HYDROLOGIC DATA: NORTH CANADIAN RIVER FROM LAKE OVERHOLSER TO LAKE EUFAULA, CENTRAL OKLAHOMA

By John S. Havens

U.S. GEOLOGICAL SURVEY
Open-File Report 84-808

Prepared in cooperation with
OKLAHOMA WATER RESOURCES BOARD

Oklahoma City, Oklahoma
1984

UNITED STATES DEPARTMENT OF THE INTERIOR
WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY
Dallas L. Peck, Director

For additional information write to:

District Chief
U.S. Geological Survey
Water Resources Division
Room 621, Old Post Office Building
215 Dean A. McGee Avenue
Oklahoma City, Oklahoma 73102

Telephone: (405) 231-4256

Copies of this report can be purchased from:

Open-File Services Section
Western Distribution Branch
U.S. Geological Survey
Box 25425, Federal Center
Lakewood, Colorado 80225

Telephone: (303) 234-5888

CONTENTS

Page

Introduction..... 1

Explanation of the site-numbering system..... 4

ILLUSTRATIONS

Figure 1.--Map showing locations of test holes and surface-water measuring and sampling sites..... 2

Figure 2 - 15.--Hydrographs of wells, 1982-84:

2. Well 11N-05W-01 DCC 1, well 11N-04W-05 CDD 1, and well 11N-03W-05 BBC 1 35
3. Well 11N-03W-03 ADD 1, well 12N-02W-15 AAA 1, and well 13N-01W-18 CDD 1 36
4. Well 12N-01E-21 CBB 1, well 11N-02E-04 BAA 1, and well 10N-03E-06 DAA 1 37
5. Well 10N-03E-23 DCC 1, well 11N-04E-24 ABB 1, and well 11N-05E-21 DCD 1 38
6. Well 11N-05E-19 BAA 1, well 11N-07E-28 CCC 1, and well 11N-06E-27 CBC 1 39
7. Well 11N-06E-19 AAA 1, well 11N-07E-28 ABA 1, and well 11N-07E-33 CCD 1 40
8. Well 11N-08E-07 DDA 1, well 12N-08E-35 CBC 1, and well 11N-08E-12 BBB 1 41
9. Well 11N-08E-03 ADD 1, well 10N-09E-06 BAA 1, and well 10N-09E-15 BBB 1 42
10. Well 10N-09E-05 AAA 1, well 10N-09E-24 BBB 1, and well 10N-09E-13 DDD 1 43
11. Well 10N-10E-10 CCC 1, well 10N-11E-18 DCC 1, and well 09N-11E-08 DDD 1 44
12. Well 09N-10E-11 CAA 1, well 09N-11E-18 BBB 1, and well 10N-11E-14 DAD 1 45
13. Well 10N-12E-24 CCC 1, well 11N-13E-36 BDD 1, and well 11N-14E-26 ABB 1 46
14. Well 08N-10E-04 DAA 1, well 08N-09E-09 DDD 1, and well 08N-09E-18 CDA 1 47
15. Well 08N-08E-17 CAA 1..... 48

Page

Figure 16.--Hydrographs of well 12N-01E-21 CBB 1 and North Canadian River near Harrah, 1983-84 49

Figure 17.--Hydrographs of well 10N-12E-24 CCC 1 and North Canadian River near Wetumka, 1983-84 50

TABLES

Table 1.--Records of wells and test holes 5

Table 2.--Field water-quality data for wells and test holes 15

Table 3.--Lithologic logs of test holes 22

Table 4.--Low-flow measurements of the North Candian River and tributaries, 1983-84 51

Table 5.--Chemical analyses of water samples collected in conjunction with low-flow measurements of the North Canadian River and tributaries, 1983-84 52

HYDROLOGIC DATA: NORTH CANADIAN RIVER FROM LAKE OVERHOLSER TO LAKE EUFAULA, CENTRAL OKLAHOMA.

by John S. Havens

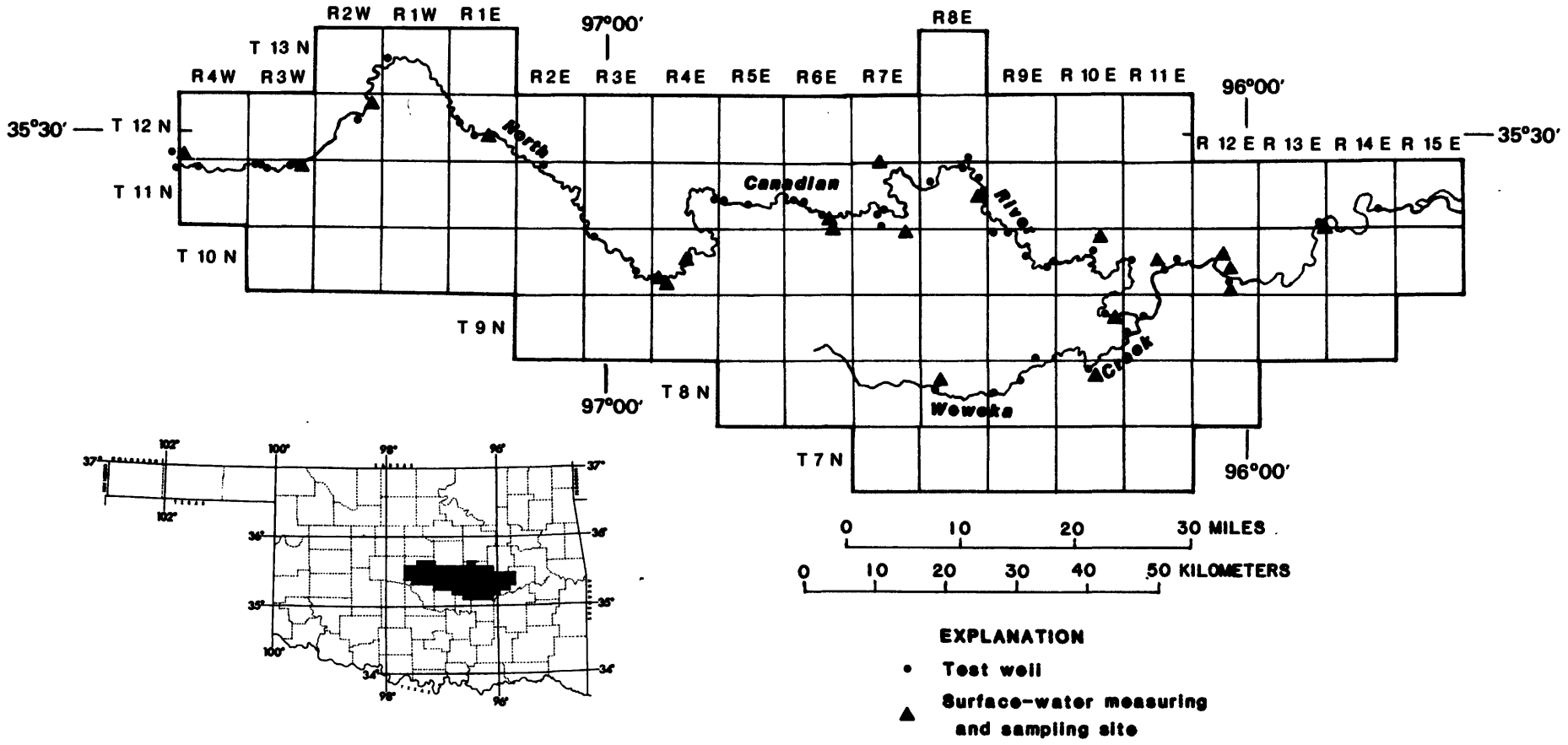
Introduction

The data contained in this report were gathered during the period 1982 to 1984 for use in constructing a digital model of the North Canadian River from Lake Overholser, in the western part of Oklahoma City, to Lake Eufaula, in eastern Oklahoma. Locations of test holes and sampling sites are shown in figure 1.

Information on well depths and water levels in table 1 was gathered in the summer of 1982. Some information in the table was reported by well owners.

Field water-quality data for water temperatures, specific conductance, and pH were measured at the time the wells were inventoried in 1982 and appear in table 2.

Forty-nine test holes were augered to provide more comprehensive lithologic and water-level data along the North Canadian River. Lithologic logs of these test holes appear in table 3. Thirty-eight of the test holes were completed as observation wells by placing perforated plastic casing in the holes. Water levels were measured in these observation wells from the time of completion in mid-1982 through mid-1984. Hydrographs of the observation wells are shown in figures 2 through 15. The data are presented graphically for clarity.



Location of study area

Figure 1. Locations of test holes and surface-water measuring and sampling sites.

Hydrographs of water-level fluctuations in two wells equipped with continuous water-level recorders and hydrographs of stage fluctuations on the North Canadian River at nearby gaging stations are shown in figures 16 and 17.

Two sets of low-flow measurements for the North Canadian River showing gains and losses in flow between measuring sites in the reach from Lake Overholser to Lake Eufaula are given in table 4. Measurements of flow on tributary streams are also given in this table.

Analyses of water-quality samples collected at the time of the low-flow measurements are given in table 5.

Explanation of the Site-Numbering System

The standard legal method of describing locations of data-collection sites by fractional section, section, township, and range is replaced in this report by the method illustrated in the diagram below. By the legal method, the location of the site indicated by the dot is described as SW 1/4 SW 1/4 SE 1/4 sec. 1, T.11 N., R.5 W. The method used in this report indicates quarter subdivisions of the section by letters and reverses the order of presentation of the subdivisions. By this method, the location of the site is given as 11N-05W-01 DCC 1. The final digit (1) is the sequence number of the site within the smallest fractional subdivision. For example, if three data collection sites were located within the same quarter-quarter-quarter section, they would be uniquely identified as DCC 1, DCC 2 and DCC 3.

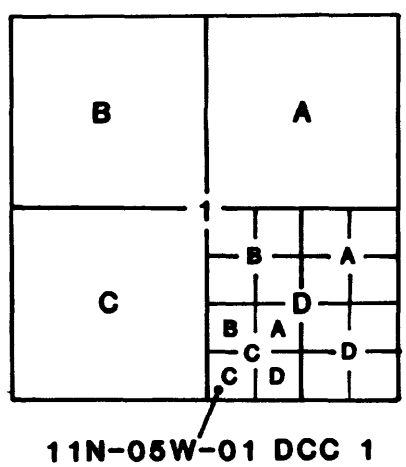


Table 1.--Records of wells and test holes.

Site-ID: Unique identification number that usually coincides with the latitude, longitude, and sequence number for the site.
Water level: Feet below land surface. S, measured with steel tape; R or O, reported by owner.
Depth of well: Feet below land surface.
Use of water: U, unused; H, domestic; S, stock; N, industrial; I, irrigation; Z, destroyed.
Other data available, QW: F, field data available; A, more complete water-quality data available.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE QW
CANADIAN COUNTY									
352700096404501	11N-05W-01 DCC 1	06/28/1982	23.70	S	38	--	1230	U	
352702097413301	11N-05W-02 DDC 1	--	--		--	--	1260	H	
352845097395201	12N-04W-30 CDD 1	05/27/1982	3.23	S	33	--	1220	H	
352847097395302	12N-04W-30 CDD 2	05/27/1982	11.84	S	16	--	1220	H	
352844097410601	12N-05W-25 CCD 1	05/26/1982	21.05	S	62	--	1241	N	F
352923097432501	12N-05W-27 BBC 1	05/28/1982	0.85	S	12	--	1270	U	F
352902097422701	12N-05W-27 DAD 1	05/27/1982	3.77	S	27	--	1250	H	F
352840097401901	12N-05W-36 AAA 1	--	--		--	--	1240	H	F
352815097401901	12N-05W-36 DAA 1	05/26/1982	15.80	S	43	--	1220	N	F
352752097404601	12N-05W-36 DCC 1	05/25/1982	20.00	R	85	--	1235	U	
HUGHES COUNTY									
350846096234401	08N-08E-23 CCD 1	--	--		--	--	820	H,S	F
350839096242301	08N-08E-25 AAA 1	07/20/1982	41.90	S	188	--	815	H,S	F
350839096250501	08N-08E-25 BAB 1	--	3.50	R	16	--	810	H	F
351138096180201	08N-09E-01 DAA 1	07/20/1982	11.56	S	83	--	755	H	F
351030096234801	08N-09E-09 DDD 1	08/11/1982	12.10	S	17	--	750	U	
350937096220801	08N-09E-16 CCC 1	07/20/1982	28.64	S	33	--	770	H	F
351022096223301	08N-09E-17 ABA 1	07/20/1982	27.62	S	31	--	800	H	F
350945096240401	08N-09E-18 CDA 1	08/13/1982	14.50	S	30	--	760	--	
350909096232201	08N-09E-19 ADD 1	--	--		--	--	760	H	F
351154096150501	08N-10E-04 ADB 1	07/21/1982	5.40	S	13	--	720	U	
351142096145301	08N-10E-04 DAA 1	08/10/1982	15.64	S	22	--	729	U	
351605096131301	09N-10E-11 CAA 1	08/05/1982	8.62	S	14	--	720	--	
351604096132401	09N-10E-11 CAB 1	--	15.00	R	18	--	720	H	F
351538096123401	09N-10E-13 BBB 1	07/13/1982	11.00	S	--	--	700	H	F
351357096132101	09N-10E-24 DDD 1	01/01/1981	6.00		46	--	708	I	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
HUGHES COUNTY--CONTINUED									
351357096132101	09N-10E-24 DDD 1	01/01/1981	6.00		46	--	708	I	F
351350096120901	09N-10E-25 BAA 1	07/21/1982	13.40	S	21	--	743	H	F
351304096142201	09N-10E-27 CDD 1	07/20/1982	26.95	S	37	--	731	U	F
351224096124601	09N-10E-35 DAD 1	07/21/1982	8.10	S	130	--	703	H	F
351538096080301	09N-11E-15 BAB 1	--	--		--	--	700	H	F
351514096085801	09N-11E-16 BDD 1	07/14/1982	35.24	S	96	--	730	H	
351449096095401	09N-11E-17 DCC 1	07/14/1982	15.77	S	43	--	760	H	
351538096113401	09N-11E-18 BBB 1	08/05/1982	6.60	S	15	--	697	--	
351450096104801	09N-11E-18 DDC 1	07/21/1982	12.75	S	135	--	705	H	F
351407096111601	09N-11E-19 CDB 1	07/21/1982	20.35	S	65	--	695	H	F
351304096104501	09N-11E-30 DDC 1	--	--		--	--	780	H	F
LINCOLN COUNTY									
352847097080701	12N-02E-30 CDC 1	--	--		--	--	1070	H	F
352752097080401	12N-02E-31 CDC 1	--	200.00	R	--	--	1073	H	F
352823097072401	12N-02E-32 BCB 1	--	--		--	--	1060	H	F
352814097065601	12N-02E-32 CAA 1	06/15/1982	1.70	S	33	--	1060	I	
MCINTOSH COUNTY									
351958095541101	10N-13E-23 BAA 1	07/14/1982	6.01	S	18	--	655	S	F
352234096474301	10N-14E-02 ABB 1	07/15/1982	15.60	S	66	--	650	H	F
352420095472601	11N-14E-26 ABB 1	08/10/1982	18.05	S	32	--	620	U	
352410095482301	11N-14E-27 AAD 1	06/01/1982	32.00	R	165	--	625	U	F
352418096470801	11N-14E-36 BBB 1	07/15/1982	42.95	S	58	--	640	H	F
OKFUSKEE COUNTY									
352213096215401	10N-09E-04 BDC 1	07/07/1982	37.20	S	58	--	812	U	
352237096221301	10N-09E-05 AAA 1	08/04/1982	12.53	S	18	--	785	--	
352238096235001	10N-09E-06 BAA 1	08/04/1982	14.10	S	32	--	801	--	
352012096180101	10N-09E-13 DDA 1	--	--		--	--	771	H	F
352007096175901	10N-09E-13 DDD 1	08/04/1982	6.61	S	15	--	770	--	
352213096210801	10N-09E-15 BBB 1	08/03/1982	16.78	S	21	--	781	--	
351959096185801	10N-09E-24 BBB 1	08/04/1982	22.80	S	30	--	780	--	
351930096180101	10N-09E-24 DAA 1	07/08/1982	34.20	S	98	--	795	H	F
352054096144601	10N-10E-10 CCC 1	08/04/1982	11.45	S	25	--	750	--	
351944096165701	10N-10E-19 ADA 1	07/08/1982	15.30	S	23	--	750	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
OKFUSKEE COUNTY--CONTINUED									
352016096061901	10N-11E-14 DAD 1	08/05/1982	16.04	S	19	--	683	--	
352000096110401	10N-11E-18 DCC 1	08/04/1982	18.13	S	25	--	734	--	
351959096112501	10N-11E-19 BBA 1	04/01/1982	13.75	R	33	--	730	H	F
351926096080401	10N-11E-22 CAC 1	07/13/1982	18.16	S	38	--	695	Z	F
351928096065101	10N-11E-23 CAD 1	--	--		--	--	700	S	F
351923096052801	10N-11E-24 DAC 1	07/14/1982	14.84	S	37	--	680	U	F
352020096032701	10N-12E-17 DBA 1	07/13/1982	16.30	S	119	--	660	H	F
351935096021801	10N-12E-21 ADC 1	07/14/1982	12.81	S	54	--	665	S	F
351853096003401	10N-12E-26 BDA 1	--	--		--	--	685	I	F
351817096020301	10N-12E-27 CCC 1	08/05/1982	8.85	S	16	--	666	--	
352728096324701	11N-07E-02 BCC 1	07/06/1982	54.33	S	146	--	850	H	F
352422096341201	11N-07E-28 ABA 1	07/08/1982	8.13	S	21	--	877	--	
352614096302101	11N-08E-07 DDA 1	08/02/1982	18.06	S	29	--	835	--	
352659096252301	11N-08E-12 BBB 1	08/03/1982	14.75	S	20	--	810	--	
352619096243701	11N-08E-12 DCA 1	07/06/1982	10.83	S	31	--	800	U	F
352619096243701	11N-08E-12 DCA 1	07/06/1982	10.83	S	31	--	800	U	F
352517096242001	11N-09E-18 CCC 1	07/06/1982	7.90	S	29	--	804	S	
352432096231901	11N-09E-19 DDA 1	07/07/1982	5.66	S	86	--	842	U	F
352752096344701	12N-07E-33 CCD 1	08/02/1982	15.65	S	37	--	850	--	
352808096262701	12N-08E-35 CBC 1	08/03/1982	0.0	S	21	--	820	--	
OKLAHOMA COUNTY									
352748097271401	11N-02W-06 BAB 1	06/04/1982	69.65	S	310	--	1200	H	F
352740097275301	11N-03W-01 ABD 1	06/04/1982	103.00	S	191	--	1210	H	F
352724097280701	11N-03W-01 CAA 1	06/03/1982	153.05	S	162	--	1218	N	F
352726097294301	11N-03W-03 ADD 1	06/30/1982	17.84	S	20	--	1100	--	
352741097324901	11N-03W-05 BBC 1	06/29/1982	19.00	S	25	--	1150	U	
352703097335301	11N-03W-06 CCC 1	--	--		--	--	1205	N	F
352651097315201	11N-03W-08 AAD 1	06/01/1982	16.22	S	48	--	1180	U	F
352721097370601	11N-04W-03 CBB 1	--	--		--	--	--	I	F
352749097375901	11N-04W-04 BBA 1	--	--		--	--	1225	H	F
352721097371701	11N-04W-04 DAB 1	05/28/1982	11.00	S	53	--	1220	I	

