

Ground-Water and Surface-Water Elevations in the Fairbanks International Airport Area, Alaska, 1990-94

By David V. Claar and Michael R. Lilly

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CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATIONS

	Multiply	By	To obtain
	foot (ft)	0.3048	meter
	mile (mi)	1.609	kilometer
	square mile (mi ²)	2.59	square kilometer
	foot per second (ft/s)	0.3048	meter per second
	gallon per minute (gal/min)	0.06308	liter per second

Vertical Datum:

In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NVGD of 1929), a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Horizontal Datum:

The horizontal datum for all locations in this report is the North American Datum of 1927. Multiple reference marks were used from Alaska Department of Transportation and Public Facilities surveys. Global positioning survey instruments were also used to determine horizontal control points.

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Abstract

Ground-water and surface-water elevation data were collected at 52 sites from 1990 to 1994 by the U.S. Geological Survey in cooperation with the Alaska Department of Transportation and Public Facilities, Fairbanks International Airport. Water elevations were measured in 32 ground-water observation wells and at 20 surface-water sites to help characterize the geohydrology of the Fairbanks International Airport area. From 1990 to 1993, data were collected in the vicinity of the former fire-training area at the airport. From 1993 to 1994, the data-collection area was expanded to include the entire airport area.

INTRODUCTION

The U.S. Geological Survey (USGS) in cooperation with the Alaska Department of Transportation and Public Facilities, Fairbanks International Airport (FIA), is presently (1995) conducting an investigation to characterize the geohydrology of the area around the FIA (fig. 1 and plate 1). The airport is located southwest of and adjacent to the city of Fairbanks. From 1990 to 1993, data were collected in the vicinity of the former fire-training area at the airport to characterize the geohydrologic conditions in this area. The current study is an expansion of work started in 1990 and includes the entire airport area. This report presents ground-water and surface-water-elevation data that were collected between October 1990 and October 1994.

Water elevations at many of the ground-water and surface-water sites were collected at monthly intervals. In addition, water-elevation data at selected sites were collected at more frequent intervals to document short-term changes in ground-water elevations caused by rapid stage changes of the Chena and Tanana Rivers. All ground-water data are maintained in the USGS Ground-Water Site Inventory (GWSI) data base. Surface-water data are in the USGS Automatic Data Acquisition and Processing System (ADAPS) data base (table 1).

HYDROLOGIC SETTING

The FIA study area occupies about 8 mi² of the flood plain between the Chena and Tanana Rivers at their confluence (plate 1). The former FIA fire-training area encompasses about 0.1 mi² near the southwest corner of the FIA (plates 1 and 2). The subsurface material at the study area and most of the surrounding area is composed of alluvial sand and gravel, known as the Chena Alluvium, deposited by the Tanana River (Péwé and others, 1976). Originally, the Chena River entered the Tanana River about 7 mi east of Fairbanks. In 1940, the U.S. Army Corps of Engineers blocked several sloughs between the Chena and Tanana Rivers, redefining the mouth of the Chena River to a location 7 mi southwest of Fairbanks (T.L. Péwé, written commun., 1995). Sediment facies within the deposits are laterally discontinuous as is typical of braided river deposits (Rust,

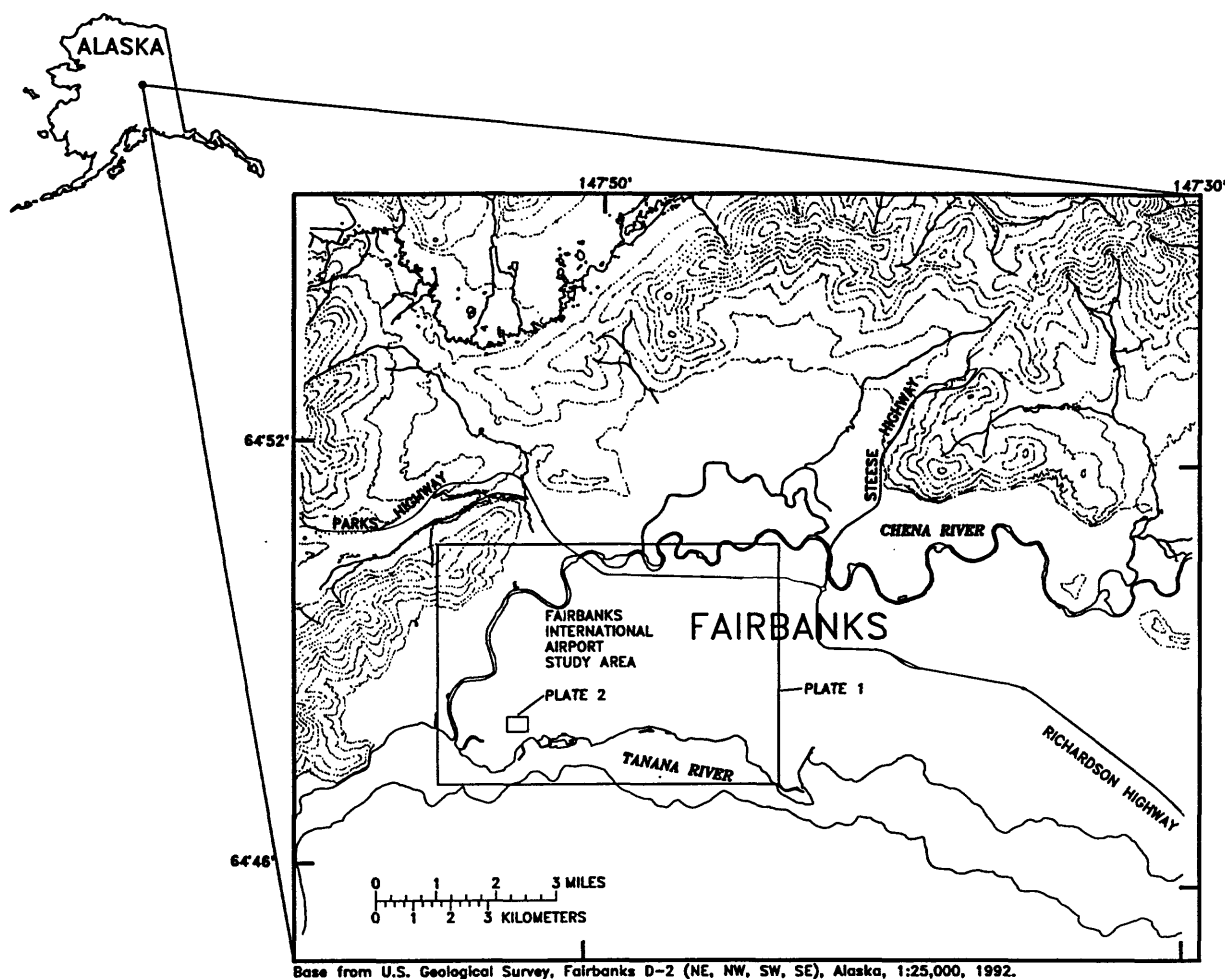


Figure 1. Location of Fairbanks, Alaska, and the Fairbanks International Airport study area.

1978). The thickness of these deposits is unknown but may be in excess of 500 ft (Nelson, 1978). Chena Ridge, which is located north of the Chena River along the northwest boundary of the study area, is part of a metamorphic system that forms the Yukon-Tanana Upland (Anderson, 1970).

The Tanana River is the main surface-water influence on much of the alluvial aquifer in the general Fairbanks area (Nelson, 1978). The Tanana River stage typically rises for one to two weeks during spring snowmelt and from ice-jam effects and then recedes (fig. 2). The stage again rises for a longer period during the middle of the summer in response to glacial runoff from the Alaska Range. The flow and stage of the Tanana River decrease during late summer when temperatures drop in the Alaska Range. The river stages increase after complete ice cover is established across the river as a result of an increase in flow resistance from ice cover. Stages then decrease throughout the winter because of the continuing reduction of water flow.

Stages in the reach of the Chena River within the study area are affected by backwater from the Tanana River, as well as by variation in flow in the Chena River. Flows in the Chena River rise during spring snowmelt runoff and late summer rainfall runoff (fig. 2). Ice also covers most of the Chena River during the winter season, although long reaches may remain ice free throughout the winter.

Table 1. Ground- and surface-water data-collection sites, Fairbanks International Airport area.

[-- indicates no previously used name]

Site name this report	Site name previously used	USGS data base	Site ID
Ground-water sites			
FIA1	--	GWSI	644954147502901
FIA2	IGW	GWSI	644804147523201
FIA3	LFW	GWSI	644804147523501
FIA4	B1	GWSI	644802147522701
FIA5	B2	GWSI	644802147523001
FIA6	B3	GWSI	644804147523101
FIA7	B4	GWSI	644804147522301
FIA8	P111	GWSI	644752147541101
FIA9	PTAN	GWSI	644758147520601
FIA10	CP60	GWSI	644800147520901
FIA11	DEC1	GWSI	644804147523301
FIA12	DEC2	GWSI	644805147523301
FIA13	--	GWSI	644922147492701
FIA14	--	GWSI	644944147493801
FIA15	TH93-1	GWSI	644936147483501
FIA16	TH93-3	GWSI	644950147483501
FIA17	TH93-5	GWSI	645001147484001
IG1	--	GWSI	644804147523302
IG2	--	GWSI	644804147523202
IG3	--	GWSI	644804147523001
IG4	--	GWSI	644804147523203
IG5	--	GWSI	644804147523204
IG6	--	GWSI	644804147523102
IG7	--	GWSI	644804147523002
IG8	--	GWSI	644804147523003
IG9	--	GWSI	644804147523303
IG10	--	GWSI	644804147523005
IG11	--	GWSI	644804147523304
IG12	--	GWSI	644804147523305
TR1	--	GWSI	644804147522901
TR2	--	GWSI	644804147522902
TR3	--	GWSI	644804147523004
Surface-water sites			
Sloughs and ponds			
FIASL1	SLS1	GWSI	644944147494001
FIASL2	SLR1, CU5	GWSI	644807147524501
FIASL3	SLR2	GWSI	644800147523301
FIASL4	SLR3, CU1a, CU1b, CU1c	GWSI	644757147522701
FIASL5	SLR4	GWSI	644752147522101
FIASL6	CU4	GWSI	644750148523701
FIASL7	SLR8, SLR12	GWSI	644758147532701
FIASL8	CU2	GWSI	644749147533301
FIASL9	SLR7b, SLR7c, SLR7d, SLR7e	GWSI	644742147541501
FIASL10	CU3, SLR9	GWSI	644814147523901
FIASL11	SLR13, SLR13b	GWSI	644915147515001
FIASL12	SLR14, SLR14b, CU6	GWSI	644916147514601
FIASL13	SLS3	GWSI	644944147494001
FIASL14	SLR6, SLR10, SLR11, SLS2	GWSI	644749147533101
Rivers			
Chena River at Fairbanks		ADAPS	15514000
Chena River at University Ave.		ADAPS	15514016
Chena River at Parks Highway		ADAPS	15514018
Chena River at Pike's Landing		ADAPS	15514020
Tanana River at Peger Road		ADAPS	Not yet assigned
Tanana River at Fairbanks		ADAPS	15485500

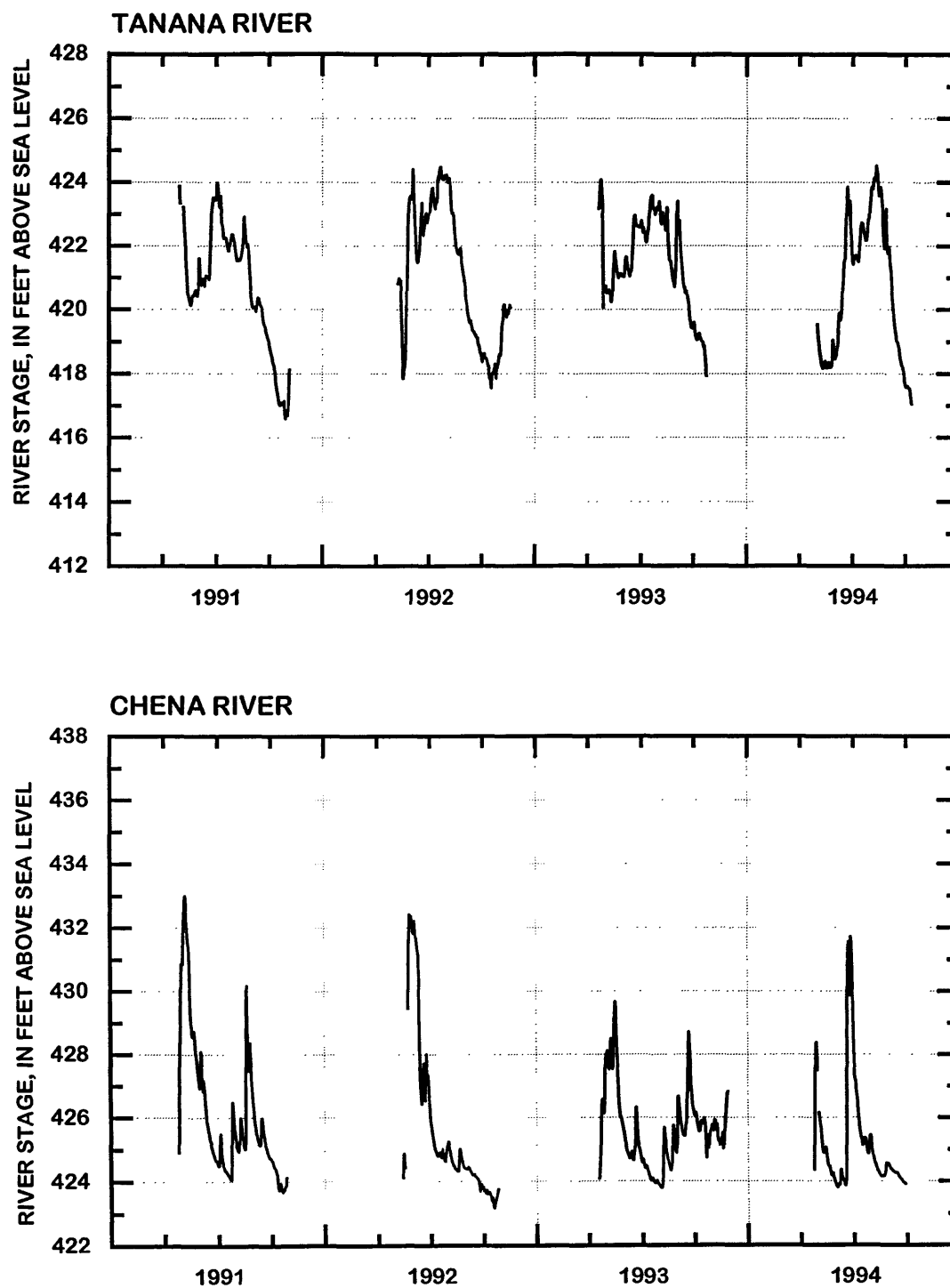


Figure 2. Water-surface elevations of the Tanana and Chena Rivers at Fairbanks gaging stations for calendar years 1991 to 1994.

The depth to ground water below the land surface is less than 10 ft throughout most of the study area. Ground-water elevations respond to changes in stage of the Chena and Tanana Rivers. No major withdrawals of ground water within the study area affect regional ground-water levels. However, water levels within the former fire-training area were affected by small-scale pumping during short periods of time when ground-water remediation experiments were conducted during the summer of 1992. The College Utilities Corporation also withdraws water from wells on the north side of the Chena River close to the northeast corner of the study area. The effect of these withdrawals on water levels within the study area is unknown, but is thought to be insignificant over most of the study area.

GROUND-WATER SITES

During this study, water elevations were measured in 32 wells, 23 of which are in the former fire-training area (plates 1 and 2, and table 1). All wells are shallow—less than 30 ft deep—and most are screened at the water table. Data from some of the wells have been previously reported or released to the public using well names that are different from those used in this report. Present and previous names are cross referenced in table 1.

The water elevation in a well was determined by using either a steel tape and chalk or an electric tape to measure the vertical distance between a measuring point and the water surface. The electric tapes were calibrated against steel tapes and correction factors were applied. Replicate measurements were taken at each well until depth-to-water readings were duplicated within 0.01 ft for measurements made by steel tapes and within 0.02 ft for those made by electric tapes. The measuring points at all wells used in this study were labeled to avoid errors.

SURFACE-WATER SITES

Surface-water elevations were measured at 20 sites: 4 on the Chena River, 2 on the Tanana River, and 14 on miscellaneous sloughs and ponds (plates 1, 2 and table 1). The Chena River at Fairbanks gaging station (not shown on plate 1) is located about 0.5 mi downstream from the Steese Highway bridge. The sloughs and ponds act as retention ponds for snowmelt and rainfall runoff. Water elevations in sloughs, ponds, and selected river sites were determined by reading a staff gage or by using a measuring tape to measure the distance from the water surface to a point of known elevation. At stream-gaging stations, water elevations were determined by using wire-weight gages on bridges, by surveying to the water surface, or by water-level sensors interfaced with a continuous stage recorder. In the winter, holes were cut through the ice to measure water elevations.

SURVEY DATA

Elevation of reference points at all water-elevation measuring sites in this study were surveyed to the National Geodetic Vertical Datum of 1929. The datum is called "sea level" in this report. The reference benchmark located on the main airport runway is K 60 (U.S. Coast and Geodetic Survey, 1966). The elevation of K 60 used for this study and used by the Fairbanks International Airport is 432.95 ft. This elevation is 0.02 ft higher than the elevation given by the U.S. Coast and Geodetic Survey (1966). Before June 1992, the USGS used a different benchmark; pre-

viously released elevations may differ from those given in this report. The elevations of reference points forming the FIA vertical survey net were connected to the vertical survey net used by the USGS in a study of the University of Alaska area, located northeast of the FIA.

Selected wells were re-surveyed to check and adjust elevations for frost jacking. Frost jacking occurs mainly in late spring or early summer, after the snow has melted. Updated measuring point elevations are applied to water elevations after the estimated time of movement. Horizontal locations of sites were determined by horizontal ground surveys, satellite-based global positioning systems, and from maps of the study area.

GROUND-WATER AND SURFACE-WATER ELEVATIONS

The remainder of this report consists of a section called "Water-Elevation Tables and Hydrographs." This section shows ground-water and surface-water data collected in the Fairbanks International Airport area between 1990 and 1994. Data for each site consist of water elevations collected (1) during mass measurements (MM)—sets of measurements made once each month at a large group of sites within a short time period, and (2) during partial measurements (PM)—sets of measurements made as needed at a smaller selection of sites.

Tables: Each table showing water elevations contains information about the site, well construction, and each measurement made at the site. Land surface (LS) is the average elevation of the ground immediately surrounding the well, rebar, culvert, or staff gage at each site. The measuring point (MP) is the point of known elevation from which all water-elevation measurements are taken. The site identification (ID) is based on latitude and longitude and is the primary identifier used in the USGS data bases GWSI and ADAPS. The local number is based on the State Rectangular Coordinate System, defined by base and meridian, township, range, section, and quarter section to the fourth order number (fig. 3).

Hydrographs: Each hydrograph shows all data presented on the corresponding water-elevation table. Each point on the hydrograph represents a measured water elevation. Uniform time and elevation scales for each hydrograph are used to allow direct comparison between hydrographs. Data points are plotted and connected with lines. These lines show the estimated trends between measurements; however, the connecting lines do not reflect any shorter period stage changes that may have occurred between measurements. No trend lines were drawn between points 2 months or more apart.

REFERENCES CITED

- Anderson, G.S., 1970, Hydrologic reconnaissance of the Tanana Basin, Central Alaska: U.S. Geological Survey Hydrologic Investigations Atlas HA-319, 4 sheets.
- Nelson, G.L., 1978, Hydrologic information for land-use planning, Fairbanks vicinity, Alaska: U.S. Geological Survey Open-File Report 78-959, 47 p.
- Péwé, T.L., Bell, J.W., Forbes, R.B., and Weber, F.R., 1976, Geologic map of the Fairbanks D-2 SW quadrangle, Alaska: U.S. Geological Survey Miscellaneous Investigations Series Map I-829-A, scale, 1:24000, 1 sheet.
- Rust, B.R., 1978, Depositional models for braided alluvium, *in* Miall, A.D., ed., *Fluvial sedimentology*: Canadian Society of Petroleum Geology Memoir 5, p. 605 - 625.
- U.S. Coast and Geodetic Survey, 1966, Vertical control datum: U.S. Department of Commerce, Environmental Sciences Services Administration, September, 26 p.

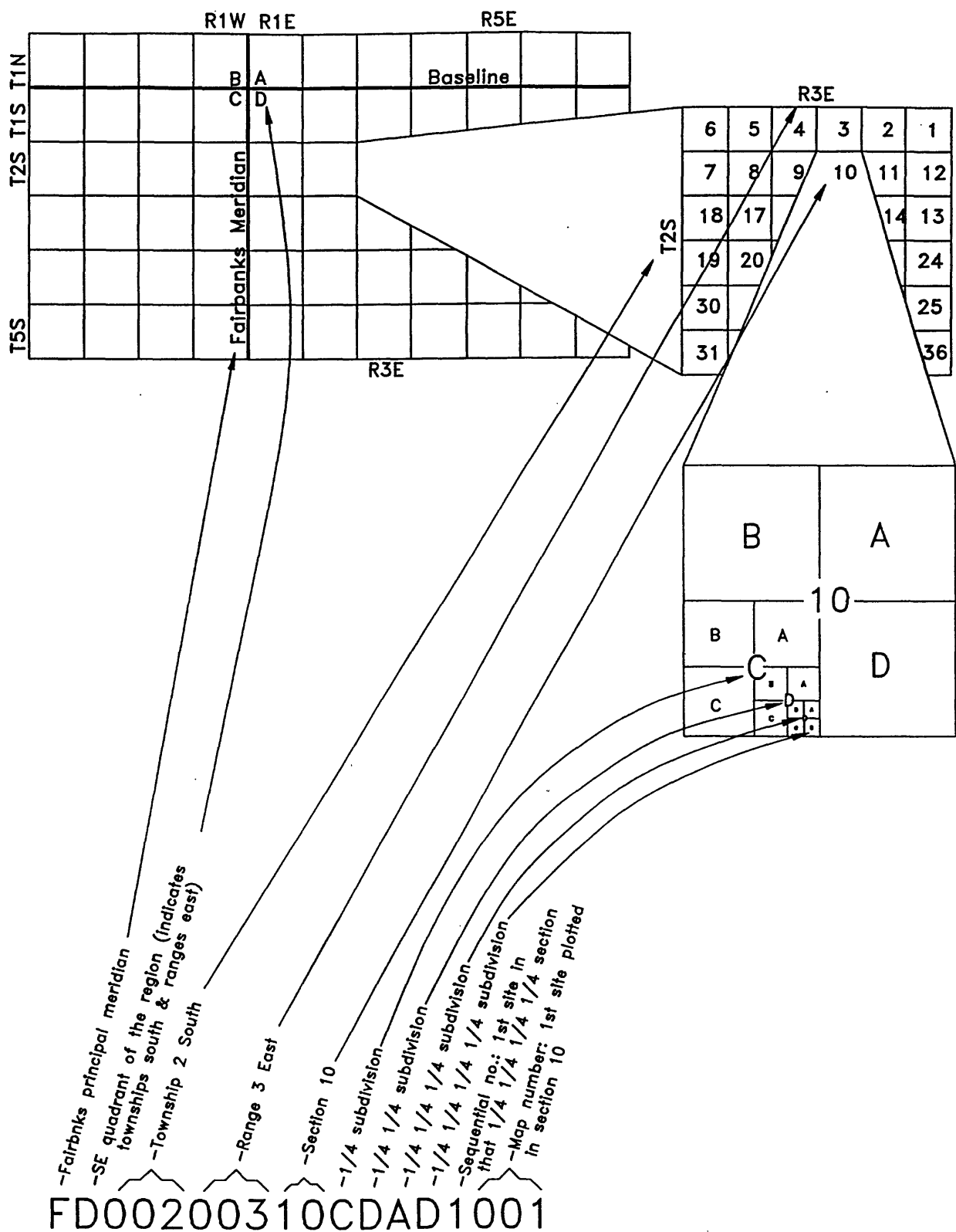


Figure 3. Derivation of local number from the official rectangular subdivision of public lands.

WATER-ELEVATION TABLES AND HYDROGRAPHS

FIA1 GROUND-WATER OBSERVATION WELL
Well at FAA facility

Site ID: 644954147502901
Local Number: FC00100118BBCD1 003

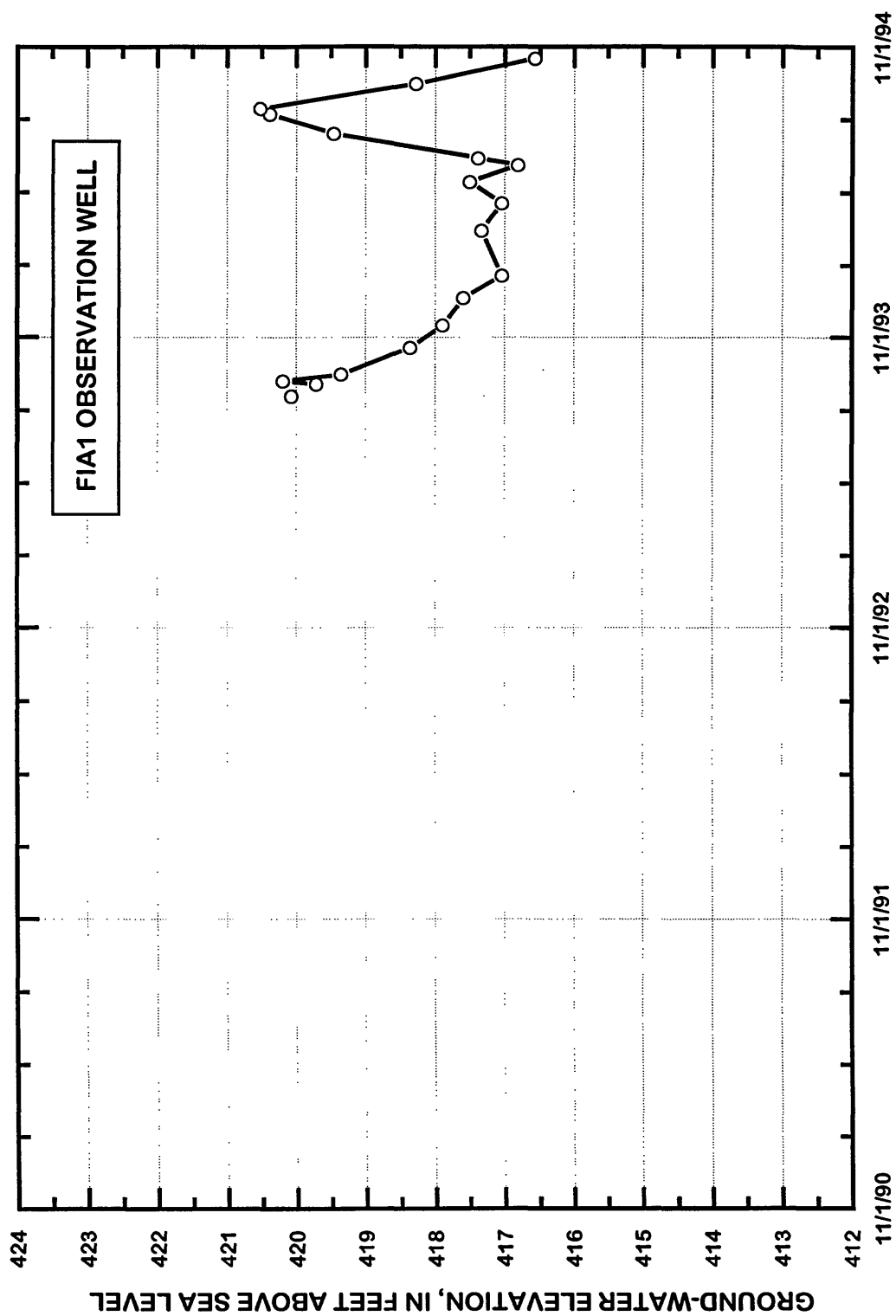
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	NA	NA
Depth from TOC to top of SI :	NA	NA
Depth from TOC to bottom of SI :	NA	NA
Land surface datum:		430.09

CR10, data logger
LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-12-93	425.04

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-19-93	0920	Steel tape	4.97	0.01	10.02	420.07	MM
09-03-93	1332	Steel tape	5.33	0.01	10.38	419.71	Installed CR10, PM
09-07-93	1545	Steel tape	4.85	0.01	9.90	420.19	PM
09-15-93	1345	Steel tape	5.69	0.01	10.74	419.35	MM
10-19-93	1412	Steel tape	6.68	0.01	11.73	418.36	MM
11-16-93	1223	Steel tape	7.15	0.01	12.20	417.89	MM
12-21-93	1204	Steel tape	7.45	0.01	12.50	417.59	MM
01-18-94	1253	Steel tape	8.00	0.01	13.05	417.04	MM
03-16-94	1053	Steel tape	7.71	0.01	12.76	417.33	MM
04-19-94	1508	Steel tape	8.00	0.01	13.05	417.04	MM
05-16-94	1030	Steel tape	7.55	0.01	12.60	417.49	MM
06-06-94	0922	Steel tape	8.23	0.01	13.28	416.81	PM
06-15-94	1111	Steel tape	7.66	0.01	12.71	417.38	MM
07-15-94	1254	Steel tape	5.58	0.01	10.63	419.46	MM
08-08-94	1008	Steel tape	4.66	0.01	9.71	420.38	PM
08-15-94	1050	Steel tape	4.52	0.01	9.57	420.52	MM
09-15-94	1205	Steel tape	6.76	0.01	11.81	418.28	MM
10-17-94	1051	Steel tape	8.47	0.01	13.52	416.57	MM
11-15-94	1006	Steel tape	8.28	0.01	13.33	416.76	MM



FIA2 GROUND-WATER OBSERVATION WELL
Formerly observation well IGW

Site ID: 644804147523201
Local Number: FC00100225BCBC1 010

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	30.0	396.2
Depth from TOC to top of SI :	25.0	401.2
Depth from TOC to bottom of SI :	30.0	396.2
Land surface datum:		423.98

CR10, data logger
LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	426.13
06-01-92	426.13 Updated MP
06-26-92	426.13 Updated MP
08-11-92	426.20 New datum (All WS elevations reflect datum change.)
06-30-93	426.20 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	E-tape	7.83	0.02	5.61	418.37	MM
08-22-91	1032	E-tape	5.68	0.02	3.46	420.52	MM
08-26-91	0931	E-tape	6.52	0.02	4.30	419.68	PM
09-10-91	0929	E-tape	7.73	0.02	5.51	418.47	MM
10-01-91	1014	E-tape	8.41	0.02	6.19	417.79	MM
01-02-92	NA	E-tape	NA	NA	NA	NA	Frozen, MM
04-20-92	NA	E-tape	6.33	0.02	4.11	419.87	MM
06-12-92	1612	E-tape	5.69	0.02	3.47	420.51	Updated MP, MM
06-19-92	1436	E-tape	5.30	0.02	3.08	420.90	PM
06-25-92	1145	E-tape	5.44	0.02	3.22	420.76	PM
06-27-92	2100	Steel tape	6.00	0.01	3.78	420.20	Updated MP, PM
07-06-92	0745	Steel tape	5.87	0.01	3.65	420.33	PM
07-08-92	1554	Steel tape	5.64	0.01	3.42	420.56	PM
07-23-92	1256	Steel tape	5.14	0.01	2.92	421.06	MM
08-11-92	1220	Steel tape	5.56	0.01	3.34	420.64	New datum, PM
08-13-92	1238	Steel tape	5.70	0.01	3.48	420.50	MM

FIA2 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well IGW

Site ID: 644804147523201
 Local Number: FC00100225BCBC1 010

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
01-13-93	NA	Steel tape	NA	NA	NA	NA	Frozen, MM
04-14-93	1519	Steel tape	NA	NA	NA	NA	Frozen, MM
06-03-93	1617	Steel tape	6.56	0.01	4.34	419.64	Updated MP, PM
06-11-93	1445	Steel tape	6.47	0.01	4.25	419.73	Installed CR10, MM
06-30-93	1532	Steel tape	5.76	0.01	3.54	420.44	PM
07-16-93	1250	Steel tape	5.63	0.01	3.41	420.57	MM
08-16-93	1632	Steel tape	4.88	0.01	2.66	421.32	MM
09-07-93	1617	Steel tape	4.92	0.01	2.70	421.28	PM
09-15-93	1525	Steel tape	5.61	0.01	3.39	420.59	MM
10-19-93	1335	Steel tape	7.53	0.01	5.31	418.67	MM
11-17-93	1505	Steel tape	8.87	0.01	6.65	417.33	MM
12-21-93	1353	Steel tape	NA	NA	NA	NA	Frozen, MM
01-18-94	1456	Steel tape	NA	NA	NA	NA	Frozen, MM
02-25-94	1209	Steel tape	NA	NA	NA	NA	Frozen, MM
03-16-94	1332	Steel tape	NA	NA	NA	NA	Frozen, MM
04-18-94	1551	Steel tape	NA	NA	NA	NA	Frozen, MM
05-16-94	1330	Steel tape	NA	NA	NA	NA	Frozen, MM
06-06-94	0942	Steel tape	8.30	0.01	6.08	417.90	PM
06-15-94	1337	Steel tape	7.58	0.01	5.36	418.62	MM
07-15-94	1505	Steel tape	5.83	0.01	3.61	420.37	MM
08-08-94	1054	Steel tape	4.52	0.01	2.30	421.68	PM
08-15-94	1329	Steel tape	5.34	0.01	3.12	420.86	MM
09-15-94	1428	Steel tape	7.54	0.01	5.32	418.66	MM
10-17-94	1303	Steel tape	9.06	0.01	6.84	417.14	MM
11-15-94	1100	Steel tape	8.23	0.01	6.01	417.97	MM

FIA3 GROUND-WATER OBSERVATION WELL
Formerly observation well LFW

Site ID: 644804147523501
Local Number: FC00100226ADAB1 006

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	31.6	397.2
Depth from TOC to top of SI :	28.0	400.8
Depth from TOC to bottom of SI :	32.0	396.8
Land surface datum:		426.65

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

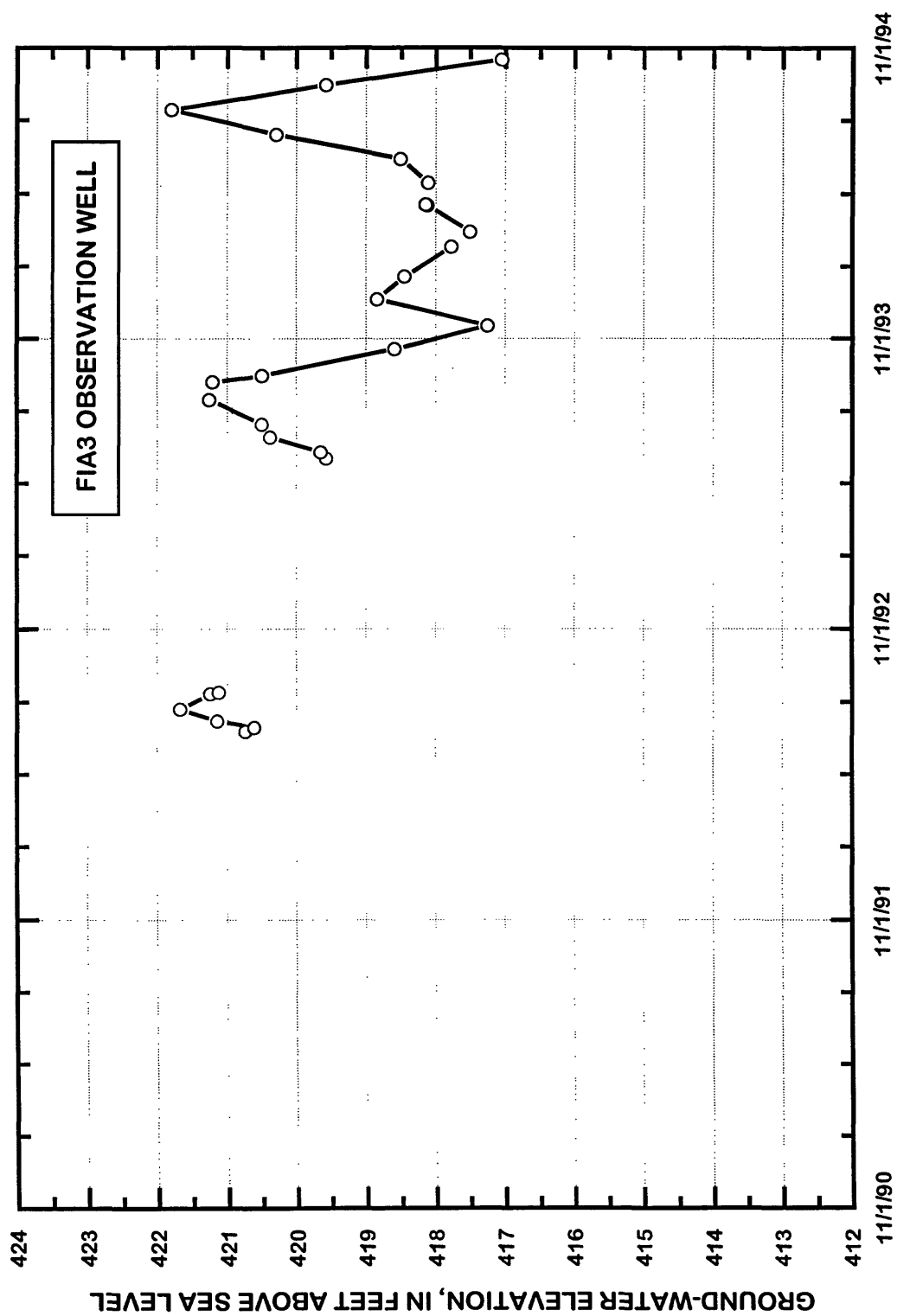
Date	MP Elevation (feet above sea level)
06-01-92	428.71
08-11-92	428.78 New datum
06-30-93	428.80 Updated MP
11-07-94	428.81 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-25-92	NA	E-tape	8.04	0.02	5.91	420.74	PM
06-30-92	1306	Steel tape	8.17	0.01	6.04	420.61	MM
07-08-92	1914	Steel tape	7.64	0.01	5.51	421.14	PM
07-23-92	1408	Steel tape	7.11	0.01	4.98	421.67	MM
08-11-92	1104	Steel tape	7.54	0.01	5.41	421.24	New datum, PM
08-13-92	1355	Steel tape	7.66	0.01	5.53	421.12	MM
06-03-93	1622	Steel tape	9.23	0.01	7.08	419.57	Updated MP, PM
06-11-93	1447	Steel tape	9.15	0.01	7.00	419.65	MM
06-30-93	1543	Steel tape	8.42	0.01	6.27	420.38	PM
07-16-93	1304	Steel tape	8.30	0.01	6.15	420.50	MM
08-16-93	1623	Steel tape	7.55	0.01	5.40	421.25	MM
09-07-93	1631	Steel tape	7.60	0.01	5.45	421.20	PM
09-15-93	1537	Steel tape	8.30	0.01	6.15	420.50	MM
10-19-93	1321	Steel tape	10.21	0.01	8.06	418.59	MM
11-17-93	1509	Steel tape	11.55	0.01	9.40	417.25	MM
12-21-93	1349	Steel tape	9.96	0.01	7.81	418.84	MM
01-18-94	1444	Steel tape	10.35	0.01	8.20	418.45	MM

