(200)
R290
no. 79-1164

U.S. Geological Survey
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Table 3.—Candidate wells for inclusion in MPCA statewide network to monitor ground-water quality

SITE LOCATION AND IDENTIFICATION								WELL CONSTRUCTION AND WATER USE										HYDROGEOLOGY			AVAILABLE DATA AND SOURCE						MONITORING NETWORK					REMARKS
Township and range site No.	Latitude and longitude site No. (STORET site No.)	Minnesota unique well No.	DNR permit application No.	U.S.G.S. Topographic quadrangle map	Land surface altitude	Watershed[1] unit	Owner or user	Date drilled	Depth of well	Depth to first perforation	Casing diameter (in)	Finish [2]	Water level (ft below lsd)	Pump type [3]	Pumping rate (gal/min)	Use of water [4]	Aquifer	Uppermost bedrock unit	Drift thickness (ft)	Geologist's log or sample study	Driller's log	Water levels	Previous water-quality analyses	Aquifer or well tests	Pumpage records	Point sampling	Point monitoring	Areal monitoring	Suggested schedules of characteristics for initial analysis (table 4)	Suggested initial frequency of sampling	
OTTER TAIL																																
131N36W20BCC	460838095150000	215882	---	Parkers Prairie	1442	Crow Wing	USGS #127	1972	27	25	1 1/4	SP	19	N	---	U	Surficial sand	Precambrian, undifferentiated	350(E)	X	---	USGS	USGS	---	---			X	I, II, III, IV, V	Twice annually, every 3 years	WL 1972-79; QW 9/73
132N37W16BCD	461447095210301	215883	---	Parkers Prairie	1460	Crow Wing	USGS #154	1972	21	19	1 1/4	SP	15	N	---	U	Surficial sand	do	350(E)	X	---	USGS	---	---	---			X	do	do	WL 1972-79
132N37W36ABB	461233095163300	215884	---	Parkers Prairie	1449	Crow Wing	USGS #159	1972	31	29	1 1/4	SP	23	N	---	U	Surficial sand	do	400(E)	X	---	USGS	USGS	---	---			X	do	do	WL 1972-79; QW 9/72
133N37W23CCB	461840095191001	215885	---	Henning SE	1445	Crow Wing	USGS #57	1971	20	18	1 1/4	SP	13	N	---	U	Surficial sand	do	350(E)	X	---	USGS	USGS	---	---			X	do	do	WL 1971-79; QW 11/73
133N40W15CDC	461935095424501	215886	---	Battle Lake 7 1/2'	1345	Otter Tail	Gerald Hamilton	1966	47	47	16	OE	9	C	1000	IR	Buried sand	do	300(E)	---	X	---	USGS	USGS	DNR			X	do	do	QW 9/68; pumping test 8/67, aquifer test 9/68
133N40W34CDB	461705095423601	215887	---	Battle Lake 7 1/2'	1360	Otter Tail	City of Battle Lake	1936	71	56	10	S	21	-	350	PS	Surficial sand	do	300(E)	---	X	---	USGS	USGS	DNR			X	do	do	QW 6/64; pumping test 1964
134N36W02DCC2	462622095105501	215888	---	Wadena 7 1/2'	1363	Crow Wing	M. Johnson	1965	80	50	16	S	13	C	450	IR	Surficial sand	do	300(E)	---	---	---	USGS	---	DNR			X	do	do	QW 11/67
134N36W36AAB	462254095091801	215889	---	Wrightstown 7 1/2'	1390	Crow Wing	L. McGrane	1957	20	---	1 1/4	SP	16	J	---	D	Surficial sand	do	250(E)	---	---	---	USGS	---	---			X	do	do	QW 7/72