Table 1.--Records of wells and test holes.--Continuted.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE QW
OKLAHOMA COUNTY--CONTINUED									
352710097391201	11N-04W-05 CCB 1	--	--		--	--	1220	--	
352700097384101	11N-04W-05 CDD 1	06/29/1982	15.05	S	18	--	1220	U	
352702097381601	11N-04W-05 DDD 1	--	--		43	--	1220	H	F
352746097394601	11N-04W-06 BAA 1	05/27/1982	26.40	S	50	--	1230	U	F
352721097391501	11N-04W-06 DAA 1	01/01/1982	21.00		55	--	1200	H	F
352634097380801	11N-04W-09 BCC 1	--	--		--	--	1230	H	F
352622097360401	11N-04W-10 DAD 1	--	--		187	--	1250	U	
352624097345401	11N-04W-12 CBC 1	06/01/1982	7.01	S	51	--	1218	U	F
352605097370201	11N-04W-15 BBA 1	06/01/1982	3.32	S	17	--	1230	U	F
352702097381601	11W-04W-05 DDD 1	--	--		--	--	1220	H	F
353209097140701	12N-01E-07 ABA 1	06/10/1982	15.80	S	53	--	1101	D	F
353142097144801	12N-01E-07 CBB 1	09/06/1982	21.02	S	85	--	1100	H	F
353142097144802	12N-01E-07 CBB 2	06/10/1982	19.16	S	28	--	1100	H	
353143097134901	12N-01E-07 DAA 1	06/14/1982	15.75		68	--	1100	H	F
353116097115401	12N-01E-16 AAB 1	11/01/1969	76.00		--	--	1145	H	F
353107097114201	12N-01E-16 DDA 1	--	--		--	--	1085	H	F
353117097125301	12N-01E-17 AAB 1	06/14/1982	33.08	S	52	--	1110	H	F
353358097134401	12N-01E-17 BCB 1	01/01/1982	30.00		48	--	1100	H	F
352940097152701	12N-01E-19 BBA 1	--	--		--	--	1120	H	F
352947097134601	12N-01E-20 CCB 1	--	--		60	--	1120	H	F
352949097124801	12N-01E-20 DDA 1	--	--		--	--	1095	H	F
353023097114201	12N-01E-21 AAA 1	06/14/1982	22.36	S	113	--	1090	H	F
352957097124201	12N-01E-21 CBB 1	07/06/1982	9.39	S	23	--	1085	--	
352951097115701	12N-01E-21 DBD 1	--	--		--	--	1100	H	F
352941097114101	12N-01E-21 DDD 1	--	75.00	R	110	--	1130	H	F
352938097103801	12N-01E-22 DDD 1	--	--		--	--	1118	H	F
352948097093601	12N-01E-23 DAD 1	06/14/1982	34.04	S	189	--	1080	H	F
352945097092201	12N-01E-24 CCA 1	06/14/1982	32.60	S	164	--	1076	H	F
352930097084701	12N-01E-25 ABA 1	--	--		--	--	1060	H	F
352927097092901	12N-01E-25 BBC 1	01/01/1980	26.00	R	--	--	1070	I	F
352808097093001	12N-01E-36 CBC 1	--	90.00	R	--	--	1092	H	F
353302097145101	12N-01W-01 AAA 1	--	40.00	R	--	--	1104	H	F
353214097150601	12N-01W-01 DCD 1	--	35.00		120	--	1120	H	F
353303097224701	12N-02W-02 ABB 1	06/07/1982	24.10	S	126	--	1138	H	F
353231097221801	12N-02W-02 DAA 1	06/08/1982	9.55	S	20	--	1140	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE QW
OKLAHOMA COUNTY--CONTINUED									
353214097224401	12N-02W-02 DCC 1	01/01/1970	8.38	S	146	--	1138	--	F
353157097232101	12N-02W-10 ADA 1	--	--		200	--	1140	H	F
353210097240001	12N-02W-10 BAB 1	--	--		85	--	1180	H	F
353727097230701	12N-02W-11 BCA 1	06/07/1982	30.30	S	138	--	1150	H	F
353138097231601	12N-02W-11 CBC 1	06/07/1982	23.65	S	106	--	1144	H	F
353126097224001	12N-02W-11 DCC 1	06/08/1982	29.28	S	36	--	1190	U	F
353154097221101	12N-02W-12 BCB 1	06/08/1982	46.17	S	91	--	1180	H	F
353644097231901	12N-02W-15 AAA 1	07/01/1982	16.60	S	20	--	1145	--	
353054097232001	12N-02W-15 ADD 1	--	--		--	--	1190	H	F
353054097235901	12N-02W-15 BDC 1	--	--		--	--	1155	H	F
353147097251601	12N-02W-16 BBB 1	06/04/1982	65.70	S	96	--	1210	H	F
353102097252901	12N-02W-17 DDD 1	--	--		--	--	--	H	F
353024097261601	12N-02W-20 BBA 1	06/04/1982	89.55	S	158	--	1205	H	F
352947097262701	12N-02W-20 CCB 1	--	--		--	--	1245	H	F
352939097254901	12N-02W-20 DCD 1	06/04/1982	58.55	S	158	--	1175	H	F
352937097253001	12N-02W-20 DDD 1	06/04/1982	26.18	S	107	--	1160	U	
353017097245201	12N-02W-21 ABC 1	06/09/1982	24.00	S	63	--	1160	H	F
353019097242101	12N-02W-22 BBC 1	--	--		--	--	1150	H	F
352855097252301	12N-02W-28 CCB 1	06/04/1982	17.80	R	260	--	1170	H	F
352933097271701	12N-02W-30 BAB 1	06/04/1982	22.95		160	--	1245	H	F
352934097272401	12N-02W-30 BBA 1	--	--		--	--	1240	H	F
352840097263201	12N-02W-31 AAA 1	--	25.00		150	--	1130	C	F
352815097272501	12N-02W-31 BCC 1	--	150.00		900	--	1160	C	
352838097260101	12N-02W-32 BAD 1	06/03/1982	8.56	S	100	--	1160	U	F
353253097391601	12N-04W-06 AAD 1	05/25/1982	64.70	S	98	--	1279	H	F
353145097394701	12N-04W-07 CAA 1	--	30.00	O	100	--	1270	H,S	F
352853097393101	12N-04W-30 CAA 1	05/27/1972	25.00		45	--	1270	H	F
343000097394401	12N-04W-30 DBC 1	--	30.00	O	78	--	1260	H	F
352807097391701	12N-04W-31 DAD 1	05/27/1982	14.55	S	54	--	1230	U	F
352816097390601	12N-04W-32 CBA 1	--	--		--	--	1238	H	F
352753097380501	12N-04W-33 CCD 1	--	--		--	--	1230	H	F
352821097360101	12N-04W-35 BBC 1	01/06/1982	15.00		38	--	1220	H	F
353328097144001	13N-01E-31 CBA 1	--	--		--	--	1100	H	F
353606097175701	13N-01W-15 CBB 1	06/08/1982	77.85	S	105	--	1150	H	F
353622097194501	13N-01W-17 BAC 1	--	--		163	--	1180	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE QW
OKLAHOMA COUNTY--CONTINUED									
353618097201401	13N-01W-18 ADA 1	01/01/1981	40.00	S	44	--	1140	H	F
353544097204601	13N-01W-18 CDD 1	07/01/1982	21.32	S	25	--	1130	--	
353539097203801	13N-01W-19 ABB 1	06/07/1982	19.20	S	--	--	1130	H	F
353515097201101	13N-01W-19 ADD 1	--	--		--	--	1150	H	F
353452097203701	13N-01W-19 DCC 1	06/09/1982	32.03	S	79	--	1160	H	F
353451097183101	13N-01W-21 DCC 1	05/20/1982	26.53	S	102	--	1130	H	A
353532097170201	13N-01W-22 ADD 1	06/09/1982	63.58	S	121	--	1135	H	F
353528097175901	13N-01W-22 BBC 1	06/09/1982	22.84	S	109	--	1120	H	F
353450097172701	13N-01W-22 DCC 1	06/09/1982	17.88	S	48	--	1120	H	F
353457097162701	13N-01W-23 CDA 1	05/20/1982	23.28	S	143	--	1120	H	F
353429097154401	13N-01W-25 BCA 1	--	--		200	--	1175	H	F
353445097155601	13N-01W-26 AAA 1	06/09/1982	62.80	S	131	--	1180	H	F
353356097162301	13N-01W-26 DCC 1	06/10/1982	50.80	S	250	--	1100	H	F
353403097210901	13N-01W-30 CCB 1	06/07/1982	34.45	S	107	--	1150	H	F
353313097162601	13N-01W-35 CDA 1	--	--		--	--	1130	H	F
353305097155301	13N-01W-35 DDD 1	09/06/1982	42.10		139	--	1105	H	F
353513097222201	13N-02W-23 DAA 1	--	--		--	--	1132	H	F
353530097211701	13N-02W-24 AAD 1	--	--		--	--	1132	H	F
353454097213901	13N-02W-24 DCC 1	06/08/1982	8.80	S	111	--	1120	H	F
353447097215801	13N-02W-25 BAB 1	06/08/1982	17.25	S	97	--	1130	H	F
353351097230701	13N-02W-35 BBD 1	06/07/1982	25.92	S	85	--	1143	H	F
353306097231801	13N-02W-35 CCC 1	--	--		--	--	1140	H	F
353354097213901	13N-02W-36 ABB 1	06/07/1982	46.57	S	85	--	1180	H	F
353205097215301	13N-02W-36 CDC 1	06/08/1982	46.95	S	82	--	1170	H	F
OKMULGEE COUNTY									
352307095531301	11N-13E-36 BDC 1	07/15/1982	30.63	S	37	--	630	H	F
352303095530701	11N-13E-36 BDD 1	08/09/1982	15.58	S	19	--	625	--	

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
POTTAWATOMIE COUNTY									
352227097010301	10N-03E-05 BBC 1	06/18/1982	40.51	S	94	--	1050	H	F
352155097000401	10N-03E-05 DAA 1	12/01/1981	20.00	R	90	--	1040	H	F
352219097020901	10N-03E-06 BCB 1	--	--		--	--	1020	H	F
352208097010601	10N-03E-06 DAA 1	07/07/1982	8.08	S	19	--	990	--	
352145097010601	10N-03E-06 DDD 1	06/17/1982	6.63	S	111	--	--	H	F
352139097000301	10N-03E-08 AAD 1	01/01/1961	16.00	R	--	--	1020	H	F
352141096585901	10N-03E-09 AAA 1	06/21/1982	22.80	S	60	--	1040	H	F
352141096595201	10N-03E-09 BBA 1	--	--		--	--	1121	H	F
352059097000001	10N-03E-09 CCB 1	06/18/1982	13.60	S	58	--	1011	H	F
352056096585901	10N-03E-09 DDD 1	06/18/1982	8.67	S	31	--	1000	U	F
352140096581601	10N-03E-10 ABA 1	--	--		--	--	1039	H	F
352006096574201	10N-03E-14 CCA 1	06/21/1982	16.99	S	58	--	1000	I	F
352046097575601	10N-03E-15 AAA 1	06/22/1982	14.68	S	47	--	1010	H	F
352000096594001	10N-03E-16 CDC 1	06/18/1982	21.68	S	194	--	1040	H	F
351909096580001	10N-03E-22 DDD 1	--	--		--	--	1000	H	F
351956096565801	10N-03E-23 AAA 1	05/01/1982	40.00	R	60	--	1050	I	F
351936096571101	10N-03E-23 ACD 1	06/22/1982	66.39	S	96	--	1060	U	
351915096572601	10N-03E-23 CDA 1	--	--		--	--	995	Z	F
351923096565301	10N-03E-23 DAD 1	06/22/1982	37.58	S	65	--	1050	H	F
351908096572101	10N-03E-23 DCC 1	07/07/1982	4.87	S	12	--	995	--	
351907096561601	10N-03E-24 DCC 1	06/22/1982	13.32	S	210	--	1030	U	F
351819096561501	10N-03E-25 CAC 1	06/22/1982	19.60	S	43	--	1000	I,S	F
352330097021001	10N-03E-25 DDD 1	--	--		--	--	1020	H	F
351817096573001	10N-03E-26 CDD 1	--	--		--	--	990	H	F
352152096493001	10N-04E-01 DDB 1	06/23/1982	20.85	S	42	--	960	H	F
352220096513001	10N-04E-02 BCB 1	01/01/1980	30.00	E	--	--	1010	H	F
352110096502901	10N-04E-11 DAA 1	01/01/1982	40.00	R	100	--	1008	H	F
352139096502301	10N-04E-12 BBB 1	01/01/1977	35.00	Z	--	--	984	H	F
352001096501901	10N-04E-13 CCD 1	01/01/1981	20.00	R	120	--	1010	H	F
352000096511901	10N-04E-14 CCD 1	06/23/1982	8.50	S	68	--	1000	H	F
352026096523101	10N-04E-15 BBC 1	06/23/1982	16.01	S	39	--	980	H	F
352003096515301	10N-04E-15 DCD 1	06/23/1982	39.85	S	47	--	1010	U	
351959096523901	10N-04E-16 DDD 1	06/23/1982	27.62	S	72	--	974	H	F
351910096553001	10N-04E-19 CDC 1	--	--		31	--	1030	H	F
351920096540601	10N-04E-20 DBC 1	06/23/1982	53.78	S	64	--	1040	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
POTTAWATOMIE COUNTY--CONTINUED									
351904096523401	10N-04E-27 BBA 1	06/23/1982	5.38	S	97	--	990	U	F
351905096533901	10N-04E-28 BBB 1	06/23/1982	20.30	S	119	--	990	H	F
351818096532701	10N-04E-28 CCD 1	05/01/1982	10.00	R	184	--	995	H	F
351818096541201	10N-04E-29 DCC 1	06/23/1982	14.16	S	46	--	990	H	F
351836096552801	10N-04E-30 CAB 1	06/22/1982	6.25	S	35	--	980	S	F
351753096545001	10N-04E-31 ADD 1	06/01/1973	25.00	R	--	--	995	H	F
352130096492401	10N-05E-07 BCB 1	06/24/1982	19.32	S	55	--	970	U	F
352104096492601	10N-05E-07 CCB 1	06/23/1982	16.10	S	41	--	970	I	F
352511097033101	11N-01E-23 ABA 1	--	50.00	R	--	--	1050	H	F
352748097055201	11N-02E-04 BAA 1	07/06/1982	10.32	S	22	--	1050	--	
352702097055401	11N-02E-04 CDD 1	--	--		--	--	1050	H	F
352718097071301	11N-02E-05 CBA 1	06/15/1982	44.55	S	95	--	1085	H	F
352658097264501	11N-02E-05 DCD 1	--	17.00	R	31	--	1085	H	F
352647097062201	11N-02E-09 BBC 1	--	45.00	R	--	--	1095	H	F
352630097061501	11N-02E-09 CBA 1	06/16/1982	59.80	S	89	--	1128	H	F
352656097042801	11N-02E-10 AAB 1	06/16/1982	14.53	S	95	--	1050	H	F
352654097051301	11N-02E-10 BBB 1	--			125	--	1055	H	F
352642097034801	11N-02E-11 BDA 1	06/16/1982	22.55	S	108	--	1150	H	F
352619097023001	11N-02E-11 DAD 1	06/16/1982	18.78	S	56	--	1055	H	F
352619097032001	11N-02E-12 CDD 1	--	--		--	--	1050	H	F
352540097021601	11N-02E-13 ADD 1	--	--		--	--	1065	H	F
352540097043301	11N-02E-15 ADC 1	--	15.00	R	--	--	1065	H	F
352450097031301	11N-02E-24 BCC 1	06/17/1982	25.35	S	103	--	1045	H	F
352330097023901	11N-02E-25 DCC 1	06/17/1982	42.70	S	98	--	1032	H	F
352407097031801	11N-02E-26 ADA 1	06/16/1982	18.80	S	108	--	1040	H	F
350238097230401	11N-02E-36 ACC 1	--	--		100	--	1033	H	F
352233097010301	11N-03E-05 BBB 1	06/17/1982	45.58	S	80	--	1030	H	F
352459097020601	11N-03E-19 BCC 1	06/16/1982	26.15	S	57	--	1042	H	F
352419097015301	11N-03E-30 BBA 1	06/17/1982	14.38	S	72	--	1040	H	F
352330097014601	11N-03E-30 CDC 1	--	--		--	--	1030	H	F
352313097011901	11N-03E-31 ADB 1	--	--		--	--	1050	H	F
352302097010601	11N-03E-31 ADD 1	06/17/1982	21.82	S	--	--	1045	H	F
352513096502701	11N-04E-13 CCC 1	--	--		50	--	930	H	F
352603096494001	11N-04E-14 AAB 1	--	--		100	--	990	H	F
352600096205501	11N-04E-14 ABB 1	06/24/1982	41.09		67	--	970	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
POTTAWATOMIE COUNTY--CONTINUED									
352600096513201	11N-04E-15 AAA 1	--	--		--	--	990	H	F
352507096514101	11N-04E-22 AAA 1	07/01/1981	40.00	R	110	--	990	H	F
352429096523401	11N-04E-22 CCB 1	--	12.00	R	40	--	943	H	F
352512096490701	11N-04E-24 ABB 1	07/07/1982	4.47	S	14	--	935	--	
352414096520201	11N-04E-27 ABB 1	06/24/1982	21.62	S	98	--	950	H	F
352327096522001	11N-04E-34 BAB 1	06/24/1982	39.20	S	80	--	980	C	F
352552096434601	11N-05E-13 BAC 1	06/29/1982	85.20	S	240	--	980	H	F
352525096444301	11N-05E-14 CAD 1	--	--		--	--	924	H	F
352510096485901	11N-05E-19 BAA 1	07/07/1982	12.90	S	27	--	928	--	
352428096485601	11N-05E-19 CDA 1	08/24/1965	20.00	R	--	--	925	H	F
352425096480901	11N-05E-20 CCD 1	06/25/1982	23.36		43	--	910	H,S	F
352509096463701	11N-05E-21 ABA 1	--	--		--	--	935	H	F
352420096463601	11N-05E-21 DCD 1	07/07/1982	5.63	S	17	--	910	--	
352453096453601	11N-05E-22 ACA 1	--	--		--	--	950	H	F
352507096451101	11N-05E-23 BBB 1	--	32.00	R	76	--	950	H	F
352535096415301	11N-06E-17 CBA 1	--	--		--	--	920	H	F
352509096420601	11N-06E-19 AAA 1	07/08/1982	10.47	S	17	--	895	--	
352444096405901	11N-06E-20 ADD 1	--	--		--	--	890	--	
352421096380601	11N-06E-23 DCD 1	06/29/1982	39.95	S	51	--	925	U	
352353096391401	11N-06E-27 ACD 1	06/29/1982	24.65	S	90	--	890	H	F
352720096334901	11N-07E-03 CBB 1	--	--		--	--	870	H	F
352437096360001	11N-07E-20 CBC 1	07/02/1982	35.30	S	58	--	920	U	F
352447096345901	11N-07E-20 DAA 1	01/01/1970	70.00	R	270	--	975	H	F

Table 1.--Records of wells and test holes.--Continued.