FIA3 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well LFW

Site ID: 644804147523501
 Local Number: FC00100226ADAB1 006

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
02-25-94	1214	Steel tape	11.03	0.01	8.88	417.77	MM
03-16-94	1340	Steel tape	11.31	0.01	9.16	417.49	MM
04-18-94	1602	Steel tape	10.68	0.01	8.53	418.12	MM
04-19-94	1547	Steel tape	10.65	0.01	8.50	418.15	PM
05-16-94	1321	Steel tape	10.69	0.01	8.54	418.11	MM
06-15-94	1342	Steel tape	10.29	0.01	8.14	418.51	MM
07-15-94	1510	Steel tape	8.52	0.01	6.36	420.29	Updated MP, MM
08-15-94	1335	Steel tape	7.02	0.01	4.86	421.79	MM
09-15-94	1436	Steel tape	9.24	0.01	7.08	419.57	MM
10-17-94	1313	Steel tape	11.76	0.01	9.60	417.05	MM



FIA4 GROUND-WATER OBSERVATION WELL
Formerly observation well B1

Site ID: 644802147522701
Local Number: FC00100225BCCB1 006

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	17.94	411.8
Depth from TOC to top of SI :	5.26	424.5
Depth from TOC to bottom of SI :	14.75	415.0
Land surface datum:		427.13

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-25-91	429.69
10-10-91	429.68 Updated MP
06-26-92	429.76 New datum (all WS elevations reflect changes)
06-30-93	429.76 Updated MP
06-30-93	429.76 Updated MP
11-07-93	429.88 New MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
11-15-90	NA	E-tape	11.19	0.02	8.56	418.57	Non-USGS E-tape, MM
12-13-90	1320	E-tape	11.10	0.02	8.47	418.66	Non-USGS E-tape, MM
02-13-91	1207	E-tape	11.25	0.02	8.62	418.51	Non-USGS E-tape, MM
03-21-91	NA	E-tape	11.64	0.02	9.01	418.12	Non-USGS E-tape, MM
04-24-91	NA	E-tape	10.77	0.02	8.14	418.99	Non-USGS E-tape, MM
05-02-91	NA	E-tape	7.89	0.02	5.26	421.87	Non-USGS E-tape, PM
05-07-91	NA	E-tape	7.97	0.02	5.34	421.79	Non-USGS E-tape, PM
05-28-91	1007	E-tape	9.82	0.02	7.19	419.94	Non-USGS E-tape, MM
06-21-91	NA	E-tape	10.08	0.02	7.45	419.68	Non-USGS E-tape, PM
06-24-91	1434	E-tape	9.65	0.02	7.02	420.11	Non-USGS E-tape, MM
06-25-91	1242	E-tape	9.50	0.02	6.87	420.26	Non-USGS E-tape, PM
06-27-91	1029	E-tape	9.23	0.02	6.60	420.53	Non-USGS E-tape, PM
07-09-91	1203	E-tape	8.71	0.02	6.08	421.05	Non-USGS E-tape, PM
07-10-91	1155	E-tape	8.50	0.02	5.87	421.26	Non-USGS E-tape, PM
07-12-91	1150	E-tape	8.93	0.02	6.30	420.83	PM

FIA4 GROUND-WATER OBSERVATION WELL
Formerly observation well B1

(Continued)

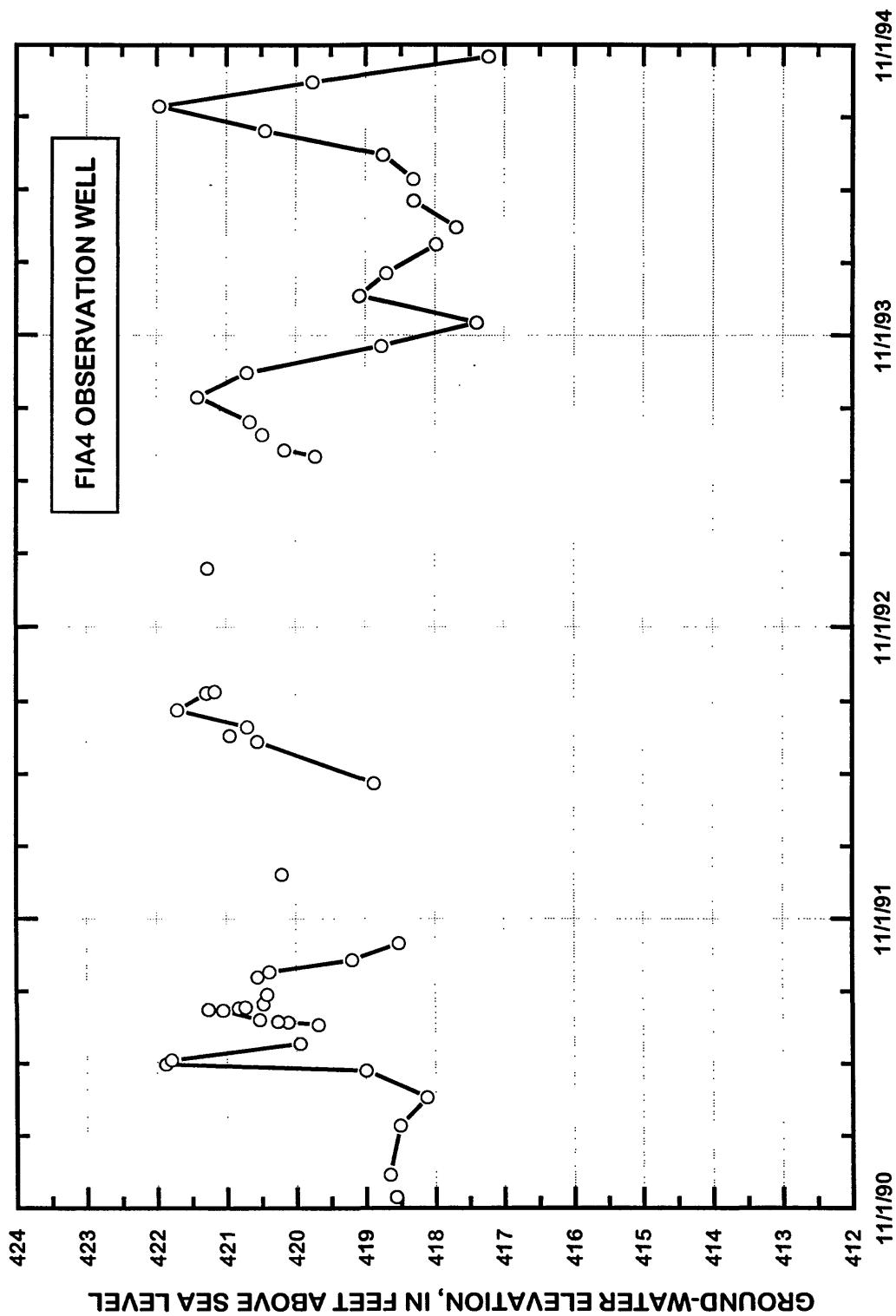
Site ID: 644802147522701
Local Number: FC00100225BCCB1 006

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-13-91	1210	E-tape	9.03	0.02	6.40	420.73	PM
07-17-91	0950	E-tape	9.29	0.02	6.66	420.47	MM
07-29-91	1502	E-tape	9.35	0.02	6.72	420.41	PM
08-20-91	0900	E-tape	9.21	0.02	6.58	420.55	MM
08-26-91	NA	E-tape	9.38	0.02	6.75	420.38	Non-USGS E-tape, PM
09-10-91	NA	E-tape	10.57	0.02	7.94	419.19	MM
10-01-91	1059	E-tape	11.23	0.02	8.61	418.52	Updated MP, MM
12-27-91	NA	E-tape	9.55	0.02	6.93	420.20	MM
04-20-92	1045	E-tape	10.88	0.02	8.26	418.87	MM
06-12-92	1645	E-tape	9.21	0.02	6.58	420.55	New datum, MM
06-19-92	0935	E-tape	8.81	0.02	6.18	420.95	PM
06-30-92	1205	Steel tape	9.06	0.01	6.43	420.70	PM
07-21-92	1135	Steel tape	8.06	0.01	5.43	421.70	MM
08-11-92	1119	Steel tape	8.48	0.01	5.85	421.28	PM
08-13-92	1316	Steel tape	8.60	0.01	5.97	421.16	MM
01-13-93	1010	E-tape	8.50	0.02	5.87	421.26	MM
06-03-93	1605	Steel tape	10.04	0.01	7.41	419.72	PM
06-11-93	1435	Steel tape	9.60	0.01	6.97	420.16	MM
06-30-93	1518	Steel tape	9.28	0.01	6.65	420.48	PM
07-16-93	1210	Steel tape	9.10	0.01	6.47	420.66	MM
08-16-93	1602	Steel tape	8.35	0.01	5.72	421.41	MM
09-15-93	1513	Steel tape	9.18	0.01	6.43	420.70	New MP, MM
10-19-93	1310	Steel tape	11.11	0.01	8.36	418.77	MM
11-17-93	1447	Steel tape	12.49	0.01	9.74	417.39	MM
12-21-93	1331	Steel tape	10.80	0.01	8.05	419.08	MM
01-18-94	1430	Steel tape	11.18	0.01	8.43	418.70	MM
02-23-94	1155	Steel tape	11.90	0.01	9.15	417.98	MM
03-16-94	1315	Steel tape	12.20	0.01	9.45	417.68	MM
04-18-94	1532	Steel tape	11.58	0.01	8.83	418.30	MM
05-16-94	1314	Steel tape	11.57	0.01	8.82	418.31	MM
06-15-94	1320	Steel tape	11.13	0.01	8.38	418.75	MM

FIA4 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well B1

Site ID: 644802147522701
 Local Number: FC00100225BCCB1 006

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-15-94	1459	Steel tape	9.43	0.01	6.68	420.45	MM
08-15-94	1324	Steel tape	7.92	0.01	5.17	421.96	MM
09-15-94	1421	Steel tape	10.12	0.01	7.37	419.76	MM
10-17-94	1257	Steel tape	12.66	0.01	9.91	417.22	MM



FIA5 GROUND-WATER OBSERVATION WELL
Formerly observation well B2

Site ID: 644802147523001
Local Number: FC00100226ADAA1 007

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	17.4	411.4
Depth from TOC to top of SI :	4.9	424.0
Depth from TOC to bottom of SI :	14.3	414.6
Land surface datum:		426.42

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

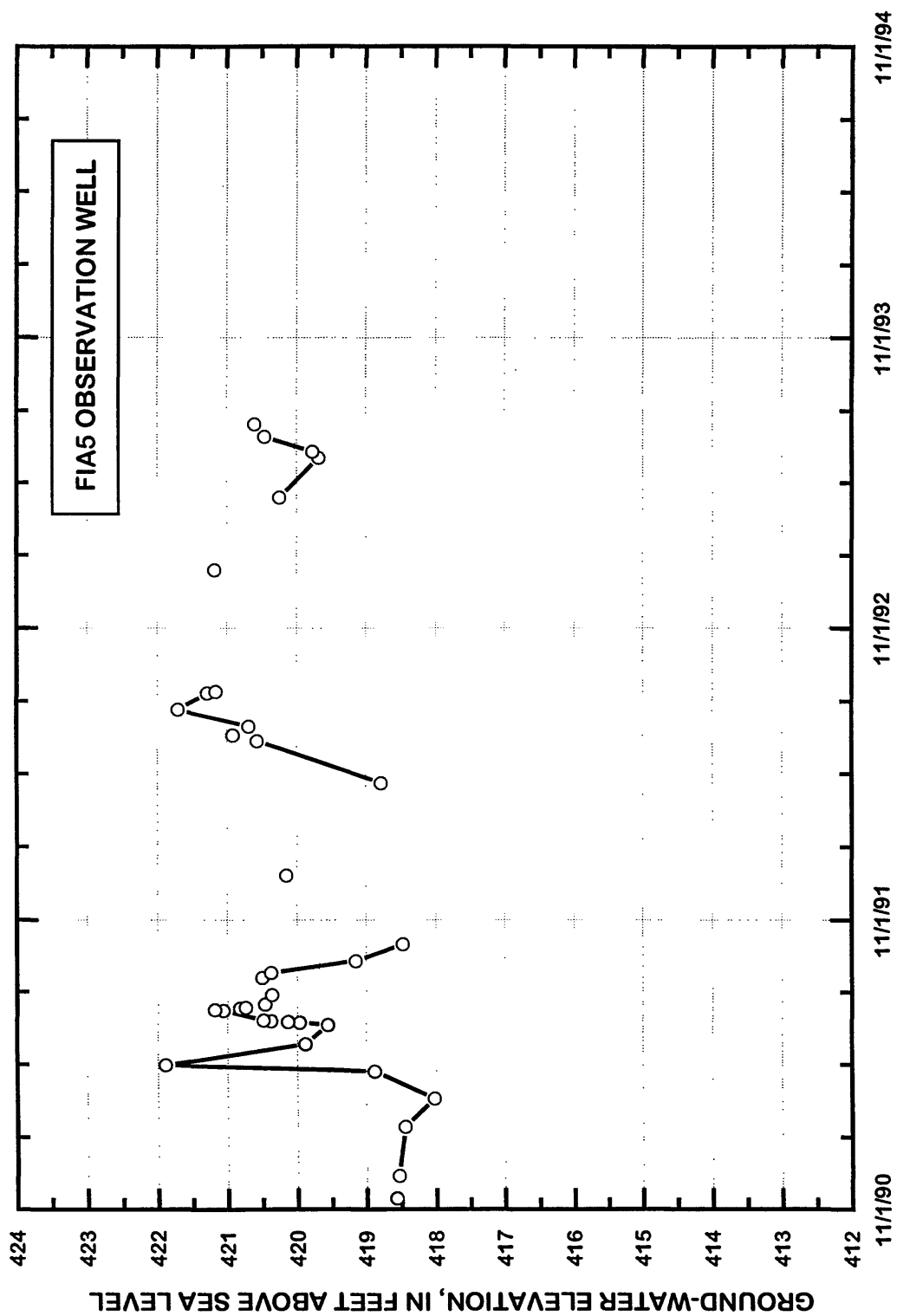
Date	MP Elevation (feet above sea level)
06-25-91	428.72
10-10-91	428.72 Updated MP
08-11-92	428.83 New datum (All WS elevations reflect datum change.)
06-30-93	428.87 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
11-15-90	1250	E-tape	10.22	0.02	7.85	418.57	Non-USGS E-tape, MM
12-13-90	1150	E-tape	10.25	0.02	7.88	418.54	Non-USGS E-tape, MM
02-13-91	1125	E-tape	10.34	0.02	7.97	418.45	Non-USGS E-tape, MM
03-21-91	NA	E-tape	10.76	0.02	8.39	418.03	Non-USGS E-tape, MM
04-24-91	NA	E-tape	9.91	0.02	7.54	418.88	Non-USGS E-tape, MM
05-02-91	NA	E-tape	6.90	0.02	4.53	421.89	Non-USGS E-tape, PM
05-28-91	0925	E-tape	8.91	0.02	6.54	419.88	Non-USGS E-tape, MM
06-21-91	1517	E-tape	9.24	0.02	6.87	419.55	Non-USGS E-tape, PM
06-24-91	1429	E-tape	8.83	0.02	6.46	419.96	Non-USGS E-tape, MM
06-25-91	1130	E-tape	8.66	0.02	6.29	420.13	Non-USGS E-tape, PM
06-26-91	1759	E-tape	8.42	0.02	6.05	420.37	Non-USGS E-tape, PM
06-27-91	1035	E-tape	8.31	0.02	5.94	420.48	Non-USGS E-tape, PM
07-09-91	1209	E-tape	7.73	0.02	5.36	421.06	Non-USGS E-tape, PM
07-10-91	1145	E-tape	7.61	0.02	5.24	421.18	Non-USGS E-tape, PM
07-12-91	1139	E-tape	7.97	0.02	5.60	420.82	Non-USGS E-tape, PM
07-13-91	1156	E-tape	8.05	0.02	5.68	420.74	PM
07-17-91	0936	E-tape	8.33	0.02	5.96	420.46	PM

FIA5 GROUND-WATER OBSERVATION WELL (Continued)
Formerly observation well B2

Site ID: 644802147523001
Local Number: FC00100226ADAA1 007

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-29-91	1529	E-tape	8.43	0.02	6.06	420.36	PM
08-20-91	1400	E-tape	8.29	0.02	5.92	420.50	MM
08-26-91	NA	E-tape	8.42	0.02	6.05	420.37	PM
09-10-91	NA	E-tape	9.64	0.02	7.27	419.15	MM
10-01-91	1109	E-tape	10.32	0.02	7.95	418.47	MM
12-27-91	1129	E-tape	8.64	0.02	6.27	420.15	MM
04-20-92	NA	E-tape	10.01	0.02	7.64	418.78	MM
06-12-92	1640	E-tape	8.26	0.02	5.85	420.57	MM
06-19-92	1044	E-tape	7.92	0.02	5.51	420.91	PM
06-30-92	1227	Steel tape	8.14	0.01	5.73	420.69	PM
07-21-92	1138	Steel tape	7.13	0.01	4.72	421.70	MM
08-11-92	1114	Steel tape	7.55	0.01	5.14	421.28	New datum, PM
08-13-92	1320	Steel tape	7.67	0.01	5.26	421.16	MM
01-13-93	0945	E-tape	7.66	0.02	5.25	421.17	Non-USGS E-tape, MM
04-14-93	1418	Steel tape	8.58	0.01	6.17	420.25	MM
06-03-93	1600	Steel tape	9.19	0.01	6.74	419.68	Updated MP, PM
06-11-93	1430	Steel tape	9.10	0.01	6.65	419.77	MM
06-30-93	1513	Steel tape	8.41	0.01	5.96	420.46	PM
07-16-93	1206	Steel tape	8.27	0.01	5.82	420.60	MM
08-16-93	1556	NA	NA	NA	NA	NA	Well destroyed, MM
09-15-93	1512	NA	NA	NA	NA	NA	Well destroyed, MM



FIA6 GROUND-WATER OBSERVATION WELL
Formerly observation well B3

Site ID: 644804147523101
Local Number: FC00100226ADAD2 008

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	17.9	410.8
Depth from TOC to top of SI :	4.7	424.0
Depth from TOC to bottom of SI :	14.2	414.5
Land surface datum:		425.67

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-25-91	428.63
10-10-91	Updated MP
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP
06-30-93	Updated MP

Date	Time	Method	MP to VS	Error	LS to WS	WS elevation	Remarks
03-21-91	1443	E-tape	10.67	0.02	7.64	418.03	Non-USGS E-tape, MM
05-02-91	NA	E-tape	6.92	0.02	3.89	421.78	Non-USGS E-tape, PM
05-28-91	1304	E-tape	8.77	0.02	5.74	419.93	Non-USGS E-tape, MM
06-21-91	1528	E-tape	9.16	0.02	6.13	419.54	Non-USGS E-tape, PM
06-24-91	1421	E-tape	8.82	0.02	5.79	419.88	Non-USGS E-tape, MM
06-25-91	1352	E-tape	8.54	0.02	5.51	420.16	Non-USGS E-tape, PM
06-27-91	0940	E-tape	8.32	0.02	5.29	420.38	Non-USGS E-tape, PM
07-09-91	1112	E-tape	7.92	0.02	4.89	420.78	Non-USGS E-tape, PM
07-09-91	1730	E-tape	8.13	0.02	5.10	420.57	Non-USGS E-tape, PM
07-10-91	0827	E-tape	7.76	0.02	4.73	420.94	Non-USGS E-tape, PM
07-12-91	1006	E-tape	8.02	0.02	4.99	420.68	PM
07-12-91	1114	E-tape	7.98	0.02	4.95	420.72	PM
07-12-91	1356	E-tape	8.23	0.02	5.20	420.47	PM
07-12-91	1641	E-tape	8.16	0.02	5.13	420.54	PM

FIA6 GROUND-WATER OBSERVATION WELL (Continued)
Formerly observation well B3

Site ID: 644804147523101
Local Number: FC00100226ADAD2 008

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-13-91	1114	E-tape	7.95	0.02	4.92	420.75	PM
07-17-91	1002	E-tape	8.24	0.02	5.21	420.46	MM
07-29-91	1410	E-tape	8.42	0.02	5.39	420.28	PM
08-20-91	0922	E-tape	8.25	0.02	5.22	420.45	MM
08-26-91	1102	E-tape	8.10	0.02	5.07	420.60	PM
09-10-91	0943	E-tape	9.27	0.02	6.24	419.43	MM
10-01-91	1027	E-tape	9.94	0.02	6.91	418.76	MM
12-27-91	1310	E-tape	8.68	0.02	5.65	420.02	Updated MP, MM
04-20-92	NA	E-tape	10.10	0.02	7.07	418.60	Non-USGS E-tape, MM
06-12-92	NA	E-tape	8.17	0.02	5.12	420.55	Updated MP, MM
06-19-92	1157	E-tape	7.83	0.02	4.78	420.89	PM
06-30-92	1250	Steel tape	7.74	0.01	4.68	420.99	PM
07-08-92	1941	Steel tape	7.21	0.01	4.15	421.52	Updated MP, PM
07-23-92	1425	Steel tape	6.69	0.01	3.63	422.04	MM
08-11-92	1041	Steel tape	7.17	0.01	4.11	421.56	New datum, PM
08-13-92	1349	Steel tape	7.30	0.01	4.24	421.43	MM
01-13-93	NA	E-tape	7.65	0.02	4.59	421.08	Non-USGS E-tape, MM
04-14-93	1533	Steel tape	8.57	0.01	5.51	420.16	MM
06-03-93	1615	Steel tape	9.04	0.01	5.98	419.69	Updated MP, PM
06-11-93	1442	Steel tape	8.98	0.01	5.92	419.75	MM
06-30-93	1528	Steel tape	8.30	0.01	5.24	420.43	PM
07-16-93	1245	Steel tape	8.17	0.01	5.11	420.56	MM
08-16-93	1635	Steel tape	7.41	0.01	4.35	421.32	MM
09-16-93	1522	Steel tape	8.10	0.01	5.04	420.63	MM
10-19-93	1316	Steel tape	10.00	0.01	6.94	418.73	MM
11-17-93	1459	Steel tape	11.39	0.01	8.33	417.34	MM
12-21-93	1401	Steel tape	9.84	0.01	6.78	418.89	MM
01-18-94	1459	Steel tape	10.25	0.01	7.19	418.48	MM
02-25-94	1204	Steel tape	10.95	0.01	7.89	417.78	MM
03-16-94	1323	Steel tape	11.24	0.01	8.18	417.49	MM
04-18-94	1544	Steel tape	10.63	0.01	7.57	418.10	MM

FIA6 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well B3

Site ID: 644804147523101
 Local Number: FC00100226ADAD2 008

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
05-16-94	1335	Steel tape	10.53	0.01	7.47	418.20	MM
06-15-94	1334	Steel tape	10.14	0.01	7.08	418.59	MM
07-15-94	1503	Steel tape	8.38	0.01	5.31	420.36	Updated MP, PM
08-15-94	1329	Steel tape	6.88	0.01	3.81	421.86	MM

FIA7 GROUND-WATER OBSERVATION WELL
Formerly observation well B4

Site ID: 644804147522301
Local Number: FC00100225BCCB1 005

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	17.8	410.6
Depth from TOC to top of SI :	4.7	423.7
Depth from TOC to bottom of SI :	14.2	414.2
Land surface datum:		425.53

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

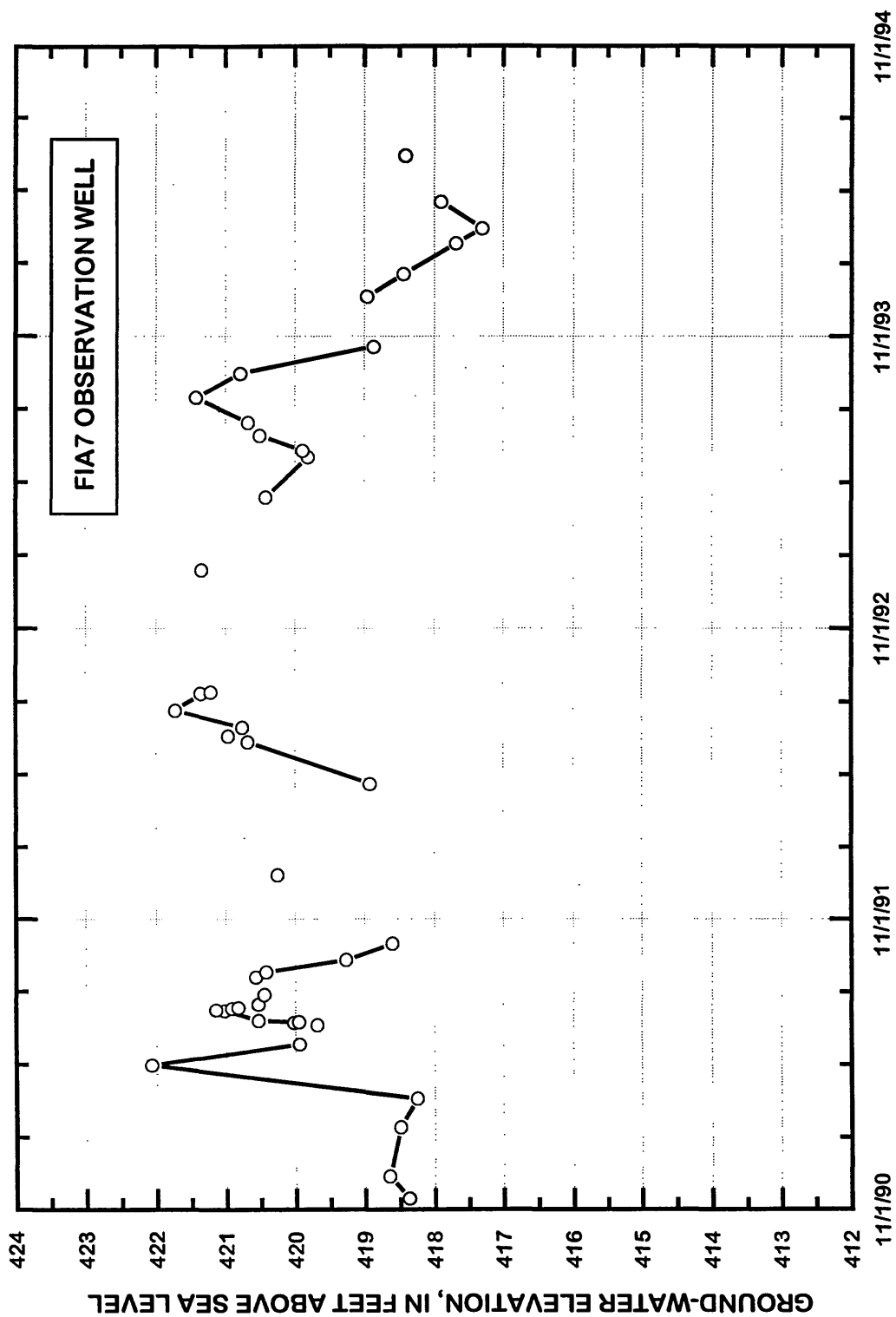
Date	MP Elevation (feet above sea level)
06-25-91	428.30
08-11-92	428.37 New datum (All WS elevations reflect datum change.)
06-30-93	428.38 Updated MP
11-07-94	428.30 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
11-15-90	1415	E-tape	10.00	0.02	7.16	418.37	Non-USGS E-tape, MM
12-13-90	1440	E-tape	9.72	0.02	6.88	418.65	Non-USGS E-tape, MM
02-13-91	NA	E-tape	9.88	0.02	7.04	418.49	Non-USGS E-tape, MM
03-21-91	1253	E-tape	10.12	0.02	7.28	418.25	Non-USGS E-tape, PM
05-02-91	NA	E-tape	6.30	0.02	3.46	422.07	Non-USGS E-tape, MM
05-28-91	1106	E-tape	8.43	0.02	5.59	419.94	Non-USGS E-tape, MM
06-21-91	1406	E-tape	8.69	0.02	5.85	419.68	Non-USGS E-tape, PM
06-24-91	1438	E-tape	8.35	0.02	5.51	420.02	Non-USGS E-tape, MM
06-25-91	1445	E-tape	8.42	0.02	5.58	419.95	Non-USGS E-tape, PM
06-27-91	1024	E-tape	7.84	0.02	5.00	420.53	Non-USGS E-tape, PM
07-09-91	1157	E-tape	7.35	0.02	4.51	421.02	Non-USGS E-tape, PM
07-10-91	1136	E-tape	7.23	0.02	4.39	421.14	Non-USGS E-tape, PM
07-12-91	1124	E-tape	7.46	0.02	4.62	420.91	PM
07-13-91	1146	E-tape	7.55	0.02	4.71	420.82	PM
07-17-91	1133	E-tape	7.84	0.02	5.00	420.53	MM
07-29-91	1514	E-tape	7.92	0.02	5.08	420.45	PM
08-20-91	0910	E-tape	7.80	0.02	4.96	420.57	MM

FIA7 GROUND-WATER OBSERVATION WELL (Continued)
Formerly observation well B4

Site ID: 644804147522301
Local Number: FC00100225BCCB1 005

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-26-91	1110	E-tape	7.95	0.02	5.11	420.42	PM
09-10-91	0949	E-tape	9.10	0.02	6.26	419.27	MM
10-01-91	1103	E-tape	9.77	0.02	6.93	418.60	MM
12-27-91	1200	E-tape	8.12	0.02	5.28	420.25	MM
04-20-92	NA	E-tape	9.45	0.02	6.61	418.92	MM
06-12-92	1650	E-tape	7.69	0.02	4.85	420.68	MM
06-19-92	1209	E-tape	7.41	0.02	4.57	420.96	PM
06-30-92	1151	Steel tape	7.61	0.01	4.77	420.76	PM
07-21-92	1125	Steel tape	6.65	0.01	3.81	421.72	MM
08-11-92	1127	Steel tape	7.02	0.01	4.18	421.35	New datum, PM
08-13-92	NA	Steel tape	7.16	0.01	4.32	421.21	MM
01-13-93	1058	E-tape	7.03	0.02	4.19	421.34	MM
04-14-93	1433	Steel Tape	7.95	0.01	5.11	420.42	MM
06-03-93	1612	Steel tape	8.57	0.01	5.72	419.81	Updated MP, PM
06-11-93	1440	Steel tape	8.49	0.01	5.64	419.89	MM
06-30-93	1522	Steel tape	7.88	0.01	5.03	420.50	PM
07-16-93	1240	Steel tape	7.71	0.01	4.86	420.67	MM
08-16-93	1606	Steel tape	6.96	0.01	4.11	421.42	MM
09-15-93	1519	Steel tape	7.60	0.01	4.75	420.78	MM
10-19-93	1315	Steel tape	9.52	0.01	6.67	418.86	MM
12-21-93	1339	Steel tape	9.42	0.01	6.57	418.96	MM
01-18-94	1439	Steel tape	9.95	0.01	7.10	418.43	MM
02-25-94	1159	Steel tape	10.70	0.01	7.85	417.68	MM
03-16-94	1317	Steel tape	11.08	0.01	8.23	417.30	MM
04-18-94	1540	Steel tape	10.48	0.01	7.63	417.90	MM
06-15-94	1324	Steel tape	9.89	0.01	7.12	418.41	Updated MP, PM



FIA8 GROUND-WATER OBSERVATION WELL
Formerly observation well P111

Site ID: 644752147541101
Local Number: FC00100226CABB1 001

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	29.40	396.4
Depth from TOC to top of SI :	25.40	400.4
Depth from TOC to bottom of SI :	29.40	396.4
Land surface datum:		423.29

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

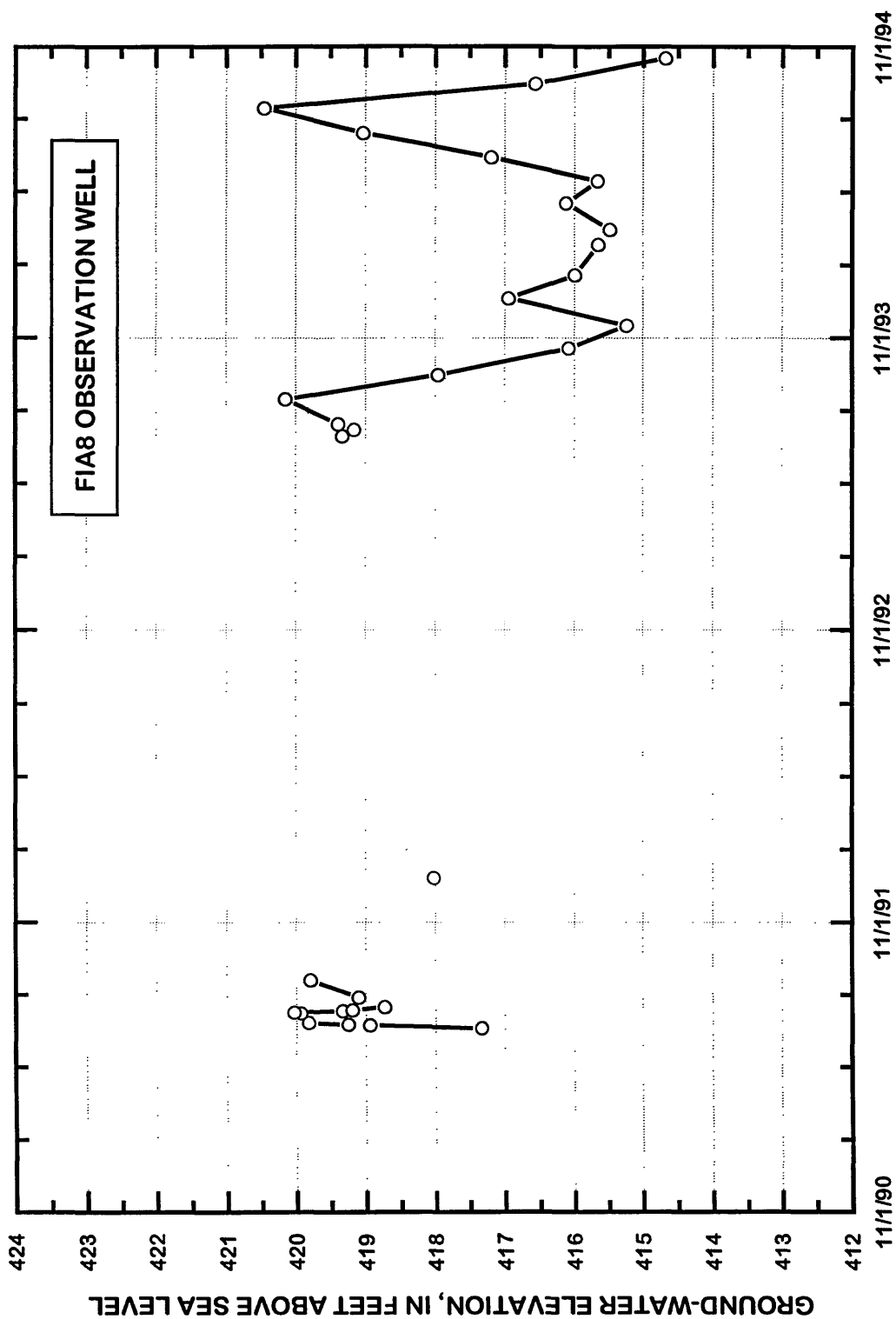
Date	MP Elevation (feet above sea level)
07-01-93	425.79 New datum

Date	Time	Method	MP to WS	(error)	LS to WS	WS Elevation	Remarks
06-20-91	1445	E-tape	8.46	0.02	5.96	417.33	Non-USGS E-tape, PM
06-24-91	0950	E-tape	6.85	0.02	4.35	418.94	Non-USGS E-tape, MM
06-25-91	0950	E-tape	6.54	0.02	4.04	419.25	Non-USGS E-tape, PM
06-27-91	NA	E-tape	5.97	0.02	3.47	419.82	Non-USGS E-tape, PM
07-09-91	1325	E-tape	5.86	0.02	3.36	419.93	Non-USGS E-tape, PM
07-10-91	1312	E-tape	5.76	0.02	3.26	420.03	Non-USGS E-tape, PM
07-12-91	1254	E-tape	6.46	0.02	3.96	419.33	PM
07-13-91	1314	E-tape	6.60	0.02	4.10	419.19	PM
07-17-91	1235	E-tape	7.06	0.02	4.56	418.73	MM
07-29-91	1350	E-tape	6.69	0.02	4.19	419.10	PM
08-20-91	1406	E-tape	6.00	0.02	3.50	419.79	MM
12-27-91	NA	E-tape	7.77	0.02	5.27	418.02	MM
07-01-93	1250	Steel tape	6.46	0.01	3.96	419.33	PM
07-09-93	1200	Steel tape	6.63	0.01	4.13	419.16	PM
07-16-93	1130	Steel tape	6.40	0.01	3.90	419.39	MM
08-16-93	1430	Steel tape	5.64	0.01	3.14	420.15	MM
09-15-93	1418	Steel tape	7.83	0.01	5.33	417.96	MM
10-19-93	1150	Steel tape	9.71	0.01	7.21	416.08	MM
11-16-93	1344	Steel tape	10.55	0.01	8.05	415.24	MM
12-21-93	1247	Steel tape	8.85	0.01	6.35	416.94	MM

FIA8 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well P111

Site ID: 644752147541101
 Local Number: FC00100226CABB1 001

Date	Time	Method	MP to WS	(error)	LS to WS	WS Elevation	Remarks
01-18-94	1324	Steel tape	9.80	0.01	7.30	415.99	MM
02-25-94	1034	Steel tape	10.14	0.01	7.64	415.65	MM
03-16-94	1420	Steel tape	10.31	0.01	7.81	415.48	MM
04-18-94	1448	Steel tape	9.67	0.01	7.17	416.12	MM
05-16-94	1105	Steel tape	10.13	0.01	7.63	415.66	MM
06-15-94	1208	Steel tape	8.60	0.01	6.10	417.19	MM
07-15-94	1406	Steel tape	6.76	0.01	4.26	419.03	MM
08-15-94	1240	Steel tape	5.34	0.01	2.84	420.45	MM
09-15-94	1322	Steel tape	9.22	0.01	6.72	416.57	MM
10-17-94	1137	Steel tape	11.11	0.01	8.61	414.68	MM
11-15-94	1029	Steel tape	9.71	0.01	7.21	416.08	MM



FIA9 GROUND-WATER OBSERVATION WELL
Formerly observation well PTAN

Site ID: 644758147520601
Local Number: FC00100225BCDD1 003

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	16.17	414.8
Depth from TOC to top of SI :	NA	NA
Depth from TOC to bottom of SI :	NA	NA
Land surface datum:		425.56

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-25-91	430.65
07-09-93	430.96 New datum

