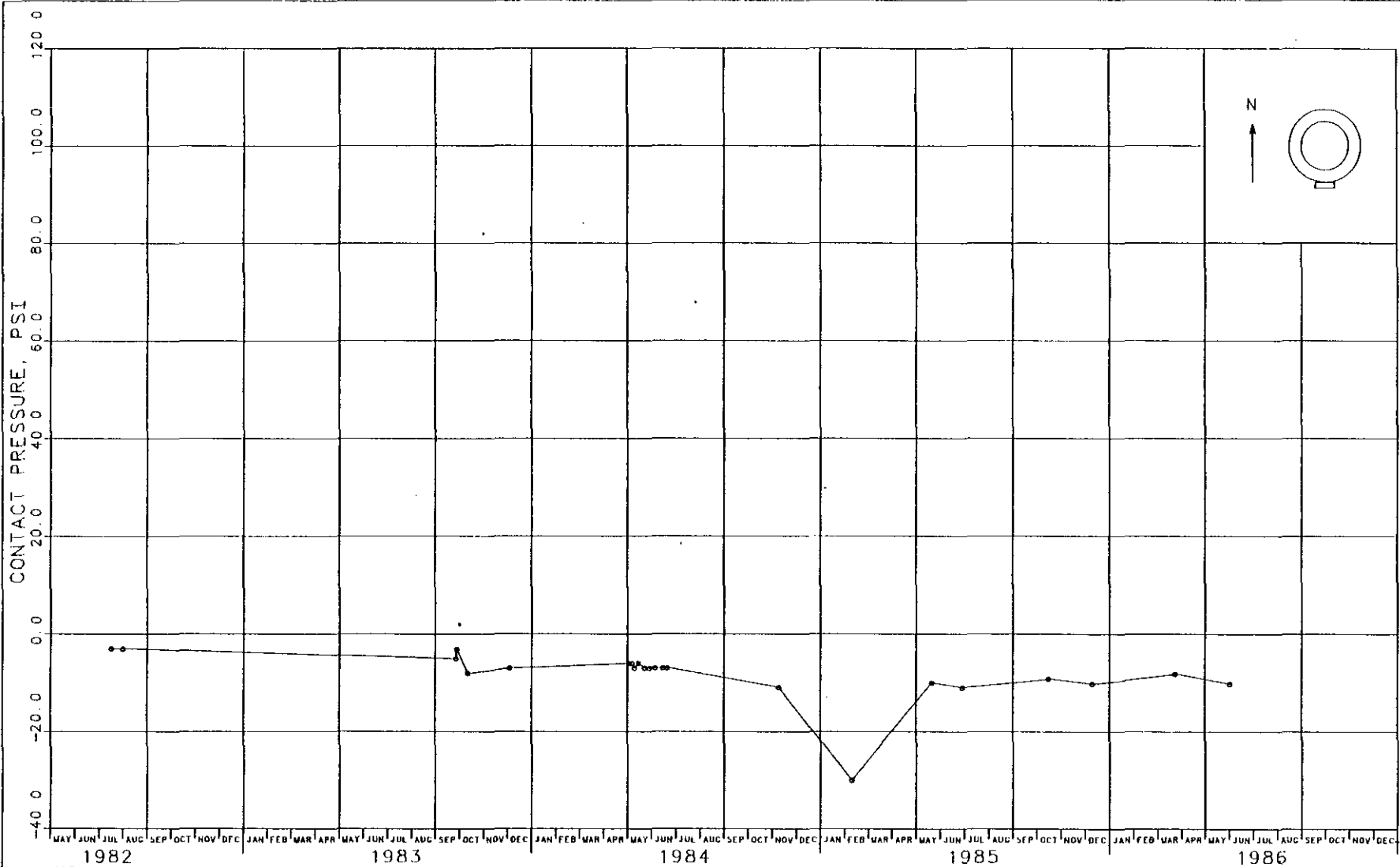




NOTES

- 1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
- 2. SIZE OF EXCAVATION 15 FT DIAM.

FIGURE J-54  
 PRESSURE CELL 37X-WE-00201  
 C & SH SHAFT KEY - EL 2550 - WEST SIDE  
 PRESSURE VS CALENDAR MONTH

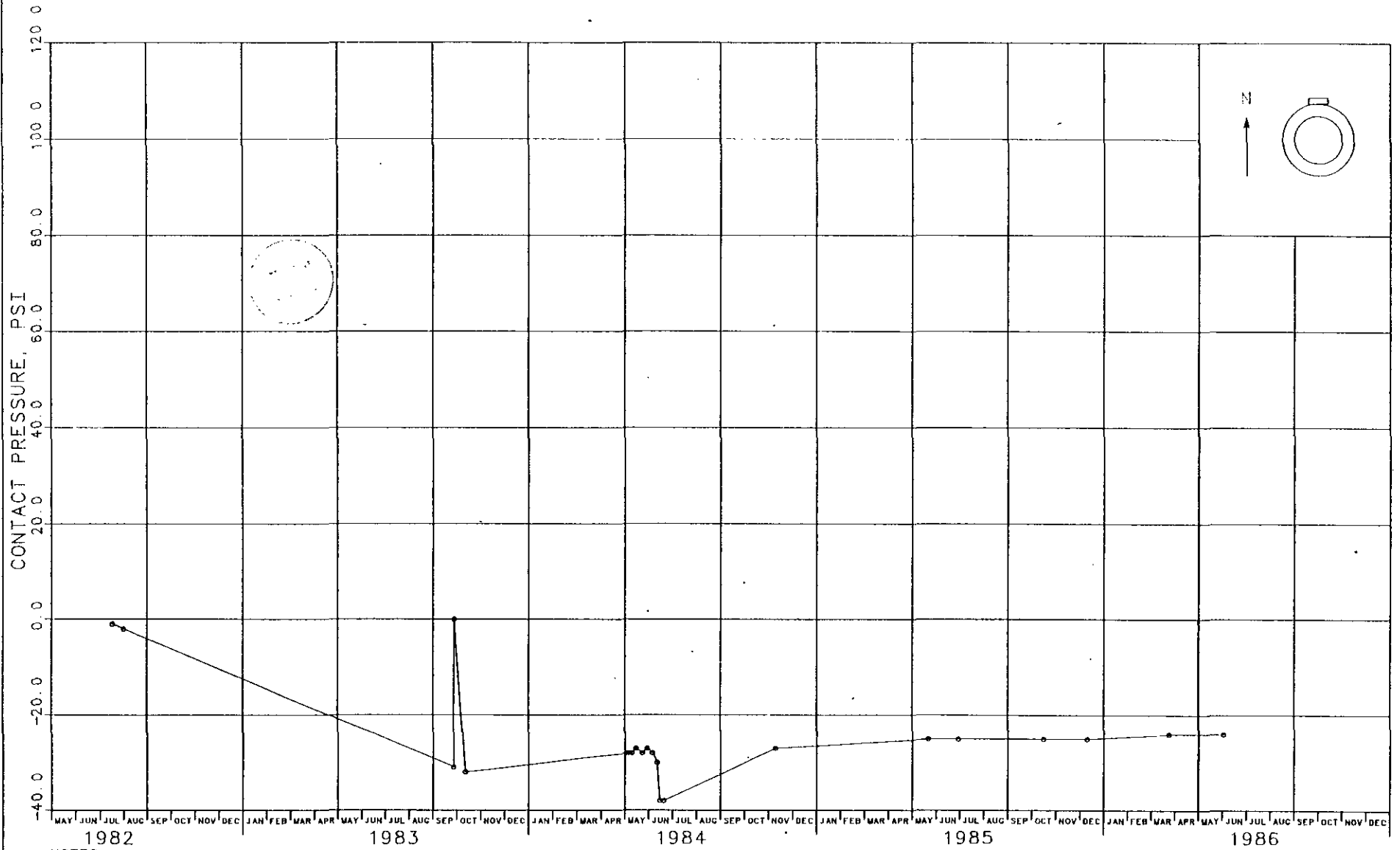


NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-55  
 PRESSURE CELL 37X-WE-00202  
 C & SH SHAFT KEY - EL 2550 - SOUTH SIDE  
 PRESSURE VS. CALENDAR MONTH

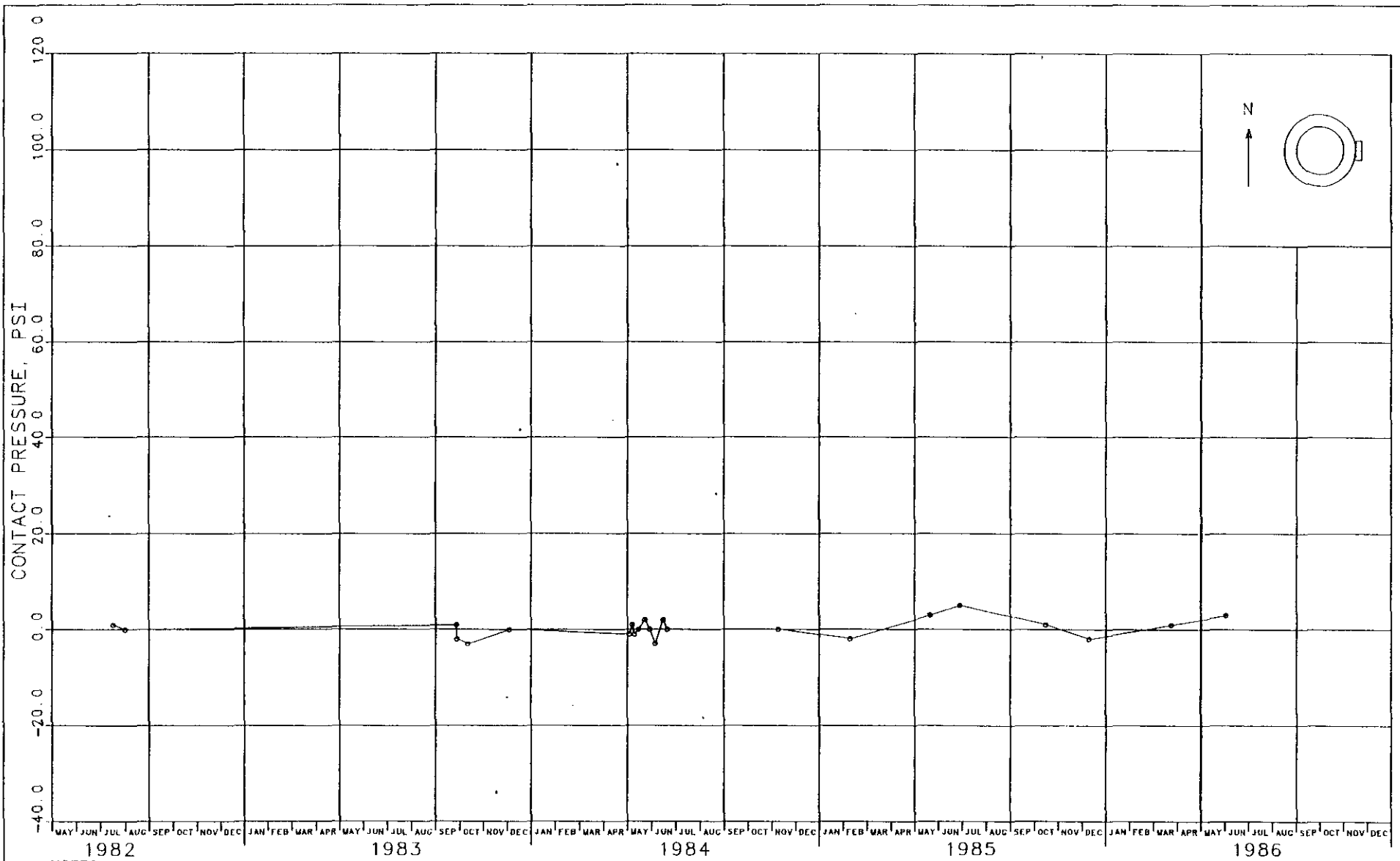




NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-56  
 PRESSURE CELL 37X-WE-00203  
 C & SH SHAFT KEY - EL 2550 - NORTH SIDE  
 PRESSURE VS. CALENDAR MONTH

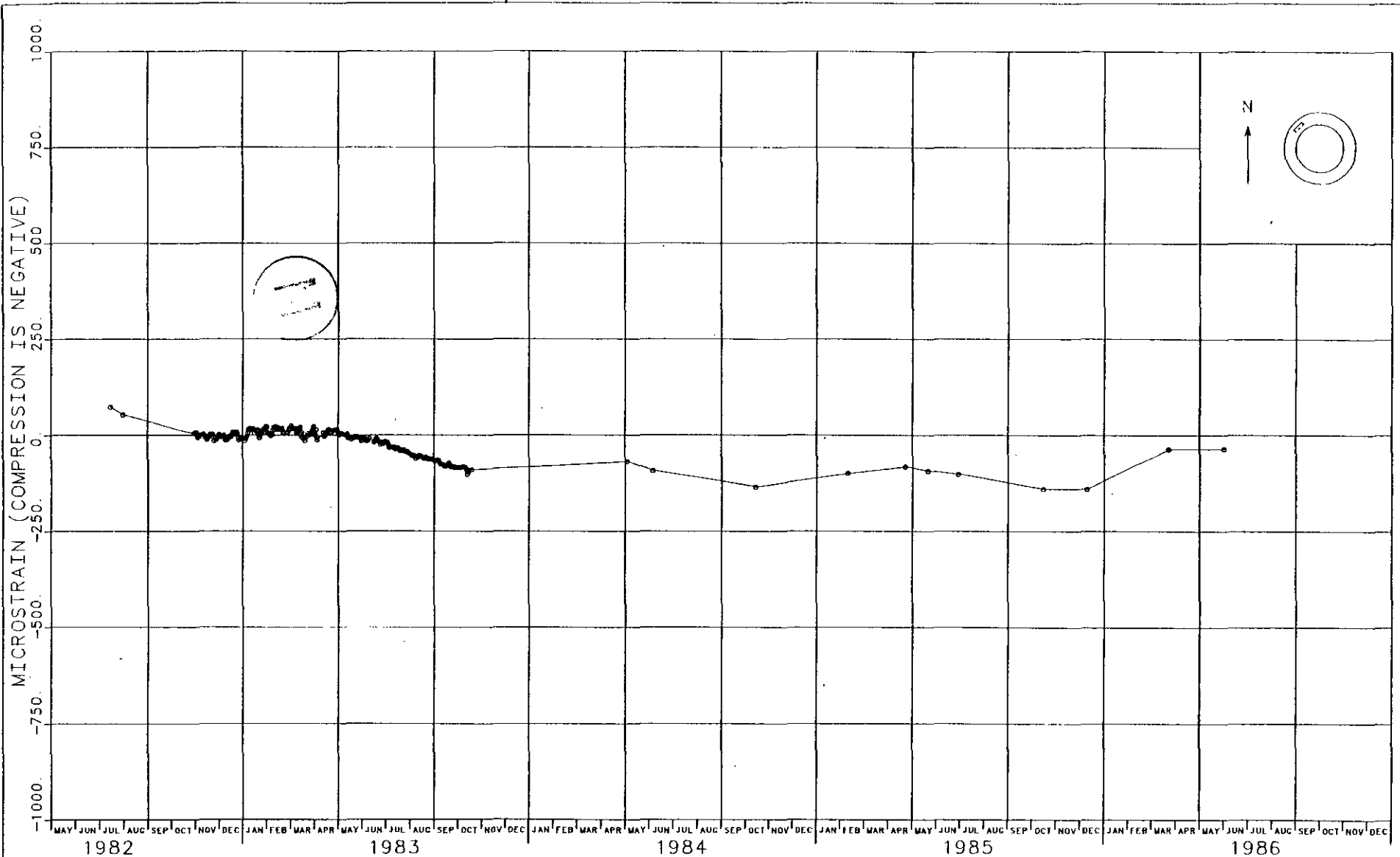


NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. SIZE OF EXCAVATION: 15 FT DIAM.

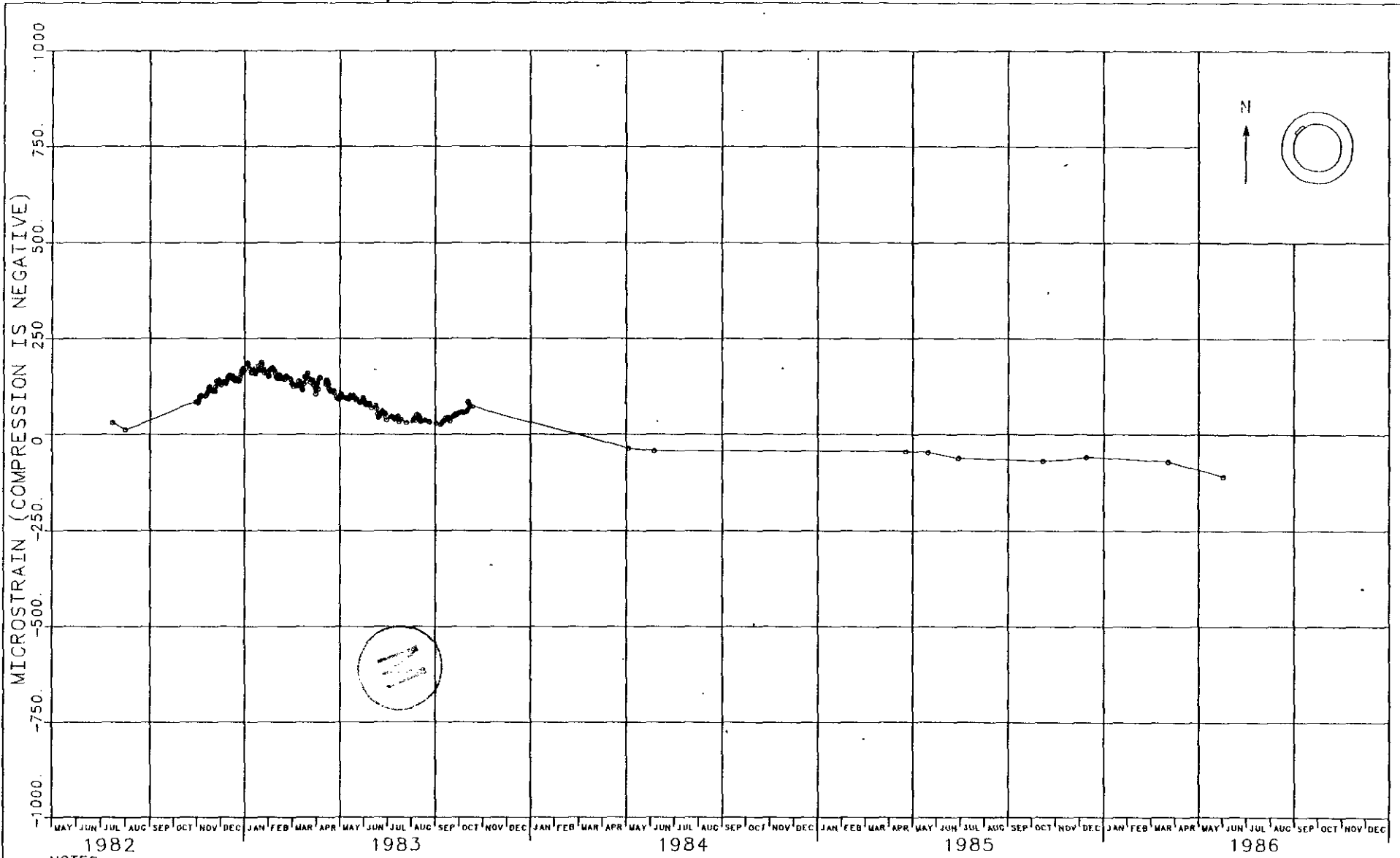


FIGURE J-57  
 PRESSURE CELL 37X-WE-00204  
 C & SH SHAFT KEY - EL 2550 - EAST SIDE  
 PRESSURE VS. CALENDAR MONTH



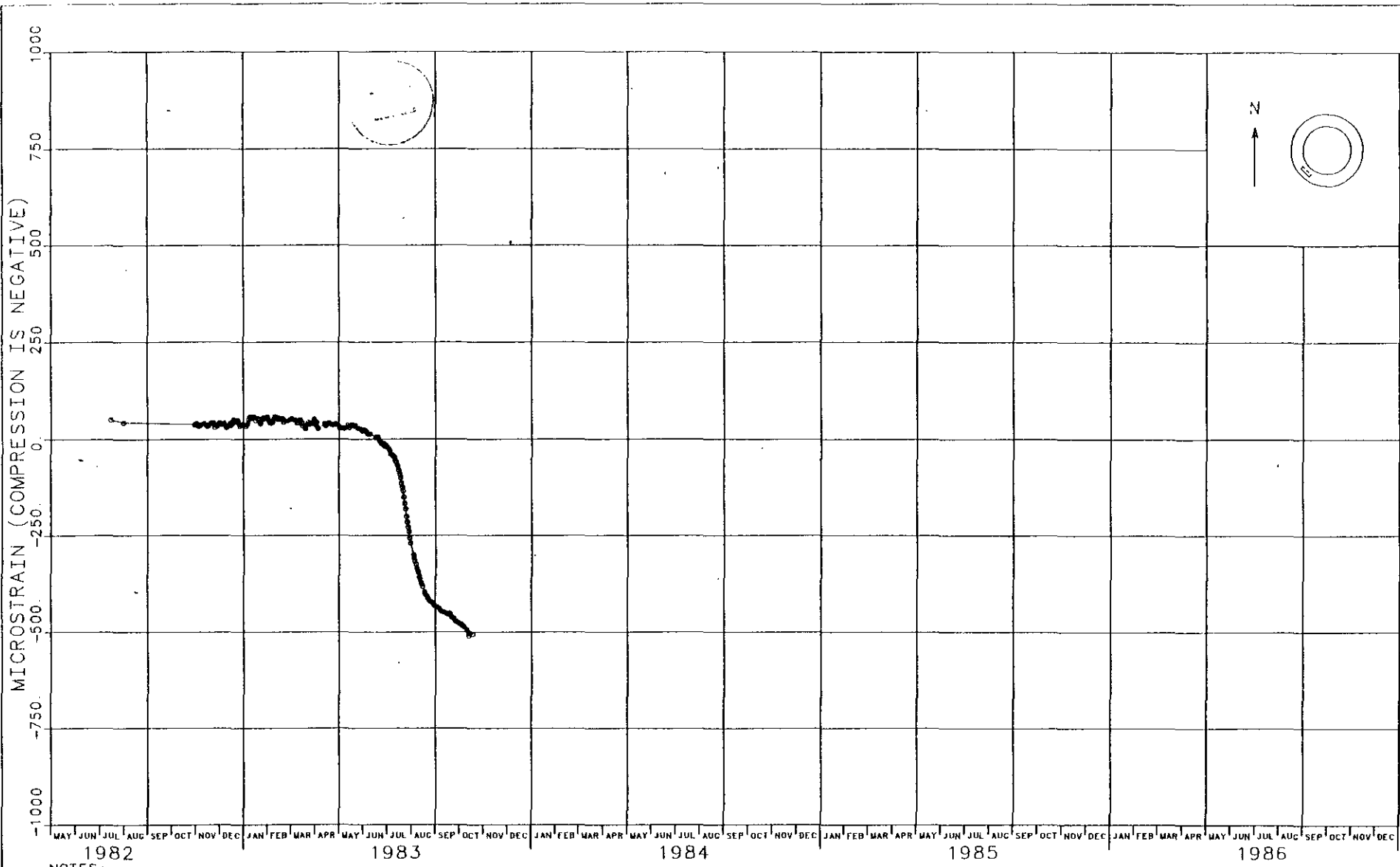
- NOTES
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
  2. STRAIN SINCE READING ON APR. 22, 1982.
  3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON NW SIDE OF CONCRETE KEY.
  4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-5B  
 WELDED STRAIN GAUGE 37X-ZE-00201  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



- NOTES:
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
  2. STRAIN SINCE READING ON APR 22, 1982
  3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON NW SIDE OF CONCRETE KEY.
  4. SIZE OF EXCAVATION: 15 FT DIAM

FIGURE J-59  
 WELDED STRAIN GAUGE 37X-ZE-00202  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



- NOTES:
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
  2. STRAIN SINCE READING ON APR. 22, 1982.
  3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON SW SIDE OF CONCRETE KEY
  4. SIZE OF EXCAVATION: 15 FT DIAM.
  5. INSTRUMENT HAS PERMANENTLY FAILED.

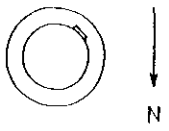
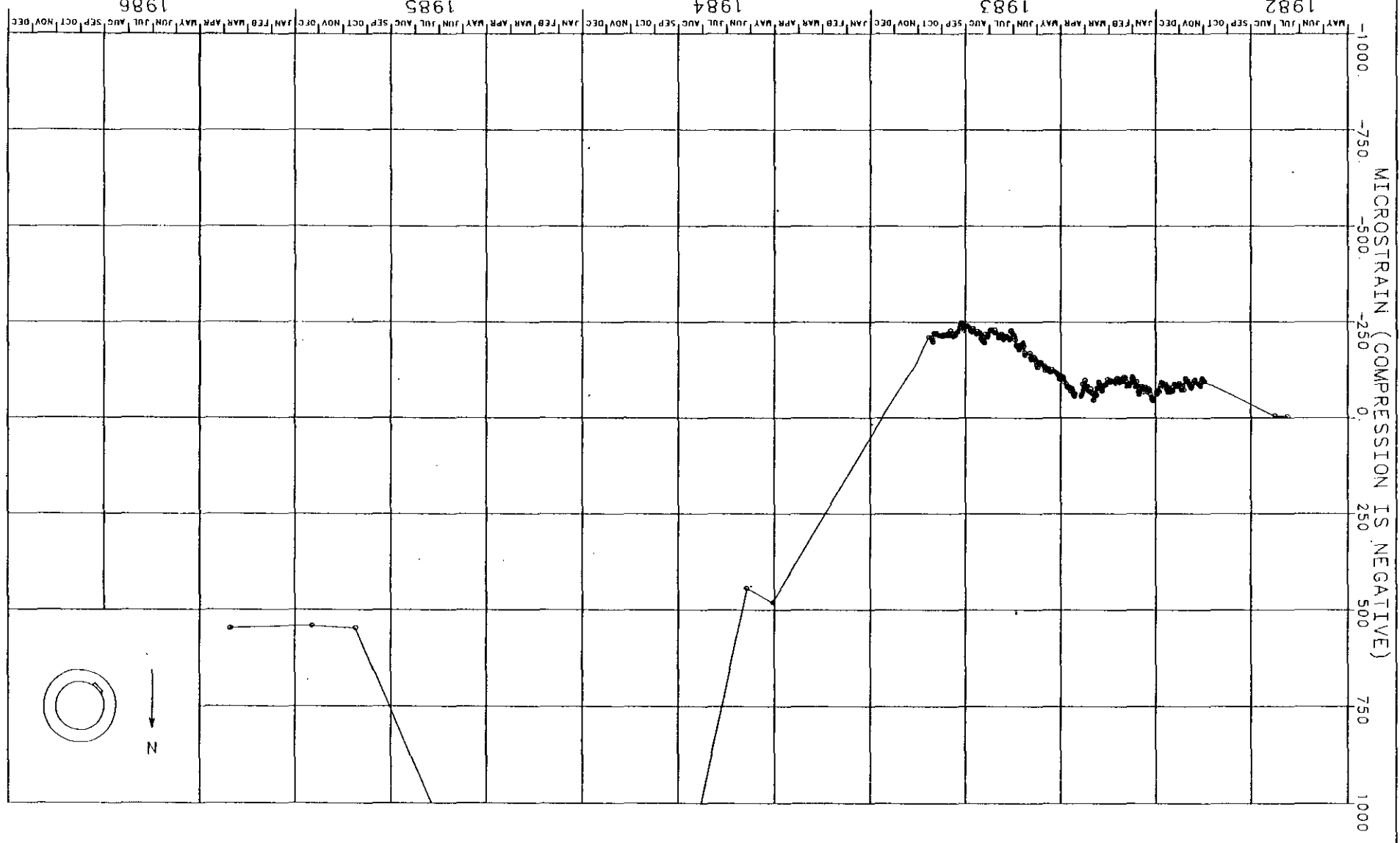
FIGURE J-60  
 WELDED STRAIN GAUGE 37X-ZE-00203  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



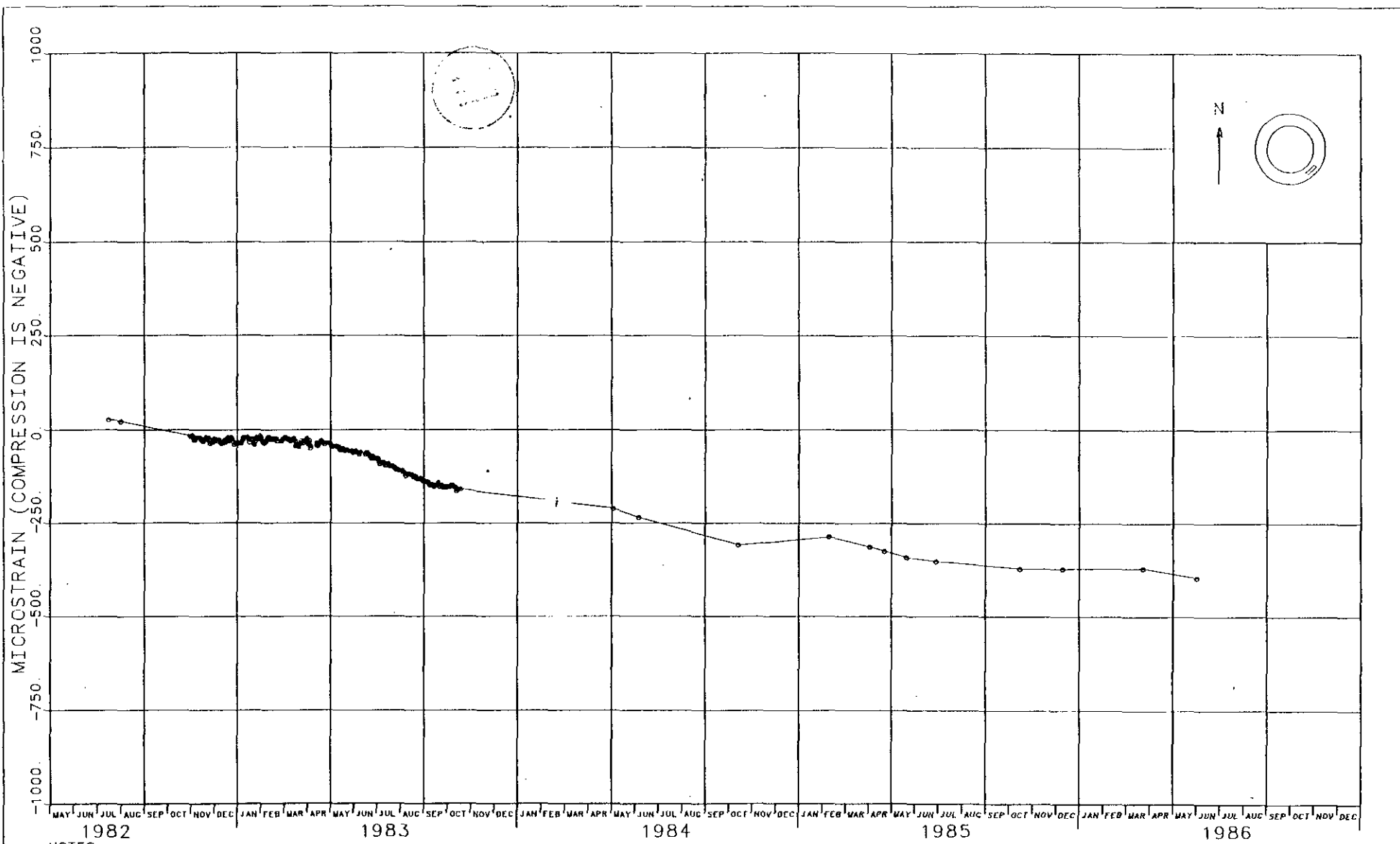
FIGURE J-61  
 WELDED STRAIN GAUGE 37X-ZE-00204  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON SW SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

NOTES



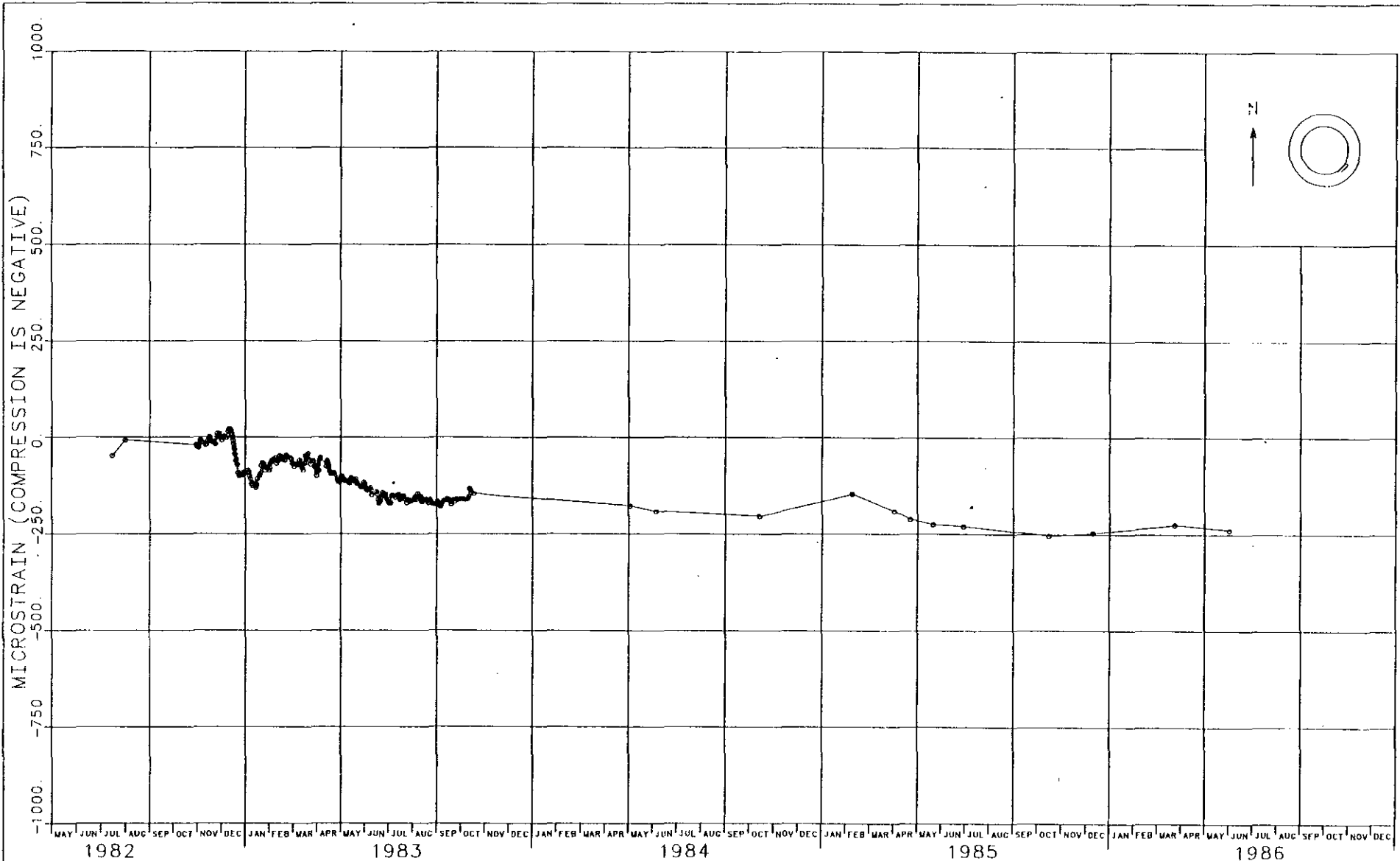




NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982
3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON SE SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-62  
 WELDED STRAIN GAUGE 37X-ZE-00205  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH

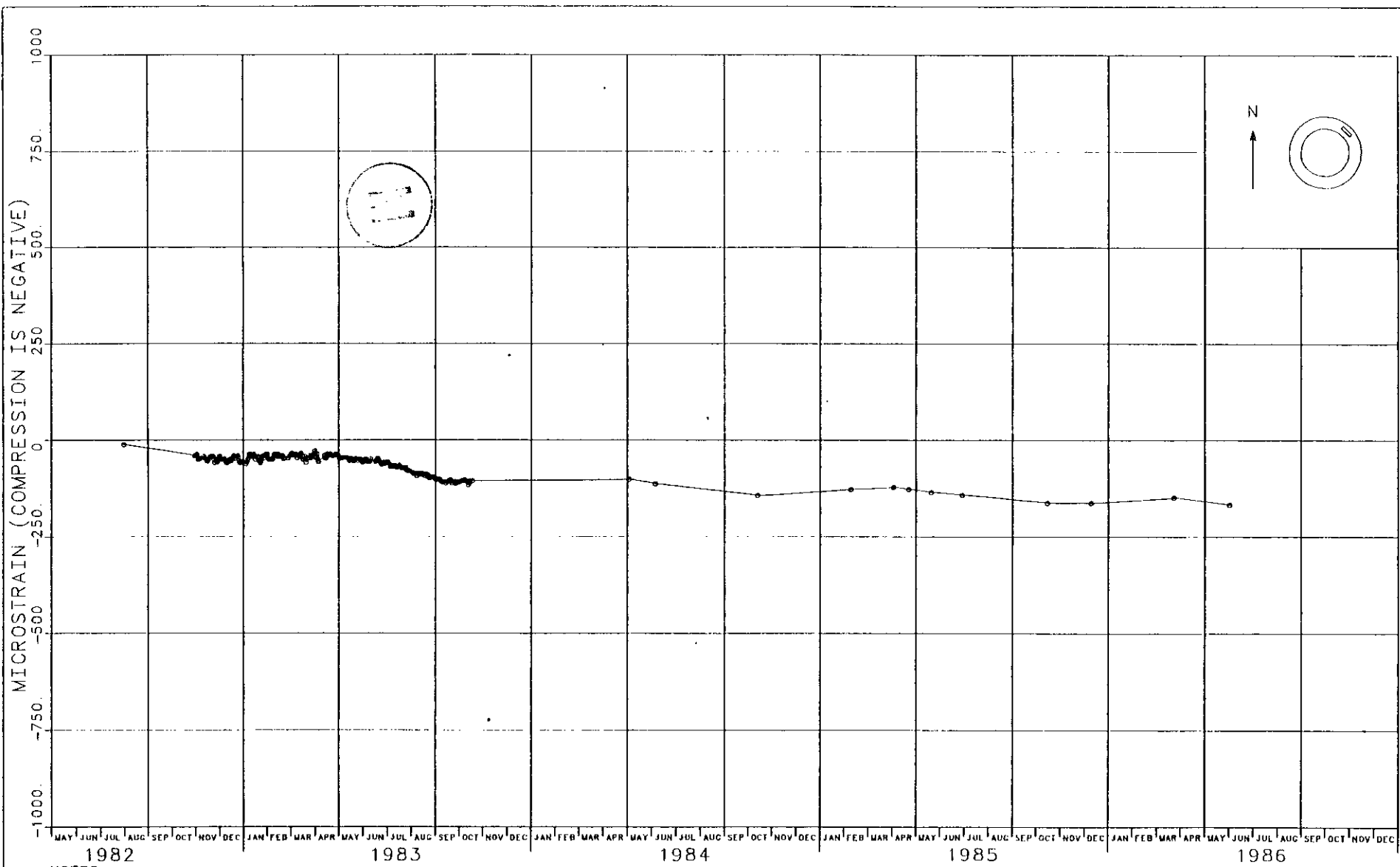


NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON SE SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM

FIGURE J-63  
 WELDED STRAIN GAUGE 37X-ZE-00206  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH

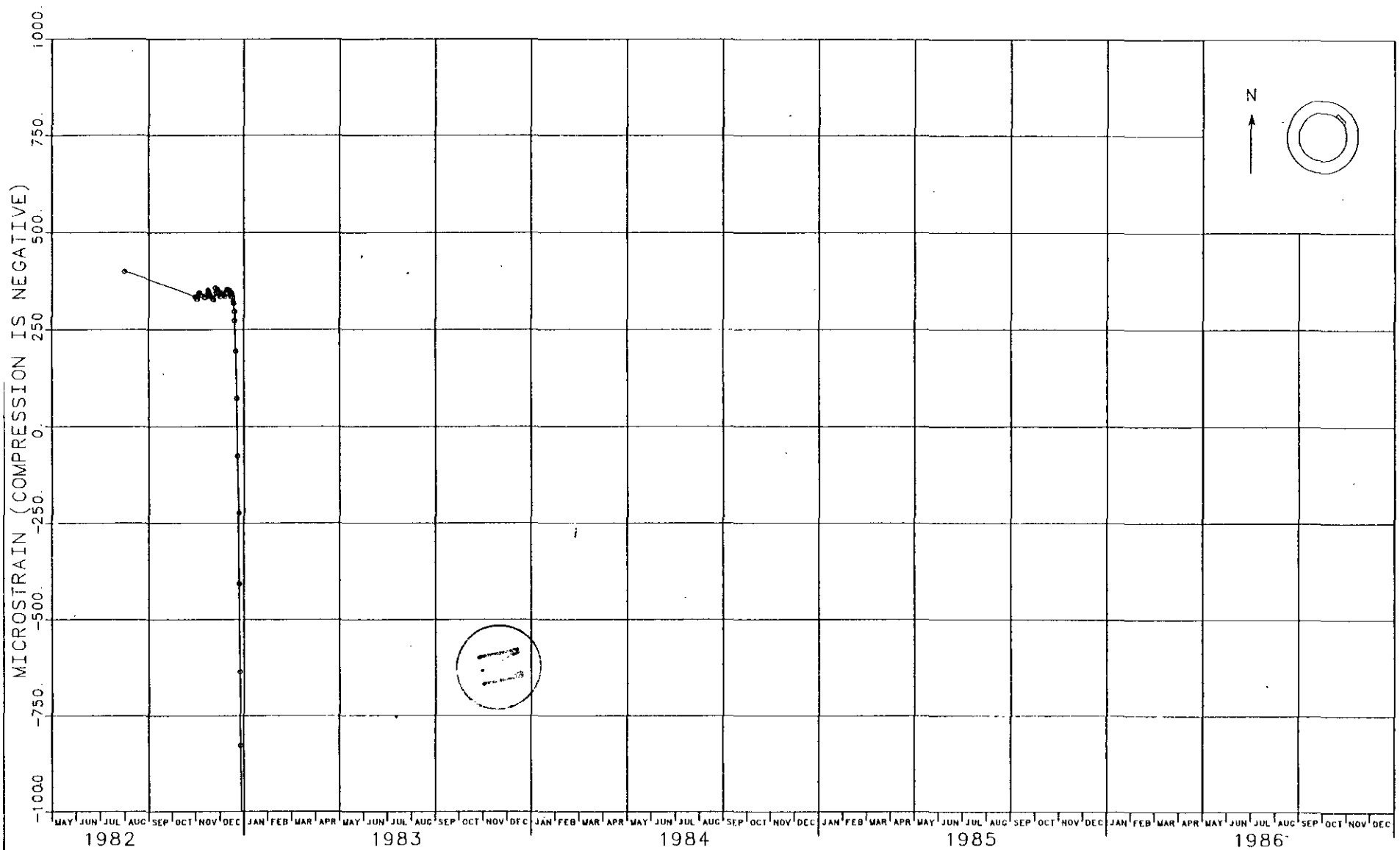




NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982
3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON NE SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM

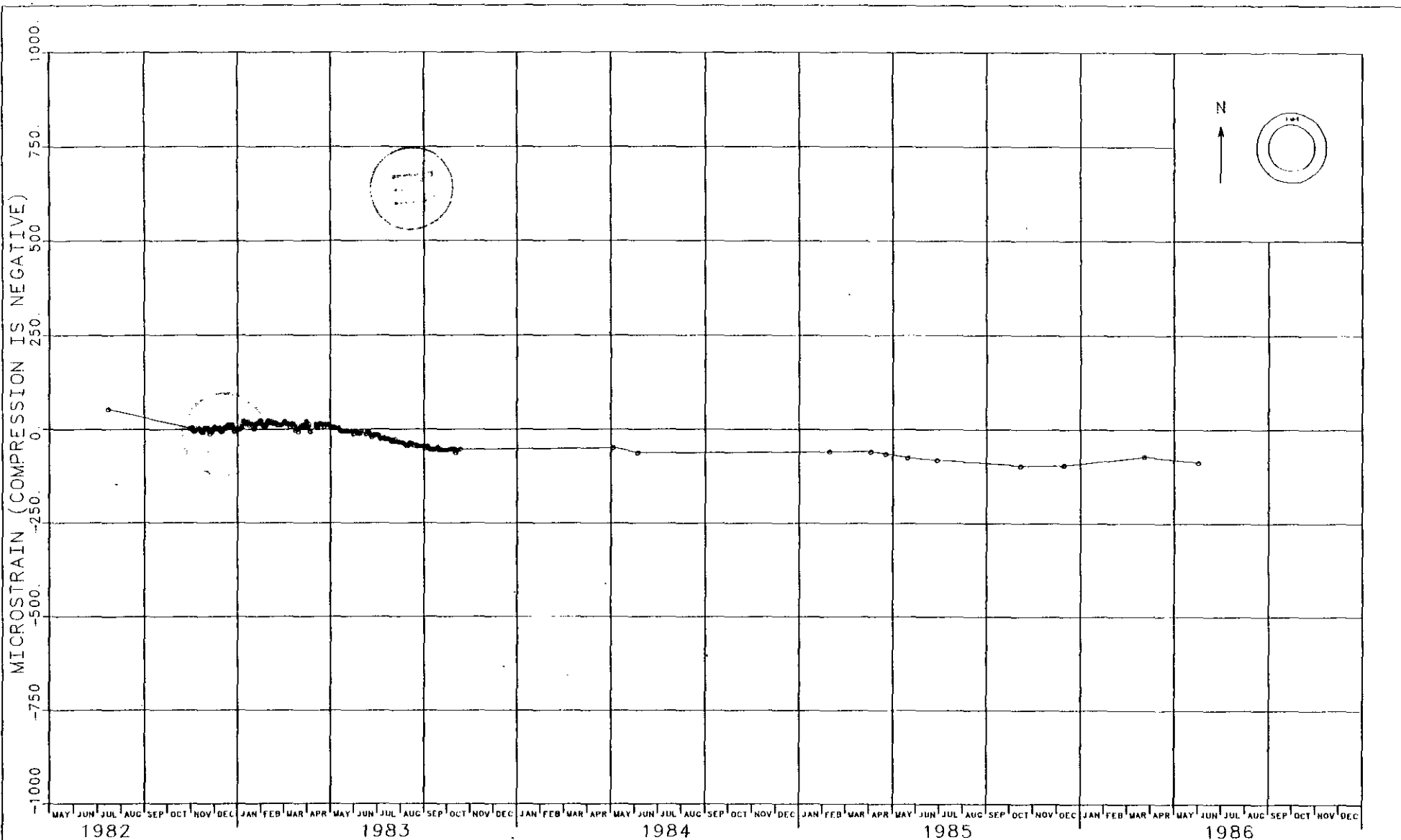
FIGURE J-64  
 WELDED STRAIN GAUGE 37X-ZE-00207  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS CALENDAR MONTH



NOTES

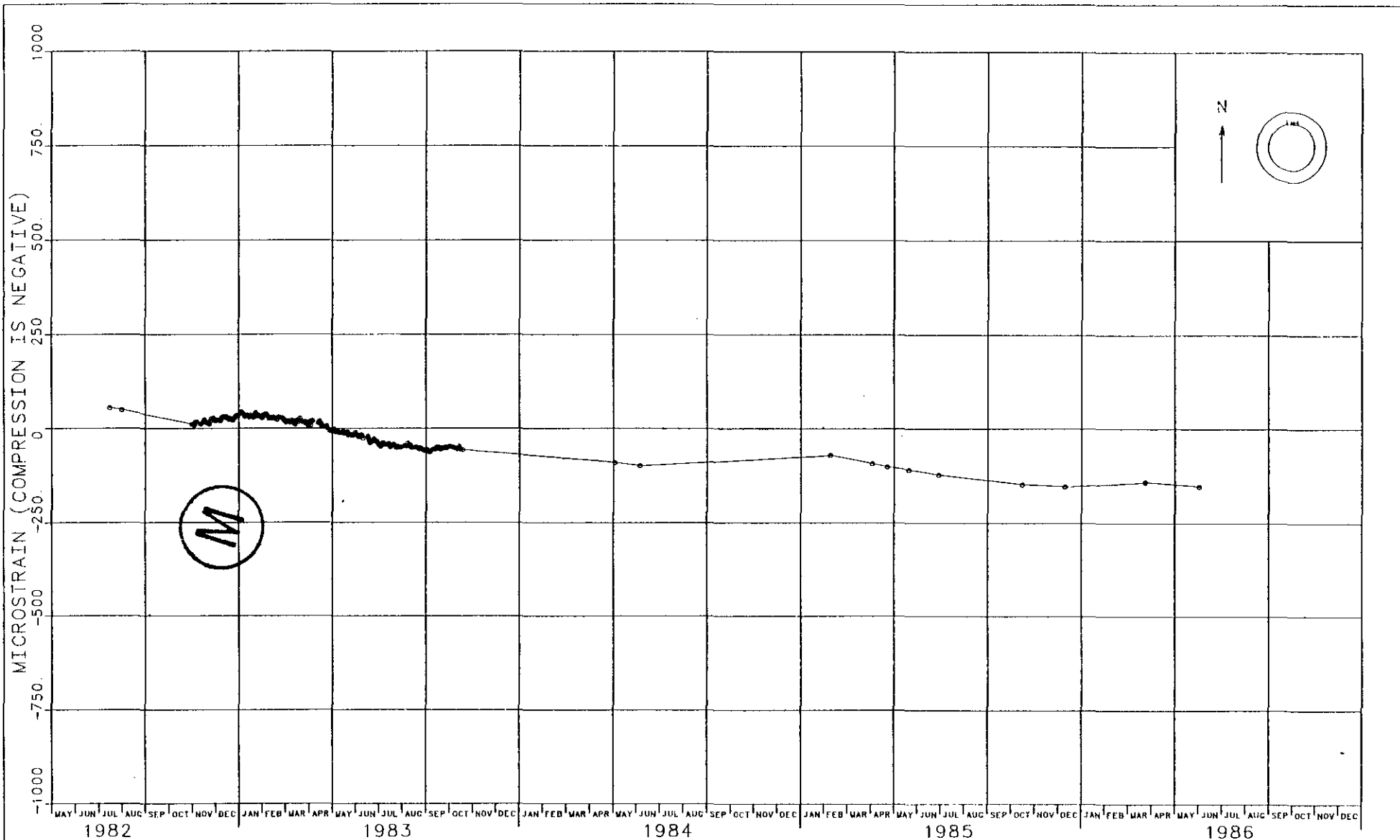
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON NE SIDE OF CONCRETE KEY
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT HAS PERMANENTLY FAILED.