134N39W01ACD	462656095322201	215890	65-1312G	Ottertail 7 1/2'	1332	Otter Tail	Dreyer Bros.	1965	25	19	16	S	5	-	550	IR	Buried sand	do	250(E)	---	X	---	USGS	USGS	DNR		X		do	Twice annually	QW 9/68; pumping test 11/65, aquifer test 9/68
134N39W03BAD	462710095350201	215891	---	Ottertail 7 1/2'	1340	Otter Tail	Leonard Rustadt	-	24		1 1/4	SP		-	---	D	Surficial sand	do	250(E)	---	---	---	USGS	---	---			X	do	Twice annually, every 3 years	QW 9/65
135N39W34CAC	462738095351801	215892	63-991G	Ottertail 7 1/2'	1342	Otter Tail	Otto Ewert	1963	56	26	14	S	17	C	300	IR	Surficial sand	do	250(E)	---	X	---	---	USGS	DNR			X	do	do	Pumping test 10/63, aquifer test 9/68
135N39W35BBB	462806095341701	215893	---	Ottertail 7 1/2'	1330	Otter Tail	Marvin Heisler	1968	56	20	20	S	3	C	650	IR	Surficial sand	do	250(E)	---	X	---	USGS	USGS	DNR			X	do	do	QW 9/68; aquifer test 9/68
136N39W14DAD	463525095332001	215894	---	Perham 7 1/2'	1362	Otter Tail	Robert Perry	1957	68	45	18	S	22	-	660	U	Surficial sand	do	250(E)	---	X	---	USGS	USGS	---			X	do	do	QW 7/68; pumping test before 8/67, aquifer test 7/68
136N39W19ABD	463456095383401	215895	---	Dent 7 1/2'	1390	Otter Tail	Robert Riestenberg	1967	115	80	12	S	43	T	730	IR	Surficial sand	do	250(E)	---	X	---	USGS	USGS	DNR			X	do	do	QW 9/68; aquifer test 9/68
136N39W32CAC	463245095375001	215896	---	Dent 7 1/2'	1380	Otter Tail	Art Ternus	1966	105	69	12	S	23	T	830	IR	Surficial sand	do	250(E)	---	X	---	USGS	USGS	DNR			X	do	do	QW 7/68; aquifer test 7/68
136N39W35DAD	463248095331501	215897	---	Perham 7 1/2'	1380	Otter Tail	A. Lachowitzer	1964	68	---	2	S	---	J	12	D,S	Surficial sand	do	250(E)	---	---	---	USGS	---	---			X	do	do	QW 9/65
137N39W24BBC	464011095334301	215898	---	Little Pine Lake	1383	Otter Tail	Arthur Carow	---	24	---	1 1/4	SP	16	-	---	S	Surficial sand	do	400(E)	---	---	---	USGS	---	---			X	do	do	QW 9/65
PENNINGTON																																
153N42W24ACC	480323095592201	128443	---	Goodridge SW 7 1/2'	1140	Red Lake River	Don Johnson, Jr.	1977	236	228	4	S	25	-	130	D	Buried sand	Precambrian, undifferentiated	400(E)	---	X	---	---	---	---	X			I, II, IV	Once	---
153N43W22AAD	480339096092101	128448	---	Thief River Falls 7 1/2'	1115	Red Lake River	Marland Johnson	1977	184	180	4	S	775	S	125	D	Buried sand	do	400(E)	---	X	---	---	---	---	X			do	do	---
154N43W13BBC	480947096074501	128426	---	Thief River Falls 7 1/2'	1137	Red Lake River	Frank Pesek	1977	364	360	4	S	35	-	125	D	Buried sand	do	425(E)	---	X	---	---	---	---	X			do	do	---
154N43W32BAB	480717096121501	128428	---	Thief River Falls 7 1/2'	1125	Red Lake River	Sparby-Johnson Inc.	1977	266	250	4	S	40	-	100+	D	Buried sand	do	425(E)	---	X	---	---	---	---	X			do	do	---
PINE																																
42N20W22ACB2	460632092511302	215985	---	Sandstone 15'	1040	Kettle River	Sandstone Federal Prison	1961	565	180	5	OH	38	T	400	PS	Hinckley-Fond du Lac	Hinckley Formation	20	---	X	---	USGS	---	---	X			I, II, IV	Once	QW 8/67
