

DEPARTMENT OF ECOLOGY
EASTERN WASHINGTON
OBSERVATION WELL NETWORK

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This Open-File Technical Report presents the data collected on 24 observation wells located throughout eastern Washington. It is intended as a working document to be added to annually. This report may be circulated to other agencies and the public, but is not a formal Ecology publication.

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EASTERN WASHINGTON OBSERVATION WELL NETWORK

During the late 1950's the significant benefits in increased yield from grain crops in eastern Washington with irrigation became evident. Some of the first irrigation wells were drilled in the vicinity of Odessa. By the mid 1960's annual declines in the regional water table were noted. It was the recognition of regional declines in ground water levels that prompted the cooperative effort of the state and federal water resource agencies to embark on the observation well network.

In an effort to obtain information on the effect of ground water withdrawals in eastern Washington the Department of Ecology initiated an observation well drilling program in 1970. The wells are located throughout the Columbia Plateau to obtain subsurface stratigraphic and hydrogeologic information, evaluate aquifer systems and monitor changes in water levels. Currently there are 24 observation wells located throughout eastern Washington in Adams, Benton, Douglas, Grant, Kittitas, Klickitat, Lincoln, Spokane, Walla Walla, and Whitman Counties.

All observation wells are measured on periodic intervals and water level data plotted on hydrographs. The number of measurements per year on any individual well may vary depending on specific data needs related to a research project or special interest in a local area. As a minimum, most wells are measured twice per year - spring and fall. None of the observation wells have pumps installed for production purposes. Most of the wells have multiple piezometers installed to provide water level data on discrete aquifer systems.

The observation well program was originally a cooperative effort between the Washington State Department of Ecology-Water Resource Program and the U.S. Geological Survey-Water Resource Branch and was financed jointly. During the 1970's and early 1980's thirteen observation wells were financed and drilled through this cooperative approach. In the order of their drilling, these wells were: Odessa (20N/33E-16E), Blockhouse (04N/15E-16F), Davenport (24N/36E-16A), Burbank Creek (15N/19E-22L), Almira (24N/31E-16E), Mansfield (27N/26E-25D), Paterson (07N/25E-36N), Walla Walla (06N/35E-18A), Pullman (14N/45E-01F), George (18N/25E-15E), Umtanum (16N/19E-28C), Sagebrush Flats (23N/25E-27L), and West Horse Heaven Hills (05N/21E-16L).

In addition to the observation wells constructed under the joint efforts of the Department and the Survey, unused wells were acquired by agreement by the State and converted to observation wells. The first such well was Basalt Explorer located southwest of Odessa (21N/31E-10M). This is a wildcat oil/gas exploration well 4682 ft. deep drilled in 1960. Three piezometers were installed in November, 1972 with periodic measurements of water levels collected continuously since that date.

The second well acquired was the Hart well (15N/32E-35E) situated northeast of Connell. This is a 1045 ft. well intended for irrigation. Upon completion of drilling the static water level was approximately 600 ft. below land surface. Expected yield of the well did not merit testing and the project was abandoned. Five piezometers were installed in November, 1980.

The third well acquired was the Pixlee well located northwest of Ephrata (23N/26E-20D). This is a 1315 ft. well intended for irrigation. It was originally drilled in 1974 to a depth of 802 ft. and deepened twice. The static water level at the 1315 ft. depth was approximately 450 ft. below land surface but expected yield did not warrant additional expense and the project was abandoned. Six piezometers were installed in September, 1982.

The fourth well acquired was the Dreger well located south of Creston (25N/34E-29J). The intended use was irrigation. It was deepened several times to a final depth of 1225 ft. At this depth the static water level was approximately 625 ft. below land surface. A low head aquifer (thief zone) was encountered near the bottom of the hole. The expected yield did not merit an aquifer test and the project was abandoned. Six piezometers were installed in September, 1983.

This report presents a brief synopsis of the drilling history on each well. Information presented for each well includes: the Unique Well ID Tag Number; well location (Section-Township-Range and County); drilling company(s) and drilling dates; and the monitored depths and respective aquifers. Figure 1 is a map of eastern Washington showing the location of each site.

The following details construction specifics for each well:

ALMIRA: Unique Well I.D. Number AAE-558
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T24N R31E Douglas Co.
Drilled by Adcock Drilling Co. 11/23/70-2/10/71 to 750'
Piezometers installed in May, 1971

Depths monitored by the piezometers and aquifers

60' - 316'	16E01	Wanapum
424' - 456'	16E02	Grande Ronde
494' - 556'	16E03	Grande Ronde
650' - 698'	16E04	Grande Ronde

BASALT EXPLORER: Unique Well I.D. Number AAE-564
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 10, T21N R31E Lincoln Co.
Drilled by C&D Mineral Dev. Co. 8/12/60-12/14/60 to 4682.5'
Piezometers installed in November, 1972

Depths monitored by the piezometers and aquifers

96' - 735'	10M02	Wanapum & Grande Ronde
755' - 1480'	10M03	Grande Ronde
1498' - 2300'	10M04	Grande Ronde

(10M01 pre-piezometer readings for depth of 96' to 4682.5')

BLOCKHOUSE: Unique Well I.D. Number AAE-567
 SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T4N R15E Klickitat Co.
 Drilled by L&L Drilling Co. 9/9/70-11/9/70 to 595'
 Piezometers installed in February, 1973
 Depths monitored by the piezometers and aquifers

0' - 200'	16F01	basalt
210' - 325'	16F02	basalt
330' - 440'	16F03	Wanapum
500' - 590'	16F04	Wanapum

BURBANK CREEK: Unique Well I.D. Number AAE-570
 NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22, T15N R19E Kittitas Co.
 Drilled by Holman Drilling Corp. 10/17/77-11/2/77 to 602'
 No piezometers - artesian flow

201' - 602'	22L01	Wanapum & Grande Ronde
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DAVENPORT: Unique Well I.D. Number AAE-562
 NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 16, T24N R36E Lincoln Co.
 Drilled by Adcock Drilling Co. 9/23/70-3/17/71 to 750'
 Piezometers installed in September, 1971
 Depths monitored by the piezometers and aquifers

0' - 120'	16A01	Wanapum
130' - 160'	16A02	Wanapum
210' - 225'	16A03	Wanapum
245' - 260'	16A04	Wanapum
315' - 365'	16A05	Wanapum & Grande Ronde
455' - 490'	16A06	Grande Ronde
595' - 640'	16A07	Grande Ronde
730' - 750'	16A08	Grande Ronde

DREGER: Unique Well I.D. Number AAE-559
 NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29, T25N R34E Lincoln Co.
 Drilled by Richard Dreger, deepened by L&L Drilling Co.
 Hole completed 9/21/82 at 1233'
 Piezometers installed September, 1983
 Depths monitored by the piezometers and aquifers

0' - 253'	29J07	Wanapum
269' - 352'	29J06	Wanapum
364' - 463'	29J05	Wanapum
673' - 747'	29J04	Grande Ronde
910' - 996'	29J03	Grande Ronde
1090' - 1233'	29J02	Grande Ronde

GEORGE: Unique Well I.D. Number AAE-554
 SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 15, T18N R25E Grant Co.
 Drilled by Brinkerhoff Drilling Co. 5/75 to 975', deepened
 by Holman Drilling Co. 1/78 to 1610'
 Piezometers installed in March, 1979
 Depths monitored by the piezometers and aquifers

0' - 975'	15E01	Saddle Mountains & Wanapum
1145' - 1225'	15E06	Wanapum & Grande Ronde
1379' - 1463'	15E07	Grande Ronde
1520' - 1610'	15E08	Grande Ronde

(15E01D2 pre-piezometer readings for depth of 996' to 1610')

HART: Unique Well I.D. Number AAE-552
 SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 35, T15N R32E Adams Co.
 Drilled by Frear Drilling Co. 6/4/68 - 9/15/69 to 1045'
 Piezometers installed in November, 1980
 Depths monitored by the piezometers and aquifers

36' - 362'	35E06	Wanapum
378' - 573'	35E05	Wanapum
588' - 699'	35E04	(steel tape lost, no data since 9/85)
719' - 825'	35E03	Grande Ronde
840' - 966'	35E02	Grande Ronde

(35E01 pre-piezometer readings)

MANSFIELD: Unique Well I.D. Number AAE-557
 NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 25, T27N R26E Douglas Co.
 Drilled by Adcock Drilling Co. 3/1/72 - 10/20/72 to 760'
 Piezometers installed in April, 1972
 Depths monitored by the piezometers and aquifers

0' - 60'	25D01	Wanapum
70' - 150'	25D02	Wanapum
460' - 610'	25D04	Grande Ronde
630' - 760'	25D05	Grande Ronde

ODESSA: Unique Well I.D. Number AAE-563
 SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T20N R33E Lincoln Co.
 Drilled by H.O. Meyer Co. 2/16/70 - 7/28/70 to 750'
 Piezometers installed in April, 1971
 Depths monitored by the piezometers and aquifers

60' - 140'	16E01	Wanapum
145' - 185'	16E02	Wanapum
265' - 305'	16E03	Wanapum
345' - 425'	16E04	Wanapum & Grande Ronde
550' - 620'	16E05	Grande Ronde
665' - 710'	16E06	Grande Ronde

PATERSON: Unique Well I.D. Number AAE-569
 SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 36, T7N R25E Benton Co.
 Drilled by Project Corp. 3/23/72 - 9/7/72 to 860'
 Piezometers installed in October, 1972
 Depths monitored by the piezometers and aquifers

105' - 185'	36N02	Saddle Mountains
200' - 290'	36N03 (dry)	Saddle Mountains
720' - 755'	36N04	Wanapum
770' - 860'	36N05	Wanapum

PIXLEE: Unique Well I.D. Number AAE-556
 NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 20, T23N R26E Douglas Co.
 Drilled by Adcock Drilling Co. to 802' by May 5, 1974, enlarged
 and deepened to 1190' by L&L Drilling Co. by July 2, 1975 and
 deepened to 1315' by Leach Drilling Co. by October 13, 1977.
 Piezometers installed in September, 1982
 Depths monitored by the piezometers and aquifers

55' - 466'	20D07	Grande Ronde
479' - 541'	20D06 (dry)	Grande Ronde
551' - 615'	20D05	Grande Ronde
693' - 846'	20D04	Grande Ronde
856' - 992'	20D03	Grande Ronde
1207' - 1315'	20D02	Grande Ronde

PULLMAN: Unique Well I.D. Number AAE-551
 SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T14N R45E Whitman Co.
 Drilled by A&W Well Drilling Co. 8/9/74 - 9/23/74 to 982'
 No piezometers have been installed

0' - 982'	01F01	Wanapum & Grande Ronde
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SAGEBRUSH FLATS: Unique Well I.D. Number AAE-555
 NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 27, T23N R25E Douglas Co.
 Drilled by Layne Western Co. 7/23/79 - 1/30/80 to 1300'
 Piezometers installed in September, 1982
 Depths monitored by the piezometers and aquifers

801' - 827'	27L06	Grande Ronde
834' - 958'	27L05	Grande Ronde
963' - 1030'	27L04	Grande Ronde
1039' - 1196'	27L03	Grande Ronde
1205' - 1300'	27L02	Grande Ronde

UMTANUM: Unique Well I.D. Number AAE-571
 NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 28, T16N R19E Kittitas Co.
 Drilled by Holman Drilling Co. 11/18/77 - 2/10/78 to 1019'
 No piezometers have been installed
 Water levels monitored in cased zones and aquifers

169' - 474'	28C02	Grande Ronde
474' - 1019'	28C01	Grande Ronde

WALLA WALLA: Unique Well I.D. Number AAE-553

NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 18, T6N R35E Walla Walla Co.

Drilled by Glessner Drilling Co. for the unconsolidated
sediments and Adcock Drilling Co. for the basalt 10/72 -
5/73 to 1301'

Piezometers installed in September, 1973

Depths monitored by the piezometers and aquifers

0' - 230'	18A01	gravels
680' - 740'	18A02	Saddle Mountains & Wanapum
750' - 1205'	18A03	Saddle Mountains & Wanapum
1215' - 1308'	18A04	Wanapum

WEST HORSE HEAVEN HILLS: Unique Well I.D. Number AAE-568

NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 16, T5N T21E Klickitat Co.

Drilled by Leach Well Drilling Co. 4/1//80 - 9/5/80 to 1500'

Piezometers installed in August, 1981

Depths monitored by the piezometers and aquifers

423' - 598'	16L07	Wanapum
731' - 894'	16L06	Wanapum
902' - 1019'	16L05	Wanapum
1031' - 1151'	16L04	Wanapum
1380' - 1500'	16L02	Grande Ronde

Additional miscellaneous observation wells have been added to the
network. As a result of the 1977 drought, state funding was available
to add two wells located north of Spokane referred to as the Deer Park
and Chatteroy observation wells

CHATTEROY: Unique Well I.D. Number AAE-661

NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T28N R43E Spokane Co.

Drilled By B&B Drilling Co. 1/20/78 - 1/23/78 to 242'

No piezometers have been installed

18' - 242'	16D01	sediments & granite
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DEER PARK: Unique Well I D. Number AAE-560

SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 33, T29N R42E Spokane Co.

Drilled by B&B Drilling Co. 1/23/78 - 1/25/78 to 350'

No piezometers have been installed

18' - 350'	33G01	sediments
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As part of an on-going data collection effort in the vicinity of Sinking Creek in Lincoln Co. existing unused wells were acquired and new wells were drilled. These include the following:

SINKING CREEK OW-2: Unique Well I.D. Number AAE-565
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 9, T25N R34E Lincoln Co.
Drilled by Tera Corp. for Washington Water Power Co.
in March 1980 to 117'
Piezometers installed in March, 1980
Depths monitored by the piezometers and aquifers

48' - 66'	09E01	Wanapum
90' - 117'	09E02	Wanapum

SINKING CREEK OW-8: Unique Well I.D. Number AAE-566
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 34, T26N R34E Lincoln Co.
Drilled by Tera Corp. for Washington Water Power Co.
in March 1980 to 120'
Piezometers installed in March, 1980
Depths monitored by the piezometers and aquifers

65' - 75'	34A01	Wanapum
106' - 116'	34A02	Wanapum

BARING SPRING CORE HOLE: Unique Well I.D. Number AAE-572
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 8, T25N R34E Lincoln Co.
Drilled by Budinger & Associates 6/21/91 - 7/15/91 to
335.2' for the Department of Ecology
Piezometers installed in August, 1991
Depths monitored by the piezometers and aquifers

150' - 180'	08N03	Wanapum
280' - 320'	08N02	Wanapum

BARING SPRING OVERBURDEN HOLE: Unique Well I.D. Number AAE-573
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 8, T25N R34E Lincoln Co.
Drilled by Budinger & Associates on 7/3/91 to 9.5' for the
Department of Ecology
One piezometer installed on 7/3/91
Depth monitored by the piezometer and aquifers

4.0' - 9.5'	08N04	sediments
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Overburden hole is 17' SW of corehole

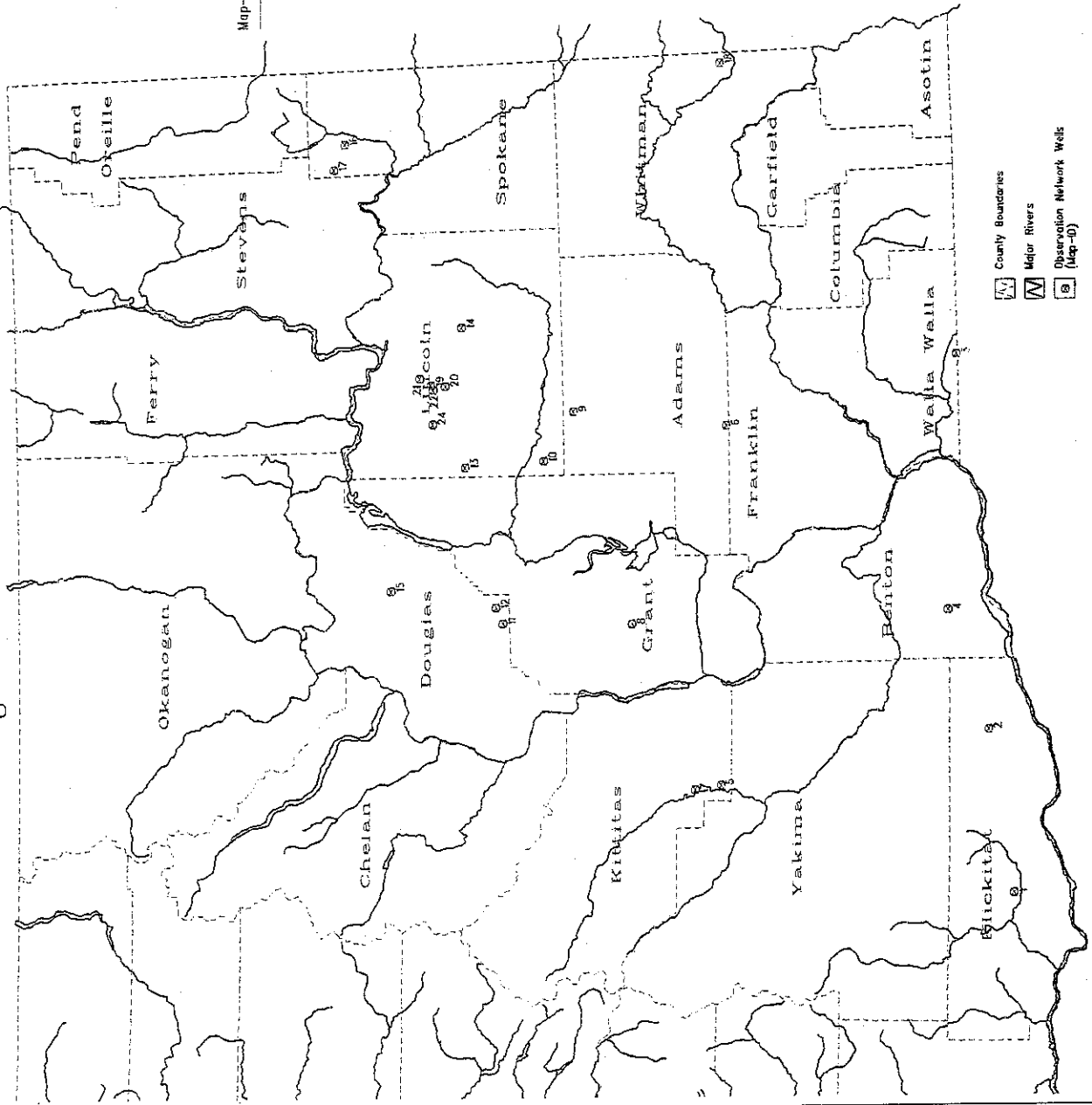
WAGNER CORE HOLE: Unique Well I.D. Number AAE-574
NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 12, T25N R32E Lincoln Co.
Drilled by Budinger & Associates 6/11/91 - 6/19/91 to 185.4' for
the Department of Ecology
One piezometer installed on 6/19/91
Depth monitored by the piezometer and aquifers

110' - 135'	12K02	Wanapum
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A hydrograph showing water level changes for each piezometer/well has been generated by the Water Resources Program's Ground Water Data Base computer application. The water levels were measured by several methods, i.e. airlines, electric tapes, steel tapes, and pressure transducers. All water levels are reported as depth to water below measuring point in feet (in the case of the Burbank Creek artesian well a pressure meter is used with readings converted to feet of head above land surface). All historical data have been adjusted to reflect the current measuring point. Sources of water level data are from the U.S. Geological Survey and Department of Ecology records. The individual water level measurements (over 7,200) are retained at the Eastern Regional Office, Water Resource Program and are available in ASCII format on diskette. Table 1 summarizes the monitored depth information for the various hydrographs presented in this report.

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Eastern Washington Observation Well Network



Map-ID	Well-ID	Site Name	Local Number
1	AAE567	Blockhouse	04N/15E-16F
2	AAE568	W Horse Heaven Hills	05N/21E-16L
3	AAE563	Walla Walla	06N/35E-18A
4	AAE569	Patterson	07N/25E-36N
5	AAE570	Burbank Creek	15N/19E-22L
6	AAE552	Mart	15N/32E-35E
7	AAE571	Umtanum	16N/19E-28C
8	AAE534	George	18N/25E-15E
9	AAE563	Odessa	20N/33E-16E
10	AAE564	Basell Explorer	21N/31E-10M
11	AAE555	Sagebrush Flats	23N/26E-27L
12	AAE556	Pixlee	23N/26E-20D
13	AAE558	Almira	24N/31E-16E
14	AAE562	Davenport	24N/36E-16A
15	AAE557	Mansfield	27N/26E-25D
16	AAE561	Chatteroy	28N/43E-16D
17	AAE560	Deer Park	29N/42E-33G
18	AAE551	Pullman	14N/45E-01F
19	AAE565	Sinking Ck OW2	25N/34E-09E
20	AAE559	Dreger	25N/34E-29J
21	AAE566	Sinking Ck OW8	26N/34E-34A
22	AAE572	Boring Corehole	25N/34E-08N
23	AAE573	Overburden (Not on Map)	25N/34E-08N
24	AAE574	Wagner Corehole	25N/32E-12K

Figure 1 - Well Location Map

Table 1 - Eastern Washington Observation Well Network

Well Tag	Subsite Id	Local Number	Site Name	Monitored Depth: Top	Monitored Depth: Bottom	Elev of LSD	MP to LSD Height
AAE567	F01	04N/15E-16F01	Blockhouse	0.0	200.0	1580.0	.4
AAE567	F02	04N/15E-16F02	Blockhouse	210.0	325.0	1580.0	.4
AAE567	F03	04N/15E-16F03	Blockhouse	330.0	440.0	1580.0	.4
AAE567	F04	04N/15E-16F04	Blockhouse	500.0	590.0	1580.0	.4
AAE568	L02	05N/21E-16L02	W Horse Heaven Hills	1380.0	1500.0	2305.0	.8
AAE568	L04	05N/21E-16L04	W Horse Heaven Hills	1031.0	1151.0	2305.0	.8
AAE568	L05	05N/21E-16L05	W Horse Heaven Hills	902.0	1019.0	2305.0	.8
AAE568	L06	05N/21E-16L06	W Horse Heaven Hills	731.0	894.0	2305.0	.8
AAE568	L07	05N/21E-16L07	W Horse Heaven Hills	423.0	598.0	2305.0	.8
AAE553	A01	06N/35E-18A01	Walla Walla	0.0	230.0	670.0	1.7
AAE553	A02	06N/35E-18A02	Walla Walla	680.0	740.0	670.0	1.7
AAE553	A03	06N/35E-18A03	Walla Walla	750.0	1205.0	670.0	1.7
AAE553	A04	06N/35E-18A04	Walla Walla	1215.0	1308.0	670.0	1.7
AAE569	N02	07N/25E-36N02	Paterson	105.0	185.0	730.0	.5
AAE569	N04	07N/25E-36N04	Paterson	720.0	755.0	730.0	0.0
AAE569	N05	07N/25E-36N05	Paterson	770.0	860.0	730.0	0.0
AAE551		14N/45E-01F01	Pullman	0.0	982.0	2475.0	2.0
AAE570		15N/19E-22L01	Burbank Creek	201.0	602.0	1390.0	0.0
AAE552	E02	15N/32E-35E02	Hart	840.0	966.0	1242.0	1.0
AAE552	E03	15N/32E-35E03	Hart	719.0	825.0	1242.0	1.0
AAE552	E04	15N/32E-35E04	Hart	588.0	699.0	1242.0	1.0
AAE552	E05	15N/32E-35E05	Hart	378.0	573.0	1242.0	1.0
AAE552	E06	15N/32E-35E06	Hart	36.0	362.0	1242.0	1.0
AAE571	C01	16N/19E-28C01	Umtanum	474.0	1019.0	1425.0	2.4
AAE571	C02	16N/19E-28C02	Umtanum	169.0	474.0	1425.0	1.6
AAE554	E01	18N/25E-15E01	George	0.0	975.0	1156.7	1.0
AAE554	E01D2	18N/25E-15E01D2	George	996.0	1610.0	1156.7	3.2
AAE554	E06	18N/25E-15E06	George	1145.0	1225.0	1156.7	1.0
AAE554	E07	18N/25E-15E07	George	1379.0	1463.0	1156.7	1.0
AAE554	E08	18N/25E-15E08	George	1520.0	1610.0	1156.7	1.0

Table 1 - Eastern Washington Observation Well Network

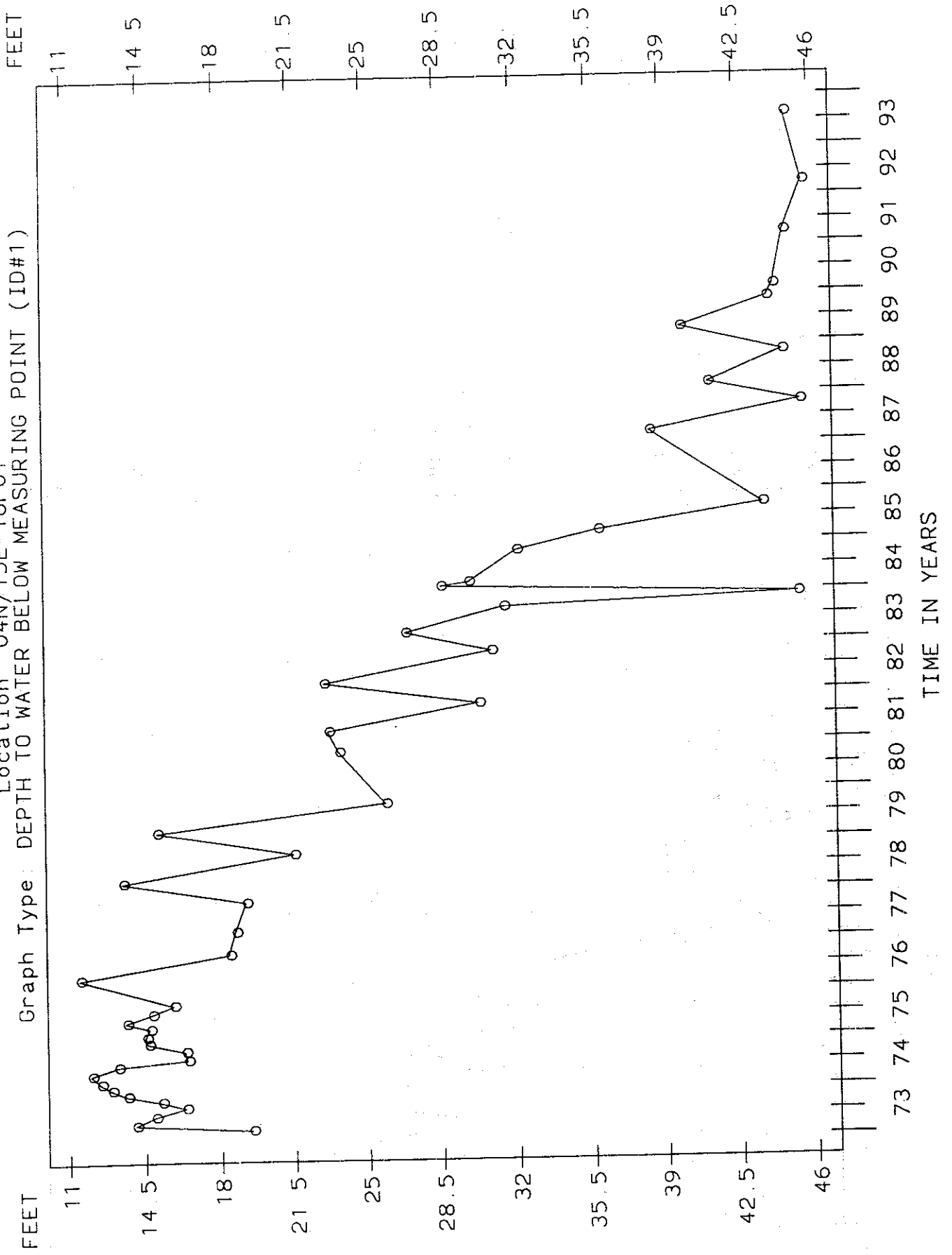
Well Tag	Subsite Id	Local Number	Site Name	Monitored Depth: Top Bottom	Elev of LSD	MP to LSD Height
AAE563	E01	20N/33E-16E01	Odessa	60.0 140.0	1670.0	.5
AAE563	E02	20N/33E-16E02	Odessa	145.0 185.0	1670.0	.5
AAE563	E03	20N/33E-16E03	Odessa	265.0 305.0	1670.0	.5
AAE563	E04	20N/33E-16E04	Odessa	345.0 425.0	1670.0	.5
AAE563	E05	20N/33E-16E05	Odessa	550.0 620.0	1670.0	.5
AAE563	E06	20N/33E-16E06	Odessa	665.0 710.0	1670.0	.5
AAE564	M01	21N/31E-10M01	Basalt Explorer	96.0 4682.5	1610.0	.5
AAE564	M02	21N/31E-10M02	Basalt Explorer	96.0 735.0	1610.0	.5
AAE564	M03	21N/31E-10M03	Basalt Explorer	755.0 1480.0	1610.0	.5
AAE564	M04	21N/31E-10M04	Basalt Explorer	1498.0 2300.0	1610.0	.5
AAE555	L02	23N/25E-27L02	Sagebrush Flats	1205.0 1300.0	1700.0	.5
AAE555	L03	23N/25E-27L03	Sagebrush Flats	1039.0 1196.0	1700.0	.5
AAE555	L04	23N/25E-27L04	Sagebrush Flats	963.0 1030.0	1700.0	.5
AAE555	L05	23N/25E-27L05	Sagebrush Flats	834.0 958.0	1700.0	.5
AAE555	L06	23N/25E-27L06	Sagebrush Flats	801.0 827.0	1700.0	.5
AAE556	D02	23N/26E-20D02	Pixlee	1207.0 1315.0	1920.0	.3
AAE556	D03	23N/26E-20D03	Pixlee	856.0 992.0	1920.0	.3
AAE556	D04	23N/26E-20D04	Pixlee	693.0 846.0	1920.0	.3
AAE556	D05	23N/26E-20D05	Pixlee	551.0 615.0	1920.0	.3
AAE556	D07	23N/26E-20D07	Pixlee	55.0 466.0	1920.0	.3
AAE558	E01	24N/31E-16E01	Almira	60.0 316.0	1850.0	0.0
AAE558	E02	24N/31E-16E02	Almira	424.0 456.0	1850.0	0.0
AAE558	E03	24N/31E-16E03	Almira	494.0 556.0	1850.0	0.0
AAE558	E04	24N/31E-16E04	Almira	650.0 698.0	1850.0	0.0
AAE562	A01	24N/36E-16A01	Davenport	0.0 120.0	2372.0	0.0
AAE562	A02	24N/36E-16A02	Davenport	130.0 160.0	2372.0	0.0
AAE562	A03	24N/36E-16A03	Davenport	210.0 225.0	2372.0	0.0
AAE562	A04	24N/36E-16A04	Davenport	245.0 260.0	2372.0	0.0
AAE562	A05	24N/36E-16A05	Davenport	315.0 365.0	2372.0	0.0
AAE562	A06	24N/36E-16A06	Davenport	455.0 490.0	2372.0	0.0
AAE562	A07	24N/36E-16A07	Davenport	595.0 640.0	2372.0	0.0

Table 1 - Eastern Washington Observation Well Network

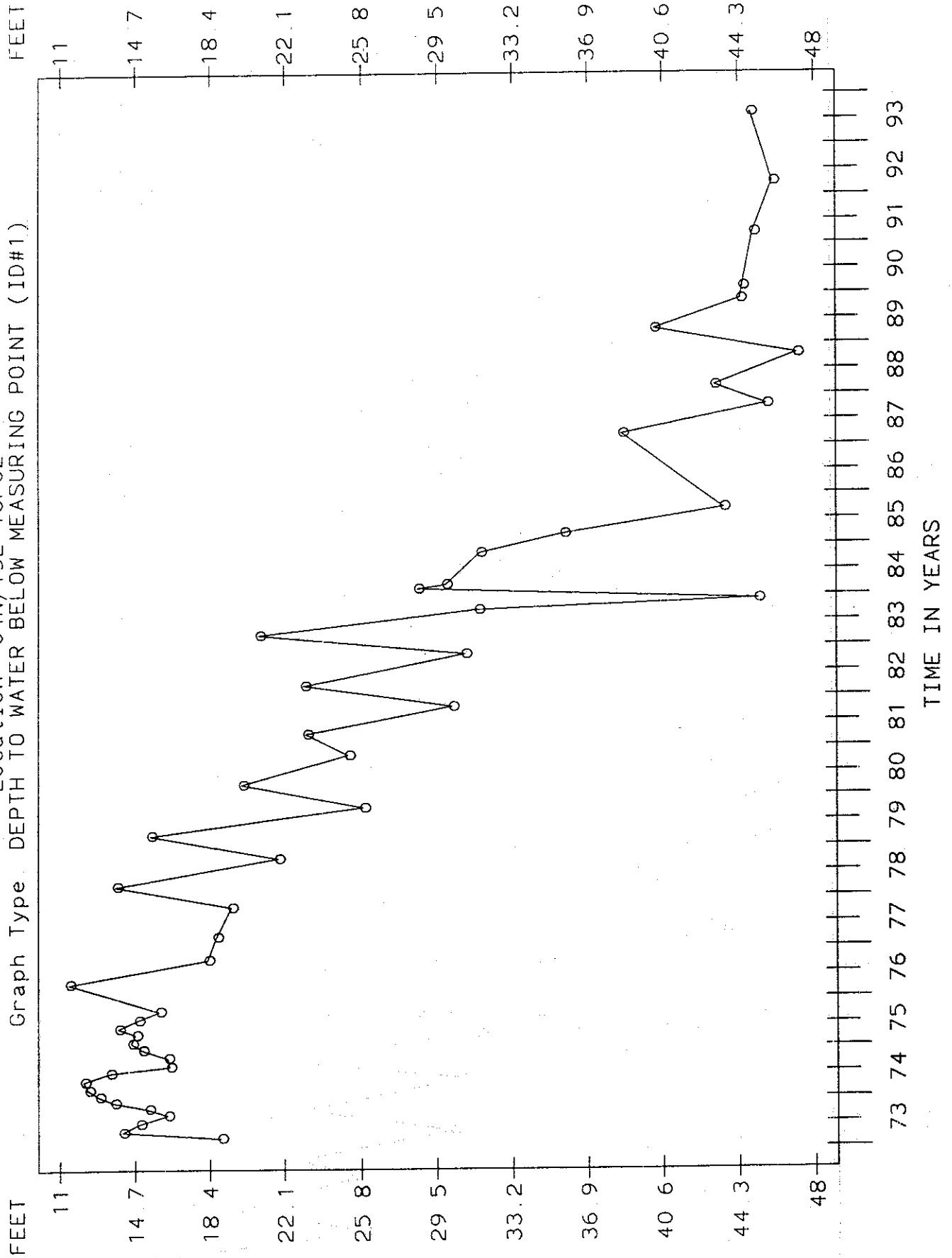
Well Tag	Subsite Id	Local Number	Site Name	Monitored Depth: Top	Monitored Depth: Bottom	Elev of LSD	MP to LSD Height
AAE562	A08	24N/36E-16A08	Davenport	730.0	750.0	2372.0	0.0
AAE574		25N/32E-12K02	Wagner Corehole	110.0	135.0	2085.0	3.0
AAE572	N02	25N/34E-08N02	Baring Corehole #1	280.0	320.0	2210.0	1.4
AAE572	N03	25N/34E-08N03	Baring Corehole #2	150.0	180.0	2210.0	1.4
AAE573		25N/34E-08N04	Baring Overburden	4.0	9.5	2210.0	.5
AAE565	E01	25N/34E-09E01	Sinking Ck OW2	48.0	66.0	2237.5	2.5
AAE565	E02	25N/34E-09E02	Sinking Ck OW2	90.0	117.0	2237.5	2.5
AAE559	J02	25N/34E-29J02	Dreger	1090.0	1233.0	2285.0	1.5
AAE559	J03	25N/34E-29J03	Dreger	910.0	996.0	2285.0	1.5
AAE559	J04	25N/34E-29J04	Dreger	673.0	747.0	2285.0	1.5
AAE559	J05	25N/34E-29J05	Dreger	364.0	463.0	2285.0	1.5
AAE559	J06	25N/34E-29J06	Dreger	269.0	352.0	2285.0	1.5
AAE559	J07	25N/34E-29J07	Dreger	0.0	253.0	2285.0	1.5
AAE566	A01	26N/34E-34A01	Sinking Ck OW8	65.0	75.0	2313.6	2.5
AAE566	A02	26N/34E-34A02	Sinking Ck OW8	106.0	116.0	2313.6	2.5
AAE557	D01	27N/26E-25D01	Mansfield	0.0	60.0	2215.0	.5
AAE557	D02	27N/26E-25D02	Mansfield	70.0	152.0	2215.0	.5
AAE557	D04	27N/26E-25D04	Mansfield	460.0	610.0	2215.0	.5
AAE557	D05	27N/26E-25D05	Mansfield	630.0	760.0	2215.0	.5
AAE561		28N/43E-16D01	Chatteroy	18.0	242.0	2000.0	4.0
AAE560		29N/42E-33G01	Deer Park	18.0	350.0	2181.0	4.0

Notes: MP = Measurement Point LSD = Land Surface Datum
 Monitored Depth = Open interval in feet below LSD
 Elev of LSD = Elevation of LSD in feet above mean sea level
 MP to LSD Height = Distance between MP and LSD in feet

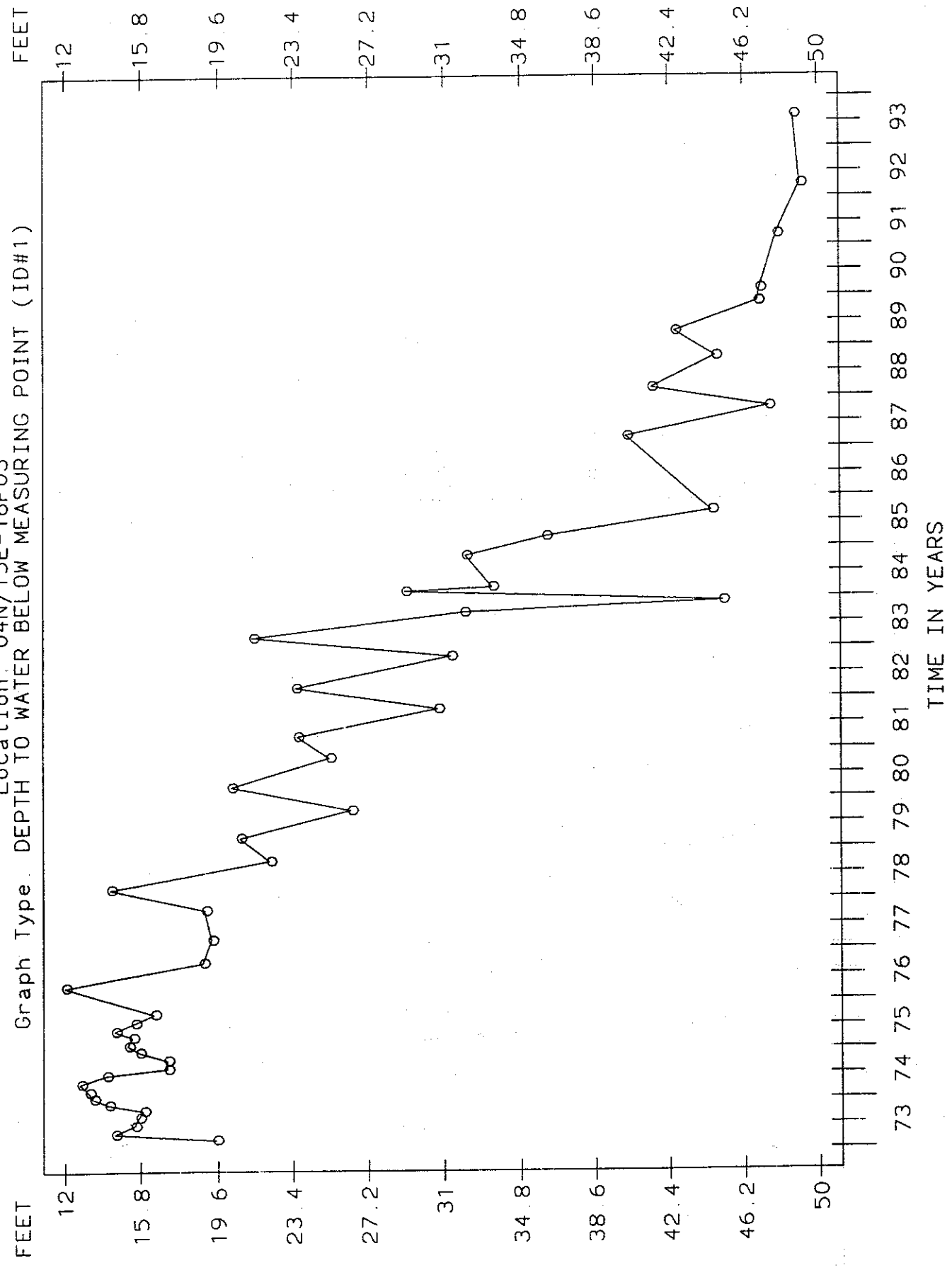
HYDROGRAPH FOR WELL AAE567 F01
 Location 04N/15E-16F01