FIGURE J-65  
 WELDED STRAIN GAUGE 37X-ZE-00208  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



- NOTES:
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
  2. STRAIN SINCE READING ON APR. 22, 1982
  3. GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON NORTH SIDE OF CONCRETE KEY
  4. SIZE OF EXCAVATION: 15 FT DIAM.

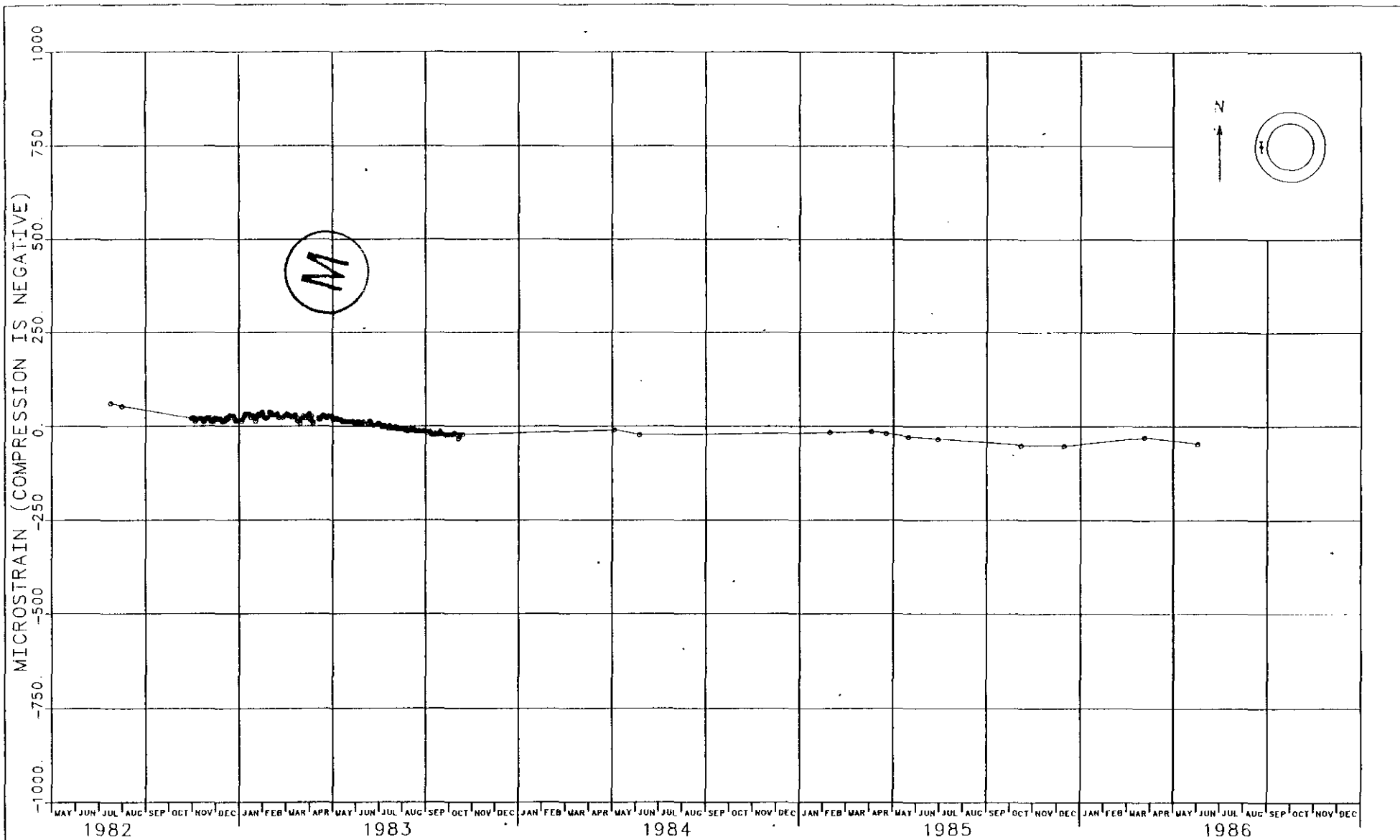
FIGURE J-66  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00209  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON NORTH SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

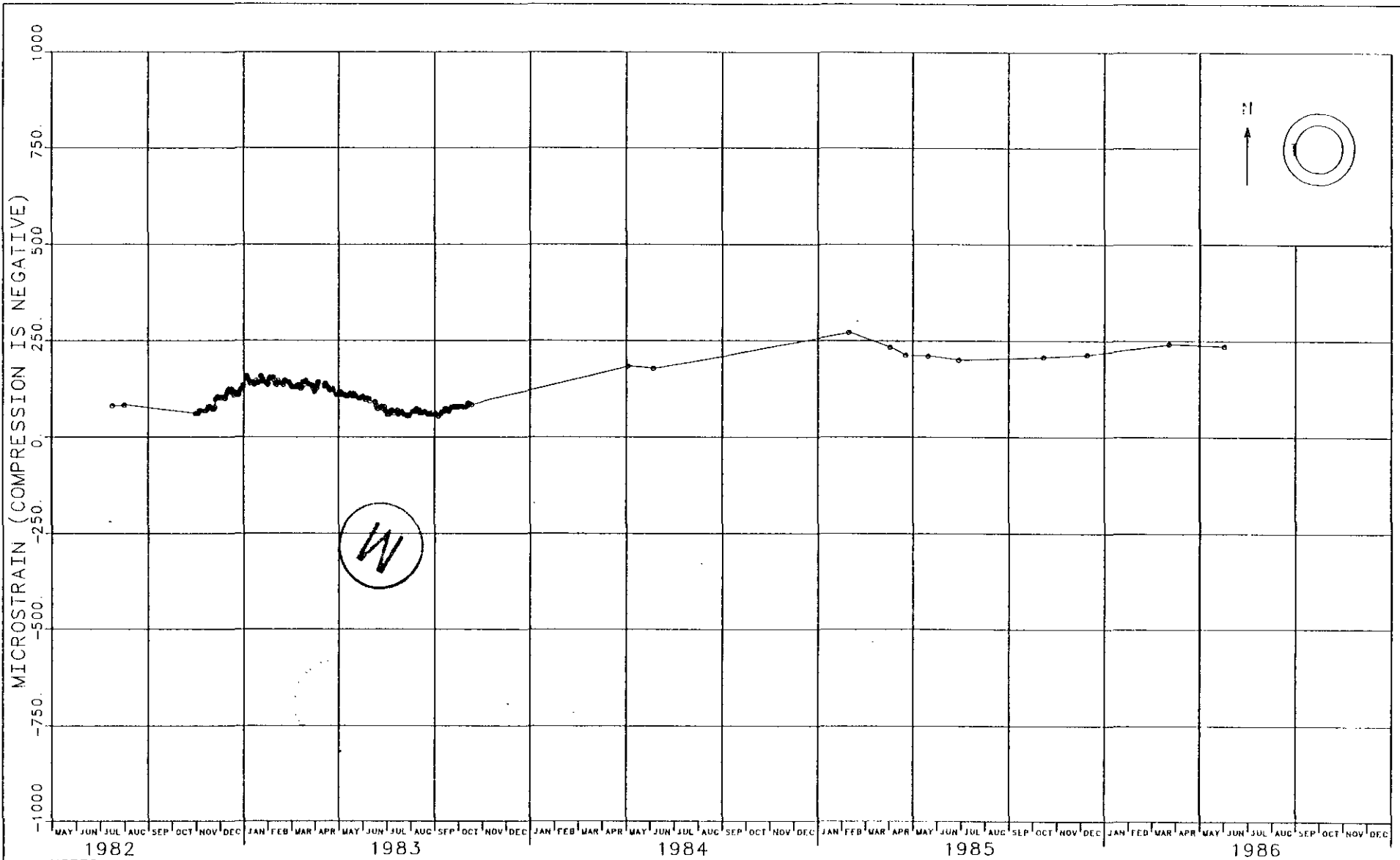
FIGURE J-67  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00210  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



NOTES

- 1 CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
- 2 STRAIN SINCE READING ON APR. 22, 1982.
- 3 GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON WEST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-68  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00211  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH

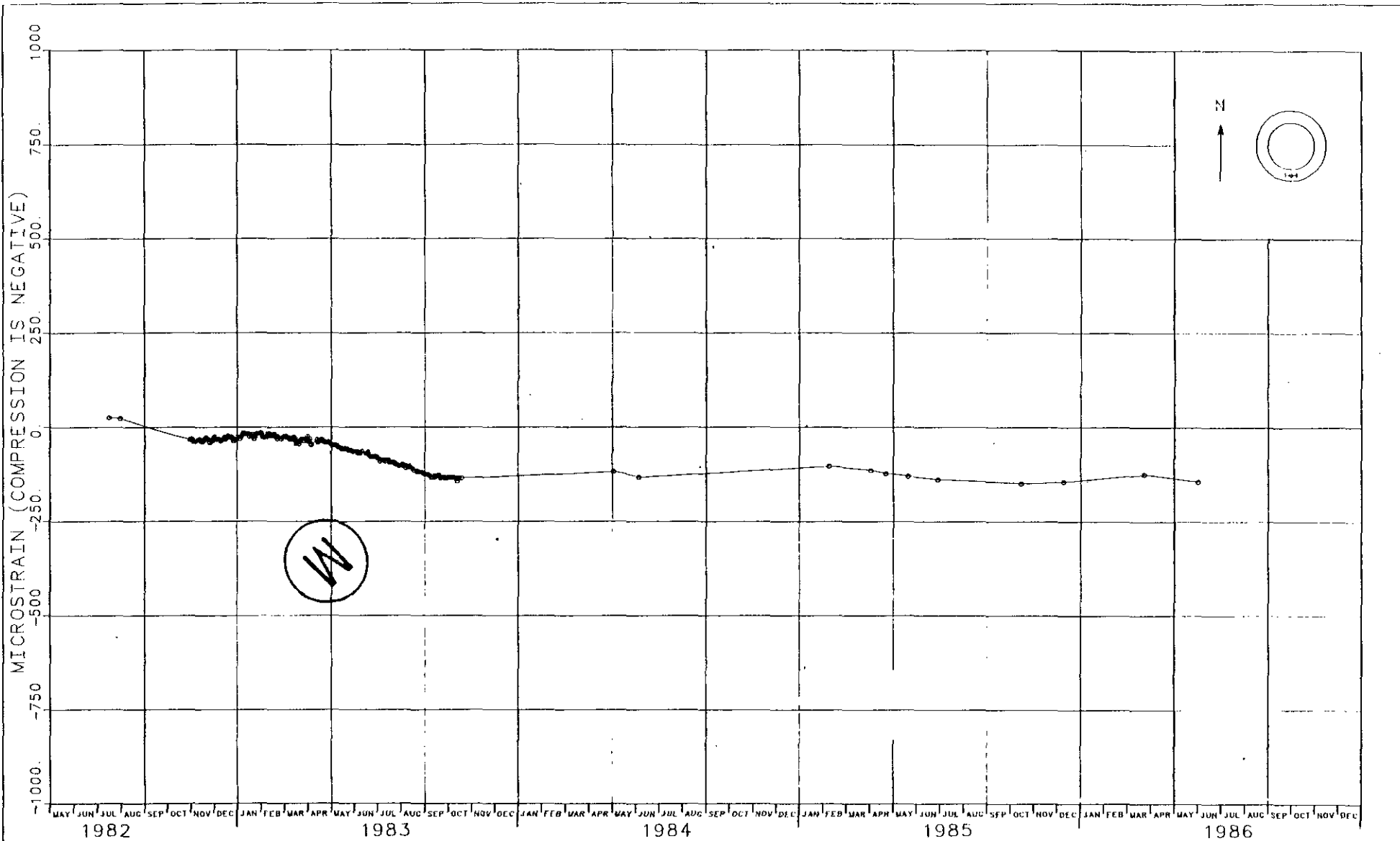


NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON WEST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM

FIGURE J-69  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00212  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH

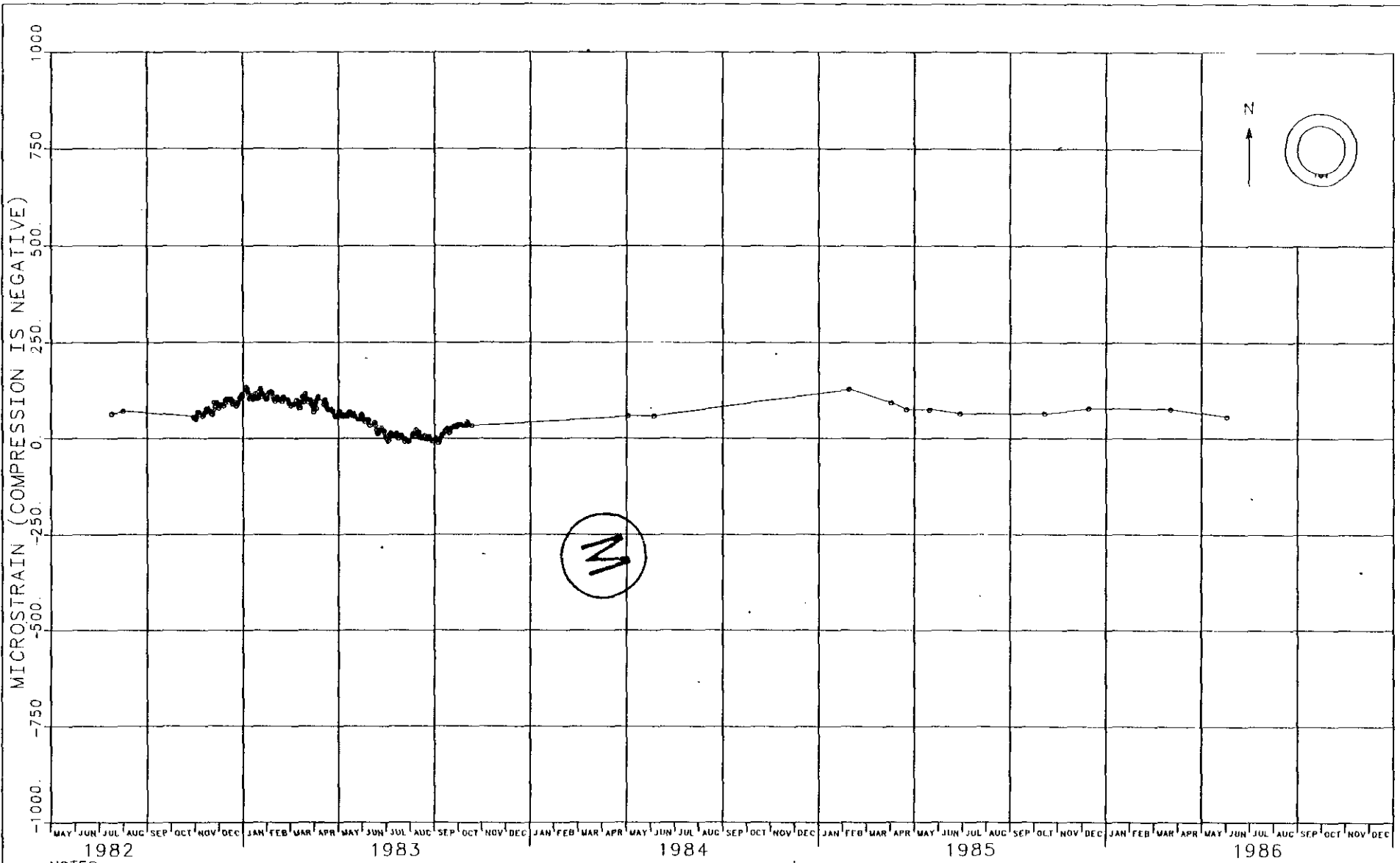




NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON SOUTH SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

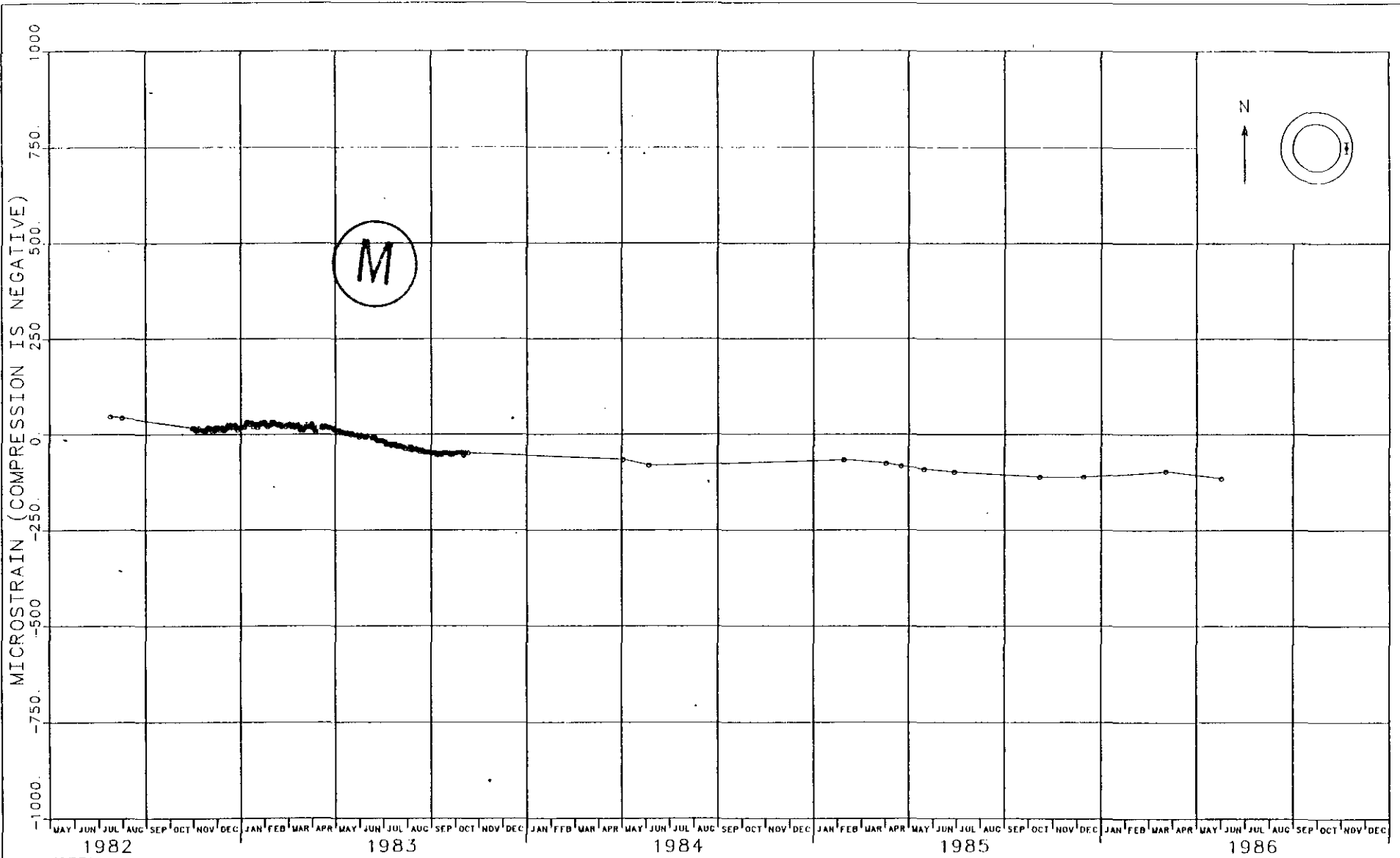
FIGURE J-70  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00213  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON SOUTH SIDE OF CONCRETE KEY
4. SIZE OF EXCAVATION: 15 FT DIAM.

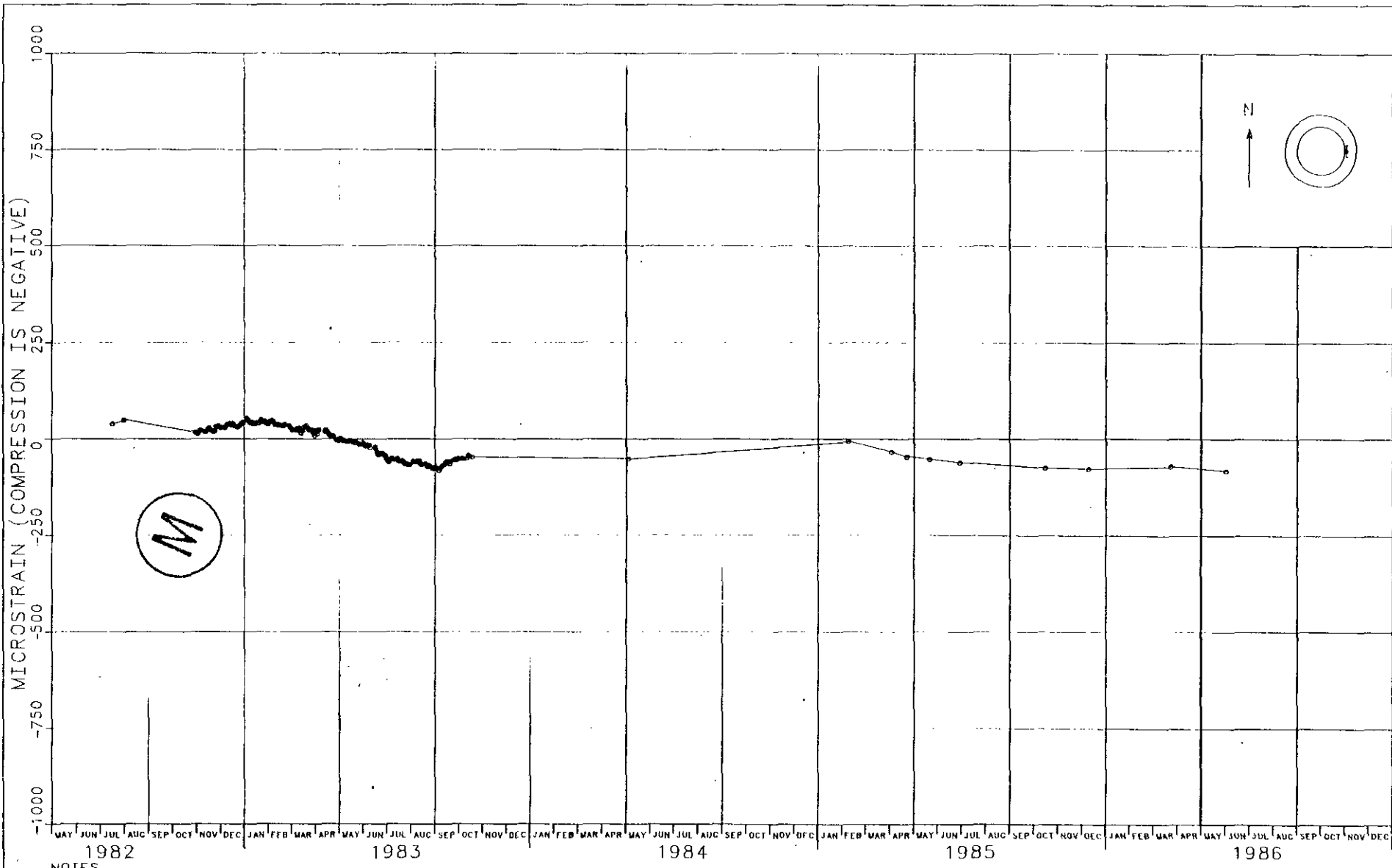
FIGURE J-71  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00214  
 C & SH SHAFT KEY - EL. 2553.7  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON EAST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

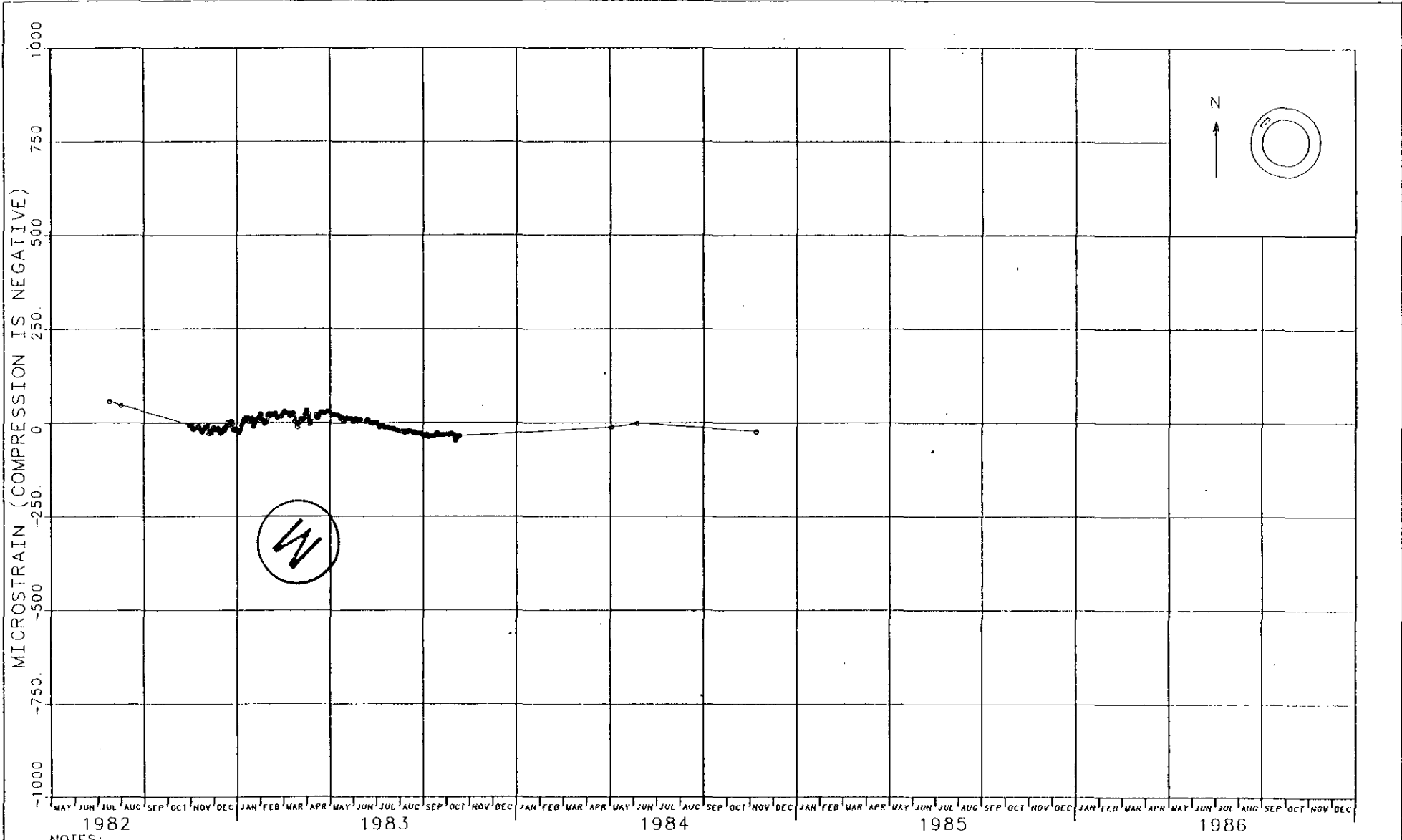
FIGURE J-72  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00215  
 C & SH SHAFT KEY - EL. 2553.7  
 STRAIN VS. CALENDAR MONTH



NOTES

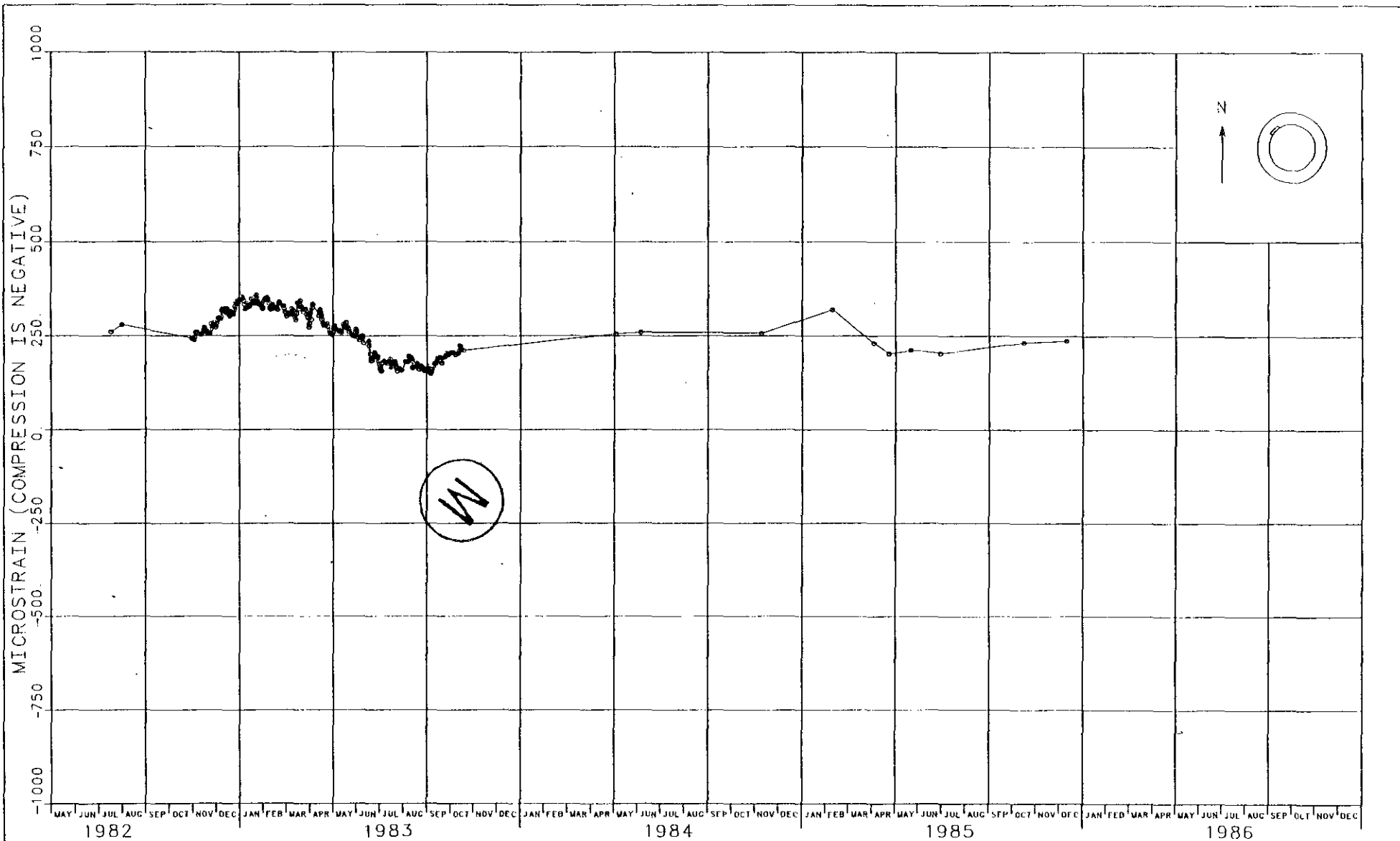
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON EAST SIDE OF CONCRETE KEY
4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-73  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00216  
 C & SH SHAFT KEY - EL 2553.7  
 STRAIN VS. CALENDAR MONTH



- NOTES:
1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
  2. STRAIN SINCE READING ON APR. 22, 1982.
  3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON NW SIDE OF CONCRETE KEY.
  4. SIZE OF EXCAVATION: 15 FT DIAM.
  5. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

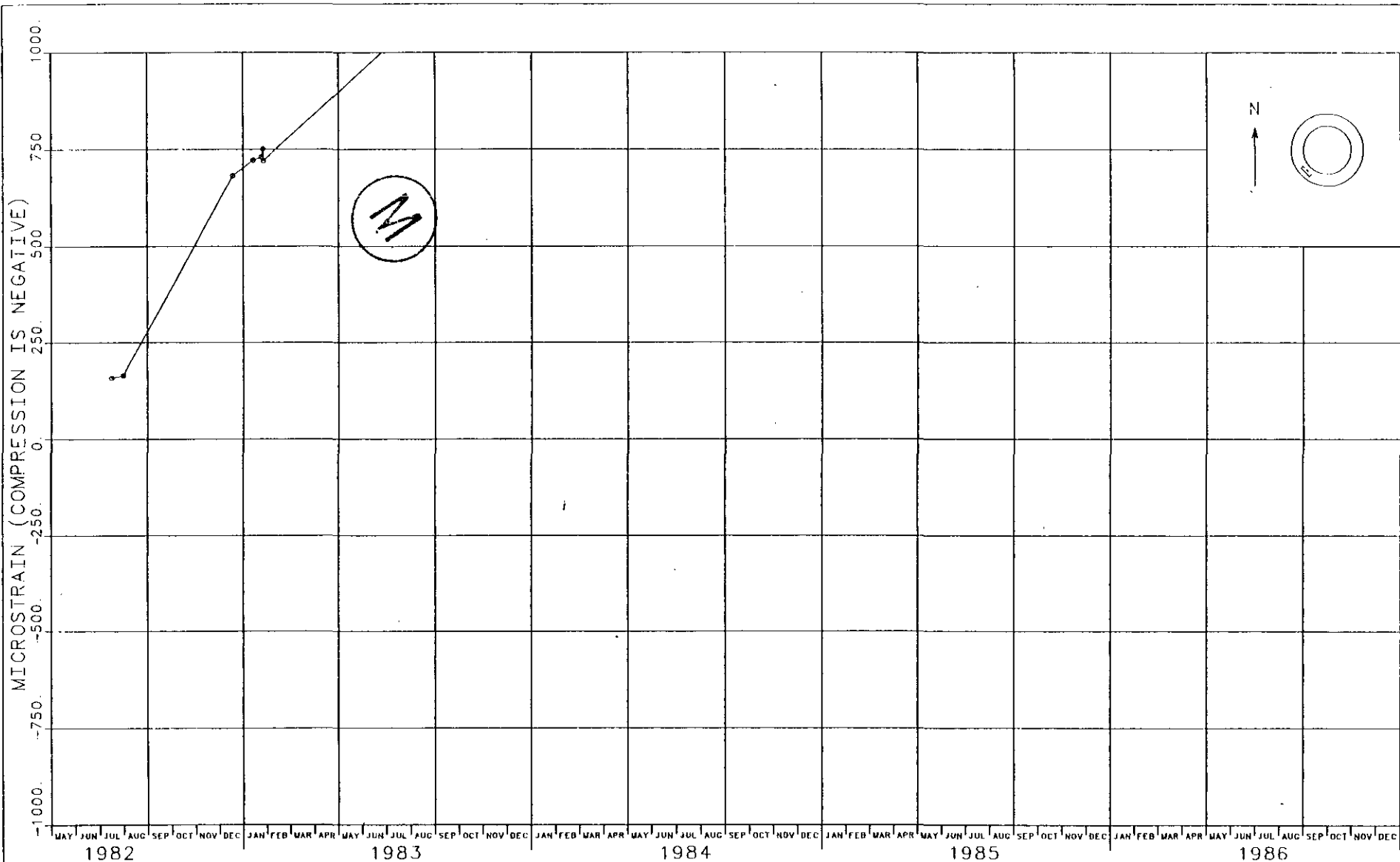
FIGURE J-74  
 WELDED STRAIN GAUGE 37X-ZE-00217  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON NW SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

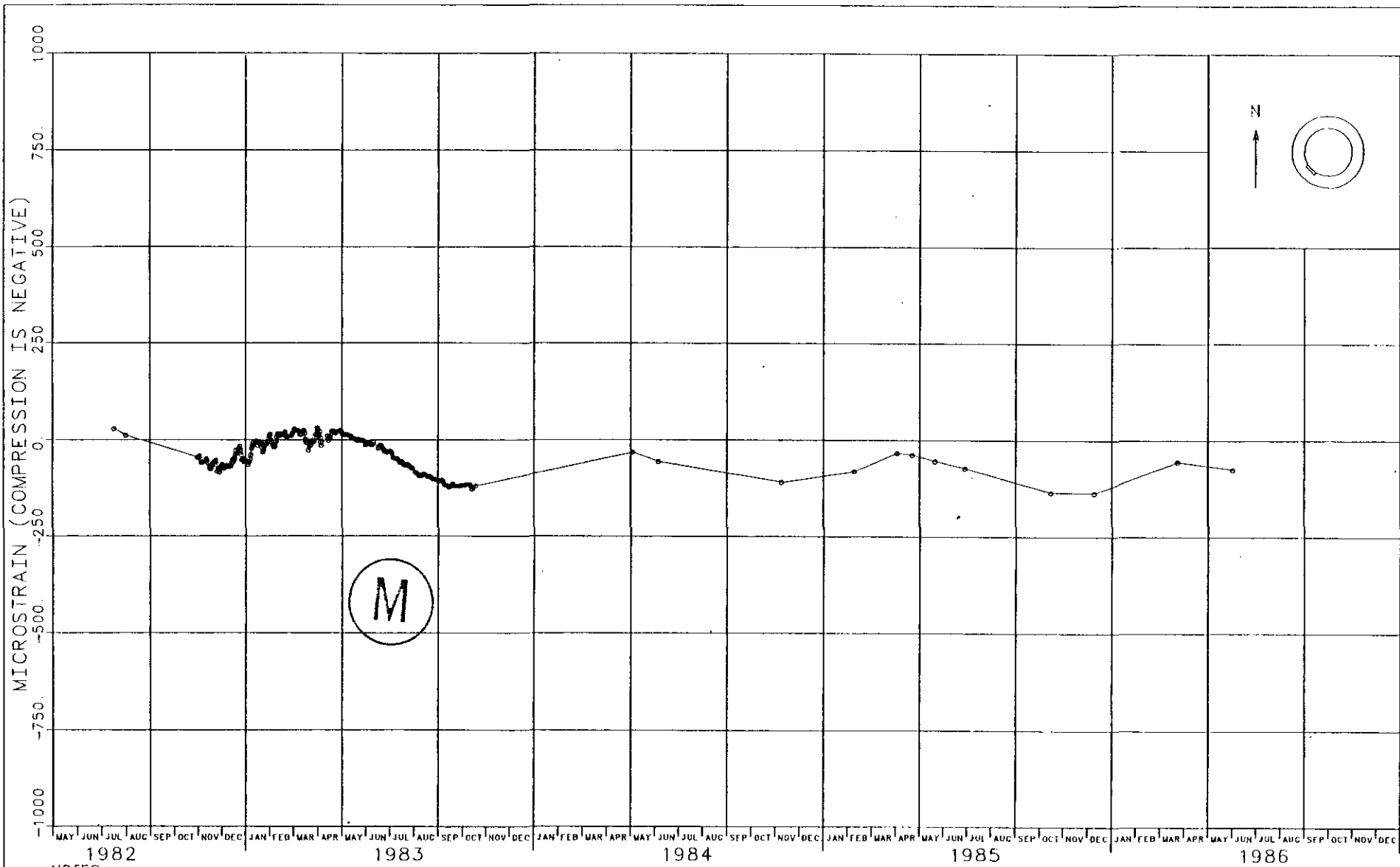
FIGURE J-75  
 WELDED STRAIN GAUGE 37X-ZE-00218  
 C & SH SHAFT KEY -- EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982
3. GAUGE IS LOCATED 15 IN. FROM INNER FACE ON SW SIDE OF CONCRETE KEY
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT HAS PERMANENTLY FAILED

