

**Prepared in cooperation with the State of North Dakota  
and with other agencies**

# **Water Resources Data North Dakota Water Year 2005**

Volume 2. Ground Water

Water-Data Report ND-05-2

# Calendar for Water Year 2005

## 2004

October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6				1	2	3	4
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	
31																				

## 2005

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5			1	2	3	4	5
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26
23	24	25	26	27	28	29	27	28						27	28	29	30	31		
30	31																			
April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2	1	2	3	4	5	6	7				1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		
July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6					1	2	3
3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10
10	11	12	13	14	15	16	14	15	16	17	18	18	20	11	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24	25	26	27	28	29	30	28	29	30	31				25	26	27	28	29	30	
31																				

# **Water Resources Data North Dakota Water Year 2005**

## **Volume 2. Ground Water**

By S.M. Robinson and D.R. Rosenkranz

Water-Data Report ND-05-2

Prepared in cooperation with the State of North Dakota  
and with other agencies

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Information about the USGS, North Dakota Water Science Center is available on the Internet at <http://nd.water.usgs.gov>

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## PREFACE

This edition of the annual hydrologic data report of North Dakota is one of a series of annual reports that document hydrologic data collected from the U.S. Geological Survey's collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by Federal, State, local agencies, and the private sector for developing and managing land and water resources in North Dakota. The records are contained in 2 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had the primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the following North Dakota Water Science Center personnel contributed significantly to the collection, processing, and tabulation of the data:

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13. ABSTRACT <i>(Maximum 200 words)</i> Water-resources data for the 2005 water year for North Dakota consists of records of discharge, stage, and water quality for streams; contents, stage, and water quality for lakes and reservoirs; and water levels and water quality for ground-water wells. Volume 2 contains water-level records for 115 ground-water wells and water-quality records for 71 monitoring wells. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in North Dakota.		
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## GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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## GROUND-WATER LEVELS, NETWORK SITES

ADAMS COUNTY

461614102515202	Local number, 132-097-07CAB2	Ludlow-Hell Creek aquifer .....	10
461614102515203	Local number, 132-097-07CAB3	Ludlow aquifer .....	10

BENSON COUNTY

475224098443202	Local number, 151-063-29AAC2	Warwick aquifer .....	11
475601099264701	Local number, 151-069-01BBB	Maddock aquifer .....	12
475515099292101	Local number, 151-069-03CCC	Maddock aquifer .....	12
480958099154801	Local number, 154-067-15BBB	Spiritwood aquifer .....	13
481041099442701	Local number, 154-071-11AAD1	Fox Hills aquifer .....	13
482212099475801	Local number, 156-071-04BBA	Pleasant Lake aquifer .....	14

BOTTINEAU COUNTY

483248101141301	Local number, 159-082-34DDC	Glenburn aquifer .....	15
483333101135402	Local number, 159-082-35BBB2	Glenburn aquifer .....	15

BOWMAN COUNTY

461039103282801	Local number, 131-102-07DDD1	Hell Creek-Fox Hills aquifer .....	16
461039103282803	Local number, 131-102-07DDD3	Tongue River-Ludlow aquifer .....	16

BURKE COUNTY

485618102455401	Local number, 163-093-17DDD	Columbus aquifer .....	17
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BURLEIGH COUNTY

464540100222101	Local number, 138-077-22AAD	McKenzie aquifer .....	18
470556100142501	Local number, 142-075-19CCB	Wing Channel aquifer .....	19

CASS COUNTY

465312096543301	Local number, 139-049-06ADB	West Fargo aquifer .....	19
470818097294104	Local number, 142-054-03DDD4	Page aquifer .....	20
471326097332902	Local number, 143-054-08BBB2	Page aquifer .....	21

CAVALIER COUNTY

484534098254401	Local number, 161-060-21BBB	Pierre Shale aquifer .....	22
484444098504301	Local number, 161-063-29BBB	Munich aquifer .....	22

DICKEY COUNTY

460830098224701	Local number, 131-062-24DDD1	Nortonville aquifer .....	23
460830098224702	Local number, 131-062-24DDD2	Ellendale aquifer .....	23

DIVIDE COUNTY

484746104015901	Local number, 161-103-02CCB	Skjermo Lake aquifer .....	24
485432103151701	Local number, 163-097-34ABB	Crosby aquifer .....	24

DUNN COUNTY

471323102290101	Local number, 143-093-09BCB	Sentinel Butte aquifer .....	25
472144102453402	Local number, 145-095-22DAD2	Killdeer aquifer .....	25
472144102453403	Local number, 145-095-22DAD3	Killdeer aquifer .....	26
472537102144801	Local number, 146-091-35BBC	Goodman Creek aquifer .....	26

EDDY COUNTY

473934099032301	Local number, 148-066-03DDC	New Rockford aquifer .....	27
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EMMONS COUNTY

462539100061101	Local number, 134-075-15BBB	Fox Hills aquifer .....	27
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FOSTER COUNTY

473051099093601	Local number, 147-067-35AAA	Carrington aquifer .....	28
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GOLDEN VALLEY COUNTY

465421103590706	Local number, 140-105-30CCC6	Hell Creek-Fox Hills aquifer .....	29
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GRAND FORKS COUNTY

475646097372201	Local number, 152-054-31BBB	Elk Valley aquifer .....	30
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## GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

Page

## GROUND-WATER LEVELS, NETWORK SITES—Continued

GRANT COUNTY

463000101575101	Local number, 135-090-23BBB1	Fox Hills aquifer .....	31
463000101575102	Local number, 135-090-23BBB2	Tongue River aquifer .....	31

GRIGGS COUNTY

472412098261201	Local number, 145-061-04DAD1	Spiritwood aquifer .....	32
472624098013101	Local number, 146-058-26BBDB	McVile aquifer .....	33
473425098232901	Local number, 147-061-01CCC	Spiritwood aquifer .....	33

HETTINGER COUNTY

463153102521001	Local number, 135-097-04DCA	Fox Hills aquifer .....	34
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KIDDER COUNTY

470638099324301	Local number, 142-070-16DDD	Marstonmoor aquifer .....	34
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LaMOURE COUNTY

461958098132901	Local number, 133-060-16DAA	LaMoure aquifer .....	35
462447098432602	Local number, 134-064-22BBB2	Edgeley aquifer .....	35

LOGAN COUNTY

463417099271002	Local number, 136-070-26BBB2	Streeter aquifer .....	36
463240099483801	Local number, 136-073-35DDD1	Napoleon aquifer .....	37
463240099483802	Local number, 136-073-35DDD2	Napoleon aquifer .....	37

McHENRY COUNTY

480913100372501	Local number, 154-077-18CCC	New Rockford aquifer .....	38
480725100373303	Local number, 154-078-36AAA3	Fox Hills aquifer .....	39
480725100373304	Local number, 154-078-36AAA4	Hell Creek aquifer .....	39
481948100305901	Local number, 156-077-13CCB1	Denbigh aquifer .....	40
481948100305902	Local number, 156-077-13CCB2	Denbigh aquifer .....	40

McINTOSH COUNTY

455807099450701	Local number, 129-072-30BBB	Zeeland aquifer .....	41
460411099200701	Local number, 130-069-21BBB1	Spring Creek aquifer .....	41
460411099200702	Local number, 130-069-21BBB2	Spring Creek aquifer .....	42
461446099312801	Local number, 132-071-14DDD1	Wishek aquifer .....	42
461446099312802	Local number, 132-071-14DDD2	Wishek aquifer .....	43

McKENZIE COUNTY

474814103104702	Local number, 150-098-23AAB2	Cherry Creek aquifer .....	43
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McLEAN COUNTY

474026100583201	Local number, 148-081-03AAB	Horseshoe Valley aquifer .....	44
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MERCER COUNTY

472641102105901	Local number, 146-090-20CCC	Fox Hills aquifer .....	44
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MORTON COUNTY

464734100543501	Local number, 138-081-09ABB1	Fox Hills aquifer .....	45
464734100543502	Local number, 138-081-09ABB2	Hell Creek aquifer .....	45
464734100543504	Local number, 138-081-09ABB4	Cannonball-Ludlow aquifer .....	46
464847101303801	Local number, 139-086-35BCC	Sims aquifer .....	46
464846101464502	Local number, 139-088-34BCC2	Hell Creek aquifer .....	47
464846101464503	Local number, 139-088-34BCC3	Tongue River aquifer .....	47

MOUNTRAIL COUNTY

480120101571901	Local number, 152-088-04BBBD1	Tongue River aquifer .....	48
480120101571902	Local number, 152-088-04BBBD2	Tongue River aquifer .....	48

NELSON COUNTY

474806098133401	Local number, 150-059-20AAA	McVile aquifer .....	49
480138098074101	Local number, 153-058-32DBB	Pierre Shale aquifer .....	49

## GROUND-WATER LEVELS, NETWORK SITES—Continued

OLIVER COUNTY

470642101162701	Local number, 142-084-24BBA	Fox Hills aquifer .....	50
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PEMBINA COUNTY

485425097550502	Local number, 163-056-29CDD2	Pembina River aquifer .....	50
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PIERCE COUNTY

475139099484801	Local number, 151-072-36AAA1	New Rockford aquifer .....	51
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482033099594901	Local number, 156-073-12CCC	Fox Hills aquifer .....	51
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483054100071901	Local number, 158-073-17BBB	Lake Souris aquifer .....	52
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RAMSEY COUNTY

480449099002402	Local number, 153-065-09DDD2	Spiritwood aquifer .....	52
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480817099013201	Local number, 154-065-21CCC	Spiritwood aquifer .....	53
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481929098392601	Local number, 156-062-20BBB	Pierre Shale aquifer.....	53
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RANSOM COUNTY

461838097553402	Local number, 133-058-25BBA2	Englevale aquifer .....	54
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462400097552502	Local number, 134-058-24CDC2	Englevale aquifer .....	55
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RENVILLE COUNTY

484500101294901	Local number, 161-084-24DDD	Fox Hills aquifer .....	56
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RICHLAND COUNTY

460358096581401	Local number, 130-050-17DDD	Milnor Channel aquifer.....	56
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462425096441202	Local number, 134-048-20ADD2	Colfax aquifer .....	57
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462633097163402	Local number, 134-052-06CCD2	Sheyenne Delta aquifer.....	58
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463422097115602	Local number, 136-052-22DDD2	Sheyenne Delta aquifer.....	59
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ROLETTE COUNTY

484731099504104	Local number, 161-071-03CDD4	Shell Valley aquifer .....	60
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484310099572401	Local number, 161-072-35CDC	Shell Valley aquifer .....	60
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485707100053701	Local number, 163-073-11CCC1	Fox Hills aquifer .....	61
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485707100053702	Local number, 163-073-11CCC2	Hell Creek aquifer.....	61
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SARGENT COUNTY