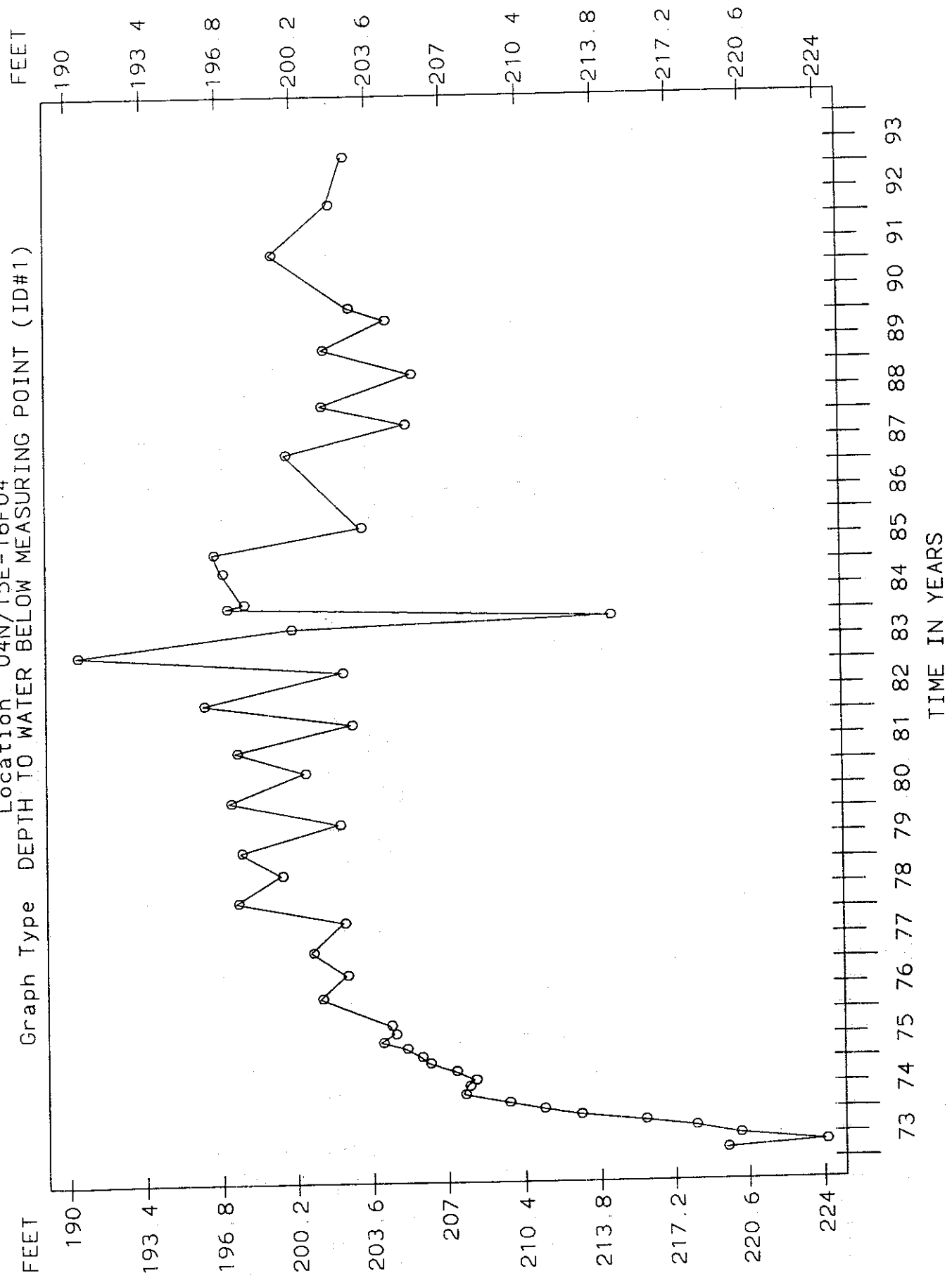
HYDROGRAPH FOR WELL AAE567 F02
 Location 04N/15E-16F02



HYDROGRAPH FOR WELL AAE567 F03
 Location: 04N/15E-16F03

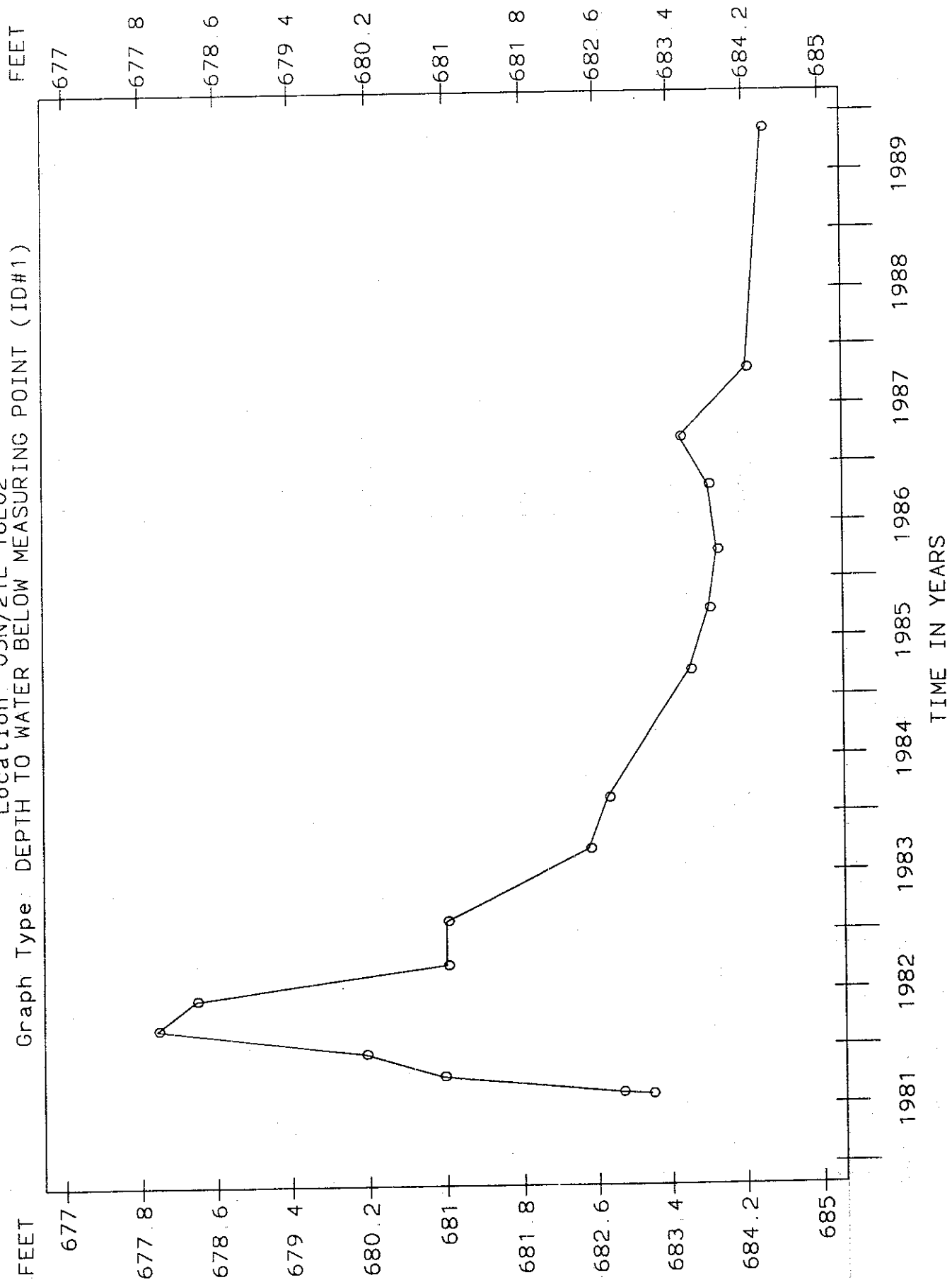


HYDROGRAPH FOR WELL AAE567 F04
 Location: 04N/15E-16F04



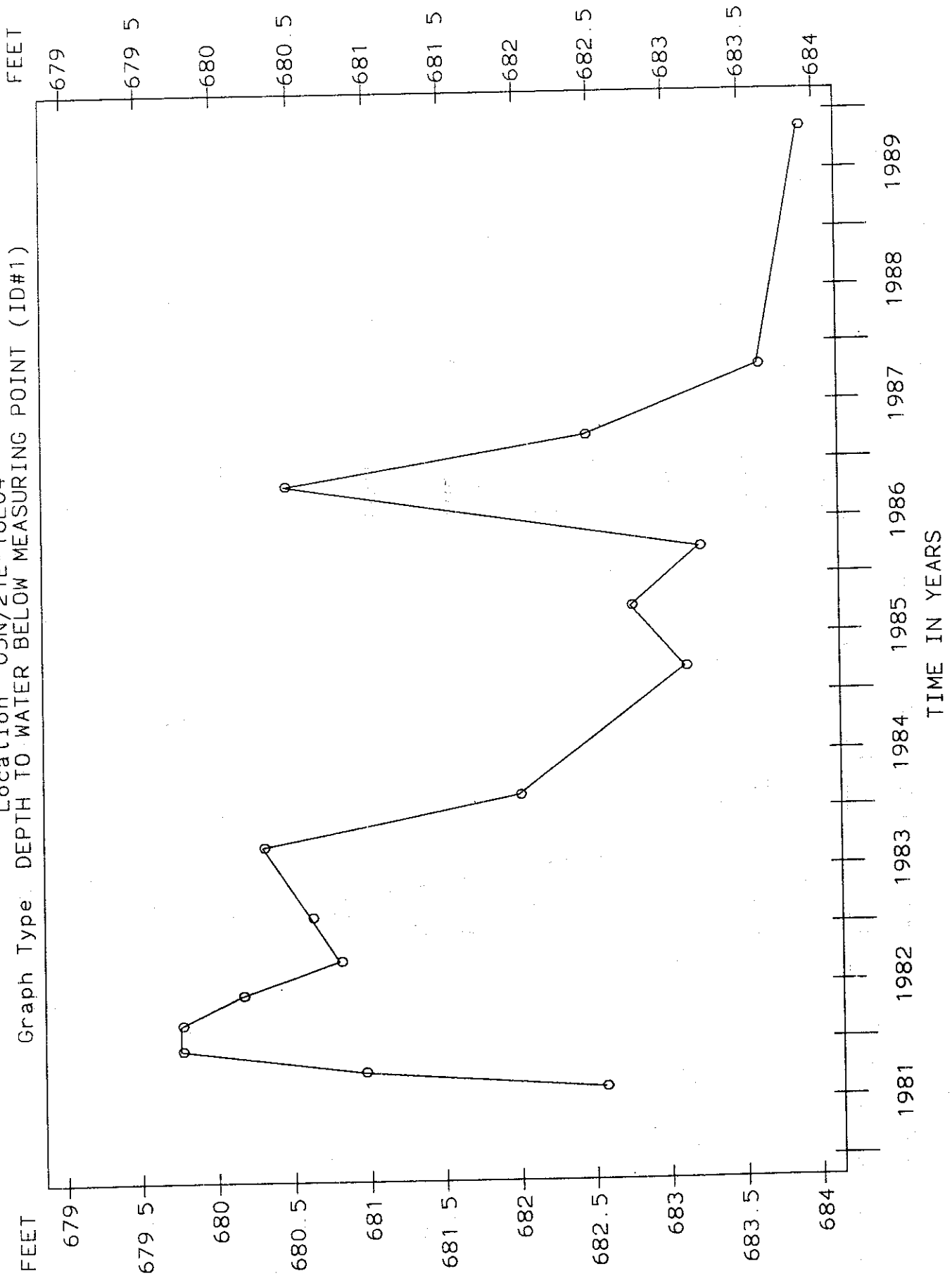
HYDROGRAPH FOR WELL AAE568 L02
Location: 05N/21E-16L02

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

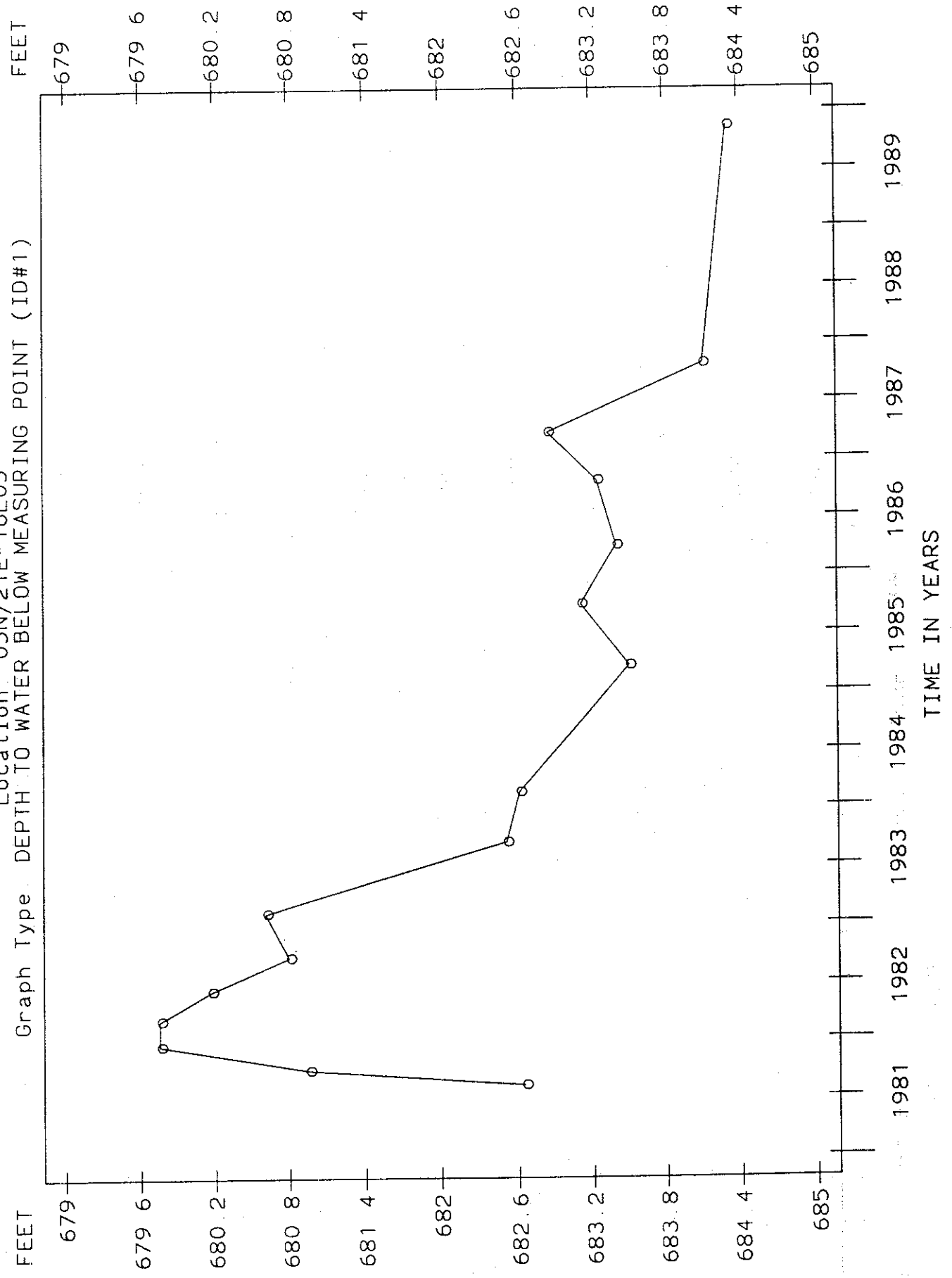


HYDROGRAPH FOR WELL AAE568 L04
Location 05N/21E-16L04

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



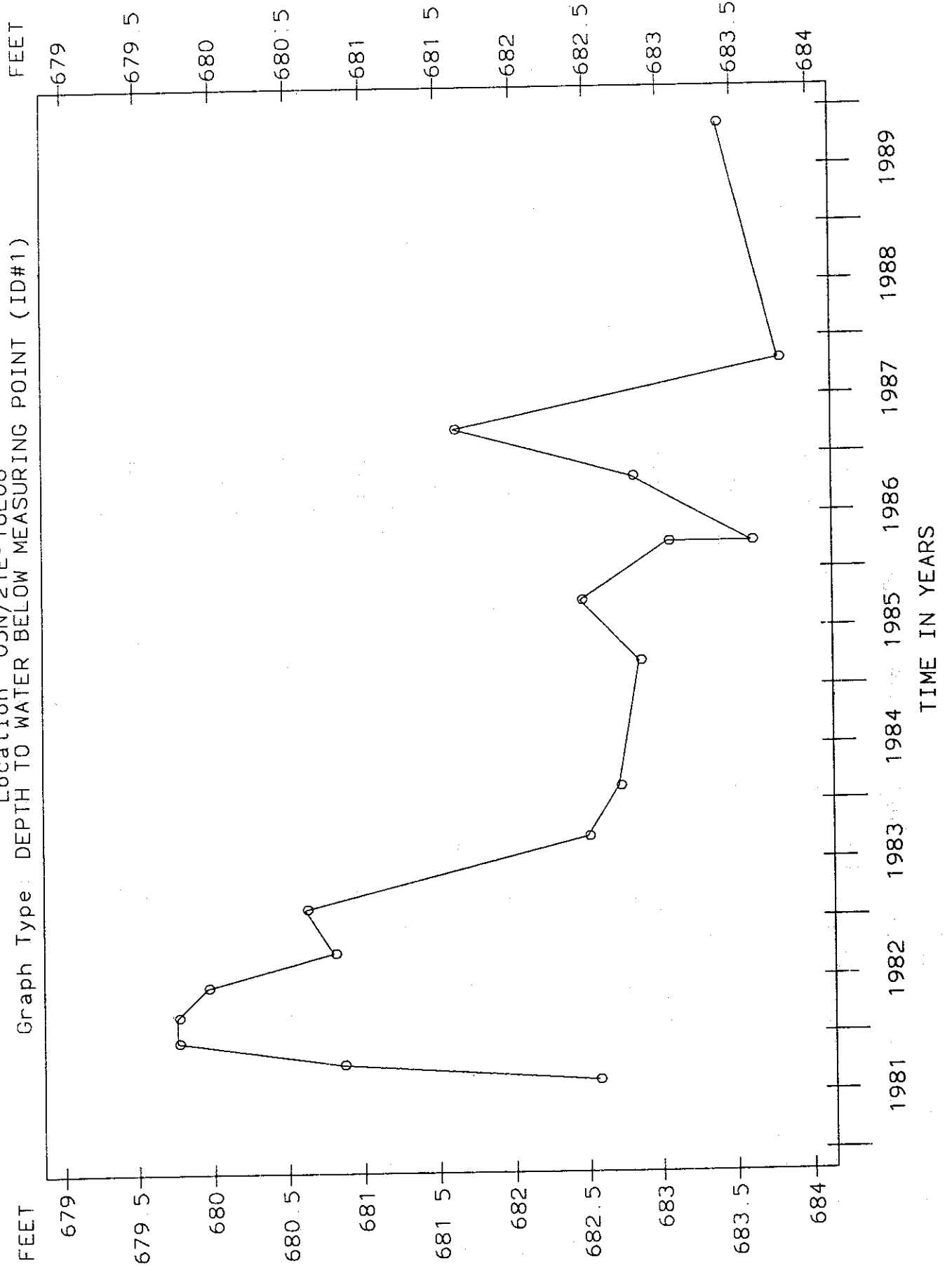
HYDROGRAPH FOR WELL AAE568 L05
Location 05N/21E-16L05



HYDROGRAPH FOR WELL AAE568 L06

Location 05N/21E-16L06

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE568 L07
 Location 05N/21E-16L07

Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

579

579.5

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582

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584

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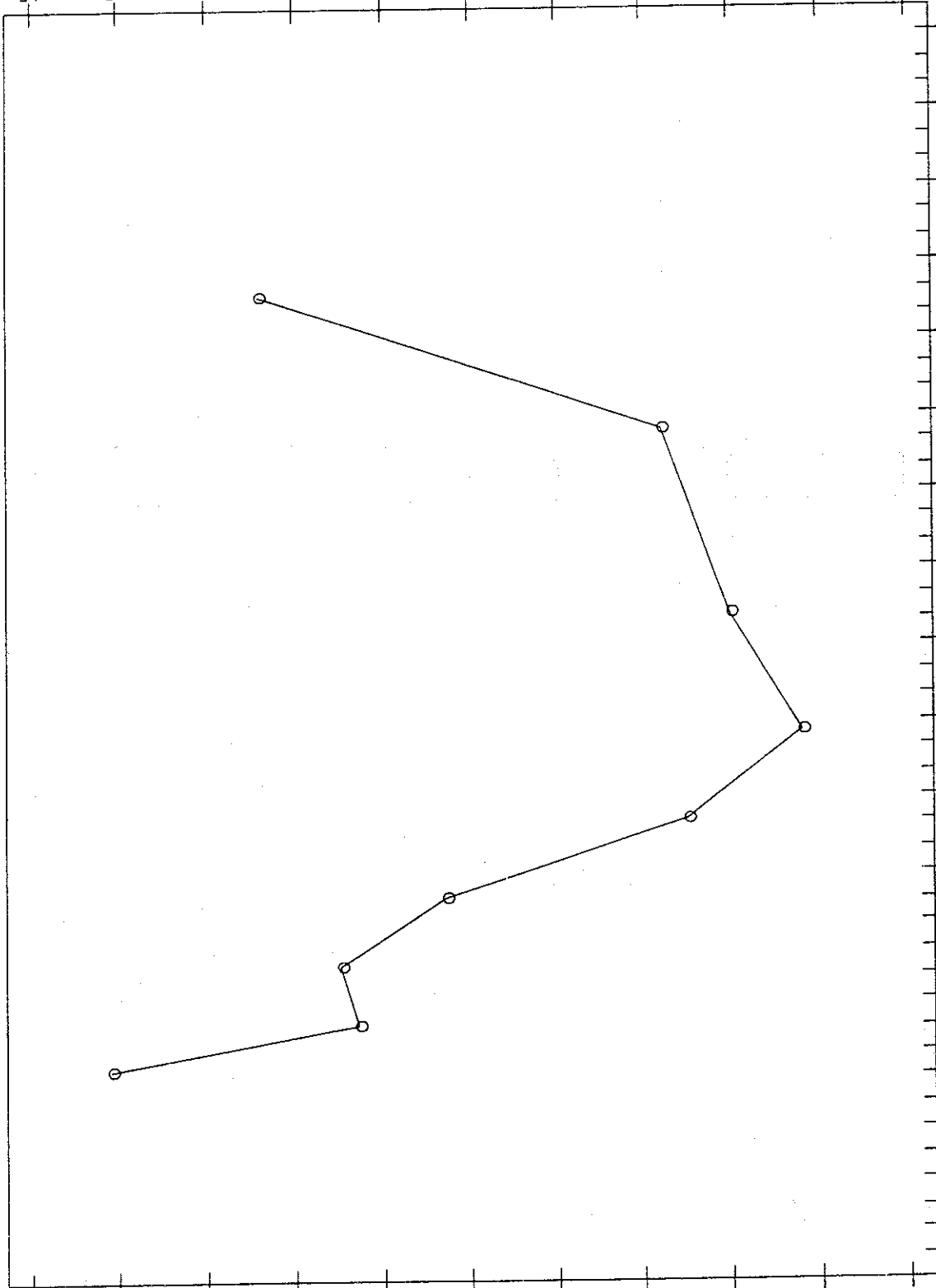
582

582.5

583

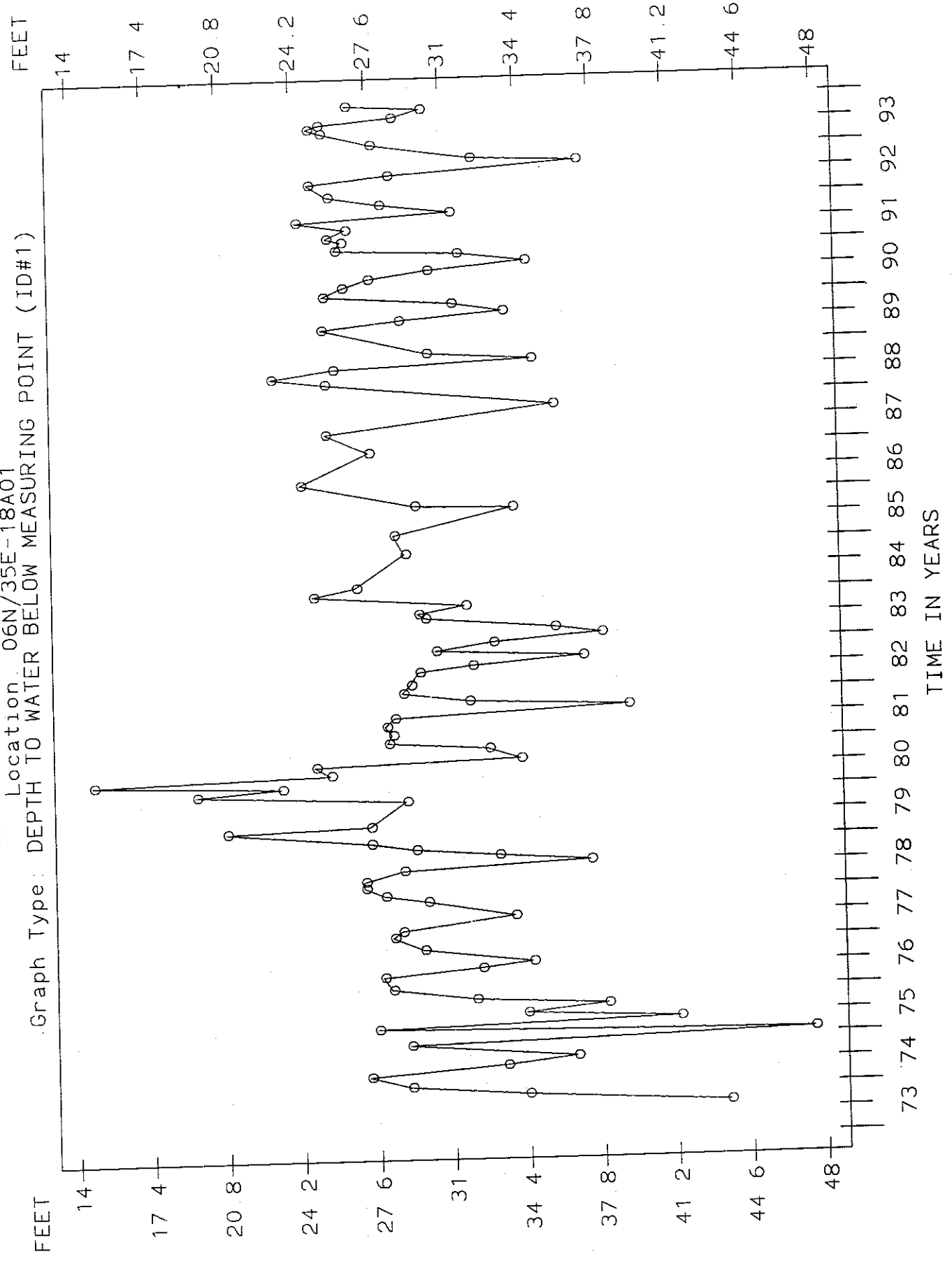
583.5

584

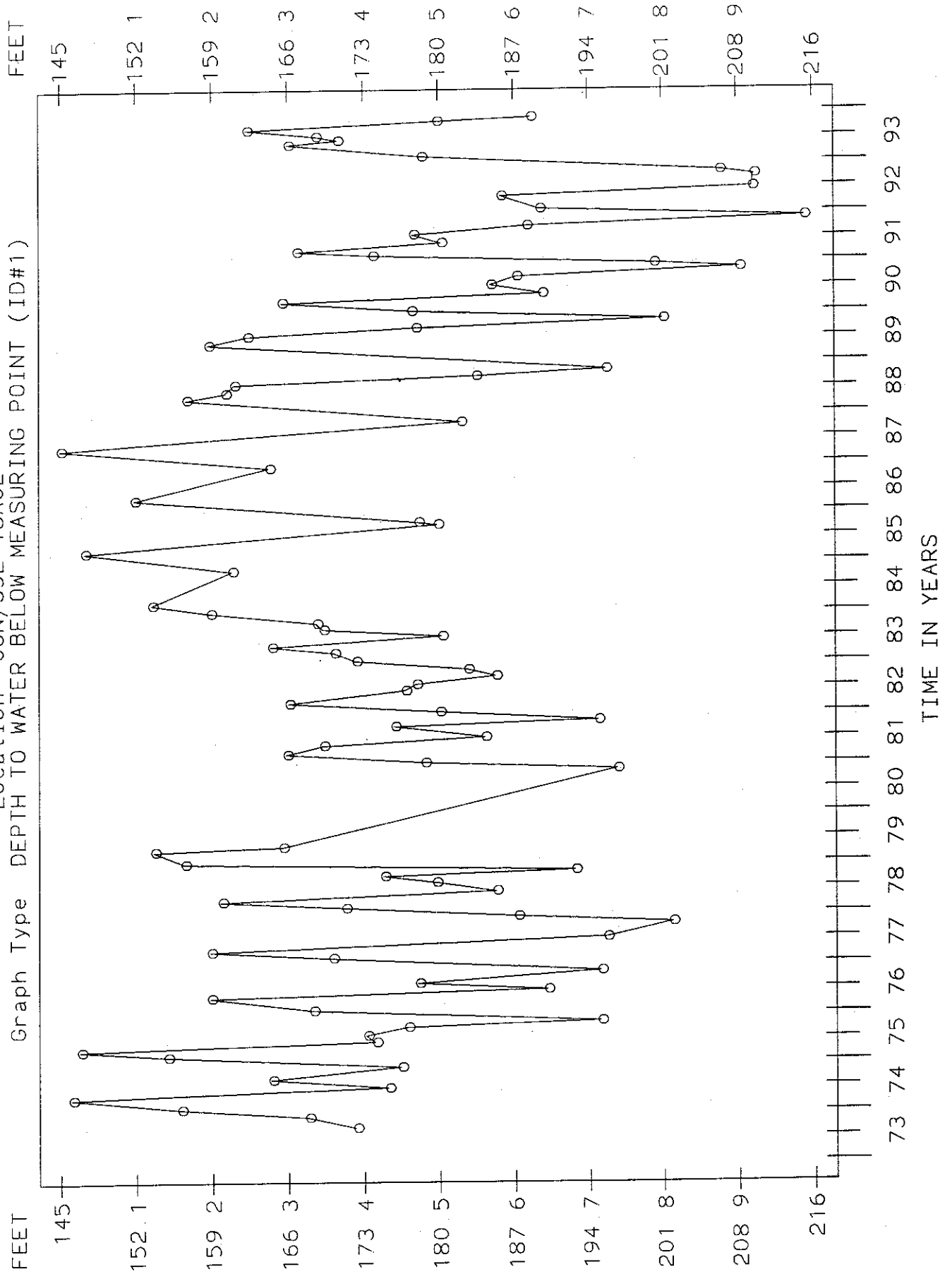


TIME IN MONTHS

HYDROGRAPH FOR WELL AAE553 A01
 Location 06N/35E-18A01



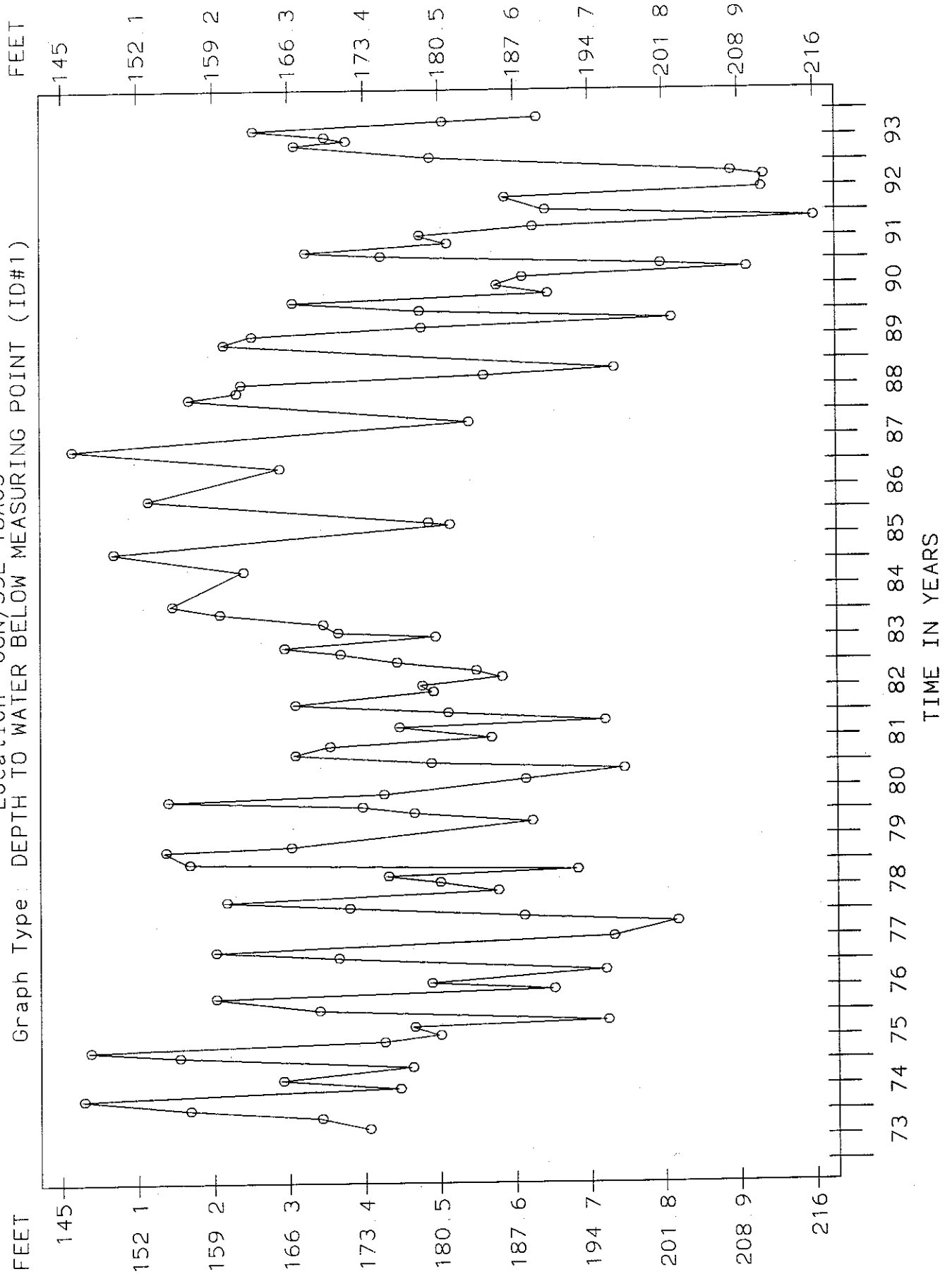
HYDROGRAPH FOR WELL AAE553 A02
 Location 06N/35E-18A02



HYDROGRAPH FOR WELL AAE553 A03

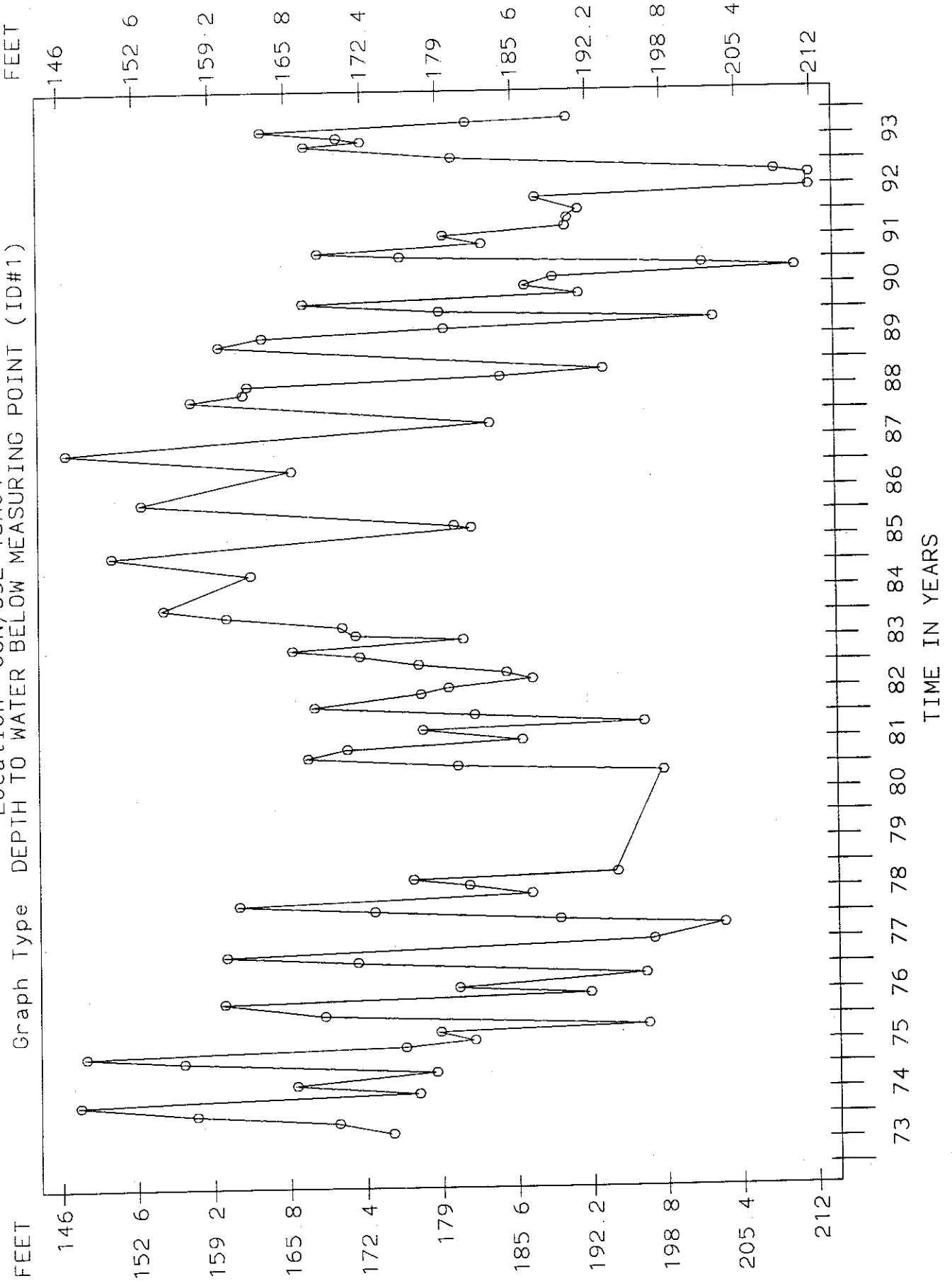
Location 06N/35E-18A03

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

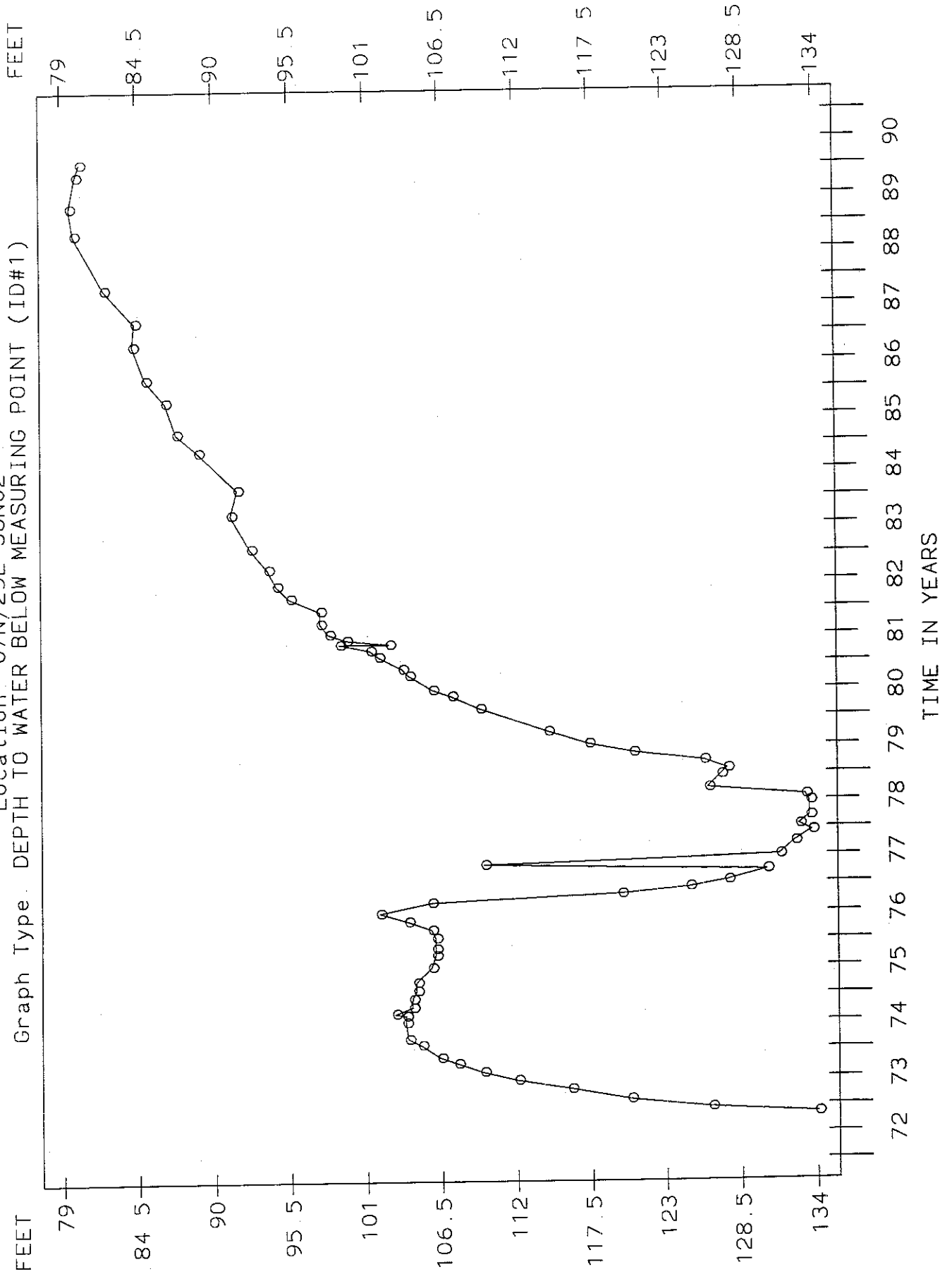


HYDROGRAPH FOR WELL AAE553 A04

Location 06N/35E-18A04



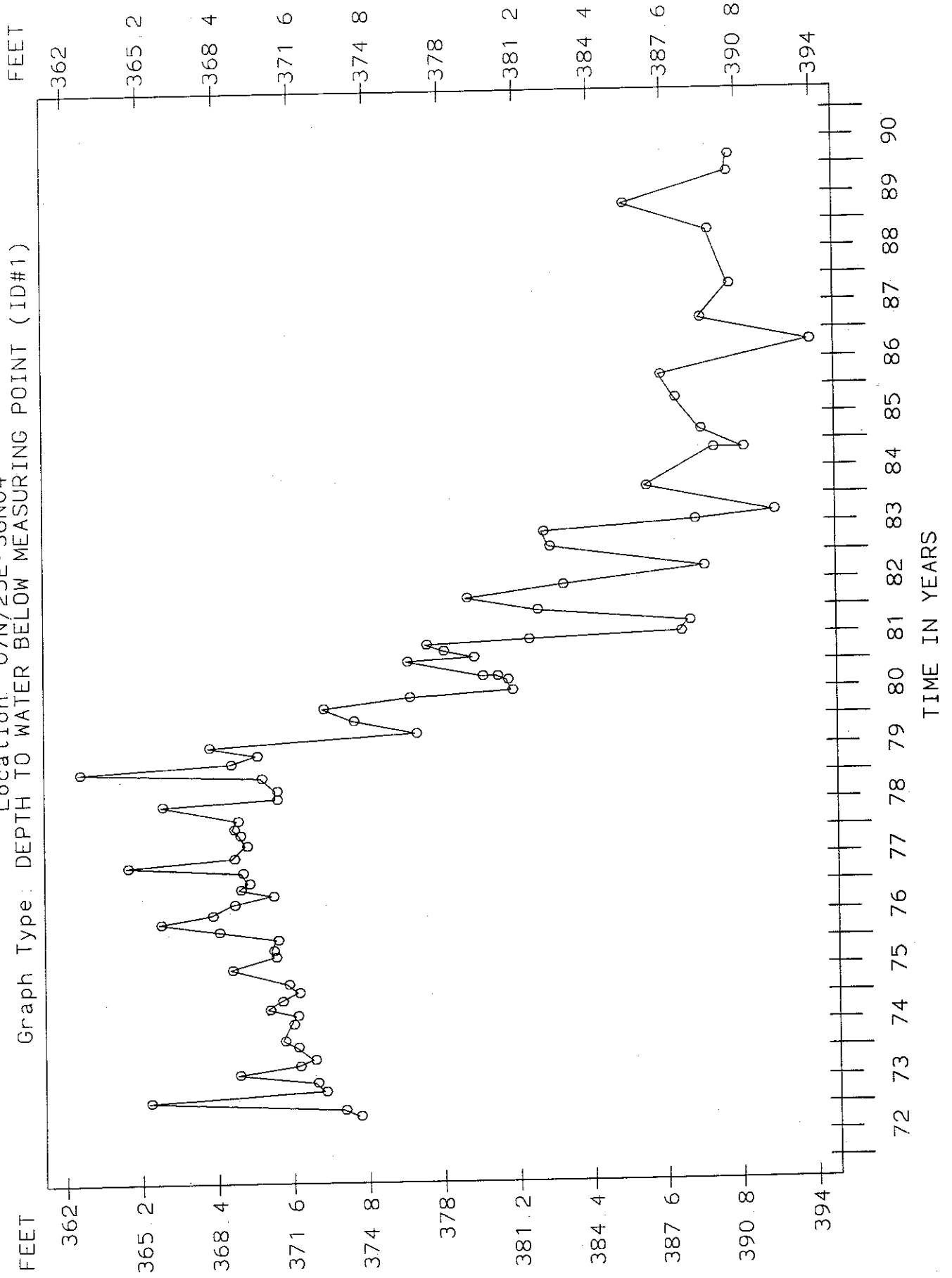
HYDROGRAPH FOR WELL AAE569 N02
 Location 07N/25E-36N02