45N20W26BCD	462113092491201	215986	58-0009	Moose Lake 15'	1062	Kettle River	General Andrews Nursery	1954	72	60	10	S	17	T	550	IR,D	Surficial sand	do	100(E)	---	X	---	---	---	---	X			I, II, III, IV, V	do	---
PIPESTONE																																
105N46W09DDB	435420096221501	215987	---	Pipestone S. 7 1/2'	1640	Rock River	Burlington Northern Ry.	1937	303	60	12,10	OH	56	-	120	IN	Sioux quartzite (sandstone)	Sioux Quartzite	60	---	X	---	---	---	---	X			I, II, IV	Once	---
106N46W07ABD	440023096245201	132265	---	Elkton SW 7 1/2'	1630	Rock River	Farmer Bros	1978	63	50	12	S	28	-	560	IR	Surficial sand	do	300(E)	---	X	---	---	---	---			X	I, II, III, IV, V	Twice annually, every 3 years	---
106N46W07BAA	440028096250801	132268	---	Elkton SW 7 1/2'	1630	Rock River	Bill Farmer	1978	61	49	12	S	32	-	550	IR	Surficial sand	do	300(E)	---	X	---	---	---	---			X	do	do	---
106N46W07CAA	440003096250801	216126	---	Elkton SW 7 1/2'	1610	Rock River	Raymond Ulik	1976	41	---	12	S	11	-	500	IR	Surficial sand	do	300(E)	---	---	---	---	---	---			X	do	Twice annually	---
106N46W07CCA	435952096252401	128465	---	Jasper NW 7 1/2'	1605	Rock River	Raymond Ulik	1976	34	15	12	S	9	-	500	IR	Surficial sand	do	300(E)	---	X	---	---	---	---		X		do	Twice annually, every 3 years	---
107N46W32BAA	440214096235501	216014	---	Elkton SW 7 1/2'	1634	Rock River	Keith Pritchett	1977	56	46	12	S	28	-	700	IR	Surficial sand	do	350(E)	---	---	---	---	---	---			X	do	do	---
POLK																																
148N42W02DBD	473945095585301	105624	---	McIntosh 7 1/2'	1240	Red Lake River	Pioneer Memorial Home	1977	160	152	4	S	48	S	150	PS	Surficial sand	Precambrian, undifferentiated	400(E)	---	X	---	---	---	---	X			I, II, IV	Once	---
148N44W03CBD	473945096162301	216127	---	Dugdale 7 1/2'	1195	Red Lake River	Vern Hagen	1976	136	106	12	S	3	-	1000	IR	Buried sand	do	400(E)	---	X	---	---	---	---	X			do	do	---
149N43W34DCC	473758096084801	128427	---	Mentor 7 1/2'	1190	Red Lake River	Maurice Stieger	1977	112	108	4	S	10	-	100	D	Surficial sand	do	300(E)	---	X	---	---	---	---	X			do	do	---
149N46W02DAA	474534096300601	138857	---	Crookston 15'	915	Red Lake River	Herb Hoppe	1977	212	207	4	S	18	-	100	D	Buried sand	do	300(E)	---	X	---	---	---	---	X			do	do	---
POPE																																
124N36W22DBC	453157095104901	215934	---	Sedan 7 1/2'	1335	Crow River	Kay Farms, Anderson 1/4	---	113	98	16	S	23	T	637	IR	Buried sand	Precambrian, undifferentiated	400(E)	---	---	---	USGS	USGS	---	X			do	Once	USGS QW 11/74; aquifer test 11/74
124N36W28DDD	453059095113701	215933	---	Sedan 7 1/2'	1330	Crow River	Ray Gannon	---	22	15	1 1/4	SP	12	J	---	D,S	Surficial sand	do	400(E)	---	---	---	USGS	---	---	X			do	do	USGS QW 2/68
124N37W06AAD	453501095213101	215937	---	Terrace 7 1/2'	1355	Chippewa River	Morton Olson	1958	327	327	4	OE	100	P	7	S	Buried sand	do	400(E)	---	X	---	USGS	---	---	X			do	do	USGS QW 8/65
