TECHNICAL REPORT ON 2005-2011 HYDROGEOLOGIC EVALUATION FOR SIERRA VALLEY

Prepared for
Sierra Valley Groundwater Management District
Sierraville, California

By
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May 2012

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May 17, 2012

Ms. Juliana Walsh
Sierra Valley Groundwater
Management District
P.O. Box 102
Sierra Valley, California 96126

Re: 2005-11 Hydrogeologic Evaluation

Dear Juliana:

Submitted herewith is our report on the 2005-11 groundwater evaluation in Sierra Valley. We appreciate the cooperation of the Groundwater Management District and the Northern District of the California Department of Water Resources in supplying information for this report.

Sincerely yours,

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INTRODUCTION

The California Department of Water Resources (1963 and 1983a and b) described groundwater conditions in Sierra Valley. The California Department of Water Resources (DWR), Northern District, subsequently prepared eight annual updates on groundwater conditions in the Sierra Valley Basin, extending through Spring 1991. Kenneth D. Schmidt and Associates prepared a triennial update extending through Spring 1994, a quadrennial update extending through Spring 1998, a five-year update extending through Spring 2003, and a two year update extending through Spring 2005. As of 2011, pumpage from 34 active wells was measured with flowmeters by the Sierra Valley Groundwater Management District. As of 2011, water levels were measured in 40 wells in the main part of Sierra Valley and in 11 wells in the Chilcoot sub-basin, in the northeast part of the valley, by the DWR. This update covers the period from Spring 2005 to 2011. This report is based on data for this six-year period, and should not be used to predict future conditions.

WATER-LEVEL ELEVATION CONTOURS

Appendix A contains water-level data for Spring 2005 and Spring 2011 from the DWR website. These are for wells in Sierra Valley that are measured twice a year by DWR. Figure 1 shows

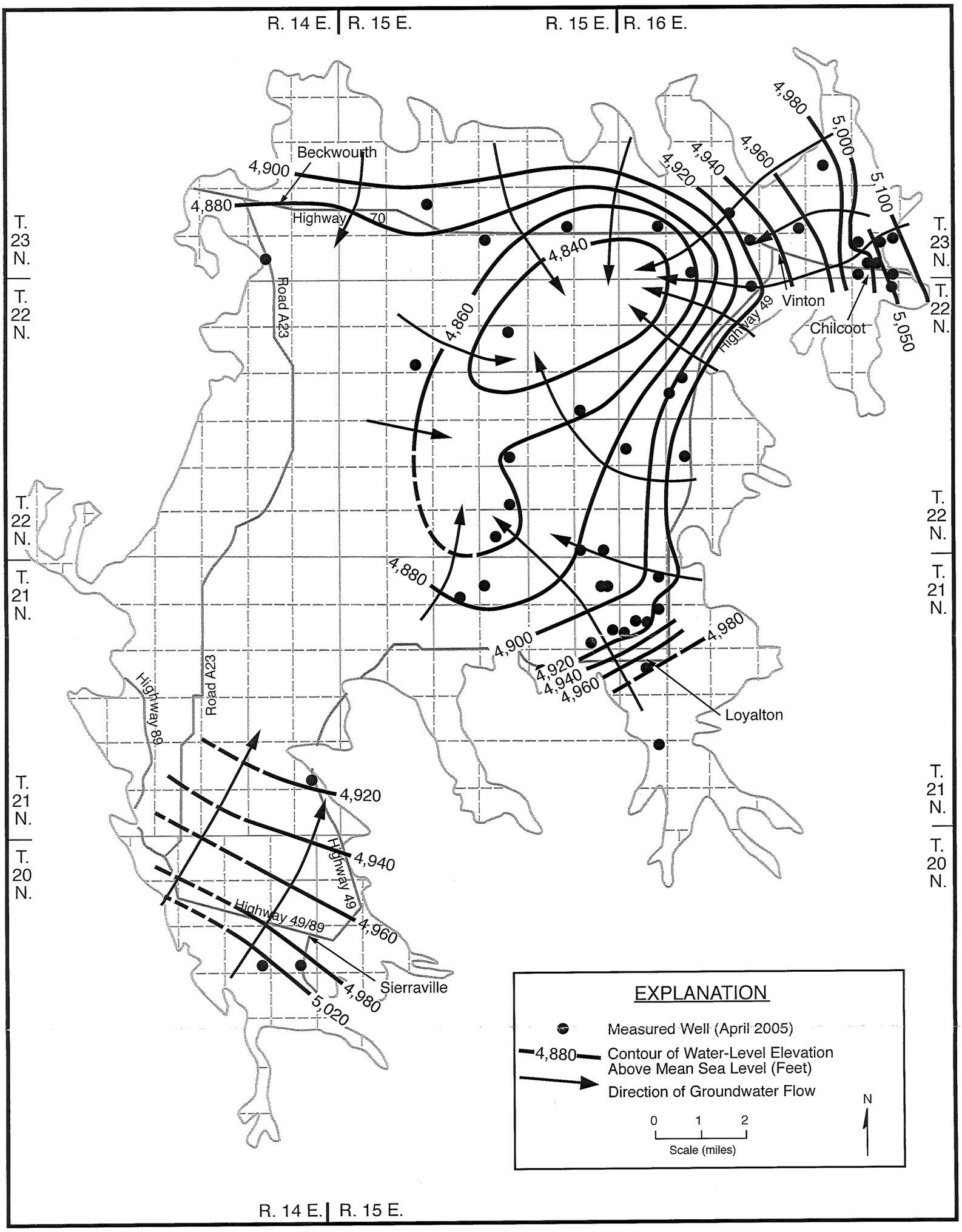

FIGURE 1 - WATER-LEVEL ELEVATIONS AND DIRECTION OF GROUNDWATER FLOW IN SPRING 2005

water-level elevation contours and the direction of groundwater flow for Spring 2005. Water-level elevations at that time ranged greater then 4,980 feet above mean sea level southeast of Loyalton in Sierra Brooks and about 5,100 feet east of Chilcoot, to less that 4,860 feet in a large pumping depression located in and southwest of the Vinton area. In Spring 2005, there appeared to be little groundwater outflow from Sierra Valley in the primary pumped zones because of this depression. A smaller cone of depression was present northwest of Loyalton.

Figure 2 shows water-level elevations and the direction of groundwater flow in Spring 2011. Similar conditions were indicated in Figure 2 as in Spring 2005. This map represents conditions after a year of relatively high pumpage in 2010.

WATER-LEVEL CHANGES

Figure 3 shows changes in water levels between Spring 2005 and Spring 2011. Water levels were lower in most wells in the Vinton subarea in Spring 2011 than in Spring 2005. Water levels in the Vinton area and to the west fell from 1 to 11 feet during this period. In the Chilcoot subarea, water levels in most wells were higher in Spring 2011 than in Spring 2005. Water levels in most wells in the Loyalton subarea were about the same or higher

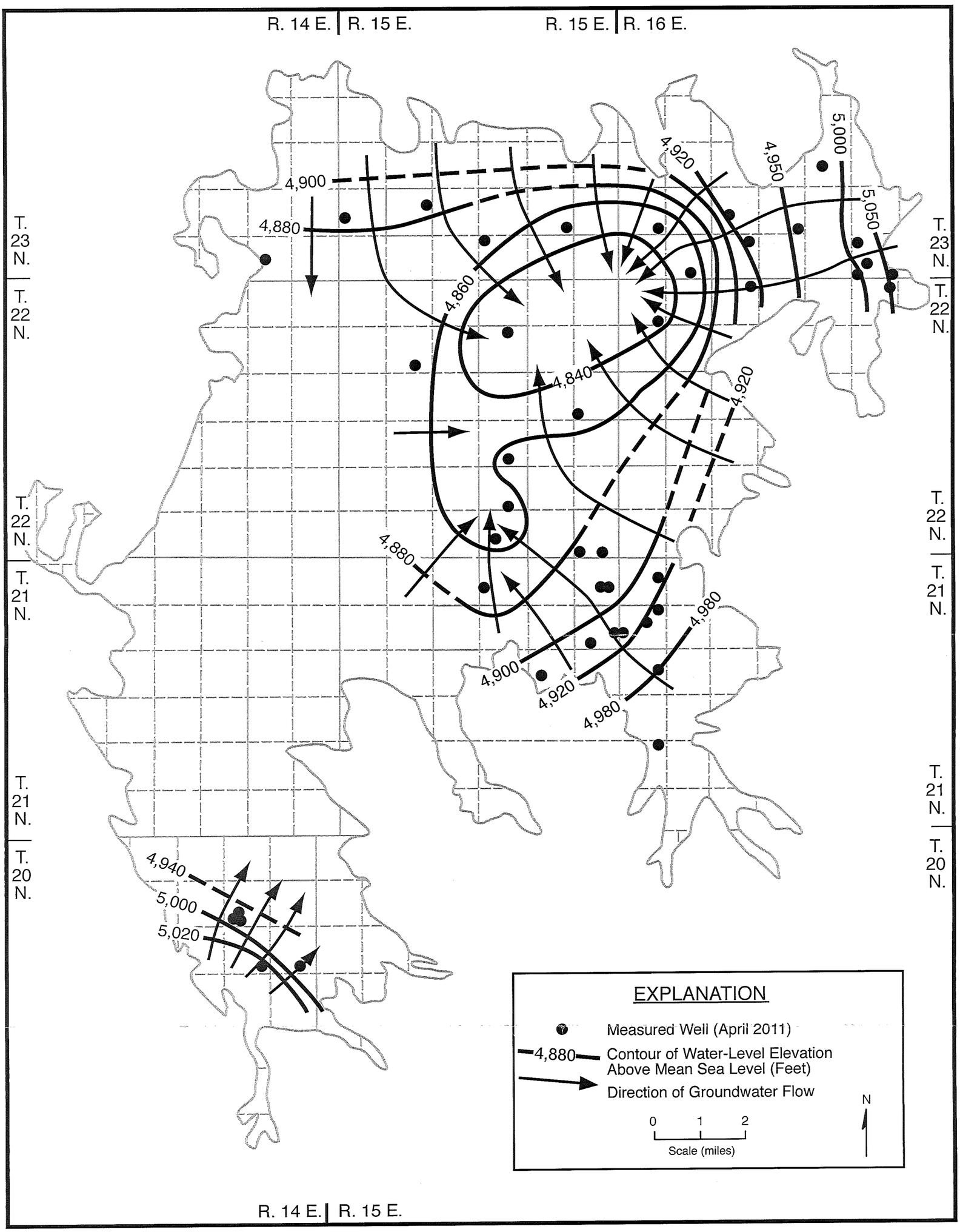

FIGURE 2 - WATER-LEVEL ELEVATIONS AND DIRECTION OF GROUNDWATER FLOW IN SPRING 2011

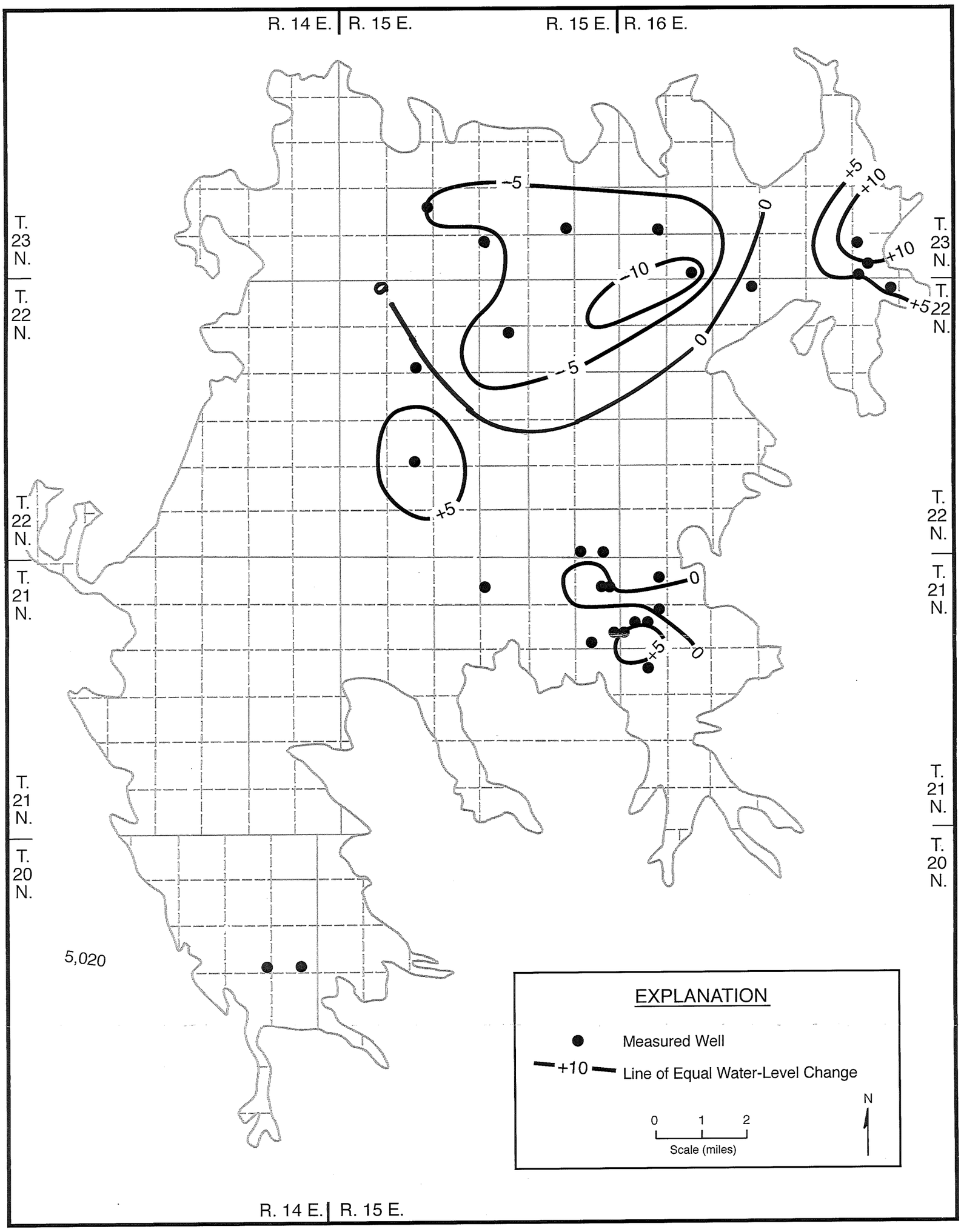

FIGURE 3 - WATER-LEVEL CHANGES FOR SPRING 2005-SPRING 2011

in Spring 2011 than in Spring 2005. The water level rises ranged from one to eight feet. Water levels in three wells were from one to three feet lower in Spring 2011 than in Spring 2005. Water levels in two wells in the Sierraville area where about the same in Spring 2011 as in Spring 2005.

WATER-LEVEL HYDROGRAPHS

Monitor Wells

Water-level measurements for District monitor wells and other frequently measured wells are provided in Appendix B. There are six sets of monitor wells. Water levels in MW-1s and 1d (north of Loyalton) fell from 1996 through Spring 2005. In 2011, water levels were slightly lower than in Spring 2005. Measurements for MW-1d show much more seasonal fluctuations, characteristic of confined groundwater. Spring water levels in this well fell between 1996 and 2004. Water levels in MW-1d were lower in 2011 than during 1996-2004. The water levels in MW-2 (all three completions) generally rose or were stable from Fall 2002 through Spring 2007. MW-2 is located several miles northwest of Sierraville. Water levels at this site were about the same in 2011, but were falling during the year due to the low precipitation. Water levels in MW-3 (all three completions) were relatively

stable from Fall 2002 through Spring 2007, and each completion clearly showed a marked response to summer pumping in 2003 and 2004. The water levels at this site were about the same in 2011 as previously, and indicated no overall decline. MW-3 is located northeast of Sattley. The water levels in MW-4 (all three completions) were relatively stable between Fall 2002 and Spring 2007. Summer declines were evident in 2003, 2004, and 2005. Water levels in 2011 were about the same as previously and showed no overall decline. Water levels in MW-5 (all three completions) were stable or rose between October 2004 and Spring 2009. MW-5 is located near Chilcoot. The water levels at MW-5 slightly fell during 2011 due to the low precipitation. Water levels in MW-6 (two completions) also rose or were relatively stable between Fall 2004 and Spring 2009. MW-6 is located east of Beckwourth. Temporary summer declines were evident in 2005, 2007, 2008, and 2011.

Other Frequently Measured Wells

For wells near the Grizzly Ranch project have been frequently measured. The water level in the easternmost of these (W-3) feel from 57.6 feet in June 1996 to 110.5 feet in February 2001. In 2011, depth to water in W-3 ranged from 102 to 114 feet. Wa-

ter levels in the next most easterly well (W-2) fell from 34.7 feet in May 1997 to 73.1 feet in March 2001. In 2011, the water level in W-2 ranged from 75.0 to 78.3 feet deep. The water level in W-4 fell from flowing prior to October 1998 to 18.6 feet deep in September 2007. Measurements for 2011 aren't available for this well. The water level in W-8 fell from 7.6 feet in June 2000 to 15.5 feet in November 2002. The water level then rose to a depth of 8.1 feet in April 2003, and then fell to 17.0 feet in September 2004. The water level in this well has risen since September 2004, and was the shallowest of record (3 feet deep) in 2011.

Long-Term Trends

In previous groundwater updates, long-term water-level hydrographs were discussed for four wells in the main part of the valley and two wells in the Chilcoot Sub-basin. The wells in the main part of the valley were:

T22N/R15E-22Q1 (northwest of Loyalton)
T22N/R15E-36N1 (north of Loyalton)
T22N/R16E-17C1 (southwest of Vinton)
T22N/R16E-4A1 (southwest of Vinton).

Fairly continuous water-level records are available for 19 other wells in the valley, extending from about 1980 to 2011. This group of wells began to be measured by DWR as part of Sierra Val-

ley Groundwater Management District activities. Long-term water-level hydrographs for many of these wells are provided in Appendix C.

Vinton Subarea

Figure 4 shows long-term water-level hydrographs for two wells southwest of Vinton: T22N/R16E-4A1 and 17C1. Well No. 4A1 is reportedly 251 feet deep. The well was flowing prior to 1979. The water level in this well was relatively stable and showed small seasonal fluctuations prior to 1979. The water level then began to decline after 1978, and reached a depth of about 25 feet in Fall 1991-92. After 1992, the water level recovered through Spring 1999 (to about five feet deep). After Spring 1999, the water level fell to about 35 feet by Fall 2004. By Fall 2004, depth to water in Well 4A1 was the deepest of record. Since Spring 2005, the spring water levels have ranged from about 20 to 26 feet deep and have been relatively stable. These water-level trends are directly related to pumping patterns during this period.

Well 17C1 is also termed the Dyson Lane recorder, and has been equipped with a continuous water-level recorder since 1981. This well is indicated to be about 100 feet deep. The well was

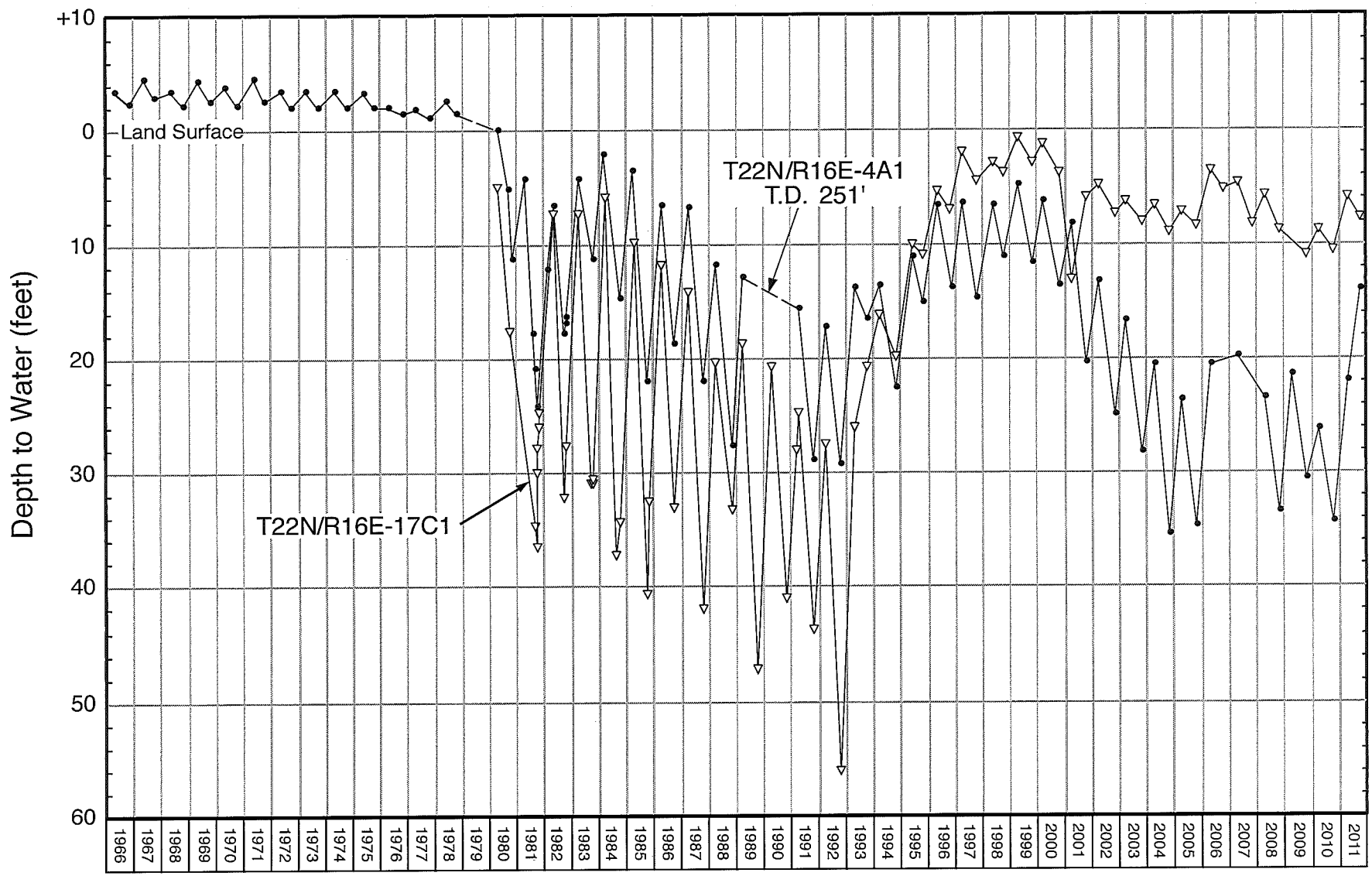

FIGURE 4 - WATER-LEVEL HYDROGRAPHS FOR VINTON AREA

originally perforated from 73 to 184 feet, but was sanded in to a depth of about 100 feet as of Fall 1980. The water level in this well has also responded highly to pumping of nearby irrigation wells, primarily to the north. Water-level records started in 1980, when depth to water was about five feet (Figure 4). Water levels fell from 1980 through 1993. The deepest water level in this well was about 56 feet in Fall 1992. By April 1999, the water level in Well 17C1 had recovered to a depth of about one foot. By Spring of 2005, the depth to water was about nine feet. During 2005-11, spring water levels in this well ranged from four to nine feet deep and were relatively stable.

Loyalton Subarea

Figure 5 shows long-term water level hydrographs for two wells in the Loyalton area: T22N/R15E-22Q1 and 36N1. Well 22Q1 is reportedly about 600 feet deep, and was flowing prior to 1966. The water level then declined slightly through 1981, and more sharply through Fall 1992 (23 feet deep). The water level in this well then recovered to 10 feet deep by Spring 1996. The water level in Well 22Q1 was relatively stable through early 2000, then fell to a depth of 23 feet by Fall 2005. Spring measurements for 2005 to 2010 indicated depth to water ranging from

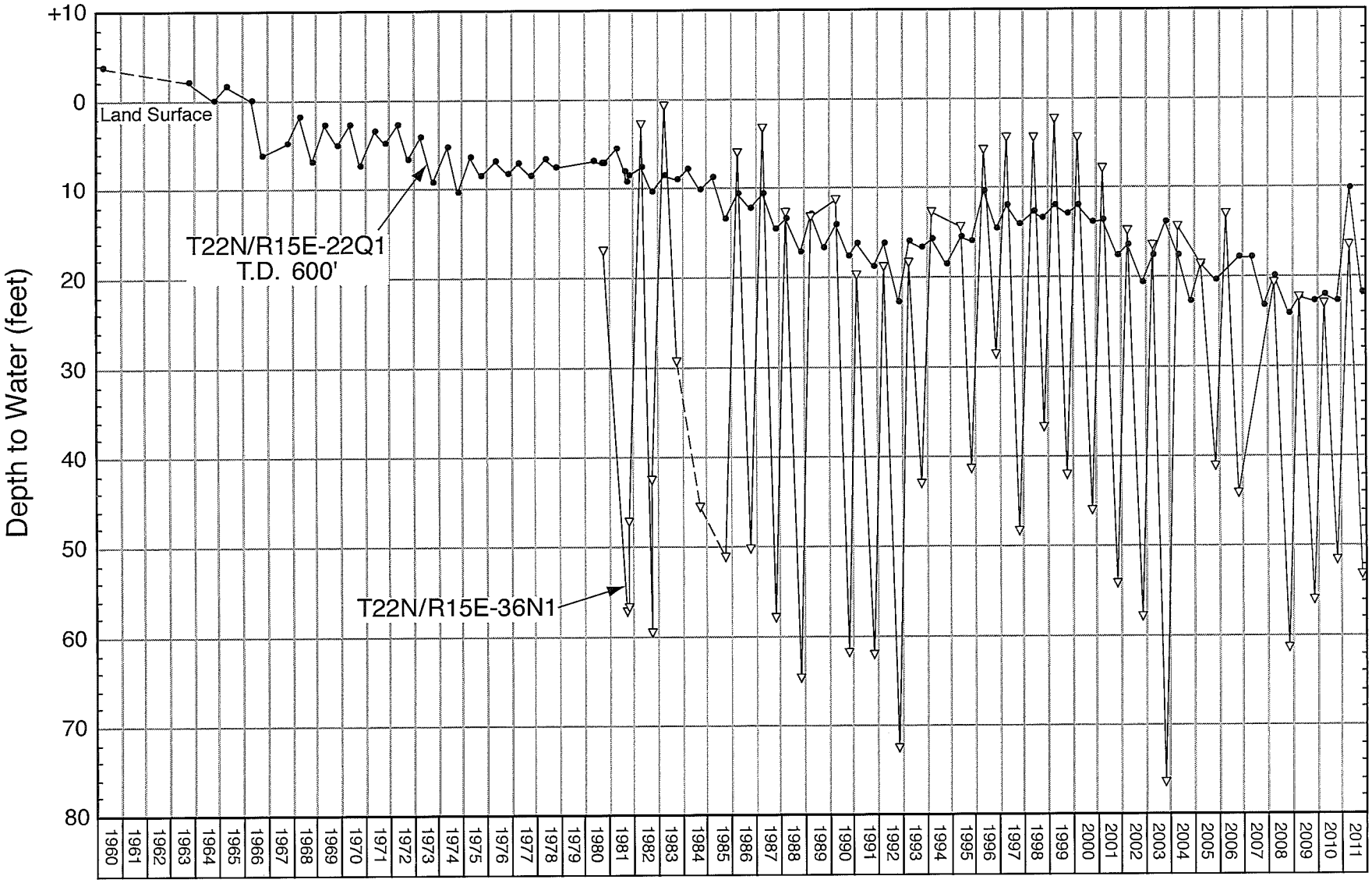

FIGURE 5 - WATER-LEVEL HYDROGRAPHS FOR LOYALTON AREA

about 18 to 22 feet, and relatively stable water levels. The water-level trend in this well is related to pumping patterns of wells in the Loyalton subarea. The small seasonal fluctuations in this well are more typical of the shallow zone.

Well 36N1 is perforated from 268 to 792 feet in depth. The water level in Well 36N1 was near the land surface prior to 1986, then gradually declined to a depth of 62 feet in Fall 1992. From Fall 1992 through Spring 1996, the water level in this well rose to a depth of 7 feet in Spring 1996. The water level in this well was relatively stable from Spring 1991 through Spring 2000, then fell to a depth of 77 feet in Fall 2005. This was the deepest water level of record for this well. Spring measurements for 2005-11 indicate depth to water ranging from about 13 to 23 feet and relatively stable levels. The water level in this well also responded primarily to pumping in the subarea. Seasonal fluctuations in water level are representative of the deep zone.

Chilcoot Subarea

Figure 6 shows water-level hydrographs for two wells in the Chilcoot subarea: T22N/R16E-1A2 and T23N/R16E-36N2. Both of these are shallow wells, tapping alluvial deposits. Water levels

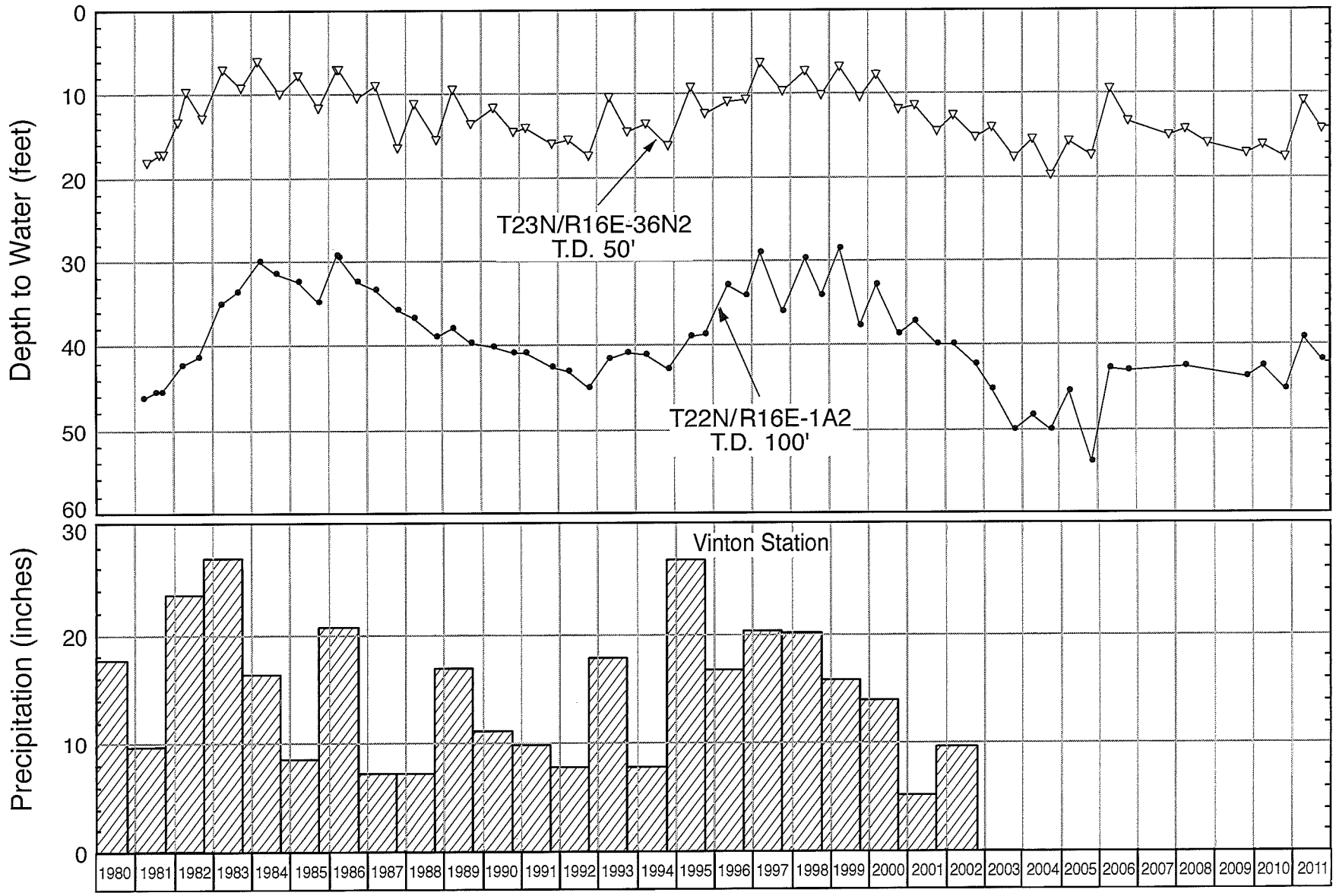

FIGURE 6 - WATER-LEVEL HYDROGRAPHS AND PRECIPITATION FOR CHILCOOT SUB-BASIN

were the shallowest in the mid 1980's, during and following years of high precipitation, and were lowest in later 1992, following years of very low precipitation. By Fall 2004, water levels in both wells were the shallowest of record. Spring measurements for Well 1A2 indicate depth to water ranging from 39 to 45 feet and relatively stable water levels for 2005-11. Spring measurements for Well 36N2 also indicated fairly stable levels during 2005-11. Water levels in these wells respond primarily to precipitation patterns and recharge, as there are no large-capacity wells in the subarea. Precipitation records were discontinued for the Vinton Station in late 2003.