HYDROGRAPH FOR WELL AAE569 N04

Location: 07N/25E-36N04

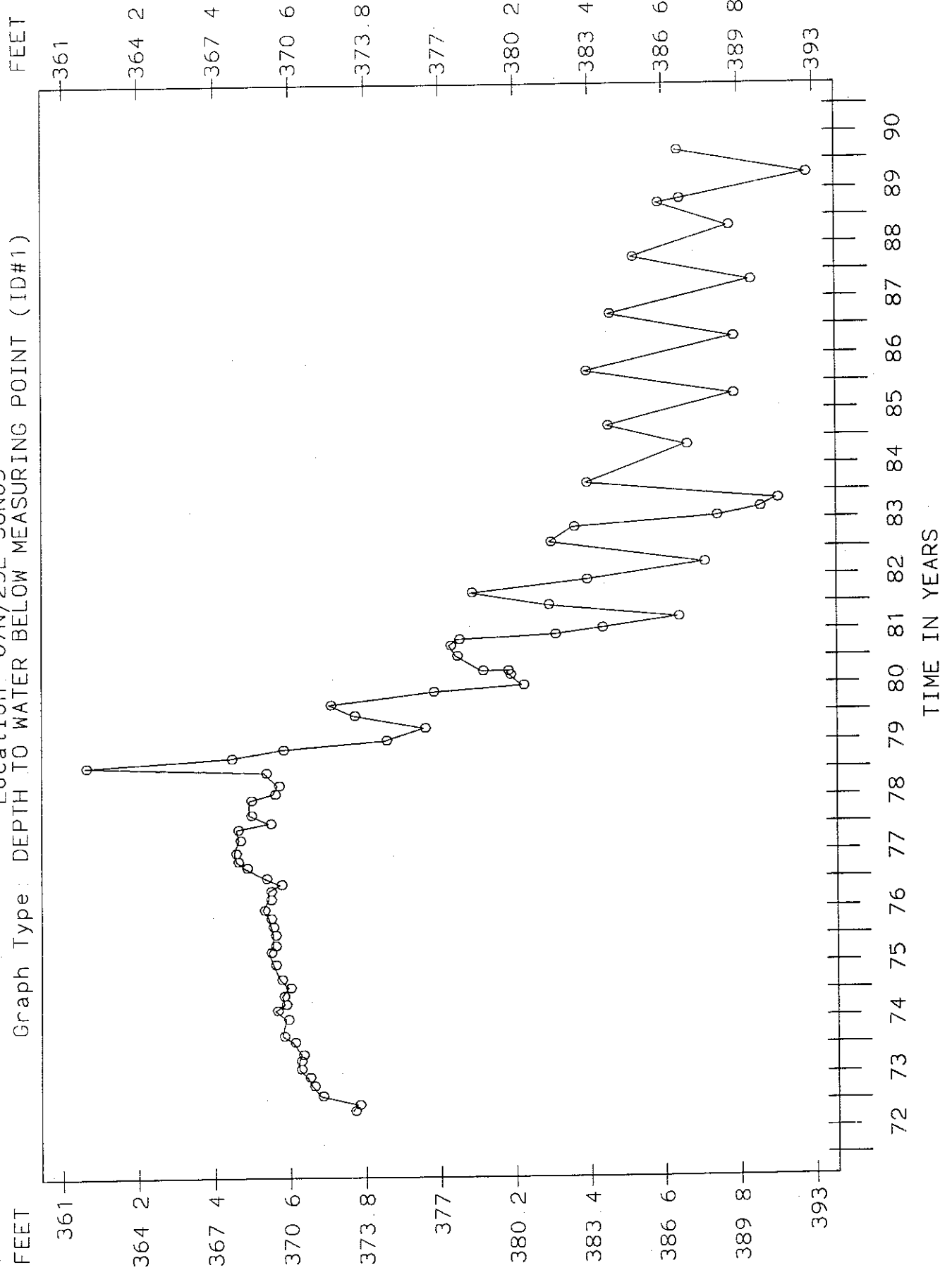
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE569 N05

Location: 07N/25E-36N05

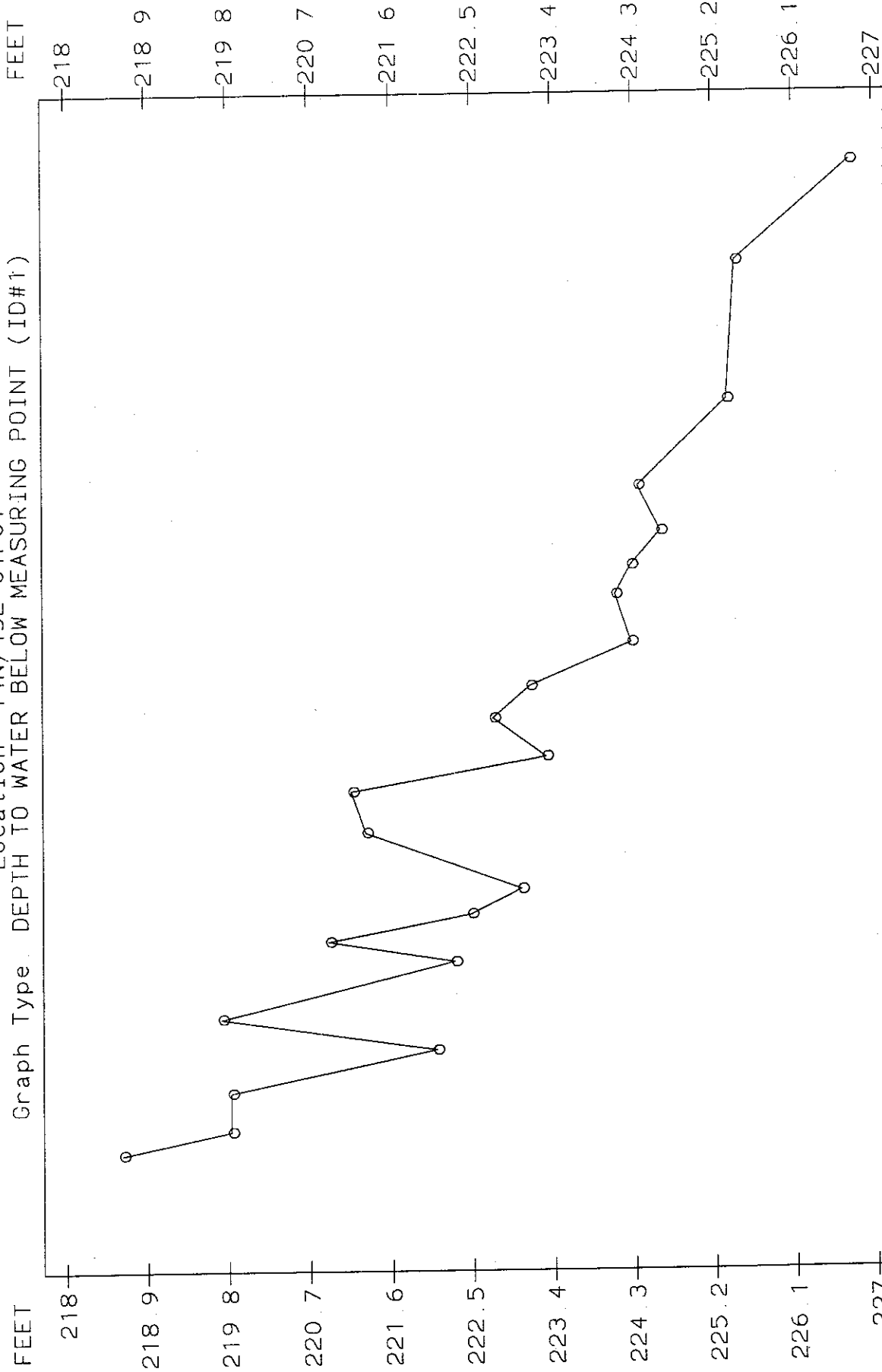
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE551

Location: 14N/45E-01FO1

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

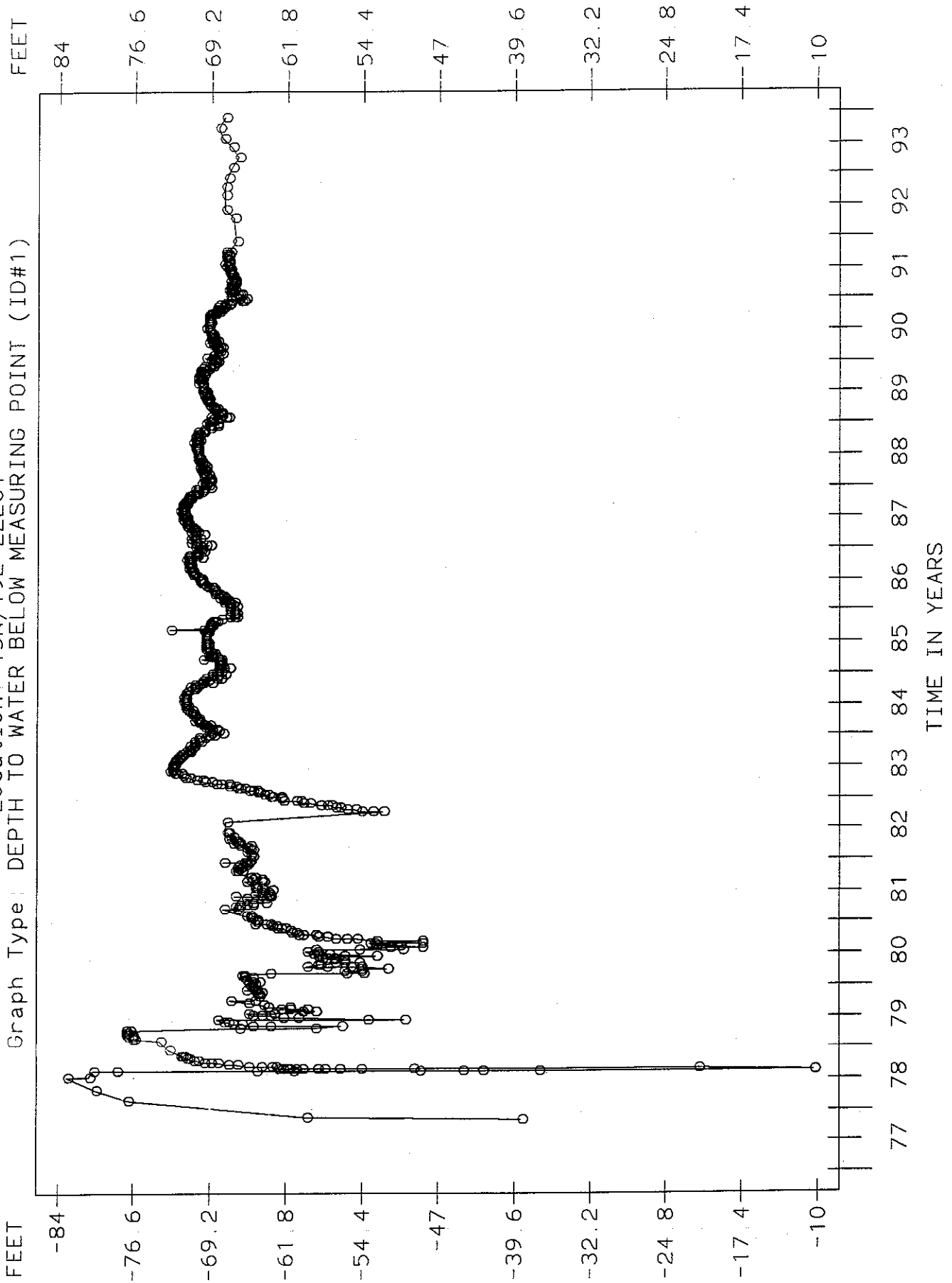


TIME IN MONTHS

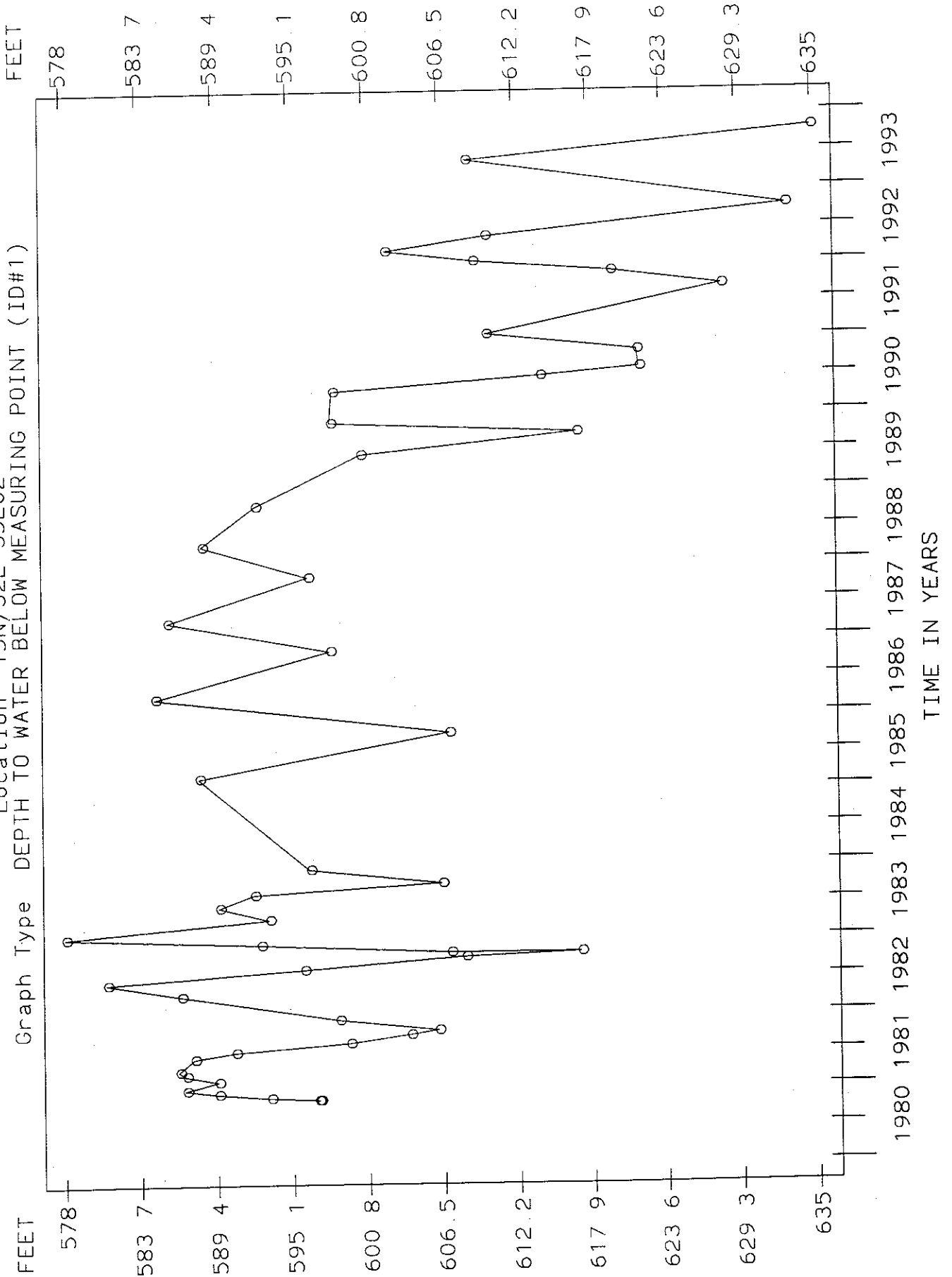
HYDROGRAPH FOR WELL AAE570

Location: 15N/19E-22L01

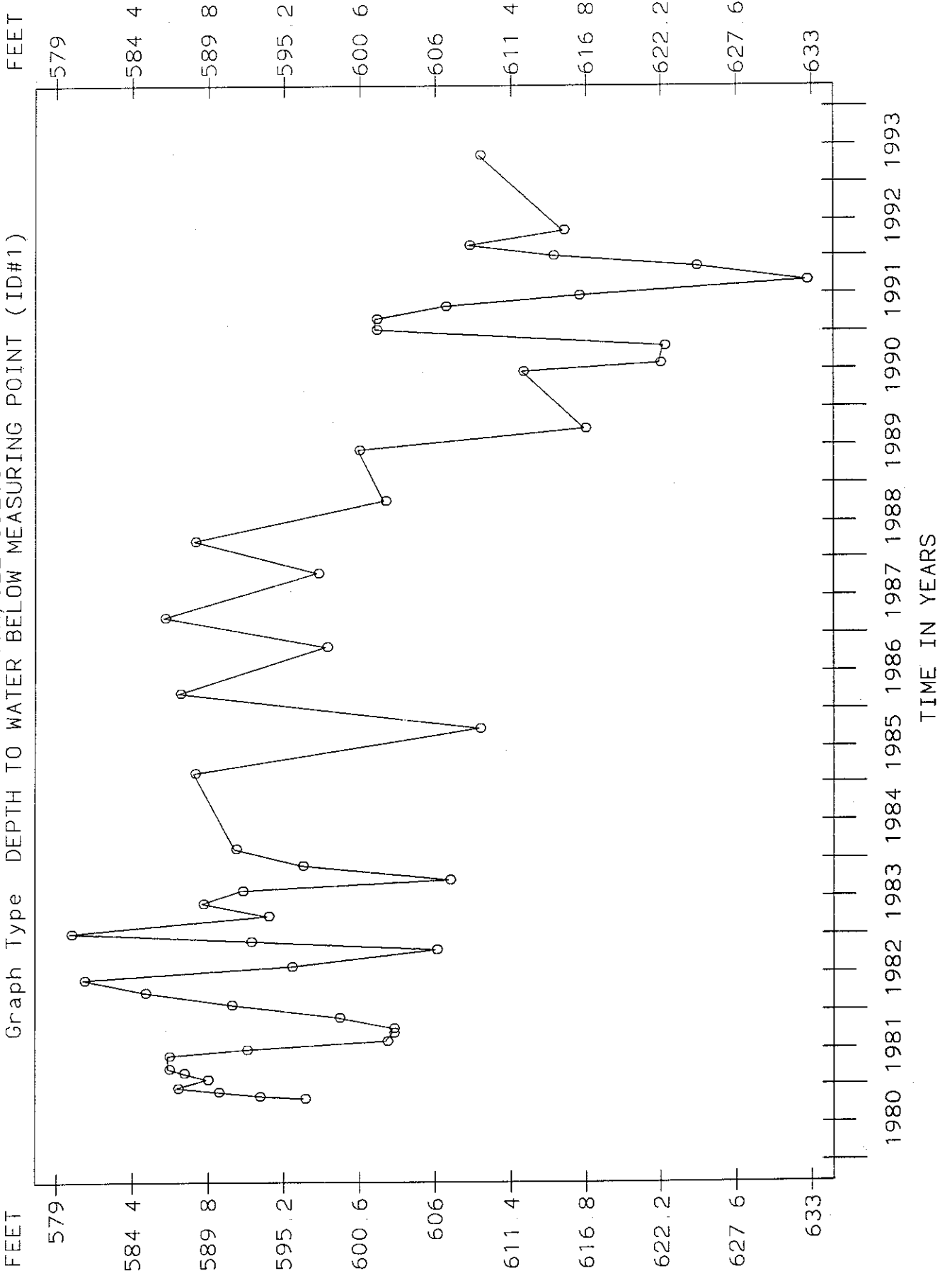
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



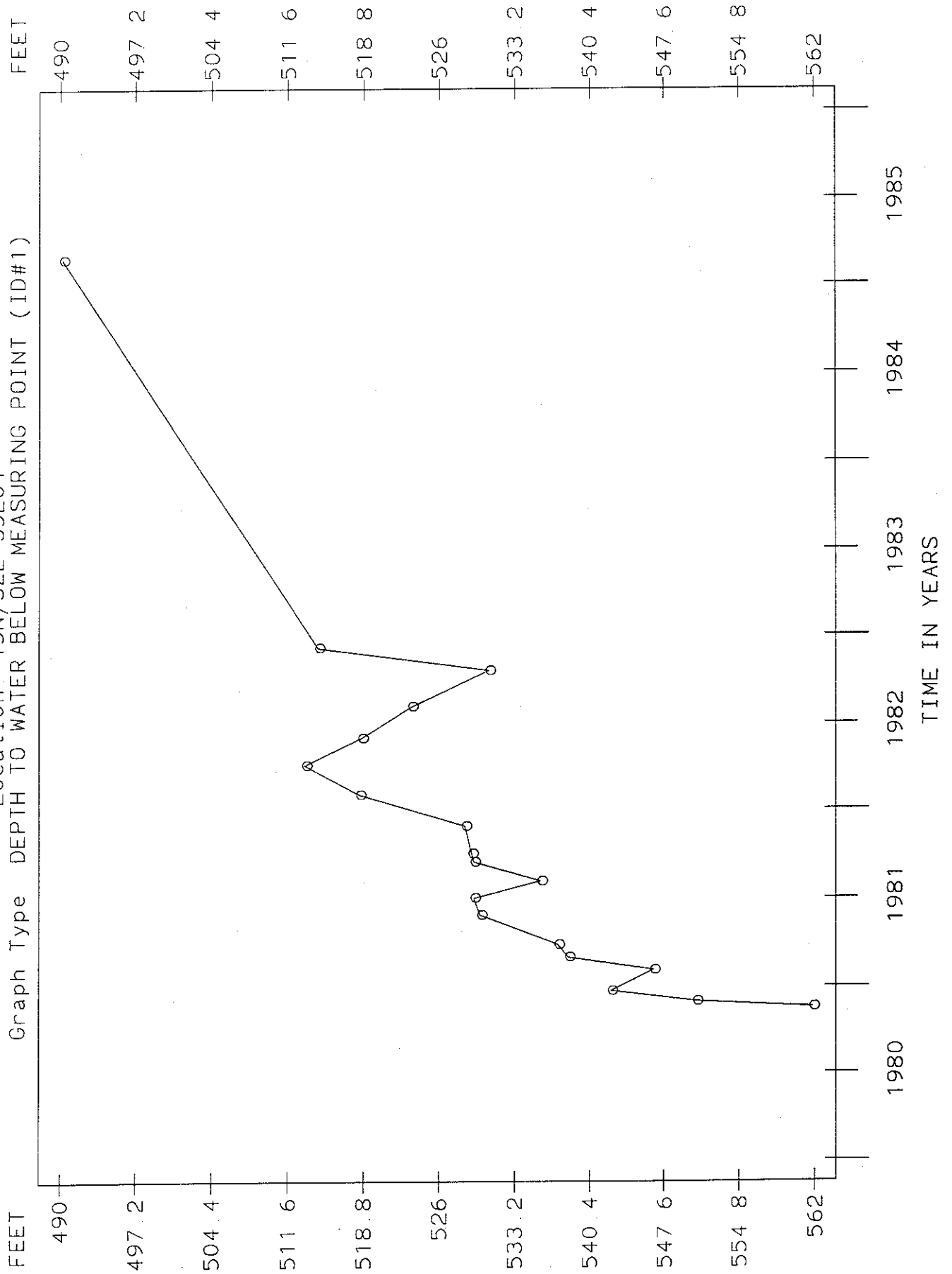
HYDROGRAPH FOR WELL AAE552 E02
 Location 15N/32E-35E02



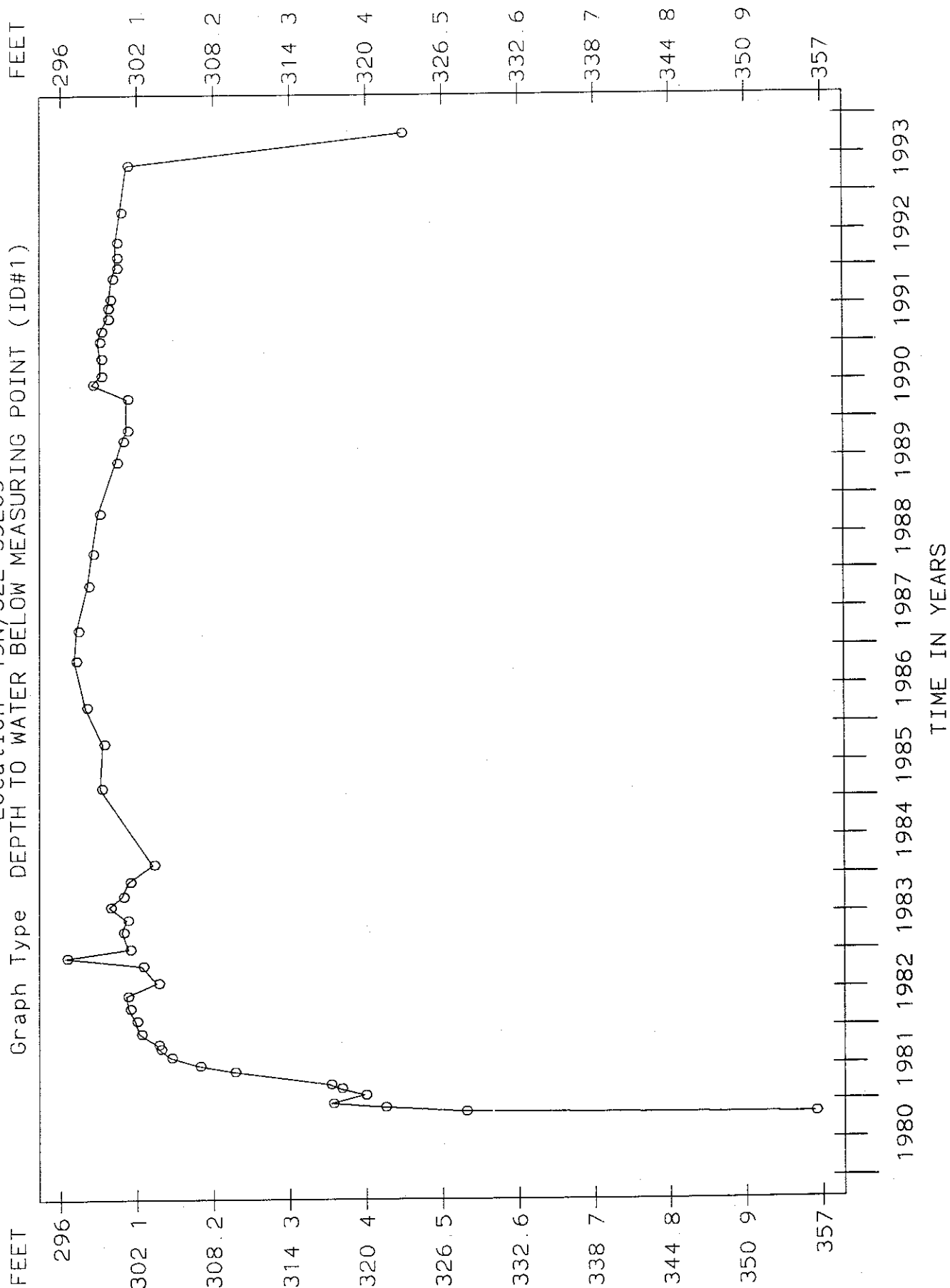
HYDROGRAPH FOR WELL AAE552 E03
 Location 15N/32E-35E03



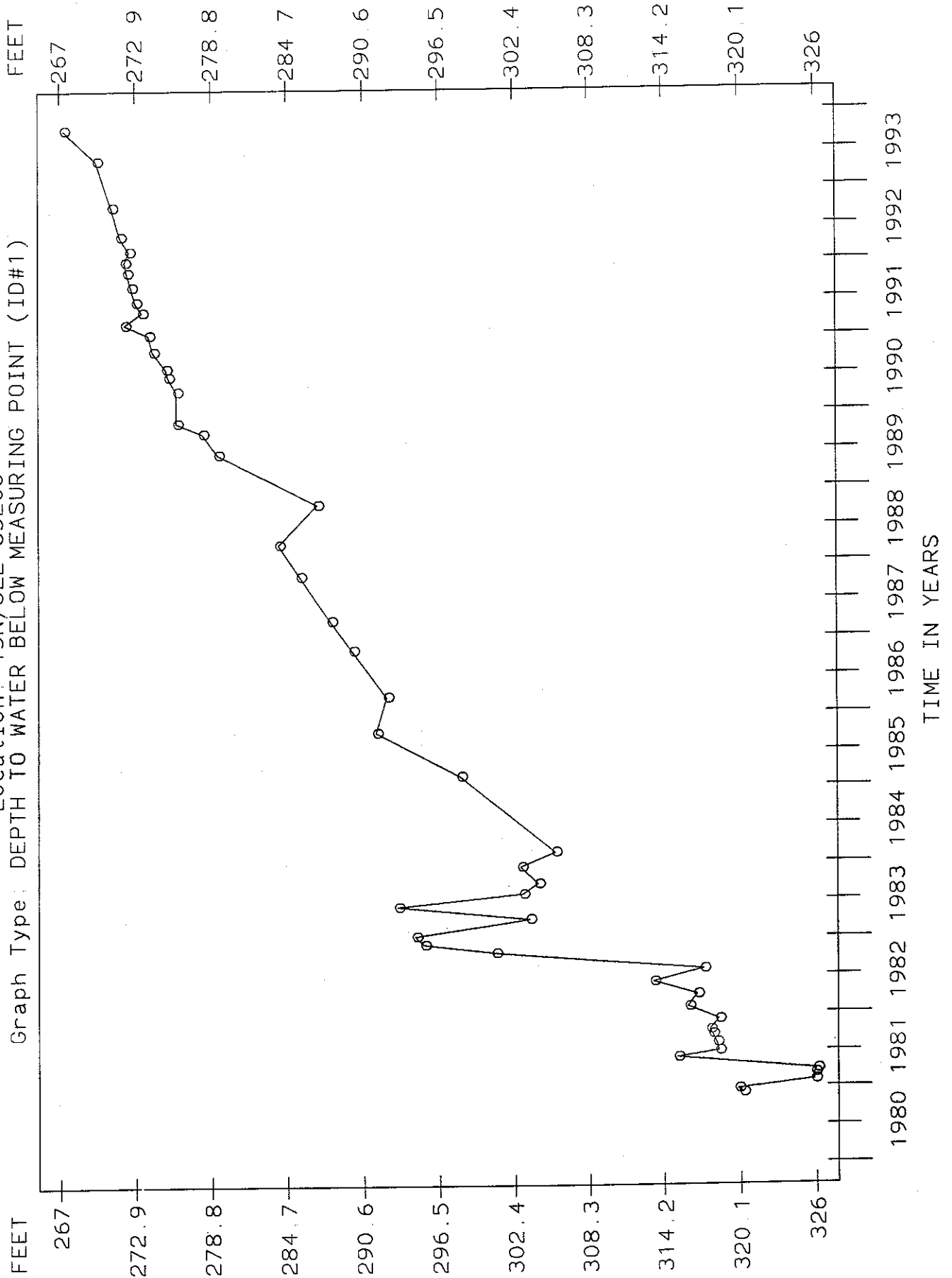
HYDROGRAPH FOR WELL AAE552 E04
Location: 15N/32E-35E04



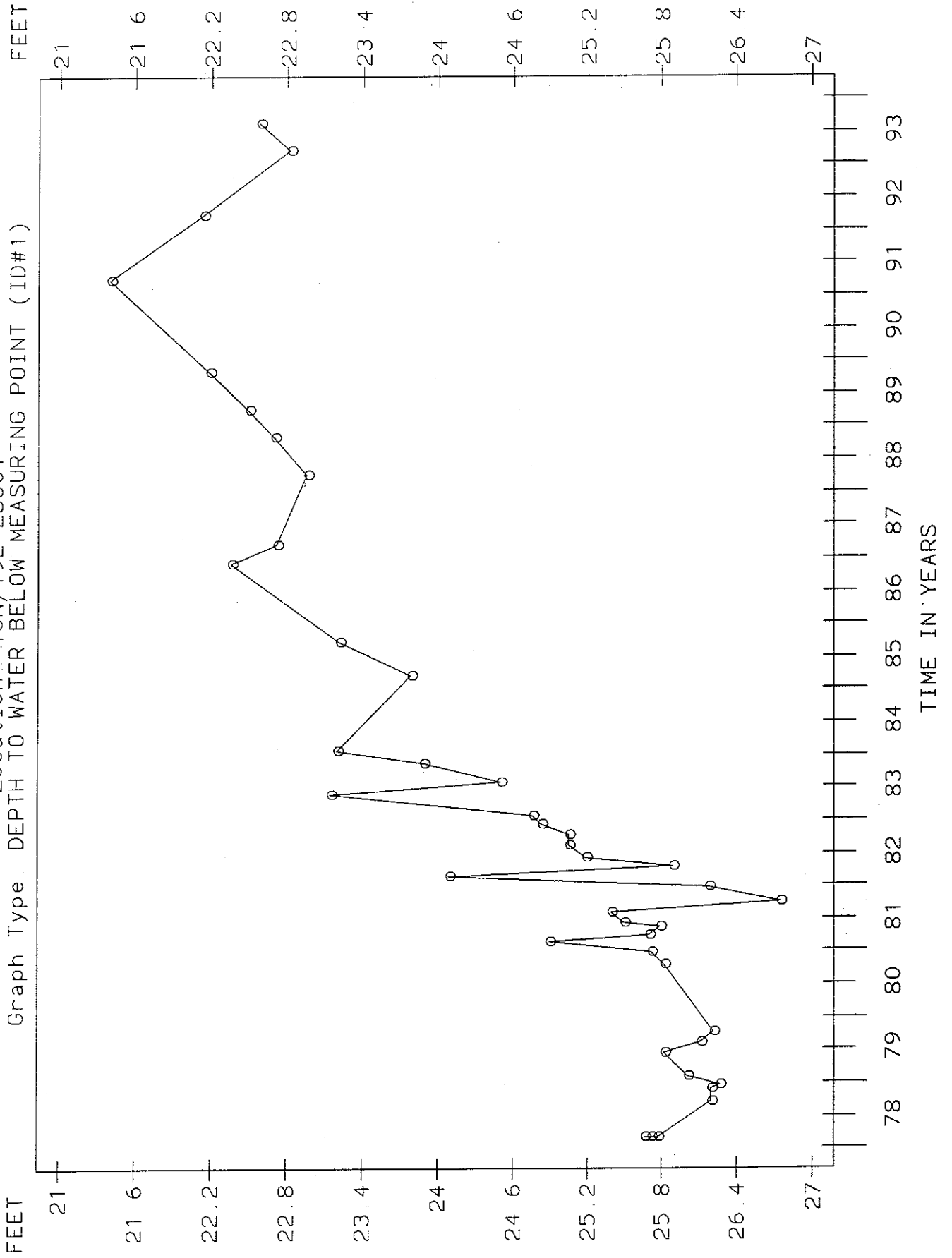
HYDROGRAPH FOR WELL AAE552 E05
 Location 15N/32E-35E05



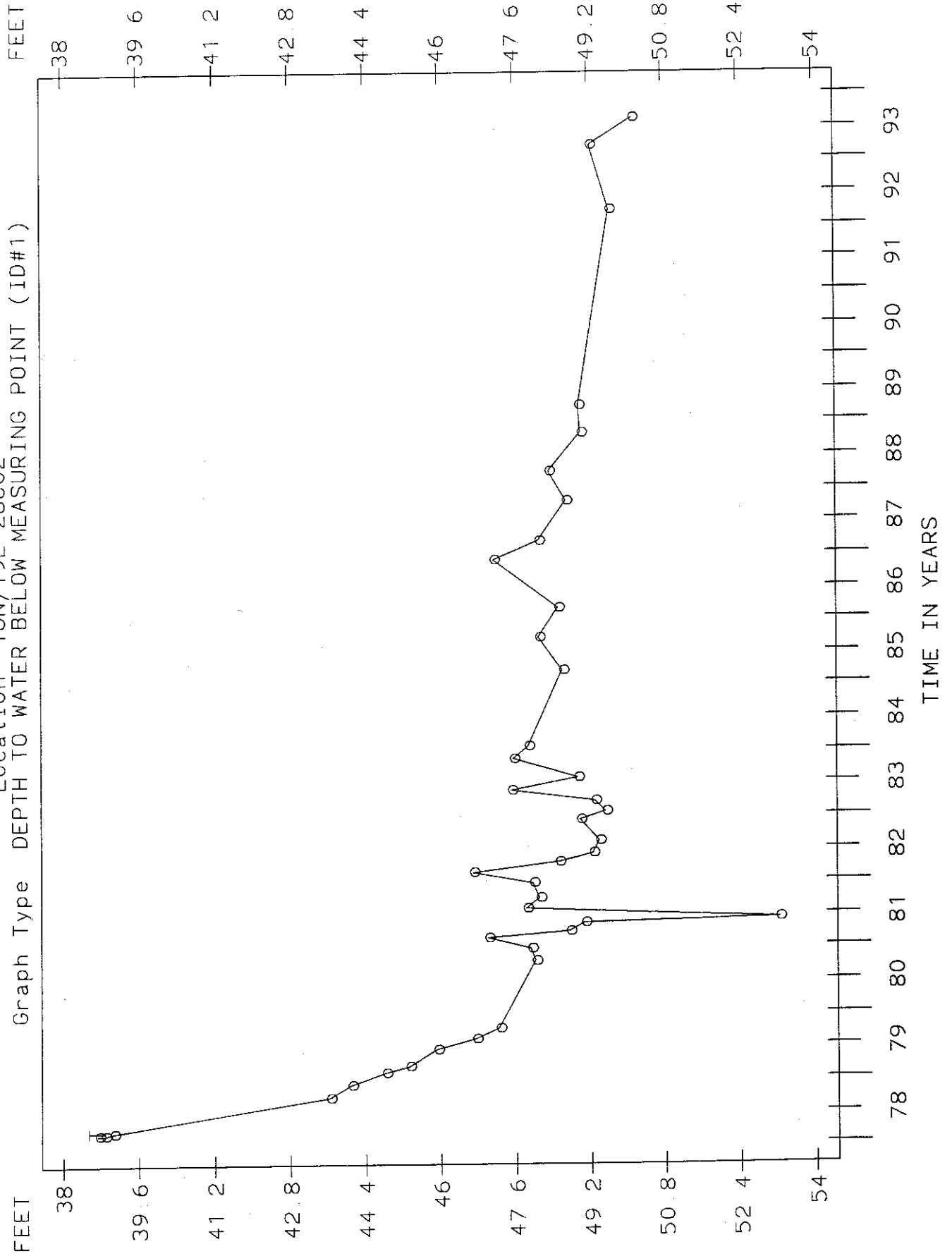
HYDROGRAPH FOR WELL AAE552 E06
 Location: 15N/32E-35E06



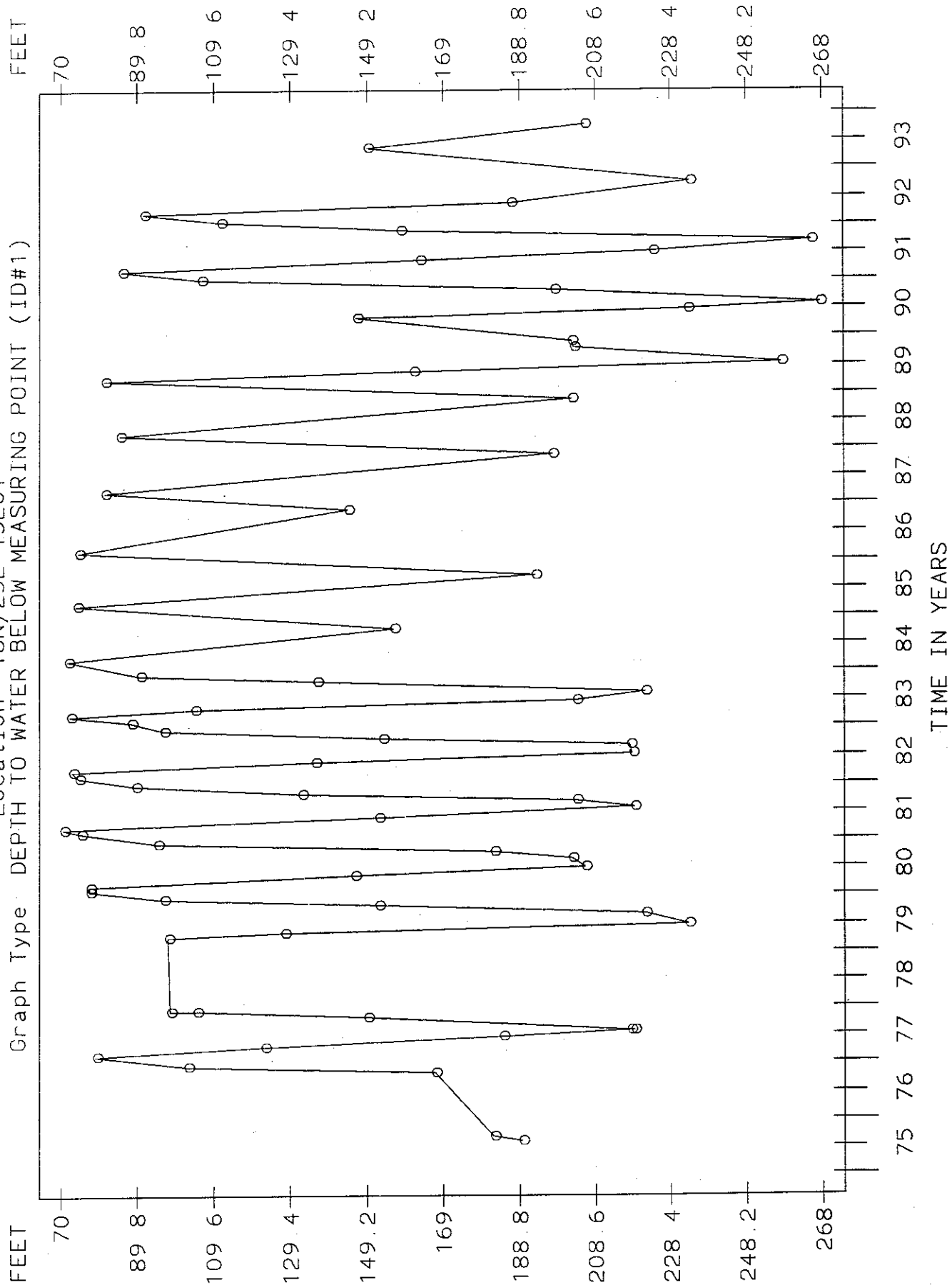
HYDROGRAPH FOR WELL AAE571 C01
 Location 16N/19E-28C01