FIGURE J-76  
 WELDED STRAIN GAUGE 37X-ZE-00219  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

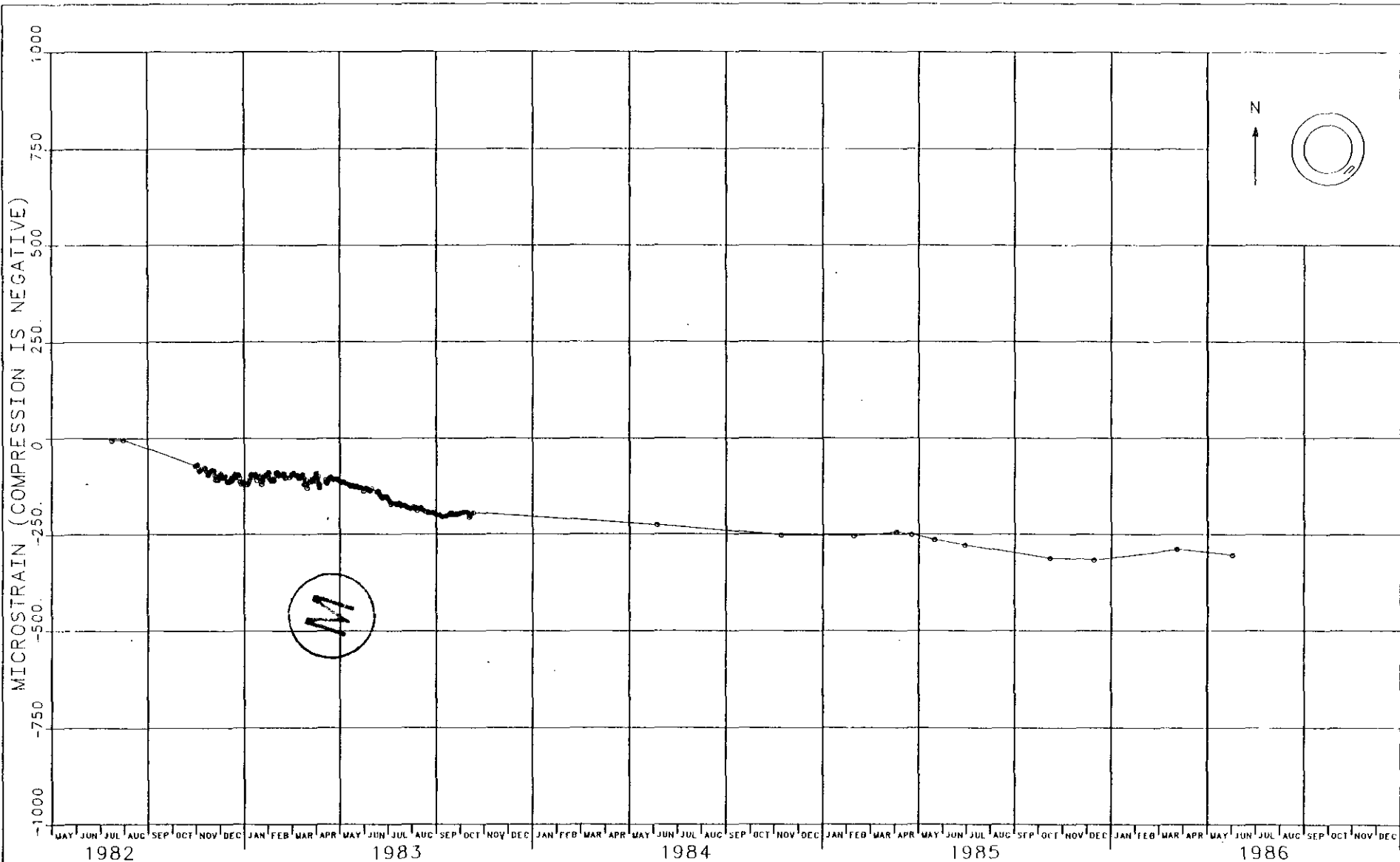


NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982
3. GAUGE IS LOCATED 3 IN FROM INNER FACE ON SW SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-77  
 WELDED STRAIN GAUGE 37X-ZE-00220  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

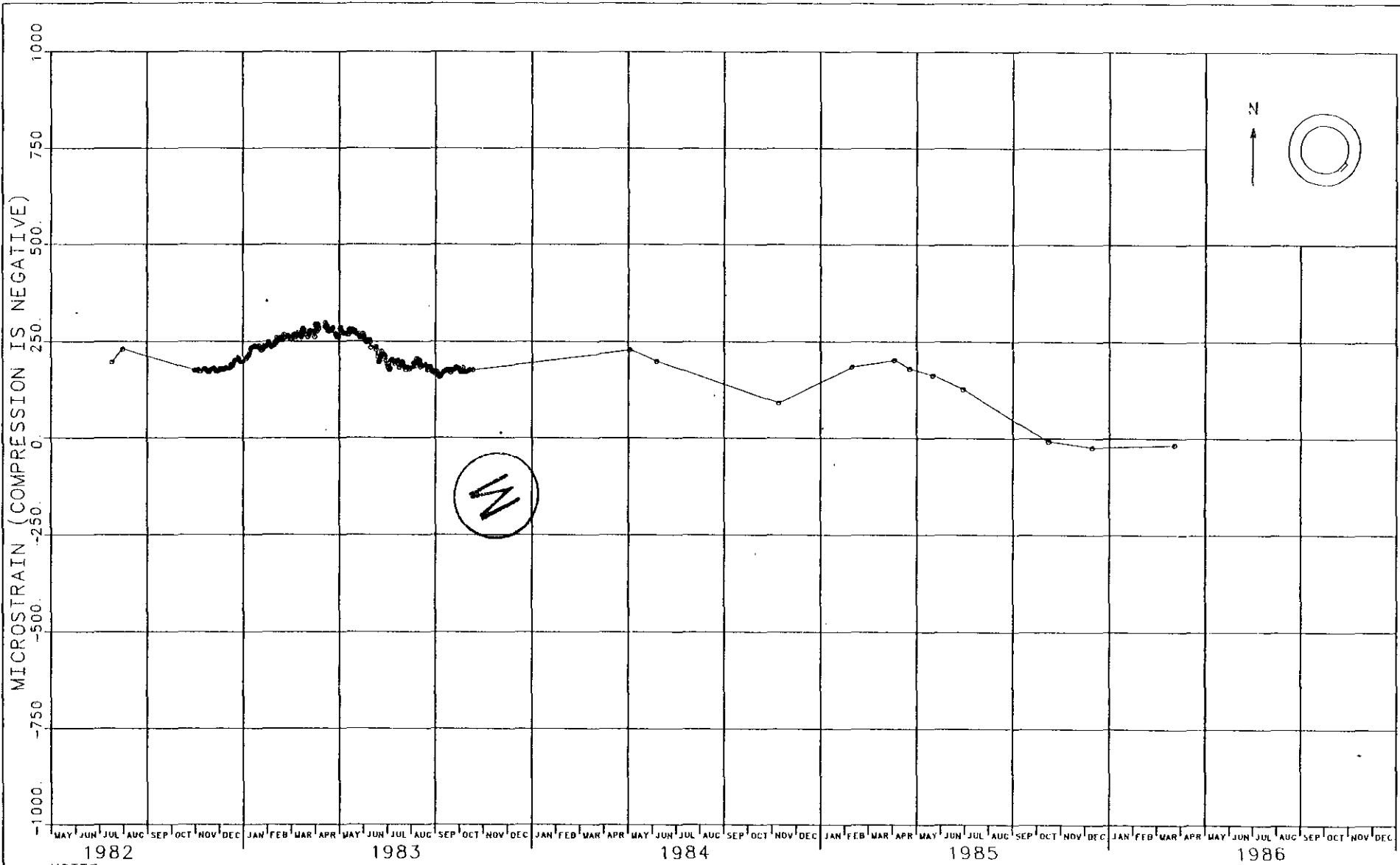




NOTES:

- 1 CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
- 3 GAUGE IS LOCATED 15 IN. FROM INNER FACE ON SE SIDE OF CONCRETE KEY.
- 4 SIZE OF EXCAVATION: 15 FT DIAM.

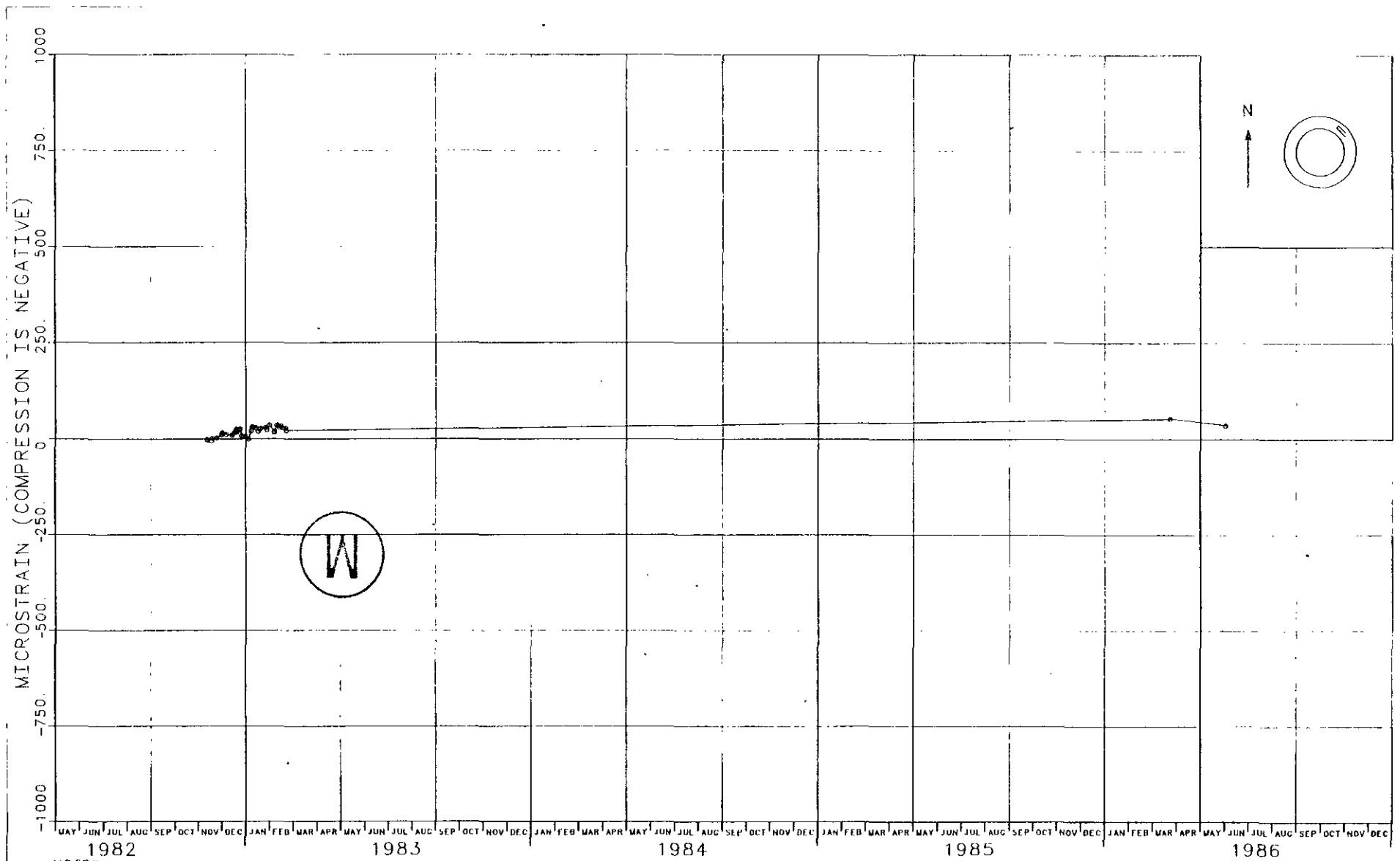
FIGURE J-78  
 WELDED STRAIN GAUGE 37X-ZE-00221,  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3 IN. FROM INNER FACE ON SE SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT IS CURRENTLY NOT FUNCTIONING

FIGURE J-79  
 WELDED STRAIN GAUGE 37X-ZE-00222  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982
2. STRAIN SINCE READING ON NOV. 11, 1982
3. GAUGE IS LOCATED 15 IN FROM INNER FACE ON NE SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM

FIGURE J-80  
 WELDED STRAIN GAUGE 37X-ZE-00223  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

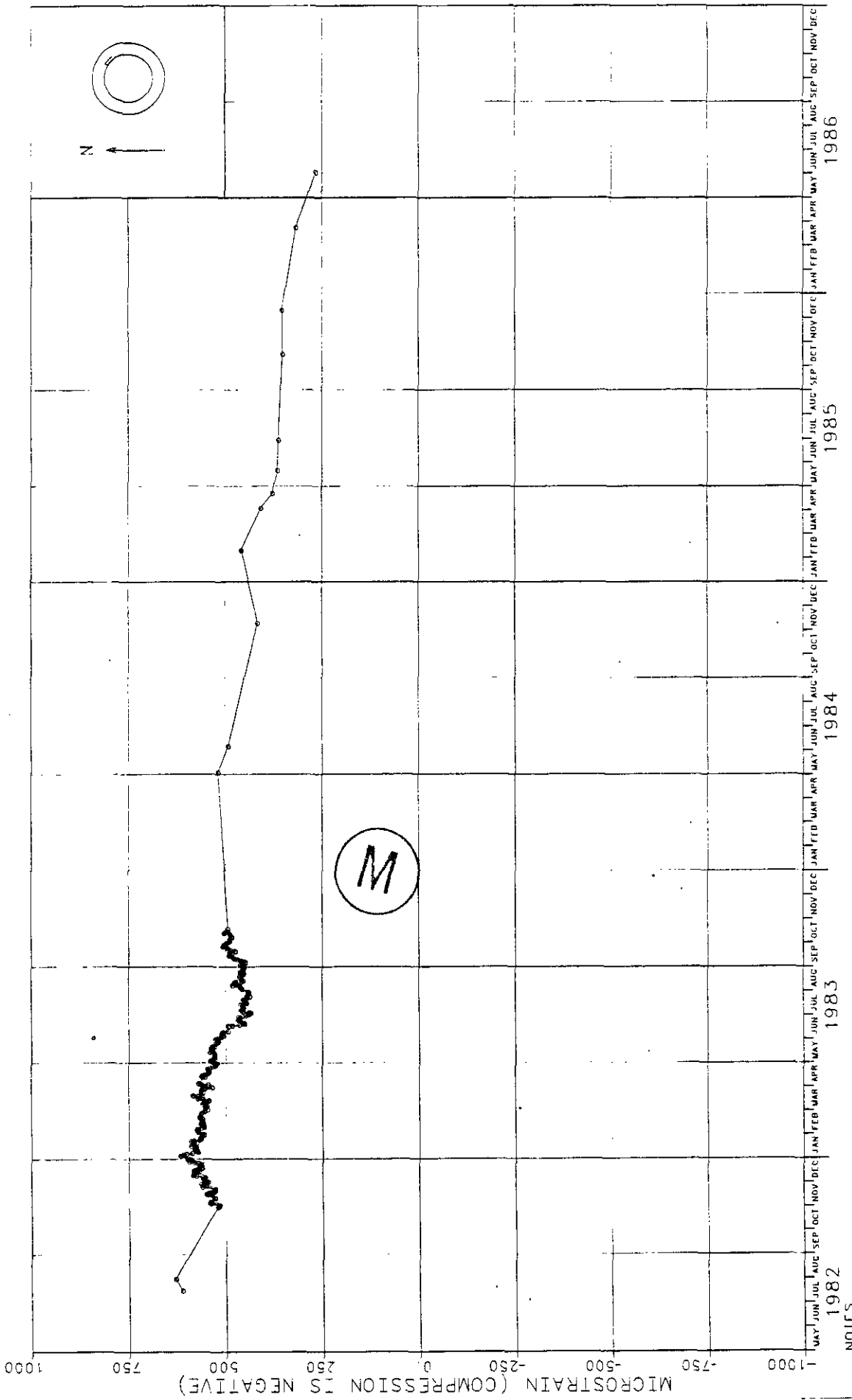
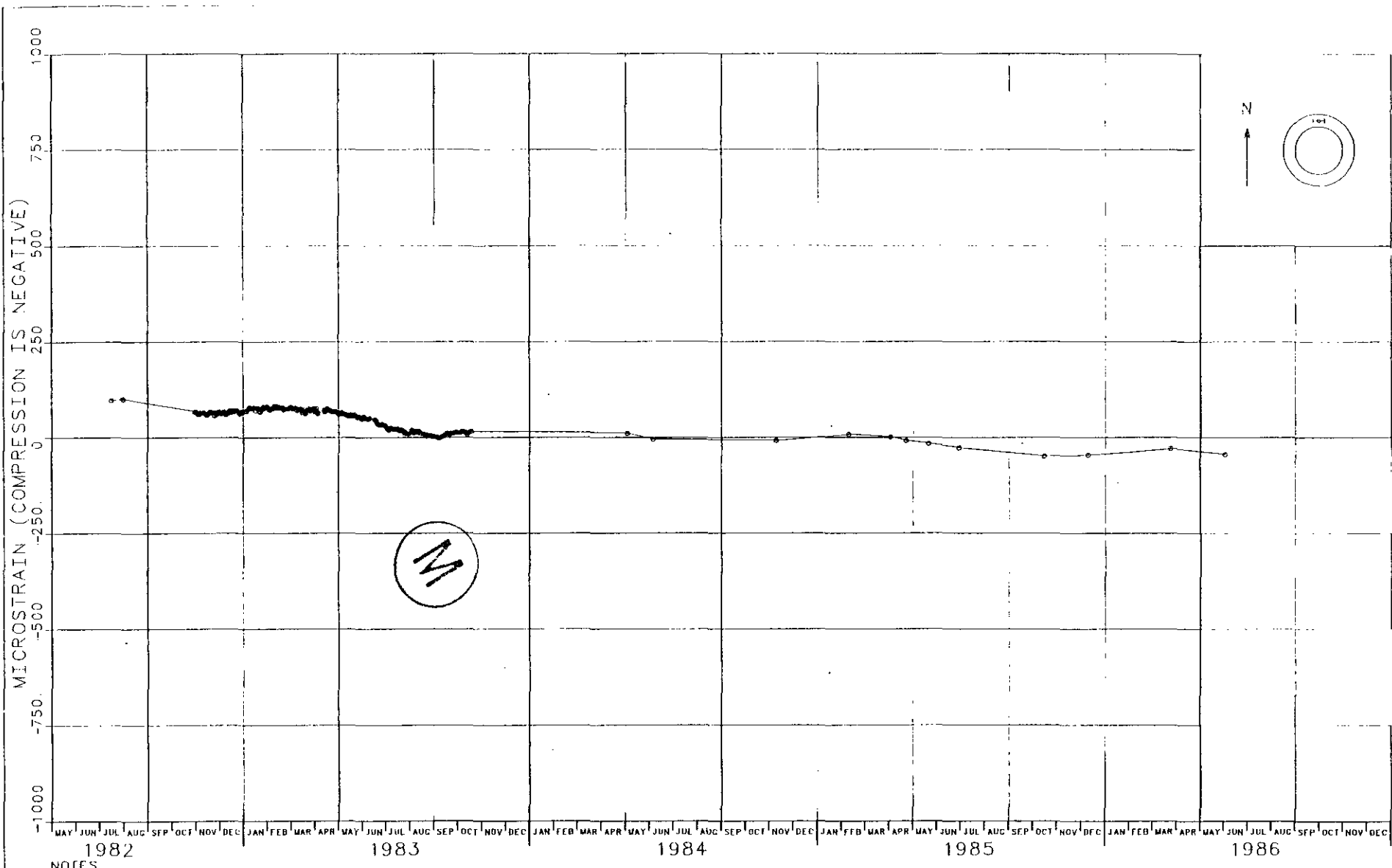


FIGURE J-81  
 WELDED STRAIN GAUGE 37X-ZE-00224  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

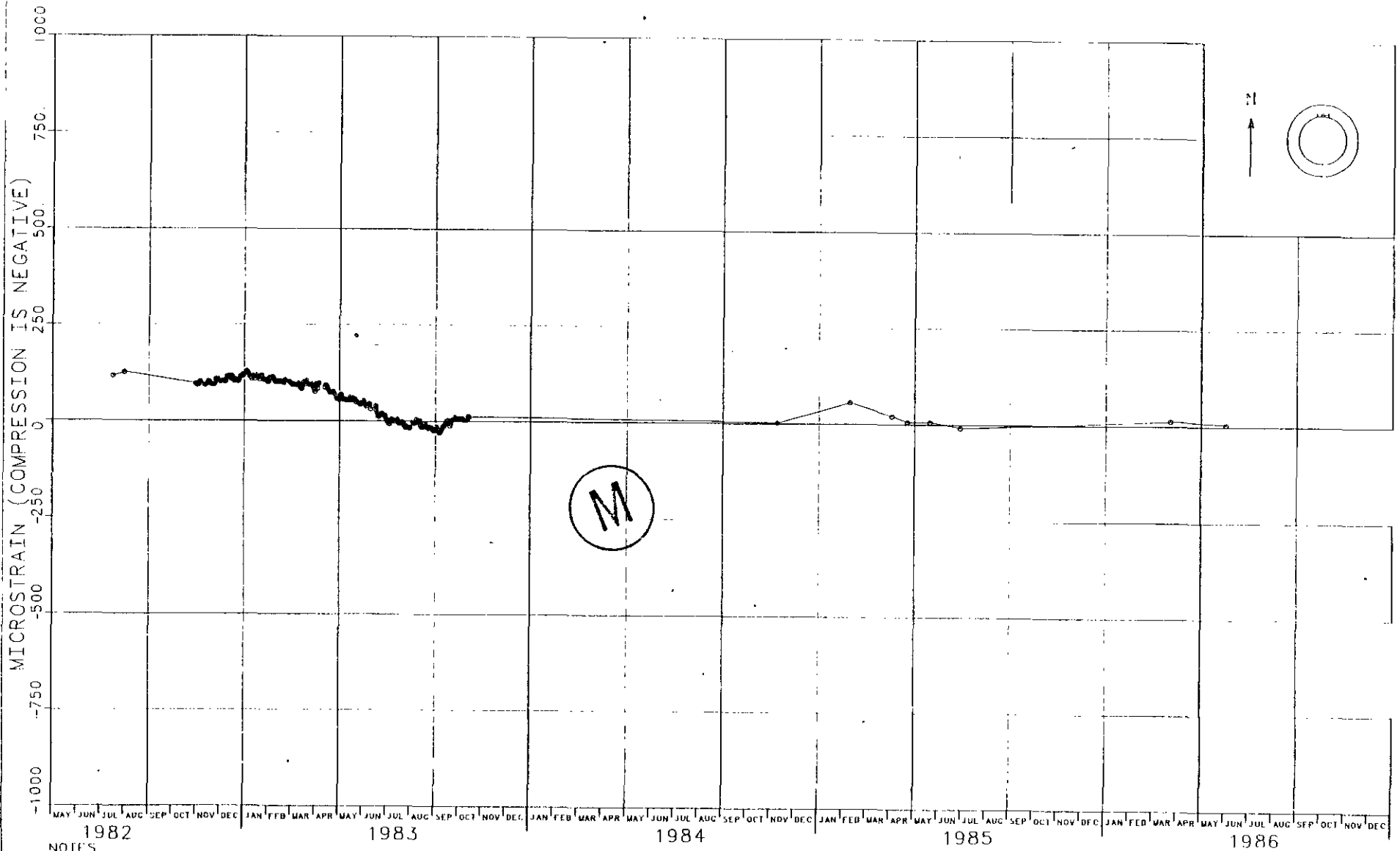
- NOTES
- 1 CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
  - 2 STRAIN SINGCT READING ON APR. 22, 1982
  - 3 GAUGE IS LOCATED 3 IN FROM INNER FACF ON NE SIDE OF CONCRETE KEY
  - 4 SIZE OF FXCAVATION: 15 FT DIAM.



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982
3. GAUGE IS LOCATED 14.5 IN FROM INNER FACE ON NORTH SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

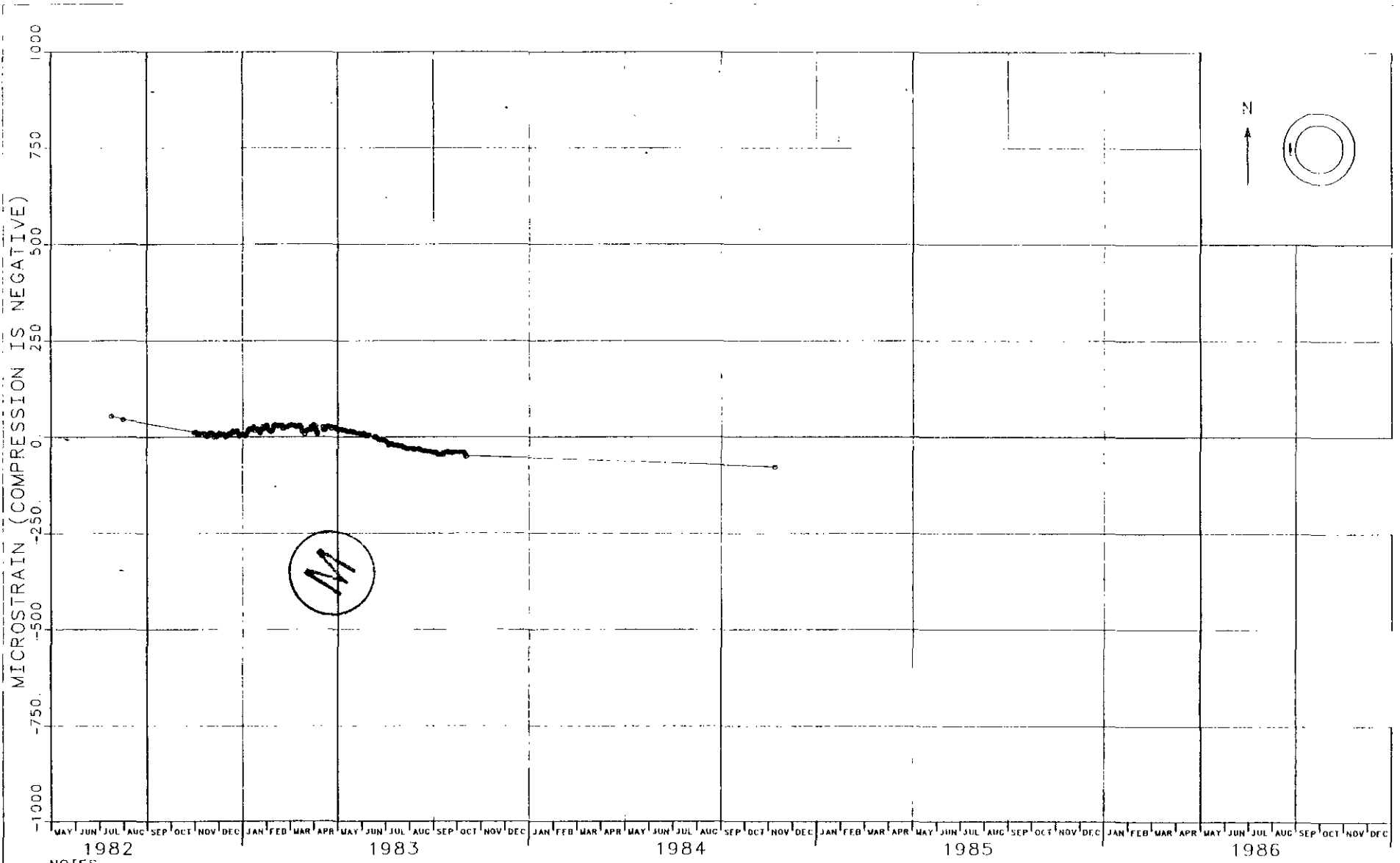
FIGURE J-82  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00225  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES

- 1 CONCRETE FOR KEY WAS PLACED IN APRIL 1982
- 2 STRAIN SINCE READING ON APR 22, 1982
- 3 GAUGE IS LOCATED 3.5 IN FROM INNER FACE ON NORTH SIDE OF CONCRETE KEY
- 4 SIZE OF EXCAVATION IS 11' DIAM.

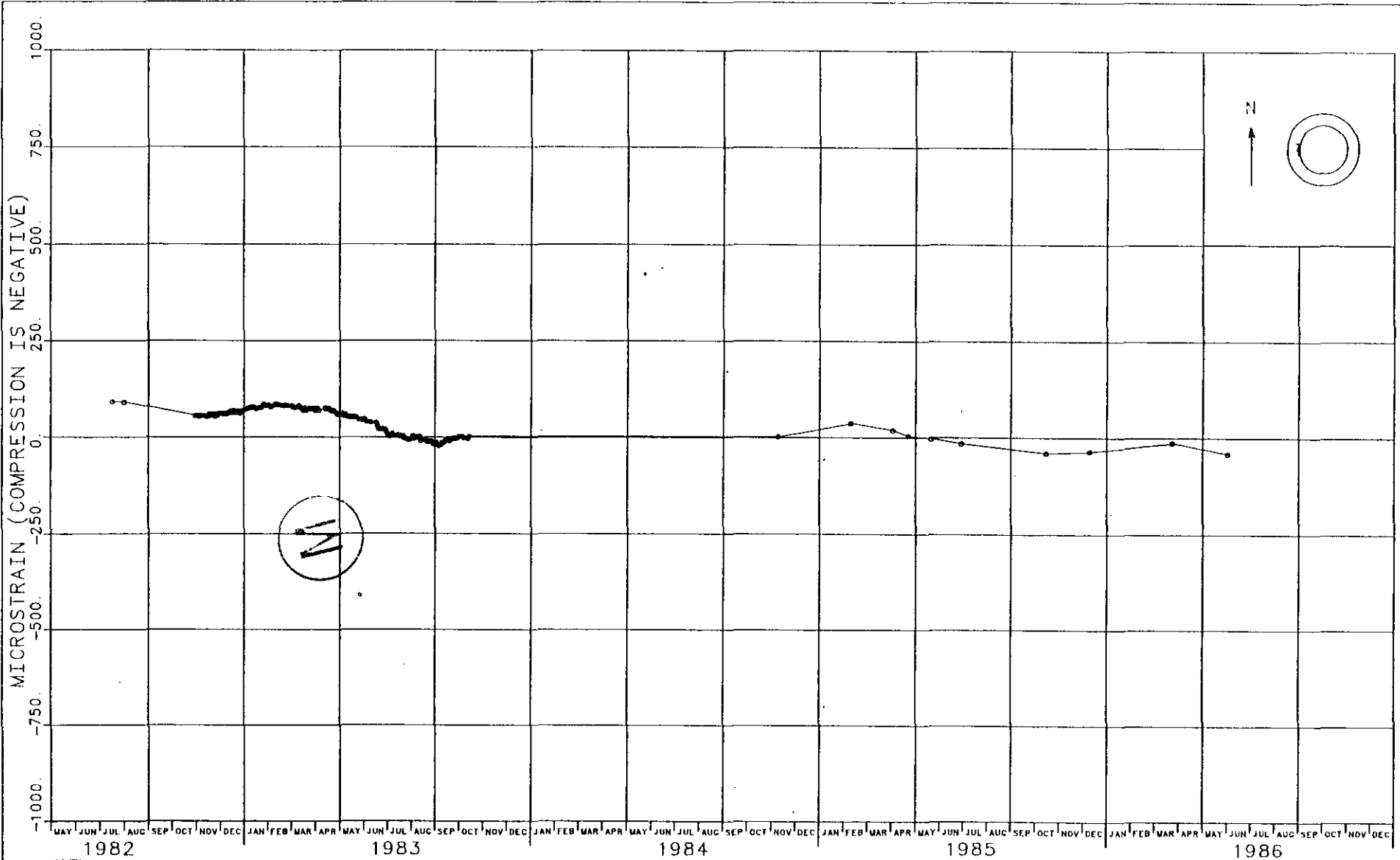
FIGURE J-83  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00226  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES

- 1 CONCRETE FOR KEY WAS PLACED IN APRIL 1982
- 2 STRAIN SINCE READING ON APR. 22, 1982
- 3 GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON WEST SIDE OF CONCRETE KEY.
- 4 SIZE OF EXCAVATION: 15 FT DIAM.
- 5 INSTRUMENT IS CURRENTLY NOT FUNCTIONING

FIGURE J-84  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00227  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

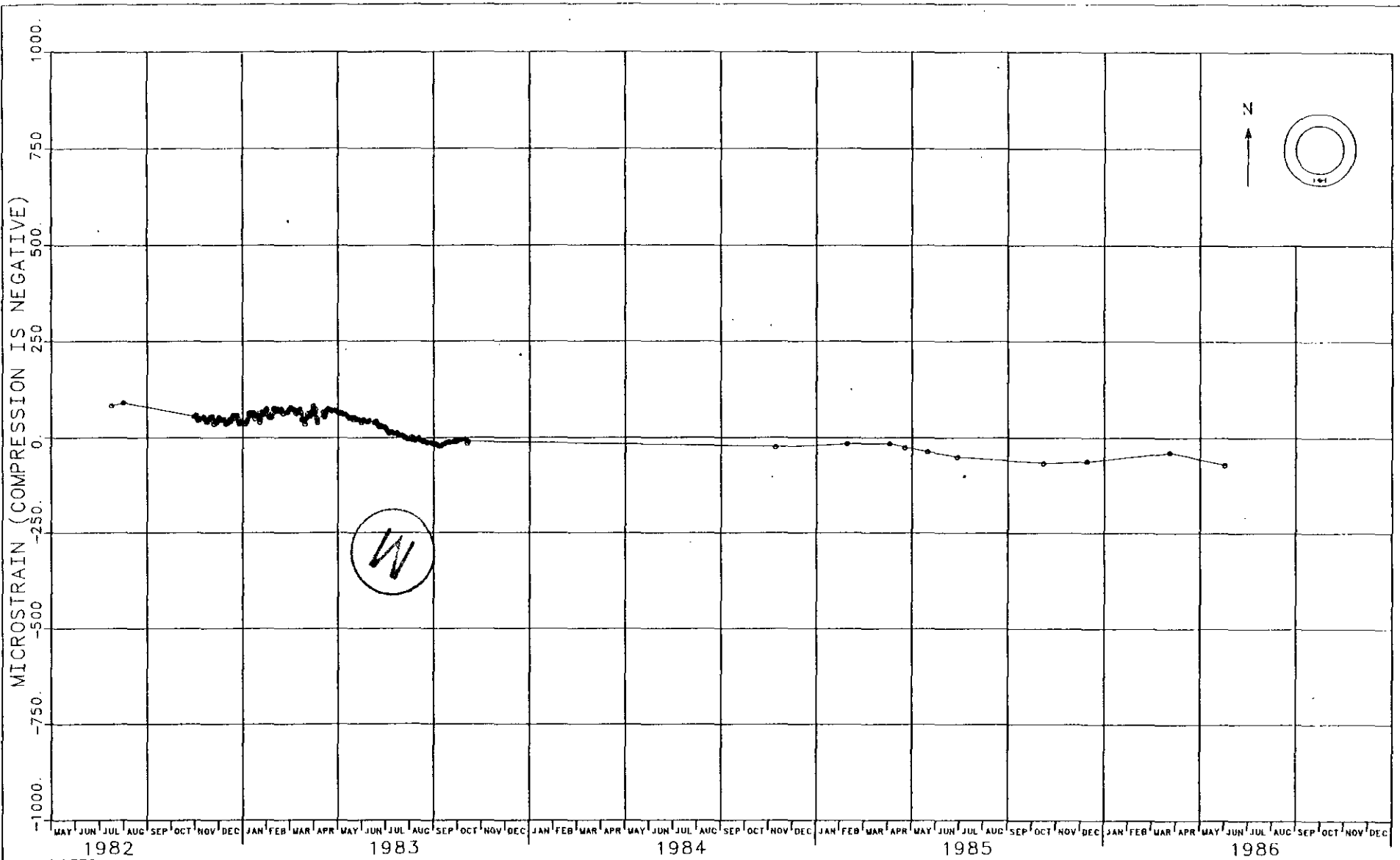


NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON WEST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

FIGURE J-85  
 EMBEDMENT STRAIN GAUGE 37X-ZE-0022B  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH

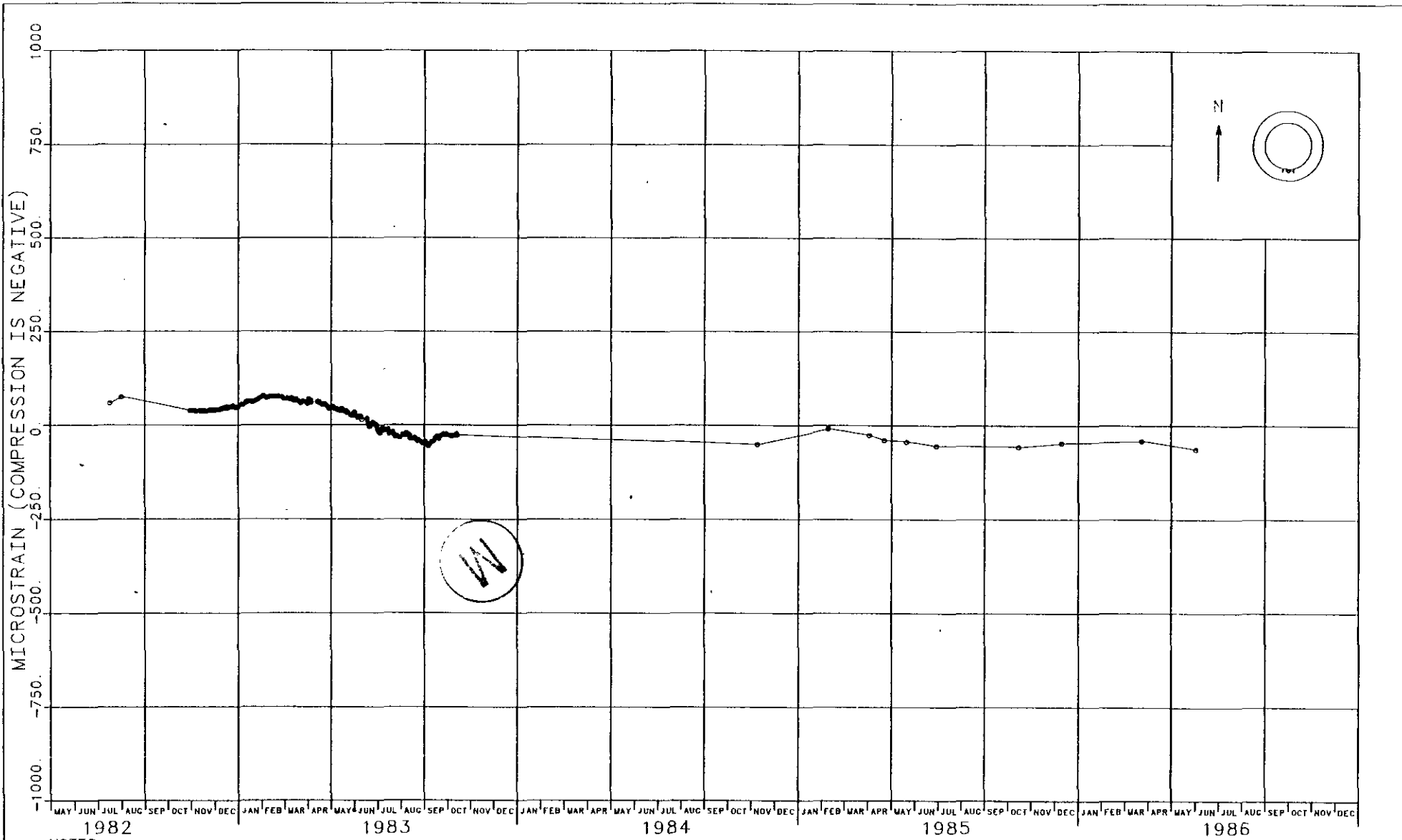




NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON SOUTH SIDE OF CONCRETE KEY
4. SIZE OF EXCAVATION: 15 FT DIAM.

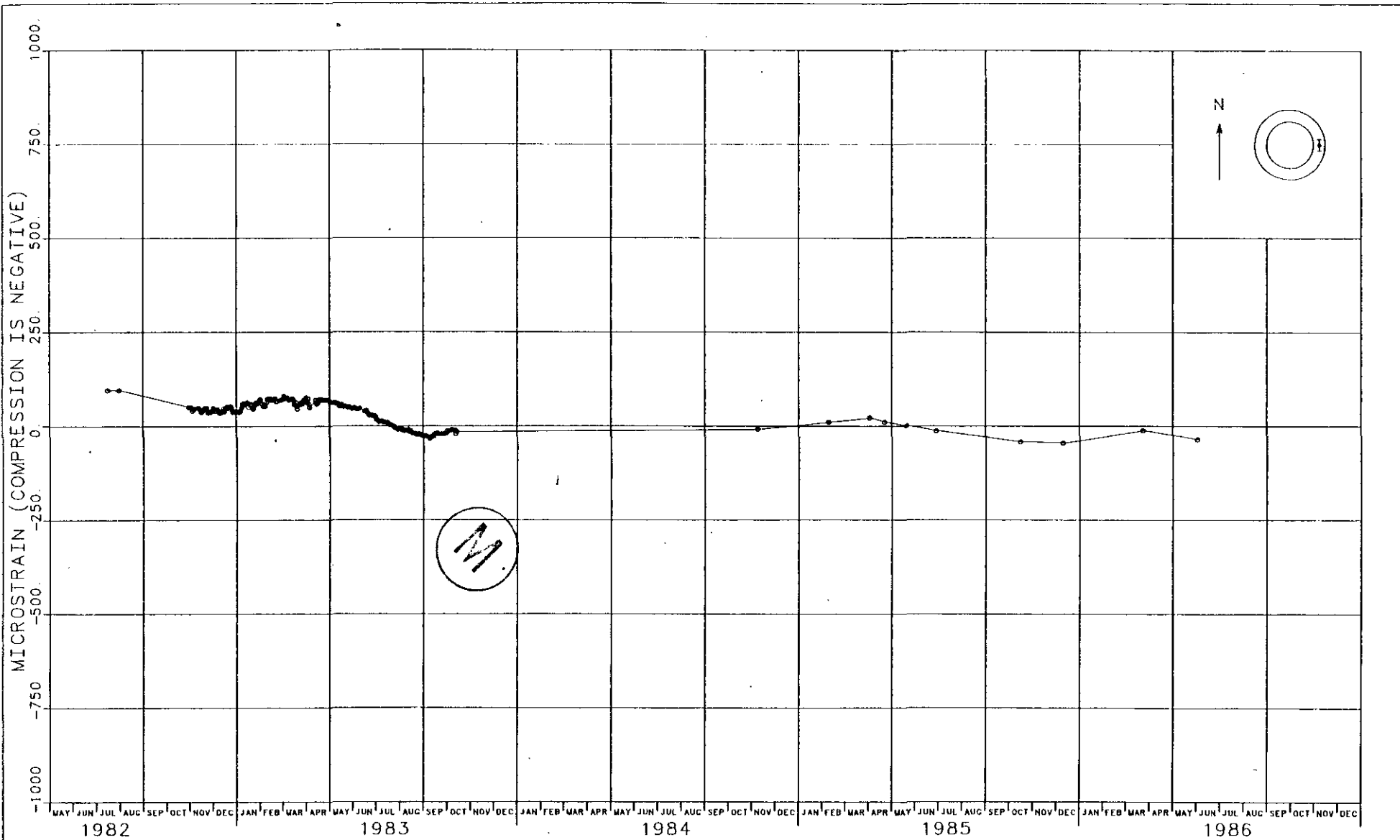
FIGURE J-86  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00229  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR. 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON SOUTH SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

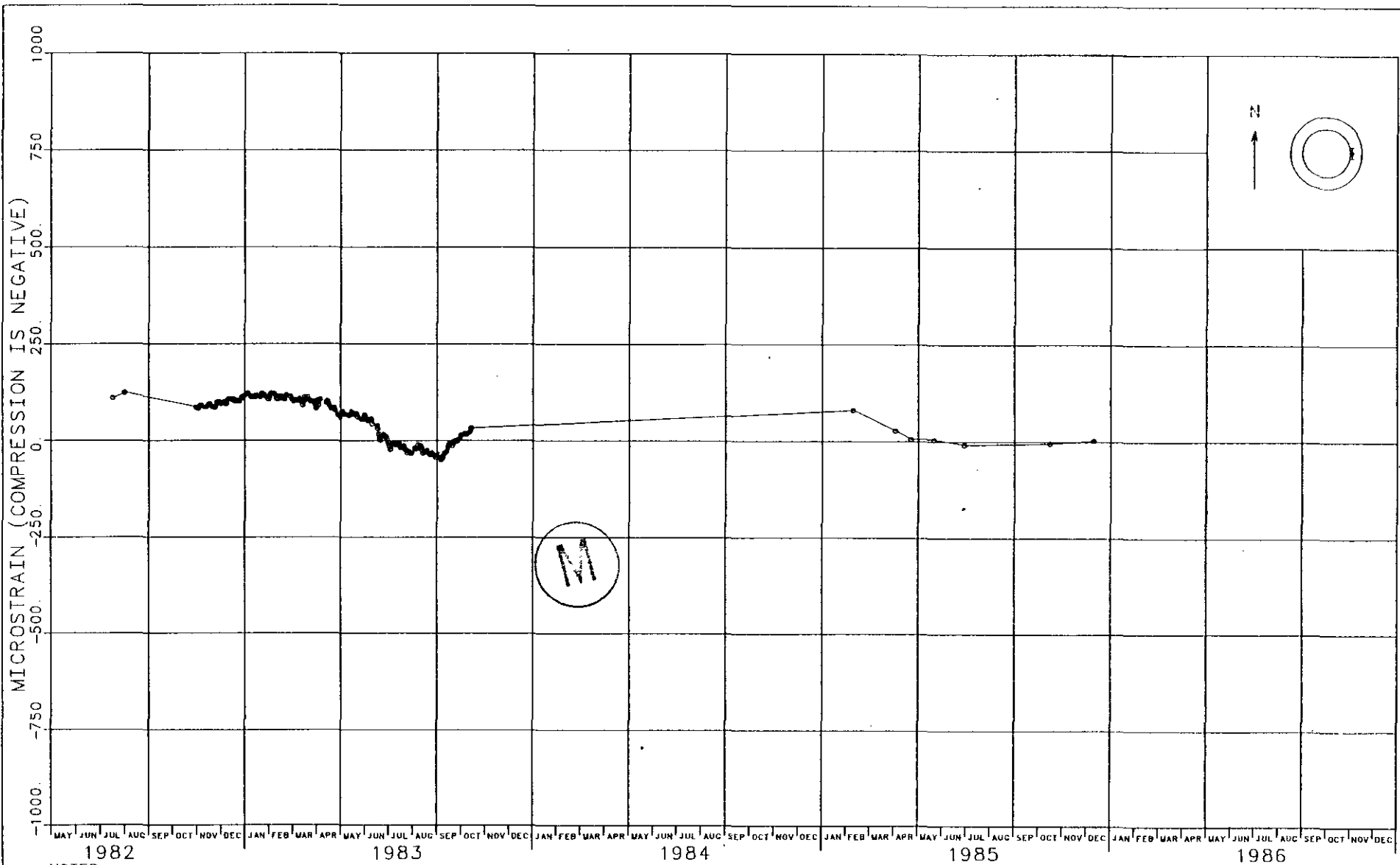
FIGURE J-B7  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00230  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES:

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR 22, 1982.
3. GAUGE IS LOCATED 14.5 IN. FROM INNER FACE ON EAST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.