124N38W06CBB	453439095295401	215935	---	Lake Minnewaska 7 1/2'	1289	Chippewa River	Palmer Ophdahl	1958	143	139	4	S	120	-	8	D,S	Buried sand	do	200(E)	---	X	---	USGS	---	---	X			do	do	USGS QW 8/65
124N39W17BDC	453302095354901	215936	---	Starbuck 7 1/2'	1210	Chippewa River	Ferd Fredrickson	1956	208	204	3		119	-	6	D,S	Weathered granite	do	204	---	X	---	USGS	---	---	X			do	do	USGS QW 8/65
125N36W19BBA	453741095153301	215949	---	Villard 7 1/2'	1360	Chippewa River	Lester Grupp	---	35	33	---	SP	20	-	---	S	Surficial sand	do	400(E)	---	X	---	USGS	---	---			X	I, II, III, IV, V	Twice annually, every 3 years	USGS QW 2/6/68
125N36W33DAB	453529095122001	215938	---	Sedan 7 1/2'	1341	Crow River	Theo. Bruhn	1960	33	33	14	OE	10	-	50	IR	Surficial sand	do	400(E)	---	X	---	USGS	---	---			X	do	do	USGS QW 8/65
126N36W21DBB	454226095123901	216015	---	Westport 7 1/2'	1345	Mississippi-Sauk	Jim Stalker	---	26	24	---	SP	13	-	---	S	Surficial sand	do	150(E)	---	---	---	USGS	---	---			X	do	do	USGS QW 2/6/68
126N37W34CCC	454024095192201	216016	---	Villard 7 1/2'	1377	Chippewa	Jim Jacobs	---	30	28	---	SP	28	-	---	D	Surficial sand	do	200(E)	---	---	---	USGS	---	---			X	do	do	USGS QW 2/6/68
RAMSEY																																
28N22W04DAB	445628093025501	215909	---	St. Paul E. 7 1/2'	---	Metro area	Milwaukee Road	1924	307	55	16	OH	+5	-	465	C	Prairie du Chien-Jordan	Prairie du Chien Group	53	---	X	---	USGS	---	---		X		I, II, IV	Once every 3 years	QW 7/74
28N22W06ABD2	445648093053402	200022	---	St. Paul E. 7 1/2'	770	Metro area	Northwestern Nat'l Bank	1964	355	212	20,16	OH	109	T	1500	A,C	Prairie du Chien-Jordan	St. Peter Sandstone	60	X	X	USGS	USGS	---	---		X		do	Annually	WL 1971-79, QW 6/73
28N22W06ACB2	445641093054102	200038	---	St. Paul E. 7 1/2'	795	Metro area	Lowry Hotel	1936	297	220	19	OH	100	T	1000	C	Prairie du Chien	Platteville Limestone	4	---	X	---	---	---	---		X		do	do	---
28N22W06BDB	445641093055701	200049	59-420	St. Paul E. 7 1/2'	785	Metro area	City of St. Paul	1959	416	200	16,12	OH	126	S	500	A,C	Prairie du Chien-Jordan	St. Peter Sandstone	16	---	X	---	USGS	---	---		X		do	do	QW 5/60, 8/61,
28N23W12AAA	445601093062701	200421	---	St. Paul E. 7 1/2'	705	Metro area	N.S.P.Highbridge plant	---	175	113	12,8	OH	25	-	400	C	Prairie du Chien	do	50	X	---	---	---	---	---		X		do	Once every 3 years	---
29N22W02CDB	450125093010701	215900	---	White Bear W. 7 1/2'	920	Metro area	Richard Carlson	1955	77	---	4	S	52	-	15	D	Buried sand	Platteville Limestone	125(E)	---	---	---	USGS	---	---		X		do	do	QW 10/61
29N22W08CCD	450003093045701	205796	---	White Bear W. 7 1/2'	945	Metro area	Andrew Blanda	1958	149	121	4	OH	105	-	20	D	Platteville	do	121	---	X	---	USGS	---	---		X		do	do	QW 8/61
29N22W12BAC	450107092595501	---	---	White Bear Lake E.	965	Metro area	City of North St. Paul #1	1935	470	259	16	OH	107	U	600	PS	Prairie du Chien-Jordan	St. Peter Sandstone	160	---	X	---	---	---	---		X		do	do	---