PUMPAGE

Table 1 shows annual pumpage by section in Sierra Valley for 2005-11. Pumpage records for the District prior to 2001 are considered to be approximate, because of possible inaccuracies in the flowmeter readings. In 2001 the meters were re-calibrated, and thus subsequent pumpage records were considered more accurate. Figure 7 shows the distribution of the average metered pumpage by section for 2005-11. The total metered pumpage ranged about 5,600 in 2009 acre-feet to about 9,500 acre-feet in 2010. Table 2 indicates the distribution of the average annual metered

TABLE 1- ANNUAL METERED PUMPAGE FOR SIERRA VALLEY (2005-11)

	Amount Pumped (Acre-feet)							
Location	2005	2006	2007	2008	2009	2010	2011	Average
T20N/R14E-25	58	58	58	58	58	58	58	58
T21N/R14E-17&20	61	61	61	61	61	61	61	61
T21N/R15E-3	326	357	486	159	208	-	814	392
T21N/R15E-12	774	797	1,133	1,016	769	1,640	771	986
T21N/R16E-7	356	297	530	465	347	65	311	339
T21N/R16E-18	920	874	-	409	245	-	140	518
T22N/R15E-4	236	208	202	238	153	61	120	174
T22N/R15E-9	0	881	543	303	99	434	67	332
T22N/R15E-10	520	431	600	656	553	510	127	485
T22N/R15E-23	308	173	522	341	228	242	242	294
T22N/R15E-27	260	309	430	366	235	866	169	376
T22N/R15E-34	186	157	288	283	176	-	-	218
T22N/R15E-36	469	634	935	1,008	640	1,913	533	862
T22N/R16E-6	213	68	325	467	66	34	0	168
T22N/R16E-19	11	11	10	10	135	43	130	50
T23N/R15E-20	208	227	331	244	185	418	107	246
T23N/R15E-25	27	3	1	24	-	-	594	130
T23N/R15E-26	63	63	60	108	68	-	66	71
T23N/R15E-27	106	101	115	105	38	417	52	133
T23N/R15E-29	296	176	399	0	0	28	261	166
T23N/R16E-19	15	60	125	143	98	168	119	104
T23N/R16E-29	173	97	241	390	271	535	233	277
T23N/R16E-30	1,032	663	1,045	989	687	1,070	613	871
T23N/R16E-32	487	430	523	653	245	952	508	543
Total	7,105	7,136	8,963	8,496	5,565	9,515	6,096	7,854

Records for Sections T20N/R14E-25 and T21N/R14E-17 and 20 were taken from previous years.

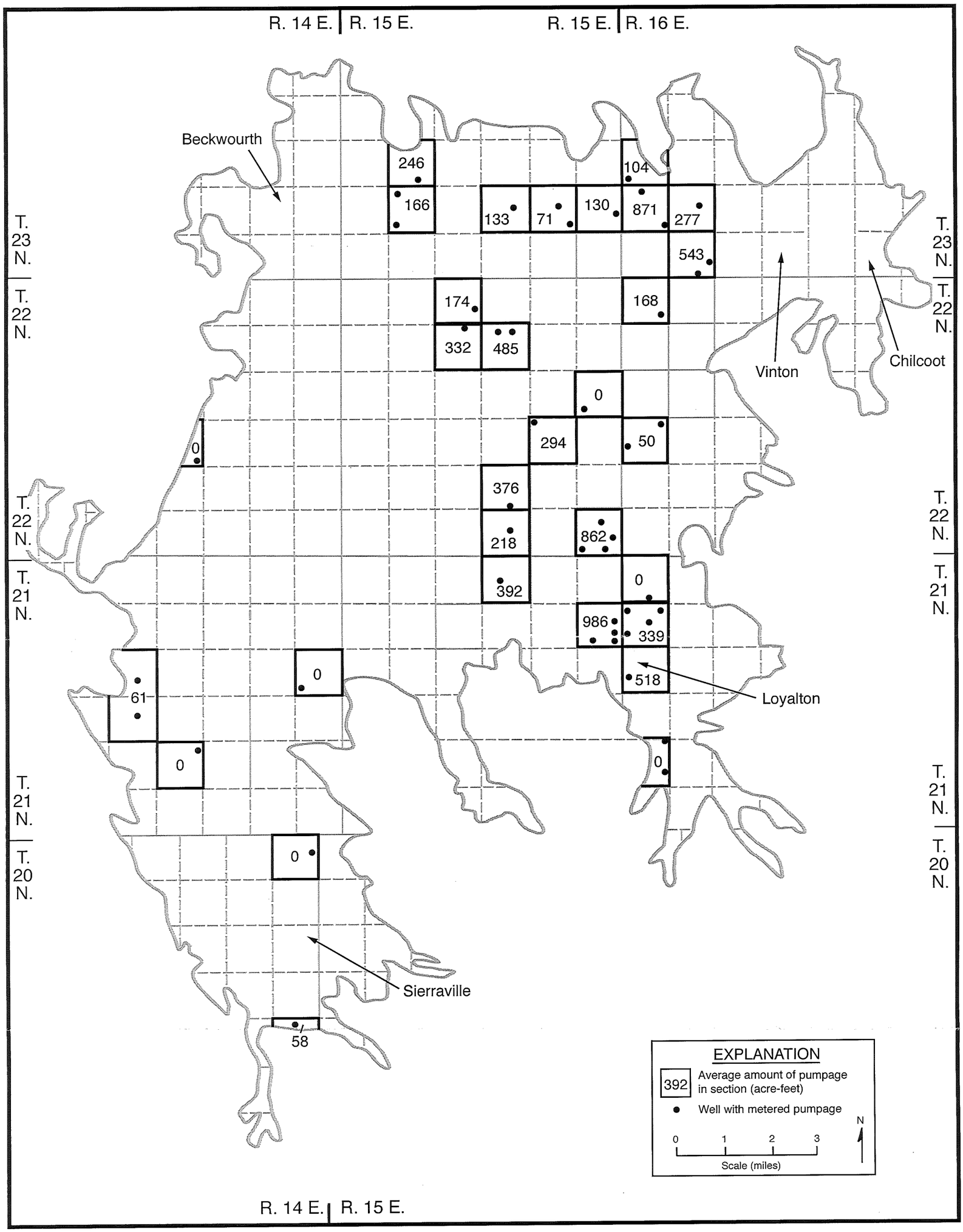

FIGURE 7 - AVERAGE METERED GROUNDWATER PUMPAGE FOR 2005-2011

TABLE 2-DISTRIBUTION OF AVERAGE ANNUAL METERED PUMPAGE BY SUBAREA FOR 2005-2011

Subarea	Pumpage (acre-feet)	% of Total
Near Beckwourth	412	5
Vinton	2,214	28
Loyalton	3,691	47
Other	1,537	20
Total	7,854	

pumpage in the valley subareas during 2005-11. Almost half of the average annual pumpage during the period was in the Loyalton subarea and 28 percent was in the Vinton subarea.

Table 3 summarizes metered pumpage in Sierra Valley by subarea since 1989. Annual metered pumpage ranged from a low of 3,470 acre-feet in 1988, to a high of 10,130 acre-feet in 1990. The period 1989-1994 was one of relatively high metered pumpage (average of about 7,800 acre-feet per year), whereas the period 1995-1999 was one of much lower pumpage (average of about 4,700 acre-feet per year). Metered pumpage during 2001-2005 averaged about 8,300 acre-feet per year, greater than the average during 1988-94. Pumpage in 2004 was the largest annual amount since 1990. Pumpage during 2007-2008 averaged almost 8,700 acre-feet per year. Pumpage in 2009 was only about 5,600 acre-feet per year. Pumpage during 2010 was about 9,500 acre-feet per year, the highest value since 2004.

SUMMARY AND CONCLUSIONS

Records of metered pumpage and water levels in Sierra Valley for the period 2005-11 were reviewed and trends interpreted. In addition, long-term water-level records extending back to the 1960's were reviewed. The primary influences on water-level

TABLE 3-SUMMARY OF METERED PUMPAGE FOR 1989-2011

	Beckwourth	Vinton	Loyalton	Other	Total
1989	668	3,574	2,798	616	7,656
1990	489	5,139	3,875	628	10,131
1991	289	3,607	3,486	935	8,317
1992	120	3,326	4,548	1,119	9,113
1993	83	1,226	2,066	719	4,094
1994	388	1,558	3,831	1,552	7,329
1995	533	973	1,964	630	4,100
1996	778	1,692	2,457	892	5,819
1997	932	1,685	2,242	457	5,316
1998	212	606	2,336	311	3,465
1999	385	1,350	2,333	797	4,865
2000	417	2,599	1,938	1,015	5,969
2001	809	2,641	2,824	1,217	7,491
2002	1,099	2,393	3,225	1,596	8,313
2003	733	2,332	3,154	1,618	7,837
2004	657	3,200	3,887	1,936	9,680
2005-11	412	2,214	3,691	1,537	7,854

The "other" subarea for 2000-2011 includes areas adjacent to the Loyalton or Vinton subareas that were previously delineated. Values for the 2005-11 period are average annual values.

changes from year to year are 1) pumping amounts, and 2) recharge from winter precipitation. There was a significant reduction in metered pumpage in the valley during 1993-97, following a severe drought. Metered pumpage during 1993-1997 averaged about 5,300 acre-feet per year, compared to an average of about 9,200 acre-feet per year during 1990-92. Because of the reductions in pumpage, water levels in many wells in pumped parts of the valley recovered in the late 1990's to near levels prior to the onset of heavy pumping in the late 1970's. Precipitation during 1993-97 was above average except for one year, and the increased recharge also caused water levels to rise. The lowest metered pumpage since 1989 was in 1998. Metered pumpage increased after 1998, and by 2004 was in the range of that for 1991-92. This increased pumpage, along with below average precipitation and less recharge, caused water levels in most wells in pumped parts of the valley to fall after 1998, in some cases to the deepest levels yet measured by Fall 2004. During 2005-2011, the pumpage averaged about 7,800 acre-feet per year, greater than the estimated safe yield (the amount of groundwater that can be pumped without overdraft). Most of the overdraft was indicated to be in or west of the Vinton subarea.

Metered pumpage records indicate that the safe yield is

about 6,000 acre-feet per year in the part of the valley now tapped by large-capacity supply wells. Metered pumpage of about 8,000 to 10,000 acre-feet per year during dry years has resulted in water-level declines. However, metered pumpage of about 3,500 to 5,000 acre-feet per year during wet years was associated with water-level rises.

Groundwater monitoring in the District provides a valuable data base for future groundwater management activities. Historical records provide a good indiction of water-level declines that can occur due to increases in pumpage. Also, the influence of changes in precipitation on recharge and water levels have been determined.

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APPENDIX A

WATER-LEVEL MEASUREMENTS FOR SPRING AND FALL 2011

Township	Range	Section	Date	Water-Surface Elev. (ft)	Depth to Water (ft)
20N	14E	11P1	4/25/11	4,949	1.1
			10/18/11	4,949	1.2
20N	14E	11P2	4/25/11	4,946	4.1
			10/18/11	4,945	5.0
20N	14E	11P3	4/25/11	4,949	1.1
20N	14E	13Q2	4/25/11	4,984	2.1
			10/18/11	4,982	3.6
20N	14E	14R1	4/25/11	5,033	1.6
			10/18/11	5,027	7.7
21N	14E	25P3	10/18/11	4,914	20.7
21N	15E	1K1	4/25/11	4,894	19.5
			10/18/11	4,861	51.8
21N	15E	1K2	4/25/11	4,895	18.5
			10/18/11	4,894	18.9
21N	15E	3M3	4/25/11	4,866	26.3
			10/18/11	4,832	59.8
21N	15E	12J1	4/25/11	4,912	30.2
			10/18/11	4,892	50.5
21N	15E	12P3	4/26/11	4,910	17.5
			10/18/11	4,883	43.6
21N	15E	14L1	4/25/11	4,910	90.0
			10/18/11	4,908	92.5
21N	16E	6H3	4/25/11	4,903	47.0
			10/18/11	4,891	58.7
21N	16E	7A1	4/25/11	4,924	42.5
			10/18/11	4,915	51.5
21N	16E	7F4	4/25/11	4,951	10.4
			10/18/11	4,943	18.0
21N	16E	7G1	10/18/11	4,892	68.4
21N	16E	7M1	4/25/11	4,909	28.6
			10/18/11	4,889	48.8
21N	16E	18G2	4/25/11	4,980	15.1
			10/18/11	4,976	19.5
21N	16E	30A1	4/25/11	5,073	17.4
			10/18/11	5,064	25.7
22N	15E	8Q1	4/25/11	4,876	1.3
			10/18/11	4,872	4.9

continued:

Township	Range	Section	Date	Water-Surface Elev. (ft)	Depth to Water (ft)
22N	15E	10B1	4/25/11	4,813	77.7
			10/18/11	4,803	88.0
22N	15E	13N1	4/25/11	4,847	46.1
			10/18/11	4,812	81.0
22N	15E	22Q1	4/25/11	4,871	10.2
			10/18/11	4,859	21.7
22N	15E	27Q1	4/25/11	4,856	25.7
			10/18/11	4,831	51.2
22N	15E	34L6	4/25/11	4,859	26.4
			10/18/11	4,813	71.7
22N	15E	36N1	4/25/11	4,881	16.5
			10/18/11	4,844	53.3
22N	15E	36Q1	4/25/11	4,896	11.9
			10/18/11	4,861	47.1
22N	16E	4A1	4/25/11	4,910	22.0
22N	16E	6R2	4/25/11	4,838	69.8
			10/18/11	4,789	118.7
23N	14E	17C1	4/25/11	4,901	5.8
			10/18/11	4,899	7.8
23N	14E	17E2	4/25/11	4,897	4.8
			10/18/11	4,895	6.0
23N	14E	20P2	4/25/11	4,933	1.5
23N	14E	35L1	4/25/11	4,868	9.1
			10/18/11	4,866	11.3
23N	15E	26R1	4/26/11	4,843	53.6
			10/19/11	4,802	95.5
23N	15E	29H1	4/26/11	4,885	11.2
			10/19/11	4,881	15.8
23N	15E	30M1	4/26/11	4,865	22.5
			10/19/11	4,855	31.6
23N	15E	30M2	4/26/11	4,878	9.4
			10/19/11	4,859	27.6
23N	15E	34D1	4/26/11	4,873	15.3
			10/19/11	4,869	19.6
23N	16E	28L1	4/26/11	4,926	12.6
			10/18/11	4,918	20.8
23N	16E	30R1	4/26/11	4,842	73.5
			10/19/11	4,783	132.5
23N	16E	32Q1	4/25/11	4,844	75.9
			10/18/11	4,804	116.0
23N	16E	33A2	4/25/11	4,922	17.8
			10/18/11	4,919	21.5

Chilcoot Sub-bas of Sierra Valley

Township	Range	Section	Date	Water-Surface Elev. (ft)	Depth to Water (ft)
22N	16E	1A2	4/26/11	5051	39.3
			10/18/11	5048	41.8
23N	16E	23F1	4/25/11	4975	14.8
			10/18/11	4974	16.4
23N	16E	27R1	4/25/11	4953	10.2
			10/18/11	4953	10.2
23N	16E	36D2	4/26/11	5043	69.3
23N	16E	36L3	4/26/11	5007	3.0
			10/18/11	4997	13.0
23N	16E	36L4	4/26/11	4994	36.3
			10/18/11	4986	43.6
23N	16E	36N2	4/26/11	4999	10.9
			10/18/11	4996	14.3
23N	16E	36N3	4/26/11	5003	3.8
			10/18/11	5003	4.4
23N	16E	36N4	4/26/11	5000	6.8
			10/18/11	4999	7.8
23N	16E	36N5	4/26/11	4998	8.9
			10/18/11	4996	10.9
23N	16E	36R1	4/26/11	5003	32.0
			10/18/11	5023	12.4

APPENDIX B

WATER-LEVEL MEASUREMENTS FOR FREQUENTLY MEASURED WELLS

MW 1s	RP= 0.82 ft			21N15E01K02M
Dotta				
Date	GS to WS	RP to WS	Time	Notes
11/17/1995	15□6	16□42	1315	aka Loyalton East
12/4/1995	15□46	16□28	1900	
1/2/1996	15□59	16□41	1145	
3/8/1996	15□18	16	1100	
4/1/1996	15□18	16	1035	
5/1/1996	15□18	16	925	
9/12/1996	16□18	17	1105	
10/2/1996	16□18	17	830	
10/14/1996	15□26	16□08	1500	
11/22/1996	16□18	17	1215	
5/3/1997	15□84	16□66	1520	
6/16/1997	15□74	16□56	0	
8/7/1997	15□93	16□75	1108	
9/3/1997	16□09	16□91	1932	
11/1/1997	16□56	17□38	1545	
12/1/1997	16□69	17□51	1615	
1/6/1998	16□66	17□48	1308	
2/4/1998	16□48	17□3	855	
3/9/1998	16□24	17□06	1539	
4/11/1998	16□15	16□97	1432	
5/5/1998	16□23	17□05	1410	
6/4/1998	16□22	17□04	919	
7/6/1998	16□29	17□11	1255	
8/7/1998	16□27	17□09	1139	
9/4/1998	16□28	17□1	1314	
10/6/1998	16□29	17□11	1107	
11/8/1998	16□5	17□32	1240	
12/10/1998	16□34	17□16	1342	
1/11/1999	16□38	17□2	1520	
2/11/1999	15□97	16□79	1615	
3/8/1999	15□93	16□75	1625	
4/10/1999	15□92	16□74	1158	
5/11/1999	16□01	16□83	1306	
6/6/1999	16□04	16□86	1653	
7/2/1999	16□03	16□85	1458	
8/1/1999	16□05	16□87	1409	
8/31/1999	16□13	16□95	1504	
10/3/1999	16□22	17□04	1021	
11/3/1999	16□37	17□19	1257	
12/6/1999	16□51	17□33	1652	
1/6/2000	16□6	17□42	1519	
2/6/2000	16□22	17□04	1512	
3/12/2000	16□03	16□85	1353	
4/6/2000	16□15	16□97	1639	
5/8/2000	16□21	17□03	1246	
6/2/2000	16□17	16□99	1419	
7/5/2000	16□25	17□07	1415	
7/29/2000	16□24	17□06	1115	
8/31/2000	16□27	17□09	1154	
10/3/2000	16□36	17□18	1542	
10/30/2000	16□47	17□29	1221	
11/27/2000	16□48	17□3	1535	
4/4/2001	16□38	17□2	1334	
4/30/2001	16□34	17□16	1059	
6/2/2001	16□31	17□13	1040	
8/29/2001	16□4	17□22	1355	
10/2/2001	16□53	17□35	1017	
11/2/2001	16□72	17□54	1257	
12/4/2001	16□66	17□48	1122	
1/2/2002	16□53	17□35	1231	
1/30/2002	16□55	17□37	1432	
2/23/2002	16□56	17□38	843	
4/2/2002	16□64	17□46	1212	
5/3/2002	16□73	17□55	930	
6/5/2002	16□72	17□54	1514	
7/2/2002	16□69	17□51	1436	
8/5/2002	16□8	17□62	1053	
9/3/2002	16□96	17□78	1226	
10/3/2002	17□16	17□98	1403	
11/1/2002	17□39	18□21	1334	
12/3/2002	17□33	18□15	1124	
12/30/2002	17□15	17□97	1054	
1/30/2003	17□12	17□94	1207	
3/1/2003	17□15	17□97	1158	
3/31/2003	17□19	18□01	836	
4/30/2003	17□14	17□96	1055	
6/2/2003	17□18	18	0	
6/30/2003	17□18	18	0	
7/30/2003	17□18	18	0	
9/3/2003	17□28	18□1	0	
10/1/2003	17□38	18□2	0	
11/1/2003	17□58	18□4	0	
12/1/2003	17□68	18□5	0	
1/1/2004				snow storm
1/31/2004	17□28	18□1	0	
2/29/2004	17□18	18	0	
4/1/2004	17□18	18	0	
4/29/2004	17□28	18□1	0	
5/31/2004	17□28	18□1	0	
6/29/2004	17□28	18□1	0	
7/30/2004	17□48	18□3	0	
8/31/2004	17□58	18□4	1055	
9/30/2004	17□68	18□5	1020	
11/2/2004	16□98	17□8	1012	
12/3/2004	17□78	18□6	0	
1/1/2005				deep snow cover
2/1/2005	17□28	18□1	1005	
3/3/2005	17□48	18□3	914	
4/2/2005	17□28	18□1	1413	
4/28/2005	17□38	18□2	716	
5/31/2005	17□58	18□4	1332	
6/29/2005	17□58	18□4	1435	
7/29/2005	17□58	18□4	1330	
9/2/2005	17□58	18□4	1023	
9/29/2005	17□88	18□7	1039	
11/1/2005	17□98	18□8	1018	
11/30/2005	18□08	18□9	1029	

MW 1d RP= 0.96 21N15E01K01M

Dotta

Date	GS to WS	RP to WS	Time	Notes
11/17/1995	30□46	31□42	1245	aka Loyalton West
12/4/1995	26□78	27□74	1900	
1/2/1996	21□69	22□65	1130	
3/8/1996	13□54	14□5	1100	
4/1/1996	11□04	12	1030	
5/1/1996	9□14	10□1	920	
9/12/1996	64□04	65	1100	
10/2/1996	44□04	45	825	
10/14/1996	35□89	36□85	1520	
11/22/1996	23□14	24□1	1200	
3/28/1997	9□01	9□97	1700	
4/10/1997	8□03	8□99	1622	
5/3/1997	8□59	9□55	1504	
6/16/1997	33□86	34□82	0	
7/15/1997	64□15	65□11	0	
8/7/1997	68□63	69□59	1103	
9/3/1997	76□7	77□66	1928	
9/8/1997	75□07	76□03	0	
9/26/1997	59□74	60□7	1735	
11/1/1997	36□13	37□09	1540	
12/1/1997	26□97	27□93	1610	
1/6/1998	20□33	21□29	1246	
1/17/1998	18□78	19□74	1240	
2/4/1998	16□36	17□32	848	
3/9/1998	13□29	14□25	1532	
4/11/1998	10□55	11□51	1421	
5/5/1998	8□99	9□95	1403	
6/4/1998	7□19	8□15	908	
7/6/1998	25□92	26□88	1244	
8/7/1998	61□85	62□81	1155	
9/4/1998	73□68	74□64	1216	
10/6/1998	40□14	41□1	1116	
11/8/1998	26□42	27□38	1247	
12/10/1998	19□18	20□14	1351	
1/11/1999	14□59	15□55	1530	
2/11/1999	11□09	12□05	1627	
3/8/1999	8□7	9□66	1612	
4/10/1999	6□45	7□41	1148	
5/11/1999	5□02	5□98	1256	
6/6/1999	24□26	25□22	1651	
7/2/1999	38□01	38□97	1456	
7/19/1999	53□72	54□68	1230	
8/1/1999	63□65	64□61	1358	
8/31/1999	58□52	59□48	1450	
10/3/1999	53□19	54□15	1016	
11/3/1999	32□88	33□84	1246	
12/6/1999	22□45	23□41	1638	
1/6/2000	16□83	17□79	1455	
2/6/2000	12□59	13□55	1505	
3/12/2000	9□39	10□35	1345	
4/6/2000	8□08	9□04	1632	
5/8/2000	7□75	8□71	1235	
6/2/2000	29□55	30□51	1412	
7/5/2000	59□13	60□09	1409	
7/29/2000	69□93	70□89	1109	
8/21/2000	75□2	76□16	920	
8/31/2000	71□91	72□87	1146	
10/3/2000	47□35	48□31	1532	
10/30/2000	34	34□96	1227	
11/27/2000	26□1	27□06	1457	
1/2/2001	19□89	20□85	1544	
2/1/2001	16□16	17□12	1615	
3/3/2001	12□84	13□8	1516	
4/4/2001	10□65	11□61	1330	
4/30/2001	17□95	18□91	1048	
6/2/2001	57□56	58□52	1008	
7/4/2001	73□54	74□5	1111	
8/5/2001	77□47	78□43	900	
8/29/2001	85□47	86□43	1401	
10/2/2001	66□42	67□38	1013	
11/2/2001	43□73	44□69	1303	
12/4/2001	33□05	34□01	1112	
1/2/2002	26□95	27□91	1220	
1/30/2002	22□75	23□71	1421	
2/23/2002	19□46	20□42	841	
3/23/2002	16□16	17□12	1045	
4/2/2002	15□02	15□98	1215	
5/3/2002	13□6	14□56	937	
6/5/2002	54□16	55□12	1518	
7/2/2002	70□31	71□27	1442	
7/12/2002	82□47	83□43	1205	
8/5/2002	79□47	80□43	1038	
9/3/2002	92□26	93□22	1235	
10/3/2002	64□57	65□53	1408	
11/1/2002	45□53	46□49	1314	
12/3/2002	34□6	35□56	1131	
12/30/2002	28□6	29□56	1043	
1/30/2003	23□7	24□66	1220	
3/1/2003	20□02	20□98	1148	
3/31/2003	17□1	18□06	847	
4/30/2003	14□51	15□47	1055	
6/2/2003	55□01	55□97	0	
6/30/2003	52□04	53	0	
7/30/2003	73□24	74□2	0	
9/3/2003	73□94	74□9	0	
10/1/2003	59□24	60□2	0	
11/1/2003	43□14	44□1	0	
12/1/2003	32□84	33□8	0	
1/1/2004				snow storm
1/31/2004	22□14	23□1	0	
2/29/2004	18□64	19□6	0	
4/1/2004	15□74	16□7	0	
4/29/2004	22□04	23	0	
5/31/2004	60□94	61□9	0	
6/29/2004	69□84	70□8	0	
7/30/2004	81□24	82□2	0	
8/31/2004	82□44	83□4	1055	

MW 2s	RP= 1.7 ft			20N14E11P01M
Sanford				
Date	**GS to WS**	**RP to WS**	**Time**	**Notes**
9/3/2002	8□06	9□76	1309	**aka Sierraville West**
10/3/2002	8□41	10□11	1205	
11/1/2002	8□62	10□32	1141	
12/3/2002	7□67	9□37	1046	
12/30/2002	7□17	8□87	915	
1/30/2003	5□64	7□34	1117	
3/1/2003	5□67	7□37	1113	
3/31/2003	5□65	7□35	758	
4/30/2003	5□14	6□84	1025	
6/3/2003	5□9	7□6	0	
6/30/2003	6□4	8□1	0	
7/2/2003	6□9	8□6	0	
7/30/2003	7□1	8□8	0	
9/2/2003	7□4	9□1	0	
10/1/2003	7□5	9□2	0	
11/1/2003	7□6	9□3	0	
12/2/2003	7□9	9□6	0	
1/1/2004				snow storm
1/31/2004	5□7	7□4	0	
2/29/2004	5□2	6□9	0	
4/1/2004	5□4	7□1	0	
4/29/2004	5□8	7□5	0	
5/31/2004	6□1	7□8	0	
6/29/2004	6□3	8	0	
7/30/2004	7□1	8□8	0	
8/31/2004	7□6	9□3	1120	
9/30/2004	7□9	9□6	931	
11/2/2004	7□8	9□5	0	
12/3/2004	7□7	9□4	943	
1/1/2005				deep snow cover
1/31/2005	5□9	7□6	1215	
3/3/2005	5□5	7□2	935	
4/2/2005	5□1	6□8	1440	
4/28/2005	5□2	6□9	717	
5/31/2005	1/5/1900	7□1	1016	
6/29/2005	1/5/1900	7□5	1509	
7/29/2005	1/6/1900	8□1	1354	
9/2/2005	1/7/1900	9	945	
9/29/2005	1/7/1900	9□4	921	
11/2/2005	1/7/1900	9□5	929	
11/30/2006	1/8/1900	9□7	858	
1/4/2006	1/5/1900	7□3	1331	
2/3/2006	1/4/1900	6□6	1140	
4/6/2006	1/4/1900	5□9	1053	
5/3/2006	1/4/1900	5□9	1017	
6/4/2006	1/4/1900	6□5	841	
7/1/2006	1/5/1900	6□9	1135	
7/31/2006	1/6/1900	7□7	1003	
9/4/2006	1/6/1900	8□6	1018	
10/3/2006	1/7/1900	8□9	1025	
12/4/2006	1/7/1900	8□9	1327	
4/8/2007	1/5/1900	7□2	730	

MW 2i	RP= 1.86 ft			20N14E11P02M
Sanford				
Date	GS to WS	RP to WS	Time	Notes
9/3/2002	4□18	6□04	1311	aka Sierraville West
10/3/2002	4□52	6□38	1207	
11/1/2002	4□78	6□64	1144	
12/3/2002	4□54	6□4	1048	
12/30/2002	4□18	6□04	917	
1/30/2003	3□74	5□6	1119	
3/1/2003	3□38	5□24	1115	
3/31/2003	3□23	5□09	801	
4/30/2003	2□87	4□73	1027	
6/3/2003	2□74	4□6	0	
6/30/2003	2□34	4□2	0	
7/2/2003	3□04	4□9	0	
7/30/2003	3□04	4□9	0	
9/2/2003	3□34	5□2	0	
10/1/2003	3□62	5□48	0	
11/1/2003	3□94	5□8	0	
12/2/2003	4□04	5□9	0	
1/1/2004				snow storm
1/31/2004	3□34	5□2	0	
2/29/2004	3□14	5	0	
4/1/2004	2□84	4□7	0	
4/29/2004	2□84	4□7	0	
5/31/2004	2□84	4□7	0	
6/29/2004	2□94	4□8	0	
7/30/2004	3□14	5	0	
8/31/2004	3□64	5□5	1120	
9/30/2004	3□94	5□8	924	
11/1/2004	4□04	5□9	936	
12/3/2004	4□04	5□9	942	
1/1/2005				deep snow cover
1/31/2005	3□54	5□4	1215	
3/3/2005	3□44	5□3	932	
4/2/2005	3□14	5	1438	
4/28/2005	2□84	4□7	716	
5/31/2005	2□64	4□5	10□14	
6/29/2005	2□74	4□6	1507	
7/29/2005	2□94	4□8	1351	
9/2/2005	3□44	5□3	943	
9/29/2005	3□84	5□7	919	
11/2/2005	3□94	5□8	932	
11/30/2006	4□04	5□9	902	
1/4/2006	3□54	5□4	1336	
2/3/2006	2□94	4□8	1051	
4/6/2006	2□04	3□9	1051	
5/3/2006	1□54	3□4	1016	
6/4/2006	1□54	3□4	840	
7/1/2006	1□74	3□6	1134	
7/31/2006	1□94	3□8	1002	
9/4/2006	2□44	4□3	1017	
10/3/2006	2□74	4□6	1024	
12/4/2006	3□24	5□1	1326	
4/8/2007	2□84	4□7	730	

MW 2d	RP= 1.86 ft			20N14E11P03M
Sanford				
Date	GS to WS	RP to WS	Time	Notes
9/3/2002	0□7	2□56	1312	aka Sierraville West
10/3/2002	0□97	2□83	1209	
11/1/2002	1□18	3□04	1145	
12/3/2002	1	2□86	1050	
12/30/2002	0□8	2□66	919	
1/30/2003	0□71	2□57	1121	
3/1/2003	0□45	2□31	1117	
3/31/2003	0□28	2□14	803	
4/30/2003	0□01	1□87	1029	
6/3/2003	-0□06	1□8	0	
6/30/2003	-0□06	1□8	0	
7/22/2003	-0□06	1□8	0	
8/30/2003	-0□06	1□8	0	
9/2/2003	-0□06	1□8	0	
10/1/2003	0□04	1□9	0	
11/1/2003	0□24	2□1	0	
12/2/2003	0□54	2□4	0	
1/1/2004				snow storm
1/31/2004	0□14	2	0	
2/29/2004	0□14	2	0	
4/1/2004	-0□06	1□8	0	
4/29/2004	-0□16	1□7	0	
5/31/2004	-0□36	1□5	0	
6/29/2004	-0□26	1□6	0	
7/30/2004	-0□16	1□7	0	
8/31/2004	0□14	2	1220	
9/30/2004	0□34	2□2	917	
11/2/2004	0□54	2□4	925	
12/3/2004	0□54	2□4	911	
1/1/2005				deep snow cover
1/31/2005	0□14	2	1215	
3/3/2005	0□14	2	908	
4/2/2005	0□14	2	1435	
4/28/2005	-0□06	1□8	715	
5/31/2005	-0□06	1□8	1011	
6/29/2005	-0□36	1□5	1505	
7/29/2005	-0□16	1□7	13□5	
9/2/2005	-0□16	1□7	1350	
9/29/2005	0□24	2□1	917	
11/2/2005	0□24	2□1	934	
11/30/2006	0□44	2□3	920	
1/4/2006	0□24	2□1	1538	
2/3/2006	0□04	1□9	1049	
4/6/2006	-0□56	1□3	1047	
5/3/2006	-0□96	0□9	1015	
6/4/2006	-1□16	0□7	839	
7/1/2006	-1□36	0□5	1133	
7/31/2006	-1□26	0□6	1000	
9/4/2006	-0□96	0□9	1016	
10/3/2006	-0□76	1□1	1023	
12/4/2006	-0□36	1□5	1325	
4/8/2007	-0□36	1□5	730	

MW 3s	RP= 1.23 ft			21N14E28G01M
Dobbas				
Date	**GS to WS**	**RP to WS**	**Time**	**Notes**
9/3/2002	0□7	1□93	1324	**aka Sattley North**
10/3/2002	1□01	2□24	920	
11/1/2002	0□81	2□04	1158	
12/3/2002	0□46	1□69	1325	
12/30/2002	-0□07	1□16	1303	
1/30/2003	-0□38	0□85	1041	
3/1/2003	-0□52	0□71	1101	
3/31/2003	-0□59	0□64	745	
4/30/2003	-0□77	0□46	1007	
6/3/2003	11□07	12□3	0	
6/30/2003	22□97	24□2	0	
7/30/2003	15□77	17	0	
9/3/2003	6□87	8□1	0	
10/1/2003	3□07	4□3	0	
11/2/2003	1□17	2□4	0	
12/2/2003	0□97	2□2	0	
1/1/2004				snow storm
1/31/2004	-0□03	1□2	0	
2/29/2004	-0□33	0□9	0	
4/1/2004	-0□43	0□8	0	
4/29/2004	15□87	17□1	0	pumping in nearby well
5/31/2004	4□27	5□5	0	
7/5/2004	26□97	28□2	0	pumping in nearby well
7/30/2004	30□57	31□8	0	pumping in nearby well
8/31/2004	29□07	30□3	1150	pumping in nearby well
9/30/2004	12□47	13□7	1433	
11/2/2004	4□97	6□2	1451	
12/3/2004	2□67	3□9	1352	
1/1/2005			0	deep snow cover
1/31/2005	0□67	1□9	1530	
3/2/2005	0□27	1□5	1102	
4/2/2005	-0□13	1□1	1025	
4/28/2005	-0□23	1	1009	
5/31/2005	-0□23	1	1536	
6/29/2005	0□17	1□4	950	
7/29/2005	0□97	2□2	1030	
9/2/2005	6□07	7□3	1029	
9/29/2005	5□07	6□3	1504	
11/5/2005	1□77	3	940	
11/30/2006	1□17	2□4	1300	
1/4/2006	0□27	1□5	1430	
2/3/2006	0□27	1□5	1030	
4/6/2006	-0□63	0□6	1500	
5/3/2006	-0□73	0□5	1347	
6/4/2006	-0□43	0□8	1507	
7/1/2006	-0□23	1	1437	
7/31/2006	0□57	1□8	1436	
9/4/2006	0□57	1□8	1429	
10/3/2006	0□67	1□9	1402	
12/4/2006	0□57	1□8	902	
4/8/2007	-0□73	0□5	756	
5/5/2007	-0□43	0□8	810	