460120097591803	Local number, 129-058-06AAA3	Oakes aquifer .....	62
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461003097191501	Local number, 131-053-10CCC	Milnor Channel aquifer.....	63
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SHERIDAN COUNTY

474817100063801	Local number, 150-074-14CCC	Martin aquifer .....	63
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SIOUX COUNTY

460244101272701	Local number, 130-086-28CCC1	Fox Hills aquifer .....	64
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460244101272702	Local number, 130-086-28CCC2	Hell Creek aquifer.....	64
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462239100375601	Local number, 134-079-32ADD	Strasburg aquifer.....	65
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STARK COUNTY

465755102410701	Local number, 140-095-08AAA	Sentinel Butte aquifer .....	65
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STEELE COUNTY

472024097315201	Local number, 145-054-27CDC	Dakota aquifer.....	66
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STUTSMAN COUNTY

463846098274101	Local number, 137-062-26DDD	Spiritwood aquifer .....	66
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465243098284801	Local number, 139-062-02CCC	Spiritwood aquifer .....	67
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465757098274401	Local number, 140-062-02DDD	Spiritwood aquifer .....	68
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TOWNER COUNTY

482908099134601	Local number, 158-066-30BBB	Spiritwood aquifer .....	69
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484209099174101	Local number, 160-067-10BBB1	Spiritwood aquifer .....	70
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484209099174102	Local number, 160-067-10BBB2	Spiritwood aquifer .....	70
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485659099222801	Local number, 163-067-18AAA1	Spiritwood aquifer .....	71
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485659099222802	Local number, 163-067-18AAA2	Spiritwood aquifer .....	71
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## GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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## GROUND-WATER LEVELS, NETWORK SITES—Continued

WALSH COUNTY

481234097234604	Local number, 155-053-25CDD4	Lacustrine deposits .....	72
481234097234605	Local number, 155-053-25CDD5	Lacustrine deposits .....	72
481841097490301	Local number, 156-056-22DDD	Fordville aquifer .....	73
482408097443201	Local number, 157-055-21DBC	Dakota aquifer.....	74
482449098095801	Local number, 157-058-18DDD	Pierre Shale aquifer.....	74

WARD COUNTY

481058101120403	Local number, 154-082-03CDC3	Sundre Buried Channel aquifer.....	75
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WELLS COUNTY

472329099194401	Local number, 145-068-10BCC	Pipestem Creek aquifer.....	76
474419099371201	Local number, 149-070-09DAA1	New Rockford aquifer .....	76

WILLIAMS COUNTY

481056103024201	Local number, 154-096-08AAA	Hofflund aquifer .....	77
483016103242801	Local number, 158-099-13DDD	Ray aquifer.....	77
483127103373102	Local number, 158-100-08DAA2	Little Muddy aquifer.....	78
483700103191501	Local number, 159-098-10AAD	West Wildrose aquifer .....	79

## GROUND-WATER QUALITY, NETWORK SITES

BOWMAN COUNTY

461039103282803	Local number, 131-102-07DDD3	Tongue River-Ludlow aquifer .....	80
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BURKE COUNTY

485618102455401	Local number, 163-093-17DDD	Columbus aquifer.....	80
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DIVIDE COUNTY

484746104015901	Local number, 161-103-02CCB	Skjermo Lake aquifer.....	80
485432103151701	Local number, 163-097-34ABB	Crosby aquifer.....	80

DUNN COUNTY

472144102453402	Local number, 145-095-22DAD2	Killdeer aquifer .....	80
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GRANT COUNTY

463000101575102	Local number, 135-090-23BBB2	Tongue River aquifer .....	80
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McKENZIE COUNTY

474814103104702	Local number, 150-098-23AAB2	Cherry Creek aquifer .....	80
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MORTON

464734100543501	Local number, 138-081-09ABB1	Foxhill aquifer.....	80
464734100543502	Local number, 138-081-09ABB2	Hell Creek aquifer.....	80
464734100543504	Local number, 138-081-09ABB4	Cannonball-Ludlow aquifer.....	80
464847101303801	Local number, 139-086-35BCC	Sims aquifer .....	80

MOUNTRAIL COUNTY

480120101571901	Local number, 152-088-04BBBD1	Sentinel Butte aquifer .....	80
480120101571902	Local number, 152-088-04BBBD2	Sentinel Butte aquifer .....	80

RENVILLE COUNTY

484500101294901	Local number, 161-084-24DDD	Foxhill aquifer.....	80
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SIOUX COUNTY

460244101272702	Local number, 130-086-28CCC2	Hell Creek aquifer.....	80
462239100375601	Local number, 134-079-32ADD	Strasburg aquifer.....	80

WILLIAMS COUNTY

483016103242801	Local number, 158-099-13DDD	Ray aquifer.....	80
483700103191501	Local number, 159-098-10AAD	West Wildrose aquifer .....	80

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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GROUND-WATER QUALITY, SPIRIT LAKE RESERVATION SITES

EDDY COUNTY

474813098480601	Local number, 150-064-14DDD	Tokio aquifer.....	82
474814098504101	Local number, 150-064-16DDD	Tokio aquifer.....	82
474906098413801	Local number, 150-063-11CCC	Warwick aquifer.....	82
474906098441203	Local number, 150-063-16BBB3	Warwick aquifer .....	82
474948098402102	Local number, 150-063-12BBC2	Warwick aquifer .....	82
474954098313002	Local number, 150-062-01DDD2	Warwick aquifer.....	82
474957098323801	Local number, 150-062-11AAA	Warwick aquifer .....	82
474959098335502	Local number, 150-062-03DDD2	Warwick aquifer .....	82
474959098393601	Local number, 150-063-01DDCC	Warwick aquifer .....	82
474959098402302	Local number, 150-063-02DDD2	Warwick aquifer .....	82
474959098425801	Local number, 150-063-04DDD	Warwick aquifer .....	82
474959098441301	Local number, 150-063-04CCC	Warwick aquifer .....	82
474959098453201	Local number, 150-063-05CCC	Warwick aquifer .....	82
474959098520001	Local number, 150-064-05DDDD	Tokio aquifer.....	82
475024098441401	Local number, 150-063-04CBB	Warwick aquifer .....	82
475050098402101	Local number, 150-063-02AAA	Warwick aquifer .....	82
475050098555101	Local number, 150-064-02AAAA	Warwick aquifer.....	82

BENSON COUNTY

475051098362701	Local number, 151-062-33CCC	Warwick aquifer.....	82
475051098374501	Local number, 151-062-32CCC	Warwick aquifer.....	82
475051098390801	Local number, 151-063-36DDD	Warwick aquifer.....	82
475107098414001	Local number, 151-063-34DAD	Warwick aquifer.....	82
475115098554901	Local number, 151-065-36CBBB	Tokio aquifer.....	82
475130098453201	Local number, 151-063-32BBC	Warwick aquifer.....	82
475142098531601	Local number, 151-064-32BBBB	Tokio aquifer.....	82
475143098425601	Local number, 151-063-27CCC	Warwick aquifer.....	82
475143098504201	Local number, 151-064-34BBBB	Tokio aquifer.....	82
475143098520201	Local number, 151-064-29DDDD	Tokio aquifer.....	82
475156098402301	Local number, 151-063-26DDA	Warwick aquifer.....	82
475209098531801	Local number, 151-064-30DAAA	Tokio aquifer.....	82
475230098504301	Local number, 151-064-28AAAD	Tokio aquifer.....	82
475234098515901	Local number, 151-064-28BBBB	Tokio aquifer.....	82
475234098554901	Local number, 151-065-25BBBB	Tokio aquifer.....	82
475235098425801	Local number, 151-063-28AAA	Warwick aquifer.....	82
475236098541301	Local number, 151-064-19CDCC	Tokio aquifer.....	82
475303098464901	Local number, 151-064-24ADD	Warwick aquifer .....	82
475326099010001	Local number, 151-065-20BBBB	Tokio aquifer.....	82
475327098531601	Local number, 151-064-20BBBB	Tokio aquifer.....	82
475328098402302	Local number, 151-063-14DDD2	Warwick aquifer.....	82
475328098520001	Local number, 151-064-20AAAA	Tokio aquifer.....	82
475340099033601	Local number, 151-066-14DDAA	Tokio aquifer.....	82
475341098504301	Local number, 151-064-16DADD	Tokio aquifer.....	82
475403098351202	Local number, 151-062-16ADA2	Warwick aquifer.....	82
475419098543701	Local number, 151-065-13AAAB	Tokio aquifer.....	82
475419098554801	Local number, 151-065-12CCC	Tokio aquifer.....	82
475419099021701	Local number, 151-065-18BBBB	Tokio aquifer.....	82
475420098464801	Local number, 151-063-07CCC	Warwick aquifer.....	82
475420098531601	Local number, 151-064-17BBBB	Tokio aquifer.....	82

## GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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## GROUND-WATER QUALITY, SPIRIT LAKE RESERVATION SITES—Continued

BENSON COUNTY

475603098570901	Local number, 151-065-03AAA	Tokio aquifer.....	82
475604098555001	Local number, 151-065-01BBBB	Tokio aquifer.....	82
475628099021701	Local number, 152-065-31CBBB	Tokio aquifer.....	82
475630098555001	Local number, 152-065-36CBBB	Tokio aquifer.....	82
475656098531601	Local number, 152-064-32BBBB	Tokio aquifer.....	82
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## INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with many other agencies, obtains a large amount of data pertaining to the water resources of North Dakota each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the U.S. Geological Survey, the data will be published annually in this report series entitled "Water Resources Data - North Dakota."

This report includes records on ground water in North Dakota. Specifically, it contains water-level records for 115 wells and water-quality records for 71 wells. Locations of the ground-water wells are shown in figures 1 and 2. Additional ground-water information for North Dakota is contained in the files, data bases, and other published reports of the U.S. Geological Survey.

This series of annual reports for North Dakota began with the 1961 water year report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. For the 1975-95 water years, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1996 water year, ground-water levels and ground-water quality data will be published in a separate volume for North Dakota.

Prior to introduction of this series and for several water years concurrent with it, water resources data for North Dakota were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 5 and 6." For the 1961-70 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941-70 water years were published annually under the title "Quality of Surface Waters of the United States," and ground-water levels for the 1935-74 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers are in libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225-0286.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. These official U.S. Geological Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report ND-05-2." For archiving and general distribution, the reports for the 1971-74 water years also are

identified as water-data reports. These water-data reports are for sale in paper copy or may be purchased on microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including the current prices, for ordering specific reports may be obtained from the USGS Water Science Center at the address given on the back of the title page or by telephoning (701) 250-7406.