29N22W12CAC	450039092594501	---	---	White Bear Lake E.	960	Metro area	City of North St. Paul #3	1960	470	375	16	OH	91	U	1000	PS	Jordan	Platteville Limestone	58	---	X	---	---	---	---		X		do	do	---
29N22W24AAD	445923092590901	200874	---	Lake Elmo 7 1/2'	896	Metro area	Northern States Power	1957	523	420	20,12	OH	142	-	440	C	Jordan	do	90	---	X	---	USGS	---	---		X		do	do	QW 8/60, 8/61
29N22W31BAB2	445745093055702	200496	---	St. Paul E. 7 1/2'	833	Metro area	Burlington Northern Ry.	1947	1083	818	10,8 12	OH	152	T	550	C	Mount Simon-Hinckley	do	35	---	X	---	USGS	---	---		X		do	do	QW 11/54, 8/61, 6/63
29N23W01ADB	450151093063501	208285	60-459	White Bear W. 7 1/2'	890	Metro area	Minn. Water Co.	1960	495	403	20,12	OH	65	T	500	PS	Jordan	Prairie du Chien Group	270	---	X	---	---	DNR	---		X		do	do	Pumping test 9/60
29N23W25CCD	445751093072801	200164	---	St. Paul E. 7 1/2'	856	Metro area	Burlington Northern Ry.	1918	1120	955	16,10, 8,6	OH	169	-	375	C	Mount Simon-Hinckley	Platteville Limestone	62	X	X	USGS	USGS	---	---		X		do	do	WL 1977-79; QW 5/71, 7/72
30N22W21DCB	450409093031801	124375	---	White Bear W. 7 1/2'	935	Metro area	Archie Cardinal	---	98	93	4	S	40	S	15	D	Buried sand	---	---	---	X	---	USGS	---	---		X		do	do	QW 10/61, well redrilled 10 ft to north 1975
30N22W25ABD	450348092592801	013983	---	White Bear E. 7 1/2'	980	Metro area	White Bear Township #3	1956	445	365	12	OH	72	T	500	PS	Jordan	do	35	---	X	---	MDH	---	---		X		do	do	QW 8/61, 6/63, MDH 4/69
30N22W36BCD	340238093000401	---	59-640	White Bear W. 7 1/2'	999	Metro area	City of White Bear Lake #4	1959	490	390	16	OH	118	S	1045	PS	Jordan	do	75	---	X	---	---	---	---		X		do	do	---
30N23W01BAB	450723093071801	206707	67-13	White Bear W. 7 1/2'	900	Metro area	City of Shoreview	1966	155	101	8	OH	29	S	250	PS	Prairie du Chien	Prairie du Chien Group	103	---	X	USGS	---	---	---		X		do	do	WL 1970-79
30N23W14CDD	---	---	---	White Bear W. 7 1/2'	910	Metro area	City of Shoreview #3	1970	413	325	24,20, 16	OH	54	U	1500	PS	Jordan	do	290	X	X	---	TCT	---	---		X		do	do	---
30N23W30BAD2	450341093130702	---	---	New Brighton 7 1/2'	990	Metro area	City of New Brighton #4	1954	500	268	24,16	OH	165	S	800	PS	Prairie du Chien-Jordan	do	247	---	X	---	---	---	---		X		do	do	QW 1970
30N23W30CBA2	450323093133102	---	60-843	New Brighton 7 1/2'	1020	Metro area	City of New Brighton #6	1961	543	447	24,16	OH	203	U	700	PS	Jordan	do	303	---	X	---	---	---	---		X		do	do	---
30N23W33DCD	450211093102701	215901	---	New Brighton 7 1/2'	910	Metro area	Alfred Koepp	1957	80	---	3	---	57	S	25	D	Buried sand	Platteville Limestone	95(E)	---	X	---	USGS	---	---		X		do	do	---
30N23W33DCD3	450211093102703	215902	---	New Brighton 7 1/2'	920	Metro area	Carl Christensen	1960	246	218	8,4	OH	72	-	15	D	St. Peter	do	98	---	X	---	---	---	---		X		do	do	QW 10/61
RED LAKE																																