SITE-ID	LOCAL NUMBER	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DEPTH OF WELL (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	USE OF WATER	OTHER DATA AVAILABLE OW
SEMINOLE COUNTY									
350957096272601	08N-08E-16 DAA 1	07/20/1982	3.73	S	33	--	812	U	
351025096291201	08N-08E-17 BAA 1	07/20/1982	23.60	S	100	--	810	Z	F
350953096293401	08N-08E-17 CAA 1	08/11/1982	11.85	S	47	--	795	--	
352451096432301	11N-06E-19 BCC 1	06/30/1982	27.95	S	196	--	902	H	F
352345096401601	11N-06E-27 CBC 1	07/08/1982	5.52	S	19	--	895	--	
352321096394001	11N-06E-34 ABC 1	--	--		42	--	925	H	F
352326096390801	11N-06E-35 BBB 1	--	20.00	R	75	--	900	H	F
352640096324801	11N-07E-11 BCB 1	07/01/1982	50.85	S	60	--	910	H	
352540096324901	11N-07E-14 CBB 1	07/01/1982	20.00	R	100	--	910	H,S	F
352512096314901	11N-07E-23 AAA 1	07/01/1982	95.08	S	113	--	940	S	F
352331096334101	11N-07E-27 CCD 1	--	50.00	R	--	--	905	H	F
352330096345601	11N-07E-28 CCC 1	07/08/1982	5.38	S	29	--	890	--	
352345096342601	11N-07E-28 CDD 1	--	62.00	R	94	--	900	H	F
352340096335801	11N-07E-28 DDA 1	--	--		80	--	900	H	F
352318096365001	11N-07E-29 CCC 1	06/30/1982	85.50	S	110	--	960	H	F
352318096365001	11N-07E-31 BBD 1	06/30/19 82	54.15	S	82	--	925	H	F
352327096314901	11N-07E-35 AAA 1	07/01/1982	30.00	R	300	--	880	H	F
352740096262601	11N-08E-03 ADD 1	08/03/1982	23.29	S	26	--	820	U	

TABLE 2.--Field water-quality data for wells and test holes.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
CANADIAN COUNTY					
352702097413301	11N-05W-02 DDC 1	05/25/1982	18.0	731	7.3
352844097410601	12N-05W-25 CCD 1	05/27/1982	16.5	1052	7.4
352923097432501	12N-05W-27 BBC 1	05/28/1982	18.8	1210	7.1
352902097422701	12N-05W-27 DAD 1	05/27/1982	19.0	1585	6.9
352840097401901	12N-05W-36 AAA 1	05/27/1982	19.0	1160	7.3
352815097401901	12N-05W-36 DAA 1	05/27/1982	19.0	1141	7.2
HUGHES COUNTY					
350846096234401	08N-08E-23 CCD 1	07/20/1982	22.0	1505	8.4
350839096242301	08N-08E-25 AAA 1	07/20/1982	19.0	150	5.8
350839096250501	08N-08E-25 BAB 1	07/20/1982	22.0	461	5.8
351138096180201	08N-09E-01 DAA 1	07/20/1982	21.0	856	7.4
350937096220801	08N-09E-16 CCC 1	07/20/1982	20.0	449	5.7
351022096223301	08N-09E-17 ABA 1	07/20/1982	18.0	570	6.4
350909096232201	08N-09E-19 ADD 1	07/20/1982	21.0	850	7.7
351604096132401	09N-10E-11 CAB 1	07/13/1982	27.5	565	6.9
351538096123401	09N-10E-13 BBB 1	07/13/1982	19.0	--	6.9
351357096132101	09N-10E-24 DDD 1	07/21/1982	19.0	640	6.8
351350096120901	09N-10E-25 BAA 1	07/21/1982	19.0	475	6.4
351304096142201	09N-10E-27 CDD 1	07/20/1982	16.5	370	6.4
351224096124601	09N-10E-35 DAD 1	07/21/1982	24.0	672	5.4
351538096080301	09N-11E-15 BAB 1	07/14/1982	18.0	1357	7.0
351450096104801	09N-11E-18-DDC 1	07/21/1982	19.0	1328	7.2
351407096111601	09N-11E-19 CDB 1	07/21/1982	20.0	1560	6.6
351304096104501	09N-11E-30 DDC 1	07/21/1982	21.0	1465	6.2
LINCOLN COUNTY					
352847097080701	12N-02E-30-CDC-01	06/15/1982	22.0	683	6.8
352752097080401	12N-02E-31 CDC 1	06/15/1982	17.5	250	5.6
352823097072401	12N-02E-32 BCB 1	06/15/1982	20.0	795	6.8

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
MCINTOSH COUNTY					
351958095541101	10N-13E-23 BAA 1	07/14/1982	28.0	474	6.0
352234096474301	10N-14E-02 ABB 1	07/15/1982	18.5	638	6.7
352410095482301	11N-14E-27 AAD 1	07/15/1982	18.0	1121	7.5
352418096470801	11N-14E-36 BBB 1	07/15/1982	19.0	575	7.3
OKFUSKEE COUNTY					
352012096180101	10N-09E-13 DDA 1	07/12/1982	22.0	862	6.7
351930096180101	10N-09E-24 DAA 1	07/08/1982	17.0	688	7.6
351944096165701	10N-10E-19 ADA 1	07/08/1982	18.0	967	5.9
351959096112501	10N-11E-19 BBA 1	07/12/1982	17.5	696	6.9
351926096080401	10N-11E-22 CAC 1	07/13/1982	17.0	2090	6.8
351928096065101	10N-11E-23 CAD 1	07/14/1982	20.0	1430	7.1
351923096052801	10N-11E-24 DAC 1	07/14/1982	16.0	445	7.0
352020096032701	10N-12E-17 DBA 1	07/13/1982	22.0	1060	6.5
351935096021801	10N-12E-21 ADC 1	07/14/1982	21.0	906	6.6
351853096003401	10N-12E-26 BDA 1	07/14/1982	22.0	183	5.7
352728096324701	11N-07E-02 BCC 1	07/06/1982	19.0	421	6.4
352619096243701	11N-08E-12 DCA 1	07/06/1982	17.0	1058	7.2
352432096231901	11N-09E-19 DDA 1	07/07/1982	18.0	412	8.0
OKLAHOMA COUNTY					
352748097271401	11N-02W-06 BAB 1	06/04/1982	17.0	477	6.8
352740097275301	11N-03W-01 ABD 1	06/04/1982	17.0	422	7.0
352724097280701	11N-03W-01 CAA 1	06/03/1982	19.5	573	7.8
352703097335301	11N-03W-06 CCC 1	06/01/1982	18.0	534	7.9
352651097315201	11N-03W-08 AAD 1	06/01/1982	19.0	482	6.8
352721097370601	11N-04W-03 CBB 1	06/01/1982	21.0	1137	7.3
352749097375901	11N-04W-04 BBA 1	06/01/1982	18.0	773	7.0
352746097394601	11N-04W-06 BAA 1	05/27/1982	17.0	757	7.8
352721097391501	11N-04W-06 DAA 1	05/27/1982	23.0	368	7.2
352634097380801	11N-04W-09 BCC 1	05/25/1982	20.4	604	8.3
352624097345401	11N-04W-12 CBC 1	06/01/1982	19.0	1507	6.9
352605097370201	11N-04W-15 BBA 1	06/01/1982	17.0	3460	6.7
352702097381601	11N-04W-05 DDD 1	05/28/1982	19.0	1719	7.1
353302097145101	12N-01E-01 AAA 1	06/09/1982	20.0	720	7.0
353209097140701	12N-01E-07 ABA 1	06/10/1982	16.9	805	6.9

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
OKLAHOMA COUNTY--CONTINUED					
353142097144801	12N-01E-07 CBB 1	06/09/1982	17.0	690	6.8
353143097134901	12N-01E-07 DAA 1	06/14/1982	19.0	951	6.8
353116097115401	12N-01E-16 AAB 1	06/14/1982	20.0	401	7.1
353107097114201	12N-01E-16 DDA 1	06/14/1982	19.0	691	6.4
353117097125301	12N-01E-17 AAB 1	06/14/1982	19.0	308	6.2
353358097134401	12N-01E-17 BCB 1	--	--	--	6.9
352940097152701	12N-01E-19 BBA 1	06/10/1982	19.0	400	6.5
352947097134601	12N-01E-20 CCB 1	06/14/1982	18.5	308	6.3
352949097124801	12N-01E-20 DDA 1	06/14/1982	22.0	433	6.4
353023097114201	12N-01E-21 AAA 1	06/14/1982	19.0	704	7.2
352951097115701	12N-01E-21 DBD 1	06/14/1982	19.0	388	6.7
352941097114101	12N-01E-21 DDD 1	06/14/1982	20.0	463	6.3
352938097103801	12N-01E-22 DDD 1	06/14/1982	18.0	884	6.6
352948097093601	12N-01E-23 DAD 1	06/14/1982	18.5	1671	7.1
352945097092201	12N-01E-24 CCA 1	06/14/1982	17.5	1756	6.9
352930097084701	12N-01E-25 ABA 1	06/15/1982	17.0	613	6.6
352927097092901	12N-01E-25 BBC 1	06/14/1982	19.0	970	6.7
352808097093001	12N-01E-36 CBC 1	06/15/1982	17.0	359	6.1
353214097150601	12N-01W-01 DCD 1	06/09/1982	77.0	616	6.8
353727097230701	12N-02W 11 BCA 1	06/07/1982	19.0	1033	7.0
353303097224701	12N-02W-02 ABB 1	06/07/1982	19.0	398	7.2
353231097221801	12N-02W-02 DAA 1	06/08/1982	21.0	575	6.8
353214097224401	12N-02W-02 DCC 1	06/07/1982	19.0	420	7.3
353157097232101	12N-02W-10 ADA 1	06/07/1982	17.0	388	7.1
353210097240001	12N-02W-10 BAB 1	06/07/1982	20.0	610	6.8
353138097231601	12N-02W-11 CBC 1	06/07/1982	18.0	664	7.1
353126097224001	12N-02W-11 DCC 1	06/08/1982	17.0	594	6.4
353154097221101	12N-02W-12 BCB 1	06/08/1982	20.5	473	6.7
353054097232001	12N-02W-15 ADD 1	06/07/1982	20.0	575	6.6
353054097235901	12N-02W-15 BDC 1	06/07/1982	19.0	1010	6.8
353147097251601	12N-02W-16 BBB 1	06/04/1982	17.5	518	7.9
353102097252901	12N-02W-17 DDD 1	06/04/1982	18.0	510	7.0
353024097261601	12N-02W-20 BBA 1	06/04/1982	19.0	763	6.9
352947097262701	12N-02W-20 CCB 1	06/04/1982	19.0	691	7.5
352939097254901	12N-02W-20 DCD 1	06/04/1982	7.0	836	6.7

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
OKLAHOMA COUNTY--CONTINUED					
353017097245201	12N-02W-21 ABC 1	06/09/1982	18.0	781	6.8
353019097242101	12N-02W-22 BBC 1	06/08/1982	23.0	880	6.6
352855097252301	12N-02W-28 CCB 1	06/04/1982	17.0	935	7.3
352933097271701	12N-02W-30 BAB 1	06/04/1982	17.0	524	7.5
352934097272401	12N-02W-30 BBA 1	06/03/1982	19.0	1206	7.0
352840097263201	12N-02W-31 AAA 1	06/03/1982	18.5	1050	7.0
352838097260101	12N-02W-32 BAD 1	06/03/1982	19.2	583	7.2
353253097391601	12N-04W-06 AAD 1	05/25/1982	18.0	622	7.3
353145097394701	12N-04W-07 CAA 1	05/25/1982	18.0	10169	7.4
352853097393101	12N-04W-30 CAA 1	05/27/1982	18.0	579	6.5
343000097394401	12N-04W-30 DBC 1	05/27/1982	17.0	795	7.1
352816097390601	12N-04W-32 CBB 1	05/28/1982	20.0	806	6.7
352753097380501	12N-04W-33 CCD 1	05/29/1982	17.5	598	7.2
352821097360101	12N-04W-35 BBC 1	06/01/1982	21.0	1007	7.0
353328097144001	13N-01E-31 CBA 1	06/09/1982	17.8	736	7.1
353606097175701	13N-01W-15 CBB 1	06/08/1982	19.0	642	7.0
353622097194501	13N-01W-17 BAC 1	06/08/1982	19.0	688	7.1
353618097201401	13N-01W-18 ADA 1	06/08/1982	19.0	560	6.9
353539097203801	13N-01W-19 ABB 1	06/08/1982	19.0	872	7.0
353515097201101	13N-01W-19 ADD 1	06/07/1982	23.0	405	6.5
353452097203701	13N-01W-19 DCC 1	06/09/1982	19.0	476	6.9
353451097183101	13N-01W-21 DCC 1	05/20/1982	18.0	386	6.8
353532097170201	13N-01W-22 ADD 1	06/09/1982	22.0	477	6.8
353528097175901	13N-01W-22 BBC 1	06/09/1982	18.5	1060	6.8
353450097172701	13N-01W-22 DCC 1	06/09/1982	19.0	780	6.9
353457097162701	13N-01W-23 CDA 1	05/20/1982	18.0	500	7.2
353429097154401	13N-01W-25 BCA 1	06/09/1982	22.0	535	6.5
353445097155601	13N-01W-26 AAA 1	06/09/1982	21.0	483	6.8
353356097162301	13N-01W-26 DCC 1	06/10/1982	20.5	1635	6.9
353403097210901	13N-01W-30 CCB 1	06/07/1982	18.0	204	5.9
353313097162601	13N-01W-35 CDA 1	06/10/1982	22.0	529	6.8
353305097155301	13N-01W-35 DDD 1	06/10/1982	18.0	1622	6.6
353513097222201	13N-02W-23 DAA 1	06/09/1982	18.0	6239	7.0
353530097211701	13N-02W-24 AAD 1	06/08/1982	19.0	768	7.0
353454097213901	13N-02W-24 DCC 1	06/08/1982	18.5	490	6.9

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
OKLAHOMA COUNTY--CONTINUED					
353447097215801	13N-02W-25 BAB 1	06/08/1982	17.0	364	7.2
353351097230701	13N-02W-35 BBD 1	06/07/1982	19.0	1226	7.0
353306097231801	13N-02W-35 CCC 1	06/07/1982	18.0	846	7.0
353354097213901	13N-02W-36 ABB 1	06/07/1982	20.0	232	6.0
353205097215301	13N-02W-36 CDC 1	06/08/1982	18.0	367	6.8
OKMULGEE COUNTY					
352307095531301	11N-13E-36 BDC 1	07/15/1982	20.0	352	6.0
POTTAWATOMIE COUNTY					
352227097010301	10N-03E-05 BBC 1	06/18/1982	19.0	430	6.8
352155097000401	10N-03E-05 DAA 1	06/18/1982	19.0	2530	7.8
352219097020901	10N-03E-06 BCB 1	06/17/1982	19.5	944	8.4
352145097010601	10N-03E-06 DDD 1	06/17/1982	19.5	1208	8.2
352139097000301	10N-03E-08 AAD 1	06/18/1982	18.0	2420	7.6
352141096585901	10N-03E-09 AAA 1	06/21/1982	19.0	274	5.7
352141096595201	10N-03E-09 BBA 1	06/21/1982	17.0	952	6.6
352059097000001	10N-03E-09 CCB 1	06/18/1982	19.0	963	6.6
352056096585901	10N-03E-09 DDD 1	06/18/1982	17.0	745	7.1
352140096581601	10N-03E-10 ABA 1	06/22/1982	19.0	361	6.3
352006096574201	10N-03E-14 CCA 1	06/21/1982	19.0	1529	6.5
352046097575601	10N-03E-15 AAA 1	06/22/1982	19.0	418	6.2
352000096594001	10N-03E-16 CDC 1	06/18/1982	19.0	543	5.8
351909096580001	10N-03E-22 DDD 1	06/22/1982	19.0	827	6.7
351956096565801	10N-03E-23 AAA 1	06/22/1982	18.0	532	6.7
351915096572601	10N-03E-23 CDA 1	06/21/1982	21.0	736	6.6
351923096565301	10N-03E-23 DAD 1	06/22/1982	18.0	572	6.2
351907096561601	10N-03E-24 DCC 1	06/22/1982	17.0	1291	6.7
351819096561501	10N-03E-25 CAC 1	06/22/1982	21.0	955	7.1
351817096573001	10N-03E-26 CDD 1	06/22/1982	21.0	1754	6.8
352152096493001	10N-04E-01 DDB 1	06/23/1982	21.0	929	6.7
352220096513001	10N-04E-02 BCB 1	06/23/1982	19.0	466	6.7
352110096502901	10N-04E-11 DAA 1	06/24/1982	22.0	1353	6.7
352139096502301	10N-04E-12 BBB 1	06/24/1982	20.5	452	6.5
352001096501901	10N-04E-13 CCD 1	06/24/1982	22.0	1018	7.1