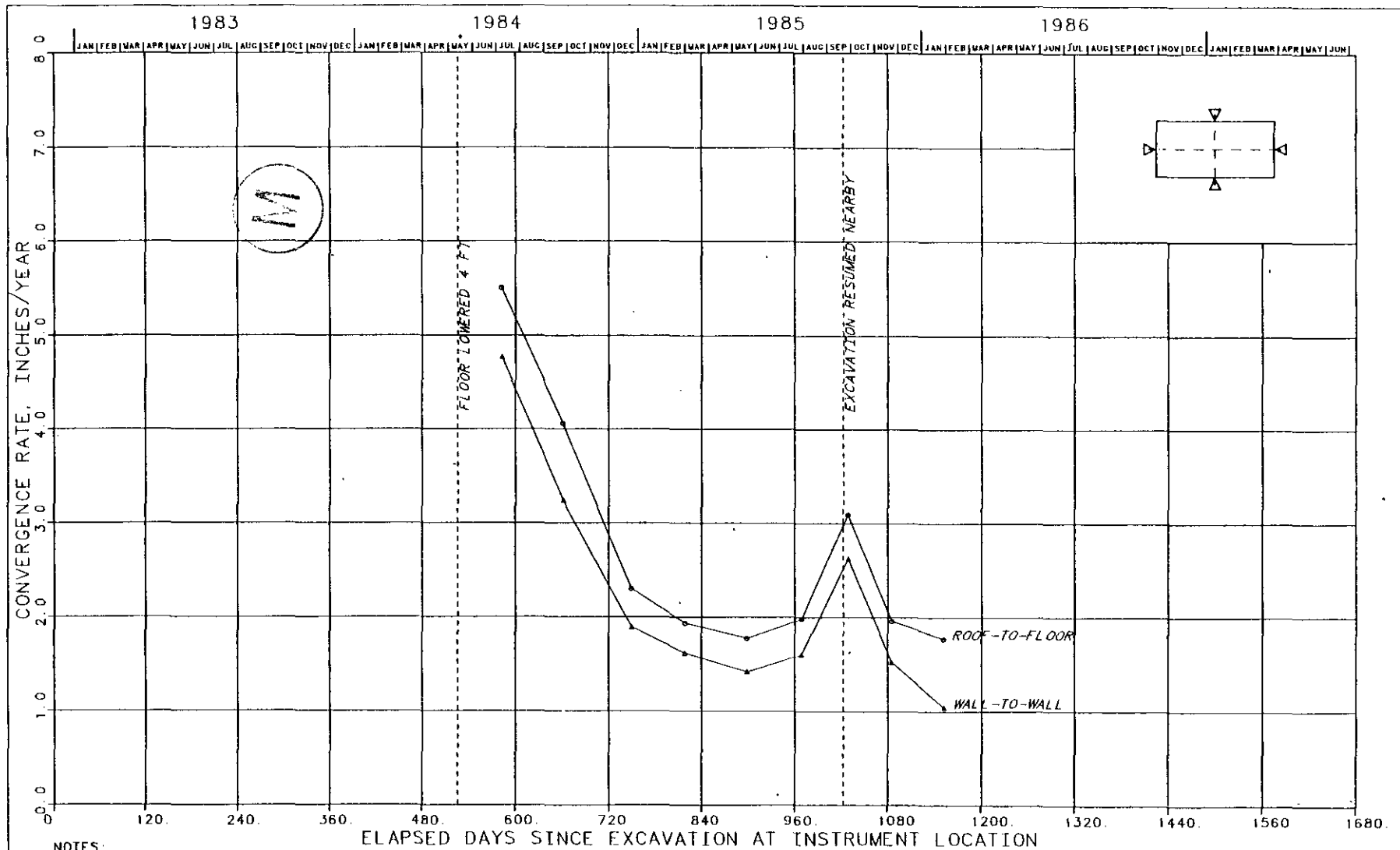
FIGURE J-88  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00231  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES

1. CONCRETE FOR KEY WAS PLACED IN APRIL 1982.
2. STRAIN SINCE READING ON APR 22, 1982.
3. GAUGE IS LOCATED 3.5 IN. FROM INNER FACE ON EAST SIDE OF CONCRETE KEY.
4. SIZE OF EXCAVATION: 15 FT DIAM.
5. INSTRUMENT IS CURRENTLY NOT FUNCTIONING.

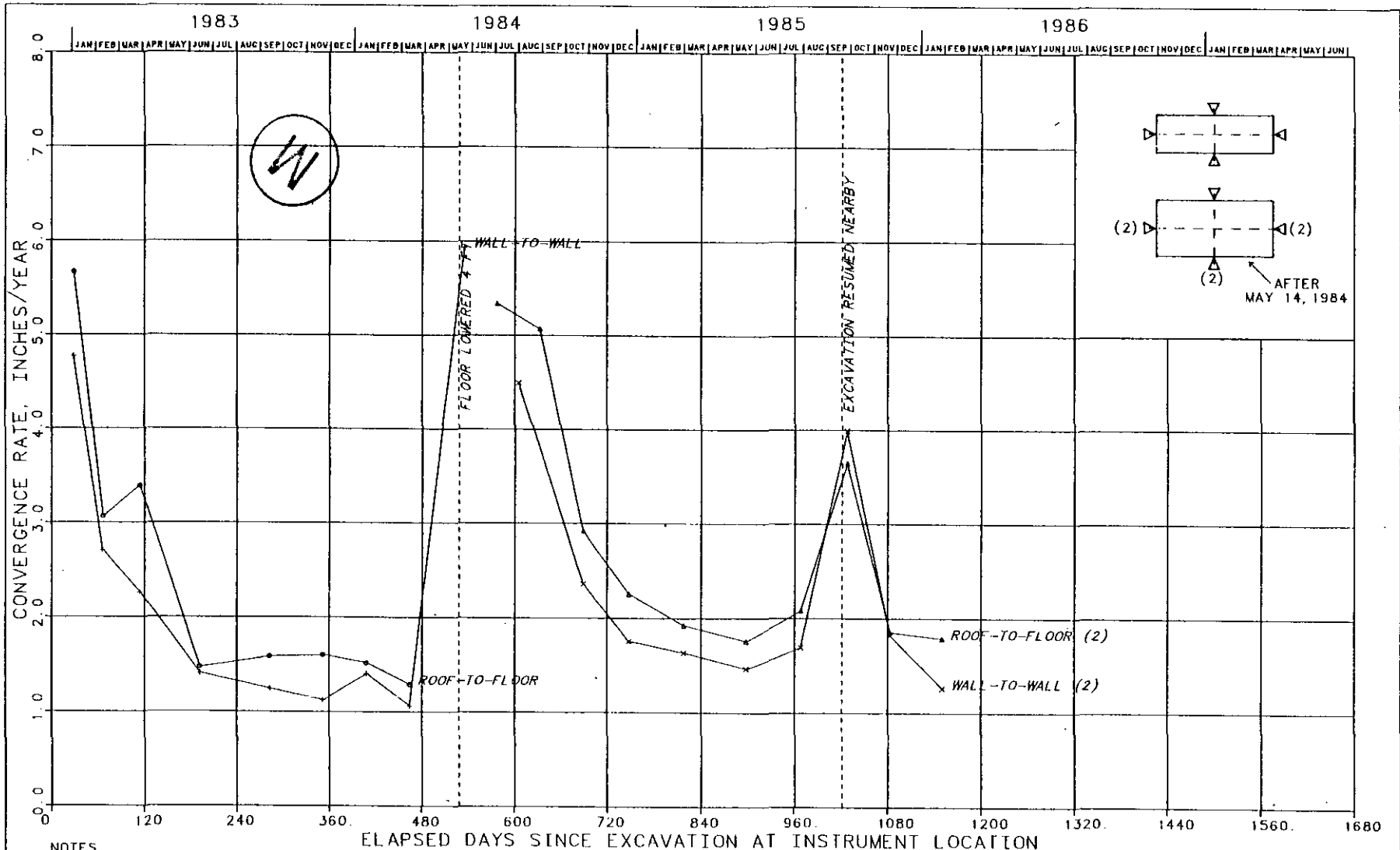
FIGURE J-89  
 EMBEDMENT STRAIN GAUGE 37X-ZE-00232  
 C & SH SHAFT KEY - EL 2547.6  
 STRAIN VS. CALENDAR MONTH



NOTES:

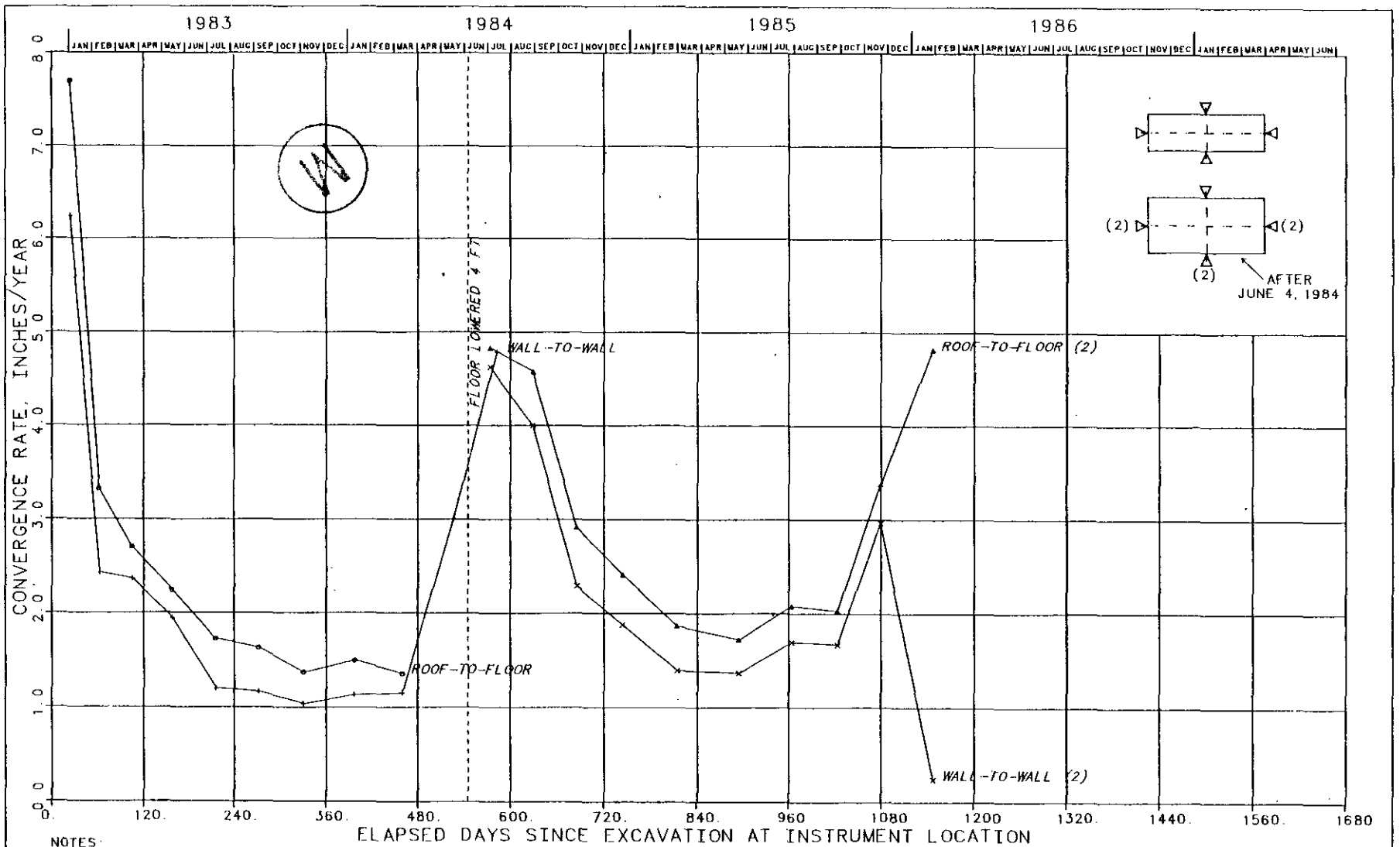
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT

FIGURE K-1  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 460 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



- NOTES
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
  2. SIZE OF EXCAVATION 12 FT X 25 FT.

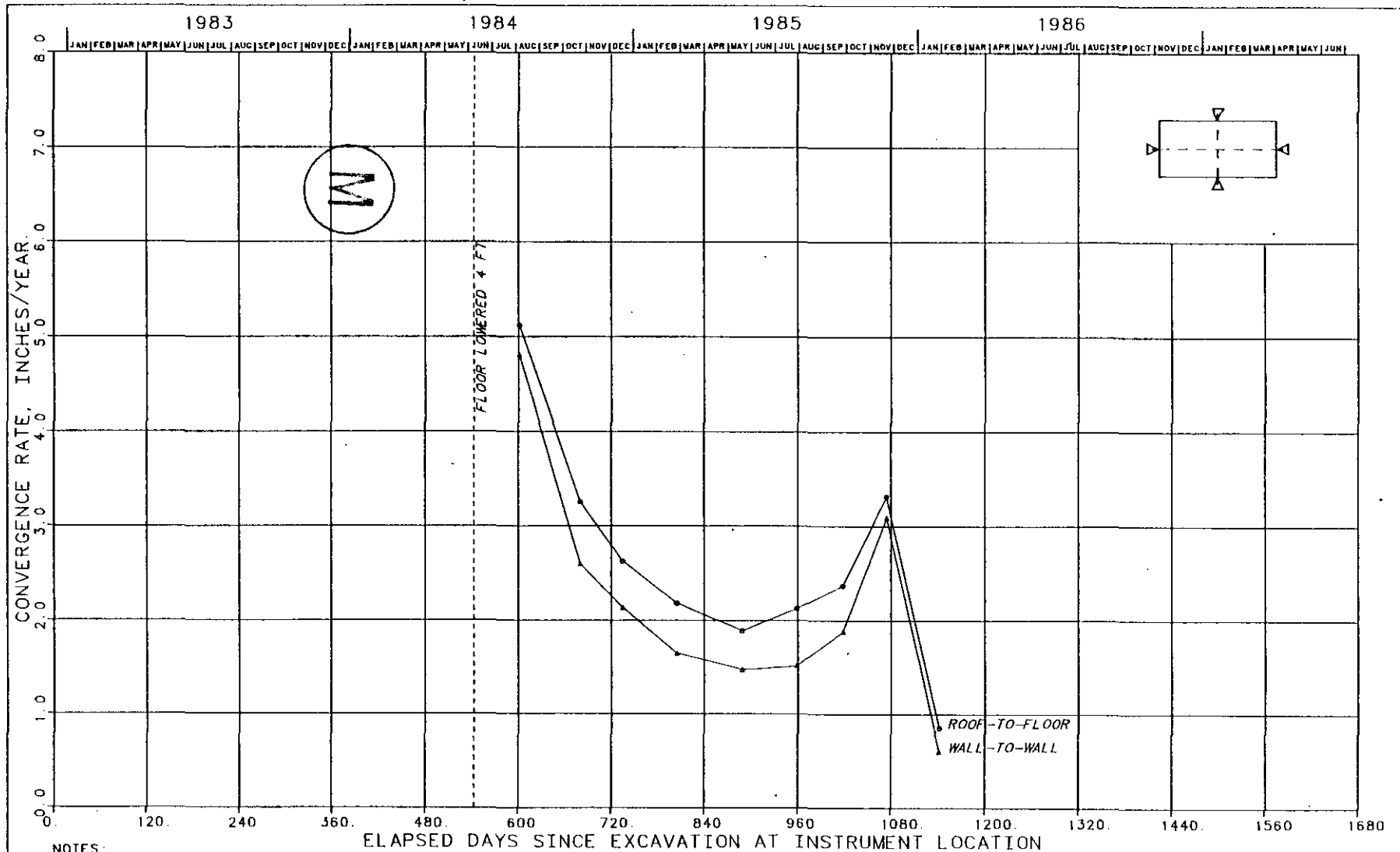
FIGURE K-2  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 550 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION 12 FT X 25 FT

FIGURE K-3  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 850 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION

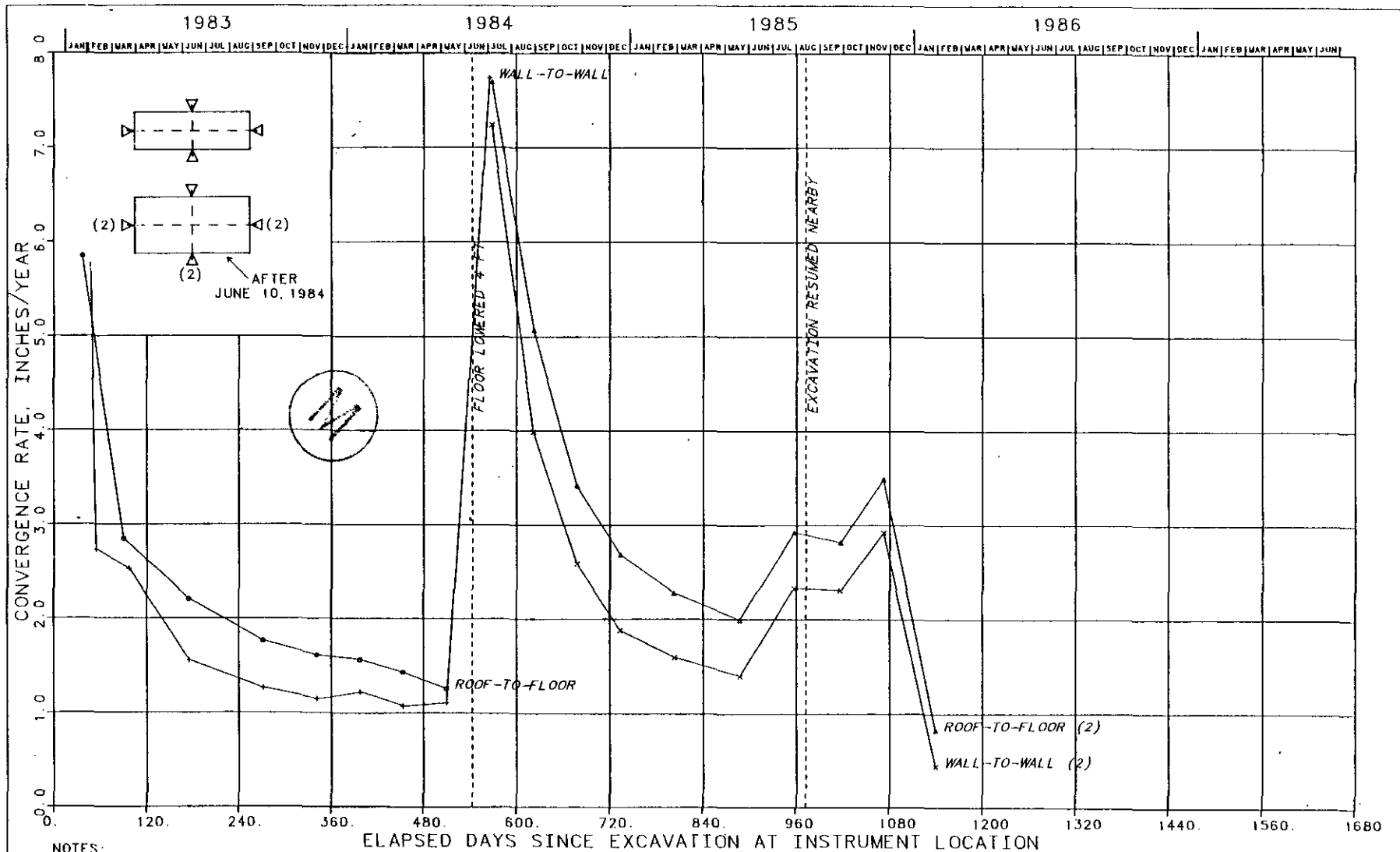


NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT.

FIGURE K-4  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 1150 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION





NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT.

FIGURE K-5  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 1246 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION

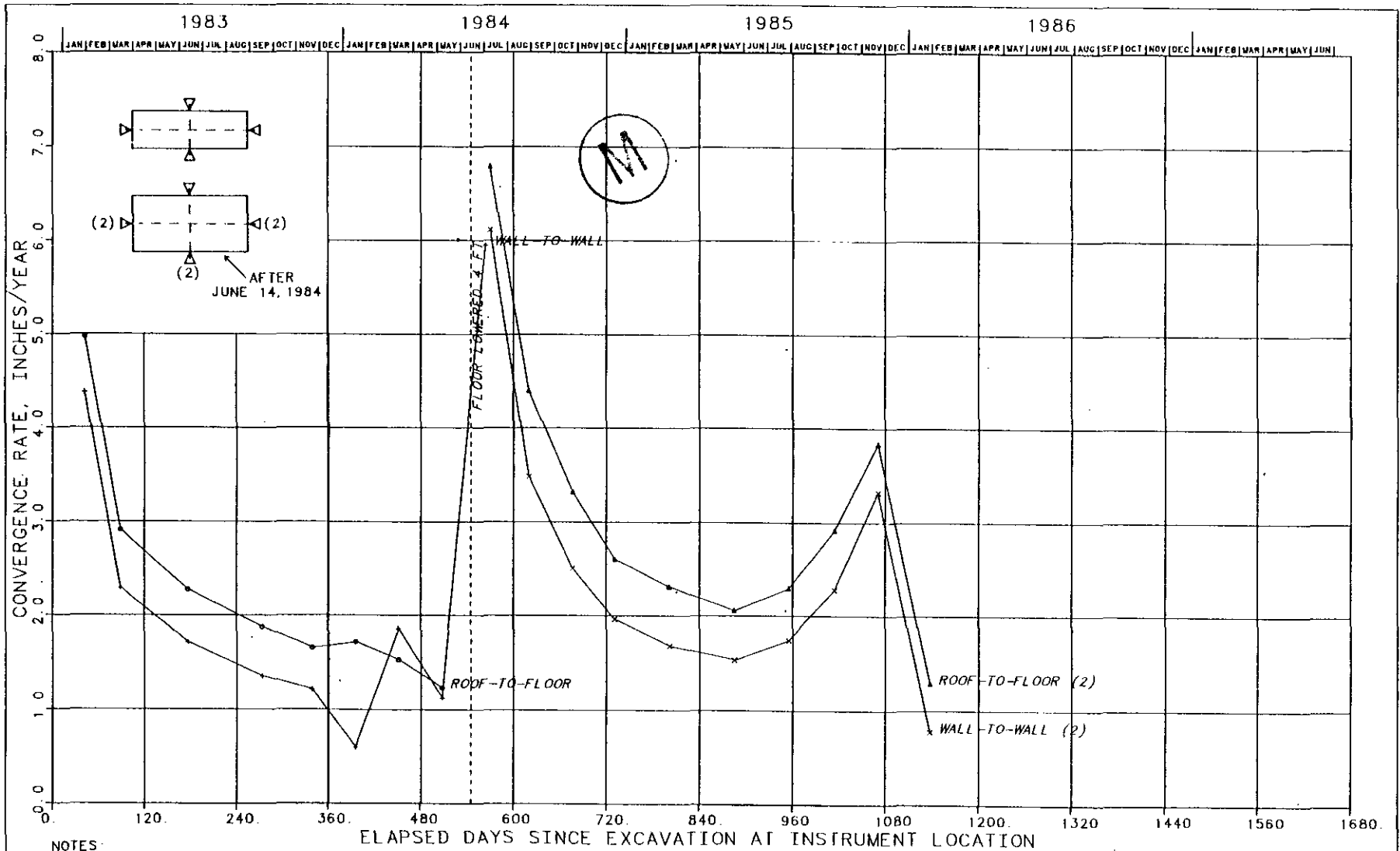
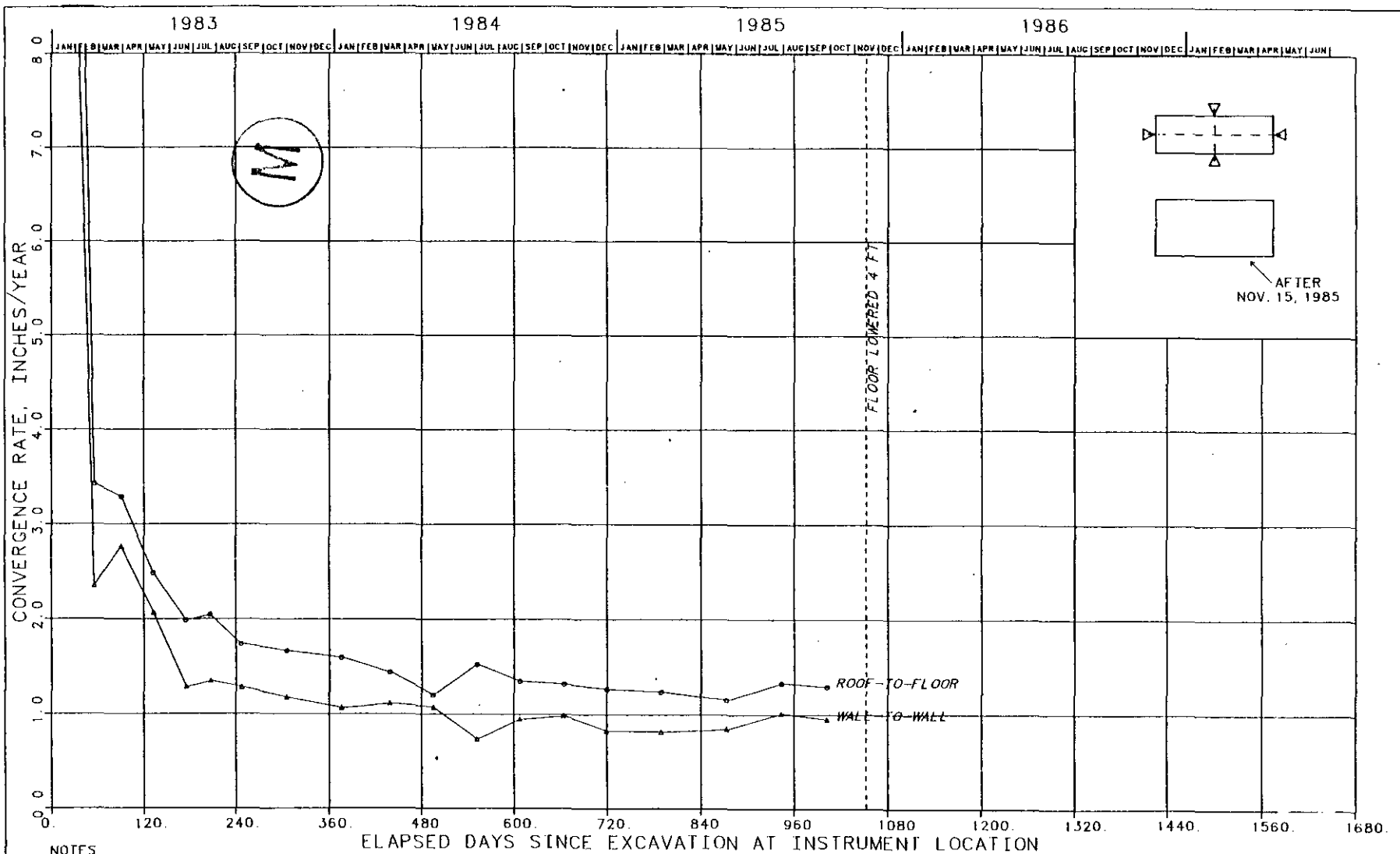


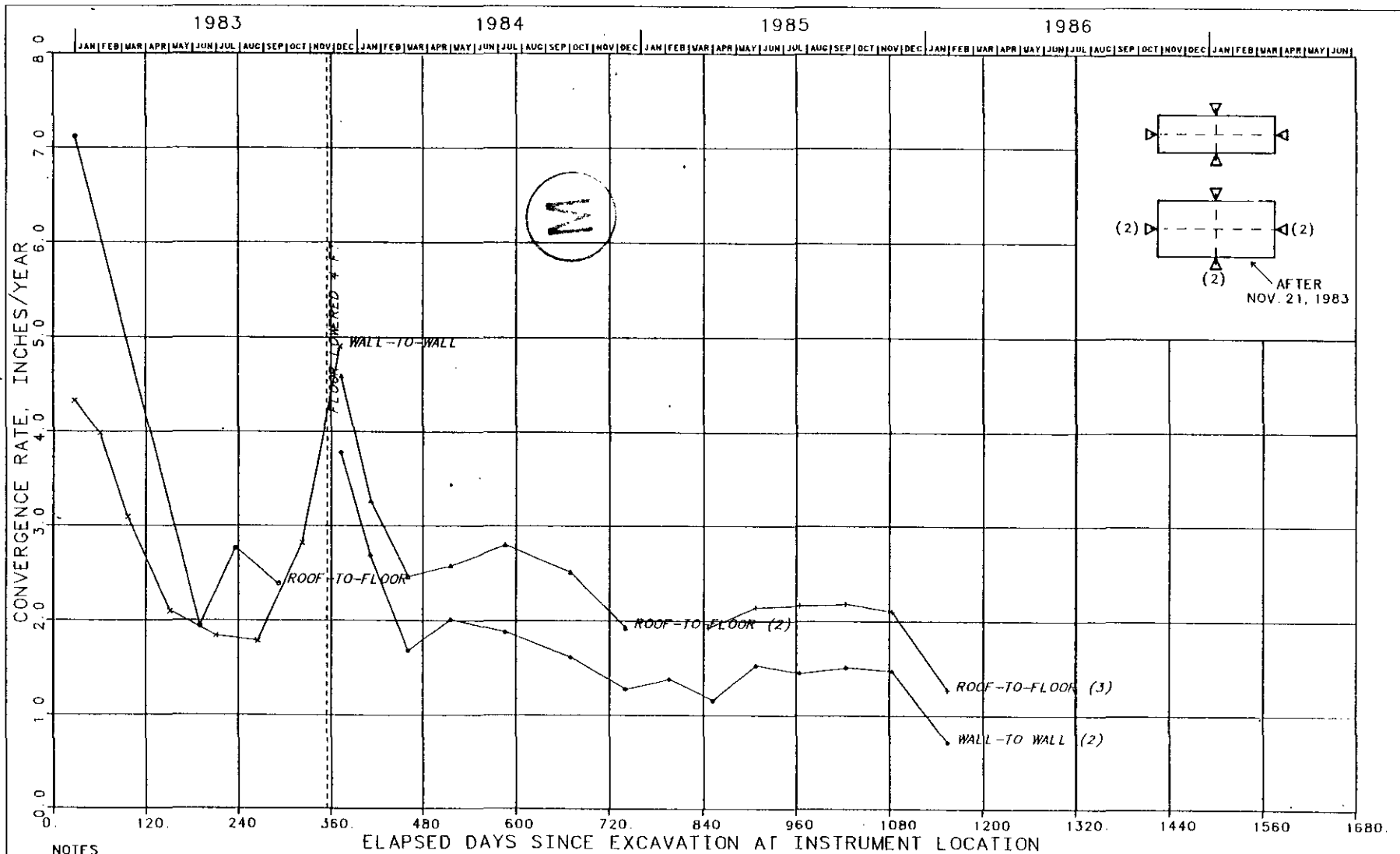
FIGURE K-6  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 1450 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT.

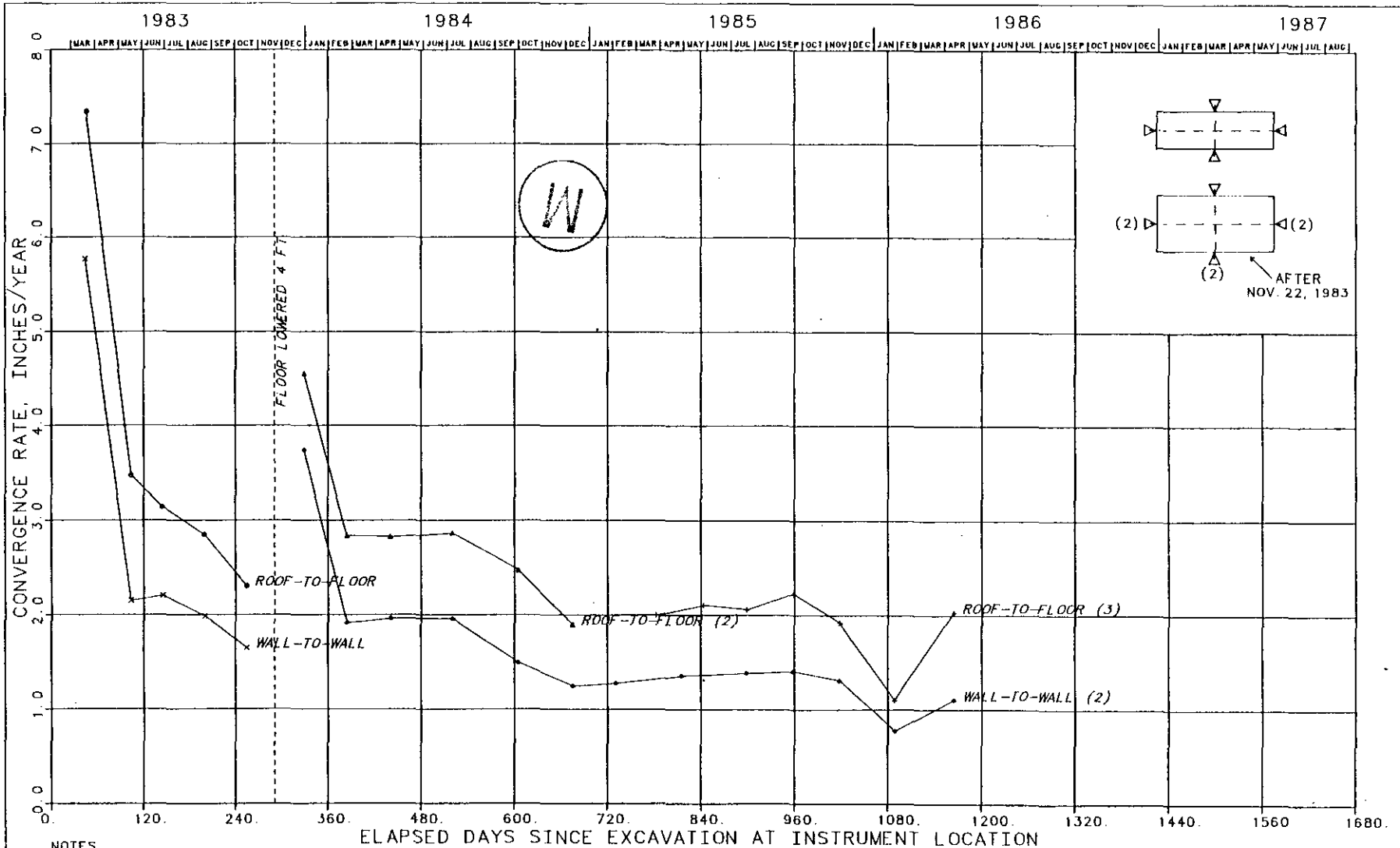
FIGURE K-7  
 CONVERGENCE POINTS  
 E140 DRIFT, SOUTH 1879 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES

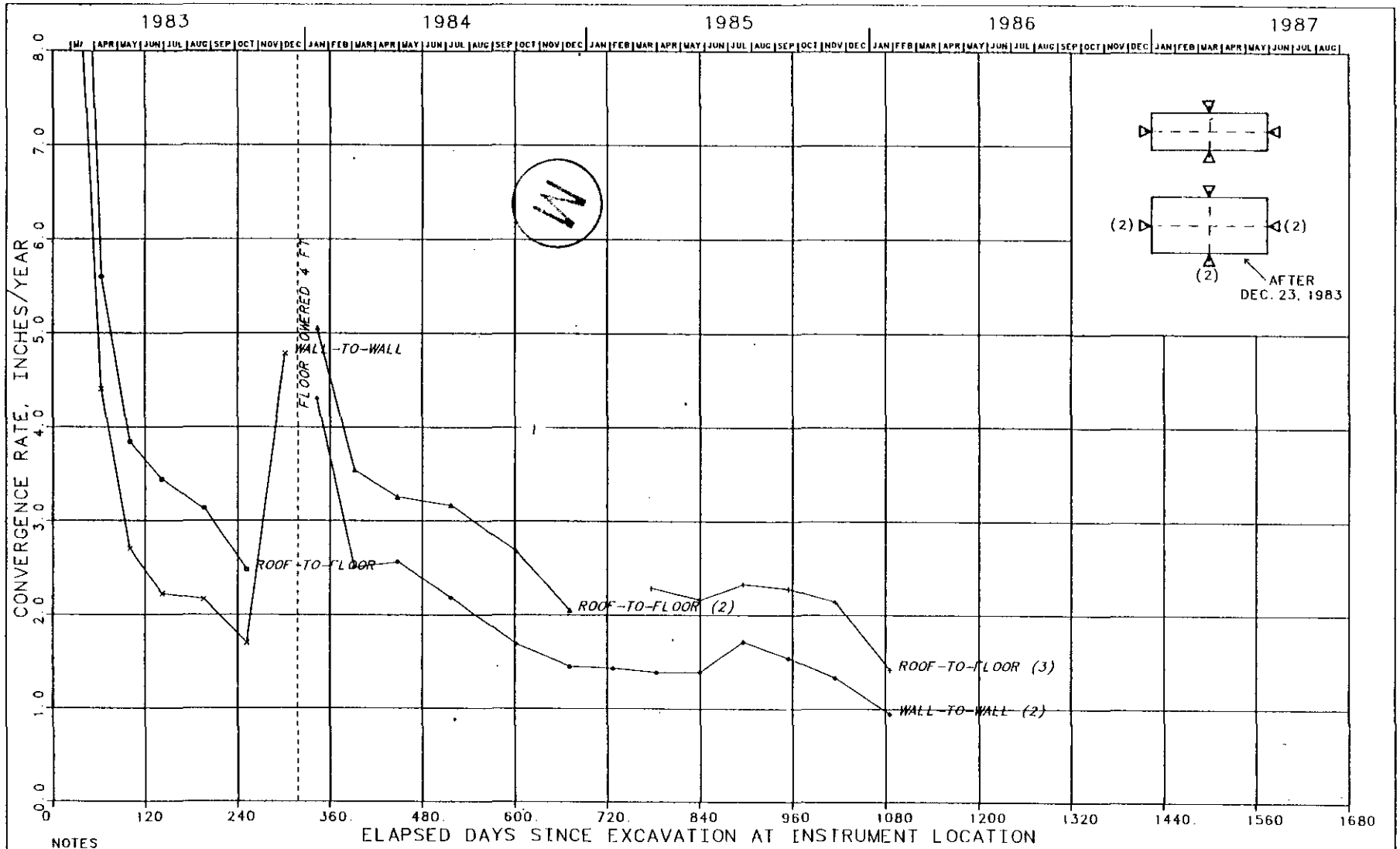
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT

FIGURE K-8  
 CONVERGENCE POINTS  
 EO DRIFT, NORTH 290 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



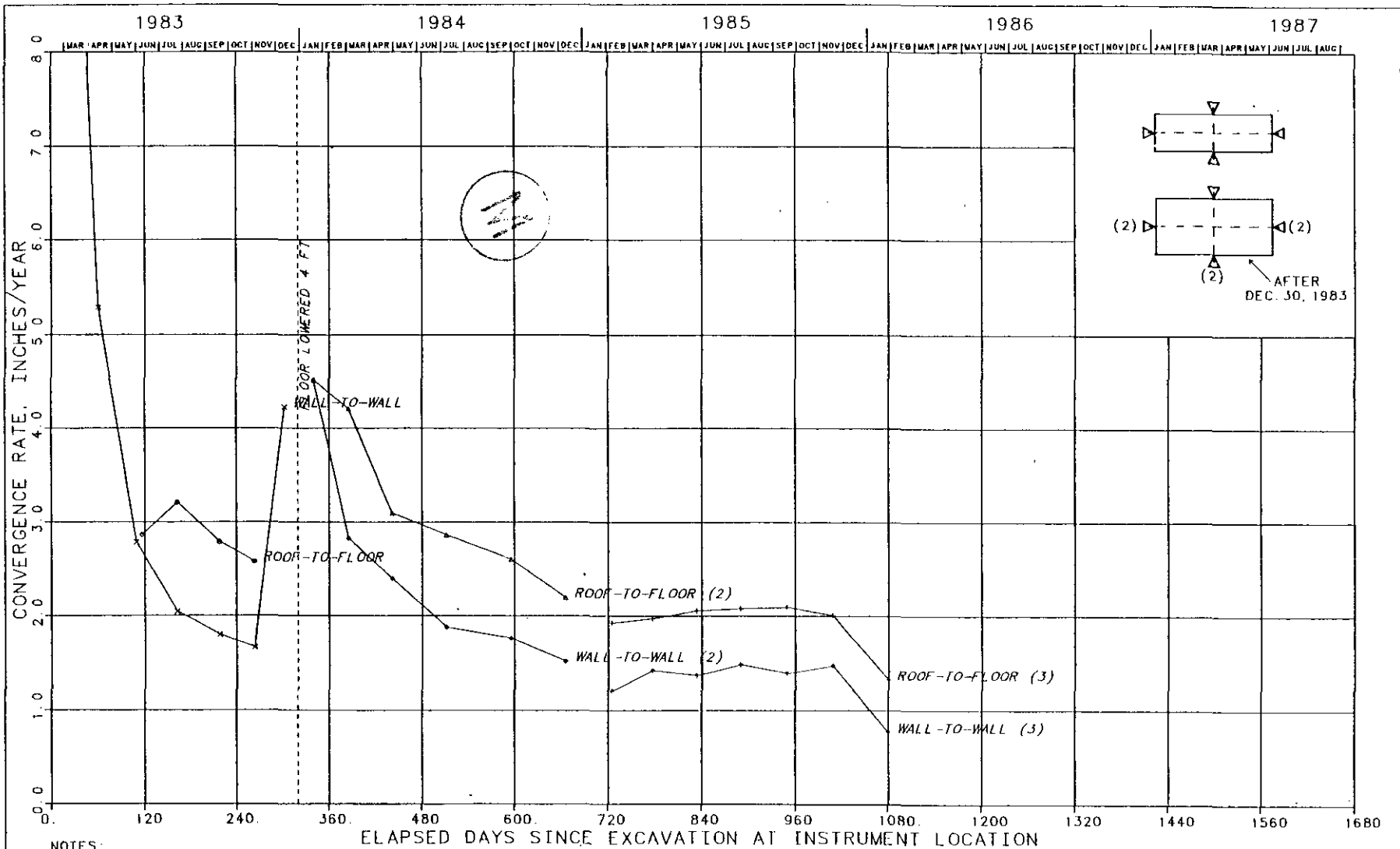
- NOTES
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
  2. SIZE OF EXCAVATION: 12 FT X 25 FT

FIGURE K-9  
 CONVERGENCE POINTS  
 ED DRIFT, NORTH 626 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



- NOTES
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
  2. SIZE OF EXCAVATION: 12 FT X 25 FT.