## COOPERATION

Organizations that assisted in the collection of ground-water data in this report through joint funding agreements with the U.S. Geological Survey are:

North Dakota State Water Commission  
Spirit Lake Tribe

## SUMMARY OF HYDROLOGIC CONDITIONS

The geography and geology of North Dakota are sufficiently complex that a summary of ground-water conditions over the entire State is difficult. Descriptions of conditions in specific aquifers apply only to that geographic area and cannot be considered to be the same for other geographic areas.

Ground-water levels fluctuate in response to a variety of stresses and changes in stress. Short- and long-term climatic conditions can lead to changes in natural recharge and discharge. Superimposed on the natural fluctuations in water levels are changes caused by increasing or decreasing ground-water withdrawals and, in some areas, changes caused by recharge from surface irrigation.

## EXPLANATION OF GROUND-WATER-LEVEL RECORDS

The ground-water records published in this report are for the 2005 water year that began October 1, 2004, and ended September 30, 2005. A calendar of the water year is provided on the inside of the front cover. The records contain ground-water level and ground-water quality data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs.

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the

WATER RESOURCES DATA - NORTH DAKOTA, 2005

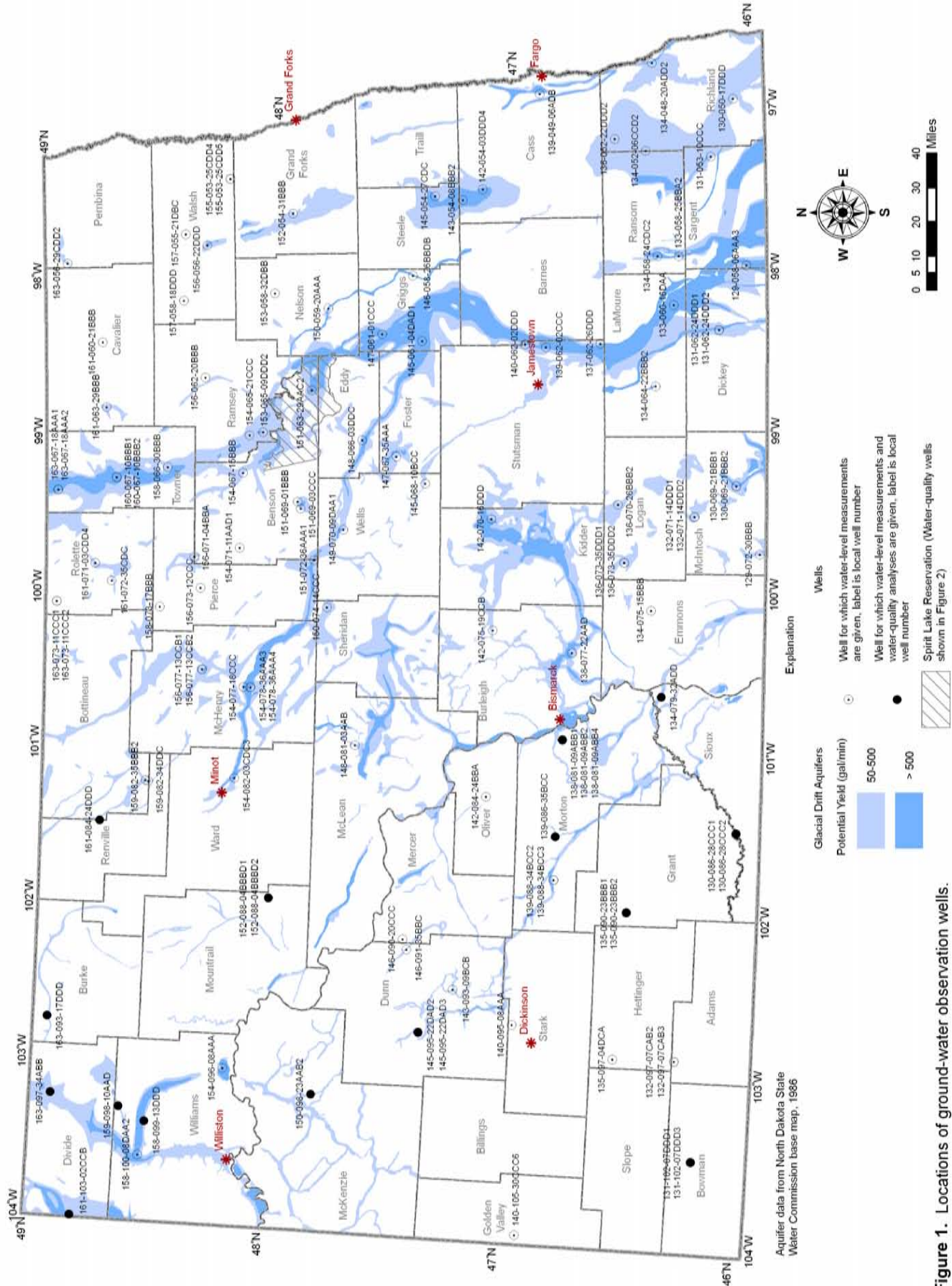


Figure 1. Locations of ground-water observation wells.





degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 3). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken. During water year 2003, the true latitude and longitude listed in the LOCATION paragraph was changed slightly at some locations. The change was made based on new information and does not signify a change in the gage location unless otherwise noted.

In addition to the well number that is based on the latitude and longitude for each well, another well number may be provided which in many states is based on the Public Land Survey System, a set of rectangular surveys that is used to identify land parcels. This well number is familiar to the water users of North Dakota and shows the location of the well by quadrant, township, range section, and position within the section (see fig. 4). The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian—A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more wells are located within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, site 138-077-22AAD is in the SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.22, T.138 N., R.077 W. Consecutive terminal numbers are added if more than one site is recorded within a 10-acre tract.

### Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRI). In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water

samples for selected unstable constituents. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in TWRI Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

### Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown and each well is identified by its local well or county well number on a map in this report (figs. 1 and 2).

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and a hyperlink to the hydrograph in the National Water Information System (NWIS). Well descriptions are presented in the headings preceding the tabular data.

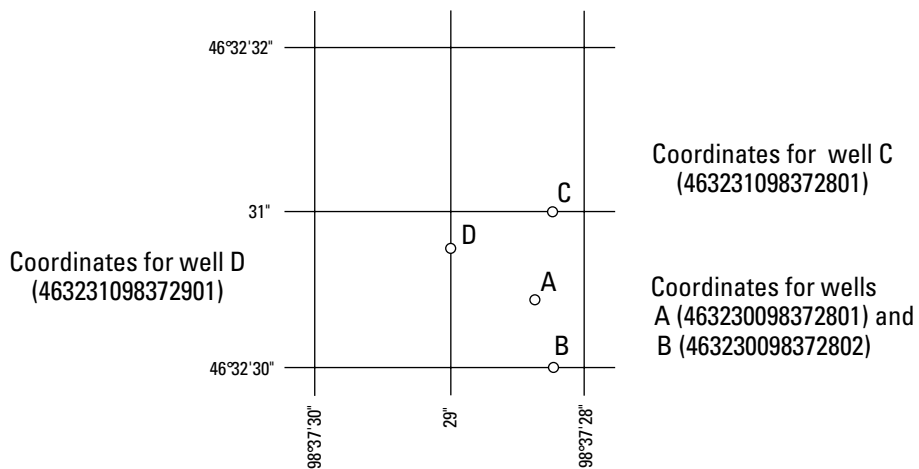


Figure 3. System for numbering wells (latitude and longitude).

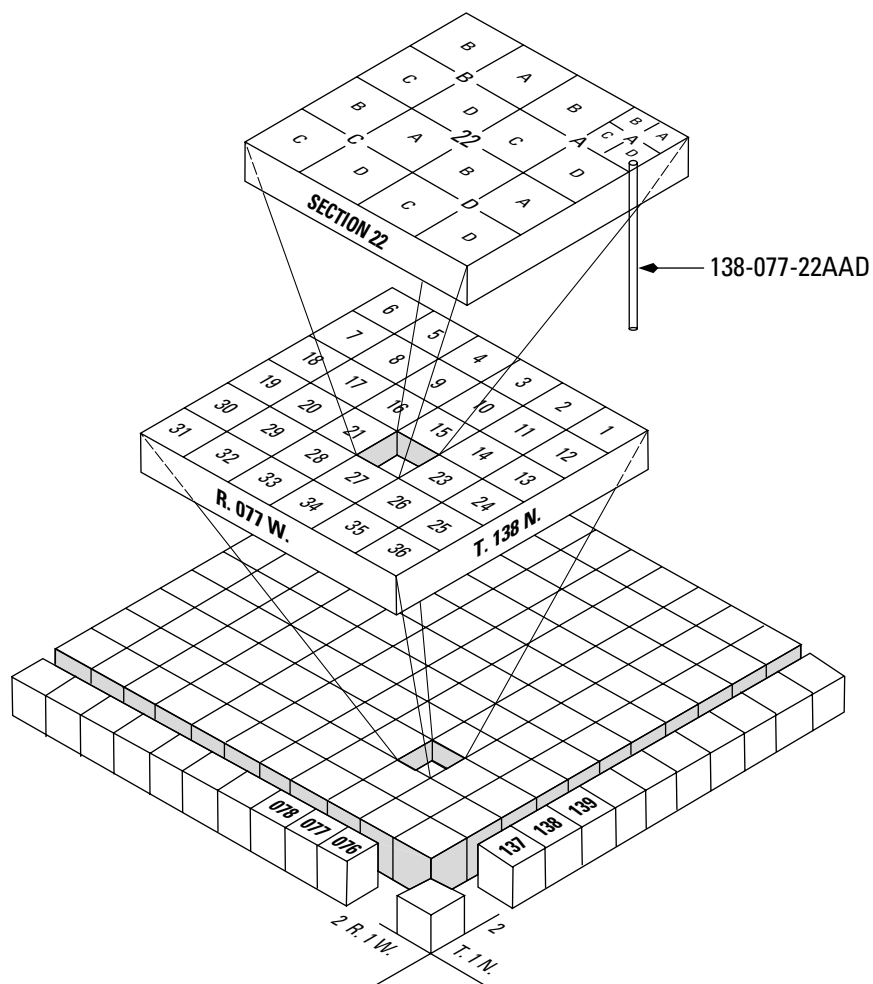


Figure 4. System for numbering wells (township and range).

The following comments clarify information presented in these various headings.

**LOCATION.**—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

**AQUIFER.**—This entry designates by name and geologic age the aquifer that the well taps.

**WELL CHARACTERISTICS.**—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

**INSTRUMENTATION.**—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

**DATUM.**—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

**REMARKS.**—This entry describes factors that may affect the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

**PERIOD OF RECORD.**—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

**EXTREMES FOR PERIOD OF RECORD.**—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

#### **Water-Level Tables**

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

#### **Hydrographs**

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, a hyperlink to a hydrograph in NWIS is provided for each well record. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Missing data in the well record are indicated by a blank space or break in the hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder’s float mechanism to water-level fluctuations in a well.