151N42W01BCD	475310095590301	105615	---	Oklee NW 7 1/2'	1130	Red Lake River	Alden Burstad	1977	225	217	4	S	33	-	150	D	Buried sand	Precambrian, undifferentiated	350(E)	---	X	---	---	---	---	X			I, II, IV	Once	---
151N43W30ABB	475231096124701	128444	---	Plummer NW 7 1/2'	1050	Red Lake River	Harlan Almen	1977	265	157	4	S	40	-	125	D	Buried sand	do	350(E)	---	X	---	---	---	---	X			do	do	---
REDWOOD																																
110N35W28CBB	441811095035401	133174	---	Clements SE 7 1/2'	1060	Cottonwood River	Russell Jensen	1977	138	134	4	S	35	U	50	D	Buried sand	Precambrian, undifferentiated	150(E)	---	X	---	---	---	---	X			I, II, IV	Once	Aquifer test 7-23-77 by DNR
112N36W12BBD	443136095073201	215945	---	Redwood Falls 15'	1039	Cottonwood River	City of Redwood Falls	1950	92	80	12	S	67	T	250-300	PS	Buried sand	do	200(E)	---	X	---	USGS	USGS-W	---	X			do	do	---
112N36W14AAA	443048095074201	215946	---	Redwood Falls 15'	1039	Cottonwood River	Frank Boots	1950	214	209	4	S	33	-	72	U	Buried sand	do	243	---	X	---	---	USGS-W	---	X			do	do	Well deepened in 1977
112N36W25ABB	442912095070001	215947	---	Clements 7 1/2'	1056	Cottonwood River	City of Redwood Falls	1954	182	142	12	S	50	U	823	PS	Buried sand	do	200(E)	---	X	---	---	USGS-W	---	X			do	do	---
REDWOOD																																
114N36W22DB	444348095095401	132395	---	Redwood Falls 15'	1050	Minnesota River-Hawk Creek	Jerry Steinkamp	1977	136	116	12	S	37	-	62	IR	Buried sand	Precambrian, undifferentiated	150(E)	---	X	---	---	---	---	X			I, II, IV	Once	---
RICE																																
110N20W31BBB	441751093165601	---	---	Faribault 7 1/2'	980	Cannon River	Faribault City #3	1961	410	70	10	OH	13	T	1000	PS	Prairie du Chien-Jordan	St. Peter Sandstone	24	---	X	---	---	---	---		X		I, II, III, IV	Every 3 years	Rebuilt in 1961
110N21W25DDA	441804093165901	---	---	Faribault 7 1/2'	922	Cannon River	Faribault City #4	1964	407	52	24	OH	12	T	2000	PS	Prairie du Chien-Jordan	do	33	---	X	---	---	---	---		X		do	do	---
111N19W06CAC	442652093091701	---	---	Northfield 7 1/2'	970	Cannon River	Northfield City #1	1944	401	109	24,16	OH	40	T	1000	PS	Prairie du Chien-Jordan	Prairie du Chien Group	100	---	X	---	---	MDH	---		X		do	do	QW 1968
111N19W06CDD	442634093090401	---	---	Northfield 7 1/2'	990	Cannon River	Northfield City #3	1969	418	340	30,24	OH	58	T	1350	PS	Jordan	St. Peter Sandstone	50	X	---	---	---	MDH	---		X		do	do	QW 1971
ROCK																																
101N45W12DBA	433353096104601	215988	---	Ash Creek 7 1/2'	1420	Rock	P. N. Haug/H. De Jongh	1968	375	371	5,3	S	72	-	10	D	Cretaceous sand	Cretaceous Sandstone	266	---	X	---	---	---	---	X			I, II, IV	Once	---
103N45W24BBB	434200096112701	215950	---	Luverne 7 1/2'	1550	Rock	Mound Spring State Park	1940	138	---	6	OH	23	-	35	PS	Sioux Quartzite	Sioux Quartzite	3	---	X	---	---	DNR	DNR	X			do	do	Pumping test 3/61