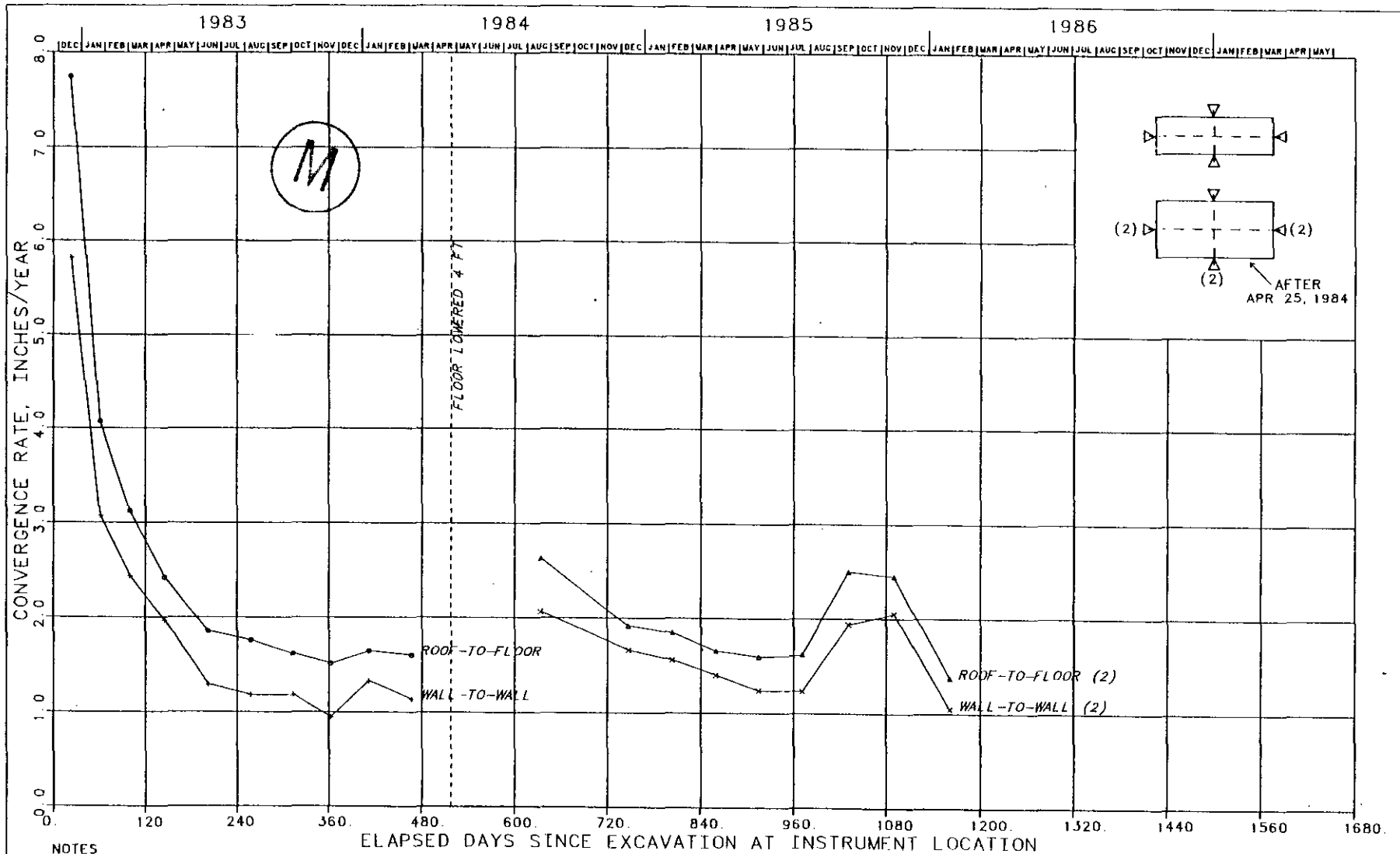
FIGURE K-10  
 CONVERGENCE POINTS  
 ED DRIFT, NORTH 940 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT.

FIGURE K-11  
 CONVERGENCE POINTS  
 E0 DRIFT, NORTH 1266 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION

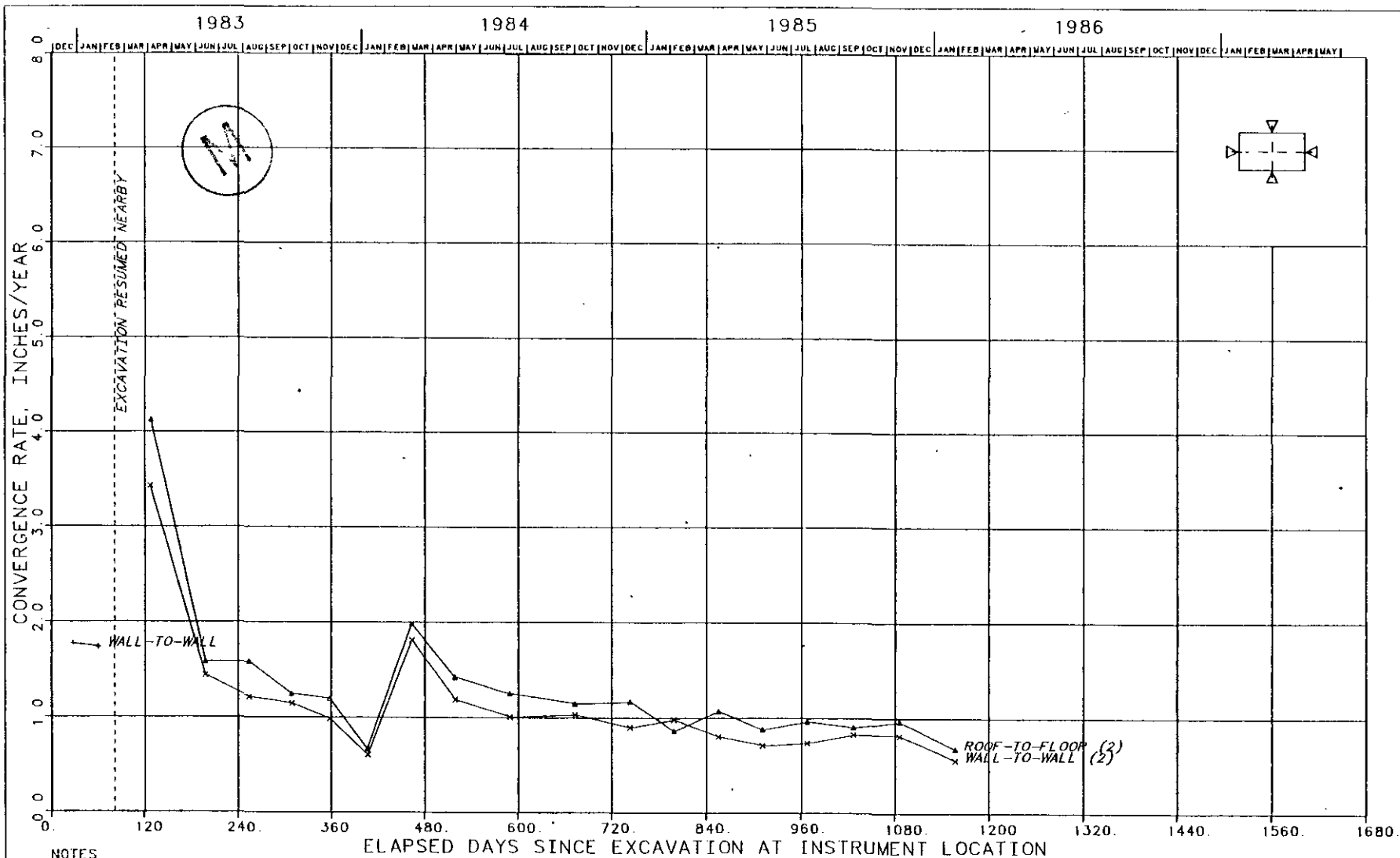


NOTES

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 12 FT X 25 FT

FIGURE K-12  
 CONVERGENCE POINTS  
 E140 DRIFT, NORTH 5 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION

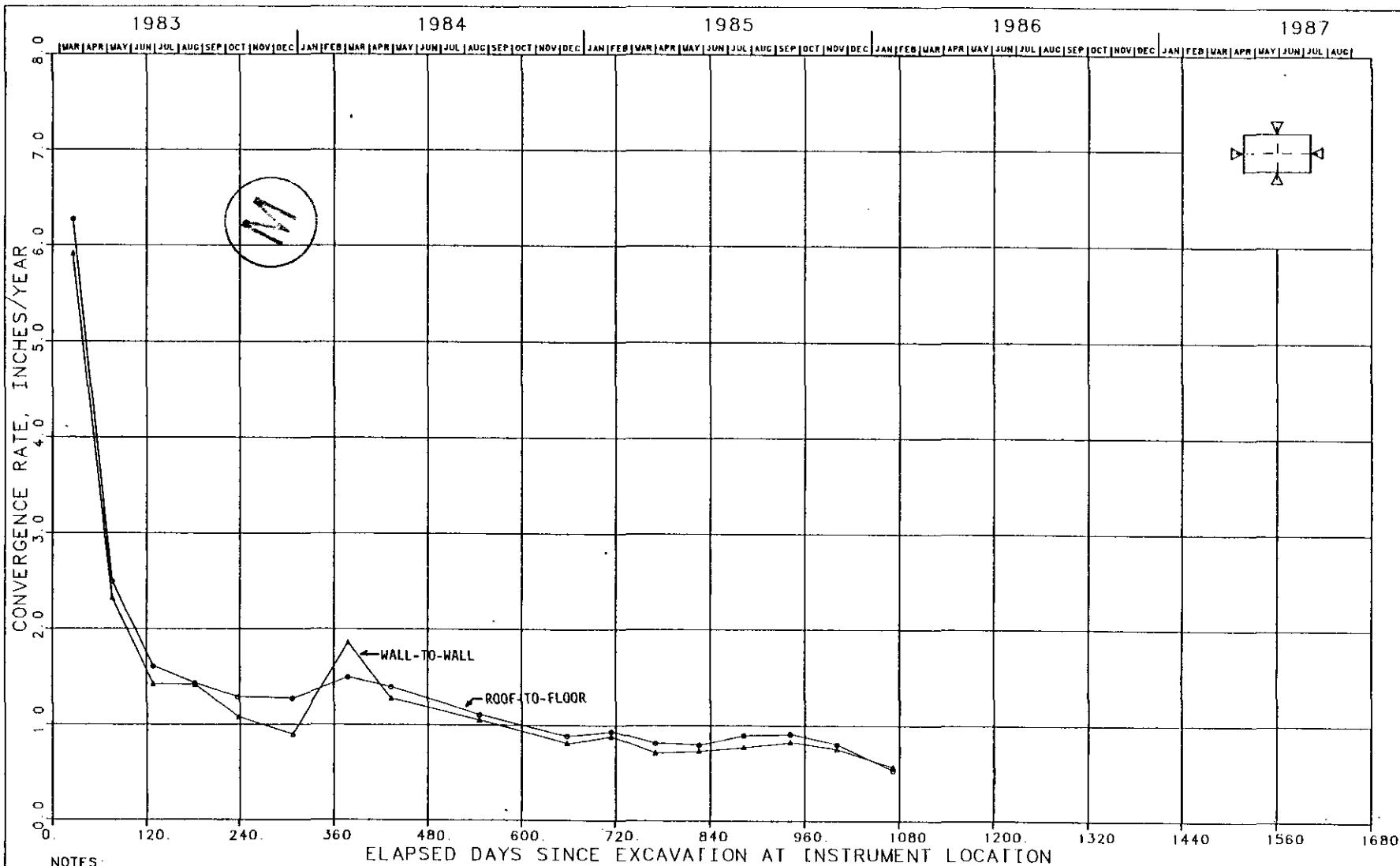




NOTES

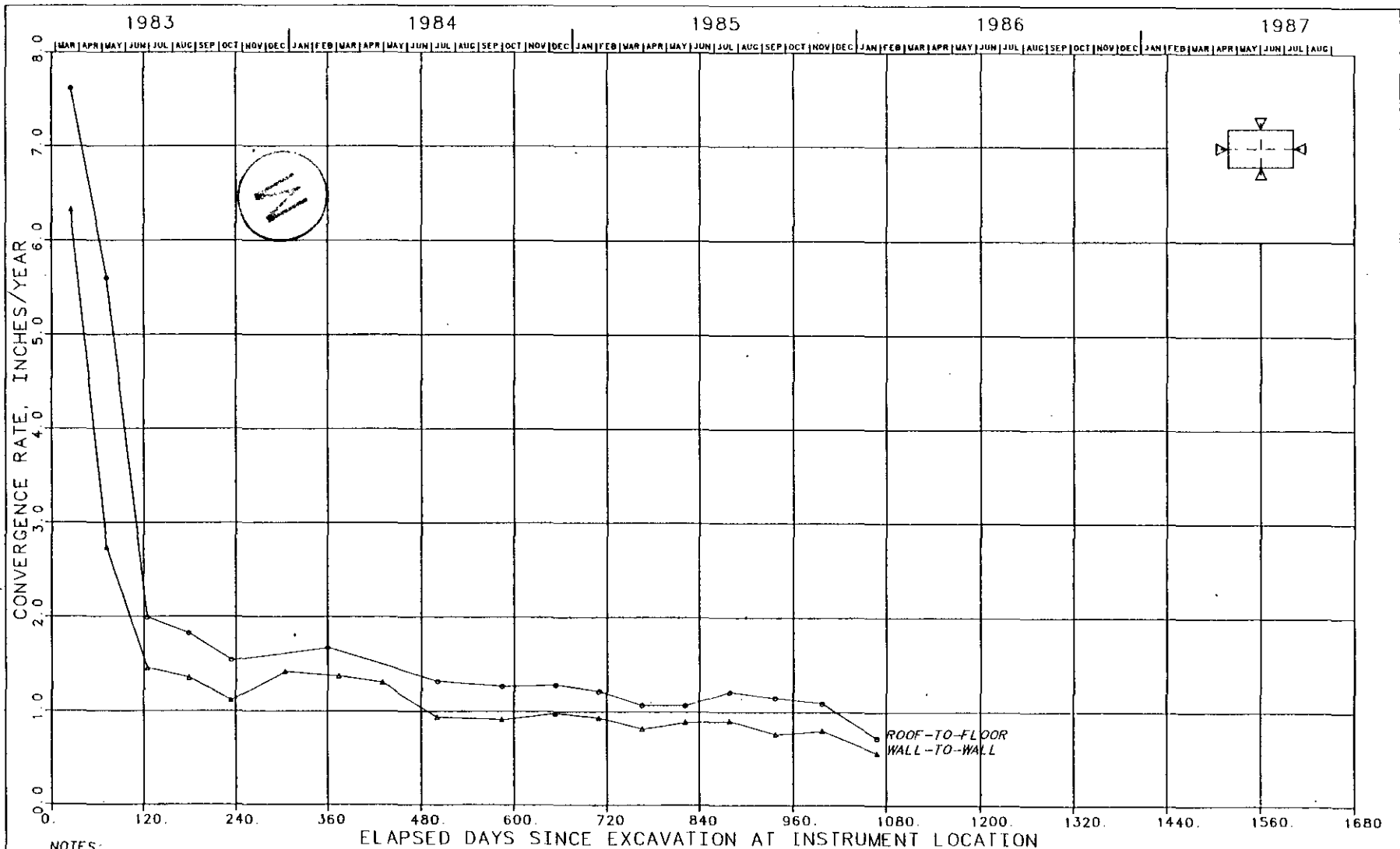
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
2. SIZE OF EXCAVATION: 8 FT X 14 FT.

FIGURE K-13  
 CONVERGENCE POINTS  
 E140 DRIFT, NORTH 240 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



- NOTES:
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
  2. SIZE OF EXCAVATION: 8 FT X 14 FT.

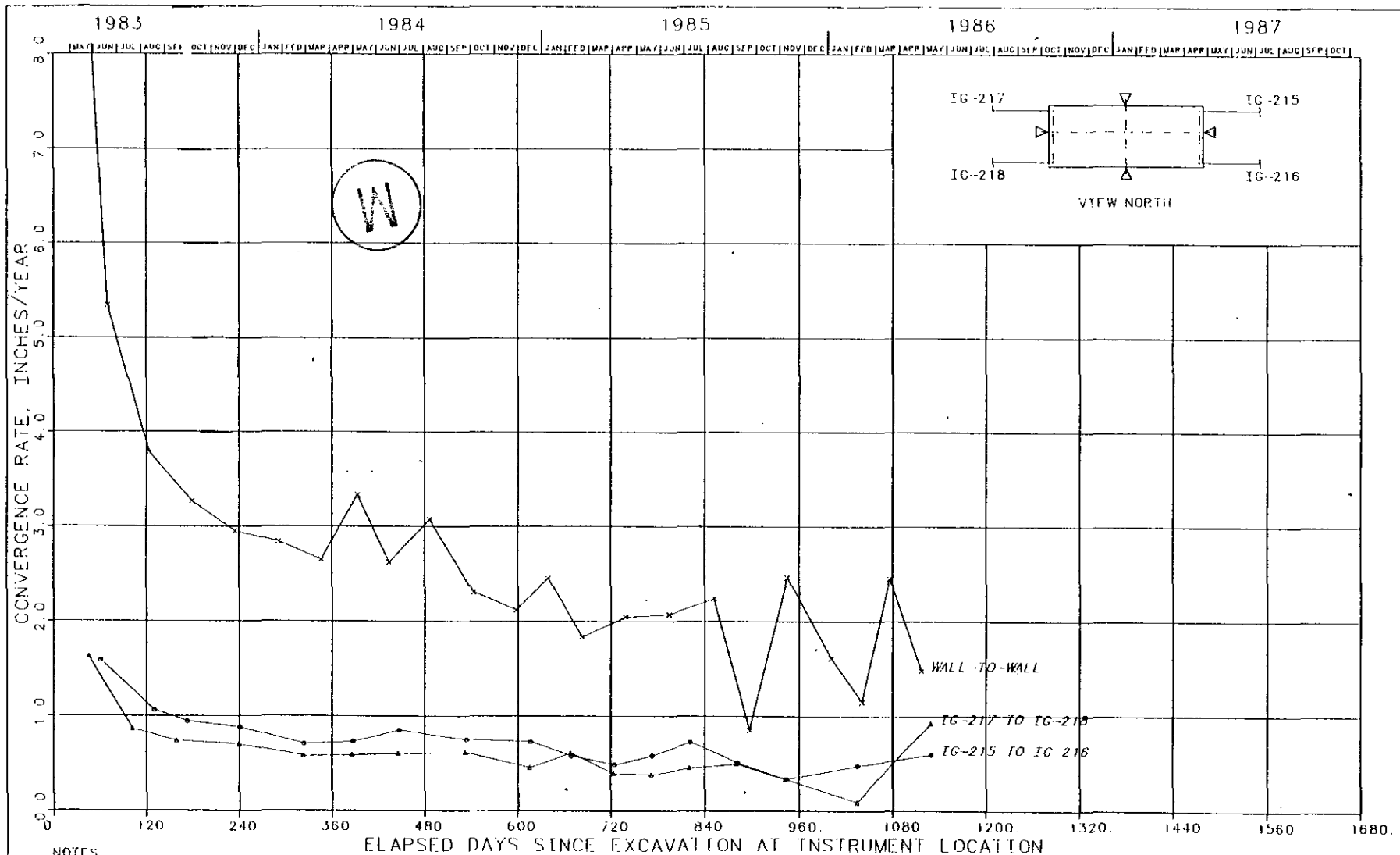
FIGURE K-14  
 CONVERGENCE POINTS  
 E140 DRIFT, NORTH 626 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES:

- 1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
- 2. SIZE OF EXCAVATION: 8 FT X 14 FT

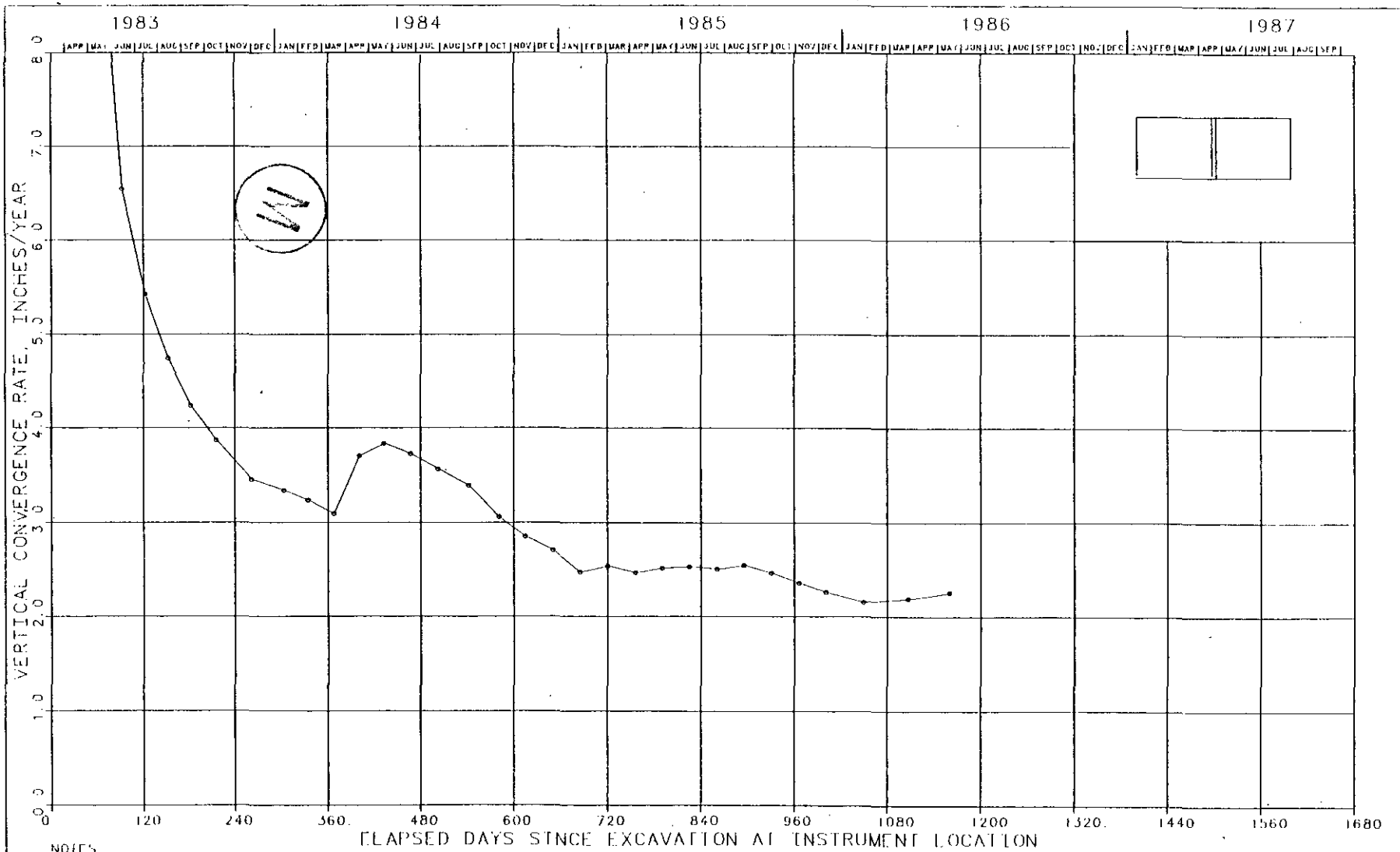
FIGURE K-15  
 CONVERGENCE POINTS  
 E140 DRIFT, NORTH 1266 FT  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES

- 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
- 2 SIZE OF EXCAVATION 13 FT X 33 FT

FIGURE K-16  
 CONVERGENCE POINTS  
 TEST ROOM 1  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



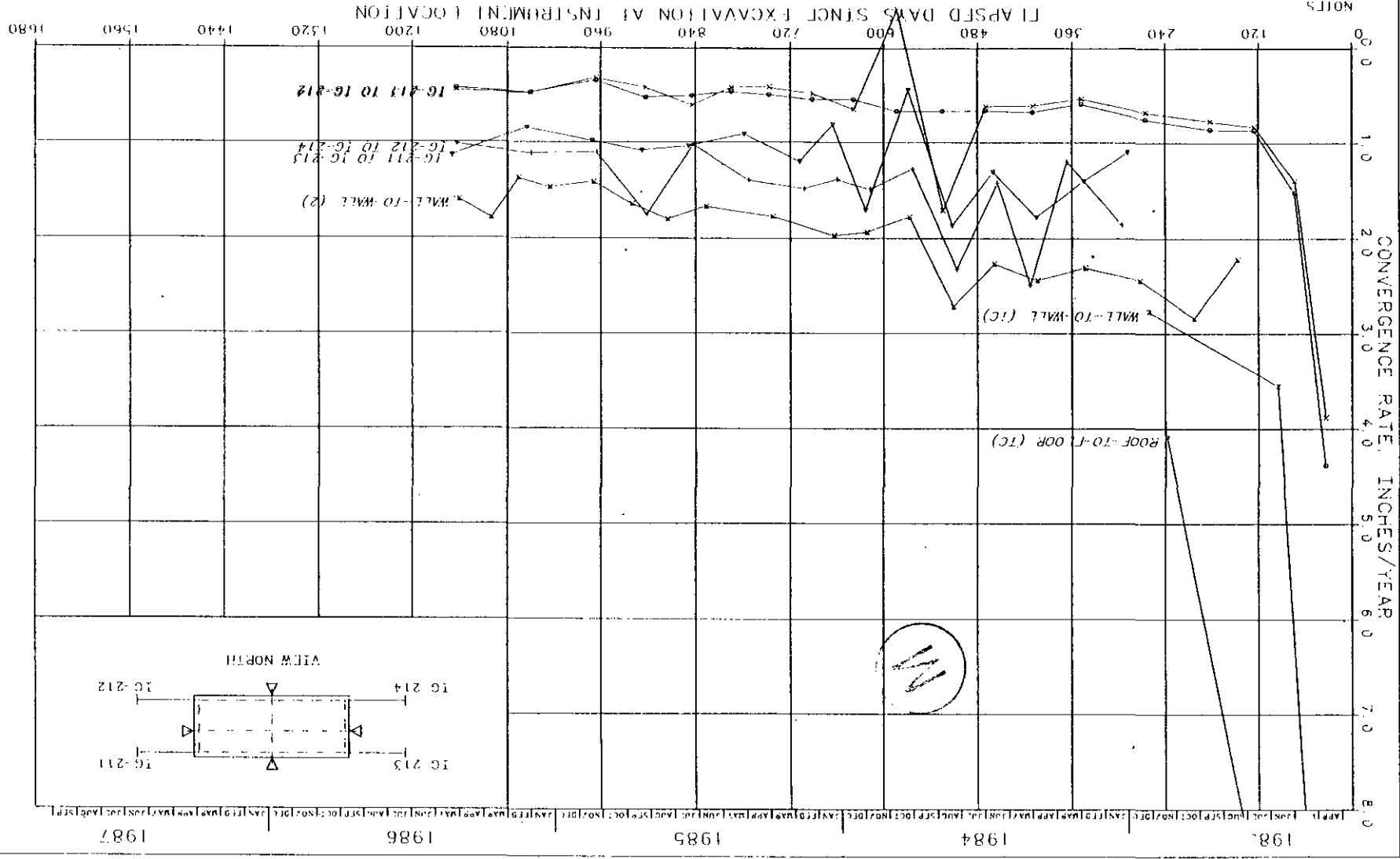
NOTES

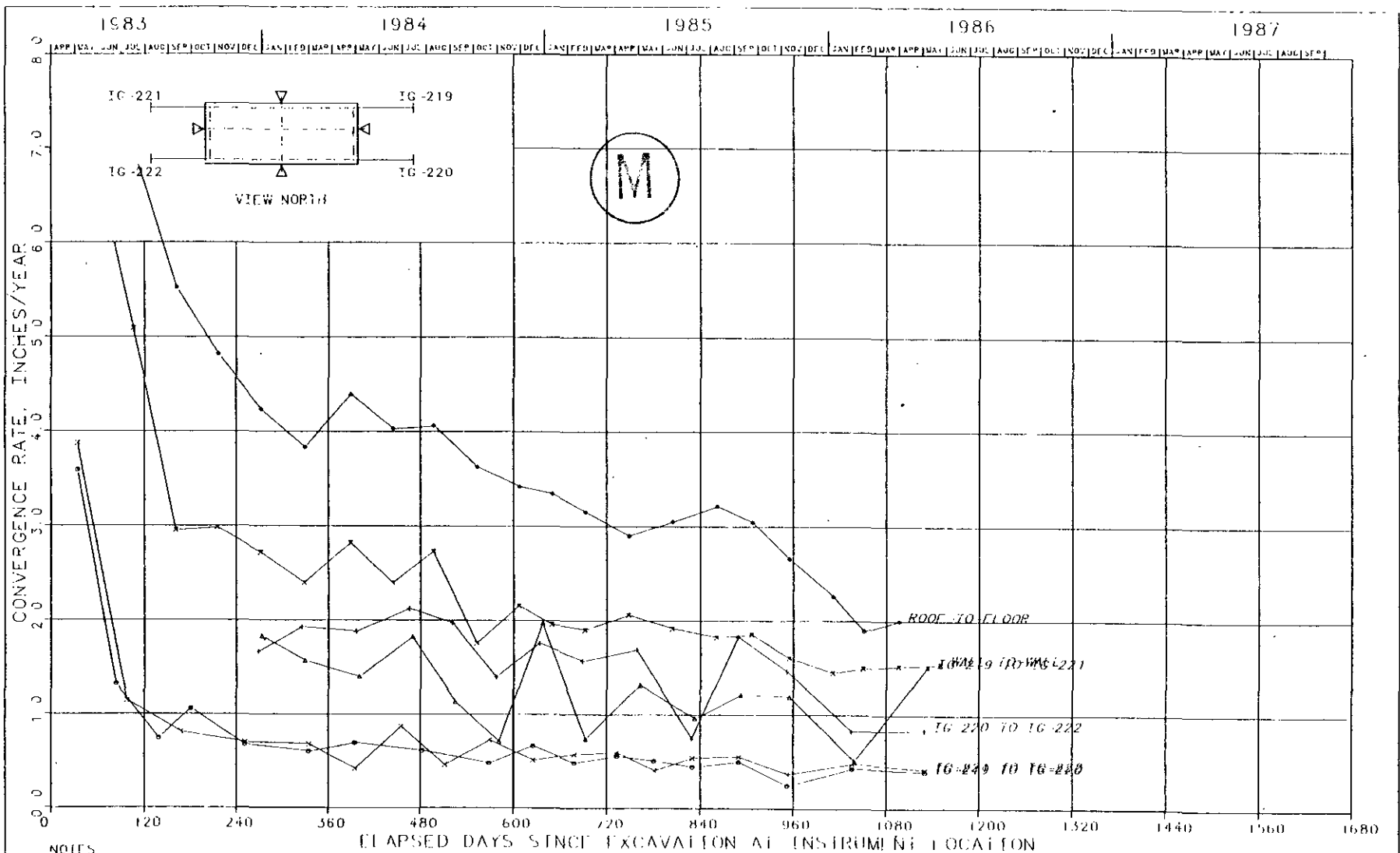
- 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
- 2 SIZE OF EXCAVATION: 13 FT X 33 FT

FIGURE K-17  
 CONVERGENCE METER 51X-CE-00201  
 TEST ROOM 2  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION

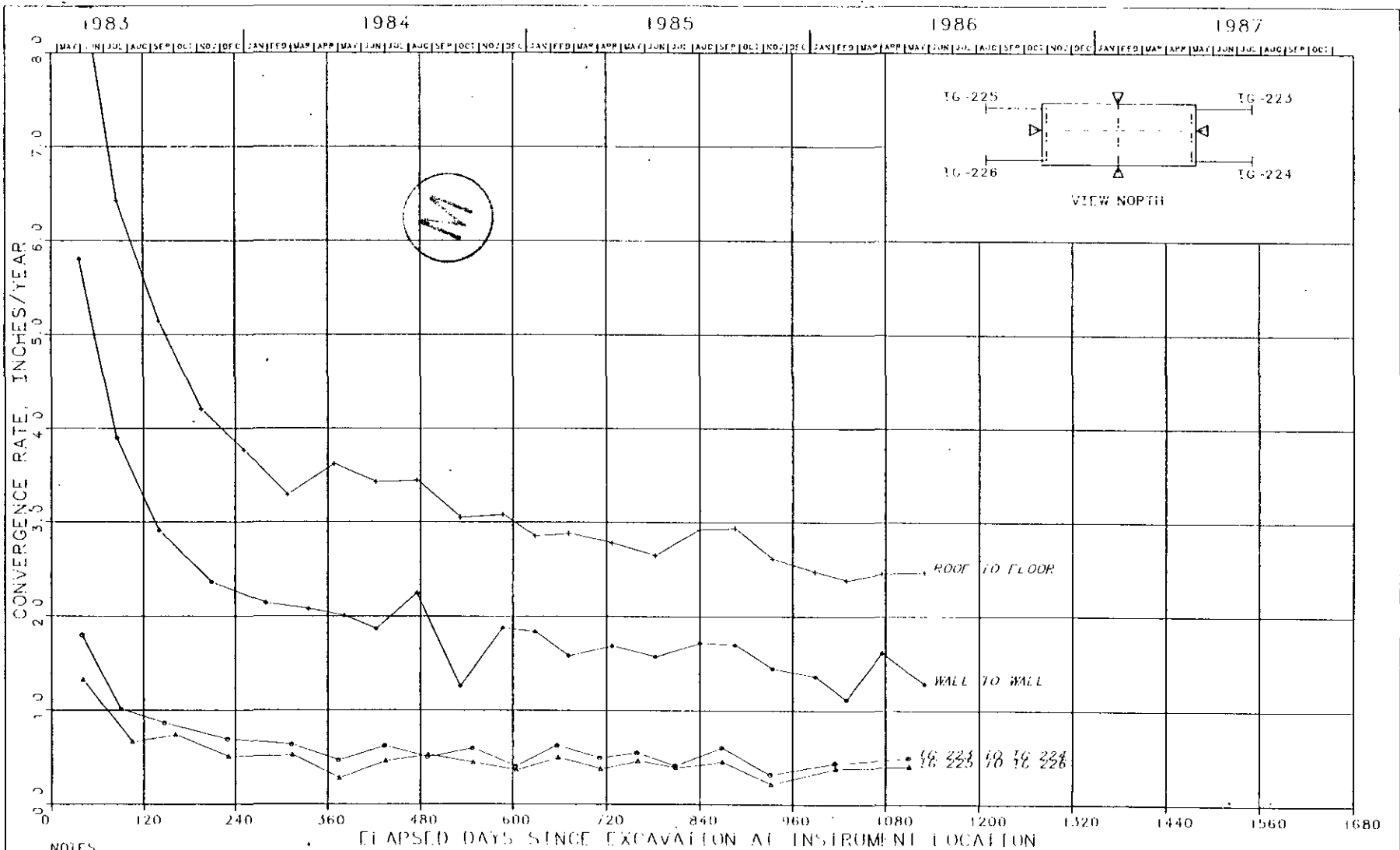
CONVERGENCE RATE VS TIME SINCE EXCAVATION  
 CONVERGENCE POINTS  
 TEST ROOM 2  
 FIGURE K-18

1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS  
 2 SIZE OF EXCAVATION 13 FT X 33 FT





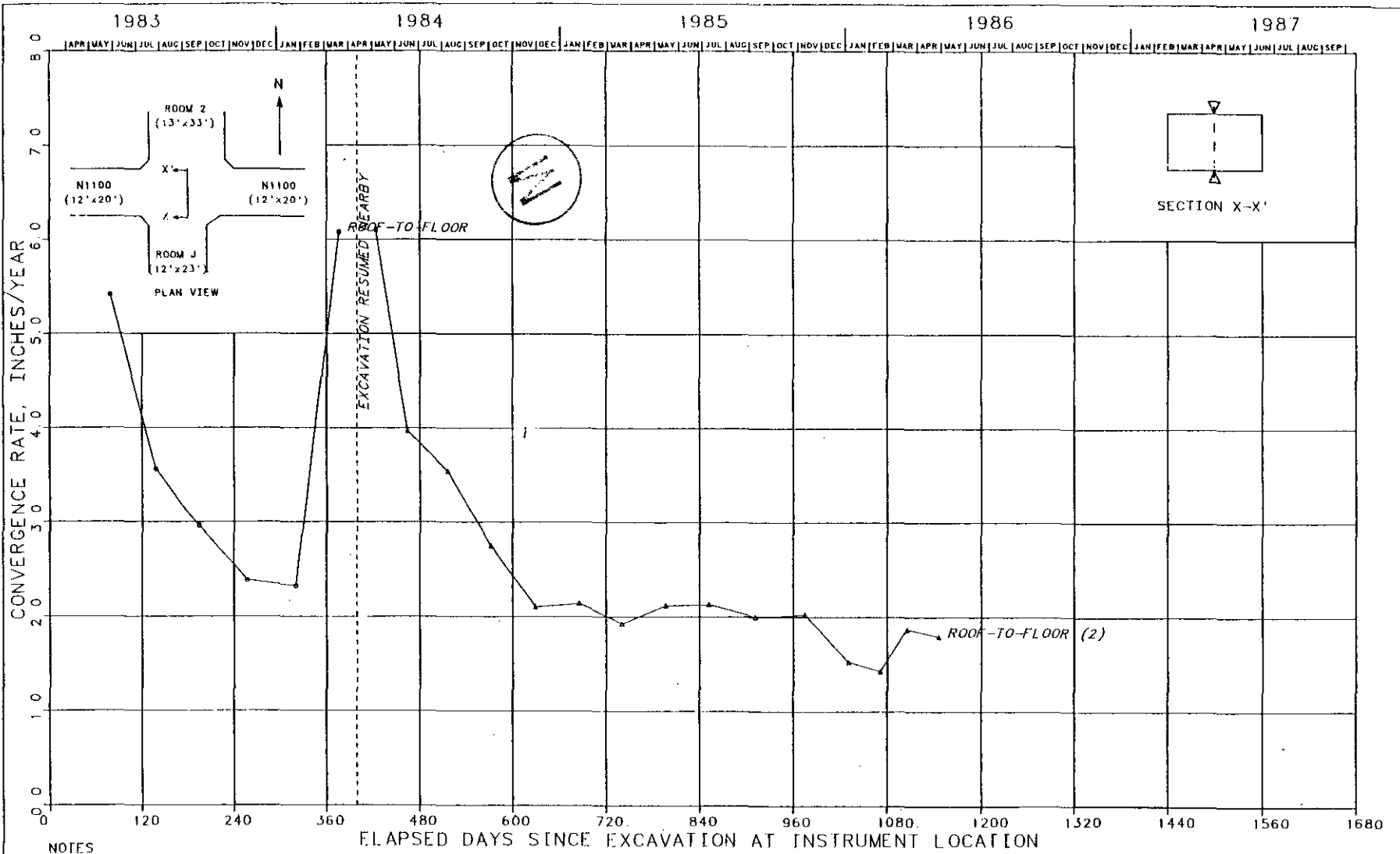
**FIGURE K-19**  
 CONVERGENCE POINTS  
 TEST ROOM 3  
 CONVERGENCE RATE VS TIME SINCE EXCAVATION



NOTES  
 1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS  
 2. SIZE OF EXCAVATION 13 FT X 33 FT

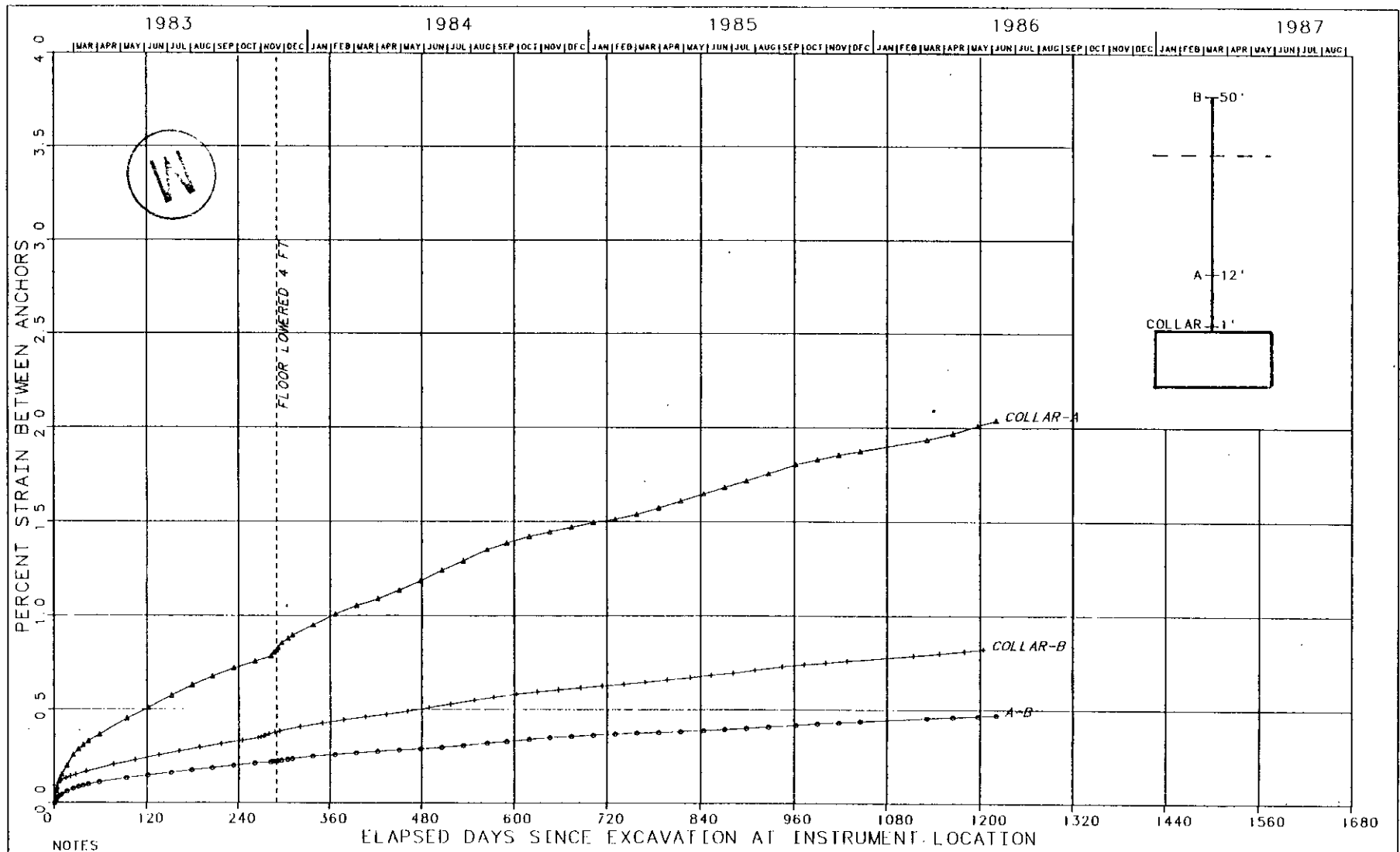
FIGURE K-20  
 CONVERGENCE POINTS  
 TEST ROOM 4  
 CONVERGENCE RATE VS TIME SINCE EXCAVATION