## **GROUND-WATER-QUALITY DATA**

### **Data Collection and Computation**

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide.

Most of the methods used for collecting and analyzing water samples are described in the TWRI, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS Water Science Center (see address shown on back of title page in this report).

### **Laboratory Measurements**

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed onsite. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2 and Book 5, Chapters A1, A3, and A4, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

### Remark Codes

The following remark codes may appear with the water-quality data in this section:

Printed Output	Remark
E	Value is estimated.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.

### Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected by this USGS Water Science Center are:

**Field blank**—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

**Trip blank**—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

**Equipment blank**—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the USGS Science Center).

**Sampler blank**—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

**Filter blank**—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

**Splitter blank**—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

**Preservation blank**—A blank solution that is treated with the sampler preservatives used for an environmental sample.

### Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are

submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

### Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected by this USGS Water Science Center are:

**Concurrent samples**—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

**Sequential samples**—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

**Split sample**—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

### Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

### ACCESS TO USGS WATER DATA

The USGS provides near real-time water-level data for many of the ground-water stations equipped with the necessary telemetry and historic water-level data for most current or discontinued stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

### DEFINITION OF TERMS

Terms related to water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

**Aquifer** is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

**Dissolved** refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determination of "dissolved" constituents are made on subsamples of the filtrate.

**Dissolved-solids concentration** of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.493 to reflect the change.

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

**Land-surface datum** is a datum plane that is approximately at land surface at each ground-water observation well.

**Micrograms per liter** (UG/L,  $\mu\text{g/L}$ ) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

**Microsiemens per centimeter at 25 degrees Celsius** (US/CM,  $\mu\text{S/cm}$ ) is a unit for reporting specific electrical conductance.

**Milligrams per liter** (MG/L,  $\text{mg/L}$ ) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in  $\text{mg/L}$  and is based on the mass of dry sediment per liter of water-sediment mixture.

**National Geodetic Vertical Datum of 1929** (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

**Open or screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

**Parameter Code** is a 5-digit number used in the U.S. Geological Survey's data system, NWIS, to uniquely identify

a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency's data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

**pH** indicates the degree of acidity or alkalinity of water and is expressed in pH units. The pH value of a solution is the negative logarithm of the concentration of hydrogen ions, in moles per liter. A pH of 7.0 indicates that the water is neither acid nor alkaline. pH readings progressively less than 7.0 denote increasing acidity and those progressively greater than 7.0 denote increasingly alkalinity. The pH of most natural surface waters ranges between 6 and 8.

**Sea level** refers to the National Geodetic Vertical Datum of 1929--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

**Sodium-adsorption-ratio** (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

**Solute** is any substance that is dissolved in water.

**Specific conductance** is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 degrees Celsius. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from well to well, and it may vary in the same source with changes in the composition of the water.

**Total** is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

**Water year** in Geological Survey reports dealing with surface- ground-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2005, is called "water year 2005."

**Water-table aquifer** is an unconfined aquifer within which is found the water table.

**Well** is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

GROUND-WATER LEVELS

NETWORK SITES

ADAMS COUNTY

461614102515202. Local number, 132-097-07CAB2.

LOCATION.--Lat 46°16'14", long 102°51'52", Hydrologic Unit 10130205. Owner: North Dakota State Water Commission.

AQUIFER.--Ludlow-Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 590 ft, cased with 578 ft of 2-in diameter steel pipe.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,665 ft. Measuring point: Top of casing 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.39 ft below land-surface datum, December 1, 1981; lowest water level, 87.46 ft below land-surface datum, August 26, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	87.32	JAN 05	87.28	MAR 23	87.10	JUN 06	86.97	JUL 12	87.30	SEP 15	87.42
NOV 15	87.18	FEB 23	87.21								
WATER YEAR 2005		HIGHEST	86.97	JUN 06, 2005		LOWEST	87.42	SEP 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461614102515202](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461614102515202)

ADAMS COUNTY--Continued

461614102515203. Local number, 132-097-07CAB3.

LOCATION.--Lat 46°16'14", long 102°51'52", Hydrologic Unit 10130205. Owner: North Dakota State Water Commission.

AQUIFER.--Ludlow.

WELL CHARACTERISTICS.--Drilled observation well, depth 229 ft, cased with 217 ft of 1.25-in diameter plastic pipe.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,665 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.85 ft below land-surface datum, April 12, 2001; lowest water level, 15.88 ft below land-surface datum, February 22, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	13.61	JAN 05	13.46	MAR 23	13.35	JUN 06	13.13	JUL 12	13.29	SEP 15	14.05
NOV 15	13.45	FEB 23	13.41								
WATER YEAR 2005		HIGHEST	13.13	JUN 06, 2005		LOWEST	14.05	SEP 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461614102515203](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461614102515203)



## GROUND-WATER LEVELS

11

## NETWORK SITES--Continued

## BENSON COUNTY

475224098443202. Local number, 151-063-29AAC2.

LOCATION.--Lat 47°52'24", long 98°44'32", Hydrologic Unit 09020201. Owner: U.S. Geological Survey.

AQUIFER.--Warwick.

WELL CHARACTERISTICS.--Drilled observation well, depth 67 ft, cased with 67 ft of 6-in diameter steel pipe, slotted 57 to 67 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder June 1974 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for August 1951 to June 1974. From June 1974 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,479.6 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.29 ft below land-surface datum, November 5, 1957; lowest water level, 27.03 ft below land-surface datum, November 11, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level, 18.84 ft below land-surface datum, December 20; lowest water level, 20.30 ft below land-surface datum, August 23.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.19	19.18	19.12	19.19	19.42	19.53	19.52	19.84	19.93	19.91	19.96	19.87
2	19.18	19.10	19.05	19.18	19.37	19.48	19.53	19.87	19.88	19.87	19.99	19.89
3	19.16	19.13	19.03	19.20	19.45	19.47	19.60	19.78	19.88	19.70	20.00	19.98
4	19.23	19.19	19.14	19.34	19.50	19.52	19.55	19.76	19.87	19.81	19.99	19.83
5	19.15	19.12	19.13	19.21	19.37	19.53	19.62	19.81	19.82	19.85	19.97	19.87
6	19.16	19.13	19.12	19.15	19.46	19.59	19.58	19.81	19.87	19.87	19.99	19.90
7	19.15	19.20	19.12	19.23	19.47	19.57	19.64	19.80	19.85	19.85	19.99	19.88
8	19.27	19.09	19.02	19.22	19.47	19.57	19.64	19.80	19.87	19.90	20.00	19.80
9	19.27	19.16	19.16	19.24	19.44	19.54	19.57	19.80	19.87	19.84	20.00	19.86
10	19.21	19.22	19.15	19.28	19.37	19.60	19.61	19.82	19.91	19.84	20.06	19.74
11	19.17	19.15	19.03	19.20	19.37	19.52	19.59	19.90	19.83	19.86	20.04	19.78
12	19.17	19.16	19.20	19.25	19.46	19.47	19.72	19.85	19.82	19.92	19.98	19.84
13	19.17	19.16	19.22	19.29	19.43	19.57	19.72	19.79	19.88	19.97	20.08	19.79
14	19.12	19.11	19.07	19.35	19.45	19.60	19.64	19.85	19.92	19.92	20.04	19.74
15	19.13	19.12	19.13	19.38	19.51	19.55	19.70	19.81	19.86	19.92	20.08	19.79
16	19.11	19.14	19.23	19.32	19.45	19.58	19.70	19.75	19.84	19.87	20.08	19.73
17	19.16	19.10	19.07	19.39	19.53	19.52	19.70	19.72	19.86	19.82	19.99	19.70
18	19.17	19.16	19.20	19.30	19.51	19.55	19.68	19.83	19.80	19.89	19.94	19.76
19	19.12	19.13	19.20	19.30	19.53	19.55	19.70	19.94	19.85	19.83	20.04	19.71
20	19.14	19.07	19.10	19.27	19.45	19.61	---	19.83	19.84	19.89	20.14	19.73
21	19.11	19.10	19.13	19.35	19.50	19.57	19.80	19.83	19.88	19.88	20.20	19.70
22	19.16	19.08	19.21	19.35	19.53	19.59	19.72	19.84	19.91	19.92	20.18	19.79
23	19.14	19.05	19.20	19.21	19.53	19.59	19.75	19.88	19.88	19.90	20.30	19.77
24	19.15	19.12	19.11	19.30	19.47	19.64	19.73	19.88	19.95	19.85	20.24	19.75
25	19.13	19.12	19.15	19.35	19.53	19.61	19.70	19.92	19.96	19.92	20.13	19.72
26	19.18	19.02	19.18	19.39	19.52	19.55	19.76	19.81	19.89	19.90	20.06	19.72
27	19.19	19.11	19.12	19.34	19.58	19.47	19.81	19.80	19.84	19.90	20.04	19.74
28	19.07	19.12	19.16	19.26	19.58	19.52	19.77	19.92	19.98	19.90	20.08	19.71
29	19.06	19.07	19.16	19.30	---	19.51	19.75	19.86	19.88	19.88	20.02	19.68
30	19.17	19.10	19.16	19.35	---	19.51	19.72	19.89	19.91	19.97	20.05	19.66
31	19.12	---	19.23	19.39	---	19.54	---	19.93	---	19.95	19.90	---
MAX	19.27	19.22	19.23	19.39	19.58	19.64	---	19.94	19.98	19.97	20.30	19.98
MIN	19.06	19.02	19.02	19.15	19.37	19.47	---	19.72	19.80	19.70	19.90	19.66

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=475224098443202](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=475224098443202)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 BENSON COUNTY--Continued

475601099264701. Local number, 151-069-01BBB.

LOCATION.--Lat 47°56'01", long 99°26'47", Hydrologic Unit 09020202. Owner: North Dakota State Water Commission.

AQUIFER.--Maddock.

WELL CHARACTERISTICS.--Drilled observation well, depth 180 ft, cased with 97 ft of 1.25-in diameter plastic pipe, screen set 97 to 103 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,550 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.31 ft below land-surface datum, July 12, 2001; lowest water level, 18.60 ft below land-surface datum, November 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	13.15	JAN 26	14.12	MAR 14	14.41	APR 20	14.59	JUN 28	14.57	AUG 15	13.46
DEC 08	13.74										
WATER YEAR 2005		HIGHEST	13.15	OCT 18, 2004		LOWEST	14.59	APR 20, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=475601099264701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=475601099264701)

BENSON COUNTY--Continued

475515099292101. Local number, 151-069-03CCC.

LOCATION.--Lat 47°55'15", long 99°29'21", Hydrologic Unit 09020202. Owner: North Dakota State Water Commission.

AQUIFER.--Maddock.