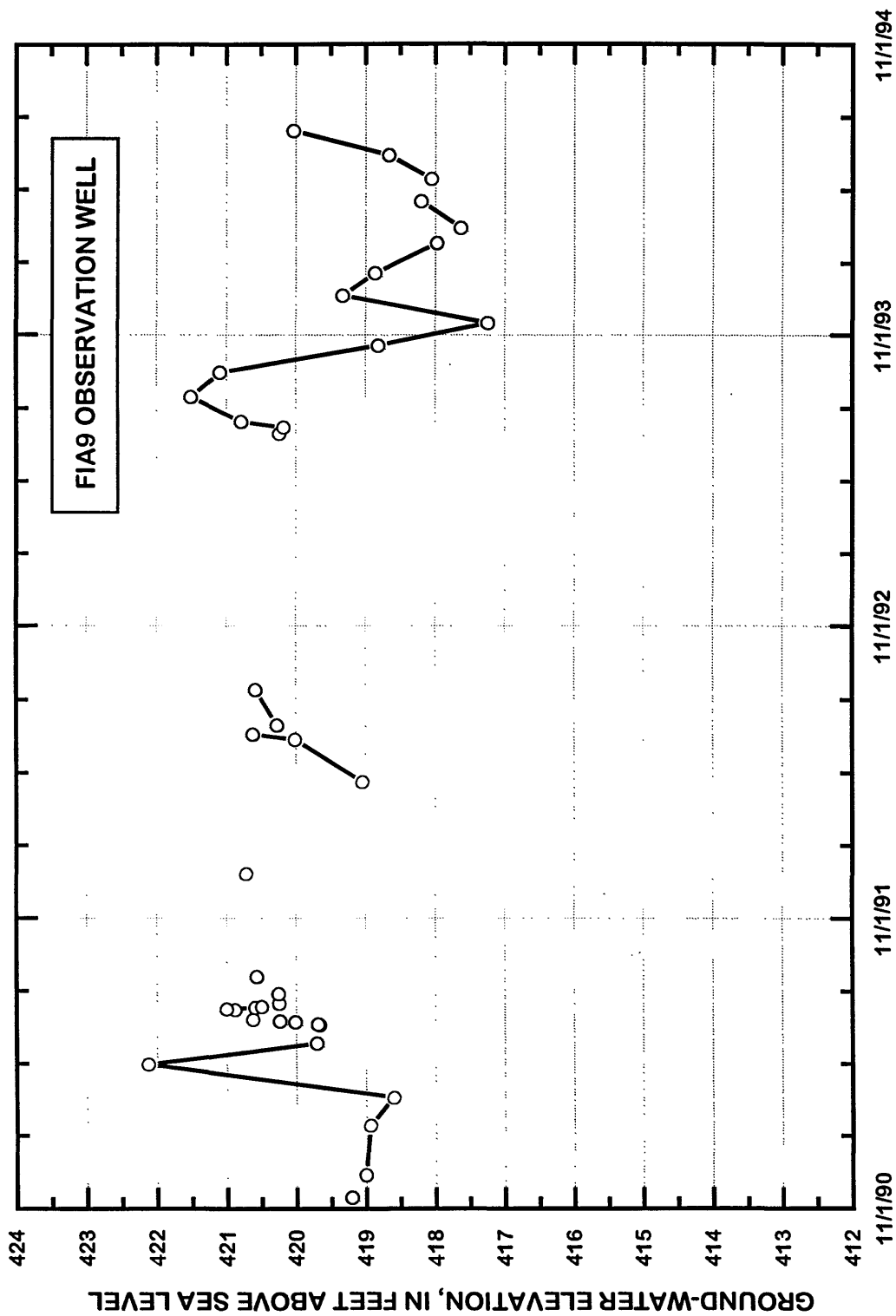
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
11-15-90	1550	E-tape	11.51	0.02	6.35	419.21	Non-USGS E-tape, MM
12-13-90	0958	E-tape	11.72	0.02	6.56	419.00	Non-USGS E-tape, MM
02-13-91	1026	E-tape	11.78	0.02	6.62	418.94	Non-USGS E-tape, MM
03-21-91	1015	E-tape	12.12	0.02	6.96	418.60	Non-USGS E-tape, MM
05-02-91	NA	E-tape	8.60	0.02	3.44	422.12	Non-USGS E-tape, PM
05-28-91	1410	E-tape	11.02	0.02	5.86	419.70	Non-USGS E-tape, MM
06-20-91	1519	E-tape	11.06	0.02	5.90	419.66	Non-USGS E-tape, PM
06-21-91	1205	E-tape	11.04	0.02	5.88	419.68	Non-USGS E-tape, PM
06-24-91	0850	E-tape	10.71	0.02	5.55	420.01	Non-USGS E-tape, MM
06-25-91	1012	E-tape	10.49	0.02	5.33	420.23	Non-USGS E-tape, PM
06-27-91	1127	E-tape	10.10	0.02	4.94	420.62	Non-USGS E-tape, PM
07-09-91	1250	E-tape	9.84	0.02	4.68	420.88	Non-USGS E-tape, PM
07-10-91	1241	E-tape	9.72	0.02	4.56	421.00	Non-USGS E-tape, PM
07-12-91	1339	E-tape	10.13	0.02	4.97	420.59	PM
07-13-91	1238	E-tape	10.23	0.02	5.07	420.49	PM
07-17-91	1203	E-tape	10.48	0.02	5.32	420.24	MM
07-29-91	1430	E-tape	10.47	0.02	5.31	420.25	PM
08-20-91	1441	E-tape	10.15	0.02	4.99	420.57	MM
12-27-91	0930	E-tape	10.00	0.02	4.84	420.72	MM

FIA9 GROUND-WATER OBSERVATION WELL
Formerly observation well PTAN

(Continued)

Site ID: 644758147520601
Local Number: FC00100225BCDD1 003

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
04-20-92	0846	E-tape	11.68	0.02	6.52	419.04	MM
06-12-92	1356	E-tape	10.71	0.02	5.55	420.01	MM
06-19-92	0830	E-tape	10.10	0.02	4.94	420.62	PM
06-30-92	1124	Steel tape	10.45	0.01	5.29	420.27	PM
08-13-92	1703	Steel tape	10.14	0.01	4.98	420.58	MM
07-01-93	1150	Steel tape	10.73	0.01	5.33	420.23	Non-USGS E-tape, PM
07-09-93	1700	Steel tape	10.79	0.01	5.39	420.17	PM
07-16-93	1322	Steel tape	10.17	0.01	4.77	420.79	MM
08-16-93	1531	Steel tape	9.45	0.01	4.05	421.51	MM
09-15-93	1448	Steel tape	9.87	0.01	4.47	421.09	MM
10-19-93	1240	Steel tape	12.15	0.01	6.75	418.81	MM
11-16-93	1408	Steel tape	13.72	0.01	8.32	417.24	MM
12-21-93	1315	Steel tape	11.63	0.01	6.23	419.33	MM
01-18-94	1407	Steel tape	12.10	0.01	6.70	418.86	MM
02-25-94	1055	Steel tape	12.99	0.01	7.59	417.97	MM
03-16-94	1403	Steel tape	13.33	0.01	7.93	417.63	MM
04-18-94	1518	Steel tape	12.76	0.01	7.36	418.20	MM
05-16-94	1255	Steel tape	12.91	0.01	7.51	418.05	MM
06-15-94	1253	Steel tape	12.30	0.01	6.90	418.66	MM
07-15-94	1435	Steel tape	10.93	0.01	5.53	420.03	MM
08-15-94	NA	NA	NA	NA	NA	NA	No data, well jacked



FIA10 GROUND-WATER OBSERVATION WELL
Formerly observation well CP60

Site ID: 644800147520901
Local Number: FC00100225BCDC1 008

All measurements in feet		Feet	Elevation	LS, land surface
Depth to bottom of well from MP :		15.83	412.7	MM, mass measurement
Depth from TOC to top of SI :		NA	NA	PM, partial measurement
Depth from TOC to bottom of SI :		NA	NA	MP, measuring point
Land surface datum:			425.62	NA, not available
				SI, screened interval
				TOC, top of casing
				WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-25-91	428.64
07-09-93	428.57

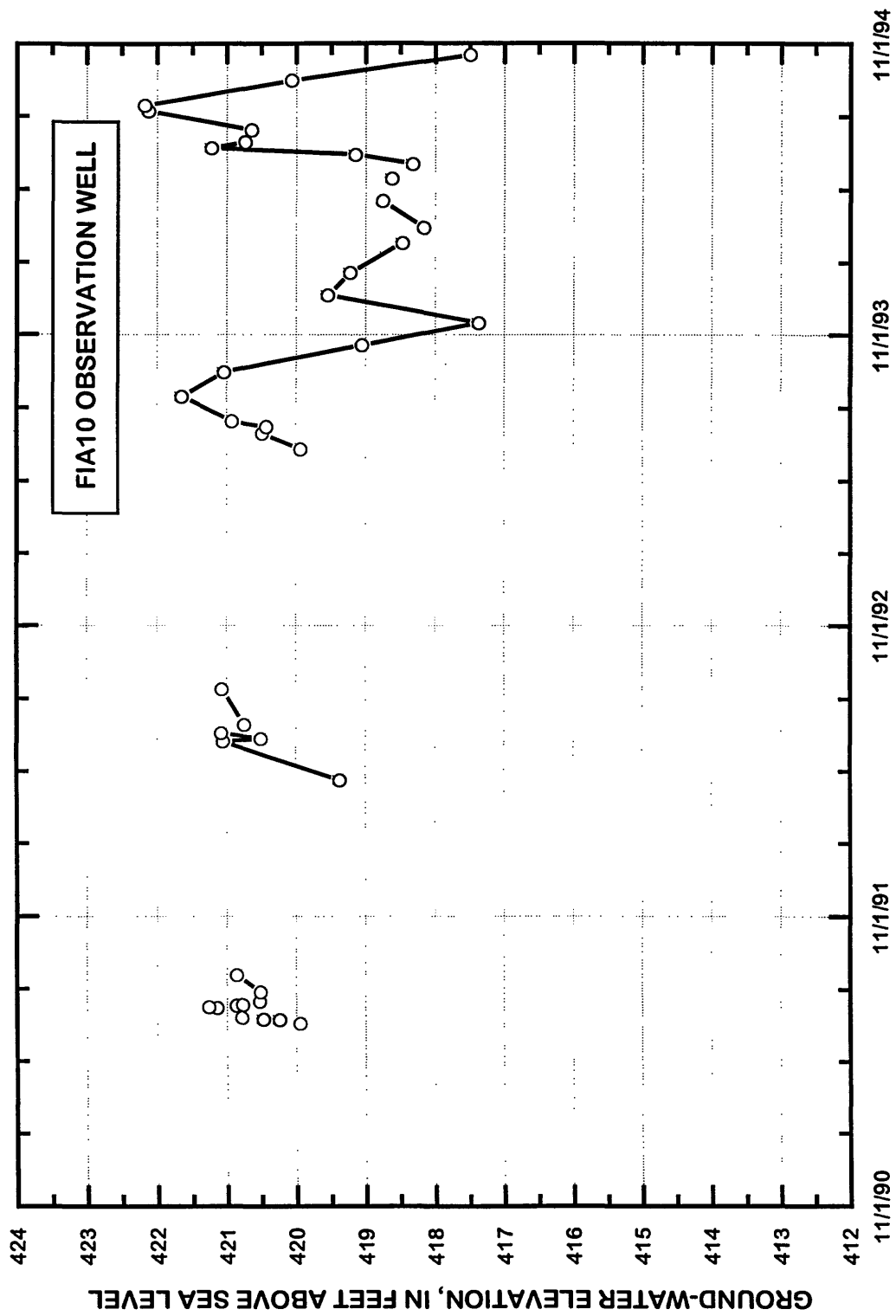
New datum(All water levels reflect datum change)

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-20-91	1513	E-tape	8.77	0.02	5.68	419.94	PM
06-24-91	0835	E-tape	8.48	0.02	5.39	420.23	Non-USGS E-tape, MM
06-25-91	1114	E-tape	8.24	0.02	5.15	420.47	Non-USGS E-tape, PM
06-27-91	1122	E-tape	7.93	0.02	4.84	420.78	Non-USGS E-tape, PM
07-09-91	1246	E-tape	7.57	0.02	4.48	421.14	Non-USGS E-tape, PM
07-10-91	1237	E-tape	7.45	0.02	4.36	421.26	Non-USGS E-tape, PM
07-12-91	1328	E-tape	7.85	0.02	4.76	420.86	PM
07-13-91	1226	E-tape	7.94	0.02	4.85	420.77	PM
07-17-91	1155	E-tape	8.19	0.02	5.10	420.52	MM
07-29-91	1438	E-tape	8.20	0.02	5.11	420.51	PM
08-20-91	1434	E-tape	7.86	0.02	4.77	420.85	MM
12-27-91	0915	E-tape	NA	NA	NA	NA	Frozen, MM
04-20-92	NA	E-tape	9.34	0.02	6.25	419.37	MM
06-08-92	1952	E-tape	7.66	0.02	4.57	421.05	PM
06-12-92	1335	E-tape	8.20	0.02	5.11	420.51	MM
06-19-92	0927	E-tape	7.63	0.02	4.54	421.08	PM
06-30-92	1105	Steel tape	7.96	0.01	4.87	420.75	PM
08-13-92	1653	Steel tape	7.64	0.01	4.55	421.07	MM
06-11-93	1525	Steel tape	8.64	0.01	5.69	419.93	New datum, MM

FIA10 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well CP60

Site ID: 644800147520901
 Local Number: FC00100225BCDC1 008

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-01-93	1130	Steel tape	8.09	0.01	5.14	420.48	PM
07-09-93	1730	Steel tape	8.15	0.01	5.20	420.42	PM
07-16-93	1319	Steel tape	7.65	0.01	4.70	420.92	MM
08-16-93	1527	Steel tape	6.93	0.01	3.98	421.64	MM
09-15-93	1445	Steel tape	7.53	0.01	4.58	421.04	MM
10-19-93	1221	Steel tape	9.52	0.01	6.57	419.05	MM
11-16-93	1358	Steel tape	11.20	0.01	8.25	417.37	MM
12-21-93	1308	Steel tape	9.03	0.01	6.08	419.54	MM
01-18-94	1400	Steel tape	9.35	0.01	6.40	419.22	MM
02-25-94	1050	Steel tape	10.11	0.01	7.16	418.46	MM
03-16-94	1359	Steel tape	10.41	0.01	7.46	418.16	MM
04-18-94	1515	Steel tape	9.82	0.01	6.87	418.75	MM
05-16-94	1250	Steel tape	9.95	0.01	7.00	418.62	MM
06-03-94	1150	Steel tape	10.25	0.01	7.30	418.32	PM
06-15-94	1150	Steel tape	9.42	0.01	6.47	419.15	MM
06-23-94	0945	Steel tape	7.35	0.01	4.40	421.22	PM
06-30-94	1612	Steel tape	7.84	0.01	4.89	420.73	PM
07-15-94	1433	Steel tape	7.93	0.01	4.98	420.64	MM
08-08-94	1044	Steel tape	6.45	0.01	3.50	422.12	PM
08-15-94	1300	Steel tape	6.40	0.01	3.45	422.17	MM
09-15-94	1347	Steel tape	8.51	0.01	5.56	420.06	MM
10-17-94	1245	Steel tape	11.08	0.01	8.13	417.49	MM
11-15-94	1050	Steel tape	10.10	0.01	7.15	418.47	MM



FIA11 GROUND-WATER OBSERVATION WELL
Formerly observation well DEC1

Site ID: 644804147523301
Local Number: FC00100226ADAD2 018

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.50	413.0
Depth from TOC to top of SI :	4.50	423.0
Depth from TOC to bottom of SI :	14.50	413.0
Land surface datum:		425.26

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	426.98
06-01-92	427.39 Updated MP
06-26-92	427.38 Updated MP
08-11-92	427.46 New datum (All WS elevations reflect datum change.)
06-30-93	427.45 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-20-91	1003	E-tape	6.53	0.02	4.74	420.52	MM
08-22-91	1023	E-tape	6.54	0.02	4.75	420.51	PM
08-26-91	0923	E-tape	6.59	0.02	4.80	420.46	PM
09-10-91	0858	E-tape	7.80	0.02	6.01	419.25	MM
10-01-91	1036	E-tape	8.54	0.02	6.75	418.51	MM
12-27-91	1215	E-tape	6.56	0.02	4.77	420.49	MM
04-20-92	NA	E-tape	8.70	0.02	6.91	418.35	MM
06-19-92	1226	E-tape	6.56	0.02	4.36	420.90	MM
06-30-92	1316	Steel tape	6.63	0.01	4.44	420.82	Updated MP, PM
07-08-92	1854	Steel tape	6.07	0.01	3.88	421.38	PM
07-23-92	1404	Steel tape	5.55	0.01	3.36	421.90	MM
08-11-92	1055	Steel tape	5.98	0.01	3.78	421.48	Updated MP, PM
08-13-92	1336	Steel tape	6.12	0.01	3.92	421.34	MM
01-13-93	1142	E-tape	6.34	0.02	4.14	421.12	MM
04-14-93	1444	Steel tape	7.21	0.01	5.01	420.25	MM
06-30-93	1538	Steel tape	7.05	0.01	4.86	420.40	Updated MP, MM
07-16-93	1258	Steel tape	6.92	0.01	4.73	420.53	MM
08-16-93	1630	Steel tape	6.18	0.01	3.99	421.27	MM
09-15-93	1531	Steel tape	6.88	0.01	4.69	420.57	MM

FIA12 GROUND-WATER OBSERVATION WELL
Formerly observation well DEC2

Site ID: 644805147523301
Local Number: FC00100226ADAA2 019

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.50	412.4
Depth from TOC to top of SI :	4.50	422.4
Depth from TOC to bottom of SI :	15.50	411.4
Land surface datum:		424.24

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-25-91	426.14
10-10-91	Updated MP
06-01-92	Updated MP
06-25-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-20-91	0938	E-tape	5.76	0.02	3.79	420.45	MM
08-22-91	1020	E-tape	5.67	0.02	3.70	420.54	PM
08-26-91	0927	E-tape	5.67	0.02	3.70	420.54	PM
09-10-91	0902	E-tape	6.76	0.02	4.79	419.45	MM
10-01-91	1044	E-tape	7.40	0.02	5.43	418.81	MM
12-27-91	NA	E-tape	7.31	0.02	4.61	419.63	Updated MP, MM
04-20-92	NA	E-tape	8.17	0.02	5.47	418.77	MM
06-12-92	1541	E-tape	6.38	0.02	3.68	420.56	Updated MP, MM
06-19-92	1328	E-tape	6.01	0.02	3.31	420.93	MM
06-30-92	1328	Steel tape	5.94	0.01	3.24	421.00	Updated MP, PM
07-08-92	1900	Steel tape	5.42	0.01	2.72	421.52	MM
07-23-92	1413	Steel tape	4.93	0.01	2.23	422.01	PM
08-11-92	1046	Steel tape	5.36	0.01	2.66	421.58	Updated MP, PM
08-13-92	1338	Steel tape	5.49	0.01	2.79	421.45	MM
01-13-93	1145	E-tape	5.82	0.02	3.12	421.12	MM

FIA12 GROUND-WATER OBSERVATION WELL (Continued)
 Formerly observation well DEC2

Site ID: 644805147523301
 Local Number: FC00100226ADAA2 019

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
04-14-93	1453	Steel tape	6.67	0.01	3.97	420.27	MM
06-30-93	1535	Steel tape	6.53	0.01	3.84	420.40	Updated MP, MM
07-16-93	1253	Steel tape	6.41	0.01	3.72	420.52	MM
08-16-93	1627	Steel tape	5.64	0.01	2.95	421.29	MM
09-15-93	1528	Steel tape	6.35	0.01	3.66	420.58	MM

FIA13 GROUND-WATER OBSERVATION WELL

Airport campground well

Site ID: 644922147492701

Local Number: FC00100118DCBD1 006

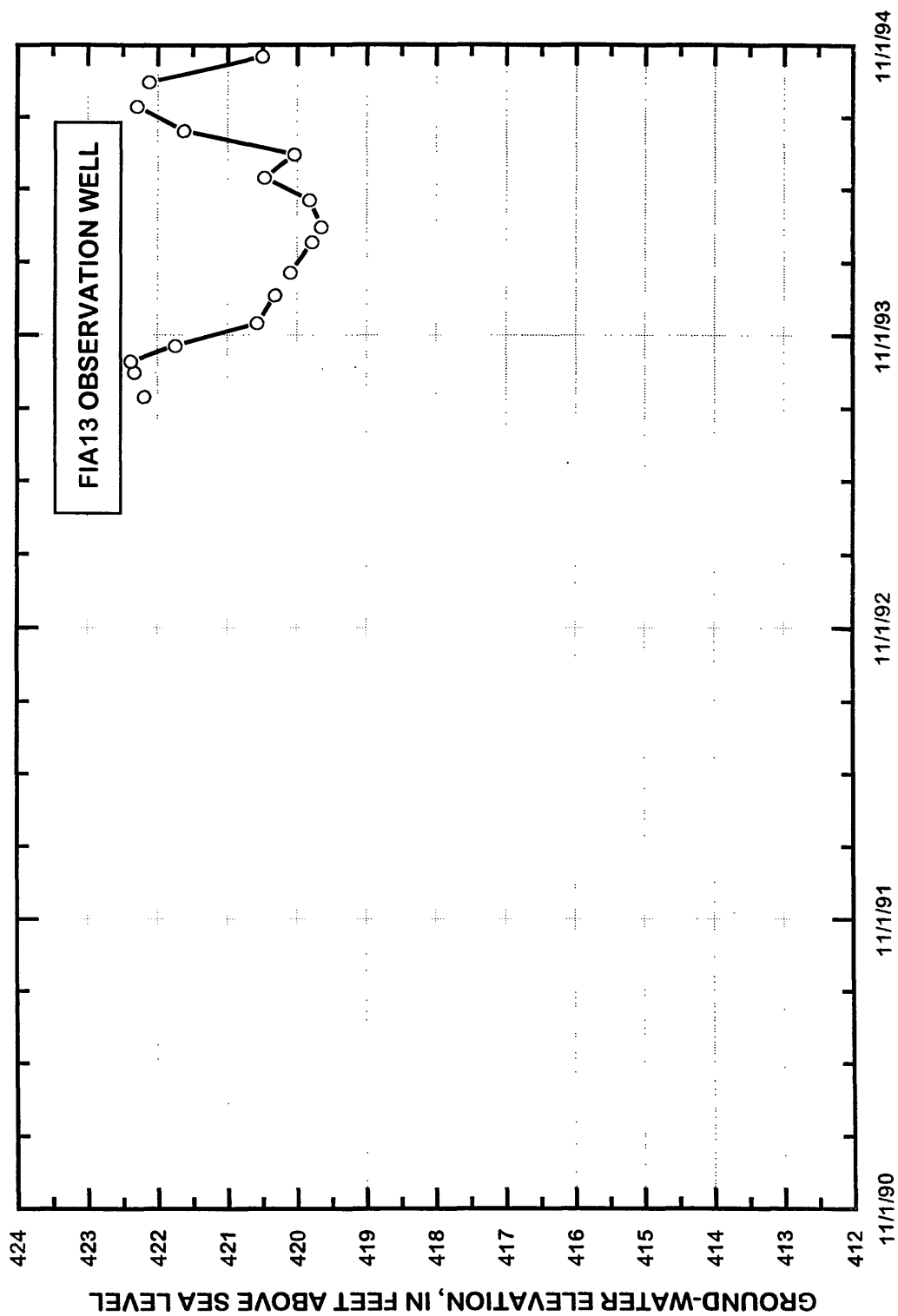
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	17.80	414.9
Depth from TOC to top of SI :	15.80	416.9
Depth from TOC to bottom of SI :	17.80	414.9
Land surface datum:		428.77

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-12-93	432.67

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-16-93	1836	Steel tape	10.48	0.01	6.58	422.19	MM
09-15-93	1551	Steel tape	10.34	0.01	6.44	422.33	MM
09-29-93	1504	Steel tape	10.29	0.01	6.39	422.38	PM
10-19-93	1351	Steel tape	10.93	0.01	7.03	421.74	MM
11-16-93	1450	Steel tape	12.10	0.01	8.20	420.57	MM
12-21-93	1422	Steel tape	12.36	0.01	8.46	420.31	MM
01-18-94	1510	Steel tape	12.57	0.01	8.67	420.10	MM
02-25-94	1229	Steel tape	12.89	0.01	8.99	419.78	MM
03-16-94	1304	Steel tape	13.02	0.01	9.12	419.65	MM
04-18-94	1625	Steel tape	12.85	0.01	8.95	419.82	MM
05-16-94	1404	Steel tape	12.20	0.01	8.30	420.47	MM
06-15-94	1404	Steel tape	12.63	0.01	8.73	420.04	MM
07-15-94	1542	Steel tape	11.05	0.01	7.15	421.62	MM
08-15-94	1404	Steel tape	10.38	0.01	6.48	422.29	MM
09-15-94	1506	Steel tape	10.55	0.01	6.65	422.12	MM
10-17-94	1329	Steel tape	12.17	0.01	8.27	420.50	MM
11-15-94	1113	Steel tape	12.88	0.01	8.98	419.79	MM
12-19-94	1432	Steel tape	12.99	0.01	9.09	419.68	MM



FIA14 GROUND-WATER OBSERVATION WELL

Float pond well

Site ID: 644944147493801

Local Number: FC00100118BDDDD2 007

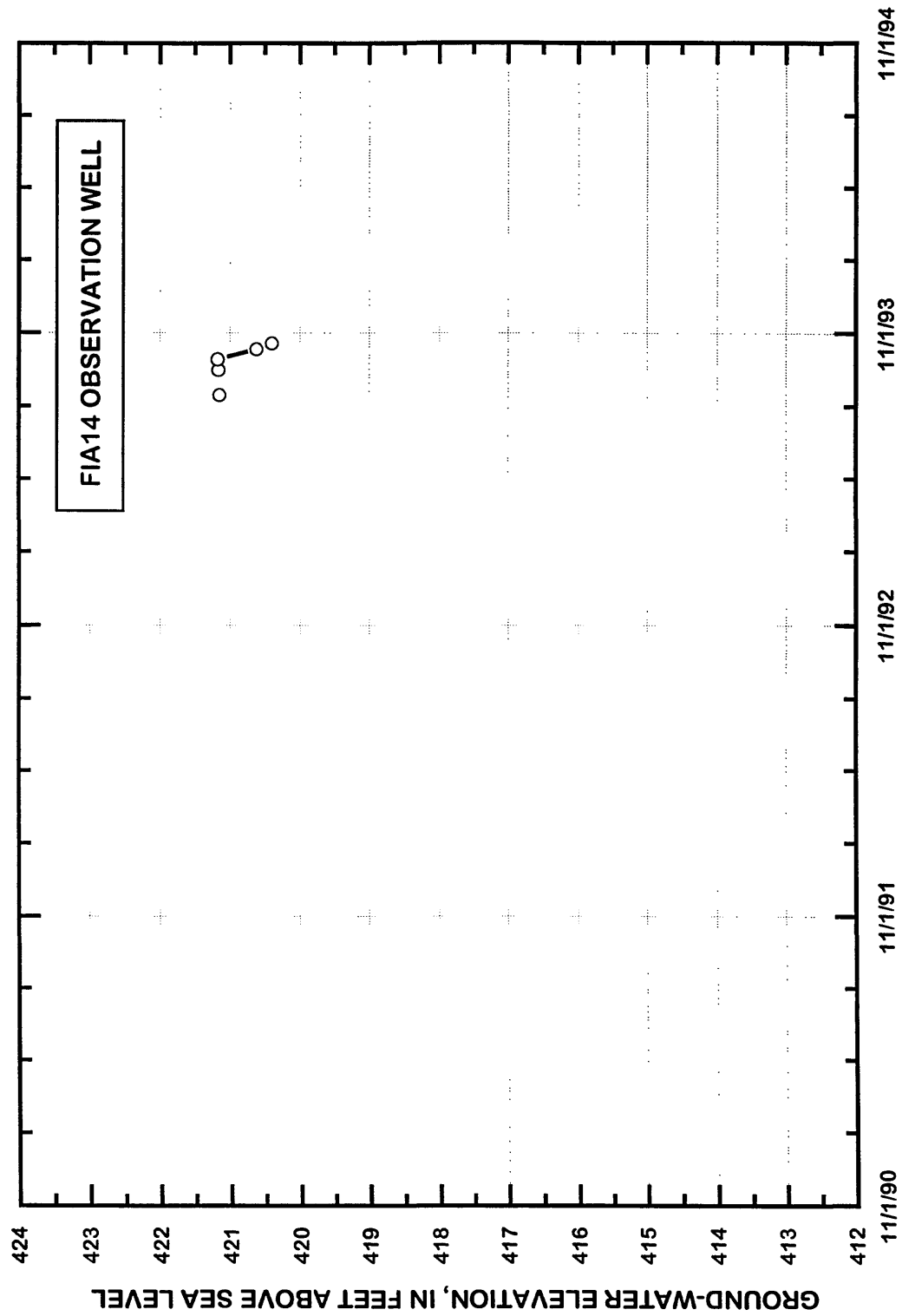
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	13.00	419.0
Depth from TOC to top of SI :	11.00	421.0
Depth from TOC to bottom of SI :	13.00	419.0
Land surface datum:		430.09

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-12-93	431.99

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-16-93	1145	Steel tape	10.84	0.01	8.94	421.15	MM
09-16-93	0944	Steel tape	10.83	0.01	8.93	421.16	PM
09-29-93	1454	Steel tape	10.82	0.01	8.92	421.17	MM
10-12-93	1530	Steel tape	11.37	0.01	9.47	420.62	PM
10-19-93	1356	Steel tape	11.59	0.01	9.69	420.40	MM
11-16-93	1443	Steel tape	NA	NA	NA	NA	Dry, MM
12-21-93	1417	Steel tape	NA	NA	NA	NA	Dry, MM
01-18-94	1356	Steel tape	NA	NA	NA	NA	Dry, MM
02-25-94	NA	Steel tape	NA	NA	NA	NA	Dry, MM
03-16-94	NA	Steel tape	NA	NA	NA	NA	Dry, MM
04-18-94	1630	Steel tape	NA	NA	NA	NA	Dry, MM
05-16-94	1400	Steel tape	NA	NA	NA	NA	Dry, MM



FIA15 GROUND-WATER OBSERVATION WELL
Formerly observation well TH93-1

Site ID: 644936147483501
Local Number: FC00100118DADB1 008

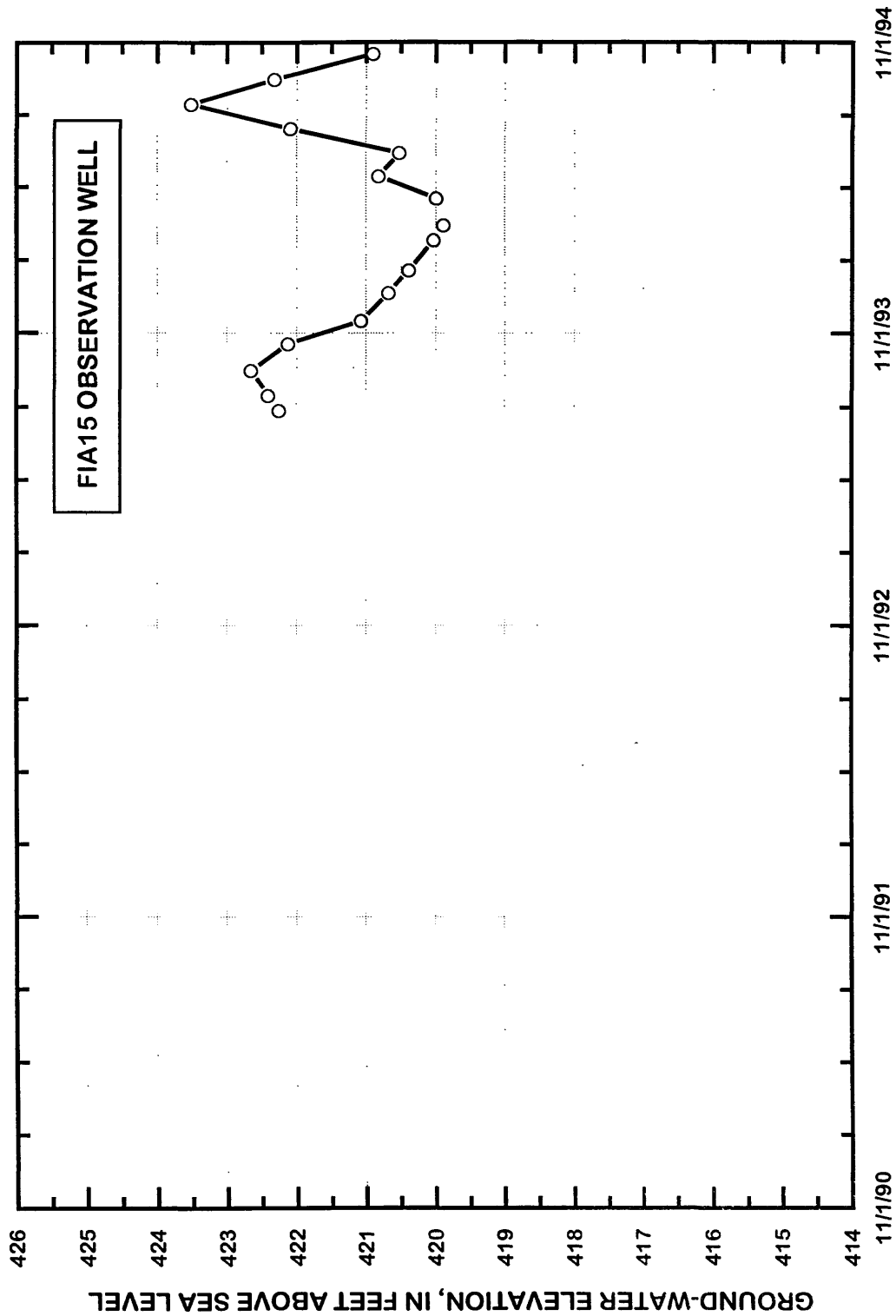
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	21.00	408.8
Depth from TOC to top of SI :	21.00	408.8
Depth from TOC to bottom of SI :	23.60	406.2
Land surface datum:		428.65

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
11-09-93	429.81
11-07-94	429.89 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-28-93	1816	Steel tape	7.56	0.01	6.40	422.25	PM
08-16-93	1841	Steel tape	7.41	0.01	6.25	422.40	MM
09-16-93	1024	Steel tape	7.16	0.01	6.00	422.65	MM
10-19-93	1454	Steel tape	7.69	0.01	6.53	422.12	MM
11-16-93	1049	Steel tape	8.74	0.01	7.58	421.07	MM
12-21-93	1430	Steel tape	9.14	0.01	7.98	420.67	MM
01-18-94	1644	Steel tape	9.42	0.01	8.26	420.39	MM
02-25-94	1235	Steel tape	9.78	0.01	8.62	420.03	MM
03-16-94	1119	Steel tape	9.92	0.01	8.76	419.89	MM
04-18-94	1132	Steel tape	9.82	0.01	8.66	419.99	MM
05-16-94	1455	Steel tape	9.00	0.01	7.84	420.81	MM
06-15-94	1414	Steel tape	9.37	0.01	8.13	420.52	Updated MP, MM
07-15-94	1139	Steel tape	7.80	0.01	6.56	422.09	MM
08-15-94	1447	Steel tape	6.37	0.01	5.13	423.52	MM
09-15-94	1514	Steel tape	7.57	0.01	6.33	422.32	MM
10-17-94	1343	Steel tape	8.99	0.01	7.75	420.90	MM
11-15-94	1135	Steel tape	9.66	0.01	8.42	420.23	MM



FIA16 GROUND-WATER OBSERVATION WELL
Formerly observation well TH93-3

Site ID: 644950147483501
Local Number: FC00100117BCBB1 003

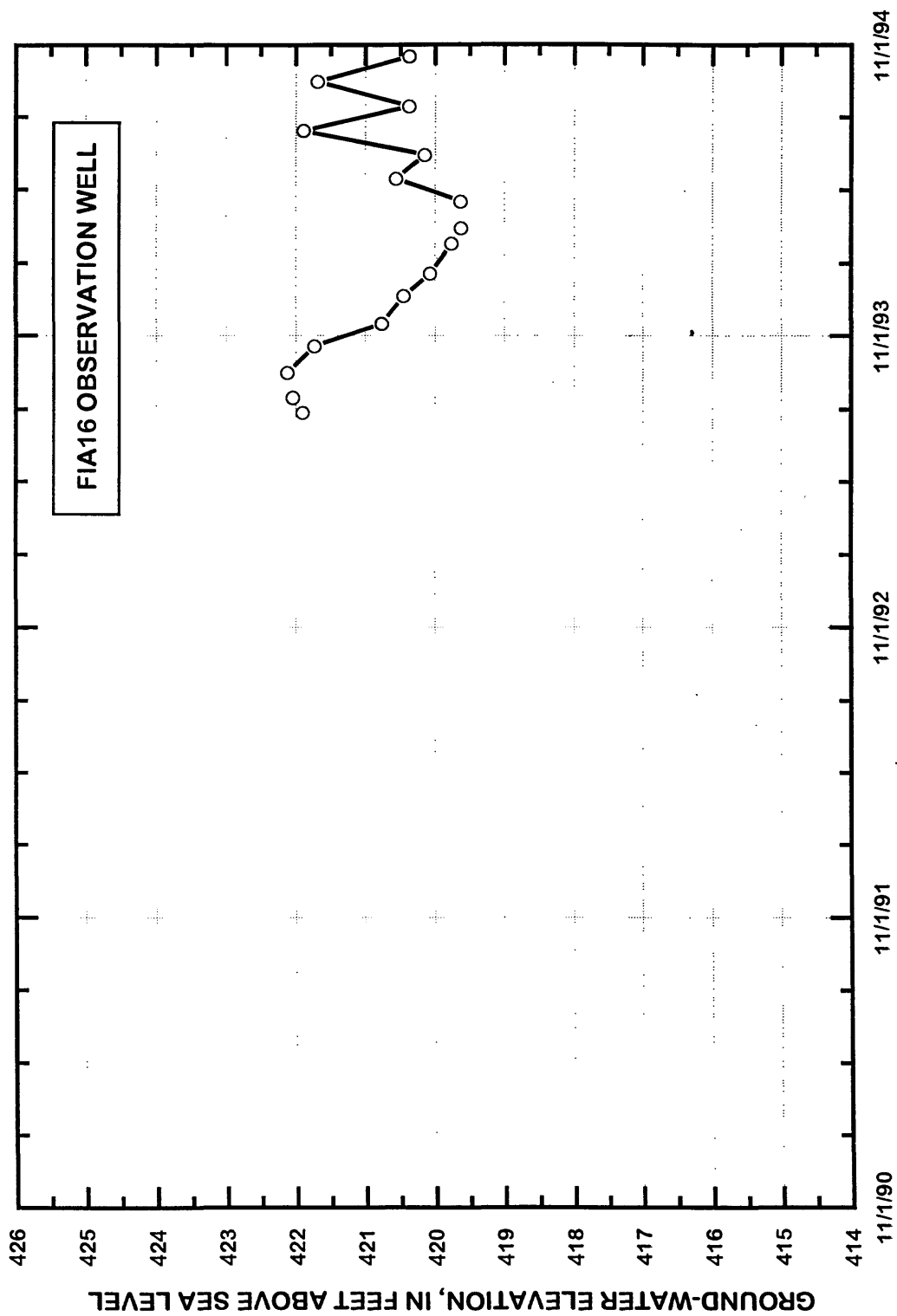
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	23.60	408.2
Depth from TOC to top of SI :	21.00	410.8
Depth from TOC to bottom of SI :	23.60	408.2
Land surface datum:		426.32