NOTES  
 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-21  
 CONVERGENCE POINTS  
 N1100 DRIFT - TEST ROOM 2 INTERSECTION  
 CONVERGENCE RATE VS. TIME SINCE EXCAVATION



NOTES  
 1 SIZE OF EXCAVATION 12 FT X 25 FT

FIGURE-K-22  
 DOUBLE-POINT EXTENSOMETER 51X-GE-00234  
 E0 DRIFT, NORTH 626 FT - ROOF  
 STRAIN VS. TIME SINCE EXCAVATION

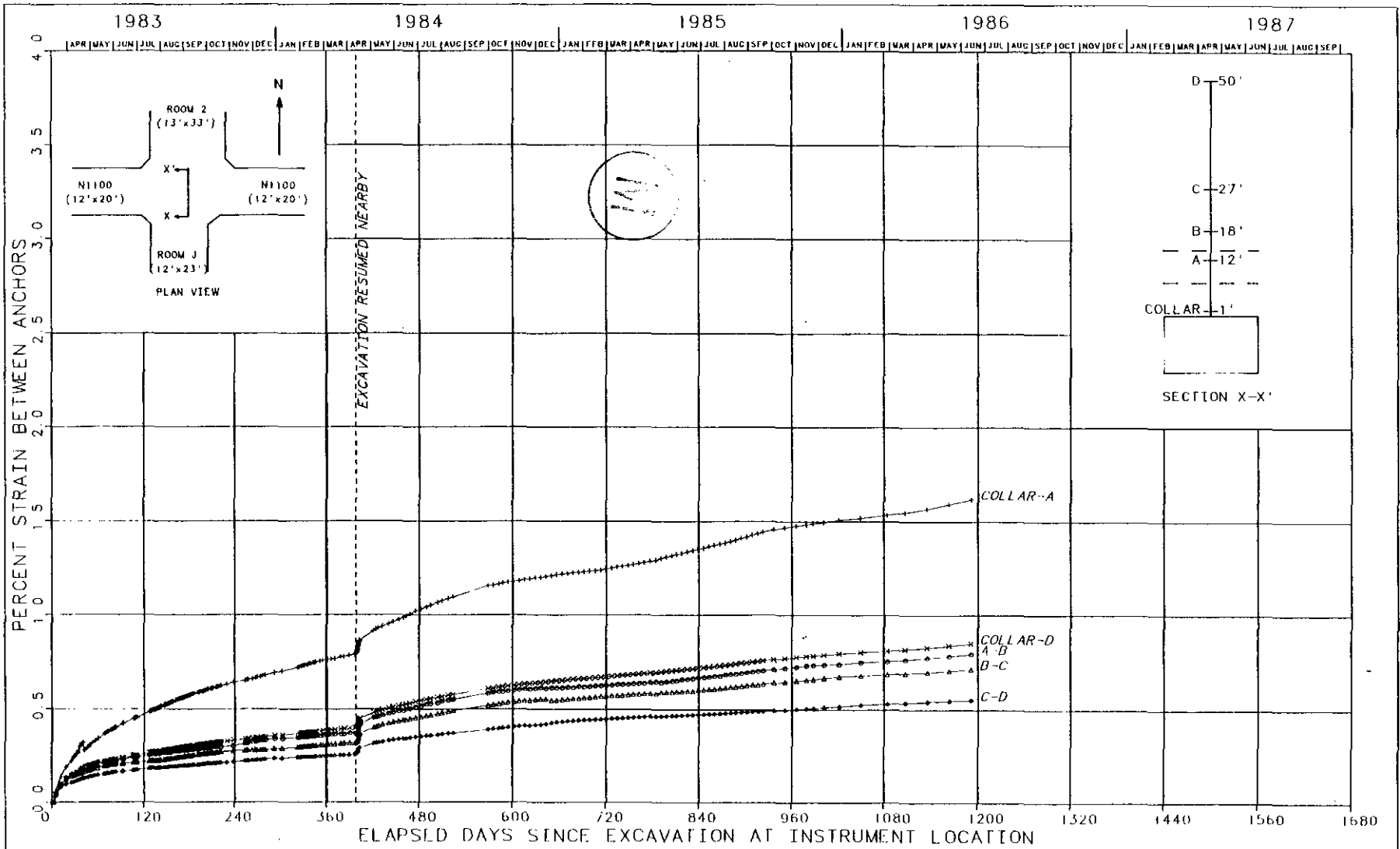


FIGURE K-23  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00241  
 N1100 - TEST ROOM 2 INTERSECTION - ROOF  
 STRAIN VS. TIME SINCE EXCAVATION

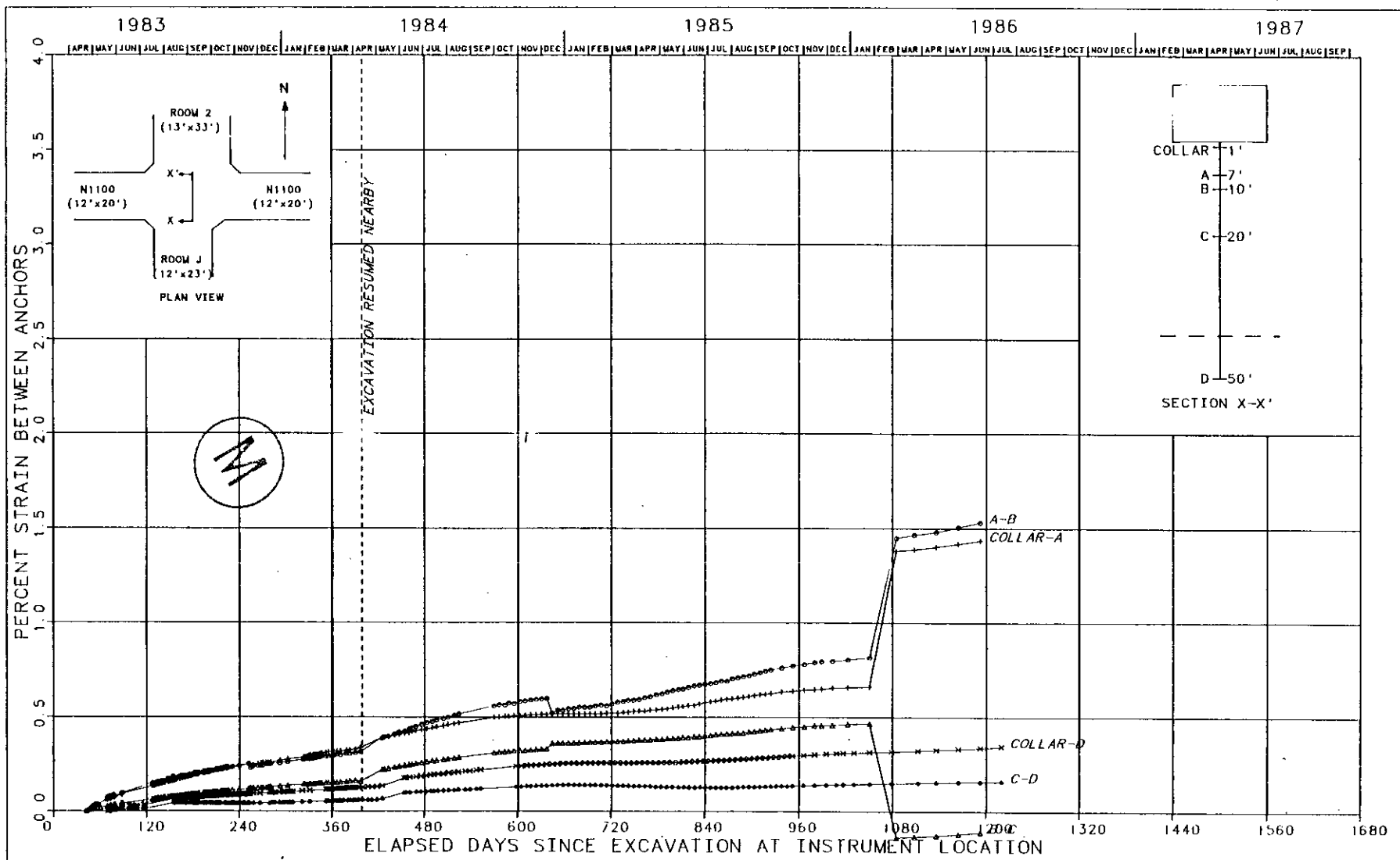
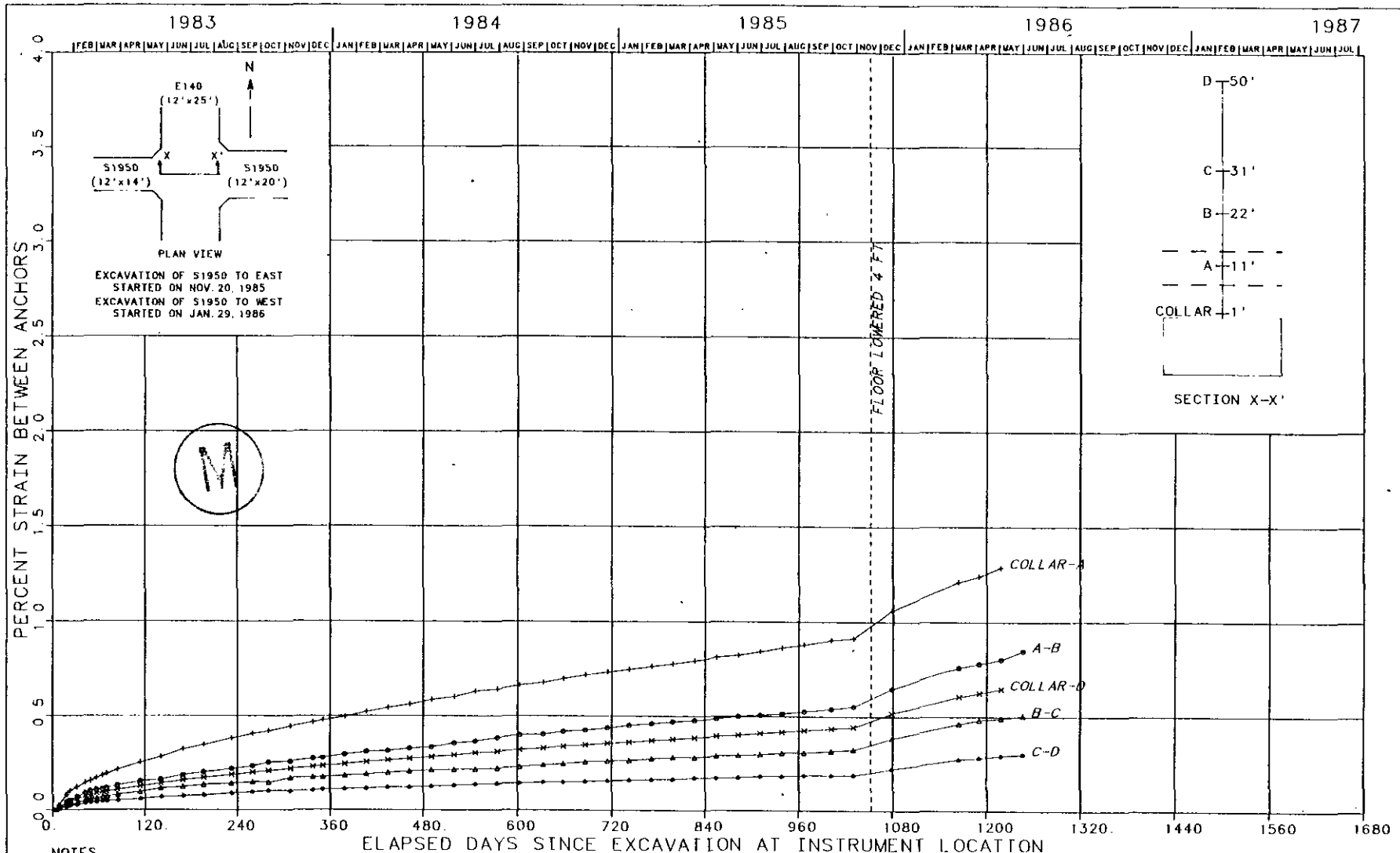
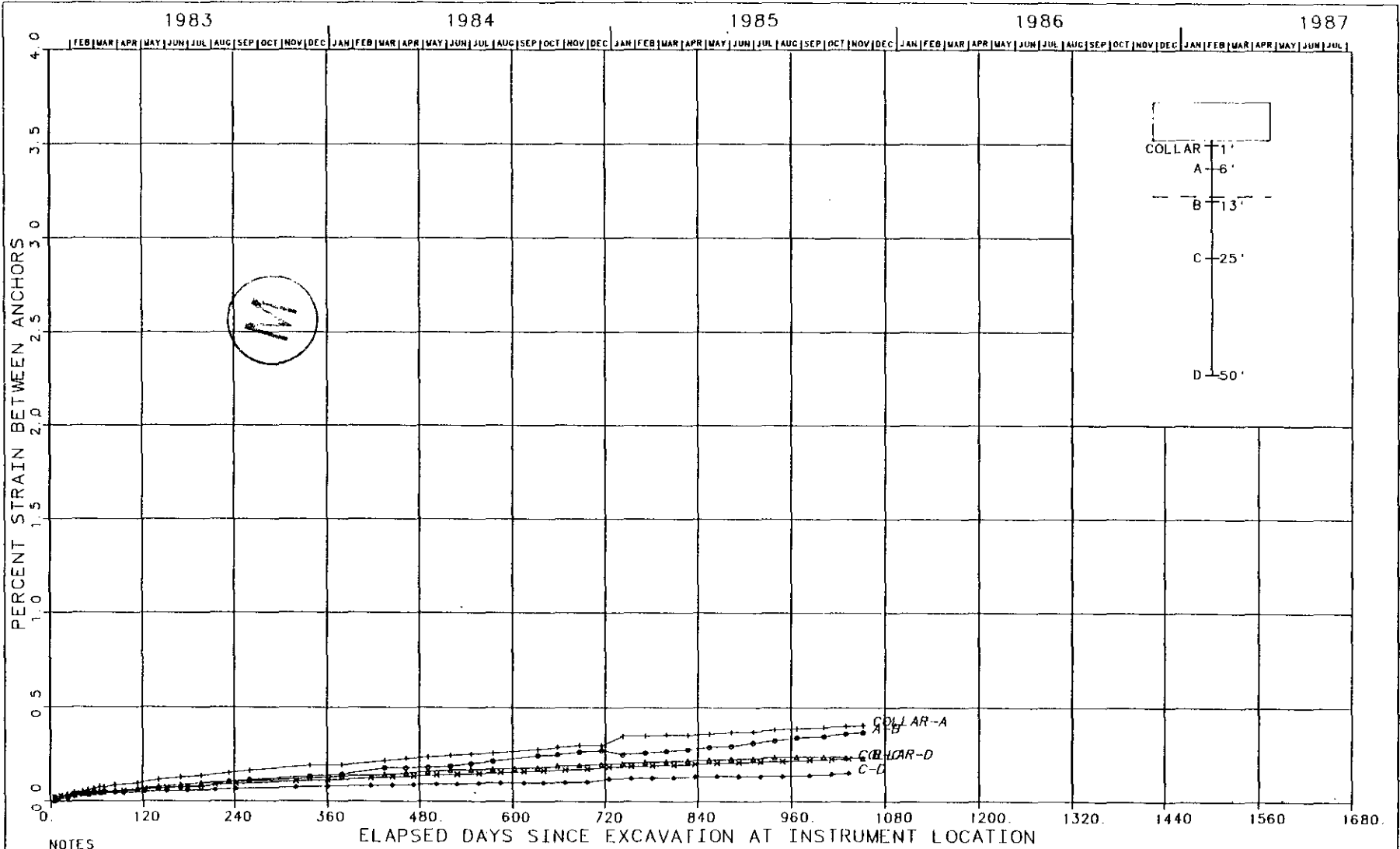


FIGURE K-24  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00242  
 N1100 - TEST ROOM 2 INTERSECTION - FLOOR  
 STRAIN VS. TIME SINCE EXCAVATION



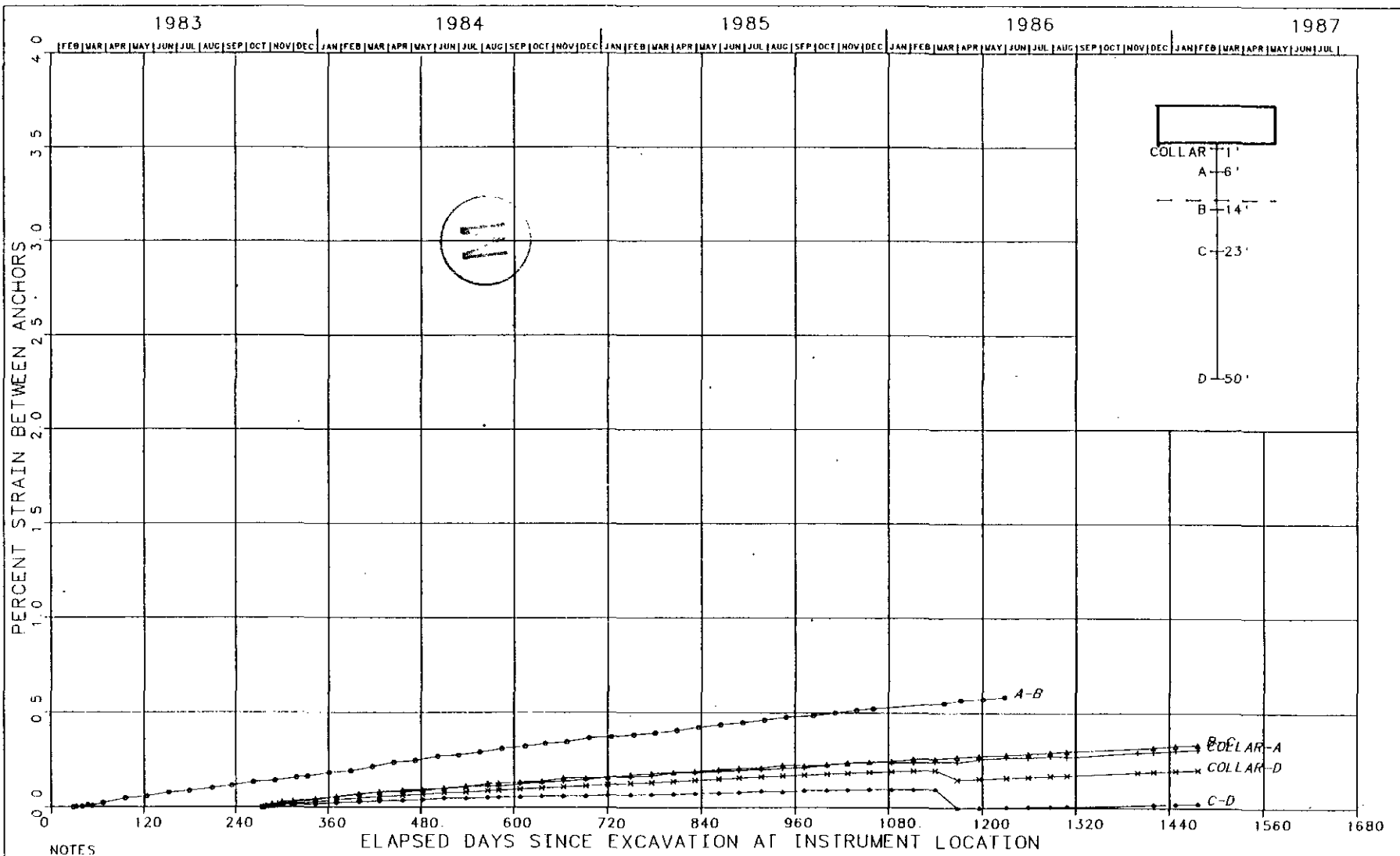
NOTES  
 1 SIZE OF EXCAVATION: 12 FT X 25 FT

FIGURE K-25  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00247  
 E140 DRIFT, SOUTH 1950 FT - ROOF  
 STRAIN VS. TIME SINCE EXCAVATION



- NOTES
1. SIZE OF EXCAVATION: 8 FT X 25 FT
  2. INSTRUMENT HAS BEEN DESTROYED

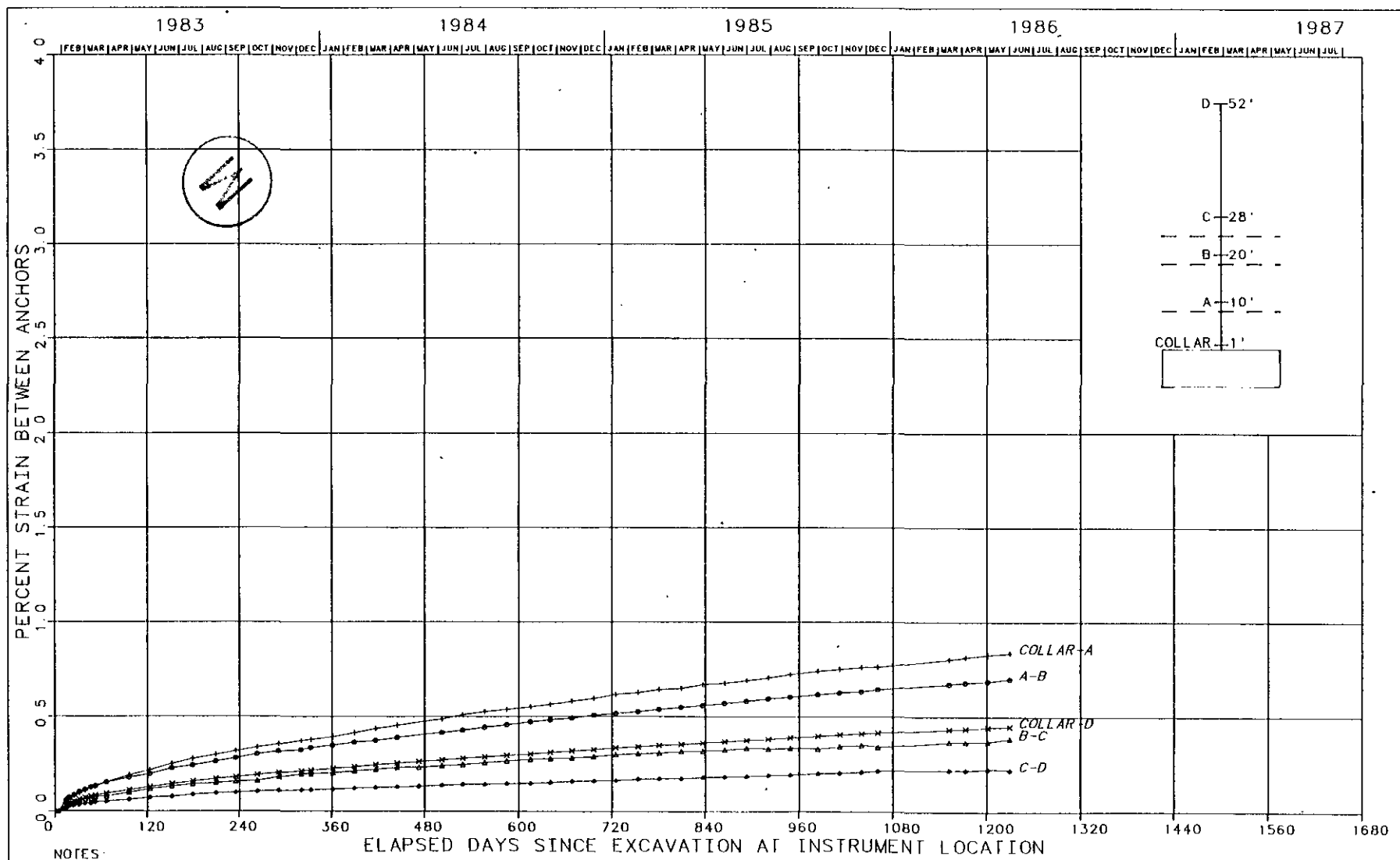
FIGURE K-26  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00248  
 E140 DRIFT, SOUTH 1950 FT - FLOOR  
 STRAIN VS. TIME SINCE EXCAVATION



NOTES

1. SIZE OF EXCAVATION 8 FT X 25 FT

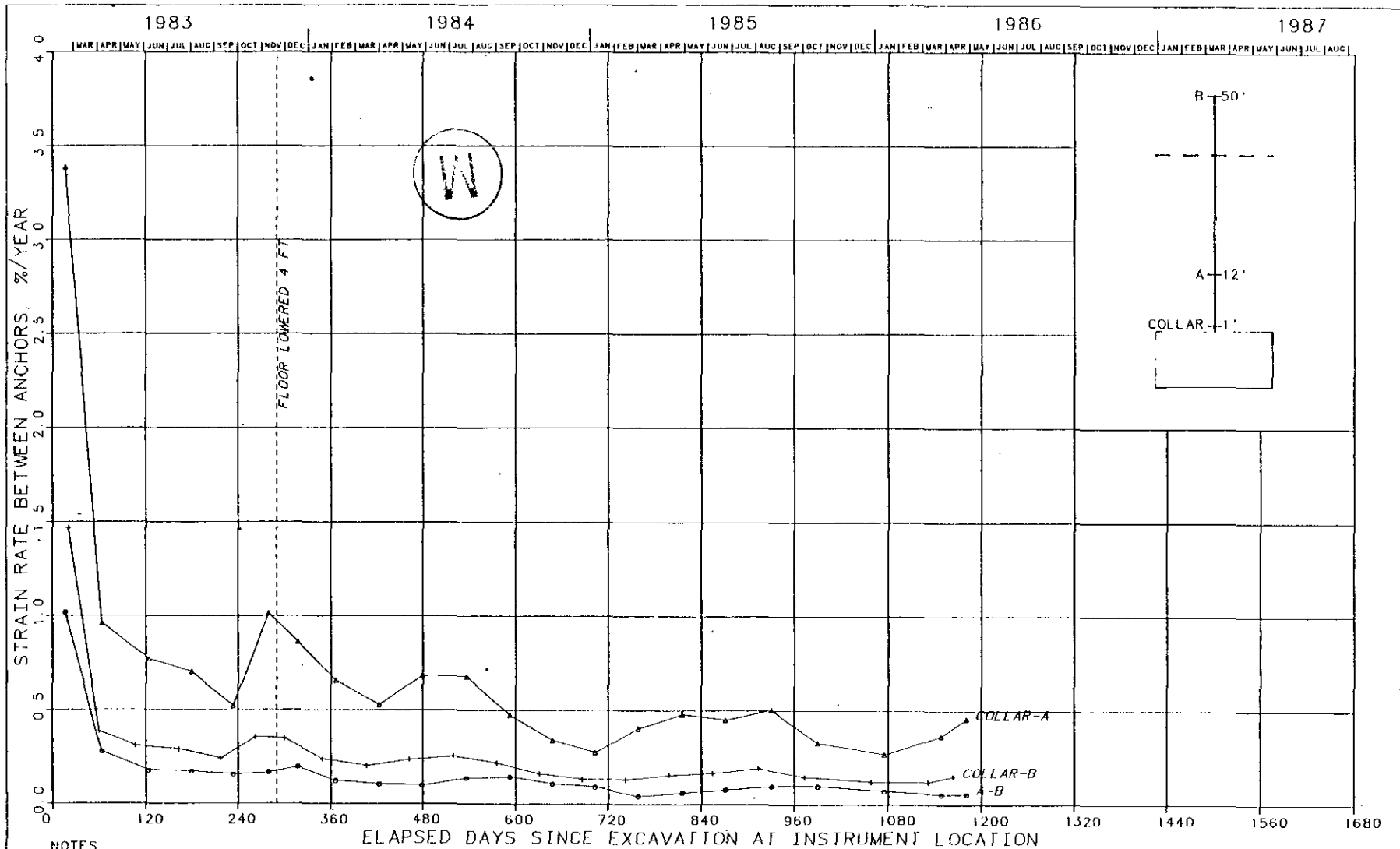
FIGURE K-27  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00250  
 E140 DRIFT, SOUTH 3045 FT - FLOOR  
 STRAIN VS. TIME SINCE EXCAVATION



NOTES:  
 1 SIZE OF EXCAVATION: 8 FT X 25 FT

FIGURE K-28  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00249  
 E140 DRIFT, SOUTH 3080 FT - ROOF  
 STRAIN VS. TIME SINCE EXCAVATION

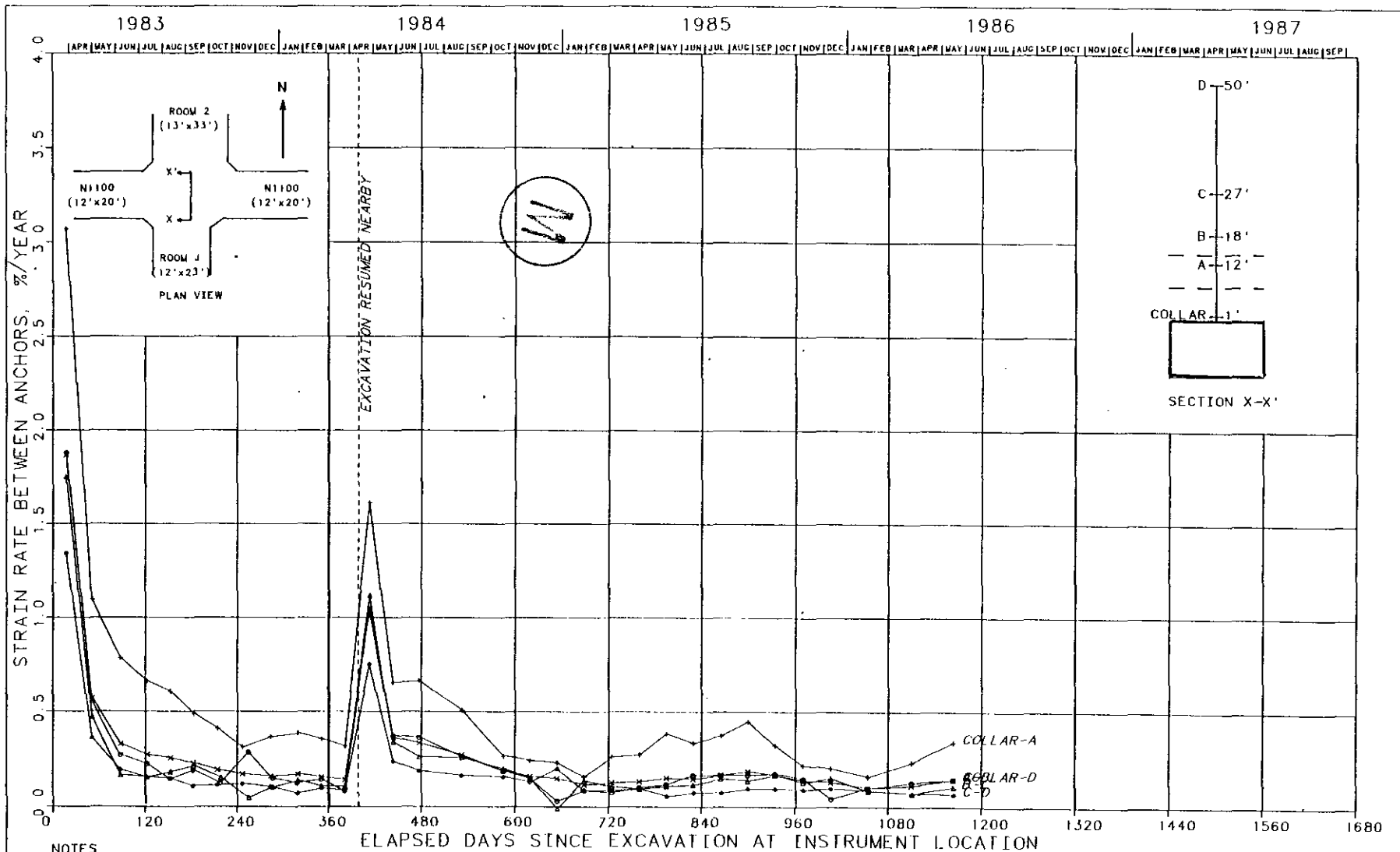




NOTES

- 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
- 2 SIZE OF EXCAVATION: 12 FT X 25 FT

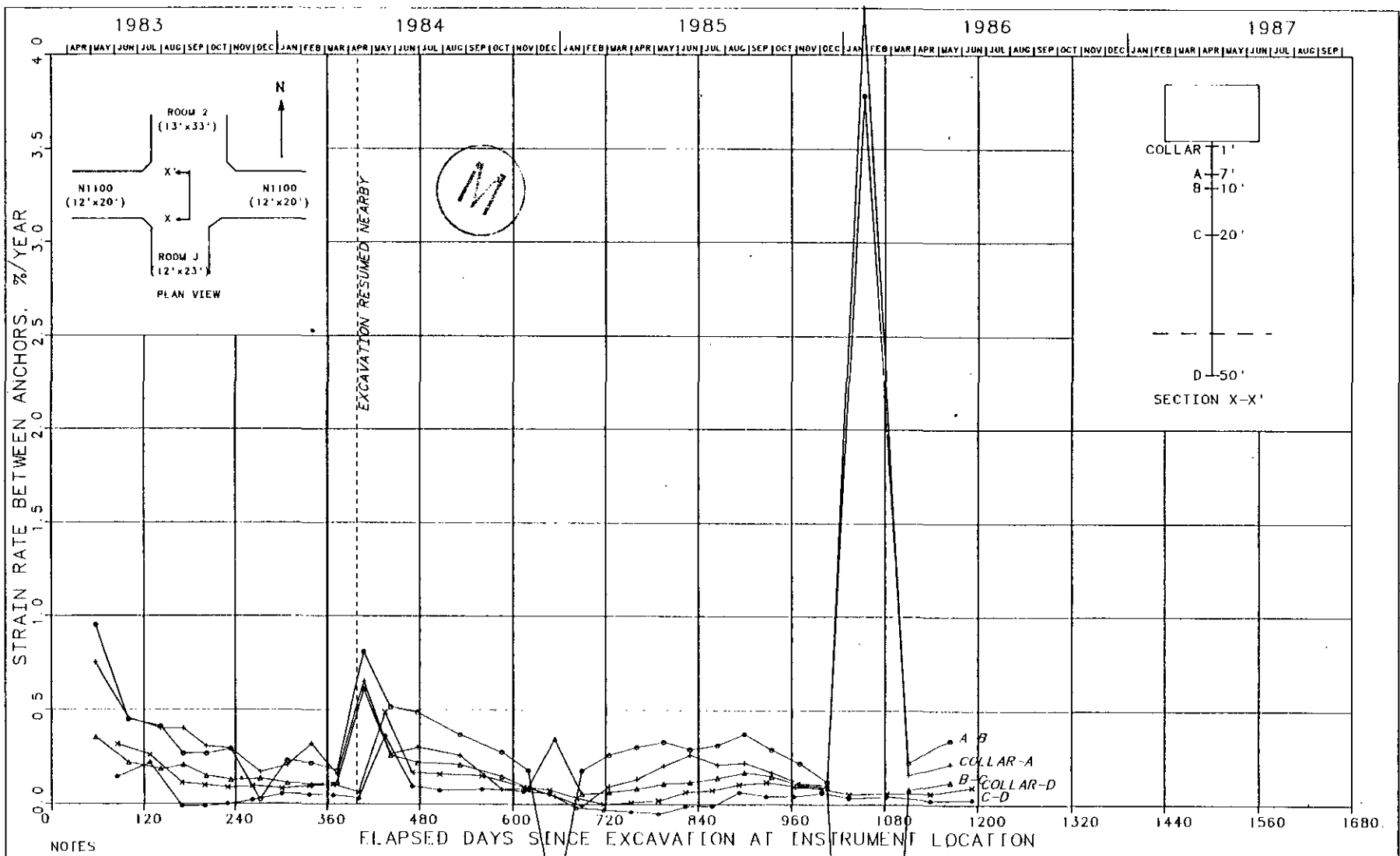
FIGURE K-29  
 DOUBLE-POINT EXTENSOMETER 51X-GE-00234  
 E0 DRIFT, NORTH 626 FT - ROOF  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES

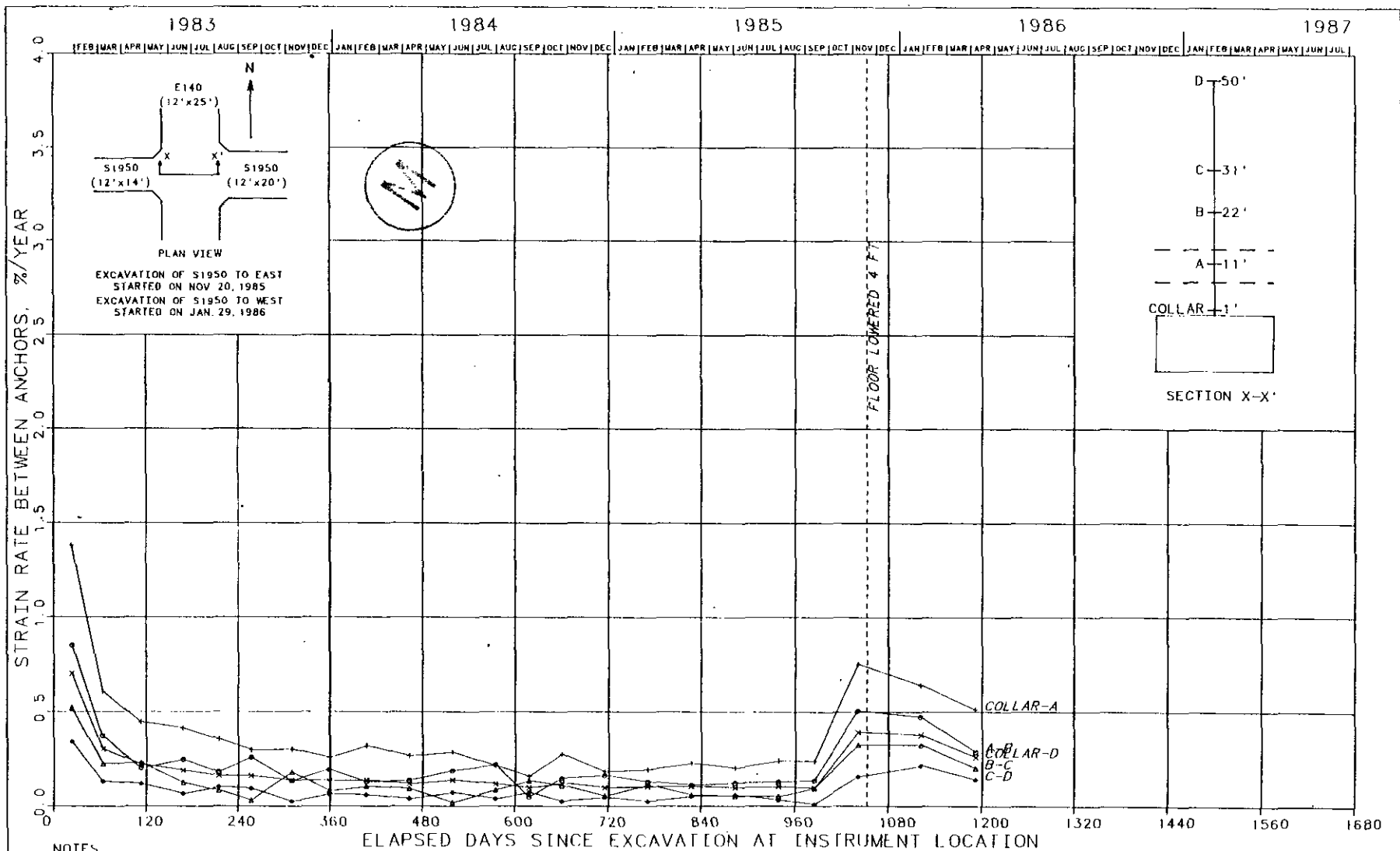
1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-30  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00241  
 N1100 - TEST ROOM 2 INTERSECTION - ROOF  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES  
 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

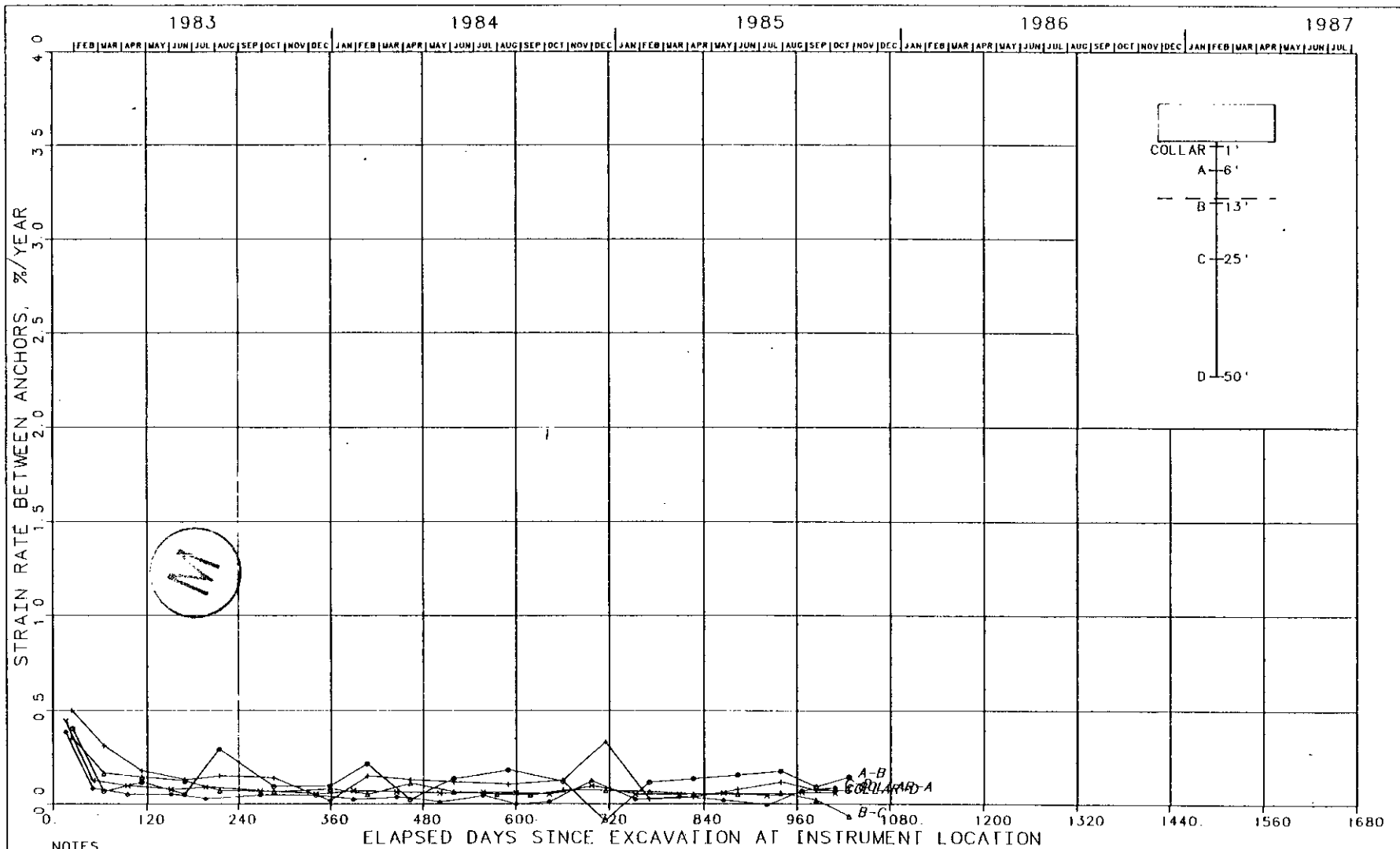
FIGURE K-31  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-0024  
 N1100 - TEST ROOM 2 INTERSECTION - FLOOR  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES

- 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
- 2 SIZE OF EXCAVATION 12 FT X 25 FT