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
POTTAWATOMIE COUNTY--CONTINUED					
352000096511901	10N-04E-14 CCD 1	06/23/1982	22.0	719	6.3
352026096523101	10N-04E-15 BBC 1	06/23/1982	18.5	1007	6.8
351959096523901	10N-04E-16 DDD 1	06/23/1982	18.0	858	7.2
351910096553001	10N-04E-19 CDC 1	06/22/1982	18.0	417	8.3
351920096540601	10N-04E-20 DBC 1	06/23/1982	16.5	818	6.9
351904096523401	10N-04E-27 BBA 1	06/23/1982	16.0	529	7.2
351905096533901	10N-04E-28 BBB 1	06/23/1982	18.0	572	7.6
351818096532701	10N-04E-28 CCD 1	06/23/1982	18.0	650	7.1
351818096541201	10N-04E-29 DCC 1	06/23/1982	20.0	579	6.7
351836096552801	10N-04E-30 CAB 1	06/22/1982	18.0	640	6.9
351753096545001	10N-04E-31 ADD 1	06/24/1982	18.0	539	7.2
352130096492401	10N-05E-07 BCB 1	06/24/1982	17.0	770	6.5
352104096492601	10N-05E-07 CCB 1	06/23/1982	22.0	767	6.5
352511097033101	11N-01E-23 ABA 1	06/16/1982	20.0	682	7.6
352702097055401	11N-02E-04 CDD 1	06/16/1982	20.0	456	7.3
352718097071301	11N-02E-05 CBA 1	06/15/1982	18.5	412	5.9
352658097264501	11N-02E-05 DCD 1	06/15/1982	18.0	407	5.9
352647097062201	11N-02E-09 BBC 1	06/16/1982	18.0	338	6.0
352630097061501	11N-02E-09 CBA 1	06/16/1982	18.0	380	6.1
352656097042801	11N-02E-10 AAB 1	06/16/1982	17.0	837	8.4
352642097034801	11N-02E-11 BDA 1	06/16/1982	20.5	571	8.2
352619097023001	11N-02E-11 DAD 1	06/16/1982	22.0	602	6.5
352619097032001	11N-02E-12 CDD 1	06/18/1982	18.0	761	8.0
352540097021601	11N-02E-13 ADD 1	06/16/1982	17.0	694	8.4
352540097043301	11N-02E-15 ADC 1	06/16/1982	18.0	316	5.7
352450097031301	11N-02E-24 BCC 1	06/16/1982	18.5	718	7.3
352330097023901	11N-02E-25 DCC 1	06/17/1982	18.0	554	8.4
352407097031801	11N-02E-26 ADA 1	06/16/1982	21.0	751	7.2
350238097230401	11N-02E-36 ACC 1	06/17/1982	19.0	673	8.0
352233097010301	11N-03E-05 BBB 1	06/17/1982	20.0	578	6.7
352459097020601	11N-03E-19 BCC 1	06/16/1982	18.0	577	6.6
352330097021001	11N-03E-25 DDD 1	06/17/1982	19.0	572	7.6
352419097015301	11N-03E-30 BBA 1	06/17/1982	20.0	361	7.7
352330097014601	11N-03E-30 CDC 1	06/17/1982	17.0	450	8.2
352313097011901	11N-03E-31 ADB 1	06/11/1982	17.0	251	6.7

TABLE 2.--Field water-quality data for wells and test holes--Continued.

SITE-ID	LOCAL NUMBER	DATE QUALITY PARAMETERS MEASURED	TEMPERATURE (DEGREES C)	SPECIFIC CONDUCTANCE (µMHOS/CM AT 25° C)	pH (UNITS)
POTTAWATOMIE COUNTY--CONTINUED					
352302097010601	11N-03E-31 ADD 1	06/17/1982	20.0	204	6.2
352513096502701	11N-04E-13 CCC 1	06/24/1982	18.0	290	5.8
352603096494001	11N-04E-14 AAB 1	06/24/1982	19.0	789	6.7
352600096205501	11N-04E-14 ABB 1	06/24/1982	17.0	682	7.6
352600096513201	11N-04E-15 AAA 1	06/24/1982	18.0	736	7.0
352507096514101	11N-04E-22 AAA 1	06/24/1982	18.0	425	6.2
352429096523401	11N-04E-22 CCB 1	06/28/1982	18.5	742	6.6
352414096520201	11N-04E-27 ABB 1	06/24/1982	19.0	382	6.6
352327096522001	11N-04E-34 BAB 1	06/24/1982	17.0	578	6.9
352552096434601	11N-05E-13 BAC 1	06/29/1982	19.0	742	6.8
352525096444301	11N-05E-14 CAD 1	06/29/1982	19.0	335	5.8
352428096485601	11N-05E-19 CDA 1	06/25/1982	21.0	515	6.2
352425096480901	11N-05E-20 CCD 1	06/25/1982	18.0	992	6.6
352509096463701	11N-05E-21 ABA 1	06/28/1982	19.0	455	5.7
352453096453601	11N-05E-22 ACA 1	06/29/1982	19.5	818	7.8
352507096451101	11N-05E-23 BBB 1	06/29/1982	20.0	472	7.3
352535096415301	11N-06E-17 CBA 1	06/29/1982	19.0	811	6.6
352353096391401	11N-06E-27 ACD 1	06/29/1982	19.0	420	7.1
352720096334901	11N-07E-03 CBB 1	07/02/1982	17.5	584	6.8
352437096360001	11N-07E-20 CBC 1	07/02/1982	17.0	363	6.6
352447096345901	11N-07E-20 DAA 1	07/02/1982	19.0	603	6.6
SEMINOLE COUNTY					
351025096291201	08N-08E-17 BAA 1	07/20/1982	19.0	630	8.0
352451096432301	11N-06E-19 BCC 1	06/30/1982	19.0	1118	7.5
352321096394001	11N-06E-34 ABC 1	06/30/1982	17.0	1015	7.1
352326096390801	11N-06E-35 BBB 1	06/30/1982	19.0	768	7.0
352540096324901	11N-07E-14 CBB 1	07/01/1982	19.0	317	5.7
352512096314901	11N-07E-23 AAA 1	07/01/1982	18.5	556	5.7
352331096334101	11N-07E-27 CCD 1	07/01/1982	18.0	257	6.1
352345096342601	11N-07E-28 CDD 1	06/30/1982	18.0	518	6.8
352340096335801	11N-07E-28 DDA 1	07/01/1982	19.0	511	6.7
352327096314901	11N-07E-35 AAA 1	07/01/1982	18.0	650	6.6

TABLE 3.--Lithologic logs of test holes.

[Abbreviations used: 110ALVM = Alluvium, 318GRBR = Garber-Wellington Formations, 322VMOS = Vamoosa Formation; Snds = Sandstone, Sncl = Sandy clay, Slsn = Siltstone; depths are in feet below land surface.]

Test Hole no. 1
Site ID: 352700097404501
Local number: 11N-05W-01 DCC 1
Date drilled: 06/28/82

Formation	From	To	Lithologic description	
110ALVM	0	5	Soil	Dark brown, fine
	5	7.5	Clay	Light brown, fine
	7.5	10	Clay	Orange, fine
	10	17.5	Clay	Dark brown, fine
	17.5	34	Clay	Brown, fine, wet
	34	35	Clay	Hard
	35	39	Clay	Brown, very fine
318GRBR	39	40	Snds	Fine red sand

Test Hole no. 2
Site ID: 352700097384101
Local number: 11N-04W-05 CDD 1
Date drilled: 06/29/82

110ALVM	0	2.5	Soil	Brown, some clay
	2.5	9.6	Clay	Brown, very fine
	9.6	28.5	Sand	Medium
	28.5	33.5	Sand	Coarse, dark
318GRBR	33.5	35	Snds	Red, very fine

Test Hole no. 3
Site ID: 352741097324901
Local number: 11N-03W-05 BBC 1
Date drilled: 06/29/82

110ALVM	0	2.5	Soil	Brown, fine
	2.5	10	Sncl	Dark brown, fine
	10	12.5	Sncl	Tan, very fine
	12.5	17	Sand	Tan, very fine
	17	34	Sncl	Fine, saturated
	34	38	Sand	Fine, grayish tan
318GRBR	38	39	Slsn	Red

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 4
Site ID: 352715097314901
Local number: 11N-03W-05 DAD 1
Date drilled: 06/29/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Sdst	Medium
	2.5	13	Sand	Fine to medium
	13	17.5	Clay	Brown,fine
	17.5	31	Sand	Medium to coarse
318GRBR	31	32.5	Snds	Red, fine

Test Hole no. 5
Site ID: 352806097411901
Local number: 12N-05W-36 CBC 1
Date drilled: 06/30/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Very fine
	2.5	10	Clay	Red, fine
	10	20	Clay	Brown, very fine
	20	38	Sand	Brown, very fine
318GRBR	38	40	Snds	Red, very fine

Test Hole no. 6
Site ID: 352726097325601
Local number: 11N-03W-06 ADD 1
Date drilled: 06/30/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Fine
	2.5	7.5	Sand	Fine
	7.5	17.5	Sncl	Fine, brown
	17.5	38.5	Sand	Fine to coarse
318GRBR	38.5	39	Snds	Red, very fine

Test Hole no. 7
Site ID: 352726097294301
Local number: 11N-03W-03 ADD 1
Date drilled: 06/30/82

Formation	From	To	Lithologic description	
110ALVM	0	15	Sand	Brown, fine
	15	22.5	Sncl	Light brown, fine
	22.5	44	Sand	Fine to medium
318GRBR	44	45	Snds	Red, very fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 8
Site ID: 352743097293701
Local number: 11N-03W-02 BBC 1
Date drilled: 06/30/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Sand	Light brown, fine
	2.5	7.5	Clay	Dark brown, very fine
	7.5	54.5	Sand	Coarse to very coarse
318GRBR	54.5	55	Snds	Red, very fine

Test Hole no. 9
Site ID: 353644097231901
Local number: 12N-02W-15 AAA 1
Date drilled: 07/01/82

110ALVM	0	2.5	Soil	Red-brown, fine
	2.5	7.5	Sand	Dark brown, fine
	7.5	12.5	Sand	Brown, very fine
	12.5	20	Sand	Light brown, fine
	20	30	Sand	Light brown, fine
	30	38	Sand	Light brown, fine
318GRBR	38	40	Snds	Red, medium, wet

Test Hole no. 10
Site ID: 353544097204601
Local number: 13N-01W-18 CDD 1
Date drilled: 07/01/82

110ALVM	0	2.5	Soil	Brown, some clay
	2.5	20	Clay	Brown, very fine
	20	32.5	Sand	Light brown, fine
	32.5	42.5	Sand	Medium
	42.5	43.5	Snds	Red, very fine
318GRBR	43.5	47.5	Snds	Light red, wet

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 11
Site ID: 354001097135501
Local number: 12N-01E-18 ADB 1
Date drilled: 07/06/82

Formation	From	To	Lithologic description	
110ALVM	0	5	Sand	Brown, fine
	5	17.5	Sand	Brown, medium
	17.5	20	Clay	Dark brown, very fine
	20	49	Sand	Medium to very coarse
318GRBR	49	50	Snds	Red, very fine

Test Hole no. 12
Site ID: 352957097124201
Local number: 12N-01E-21 CBB 1
Date drilled: 07/06/82

Formation	From	To	Lithologic description	
110ALVM	0	5	Soil	Brown, fine
	5	7.5	Clay	Dark brown, very fine
	7.5	15	Sand	Light brown, fine
	15	17.5	Sand	Darker, fine
	17.5	20	Sand	Darker, fine
	20	25	Sand	Darker, medium
	25	32.5	Sand	Brown, coarse
	32.5	37.5	Sand	Brown, medium
	37.5	40	Sand	Brown, coarse
318GRBR	40	41	Snds	Red, fine sand

Test hole no. 13
Site ID: 352748097055201
Local number: 11N-02E-04 BAA 1
Date drilled: 07/06/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Brown
	2.5	10	Clay	Light brown, fine
	10	22.5	Sand	Light brown, fine
	22.5	45	Sand	Coarse
	45	47	Snds	Red, coarse
318GRBR	47	47.5	Snds	Red, saturated

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 14
Site ID: 352208097010601
Local number: 10N-03E-06 DAA 1
Date drilled: 07/07/82

Formation	From	To	Lithologic description	
110ALVM	0	28	Sand	Fine to medium
318GRBR	28	30	Snds	Red, very fine

Test Hole no. 15
Site ID: 351908096572101
Local number: 10N-03E-23 DCC 1
Date drilled: 07/07/82

Formation	From	To	Lithologic description	
110ALVM	0	34	Sand	Fine to coarse
318GRBR	34	35	Snds	Red, very fine

Test Hole no. 16
Site ID: 352512096490701
Local number: 11N-04E-24 ABB 1
Date drilled: 07/07/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some clay
	2.5	15	Sand	Light brown, fine
	15	32.5	Sand	Brown, medium
318GRBR	32.5	35	Snds	Red, very fine

Test Hole no. 17
Site ID: 352420096463601
Local number: 11N-05E-21 DCD 1
Date drilled: 07/07/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Dark brown, fine
	2.5	5	Clay	Brown, fine, wet
	5	10	Sand	Light brown, fine
	10	20	Sand	Brown, medium
	20	32.5	Sand	Brown, coarse
	32.5	35	Clay	Blue-green, fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 18
Site ID: 352510096485901
Local number: 11N-05E-19 BAA 1
Date drilled: 07/07/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Brown, fine
	2.5	39	Sand	Fine to coarse
	39	40	Clay	Brown, very fine

Test Hole no. 19
Site ID: 352330096345601
Local number: 11N-07E-28 CCC 1
Date drilled: 07/08/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some clay
	2.5	7.5	Clay	Brown, fine
	7.5	10	Sand	Brown, fine
	10	20	Clay	Brown, fine
	20	30	Sand	Brown, very fine
318GRBR	30	33	Snds	Red, very fine

Test Hole no. 20
Site ID: 352345096401601
Local number: 11N-06E-27 CBC 1
Date drilled: 07/08/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Sand	Brown, medium
	2.5	12.5	Clay	Fine to very fine
	12.5	19	Sand	Fine to medium
318GRBR	19	20	Snds	Red, medium

Test Hole no. 21
Site ID: 352444096405901
Local number: 11N-06E-20 ADD 1
Date drilled: 07/08/82

Formation	From	To	Lithologic description	
110ALVM	0	32.5	Sand	Fine to medium
322VMOS	32.5	33	Snds	Bluish-gray, fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 22
Site ID: 352509096420601
Local number: 11N-06E-19 AAA 1
Date drilled: 07/08/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Red-brown, fine
	2.5	7.5	Clay	Dark brown
	7.5	17.5	Sand	Light brown, fine
	17.5	27.5	Sand	Brown, medium
	27.5	43	Sand	Dark brown, coarse
	43	45	Sand	Blue-gray, fine

Test Hole no. 23
Site ID: 352422096341201
Local number: 11N-07E-28 ABA 1
Date drilled: 07/08/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some sand
	2.5	12.5	Sand	Brown, very fine
	12.5	15	Clay	Brown, very fine
	15	27.5	Sand	Brown, very fine
	27.5	32.5	Sand	Brown, fine
	32.5	35	Sand	Brown, medium
	35	36	Clay	Red, fine

Test Hole no. 24
Site ID: 352752096344701
Local number: 11N-07E-33 CDD 1
Date drilled: 08/02/82

Formation	From	To	Lithologic description	
110ALVM	0	45	Clay	Brown, fine
322VMOS	45	47.5	Snds	Bluish, very fine

Test Hole no. 25
Site ID: 352614096302101
Local number: 11N-08E-07 DDA 1
Date drilled: 08/02/82

Formation	From	To	Lithologic description	
110ALVM	0	15	Clay	Brown, very fine
	15	39	Sand	Medium to fine
322VMOS	39	40	Snds	Bluish, medium

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 26
Site ID: 352808096262701
Local number: 12N-08E-35 CBC 1
Date drilled: 08/03/82

Formation	From	To	Lithologic description	
110ALVM	0	7.5	Clay	Dark brown, fine
	7.5	20	Clay	Brown, very fine
	20	25	Clay	Light brown, fine
	25	27.5	Clay	Light brown, fine
	27.5	40	Sand	Light brown, fine
	40	42	Sand	Light brown, medium
322VMOS	42	42.5	Sand	Blue-gray, fine

Test Hole no. 27
Site ID: 352659096252301
Local number: 11N-08E-12 BBB 1
Date drilled: 08/03/82

110ALVM	0	5	Clay	Very fine
	5	36	Sand	Very fine to medium
322VMOS	36	37.5	Snds	Bluish, very fine

Test Hole no. 28
Site ID: 352545096244301
Local number: 11N-08E-13 ACD 1
Date drilled: 08/03/82

	2.5	12.5	Clay	Brown, very fine
	12.5	13	Sand	Brown, very fine
	13	13.2	Sand	Yellow, very fine

Test Hole no. 29
Site ID: 352740096262601
Local number: 11N-08E-03 ADD 1
Date drilled: 08/03/82

110ALVM	0	2.5	Soil	Brown, some clay
	2.5	17.5	Clay	Brown, very fine
	17.5	35	Sand	Brown, very fine
	35	40	Sand	Brown, medium
322VMOS	40	41	Snds	Gray, fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 30
Site ID: 352238096235001
Local number: 10N-09E-06 BAA 1
Date drilled: 08/04/82

Formation	From	To	Lithologic description	
110ALVM	0	5	Sand	Brown, very fine
	5	33	Clay	Brown, very fine
322VMOS	33	35	Snds	Bluish, very fine

Test Hole no. 31
Site ID: 352213096210801
Local number: 10N-09E-15 BBB 1
Date drilled: 08/03/82

Formation	From	To	Lithologic description	
110ALVM	0	5	Clay	Black, very fine
	5	7.5	Clay	Dark brown, very fine
	7.5	12.5	Clay	Yellow-brown, fine
	12.5	30	Sand	Light brown, very fine
	30	37.5	Sand	Light brown, medium
	37.5	45	Sand	Dark brown, medium
322VMOS	45	46	Clay	Blue-gray, very fine

Test Hole no. 32
Site ID: 352237096221301
Local number: 10N-09E-05 AAA 1
Date drilled: 08/04/82

Formation	From	To	Lithologic description	
110ALVM	0	28	Sand	Fine to medium
322VMOS	28	30	Snds	Bluish gray, fine