MW 3i	RP= 1.22 ft			21N14E28G02M
Dobbas				
Date	**GS to WS**	**RP to WS**	**Time**	**Notes**
9/3/2002	-1□22	0	1325	Flowing **aka Sattley North**
10/3/2002	0□01	1□23	923	
11/1/2002	-0□05	1□17	1200	
12/3/2002	-0□14	1□08	1328	
12/30/2002	-0□23	0□99	1305	
1/30/2003	-0□25	0□97	1044	
3/1/2003	-0□3	0□92	1058	
3/31/2003	-0□36	0□86	748	
4/30/2003	-0□38	0□84	1011	
6/3/2003	19□98	21□2	0	
6/30/2003	39□48	40□7	0	
7/30/2003	19□38	20□6	0	
9/3/2003	7□28	8□5	0	
10/1/2003	1□88	3□1	0	
11/2/2003	-0□22	1	0	
12/2/2003	-0□32	0□9	0	
1/1/2004				snow storm
1/31/2004	-0□72	0□5	0	
2/29/2004	-1□02	0□2	0	
4/1/2004	-1□12	0□1	0	
4/29/2004	19□68	20□9	0	pumping in nearby well
5/31/2004	1□28	2□5	0	not pumping in nearby well
7/5/2004	28□08	29□3	0	pumping in nearby well
7/30/2004	27□68	28□9	0	pumping in nearby well
8/31/2004	23□48	24□7	1150	pumping in nearby well
9/30/2004	8□18	9□4	1432	
11/2/2004	1□08	2□3	1450	
12/3/2004	-0□72	0□5	1351	
1/1/2005				deep snow cover
1/31/2005	-1□22	0		water to top of casing
3/2/2005	-1□17	0□05	1101	below
4/2/2005	-1□17	0□05	1123	below
4/28/2005	-1□17	0□05	1008	
5/31/2005	-1□17	0□05	1533	
6/29/2005	-1□17	0□05	948	
7/29/2005	-1□18	0□04	1028	
9/2/2005	10□58	11□8	1522	
9/29/2005	0□78	2	1502	
11/5/2005	-0□72	0□5	945	
11/30/2006	-0□82	0□4	1459	
1/4/2006	-1□12	0□1	1424	
2/3/2006		even 0.0	1030	
4/6/2006			1458	flowing
5/3/2006			1346	flowing
6/4/2006			1506	flowing
7/1/2006			1436	flowing
7/31/2006		0□1	1435	
9/4/2006			1428	flowing
10/3/2006		0□1	1401	
12/4/2006			901	Flowing aka Sattley North

MW 3d	RP= 1.25 ft			21N14E28G03M
Dobbas				
Date	GS to WS	RP to WS	Time	Notes
				Flowing **aka Sattley North**
10/3/2002	-6□5	-5□25	1148	5.25' above survey pt.
11/1/2002	-6□51	-5□26	1515	5.26' above survey pt.
12/3/2002	-6□62	-5□37	1337	5.37' above survey pt.
12/30/2002	-6□91	-5□66	1310	5.66' above survey pt.
1/30/2003	-6□9	-5□65	1424	5.65' above survey pt.
3/1/2003	-7	-5□75	1333	above
3/31/2003	-7□18	-5□93	1116	above
4/30/2003	-7□2	-5□95	1258	above
6/3/2003	-5□25	-4	0	above
6/30/2003	19□85	21□1	0	not flowing
7/30/2003	10□75	12	0	not flowing
9/3/2003	2□35	3□6	0	not flowing
10/1/2003	-6□35	-5□1	0	above
11/2/2003	-5□85	-4□6	0	above
12/2/2003	-5□65	-4□4	0	above
1/1/2004				snow storm
1/31/2004	-4□85	-3□6	0	above
2/29/2004	-4□65	-3□4	0	above
4/1/2004	-4□55	-3□3	0	above
4/29/2004	8□55	9□8	0	not flowing - well nearby pumping
5/31/2004	-7□75	-6□5	0	above - well nearby not pumping
7/5/2004	15□35	16□6	0	not flowing - well nearby pumping
7/30/2004	6□55	7□8	0	not flowing - well nearby pumping
8/31/2004	14□85	16□1	1150	not flowing - well nearby pumping
9/30/2004	4□85	6□1	1431	not flowing
11/2/2004	-0□75	0□5	1449	not flowing
12/3/2004	-7□15	-5□9	0	above
1/1/2005				deep snow cover
1/31/2005	-6□15	-4□9	0	flowing
3/3/2005	-6□05	-4□8	1100	flowing
4/2/2005	-5□85	-4□6	1020	flowing
4/28/2005	-5□65	-4□4	1007	flowing
5/31/2005	##############	-4□4	1530	flowing
6/29/2005	##############	-4□3	945	flowing
7/29/2005		-4□7	1032	flowing
9/29/2005		6□9	1520	
9/29/2005		0	1520	
11/5/2005		-5□1	1034	
11/30/2006		-4□9	1458	flowing
1/4/2006			1421	flowing (extension pipe washed away)
2/3/2006			1228	flowing
4/6/2006			1456	flowing
5/3/2006			1345	flowing
6/4/2006			1505	flowing
7/1/2006			1435	flowing
7/31/2006			1434	flowing
9/4/2006			1427	flowing
10/3/2006			1400	flowing
12/4/2006			900	flowing
4/8/2007			756	flowing
5/5/2007			810	flowing

MW 4s	RP= 1.45 ft			21N14E16H01M
Bradley				
Date	GS to WS	RP to WS	Time	Notes
9/3/2002	15□21	16□66	1340	aka Calpine East
10/3/2002	15□32	16□77	902	
11/1/2002	15□79	17□24	1104	
12/3/2002	15□28	16□73	1016	
12/30/2002	14□6	16□05	1253	
1/30/2003	14□37	15□82	1001	
3/1/2003	14□16	15□61	1031	
3/31/2003	14□03	15□48	725	
4/30/2003	13□78	15□23	947	
6/3/2003	13□85	15□3	0	
6/30/2003	14□25	15□7	0	
7/30/2003	16□15	17□6	0	
9/2/2003	18□55	20	0	
10/1/2003	22□55	24	0	
11/2/2003	22□85	24□3	0	
12/2/2003	21□55	23	0	
1/4/2004				snow storm
1/31/2004	18□55	20	0	
2/29/2004	17□65	19□1	0	
4/1/2004	17□15	18□6	0	
4/29/2004	16□65	18□1	0	
5/31/2004	16□45	17□9	0	
7/5/2004	16□75	18□2	1552	
7/30/2004	17□25	18□7	0	
8/31/2004	18□95	20□4	1155	
9/30/2004	21□75	23□2	1413	
11/2/2004	20□55	22	1446	
12/3/2004	19□25	20□7	1323	
1/4/2005				deep snow cover
1/31/2005	17□45	18□9	1330	
3/2/2005	16□95	18□4	1112	
4/2/2005	16□65	18□1	1042	
4/28/2005	16□45	17□9	959	
5/31/2005	16□45	17□9	1521	
6/29/2005	16□15	17□6	1018	
7/29/2005	16□55	18	1049	
9/2/2005	19□95	21□4	1500	
9/29/2005	22□25	23□7	1439	
11/2/2005	20□95	22□4	1017	
11/30/2005	19□95	21□4	1451	
1/4/2006	18□35	19□8	1403	
2/3/2006	17□55	19	1016	
4/6/2006	16□35	17□8	1444	
5/3/2006	15□95	17□4	1337	
6/4/2006	15□95	17□4	1450	
7/1/2006	15□85	17□3	1428	
7/31/2006	15□95	17□4	1431	
9/4/2006	16□35	17□8	1420	
10/3/2006	16□55	18	1351	
12/4/2006	16□15	17□6	913	
4/8/2007	14□85	16□3	807	
5/5/2007	14□85	16□3	813	

MW 4i	RP= 2.16 ft			21N14E16H02M
Bradley				
Date	GS to WS	RP to WS	Time	5
9/3/2002	29□06	31□22	1342	aka Calpine East
10/3/2002	29□27	31□43	904	
11/1/2002	29□43	31□59	1106	
12/3/2002	29□33	31□49	1018	
12/30/2002	29□06	31□22	1255	
1/30/2003	29□17	31□33	1003	
3/1/2003	29□21	31□37	1034	
3/31/2003	29□23	31□39	727	
4/30/2003	29□14	31□3	949	
6/3/2003	29□24	31□4	0	
6/30/2003	29□44	31□6	0	
7/30/2003	29□54	31□7	0	
9/2/2003	29□64	31□8	0	
10/1/2003	29□74	31□9	0	
11/2/2003	29□94	32□1	0	
12/2/2003	30□24	32□4	0	
1/1/2004				
1/31/2004	29□94	32□1	0	
2/29/2004	29□84	32	0	
4/1/2004	29□94	32□1	0	
4/29/2004	30□14	32□3	0	
5/31/2004	30□24	32□4	0	
7/5/2004	30□44	32□6	0	
7/30/2004	30□44	32□6	0	
8/31/2004	30□74	32□9	1155	
9/30/2004	30□84	33	1410	
11/2/2004	30□94	33□1	1445	
12/3/2004	31□14	33□3	1320	
1/1/2005				deep snow cover
1/31/2005	30□84	33	1330	
3/2/2005	30□84	33	1111	
4/2/2005	31□04	33□2	1040	
4/28/2005	31□04	33□2	958	
5/31/2005	31□04	33□2	1517	
6/29/2005	31□24	33□4	1008	
7/29/2005	31□44	33□6	1047	
9/2/2005	31□44	33□6	1458	
9/29/2005	31□54	33□7	1433	
11/2/2005	31□54	33□7	1020	
11/30/2005	31□64	33□8	1438	
1/4/2006	31□24	33□4	1350	
2/3/2006	31□24	33□4	1014	
4/6/2006	31□14	33□3	1442	
5/3/2006	31□04	33□2	1336	
6/4/2006	31□14	33□3	1449	
7/1/2006	31□24	33□4	1427	
7/31/2006	31□24	33□4	1430	
9/4/2006	31□34	33□5	1419	
10/3/2006	31□24	33□4	1350	
12/4/2006	31□44	33□6	912	
4/8/2007	31□44	33□6		
5/5/2007	30□84	33		

MW 4d	RP= 1.84 ft			21N14E16H03M
Bradley				
Date	GS to WS	RP to WS	Time	Notes
9/3/2002	35□47	37□31	1343	aka Calpine East
10/3/2002	35□87	37□71	906	
11/1/2002	36□18	38□02	1108	
12/3/2002	36□21	38□05	1020	
12/30/2002	35□97	37□81	1257	
1/30/2003	36□07	37□91	1005	
3/1/2003	36□03	37□87	1036	
3/31/2003	36□03	37□87	729	
4/30/2003	35□86	37□7	951	
6/3/2003	35□76	37□6	0	
6/30/2003	35□96	37□8	0	
7/30/2003	36□06	37□9	0	
9/2/2003	36□26	38□1	0	
10/1/2003	36□56	38□4	0	
11/2/2003	36□76	38□6	0	
1/4/2004				snow storm
12/1/2003	37□16	39	0	
1/31/2004	36□76	38□6	0	
2/29/2004	36□76	38□6	0	
4/1/2004	36□76	38□6	0	
4/29/2004	36□86	38□7	0	
5/31/2004	36□96	38□8	0	
7/5/2004	37□06	38□9	0	
7/30/2004	37□16	39	0	
8/31/2004	37□36	39□2	1155	
9/30/2004	37□66	39□5	1408	
11/2/2004	38□06	39□9	1444	
12/3/2004	38□16	40	1318	
1/4/2005				heavy snow cover
1/31/2005	38□16	40	1330	
3/2/2005	38□06	39□9	1110	
4/2/2005	38□06	39□9	1038	
4/28/2005	38□06	39□9	957	
5/31/2005		39□9	1514	
6/29/2005		39□9	1006	
7/29/2005		39□9	1044	
9/2/2005		40	1456	
9/29/2005		40	1429	
11/2/2005		40□3	1027	
11/30/2005		40□1	1439	
1/4/2006		40	1356	
2/3/2006		40	1012	
4/6/2006		39□9	1440	
5/3/2006		39□8	1335	
6/4/2006		39□8	1448	
7/1/2006		39□8	1426	
7/31/2006		39□7	1429	
9/4/2006		39□8	1418	
10/3/2006		39□9	1349	
12/4/2006		40	911	
4/8/2007		39□3	807	
5/5/2007		39□3	830	

MW 5s	RP= 1.30			23N16E36N05M
Potter				
Date	GS to WS	RP to WS	Time	Notes
				aka Potter - Chilcoot
10/27/2004	13□84	15□14		
12/3/2004	13□7	15	1040	
1/1/2005				deep snow cover
2/1/2005	13□6	14□9	1115	
3/3/2005	13□1	14□4	1112	
4/2/2005	12□6	13□9	1243	
4/28/2005	12□3	13□6	811	
5/31/2005	13□1	14□4	1209	
6/29/2005	13□7	15	1400	
7/29/2005	14□6	15□9	1230	
9/2/2005	15□1	16□4	1139	
9/29/2005	14□6	15□9	1132	
11/1/2005	14□1	15□4	1232	
11/30/2005	14	15□3	1112	
1/5/2006	12□7	14	1144	
1/31/2006	11□5	12□8	1117	
4/6/2006	8□3	9□6	1216	
5/3/2006	7□1	8□4	1130	
6/4/2006	8□1	9□4	1235	
7/1/2006	8□7	10	1229	
7/31/2006	9□7	11	1158	
9/4/2006	10□5	11□8	1129	
10/3/2006	10	11□3	1203	
12/4/2006	9□6	10□9	1210	
4/8/2007	9□3	10□6	1129	
5/5/2007	9□3	10□6	1042	
6/2/2007	10□6	11□9	1425	
7/3/2007	11□7	13	1050	
8/4/2007	12□3	13□6	915	
9/3/2007	12□4	13□7	920	
9/30/2007	11□7	13	925	
11/4/2007	11□6	12□9	1045	
12/2/2007	11□4	12□7	845	
12/31/2007	11□4	12□7	1030	
3/2/2008	10□7	12	1120	
3/29/2008	9□9	11□2	810	
5/2/2008	10□1	11□4	906	
5/29/2008	10□3	11□6	940	
6/27/2008	12	13□3	730	
8/1/2008	12□8	14□1	915	
9/2/2009	12□9	14□2	530	
10/4/2008	13	14□3	940	
11/2/2008	12□4	13□7	700	
12/1/2008	12□2	13□5	1015	
1/1/2009	12□3	13□6	1005	
2/3/2009	12	13□3	845	
3/31/2009	11□6	12□9	905	
5/1/2009	12	13□3	740	
5/29/2009	13□4	14□7	800	

MW 5i	RP= 1.31			23N16E36N04M
Potter				
Date	GS to WS	RP to WS	Time	Notes
				aka Potter - Chilcoot
10/27/2004	12□98	14□29		
12/3/2004	11□79	13□1	1041	
1/1/2005				deep snow cover
2/1/2005	12□09	13□4	1115	
3/3/2005	11□49	12□8	1107	
4/2/2005	10□89	12□2	1240	
4/28/2005	10□39	11□7	810	
5/31/2005	10□99	12□3	1207	
6/29/2005	12□19	13□5	1358	
7/29/2005	13□49	14□8	1229	
9/2/2005	15□19	16□5	1137	
9/29/2005	14□39	15□7	1130	
11/1/2005	13□69	15	1231	
11/30/2005	13□19	14□5	1115	
1/5/2006	11□59	12□9	1149	
1/31/2006	10□59	11□9	1123	
4/6/2006	7□59	8□9	1208	
5/3/2006	6□49	7□8	1129	
6/4/2006	6□39	7□7	1232	
7/1/2006	7□49	8□8	1228	
7/31/2006	8□29	9□6	1157	
9/4/2006	10□39	11□7	1128	
10/3/2006	8□79	10□1	1202	
12/4/2006	8□29	9□6	1209	
4/8/2007	7□49	8□8	1129	
5/5/2007	8□39	9□7	1041	
6/2/2007	9□49	10□8	1425	
7/3/2007	10□79	12□1	1050	
8/3/2007	11□69	13	912	
9/3/2007	11□79	13□1	920	
9/30/2007	10□79	12□1	925	
11/4/2007	10□09	11□4	1045	
12/2/2007	9□69	11	845	
12/31/2007	9□19	10□5	1030	
3/2/2008	8□59	9□9	1120	
3/29/2008	8□29	9□6	810	
5/2/2008	7□99	9□3	906	
5/29/2009	7□79	9□1	940	
6/27/2009	8□39	9□7	730	
8/1/2008	9□39	10□7	915	
9/2/2008	10□19	11□5	530	
10/4/2008	10□09	11□4	940	
11/2/2008	9□59	10□9	700	
12/1/2008	9□39	10□7	1015	
1/1/2009	9□19	10□5	1005	
2/3/2009	8□99	10□3	845	
3/31/2009	8□59	9□9	905	
5/1/2009	8□99	10□3	740	
5/29/2009	9□59	10□9	855	

MW 5d	RP= 1.31			23N16E36N03M
Potter				
Date	GS to WS	RP to WS	Time	Notes
				aka Potter - Chilcoot
10/27/2004	11□42	12□73		
12/3/2004	8□59	9□9	1045	
1/1/2005				deep snow cover
2/1/2005	8□39	9□7	1115	
3/3/2005	7□89	9□2	1101	
4/2/2005	7□39	8□7	1233	
4/28/2005	6□79	8□1	809	
5/31/2005	6□79	8□1	1203	
6/29/2005	7□89	9□2	1356	
7/29/2005	9□49	10□8	1229	
9/2/2005	10□19	11□5	1135	
9/29/2005	10□39	11□7	11□26	
11/1/2005	9□59	10□9	1229	
11/30/2006	9□09	10□4	1117	
1/5/2006	7□79	9□1	1139	
1/31/2006	6□89	8□2	1128	
4/6/2006	3□89	5□2	1225	
5/3/2006	2□29	3□6	1128	
6/4/2006	1□59	2□9	1230	
7/1/2006	2□29	3□6	1227	
7/31/2006	3□49	4□8	1156	
9/4/2006	4□69	6	1127	
10/3/2006	4□59	5□9	1201	
12/4/2006	3□59	4□9	1208	
4/8/2007	3□09	4□4	1140	
5/5/2007	3□39	4□7	1041	
6/2/2007	4□59	5□9	225	
7/3/2007	5□69	7	1050	
8/3/2007	6□69	8	912	
9/3/2007	7□39	8□7	920	
9/30/2007	7□09	8□4	925	
11/4/2007	6□19	7□5	1045	
12/2/2007	5□69	7	845	
12/31/2007	5□49	6□8	1030	
3/2/2008	4□69	6	810	
3/29/2008	4□39	5□7	810	
5/2/2008	4□09	5□4	906	
5/29/2008	4□29	5□6	940	
6/27/2008	4□59	5□9	730	
8/1/2009	5□89	7□2	915	
9/2/2008	6□59	7□9	530	
10/4/2008	6□79	8□1	940	
11/2/2008	6□39	7□7	200	
12/1/2008	5□99	7□3	1015	
1/1/2009	5□69	7	1005	
2/3/2009	5□59	6□9	845	
3/31/2009	5□29	6□6	905	
5/1/2009	5□39	6□7	740	
5/29/2009	5□79	7□1	830	

MW 6s	RP= 1.11			23N15E30M02M
FRLT				
Date	GS to WS	RP to WS	Time	Notes
				Feather River Land Trust - Beckwourth
10/27/2004	22□89	24		
12/3/2004	8□39	9□5	1231	
1/1/2005				deep snow cover
2/1/2005	14□59	15□7	1345	
3/3/2005	13□39	14□5	1207	
4/2/2005	11□79	12□9	1155	
4/28/2005	10□49	11□6	849	
5/31/2005	22□39	23□5	1311	
6/29/2005	21□29	22□4	1258	
7/29/2005	33□99	35□1	1158	
9/2/2005	40□79	41□9	1042	
9/29/2005	34□49	35□6	1230	
11/1/2005	22□79	23□9	1536	
11/30/2006	25□19	26□3	1216	
1/5/2006	24□29	25□4	1041	
1/31/2006	22□79	23□9	1239	
4/6/2006	19□39	20□5	1321	
5/3/2006	17□99	19□1	1222	
6/4/2006	18□19	19□3	1338	
7/1/2006	20□89	22	1358	
7/31/2006	24□39	25□5	1243	
9/4/2006	23□99	25□1	1213	
10/3/2006	22□09	23□2	1245	
12/4/2006	10□69	11□8	1137	
4/8/2007	7□19	8□3	1015	
5/5/2007	7□19	8□3	950	
6/2/2007	21□79	22□9	1325	
7/3/2007	26□59	27□7	955	
8/3/2007	30□89	32	826	
9/3/2007	38□39	39□5	815	
9/30/2007	30□49	31□6	830	
11/4/2007	20□19	21□3	935	
12/2/2007	16□79	17□9	800	
12/31/2007	14□69	15□8	935	
3/2/2008	11□69	12□8	1030	
3/29/2008	10□59	11□7	856	
5/2/2009	8□99	10□1	942	
5/29/2008	22□69	23□8	1142	
6/27/2008	28□39	29□5	830	
8/1/2008	36□89	38	1040	
9/2/2008	44□29	45□4	620	
10/4/2008	34□39	35□5	1100	
11/2/2008	33□59	34□7	846	
12/1/2008	24□39	25□5	1100	
1/1/2009	20□59	21□7	1025	
2/3/2009	18□19	19□3	930	
3/31/2009	14□89	16	1005	
5/1/2009	14□59	15□7	900	
5/29/2009	30□59	31□7	915	

MW 6d	RP= 1.10			23N15E30M01M
FRLT				
Date	GS to WS	RP to WS	Time	Notes
				aka Feather River Land Trust - Beckwourth
10/27/2004	30□03	31□13		
12/3/2004	26□9	28	1230	
1/1/2005				deep snow cover
2/1/2005	23□8	24□9	1345	
3/3/2005	22□6	23□7	1205	
4/2/2005	21□5	22□6	1150	
4/28/2005	20□7	21□8	848	
5/31/2005	19□8	20□9	1309	
6/29/2005	23□7	24□8	1256	
7/29/2005	27□2	28□3	1156	
9/2/2005	31□7	32□8	1241	
9/29/2005	32	33□1	12□28	
11/1/2005	29□8	30□9	1535	
11/30/2006	25□2	26□3	1216	
1/5/2006	24□3	25□4	1041	
1/31/2006	22□8	23□9	1219	
4/6/2006	19□4	20□5	1321	
5/3/2006	9	10□1	1222	
6/4/2006	18□2	19□3	1338	
7/1/2006	20□9	22	1358	
7/31/2006	24□4	25□5	1243	
9/4/2006	24	25□1	1213	
10/3/2006	22□1	23□2	1245	
12/4/2006	19□7	20□8	1136	
4/8/2007	16□4	17□5	1015	
5/5/2007	16□1	17□2	950	
6/2/2007	17□4	18□5	1322	
7/3/2007	20□9	22	955	
8/3/2007	25□4	26□5	826	
9/3/2007	26□7	27□8	810	
9/30/2007	30□3	31□4	830	
11/4/2007	28□3	29□4	935	
12/2/2007	26□4	27□5	800	
12/31/2007	28□4	29□5	935	
3/2/2008	22	23□1	1030	
3/29/2008	21□1	22□2	856	
5/2/2008	20□5	21□6	942	
5/29/2008	22□4	23□5	1142	
6/27/2008	26□8	27□9	831	
8/1/2008	32□3	33□4	1040	
9/2/2008	35□5	36□6	620	
10/4/2008	37□8	38□9	1100	
11/2/2008	36□1	37□2	746	
12/1/2008	34	35□1	1100	
1/1/2009	31□3	32□4	1035	
2/3/2009	29□3	30□4	930	
3/31/2009	26□2	27□3	1005	
5/1/2009	25□2	26□3	900	
5/31/2009	26□4	27□5	945	

	A	B	C	D	E
1	**W 1**	**RP= 4.25 ft**			**22N16E17C01M**
2	Damonte				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	4/9/1980	5			**aka Dyson**
5	10/1/1980	17.7			
6	8/25/1981	34.6			
7	9/14/1981	36.4			
8	9/30/1981	29.9			
9	10/7/1981	27.8			
10	10/14/1981	26			
11	10/20/1981	24.8			
12	4/27/1982	7.4			
13	9/16/1982	32.2			
14	10/5/1982	27.6			
15	4/14/1983	7.3			
16	9/28/1983	30.9			
17	9/29/1983	30.8			
18	9/30/1983	30.6			
19	3/15/1984	5.9			
20	8/9/1984	37.2			
21	10/3/1984	34.3			
22	4/4/1985	9.9			
23	10/4/1985	40.6			
24	10/28/1985	32.5			
25	4/2/1986	11.8			
26	10/1/1986	33.1			
27	4/7/1987	14.3			
28	10/20/1987	42			
29	3/22/1988	20.4			
30	10/25/1988	33.2			
31	4/5/1989	18.7			
32	9/27/1989	47.2			
33	4/10/1990	20.7			
34	10/24/1990	41			
35	2/27/1991	28			
36	4/9/1991	24.8			
37	10/22/1991	43.8			
38	3/24/1992	27.5			
39	10/20/1992	56.1			
40	4/22/1993	26			
41	10/19/1993	20.8			
42	3/29/1994	16.2			
43	10/28/1994	19.9			
44	5/31/1995	10			
45	10/25/1995	11			
46	4/1/1996	1.75	6	1000	
47	5/1/1996	0.75	5	900	
48	10/2/1996	7.25	11.5	800	
49	4/10/1997	1.8	6.05	1545	
50	5/3/1997	1.92	6.17	1447	
51	6/16/1997	2.31	6.56	0	

	A	B	C	D	E
52	7/15/1997	2.71	6.96	0	
53	8/7/1997	3.12	7.37	1043	
54	9/3/1997	3.61	7.86	1910	
55	9/26/1997	3.94	8.19	1718	
56	11/1/1997	4.52	8.77	1525	
57	12/1/1997	4.57	8.82	1550	
58	1/6/1998	4.37	8.62	1226	
59	2/4/1998	3.93	8.18	914	
60	3/9/1998	3.08	7.33	1511	
61	4/11/1998	2.41	6.66	1401	
62	5/5/1998	2.32	6.57	1345	
63	6/4/1998	2.21	6.46	855	
64	7/6/1998	2.42	6.67	1231	
65	8/7/1998	2.84	7.09	1019	
66	9/4/1998	3.21	7.46	1156	
67	10/6/1998	3.56	7.81	1045	
68	11/6/1998	3.72	7.97	1152	
69	12/10/1998	3.47	7.72	1328	
70	1/11/1999	3.26	7.51	1505	
71	2/11/1999	1.42	5.67	1542	
72	3/8/1999	0.66	4.91	1550	
73	4/10/1999	0.5	4.75	1223	
74	5/11/1999	0.88	5.13	1240	
75	6/6/1999	1.36	5.61	1632	
76	7/2/1999	1.73	5.98	1412	
77	8/1/1999	2.14	6.39	1340	
78	8/31/1999	2.52	6.77	1434	
79	10/3/1999	2.8	7.05	1002	
80	11/3/1999	2.94	7.19	1232	
81	12/6/1999	2.9	7.15	1616	
82	1/6/2000	2.84	7.09	1555	
83	2/6/2000	2.15	6.4	1445	
84	3/12/2000	0.95	5.2	1326	
85	4/6/2000	1.22	5.47	1610	
86	5/8/2000	1.38	5.63	1220	
87	6/2/2000	1.57	5.82	1351	
88	7/5/2000	1.94	6.19	1347	
89	7/29/2000	2.27	6.52	950	
90	8/31/2000	2.89	7.14	1125	
91	10/3/2000	3.39	7.64	1514	
92	10/30/2000	3.55	7.8	1203	
93	11/27/2000	3.58	7.83	1438	
94	1/2/2001	3.49	7.74	1525	
95	4/4/2001	2.92	7.17	1314	
96	4/30/2001	2.76	7.01	1111	
97	6/2/2001	2.9	7.15	1051	
98	8/29/2001	4.73	8.98	1504	
99	10/2/2001	5.55	9.8	958	
100	11/2/2001	5.94	10.19	1401	
101	12/4/2001	5.87	10.12	1137	
102	1/2/2002	5.71	9.96	1244	

	A	B	C	D	E
103	1/30/2002	5.43	9.68	1447	
104	2/23/2002	5.23	9.48	827	
105	4/2/2002	4.86	9.11	1252	
106	5/3/2002	4.63	8.88	1002	
107	6/5/2002	4.56	8.81	1544	
108	7/2/2002	4.82	9.07	1504	
109	8/5/2002	5.5	9.75	1105	
110	9/3/2002	6.22	10.47	1215	
111	10/3/2002	6.86	11.11	1502	
112	11/1/2002	7.26	11.51	1410	
113	12/3/2002	7.36	11.61	1157	
114	12/30/2002	7.13	11.38	1124	
115	1/30/2003	6.76	11.01	1254	
116	3/1/2003	6.37	10.62	1220	
117	3/31/2003	6.04	10.29	903	
118	4/30/2003	5.63	9.88	1116	
119	6/3/2003	5.45	9.7	0	
120	6/30/2003	5.55	9.8	0	
121	7/30/2003	6.15	10.4	0	
122	9/3/2003	6.85	11.1	0	
123	10/1/2003	7.65	11.9	0	
124	11/1/2003	8.05	12.3	0	
125	12/1/2003	8.25	12.5	0	
126	1/1/2004				snow storm
127	1/31/2004	7.65	11.9	0	
128	2/29/2004	7.25	11.5	0	
129	4/1/2004	6.75	11	0	
130	4/29/2004	6.55	10.8	0	
131	5/31/2004	6.35	10.6	0	
132	6/29/2004	6.55	10.8	0	
133	7/30/2004	7.15	11.4	0	
134	8/31/2004	5.95	10.2	1045	
135	9/30/2004	8.65	12.9	1043	
136	11/2/2004	9.05	13.3	1022	
137	12/3/2004	9.25	13.5	1039	
138	1/1/2005				deep snow cover
139	2/1/2005	10.75	15	1020	
140	3/3/2005	8.25	12.5	1040	
141	4/2/2005	7.35	11.6	1353	
142	4/28/2005	6.85	11.1	756	
143					
144					
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146					
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148					
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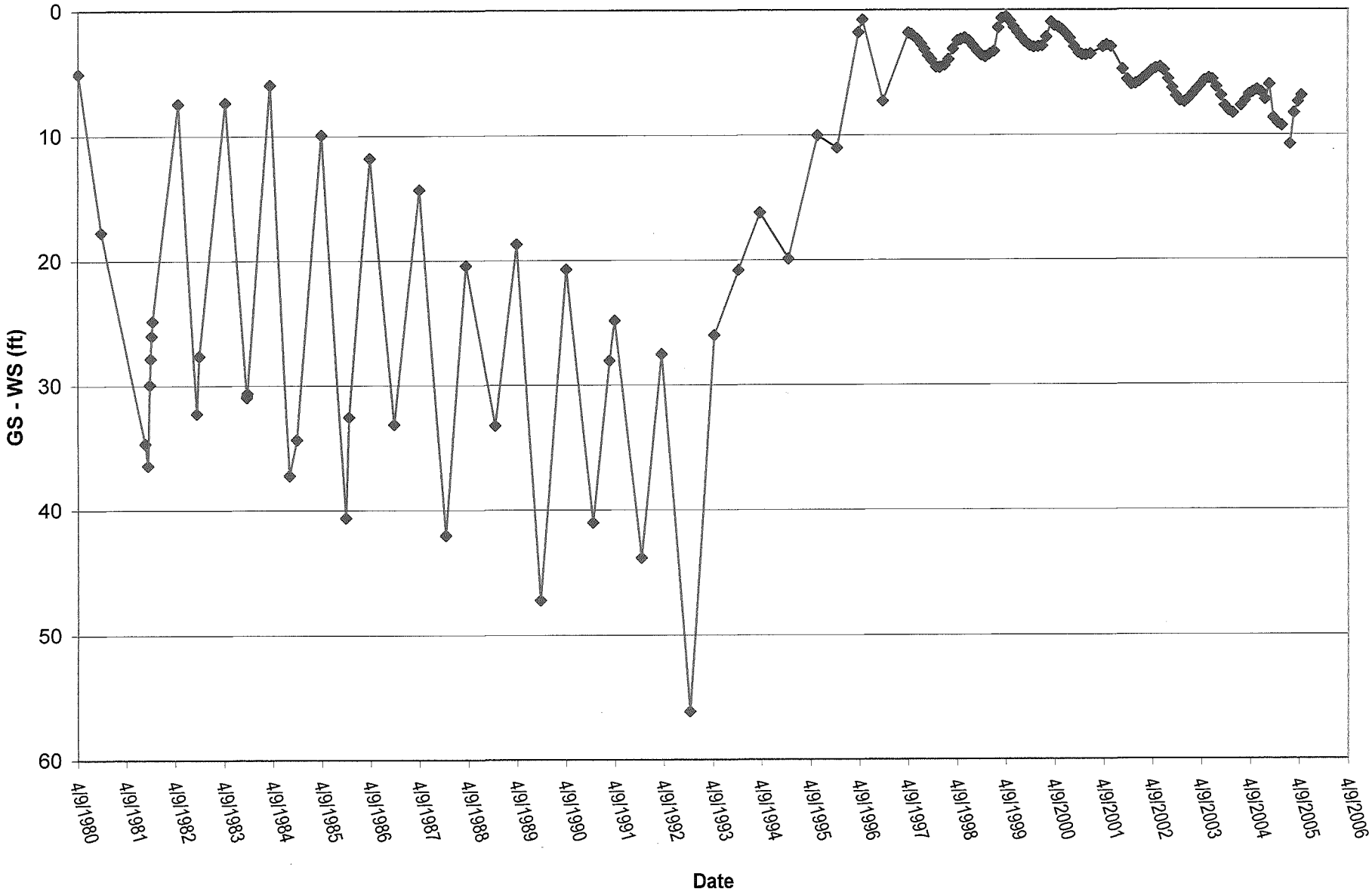
152					
153					