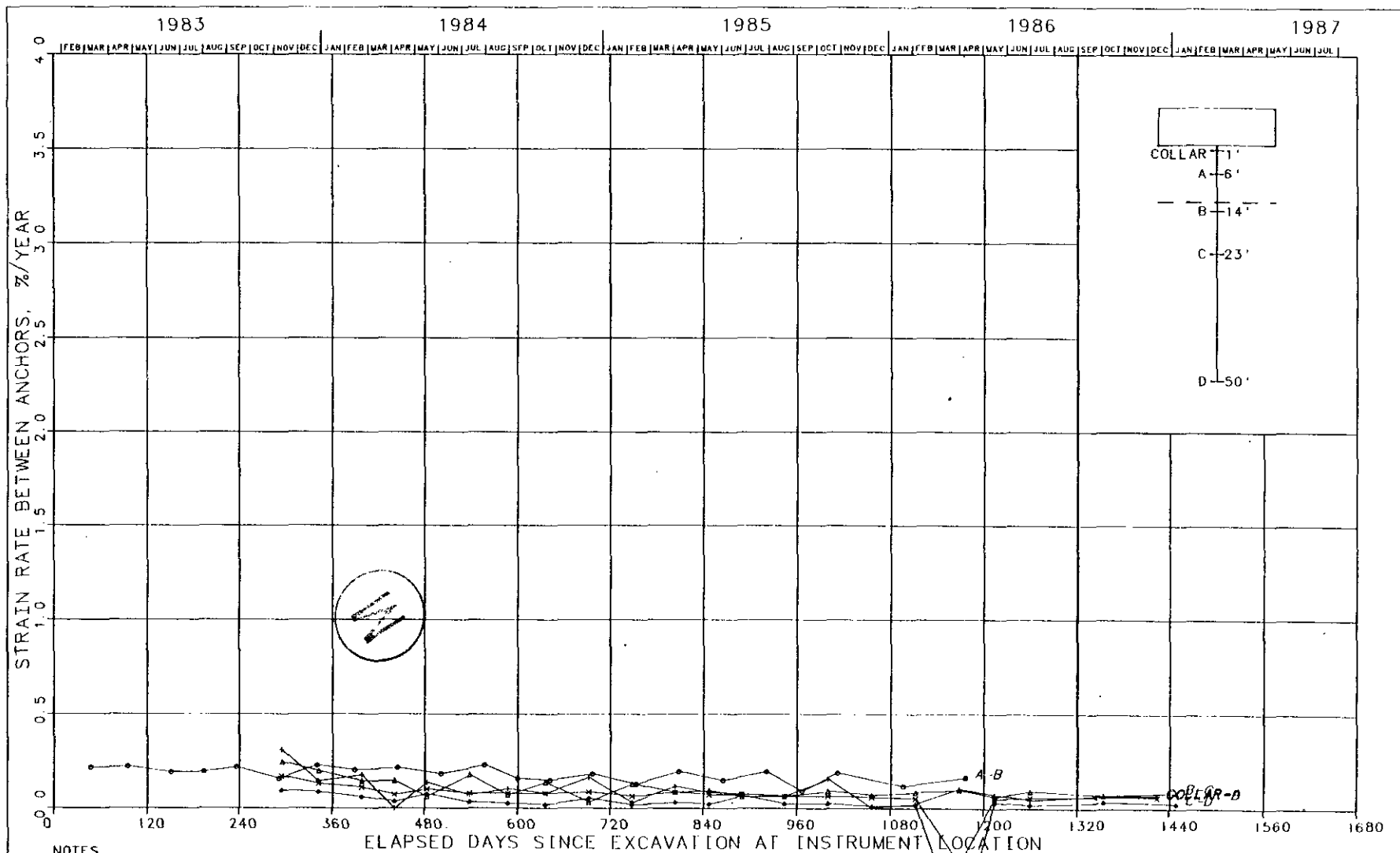
FIGURE K-32  
MULTIPLE-POINT EXTENSOMETER 51X-GE-00247  
E140 DRIFT, SOUTH 1950 FT - ROOF  
STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES

- 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
- 2 SIZE OF EXCAVATION: 8 FT X 25 FT
- 3 INSTRUMENT HAS BEEN DESTROYED

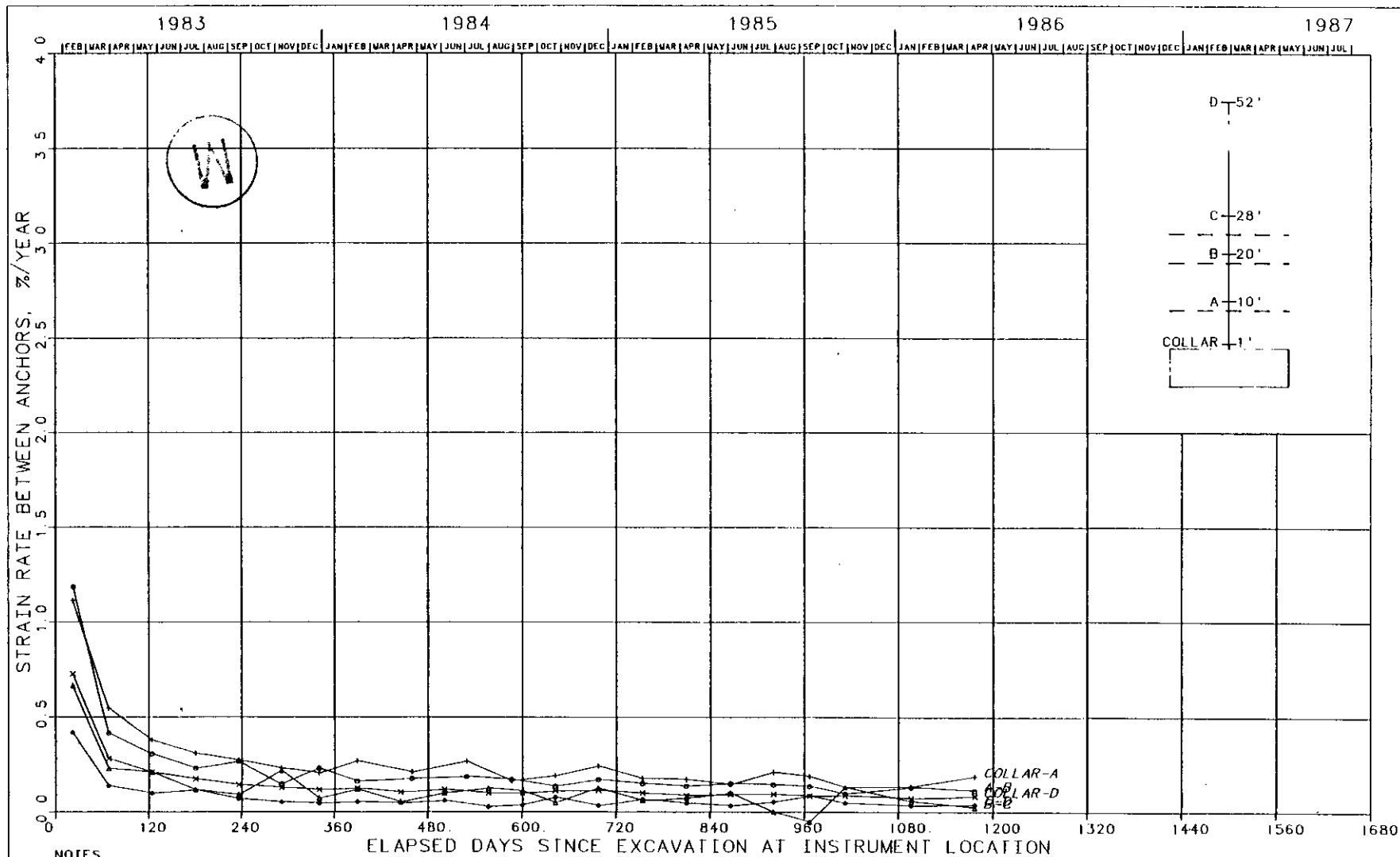
FIGURE K-33  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00248  
 E140 DRIFT, SOUTH 1950 FT - FLOOR  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS
2. SIZE OF EXCAVATION: 8 FT X 25 FT

FIGURE K-34  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00250  
 E140 DRIFT, SOUTH 3045 FT - FLOOR  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.
2. SIZE OF EXCAVATION: 8 FT X 25 FT.

FIGURE K-35  
 MULTIPLE-POINT EXTENSOMETER 51X-GE-00249  
 E140 DRIFT, SOUTH 3080 FT - ROOF  
 STRAIN RATE VS. TIME SINCE EXCAVATION

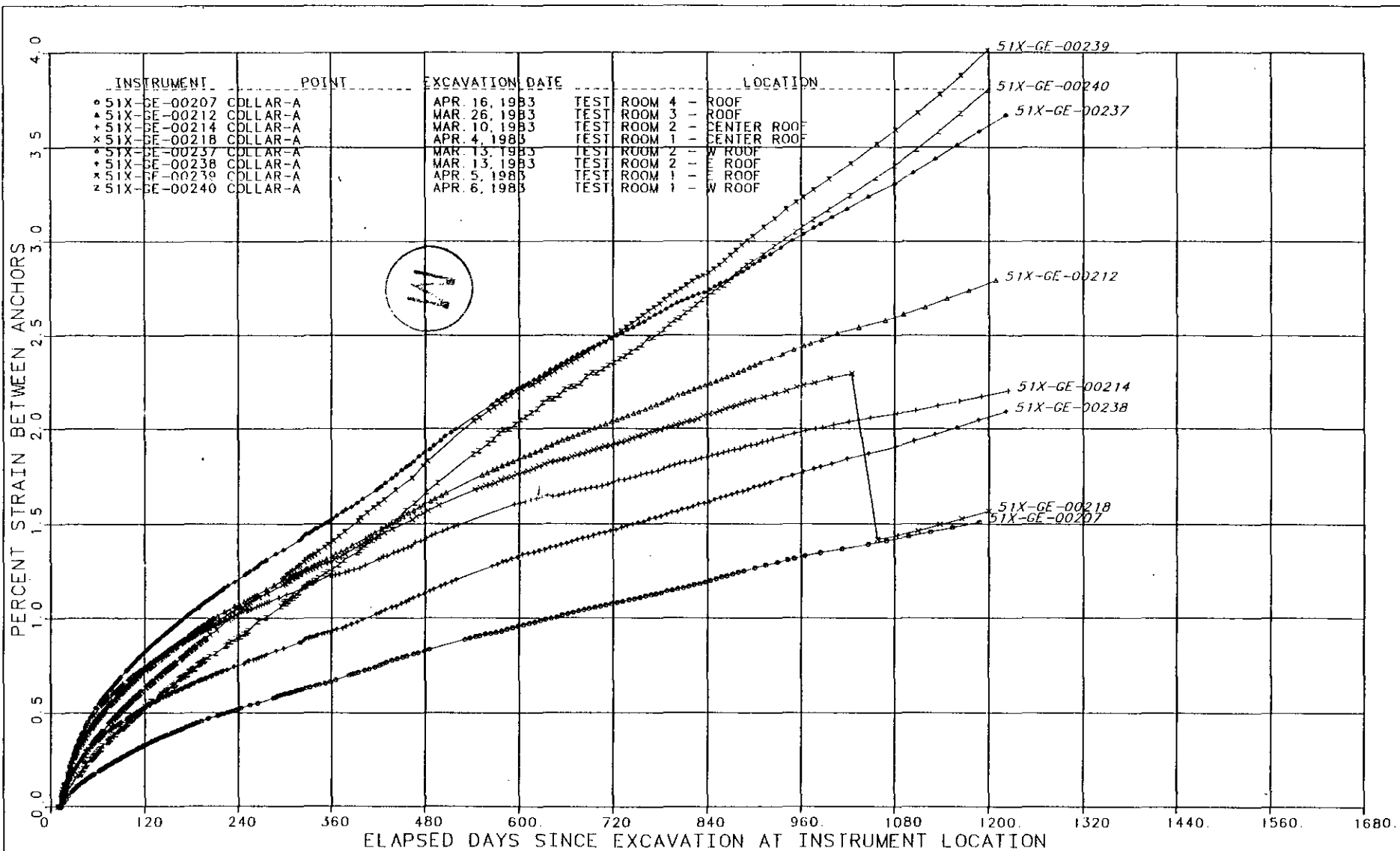


FIGURE K-36  
TEST ROOM ROOF EXTENSOMETERS -  
COLLAR TO ANCHOR A  
STRAIN VS. TIME SINCE EXCAVATION



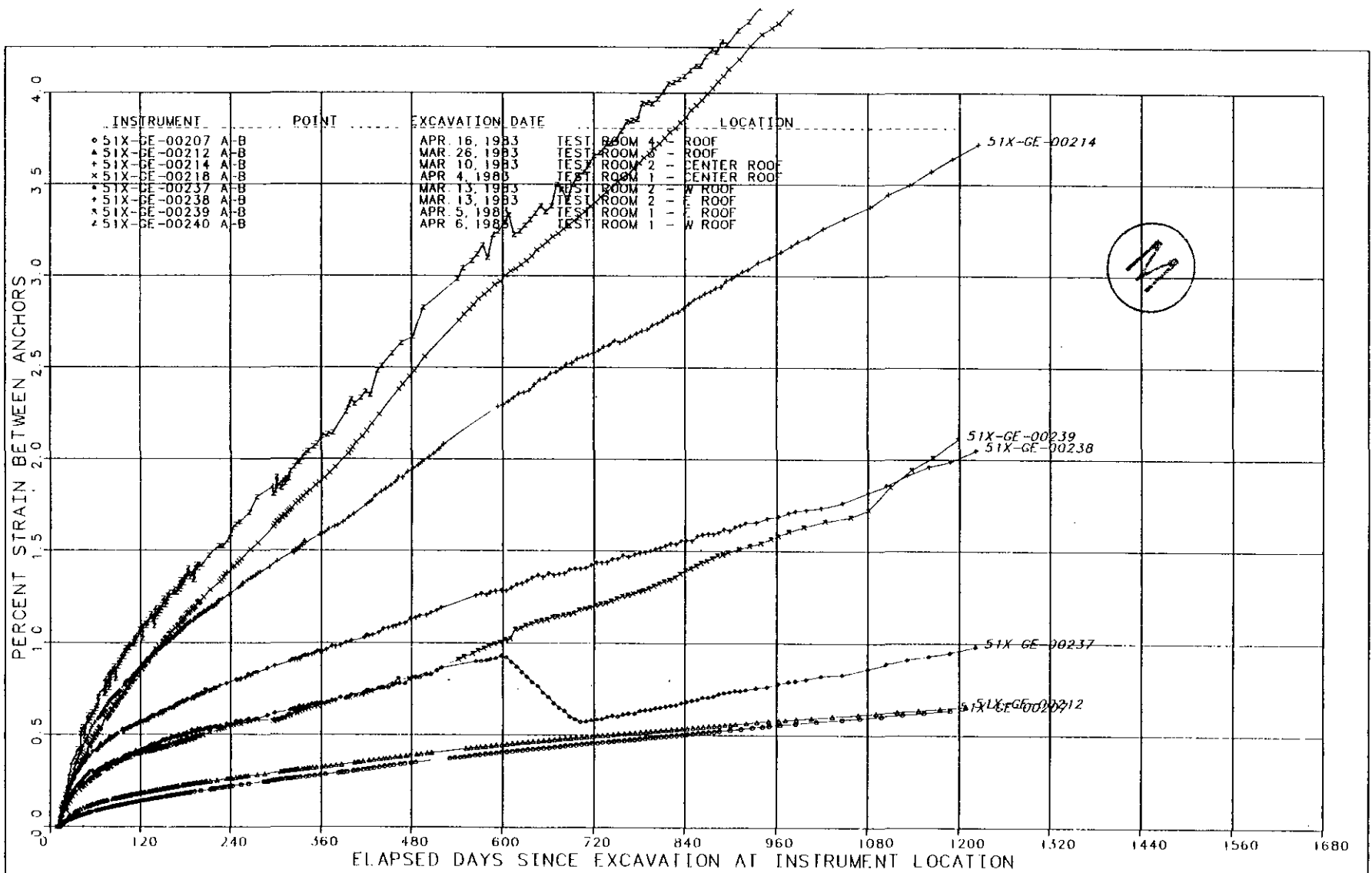


FIGURE K-37  
 TEST ROOM ROOF EXTENSOMETERS -  
 ANCHOR A TO ANCHOR B  
 STRAIN VS. TIME SINCE EXCAVATION

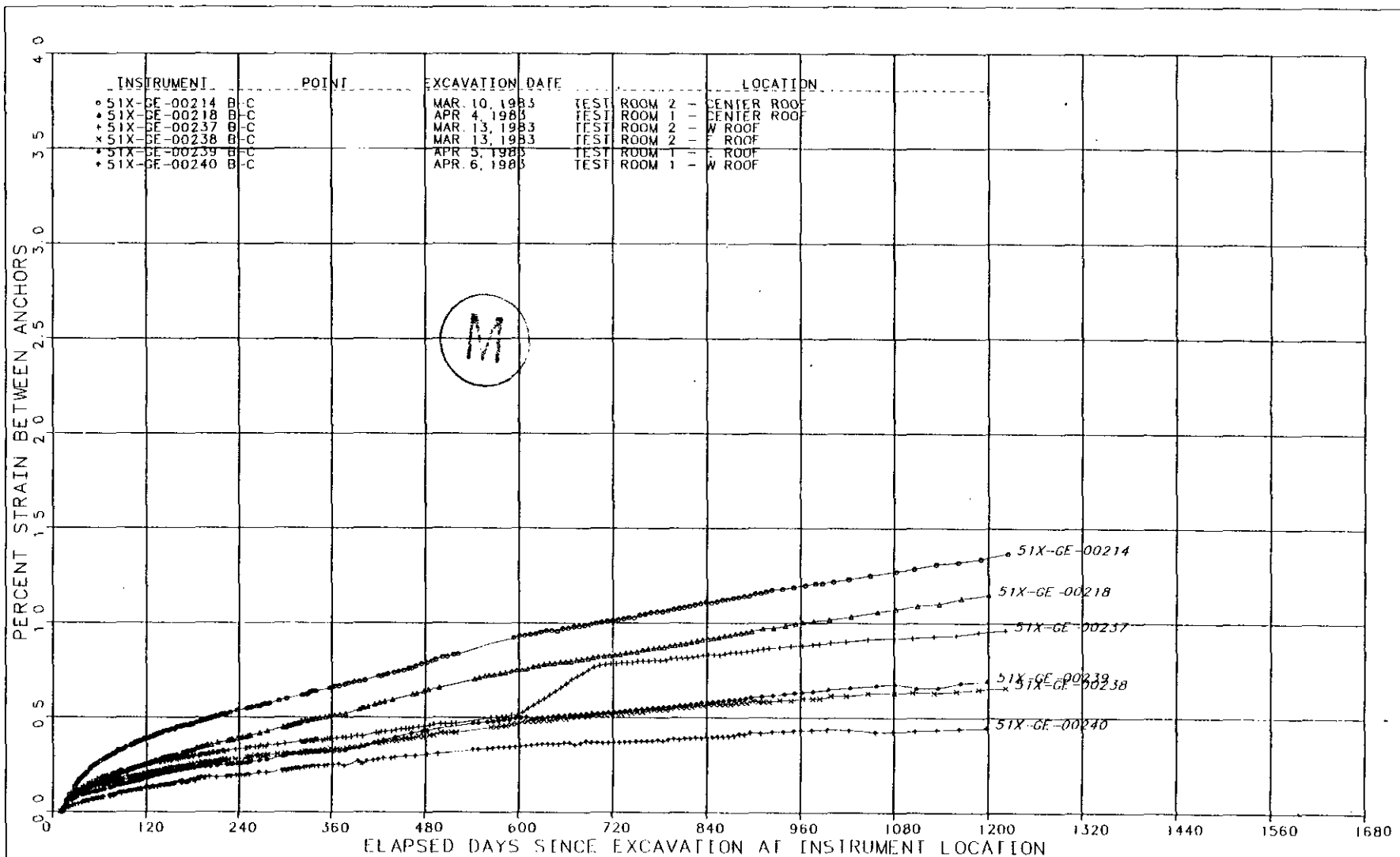


FIGURE K-38  
 TEST ROOM ROOF EXTENSOMETERS -  
 ANCHOR B TO ANCHOR C  
 STRAIN VS. TIME SINCE EXCAVATION

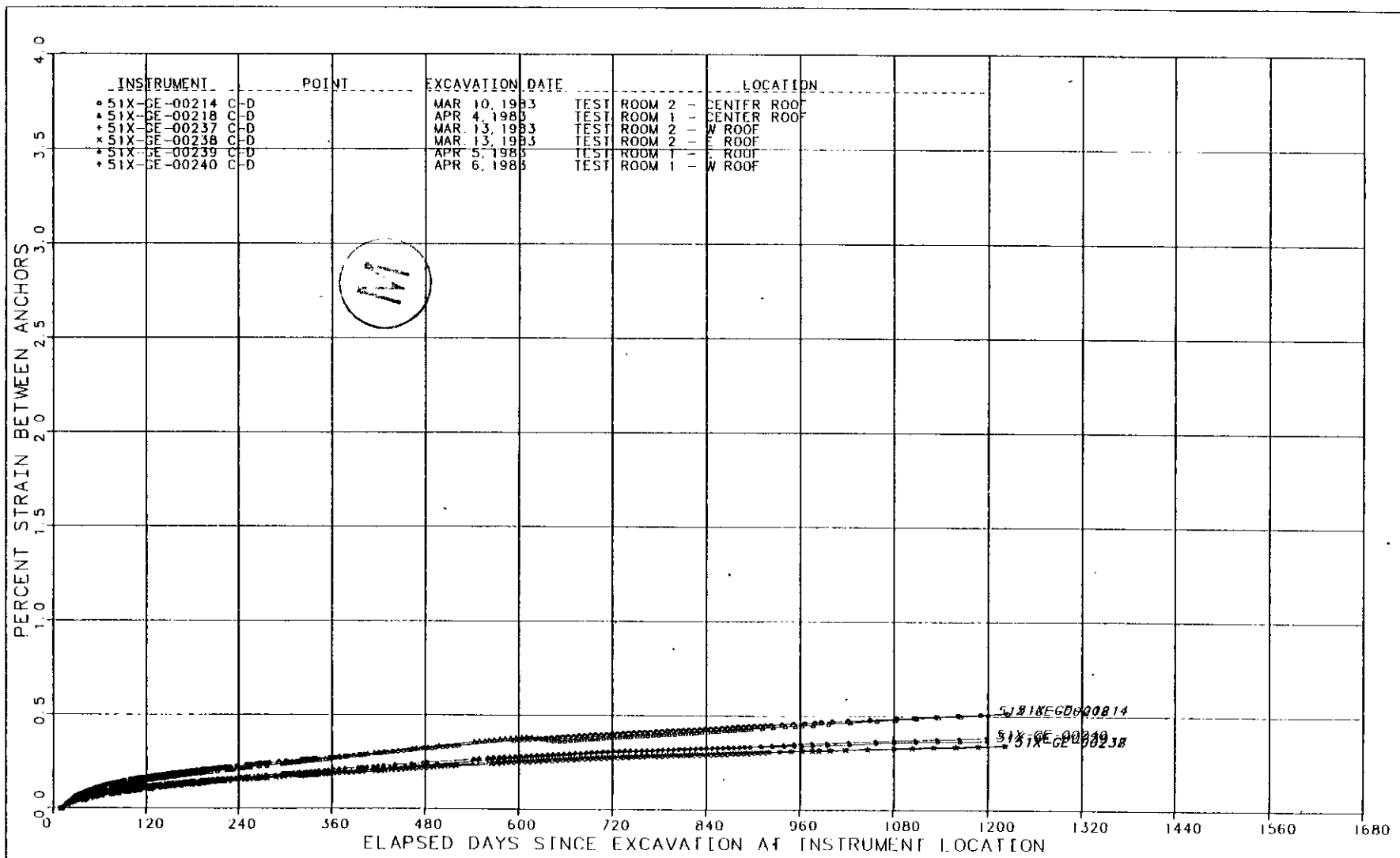


FIGURE K-39  
 TEST ROOM ROOF EXTENSOMETERS -  
 ANCHOR C TO ANCHOR D  
 STRAIN VS. TIME SINCE EXCAVATION

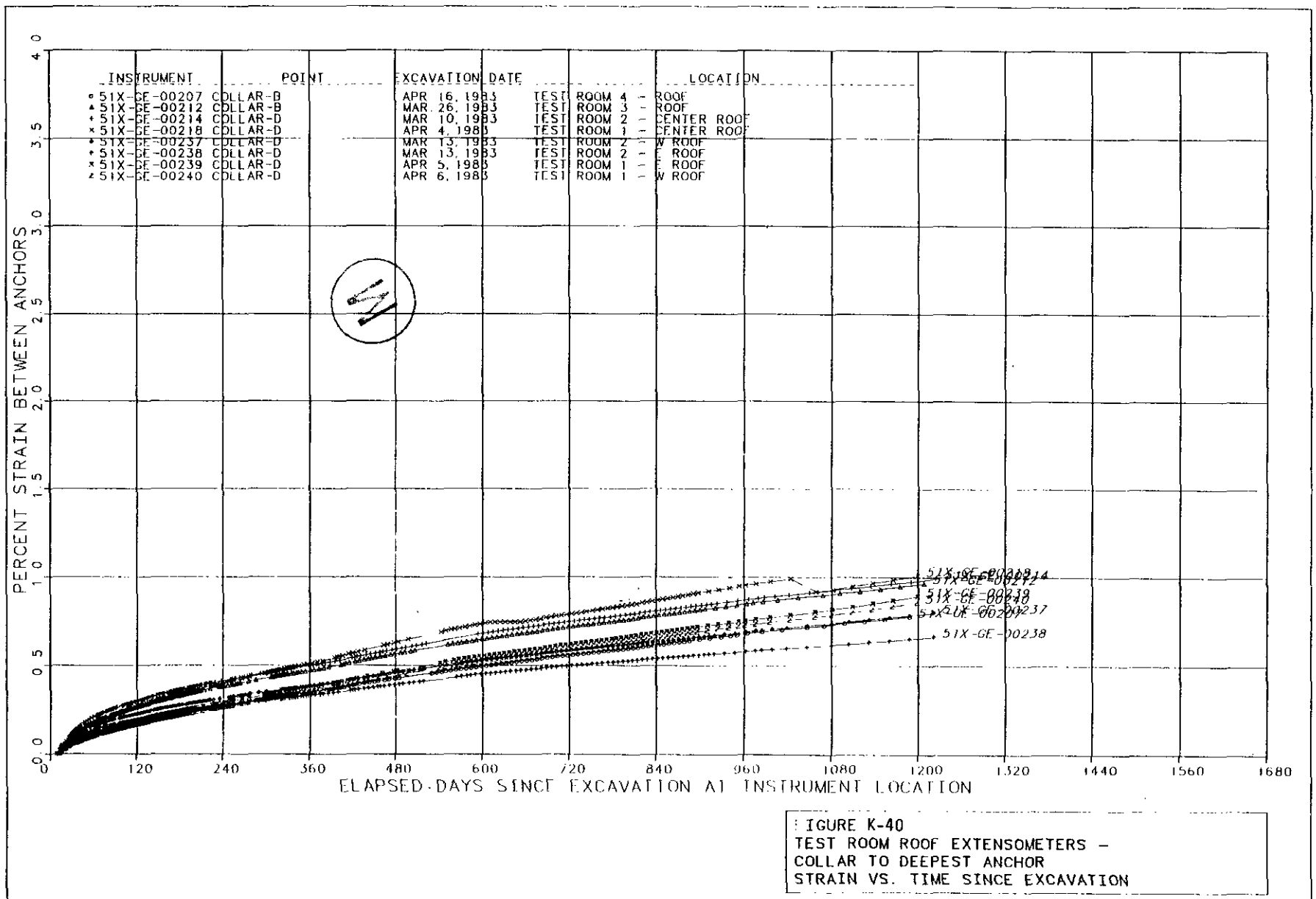


FIGURE K-40  
TEST ROOM ROOF EXTENSOMETERS -  
COLLAR TO DEEPEST ANCHOR  
STRAIN VS. TIME SINCE EXCAVATION

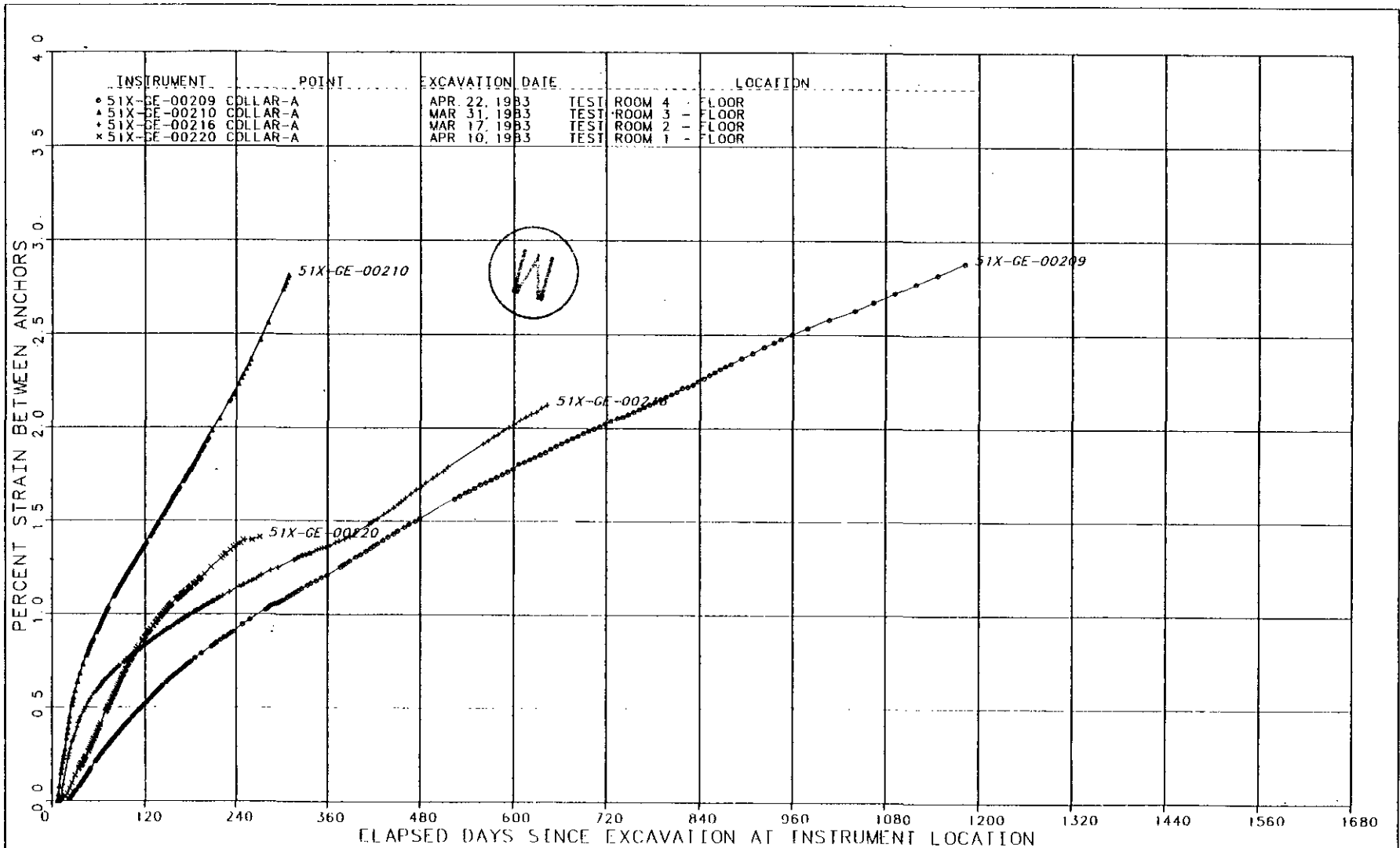


FIGURE K-41  
 TEST ROOM FLOOR EXTENSOMETERS -  
 COLLAR TO ANCHOR A  
 STRAIN VS. TIME SINCE EXCAVATION

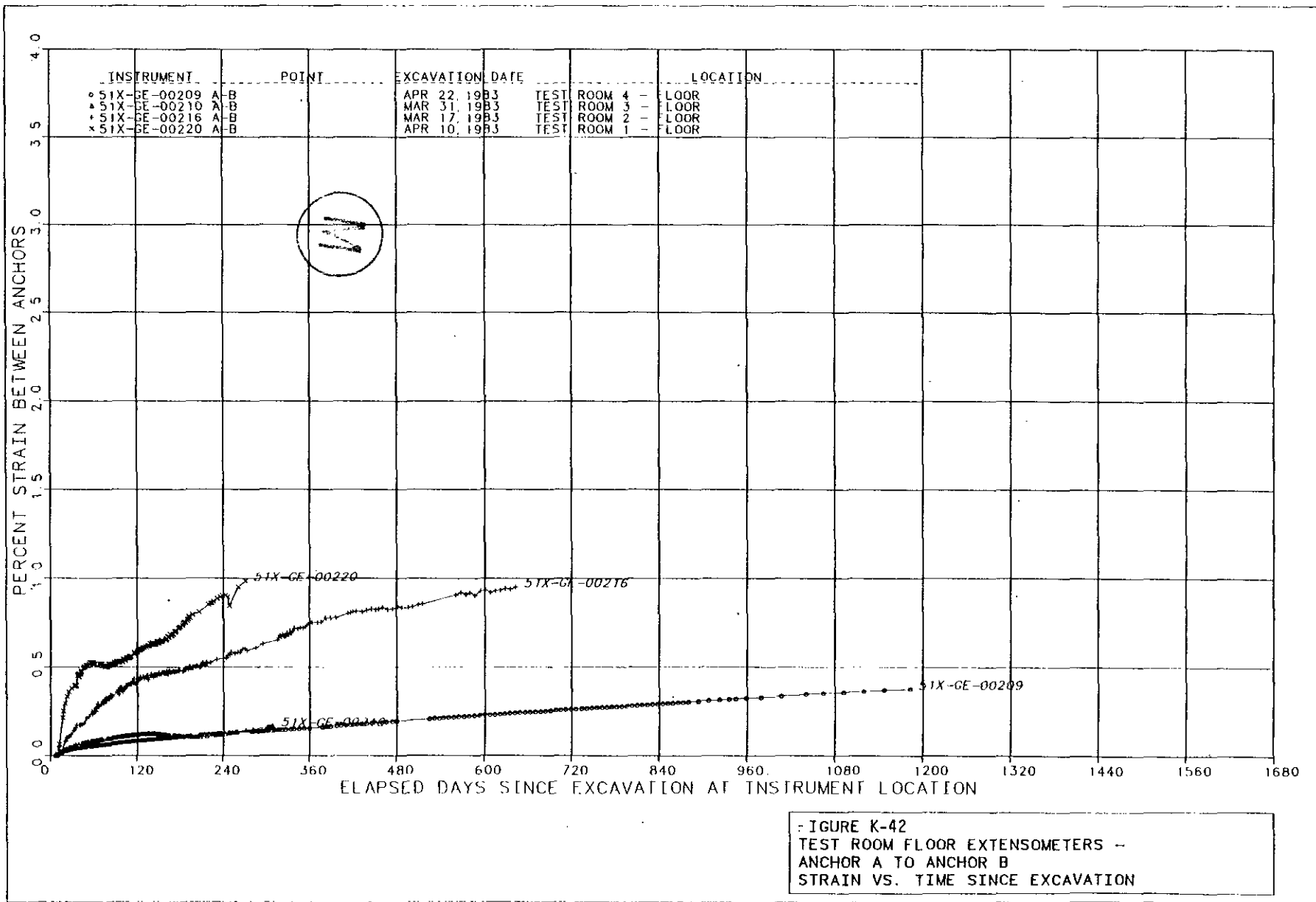
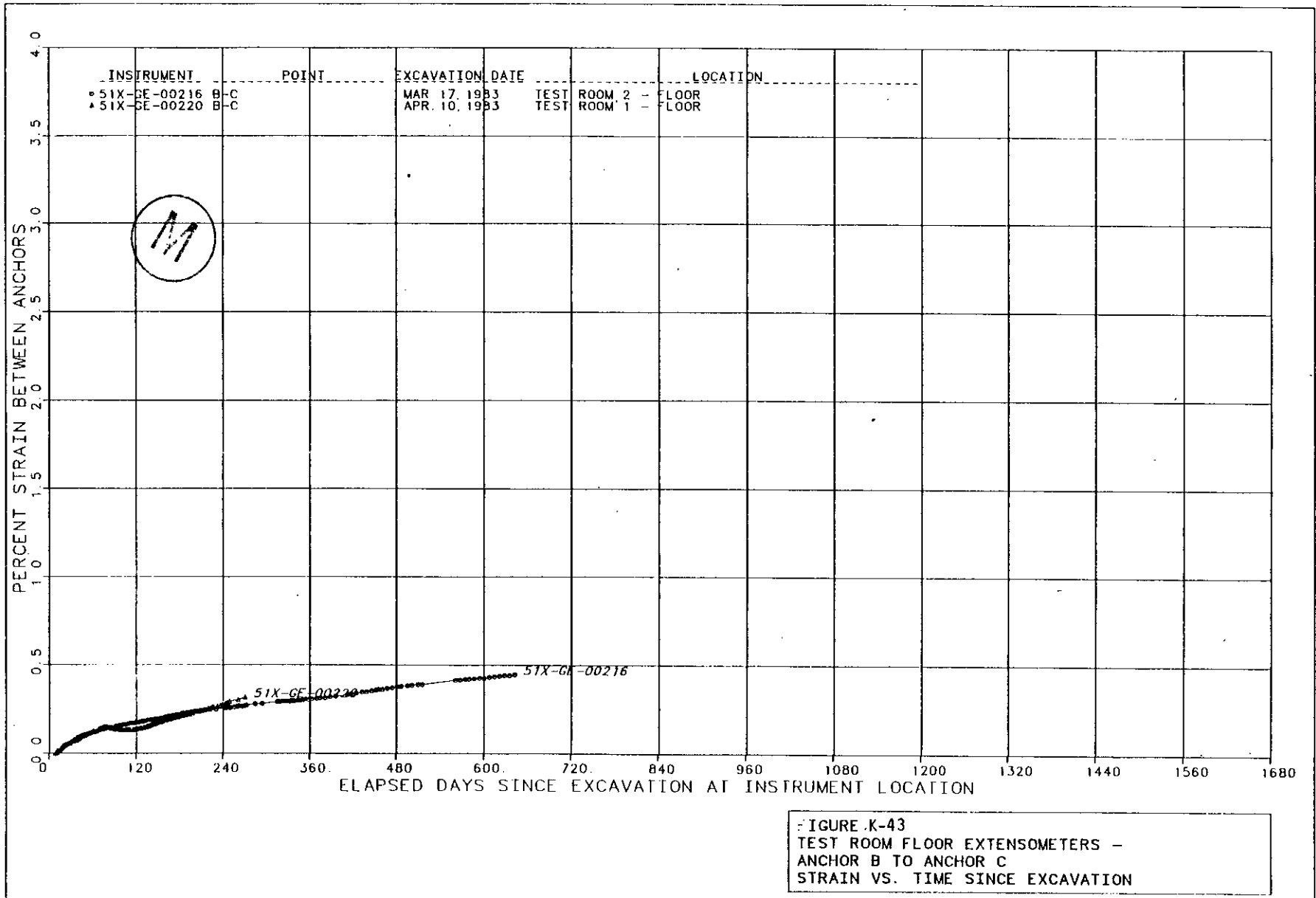


FIGURE K-42  
 TEST ROOM FLOOR EXTENSOMETERS -  
 ANCHOR A TO ANCHOR B  
 STRAIN VS. TIME SINCE EXCAVATION



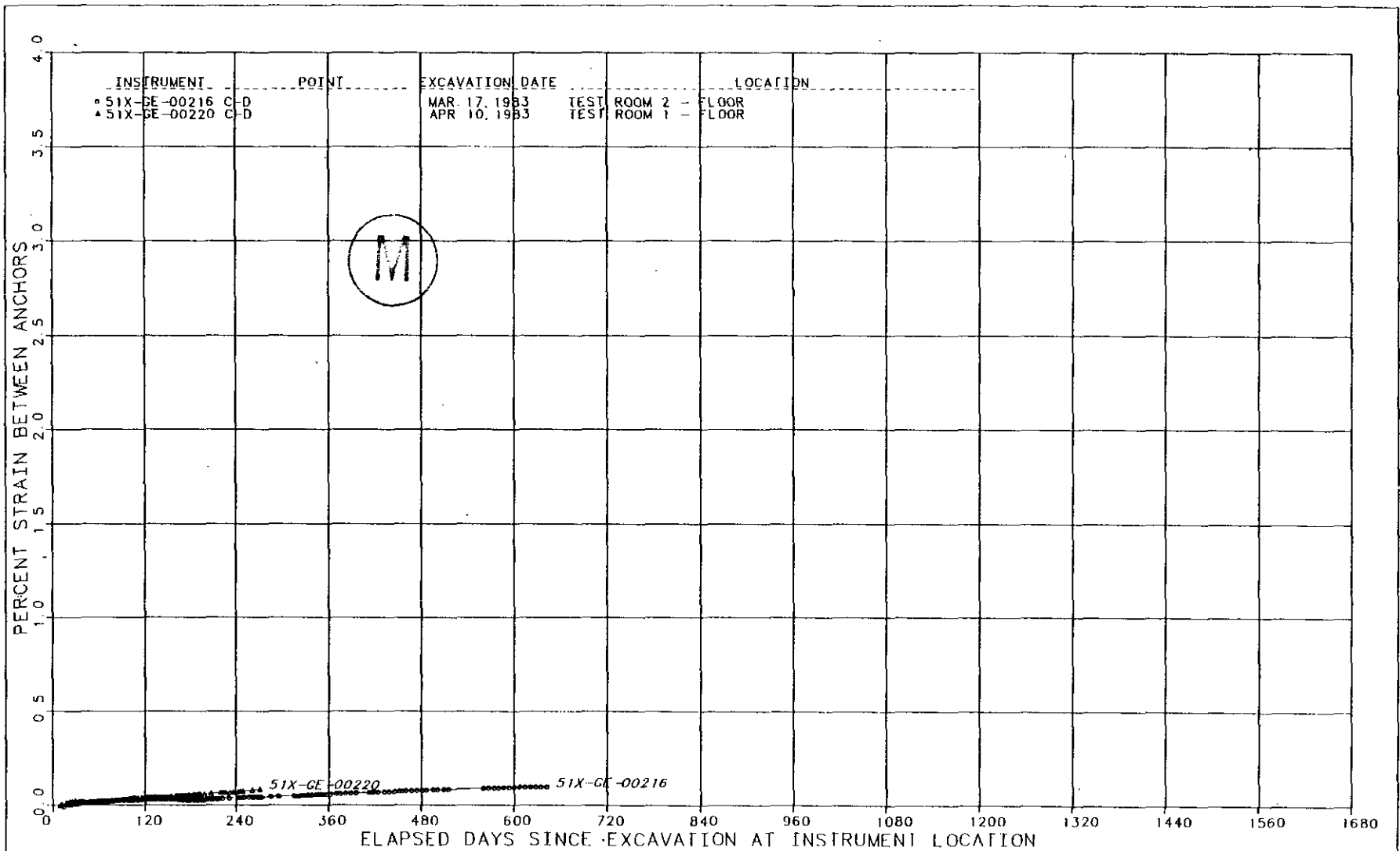


FIGURE K-44  
 TEST ROOM FLOOR EXTENSOMETERS -  
 ANCHOR C TO ANCHOR D  
 STRAIN VS. TIME SINCE EXCAVATION



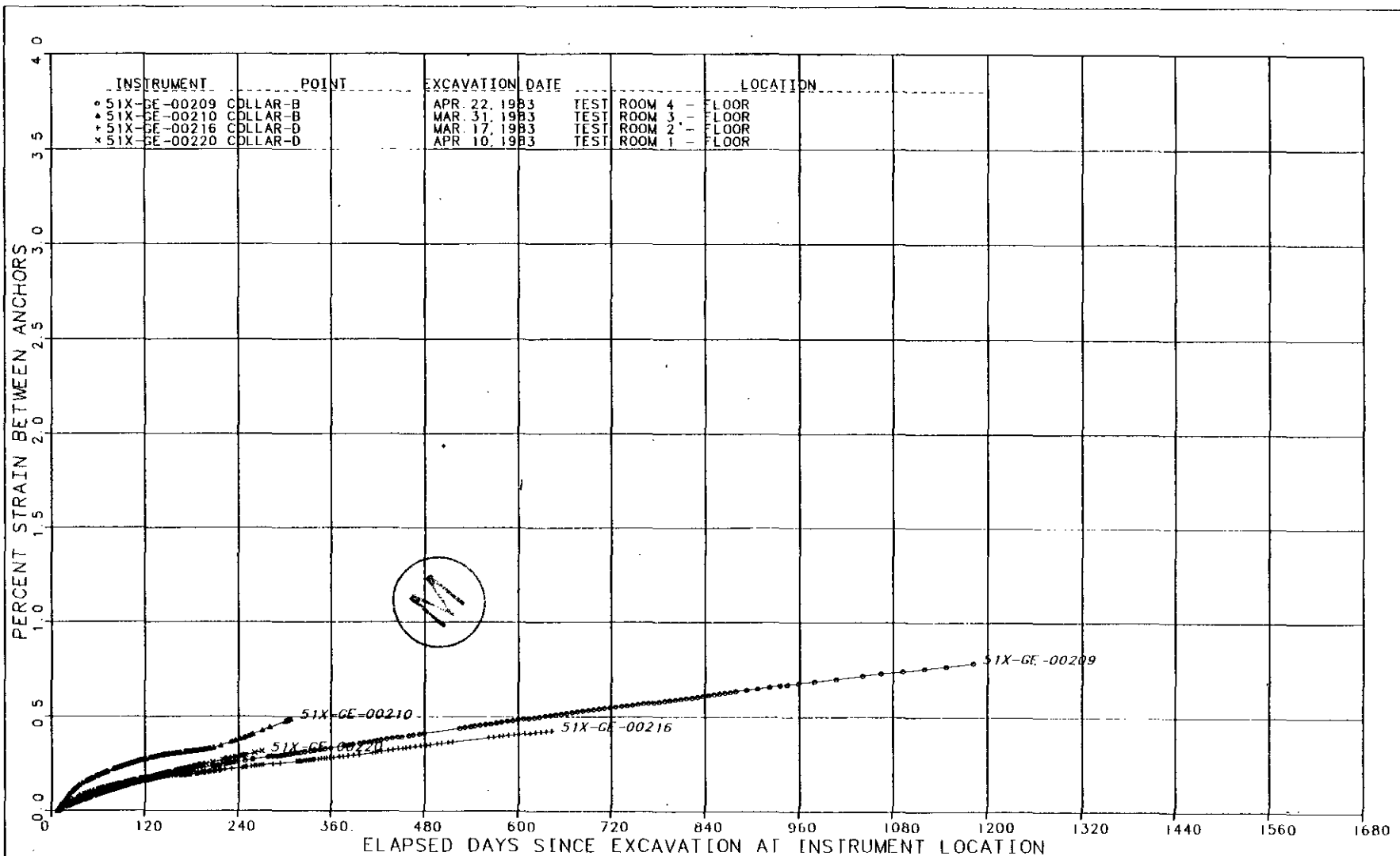
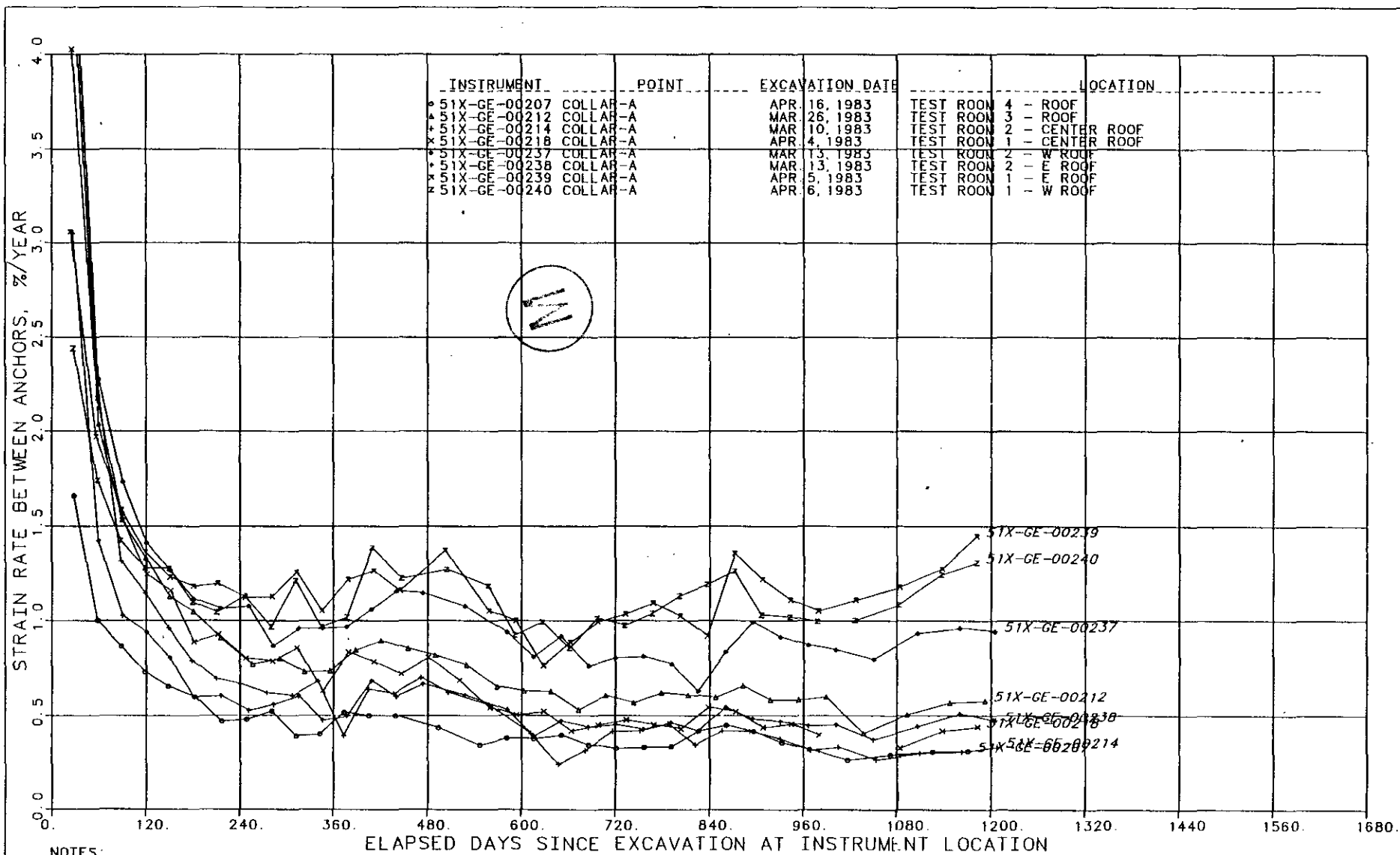