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-14-93	431.77
11-07-94	431.80 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-28-93	1813	Steel tape	9.87	0.01	4.42	421.90	PM
08-16-93	1846	Steel tape	9.73	0.01	4.28	422.04	MM
09-16-93	1030	Steel tape	9.65	0.01	4.20	422.12	MM
10-19-93	1503	Steel tape	10.04	0.01	4.59	421.73	MM
11-16-93	1059	Steel tape	11.01	0.01	5.56	420.76	MM
12-21-93	1437	Steel tape	11.32	0.01	5.87	420.45	MM
01-18-94	1655	Steel tape	11.70	0.01	6.25	420.07	MM
02-25-94	1242	Steel tape	12.01	0.01	6.56	419.76	MM
03-16-94	1129	Steel tape	12.15	0.01	6.70	419.62	MM
04-18-94	1138	Steel tape	12.14	0.01	6.69	419.63	MM
05-16-94	1500	Steel tape	11.21	0.01	5.76	420.56	MM
06-15-94	1420	Steel tape	11.65	0.01	6.17	420.15	Updated MP, MM
07-15-94	1144	Steel tape	9.91	0.01	4.43	421.89	MM
08-15-94	1450	Steel tape	11.43	0.01	5.95	420.37	MM
09-15-94	1519	Steel tape	10.11	0.01	4.63	421.69	MM
10-17-94	1344	Steel tape	11.43	0.01	5.95	420.37	MM
11-15-94	1142	Steel tape	12.01	0.01	6.53	419.79	MM



FIA17 GROUND-WATER OBSERVATION WELL
Formerly observation well TH93-5

Site ID: 645001147484001
Local Number: FC00100117BBC1 008

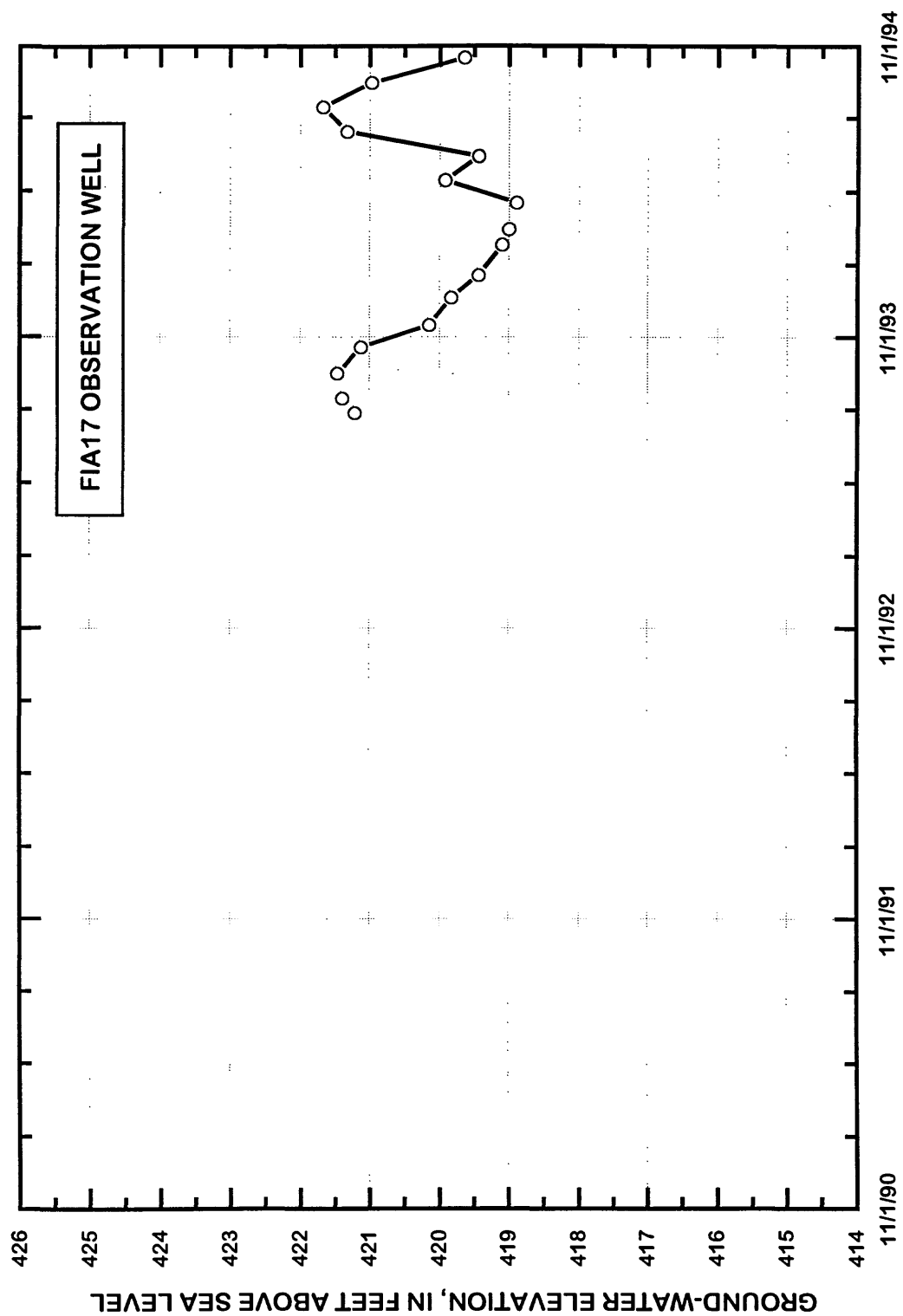
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	21.00	411.0
Depth from TOC to top of SI :	21.00	411.0
Depth from TOC to bottom of SI :	23.60	408.4
Land surface datum:		428.06

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
08-19-93	431.97
11-07-94	431.99 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-28-93	1810	Steel tape	10.76	0.01	6.85	421.21	PM
08-16-93	1852	Steel tape	10.58	0.01	6.67	421.39	MM
09-16-93	1034	Steel tape	10.51	0.01	6.60	421.46	MM
10-19-93	1503	Steel tape	10.85	0.01	6.94	421.12	MM
11-16-93	1107	Steel tape	11.82	0.01	7.91	420.15	MM
12-21-93	1445	Steel tape	12.14	0.01	8.23	419.83	MM
01-18-94	1701	Steel tape	12.54	0.01	8.63	419.43	MM
02-25-94	1247	Steel tape	12.88	0.01	8.97	419.09	MM
03-16-94	1136	Steel tape	12.98	0.01	9.07	418.99	MM
04-18-94	1143	Steel tape	13.08	0.01	9.17	418.89	MM
05-16-94	1505	Steel tape	12.05	0.01	8.14	419.92	MM
06-15-94	1424	Steel tape	12.54	0.01	8.63	419.43	MM
07-15-94	1550	Steel tape	10.66	0.01	6.73	421.33	Updated MP, MM
08-15-94	1455	Steel tape	10.32	0.01	6.39	421.67	MM
09-15-94	1526	Steel tape	11.02	0.01	7.09	420.97	MM
10-17-94	1350	Steel tape	12.35	0.01	8.42	419.64	MM
11-15-94	1148	Steel tape	12.95	0.01	9.02	419.04	MM



IG1 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523302
Local Number: FC00100226ADAA3 020

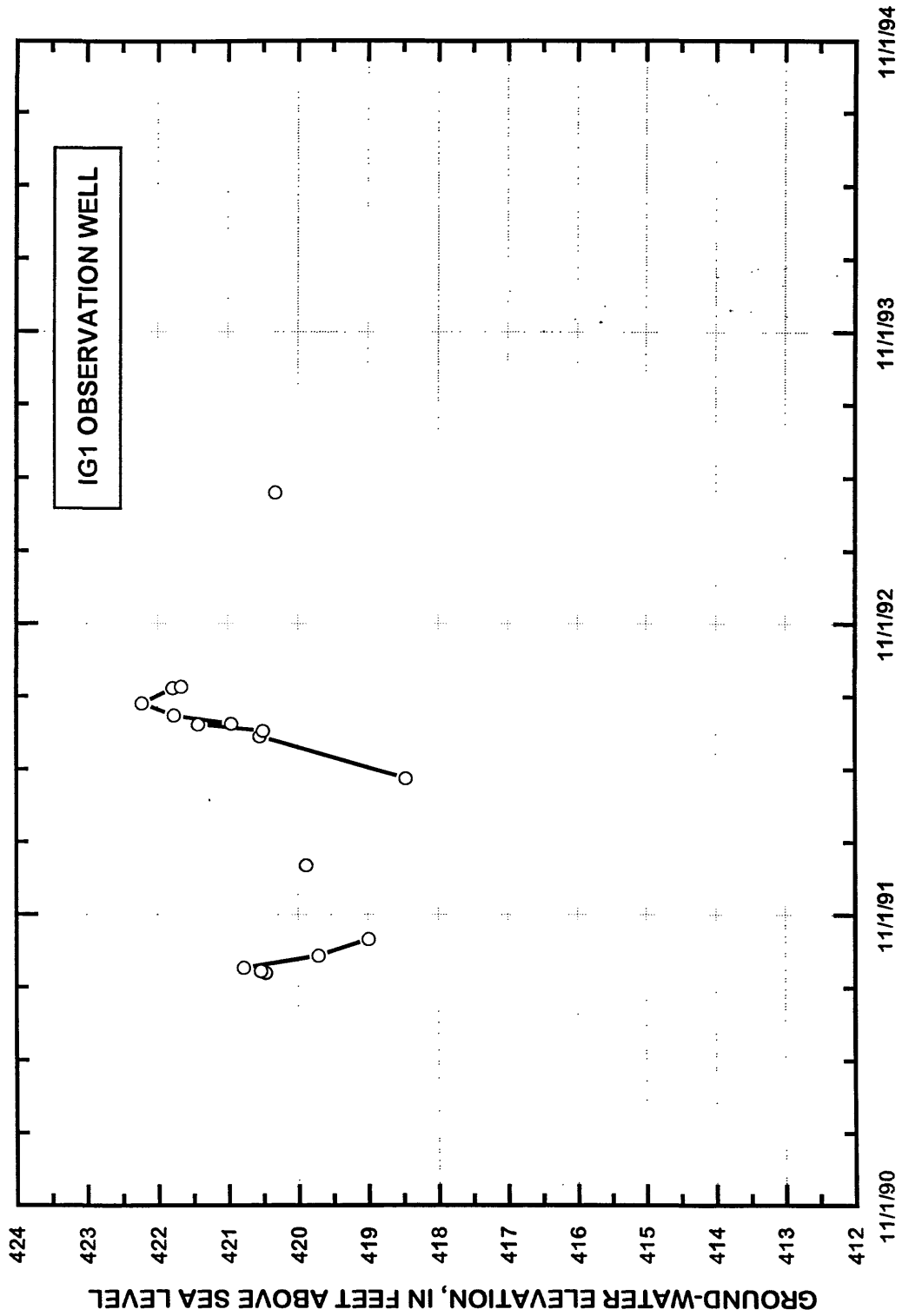
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.50	412.0
Depth from TOC to top of SI :	4.50	422.0
Depth from TOC to bottom of SI :	14.50	412.0
Land surface datum:		423.56

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	426.00
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-20-91	1032	E-tape	5.61	0.02	3.10	420.46	MM
08-22-91	1014	E-tape	5.54	0.02	3.03	420.53	PM
08-26-91	0909	E-tape	5.29	0.02	2.78	420.78	PM
09-10-91	0904	E-tape	6.36	0.02	3.85	419.71	MM
10-01-91	0953	E-tape	7.08	0.02	4.57	418.99	MM
01-02-92	1035	E-tape	6.19	0.02	3.68	419.88	MM
04-20-92	NA	E-tape	7.61	0.02	5.10	418.46	MM
06-12-92	1555	E-tape	5.93	0.02	3.02	420.54	Updated MP, MM
06-19-92	1408	E-tape	5.58	0.02	3.07	420.49	PM
06-27-92	2127	E-tape	5.05	0.02	2.14	421.42	Updated MP, PM
06-28-92	NA	Steel tape	5.12	0.01	2.61	420.95	PM
07-08-92	1748	Steel tape	4.70	0.01	1.79	421.77	PM
07-23-92	1316	Steel tape	4.25	0.01	1.34	422.22	MM
08-11-92	1154	Steel tape	4.69	0.01	1.78	421.78	New datum, PM
08-13-92	1340	Steel tape	4.81	0.01	1.90	421.66	MM
04-14-93	1505	Steel tape	6.15	0.01	3.24	420.32	MM



IG2 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523202
Local Number: FC00100226ADAD3 021

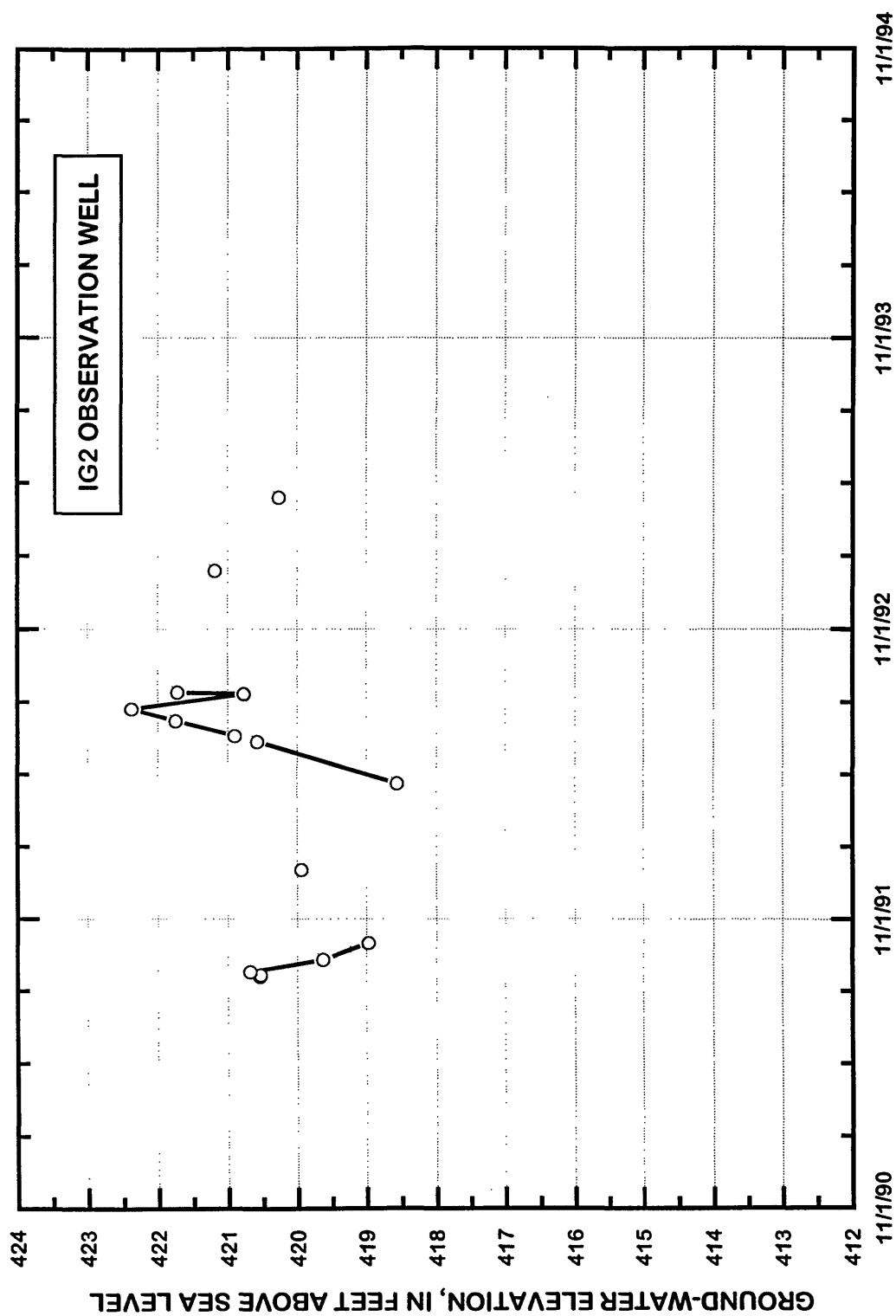
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.50	412.6
Depth from TOC to top of SI :	4.50	422.6
Depth from TOC to bottom of SI :	14.50	412.6
Land surface datum:		424.88

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	426.76
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-20-91	1048	E-tape	6.29	0.02	4.34	420.54	MM
08-22-91	1037	E-tape	6.30	0.02	4.35	420.53	PM
08-26-91	1036	E-tape	6.15	0.02	4.20	420.68	PM
09-10-91	0909	E-tape	7.20	0.02	5.25	419.63	MM
10-01-91	0957	E-tape	7.86	0.02	5.91	418.97	MM
01-02-92	1123	E-tape	6.89	0.02	4.94	419.94	MM
04-20-92	NA	E-tape	8.27	0.02	6.32	418.56	MM
06-12-92	1614	E-tape	6.51	0.02	4.30	420.58	Updated MP, MM
06-19-92	1535	E-tape	6.19	0.02	3.98	420.90	PM
07-08-92	1930	Steel tape	5.34	0.01	3.13	421.75	Updated MP, PM
07-23-92	1432	Steel tape	4.72	0.01	2.51	422.37	MM
08-11-92	1136	Steel tape	6.32	0.01	4.11	420.77	New datum, PM
08-13-92	1328	Steel tape	5.37	0.01	3.16	421.72	MM
01-13-93	1306	E-tape	5.90	0.02	3.69	421.19	MM
04-14-93	1521	Steel tape	6.83	0.01	4.62	420.26	MM



IG3 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523001
Local Number: FC00100225BCBB1 011

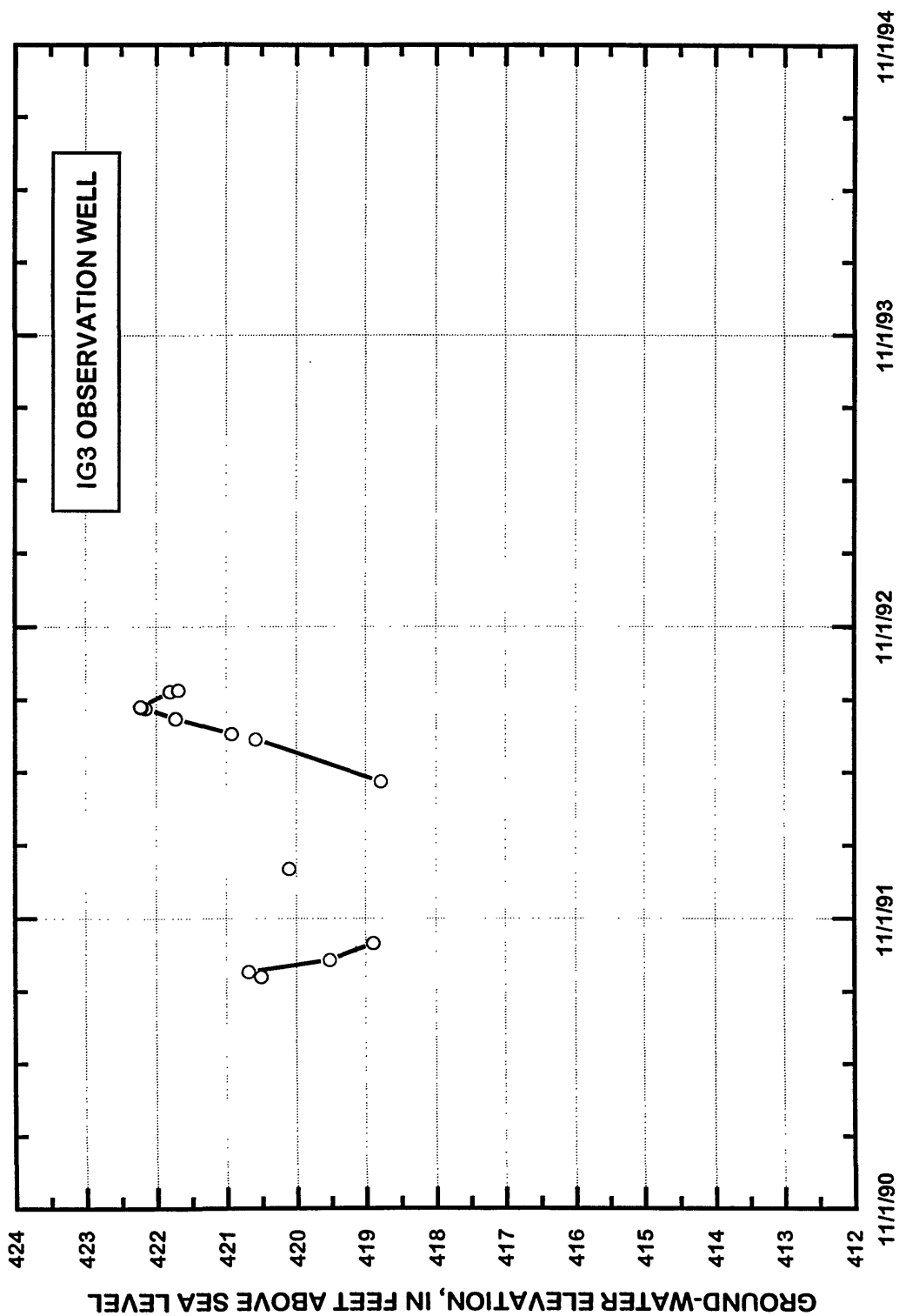
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.50	413.7
Depth from TOC to top of SI :	4.50	423.7
Depth from TOC to bottom of SI :	14.50	413.7
Land surface datum:		425.93

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	428.13
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-20-91	1102	E-tape	7.70	0.02	5.43	420.50	MM
08-26-91	1011	E-tape	7.52	0.02	5.25	420.68	PM
09-10-91	0913	E-tape	8.68	0.02	6.41	419.52	MM
10-01-91	1002	E-tape	9.31	0.02	7.04	418.89	MM
01-02-92	1115	E-tape	8.10	0.02	5.83	420.10	MM
04-20-92	NA	E-tape	9.42	0.02	7.15	418.78	MM
06-12-92	1628	E-tape	7.63	0.02	5.35	420.58	Updated MP, MM
06-19-92	1545	E-tape	7.29	0.02	5.01	420.92	PM
07-08-92	1255	Steel tape	6.49	0.01	4.21	421.72	Updated MP, PM
07-21-92	1158	Steel tape	6.06	0.01	3.78	422.15	MM
07-22-92	1239	Steel tape	6.00	0.01	3.72	422.21	PM
07-23-92	1228	Steel tape	5.99	0.01	3.71	422.22	PM
08-11-92	1012	Steel tape	6.42	0.01	4.13	421.80	New datum, PM
08-13-92	1358	Steel tape	6.54	0.01	4.25	421.68	MM



IG4 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523203
Local Number: FC00100225BCBC2 012

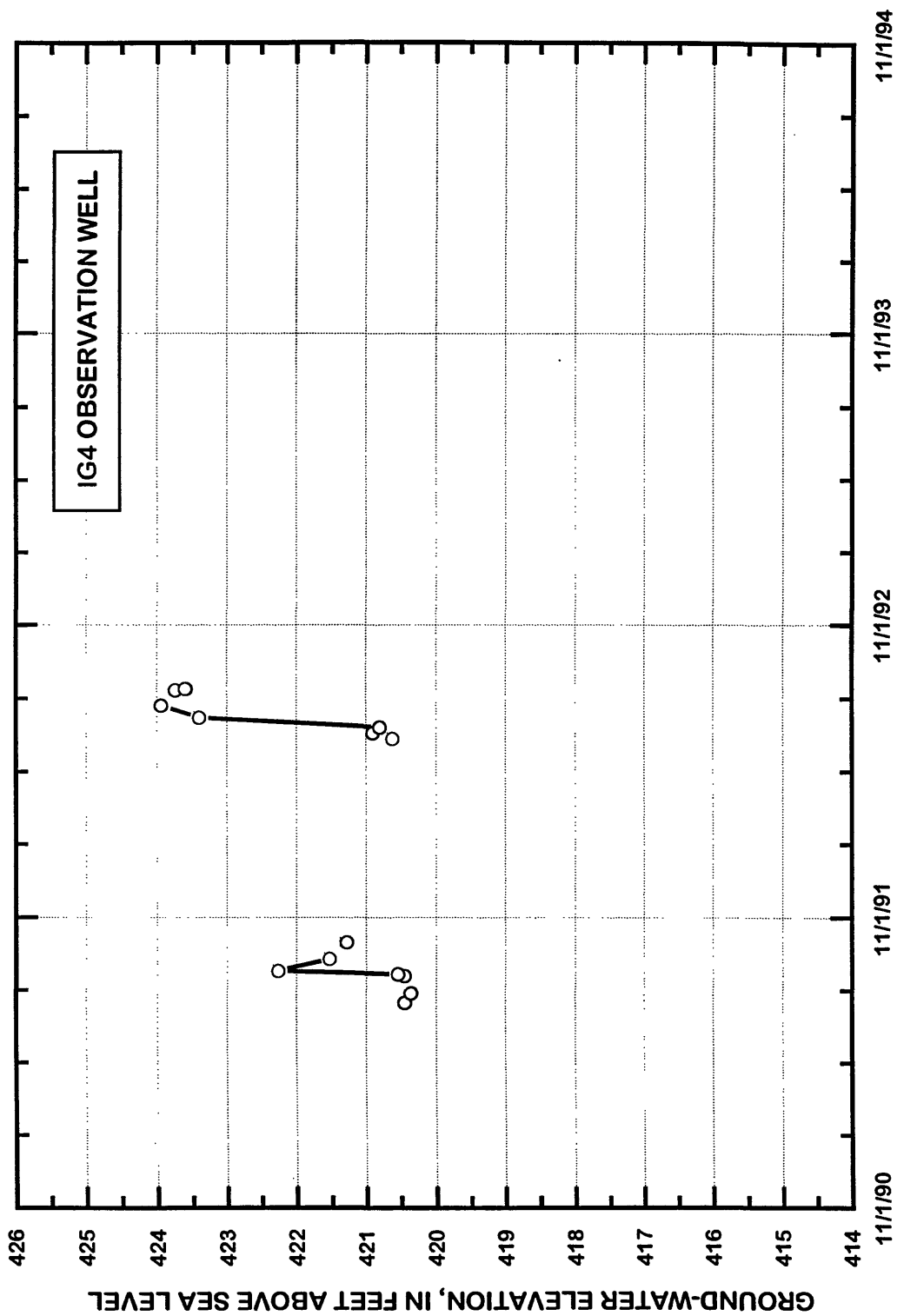
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	9.80	418.1
Depth from TOC to top of SI :	7.80	420.1
Depth from TOC to bottom of SI :	9.80	418.1
Land surface datum:		424.04

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	427.85
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	E-tape	7.48	0.02	3.60	420.44	MM
07-29-91	1615	E-tape	7.57	0.02	3.69	420.35	PM
08-20-91	1129	E-tape	7.47	0.02	3.59	420.45	MM
08-22-91	1028	E-tape	7.38	0.02	3.50	420.54	PM
08-26-91	0937	E-tape	5.66	0.02	1.78	422.26	PM
09-10-91	0918	E-tape	6.39	0.02	2.51	421.53	MM
10-01-91	1007	E-tape	6.64	0.02	2.76	421.28	MM
06-12-92	1603	E-tape	7.33	0.02	3.43	420.61	Updated MP, MM
06-19-92	1417	E-tape	7.04	0.02	3.14	420.90	PM
06-26-92	0730	E-tape	7.14	0.02	3.24	420.80	Updated MP, PM
07-08-92	1657	Steel tape	4.54	0.01	0.64	423.40	PM
07-23-92	1312	Steel tape	4.00	0.01	0.10	423.94	MM
08-11-92	1213	Steel tape	4.20	0.01	0.30	423.74	New datum, PM
08-13-92	1216	Steel tape	4.35	0.01	0.45	423.59	MM
08-13-92	1234	Steel tape	4.34	0.01	0.44	423.60	MM
04-14-93	1513	Steel tape	NA	NA	NA	NA	Frozen, MM



IG5 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523204
Local Number: FC00100226ADAA4 005

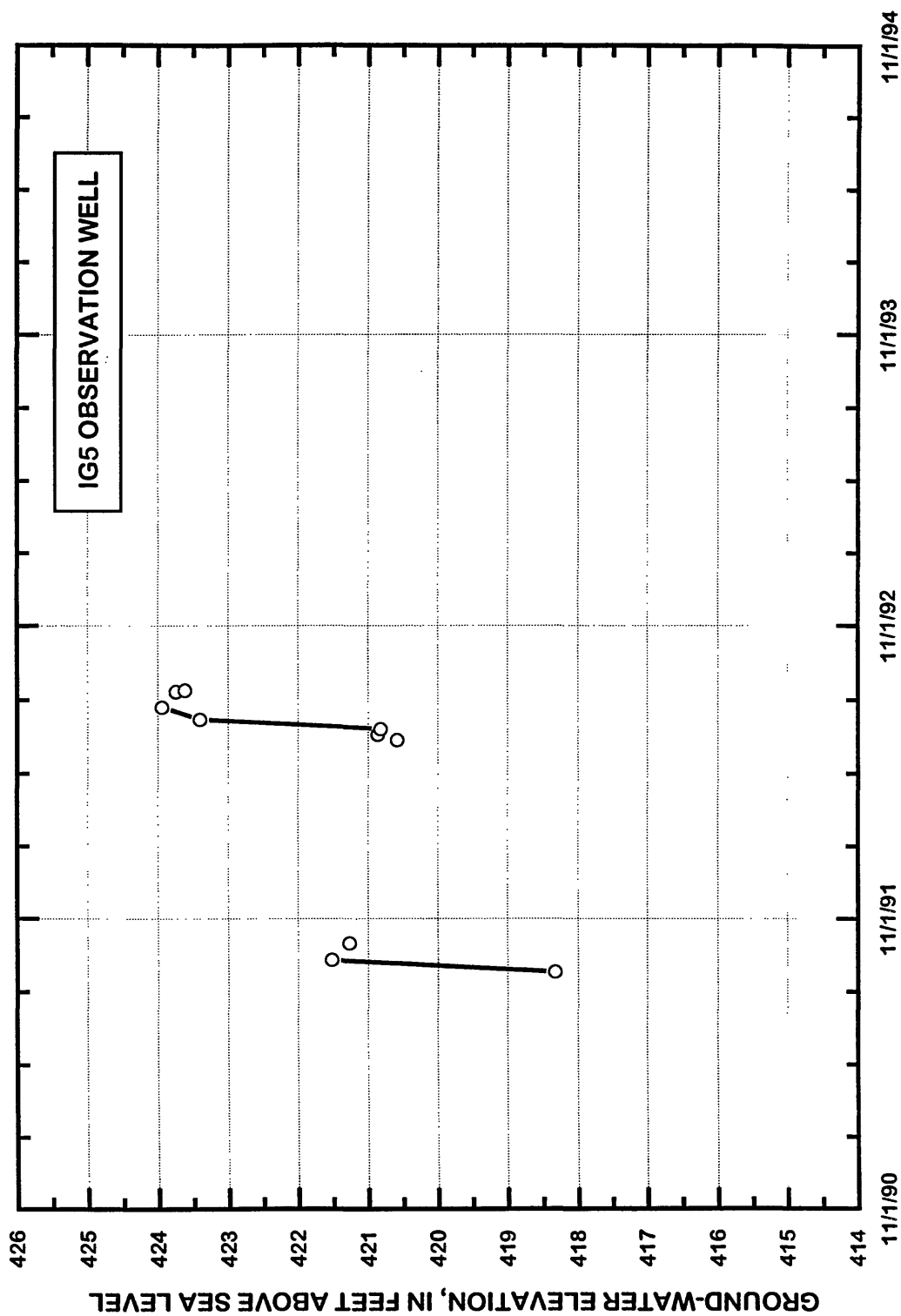
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	7.50	417.8
Depth from TOC to top of SI :	5.50	419.8
Depth from TOC to bottom of SI :	7.50	417.8
Land surface datum:		424.00

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	425.26
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	NA	NA	NA	NA	NA	Broken, MM
07-29-91	1615	NA	NA	NA	NA	NA	Broken, MM
08-26-91	NA	E-tape	7.00	0.02	5.67	418.33	New well, PM
09-10-91	0923	E-tape	3.81	0.02	2.48	421.52	MM
10-01-91	NA	E-tape	4.06	0.02	2.73	421.27	MM
06-12-92	1605	E-tape	4.75	0.02	3.42	420.58	Updated MP, MM
06-19-92	1420	E-tape	4.47	0.02	3.14	420.86	PM
06-26-92	NA	E-tape	4.51	0.02	3.18	420.82	Updated MP, PM
07-08-92	1610	Steel tape	1.93	0.01	0.60	423.40	PM
07-23-92	1307	Steel tape	1.39	0.01	0.06	423.94	MM
08-11-92	1215	Steel tape	1.59	0.01	0.26	423.74	New datum, PM
08-13-92	1228	Steel tape	1.72	0.01	0.39	423.61	MM



IG6 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523102
Local Number: FC00100225BCBC3 013

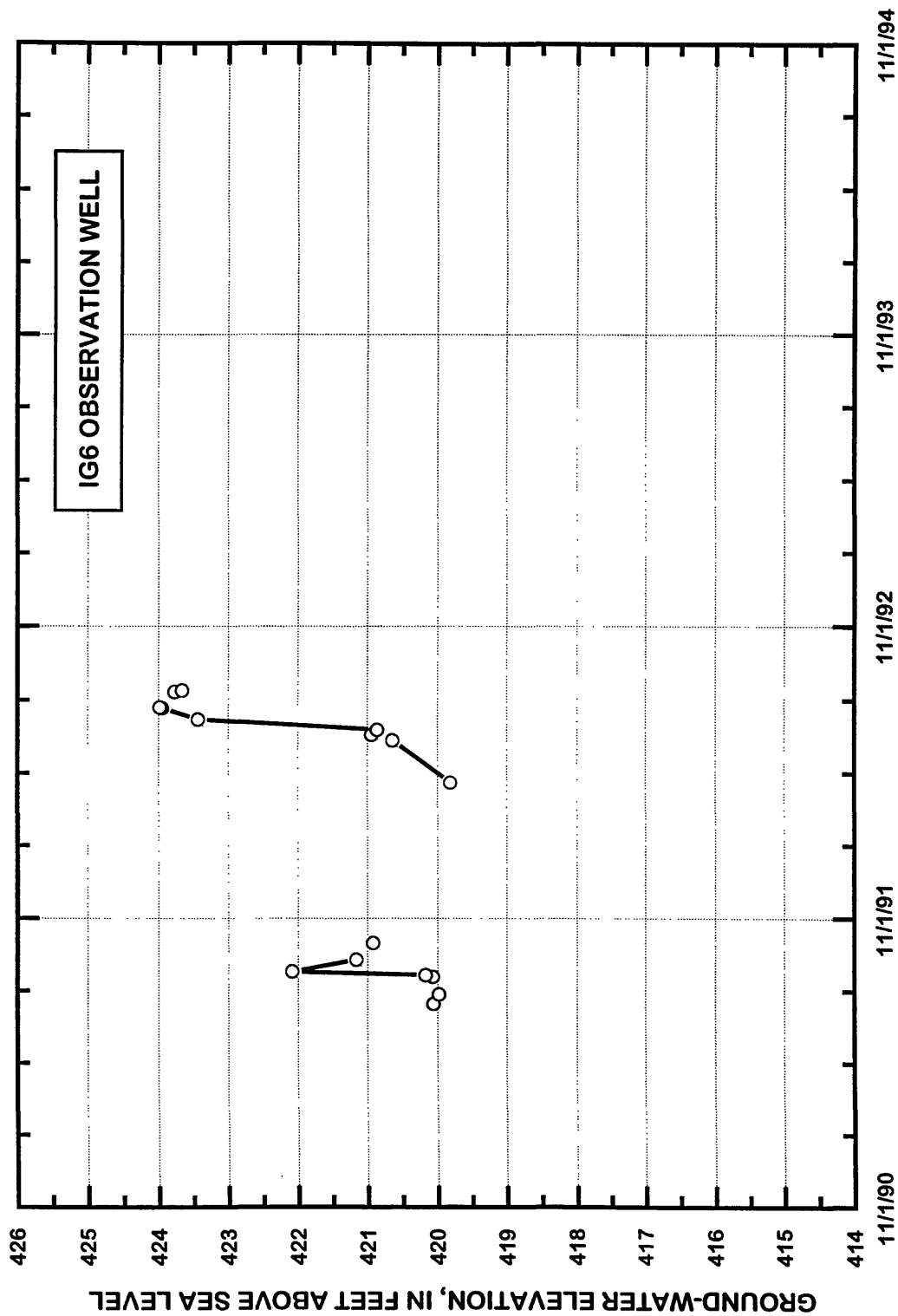
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	10.13	419.2
Depth from TOC to top of SI :	8.13	421.2
Depth from TOC to bottom of SI :	10.13	419.2
Land surface datum:		424.56

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	428.95
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	E-tape	8.96	0.02	4.50	420.06	MM
07-29-91	1615	E-tape	9.04	0.02	4.58	419.98	PM
08-20-91	1133	E-tape	8.95	0.02	4.49	420.07	MM
08-22-91	1043	E-tape	8.85	0.02	4.39	420.17	PM
08-26-91	0955	E-tape	6.94	0.02	2.48	422.08	PM
09-10-91	0933	E-tape	7.86	0.02	3.40	421.16	MM
10-01-91	1017	E-tape	8.10	0.02	3.64	420.92	MM
04-20-92	NA	E-tape	9.21	0.02	4.75	419.81	PM
06-12-92	1617	E-tape	8.80	0.02	3.92	420.64	Updated MP, MM
06-19-92	1454	E-tape	8.50	0.02	3.62	420.94	PM
06-25-92	1503	E-tape	8.58	0.02	3.70	420.86	PM
07-08-92	1506	Steel tape	5.95	0.01	1.13	423.43	Updated MP, PM
07-22-92	1252	Steel tape	5.43	0.01	0.61	423.95	MM
07-23-92	1250	Steel tape	5.40	0.01	0.58	423.98	PM
08-11-92	1035	Steel tape	5.60	0.01	0.79	423.77	New datum, PM
08-13-92	1222	Steel tape	5.71	0.01	0.90	423.66	MM



IG7 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523002
Local Number: FC00100225BCBC4 014