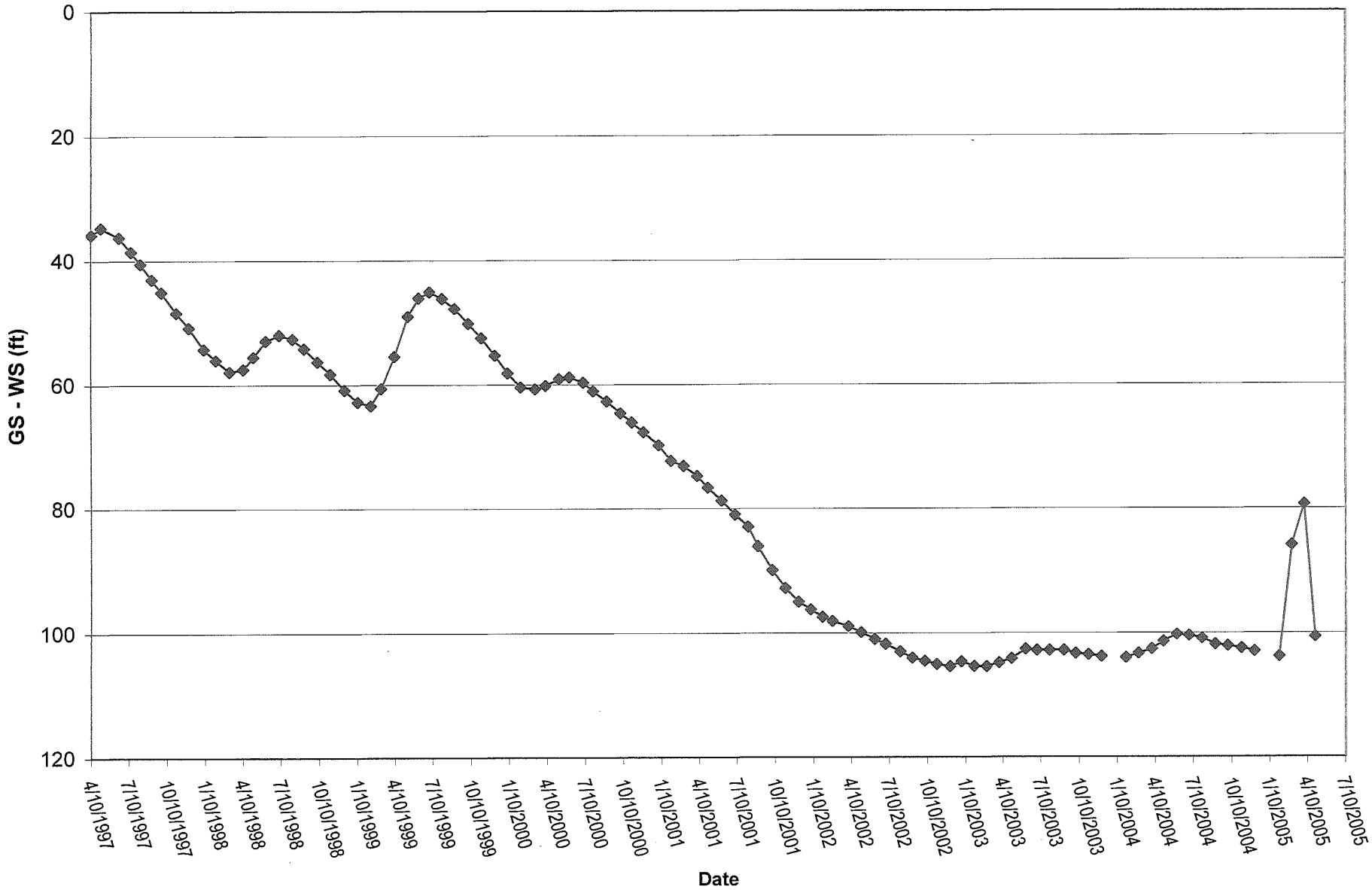
22N16E17C01M



	A	B	C	D	E
1	**W 2**	**RP= 1.19 ft**			**23N14E22M02M**
2	Murray				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	4/10/1997	35.78	36.97	1419	**aka RV21**
5	5/3/1997	34.69	35.88	1147	
6	6/16/1997	36.23	37.42	0	
7	7/15/1997	38.52	39.71	0	
8	8/7/1997	40.47	41.66	1000	
9	9/3/1997	42.98	44.17	1718	
10	9/26/1997	45.04	46.23	1132	
11	11/1/1997	48.35	49.54	837	
12	12/1/1997	50.78	51.97	835	
13	1/6/1998	54.19	55.38	1033	
14	2/4/1998	55.99	57.18	802	
15	3/9/1998	57.85	59.04	1348	
16	4/11/1998	57.44	58.63	1219	
17	5/5/1998	55.48	56.67	1125	
18	6/4/1998	52.9	54.09	744	
19	7/6/1998	51.96	53.15	1150	
20	8/7/1998	52.58	53.77	929	
21	9/4/1998	54.12	55.31	1102	
22	10/6/1998	56.25	57.44	933	
23	11/6/1998	58.22	59.41	1100	Snowing
24	12/10/1998	60.77	61.96	1248	
25	1/11/1999	62.7	63.89	1131	
26	2/11/1999	63.32	64.51	1250	
27	3/8/1999	60.56	61.75	1256	
28	4/9/1999	55.41	56.6	1149	
29	5/11/1999	48.99	50.18	1102	
30	6/6/1999	46.01	47.2	1426	
31	7/2/1999	45.05	46.24	1122	
32	8/1/1999	46.09	47.28	1002	
33	8/31/1999	47.71	48.9	1327	
34	10/3/1999	50.14	51.33	920	
35	11/3/1999	52.43	53.62	1057	
36	12/6/1999	55.26	56.45	1422	
37	1/6/2000	58.1	59.29	1411	
38	2/6/2000	60.35	61.54	1221	
39	3/12/2000	60.64	61.83	1047	
40	4/6/2000	60.12	61.31	1331	
41	5/8/2000	59.02	60.21	1328	
42	6/2/2000	58.78	59.97	1246	
43	7/5/2000	59.63	60.82	1112	
44	7/29/2000	60.99	62.18	813	
45	8/31/2000	62.63	63.82	1019	
46	10/3/2000	64.57	65.76	1248	
47	10/30/2000	66.04	67.23	851	
48	11/27/2000	67.57	68.76	1148	
49	1/2/2001	69.7	70.89	1339	
50	2/1/2001	72.26	73.45	1211	
51	3/3/2001	73.07	74.26	1348	

	A	B	C	D	E
52	4/4/2001	74.66	75.85	1057	
53	4/30/2001	76.53	77.72	1010	
54	6/2/2001	78.64	79.83	825	
55	7/4/2001	80.87	82.06	949	
56	8/5/2001	82.85	84.04	1206	
57	8/29/2001	85.97	87.16	1619	
58	10/2/2001	89.82	91.01	1102	
59	11/2/2001	92.72	93.91	1518	
60	12/4/2001	94.92	96.11	1321	
61	1/2/2002	96.13	97.32	1353	
62	1/30/2002	97.34	98.53	1600	
63	2/23/2002	98	99.19	927	
64	4/2/2002	98.84	100.03	1137	
65	5/3/2002	99.83	101.02	1108	
66	6/5/2002	100.93	102.12	1446	
67	7/1/2002	101.72	102.91	1851	
68	8/5/2002	102.91	104.1	1005	
69	9/3/2002	103.92	105.11	1118	
70	10/3/2002	104.43	105.62	1622	
71	11/1/2002	104.95	106.14	1600	
72	12/3/2002	105.29	106.48	1420	
73	12/30/2002	104.53	105.72	1405	
74	1/30/2003	105.28	106.47	1526	
75	3/1/2003	105.29	106.48	1429	
76	3/31/2003	104.72	105.91	1049	
77	4/30/2003	104.02	105.21	1357	
78	6/3/2003	102.51	103.7	0	
79	6/30/2003	102.71	103.9	0	
80	7/30/2003	102.71	103.9	0	
81	9/3/2003	102.71	103.9	0	
82	10/1/2003	103.21	104.4	0	
83	11/1/2003	103.41	104.6	0	
84	12/2/2003	103.71	104.9	0	
85	1/1/2004				snow storm
86	1/30/2004	103.91	105.1	0	
87	2/29/2004	103.21	104.4	0	
88	4/1/2004	102.51	103.7	0	
89	4/29/2004	101.31	102.5	0	
90	5/31/2004	100.21	101.4	0	
91	6/29/2004	100.41	101.6	0	
92	7/30/2004	100.81	102	0	
93	8/31/2004	101.81	103	1010	
94	9/30/2004	102.01	103.2	1247	
95	11/2/2004	102.41	103.6	1405	
96	12/3/2004	102.91	104.1	1226	
97	1/1/2005				deep snow cover
98	2/1/2005	103.71	104.9	1332	
99	3/3/2005	85.81	87	1235	
100	4/2/2005	79.31	80.5	1127	
101	4/28/2005	100.61	101.8	918	

23N14E22M02M

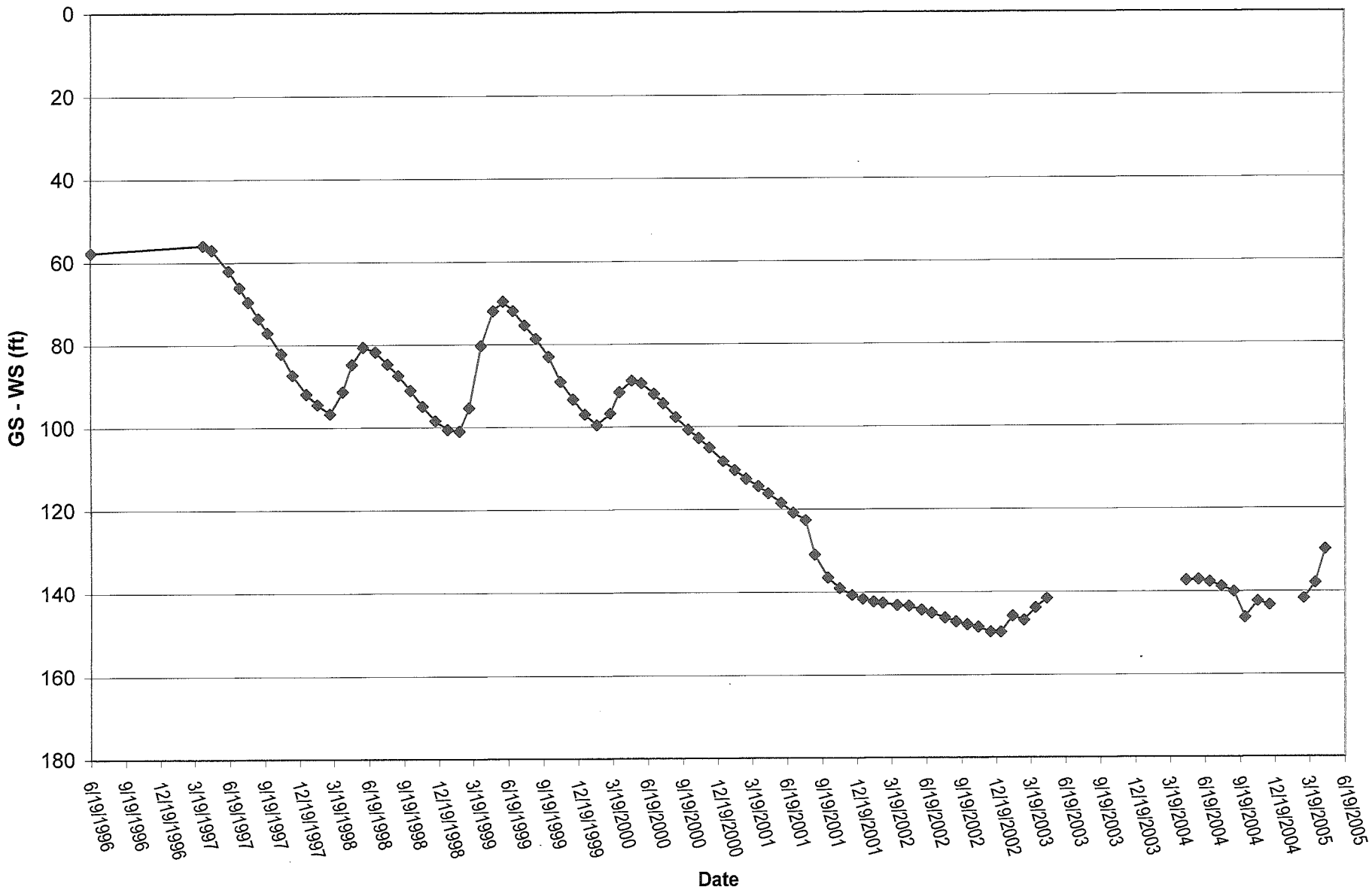


	A	B	C	D	E
1	**W 3**	**RP= 0.47 ft**			**23N14E22G05M**
2	Williams				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	6/19/1996	57.63	58.1	920	**aka RV15A**
5	4/10/1997	55.92	56.39	1430	
6	5/3/1997	56.96	57.43	1154	
7	6/16/1997	61.92	62.39	0	
8	7/15/1997	66.08	66.55	0	
9	8/7/1997	69.54	70.01	1006	
10	9/3/1997	73.54	74.01	1727	
11	9/26/1997	77.03	77.5	1139	
12	11/1/1997	82.04	82.51	844	
13	12/1/1997	87.22	87.69	845	
14	1/6/1998	91.8	92.27	1056	
15	2/4/1998	94.3	94.77	809	
16	3/9/1998	96.58	97.05	1359	
17	4/11/1998	91.2	91.67	1226	
18	5/5/1998	84.61	85.08	1133	
19	6/4/1998	80.57	81.04	751	
20	7/6/1998	81.64	82.11	1158	
21	8/7/1998	84.53	85	940	
22	9/4/1998	87.35	87.82	1113	
23	10/6/1998	90.9	91.37	940	
24	11/6/1998	94.74	95.21	1112	
25	12/10/1998	98.3	98.77	1256	
26	1/11/1999	100.46	100.93	1142	
27	2/11/1999	100.83	101.3	1303	
28	3/8/1999	95.19	95.66	1305	
29	4/9/1999	80.28	80.75	1156	
30	5/11/1999	71.84	72.31	1109	
31	6/6/1999	69.52	69.99	1434	
32	7/2/1999	71.78	72.25	1129	
33	8/1/1999	75.27	75.74	1012	
34	8/31/1999	78.58	79.05	1335	
35	10/3/1999	82.88	83.35	928	
36	11/3/1999	88.98	89.45	1104	
37	12/6/1999	93.21	93.68	1429	
38	1/6/2000	96.84	97.31	1419	
39	2/6/2000	99.44	99.91	1230	
40	3/12/2000	96.62	97.09	1055	
41	4/6/2000	91.48	91.95	1339	
42	5/8/2000	88.73	89.2	1336	
43	6/2/2000	89.34	89.81	1253	
44	7/5/2000	91.89	92.36	1121	
45	7/29/2000	94.19	94.66	821	
46	8/31/2000	97.51	97.98	1026	
47	10/3/2000	100.59	101.06	1255	
48	10/30/2000	102.66	103.13	859	
49	11/27/2000	104.89	105.36	1158	
50	1/2/2001	108.26	108.73	1349	
51	2/1/2001	110.45	110.92	1222	

	A	B	C	D	E
52	3/3/2001	112.53	113	1402	
53	4/4/2001	114.32	114.79	1108	
54	4/30/2001	116.05	116.52	1021	
55	6/2/2001	118.35	118.82	835	
56	7/4/2001	120.76	121.23	959	
57	8/5/2001	122.52	122.99	1215	
58	8/29/2001	130.8	131.27	1610	
59	10/2/2001	136.38	136.85	1111	
60	11/2/2001	138.97	139.44	1527	
61	12/4/2001	140.6	141.07	1307	
62	1/2/2002	141.55	142.02	1403	
63	1/30/2002	142.27	142.74	1549	
64	2/23/2002	142.56	143.03	918	
65	4/2/2002	143.09	143.56	1126	
66	5/3/2002	143.31	143.78	1102	
67	6/5/2002	144.21	144.68	1426	
68	7/1/2002	144.97	145.44	1836	
69	8/5/2002	146.11	146.58	940	
70	9/3/2002	147.06	147.53	1109	
71	10/3/2002	147.74	148.21	1609	
72	11/1/2002	148.32	148.79	1550	
73	12/3/2002	149.51	149.98	1410	
74	12/30/2002	149.56	150.03	1340	
75	1/30/2003	145.72	146.19	1507	
76	3/1/2003	146.73	147.2	1418	
77	3/31/2003	143.73	144.2	1030	
78	4/30/2003	141.51	141.98	1340	
79	6/3/2003			0	measured wrong well
80	6/30/2003			0	measured wrong well
81	7/30/2003			0	measured wrong well
82	9/3/2003			0	measured wrong well
83	10/1/2003			0	measured wrong well
84	11/1/2003			0	measured wrong well
85	12/2/2003			0	measured wrong well
86	1/1/2004				snow storm
87	1/30/2004			0	measured wrong well
88	2/29/2004			0	measured wrong well
89	4/1/2004			0	measured wrong well
90	4/29/2004	137.23	137.7	0	
91	5/31/2004	137.03	137.5	0	
92	6/29/2004	137.53	138	0	
93	7/30/2004	138.63	139.1	0	
94	8/31/2004	139.93	140.4	1015	
95	9/30/2004	146.23	146.7	1228	
96	11/2/2004	142.33	142.8	1358	
97	12/3/2004	143.23	143.7	1215	
98	1/1/2005				deep snow cover - skip measurment this month
99	2/1/2005				deep snow cover - couldn't find well under snow
100	3/3/2005	141.63	142.1	1225	
101	4/2/2005	137.83	138.3	1105	
102	4/28/2005	129.73	130.2	903	

W 3	RP= 0.47 ft		23N14E22G05M	
Williams				
Date	GS to WS	RP to WS	Time	Notes
6/19/1996	57□63	58□1	920	aka RV15A
4/10/1997	55□92	56□39	1430	
5/3/1997	56□96	57□43	1154	
6/16/1997	61□92	62□39	0	
7/15/1997	66□08	66□55	0	
8/7/1997	69□54	70□01	1006	
9/3/1997	73□54	74□01	1727	
9/26/1997	77□03	77□5	1139	
11/1/1997	82□04	82□51	844	
12/1/1997	87□22	87□69	845	
1/6/1998	91□8	92□27	1056	
2/4/1998	94□3	94□77	809	
3/9/1998	96□58	97□05	1359	
4/11/1998	91□2	91□67	1226	
5/5/1998	84□61	85□08	1133	
6/4/1998	80□57	81□04	751	
7/6/1998	81□64	82□11	1158	
8/7/1998	84□53	85	940	
9/4/1998	87□35	87□82	1113	
10/6/1998	90□9	91□37	940	
11/6/1998	94□74	95□21	1112	
12/10/1998	98□3	98□77	1256	
1/11/1999	100□46	100□93	1142	
2/11/1999	100□83	101□3	1303	
3/8/1999	95□19	95□66	1305	
4/9/1999	80□28	80□75	1156	
5/11/1999	71□84	72□31	1109	
6/6/1999	69□52	69□99	1434	
7/2/1999	71□78	72□25	1129	
8/1/1999	75□27	75□74	1012	
8/31/1999	78□58	79□05	1335	
10/3/1999	82□88	83□35	928	
11/3/1999	88□98	89□45	1104	
12/6/1999	93□21	93□68	1429	
1/6/2000	96□84	97□31	1419	
2/6/2000	99□44	99□91	1230	
3/12/2000	96□62	97□09	1055	
4/6/2000	91□48	91□95	1339	
5/8/2000	88□73	89□2	1336	
6/2/2000	89□34	89□81	1253	
7/5/2000	91□89	92□36	1121	
7/29/2000	94□19	94□66	821	
8/31/2000	97□51	97□98	1026	
10/3/2000	100□59	101□06	1255	
10/30/2000	102□66	103□13	859	
11/27/2000	104□89	105□36	1158	
1/2/2001	108□26	108□73	1349	
2/1/2001	110□45	110□92	1222	
3/3/2001	112□53	113	1402	
4/4/2001	114□32	114□79	1108	
4/30/2001	116□05	116□52	1021	
6/2/2001	118□35	118□82	835	
7/4/2001	120□76	121□23	959	
8/5/2001	122□52	122□99	1215	
8/29/2001	130□8	131□27	1610	
10/2/2001	136□38	136□85	1111	
11/2/2001	138□97	139□44	1527	
12/4/2001	140□6	141□07	1307	
1/2/2002	141□55	142□02	1403	
1/30/2002	142□27	142□74	1549	
2/23/2002	142□56	143□03	918	
4/2/2002	143□09	143□56	1126	
5/3/2002	143□31	143□78	1102	
6/5/2002	144□21	144□68	1426	
7/1/2002	144□97	145□44	1836	
8/5/2002	146□11	146□58	940	
9/3/2002	147□06	147□53	1109	
10/3/2002	147□74	148□21	1609	
11/1/2002	148□32	148□79	1550	
12/3/2002	149□51	149□98	1410	
12/30/2002	149□56	150□03	1340	
1/30/2003	145□72	146□19	1507	
3/1/2003	146□73	147□2	1418	
3/31/2003	143□73	144□2	1030	
4/30/2003	141□51	141□98	1340	
6/3/2003			0	measured wrong well
6/30/2003			0	measured wrong well
7/30/2003			0	measured wrong well
9/3/2003			0	measured wrong well
10/1/2003			0	measured wrong well
11/1/2003			0	measured wrong well
12/2/2003			0	measured wrong well
1/1/2004				snow storm
1/30/2004			0	measured wrong well
2/29/2004			0	measured wrong well
4/1/2004			0	measured wrong well
4/29/2004	137□23	137□7	0	
5/31/2004	137□03	137□5	0	
6/29/2004	137□53	138	0	
7/30/2004	138□63	139□1	0	
8/31/2004	139□93	140□4	1015	
9/30/2004	146□23	146□7	1228	
11/2/2004	142□33	142□8	1358	
12/3/2004	143□23	143□7	1215	
1/1/2005				deep snow cover - skip measurment this month
2/1/2005				deep snow cover - couldn't find well under snow
3/3/2005	141□63	142□1	1225	
4/2/2005	137□83	138□3	1105	
4/28/2005	129□73	130□2	903	
5/31/2005		134□2	1324	
6/29/2005		135□4	1241	
7/29/2005		137□9	1141	
9/2/2005		138□9	1304	
9/29/2005		139□7	12□51	
11/1/2005		140□6	1557	
11/30/2006		141□7	1241	
1/5/2006		139□8	1310	

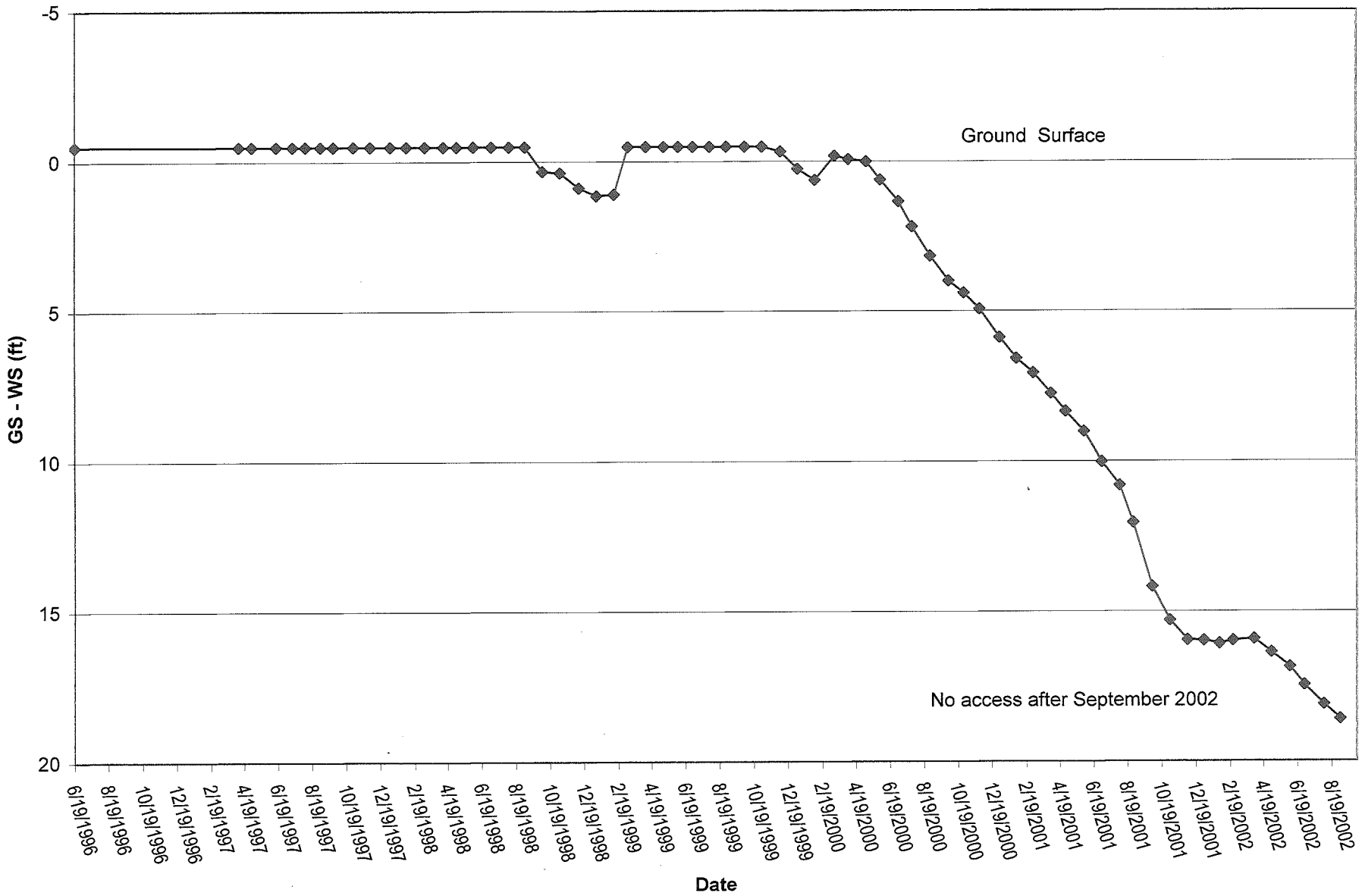
23N14E22G05M



	A	B	C	D	E
1	**W 4**	**RP= 0.50 ft**			**23N14E21Q0M**
2	Klivens				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	6/19/1996	-0.5	0	940	flowing **aka RV23**
5	4/10/1997	-0.5	0	1400	flowing
6	5/3/1997	-0.5	0	1140	flowing
7	6/16/1997	-0.5	0		flowing
8	7/15/1997	-0.5	0		flowing
9	8/7/1997	-0.5	0	950	flowing
10	9/3/1997	-0.5	0	1710	flowing
11	9/26/1997	-0.5	0	1124	flowing
12	11/1/1997	-0.5	0	830	flowing
13	12/1/1997	-0.5	0	825	flowing
14	1/6/1998	-0.5	0	1020	flowing
15	2/4/1998	-0.5	0	750	flowing
16	3/9/1998	-0.5	0	1338	flowing
17	4/11/1998	-0.5	0	1209	flowing/snowing
18	5/5/1998	-0.5	0	1114	flowing
19	6/4/1998	-0.5	0	755	flowing
20	7/6/1998	-0.5	0	1142	flowing
21	8/7/1998	-0.5	0	920	flowing
22	9/4/1998	-0.5	0	1050	flowing
23	10/6/1998	0.32	0.82	925	
24	11/6/1998	0.37	0.87	1118	snowing
25	12/10/1998	0.88	1.38	1240	
26	1/11/1999	1.14	1.64	1123	
27	2/11/1999	1.09	1.59	1158	
28	3/8/1999	-0.5	0	1247	flowing
29	4/9/1999	-0.5	0	1140	flowing
30	5/11/1999	-0.5	0	1053	flowing
31	6/6/1999	-0.5	0	1417	flowing
32	7/2/1999	-0.5	0	1115	flowing
33	8/1/1999	-0.5	0	953	flowing
34	8/31/1999	-0.5	0	1316	flowing
35	10/3/1999	-0.5	0	911	flowing
36	11/3/1999	-0.5	0	1049	flowing
37	12/6/1999	-0.34	0.16	1414	
38	1/6/2000	0.24	0.74	1402	
39	2/6/2000	0.62	1.12	1212	
40	3/12/2000	-0.19	0.31	1039	
41	4/6/2000	-0.08	0.42	1321	
42	5/8/2000	0	0.5	1319	
43	6/2/2000	0.61	1.11	1241	
44	7/5/2000	1.33	1.83	1102	
45	7/29/2000	2.18	2.68	808	
46	8/31/2000	3.15	3.65	1012	
47	10/3/2000	3.98	4.48	1234	
48	10/30/2000	4.39	4.89	845	
49	11/27/2000	4.93	5.43	1133	
50	1/2/2001	5.87	6.37	1329	
51	2/1/2001	6.57	7.07	1202	

	A	B	C	D	E
52	3/3/2001	7.05	7.55	1339	
53	4/4/2001	7.73	8.23	1045	
54	4/30/2001	8.33	8.83	957	
55	6/2/2001	9	9.5	814	
56	7/4/2001	10.01	10.51	936	
57	8/5/2001	10.81	11.31	1156	
58	8/29/2001	12.03	12.53	1625	
59	10/2/2001	14.17	14.67	1051	
60	11/2/2001	15.29	15.79	1508	
61	12/4/2001	15.94	16.44	1257	
62	1/2/2002	15.96	16.46	1345	
63	1/30/2002	16.06	16.56	1542	
64	2/23/2002	15.96	16.46	943	
65	4/2/2002	15.91	16.41	1120	
66	5/3/2002	16.35	16.85	1054	
67	6/5/2002	16.84	17.34	1418	
68	7/1/2002	17.44	17.94	1827	
69	8/5/2002	18.09	18.59	918	
70	9/3/2002	18.58	19.08	1102	
71	10/3/2002				no access dedicated pump installed

23N14E21Q01M

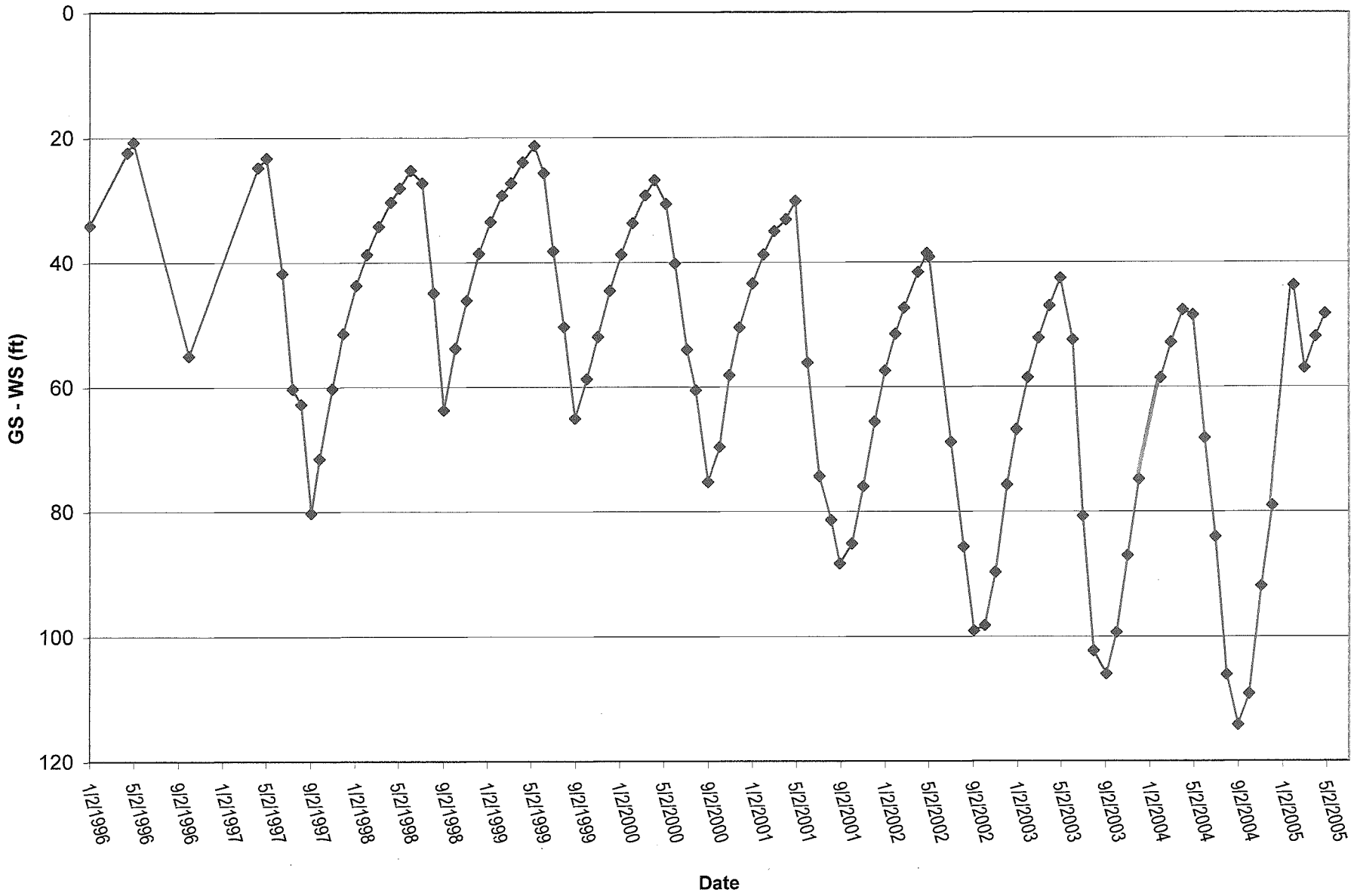


	A	B	C	D	E
1	**W 5**	**RP= 1.07 ft**			**23N15E36H02M**
2	D&S Ranch				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	1/2/1996	34.03	35.1	1345	**aka Solar**
5	4/14/1996	22.33	23.4	900	
6	5/1/1996	20.68	21.75	808	
7	10/2/1996	54.93	56	800	
8	4/10/1997	24.76	25.83	1506	
9	5/3/1997	23.25	24.32	1217	
10	6/16/1997	41.74	42.81	0	
11	7/15/1997	60.25	61.32	0	
12	8/7/1997	62.71	63.78	1027	
13	9/3/1997	80.19	81.26	1752	
14	9/26/1997	71.5	72.57	1206	
15	11/1/1997	60.18	61.25	905	
16	12/1/1997	51.42	52.49	905	
17	1/6/1998	43.68	44.75	1128	
18	2/4/1998	38.68	39.75	828	
19	3/9/1998	34.17	35.24	1421	
20	4/11/1998	30.3	31.37	1248	
21	5/5/1998	28.03	29.1	1157	
22	6/4/1998	25.2	26.27	812	
23	7/6/1998	27.22	28.29	1216	
24	8/7/1998	44.9	45.97	1259	
25	9/4/1998	63.68	64.75	1138	
26	10/6/1998	53.73	54.8	1000	
27	11/6/1998	46.08	47.15	1137	
28	10-Dec	38.53	39.6	1314	
29	1/11/1999	33.44	34.51	1202	
30	2/11/1999	29.24	30.31	1340	
31	3/8/1999	27.2	28.27	1336	
32	4/9/1999	23.9	24.97	1221	
33	5/11/1999	21.25	22.32	1129	
34	6/6/1999	25.64	26.71	1505	
35	7/2/1999	38.17	39.24	1148	
36	8/1/1999	50.34	51.41	1044	
37	8/31/1999	65.04	66.11	1355	
38	10/3/1999	58.68	59.75	946	
39	11/3/1999	51.93	53	1122	
40	12/6/1999	44.52	45.59	1452	
41	1/6/2000	38.71	39.78	1647	
42	2/6/2000	33.68	34.75	1250	
43	3/12/2000	29.22	30.29	1114	
44	4/6/2000	26.74	27.81	1403	
45	5/8/2000	30.62	31.69	740	
46	6/2/2000	40.15	41.22	1311	
47	7/5/2000	53.98	55.05	1140	
48	7/29/2000	60.48	61.55	840	
49	8/31/2000	75.17	76.24	1107	
50	10/3/2000	69.54	70.61	1329	
51	10/30/2000	58.09	59.16	1011	