WELL CHARACTERISTICS.--Drilled observation well, depth 180 ft, cased with 137 ft of 1.25-in diameter plastic pipe, screen set 137 to 143 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,560 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.52 ft below land-surface datum, May 2, 2001; lowest water level, 13.16 ft below land-surface datum, March 1, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	4.98	JAN 26	7.23	MAR 14	7.58	APR 20	5.70	JUN 28	2.18	AUG 15	4.04
DEC 08	5.55										
WATER YEAR 2005		HIGHEST	2.18	JUN 28, 2005		LOWEST	7.58	MAR 14, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=475515099292101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=475515099292101)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## BENSON COUNTY--Continued

480958099154801. Local number, 154-067-15BBB.

LOCATION.--Lat 48°09'58", long 99°15'48", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 180 ft, cased with 147 ft of 1.25-in diameter plastic pipe, screen set 147 to 153 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,475 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.27 ft below land-surface datum, August 16, 2005; lowest water level, 34.97 ft below land-surface datum, September 10, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	22.71	JAN 26	23.09	MAR 15	23.19	APR 20	23.08	JUN 28	22.60	AUG 16	21.27
DEC 08	22.98										
WATER YEAR 2005		HIGHEST	21.27	AUG 16, 2005		LOWEST	23.19	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480958099154801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480958099154801)

## BENSON COUNTY--Continued

481041099442701. Local number, 154-071-11AAD1.

LOCATION.--Lat 48°10'41", long 99°44'27", Hydrologic Unit 09020202. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 100 ft, cased with 42 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 42 to 45 ft below land-surface datum.

INSTRUMENTATION.--Measured quarterly using an electric tape.

DATUM.--Altitude of land-surface datum is 1,590 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.25 ft below land-surface datum, May 20, 1999; lowest water level, 9.27 ft below land-surface datum, June 8, 1988.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	5.55	JAN 26	6.25	MAR 15	6.49	APR 21	6.25	JUN 28	5.72	AUG 16	4.54
DEC 09	5.82										
WATER YEAR 2005		HIGHEST	4.54	AUG 16, 2005		LOWEST	6.49	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481041099442701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481041099442701)

## GROUND-WATER LEVELS

NETWORK SITES--Continued

BENSON COUNTY--Continued

482212099475801. Local number, 156-071-04BBA.

LOCATION.--Lat 48°22'12", long 99°47'58", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Pleasant Lake.

WELL CHARACTERISTICS.--Drilled observation well, depth 140 ft, cased with 58 ft of 4-in diameter plastic pipe, slotted 18 to 58 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder, January 1975 to current year. Only intermittent low and EOM water levels, obtained from strip-cart recorders, are available from the Water Science Center office for September 1968 to January 1975. From January 1975 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,604 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.84 ft below land-surface datum, May 19, 1999; lowest water level, 13.39 ft below land-surface datum, March 9, 1993.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 7.82 ft below land-surface datum, July 9-12; lowest water level recorded, 9.23 ft below land surface-surface datum, January 26-27 and March 2-3.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.74	8.85	8.96	9.10	9.21	9.20	8.79	8.59	8.65	8.13	8.14	---
2	8.74	8.86	8.96	9.11	9.21	9.23	8.75	8.63	8.61	8.05	8.14	---
3	8.79	8.86	8.96	9.11	9.21	9.23	8.73	8.64	8.64	7.94	8.08	---
4	8.81	8.86	8.96	9.11	9.21	9.22	8.73	8.64	8.63	7.93	7.93	---
5	8.81	8.86	8.96	9.11	9.20	9.22	8.75	8.66	8.59	7.94	7.92	---
6	8.79	8.86	8.97	9.11	9.19	9.14	8.77	8.66	8.63	7.98	7.98	---
7	8.79	8.87	8.97	9.11	9.19	9.09	8.77	8.66	8.64	8.01	8.00	---
8	8.81	8.88	9.00	9.11	9.19	9.09	8.75	8.66	8.59	8.05	8.07	---
9	8.81	8.88	9.01	9.11	9.19	9.08	8.72	8.58	8.45	7.86	8.11	---
10	8.82	8.88	9.01	9.11	9.20	8.98	8.74	8.58	8.45	7.83	8.13	---
11	8.83	8.88	9.01	9.11	9.20	8.98	8.73	8.61	8.46	7.83	8.14	---
12	8.83	8.88	8.99	9.12	9.20	8.96	8.73	8.61	8.50	7.85	8.16	---
13	8.84	8.89	8.99	9.13	9.20	8.97	8.73	8.61	8.51	7.89	8.18	---
14	8.84	8.89	8.99	9.14	9.20	8.97	8.71	8.60	8.51	7.89	8.21	---
15	8.81	8.89	8.99	9.15	9.20	8.99	8.65	8.61	8.49	7.89	8.24	---
16	8.83	8.91	9.01	9.16	9.19	8.99	8.65	8.62	8.53	7.90	---	---
17	8.83	8.91	9.01	9.16	9.20	8.99	8.64	8.63	8.57	7.90	---	---
18	8.83	8.91	9.02	9.16	9.20	8.98	8.63	8.62	8.61	7.84	---	---
19	8.83	8.92	9.02	9.16	9.20	8.99	8.63	8.60	8.65	7.84	---	---
20	8.83	8.92	9.01	9.16	9.20	9.00	8.62	8.63	8.69	7.90	---	---
21	8.83	8.92	9.02	9.17	9.20	9.00	8.62	8.63	8.72	7.91	---	---
22	8.83	8.92	9.06	9.18	9.21	9.00	8.59	8.45	8.72	7.94	---	---
23	8.83	8.93	9.06	9.18	9.21	9.00	8.59	8.46	8.75	7.95	---	---
24	8.82	8.93	9.06	9.18	9.20	8.99	8.59	8.51	8.76	7.95	---	---
25	8.82	8.94	9.09	9.18	9.20	8.99	8.59	8.56	8.77	7.97	---	---
26	8.82	8.94	9.09	9.23	9.20	8.99	8.59	8.57	8.78	8.01	---	---
27	8.82	8.94	9.09	9.23	9.20	8.96	8.59	8.58	8.66	8.01	---	---
28	8.82	8.94	9.09	9.22	9.20	8.92	8.59	8.59	8.60	8.03	---	---
29	8.81	8.95	9.09	9.22	---	8.88	8.59	8.63	8.59	8.05	---	---
30	8.81	8.96	9.09	9.22	---	8.84	8.59	8.64	8.34	8.08	---	---
31	8.82	---	9.10	9.21	---	8.82	---	8.65	---	8.11	---	---
MAX	8.84	8.96	9.10	9.23	9.21	9.23	8.79	8.66	8.78	8.13	---	---
MIN	8.74	8.85	8.96	9.10	9.19	8.82	8.59	8.45	8.34	7.83	---	---

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=482212099475801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=482212099475801)

## NETWORK SITES--Continued

## BOTTINEAU COUNTY

483248101141301. Local number, 159-082-34DDC.

LOCATION.--Lat 48°32'48", long 101°14'13", Hydrologic Unit 09010005. Owner: North Dakota State Water Commission.

AQUIFER.--Glenburn.

WELL CHARACTERISTICS.--Drilled observation well, depth 400 ft, cased with 1.2-in diameter plastic pipe, screen set 238 to 241 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,566 ft. Measuring point: Top of casing 2.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to 1995, August 2005 to September 2005.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.70 ft below land-surface datum, May 21, 1980; lowest water level, 61.99 ft below land-surface datum, September 28, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

	DATE	WATER LEVEL	DATE	WATER LEVEL		
	AUG 03	61.69	SEP 28	61.99		
WATER YEAR 2005	HIGHEST	61.69	AUG 03	LOWEST	61.99	SEP 28, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483248101141301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483248101141301)

## BOTTINEAU COUNTY--Continued

483333101135402. Local number, 159-082-35BBB2.

LOCATION.--Lat 48°33'33", long 101°13'54", Hydrologic Unit 09010005. Owner: North Dakota State Water Commission.

AQUIFER.--Glenburn.

WELL CHARACTERISTICS.--Drilled observation well, depth 181 ft, cased with 178 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 178 to 181 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,560 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.39 ft below land-surface datum, May 21, 1980; lowest water level, 63.40 ft below land-surface datum, August 20, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	59.16	NOV 17	61.00	MAR 02	58.39	MAR 30	59.19	APR 27	61.20	MAY 19	59.62
WATER YEAR 2005		HIGHEST	58.39	MAR 02, 2005		LOWEST	61.20	APR 27, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483333101135402](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483333101135402)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
BOWMAN COUNTY

461039103282801. Local number, 131-102-07DDD1.

LOCATION.--Lat 46°10'39", long 103°28'28", Hydrologic Unit 10130301. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek-Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 963 ft, cased with 951 ft of 2-in diameter steel pipe.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,945 ft. Measuring point: Top of casing 3.20 ft above land-surface datum.

PERIOD OF RECORD.--August 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.35 ft below land-surface datum, June 21, 1973, and August 13, 1973; lowest water level, 228.62 ft below land-surface datum, January 5, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	228.36	JAN 05	228.62	MAR 15	228.42	MAY 11	228.48	JUL 13	228.15	AUG 30	228.20
NOV 16	228.32	FEB 03	228.51								
WATER YEAR 2005		HIGHEST	228.15	JUL 13, 2005	LOWEST	228.62	JAN 05, 2005				

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461039103282801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461039103282801)

BOWMAN COUNTY--Continued

461039103282803. Local number, 131-102-07DDD3.

LOCATION.--Lat 46°10'39", long 103°28'28", Hydrologic Unit 10130301. Owner: North Dakota State Water Commission.

AQUIFER.--Tongue River-Ludlow.

WELL CHARACTERISTICS.--Drilled observation well, depth 138 ft, cased with 132 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 132 to 138 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,945 ft. Measuring point: Top of casing 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.77 ft below land-surface datum, December 1, 1982; lowest water level, 8.75 ft below land-surface datum, November 17, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	6.56	NOV 16	6.20	FEB 03	6.16	MAY 11	6.41	AUG 10	6.28	AUG 30	6.42
NOV 04	6.28	JAN 05	6.16	MAR 15	6.22	JUL 13	6.19				
WATER YEAR 2005		HIGHEST	6.16	JAN 05, 2005	FEB 03, 2005	LOWEST	6.56	OCT 12, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461039103282803](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461039103282803)

## GROUND-WATER LEVELS

17

## NETWORK SITES--Continued

## BURKE COUNTY

485618102455401. Local number, 163-093-17DDD.

LOCATION.--Lat 48°56'18", long 102°45'54", Hydrologic Unit 09010001. Owner: North Dakota State Water Commission.

AQUIFER.--Columbus.