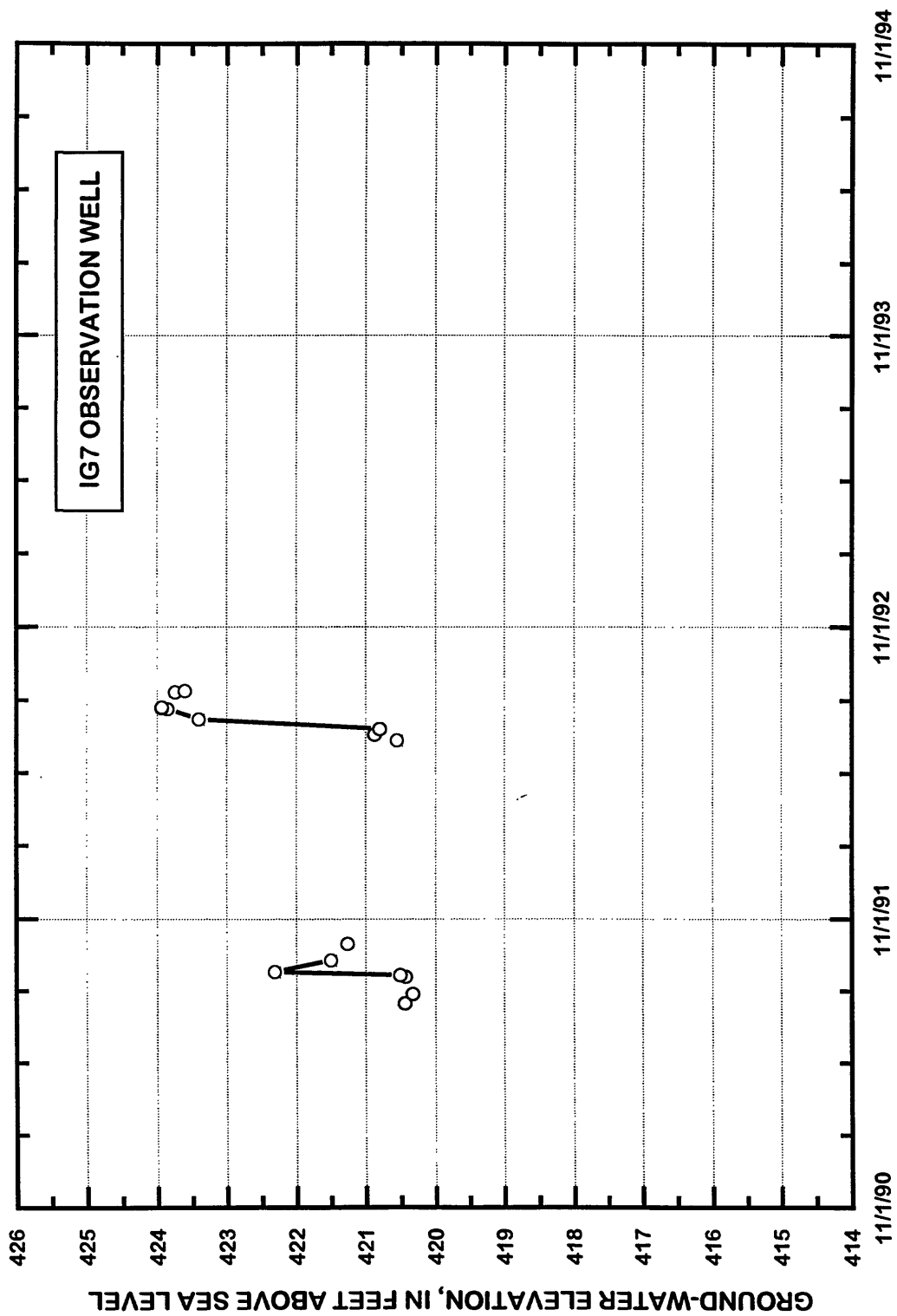
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	9.94	418.8
Depth from TOC to top of SI :	7.90	420.8
Depth from TOC to bottom of SI :	9.90	418.8
Land surface datum:		424.66

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	428.64
06-01-92	428.65 Updated MP
06-26-92	428.65 Updated MP
08-11-92	428.73 New datum (All WS elevations reflect datum change.)
06-30-93	428.72 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	E-tape	8.27	0.02	4.22	420.44	MM
07-29-91	1615	E-tape	8.38	0.02	4.33	420.33	PM
08-20-91	1152	E-tape	8.28	0.02	4.23	420.43	MM
08-22-91	1050	E-tape	8.20	0.02	4.15	420.51	PM
08-26-91	1005	E-tape	6.40	0.02	2.35	422.31	PM
09-10-91	0937	E-tape	7.21	0.02	3.16	421.50	MM
10-01-91	NA	E-tape	7.45	0.02	3.40	421.26	MM
06-12-92	1625	E-tape	8.17	0.02	4.11	420.55	Updated MP, MM
06-19-92	1505	E-tape	7.85	0.02	3.79	420.87	PM
06-26-92	0826	E-tape	7.92	0.02	3.86	420.80	PM
07-08-92	1317	Steel tape	5.32	0.01	1.26	423.40	Updated MP, PM
07-21-92	1214	Steel tape	4.87	0.01	0.81	423.85	MM
07-22-92	1243	Steel tape	4.79	0.01	0.73	423.93	PM
07-23-92	1235	Steel tape	4.79	0.01	0.73	423.93	PM
08-11-92	1025	Steel tape	4.99	0.01	0.92	423.74	New datum, PM
08-13-92	1112	Steel tape	5.13	0.01	1.06	423.60	MM
04-14-93	1538	Steel tape	NA	NA	NA	NA	Frozen, MM



IG8 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523003
Local Number: FC00100225BCBC5 015

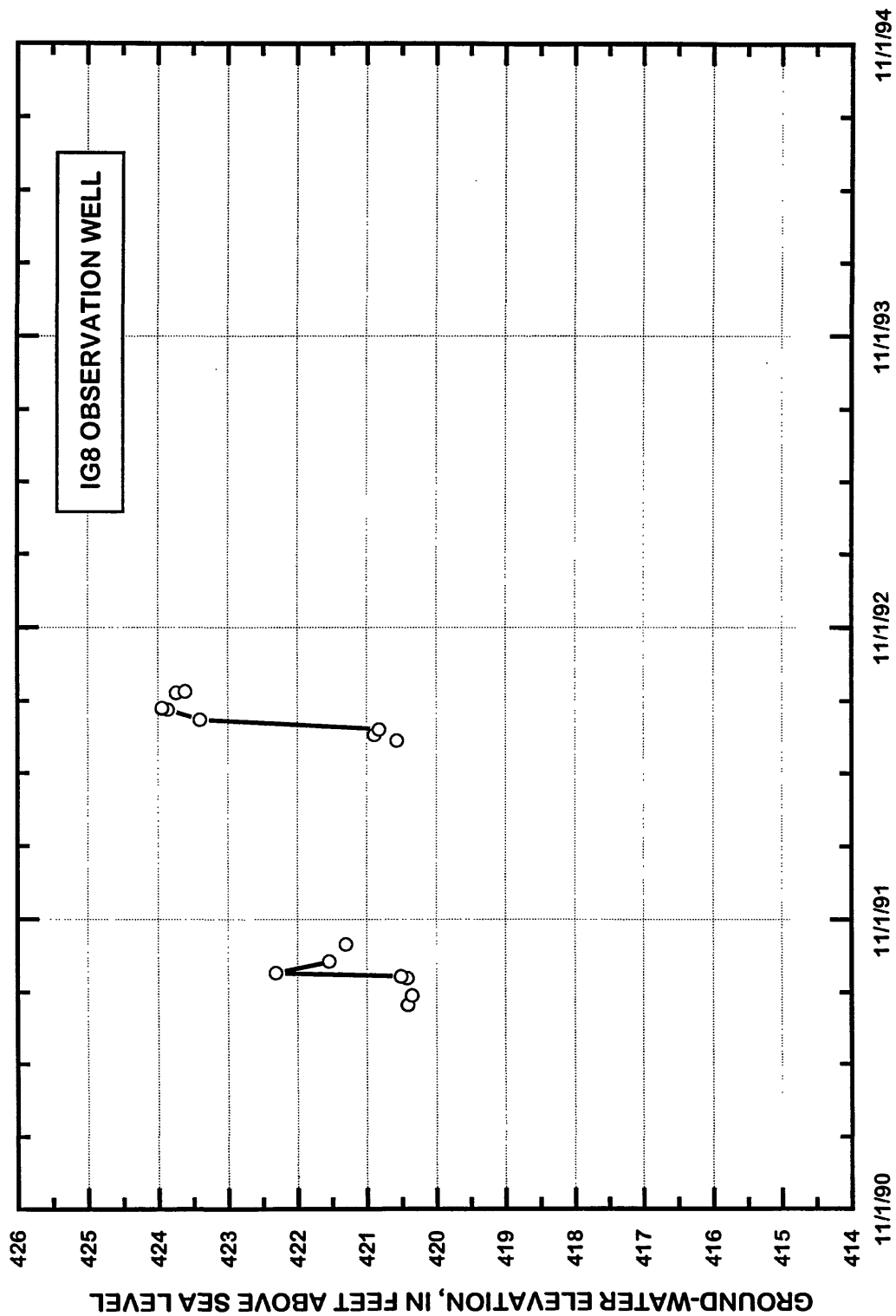
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	10.13	418.1
Depth from TOC to top of SI :	8.13	420.1
Depth from TOC to bottom of SI :	10.13	418.1
Land surface datum:		424.31

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-10-91	428.17
06-01-92	Updated MP
06-26-92	Updated MP
08-11-92	New datum (All WS elevations reflect datum change.)
06-30-93	Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-17-91	NA	E-Tape	7.83	0.02	3.90	420.41	MM
07-29-91	1615	E-Tape	7.89	0.02	3.96	420.35	PM
08-20-91	1155	E-Tape	7.82	0.02	3.89	420.42	MM
08-22-91	1053	E-Tape	7.73	0.02	3.80	420.51	PM
08-26-91	1008	E-Tape	5.93	0.02	2.00	422.31	PM
09-10-91	0940	E-Tape	6.70	0.02	2.77	421.54	MM
10-01-91	1025	E-Tape	6.94	0.02	3.01	421.30	MM
06-12-92	1621	E-Tape	7.67	0.02	3.74	420.57	Updated MP, MM
06-19-92	1528	E-Tape	7.35	0.02	3.42	420.89	PM
06-26-92	0854	E-Tape	7.42	0.02	3.49	420.82	PM
07-08-92	1432	Steel tape	4.84	0.01	0.91	423.40	Updated MP, PM
07-21-92	1226	Steel tape	4.38	0.01	0.45	423.86	MM
07-22-92	1249	Steel tape	4.30	0.01	0.37	423.94	PM
07-23-92	1244	Steel tape	4.30	0.01	0.37	423.94	PM
08-11-92	1017	Steel tape	4.50	0.01	0.57	423.74	New datum, PM
08-13-92	1210	Steel tape	4.63	0.01	0.70	423.61	MM
04-14-93	1541	Steel tape	NA	NA	NA	NA	MM, frozen



IG9 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523303

Local Number: FC00100226ADAD4 022

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	10.00	419.0
Depth from TOC to top of SI :	NA	NA
Depth from TOC to bottom of SI :	NA	NA
Land surface datum:		424.98

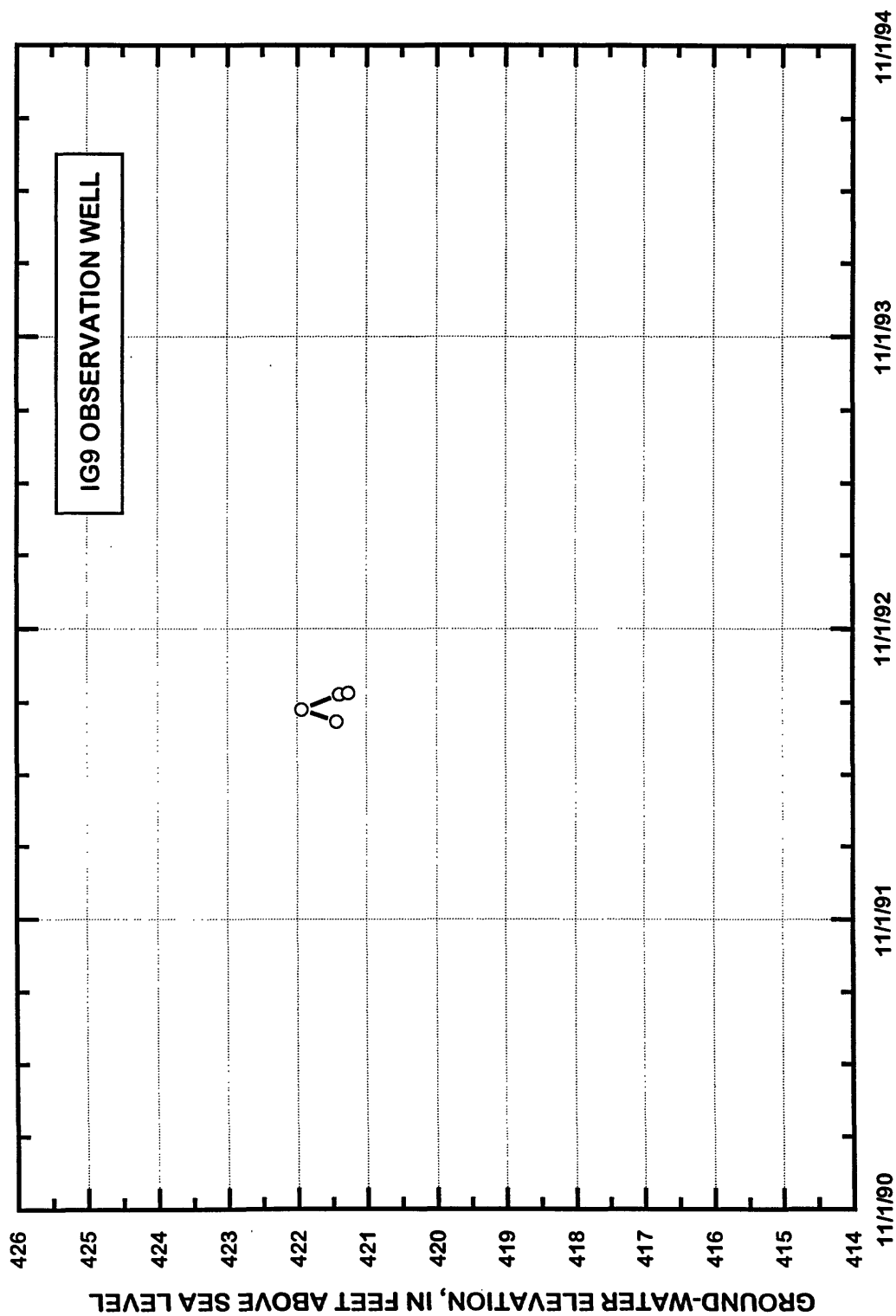
LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-26-92	428.86
08-11-93	428.83
06-30-93	429.02

New datum (All WS elevations reflect datum change)
Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-08-92	1926	Steel tape	7.50	0.01	3.55	421.43	PM
07-23-92	1441	Steel tape	7.00	0.01	3.05	421.93	MM
08-11-92	1147	Steel tape	7.44	0.01	3.59	421.39	New datum, PM
08-13-92	1331	Steel tape	7.57	0.01	3.72	421.26	MM



IG10 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523005
Local Number: FC00100225BCBC9 019

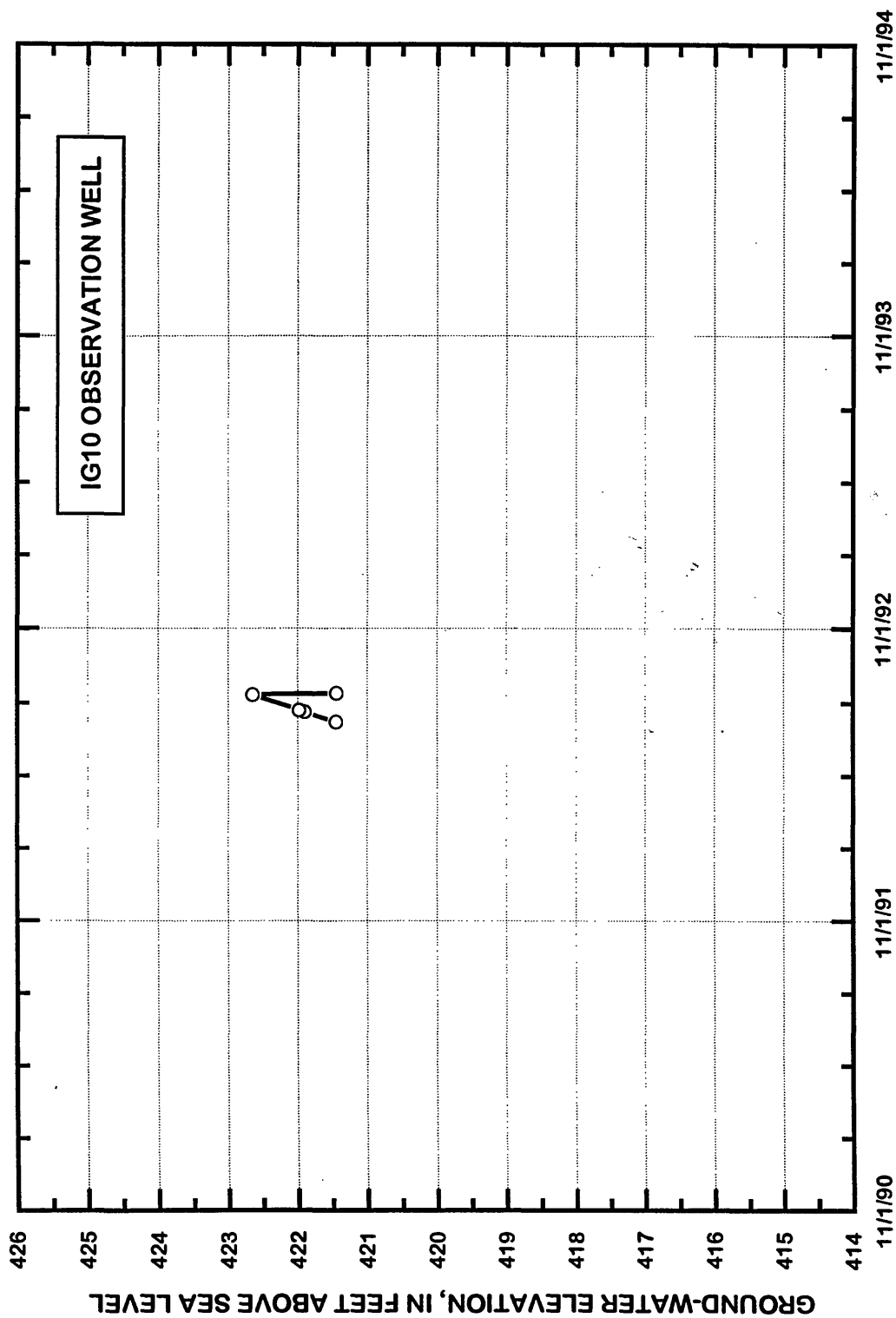
All measurements in feet	Feet	Elevation	LS, land surface
Depth to bottom of well from MP :	10.00	417.9	MM, mass measurement
Depth from TOC to top of SI :	NA	NA	PM, partial measurement
Depth from TOC to bottom of SI :	NA	NA	MP, measuring point
Land surface datum:		424.33	NA, not available
			SI, screened interval
			TOC, top of casing
			WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-26-92	427.82
06-30-93	427.89

New datum (All WS elevations reflect datum change)

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-08-92	1933	Steel tape	6.44	0.01	2.88	421.45	PM
07-21-92	1208	Steel tape	5.99	0.01	2.43	421.90	MM
07-23-92	1437	Steel tape	5.91	0.01	2.35	421.98	PM
08-11-92	1143	Steel tape	5.24	0.01	1.68	422.65	New datum, PM
08-13-92	1324	Steel tape	6.45	0.01	2.89	421.44	MM



IG11 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523304
Local Number: FC00100226ADAD4 022

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	6.72	418.1
Depth from TOC to top of SI :	4.50	420.3
Depth from TOC to bottom of SI :	6.50	418.3
Land surface datum:		424.28

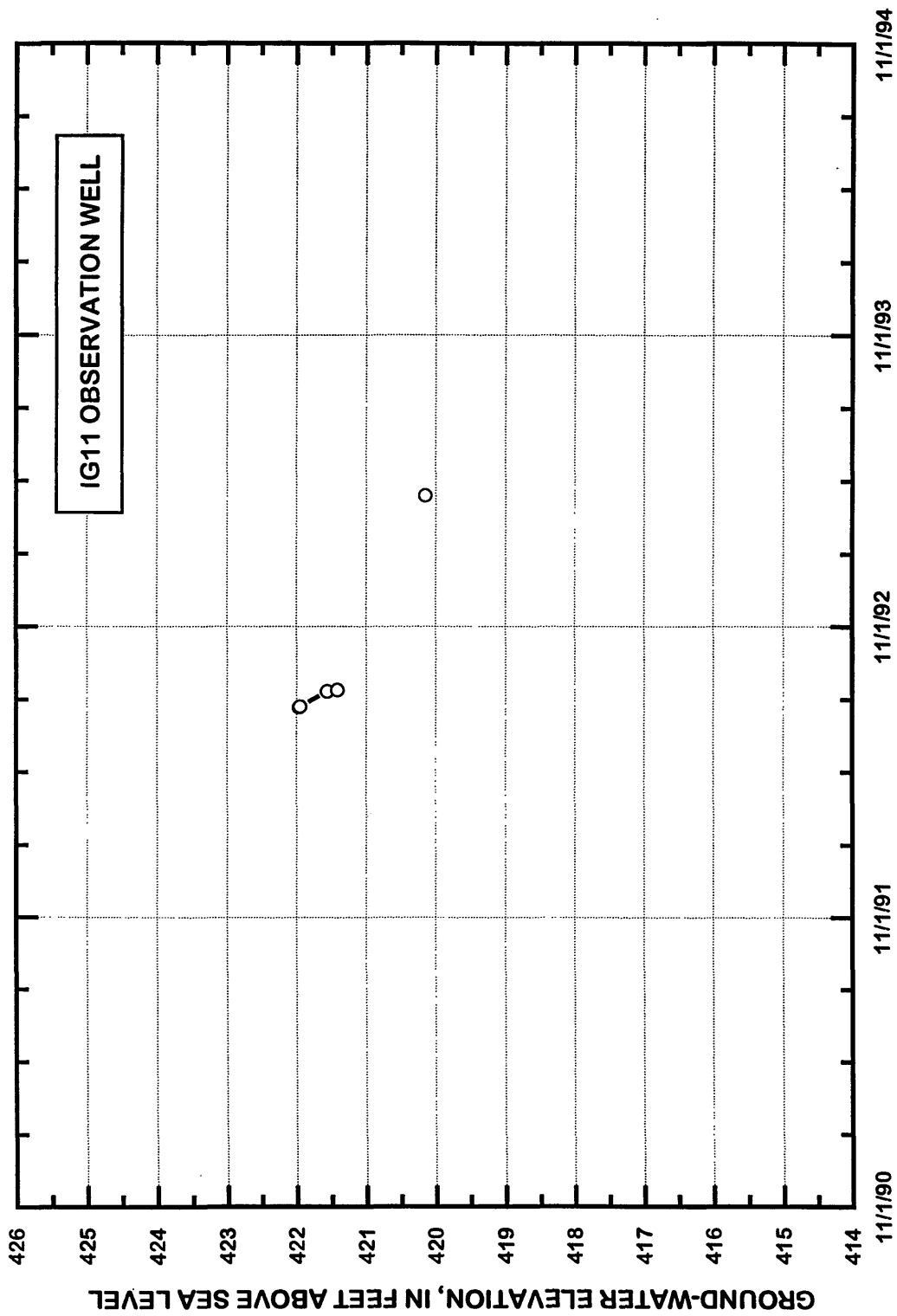
LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-26-92	424.59
08-11-92	424.66
06-30-93	424.78

New datum (All WS elevations reflect datum change)
Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-22-92	0923	Steel tape	2.70	0.01	2.32	421.96	MM
07-23-92	1326	Steel tape	2.71	0.01	2.33	421.95	PM
08-11-92	1049	Steel tape	3.10	0.01	2.72	421.56	New datum, PM
08-13-92	1346	Steel tape	3.25	0.01	2.87	421.41	MM
04-14-93	1459	Steel tape	4.51	0.01	4.13	420.15	MM



IG12 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523305
Local Number: FC00100226ADAD7 025

All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	6.70	417.8
Depth from TOC to top of SI :	4.40	420.1
Depth from TOC to bottom of SI :	6.50	418.0
Land surface datum:		423.71

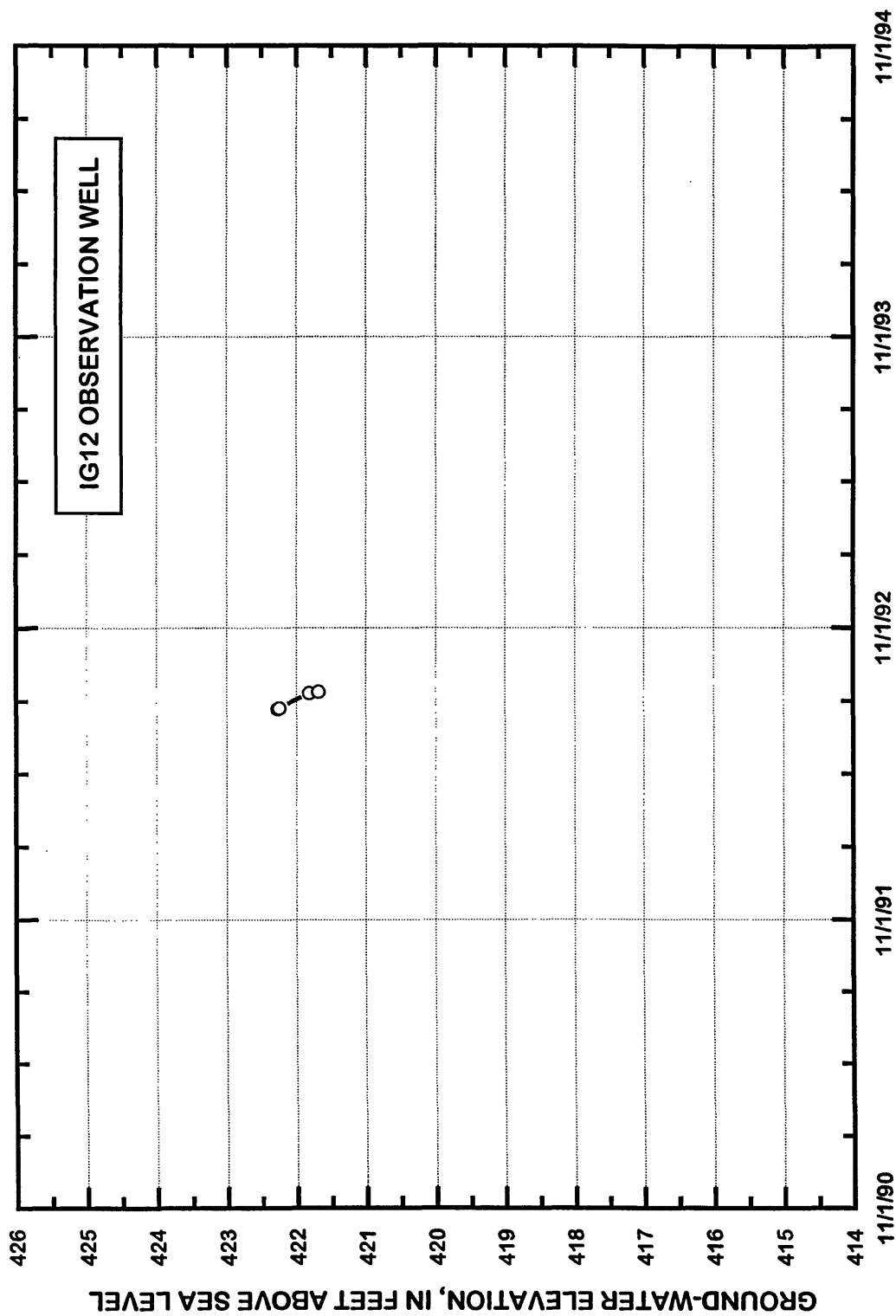
LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-26-93	424.11
08-11-92	424.18
06-30-93	424.51

New datum (All WS elevations reflect datum change)
Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-22-92	0928	Steel tape	1.92	0.01	1.45	422.26	MM
07-23-92	1320	Steel tape	1.94	0.01	1.47	422.24	PM
08-11-92	1059	Steel tape	2.37	0.01	1.90	421.81	New datum, PM
08-13-92	1344	Steel tape	2.50	0.01	2.03	421.68	MM



TR1 GROUND-WATER OBSERVATION WELL

Site ID: 644804147522901
Local Number: FC00100225BCBC7 016

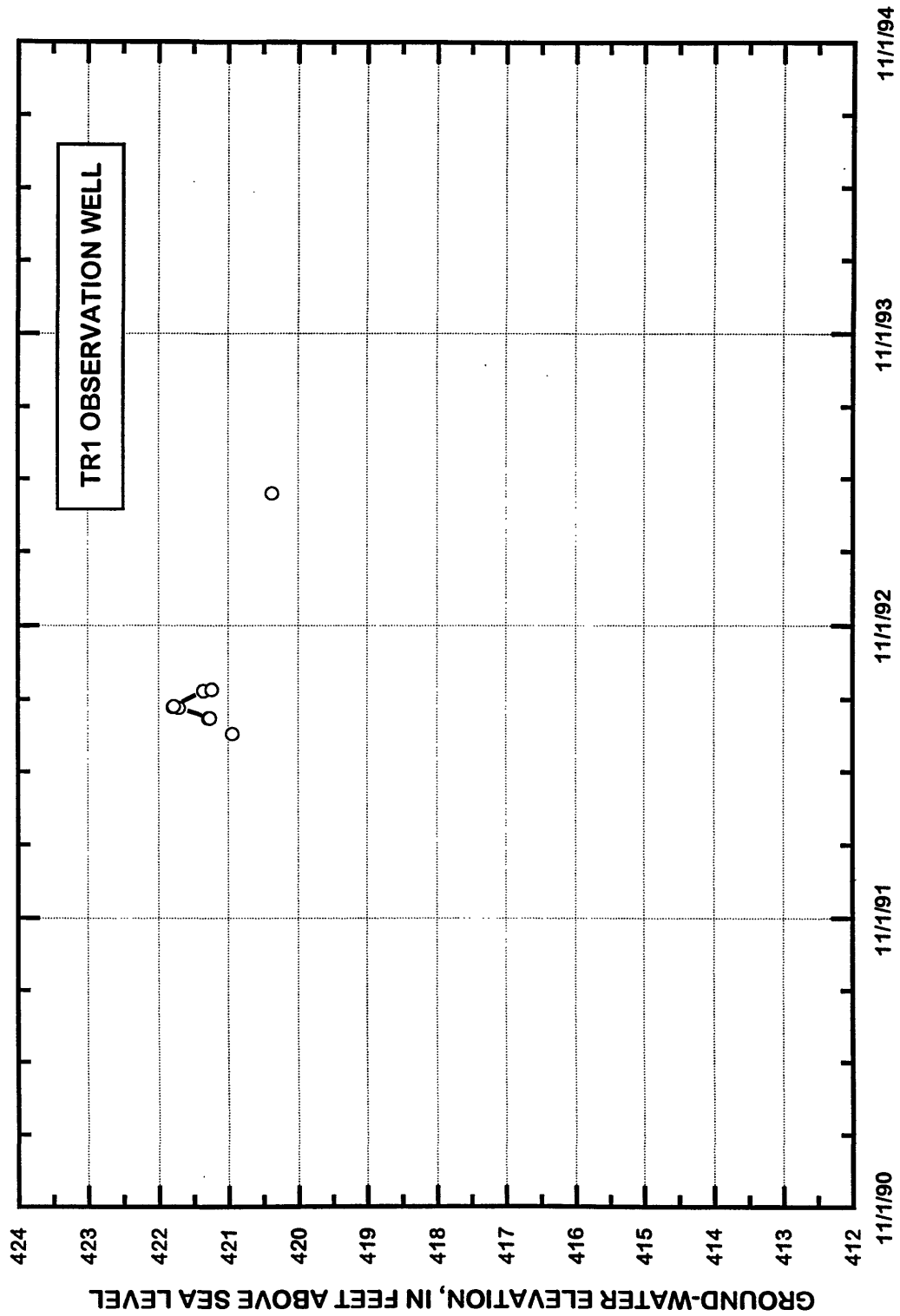
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	14.60	413.2
Depth from TOC to top of SI :	5.00	422.8
Depth from TOC to bottom of SI :	14.60	413.2
Land surface datum:		425.86

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-01-92	427.75
06-26-92	427.74 Updated MP
08-11-92	427.83 New datum (all WS elevations reflect datum change)
06-30-93	427.80 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-19-92	1750	E-tape	6.88	0.02	4.92	420.94	PM
07-08-92	1143	Steel tape	6.53	0.01	4.58	421.28	Updated MP, PM
07-08-92	NA	Steel tape	6.55	0.01	4.60	421.26	PM
07-21-92	1143	Steel tape	6.10	0.01	4.15	421.71	MM
07-22-92	1223	Steel tape	6.02	0.01	4.07	421.79	PM
07-23-92	1203	Steel tape	6.03	0.01	4.08	421.78	PM
08-11-92	0956	Steel tape	6.48	0.01	4.51	421.35	New datum, PM
08-13-92	1412	Steel tape	6.60	0.01	4.63	421.23	MM
04-14-93	1554	Steel tape	7.46	0.01	5.49	420.37	MM



TR2 GROUND-WATER OBSERVATION WELL

Site ID: 644804147522902
Local Number: FC00100225BCBC7 017

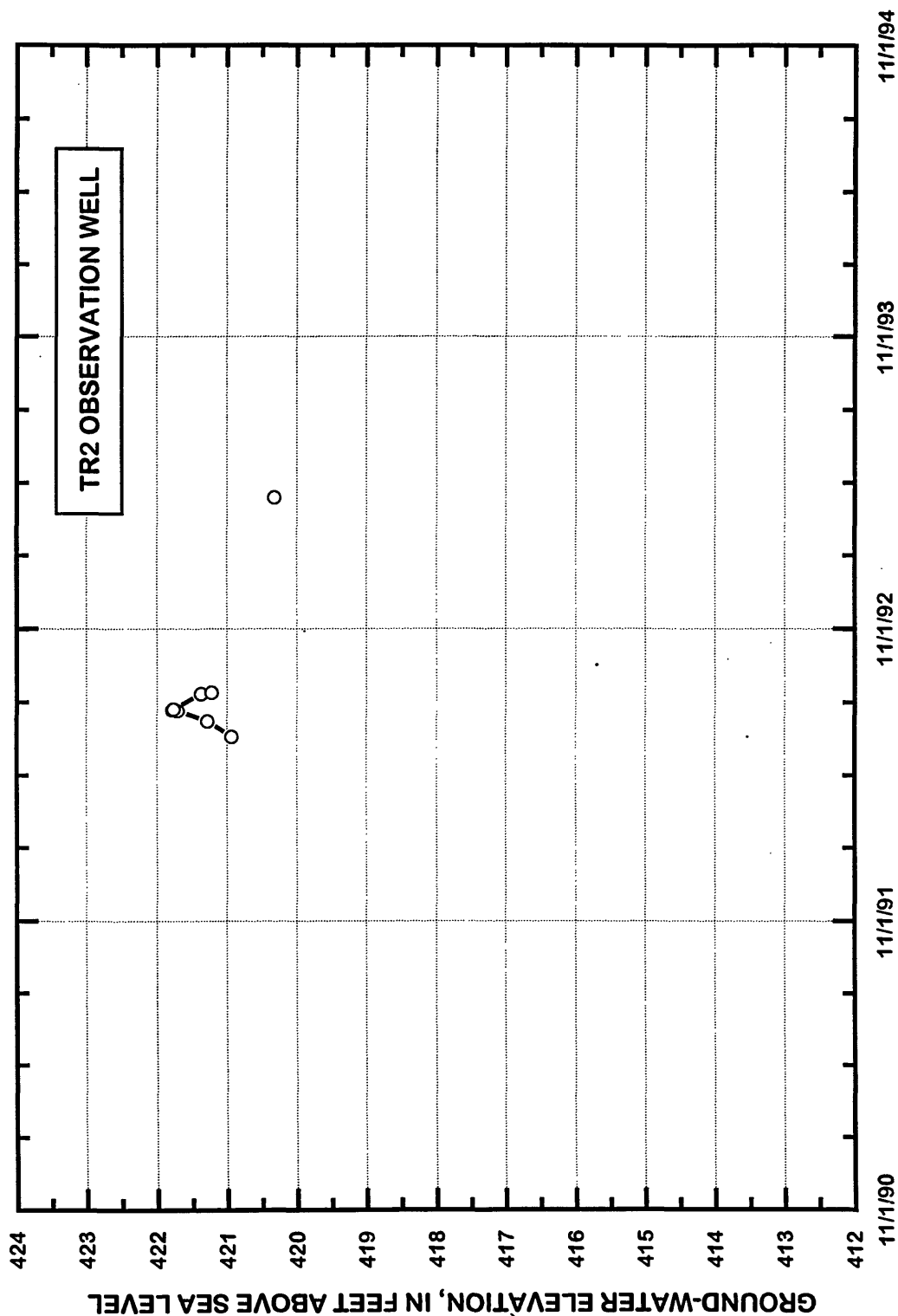
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	22.00	406.1
Depth from TOC to top of SI :	20.00	408.1
Depth from TOC to bottom of SI :	22.00	406.1
Land surface datum:		425.95

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-01-92	428.01
06-26-92	428.00 Updated MP
08-11-92	428.09 New datum (All WS elevations reflect datum change)
06-30-93	428.09 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-19-92	1732	E-tape	7.15	0.02	5.02	420.93	PM
07-08-92	1200	Steel tape	6.79	0.01	4.67	421.28	Updated MP, PM
07-21-92	1148	Steel tape	6.36	0.01	4.24	421.71	MM
07-22-92	1227	Steel tape	6.29	0.01	4.17	421.78	PM
07-23-92	1223	Steel tape	6.30	0.01	4.18	421.77	PM
08-11-92	1004	Steel tape	6.72	0.01	4.58	421.37	New datum, PM
08-13-92	1407	Steel tape	6.87	0.01	4.73	421.22	MM
04-14-93	1550	Steel tape	7.77	0.01	5.63	420.32	MM