	A	B	C	D	E
52	11/27/2000	50.46	51.53	1321	
53	1/2/2001	43.42	44.49	1415	
54	2/1/2001	38.73	39.8	1507	
55	3/3/2001	34.97	36.04	1426	
56	4/4/2001	33.1	34.17	1130	
57	4/30/2001	30.16	31.23	1146	
58	6/2/2001	56.04	57.11	912	
59	7/4/2001	74.27	75.34	1020	
60	8/5/2001	81.3	82.37	1136	
61	8/29/2001	88.25	89.32	1548	
62	10/2/2001	85.06	86.13	921	
63	11/2/2001	75.87	76.94	1440	
64	12/4/2001	65.55	66.62	1236	
65	1/2/2002	57.38	58.45	1318	
66	1/30/2002	51.48	52.55	1523	
67	2/23/2002	47.27	48.34	736	
68	4/2/2002	41.61	42.68	1523	
69	4/27/2002	38.55	39.62	725	
70	5/3/2002	39.13	40.2	1038	
71	7/2/2002	68.76	69.83	1538	
72	8/5/2002	85.55	86.62	1151	
73	9/3/2002	98.95	100.02	1138	
74	10/3/2002	98.1	99.17	1533	pumping
75	11/1/2002	89.6	90.67	1445	
76	12/3/2002	75.63	76.7	1255	
77	12/30/2002	66.82	67.89	1207	
78	1/30/2003	58.51	59.58	1346	
79	3/1/2003	52.17	53.24	1305	
80	3/31/2003	46.96	48.03	942	
81	4/30/2003	42.57	43.64	1145	
82	6/3/2003	52.43	53.5	0	
83	6/30/2003	80.63	81.7	0	
84	7/30/2003	102.23	103.3	0	
85	9/3/2003	105.93	107	0	
86	10/1/2003	99.23	100.3	0	
87	11/1/2003	86.93	88	0	
88	12/2/2003	74.73	75.8	0	
89	1/1/2004				snow storm
90	1/31/2004	58.53	59.6	0	
91	2/29/2004	52.83	53.9	0	
92	4/1/2004	47.63	48.7	0	
93	4/29/2004	48.43	49.5	0	
94	5/31/2004	68.13	69.2	0	
95	6/29/2004	83.93	85	0	
96	7/30/2004	106.03	107.1	0	
97	8/31/2004	114.13	115.2	1025	
98	9/30/2004	109.13	110.2	1210	
99	11/2/2004	91.83	92.9	1245	
100	12/3/2004	78.93	80	1141	
101	1/1/2005				deep snow cover
102	2/1/2005	43.73	44.8	1130	

	A	B	C	D	E
103	3/3/2005	56.93	58	1144	
104	4/2/2005	51.93	53	1214	
105	4/28/2005	48.23	49.3	836	

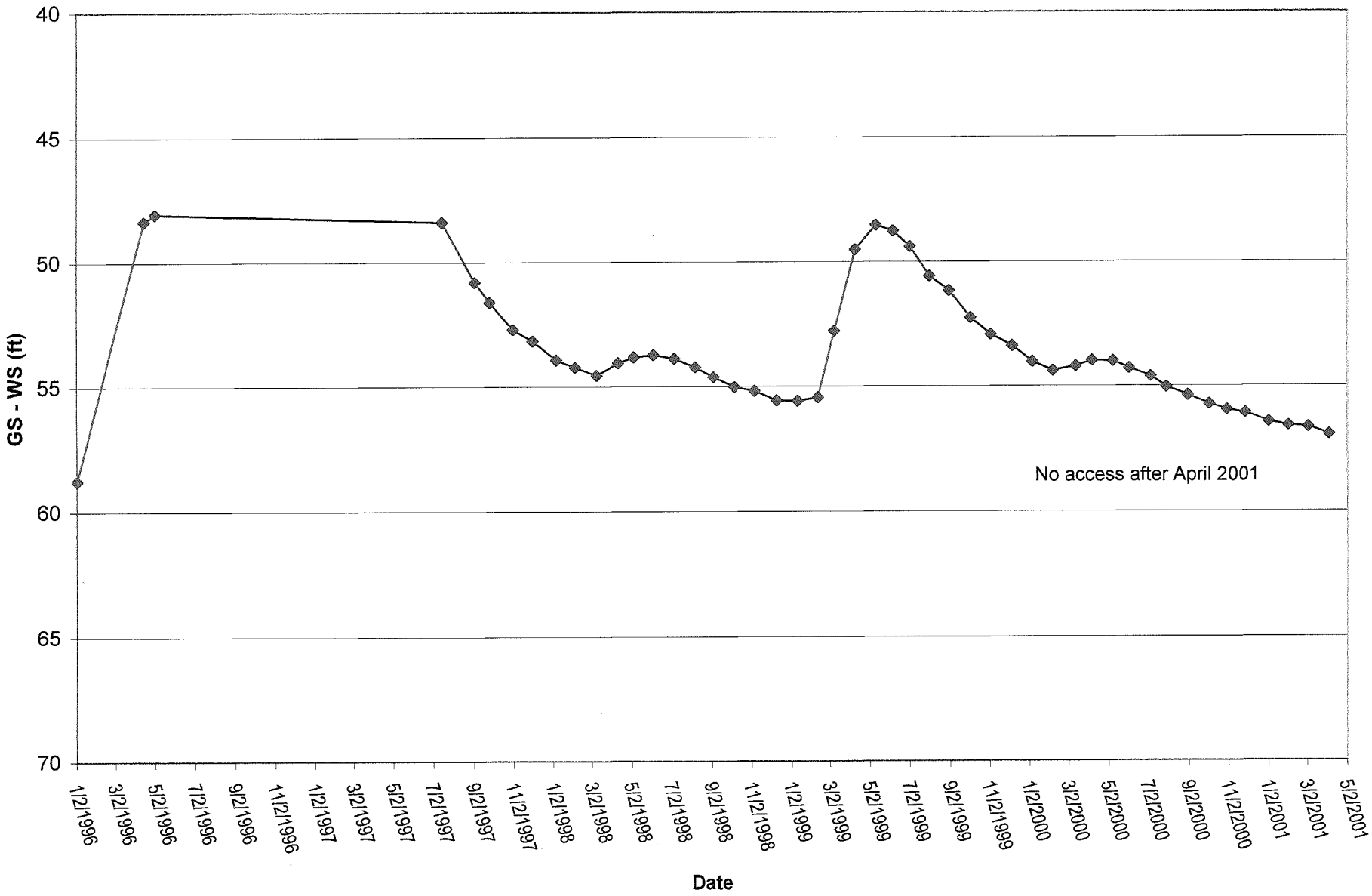
23N15E36H02M



	A	B	C	D	E
1	**W 6**	**RP= 1.95 ft**			**23N16E36A02M**
2	Black				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	1/2/1996	58.75	60.7	1250	**aka FLRE2**
5	4/14/1996	48.35	50.3	930	
6	5/1/1996	48.05	50	840	
7	7/15/1997	48.38	50.33	0	
8	9/3/1997	50.8	52.75	1835	
9	9/26/1997	51.6	53.55	1236	
10	11/1/1997	52.69	54.64	925	
11	12/1/1997	53.15	55.1	1530	
12	1/6/1998	53.91	55.86	1149	
13	2/4/1998	54.21	56.16	1830	
14	3/9/1998	54.54	56.49	1436	
15	4/11/1998	54.03	55.98	1305	
16	5/5/1998	53.8	55.75	1218	
17	6/4/1998	53.71	55.66	830	
18	7/6/1998	53.86	55.81	1328	
19	8/7/1998	54.21	56.16	1231	
20	9/4/1998	54.61	56.56	1350	
21	10/6/1998	55.01	56.96	1014	
22	11/6/1998	55.16	57.11	1235	
23	12/10/1998	55.54	57.49	1421	
24	1/11/1999	55.56	57.51	1228	
25	2/11/1999	55.43	57.38	1426	
26	3/8/1999	52.77	54.72	1352	
27	4/9/1999	49.5	51.45	1241	
28	5/11/1999	48.52	50.47	1212	
29	6/6/1999	48.76	50.71	1527	
30	7/2/1999	49.38	51.33	1325	
31	8/1/1999	50.57	52.52	1130	
32	8/31/1999	51.16	53.11	1408	
33	10/3/1999	52.24	54.19	1056	
34	11/3/1999	52.91	54.86	1135	
35	12/6/1999	53.38	55.33	1523	
36	1/6/2000	54	55.95	1611	
37	2/6/2000	54.36	56.31	1305	
38	3/12/2000	54.18	56.13	1126	
39	4/6/2000	53.96	55.91	1430	
40	5/8/2000	53.98	55.93	1135	
41	6/2/2000	54.27	56.22	1324	
42	7/5/2000	54.59	56.54	1211	
43	7/29/2000	55.03	56.98	922	
44	8/31/2000	55.36	57.31	1233	
45	10/3/2000	55.71	57.66	1345	
46	10/30/2000	55.93	57.88	1055	
47	11/27/2000	56.05	58	1402	
48	1/2/2001	56.42	58.37	1447	
49	2/1/2001	56.58	58.53	1544	
50	3/3/2001	56.63	58.58	1450	
51	4/4/2001	56.92	58.87	1215	

	A	B	C	D	E
52	4/30/2001				no access pump installed

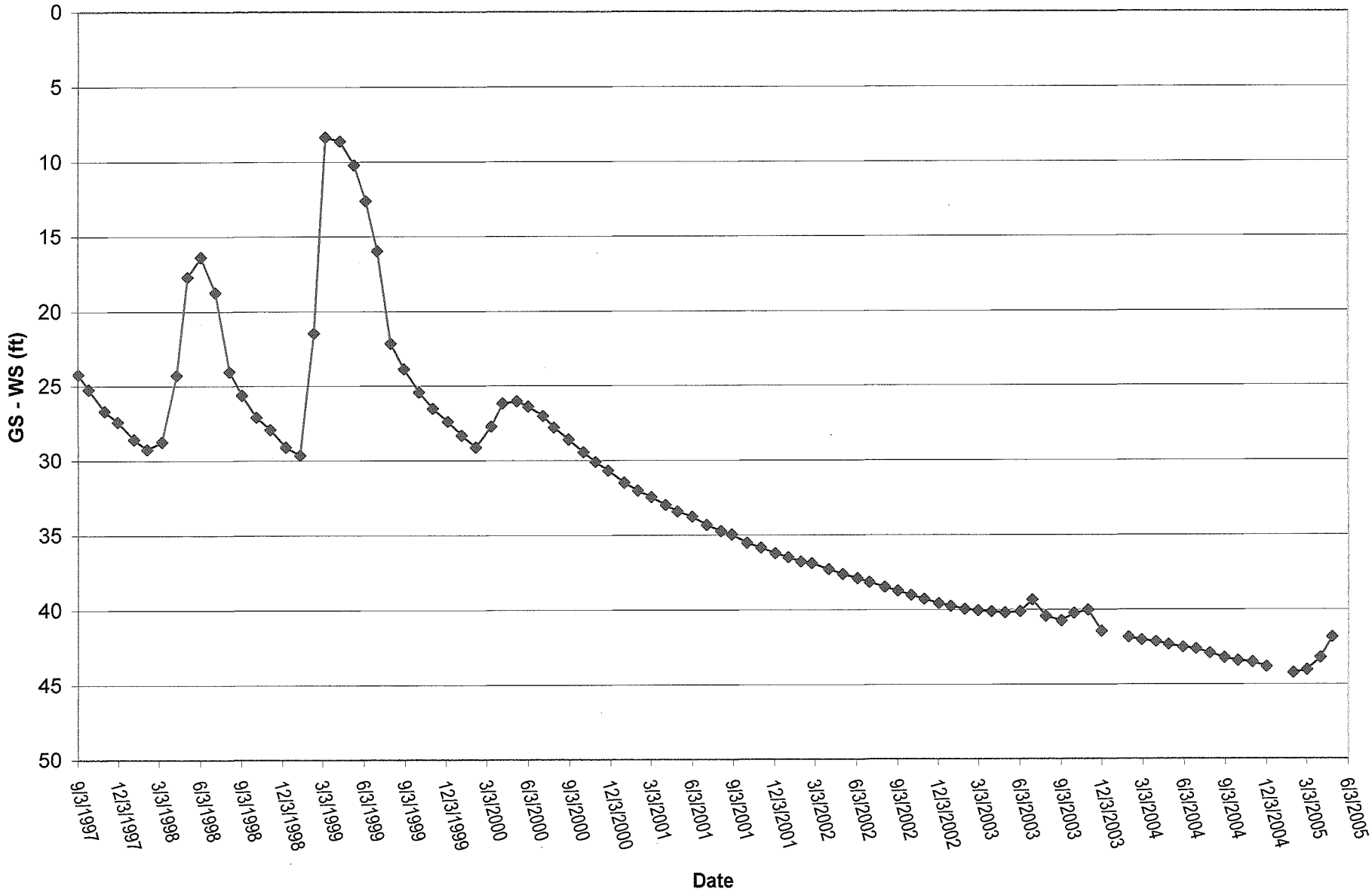
23N16E36A02M



	A	B	C	D	E
1	**W 7**	**RP= 0.6 ft**			**23N16E36H02M**
2	Copper				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	9/3/1997	24.2	24.8	1847	**aka SVS3**
5	9/26/1997	25.21	25.81	1247	
6	11/1/1997	26.65	27.25	935	
7	12/1/1997	27.38	27.98	1520	
8	1/6/1998	28.54	29.14	1159	
9	2/4/1998	29.21	29.81	1840	
10	3/9/1998	28.71	29.31	1444	
11	4/11/1998	24.26	24.86	1314	
12	5/5/1998	17.69	18.29	1225	
13	6/4/1998	16.35	16.95	840	
14	7/6/1998	18.73	19.33	1336	
15	8/7/1998	24.01	24.61	1240	
16	9/4/1998	25.6	26.2	1402	
17	10/6/1998	27.06	27.66	1020	
18	11/6/1998	27.9	28.5	1242	
19	12/10/1998	29.06	29.66	1429	
20	1/11/1999	29.6	30.2	1220	
21	2/11/1999	21.46	22.06	1437	
22	3/8/1999	8.32	8.92	1400	
23	4/9/1999	8.59	9.19	1248	
24	5/11/1999	10.19	10.79	1220	
25	6/6/1999	12.59	13.19	1534	
26	7/2/1999	15.95	16.55	1333	
27	8/1/1999	22.15	22.75	1115	
28	8/31/1999	23.84	24.44	1414	
29	10/3/1999	25.41	26.01	1102	
30	11/3/1999	26.49	27.09	1141	
31	12/6/1999	27.36	27.96	1531	
32	1/6/2000	28.3	28.9	1618	
33	2/6/2000	29.07	29.67	1312	
34	3/12/2000	27.71	28.31	1132	
35	4/6/2000	26.15	26.75	1437	
36	5/8/2000	26	26.6	1128	
37	6/2/2000	26.35	26.95	1331	
38	7/5/2000	26.98	27.58	1217	
39	7/29/2000	27.77	28.37	929	
40	8/31/2000	28.57	29.17	1246	
41	10/3/2000	29.42	30.02	1352	
42	10/30/2000	30.08	30.68	1104	
43	11/27/2000	30.67	31.27	1409	
44	1/2/2001	31.48	32.08	1500	
45	2/1/2001	31.99	32.59	1551	
46	3/3/2001	32.43	33.03	1456	
47	4/4/2001	32.96	33.56	1230	
48	4/30/2001	33.39	33.99	1130	
49	6/2/2001	33.74	34.34	1108	
50	7/4/2001	34.31	34.91	1035	
51	8/5/2001	34.72	35.32	1105	

	A	B	C	D	E
52	8/29/2001	34.94	35.54	1518	
53	10/2/2001	35.49	36.09	946	
54	11/2/2001	35.81	36.41	1415	
55	12/4/2001	36.18	36.78	1155	
56	1/2/2002	36.45	37.05	1258	
57	1/30/2002	36.75	37.35	1502	
58	2/23/2002	36.86	37.46	758	
59	4/2/2002	37.26	37.86	1448	
60	5/3/2002	37.58	38.18	1021	
61	6/5/2002	37.85	38.45	1558	
62	7/2/2002	38.11	38.71	1516	
63	8/5/2002	38.43	39.03	1125	
64	9/3/2002	38.7	39.3	1159	
65	10/3/2002	38.98	39.58	1518	
66	11/1/2002	39.25	39.85	1427	
67	12/3/2002	39.54	40.14	1218	
68	12/30/2002	39.74	40.34	1138	
69	1/30/2003	39.93	40.53	1314	
70	3/1/2003	40.03	40.63	1242	
71	3/31/2003	40.1	40.7	916	
72	4/30/2003	40.18	40.78	1129	
73	6/3/2003	40.1	40.7	0	
74	6/30/2003	39.3	39.9	0	
75	7/30/2003	40.4	41	0	
76	9/3/2003	40.7	41.3	0	
77	10/1/2003	40.2	40.8	0	
78	11/1/2003	40	40.6	0	
79	12/1/2003	41.4	42	0	
80	1/1/2004				snow storm
81	1/31/2004	41.8	42.4	0	
82	2/29/2004	42	42.6	0	
83	4/1/2004	42.1	42.7	0	
84	4/29/2004	42.3	42.9	0	
85	5/31/2004	42.5	43.1	0	
86	6/29/2004	42.6	43.2	0	
87	7/30/2004	42.9	43.5	0	
88	8/31/2004	43.2	43.8	1035	
89	9/30/2004	43.4	44	1110	
90	11/2/2004	43.5	44.1	1036	
91	12/3/2004	43.8	44.4	1123	
92	1/1/2005				deep snow cover
93	2/1/2005	44.2	44.8	1018	
94	3/3/2005	44	44.6	1049	
95	4/2/2005	43.2	43.8	1338	
96	4/28/2005	41.8	42.4	822	

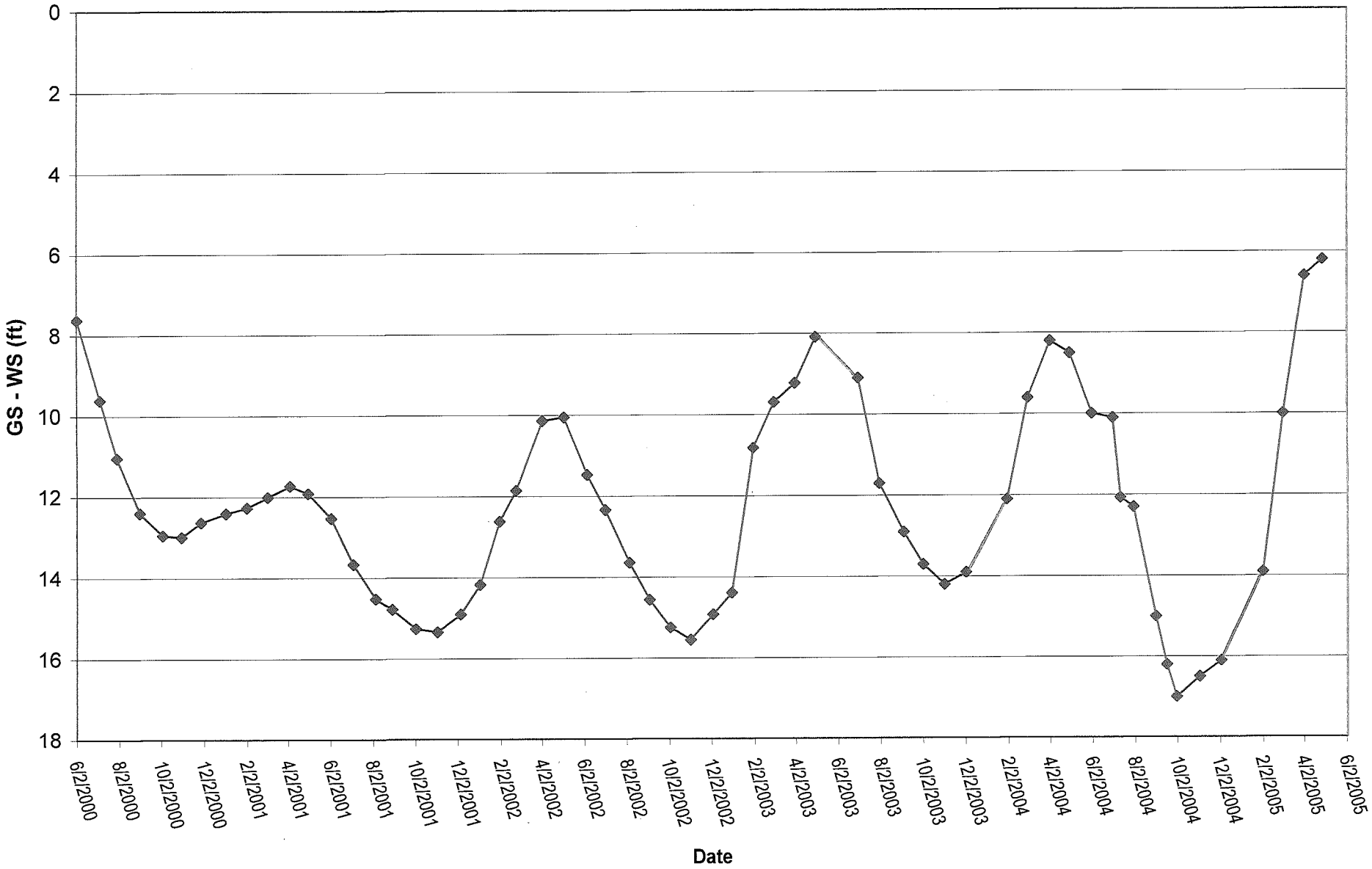
23N16E36H02M



	A	B	C	D	E
1	**W 8**	**RP= 0.91 ft**			**23N14E16Q01M**
2	Grizzly				
3	**Date**	**GS to WS**	**RP to WS**	**Time**	**Notes**
4	6/2/2000	7.62	8.53	1219	**aka GR3A**
5	7/5/2000	9.6	10.51	1459	
6	7/29/2000	11.04	11.95	757	
7	8/31/2000	12.39	13.3	1041	
8	10/3/2000	12.94	13.85	1216	
9	10/30/2000	12.98	13.89	834	
10	11/27/2000	12.62	13.53	1639	
11	1/2/2001	12.4	13.31	1244	
12	2/1/2001	12.26	13.17	1135	
13	3/3/2001	12	12.91	1319	
14	4/4/2001	11.72	12.63	1023	
15	4/30/2001	11.91	12.82	935	
16	6/2/2001	12.52	13.43	756	
17	7/4/2001	13.66	14.57	917	
18	8/5/2001	14.51	15.42	1251	
19	8/29/2001	14.77	15.68	1637	
20	10/2/2001	15.26	16.17	1126	
21	11/2/2001	15.34	16.25	1547	
22	12/5/2001	14.89	15.8	950	
23	1/2/2002	14.17	15.08	1445	
24	1/30/2002	12.61	13.52	1007	
25	2/23/2002	11.85	12.76	957	
26	4/2/2002	10.13	11.04	1040	
27	5/3/2002	10.04	10.95	1125	
28	6/5/2002	11.46	12.37	1401	
29	7/1/2002	12.33	13.24	1914	
30	8/5/2002	13.63	14.54	850	
31	9/3/2002	14.55	15.46	1041	
32	10/3/2002	15.24	16.15	827	
33	11/1/2002	15.54	16.45	1031	
34	12/3/2002	14.91	15.82	1436	
35	12/30/2002	14.38	15.29	1446	
36	1/30/2003	10.81	11.72	1555	
37	3/1/2003	9.68	10.59	951	
38	3/31/2003	9.21	10.12	1152	
39	4/30/2003	8.08	8.99	1413	
40	6/1/2003				couldn't locate well
41	6/30/2003	9.09	10	0	
42	7/30/2003	11.69	12.6	0	
43	9/3/2003	12.89	13.8	0	
44	10/1/2003	13.69	14.6	0	
45	11/1/2003	14.19	15.1	0	
46	12/2/2003	13.89	14.8	0	
47	1/1/2004				snow storm
48	1/30/2004	12.09	13	0	
49	2/29/2004	9.59	10.5	0	
50	4/1/2004	8.19	9.1	0	
51	4/29/2004	8.49	9.4	0	

	A	B	C	D	E
52	5/31/2004	9.99	10.9	0	
53	6/30/2004	10.09	11	0	
54	7/11/2004	12.06	12.97	1110	
55	7/30/2004	12.29	13.2	0	
56	8/31/2004	14.99	15.9	930	
57	9/16/2004	16.19	17.1	1618	
58	9/30/2004	16.99	17.9	1303	
59	11/2/2004	16.49	17.4	0	
60	12/3/2004	16.09	17	1248	
61	1/1/2005				deep snow cover
62	2/1/2005	13.89	14.8	1615	
63	3/2/2005	9.99	10.9	1704	
64	4/2/2005	6.59	7.5	1133	
65	4/28/2005	6.19	7.1	932	

23N14E16Q01M



Sierra Valley

Water Levels

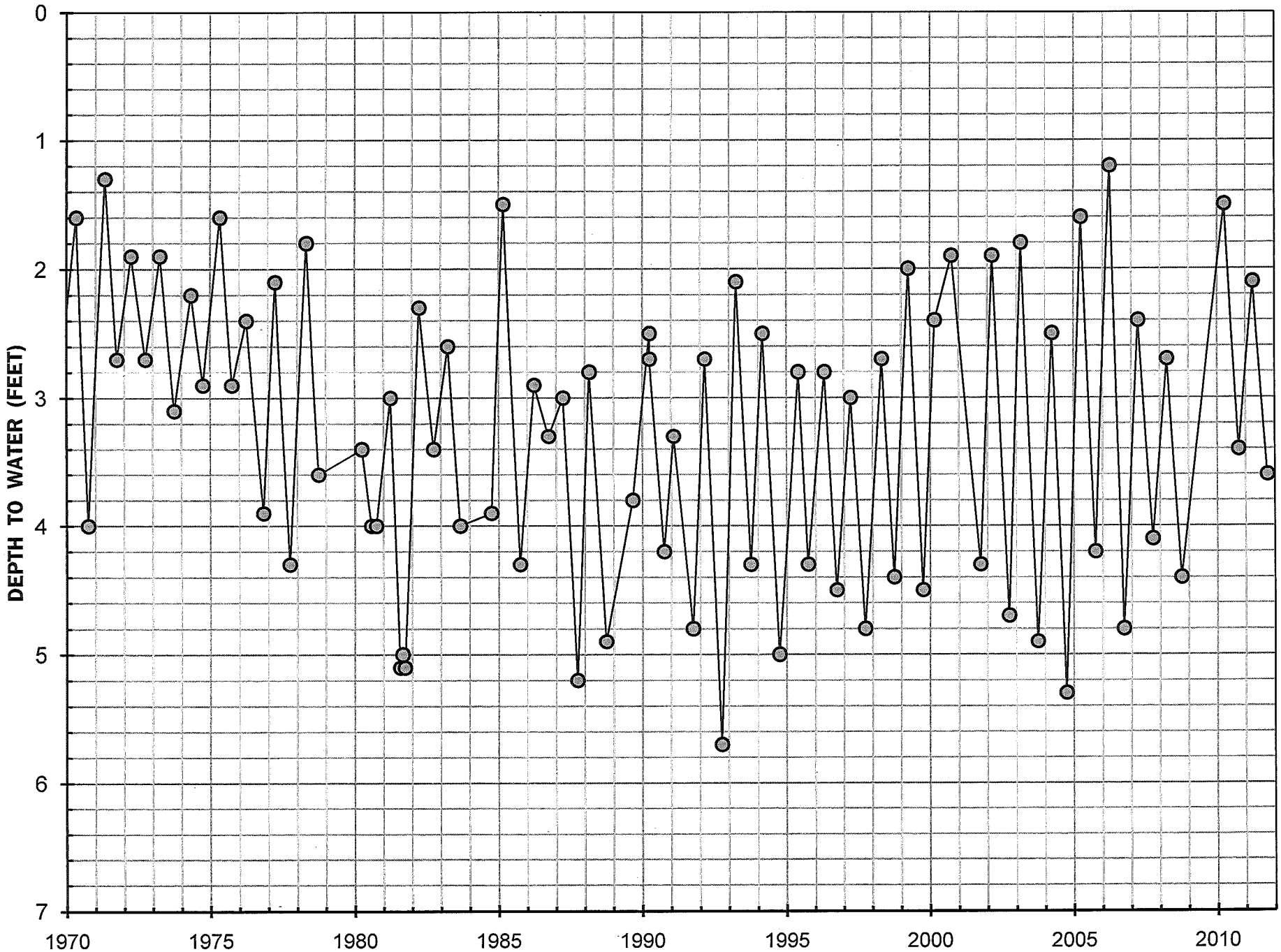
2011

WELL	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Dobbas MW3							
shallow	2'	2'	2'	2'	2'	2'	2'
intermediate	full	full	full	full	full	full	full
deep	flowing	flow	flow	flow	flow	flow	flow
Bradley MW4							
shallow	18.'	17.3'	17.2'	18.9'	19.8'	18.1'	18.8'
inter.	35.5'	35.5'	35.3'	35.5'	35.5'	35.3'	35.2'
deep	42.3'	42.'	41.9'	41.5'	41.9'	41.8'	42.'
Grizzly Golf W8	3.'	3.'	3.'	3.'	3.'	3.'	gate locked
Murray W2	78.3'	75.5'	75.2'	75.'	75.9'	76.8'	77.'
Williams W3	103.2'	102.'	103.8'	106.5'	109.3'	114.'	111.2'
Feather R. Land Trust MW6							
shallow	19.8'	21.'	32.7'	37.'	32.7'	24.4'	19.8'
deep	22.'	22.6'	26.'	30.'	33.'	31.5'	29.'
DS Ranch W5							
	62.'	85.'	88.5'	92.'	gate locked		
Elsie Potter MW5							
shallow	10.8'	11.7'	12.'	12.5'	12.6'	12.'	11.8'
inter	7.6'	8.1'	9.5'	9.3'	9.5'	9.'	9.8'
deep	4.'	4.3'	5.'	5.8'	6.2'	5.5'	5.5'
Shea Black W6	15.5'	21.5'	26.5'	32.'	33.5'	35.2'	36.5'
DS Ranch W1	10.1'	10.2'	11.'	11.5'	12.'	12.'	12.2'
Dotta MW 1d	27.5'	37.5'	70.'	90.'	65.'	44.'	36.'
Dotta MW 1s	19.3'	19.3'	19.'	19.5'	19.5'	19.5'	19.6'

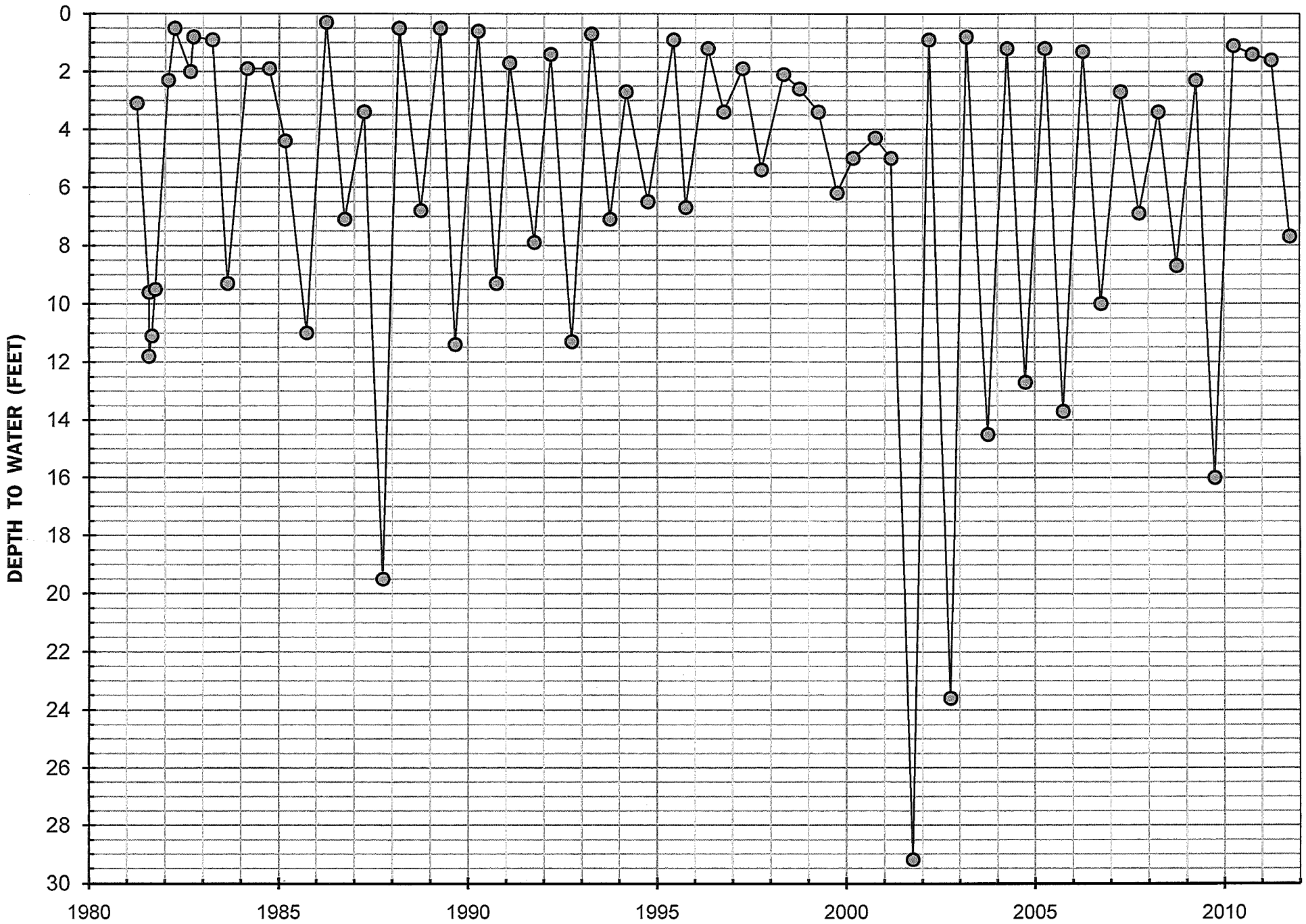
	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Sanford MW2							
shallow	7.1'	7.'	8.'	8.5'	9.'	8.5'	9.'
Inter	4.'	3.6'	4.1'	4.5'	5.'	5.'	6.5'
deep	1.'	1.'	1.'	1.'	1.'	1.2'	1.5.'