HYDROGRAPH FOR WELL AAE571 C02
 Location 16N/19E-28C02



HYDROGRAPH FOR WELL AAE554 E01
 Location 18N/25E-15E01



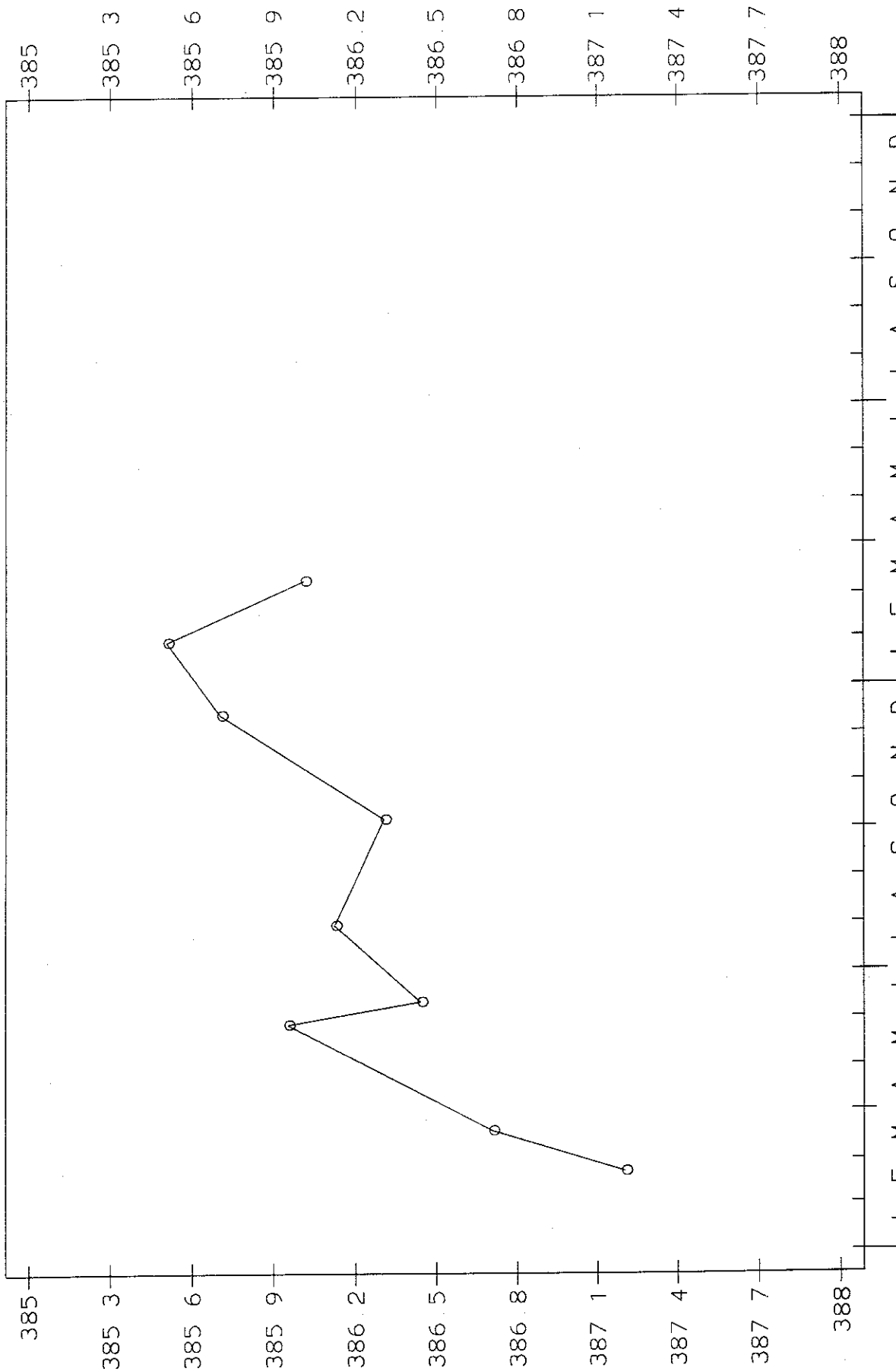
HYDROGRAPH FOR WELL AAE554 E01D2

Location: 18N/25E-15E01D2

Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

FEET

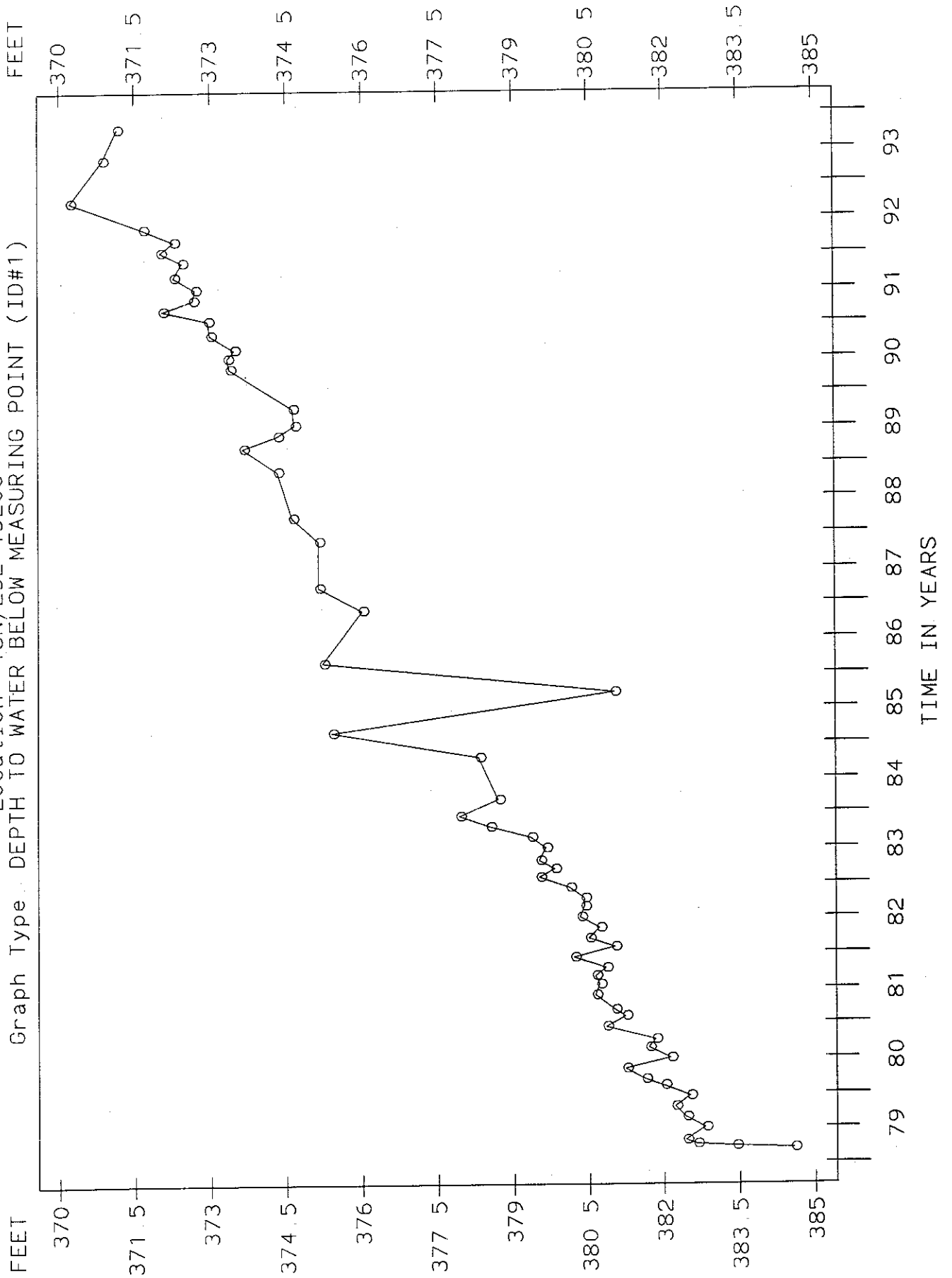


1979

1978

TIME IN MONTHS

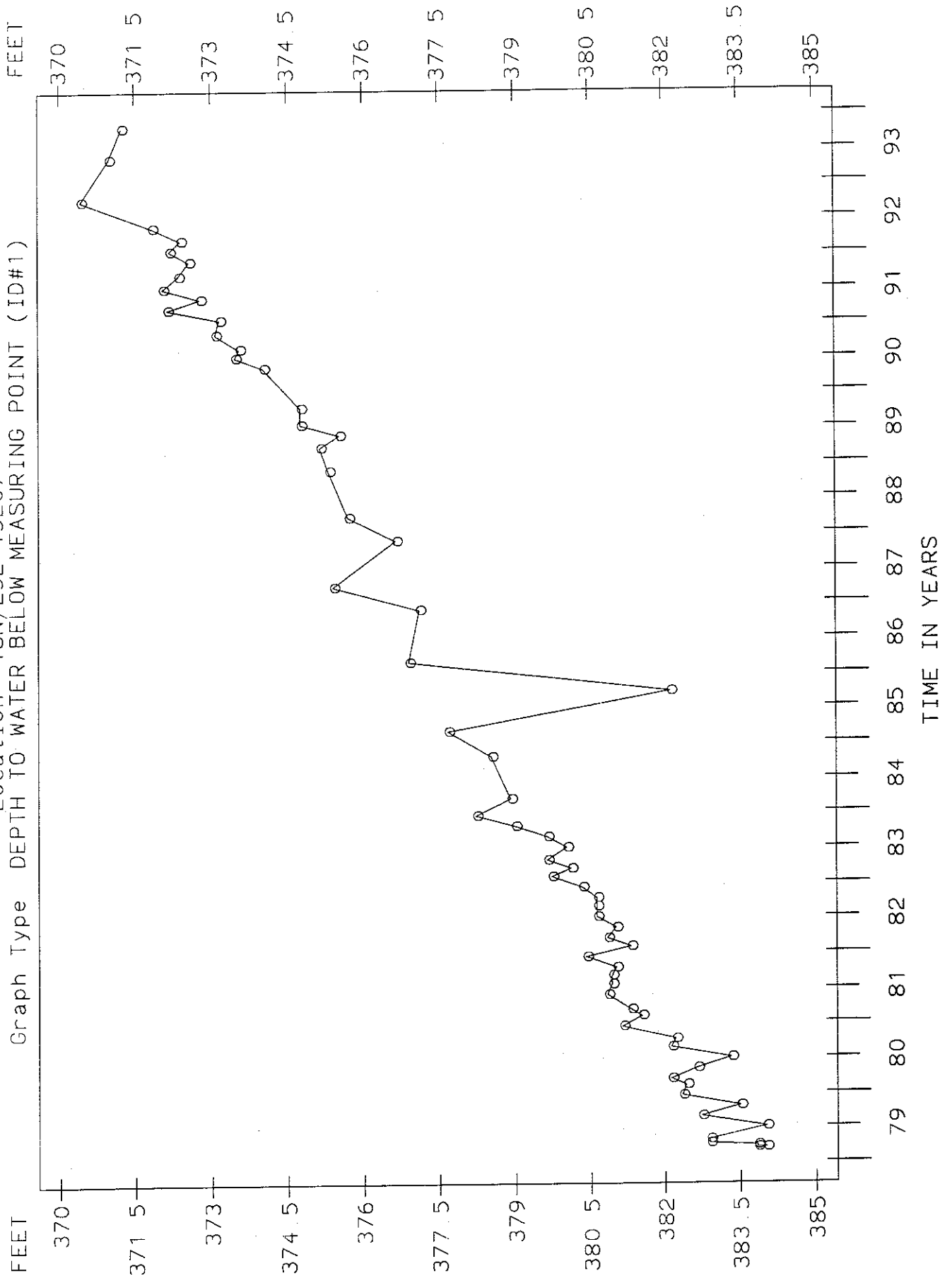
HYDROGRAPH FOR WELL AAE554 E06
Location 18N/25E-15E06



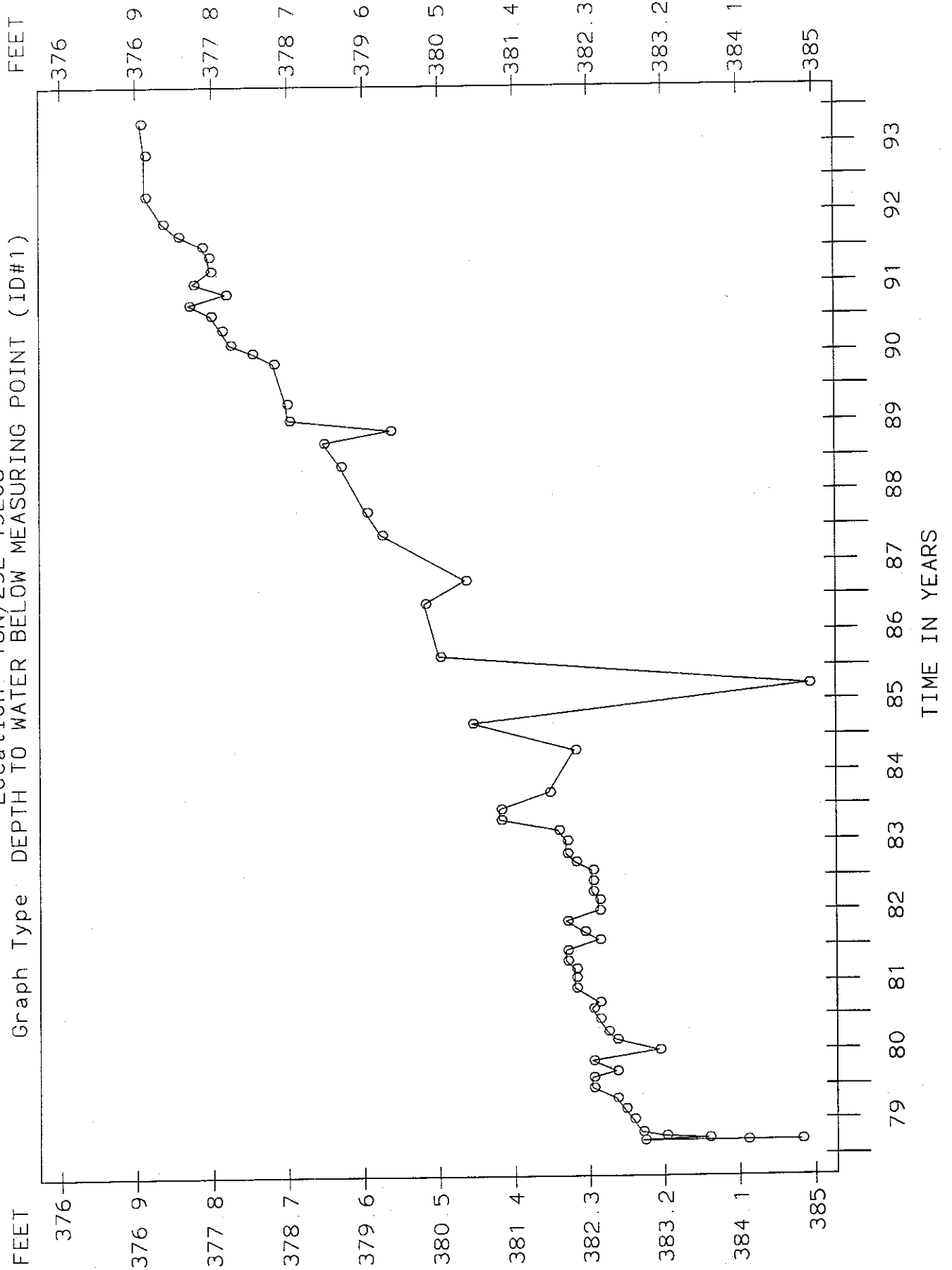
HYDROGRAPH FOR WELL AAE554 E07

Location 18N/25E-15E07

Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE554 E08
Location 18N/25E-15E08



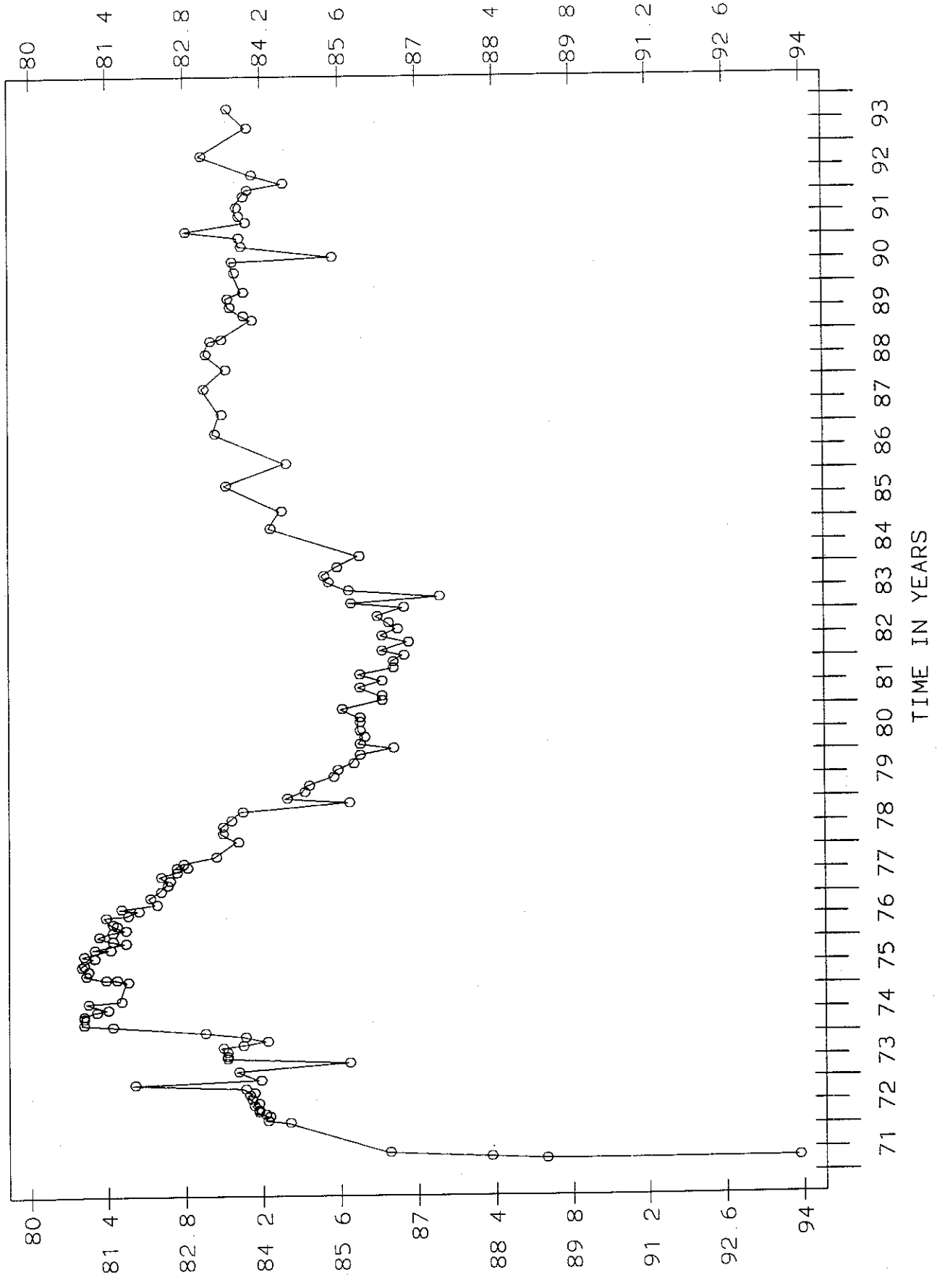
HYDROGRAPH FOR WELL AAE563 E01

Location 20N/33E-16E01

Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)

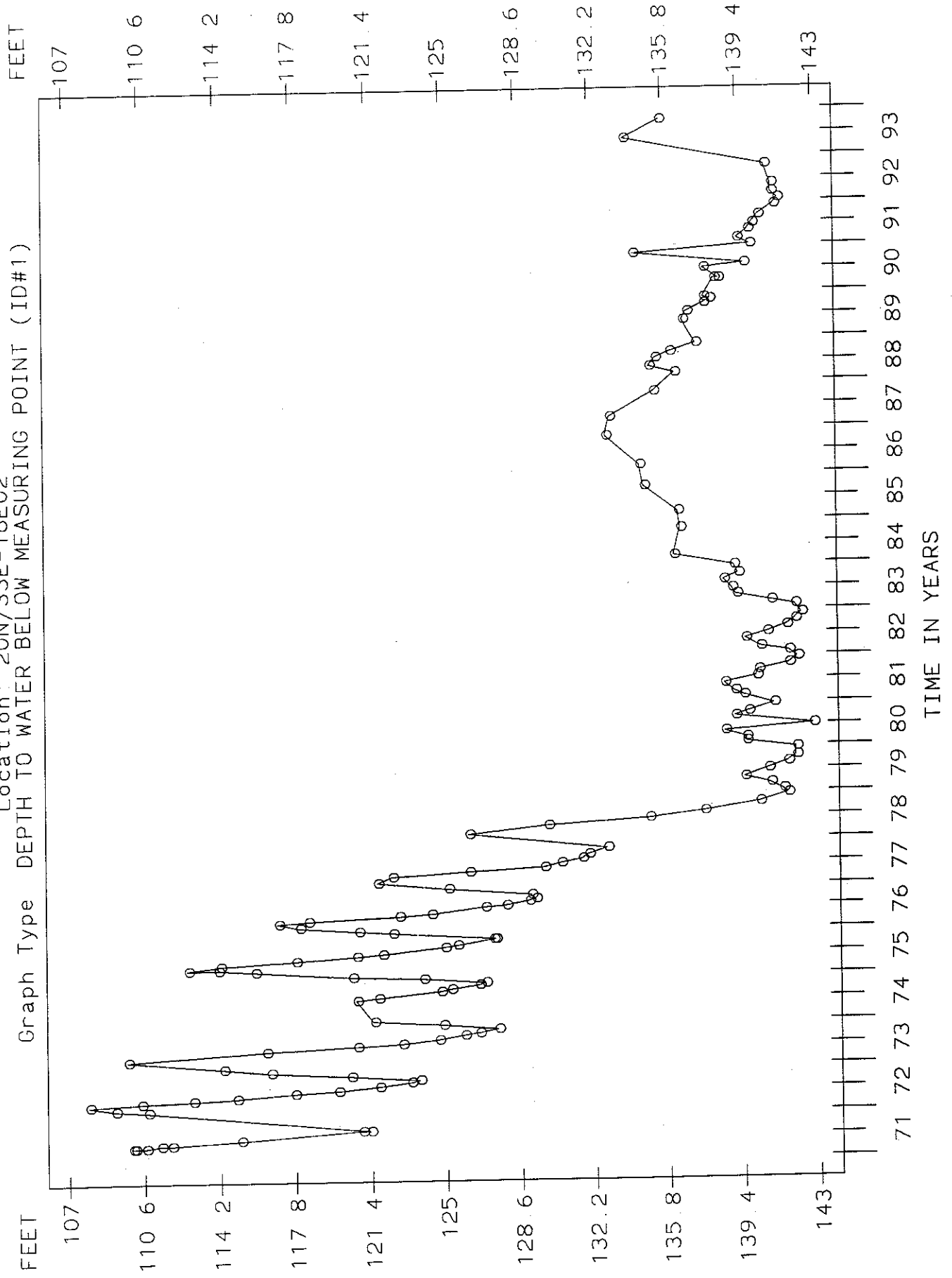
FEET

FEET

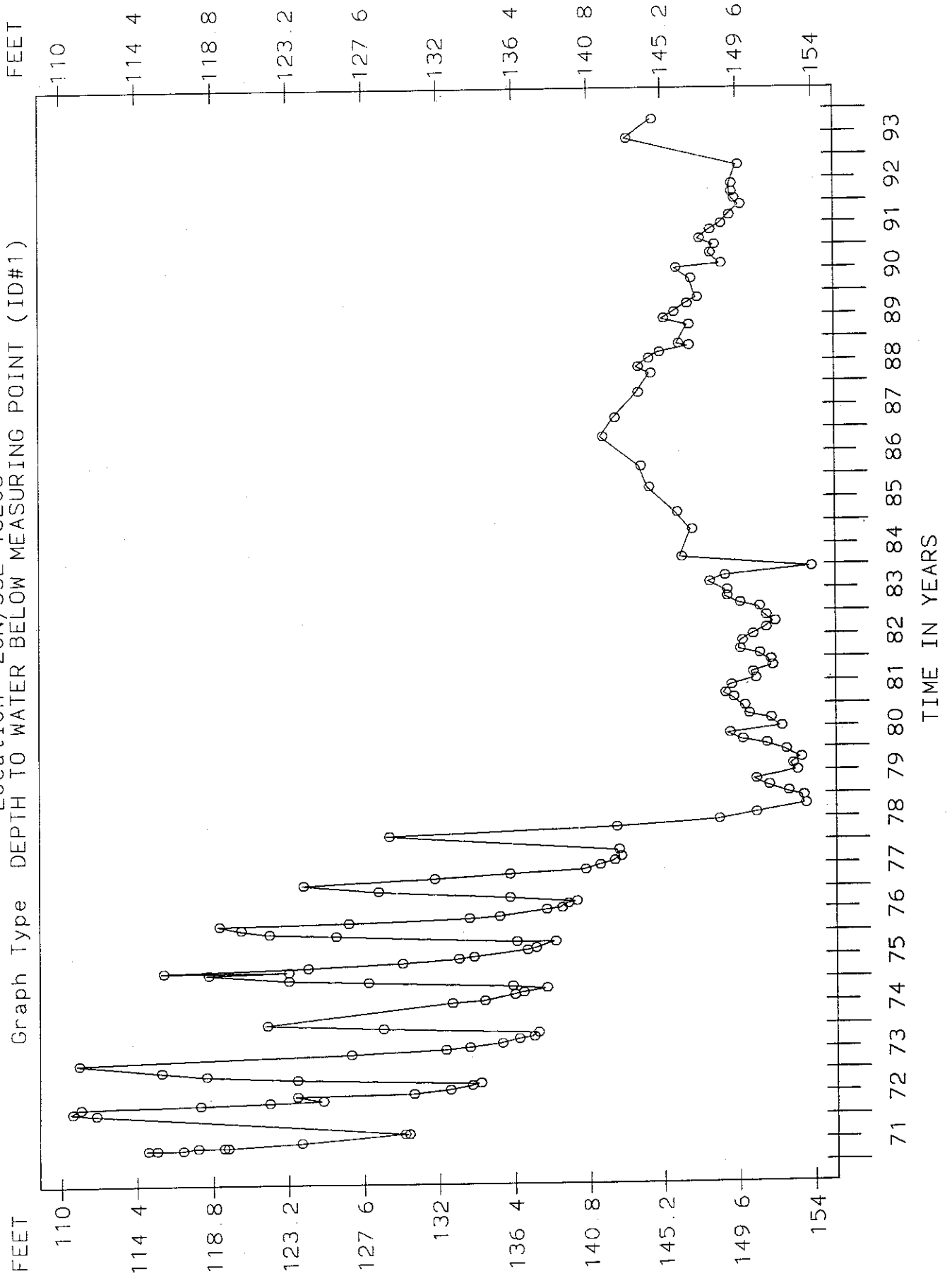


HYDROGRAPH FOR WELL AAE563 E02

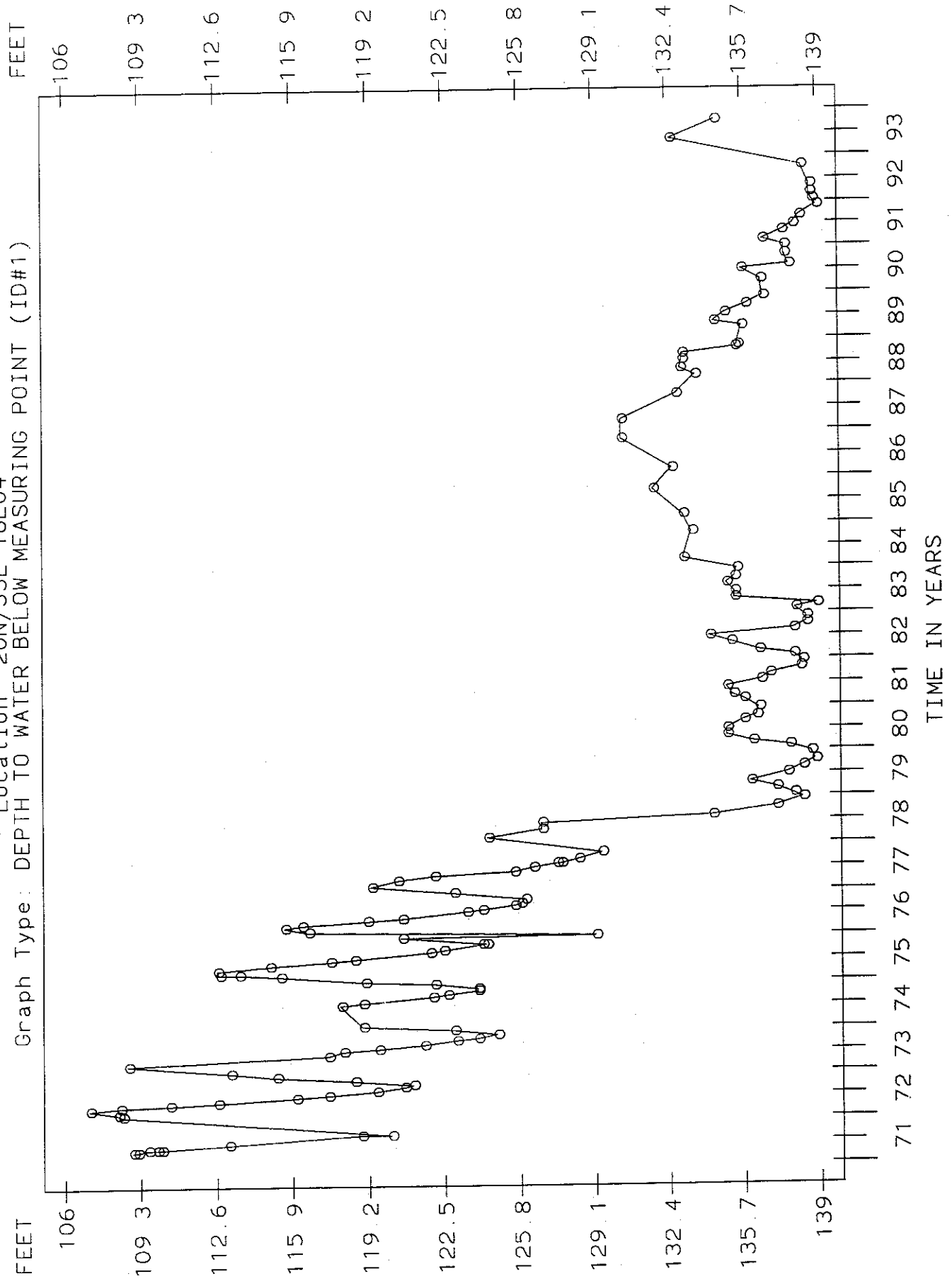
Location: 20N/33E-16E02



HYDROGRAPH FOR WELL AAE563 E03
 Location 20N/33E-16E03



HYDROGRAPH FOR WELL AAE563 E04
 Location 20N/33E-16E04



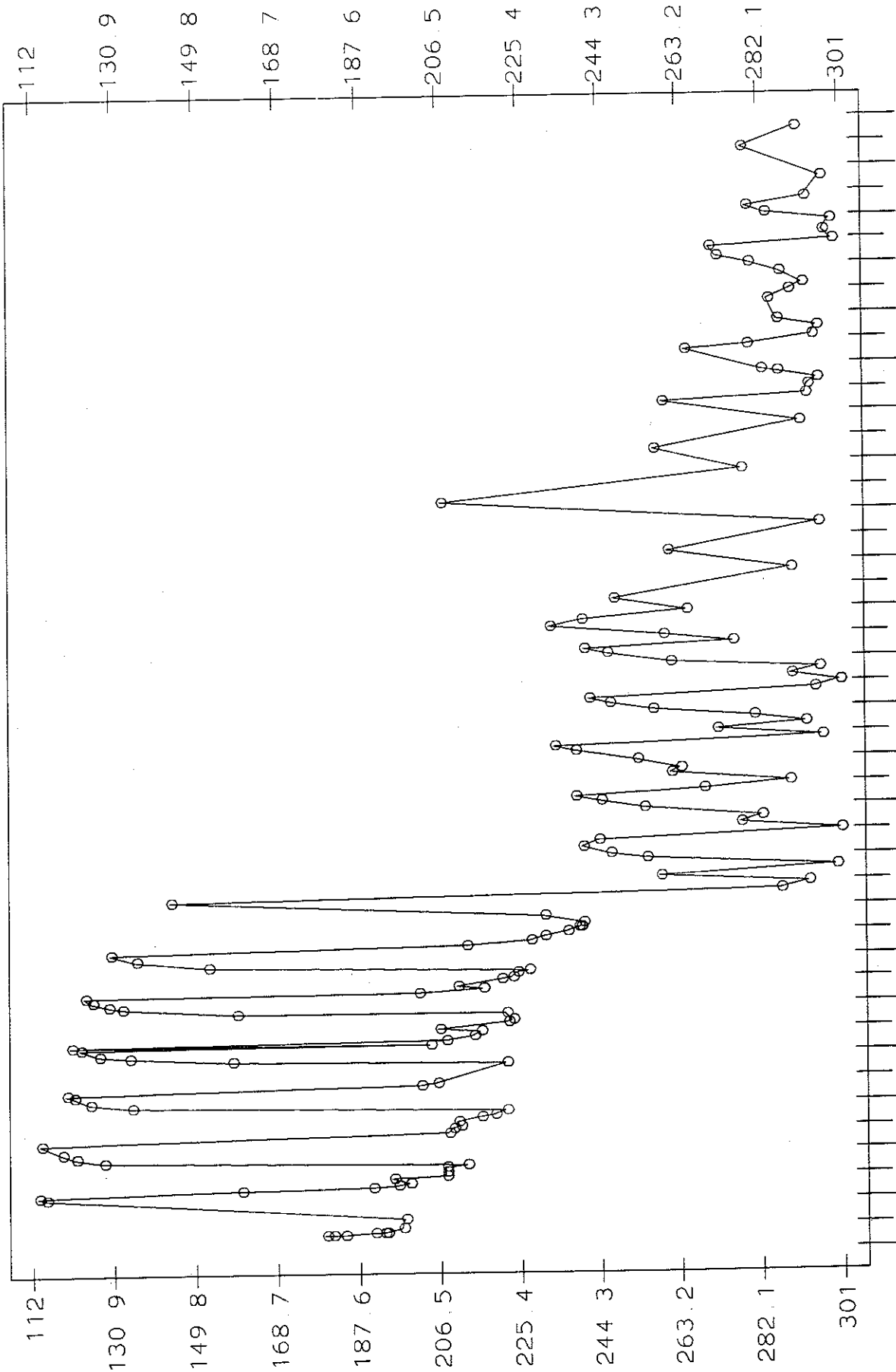
HYDROGRAPH FOR WELL AAE563 E05

Location 20N/33E-16E05

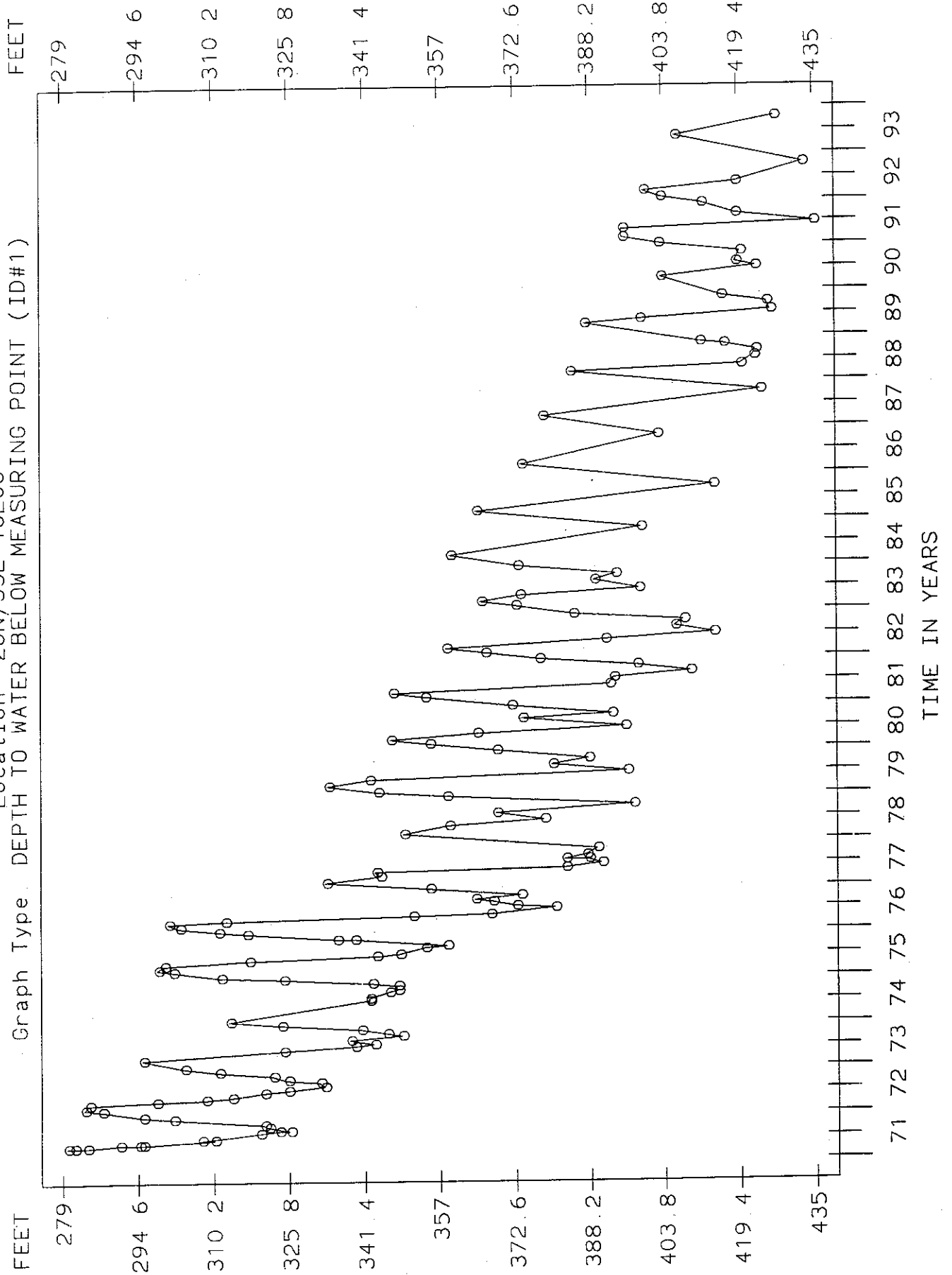
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