TR3 GROUND-WATER OBSERVATION WELL

Site ID: 644804147523004
Local Number: FC00100225BCBC8 018

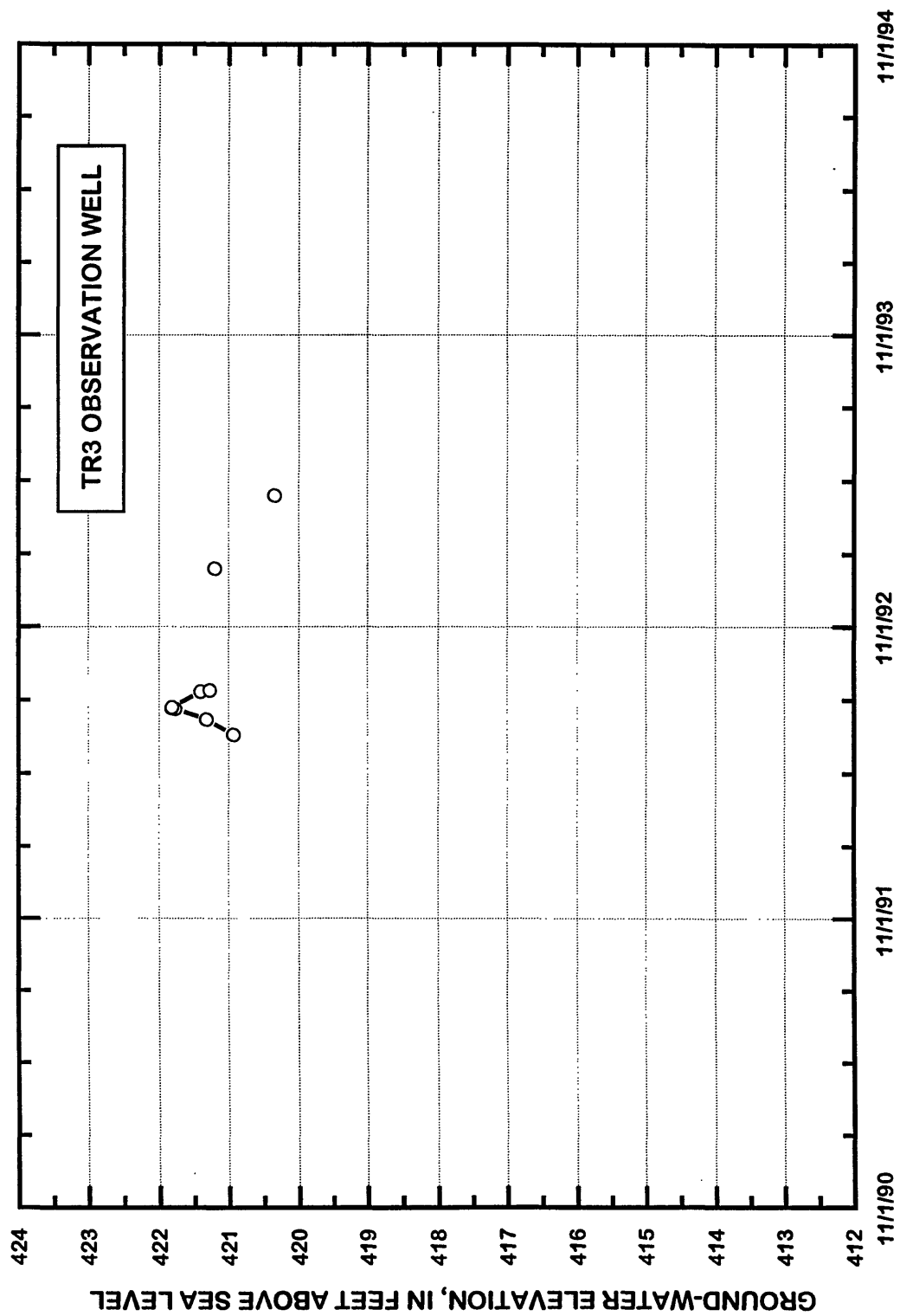
All measurements in feet	Feet	Elevation
Depth to bottom of well from MP :	22.00	406.2
Depth from TOC to top of SI :	20.00	408.2
Depth from TOC to bottom of SI :	22.00	406.2
Land surface datum:		425.86

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
SI, screened interval
TOC, top of casing
WS, water surface

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
06-01-92	428.12
06-26-92	428.12 Updated MP
08-11-92	428.20 New datum (All WS elevations reflect datum change)
06-30-93	428.19 Updated MP

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-19-92	1624	E-tape	7.26	0.02	4.93	420.93	PM
07-08-92	1223	Steel tape	6.87	0.01	4.54	421.32	Updated MP, PM
07-21-92	1152	Steel tape	6.42	0.01	4.09	421.77	MM
07-22-92	1233	Steel tape	6.37	0.01	4.04	421.82	PM
07-23-92	1210	Steel tape	6.38	0.01	4.05	421.81	PM
08-11-92	1009	Steel tape	6.80	0.01	4.46	421.40	New datum, PM
08-13-92	1402	Steel tape	6.93	0.01	4.59	421.27	MM
01-13-93	1339	E-tape	7.00	0.01	4.66	421.20	MM
04-14-93	1547	Steel tape	7.86	0.01	5.52	420.34	MM



FIASL1 SLOUGH SITE

Slough site north-west of bioremediation area

Site ID: 644944147494001

Local Number: FC00100226ADAB1 010

All measurements in feet

Reading from staff at this site

Staff: SLS1

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 418.76

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-20-91	1610	Staff	1.06	0.01	-1.45	420.21	PM
06-24-91	1421	Staff	0.99	0.01	-1.38	420.14	MM
06-25-91	1611	Staff	0.99	0.01	-1.38	420.14	PM
06-26-91	NA	Staff	1.06	0.01	-1.45	420.21	PM
06-27-91	1006	Staff	1.09	0.01	-1.48	420.24	PM
07-09-91	1146	Staff	2.06	0.01	-2.45	421.21	PM
07-10-91	1110	Staff	2.07	0.01	-2.46	421.22	PM
07-11-91	1741	Staff	2.10	0.01	-2.49	421.25	PM
07-12-91	1030	Staff	2.11	0.01	-2.50	421.26	PM
07-13-91	1136	Staff	2.10	0.01	-2.49	421.25	PM
07-16-91	1523	Staff	2.04	0.01	-2.43	421.19	PM
07-17-91	1024	Staff	2.01	0.01	-2.40	421.16	MM
07-29-91	1558	Staff	1.68	0.01	-2.07	420.83	PM
08-12-91	1245	Staff	2.71	0.01	-3.10	421.86	PM
08-20-91	1200	Staff	1.50	0.01	-1.89	420.65	MM
08-26-91	1133	Staff	1.58	0.01	-1.97	420.73	PM
09-10-91	0842	Staff	0.93	0.01	-1.32	420.08	MM
10-01-91	0935	Staff	NA	NA	NA	NA	MM, dry
06-12-92	1535	Staff	2.06	0.01	-2.05	420.81	MM
06-19-92	1843	Staff	1.87	0.01	-1.86	420.62	PM
06-30-92	0900	Staff	1.84	0.01	-1.83	420.59	PM
07-21-92	1239	Staff	2.32	0.01	-2.31	421.07	MM
07-23-92	1450	Staff	2.42	0.01	-2.41	421.17	PM
08-13-92	1401	Staff	2.66	0.01	-2.65	421.41	MM

FIASL1 SLOUGH SITE
 Slough site north-west of bioremediation area

(Continued)

Site ID: 644944147494001
 Local Number: FC00100226ADAB1 010

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-03-93	1630	Staff	1.00	0.01	-1.00	419.76	PM
06-11-93	1450	Staff	0.87	0.02	-0.87	419.63	MM, waves
06-30-93	1610	Staff	1.23	0.01	-1.23	419.99	PM
07-16-93	1236	Staff	1.32	0.01	-1.32	420.08	MM
08-16-93	1611	Staff	2.28	0.01	-2.28	421.04	MM
09-15-93	1540	Staff	3.06	0.01	-3.06	421.82	MM
10-19-93	1330	Staff	0.43	0.01	-0.43	419.19	MM
11-17-93	1520	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1345	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1441	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1317	Staff	NA	NA	NA	NA	MM, out of water
06-15-94	1346	Staff	NA	NA	NA	NA	MM, out of water
07-15-94	1520	Staff	NA	NA	NA	NA	MM, could not reach

FIASL2 SLOUGH SITE

Slough site south-west of bioremediation area

Site ID: 644807147524501

Local Number: FC00100226ADAB2 015

All measurements in feet

Best reading from rebar and culvert at this site

Rebar: RB1

Culvert: CU5

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 418.67

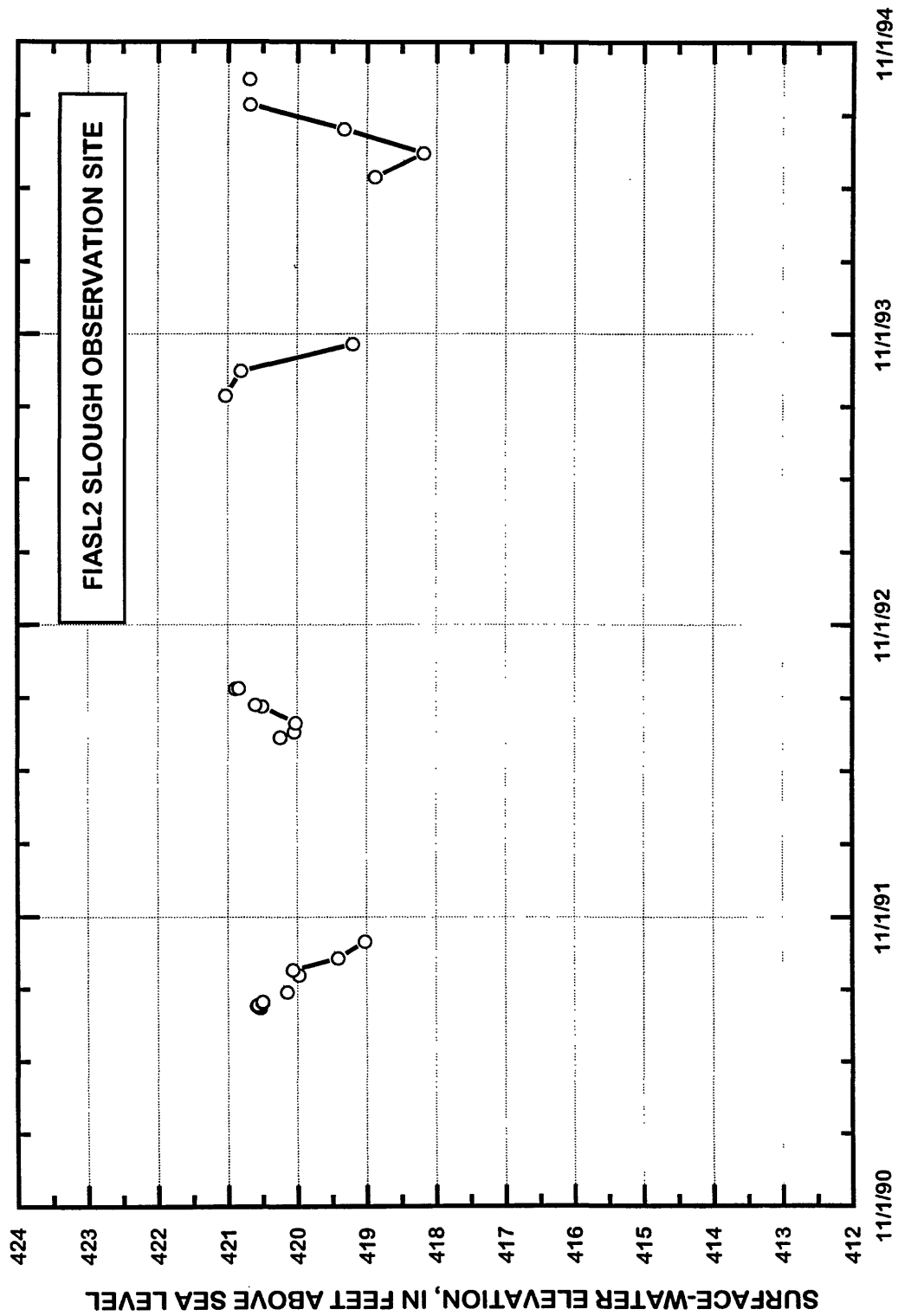
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-09-91	1700	Rebar	0.74	0.01	-1.86	420.53	PM, RB1
07-10-91	1117	Rebar	0.76	0.01	-1.88	420.55	PM, RB1
07-12-91	1056	Rebar	0.79	0.01	-1.91	420.58	PM, RB1
07-13-91	1139	Rebar	0.78	0.01	-1.90	420.57	PM, RB1
07-16-91	1527	Rebar	0.71	0.01	-1.83	420.50	PM, RB1
07-17-91	1032	Rebar	0.70	0.01	-1.82	420.49	MM, RB1
07-29-91	1555	Rebar	0.35	0.01	-1.47	420.14	PM, RB1
08-20-91	1205	Rebar	0.18	0.01	-1.30	419.97	MM, RB1
08-26-91	1136	Rebar	0.27	0.01	-1.39	420.06	PM, RB1
09-10-91	0845	Rebar	-0.38	0.01	-0.74	419.41	MM, RB1
10-01-91	0940	Rebar	-0.77	0.01	-0.35	419.02	MM, dry
06-12-92	1530	Rebar	0.45	0.01	-1.57	420.24	MM, RB1
06-19-92	1845	Rebar	0.25	0.01	-1.37	420.04	PM, RB1
06-30-92	0904	Rebar	0.23	0.01	-1.35	420.02	PM, RB1
07-21-92	NA	Rebar	0.71	0.01	-1.83	420.50	MM, RB1
07-23-92	1457	Rebar	0.81	0.01	-1.93	420.60	PM, RB1
08-12-92	1247	Rebar	1.10	0.01	-2.22	420.89	PM, RB1
08-13-92	1404	Rebar	1.05	0.01	-2.17	420.84	MM, RB1
08-16-93	1616	Rebar	0.66	0.01	-2.36	421.03	MM, RB1
09-15-93	1542	Rebar	0.44	0.01	-2.14	420.81	MM, RB1
10-19-93	1335	Rebar	-1.17	0.01	-0.53	419.20	MM, RB1
11-17-93	1520	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1345	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1441	NA	NA	NA	NA	NA	MM, frozen

FIASL2 SLOUGH SITE
 Slough site south-west of bioremediation area

(Continued)

Site ID: 644807147524501
 Local Number: FC00100226ADAB2 015

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	NA	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1318	Rebar	-1.49	0.01	-0.21	418.88	MM, RB1
06-15-94	1348	Rebar	-2.19	0.01	0.49	418.18	MM, RB1
07-15-94	1543	Culvert	2.11	0.01	-0.65	419.32	MM, CU5
08-15-94	1339	Culvert	0.75	0.01	-2.01	420.68	MM, CU5
09-15-94	1444	Culvert	0.74	0.01	-2.02	420.69	MM, CU5



FIASL3 SLOUGH SITE

Slough site immediately south of of bioremediation area

Site ID: 644800147523301

Local Number: FC00100226ADDA1 009

All measurements in feet

Best reading from rebar at this site

Rebars: SLR2

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 420.09

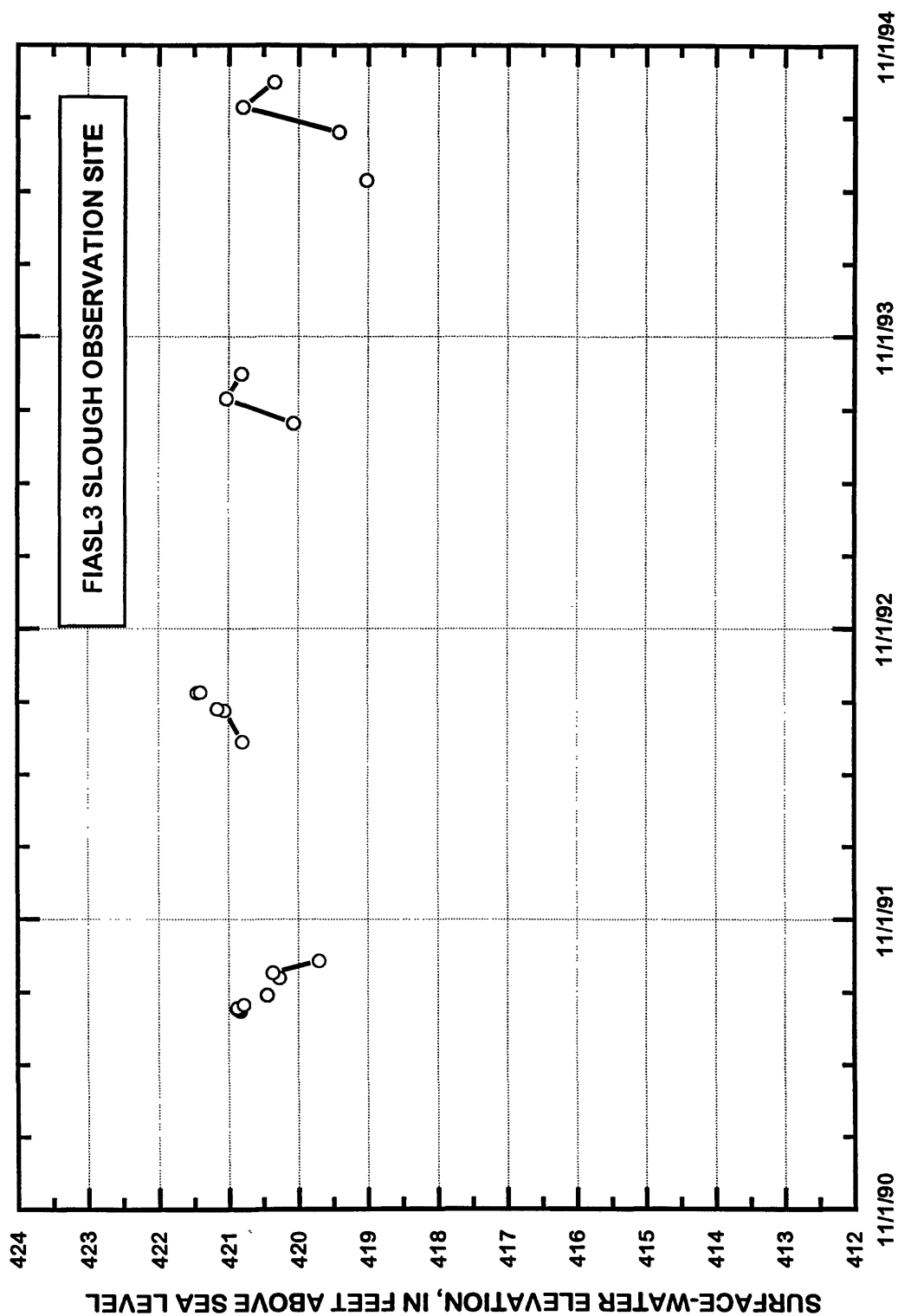
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-09-91	1645	Rebar	0.70	0.01	-0.74	420.83	PM
07-10-91	1124	Rebar	0.72	0.01	-0.76	420.85	PM
07-12-91	1108	Rebar	0.75	0.01	-0.79	420.88	PM
07-13-91	NA	Rebar	0.74	0.01	-0.78	420.87	PM
07-17-91	1127	Rebar	0.65	0.01	-0.69	420.78	MM
07-29-91	1457	Rebar	0.31	0.01	-0.35	420.44	PM
08-20-91	1213	Rebar	0.14	0.01	-0.18	420.27	MM
08-26-91	1145	Rebar	0.23	0.01	-0.27	420.36	PM
09-10-91	1008	Rebar	-0.42	0.01	0.38	419.71	MM
10-01-91	0946	NA	NA	NA	NA	NA	MM, dry
06-12-92	1526	Rebar	0.67	0.01	-0.71	420.80	MM
07-21-92	1251	Rebar	0.93	0.01	-0.97	421.06	MM
07-23-92	1500	Rebar	1.03	0.01	-1.07	421.16	PM
08-12-92	1304	Rebar	1.32	0.01	-1.36	421.45	PM
08-13-92	1411	Rebar	1.27	0.01	-1.31	421.40	MM
04-14-93	NA	NA	NA	NA	NA	NA	Frozen
07-16-93	1220	Rebar	-0.02	0.01	0.02	420.07	MM
08-16-93	1552	Rebar	0.94	0.01	-0.94	421.03	MM
09-15-93	1508	Rebar	0.72	0.01	-0.72	420.81	MM
10-19-93	1307	NA	NA	NA	NA	NA	MM, out of water
11-17-93	1443	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1326	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1417	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen

FIASL3 SLOUGH SITE
 Slough site immediately south of of bioremediation area

(Continued)

Site ID: 644800147523301
 Local Number: FC00100226ADDA1 009

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	NA	NA	NA	NA	NA	NA	MM, frozen
05-16-94	NA	Rebar	-1.07	0.01	1.07	419.02	MM
06-15-94	1315	Rebar	NA	NA	NA	NA	MM, out of water
07-15-94	1455	Rebar	-0.68	0.01	0.68	419.41	MM
08-15-94	1320	Rebar	0.70	0.01	-0.70	420.79	MM
09-15-94	1417	Rebar	0.25	0.01	-0.25	420.34	MM



FIASL4 SLOUGH SITE

Slough site immediately across road east of bioremediation area

Site ID: 644757147522701
Local Number: FC00100225BCCCC1 007

All measurements in feet

Best reading from rebar and culverts at this site

Rebars: SLR3

Culverts: CU1a, CU1b, CU1c

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 422.35

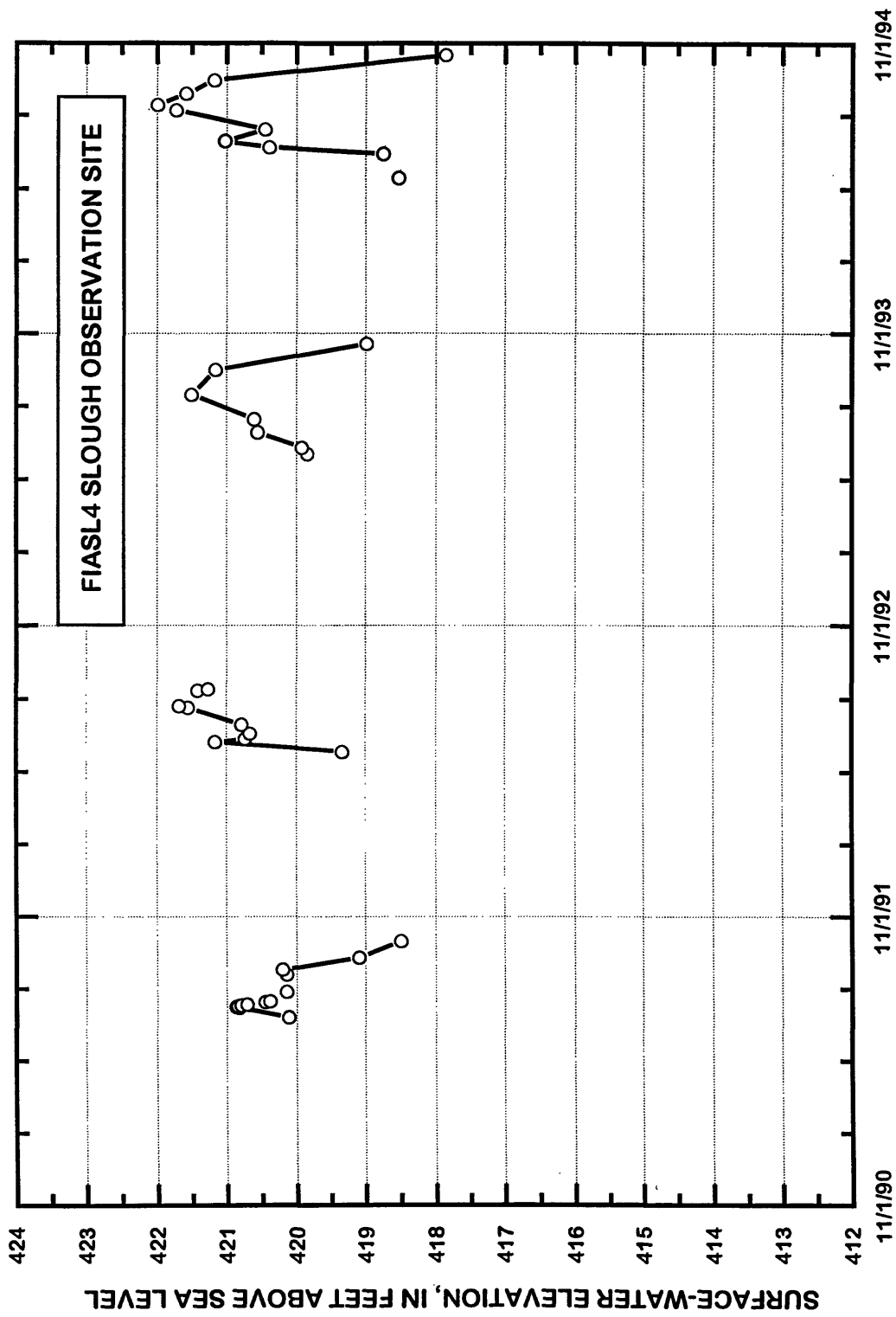
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-27-91	1058	Culvert	2.23	0.01	2.24	420.11	PM, CU1a
07-09-91	1231	Culvert	1.52	0.01	1.53	420.82	PM, CU1a
07-10-91	1225	Culvert	1.48	0.01	1.49	420.86	PM, CU1a
07-11-91	1748	Rebar	1.02	0.01	1.51	420.84	PM, SLR3
07-12-91	1350	Rebar	0.97	0.01	1.56	420.79	PM, SLR3
07-13-91	NA	Rebar	0.89	0.01	1.64	420.71	PM, SLR3
07-16-91	1615	Rebar	0.63	0.01	1.90	420.45	PM, SLR3
07-17-91	1142	Rebar	0.56	0.01	1.97	420.38	MM, SLR3
07-29-91	1453	Rebar	0.32	0.01	2.21	420.14	PM, SLR3
08-20-91	NA	Rebar	0.32	0.01	2.21	420.14	MM, SLR3
08-26-91	1206	Rebar	0.38	0.01	2.15	420.20	MM, SLR3
09-10-91	1017	Rebar	-0.73	0.01	3.26	419.09	MM, SLR3
10-01-91	1138	Rebar	-1.33	0.01	3.86	418.49	MM, SLR3
05-27-92	0822	Rebar	-1.22	0.01	3.02	419.33	MM, SLR3
06-08-92	1935	Culvert	1.16	0.01	1.19	421.16	PM, CU1a
06-12-92	1511	Culvert	1.59	0.01	1.62	420.73	MM, CU1a
06-19-92	1852	Rebar	0.11	0.01	1.69	420.66	PM, SLR3
06-30-92	0847	Culvert	1.54	0.01	1.57	420.78	PM, CU1a
07-21-92	1300	Rebar	1.00	0.01	0.80	421.55	MM, SLR3
07-23-92	1511	Rebar	1.13	0.01	0.67	421.68	PM, SLR3
08-11-92	1652	Rebar	0.86	0.01	0.94	421.41	PM, SLR3
08-13-92	1647	Rebar	0.71	0.01	1.09	421.26	MM, SLR3
04-14-93	NA	NA	NA	NA	NA	NA	MM, frozen
06-03-93	1207	Culvert	2.51	0.01	2.51	419.84	PM, CU1c

FIASL4 SLOUGH SITE
 Slough site immediately across road east of bioremediation area

(Continued)

Site ID: 644757147522701
 Local Number: FC00100225BCCCC1 007

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-11-93	1510	Culvert	0.49	0.01	2.43	419.92	MM, CU1a
06-30-93	1700	Culvert	1.80	0.01	1.80	420.55	PM, CU1c
07-16-93	1201	Culvert	-0.19	0.01	1.75	420.60	MM, CU1a
08-16-93	1542	Culvert	0.85	0.01	0.85	421.50	MM, CU1a
09-16-93	1502	Culvert	1.20	0.01	1.20	421.15	MM, CU1a
10-19-93	1258	Culvert	3.02	0.01	3.37	418.98	MM, CU1b
11-16-93	1420	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1325	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1416	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	NA	NA	NA	NA	NA	NA	MM, frozen
05-16-94	NA	Culvert	1.88	0.01	3.82	418.53	MM, CU1c
06-15-94	1308	Culvert	1.66	0.01	3.60	418.75	MM, CU1c
06-23-94	0954	Culvert	0.02	0.01	1.96	420.39	PM, CU1c
06-30-94	1618	Culvert	0.98	0.01	1.33	421.02	PM, CU1b
07-15-94	1446	Culvert	1.55	0.01	1.90	420.45	MM, CU1b
08-08-94	1051	Culvert	0.63	0.01	0.63	421.72	PM, CU1a
08-15-94	1315	Culvert	0.36	0.01	0.36	421.99	MM, CU1a
08-29-94	1644	Culvert	0.42	0.01	0.77	421.58	PM, CU1a
09-15-94	1407	Culvert	0.83	0.01	1.18	421.17	MM, CU1c
10-17-94	1253	Rebar	-1.09	0.01	4.49	417.86	MM, SLR3



FIASL5 SLOUGH SITE

Site in the old channel of the Tanana River

Site ID: 644752147522101

Local Number: FC00100225CBBD1

All measurements in feet

Best reading from rebar at this site

Rebar: SLR4

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 418.87

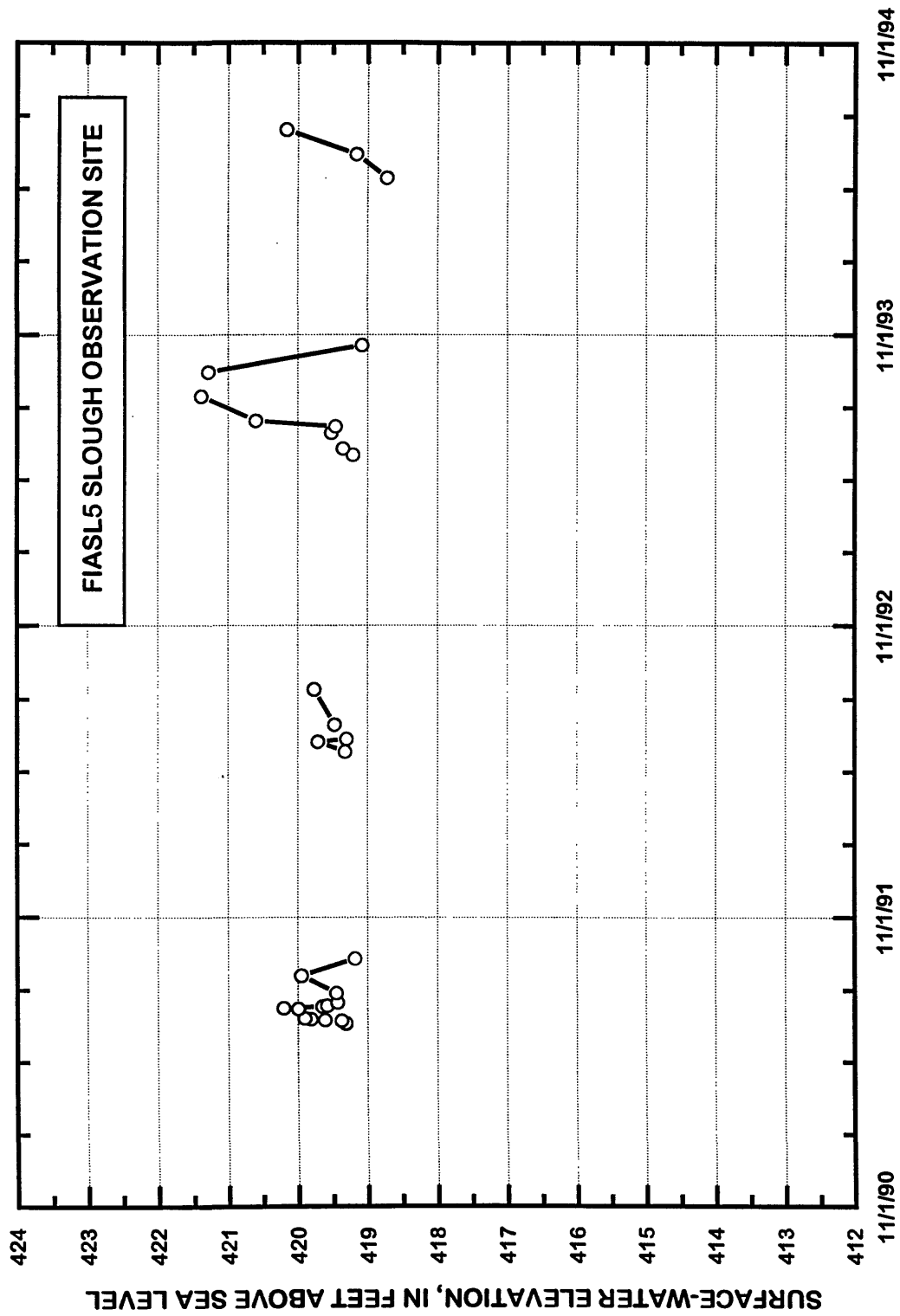
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-20-91	1540	Rebar	0.44	0.01	-0.44	419.31	PM
06-21-91	1210	Rebar	0.44	0.01	-0.44	419.31	PM
06-24-91	0859	Rebar	0.50	0.01	-0.50	419.37	MM
06-25-91	1118	Rebar	0.74	0.01	-0.74	419.61	PM
06-26-91	1919	Rebar	0.94	0.01	-0.94	419.81	PM
06-27-91	1115	Rebar	1.03	0.01	-1.03	419.90	PM
07-09-91	1255	Rebar	1.12	0.01	-1.12	419.99	PM
07-10-91	1250	Rebar	1.33	0.01	-1.33	420.20	PM
07-12-91	1344	Rebar	0.78	0.01	-0.78	419.65	PM
07-13-91	1250	Rebar	0.71	0.01	-0.71	419.58	PM
07-17-91	1211	Rebar	0.56	0.01	-0.56	419.43	MM
07-29-91	1424	Rebar	0.58	0.01	-0.58	419.45	PM
08-20-91	1448	Rebar	1.08	0.01	-1.08	419.95	MM
09-10-91	1025	Rebar	0.31	0.01	-0.31	419.18	MM
05-27-92	0839	Rebar	0.45	0.01	-0.45	419.32	MM
06-08-92	1947	Rebar	0.84	0.01	-0.84	419.71	PM
06-12-92	1405	Rebar	0.43	0.01	-0.43	419.30	MM
06-30-92	0836	Rebar	0.60	0.01	-0.60	419.47	PM
08-13-92	1658	Rebar	0.90	0.01	-0.90	419.77	MM
06-03-93	1235	Rebar	0.34	0.01	-0.34	419.21	PM
06-11-93	1540	Rebar	0.48	0.01	-0.48	419.35	MM
07-01-93	1158	Rebar	0.65	0.02	-0.65	419.52	PM, choppy
07-09-93	1547	Rebar	0.59	0.01	-0.59	419.46	PM
07-16-93	1334	Rebar	1.73	0.01	-1.73	420.60	MM

FIASL5 SLOUGH SITE
 Site in the old channel of the Tanana River

(Continued)

Site ID: 644752147522101
 Local Number: FC00100225CBBD1

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-16-93	1539	Rebar	2.52	0.01	-2.52	421.39	MM
09-15-93	1456	Rebar	2.41	0.01	-2.41	421.28	MM
10-19-93	1253	Rebar	0.21	0.01	-0.21	419.08	MM
11-16-93	1416	Rebar	NA	NA	NA	NA	MM, frozen
12-21-93	1305	Rebar	NA	NA	NA	NA	MM, frozen
01-18-94	1347	Rebar	NA	NA	NA	NA	MM, frozen
02-25-94	NA	Rebar	NA	NA	NA	NA	MM, frozen
03-16-94	NA	Rebar	NA	NA	NA	NA	MM, frozen
04-18-94	NA	Rebar	NA	NA	NA	NA	MM, frozen
05-16-94	1211	Rebar	-0.15	0.01	0.15	418.72	MM
06-15-94	1303	Rebar	0.29	0.01	-0.29	419.16	MM
07-15-94	1441	Rebar	1.29	0.01	-1.29	420.16	MM



FIASL6 SLOUGH SITE

Site ID: 644750148523701

Site on the west side of old Tanana River channel

Local Number: FC00100225BCDC3 020

All measurements in feet

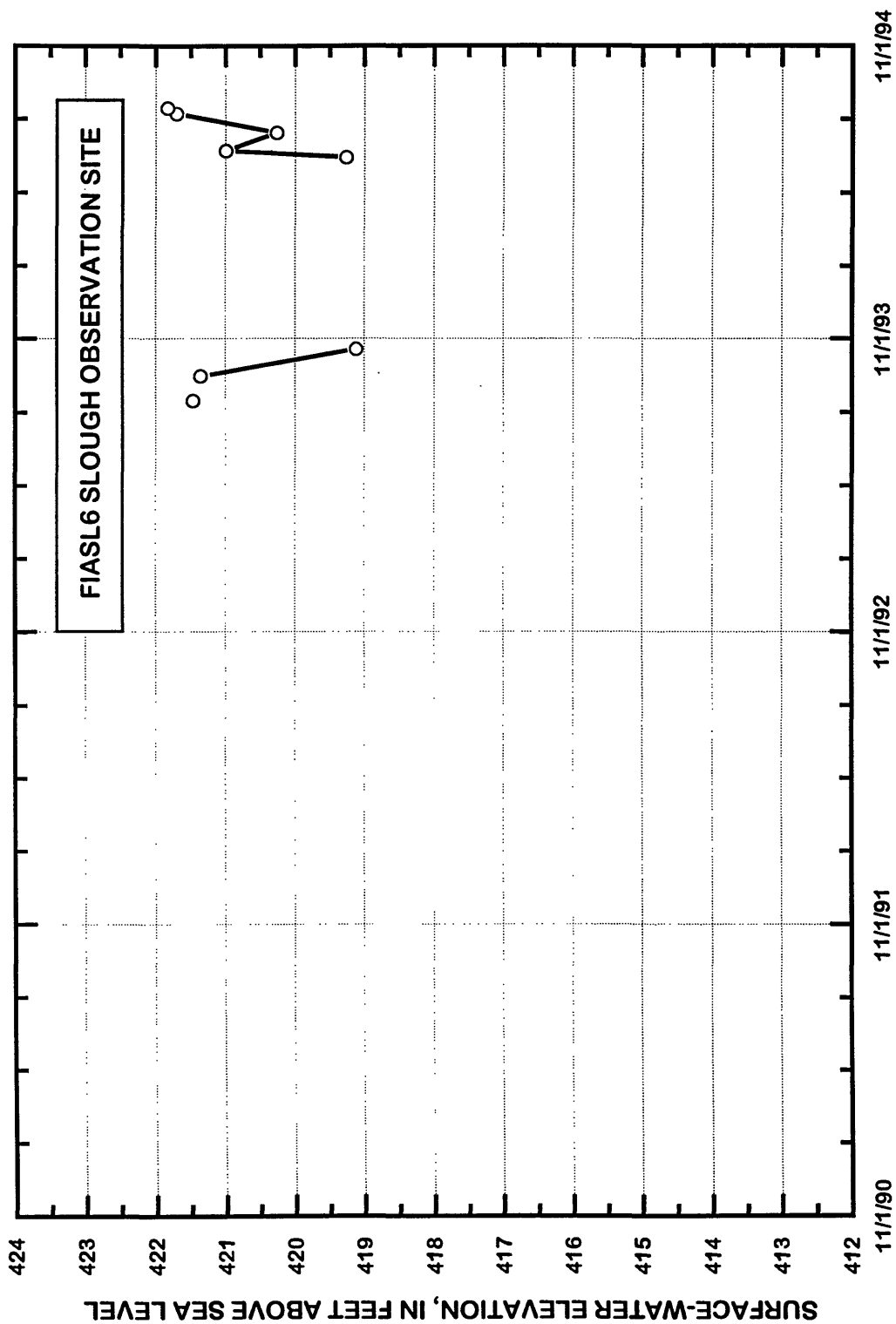
Best reading from culvert at this site

Culvert: CU4

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 422.67

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-16-93	1534	Culvert	1.21	0.01	1.21	421.46	MM
09-15-93	1452	Culvert	1.32	0.01	1.32	421.35	MM
10-19-93	1248	Culvert	3.56	0.01	3.56	419.11	MM
11-16-93	1412	Culvert	NA	NA	NA	NA	MM, frozen
12-21-93	1313	Culvert	NA	NA	NA	NA	MM, frozen
01-18-94	1403	Culvert	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1523	Culvert	NA	NA	NA	NA	MM, frozen
05-16-94	NA	Culvert	NA	NA	NA	NA	MM, out of water
06-15-94	1259	Culvert	3.41	0.01	3.41	419.26	MM
06-23-94	0949	Culvert	1.68	0.01	1.68	420.99	MM
07-15-94	1439	Culvert	2.41	0.01	2.41	420.26	MM
08-08-94	1049	Culvert	0.97	0.01	0.97	421.70	PM
08-15-94	1305	Culvert	0.84	0.01	0.84	421.83	MM