APPENDIX C

LONG-TERM WATER-LEVEL HYDROGRAPHS



WATER-LEVEL HYDROGRAPHS FOR WELL T.20N./R.14E.-13Q2



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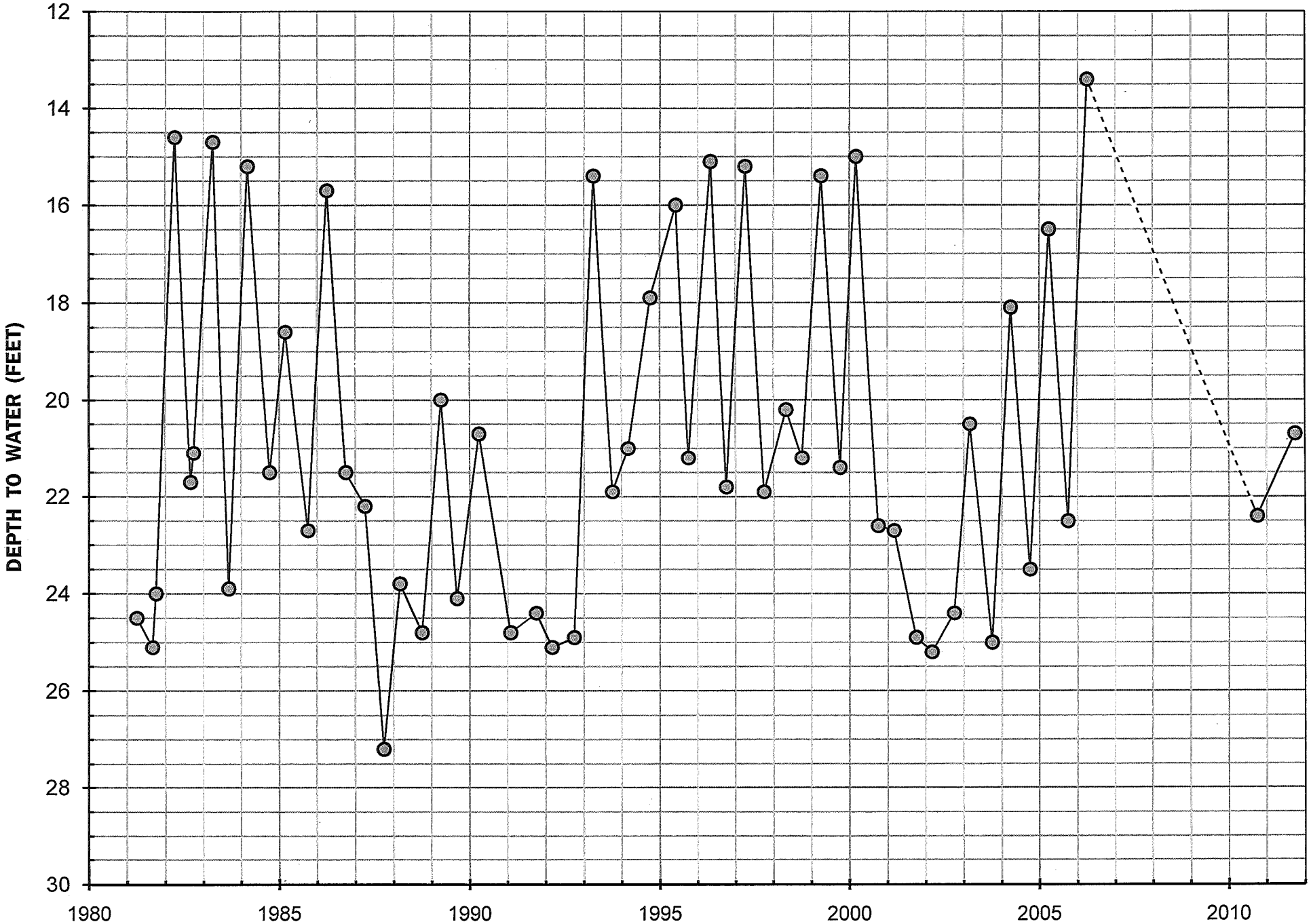

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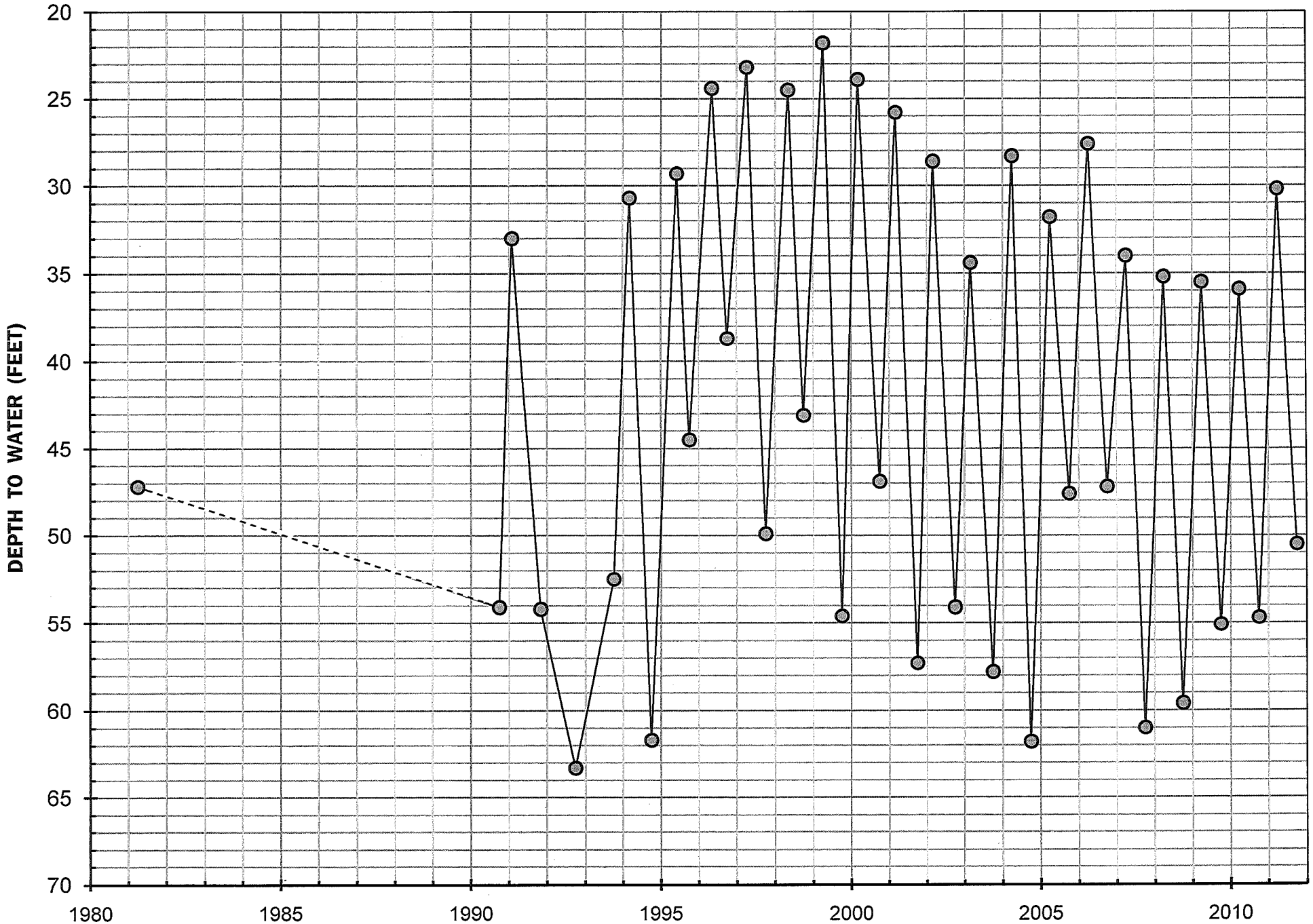

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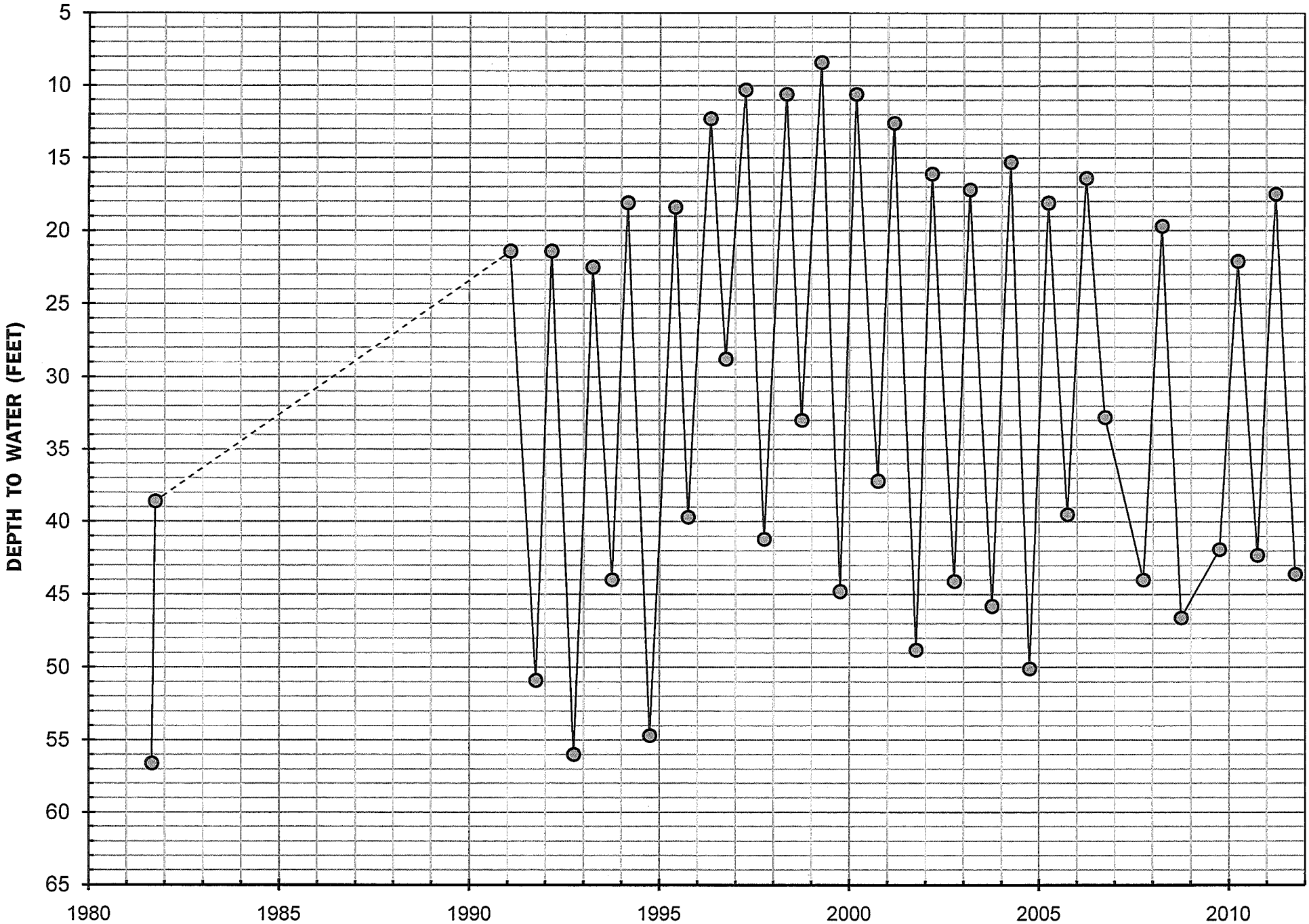

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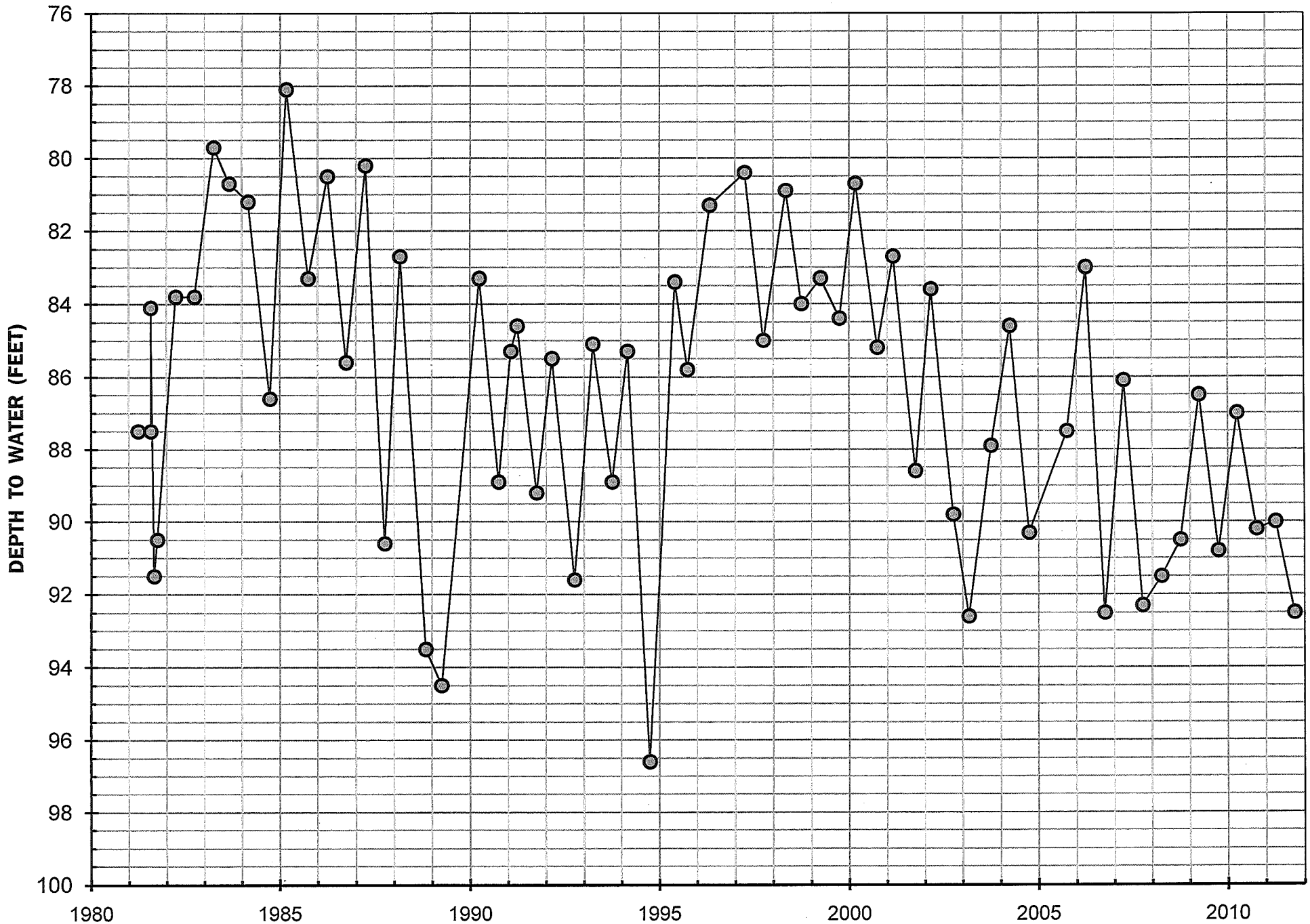
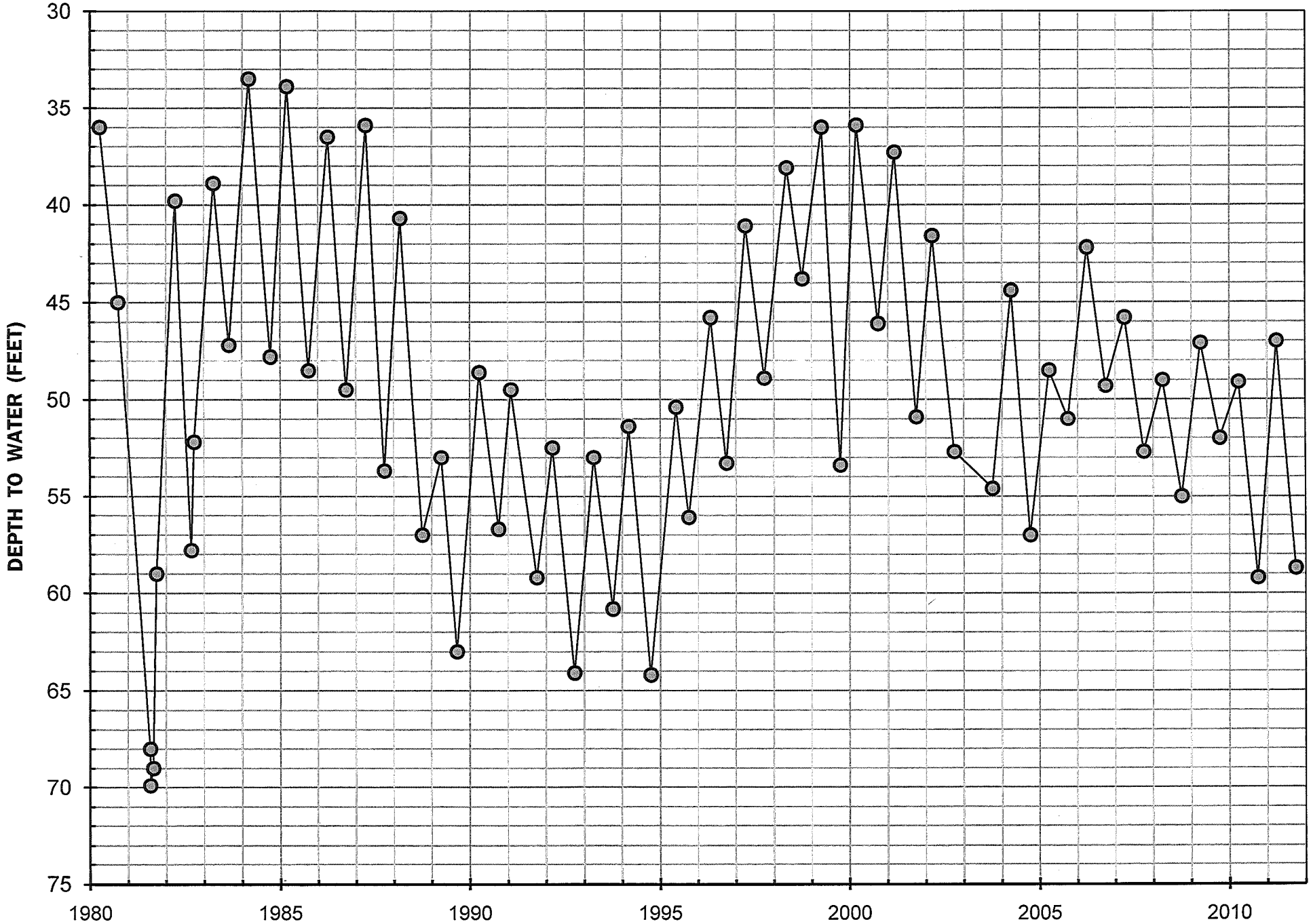
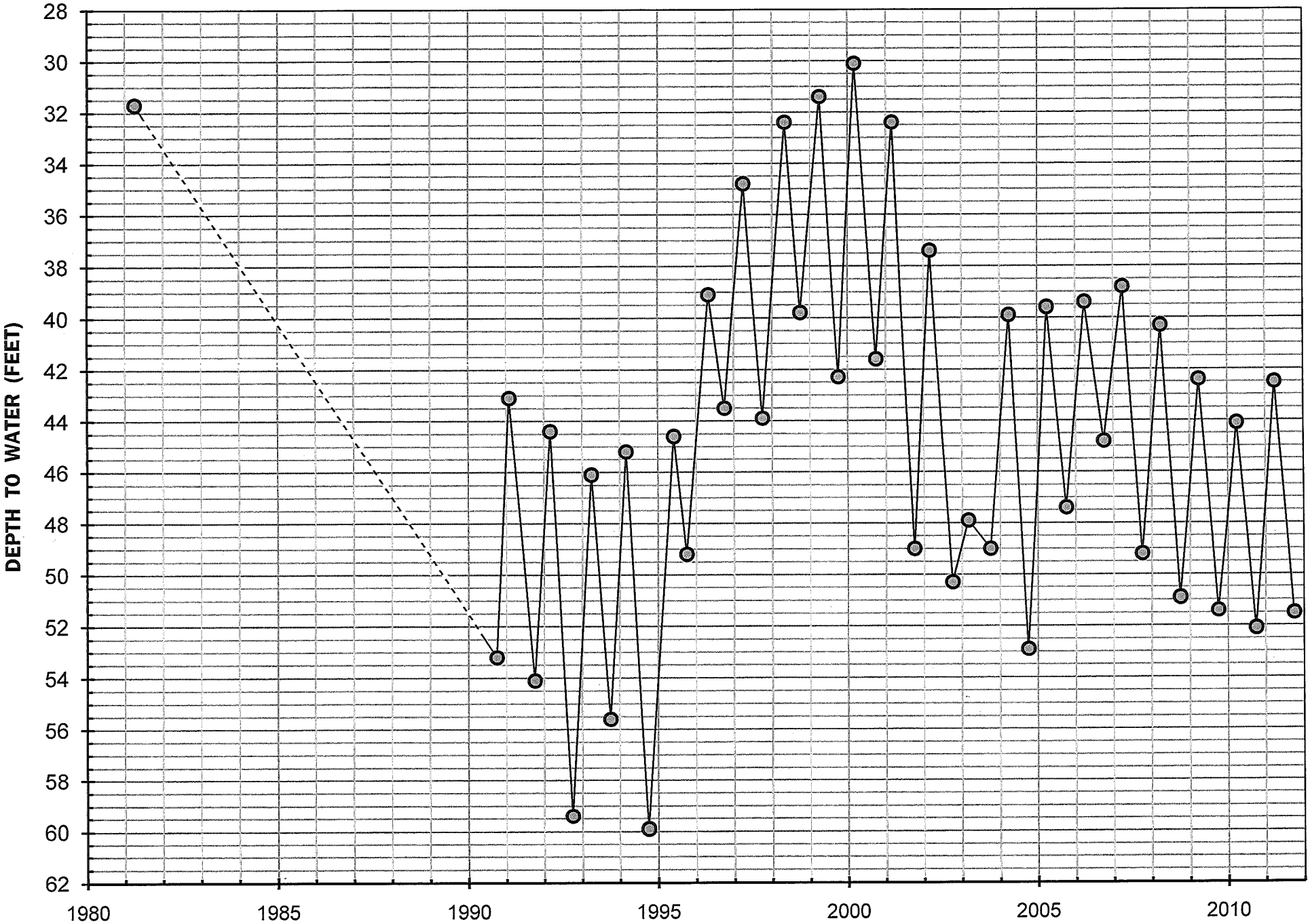


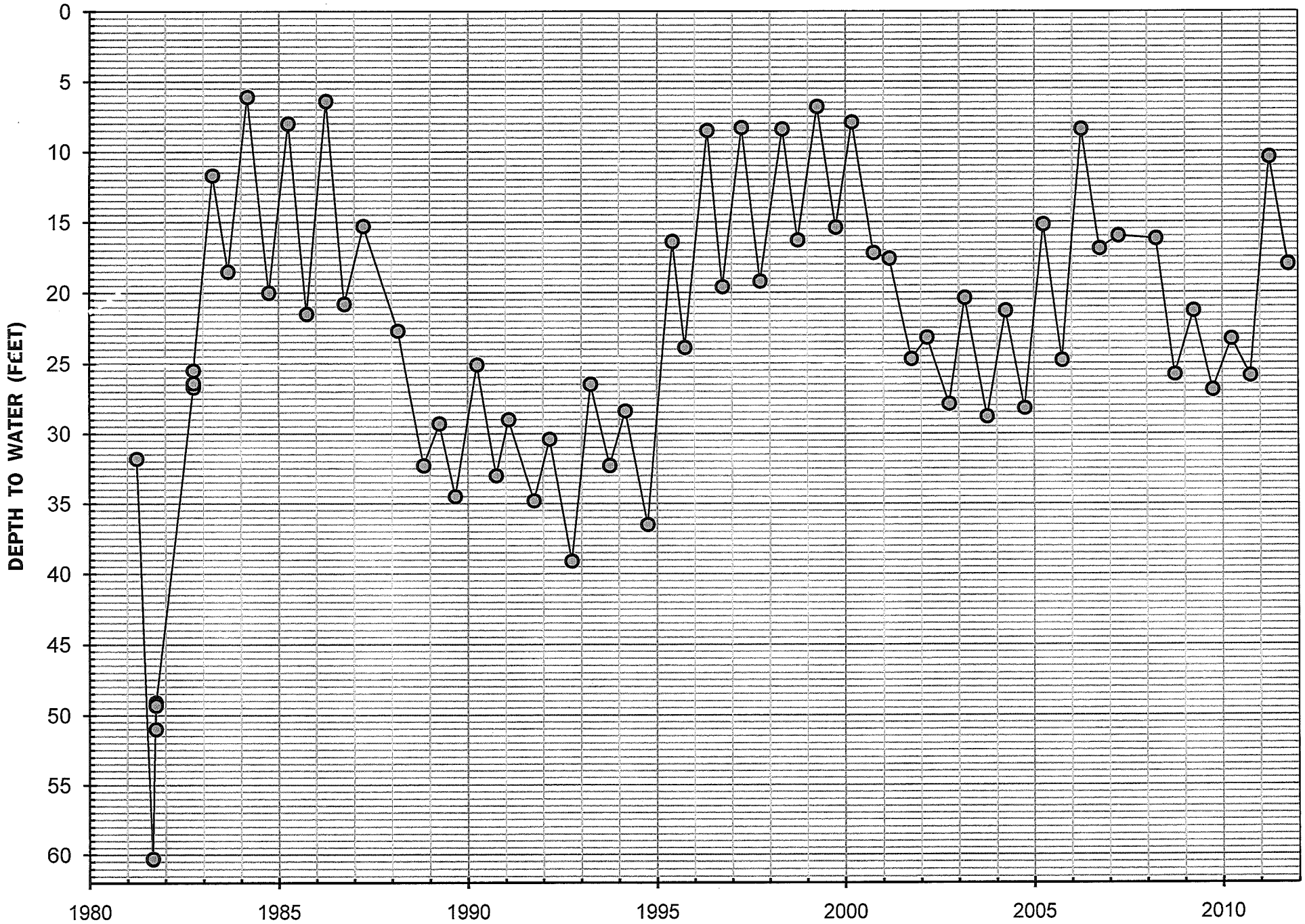
WATER-LEVEL HYDROGRAPHS FOR WELL T.21N./R.15E.-14L1