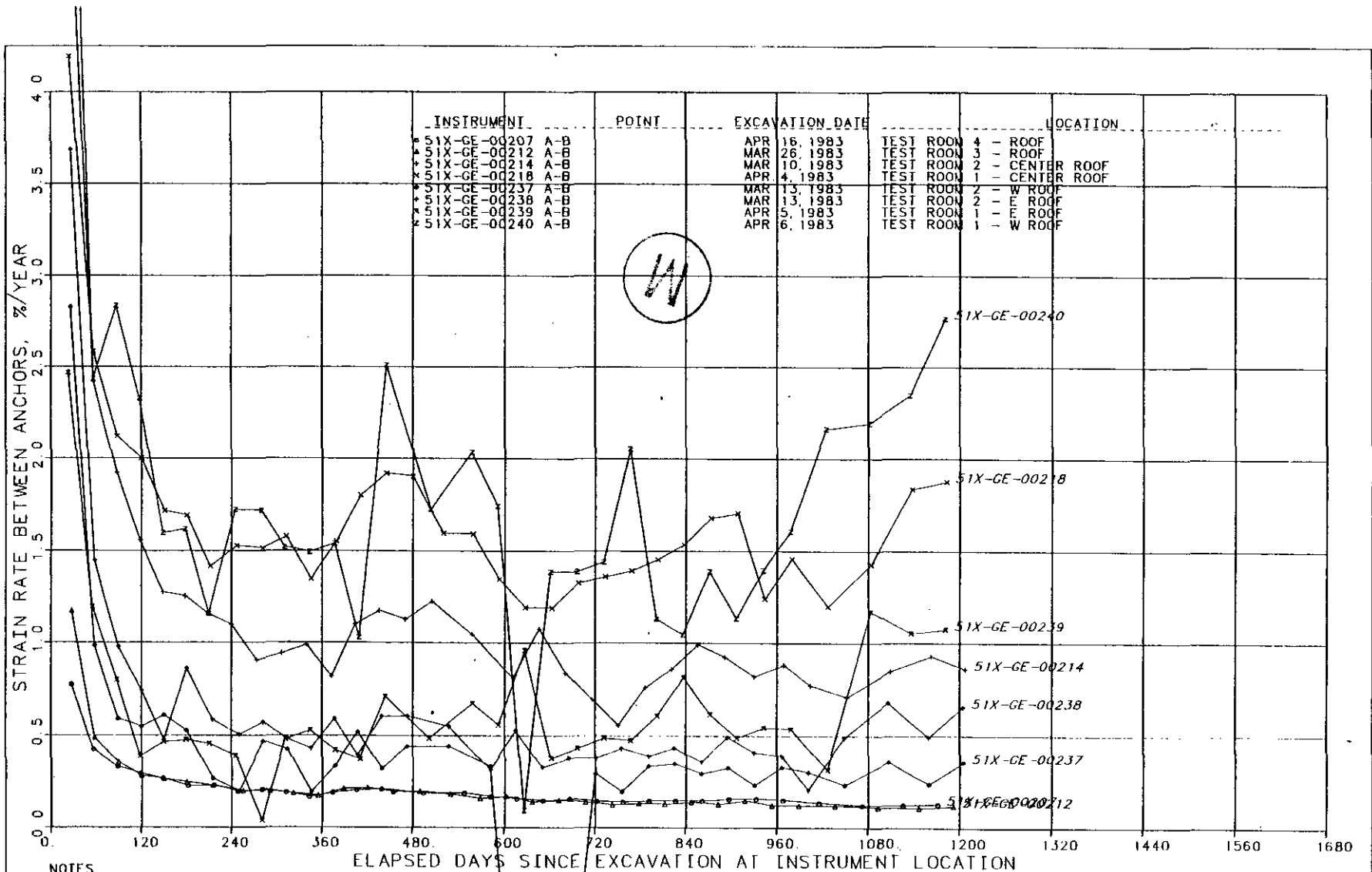
FIGURE K-45  
 TEST ROOM FLOOR EXTENSOMETERS -  
 COLLAR TO DEEPEST ANCHOR  
 STRAIN VS. TIME SINCE EXCAVATION



NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.

FIGURE K-46  
 TEST ROOM ROOF EXTENSOMETERS -  
 COLLAR TO ANCHOR A  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES  
 1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-47  
 TEST ROOM ROOF EXTENSOMETERS --  
 ANCHOR A TO ANCHOR B  
 STRAIN RATE VS. TIME SINCE EXCAVATION

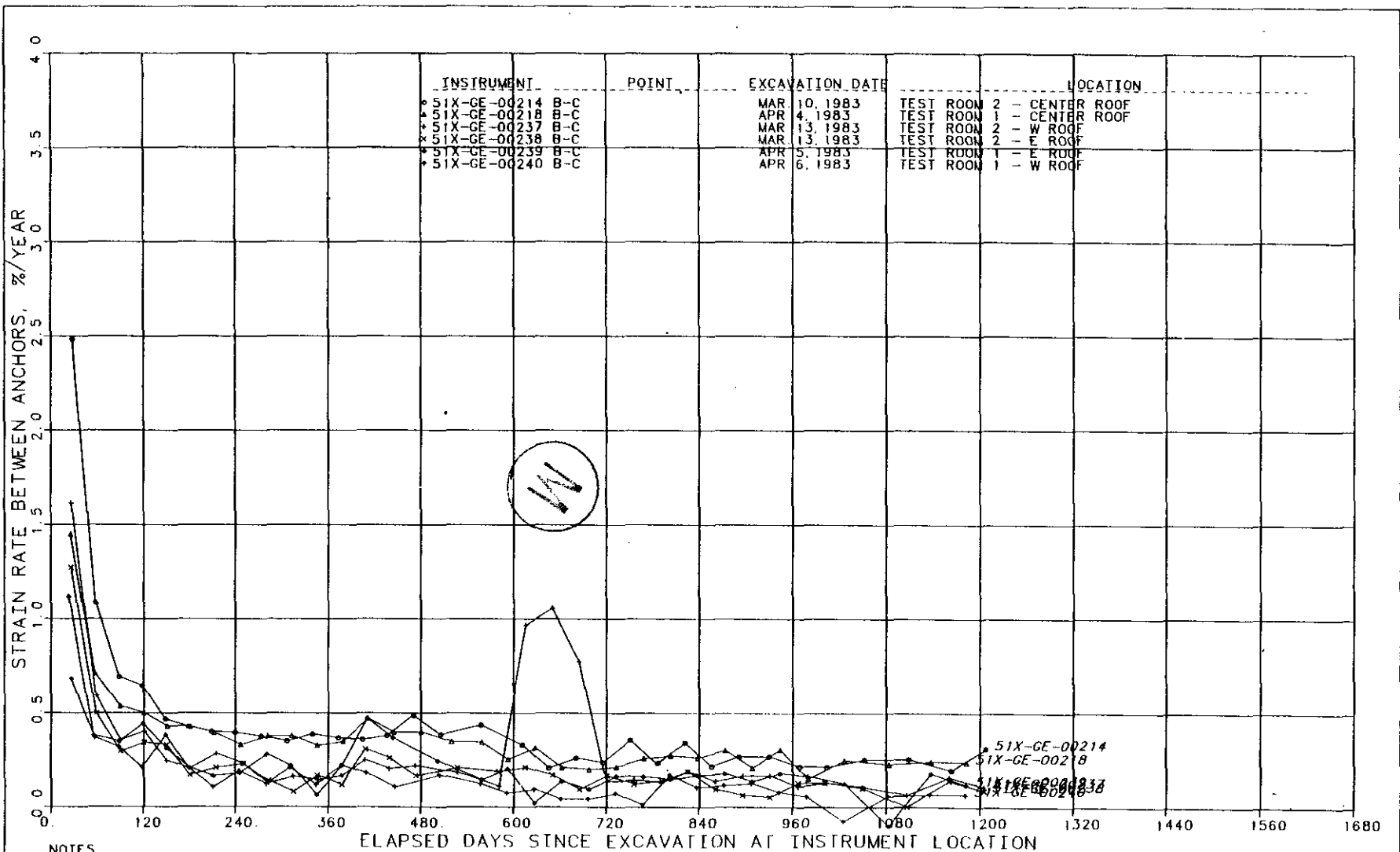
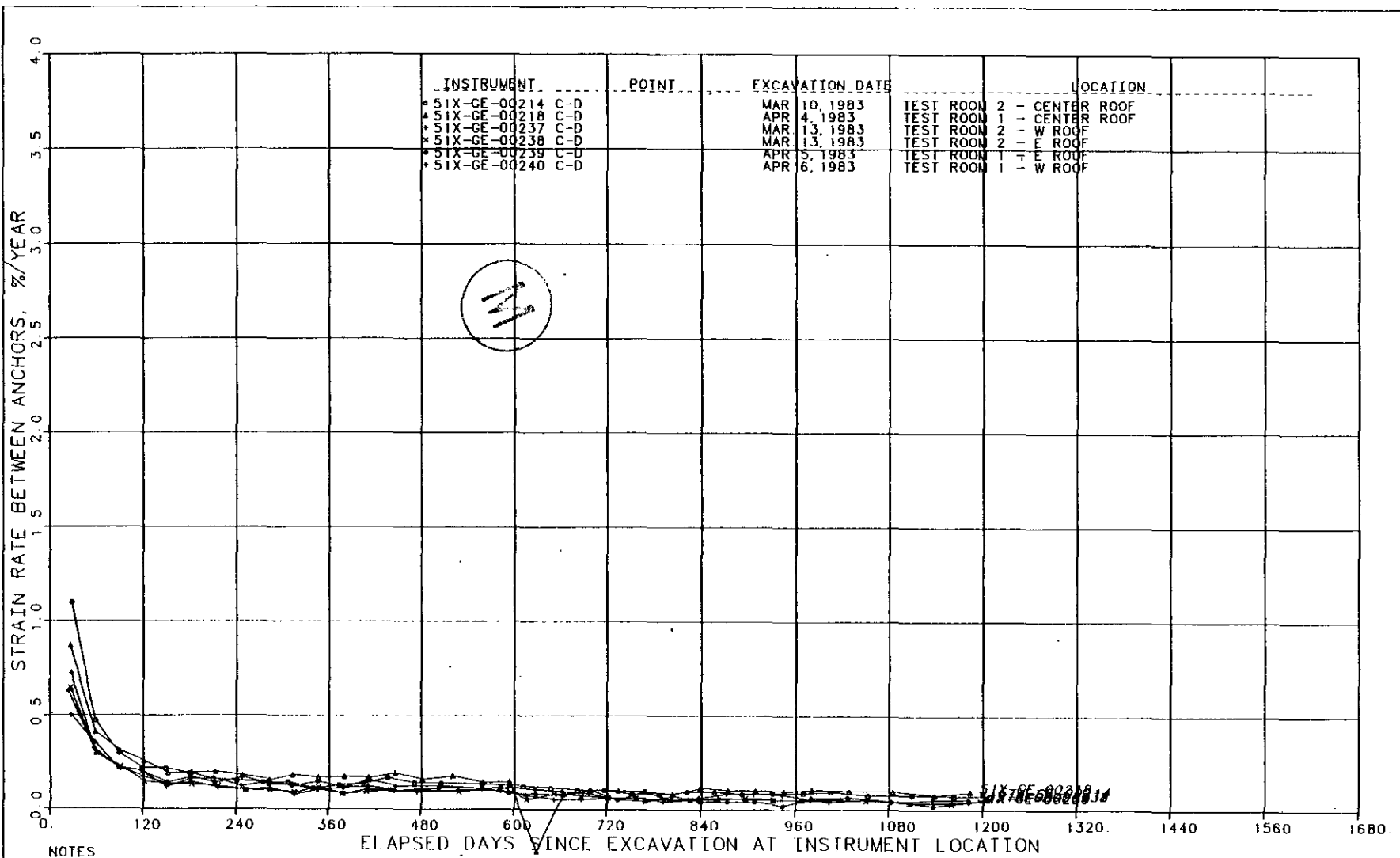


FIGURE K-48  
 TEST ROOM ROOF EXTENSOMETERS -  
 ANCHOR B TO ANCHOR C  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES  
 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-49  
 TEST ROOM ROOF EXTENSOMETERS -  
 ANCHOR C TO ANCHOR D  
 STRAIN RATE VS. TIME SINCE EXCAVATION

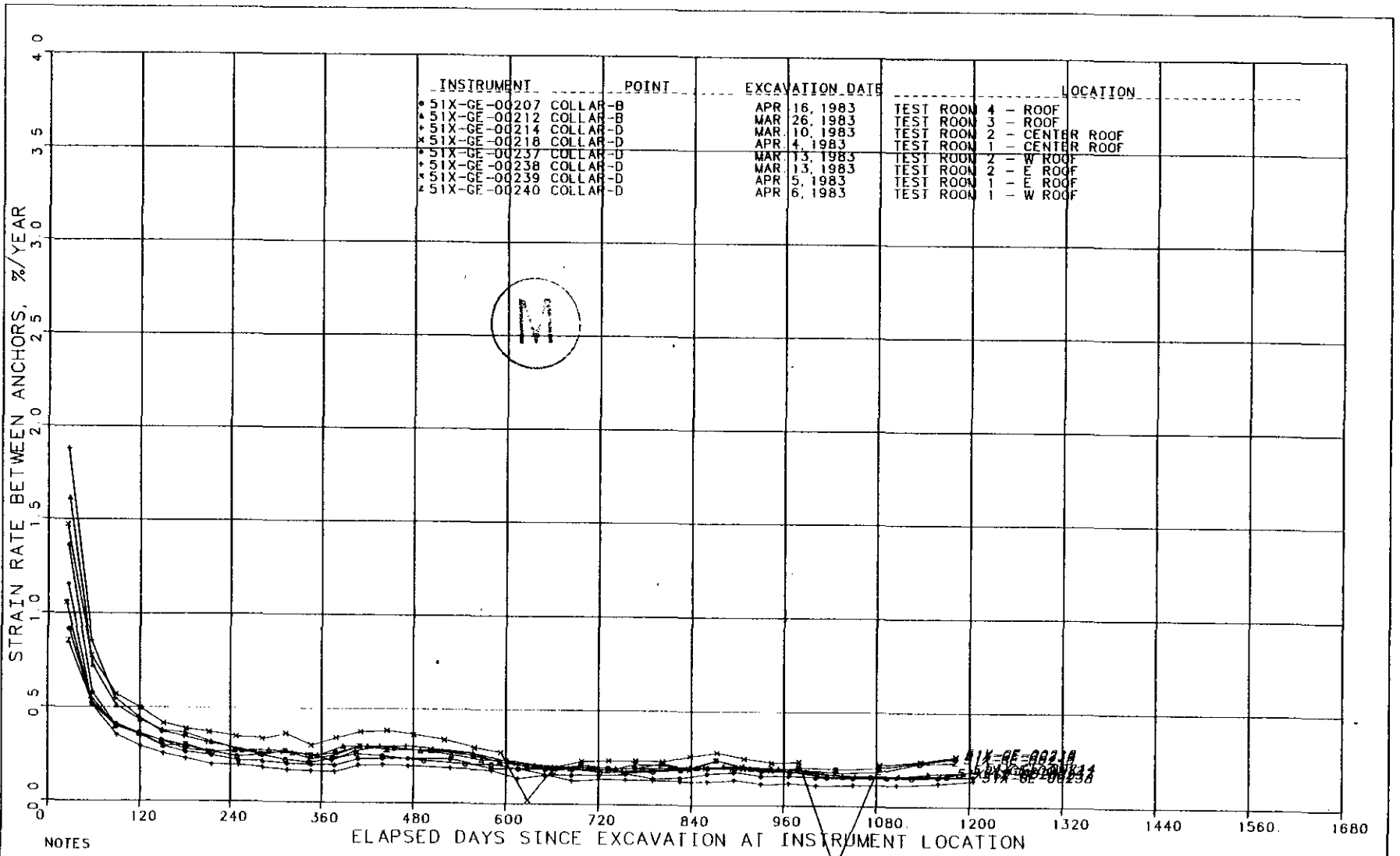
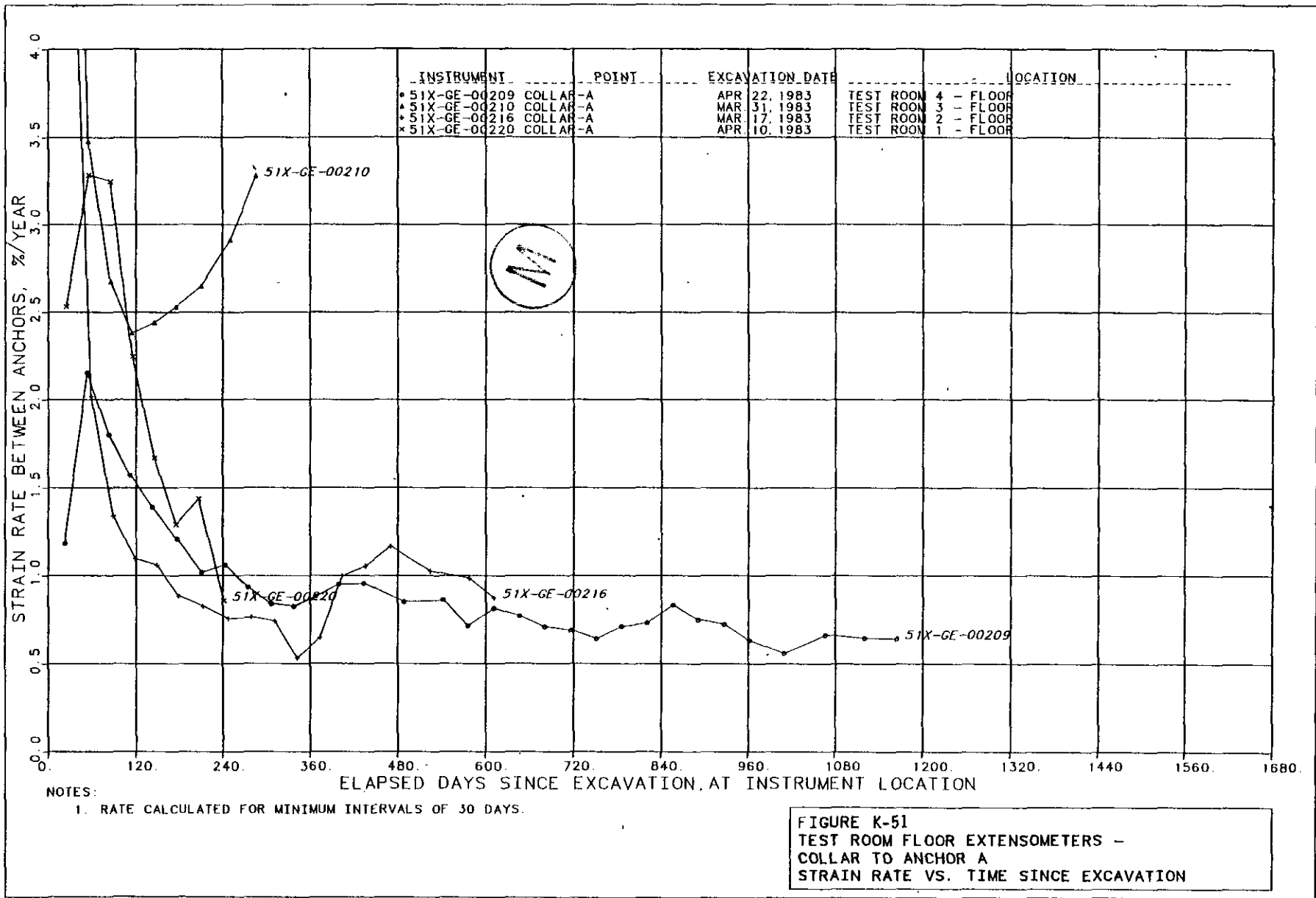
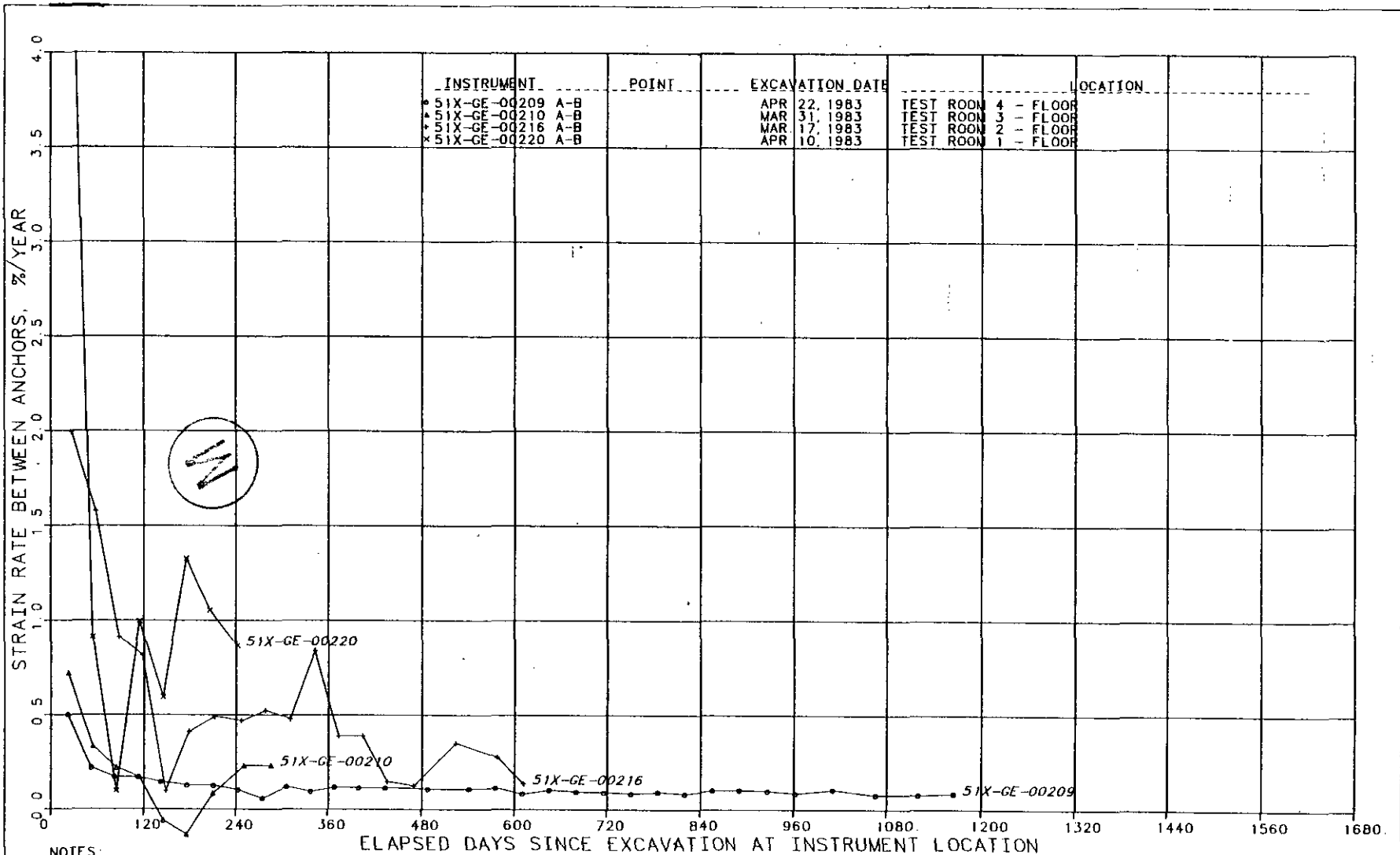


FIGURE K-50  
TEST ROOM ROOF EXTENSOMETERS  
COLLAR TO DEEPEST ANCHOR  
STRAIN RATE VS. TIME SINCE EXCAVATION

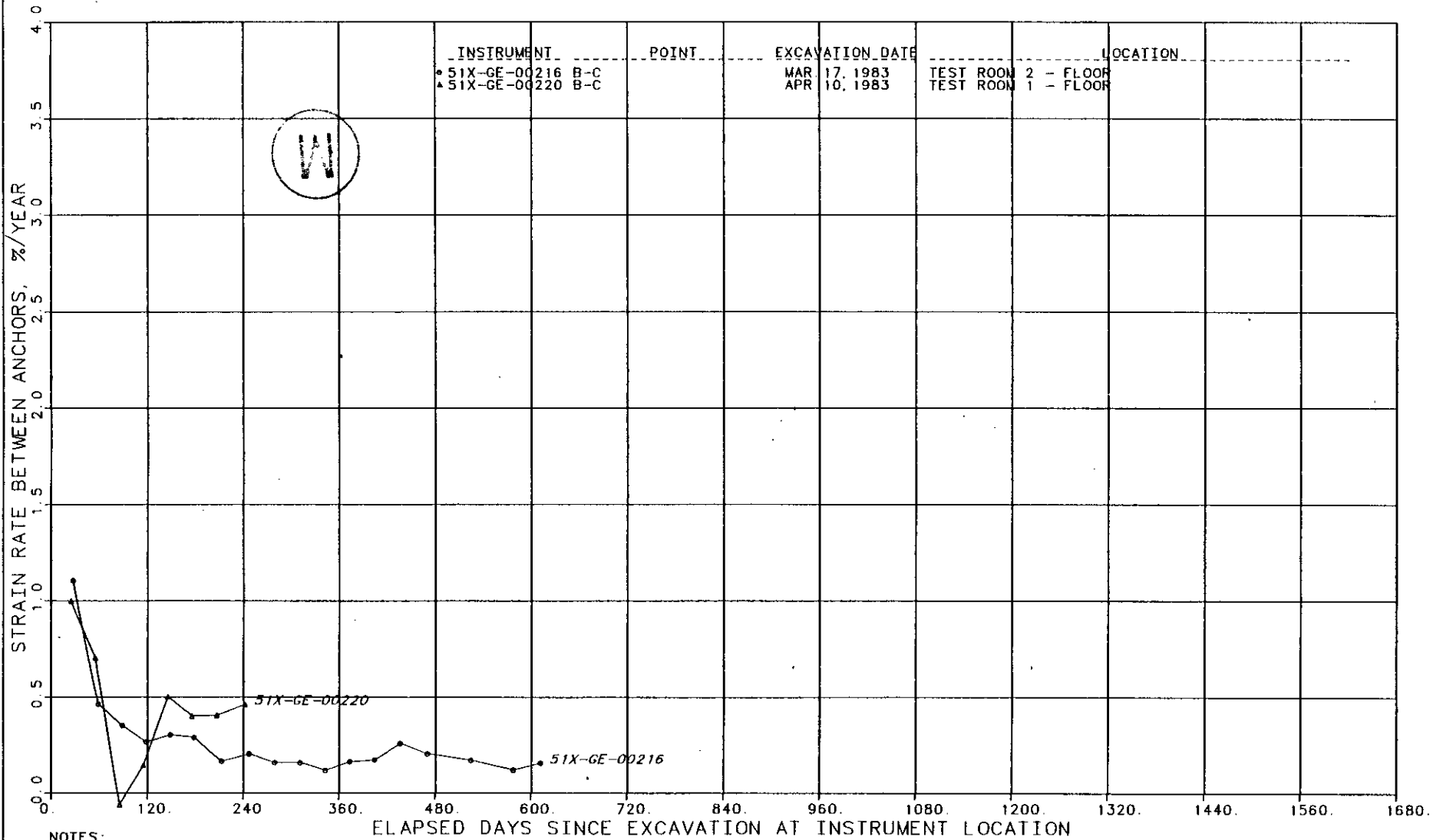




NOTES:  
 1 RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-52  
 TEST ROOM FLOOR EXTENSOMETERS -  
 ANCHOR A TO ANCHOR B  
 STRAIN RATE VS. TIME SINCE EXCAVATION

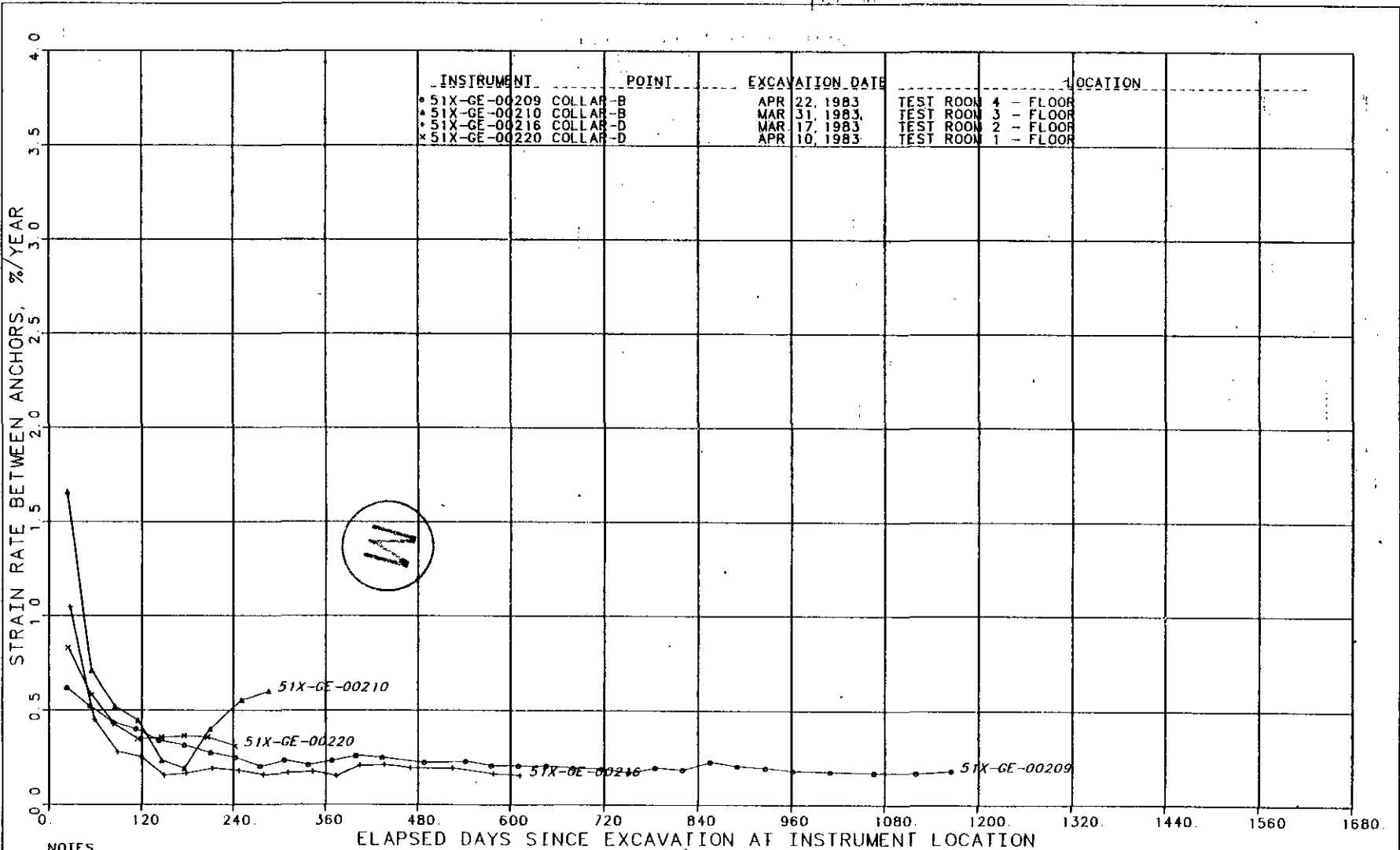




NOTES:

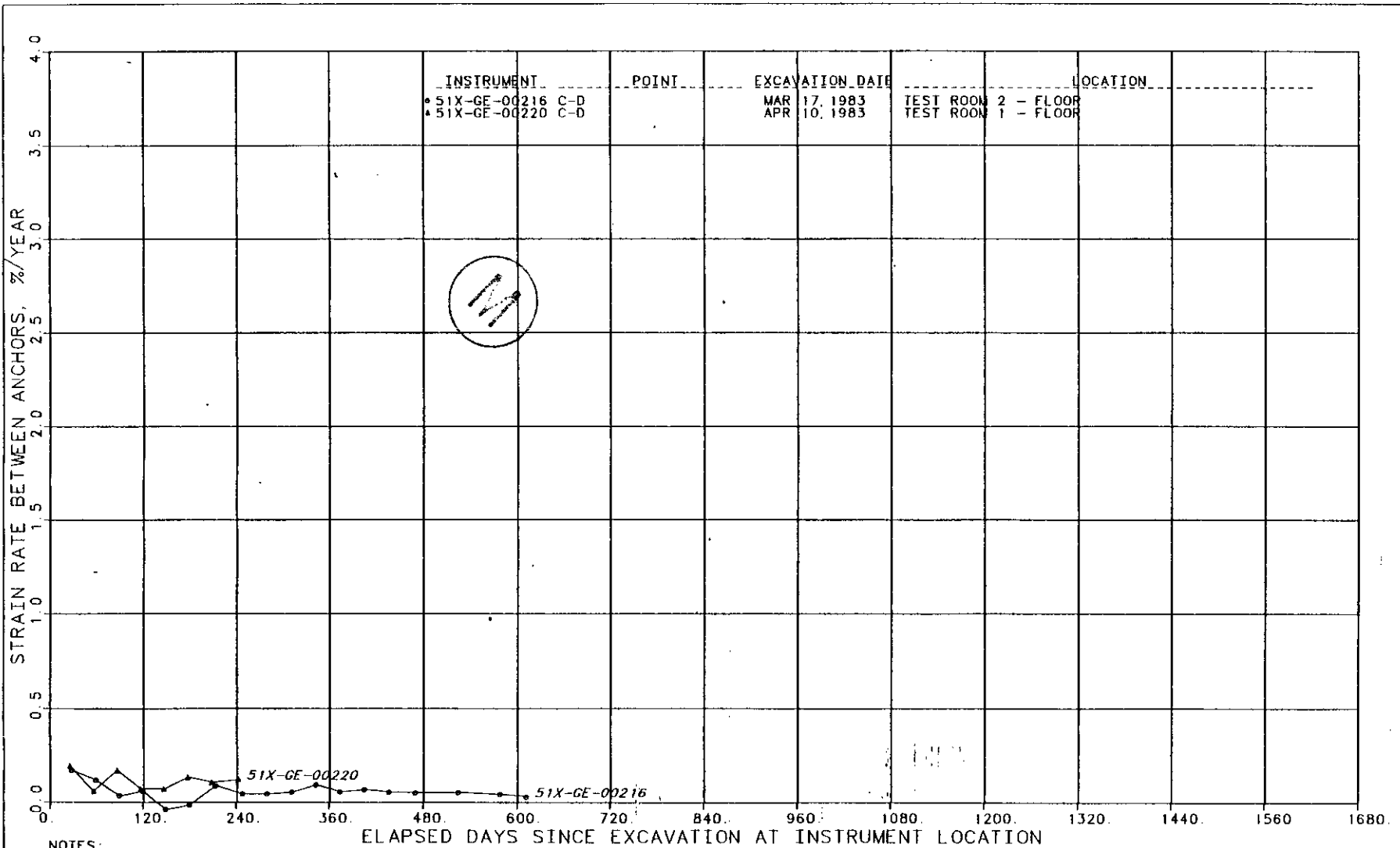
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS.

FIGURE K-53  
 TEST ROOM FLOOR EXTENSOMETERS -  
 ANCHOR B TO ANCHOR C  
 STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES  
1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-55  
TEST ROOM FLOOR EXTENSOMETERS -  
COLLAR TO DEEPEST ANCHOR  
STRAIN RATE VS. TIME SINCE EXCAVATION



NOTES:

1. RATE CALCULATED FOR MINIMUM INTERVALS OF 30 DAYS

FIGURE K-54  
 TEST ROOM FLOOR EXTENSOMETERS -  
 ANCHOR C TO ANCHOR D  
 STRAIN RATE VS. TIME SINCE EXCAVATION

Figure No.      Title/Description

Strain Versus Time Since Excavation

K-36	Test Room Roof Extensometers - Collar to Anchor A
K-37	Test Room Roof Extensometers - Anchor A to Anchor B
K-38	Test Room Roof Extensometers - Anchor B to Anchor C
K-39	Test Room Roof Extensometers - Anchor C to Anchor D
K-40	Test Room Roof Extensometers - Collar to Deepest Anchor
K-41	Test Room Floor Extensometers - Collar to Anchor A
K-42	Test Room Floor Extensometers - Anchor A to Anchor B
K-43	Test Room Floor Extensometers - Anchor B to Anchor C
K-44	Test Room Floor Extensometers - Anchor C to Anchor D
K-45	Test Room Floor Extensometers - Collar to Deepest Anchor

Strain Rate Versus Time Since Excavation

K-46	Test Room Roof Extensometers - Collar to Anchor A
K-47	Test Room Roof Extensometers - Anchor A to Anchor B
K-48	Test Room Roof Extensometers - Anchor B to Anchor C
K-49	Test Room Roof Extensometers - Anchor C to Anchor D
K-50	Test Room Roof Extensometers - Collar to Deepest Anchor
K-51	Test Room Floor Extensometers - Collar to Anchor A
K-52	Test Room Floor Extensometers - Anchor A to Anchor B
K-53	Test Room Floor Extensometers - Anchor B to Anchor C
K-54	Test Room Floor Extensometers - Anchor C to Anchor D
K-55	Test Room Floor Extensometers - Collar to Deepest Anchor



CONTENTS

Figure No.      Title/Description

Convergence Rate Versus Time Since Excavation

K-1	E140/S460
K-2	E140/S550
K-3	E140/S850
K-4	E140/S1150
K-5	E140/S1246
K-6	E140/S1450
K-7	E140/S1879
K-8	E0/N290
K-9	E0/N626
K-10	E0/N940
K-11	E0/N1266
K-12	E140/N5
K-13	E140/N240
K-14	E140/N626
K-15	E140/N1266
K-16	Test Room 1
K-17	Test Room 2 - Convergence Meter 51X-CE-00201
K-18	Test Room 2
K-19	Test Room 3
K-20	Test Room 4
K-21	Test Room 2 Intersection/N1110



Strain Versus Time Since Excavation

K-22	Roof Extensometer 51X-GE-00234 - E0/N626
K-23	Roof Extensometer 51X-GE-00241 - Test Room 2 Intersection/N1100
K-24	Floor Extensometer 51X-GE-00242 - Test Room 2 Intersection/N1100
K-25	Roof Extensometer 51X-GE-00247 - E140/S1950
K-26	Floor Extensometer 51X-GE-00248 - E140/S1950
K-27	Floor Extensometer 51X-GE-00250 - E140/S3045
K-28	Roof Extensometer 51X-GE-00249 - E140/S3080

Strain Rate Versus Time Since Excavation

K-29	Roof Extensometer 51X-GE-00234 - E0/N626
K-30	Roof Extensometer 51X-GE-00241 - Test Room 2 Intersection/N1100
K-31	Floor Extensometer 51X-GE-00242 - Test Room 2 Intersection/N1100
K-32	Roof Extensometer 51X-GE-00247 - E140/S1950
K-33	Floor Extensometer 51X-GE-00248 - E140/S1950
K-34	Floor Extensometer 51X-GE-00250 - E140/S3045
K-35	Roof Extensometer 51X-GE-00249 - E140/S3080