Test Hole no. 33
Site ID: 351959096185801
Local number: 10N-09E-24 BBB 1
Date drilled: 08/04/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Black, fine
	2.5	5	Sand	Dark brown, fine
	5	10	Sand	Brown, fine
	10	12.5	Sand	Gray, fine
	12.5	22.5	Clay	Brown, sandy, fine
	22.5	30	Sand	Gray, fine
	30	51	Sand	Brown, fine to medium
322VMOS	51	52	Clay	Dark gray, fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 34
Site ID: 352007096175901
Local number: 10N-09E-13 DDD 1
Date drilled: 08/04/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some sand
	2.5	5	Sand	Brown, very fine
	5	10	Clay	Brown, very fine
	10	22.5	Sand	Dark brown, medium
	22.5	30	Sand	Dark brown, coarse
322VMOS	30	31.5	Snds	Gray, very fine

Test Hole no. 35
Site ID: 352054096144601
Local number: 10N-10E-10 CCC 1
Date drilled: 08/05/82

110ALVM	0	2.5	Sand	Light brown, very fine
	2.5	15	Clay	Brown, very fine
	15	36	Sand	Very fine to medium
322VMOS	36	37.5	Snds	Bluish, very fine

Test Hole no. 36
Site ID: 352000096110401
Local number: 10N-11E-18 DCC 1
Date drilled: 08/04/82

110ALVM	0	5	Sand	Dark brown, very fine
	5	12.5	Clay	Brown, very fine
	12.5	42.5	Sand	Brown, medium
322VMOS	42.5	43	Clay	Gray, coarse

Test Hole no. 37
Site ID: 351546096093001
Local number: 09N-11E-08 DDD 1
Date drilled: 08/05/82

110ALVM	0	2.5	Soil	Brown, some sand
	2.5	15	Clay	Brown, very fine
	15	22.5	Sand	Brown, very fine
	22.5	37.5	Clay	Brown, very fine
	37.5	42.5	Sand	Beige, very fine
322VMOS	42.5	43	Snds	Gray, very fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 38
Site ID: 351605096131301
Local number: 09N-10E-11 CAA 1
Date drilled: 08/05/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Clay	Brown, very fine
	2.5	30.5	Sand	Very fine to fine
322VMOS	30.5	32.5	Snds	Gray, very fine

Test Hole no. 39
Site ID: 351538096113401
Local number: 09N-11E-18 BBB 1
Date drilled: 08/05/82

110ALVM	0	10	Sand	Brown, very fine
	10	12.5	Sand	Light brown, fine
	12.5	17	Sand	Dark brown, fine
	17	32.5	Sand	Dark brown, medium
	32.5	33.8	Clay	Blue-gray, very fine

Test Hole no. 40
Site ID: 351915096073801
Local number: 10N-11E-22 DCA 1
Date drilled: 08/05/82

110ALVM	0	2.5	Sand	Brown, very fine
	2.5	7.5	Clay	Brown, very fine
	7.5	10	Sand	Brown, very fine
	10	12.5	Clay	Brown, very fine
322VMOS	12.5	15	Clay	Gray, very fine

Test Hole no. 41
Site ID: 352016096061901
Local number: 10N-11E-14 DAD 1
Date drilled: 08/05/82

110ALVM	0	15	Clay	Brown, very fine
	15	39	Sand	Very fine to medium
322VMOS	39	40	Snds	Bluish-gray, fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 42
Site ID: 351817096020301
Local number: 10N-12E-27 CCC 1
Date drilled: 08/05/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some clay
	2.5	15	Clay	Brown, very fine
	15	17.5	Sand	Brown, very fine
	17.5	19	Snds	Black, fine

Test Hole no. 43
Site ID: 352303095530701
Local number: 11N-13E-36 BDD 1
Date drilled: 08/09/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Sand	Brown, very fine
	2.5	7.5	Sand	Light brown, very fine
	7.5	17.5	Sand	Brown, very fine
	17.5	20	Sand	Light brown, very fine
	20	22.5	Sand	Brown, very fine
	22.5	25	Sand	Gray-brown, very fine
	25	37.5	Sand	Brown, fine
	37.5	38	Clay	Gray, very fine

Test Hole no. 44
Site ID: 352420095472601
Local number: 11N-14E-26 ABB 1
Date drilled: 08/10/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Sncl	Brown, very fine
	2.5	5	Clay	Brown, very fine
	5	12.5	Clay	Reddish, very fine
	12.5	17.5	Sand	Brown, very fine
	17.5	32.5	Clay	Brown, very fine
	32.5	35	Clay	Hard

Test Hole no. 45
Site ID: 351142096145301
Local number: 08N-10E-04 DAA 1
Date drilled: 08/10/82

Formation	From	To	Lithologic description	
110ALVM	0	21	Clay	Brown, very fine
322VMOS	21	22.5	Snds	Blue, very fine

TABLE 3.--Lithologic logs of test holes.--Continued.

Test Hole no. 46
Site ID: 351030096234801
Local number: 08N-09E-09 DDD 1
Date drilled: 08/11/82

Formation	From	To	Lithologic description	
110ALVM	0	2.5	Soil	Brown, some clay
	2.5	7.5	Clay	Brown, very fine
	7.5	17.5	Sand	Brown, very fine
322VMOS	17.5	18	Snds	Gray, very fine

Test Hole no. 47
Site ID: 351213096200201
Local number: 09N-09E-35 CCC 1
Date drilled: 08/10/82

110ALVM	0	2.5	Sand	Yellow-brown, very fine
	2.5	7.5	Clay	Black, very fine
	7.5	12.5	Clay	Yellow-brown, very fine
	12.5	20	Clay	Brown, very fine

Test Hole no. 48
Site ID: 350945096240401
Local number: 08N-09E-18 CDA 1
Date drilled: 08/12/82

110ALVM	0	5	Sand	Light brown, fine
	5	7.5	Clay	Red, fine
	7.5	27.5	Clay	Brown, very fine
	27.5	28	Sand	Brown, fine
322VMOS	28	30	Clay	Gray, fine

Test Hole no. 49
Site ID: 350953096293401
Local number: 08N-08E-17 CAA 1
Date drilled: 08/11/82

110ALVM	0	2.5	Soil	Brown, sandy
	2.5	47.5	Clay	Brown, very fine
322VMOS	47.5	49	Snds	Gray, very fine

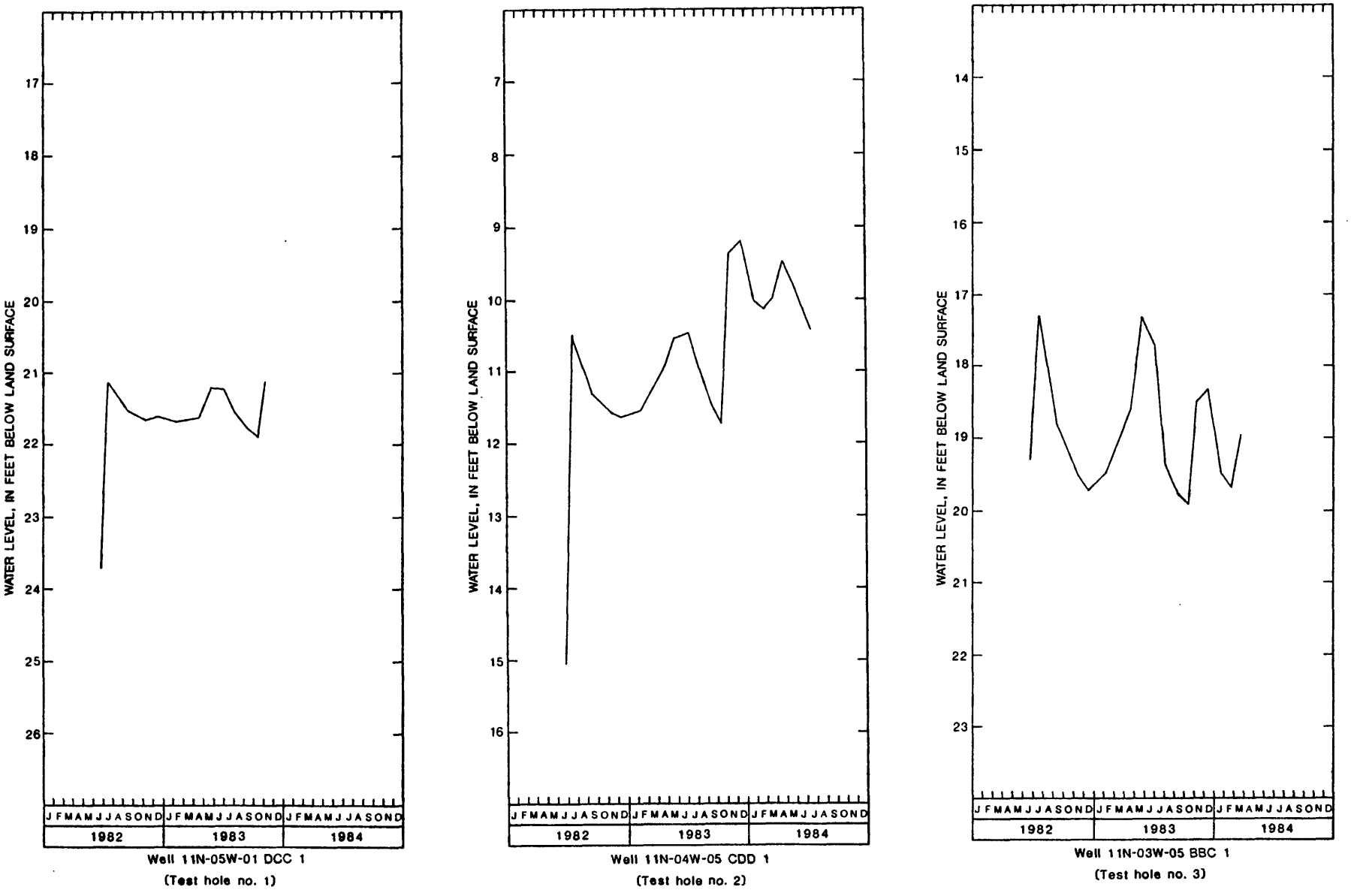


Figure 2.—Hydrographs of well 11N-05W-01 DCC 1, well 11N-04W-05 CDD 1, and well 11N-03W-05 BBC 1, 1982-84.

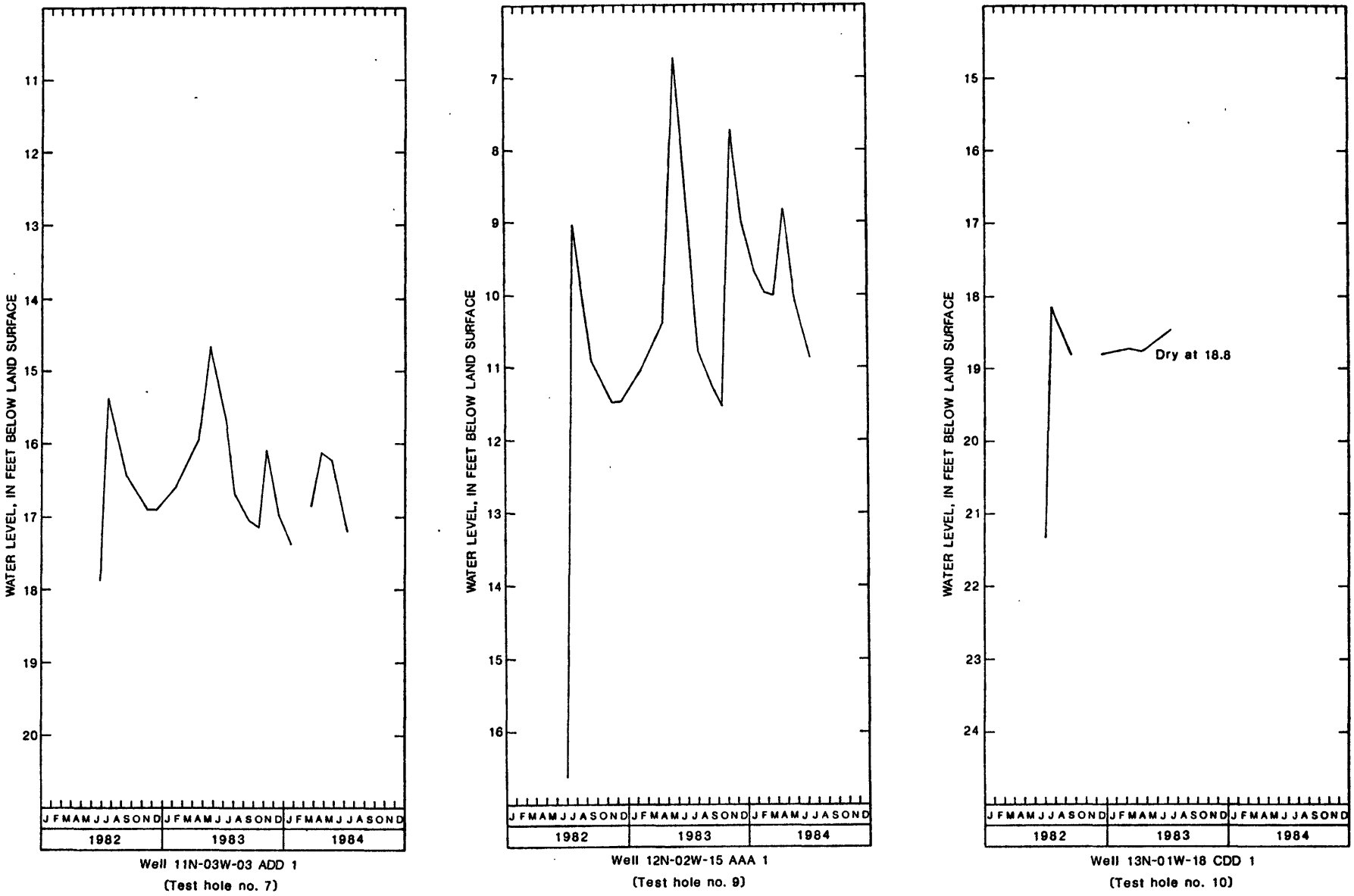


Figure 3.—Hydrographs of well 11N-03W-03 ADD 1, well 12N-02W-15 AAA 1, and well 13N-01W-18 CDD 1, 1982-84.

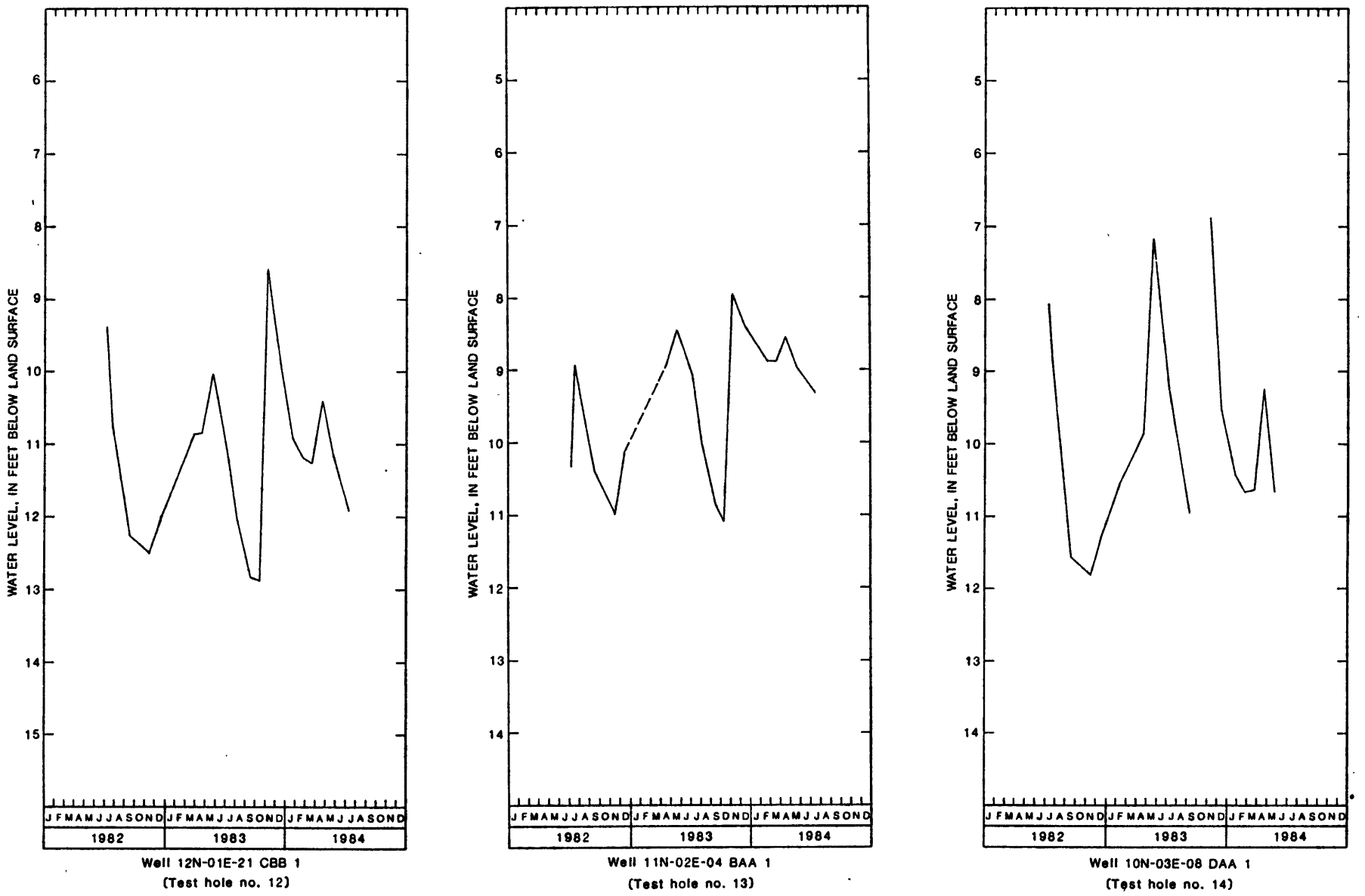


Figure 4.—Hydrographs of well 12N-01E-21 CBB 1, well 11N-02E-04 BAA 1, and well 10N-03E-06 DAA 1, 1982-84.