WATER-LEVEL HYDROGRAPHS FOR WELL T.21N./R.16E.-6H3



WATER-LEVEL HYDROGRAPHS FOR WELL T.21N./R.16E.-7A1



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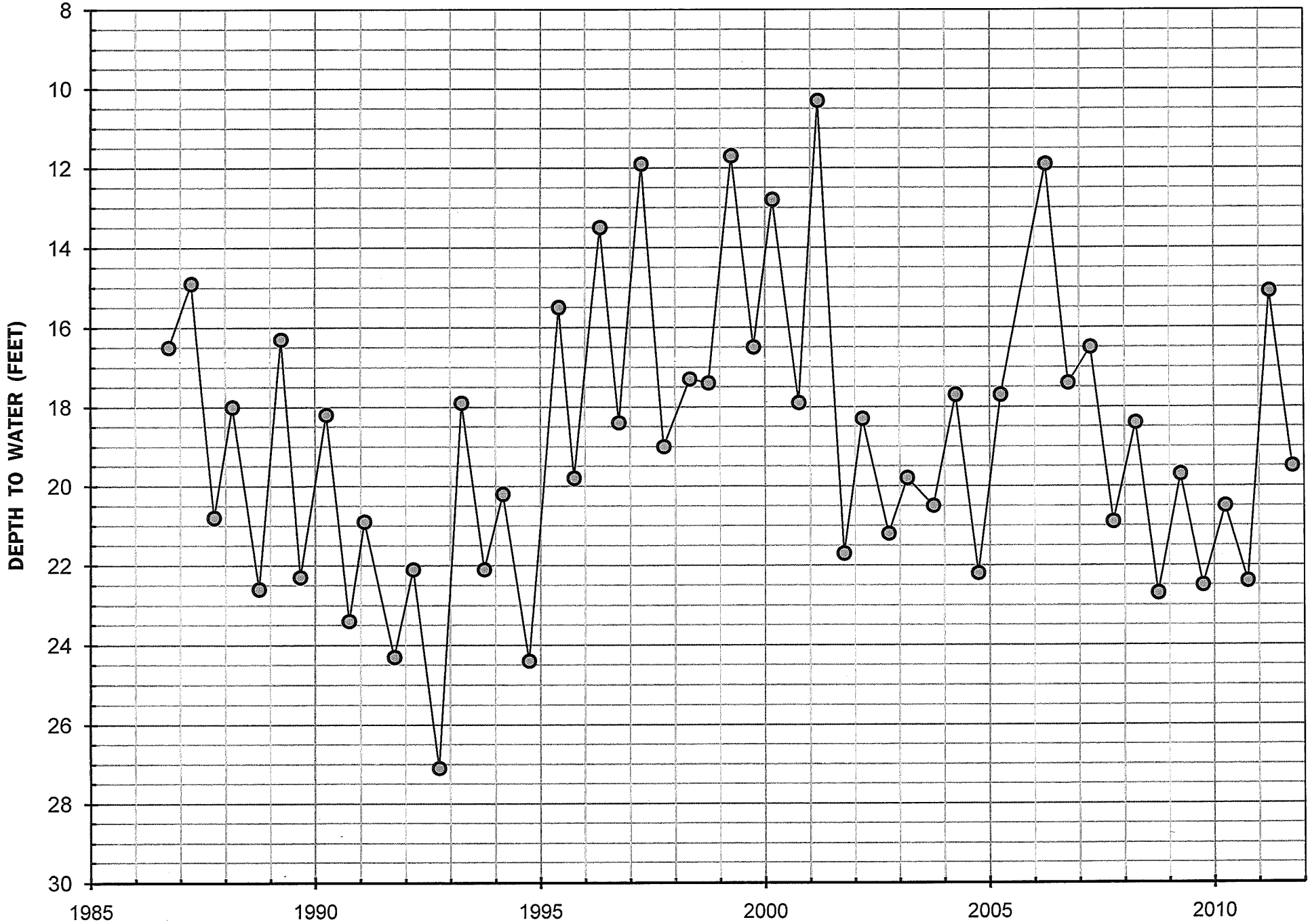
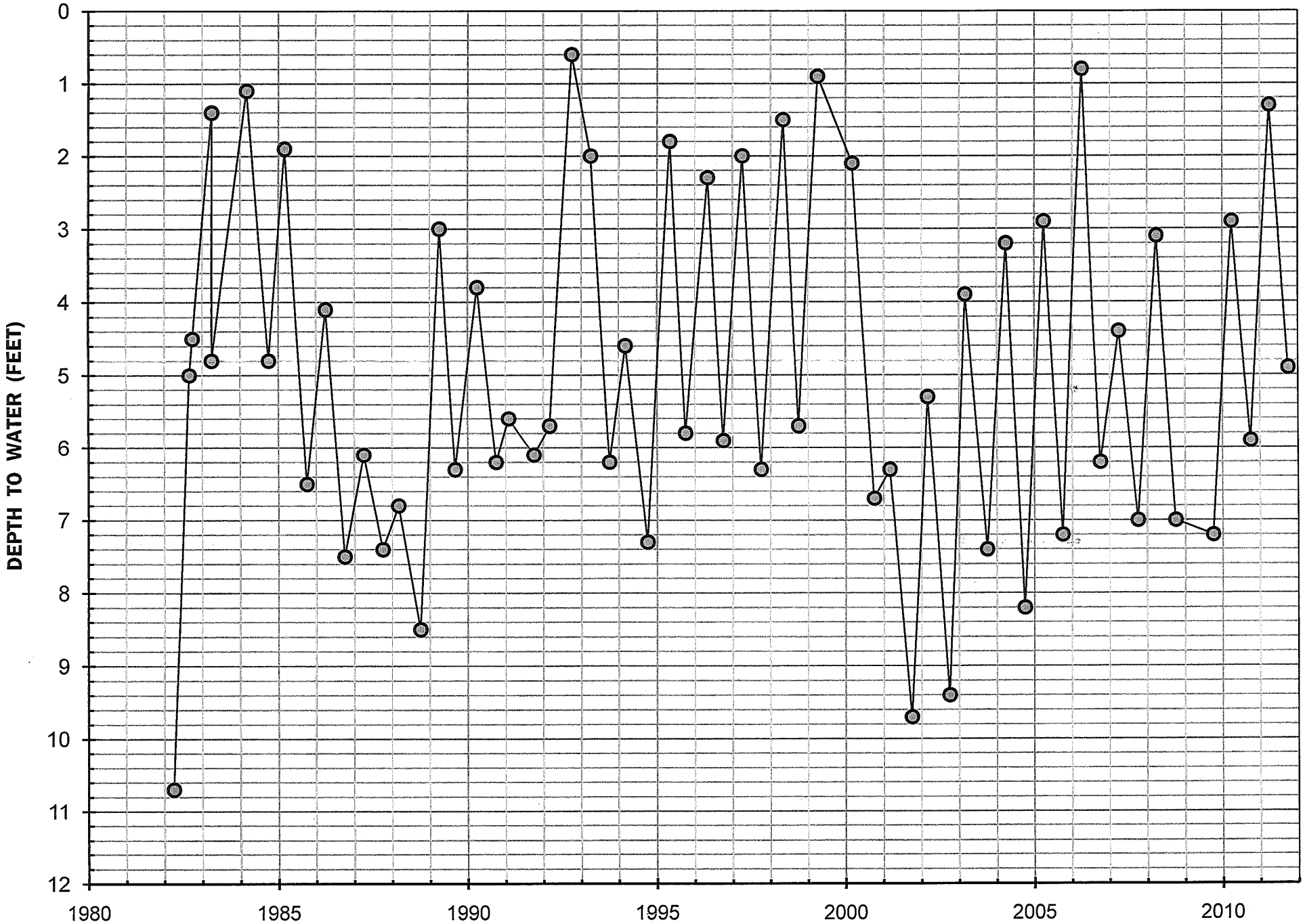
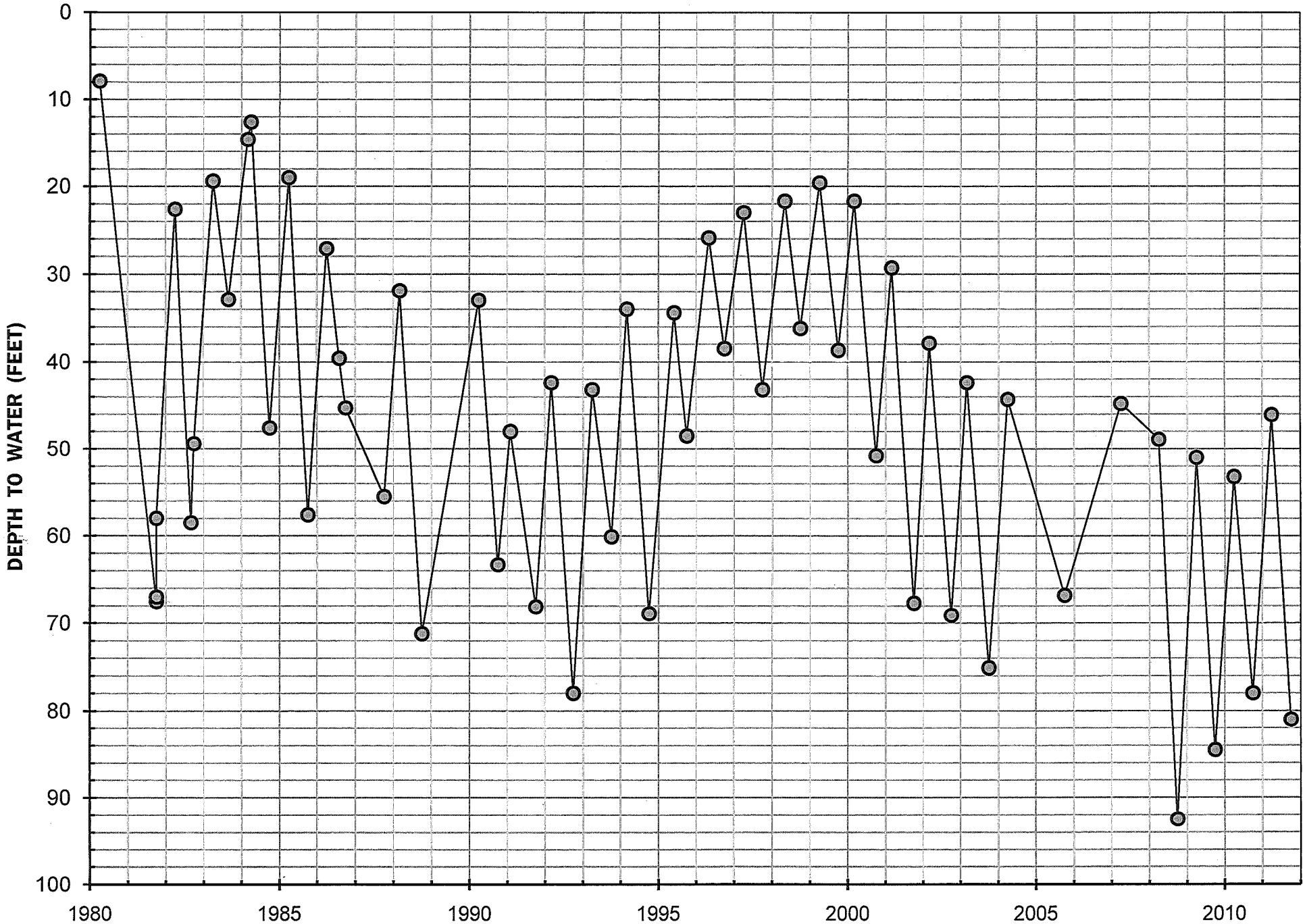


WATER-LEVEL HYDROGRAPHS FOR WELL T.21N./R.16E.-18G2

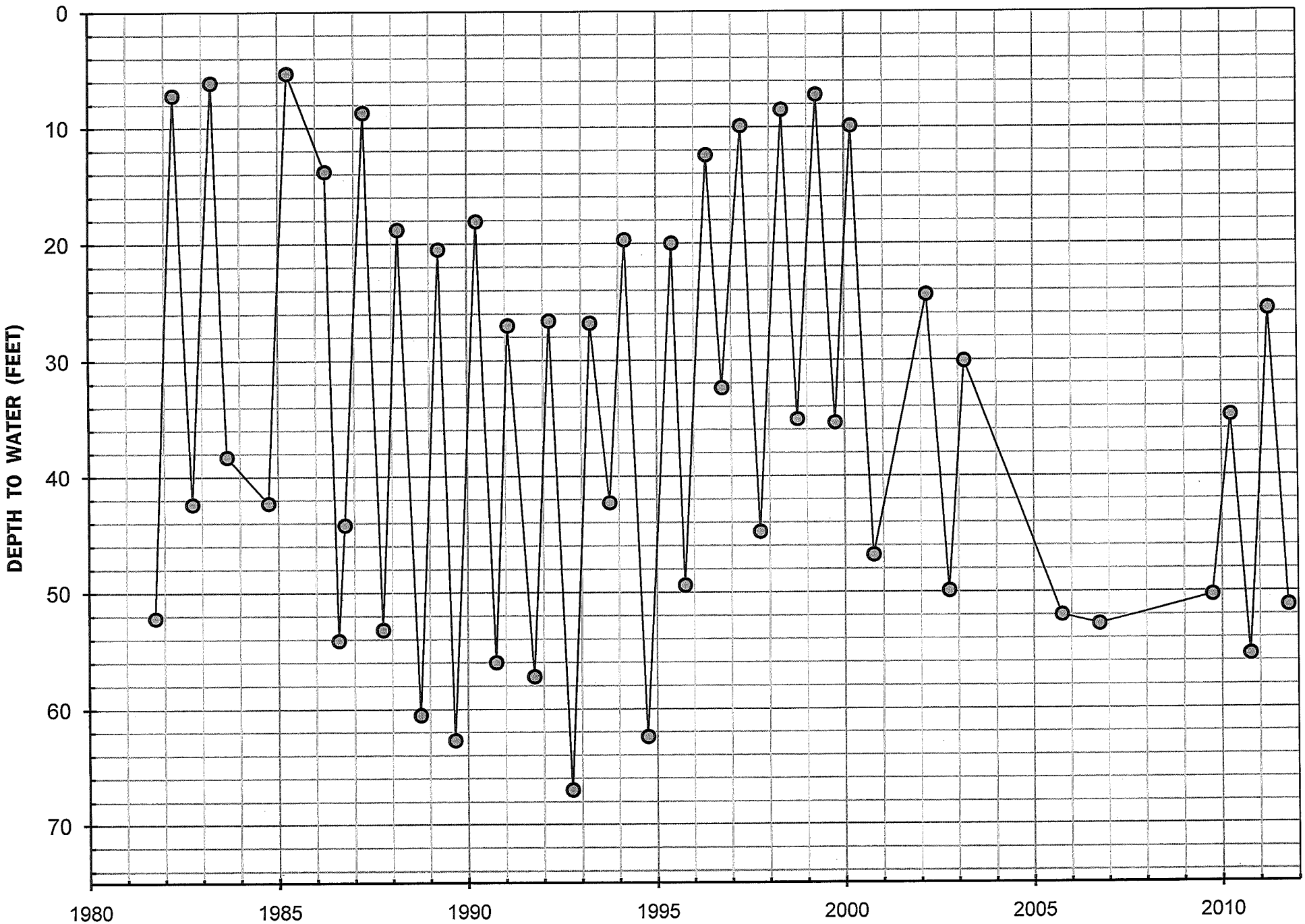


WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-8Q1

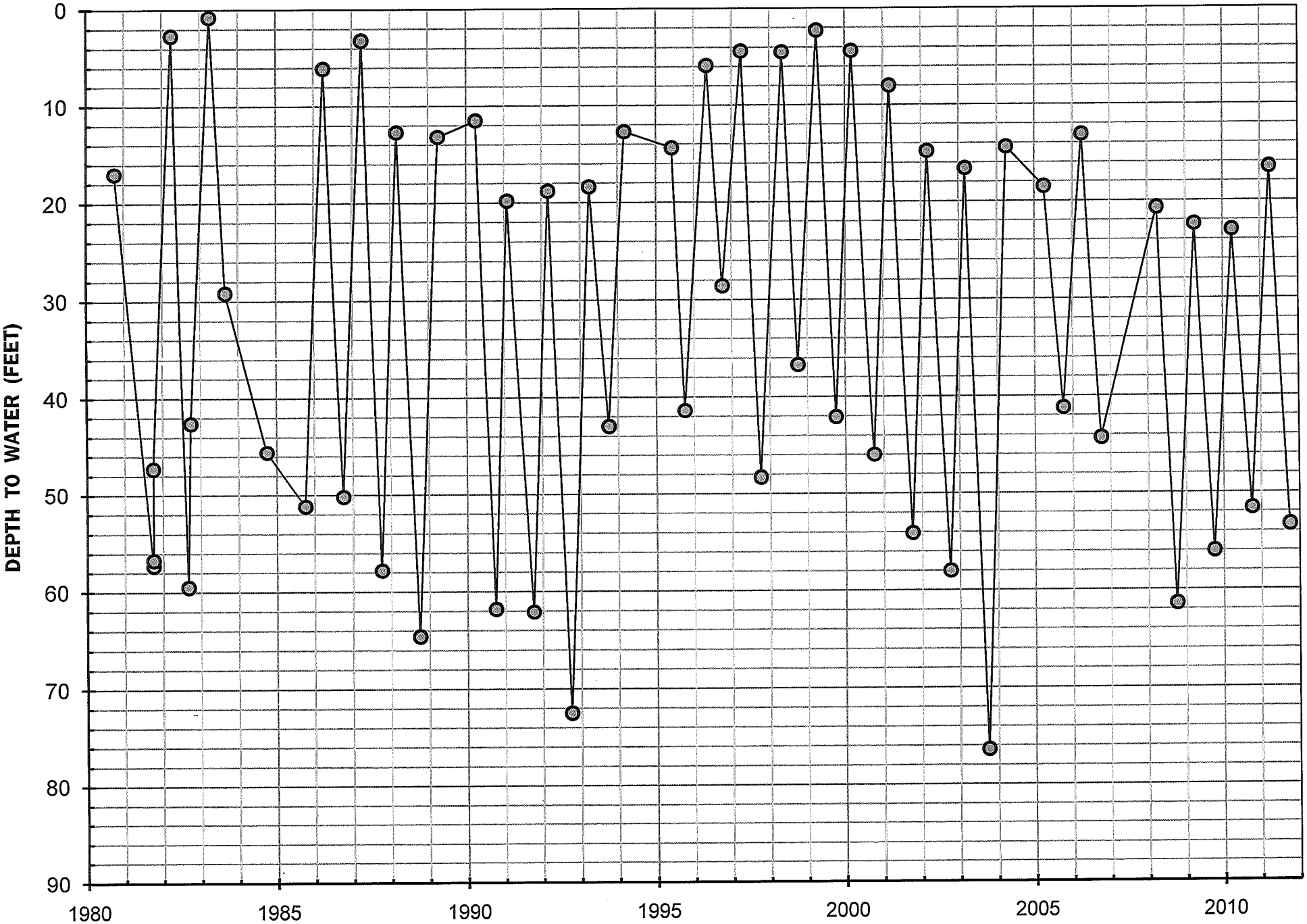


WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-13N1

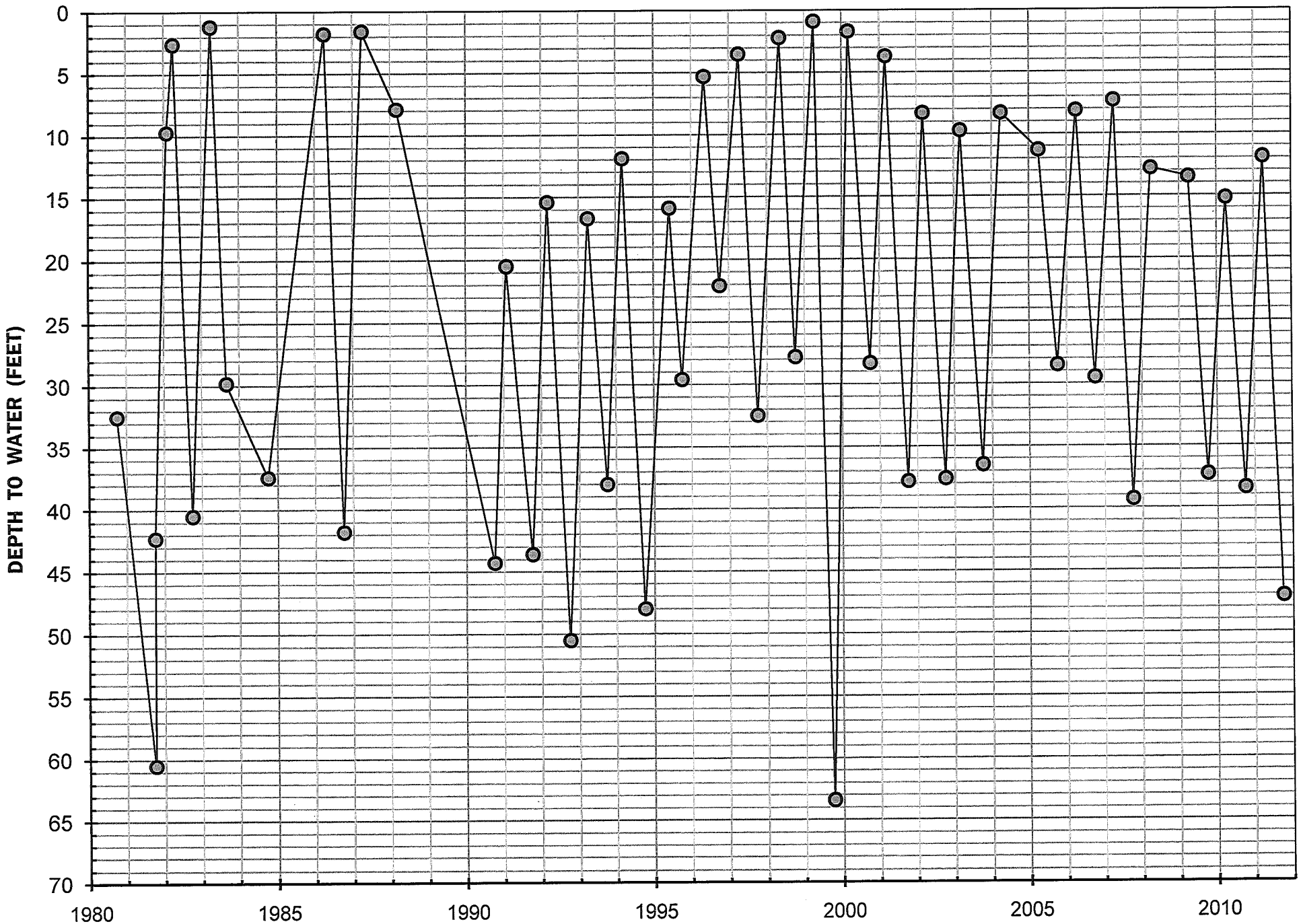
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-22Q1



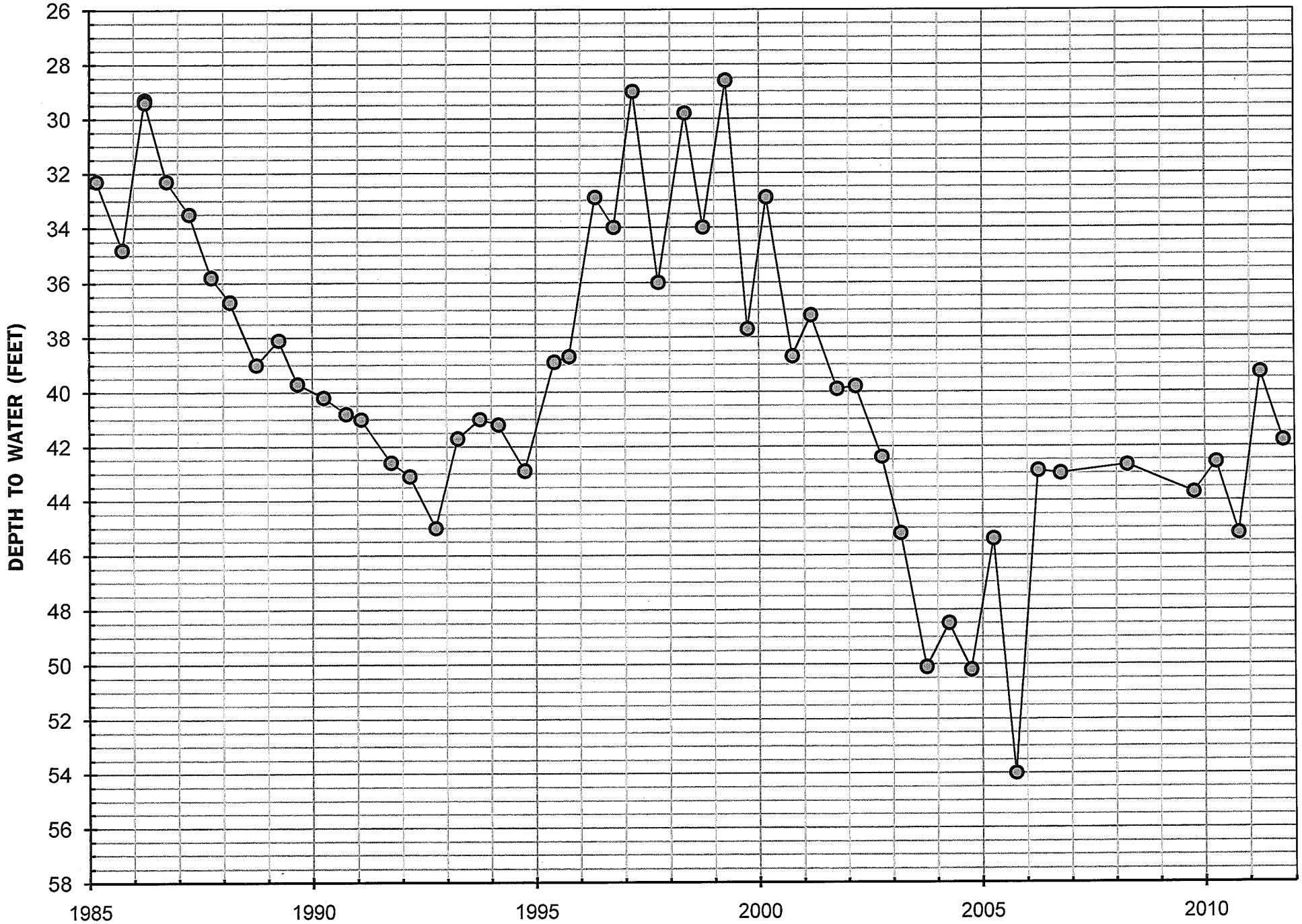
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-27Q1



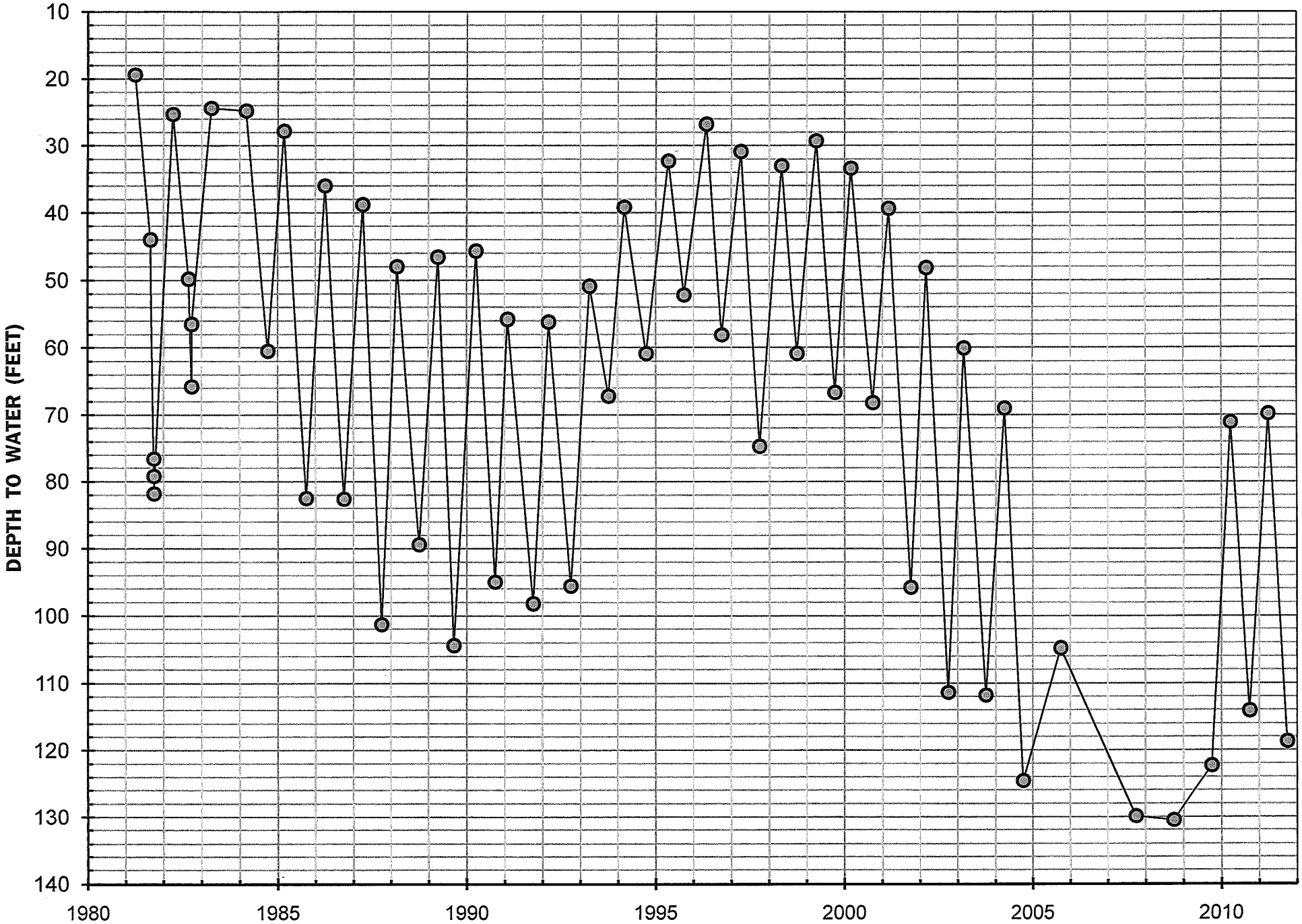
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-36N1



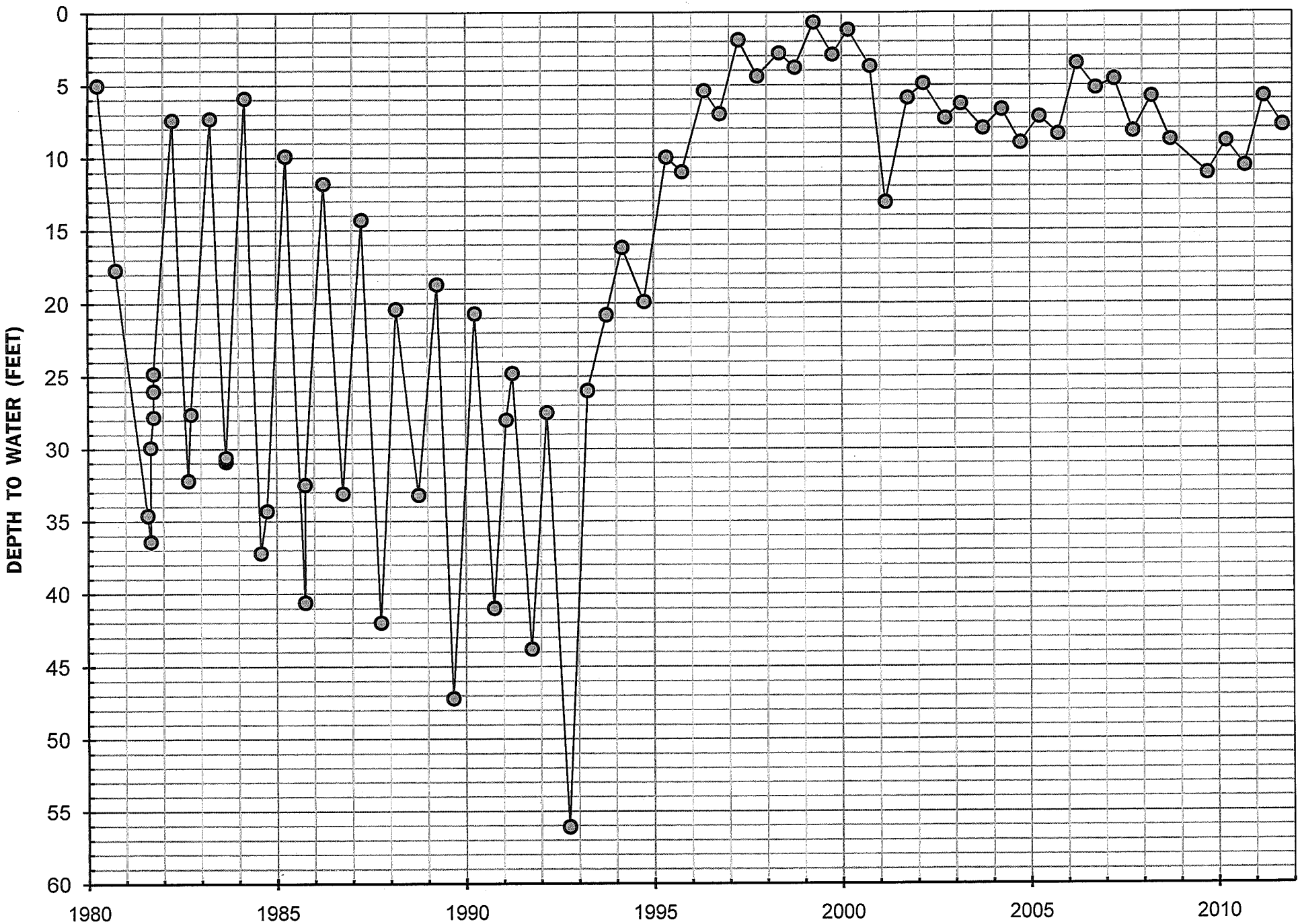
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.15E.-36Q1



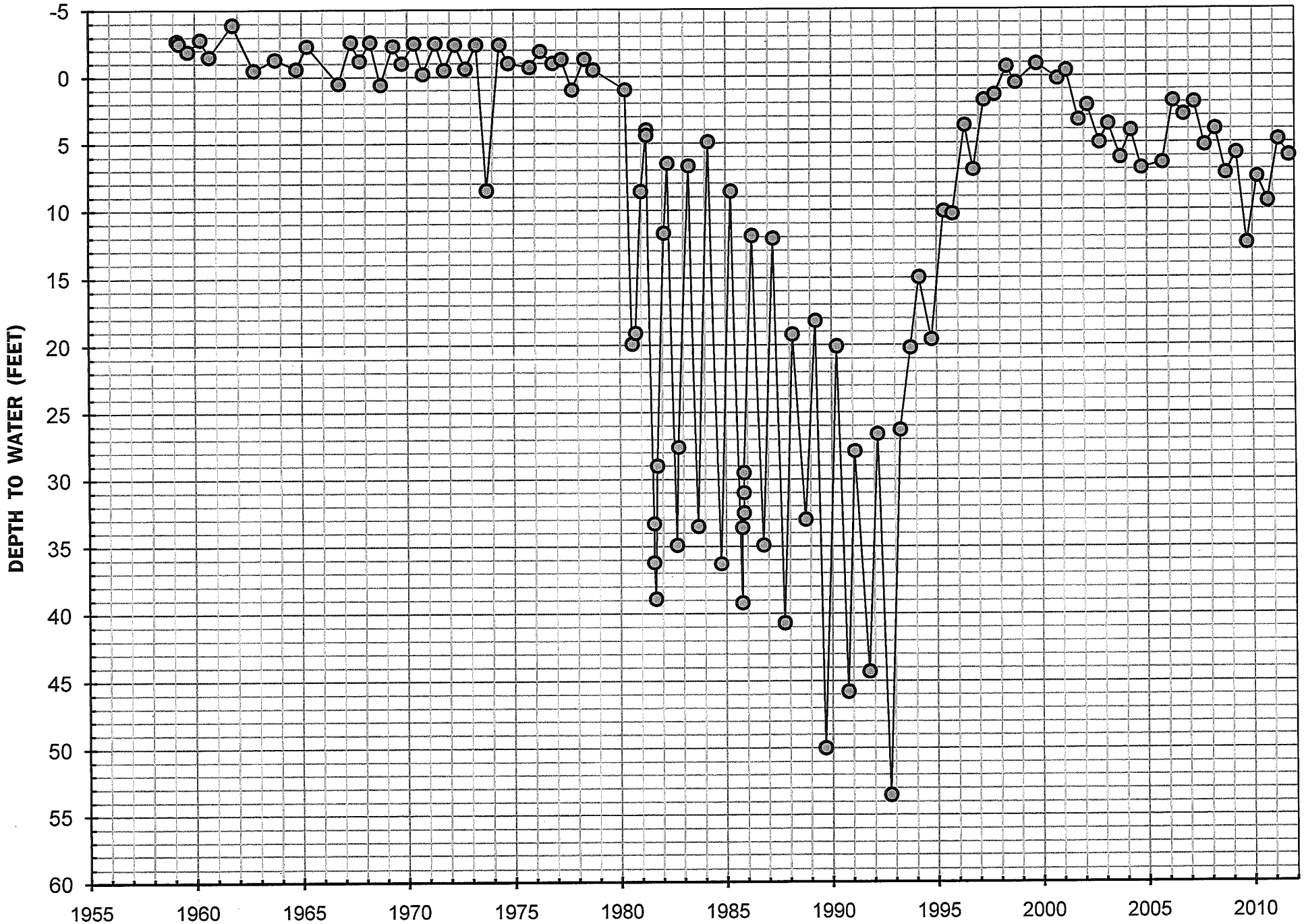
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.16E.-1A2