FIASL7 SLOUGH SITE

Slough site immediately across road north of flight shed

Site ID: 644758147532701

Local Number: FC00100226ACCC1 016

All measurements in feet

Best reading from rebars at this site

Rebars: SLR8, SLR12

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 418.48

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-27-91	1139	Rebar	0.65	0.01	-0.95	419.43	PM, SLR8
07-09-91	1340	Rebar	1.33	0.01	-1.63	420.11	PM, SLR8
07-10-91	1326	Rebar	1.40	0.01	-1.70	420.18	PM, SLR8
07-12-91	1311	Rebar	1.25	0.01	-1.55	420.03	PM, SLR8
07-13-91	1330	Rebar	1.67	0.01	-1.97	420.45	PM, SLR8
07-16-91	1638	Rebar	0.91	0.01	-1.21	419.69	PM, SLR8
07-17-91	1300	Rebar	0.83	0.01	-1.13	419.61	MM, SLR8
07-29-91	1410	Rebar	0.59	0.01	-0.89	419.37	PM, SLR8
08-20-91	1422	Rebar	0.81	0.01	-1.11	419.59	MM, SLR8
09-10-91	1038	Rebar	NA	NA	NA	NA	MM, SLR8, dry
06-12-92	1451	Rebar	1.41	0.01	-1.02	419.50	MM, SLR12
06-30-92	0830	Rebar	1.24	0.01	-0.85	419.33	PM, SLR12
08-13-92	1741	Rebar	2.28	0.01	-1.89	420.37	MM, SLR12
06-11-93	1610	Rebar	-0.12	0.01	-0.18	418.66	MM, SLR8, raining
07-01-93	1230	Rebar	0.85	0.01	-1.15	419.63	PM, SLR8
07-16-93	1150	Rebar	0.66	0.01	-0.96	419.44	MM, SLR8
08-16-93	1522	Rebar	1.36	0.01	-1.66	420.14	MM, SLR8
09-15-93	1436	Rebar	0.63	0.01	-0.93	419.41	MM, SLR8
10-19-93	1217	Rebar	-0.41	0.01	0.80	417.68	MM, SLR12
11-16-93	1351	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1300	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1351	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen

FIASL7 SLOUGH SITE

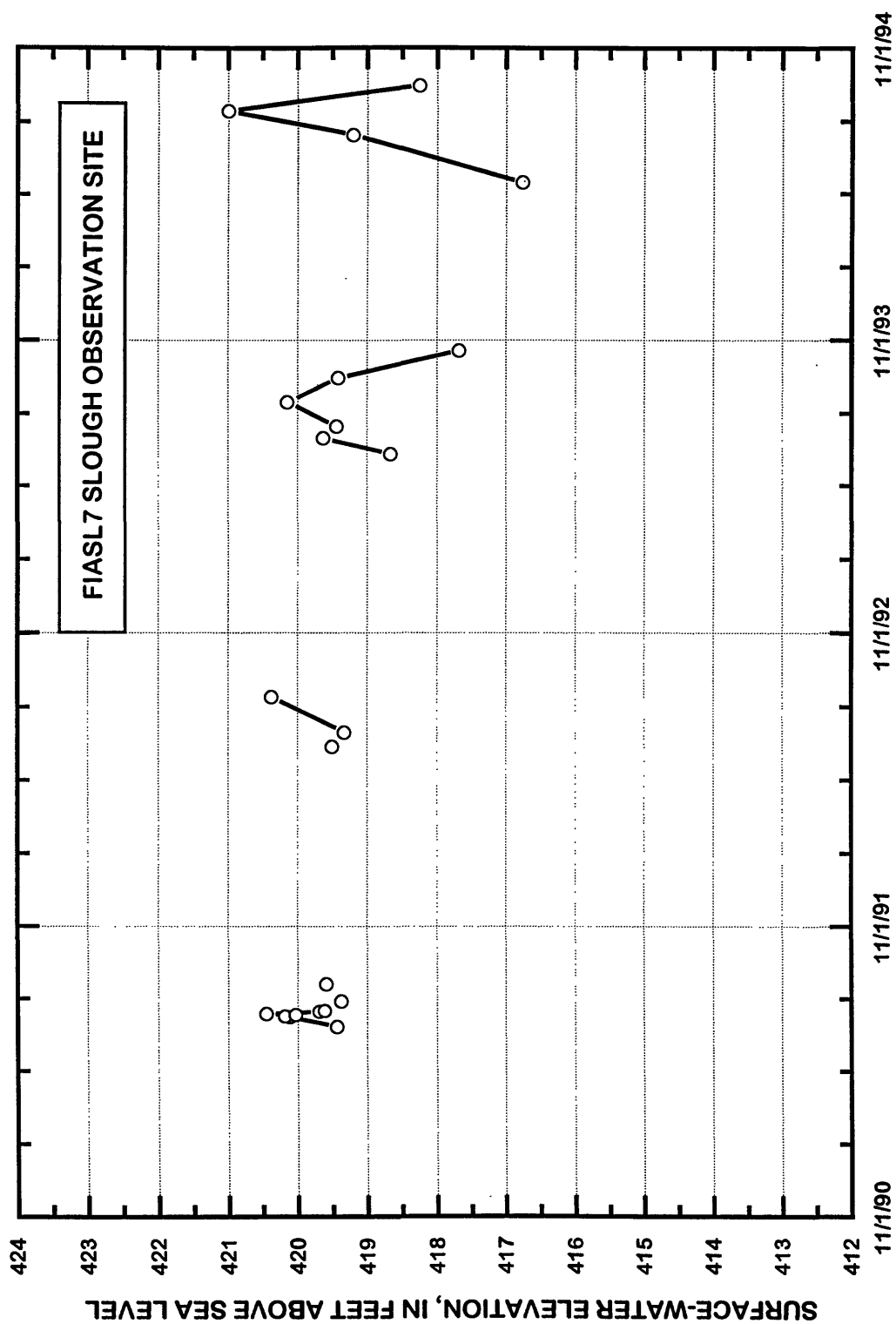
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Slough site immediately across road north of flight shed

Site ID: 644758147532701

Local Number: FC00100226ACCC1 016

Date	Time	Method	MP to VS	Error	LS to WS	WS elevation	Remarks
04-18-94	1511	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1203	Rebar	-1.33	0.01	1.72	416.76	MM, SLR12
07-15-94	1426	Rebar	0.54	0.01	-0.72	419.20	MM, SLR8b
08-15-94	1253	Rebar	2.33	0.01	-2.51	420.99	MM, SLR8b
09-15-94	1333	Rebar	-0.41	0.01	0.23	418.25	MM, SLR8b



FIASL8 SLOUGH SITE

Slough site immediately south of flight shed

Site ID: 644749147533301
Local Number: FC00100226CADA1 013

All measurements in feet

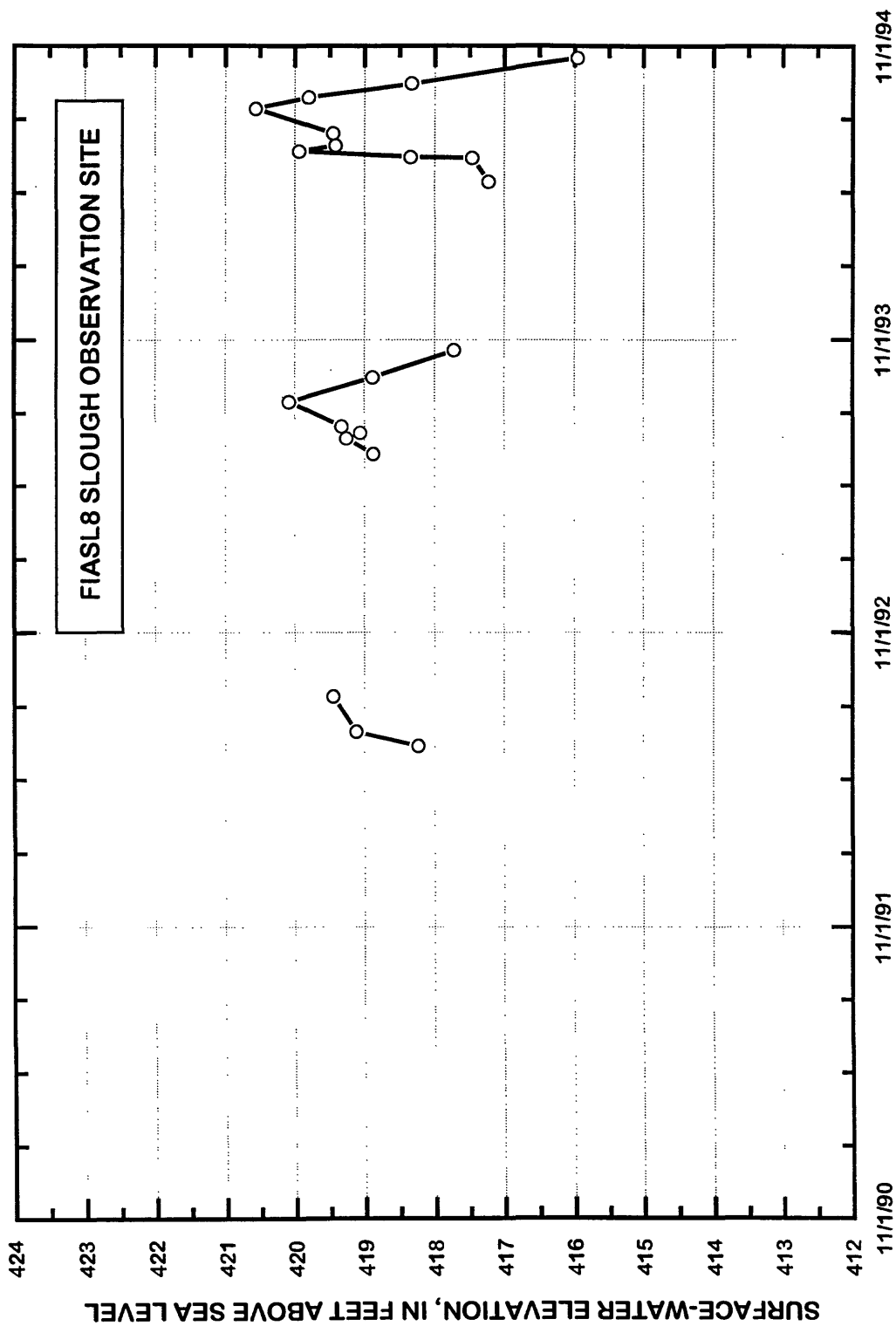
Best reading from culvert at this site

Culvert: CU2

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 420.44

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-12-92	1442	Culvert	2.21	0.01	2.21	418.23	MM
06-30-92	0812	Culvert	1.33	0.01	1.33	419.11	PM
08-13-92	1728	Culvert	0.99	0.01	0.99	419.45	PM
06-11-93	1545	Culvert	1.57	0.01	1.57	418.87	MM
07-01-93	1235	Culvert	1.18	0.01	1.18	419.26	PM
07-08-93	1433	Culvert	1.38	0.01	1.38	419.06	PM
07-16-93	1104	Culvert	1.11	0.01	1.11	419.33	MM
08-16-93	1444	Culvert	0.36	0.01	0.36	420.08	MM
09-15-93	1429	Culvert	1.56	0.01	1.56	418.88	MM
10-19-93	1213	Culvert	2.72	0.01	2.72	417.72	MM
11-16-93	1305	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1227	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1343	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1505	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1158	Culvert	3.22	0.01	3.22	417.22	MM
06-15-94	1240	Culvert	2.98	0.01	2.98	417.46	MM
06-16-94	1720	Culvert	2.10	0.01	2.10	418.34	PM
06-23-94	0925	Culvert	0.51	0.01	0.51	419.93	PM
06-30-94	1556	Culvert	1.03	0.01	1.03	419.41	PM
07-15-94	1355	Culvert	0.99	0.01	0.99	419.45	MM
08-15-94	1125	Culvert	-0.12	0.01	-0.12	420.56	MM
08-29-94	1639	Culvert	0.64	0.01	0.64	419.80	PM
09-15-94	1258	Culvert	2.11	0.01	2.11	418.33	MM
10-17-94	1150	Culvert	4.48	0.01	4.48	415.96	MM



FIASL9 SLOUGH SITE
 Slough site near mouth of Chena

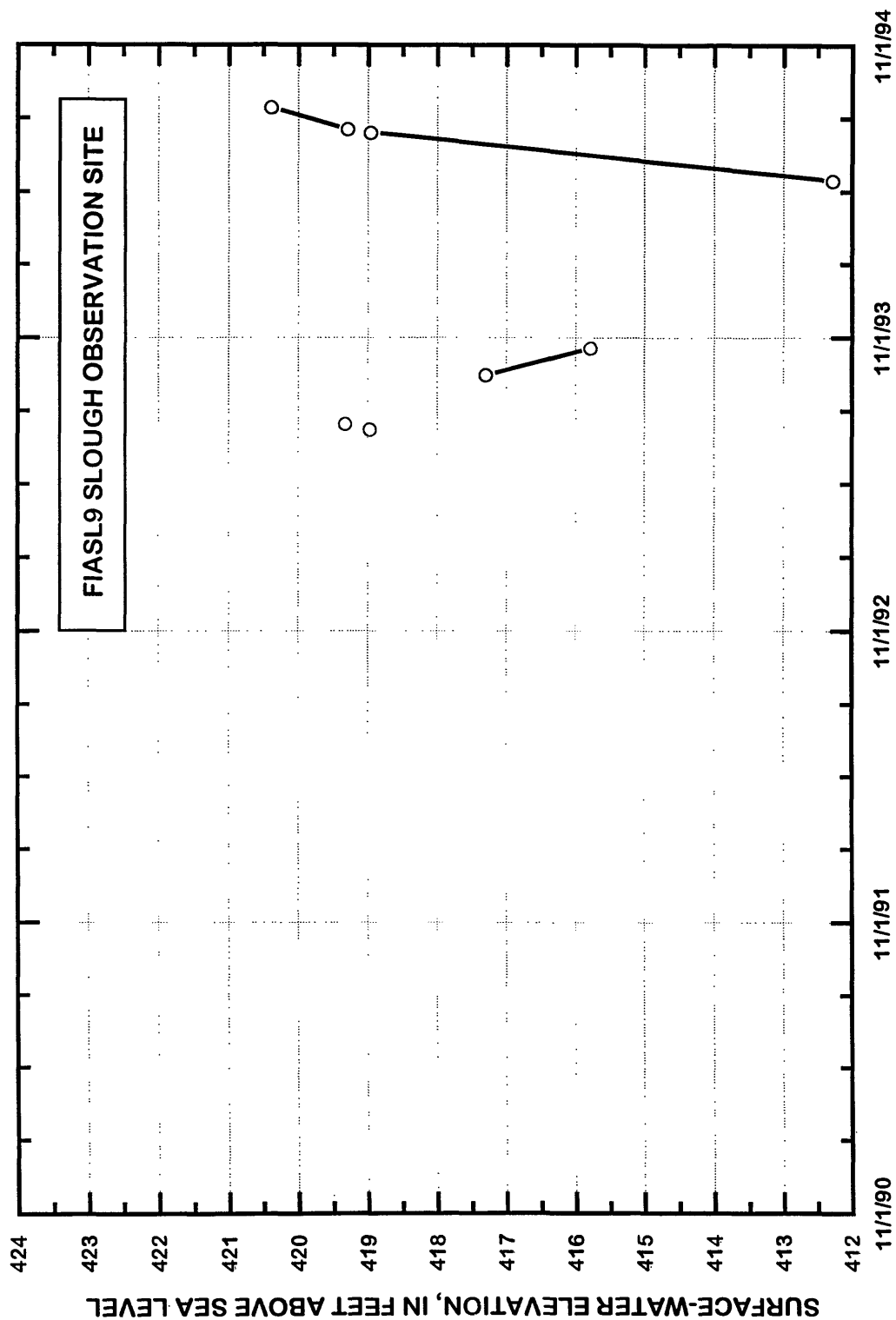
Site ID: 644742147541501
 Local Number: FC00100226CCAB1 012

All measurements in feet
 Best reading from rebars at this site
 Rebars: SLR7b, SLR7c
 SLR7d, SLR7e

Land surface datum: 417.57

LS, land surface
 MM, mass measurement
 PM, partial measurement
 MP, measuring point
 NA, not available
 WS, water surface

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-09-93	1245	Rebar	1.16	0.01	-1.40	418.97	PM, SLR7b
07-16-93	1113	Rebar	1.52	0.01	-1.76	419.33	MM, SLR7b
08-16-93	1410	NA	NA	NA	NA	NA	MM, cannot find
09-15-93	1406	Rebar	-0.52	0.02	0.28	417.29	MM, SLR7b
10-19-93	1135	Rebar	0.00	0.02	1.79	415.78	MM, SLR7c
11-16-93	1324	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1231	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1324	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1454	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1115	Rebar	-3.50	0.04	5.29	412.28	MM, SLR7c
07-15-94	1413	Rebar	0.16	0.01	-1.39	418.96	MM, SLR7e
07-19-94	1734	Rebar	0.49	0.01	-1.72	419.29	PM, SLR7e
08-15-94	1230	Rebar	1.58	0.01	-2.81	420.38	MM, SLR7e



FIASL10 SLOUGH SITE

Slough site in slough near United Postal Service

Site ID: 644814147523901

Local Number: FC00100226ABCB1 017

All measurements in feet

Best reading from culvert and rebar at this site

Culvert: CU3

Rebar: SLR9

LS, land surface

MM, mass measurement

PM, partial measurement

MP, measuring point

NA, not available

WS, water surface

Land surface datum: 419.79

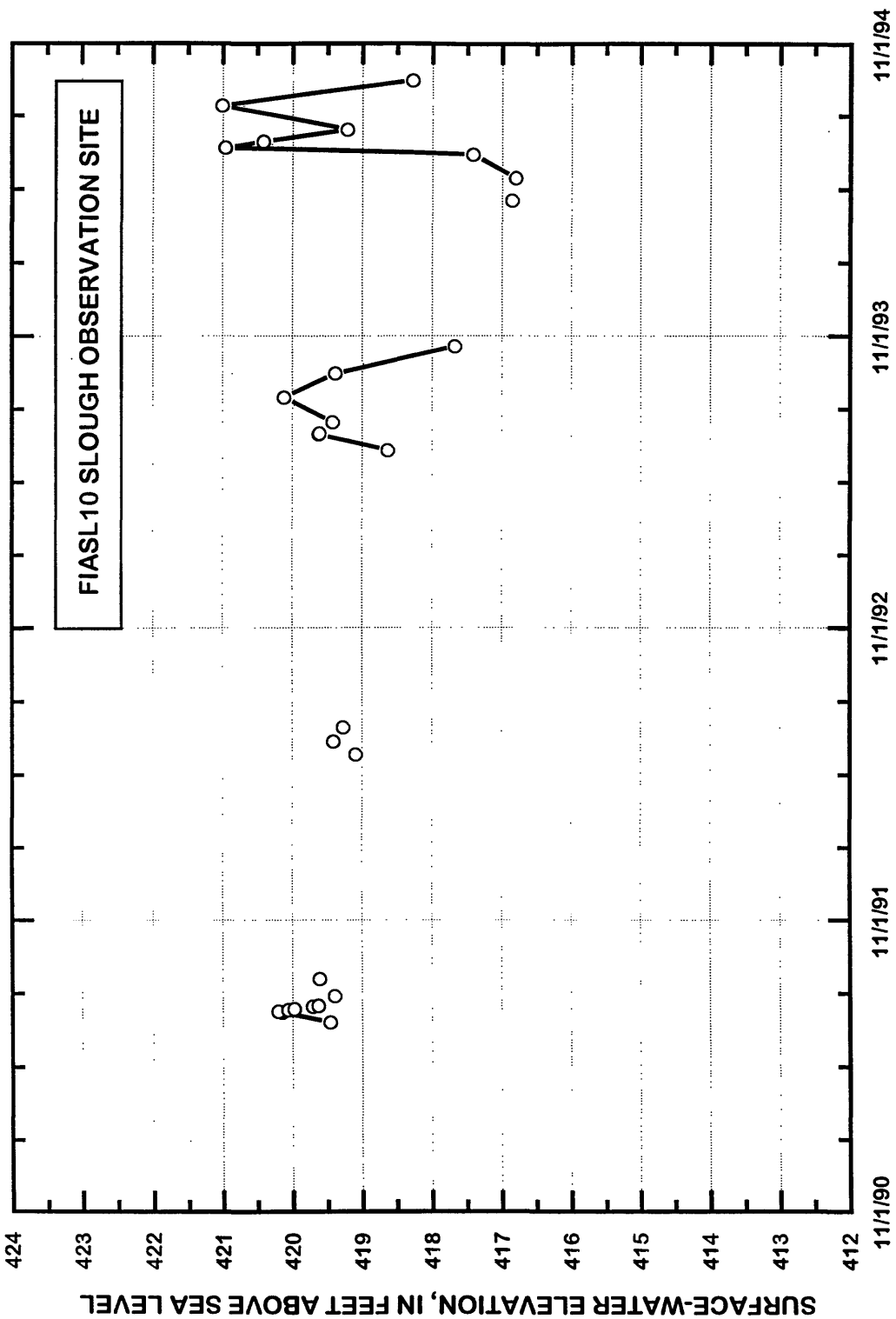
Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-27-91	1233	Rebar	0.43	0.01	0.33	419.46	PM, SLR9
07-09-91	1342	Rebar	1.12	0.01	-0.36	420.15	PM, SLR9
07-10-91	1332	Rebar	1.17	0.01	-0.41	420.20	PM, SLR9
07-12-91	1320	Rebar	1.03	0.01	-0.27	420.06	PM, SLR9
07-13-91	1334	Rebar	0.94	0.01	-0.18	419.97	PM, SLR9
07-16-91	1641	Rebar	0.68	0.01	0.08	419.71	PM, SLR9
07-17-91	1303	Rebar	0.60	0.01	0.16	419.63	MM, SLR9
07-29-91	1415	Rebar	0.36	0.01	0.40	419.39	PM, SLR9
08-20-91	1427	Rebar	0.58	0.01	0.18	419.61	MM, SLR9
09-10-91	1043	Rebar	NA	NA	NA	NA	MM, dry, SLR9
10-01-91	NA	Rebar	NA	NA	NA	NA	MM, dry, SLR9
05-27-92	0912	Rebar	0.06	0.01	0.70	419.09	MM, SLR9
06-12-92	1700	Culvert	0.38	0.01	0.38	419.41	MM, CU3
06-30-92	0755	Culvert	0.52	0.01	0.52	419.27	PM, CU3
06-11-93	1615	Culvert	1.16	0.01	1.16	418.63	MM, raining, CU3
07-01-93	1313	Culvert	0.17	0.01	0.17	419.62	PM, CU3
07-02-93	1700	Culvert	0.18	0.01	0.18	419.61	PM, CU3
07-16-93	1144	Culvert	0.37	0.01	0.37	419.42	MM, CU3
08-16-93	1513	Culvert	-0.33	0.01	-0.33	420.12	MM, CU3
09-15-93	1355	Culvert	0.40	0.01	0.40	419.39	MM, CU3
10-19-93	1102	Culvert	2.12	0.01	2.12	417.67	MM, CU3
11-16-93	1255	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1224	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1306	NA	NA	NA	NA	NA	MM, frozen

FIASL10 SLOUGH SITE
Slough site in slough near United Postal Service

(Continued)

Site ID: 644814147523901
Local Number: FC00100226ABCB1 017

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1440	Culvert	2.94	0.01	2.94	416.85	MM, CU3
05-16-94	1055	Culvert	2.99	0.01	2.99	416.80	MM, CU3
06-15-94	1150	Culvert	2.37	0.01	2.37	417.42	MM, CU3
06-23-94	0916	Culvert	-1.17	0.01	-1.17	420.96	PM, CU3
06-30-94	1545	Culvert	-0.62	0.01	-0.62	420.41	PM, CU3
07-15-94	1338	Culvert	0.57	0.01	0.57	419.22	MM, CU3
07-15-94	1338	Culvert	0.57	0.01	0.57	419.22	MM, CU3
08-15-94	1118	Rebar	1.98	0.01	-1.22	421.01	MM, SLR9
09-15-94	1245	Culvert	1.51	0.01	1.51	418.28	MM, CU3
10-17-94	1127	Culvert	NA	NA	NA	NA	MM, out of water



FIASL11 SLOUGH SITE

Slough site at pond south-west of airport terminal

Site ID: 644915147515001
Local Number: FC00100224BABA1 005

All measurements in feet

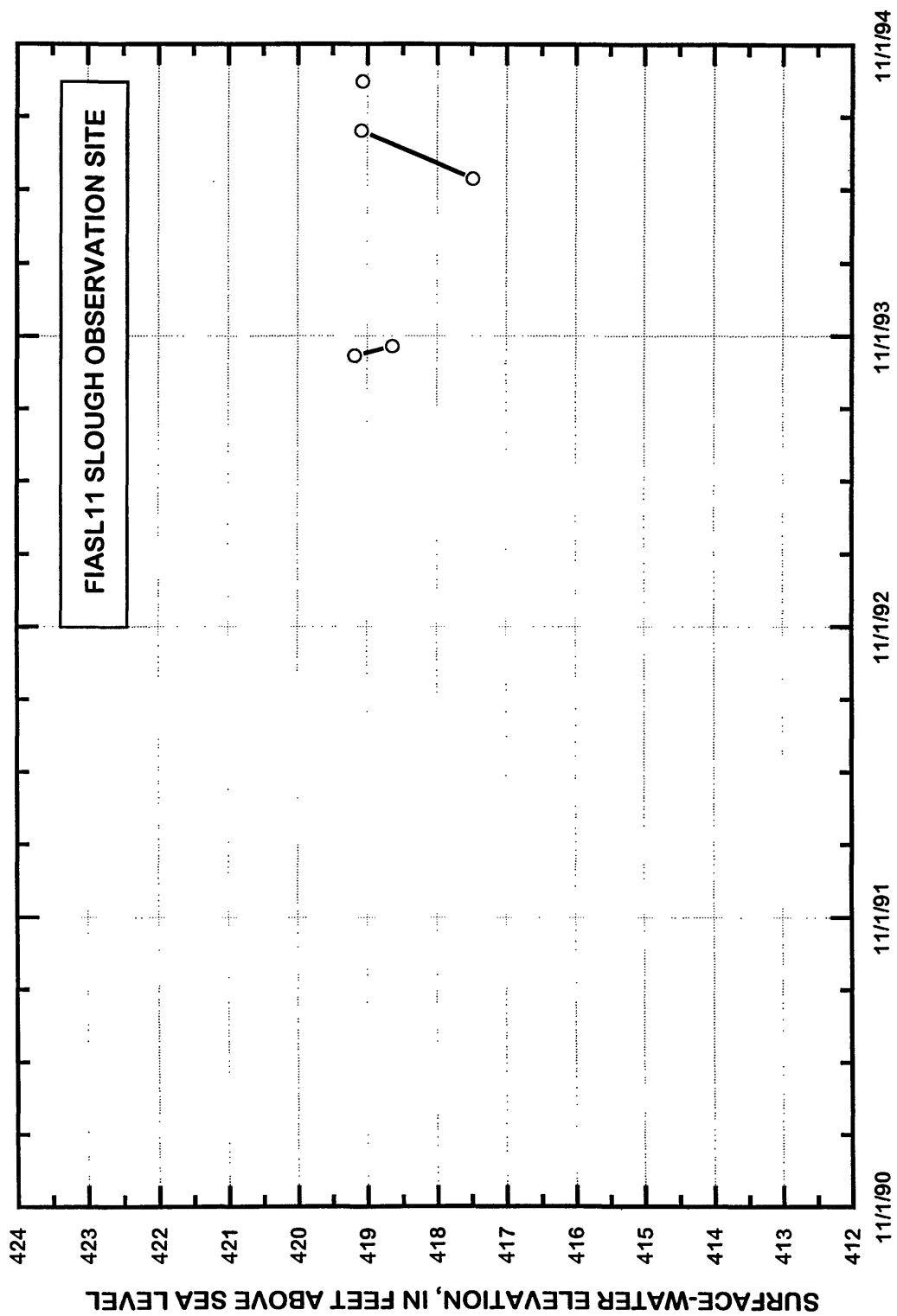
Best reading from rebars at this site

Rebars: SLR13, SLR13b

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 418.33

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
10-07-93	1045	Rebar	0.55	0.01	-0.85	419.18	PM, SLR13
10-19-93	1335	Rebar	0.01	0.01	-0.31	418.64	MM, SLR13
11-16-93	1240	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1209	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1302	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1430	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1044	Rebar	-1.15	0.03	0.85	417.48	MM, SLR13
07-15-94	1321	Rebar	0.45	0.03	-0.75	419.08	MM, SLR13
08-15-94	NA	NA	NA	NA	NA	NA	MM, no data high water
09-15-94	1335	Rebar	0.44	0.01	-0.74	419.07	MM



Site ID: 644916147514601
Local Number: FC00100213CD1 002

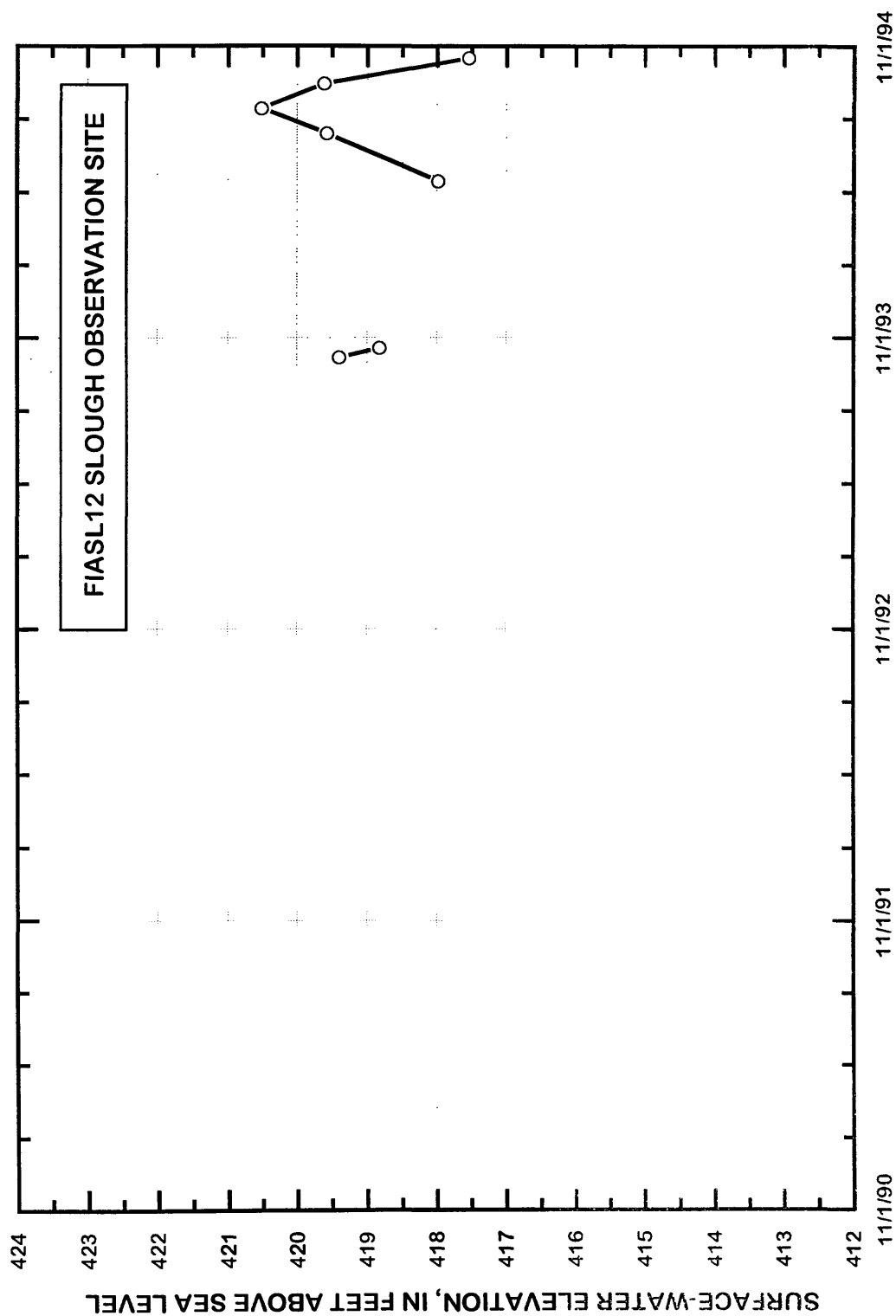
FIASL12 SLOUGH SITE
Slough site at pond north-west of airport terminal

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

All measurements in feet
Best reading from culvert and rebars at this site
Rebars: SLR14, SLR14b
Culvert: CU6

Land surface datum: 418.09

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
10-07-93	1105	Rebar	0.85	0.01	-1.30	419.39	MM, SLR14
10-19-93	1048	Rebar	0.28	0.01	-0.73	418.82	MM, SLR14
11-16-93	1240	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1209	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1302	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1428	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1040	Rebar	-0.56	0.01	0.11	417.98	MM, frozen & buried
07-15-94	1319	Rebar	1.03	0.01	-1.48	419.57	MM, SLR14
08-15-94	1053	Culvert	1.48	0.01	-2.42	420.51	MM, CU6
09-15-94	1225	Culvert	2.38	0.01	-1.52	419.61	MM, CU6
10-17-94	1115	Rebar	-1.00	0.01	0.55	417.54	MM, SLR14



FIASL13 SLOUGH SITE

Site at the north end of airport float pond

Site ID: 644944147494001
Local Number: FC00100118BDDD1 004

All measurements in feet

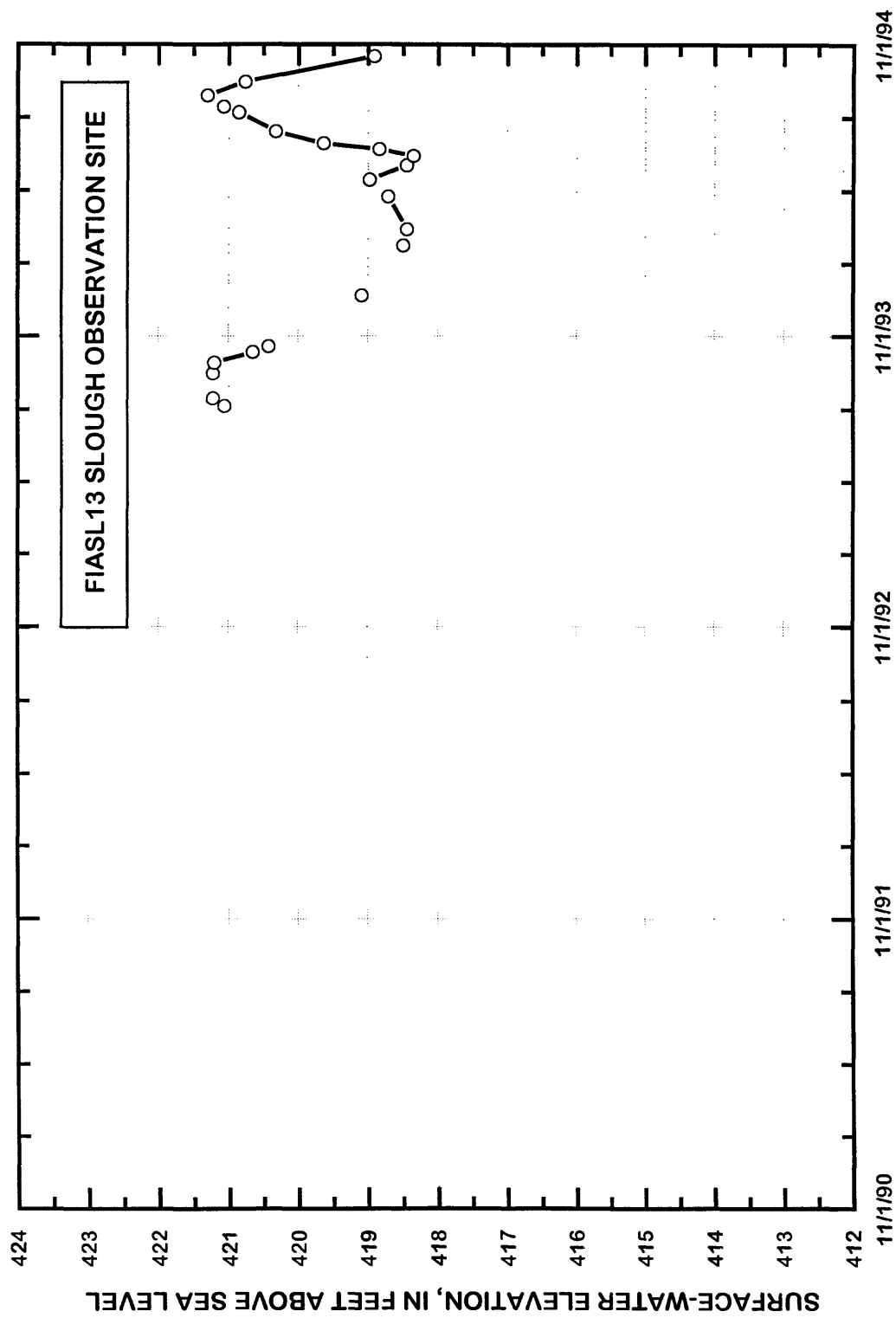
Best reading from staff at this site

Staff: SLS3

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 419.05

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
08-06-93	1005	Staff	2.00	0.05	-2.00	421.05	PM, waves
08-16-93	1158	Staff	2.17	0.04	-2.17	421.22	MM, waves
09-16-93	0944	Staff	2.17	0.01	-2.17	421.22	MM
09-29-93	1454	Staff	2.15	0.01	-2.15	421.20	PM
10-12-93	1525	Staff	1.60	0.01	-1.60	420.65	PM
10-19-93	1356	Staff	1.37	0.01	-1.37	420.42	MM
11-16-93	1443	NA	NA	NA	NA	NA	MM, frozen
12-22-93	NA	Level	12.17	0.01	-0.03	419.08	MM, frozen
01-18-94	1520	NA	NA	NA	NA	NA	MM, frozen
02-23-94	1429	Level	12.76	0.01	0.56	418.49	MM, frozen
03-15-94	1529	Level	12.81	0.01	0.61	418.44	MM, frozen
04-25-94	1443	Level	12.54	0.01	0.34	418.71	MM, frozen
05-16-94	1400	Staff	0.24	0.02	0.08	418.97	MM
06-03-94	1202	Staff	-0.28	0.02	0.60	418.45	PM
06-15-94	1408	Staff	-0.38	0.03	0.70	418.35	MM
06-23-94	1002	Staff	0.11	0.02	0.21	418.84	PM
06-30-94	1627	Staff	0.91	0.02	-0.59	419.64	PM
07-15-94	1552	Staff	1.59	0.02	-1.27	420.32	MM
08-08-94	1105	Staff	2.12	0.01	-1.80	420.85	PM
08-15-94	1410	Staff	2.34	0.04	-2.02	421.07	MM
08-29-94	1651	Staff	2.57	0.03	-2.25	421.30	PM
09-15-94	1502	Staff	2.03	0.03	-1.71	420.76	MM
10-17-94	1335	Staff	0.18	0.03	0.14	418.91	MM
11-15-94	1124	Staff	-0.43	0.01	0.75	418.30	MM