104N45W01CDC	435003096110701	135725	---	Edgerton So. 7 1/2'	1625	Rock	Conrad Hulstein	1977	193	193	36,24	OE	80	-	10	D	Buried sandy clay	do	250(E)	---	X	---	---	---	---	X			do	do	---
ROSEAU																																
161N38W35ADB	484323095303001	215989	---	Wanaska NE 7 1/2'	1150	Roseau River	Ray Karlstad	---	175	---	---	S	8	-	70	D,S	Buried sand	Precambrian, undifferentiated	200(E)	---	X	---	USGS	---	---	X			I, II, IV	Once	QW 9/64
162N40W03BBC	485318095484101	215990	---	Roseau NE 7 1/2'	1050	Roseau River	Henry Nelson	---	128	---	4	S	1	J	150	D,S	Buried sand	do	250(E)	---	X	---	USGS	---	---	X			do	do	QW 9/64
ST. LOUIS																																
56N20W06BBB1	---	---	---	---	1443	St. Louis River	City of Hibbing #7	1915(59)	118	96	24	S	40	C	350	PS	Surficial sand	Biwabik Iron Formation	---	---	---	---	---	---	---	X			I, II, IV	Once	---
56N20W07BBB2	---	---	---	---	1378	St. Louis River	City of Hibbing #18	1951	112	82	16	S	29	T	400	PS	Surficial sand	do	---	---	---	---	---	---	---	X			do	do	Driller pumping data
57N21W21ABA1	---	---	---	---	---	St. Louis River	Hibbing-Scranton	1953	291+	189	24,16	OH	---	T	450	PS	Biwabik Iron Formation	do	0	---	---	---	---	X	---		X		do	Annually	M Scanlon open-pit mine (540 ft below original land surface)
58N15W03BCC	473221092141502	---	---	Aurora 7 1/2'	1482	St. Louis River	City of Aurora or USGS	1955	181	---	16	OH	20	-	180-250	---	Biwabik Iron Formation	do	60	---	X	---	---	---	---	X			do	Once	---
58N15W03BCD	473218092141801	---	---	Aurora 7 1/2'	1490	St. Louis River	---	---	90	---	6	OH	20	-	150	---	Biwabik Iron Formation	do	100(E)	---	---	---	---	---	---	X			do	do	---
58N15W03CCA	473200092140001	---	---	Aurora 7 1/2'	1475	St. Louis River	City of Aurora	1942	455	76	10	OE	41	T	150	PS	Biwabik Iron Formation	do	80	---	X	---	---	---	---		X		do	Annually	---
58N15W04DBA	473215092144201	---	---	Aurora 7 1/2'	1495	St. Louis River	USGS	1955	35	---	---	OH	12	-	50	U	Buried sand	do	100(E)	---	X	---	USGS	---	---	X			do	Once	QW 6/55
58N15W09ABB	473154092144501	---	---	Aurora 7 1/2'	1440	St. Louis River	---	---	112	---	10	---	---	-	232	---	Buried sand	do	100(E)	---	X	---	---	---	---	X			do	do	---
58N17W08ACA	---	---	---	---	---	St. Louis River	Virginia City Mine Shaft	---	157+	---	---	OH	---	T	2000	PS	Biwabik Iron Formation	do	0	---	---	---	---	---	---		X		do	Annually	---
58N18W12CCC3	---	---	---	---	1670	St. Louis River	City of Virginia #1	1958	94	69	16	S	17	U	1400	PS	Buried sand	do	---	---	X	---	---	---	---	X			do	Once	---

[1]From U.S. Geological Survey Hydrologic Investigations Atlas Series; [2]OE = open end, OH = open hole, S = screen, SP = sand point, W = walled or tile; [3]C = centrifugal, J = jet, P = piston, S = submersible, T = turbine, U = unknown; [4]A = air conditioning, C = commercial, D = domestic, IN = industrial, IR = irrigation, PS = public supply, S = stock, U = unused.