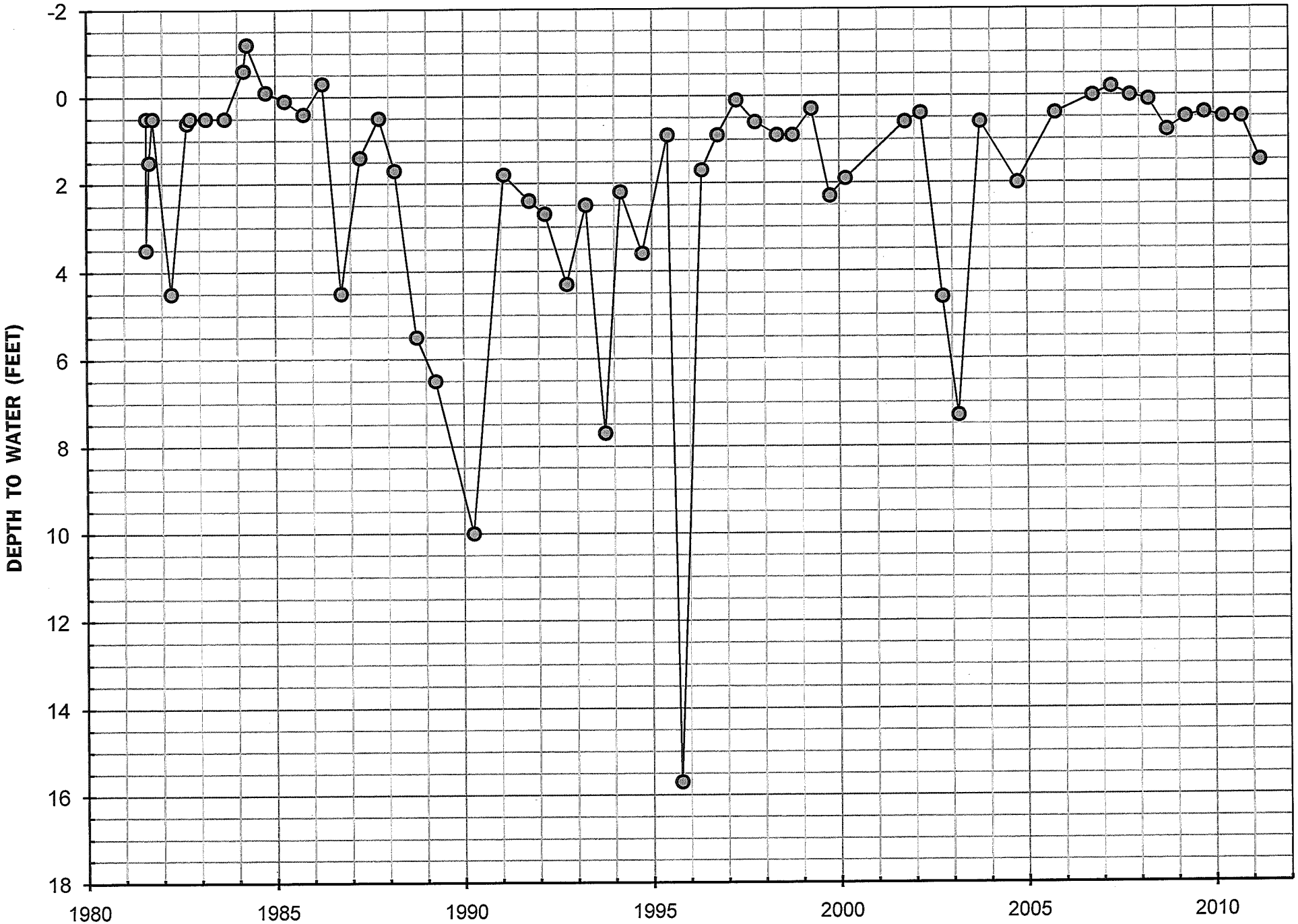
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.16E.-6R2



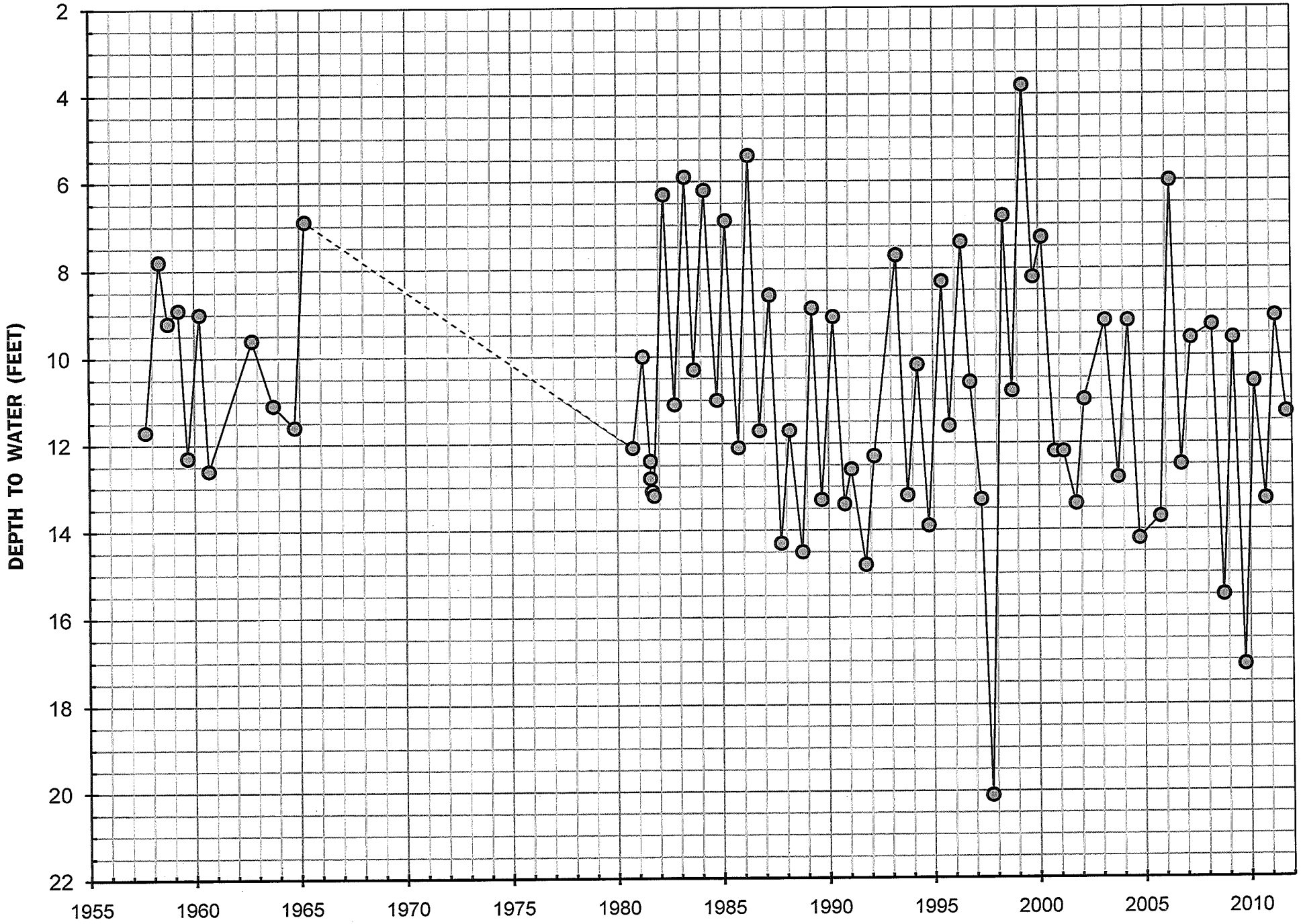
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.16E.-17C1



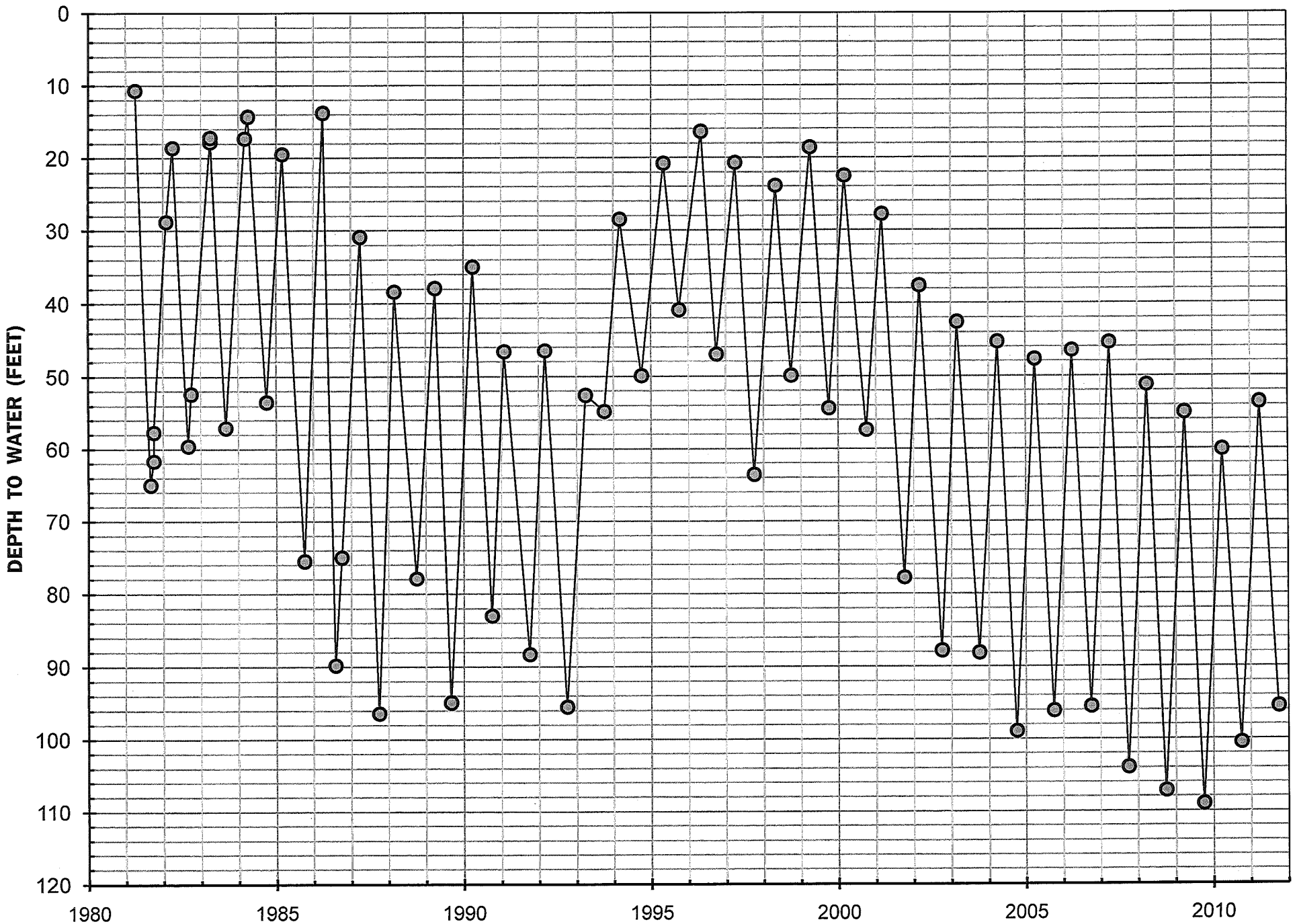
WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.16E.-17E2



WATER-LEVEL HYDROGRAPHS FOR WELL T.22N./R.16E.-20P2



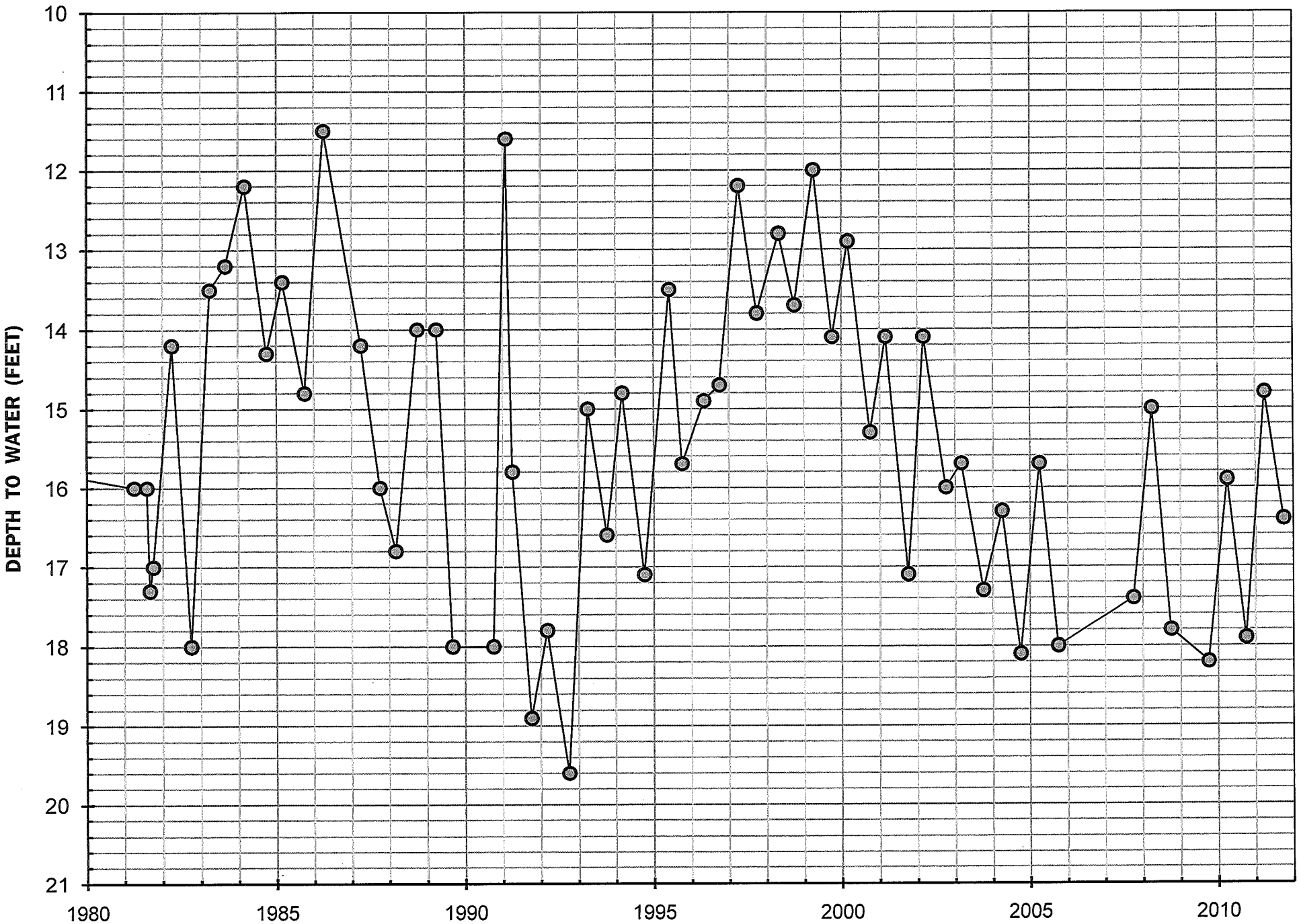
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.14E.-35L1



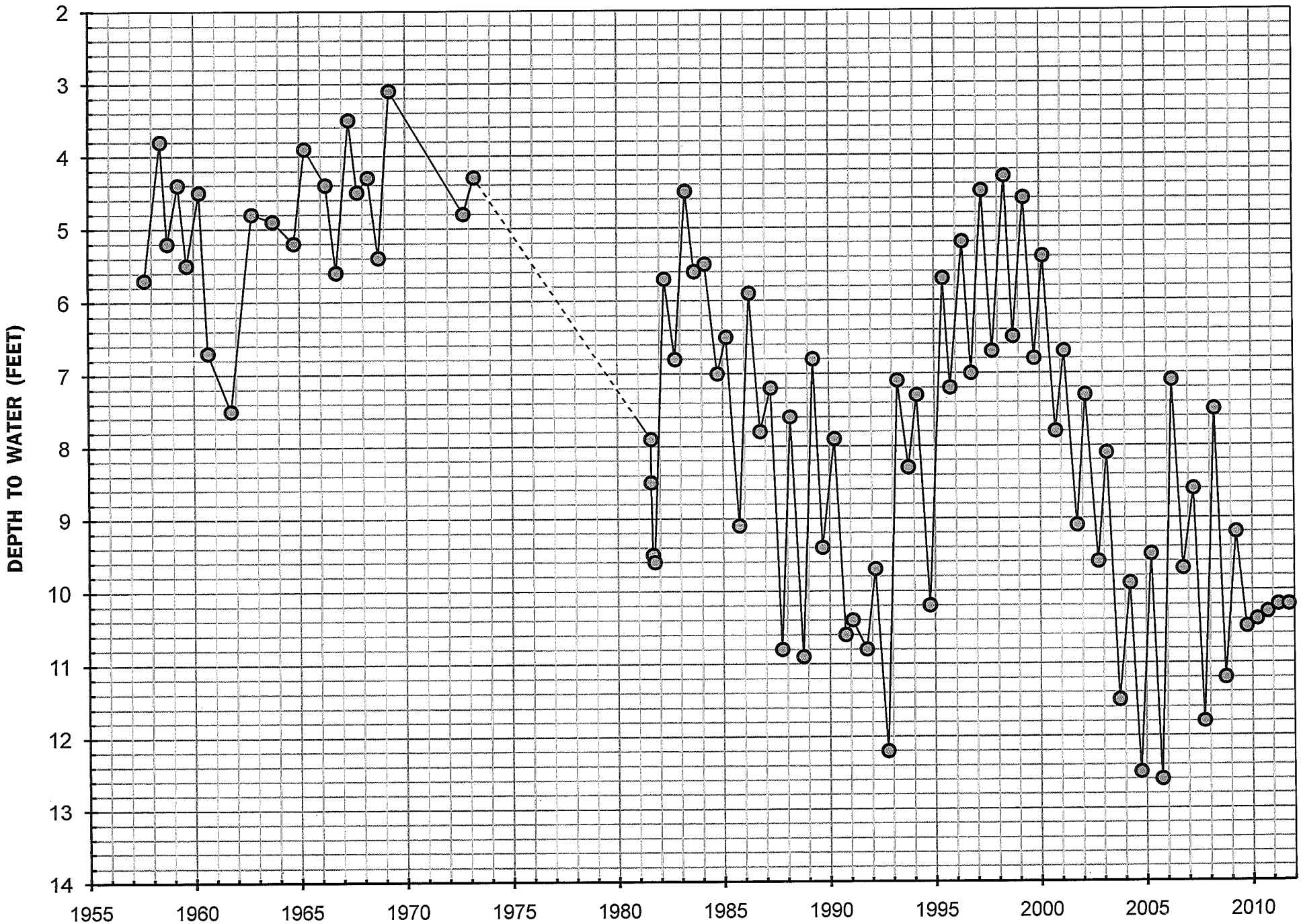
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.15E.-26R1

WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.15E.-29H1

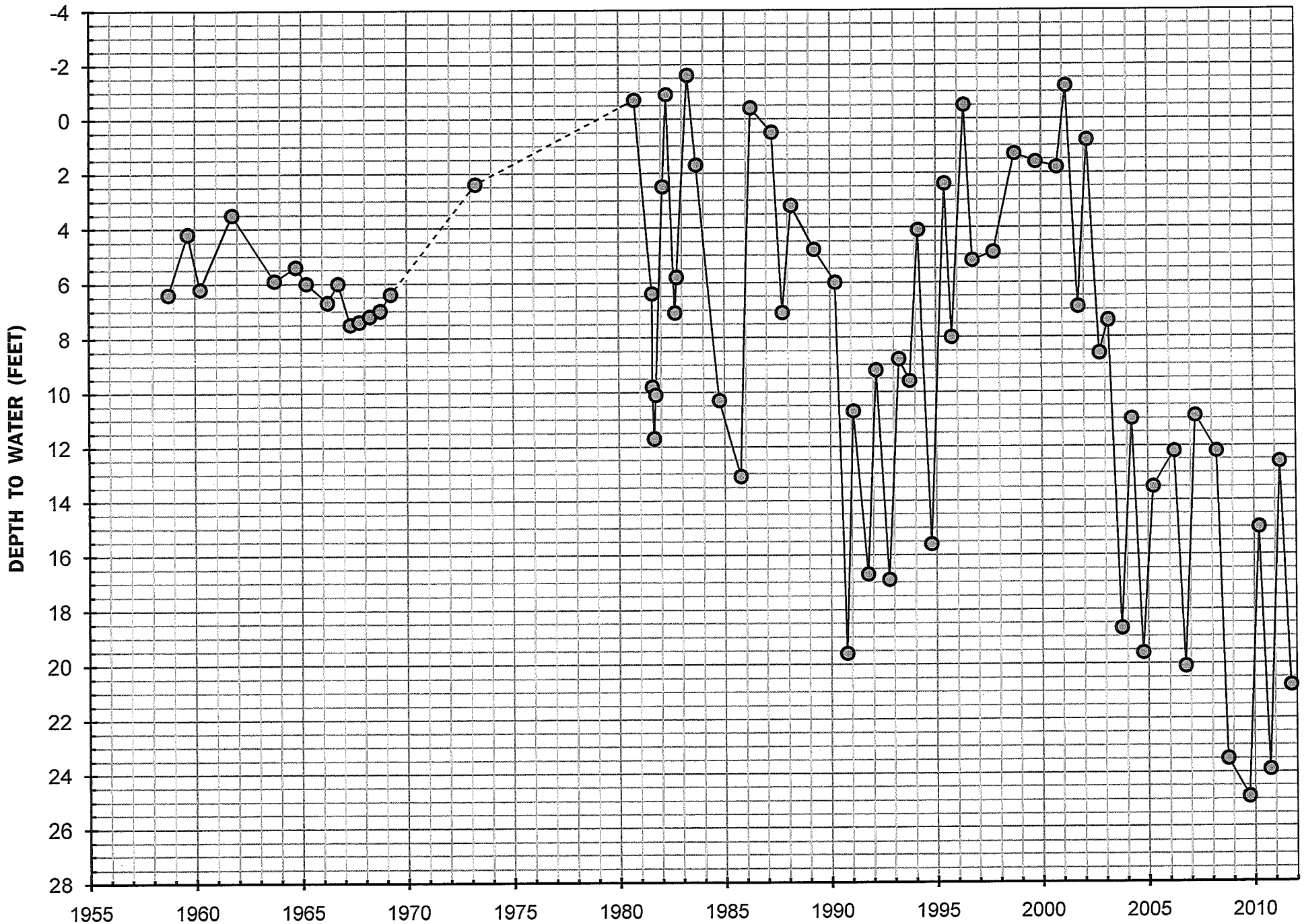
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.15E.-34D1



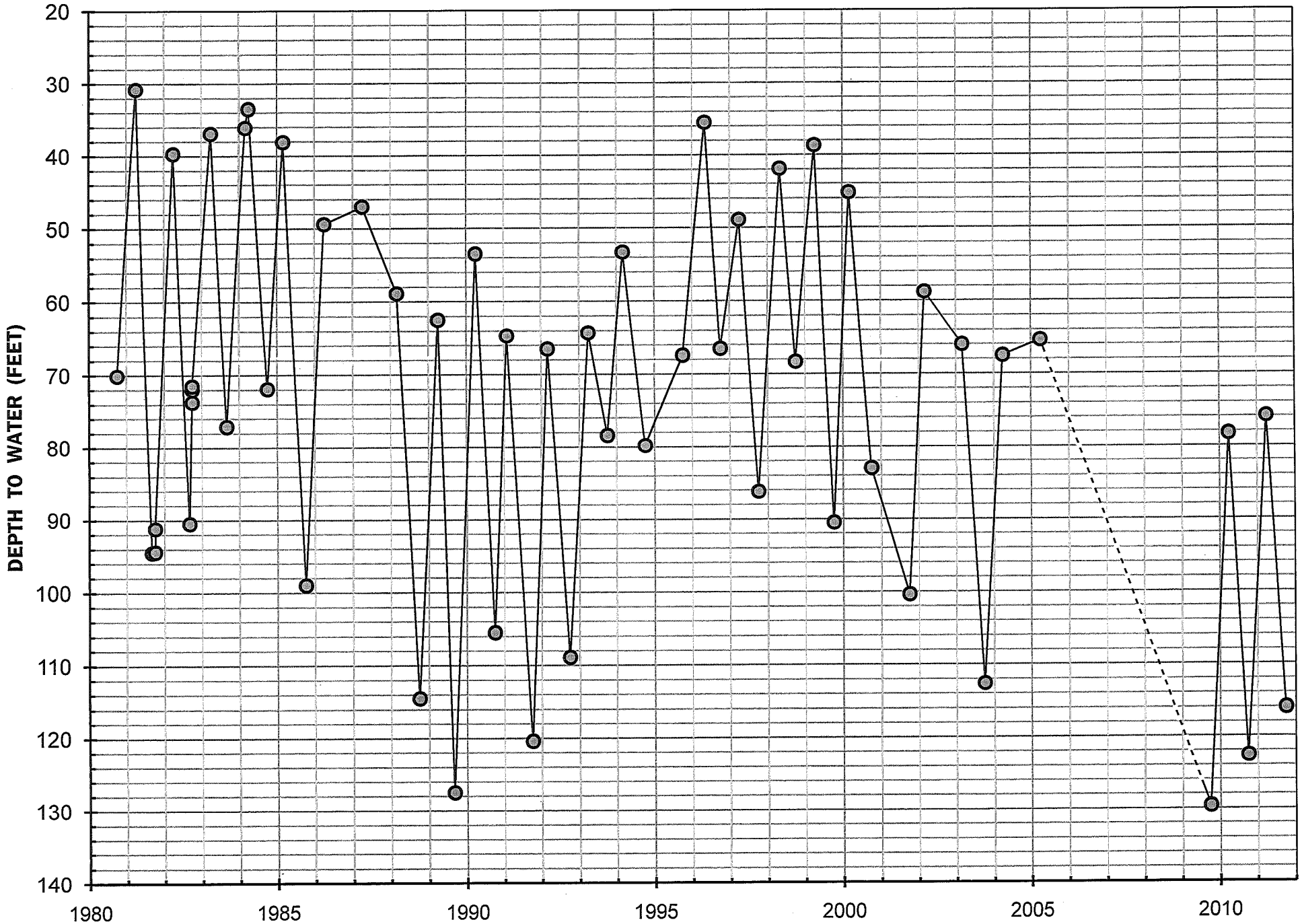
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-23F1



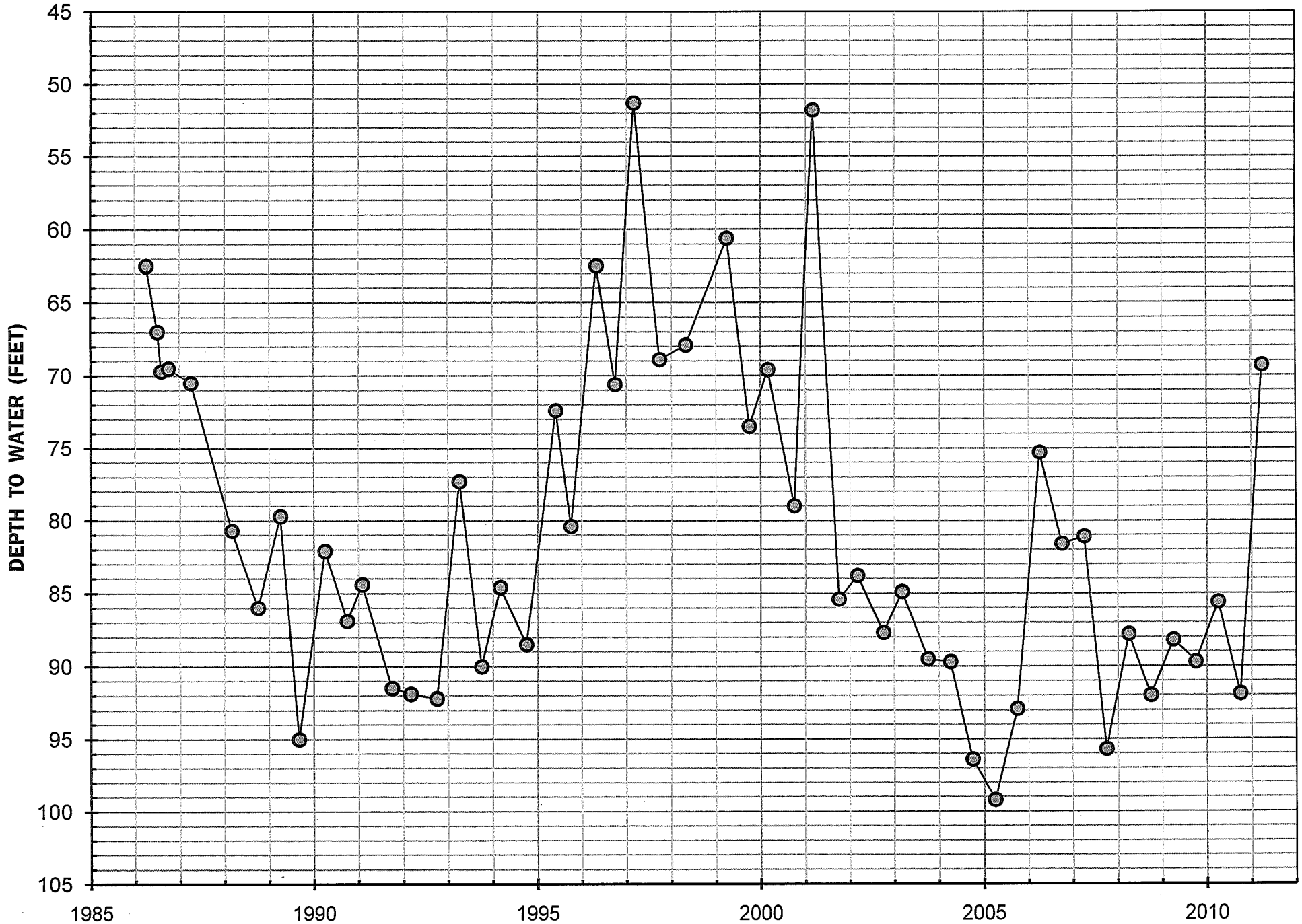
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-27R1



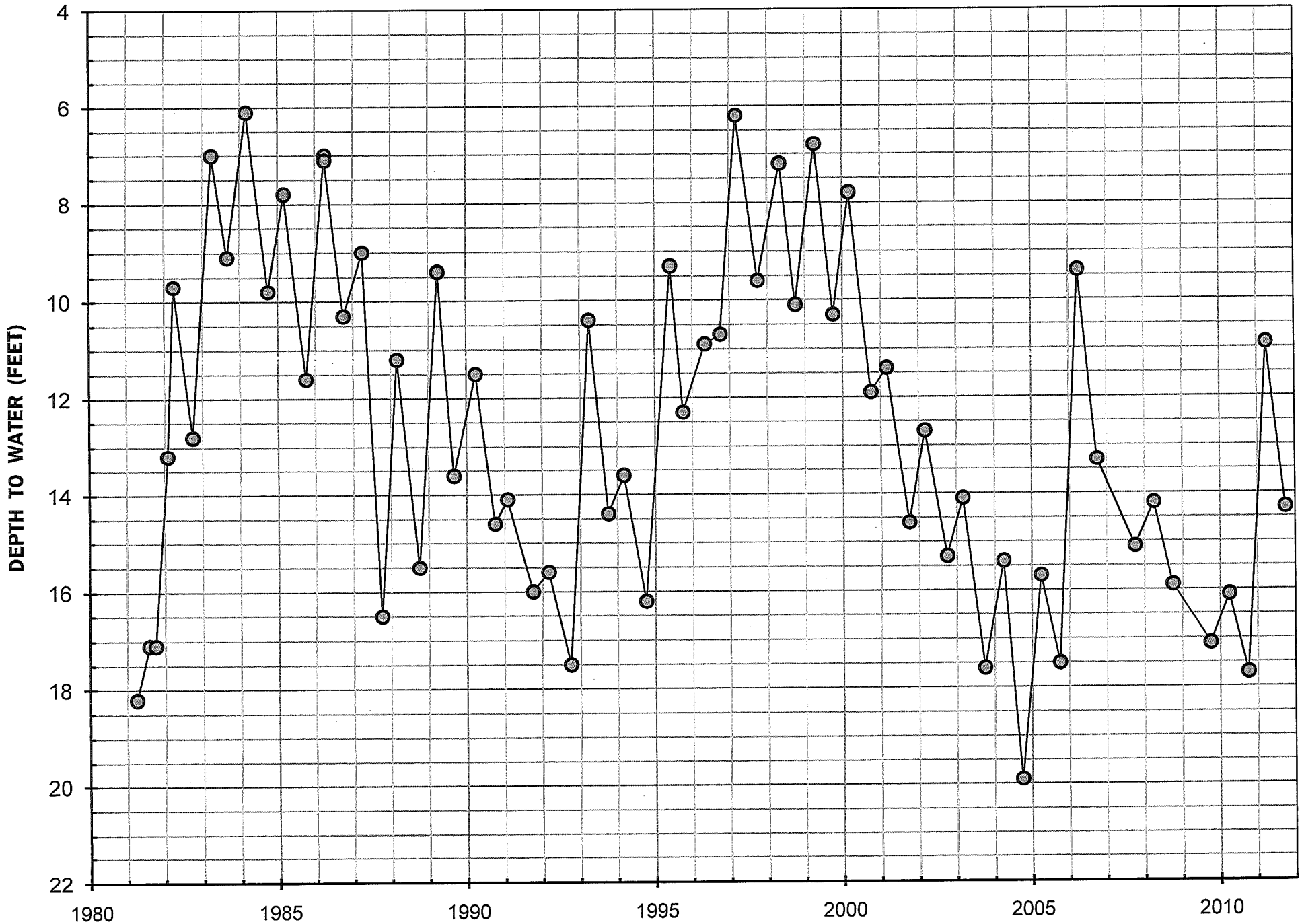
WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-28L1



WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-32Q1



WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-36D2



WATER-LEVEL HYDROGRAPHS FOR WELL T.23N./R.16E.-36N2