WELL CHARACTERISTICS.--Drilled observation well, depth 80 ft, cased with 76 ft of 1.25-in diameter plastic pipe, slotted 56 to 76 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,917 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--June 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.25 ft below land-surface datum, June 16, 2004; lowest water level, 17.24 ft below land-surface datum, April 1, 1968.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	9.91	APR 21	11.82	MAY 24	9.91	JUN 28	7.30	JUL 28	9.35	AUG 17	10.59
NOV 18	9.85										
WATER YEAR 2005		HIGHEST	7.30	JUN 28, 2005		LOWEST	11.82	APR 21, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485618102455401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485618102455401)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 BURLEIGH COUNTY

464540100222101. Local number, 138-077-22AAD.

LOCATION.--Lat 46°45'40", long 100°22'21", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--McKenzie.

WELL CHARACTERISTICS.--Drilled observation well, depth 126 ft, cased with 116 ft of 4.5-in diameter steel pipe, slotted 86 to 116 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder October 1973 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for September 1961 to October 1973. From October 1973 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,720 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.87 ft below land-surface datum, June 15, 16, 18, and 19, 2001; lowest water level, 32.88 ft below land-surface datum, August 22-23, 1977.

EXTREMES FOR CURRENT YEAR.--Highest water level, 7.54 ft below land-surface datum, May 17-19 and 21; lowest water level, 11.42 ft below land-surface datum, September 7.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.29	8.82	8.54	8.29	8.11	7.95	7.78	7.73	7.60	7.86	10.26	10.47
2	9.29	8.82	8.54	8.29	8.10	7.95	7.78	7.73	7.56	7.86	10.21	10.40
3	9.27	8.82	8.50	8.29	8.10	7.95	7.77	7.73	7.56	7.82	10.20	10.65
4	9.26	8.82	8.47	8.29	8.09	7.94	7.76	7.73	7.62	7.79	10.34	10.89
5	9.25	8.81	8.47	8.29	8.07	7.94	7.76	7.72	7.77	7.79	10.36	11.05
6	9.22	8.78	8.47	8.28	8.05	7.93	7.76	7.72	7.93	7.79	10.33	11.32
7	9.20	8.78	8.47	8.24	8.05	7.90	7.76	7.70	7.93	7.79	10.34	11.42
8	9.20	8.78	8.47	8.24	8.05	7.89	7.75	7.68	7.81	8.09	10.41	11.38
9	9.20	8.78	8.46	8.24	8.05	7.89	7.72	7.62	7.75	8.29	10.47	11.23
10	9.16	8.76	8.45	8.24	8.05	7.90	7.73	7.64	7.76	8.52	10.47	11.22
11	9.16	8.76	8.45	8.23	8.04	7.89	7.73	7.67	7.76	8.52	10.42	11.32
12	9.16	8.75	8.44	8.20	8.04	7.86	7.71	7.66	7.76	8.64	10.21	11.40
13	9.13	8.74	8.44	8.20	8.03	7.85	7.73	7.59	7.76	8.65	10.11	11.34
14	9.12	8.73	8.44	8.20	8.02	7.85	7.73	7.58	7.75	8.80	10.00	11.18
15	9.06	8.73	8.43	8.20	8.02	7.85	7.72	7.58	7.75	9.05	9.92	11.04
16	9.06	8.70	8.42	8.20	8.02	7.85	7.72	7.58	7.75	9.23	9.99	10.93
17	9.06	8.68	8.42	8.20	8.02	7.85	7.72	7.56	7.76	9.22	10.05	10.85
18	9.05	8.68	8.41	8.19	8.02	7.84	7.71	7.54	7.76	9.41	10.22	10.80
19	9.01	8.67	8.41	8.17	8.01	7.84	7.72	7.55	7.76	9.66	10.22	10.69
20	9.00	8.64	8.37	8.17	8.00	7.84	7.72	7.57	7.95	9.84	10.12	10.62
21	8.99	8.64	8.36	8.16	7.99	7.84	7.72	7.57	8.05	10.00	10.21	10.52
22	8.98	8.63	8.37	8.16	7.99	7.84	7.74	7.58	8.05	9.97	10.26	10.46
23	8.95	8.60	8.37	8.16	7.99	7.82	7.74	7.58	8.01	9.83	10.23	10.39
24	8.93	8.60	8.37	8.14	7.99	7.81	7.74	7.58	7.98	9.91	10.11	10.32
25	8.93	8.59	8.35	8.13	7.97	7.81	7.71	7.59	7.98	9.91	10.03	10.30
26	8.93	8.57	8.35	8.11	7.97	7.81	7.71	7.60	8.06	9.78	10.24	10.45
27	8.92	8.55	8.35	8.11	7.96	7.80	7.71	7.59	8.04	9.73	10.44	10.45
28	8.90	8.55	8.35	8.11	7.96	7.78	7.71	7.59	8.03	9.76	10.44	10.40
29	8.85	8.55	8.33	8.11	---	7.75	7.71	7.60	7.98	9.75	10.46	10.39
30	8.82	8.55	8.31	8.11	---	7.75	7.73	7.61	7.88	9.93	10.46	10.44
31	8.82	---	8.29	8.11	---	7.78	---	7.61	---	10.15	10.51	---
MAX	9.29	8.82	8.54	8.29	8.11	7.95	7.78	7.73	8.06	10.15	10.51	11.42
MIN	8.82	8.55	8.29	8.11	7.96	7.75	7.71	7.54	7.56	7.79	9.92	10.30

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464540100222101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464540100222101)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## BURLEIGH COUNTY--Continued

470556100142501. Local number, 142-075-19CCB.

LOCATION.--Lat 47°05'56", long 100°14'25", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Wing Channel.

WELL CHARACTERISTICS.--Drilled observation well, depth 210 ft, cased with 197 ft of 1.25-in diameter plastic pipe, slotted 190 to 197 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,884.25 ft. Measuring point: Top of casing 2.40 ft above land-surface datum.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -1.02 ft below land-surface datum, October 20, 1999; lowest water level, 6.39 ft below land-surface datum, October 2, 1963.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	2.08	JAN 20	1.89	APR 13	2.42	JUL 11	1.91	AUG 24	1.98	SEP 13	2.25
NOV 18	1.88	FEB 28	2.10	MAY 09	2.01						
WATER YEAR 2005		HIGHEST	1.88	NOV 18, 2004	LOWEST	2.42	APR 13, 2005				

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=470556100142501](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=470556100142501)

## CASS COUNTY

465312096543301. Local number, 139-049-06ADB.

LOCATION.--Lat 46°53'12", long 96°54'33", Hydrologic Unit 09020204. Owner: North Dakota State Water Commission.

AQUIFER.--West Fargo.

WELL CHARACTERISTICS.--Drilled observation well, depth 230 ft, cased with 220 ft of 8-in diameter steel pipe, screen set 220 to 230 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape April 2002 to current year. Water-level recorder January 1938 to April 2002. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for January 1928 to April 1998. From April 1998 to April 2002, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 899.4 ft. Measuring point: Top of casing 0.40 ft above land-surface datum.

PERIOD OF RECORD.--December 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.77 ft below land-surface datum, February 5, 1938; lowest water level, 132.70 ft below land-surface datum, September 22, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22	129.94	MAY 20	129.20	JUN 24	130.74	JUL 21	130.94	AUG 19	130.92	SEP 22	132.70
WATER YEAR 2005		HIGHEST	129.20	MAY 20, 2005	LOWEST	132.70	SEP 22, 2005				

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=465312096543301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=465312096543301)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 CASS COUNTY--Continued

470818097294104. Local number, 142-054-03DDD4.

LOCATION.--Lat 47°08'18", long 97°29'41", Hydrologic Unit 09020107. Owner: North Dakota State Water Commission.

AQUIFER.--Page.

WELL CHARACTERISTICS.--Drilled observation well, depth 182 ft, cased with 158 ft of 6-in diameter plastic pipe, No. 12 slot screen set 158 to 168 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape August 1996 to current year. Water-level recorder October 1982 to August 1996, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,226.2 ft. Measuring point: Top of casing 1.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.13 ft below land-surface datum, June 24,2005; lowest water level, 98.52 ft below land-surface datum, August 23,1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20	22.74	JUN 01	21.24	JUN 24	20.13	JUL 29	42.08	AUG 23	40.72	SEP 24	32.56
WATER YEAR 2005		HIGHEST	20.13	JUN 24, 2005		LOWEST	42.08	JUL 29, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=470818097294104](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=470818097294104)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## CASS COUNTY--Continued

471326097332902. Local number, 143-054-08BBB2.

LOCATION.--Lat 47°13'26", long 97°33'29", Hydrologic Unit 09020107. Owner: North Dakota State Water Commission.

AQUIFER.--Page.

WELL CHARACTERISTICS.--Drilled observation well, depth 92 ft, cased with 81 ft of 5-in diameter plastic pipe, No. 15 slot screen set 81 to 86 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder September 1982 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,171.33 ft. Measuring point: Top of casing 1.95 ft above land-surface datum.

PERIOD OF RECORD.--September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.61 ft below land-surface datum, July 27-28, 1995; lowest water level, 34.08 ft below land-surface datum, August 18, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level, 15.70 ft below land-surface datum, July 17-18; lowest water level, 21.37 ft below land-surface datum, April 23.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.11	20.78	20.17	20.08	20.42	20.77	21.16	21.27	20.08	16.36	---	18.57
2	21.11	20.81	20.17	20.12	20.42	20.77	21.16	21.30	19.93	16.36	---	18.62
3	21.11	20.80	20.15	20.16	---	20.77	21.16	21.30	19.84	16.32	---	18.62
4	21.13	20.76	20.09	20.21	---	20.83	21.15	21.30	19.68	16.30	---	18.61
5	21.13	20.76	20.12	20.22	---	20.84	21.11	21.27	19.58	16.30	19.64	18.58
6	21.10	20.68	20.11	20.22	---	20.84	21.22	21.25	19.51	16.30	20.01	18.60
7	21.06	20.75	20.05	20.08	---	20.82	21.23	21.23	19.47	16.28	20.26	18.64
8	21.04	20.76	20.05	20.09	---	20.82	21.23	21.13	19.33	16.27	20.49	18.64
9	21.05	20.76	20.04	20.09	---	20.82	21.15	21.05	19.21	15.93	20.49	18.61
10	21.05	20.72	20.07	20.12	---	20.82	21.13	21.09	19.20	15.87	20.36	18.46
11	21.04	20.74	20.07	20.12	---	20.82	21.14	21.19	19.12	15.83	20.22	18.45
12	21.04	20.74	20.05	20.10	---	20.82	21.14	21.20	18.86	15.86	20.07	18.47
13	21.02	20.73	20.17	20.14	---	20.82	21.25	21.17	18.81	15.87	19.90	18.46
14	21.02	20.70	20.19	20.23	---	20.82	21.29	21.04	18.73	15.87	19.80	18.49
15	20.94	20.68	20.12	20.30	---	20.82	21.28	21.03	18.48	15.78	19.65	18.52
16	20.87	20.57	20.11	20.37	---	20.82	21.31	21.03	18.41	15.78	19.55	18.54
17	20.89	20.49	20.12	20.39	---	20.82	21.32	20.98	18.28	15.74	19.45	18.54
18	20.91	20.49	20.13	20.39	---	20.82	21.28	20.77	18.09	15.74	19.26	18.55
19	20.91	20.49	20.14	20.22	---	20.82	21.23	20.75	17.89	15.76	19.18	18.56
20	20.94	20.42	20.03	20.22	---	21.10	21.29	20.78	17.74	15.94	19.01	18.53
21	20.94	20.42	19.99	20.22	---	21.12	21.30	20.75	17.63	16.14	19.00	18.53
22	20.89	20.39	20.11	20.31	---	21.14	21.35	20.67	17.55	16.23	19.00	18.58
23	20.81	20.27	20.15	20.31	---	21.14	21.37	20.64	17.49	16.24	18.96	18.62
24	20.81	20.27	20.15	20.27	---	21.12	21.36	20.62	17.09	16.38	18.89	18.60
25	20.89	20.27	20.06	20.24	20.77	21.15	21.25	20.53	17.04	16.75	18.80	18.58
26	20.95	20.20	20.13	20.29	20.77	21.15	21.17	20.48	16.93	16.77	18.76	18.58
27	20.98	20.16	20.13	20.36	20.77	21.15	21.18	20.41	16.76	---	18.69	18.58
28	20.98	20.22	20.13	20.36	20.77	21.08	21.21	20.32	16.69	---	18.62	18.65
29	20.85	20.23	20.08	20.39	---	21.02	21.22	20.24	16.63	---	18.61	18.65
30	20.66	20.23	20.05	20.40	---	21.02	21.23	20.21	16.41	---	18.61	18.59
31	20.73	---	20.02	20.42	---	21.11	---	20.17	---	---	18.58	---
MAX	21.13	20.81	20.19	20.42	---	21.15	21.37	21.30	20.08	---	---	18.65
MIN	20.66	20.16	19.99	20.08	---	20.77	21.11	20.17	16.41	---	---	18.45