FEET



HYDROGRAPH FOR WELL AAE563 E06
 Location 20N/33E-16E06



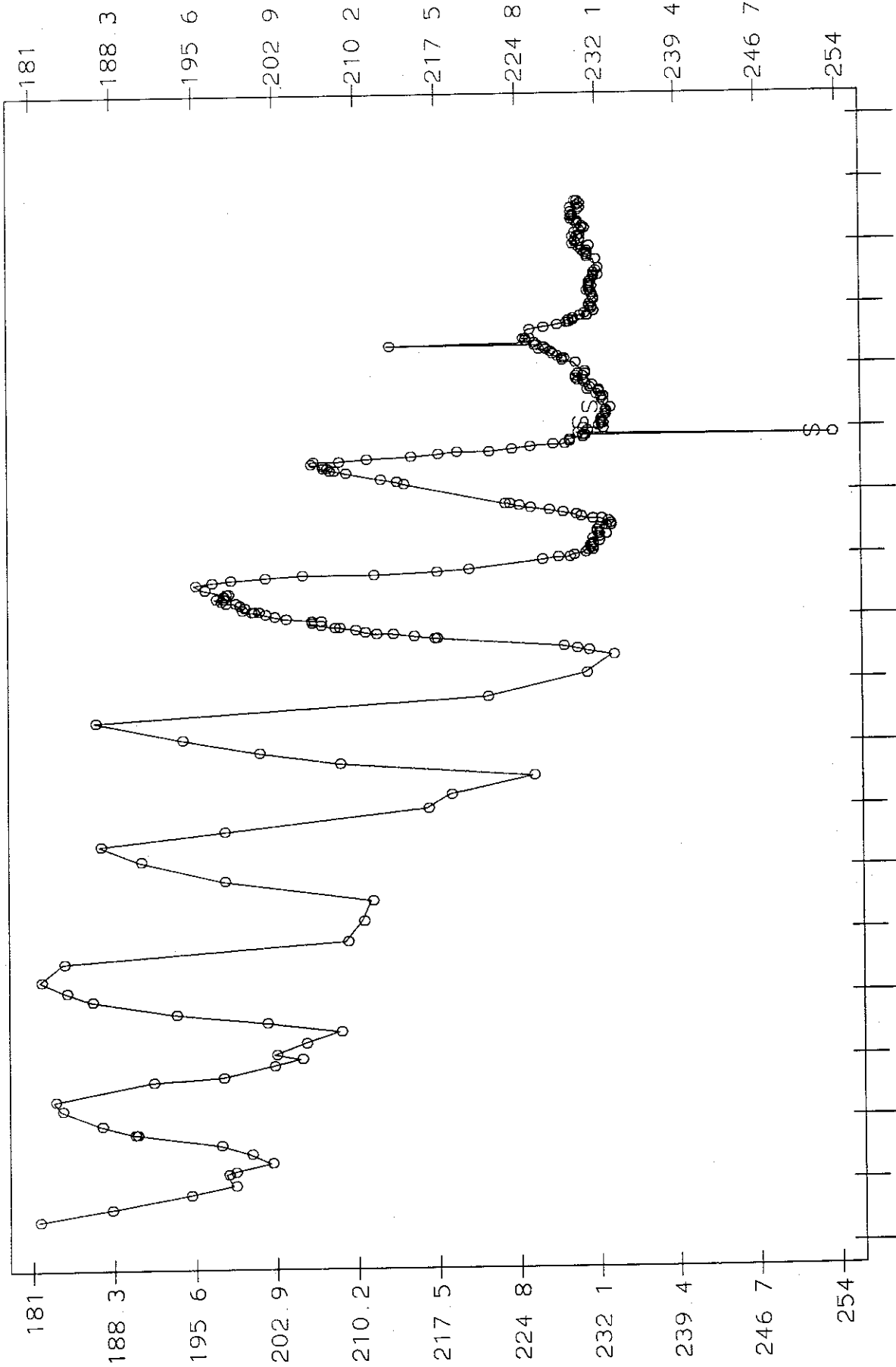
HYDROGRAPH FOR WELL AAE564 M01

Location 21N/31E-10M01

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

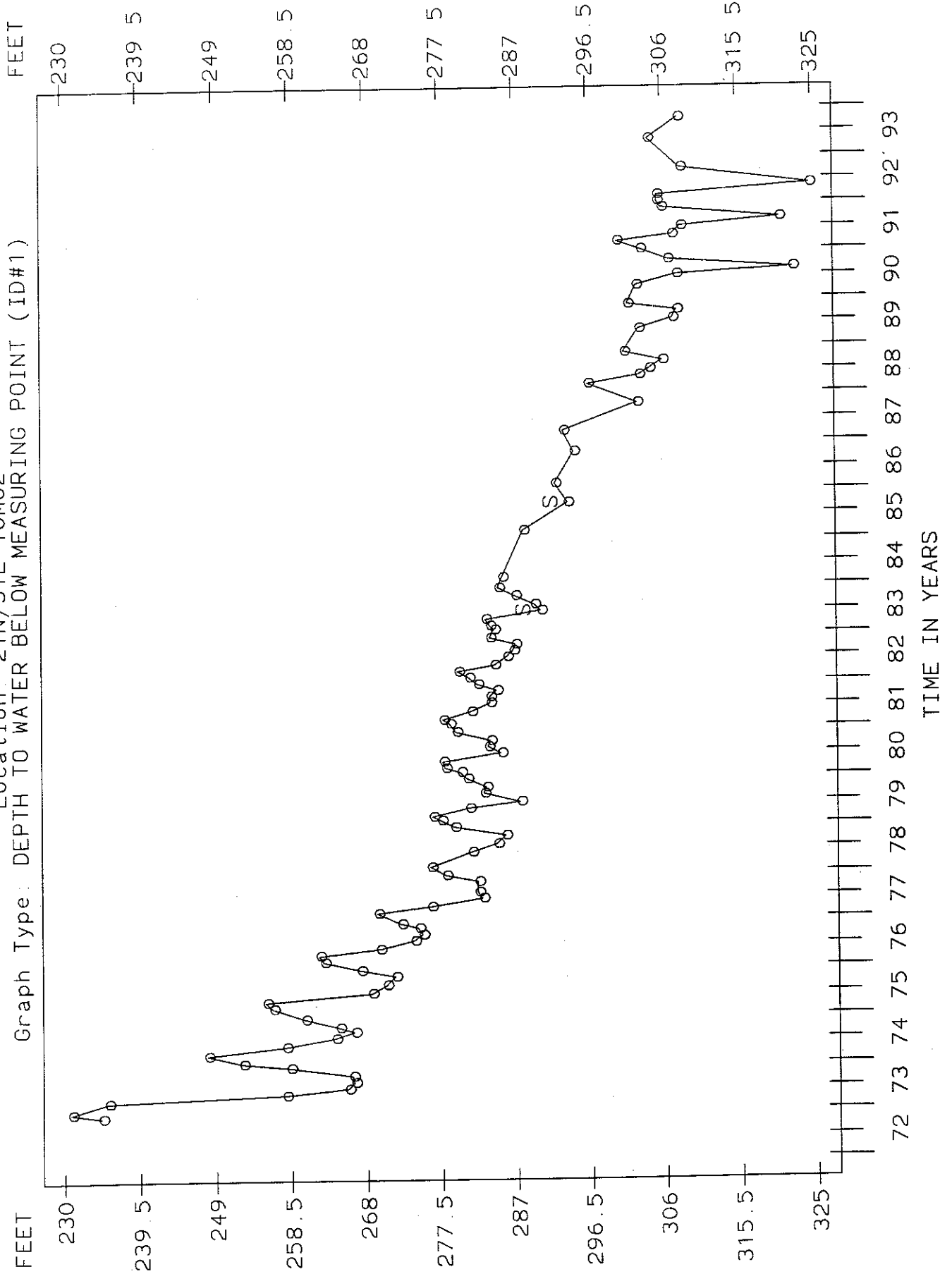
FEET



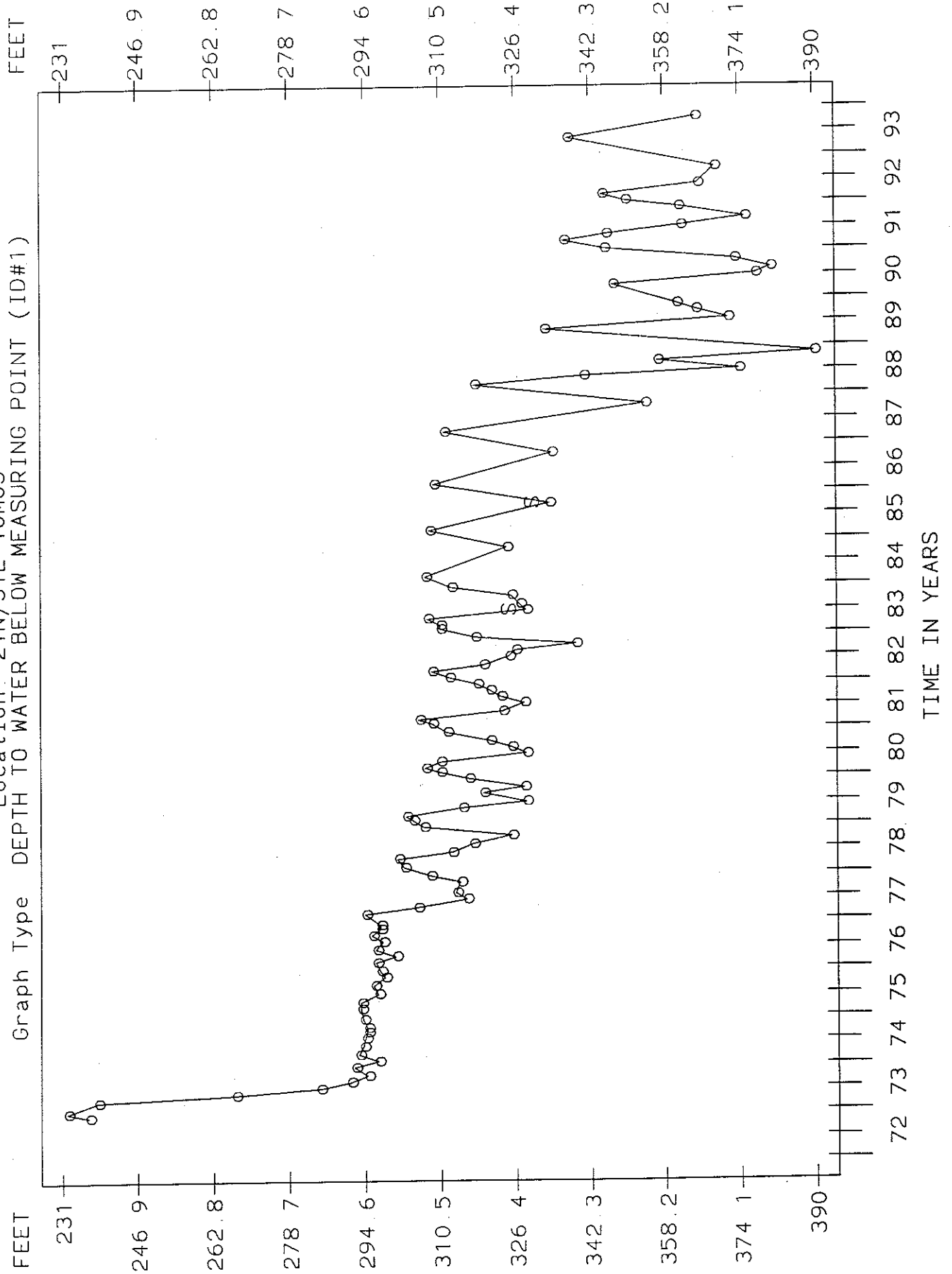
HYDROGRAPH FOR WELL AAE564 M02

Location: 21N/31E-10M02

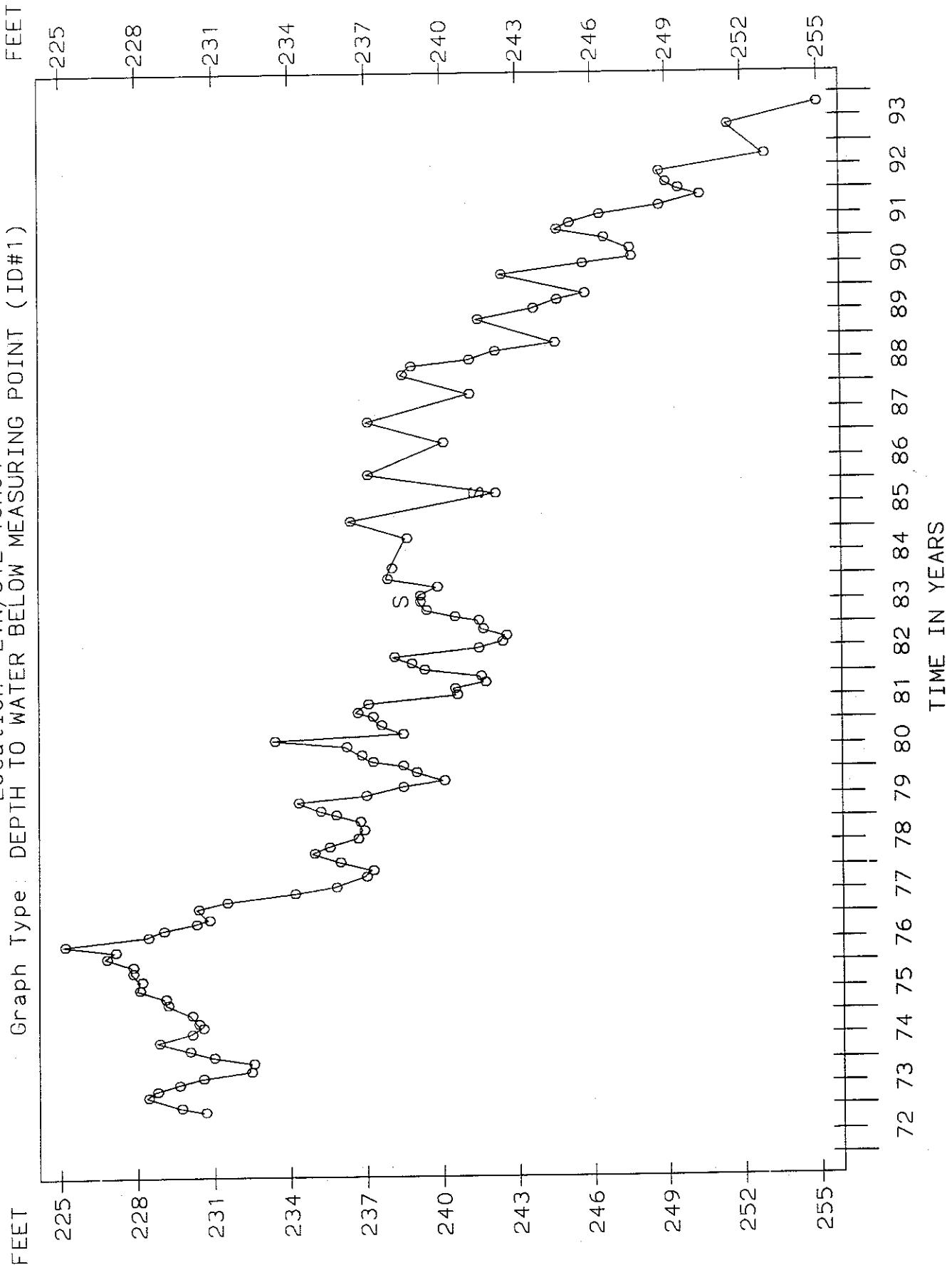
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



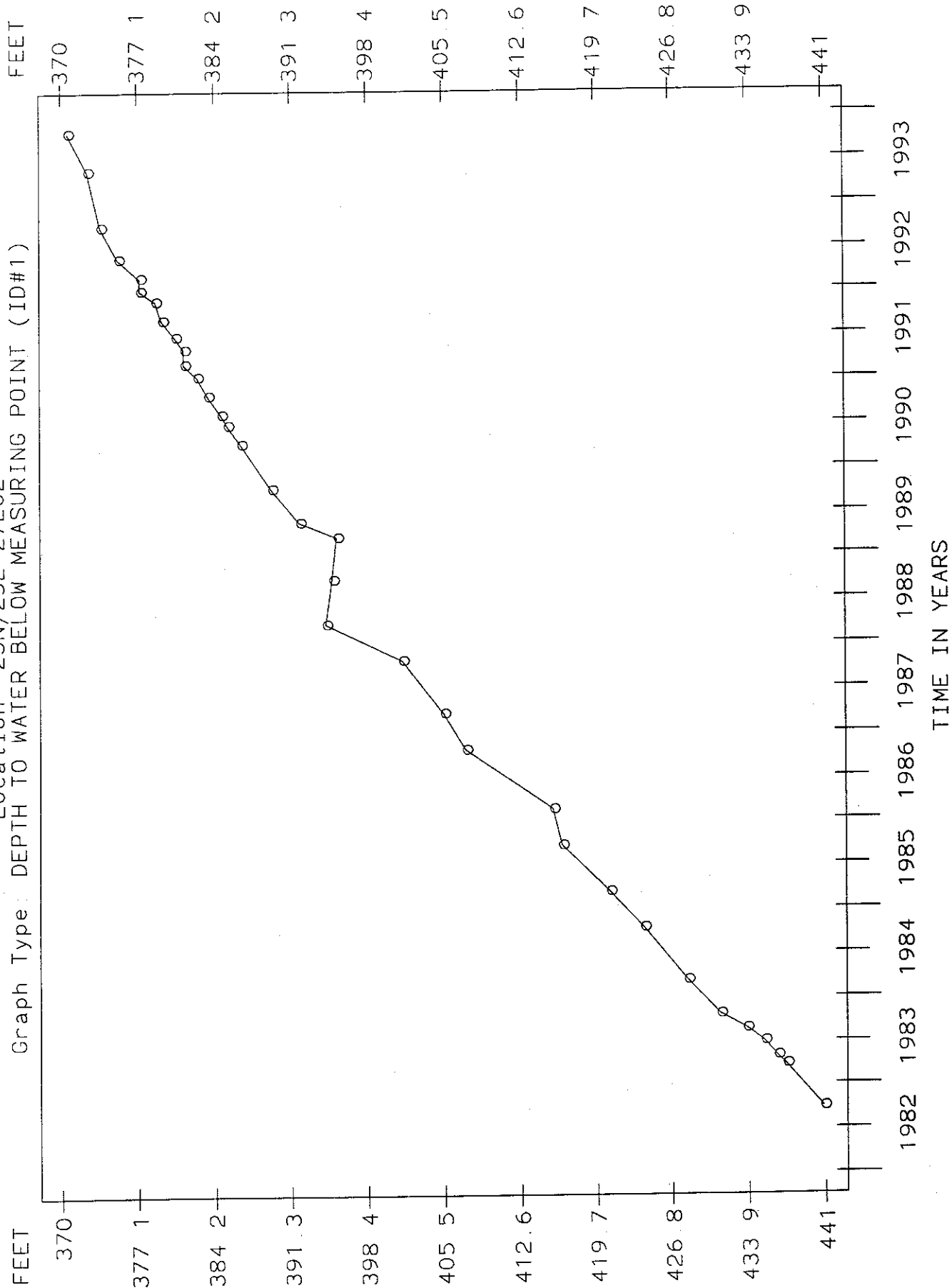
HYDROGRAPH FOR WELL AAE564 M03
 Location: 21N/31E-10M03



HYDROGRAPH FOR WELL AAE564 M04
 Location 21N/31E-10M04



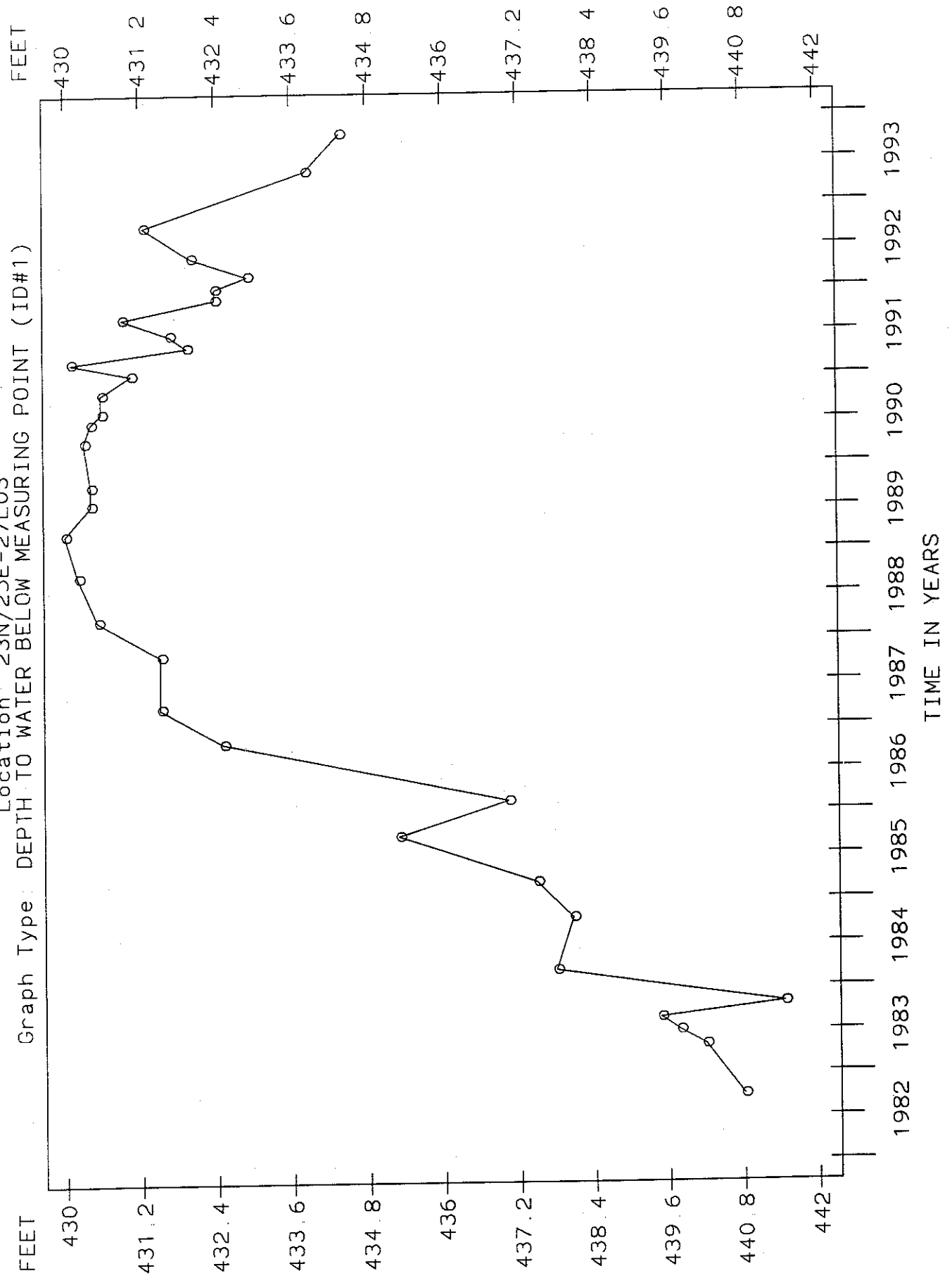
HYDROGRAPH FOR WELL AAE555 L02
Location 23N/25E-27L02



HYDROGRAPH FOR WELL AAE555 L03

Location: 23N/25E-27L03

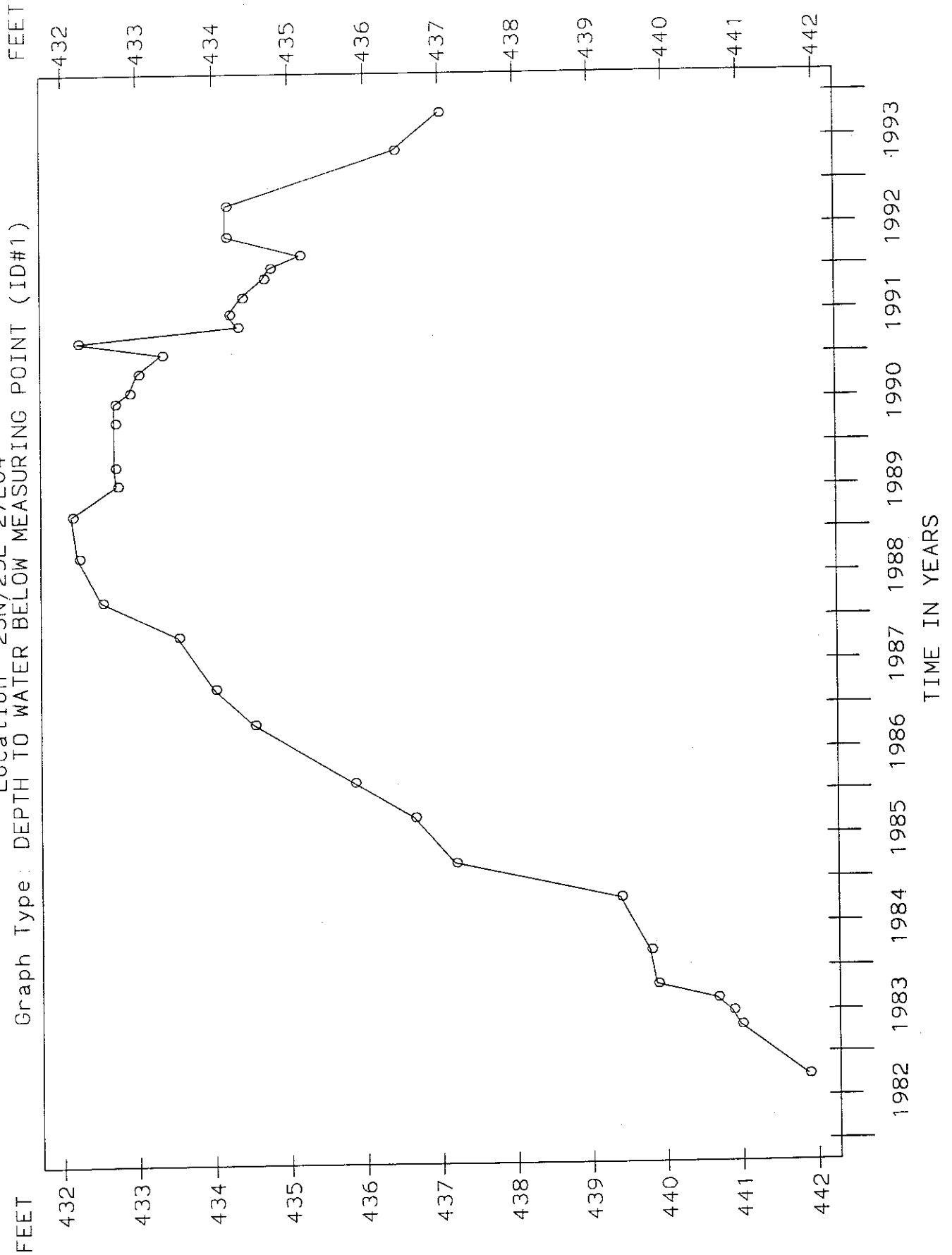
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



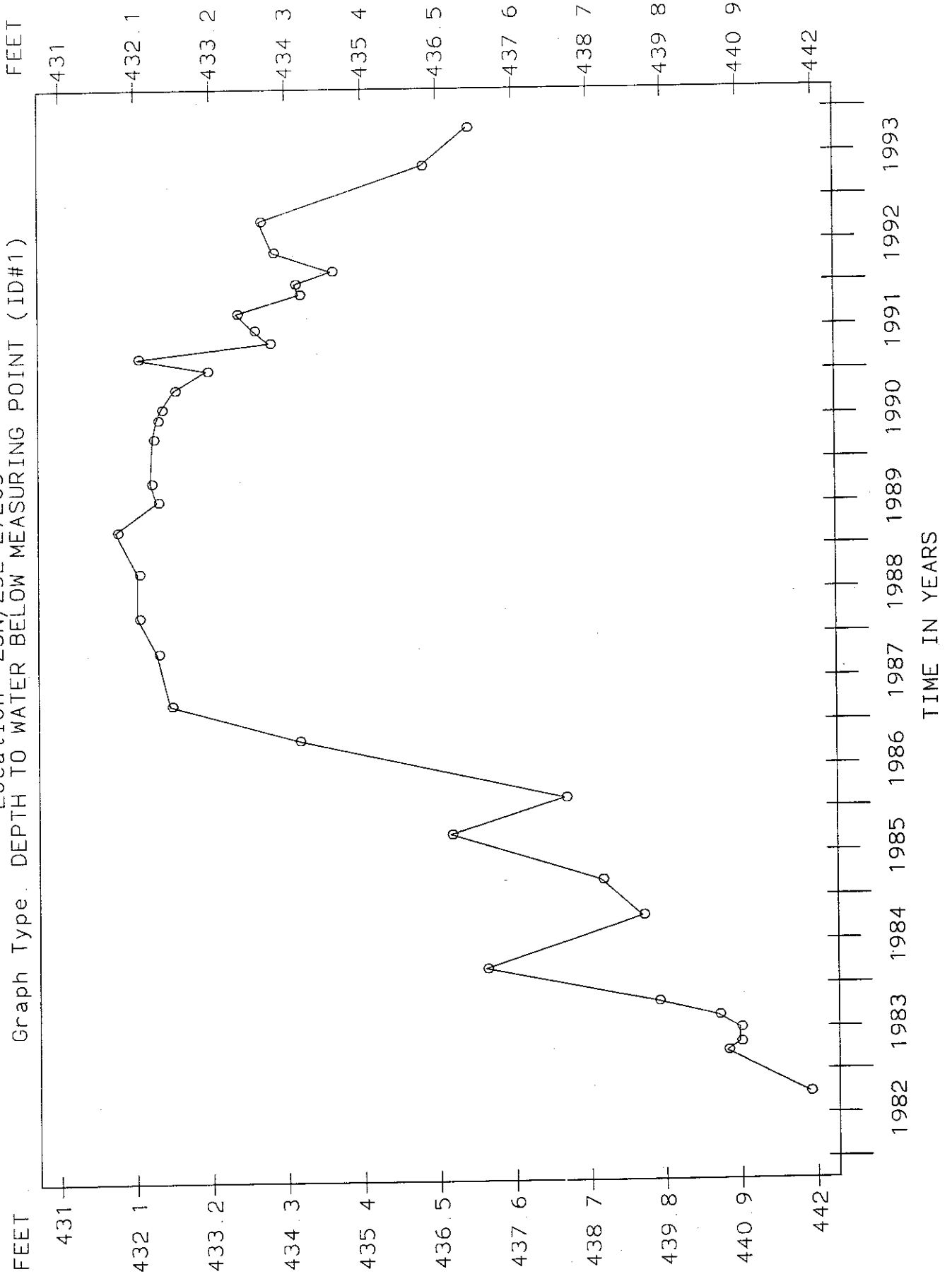
HYDROGRAPH FOR WELL AAE555 L04

Location 23N/25E-27L04

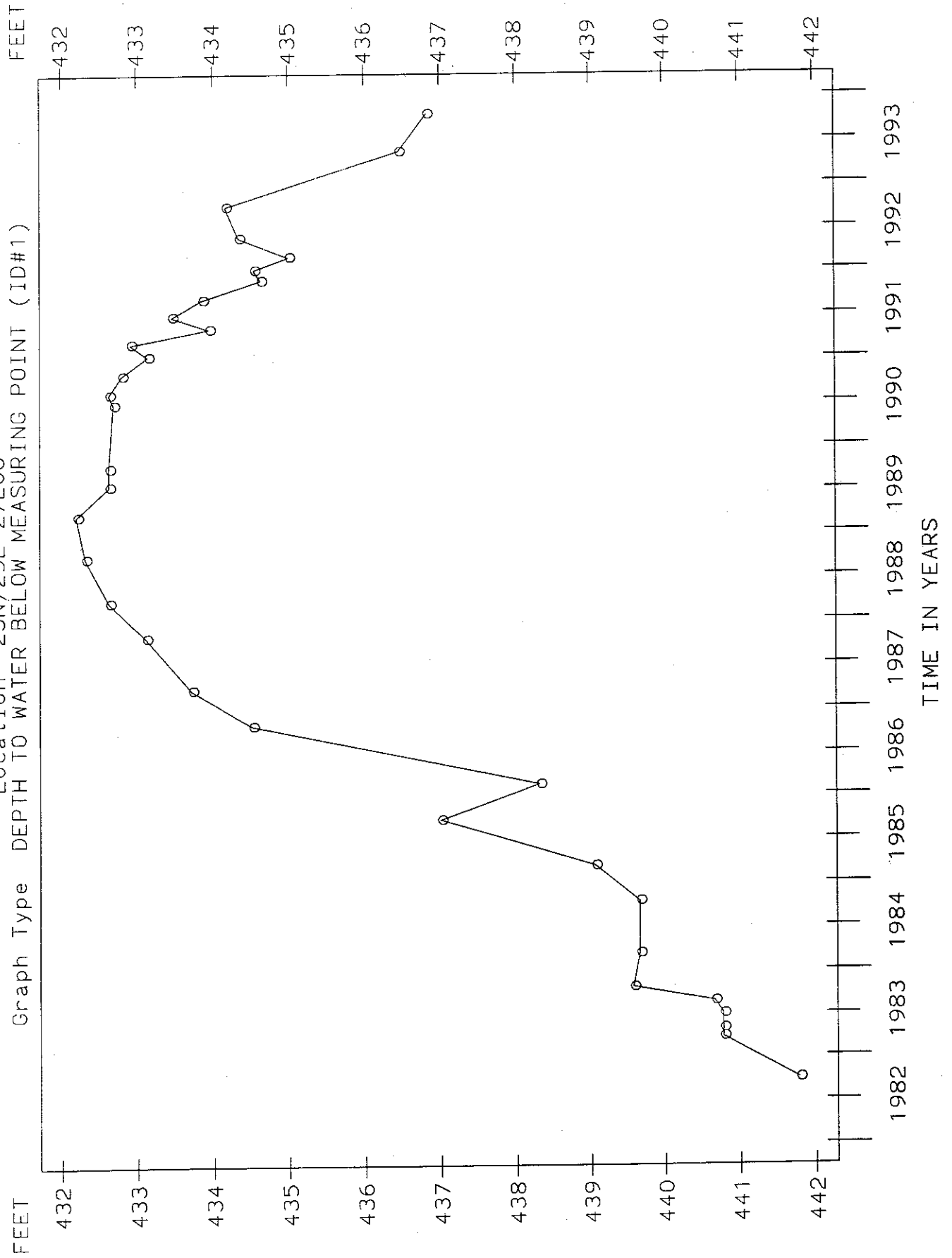
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE555 L05
 Location 23N/25E-27L05



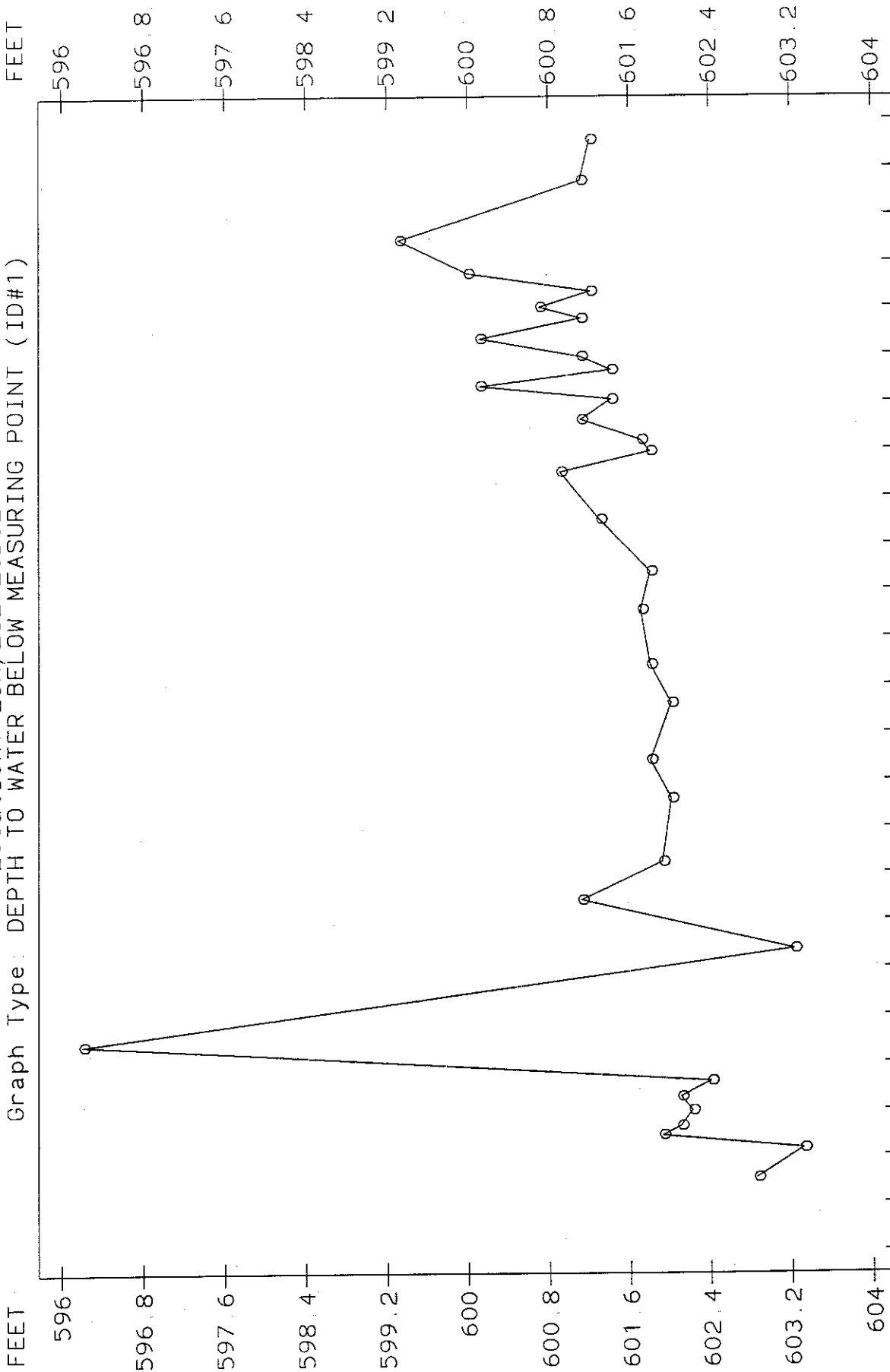
HYDROGRAPH FOR WELL AAE555 L06
 Location 23N/25E-27L06



HYDROGRAPH FOR WELL AAE556 D02

Location: 23N/26E-20D02

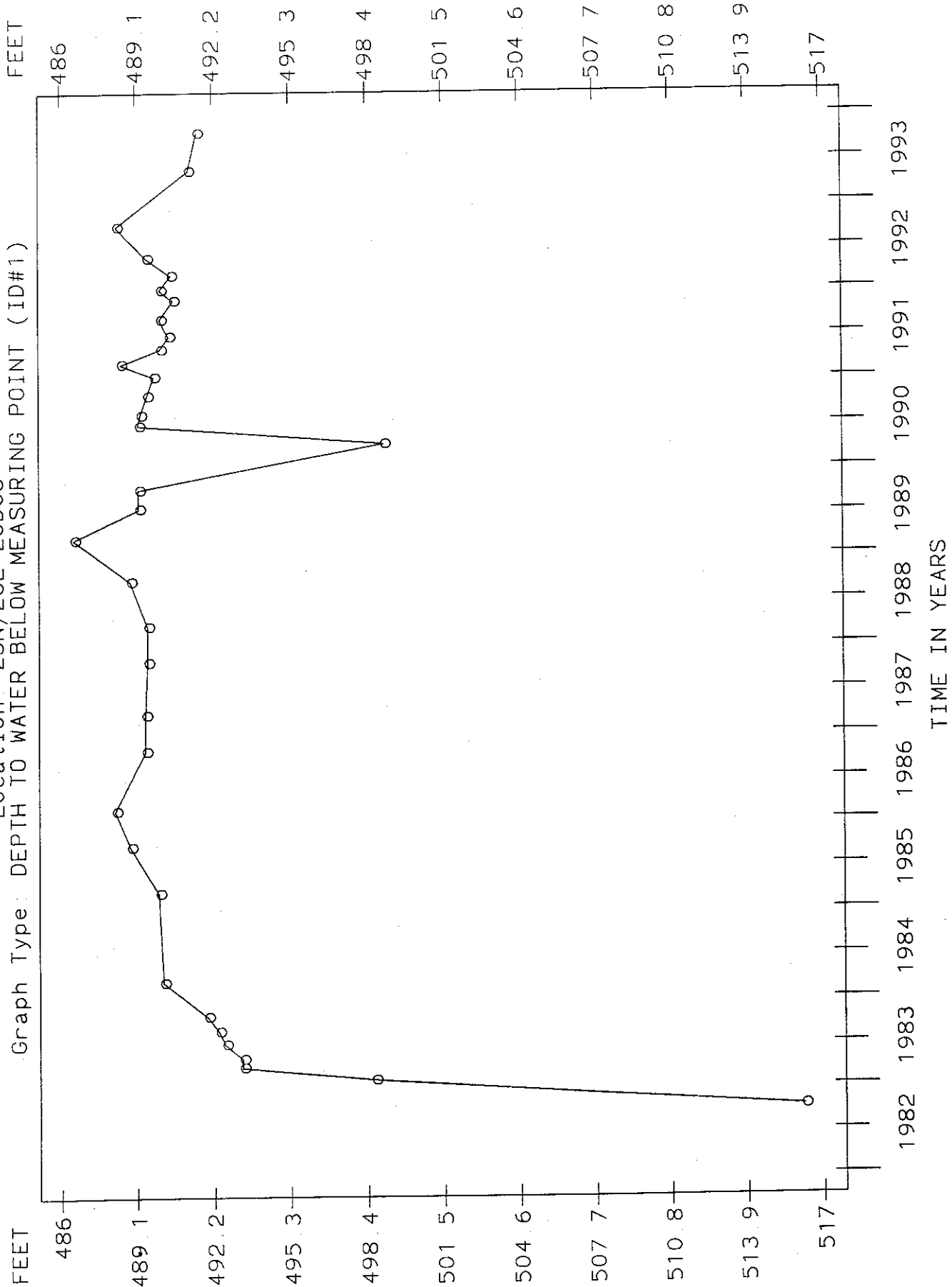
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



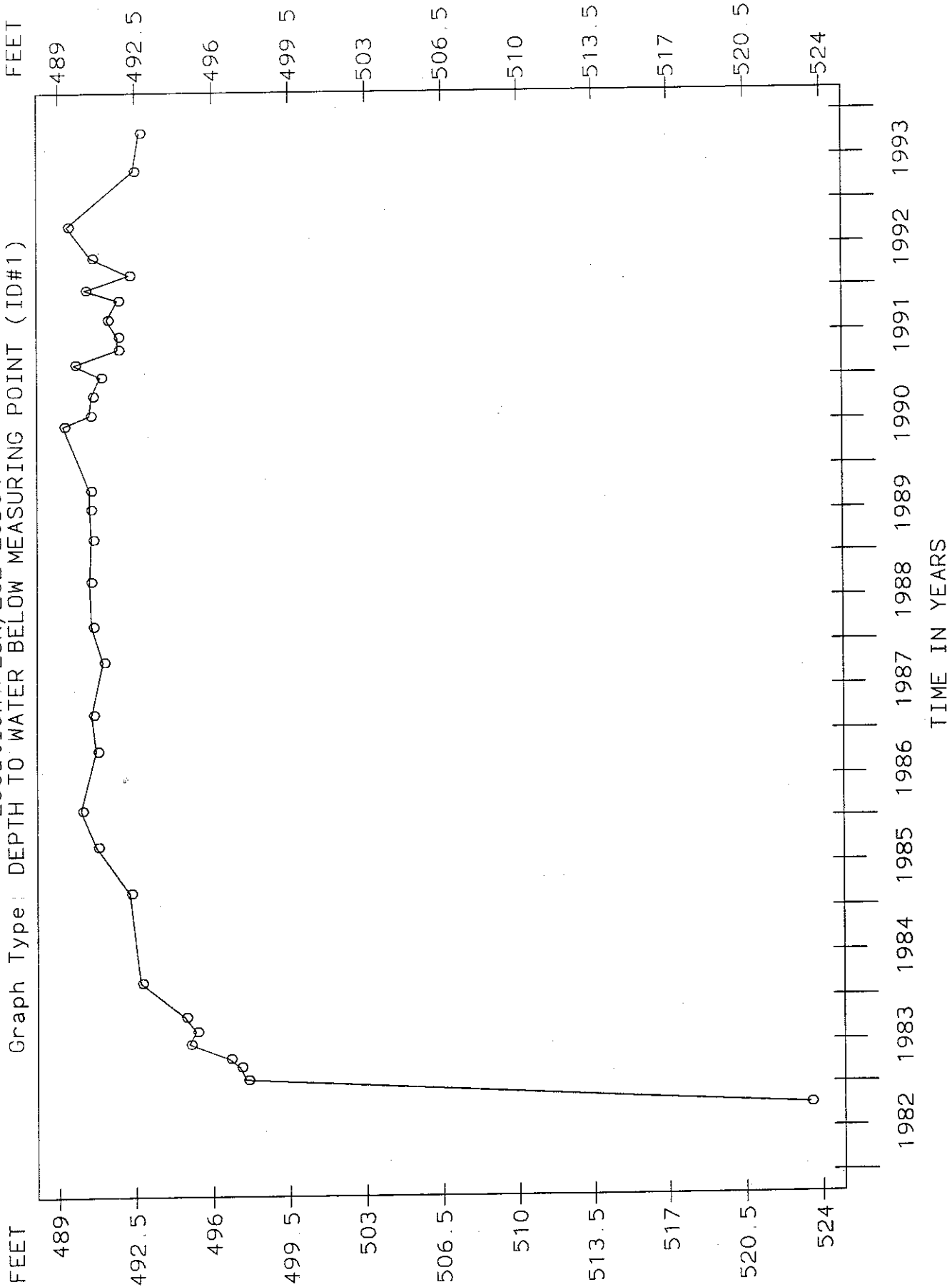
HYDROGRAPH FOR WELL AAE556 D03

Location: 23N/26E--20D03

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE556 D04
Location: 23N/26E-20D04