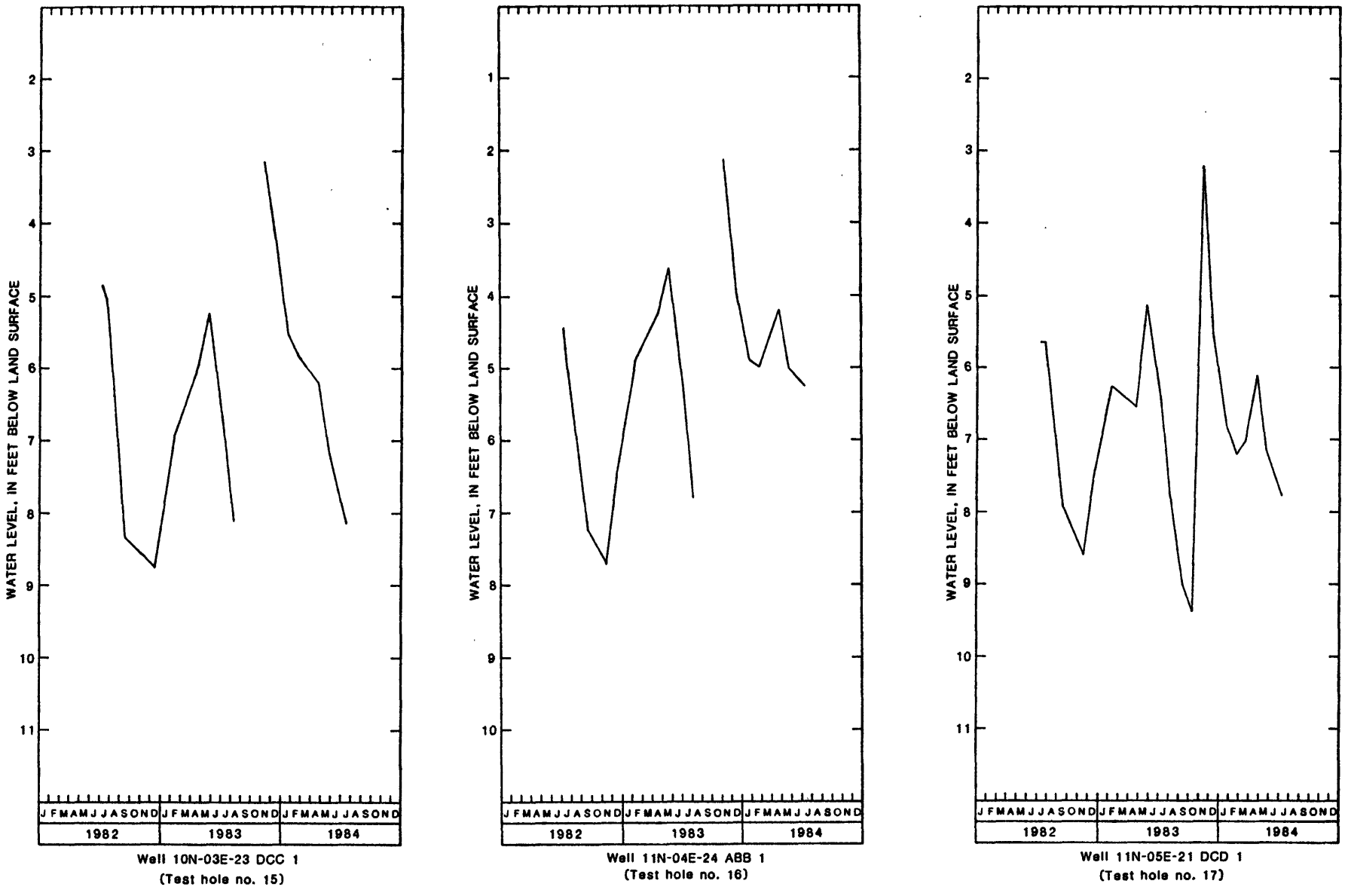


Figure 5.--Hydrographs of well 10N-03E-23 DCC 1, well 11N-04E-24 ABB 1, and well 11N-05E-21 DCD 1, 1982-84.

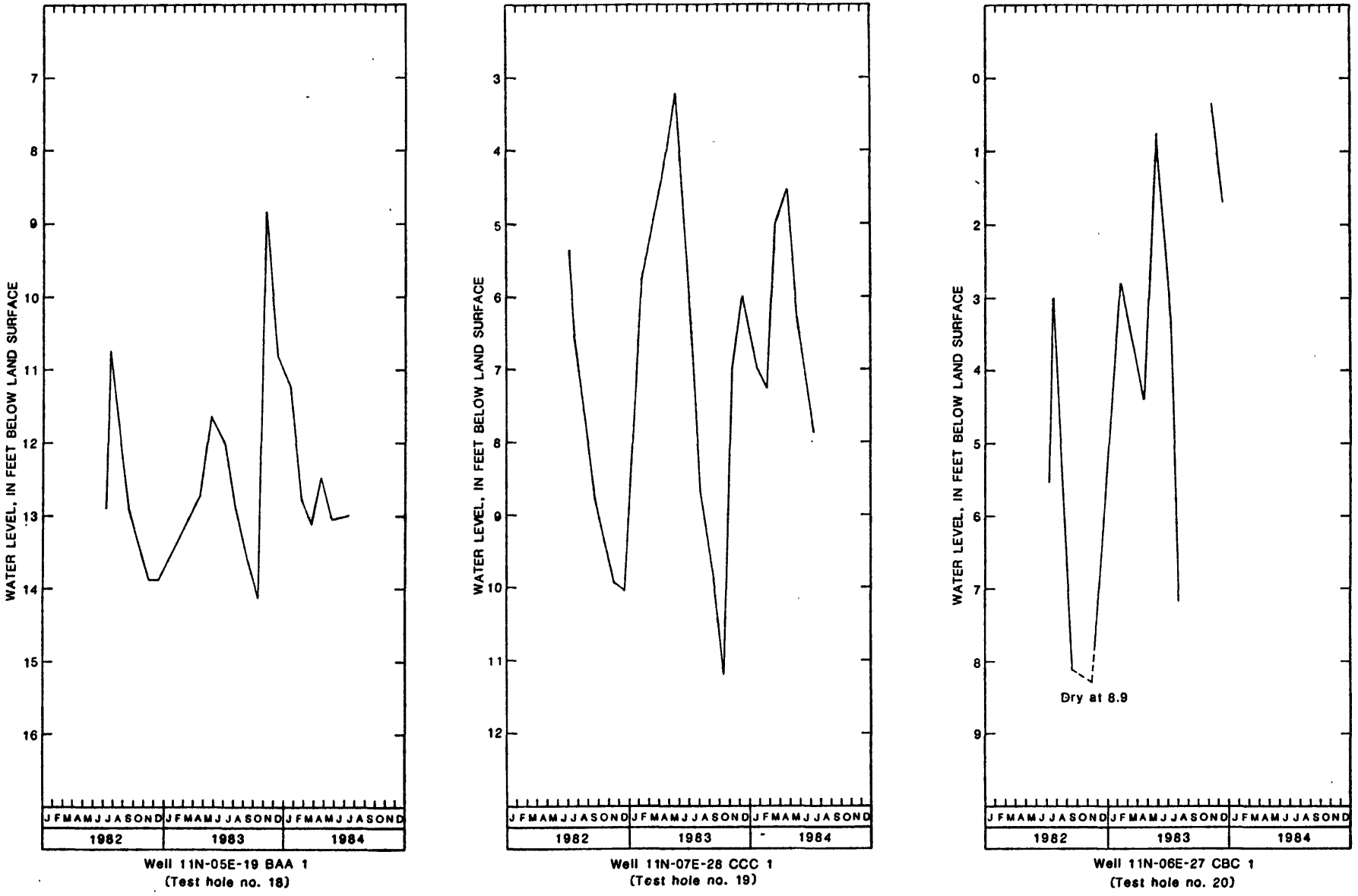


Figure 6.--Hydrographs of well 11N-05E-19 BAA 1, well 11N-07E-28 CCC 1, and well 11N-06E-27 CBC 1, 1982-84.

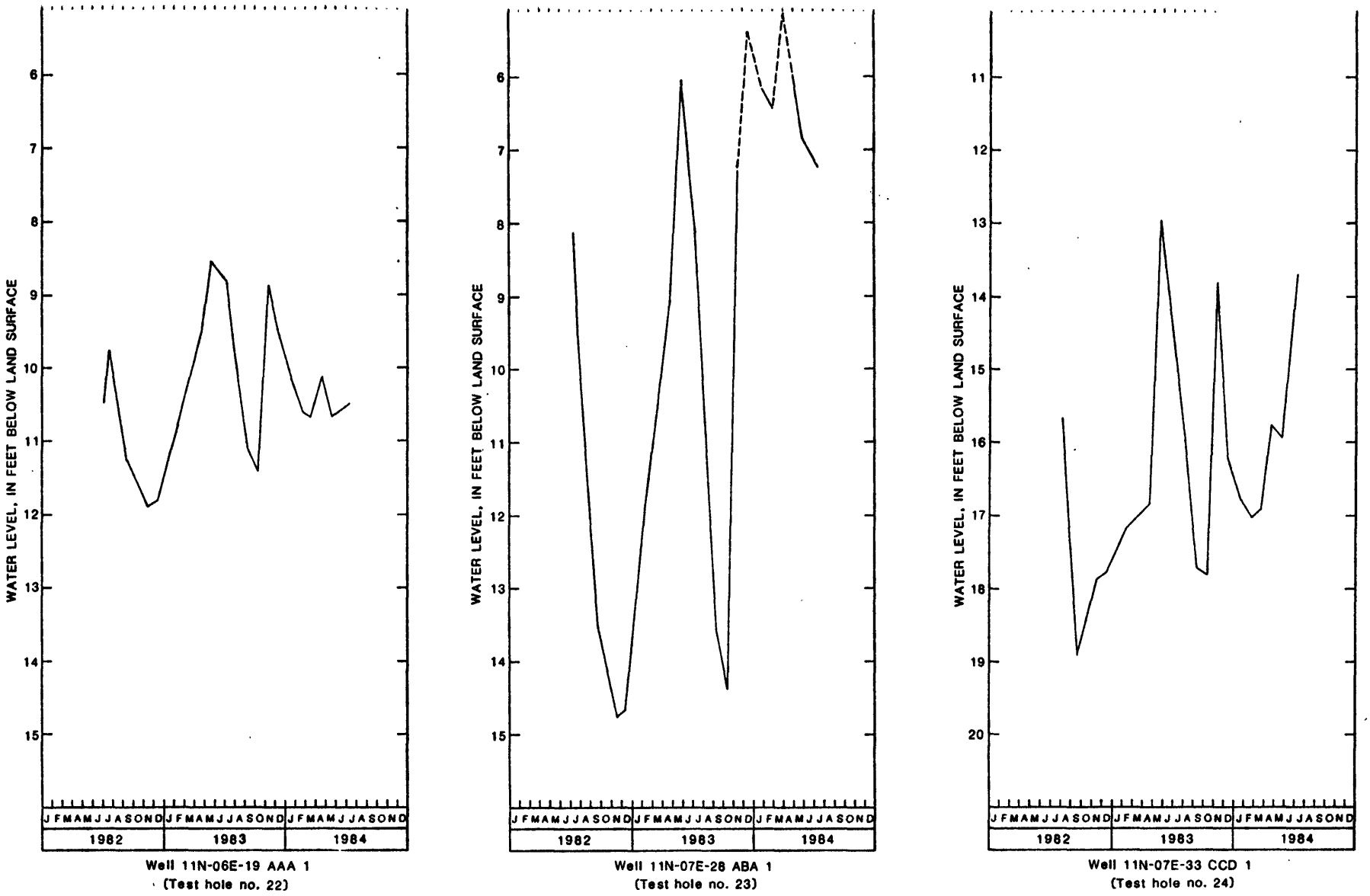


Figure 7.—Hydrographs of well 11N-06E-19 AAA 1, well 11N-07E-28 ABA 1, and well 11N-07E-33 CCD 1, 1982-84.

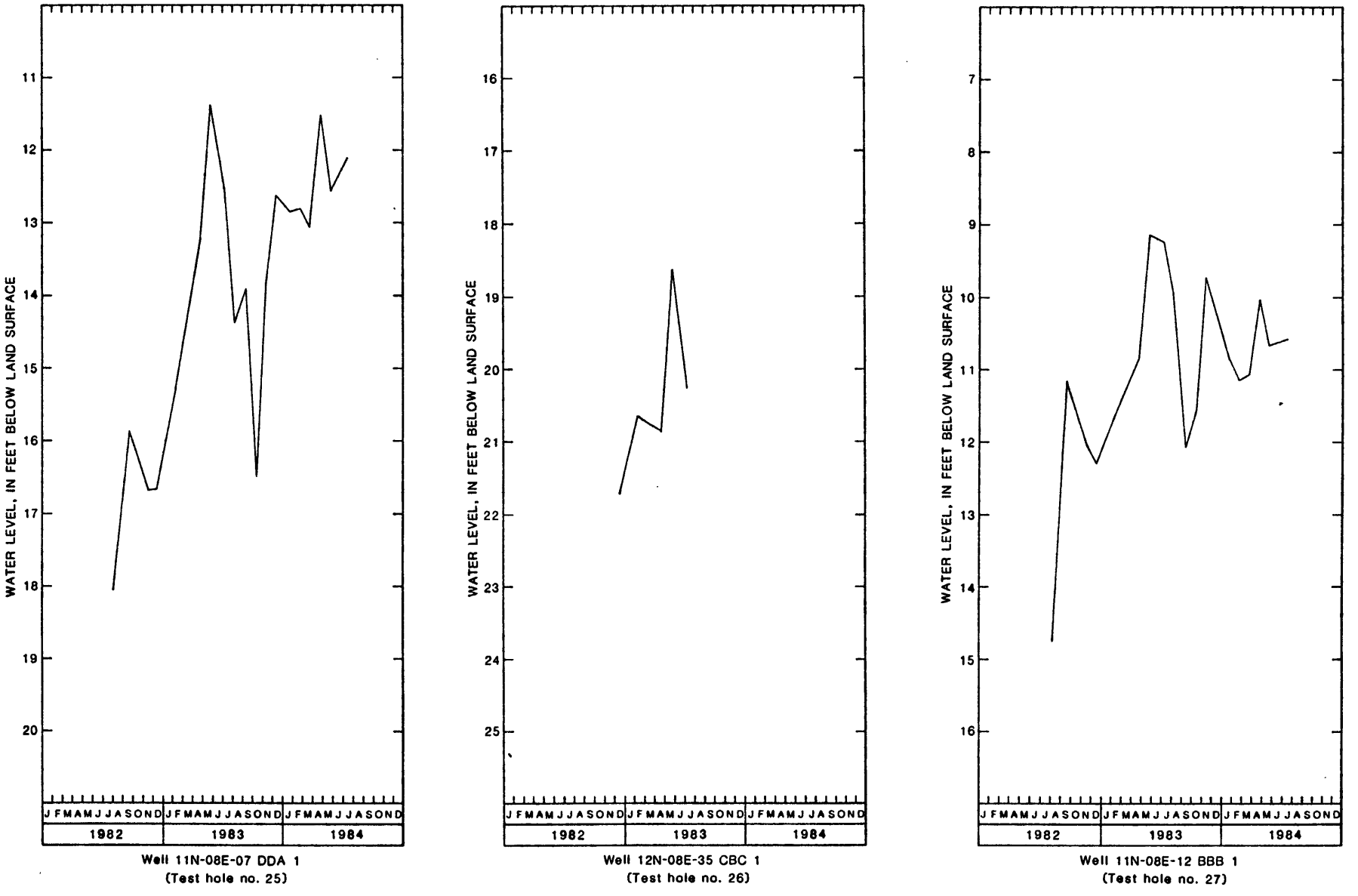


Figure 8.—Hydrographs of well 11N-08E-07 DDA 1, well 12N-08E-35 CBC 1, and well 11N-08E-12 BBB 1, 1982-84.

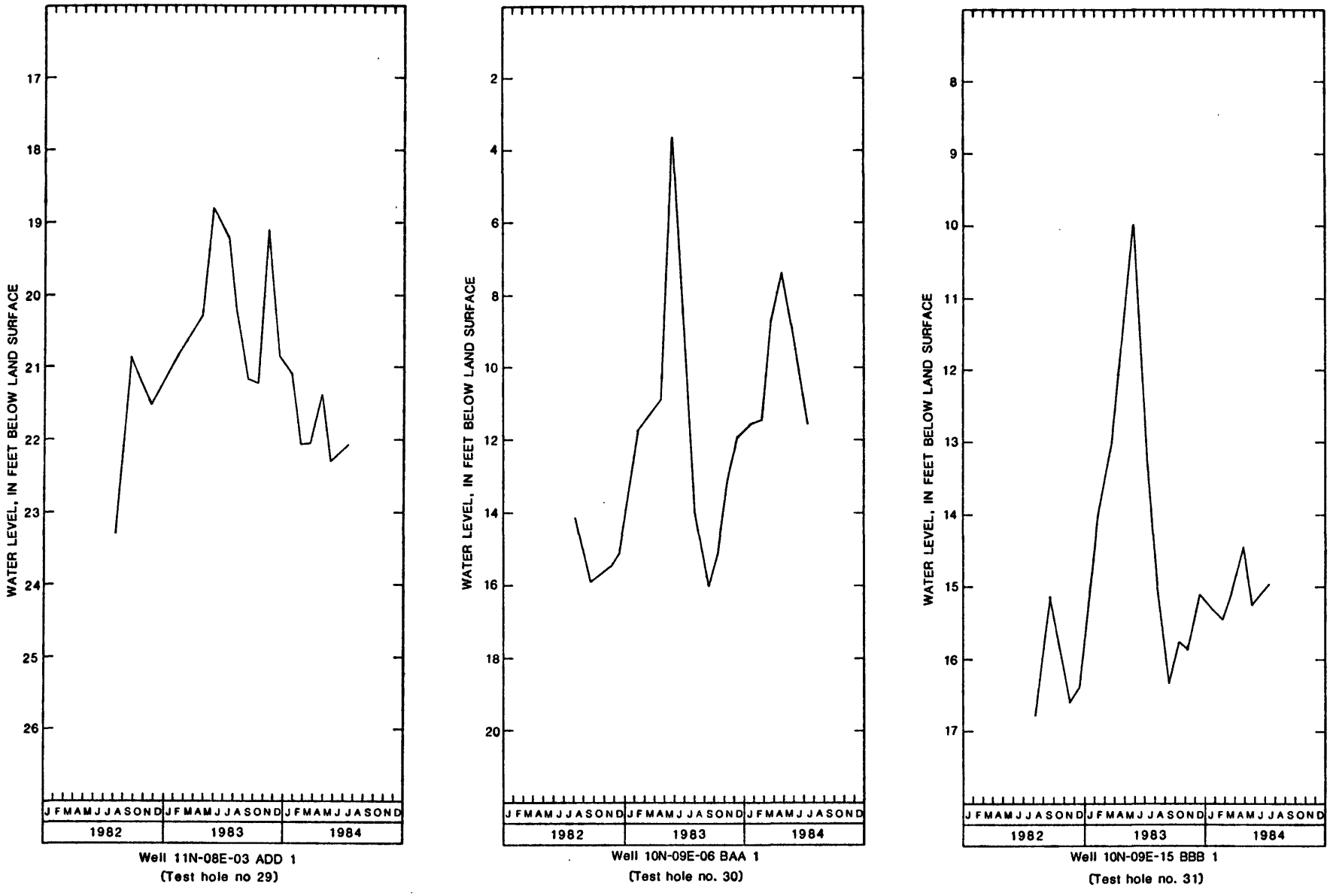


Figure 9.—Hydrographs of well 11N-08E-03 ADD 1, well 10N-09E-06 BAA 1, and well 10N-09E-15 BBB 1, 1982-84.