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=471326097332902](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=471326097332902)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
CAVALIER COUNTY

484534098254401. Local number, 161-060-21BBB.

LOCATION.--Lat 48°45'34", long 98°25'44", Hydrologic Unit 09020313. Owner: North Dakota State Water Commission.

AQUIFER.--Pierre Shale.

WELL CHARACTERISTICS.--Drilled observation well, depth 40 ft, cased with 10 ft of 4-in diameter steel pipe, open ended.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,603 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.57 ft below land-surface datum, June 10, 2005; lowest water level, 11.20 ft below land-surface datum, March 9, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	5.90	DEC 29	7.02	MAR 22	9.08	JUN 10	2.57	JUL 19	3.88	AUG 17	6.41
NOV 18	5.75	FEB 09	8.32	APR 29	6.00						
WATER YEAR 2005		HIGHEST	2.57	JUN 10, 2005	LOWEST	9.08	MAR 22, 2005				

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484534098254401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484534098254401)

CAVALIER COUNTY--Continued

484444098504301. Local number, 161-063-29BBB.

LOCATION.--Lat 48°44'44", long 98°50'43", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Munich.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 133 ft of 1.25-in diameter plastic pipe, slotted 113 to 133 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,619 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.52 ft below land-surface datum, November 28, 1994; lowest water level, 19.86 ft below land-surface datum, November 15, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	12.97	DEC 29	12.85	MAR 22	15.37	JUN 16	15.13	JUL 19	13.04	AUG 17	12.68
NOV 18	12.64	FEB 09	14.14	APR 28	16.38						
WATER YEAR 2005		HIGHEST	12.64	NOV 18, 2004	LOWEST	16.38	APR 28, 2005				

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484444098504301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484444098504301)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## DICKY COUNTY

460830098224701. Local number, 131-062-24DDD1.

LOCATION.--Lat 46°08'30", long 98°22'47", Hydrologic Unit 10160004. Owner: North Dakota State Water Commission.

AQUIFER.--Nortonville.

WELL CHARACTERISTICS.--Drilled observation well, depth 300 ft, cased with 190 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 190 to 196 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,412.6 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.70 ft below land-surface datum, May 8, 2000; lowest water level, 21.50 ft below land-surface datum, December 3, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	12.28	JAN 12	11.98	APR 19	12.15	MAY 24	11.96	JUL 08	10.73	AUG 23	10.26
NOV 17	12.18										
WATER YEAR 2005		HIGHEST	10.26	AUG 23, 2005		LOWEST	12.28	OCT 07, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460830098224701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460830098224701)

## DICKY COUNTY--Continued

460830098224702. Local number, 131-062-24DDD2.

LOCATION.--Lat 46°08'30", long 98°22'47", Hydrologic Unit 10160004. Owner: North Dakota State Water Commission.

AQUIFER.--Ellendale.

WELL CHARACTERISTICS.--Drilled observation well, depth 100 ft, cased with 78 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 78 to 81 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,412.5 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.51 ft below land-surface datum, October 14, 1999, and November 18, 1999; lowest water level, 21.34 ft below land-surface datum, November 27, 1990.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	11.98	JAN 12	11.70	APR 19	11.80	MAY 24	11.68	JUL 08	11.30	AUG 23	10.99
NOV 17	11.81	MAR 02	11.77								
WATER YEAR 2005		HIGHEST	10.99	AUG 23, 2005		LOWEST	11.98	OCT 07, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460830098224702](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460830098224702)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
DIVIDE COUNTY

484746104015901. Local number, 161-103-02CCB.

LOCATION.--Lat 48°47'46", long 104°01'59", Hydrologic Unit 10060007. Owner: North Dakota State Water Commission.

AQUIFER.--Skjermo Lake.

WELL CHARACTERISTICS.--Drilled observation well, depth 200 ft, cased with 91 ft of 5-in diameter steel pipe, No. 18 slot screen set 91 to 96 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape October 1997 to current year. Water-level recorder June 1982 to September 1997, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 2,073.9 ft. Measuring point: Top of casing 2.33 ft above land-surface datum.

PERIOD OF RECORD.--June 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.61 ft below land-surface datum, July 2 and 5, 1982; lowest water level, 26.87 ft below land-surface datum, March 3-6, 9-12, and 16-17, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 01	25.40	JUN 02	25.40	JUL 01	25.35	JUL 28	25.78	AUG 01	25.66	SEP 05	25.77
MAY 02	25.36										
WATER YEAR 2005		HIGHEST	25.35	JUL 01, 2005		LOWEST	25.78	JUL 28, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484746104015901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484746104015901)

DIVIDE COUNTY--Continued

485432103151701. Local number, 163-097-34ABB.

LOCATION.--Lat 48°54'32", long 103°15'17", Hydrologic Unit 09010001. Owner: North Dakota State Water Commission.

AQUIFER.--Crosby.

WELL CHARACTERISTICS.--Drilled observation well, depth 400 ft, cased with 366 ft of 2-in diameter steel pipe, No. 18 slot screen set 366 to 378 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,952 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1972 to August 1995 and November 2002 to current year.

REMARKS.--Replaces well 163-097-27CCC, which became plugged.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.10 ft below land-surface datum, January 11 and April 4, 1972; lowest water level, 27.85 ft below land-surface datum, October 12, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	27.85	APR 21	27.07	MAY 21	26.84	JUN 29	26.71	JUL 28	27.11	AUG 16	27.44
NOV 18	27.84	MAY 05	26.99	JUN 01	26.75	JUL 06	26.79	AUG 10	27.37	SEP 08	27.44
MAR 01	27.24										
WATER YEAR 2005		HIGHEST	26.71	JUN 29, 2005		LOWEST	27.85	OCT 12, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485432103151701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485432103151701)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## DUNN COUNTY

471323102290101. Local number, 143-093-09BCB.

LOCATION.--Lat 47°13'23", long 102°29'01", Hydrologic Unit 10130201. Owner: North Dakota State Water Commission.

AQUIFER.--Sentinel Butte.

WELL CHARACTERISTICS.--Drilled observation well, depth 965 ft, cased with 378 ft of 2-in diameter steel pipe, No. 12 slot screen set 378 to 396 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,133 ft. Measuring point: Top of casing 2.10 ft above land-surface datum.

PERIOD OF RECORD.--February 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.64 ft below land-surface datum, August 14, 1993, and November 19, 1993; lowest water level, 94.87 ft below land-surface datum, September 21, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	94.83	FEB 03	94.73	MAY 26	94.59	JUL 29	94.74	AUG 16	94.84	SEP 21	94.87
NOV 18	94.75	MAR 15	94.74								
WATER YEAR 2005		HIGHEST	94.59	MAY 26, 2005		LOWEST	94.87	SEP 21, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=471323102290101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=471323102290101)

## DUNN COUNTY--Continued

472144102453402. Local number, 145-095-22DAD2.

LOCATION.--Lat 47°21'44", long 102°45'34", Hydrologic Unit 10130201. Owner: North Dakota State Water Commission.

AQUIFER.--Killdeer.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 157 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 157 to 160 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,237 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.67 ft below land-surface datum, May 9, 1973; lowest water level, 11.78 ft below land-surface datum, September 4, 1990.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	8.33	FEB 03	7.92	APR 13	7.24	JUL 29	8.38	AUG 09	8.81	AUG 16	8.78
NOV 18	7.90	MAR 14	7.32	MAY 26	7.93						
WATER YEAR 2005		HIGHEST	7.24	APR 13, 2005		LOWEST	8.81	AUG 09, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472144102453402](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472144102453402)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 DUNN COUNTY--Continued

472144102453403. Local number, 145-095-22DAD3.

LOCATION.--Lat 47°21'44", long 102°45'34", Hydrologic Unit 10130201. Owner: North Dakota State Water Commission.

AQUIFER.--Killdeer.

WELL CHARACTERISTICS.--Drilled observation well, depth 54 ft, cased with 49 ft of 4-in diameter plastic pipe, No. 18 slot screen set 49 to 54 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,237 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--September 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land-surface datum, May 20, 1973; lowest water level, 13.07 ft below land-surface datum, September 4, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	9.82	FEB 03	9.36	APR 13	8.73	JUL 29	9.70	AUG 09	10.16	AUG 16	10.10
NOV 18	9.35	MAR 14	8.82	MAY 26	9.28						
WATER YEAR 2005		HIGHEST	8.73	APR 13, 2005		LOWEST	10.16	AUG 09, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472144102453403](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472144102453403)

DUNN COUNTY--Continued

472537102144801. Local number, 146-091-35BBC.

LOCATION.--Lat 47°25'37", long 102°14'48", Hydrologic Unit 10110205. Owner: North Dakota State Water Commission.