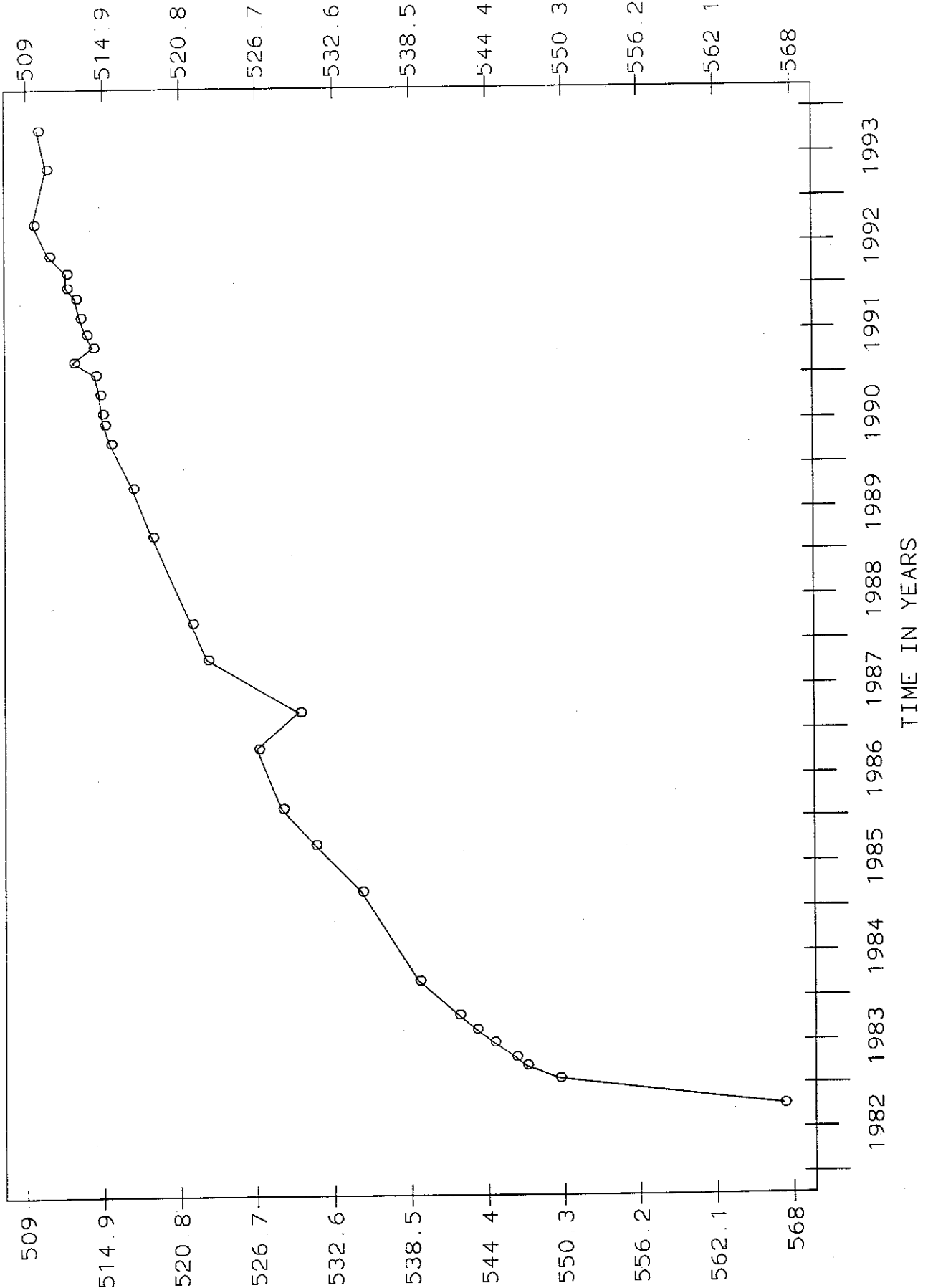
HYDROGRAPH FOR WELL AAE556 D05

Location: 23N/26E-20D05

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

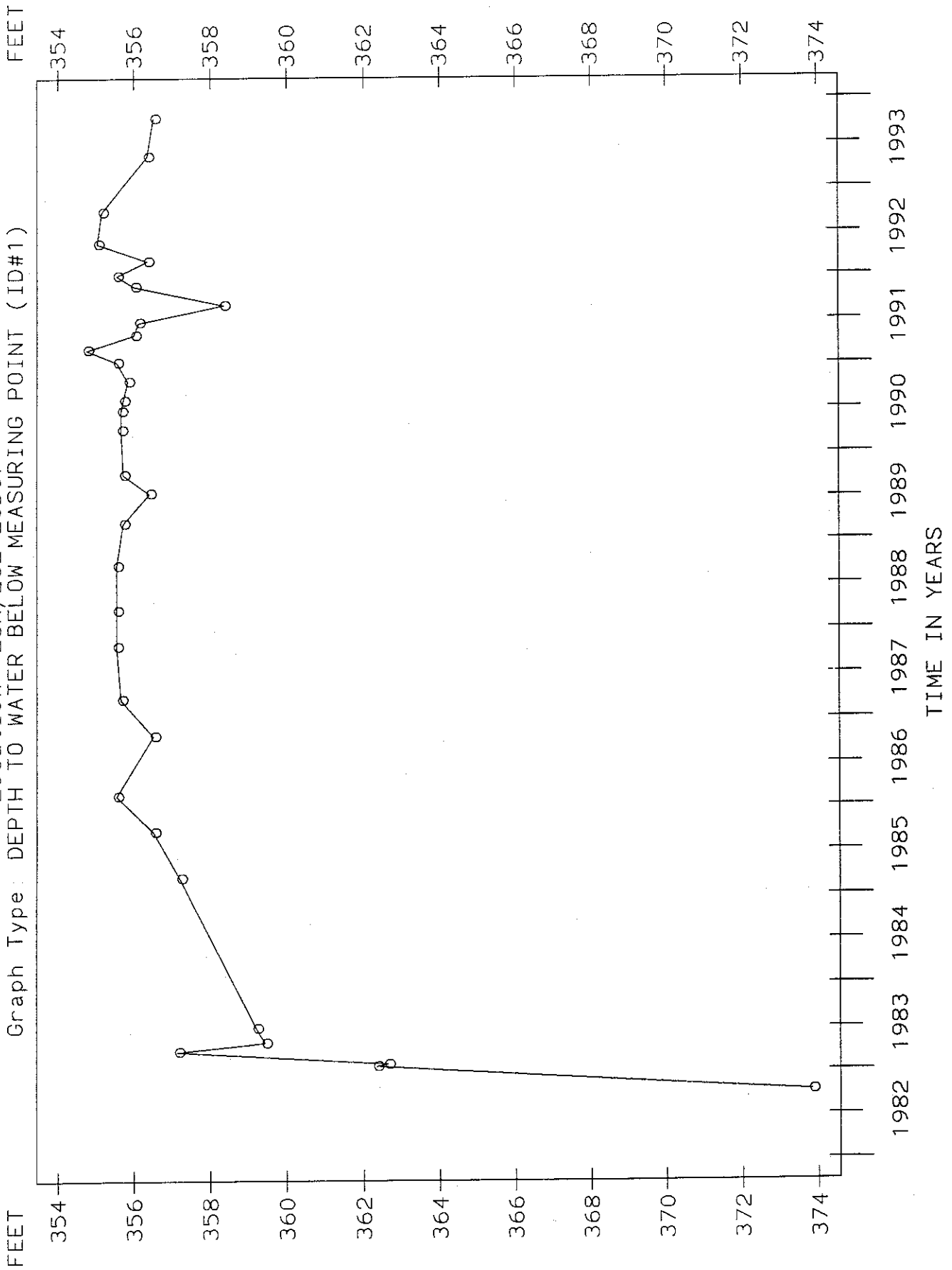
FEET



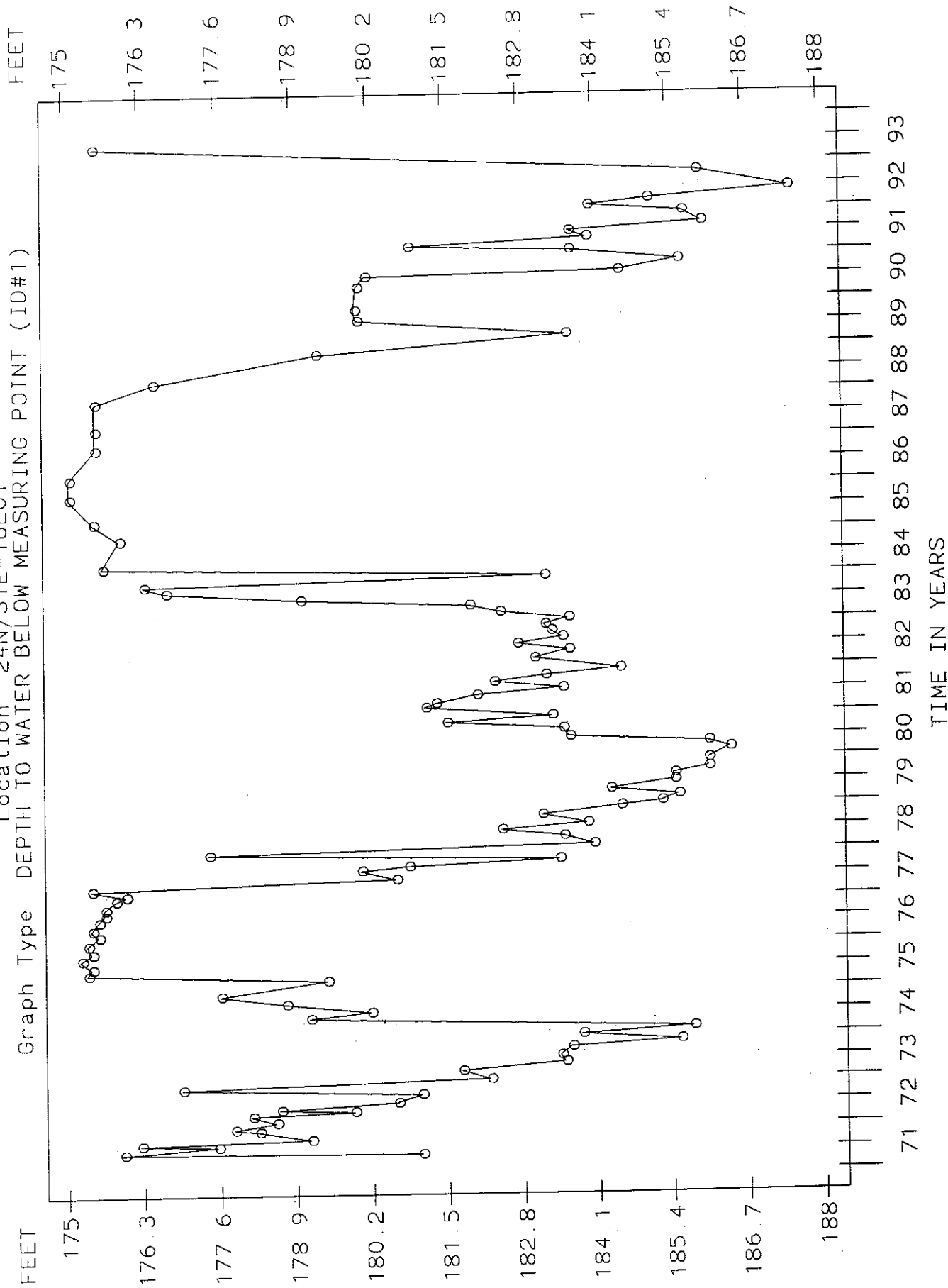
HYDROGRAPH FOR WELL AAE556 D07

Location: 23N/26E-20D07

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE558 E01
 Location 24N/31E-16E01



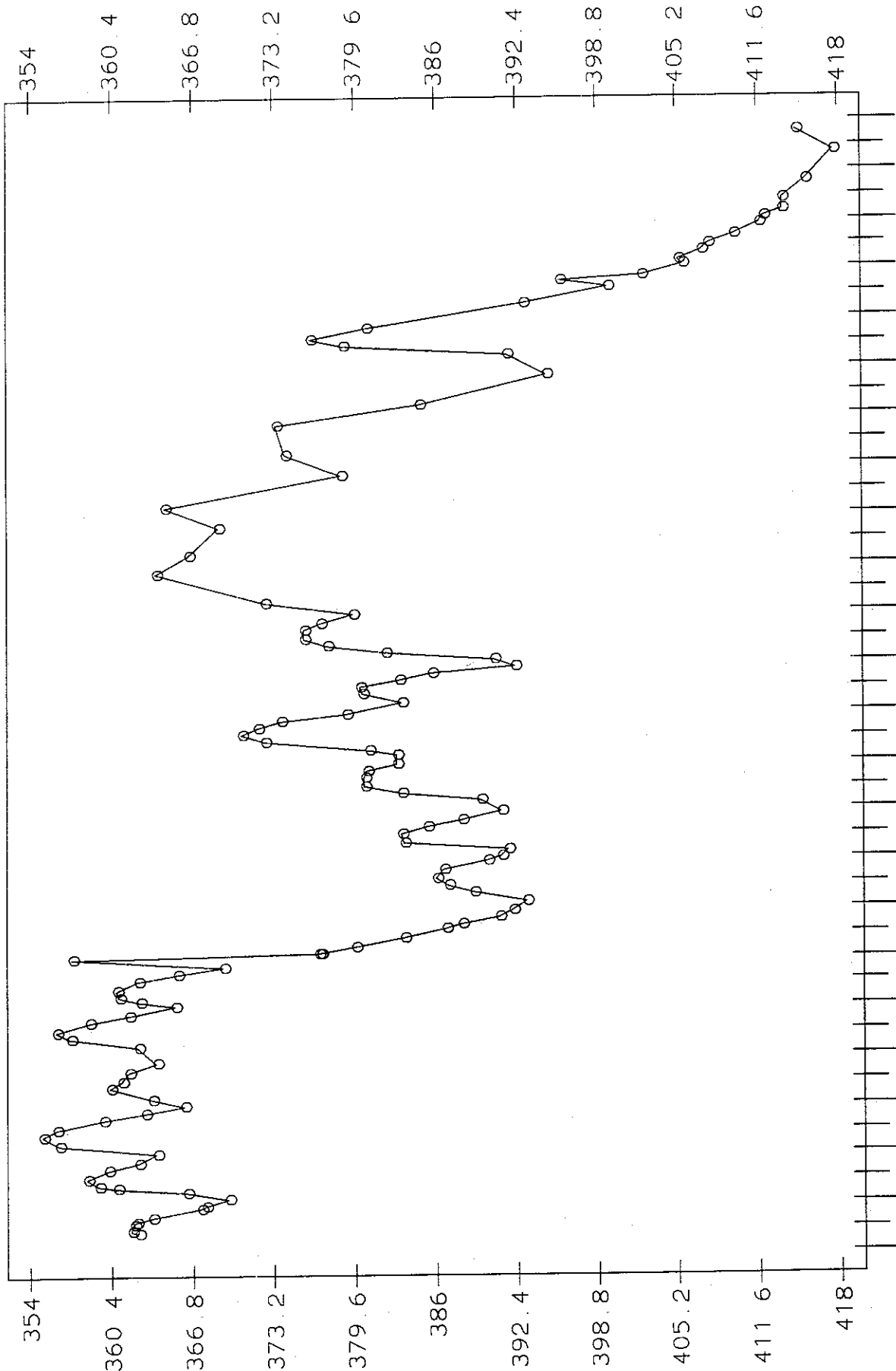
HYDROGRAPH FOR WELL AAE558 E02

Location 24N/31E-16E02

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

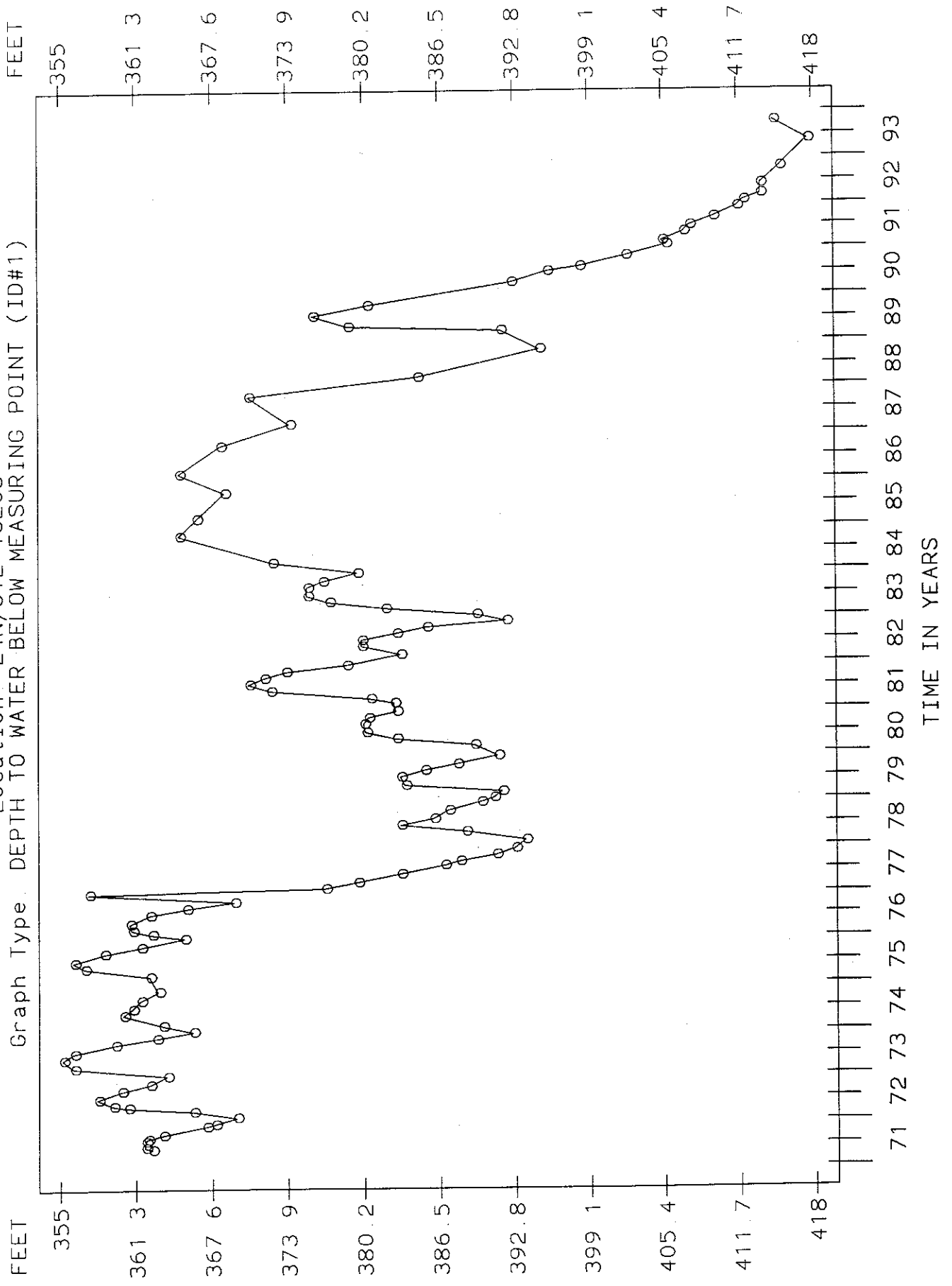
FEET

FEET

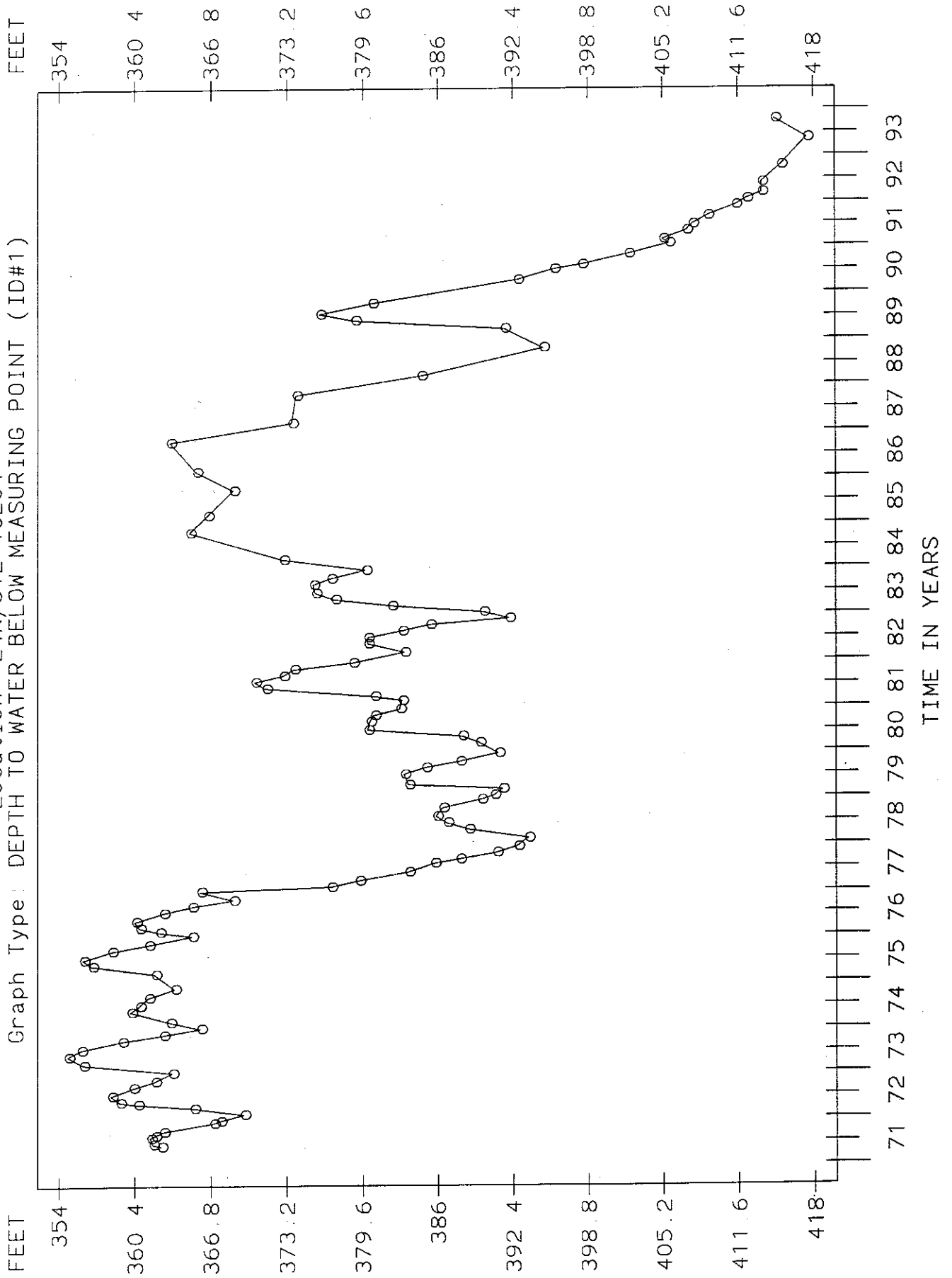


71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93
TIME IN YEARS

HYDROGRAPH FOR WELL AAE558 E03
 Location 24N/31E-16E03



HYDROGRAPH FOR WELL AAE558 E04
 Location: 24N/31E-16E04



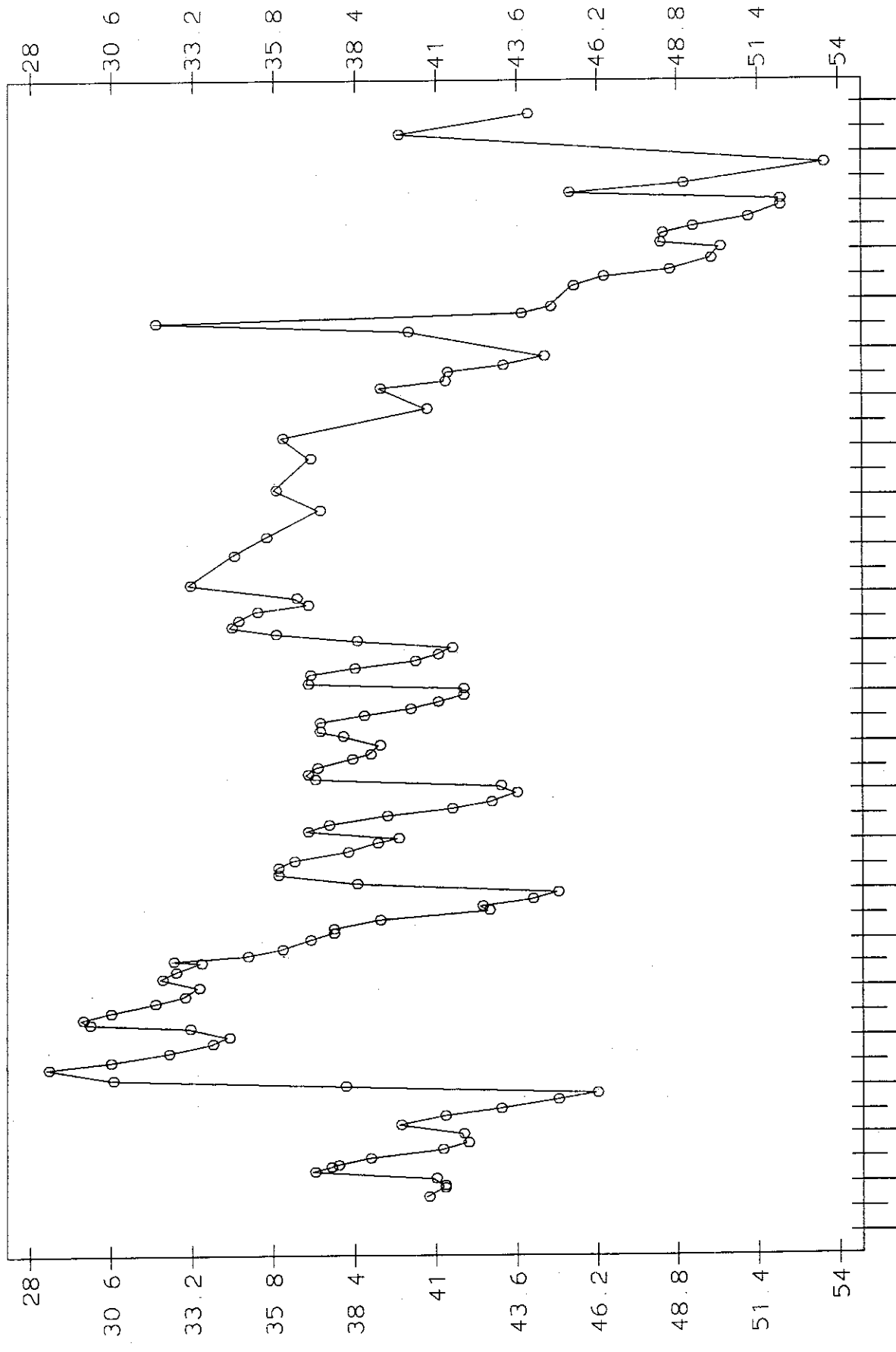
HYDROGRAPH FOR WELL AAE562 A01

Location 24N/36E-16A01

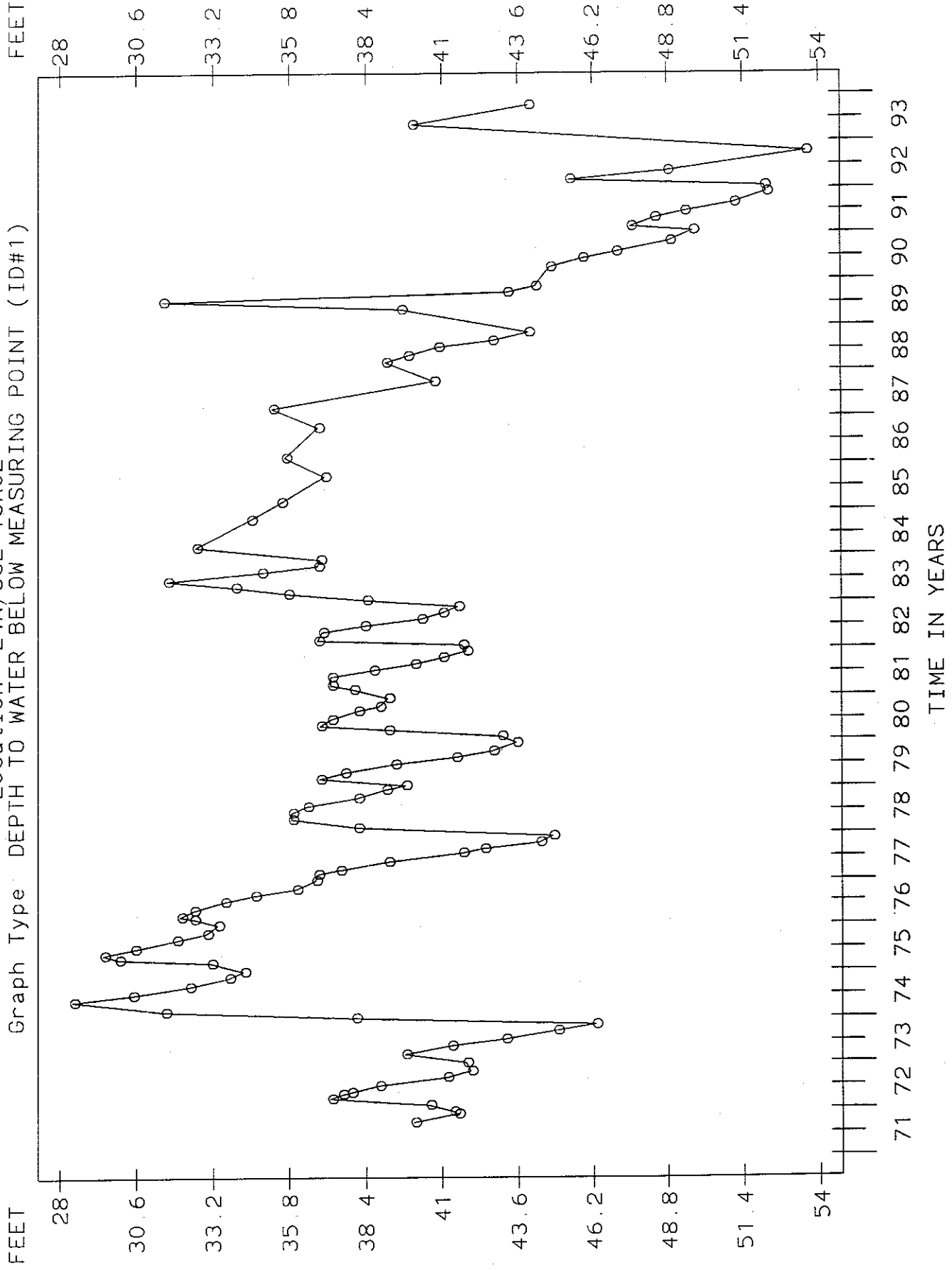
Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

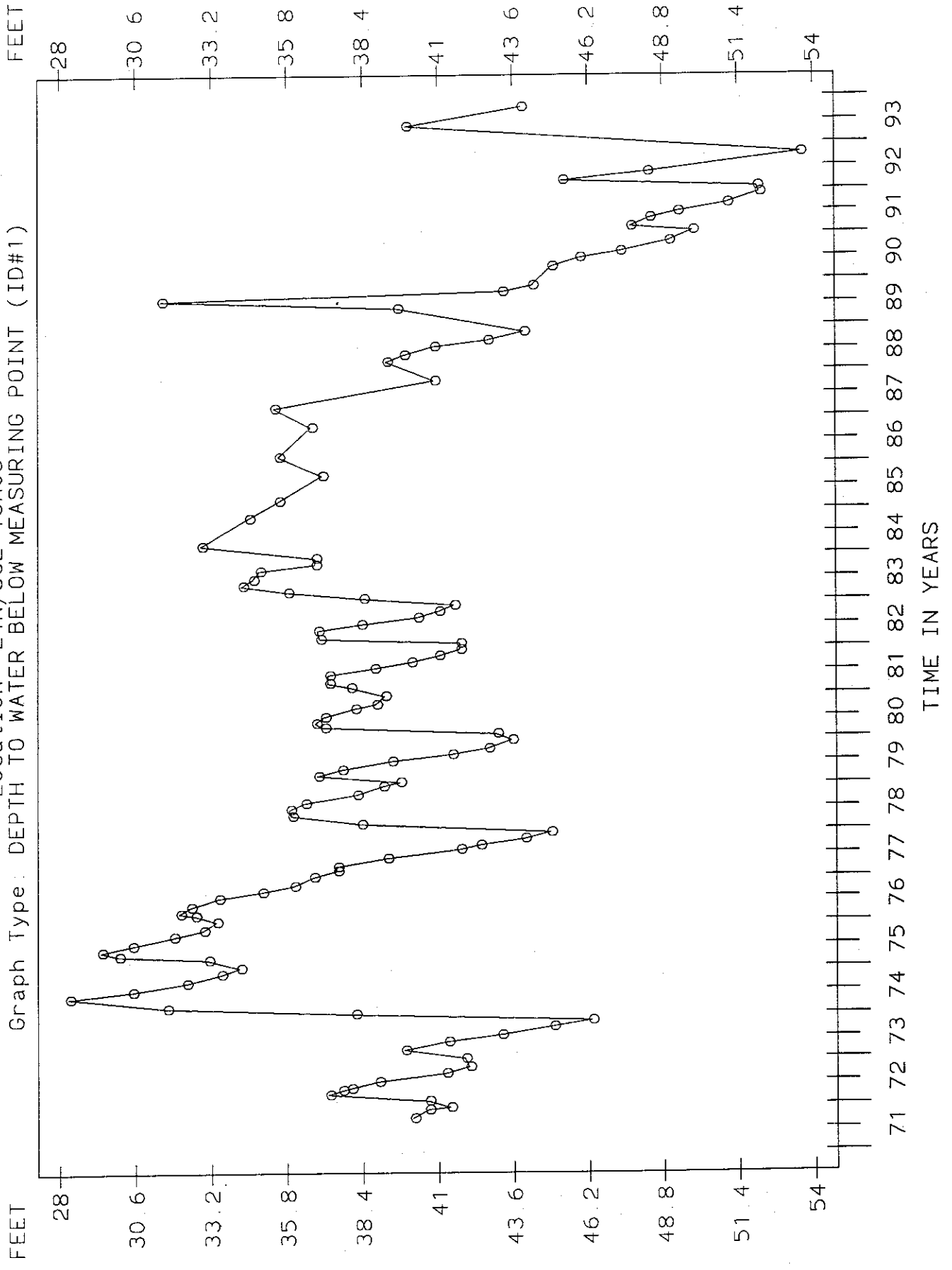
FEET



HYDROGRAPH FOR WELL AAE562 A02
 Location 24N/36E-16A02



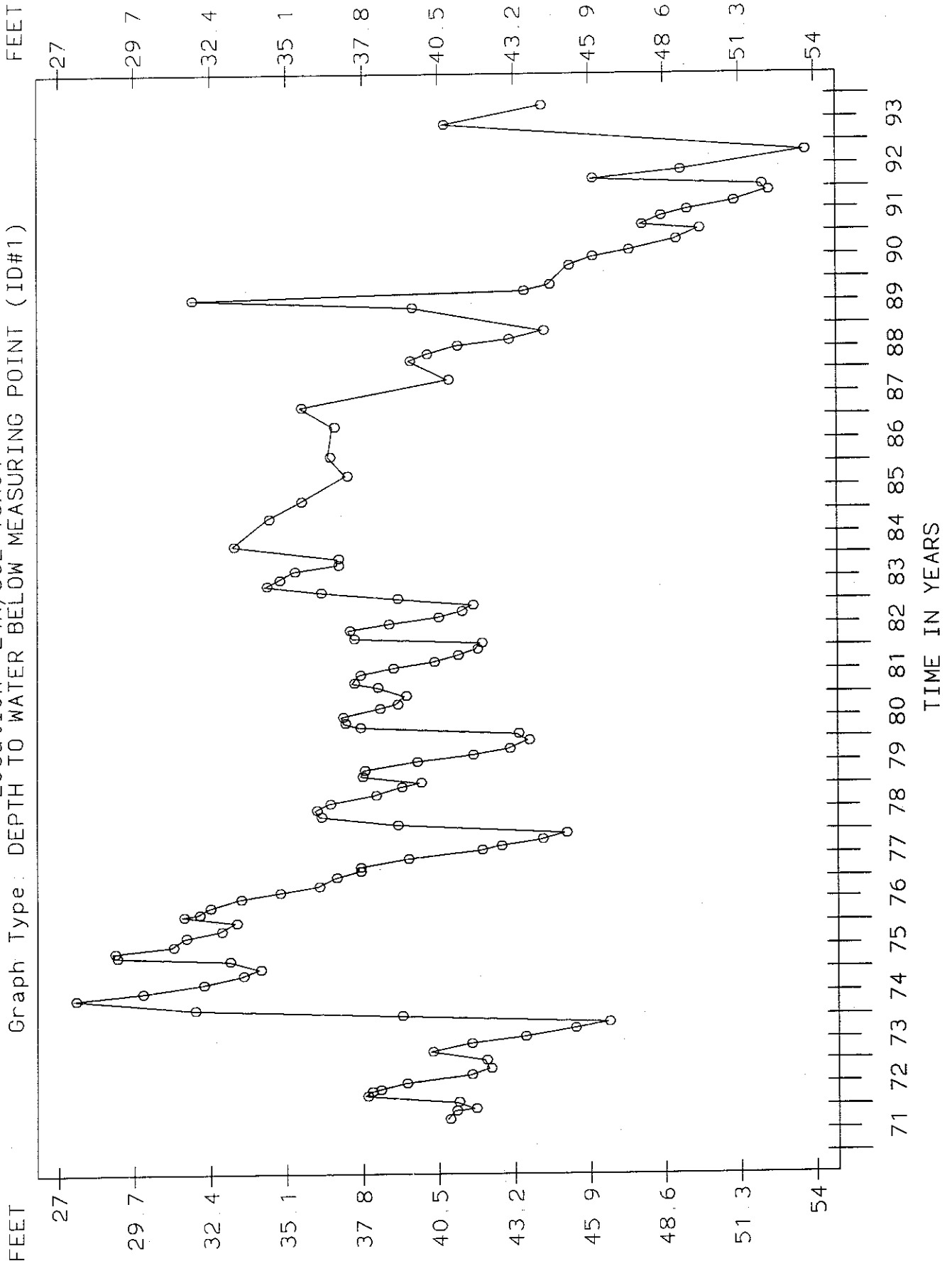
HYDROGRAPH FOR WELL AAE562 A03
 Location 24N/36E-16A03