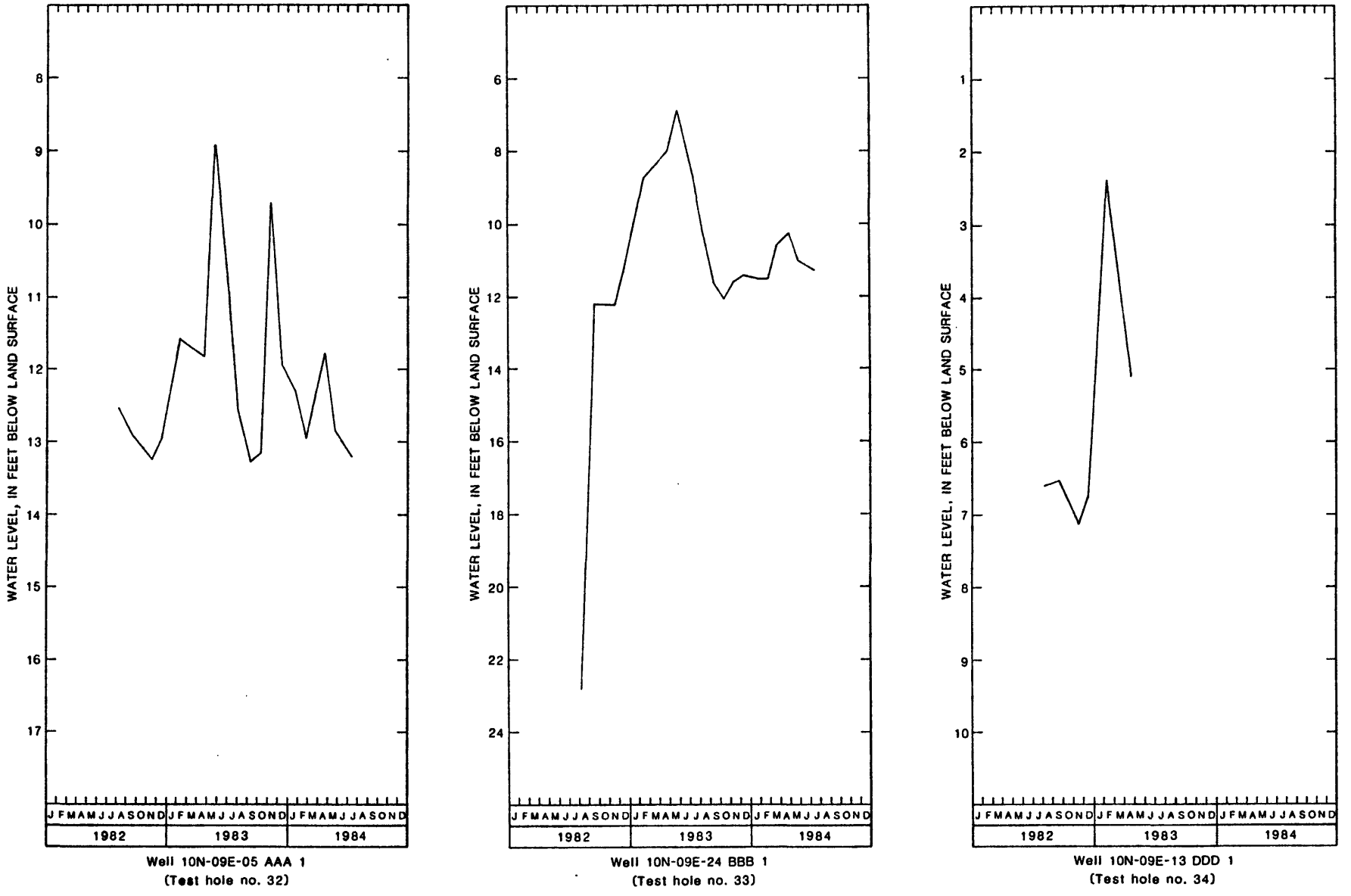


Figure 10.--Hydrographs of well 10N-09E-05 AAA 1, well 10N-09E-24 BBB 1, and well 10N-09E-13 DDD 1, 1982-84.

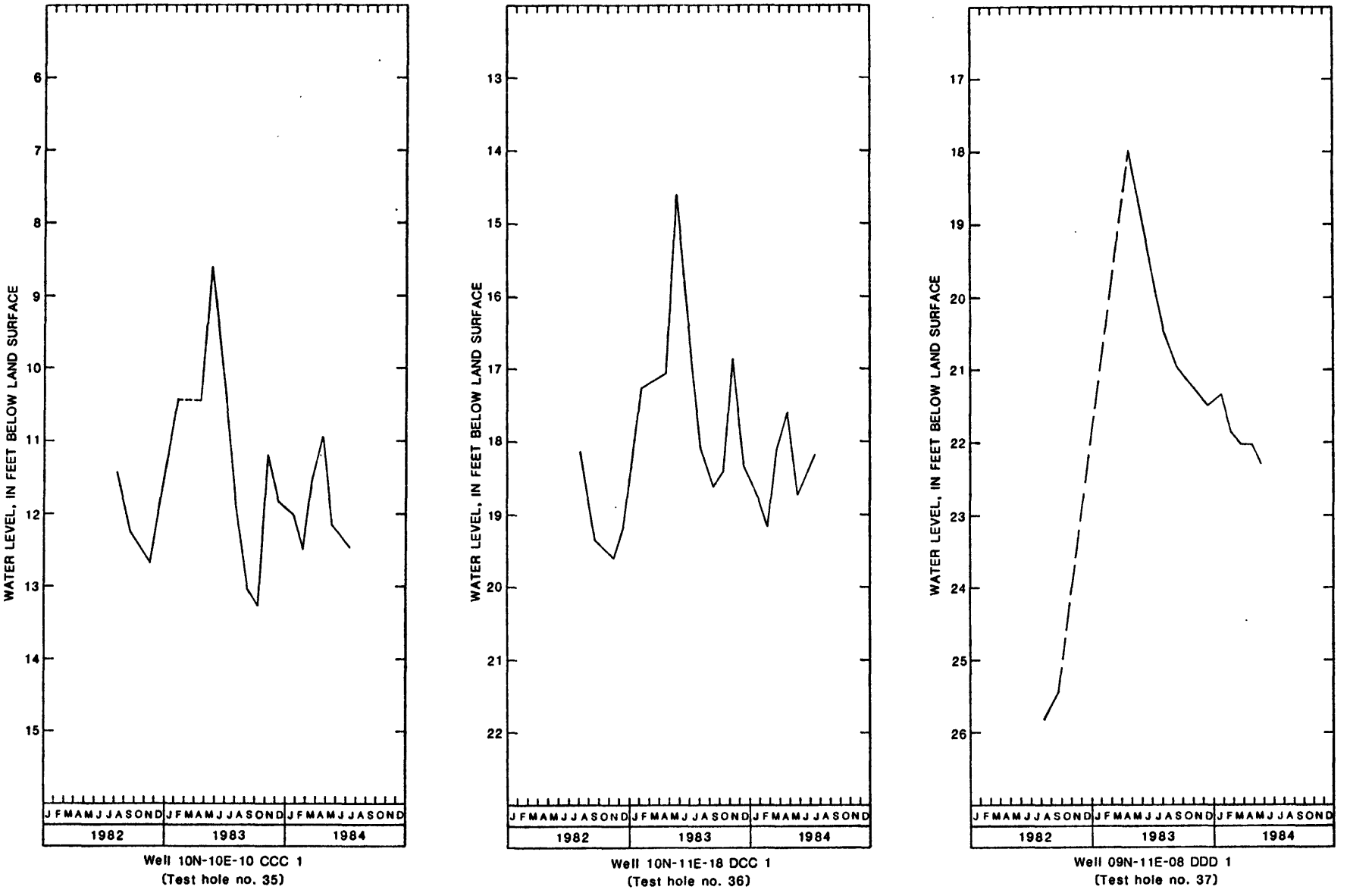


Figure 11.--Hydrographs of well 10N-10E-10 CCC 1, well 10N-11E-18 DCC 1, and well 09N-11E-08 DDD 1, 1982-84.

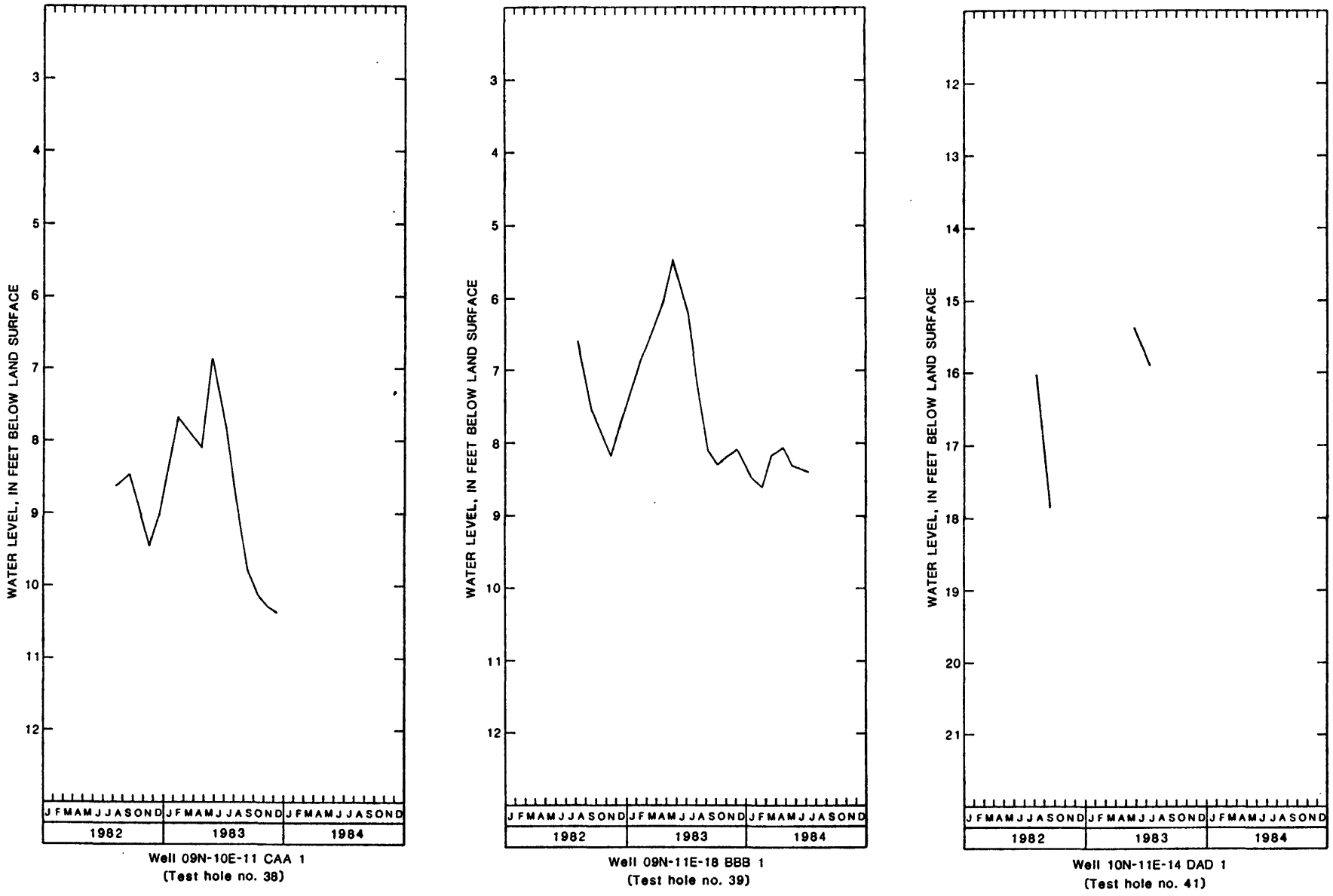


Figure 12.—Hydrographs of well 09N-10E-11 CAA 1, well 09N-11E-18 BBB 1, and well 10N-11E-14 DAD 1, 1982-84.

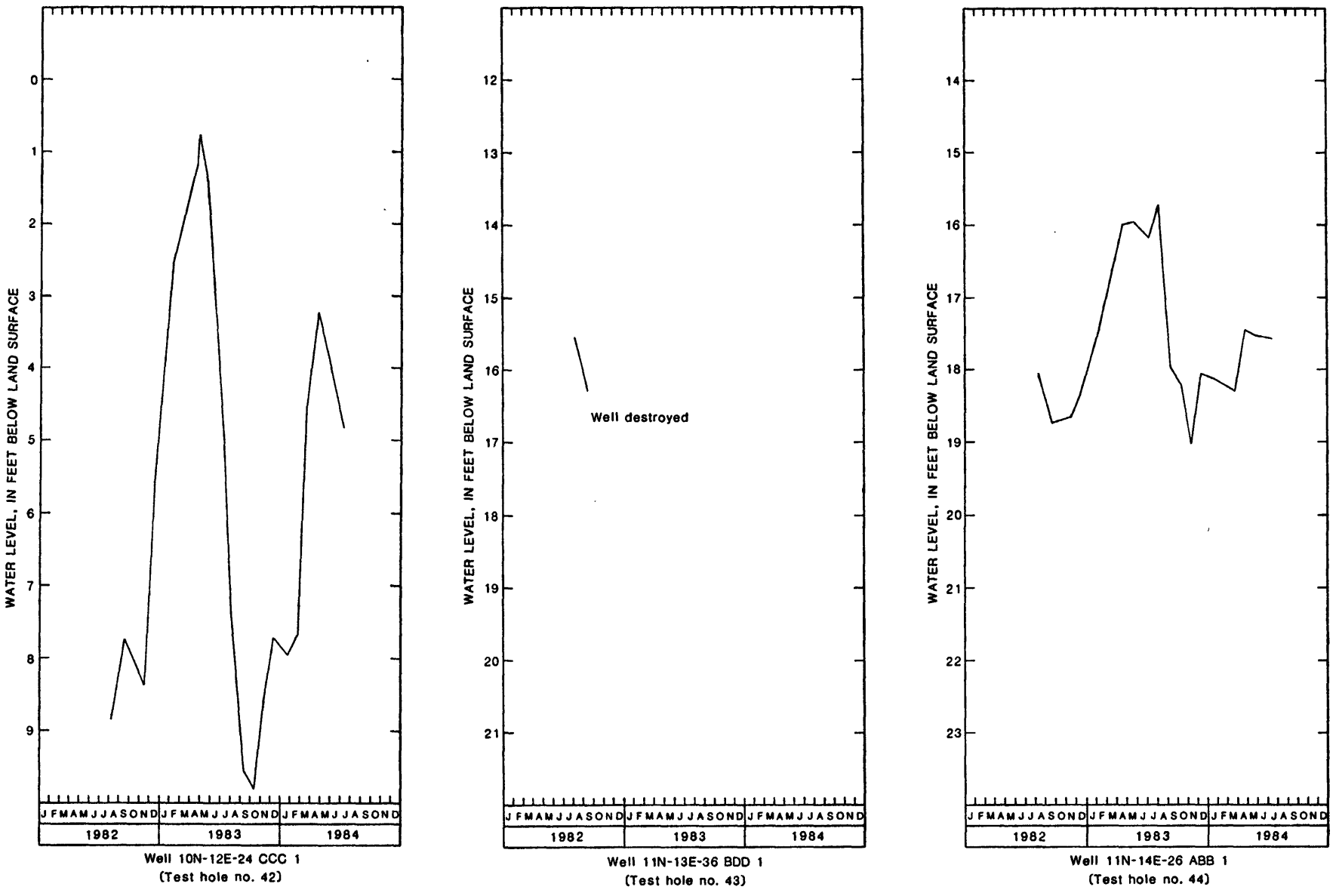


Figure 13.--Hydrographs of well 10N-12E-24 CCC 1, well 11N-13E-36 BDD 1, and well 11N-14E-26 ABB 1, 1982-84.