FIASL14 SLOUGH SITE
Slough site at road crossing the dike

Site ID: 644749147533101
Local Number: FC00100226DBC1 014

All measurements in feet
Best reading from rebars and staff at this site
Rebars: SLR6, SLR10, SLR11
Staff: SLS2

LS, land surface
MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

Land surface datum: 417.62

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
06-20-91	1415	Staff	1.83	0.01	-0.68	418.30	PM, SLS2
06-21-91	1149	Staff	2.04	0.01	-0.89	418.51	PM, SLS2
06-24-91	NA	Staff	3.61	0.01	-2.46	420.08	MM, SLS2
06-24-91	1511	Staff	3.74	0.01	-2.59	420.21	MM, SLS2
06-25-91	1000	Rebar	0.79	0.01	-3.01	420.63	PM, SLR6
06-26-91	1929	Rebar	1.00	0.01	-3.22	420.84	PM, SLR6
06-27-91	1145	Rebar	1.10	0.01	-3.32	420.94	PM, SLR6
07-09-91	1333	Rebar	1.25	0.01	-3.47	421.09	PM, SLR6
07-10-91	1320	Rebar	1.25	0.01	-3.47	421.09	PM, SLR6
07-12-91	1307	Rebar	0.35	0.01	-2.57	420.19	PM, SLR6
07-13-91	1305	Rebar	0.26	0.01	-2.48	420.10	PM, SLR6
07-16-91	1633	Staff	3.14	0.01	-1.99	419.61	PM, SLS2
07-17-91	1248	Staff	3.18	0.01	-2.03	419.65	MM, SLS2
07-29-91	1400	Rebar	0.29	0.01	-2.51	420.13	PM, SLR6
08-20-91	1418	Rebar	1.17	0.01	-3.39	421.01	MM, SLR6
09-10-91	1031	Staff	2.42	0.01	-1.27	418.89	MM, SLS2
10-01-91	NA	Staff	1.82	0.01	-0.67	418.29	MM, SLS2
06-04-92	NA	Rebar	-1.53	0.01	0.21	417.41	PM, SLR10
06-12-92	1412	Rebar	1.25	0.01	-0.63	418.25	MM, SLR11
06-30-92	0812	Rebar	-0.71	0.01	-1.51	419.13	PM, SLR6
08-13-92	1719	Rebar	-0.39	0.01	-1.83	419.45	MM, SLR6
04-14-93	NA	NA	NA	NA	NA	NA	MM, frozen
06-11-93	1545	Rebar	1.80	0.01	-1.01	418.63	MM, SLR11
07-01-93	1220	Rebar	2.41	0.01	-1.62	419.24	PM, SLR11

FIASL14 SLOUGH SITE
Slough site at road crossing the dike

(Continued)

Site ID: 644749147533101
Local Number: FC00100226DBC1 014

Date	Time	Method	MP to WS	Error	LS to WS	WS elevation	Remarks
07-08-93	1438	Rebar	2.22	0.01	-1.43	419.05	PM, SLR11
07-16-93	1101	Rebar	2.49	0.01	-1.70	419.32	MM, SLR11
08-16-93	1440	Rebar	1.26	0.01	-2.46	420.08	MM, SLR10
09-15-93	1429	Rebar	0.04	0.01	-1.24	418.86	MM, SLR10
10-19-93	1210	Rebar	0.88	0.01	-0.09	417.71	MM, SLR11
11-16-93	1305	NA	NA	NA	NA	NA	MM, frozen
12-21-93	1227	NA	NA	NA	NA	NA	MM, frozen
01-18-94	1343	NA	NA	NA	NA	NA	MM, frozen
02-25-94	NA	NA	NA	NA	NA	NA	MM, frozen
03-16-94	NA	NA	NA	NA	NA	NA	MM, frozen
04-18-94	1505	NA	NA	NA	NA	NA	MM, frozen
05-16-94	1203	NA	NA	NA	NA	NA	MM, dry

Chena River at University Avenue at Fairbanks
Wire Weight Gage

Site ID: 15514016
Local Number: FC00100108CBBB

All measurements in feet

Datum corrections, reference survey notes in site folders

Land Surface Datum : 415.00

CB, check bar
ft/s, foot per second
MM, mass measurement
PM, partial measurement
WS, water surface

Date	CB elevation (feet above sea level)
08-10-92	438.90
06-22-93	438.86 Updated datum

Date	Time	Check bar	CB to WS	Error	WS elevation	Remarks
05-07-92	1011	38.85	17.42	0.02	417.47	PM
05-14-92	1031	38.85	18.85	0.02	418.90	MM
05-24-92	1900	38.85	22.56	0.02	422.61	PM, turbid, floating debris
05-26-92	1254	38.85	24.30	0.02	424.35	PM
05-26-92	1400	38.85	24.33	0.02	424.38	PM, moderate debris
05-27-92	0810	38.85	24.58	0.02	424.63	PM
05-29-92	1630	38.85	25.97	0.02	426.02	PM
05-30-92	1030	38.85	24.97	0.02	425.02	PM
05-31-92	1810	38.85	24.78	0.02	424.83	PM
06-01-92	2155	38.85	24.51	0.02	424.56	PM
06-02-92	0737	38.85	24.50	0.02	424.55	PM
06-02-92	2316	38.85	24.56	0.02	424.61	PM
06-03-92	2322	38.85	24.89	0.02	424.94	PM
06-04-92	1000	38.85	25.10	0.02	425.15	PM
06-08-92	1913	38.85	24.08	0.02	424.13	PM
06-16-92	0830	38.85	20.28	0.02	420.33	MM
06-17-92	0805	38.85	20.42	0.02	420.47	PM
06-22-92	0733	38.85	20.48	0.02	420.53	PM
07-08-92	1400	38.85	20.24	0.02	420.29	PM
07-17-92	1058	38.85	20.59	0.02	420.64	MM
07-24-92	1745	38.85	20.71	0.02	420.76	PM

Chena River at University Avenue at Fairbanks (Continued) Site ID: 15514016
 Wire Weight Gage Local Number: FC00100108CBBB

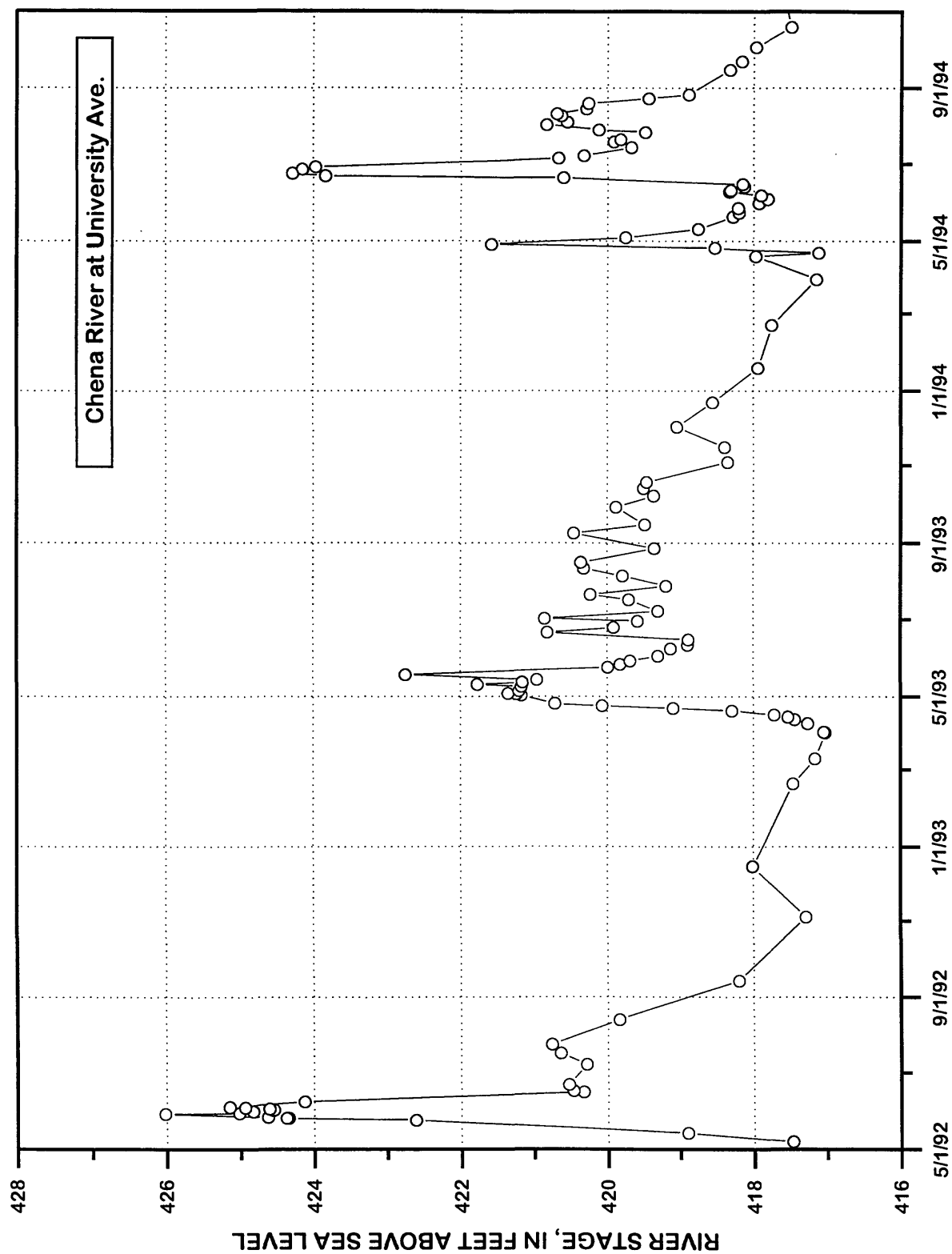
Date	Time	Check bar	WS	Error	WS elevation	Remarks
08-13-92	1813	38.85	19.79	0.02	419.84	MM
09-14-92	0820	38.85	18.15	0.02	418.20	PM
11-05-92	0930	38.85	17.23	0.02	417.28	MM, ice
12-15-92	1200	38.85	17.96	0.02	418.01	MM, ice
02-20-93	1333	38.85	17.41	0.02	417.46	MM, ice
03-12-93	1520	38.85	17.11	0.04	417.16	MM, ice
04-02-93	1004	38.85	16.97	0.04	417.02	PM, ice
04-02-93	1532	38.85	16.98	0.04	417.03	PM, ice
04-02-93	1605	38.85	16.99	0.04	417.04	PM, ice
04-09-93	1335	38.85	17.21	0.04	417.26	PM, flowing water
04-12-93	1633	38.85	17.39	0.02	417.44	PM, clear of ice
04-14-93	1408	38.85	17.48	0.02	417.53	PM
04-16-93	1210	38.85	17.67	0.02	417.72	MM
04-19-93	1745	38.85	18.24	0.02	418.29	PM
04-21-93	1620	38.85	19.04	0.02	419.09	PM
04-23-93	1630	38.85	20.02	0.02	420.07	PM
04-25-93	0840	38.85	20.66	0.02	420.71	PM, no ice running, vel., ft/s
05-01-93	1959	38.85	21.12	0.02	421.17	PM
05-02-93	2150	38.85	21.18	0.02	421.23	PM
05-03-93	1111	38.85	21.30	0.02	421.35	PM
05-05-93	1205	38.85	21.15	0.02	421.20	PM
05-08-93	2142	38.85	21.12	0.02	421.17	PM
05-10-93	1355	38.85	21.72	0.02	421.77	PM
05-12-93	1130	38.85	21.10	0.02	421.15	PM
05-14-93	1100	38.85	20.90	0.02	420.95	PM
05-18-93	1550	38.85	22.69	0.02	422.74	MM
05-24-93	1405	38.85	19.94	0.02	419.99	PM
05-26-93	1715	38.85	19.77	0.02	419.82	PM
05-29-93	1410	38.85	19.63	0.03	419.68	PM
06-02-93	1545	38.84	19.24	0.02	419.30	PM
06-08-93	1405	38.85	19.07	0.02	419.12	PM

Chena River at University Avenue at Fairbanks (Continued) Site ID: 15514016
 Wire Weight Gage Local Number: FC00100108CBBB

Date	Time	Check bar	WS	Error	WS elevation	Remarks
06-11-93	1228	38.85	18.84	0.02	418.89	MM
06-15-93	1930	38.85	18.83	0.02	418.88	PM
06-21-93	1045	38.85	20.76	0.02	420.81	PM
06-25-93	1652	38.84	19.89	0.02	419.91	PM, has been surveyed
06-30-93	1935	38.85	19.57	0.02	419.58	
07-02-93	1830	38.85	20.84	0.02	420.85	
07-08-93	1447	38.85	19.29	0.02	419.30	PM
07-17-93	1709	38.84	19.68	0.02	419.70	MM
07-21-93	1700	38.84	20.21	0.02	420.23	PM
07-28-93	1802	38.84	19.17	0.02	419.19	PM
08-05-93	1852	38.84	19.77	0.02	419.79	PM
08-11-93	1435	38.85	20.31	0.02	420.32	PM
08-16-93	1134	38.85	20.35	0.02	420.36	MM
08-27-93	1940	38.85	19.34	0.02	419.35	PM
09-08-93	1844	38.85	20.45	0.02	420.46	PM
09-15-93	1600	38.85	19.47	0.02	419.48	MM
09-29-93	1655	38.84	19.86	0.02	419.88	PM
10-08-93	1602	38.85	19.35	0.02	419.36	PM
10-14-93	1317	38.85	19.49	0.02	419.50	PM
10-19-93	1317	38.85	19.45	0.02	419.46	MM
01-19-94	1315	38.85	17.93	0.02	417.94	MM
02-22-94	1549	38.86	17.75	0.02	417.75	MM
03-31-94	1500	38.85	17.13	0.02	417.14	MM
04-18-94	2019	38.85	17.96	0.02	417.97	MM
04-21-94	1538	38.85	17.10	0.02	417.11	MM
04-25-94	1245	38.85	18.51	0.02	418.52	PM
04-28-94	1215	38.85	21.57	0.02	421.58	PM
05-03-94	1557	38.85	19.74	0.02	419.75	MM
05-10-94	1455	38.85	18.74	0.02	418.75	PM
05-20-94	1132	38.85	18.27	0.02	418.28	PM
05-23-94	1628	38.85	18.19	0.02	418.20	PM

Chena River at University Avenue at Fairbanks (Continued) Site ID: 15514016
Wire Weight Gage Local Number: FC00100108CBBB

Date	Time	Check bar	WS	Error	WS elevation	Remarks
05-27-94	0928	38.85	18.20	0.02	418.21	PM
05-31-94	1005	38.85	17.92	0.02	417.93	PM
06-03-94	1215	38.85	17.80	0.02	417.81	PM
06-06-94	1519	38.85	17.89	0.02	417.90	PM
06-09-94	1545	38.85	18.32	0.02	418.33	PM
06-10-94	1606	38.85	18.30	0.02	418.31	PM
06-24-94	1127	38.85	24.28	0.02	424.29	PM
06-27-94	1612	38.85	24.14	0.02	424.15	PM
06-29-94	1601	38.85	23.96	0.02	423.97	PM
07-06-94	1705	38.85	20.65	0.02	420.66	PM
07-08-94	1514	38.85	20.31	0.02	420.32	PM
07-15-94	0738	38.85	19.66	0.02	419.67	MM
07-19-94	1703	38.85	19.90	0.02	419.91	PM
07-21-94	1600	38.85	19.81	0.02	419.82	PM
07-27-94	1234	38.85	19.47	0.02	419.48	PM
07-29-94	1115	38.85	20.11	0.02	420.12	PM
08-02-94	1550	38.85	20.82	0.02	420.83	PM
08-04-94	1627	38.85	20.54	0.02	420.55	PM
08-09-94	1558	38.85	20.62	0.02	420.63	PM
08-11-94	1054	38.85	20.68	0.02	420.69	PM
08-15-94	0910	38.85	20.28	0.02	420.29	MM
08-19-94	1544	38.85	20.25	0.02	420.26	PM
08-23-94	1502	38.85	19.42	0.02	419.43	PM
10-19-94	1225	38.85	17.48	0.02	417.49	MM



Chena River at Parks Highway at Fairbanks
Wire Weight Gage

Site ID: 15514018
Local Number: FC00100212DA

All measurements in feet
Datum corrections, reference survey notes in site folders

Land Surface Datum: 410.00

Date	CB elevation (feet above sea level)
08-05-92	448.99

CB, check bar
MM, mass measurement
PM, partial measurement
NA, not available
WS, water surface

Date	Time	Check bar	CB to WS	Error	WS elevation	Remarks
05-19-92	1630	90.89	57.20	0.02	415.30	PM, installed
05-21-92	0846	90.91	57.92	0.02	416.00	PM, installed backing plate
05-24-92	0800	90.90	62.48	0.02	420.57	PM
05-24-92	1830	90.90	62.48	0.02	420.57	PM
05-26-92	0641	90.90	64.37	0.02	422.46	PM
05-26-92	1240	90.90	64.38	0.03	422.47	PM
05-27-92	0724	90.90	64.73	0.02	422.82	PM, snowmelt rise
05-29-92	1611	90.91	65.20	0.02	423.28	PM
05-30-92	1050	90.91	65.25	0.02	423.33	PM
06-01-92	2016	90.91	64.87	0.02	422.95	PM, after heavy rains
06-02-92	0704	90.91	64.84	0.02	422.92	PM
06-02-92	2240	90.91	64.94	0.02	423.02	PM
06-04-92	0740	90.91	65.48	0.02	423.56	PM
06-16-92	0735	90.91	60.88	0.02	418.96	MM
06-17-92	1006	90.91	61.30	0.02	419.38	MM
06-22-92	0833	90.91	61.25	0.02	419.33	PM
07-17-92	1150	90.91	62.25	0.02	420.33	MM
07-21-92	1830	90.90	62.65	0.02	420.74	PM
08-13-92	0747	90.91	61.43	0.02	419.51	MM
09-14-92	1115	90.90	57.63	0.02	415.72	PM
11-05-92	1055	90.90	57.60	0.10	415.69	MM, ice

Chena River at Parks Highway at Fairbanks
Wire Weight Gage

Site ID: 15514018
Local Number: FC00100212DA

Date	Time	Check bar	WS	Error	WS elevation	Remarks
02-20-93	1500	90.86	58.06	0.04	416.19	MM, ice
03-12-93	1600	90.85	58.69	0.02	416.83	MM, ice
04-02-93	1035	90.86	58.45	0.02	416.58	PM, ice
04-02-93	1540	90.86	58.48	0.02	416.61	PM, ice
04-09-93	1353	90.88	58.78	0.02	416.89	PM, flowing water
04-12-93	1620	90.88	58.96	0.02	417.07	PM, rough water surface
04-14-93	1420	90.88	58.86	0.02	416.97	PM, open water
04-16-93	1150	90.88	59.25	0.02	417.36	MM, open water
04-19-93	1735	90.88	59.69	0.02	417.80	PM
04-21-93	1612	90.88	60.22	0.03	418.33	PM, rough water surface
04-23-93	1615	90.88	61.25	0.03	419.36	PM, rough water surface
05-01-93	1927	90.86	61.15	0.02	419.28	PM
05-02-93	2214	90.85	61.39	0.02	419.53	PM
05-03-93	1103	90.86	61.34	0.02	419.47	PM
05-05-93	1158	90.86	61.24	0.02	419.37	PM, rough water surface
05-08-93	2112	90.86	61.14	0.02	419.27	PM
05-14-93	1020	90.90	60.84	0.02	418.93	PM
05-18-93	1542	90.90	62.91	0.02	421.00	MM
05-24-93	1357	90.90	60.24	0.02	418.33	PM
05-26-93	1700	90.90	60.19	0.02	418.28	PM
05-29-93	1400	90.90	59.02	0.02	417.11	PM
06-02-93	1536	90.90	59.72	0.02	417.81	PM
06-08-93	1355	90.89	59.03	0.02	417.13	PM
06-11-93	1218	90.90	59.66	0.02	417.75	MM
06-14-93	2000	90.90	59.57	0.02	417.66	PM
06-15-93	1940	90.90	59.50	0.02	417.59	PM
06-21-93	1043	90.90	61.88	0.02	419.97	PM
06-25-93	1646	90.90	61.18	0.02	419.27	PM
06-30-93	1925	90.90	60.06	0.02	418.15	PM
07-02-93	1800	90.90	62.50	0.02	420.59	PM
07-09-93	0902	90.90	60.78	0.02	418.87	PM

Chena River at Parks Highway at Fairbanks
Wire Weight Gage

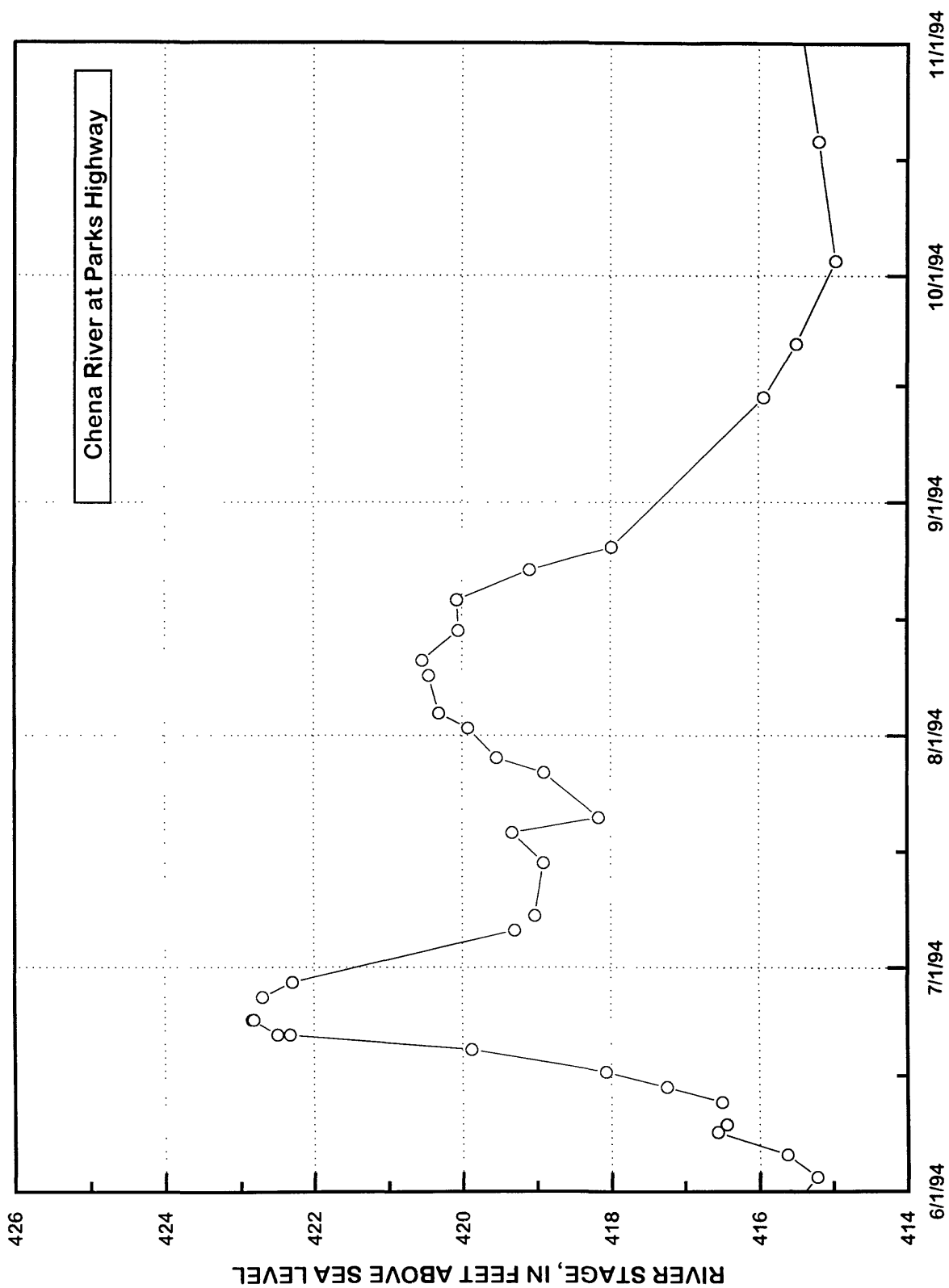
Site ID: 15514018
Local Number: FC00100212DA

Date	Time	Check bar	WS	Error	WS elevation	Remarks
07-16-93	1337	90.90	60.10	0.02	418.19	MM
07-21-93	1650	90.90	61.01	0.02	419.10	PM
07-28-93	1747	90.90	61.51	0.02	419.60	PM
08-05-93	1830	90.90	61.47	0.02	419.56	PM
08-11-93	1423	90.90	61.73	0.02	419.82	PM
08-16-93	1110	90.90	61.98	0.02	420.07	MM
08-27-93	1933	90.90	59.55	0.02	417.64	PM
09-08-93	0852	90.90	61.73	0.02	419.82	PM
09-16-93	1553	90.90	59.83	0.02	417.92	MM
09-29-93	1645	90.90	59.53	0.02	417.62	PM
10-14-93	1310	90.89	59.00	0.02	417.10	PM
10-19-93	1345	90.89	58.92	0.02	417.02	MM
11-16-93	1300	90.90	NA	0.02	--	MM, Frozen
11-18-93	1300	90.90	59.33	0.02	417.42	MM
12-02-93	1210	90.90	59.25	0.02	417.34	PM
12-22-93	1147	90.90	58.43	0.02	416.52	MM
01-19-94	1355	90.90	57.82	0.02	415.91	MM
02-22-94	1610	90.91	58.41	0.02	416.49	MM
04-21-94	1530	90.90	57.94	0.02	416.03	MM
04-25-94	1255	90.89	59.87	0.02	417.97	PM
04-28-94	1227	90.89	62.78	0.03	420.88	PM
05-03-94	1546	90.90	59.63	0.03	417.72	PM
05-10-94	1507	90.90	57.03	0.02	415.12	PM
05-13-94	1135	90.90	58.14	0.02	416.23	MM
05-20-94	0943	90.90	57.57	0.02	415.66	PM
05-23-94	1700	90.90	57.43	0.02	415.52	PM
05-27-94	0923	90.89	57.44	0.02	415.54	PM
05-31-94	1019	90.90	57.38	0.02	415.47	PM
06-03-94	1054	90.90	57.14	0.02	415.23	PM
06-06-94	1528	90.90	57.54	0.02	415.63	PM
06-09-94	1523	90.91	58.48	0.02	416.56	PM

Chena River at Parks Highway at Fairbanks
Wire Weight Gage

Site ID: 15514018
Local Number: FC00100212DA

Date	Time	Check bar	WS	Error	WS elevation	Remarks
06-10-94	1434	90.89	58.34	0.02	416.44	PM
06-13-94	1056	90.89	58.40	0.02	416.50	PM
06-15-94	1445	90.89	59.15	0.02	417.25	MM
06-17-94	1522	90.90	59.98	0.02	418.07	PM
06-20-94	1715	90.90	61.79	0.02	419.88	PM
06-22-94	0911	90.90	64.24	0.02	422.33	PM
06-22-94	1158	90.90	64.41	0.02	422.50	PM
06-24-94	0903	90.90	64.75	0.02	422.84	PM
06-24-94	1151	90.90	64.73	0.02	422.82	PM
06-27-94	1623	90.90	64.61	0.02	422.70	PM
06-29-94	1613	90.90	64.21	0.02	422.30	PM
07-06-94	1715	90.89	61.20	0.02	419.30	PM
07-08-94	1527	90.89	60.93	0.02	419.03	PM
07-15-94	0750	90.90	60.82	0.02	418.91	MM
07-19-94	1703	90.90	61.24	0.02	419.33	PM
07-21-94	1613	90.89	60.06	0.02	418.16	PM
07-27-94	1256	90.90	60.81	0.02	418.90	PM
07-29-94	1127	90.90	61.45	0.02	419.54	PM
08-02-94	1602	90.89	61.82	0.02	419.92	PM
08-04-94	1645	90.89	62.21	0.02	420.31	PM
08-09-94	1611	90.89	62.35	0.02	420.45	PM
08-11-94	1110	90.89	62.44	0.02	420.54	PM
08-15-94	0855	90.90	61.96	0.02	420.05	MM
08-19-94	1557	90.90	61.98	0.02	420.07	PM
08-23-94	1515	90.90	61.00	0.02	419.09	PM
08-26-94	1607	90.90	59.90	0.02	417.99	PM
09-15-94	1204	90.89	57.83	0.02	415.93	MM
09-22-94	1007	90.90	57.41	0.02	415.50	PM
10-03-94	1104	90.90	56.87	0.02	414.96	PM
10-19-94	1245	90.90	57.10	0.03	415.19	MM



Chena River at Pike's Landing at Fairbanks

Site ID: 15514020
Local Number: FC00100213A

Land Surface Datum: 410.00

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
10-12-93	428.68 Reference Marker 1
05-16-94	423.97 Reference Marker 2
05-23-94	414.75 BRASS CAP
07-19-94	419.15 REBAR 2
08-28-94	418.18 REBAR 3

MM, mass measurement
PM, partial measurement
MP, measuring point
NA, not available
WS, water surface

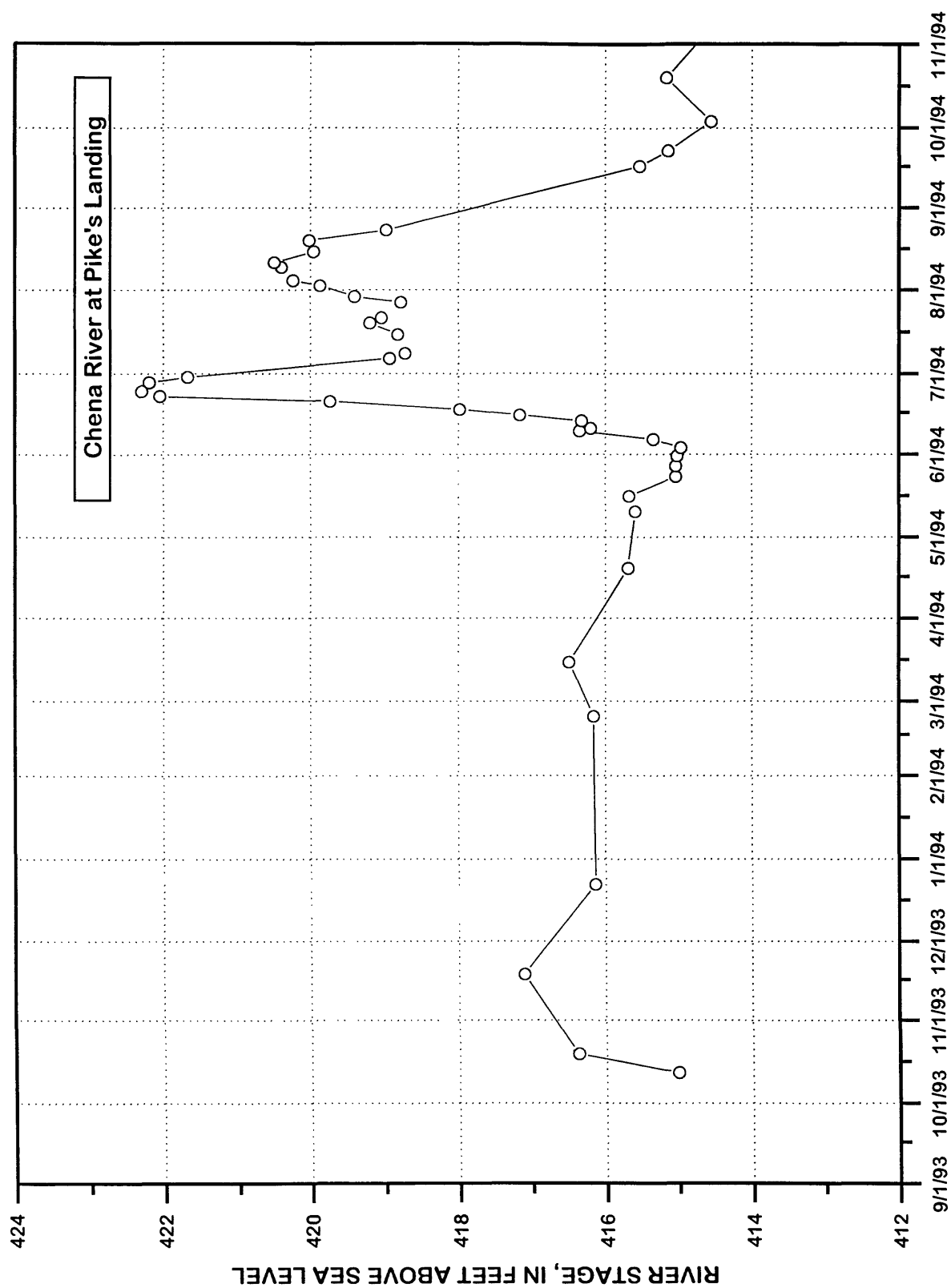
Date	Time	Method	MP to WS	Error	WS Elevation	Remarks
10-12-93	1015	Staff	13.67	0.01	415.01	PM
10-19-93	1007	Staff	12.30	0.01	416.38	MM
11-18-93	N/A	Staff	11.57	0.01	417.11	MM
12-22-93	1340	Staff	12.54	0.01	416.14	MM
02-23-94	1030	Staff	12.52	0.01	416.16	MM
03-15-94	1400	Staff	12.19	0.01	416.49	MM
04-19-94	1527	Staff	12.99	0.01	415.69	MM
05-10-94	1526	Staff	13.09	0.01	415.59	MM
05-16-94	0922	Staff	13.01	0.01	415.67	MM
05-23-94	1746	Tape	0.28	0.01	415.03	PM
05-27-94	1506	Tape	0.28	0.01	415.03	PM
05-31-94	1030	Staff	8.96	0.01	415.01	PM
06-03-94	1104	Tape	0.21	0.01	414.96	PM
06-06-94	1537	Staff	8.63	0.01	415.34	PM
06-09-94	1600	Staff	7.62	0.01	416.35	PM
06-10-94	1445	Staff	7.77	0.01	416.20	PM
06-13-94	1115	Staff	7.65	0.01	416.32	PM
06-15-94	1500	Staff	6.81	0.01	417.16	PM
06-17-94	1528	Staff	5.99	0.01	417.98	PM

Chena River at Pike's Landing at Fairbanks

(Continued)

 Site ID: 15514020
 Local Number: FC00100213A

Date	Time	Method	MP to WS	Error	WS Elevation	Remarks
06-20-94	1733	Tape	0.59	0.01	419.74	PM
06-22-94	1205	Tape	1.92	0.02	422.05	PM
06-24-94	1141	Tape	1.68	0.02	422.29	PM
06-27-94	1636	Tape	1.78	0.02	422.19	PM
06-29-94	1624	Tape	2.30	0.02	421.67	PM
07-06-94	1729	Tape	-0.22	0.02	418.93	PM
07-08-94	1539	Tape	-0.43	0.02	418.72	PM
07-15-94	1311	Tape	-0.33	0.02	418.82	MM
07-19-94	1712	Tape	0.05	0.02	419.20	PM
07-21-94	1625	Tape	-0.11	0.02	419.04	PM
07-27-94	1309	Tape	-0.37	0.02	418.78	PM
07-29-94	1139	Tape	0.26	0.02	419.41	PM
08-02-94	1615	Tape	0.72	0.02	419.87	PM
08-04-94	1653	Tape	1.09	0.02	420.24	PM
08-09-94	1621	Tape	1.25	0.02	420.40	PM
08-11-94	1115	Tape	1.35	0.02	420.50	PM
08-15-94	1038	Tape	0.81	0.02	419.96	MM
08-19-94	1609	Tape	0.87	0.02	420.02	PM
08-23-94	1525	Tape	-0.17	0.02	418.98	PM
09-16-94	1517	Level	8.44	0.02	415.53	MM
09-22-94	1109	Level	8.84	0.02	415.13	PM
10-03-94	1110	Level	9.42	0.02	414.55	PM
10-19-94	1613	Hand level	-3.99	0.02	415.16	MM



Tanana River at Peger Road
Bolt in SW corner base of flow valve

Site ID: 15485475
Local Number: FC00100129DAAA1

Datum corrections, reference survey notes in site folders

Date	MP Elevation (feet above sea level)
09-23-93	435.43
01-17-95	432.56 TBM

MM, mass measurement
MP, measuring point
NA, not available
WS, water surface

Date	Time	Method	MP to WS	Error	WS Elevation	Remarks
09-16-93	1640	Level	7.79	0.01	427.64	--
09-23-93	1125	Level	8.17	0.01	427.26	--
02-23-94	1522	Level	7.14	0.01	428.29	MM
03-21-94	1048	Level	7.10	0.01	428.33	MM
04-25-94	1520	Level	5.74	0.01	429.69	MM
05-16-94	1419	Level	6.64	0.01	428.79	MM
06-15-94	1046	Level	4.88	0.01	430.55	MM
06-20-94	1422	Level	3.52	0.01	431.91	PM
06-23-94	1012	Level	2.75	0.01	432.68	PM
06-24-94	1611	Level	3.02	0.01	432.41	PM
06-30-94	1647	Level	3.97	0.01	431.46	PM
07-15-94	1126	Level	3.74	0.01	431.69	MM
08-29-94	1537	Level	3.49	0.01	431.94	PM
09-16-94	1416	Level	6.00	0.01	429.43	MM
10-19-94	0944	Level	7.92	0.01	427.51	MM