HYDROGRAPH FOR WELL AAE562 A04

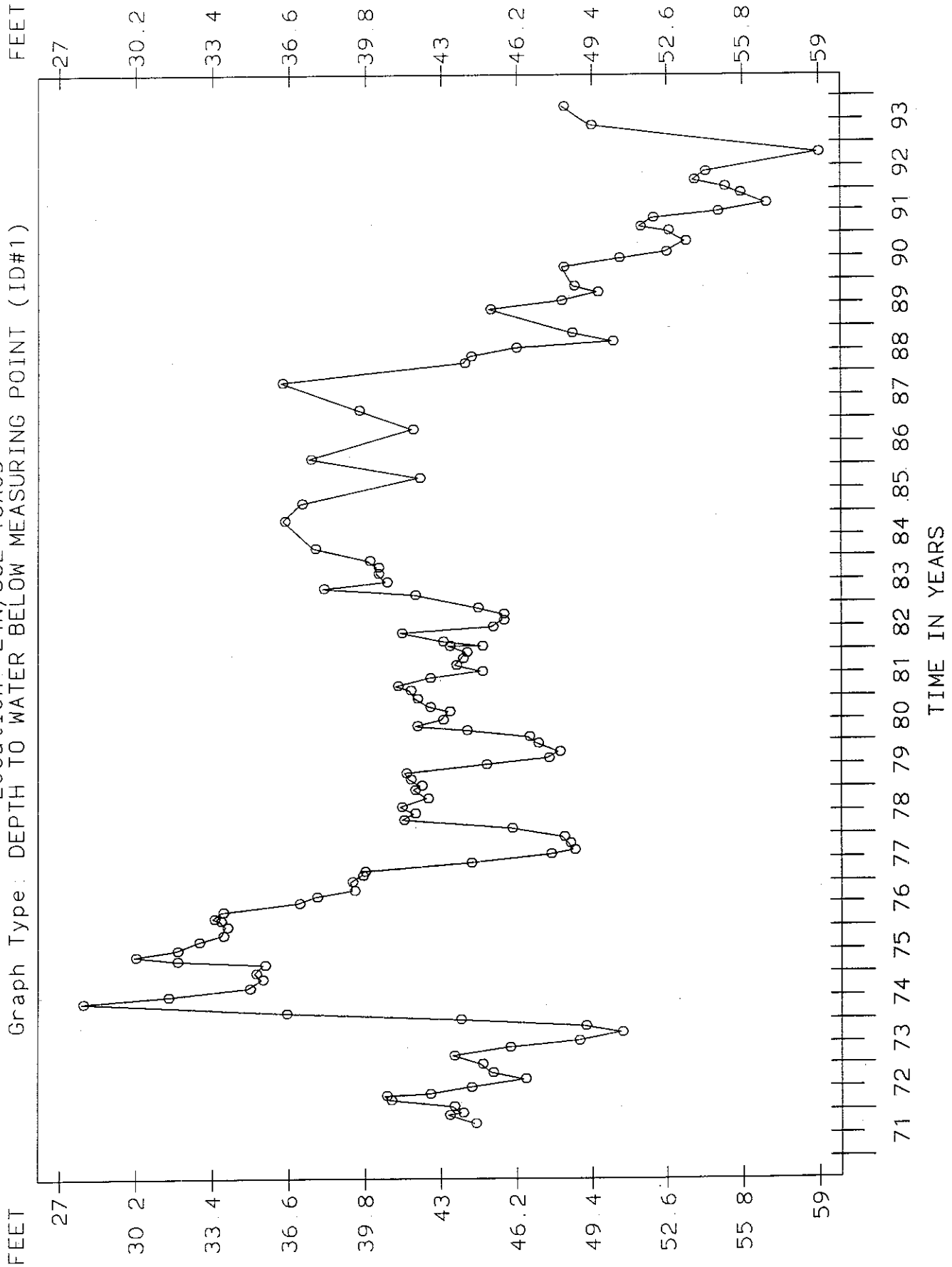
Location 24N/36E-16A04

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

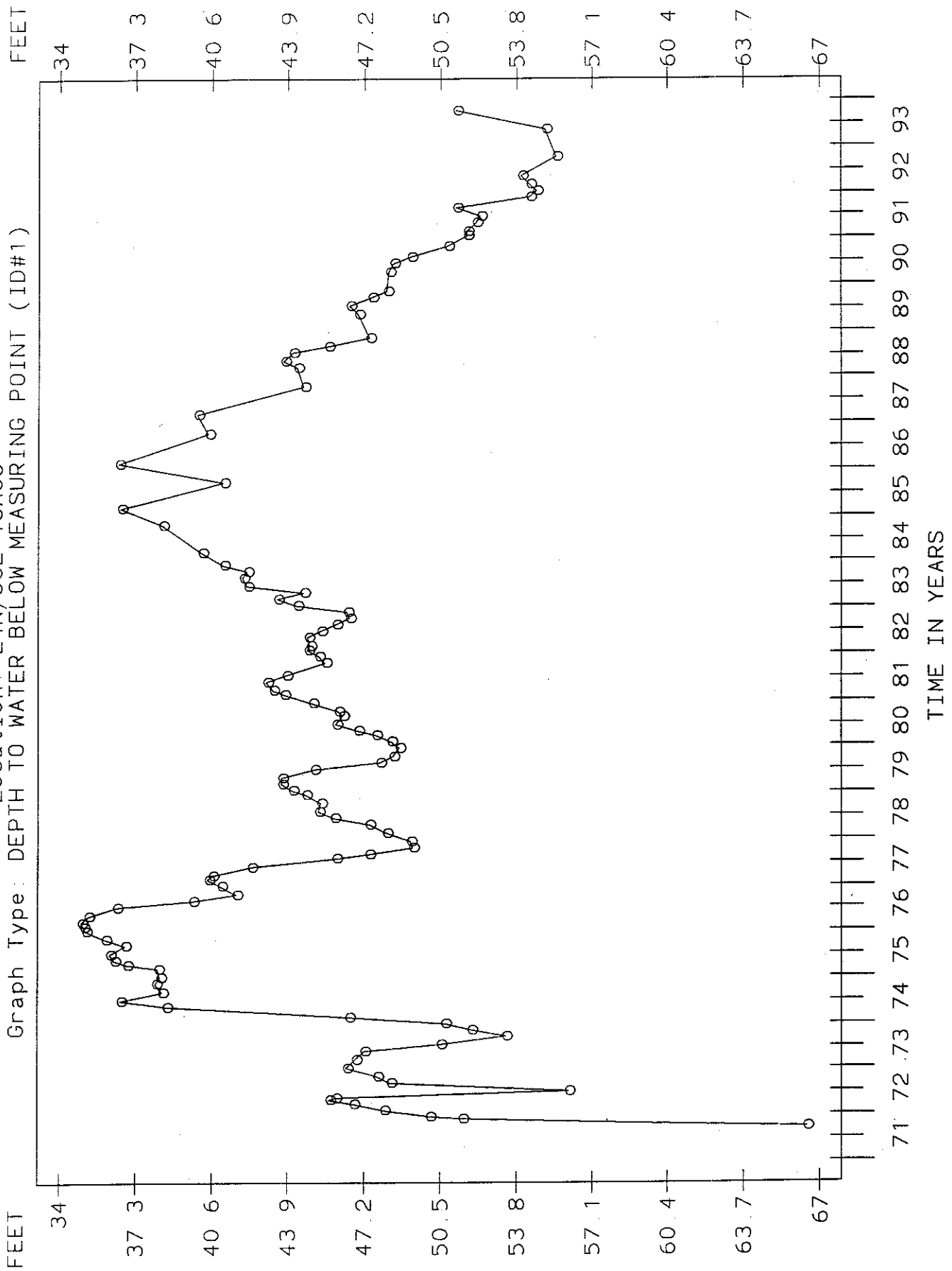


HYDROGRAPH FOR WELL AAE562 A05
 Location: 24N/36E-16A05

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE562 A06
 Location: 24N/36E-16A06



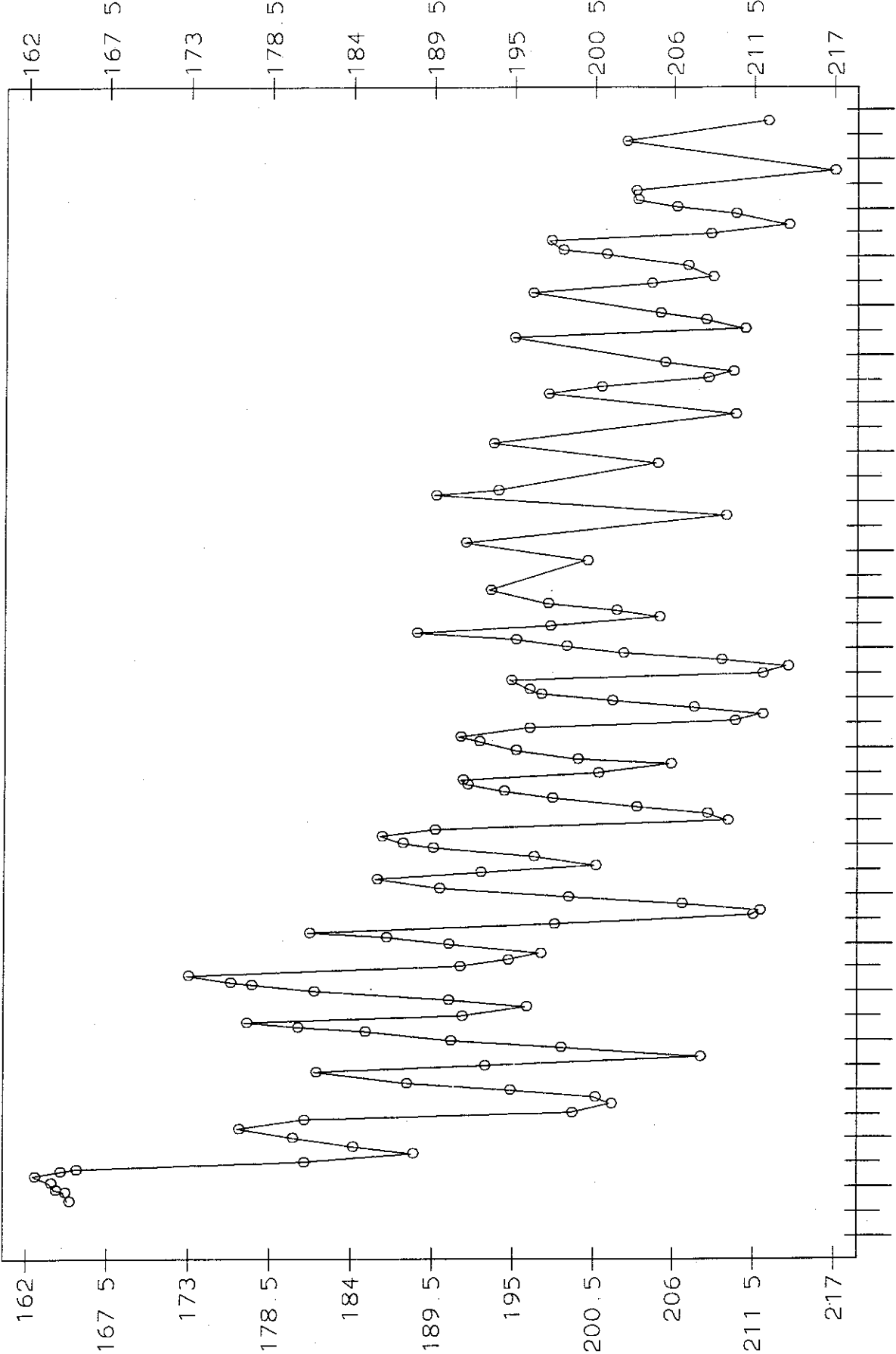
HYDROGRAPH FOR WELL AAE562 A07

Location 24N/36E-16A07

Graph Type DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

FEET



71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93
TIME IN YEARS

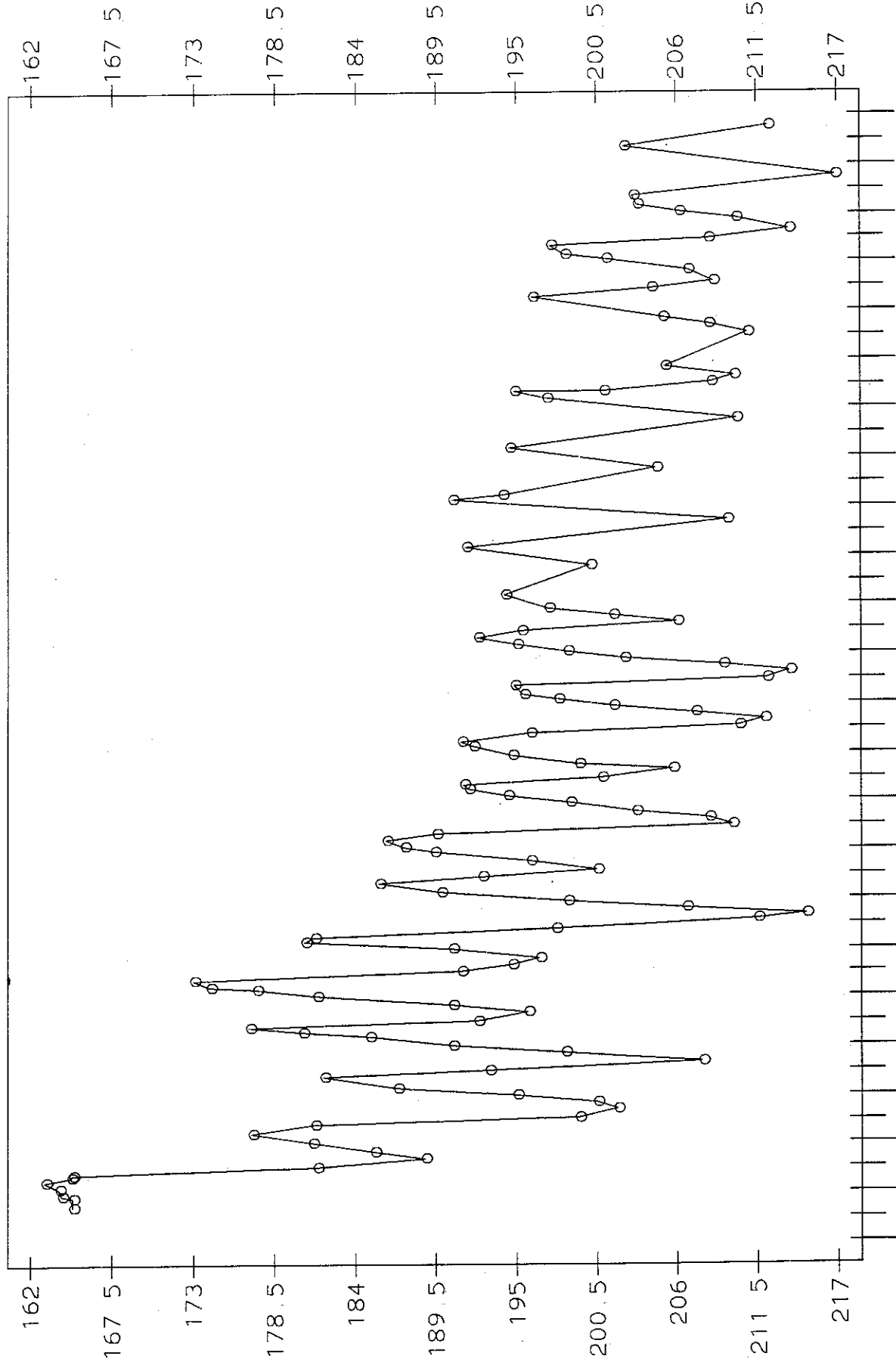
HYDROGRAPH FOR WELL AAE562 A08

Location 24N/36E-16A08

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

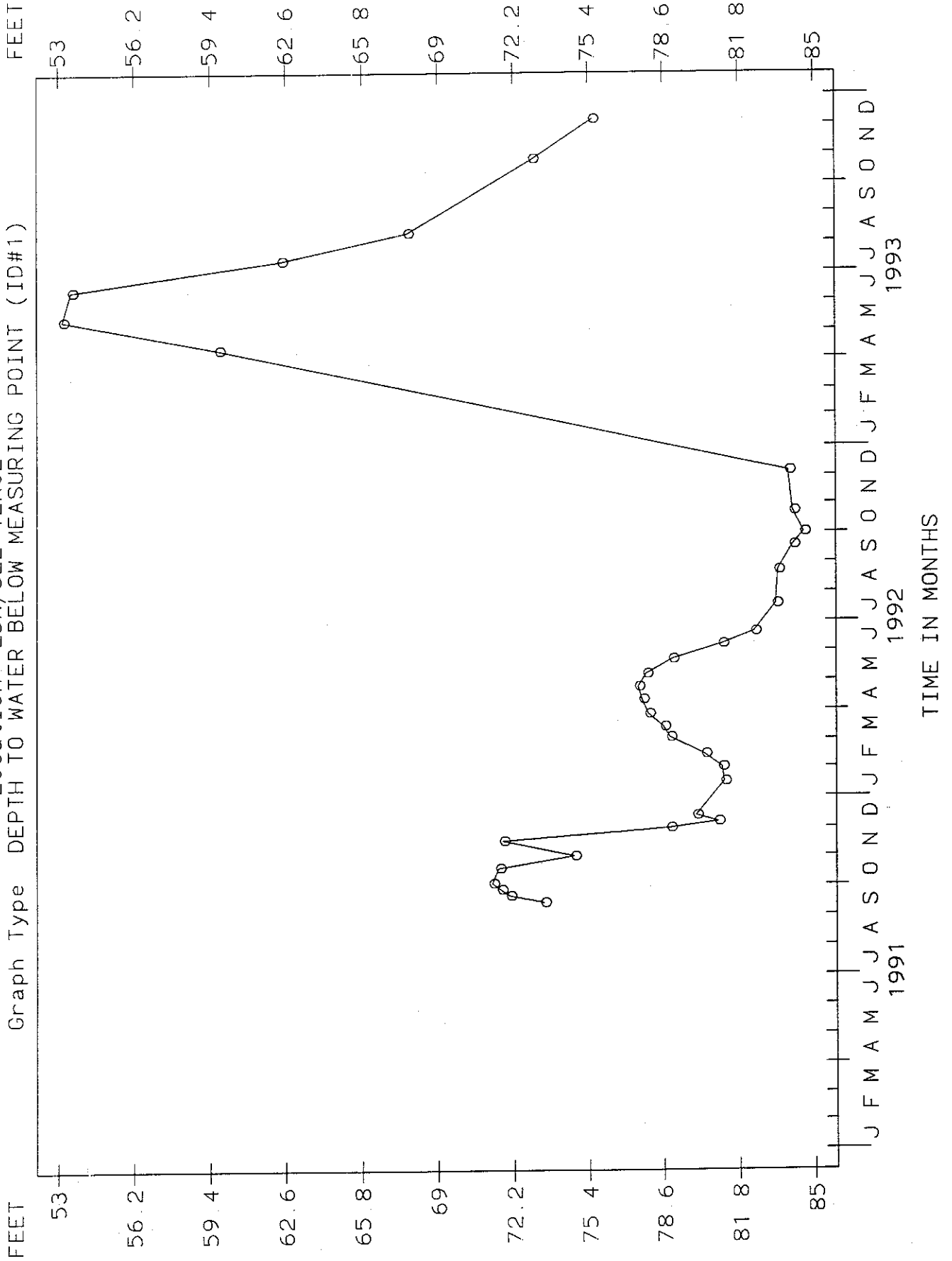
FEET

FEET

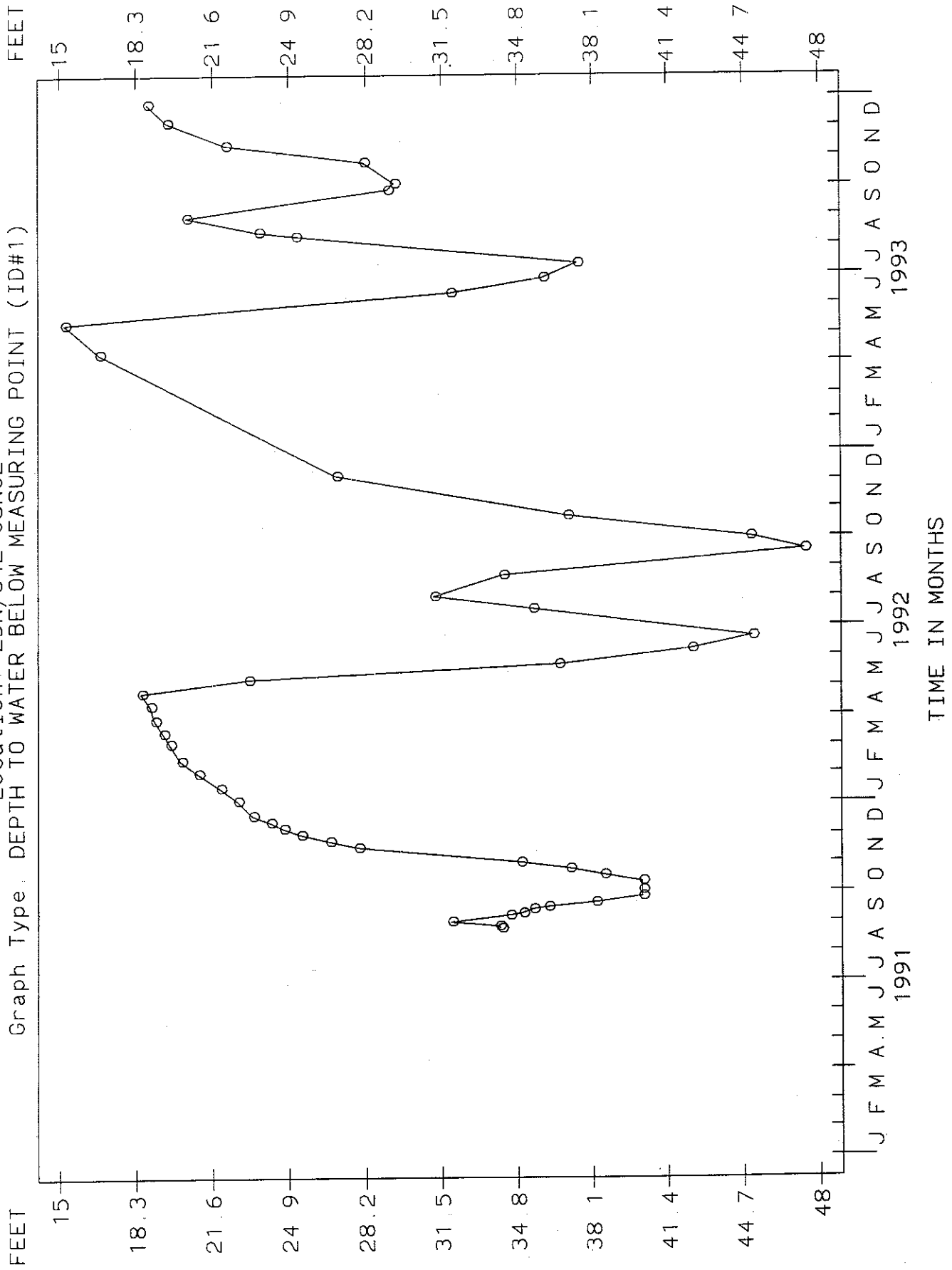


71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93
TIME IN YEARS

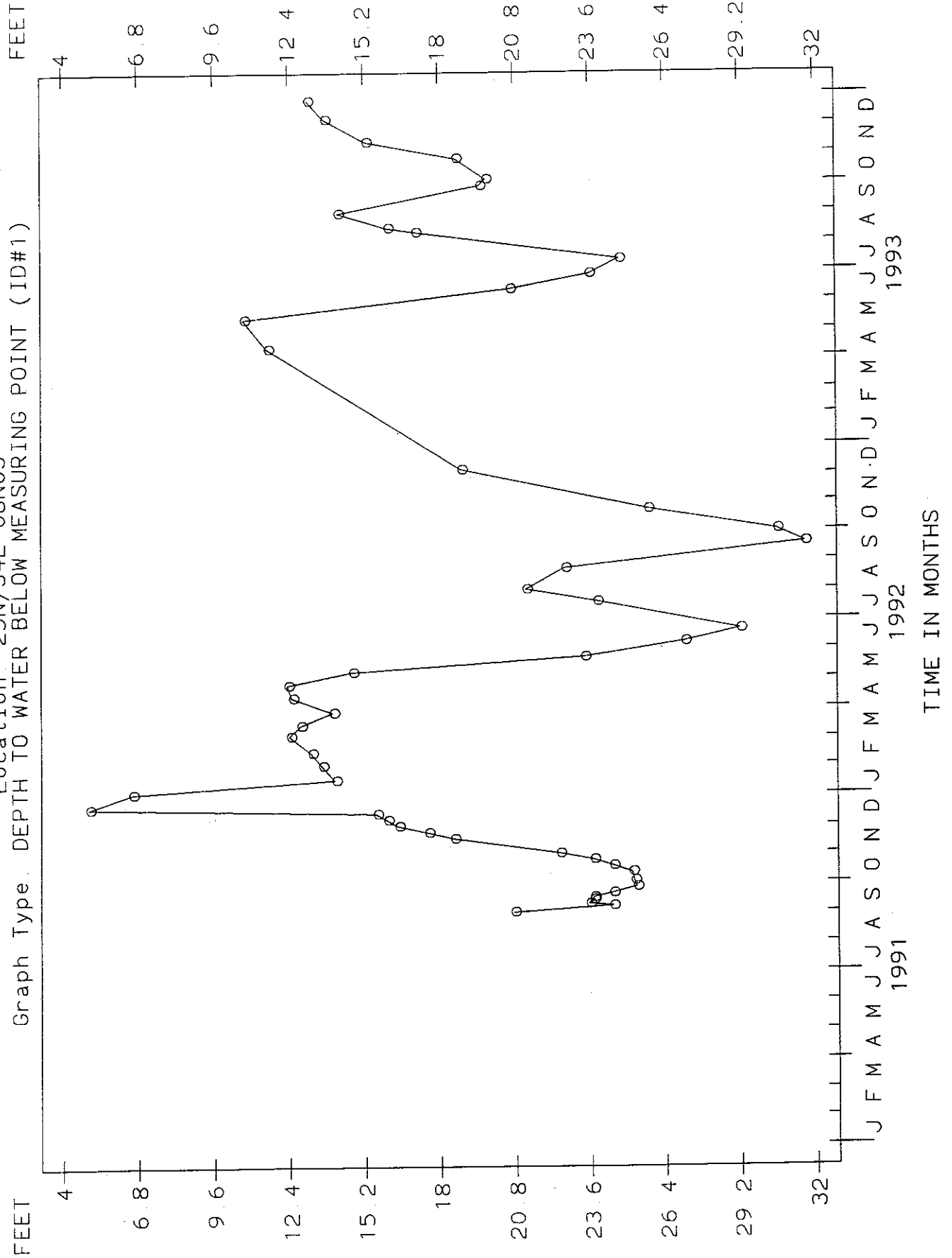
HYDROGRAPH FOR WELL AAE574
 Location 25N/32E-12K02



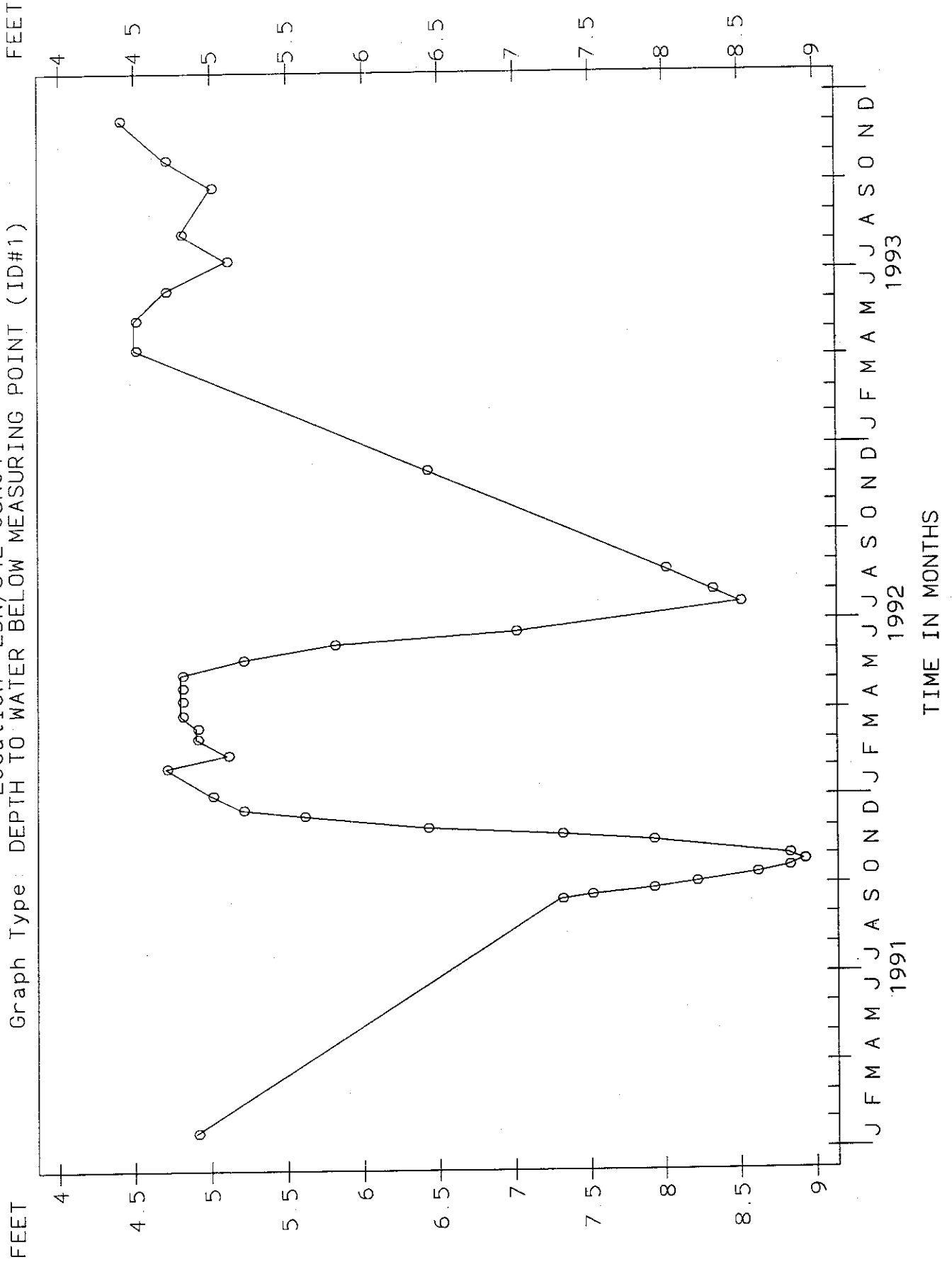
HYDROGRAPH FOR WELL AAE572 N02
 Location 25N/34E-08N02



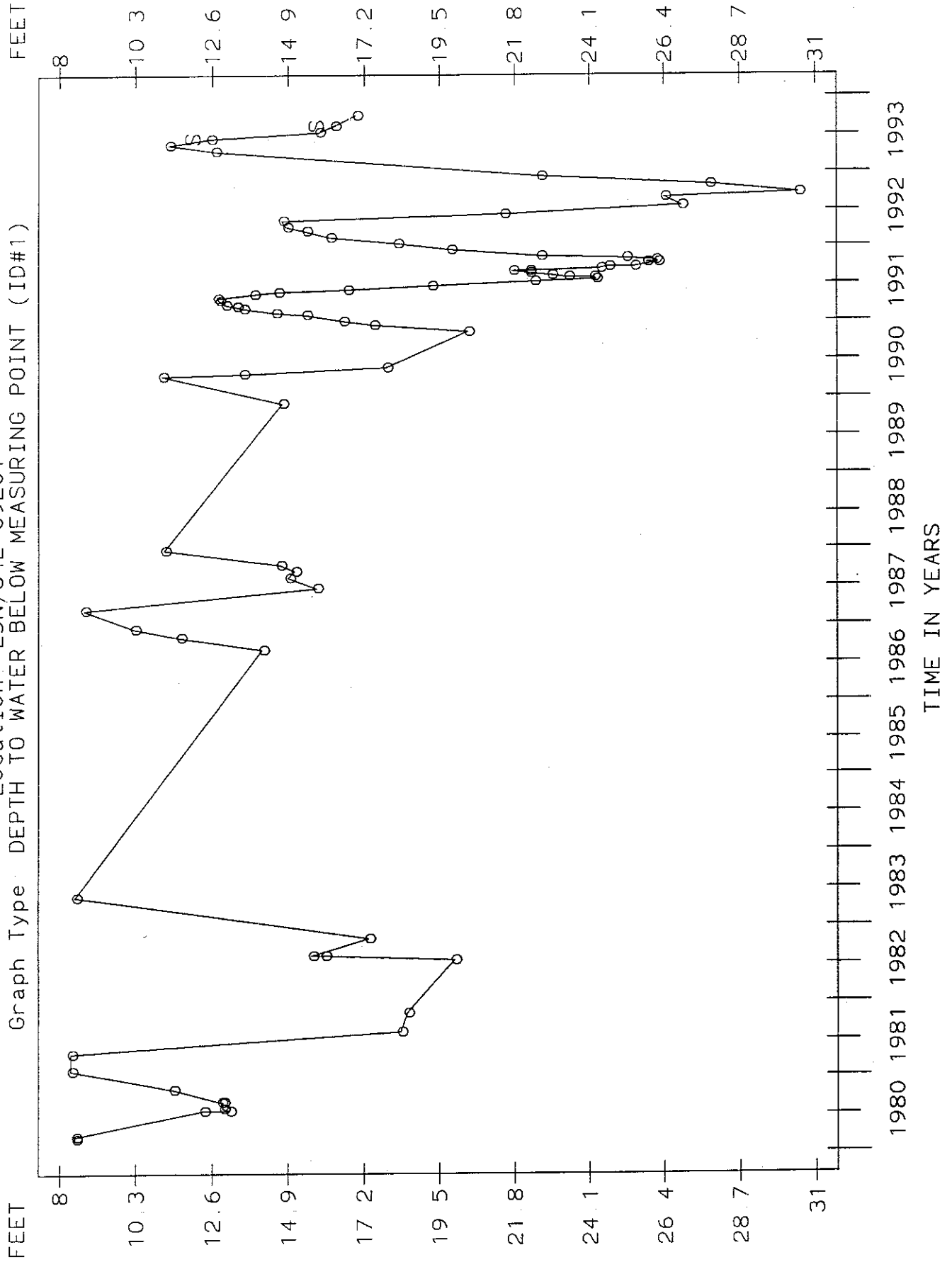
HYDROGRAPH FOR WELL AAE572 N03
 Location 25N/34E-08N03



HYDROGRAPH FOR WELL AAE573
 Location: 25N/34E-08N04



HYDROGRAPH FOR WELL AAE565 E01
 Location 25N/34E-09E01



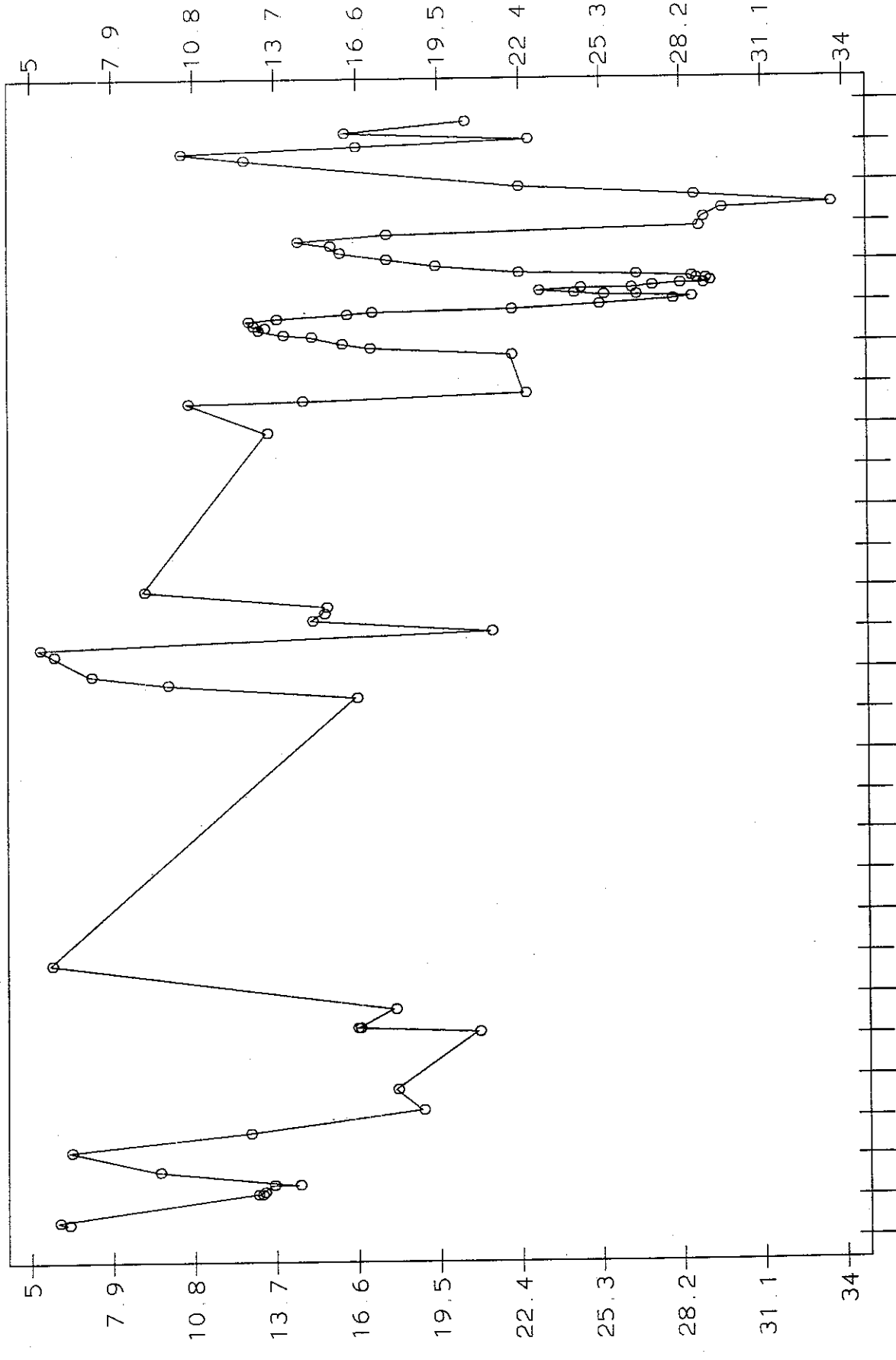
HYDROGRAPH FOR WELL AAE565 E02

Location 25N/34E-09E02

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

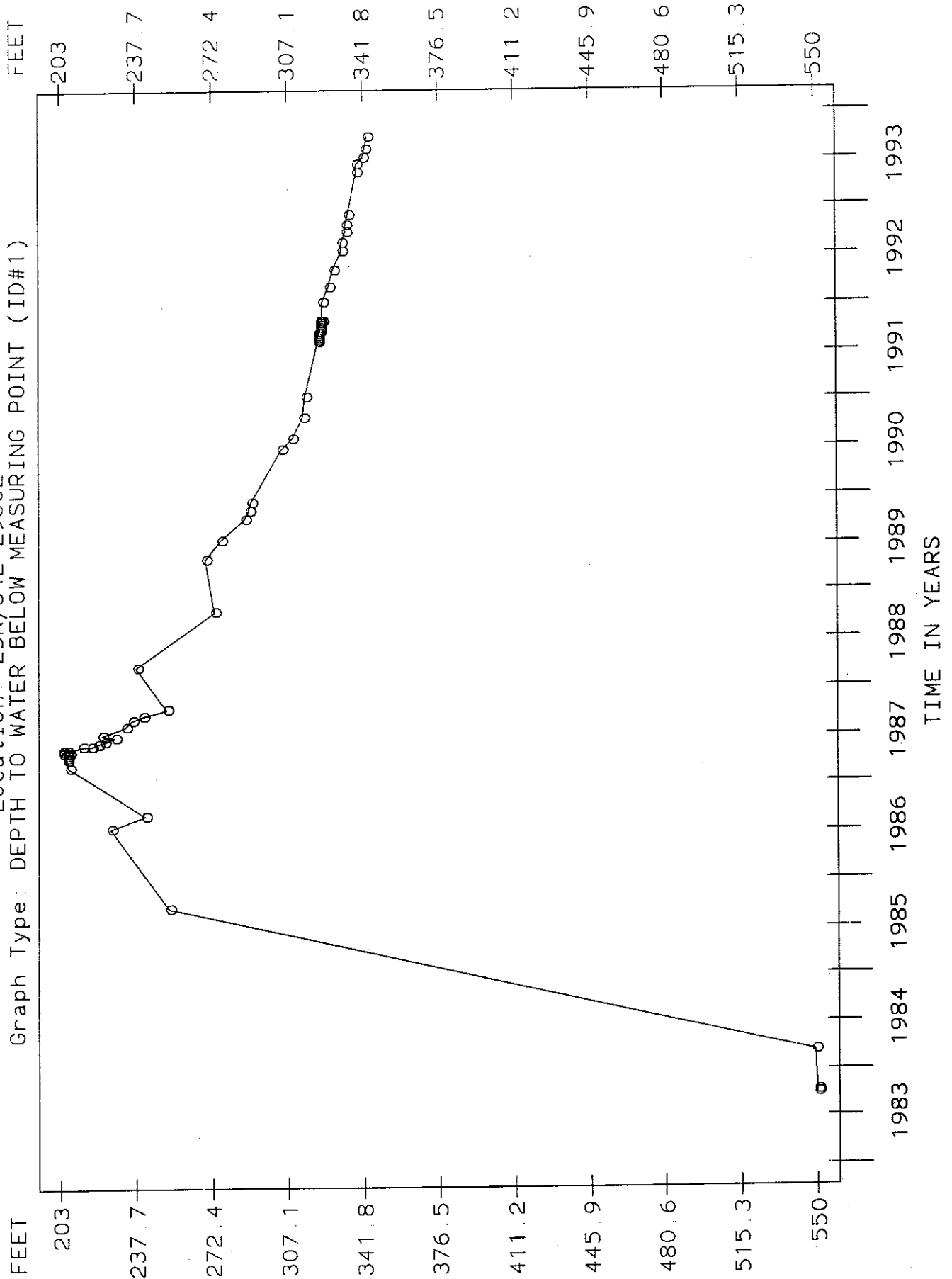
FEET



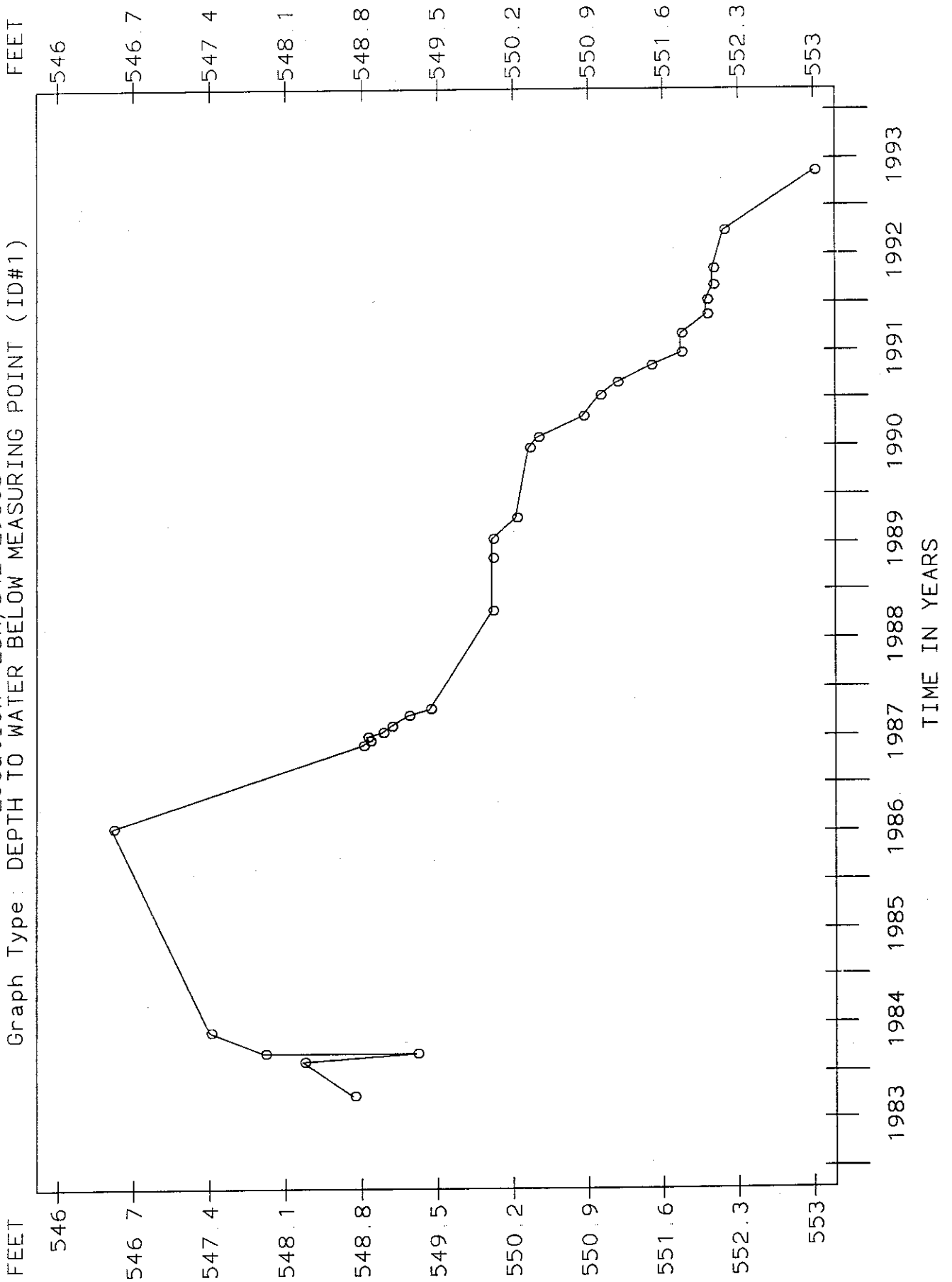
TIME IN YEARS

HYDROGRAPH FOR WELL AAE559 J02
 Location: 25N/34E-29J02

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



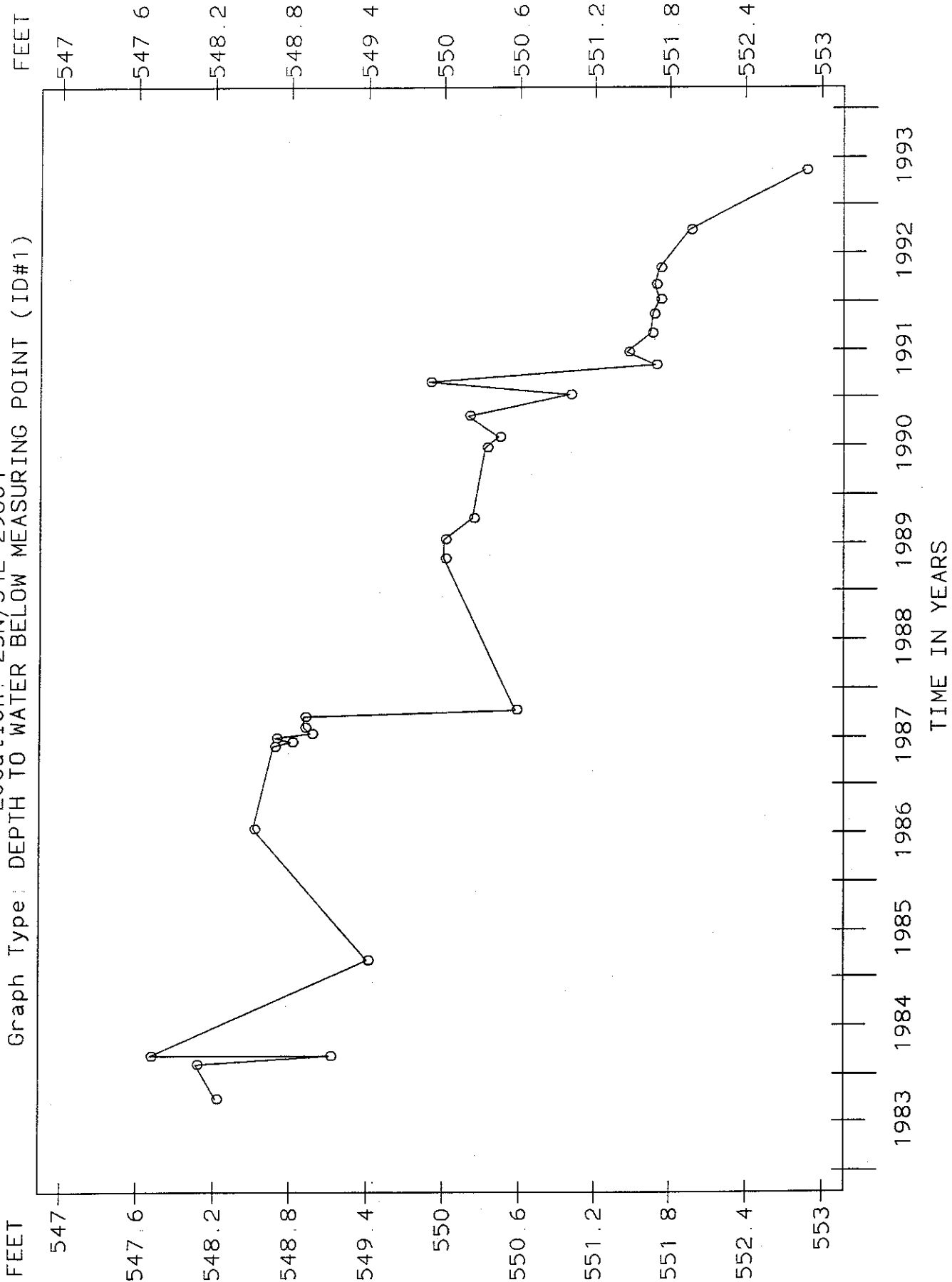
HYDROGRAPH FOR WELL AAE559 J03
Location: 25N/34E-29J03