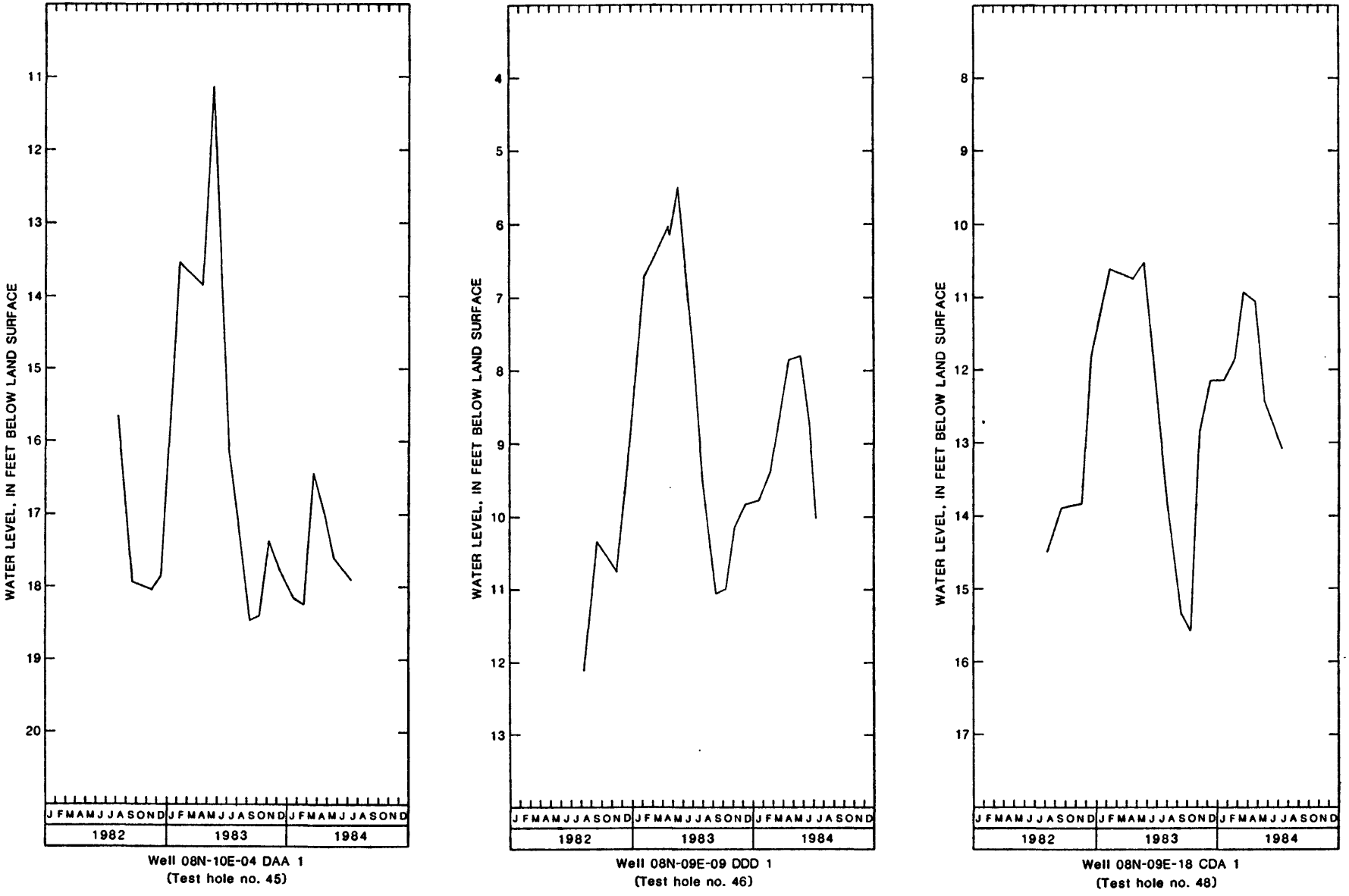


Figure 14.--Hydrographs of well 08N-10E-04 DAA 1, well 08N-09E-09 DDD 1, and well 08N-09E-18 CDA 1, 1982-84.

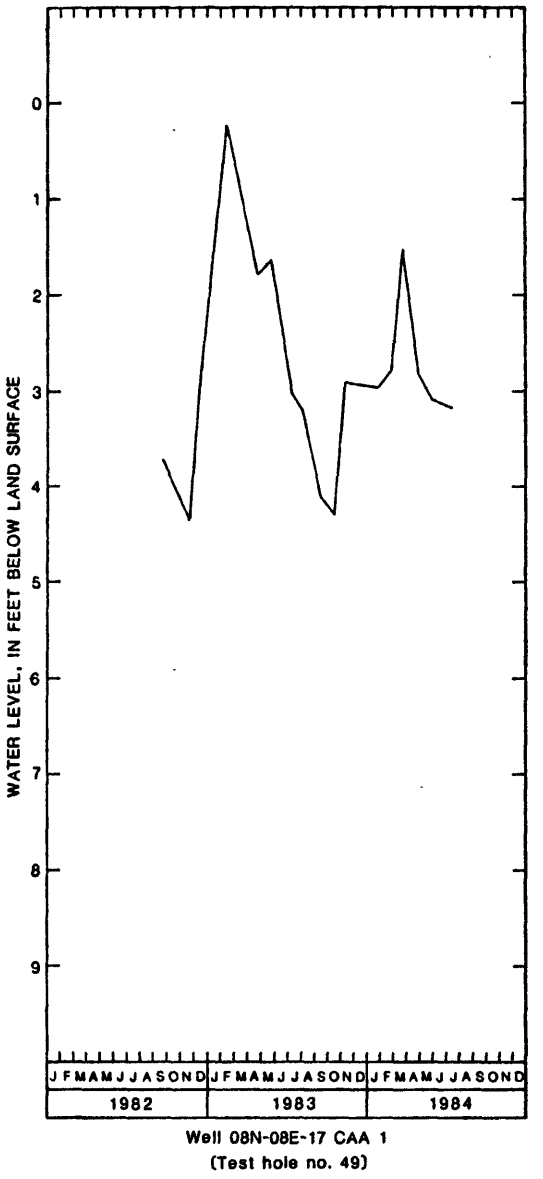


Figure 15.--Hydrograph of well 08N-08E-17 CAA 1, 1982-84.

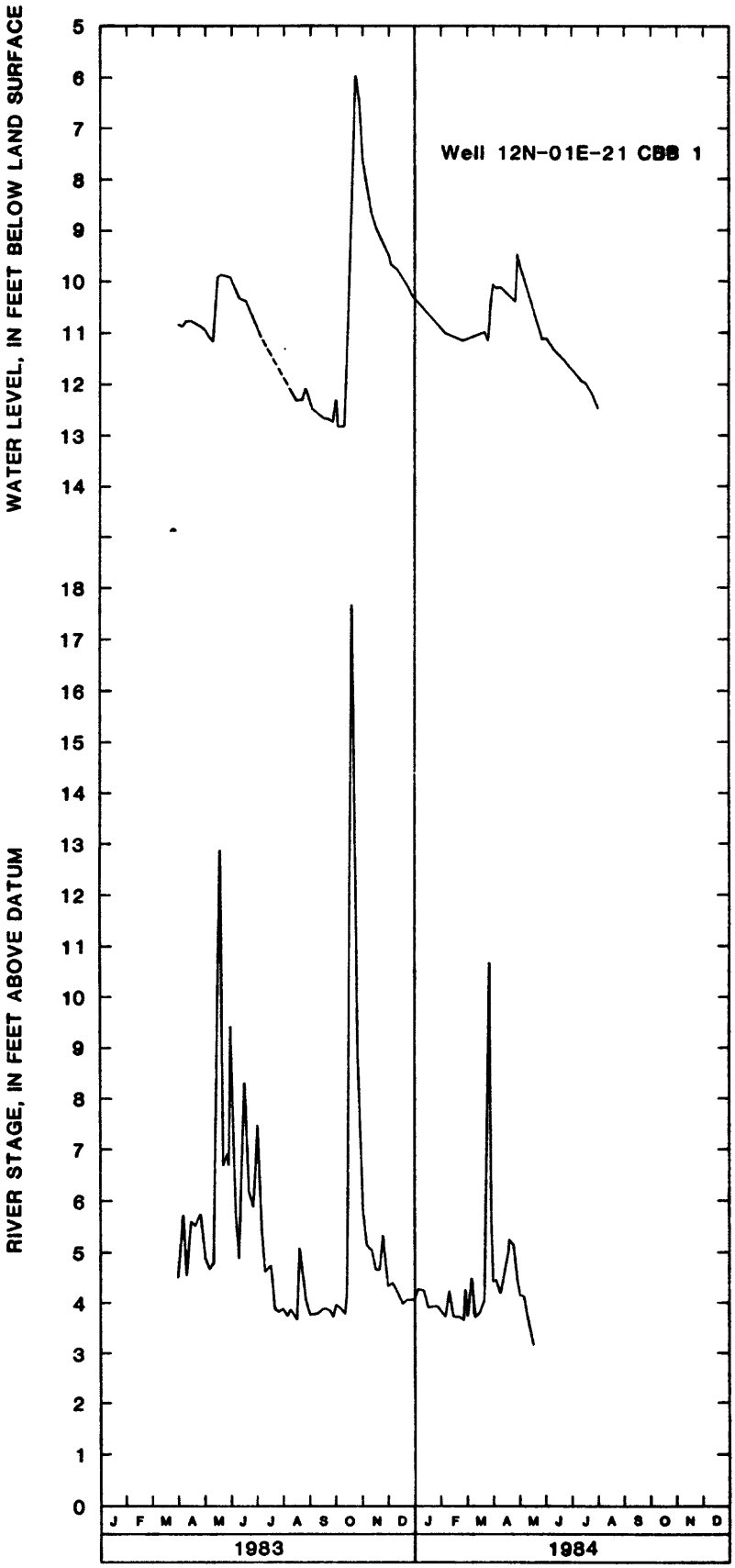


Figure 16.--Hydrographs of well 12N-01E-21 CBB 1 and North Canadian River near Harrah, 1983-84.

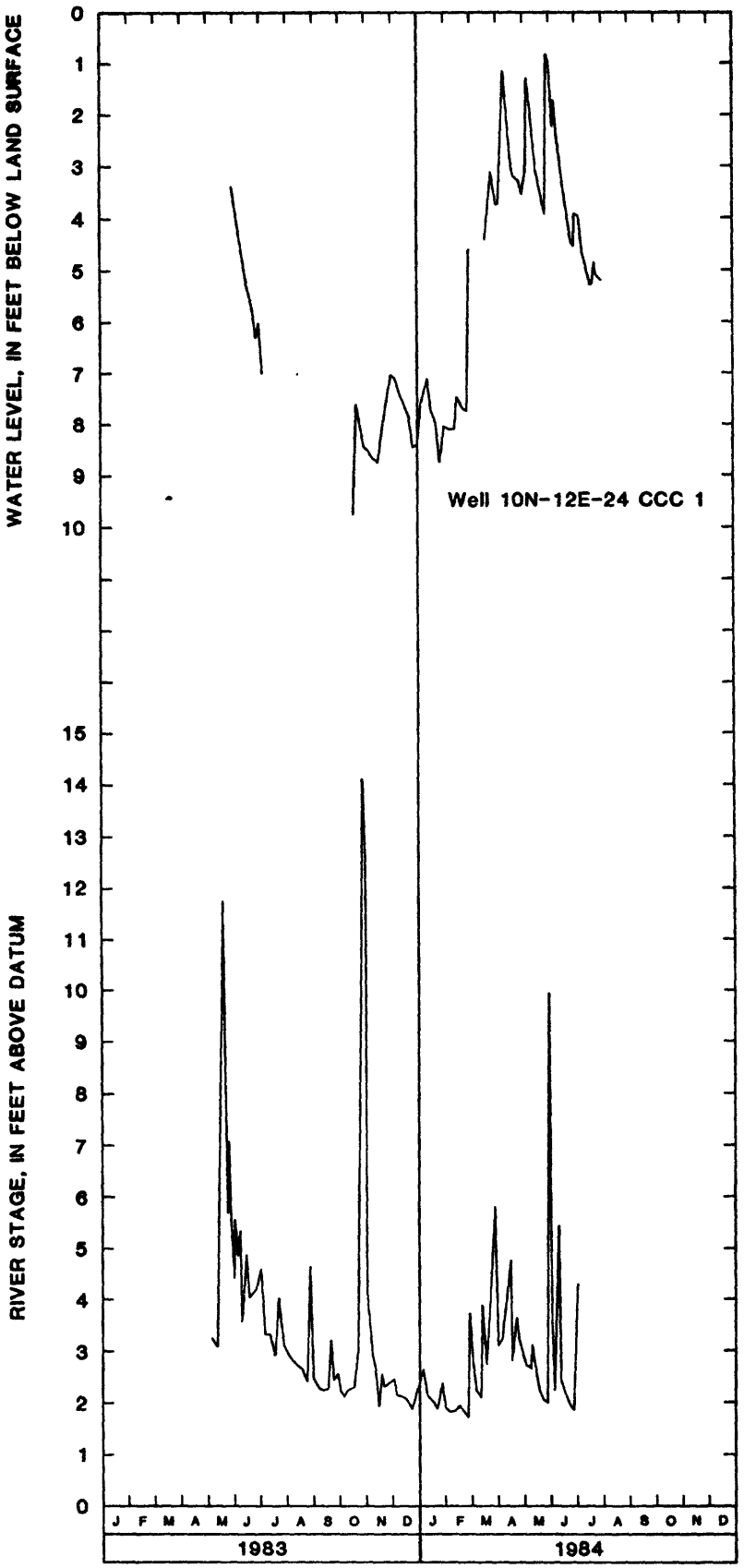


Figure 17.--Hydrographs of well 10N-12E-24 CCC 1 and North Canadian River near Wetumka, 1983-84.

TABLE 4.--Low-flow measurements of the North Canadian River and tributaries, 1983-84.

	8/29-8/31/83 Discharge (cfs)	8/29-8/31/83 Difference (cfs)	2/23-2/24/84 Discharge (cfs)	2/23-2/24/84 Difference (cfs)
North Canadian R. below L. Overholser	9.62		45.3	
		18.7		18.3
North Canadian R. at I-35 Bridge	28.3		63.6	
		114		124
Inflow from Oklahoma City sewage		-82		-82
North Canadian R. nr. Harrah	142		188	
		-10		-20
North Canadian R. at Shawnee Bridge	132		168	
		2		23
[Squirrel Ck. nr. Shawnee]*	[0.5]*		[0.835]*	
North Canadian R. NE of Shawnee	134		191	
		20		3
North Canadian R. nr. Prague	154		194	
		17		53
[Turkey Ck. nr. Prague]*	--		[0.685]*	
[Gar Ck. nr. Prague]*	--		[2.50]*	
[Rock Ck. nr. Paden]*	--		[0.665]*	
North Canadian R. W of Okemah	171		247	
		-4		67
[Flat Rock Ck. nr. Weleetka]*	--		[0.334]*	
North Canadian R. nr. Wetumka	167		314	
		72		22
[Alabama Ck. at Weleetka]*	--		[0.188]*	
[Bad Ck. nr. Graham]*	[0.2]*		--	
[Parsley Ck. nr. Graham]*	--		[0.1]*	
[Stidham Ck. nr. Graham]*	--		[0.4]*	
North Canadian R. above L. Eufaula	239		336	
Change in flow, Lake Overholser to Lake Eufaula		148		209

* Tributary which contributes to flow of North Canadian River. Discharge not used in calculation of total flow.

Table 5.--Chemical analyses of water samples collected in conjunction with low-flow measurements of the North Canadian River and tributaries, 1983-84.

Station	Flow (ft^3/sec)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Alkalinity (mg/L as $CaCO_3$)	Sulfate (mg/L)	pH (units)	Residue on evaporation (mg/L)	Specific conductance (µmhos at 25° C)	Temperature (degrees C)	Remarks
Low-flow measurements, August 29-31,1983:													
North Canadian R. blw L. Overholser	9.62	6.1	46	19	65	75	145	98	7.8	414	773	26.0	
North Canadian R. at I-35 bridge Oklahoma City	28.3	9.5	110	44	180	250	267	230	8.3	1020	1810	17.0	Above Garber-Wellington
North Canadian R. at 63rd. St. bridge, Oklahoma City	71.2	10.	87	34	210	320	209	150	8.1	974	1640	36.5	Below sewage plant, OKC
North Canadian R. nr Harrah	142.	11	72	25	180	280	185	130	8.0	845	1430	28.0	
North Canadian R. at Shawnee Bridge	131.8	11	64	24	170	250	184	110	8.2	761	1400	28.5	Below Garber-Wellington
Squirrel Creek nr Shawnee	0.50	12	48	11	74	64	121	86	6.5	442	715	27.0	
North Canadian R. east of Shawnee	134.5	11	69	25	180	250	183	130	8.3	777	1400	30.0	Below sewage plant
North Canadian R. nr Prague	154.	11	71	26	180	250	180	150	8.7	822	1400	31.5	Above Vamoosa
North Canadian R. west of Okemah	171.1	9.8	64	20	160	220	156	120	8.8	695	1200	33.0	Below Vamoosa
North Canadian R. nr Wetumka	167.	9.3	58	16	150	230	130	120	9.0	660	1320	28.0	
Wewoka Creek north of Wewoka	0.557	12	46	26	260	390	224	50	8.6	930	1860	32.0	
Bad Creek nr Graham	0.19	2.6	94	16	130	230	257	12	6.5	691	1250	26.5	
North Canadian R. abv L. Eufaula	239.3	6.4	52	16	80	110	138	79	8.1	454	790	34.5	
Low-flow measurements, February 23-24, 1984:													
North Canadian R. blw L. Overholser	45.3	5.2	120	48	160	170	321	270	8.4	974	1450	10.0	
North Canadian R. at I-35 Bridge, Oklahoma City	63.6	5.9	110	47	170	200	328	250	8.0	999	1490	13.0	Above Garber-Wellington
North Canadian R. nr Harrah	188.	9.3	90	33	180	240	282	160	7.4	901	1550	11.0	
North Canadian R. at Shawnee Bridge	168.	7.9	89	30	160	240	282	130	7.9	828	1380	10.0	Below Garber-Wellington
Squirrel Creek nr Shawnee	0.84	7.0	64	20	79		239		7.7	480	837	8.5	
North Canadian R. east of Shawnee	191.	7.7	95	31	160	230	281	120	8.0	821	1390	11.0	Below sewage plant
North Canadian R. nr Prague	194.	7.5	110	33	170	250	275	140	8.6	864	1410	11.0	Above Vamoosa
Turkey Creek nr Prague	0.68	6.1	270	110	850	2100	274	39	7.9	3550	6170	12.0	
Gar Creek nr Prague	2.50	1.8	42	16	44	100	119	16	7.8	308	537	11.0	
Rock Creek nr Paden	0.66	2.0	68	29	31	61	257	18	8.0	367	633	11.0	
North Canadian R. west of Okemah	247.	7.2	110	31	160	240	285	120	9.1	833	1320	12.0	Below Vamoosa
Flat Rock Creek nr Weleetka	0.33	6.6	34	9.8	60	72	128	32	7.6	314	527	11.0	
North Canadian R. nr Wetumka	314.	6.2	94	30	150	230	270	110	8.4	781	1270		
Wewoka Ck. nr Wetumka	8.54	6.1	140	61	460	920	199	46	8.0	1850	3270		
Alabama Creek at Weleetka	0.19	7.3	61	15	140	240	183	56	7.2	635	1180		
Parsley Creek nr Graham	0.1	2.1	13	3.9	21	13	58	22	7.2	140	184	9.0	
Stidham Creek nr Graham	0.4	3.6	39	14	85	190	79	17	7.2	428	756	9.0	
North Canadian R. abv L. Eufaula	336.	6.1	75	31	150	230	239	100	9.2	749	1430	8.5	