HYDROGRAPH FOR WELL AAE559 J04

Location: 25N/34E-29J04

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



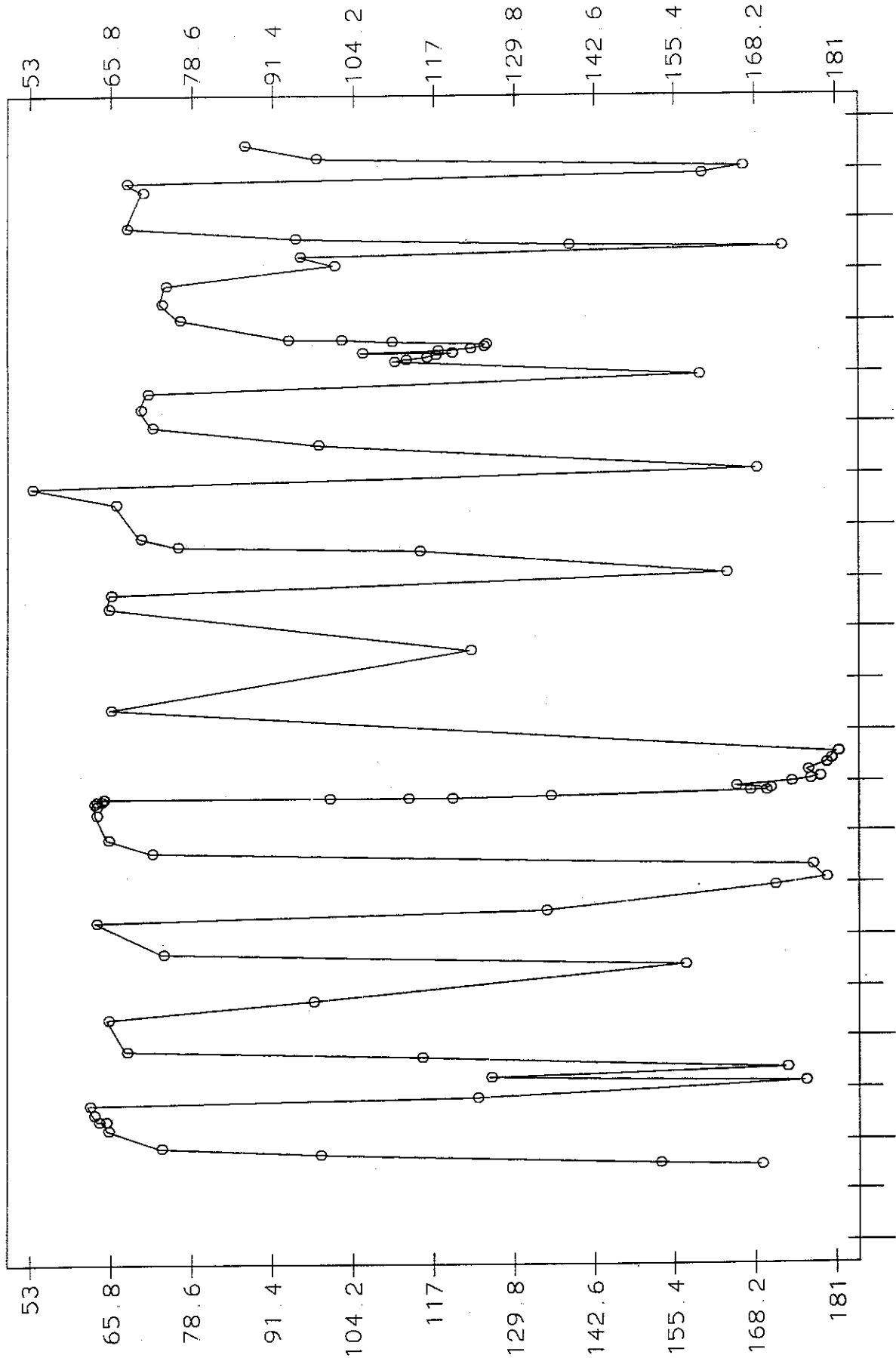
HYDROGRAPH FOR WELL AAE559 J05

Location: 25N/34E-29J05

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)

FEET

FEET



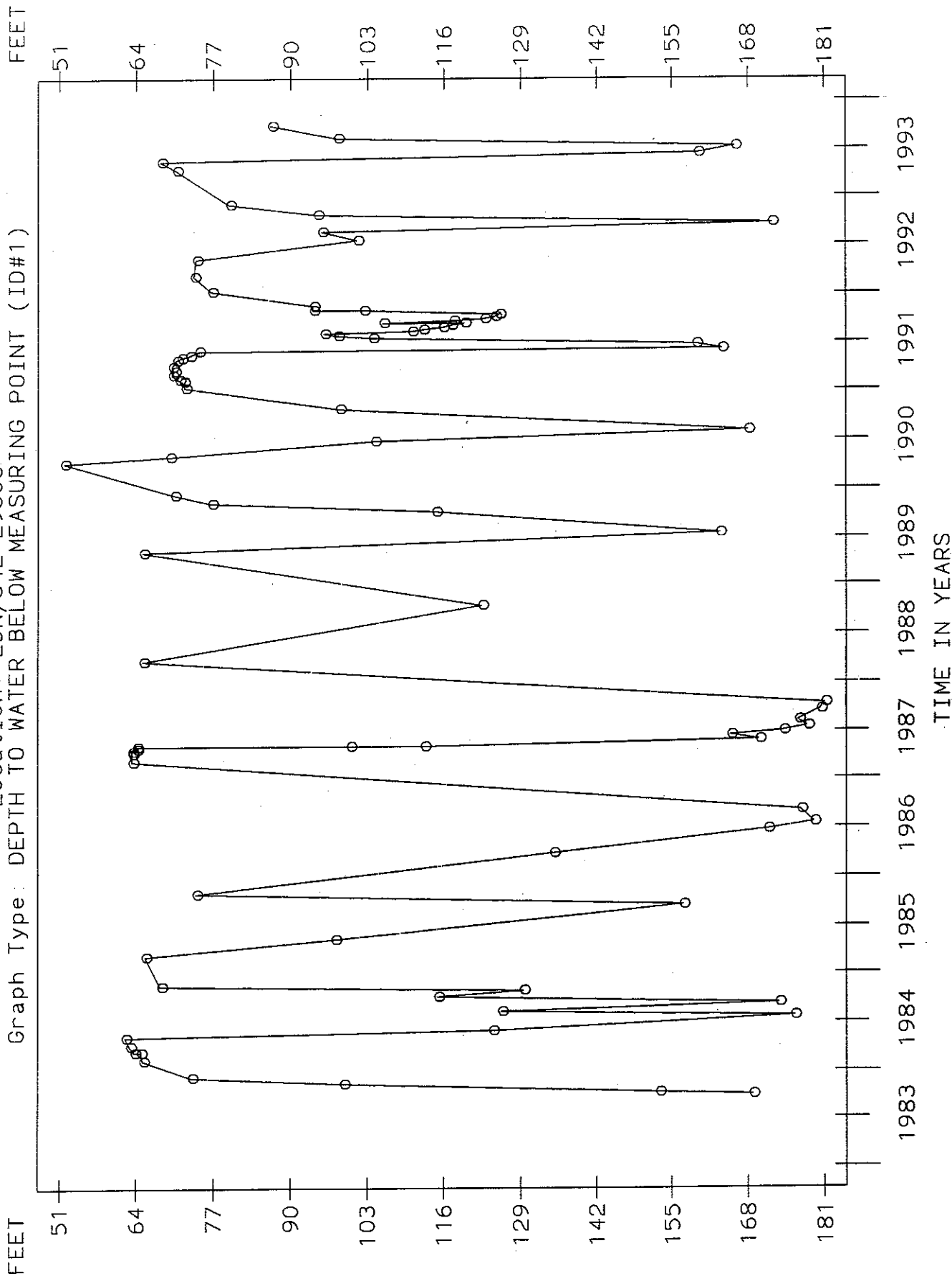
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993

TIME IN YEARS

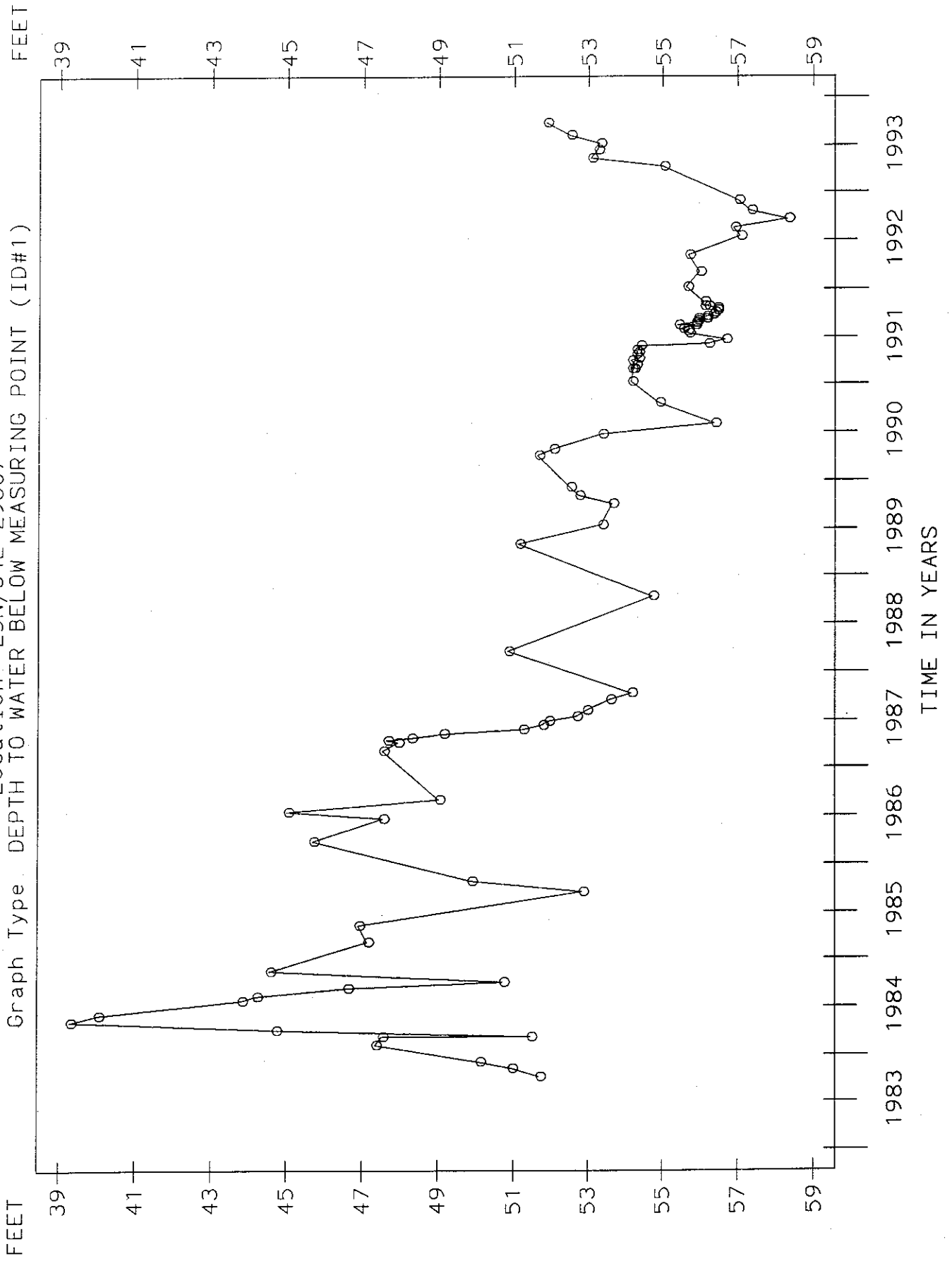
HYDROGRAPH FOR WELL AAE559 J06

Location: 25N/34E-29J06

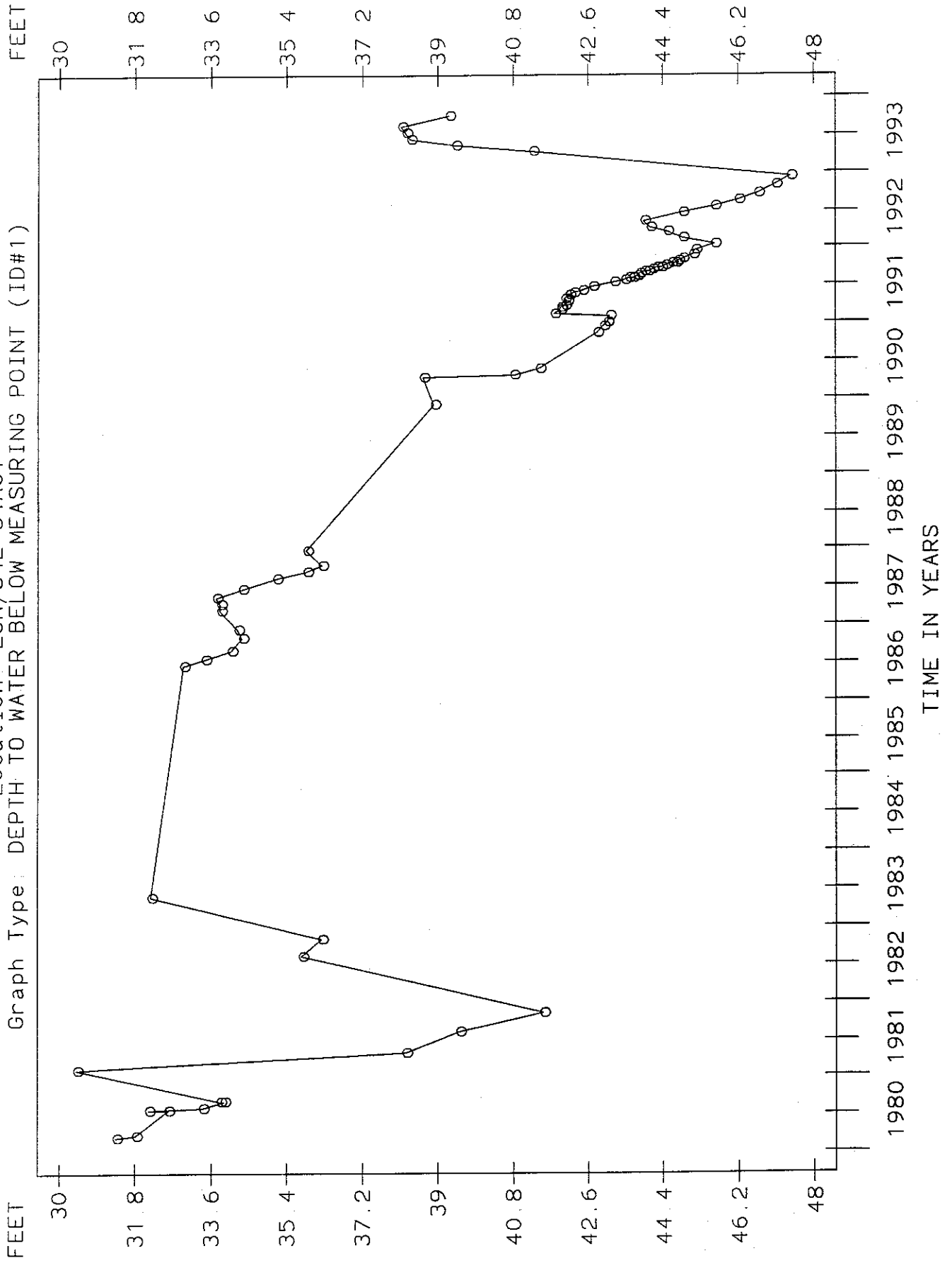
Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE559 J07
 Location 25N/34E-29J07

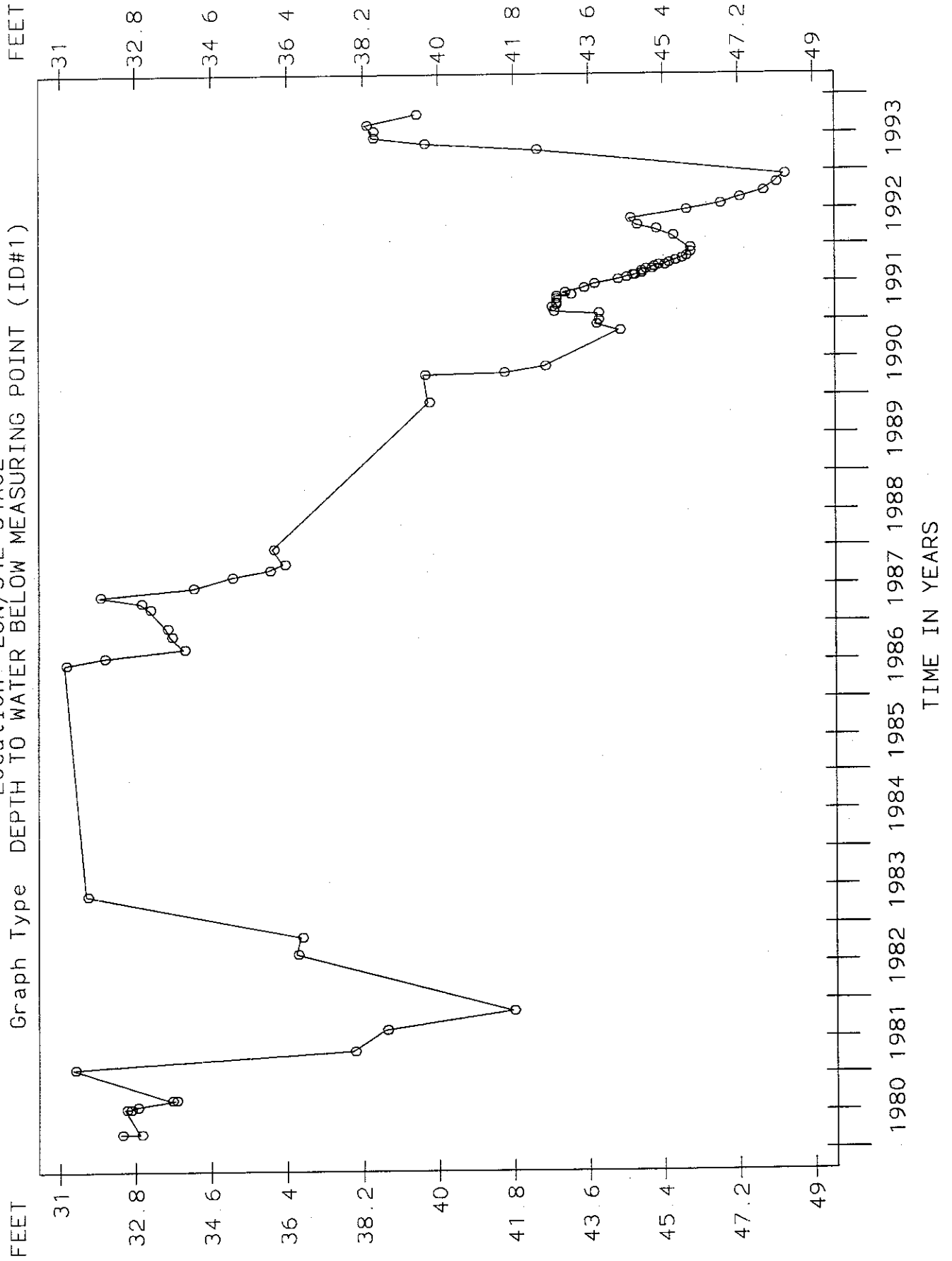


HYDROGRAPH FOR WELL AAE566 A01
 Location 26N/34E-34A01

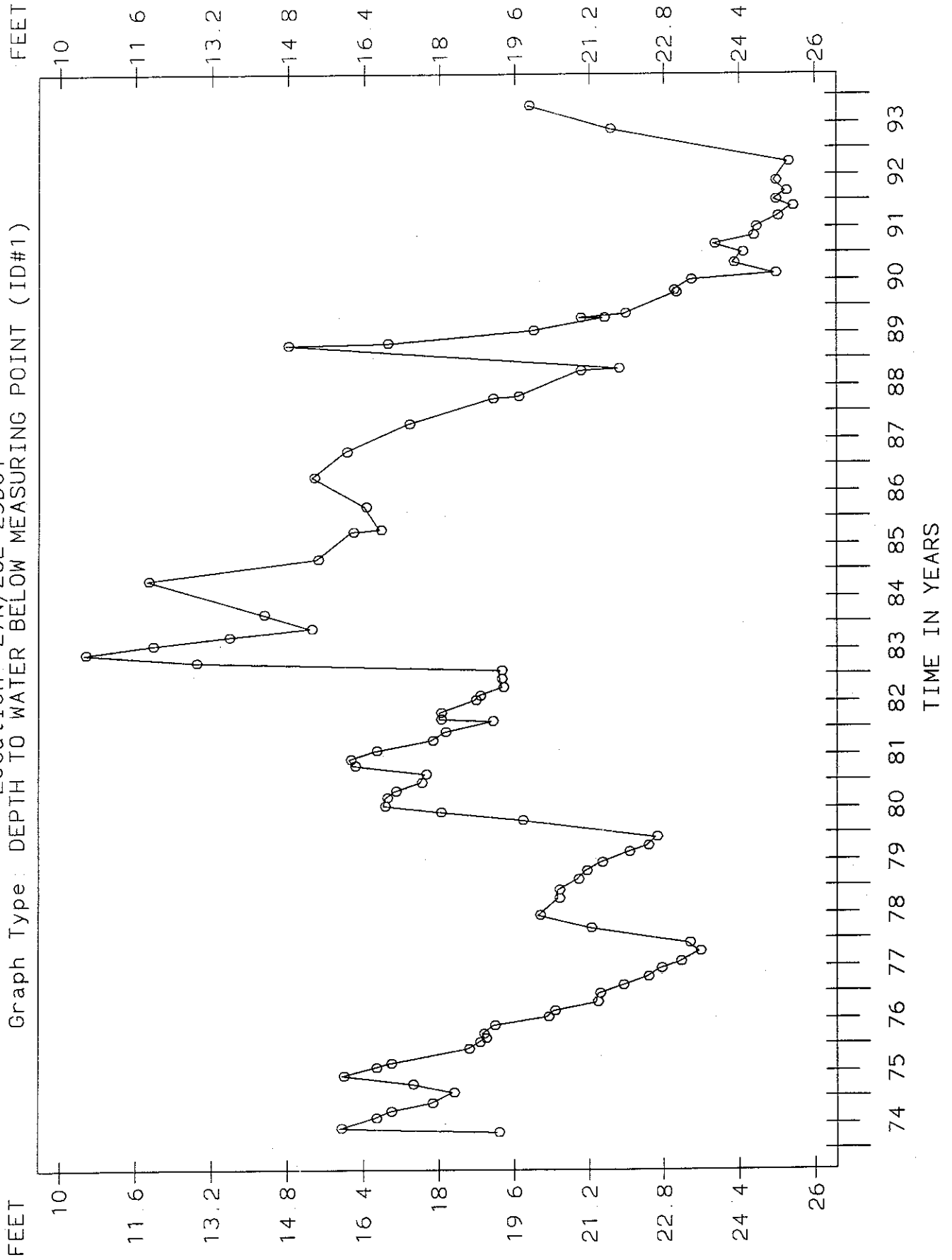


HYDROGRAPH FOR WELL AAE566 A02

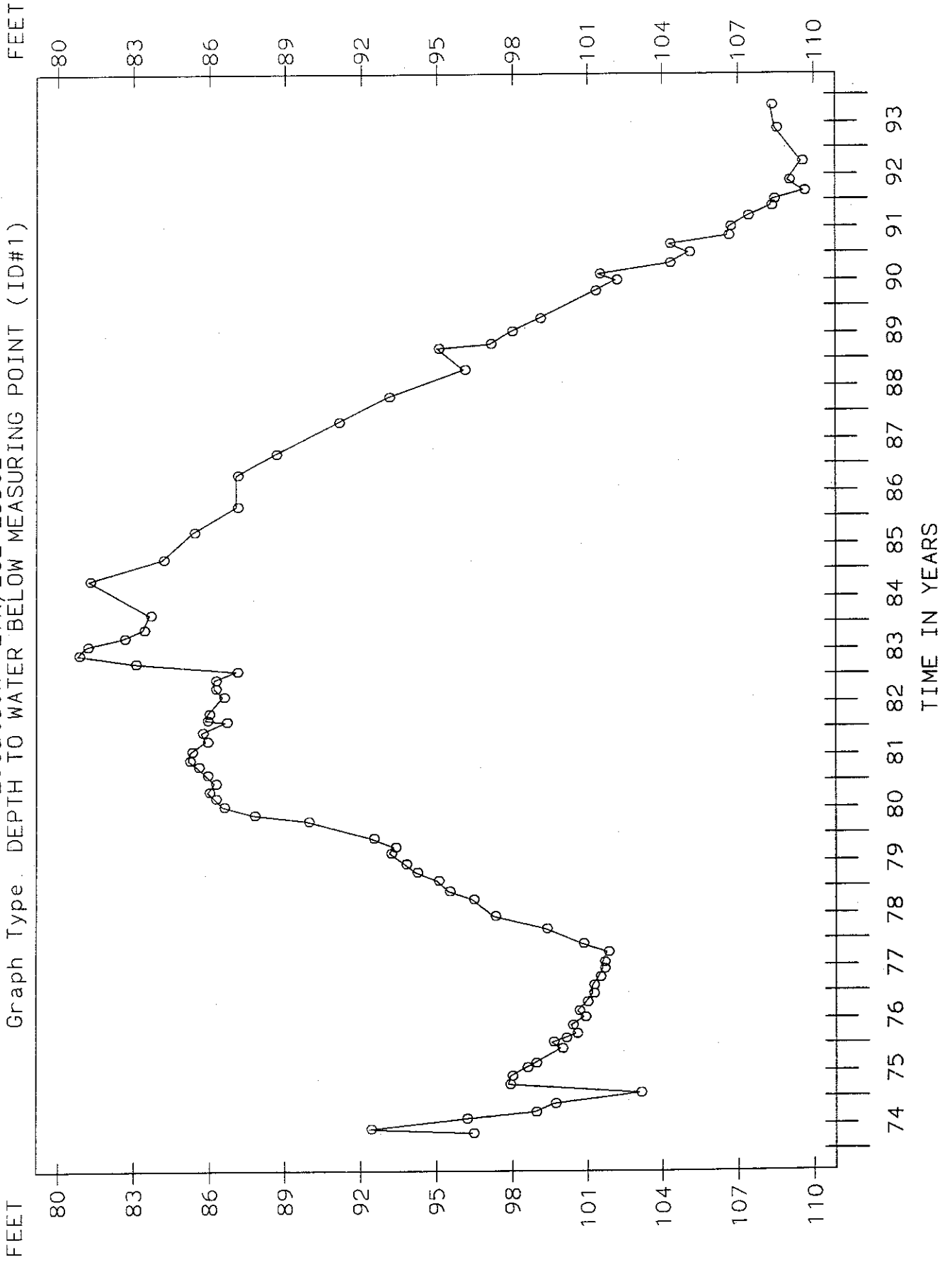
Location: 26N/34E-34A02



HYDROGRAPH FOR WELL AAE557 D01
 Location 27N/26E-25D01



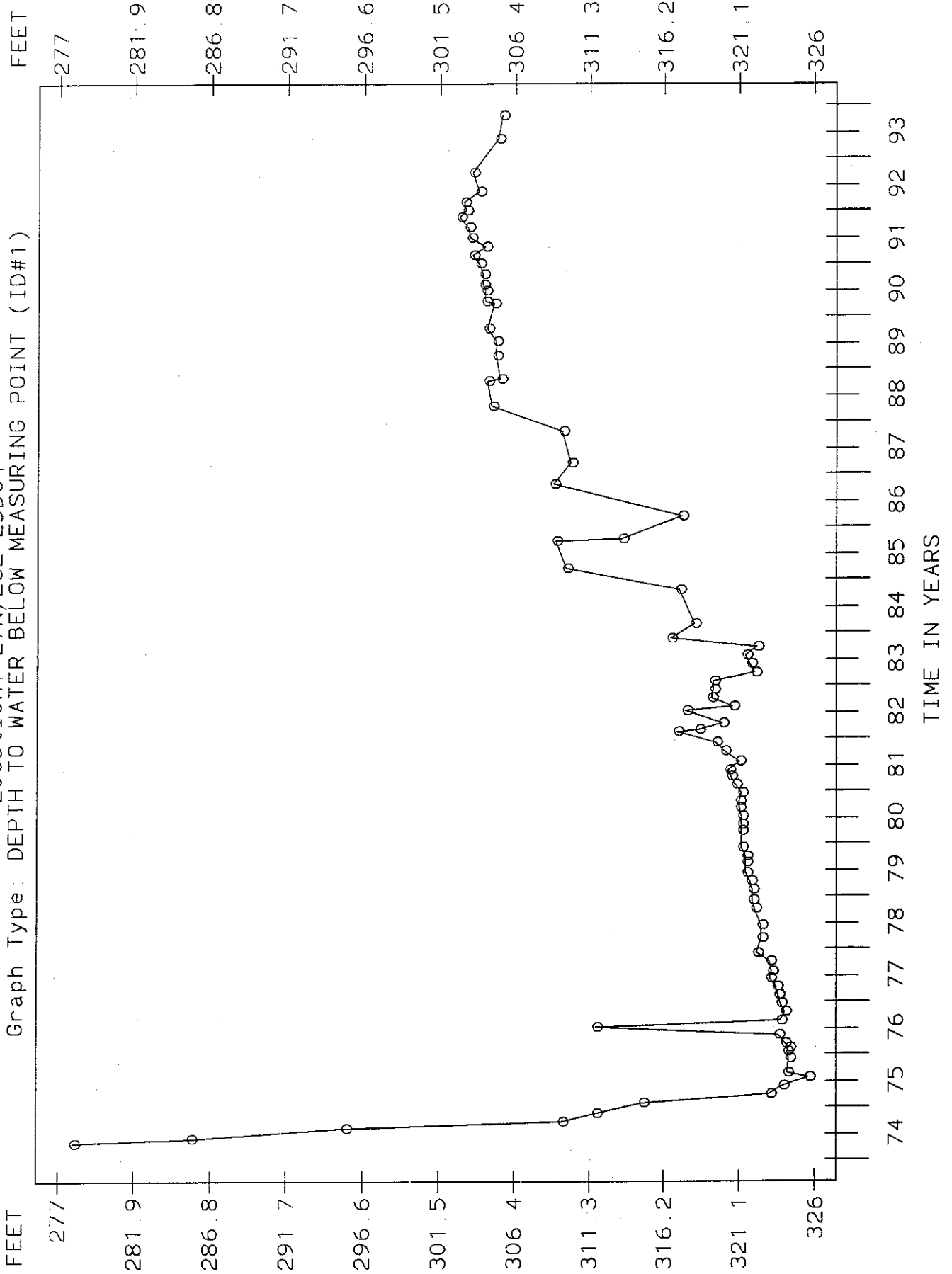
HYDROGRAPH FOR WELL AAE557 D02
 Location 27N/26E-25D02



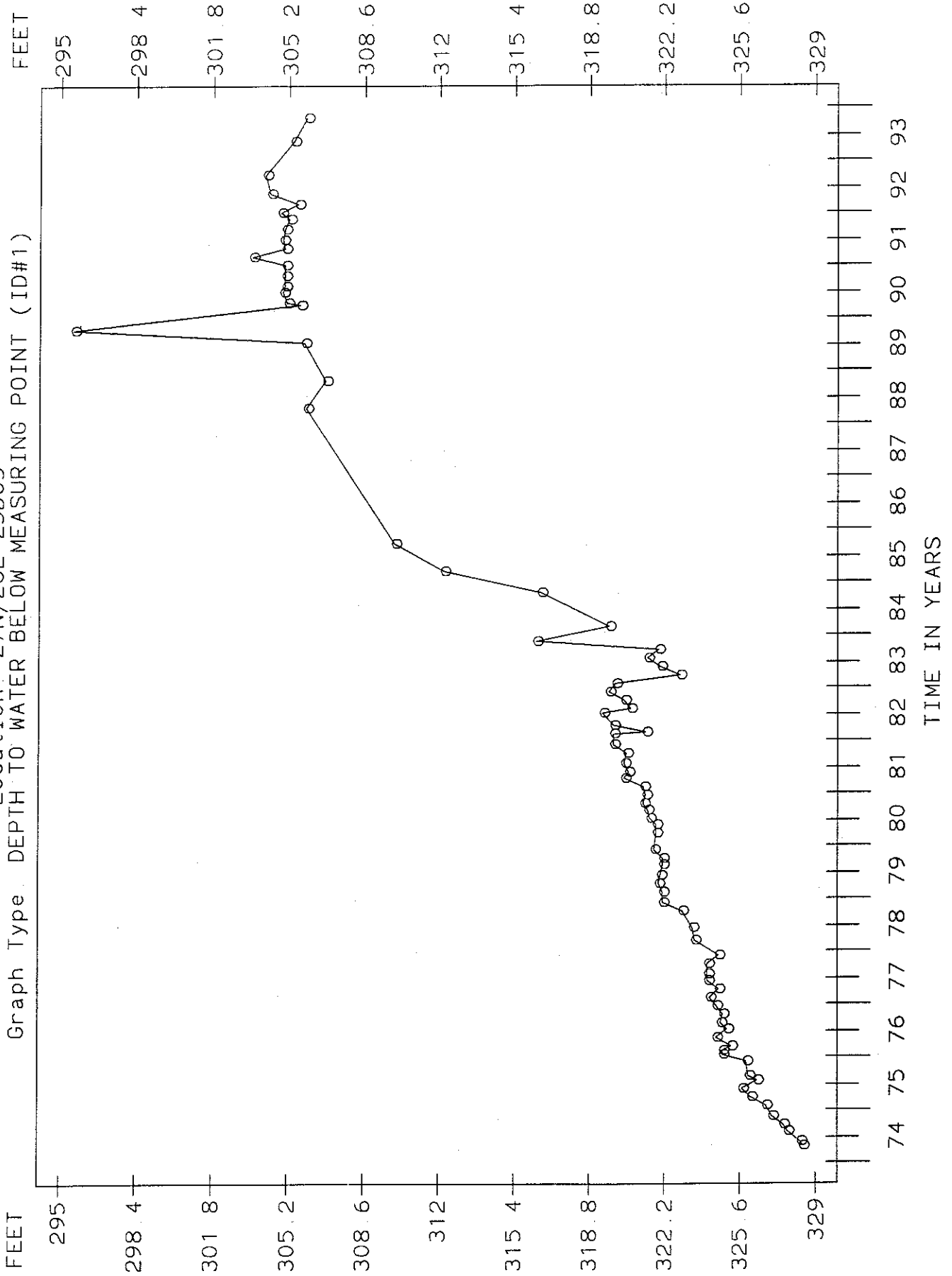
HYDROGRAPH FOR WELL AAE557 D04

Location: 27N/26E-25D04

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



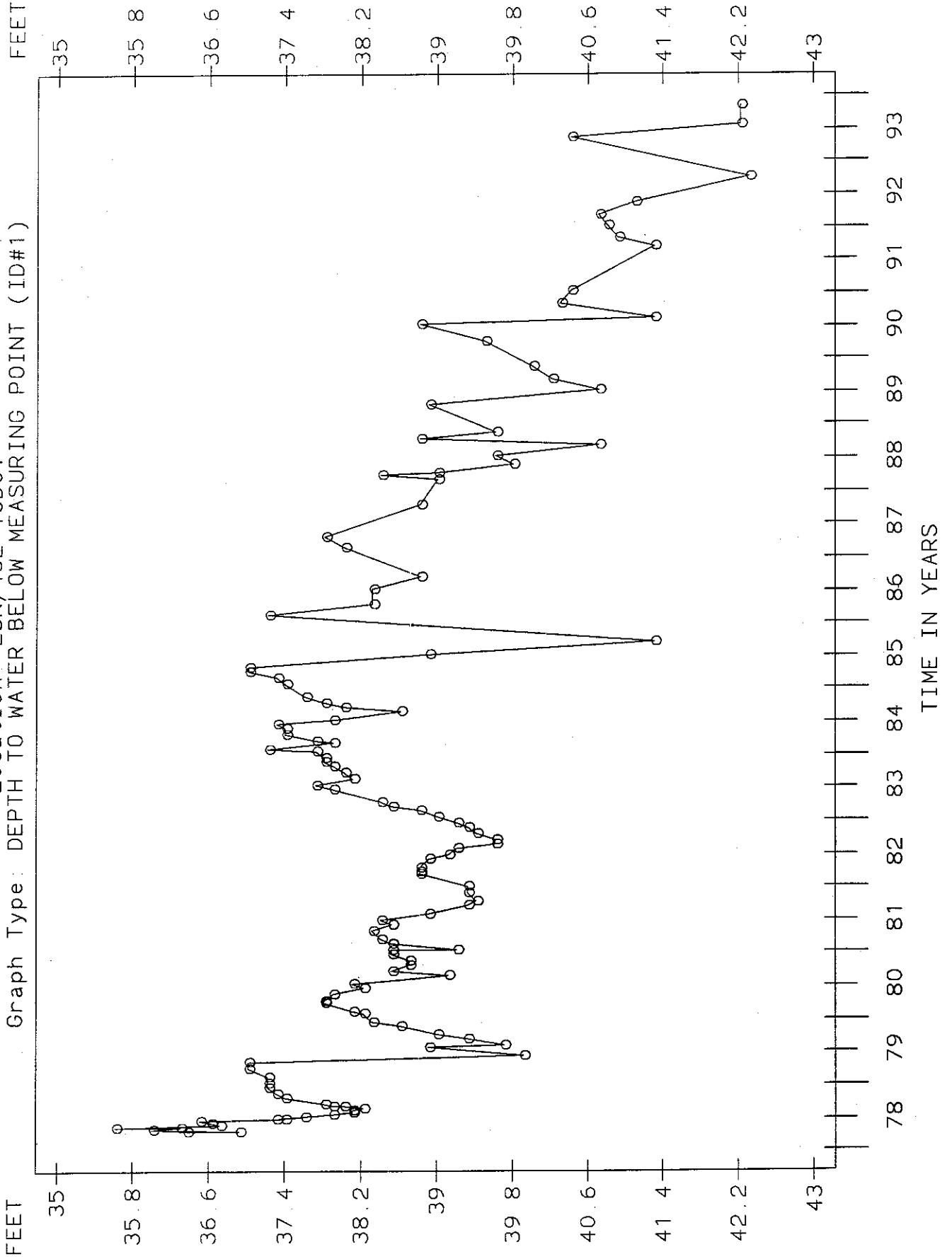
HYDROGRAPH FOR WELL AAE557 D05
Location 27N/26E-25D05



HYDROGRAPH FOR WELL AAE561

Location: 28N/43E-16D01

Graph Type: DEPTH TO WATER BELOW MEASURING POINT (ID#1)



HYDROGRAPH FOR WELL AAE560
 Location 29N/42E-33G01