AQUIFER.--Goodman Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 320 ft, cased with 218 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 218 to 221 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,020 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.97 ft below land-surface datum, May 14, 1987; lowest water level, 37.60 ft below land-surface datum, September 24, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	33.75	FEB 03	33.90	MAY 25	33.63	JUL 29	32.85	AUG 16	33.01	SEP 21	33.27
NOV 18	33.82	MAR 15	34.14								
WATER YEAR 2005		HIGHEST	32.85	JUL 29, 2005		LOWEST	34.14	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472537102144801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472537102144801)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## EDDY COUNTY

473934099032301. Local number, 148-066-03DDC.

LOCATION.--Lat 47°39'34", long 99°03'23", Hydrologic Unit 10160001. Owner: North Dakota State Water Commission.

AQUIFER.--New Rockford.

WELL CHARACTERISTICS.--Drilled observation well, depth 252 ft, cased with 218 ft of 1.25-in diameter plastic pipe, slotted 210 to 218 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,493 ft. Measuring point: Top of casing 4.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.50 ft below land-surface datum, May 1, 2001; lowest water level, 21.44 ft below land-surface datum, August 1, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	11.10	JAN 27	11.22	APR 20	11.34	JUN 27	11.34	AUG 15	11.26	AUG 23	11.31
DEC 08	11.35	MAR 14	11.30	MAY 17	11.39						
WATER YEAR 2005		HIGHEST	11.10	OCT 18, 2004		LOWEST	11.39	MAY 17, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=473934099032301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=473934099032301)

## EMMONS COUNTY

462539100061101. Local number, 134-075-15BBB.

LOCATION.--Lat 46°25'39", long 100°06'11", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 280 ft, cased with 97 ft of 1.25-in diameter plastic pipe, screen set 97 to 103 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,010 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.72 ft below land-surface datum, August 15, 2005; lowest water level, 60.44 ft below land-surface datum, February 15, 1973.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	48.98	JAN 27	48.92	MAR 14	49.09	APR 19	48.90	JUN 27	48.91	AUG 15	48.72
DEC 08	49.16										
WATER YEAR 2005		HIGHEST	48.72	AUG 15, 2005		LOWEST	49.16	DEC 08, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462539100061101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462539100061101)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
FOSTER COUNTY

473051099093601. Local number, 147-067-35AAA.

LOCATION.--Lat 47°30'51", long 99°09'36", Hydrologic Unit 10160001. Owner: North Dakota State Water Commission.

AQUIFER.--Carrington.

WELL CHARACTERISTICS.--Drilled observation well, depth 100 ft, cased with 77.7 ft of 8-in diameter plastic pipe, No. 18 slot screen set 77.7 to 87.7 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder July 1991 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,567.03 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.42 ft below land-surface datum, August 14, 2001; lowest water level, 26.06 ft below land-surface datum, September 27, 1992.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.04 ft below land-surface datum, December 19-20; lowest water level, 20.83 ft below land-surface datum, September 2.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.10	19.95	19.73	20.00	19.72	19.76	19.84	19.68	19.49	---	---	20.77
2	20.00	19.92	19.68	19.84	19.70	19.82	19.67	19.69	19.50	---	---	20.83
3	20.12	19.77	19.47	19.84	19.80	19.75	19.67	19.63	19.50	---	---	20.74
4	20.14	19.82	19.86	19.93	19.72	19.86	19.52	19.55	19.51	---	---	20.58
5	19.89	19.60	19.85	19.88	19.73	19.86	19.81	19.63	19.56	---	---	20.67
6	19.88	19.86	19.61	19.47	19.92	19.76	19.84	19.65	19.60	---	---	20.82
7	19.85	19.97	19.64	19.77	19.92	19.86	19.73	19.46	19.57	---	---	20.81
8	20.01	19.92	19.59	19.76	19.83	19.84	19.49	19.57	19.55	---	---	20.64
9	19.98	19.66	19.78	19.79	19.70	19.81	19.57	19.56	19.64	---	---	20.50
10	19.95	19.98	19.81	19.78	19.71	19.80	19.69	19.82	19.60	---	---	20.58
11	19.99	19.97	19.64	19.61	19.70	19.74	19.69	19.86	19.52	---	---	20.70
12	19.87	19.77	19.97	19.73	19.60	19.75	19.75	19.71	19.52	---	---	20.67
13	19.99	19.74	20.00	19.97	19.57	19.83	19.79	19.48	19.53	---	---	20.62
14	19.83	19.75	19.86	19.97	19.82	19.83	19.67	19.67	19.59	---	---	20.63
15	19.86	19.68	19.70	19.89	19.86	19.76	19.73	19.64	19.62	---	---	20.65
16	19.88	19.65	19.85	19.87	19.85	19.78	19.66	19.46	19.56	---	20.63	20.66
17	19.87	19.79	19.73	19.84	19.90	19.71	19.59	19.40	19.49	---	20.51	20.80
18	19.85	19.83	19.98	19.71	19.84	19.79	19.54	19.49	19.43	---	20.57	20.80
19	19.89	19.60	19.93	19.76	19.78	19.78	19.69	19.61	19.77	---	20.59	20.71
20	19.94	19.74	19.69	19.74	19.72	19.75	19.69	19.68	19.87	---	20.67	20.68
21	19.76	19.73	19.94	19.90	19.79	19.76	19.65	19.53	19.92	---	20.73	20.71
22	19.76	19.68	19.94	20.03	19.91	19.76	19.77	19.58	19.77	---	20.66	20.76
23	19.73	19.72	19.93	19.62	19.82	19.64	19.71	19.59	19.96	---	20.54	20.70
24	19.90	19.70	19.57	19.68	19.80	19.82	19.55	19.63	20.07	---	20.52	20.65
25	19.90	19.51	19.85	19.84	19.85	19.82	19.47	19.65	20.11	---	20.65	20.65
26	19.89	19.67	19.85	19.94	19.80	19.63	19.53	19.58	19.96	---	20.59	20.59
27	19.86	19.72	19.77	19.81	19.82	19.54	19.58	19.53	---	---	20.55	20.68
28	19.68	19.82	19.58	19.76	19.84	19.47	19.59	19.62	---	---	20.59	20.79
29	19.55	19.81	19.56	19.88	---	19.58	19.60	19.68	---	---	20.60	20.63
30	19.75	19.59	19.52	19.74	---	19.79	19.64	19.68	---	---	20.54	20.57
31	19.86	---	20.00	19.81	---	19.85	---	19.61	---	---	20.60	---
MAX	20.14	19.98	20.00	20.03	19.92	19.86	19.84	19.86	---	---	---	20.83
MIN	19.55	19.51	19.47	19.47	19.57	19.47	19.47	19.40	---	---	---	20.50

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=473051099093601](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=473051099093601)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## GOLDEN VALLEY COUNTY

465421103590706. Local number, 140-105-30CCC6.

LOCATION.--Lat 46°54'21", long 103°59'07", Hydrologic Unit 10110204. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek-Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 1,140 ft, cased with 1,050 ft of 4-in diameter steel pipe, screen set 1,050 to 1,130 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,770 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 328.95 ft below land-surface datum, March 11, 1985; lowest water level, 365.80 ft below land-surface datum, February 13, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	344.61	MAR 09	338.20	MAY 26	336.47	JUL 21	335.64	AUG 17	335.17	SEP 20	334.84
NOV 18	342.48	APR 12	337.39								
WATER YEAR 2005		HIGHEST	334.84	SEP 20, 2005		LOWEST	344.61	OCT 06, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=465421103590706](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=465421103590706)

## GROUND-WATER LEVELS

## NETWORK SITES--Continued

## GRAND FORKS COUNTY

475646097372201. Local number, 152-054-31BBB.

LOCATION.--Lat 47°56'46", long 97°37'22", Hydrologic Unit 09020307. Owner: North Dakota State Water Commission.

AQUIFER.--Elk Valley.

WELL CHARACTERISTICS.--Drilled observation well, depth 84 ft, cased with 60 ft of 4-in diameter plastic pipe, slotted 50 to 60 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder October 1973 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for June 1965 to September 1973. From October 1973 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,122.6 ft. Measuring point: Top of casing 1.31 ft above land-surface datum. Prior to road construction completed on October 19, 1978, altitude of land-surface datum was 1,127 ft.

PERIOD OF RECORD.--September 1965 to current year.

REMARKS.--Real-time data available on the U.S. Geological Survey webpage at: <http://nd.water.usgs.gov>.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.40 ft below land-surface datum, June 10-11, 2001; lowest water level 26.50 ft below land-surface datum, September 1, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 22.36 ft below land-surface datum, June 22-23; lowest water level, 23.41 ft below land-surface datum, October 1.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.41	23.13	22.96	22.83	22.78	22.76	22.71	22.69	22.68	22.58	23.00	22.92
2	23.39	23.13	22.95	22.83	22.77	22.76	22.71	22.69	22.65	22.52	23.02	22.95
3	23.39	23.12	22.95	22.83	22.77	22.76	22.70	22.69	22.65	22.45	23.02	22.95
4	23.38	23.11	22.94	22.83	22.77	22.76	22.69	22.69	22.63	22.44	23.04	22.95
5	23.36	23.10	22.94	22.83	22.77	22.76	22.69	22.68	22.63	22.44	23.05	22.95
6	23.34	23.09	22.94	22.82	22.77	22.77	22.69	22.69	22.62	22.43	23.05	22.95
7	23.34	23.09	22.93	22.80	22.77	22.77	22.69	22.69	22.60	22.42	23.06	22.95
8	23.32	23.09	22.93	22.80	22.77	22.77	22.69	22.68	22.56	22.41	23.10	22.95
9	23.32	23.08	---	22.81	22.77	22.77	22.68	22.67	22.55	22.40	23.12	22.93
10	23.31	23.08	---	22.81	22.77	22.77	22.68	22.69	22.55	22.40	23.16	22.90
11	23.30	23.07	22.92	22.81	22.76	22.77	22.68	22.70	22.53	22.40	23.17	22.91
12	23.29	23.05	22.91	22.80	22.76	22.76	22.68	22.70	22.54	22.40	23.17	22.91
13	23.28	23.05	22.92	22.80	22.76	22.76	22.69	22.70	22.52	22.41	23.17	22.89
14	23.28	23.05	22.92	22.81	22.75	22.77	22.69	22.70	22.50	22.42	23.17	22.88
15	23.26	23.04	22.90	22.81	22.76	22.77	22.70	22.70	22.48	22.45	23.16	22.86
16	23.26	23.03	22.90	22.81	22.76	22.77	22.70	22.70	22.43	22.47	23.15	22.85
17	23.25	23.03	22.90	22.81	22.77	22.77	22.70	22.69	---	22.52	23.14	22.83
18	23.25	23.02	22.89	22.80	22.77	22.79	22.70	22.68	---	22.61	23.11	22.82
19	23.24	23.02	22.89	22.79	22.77	22.79	22.70	22.68	---	22.62	23.11	22.81
20	23.24	23.01	22.87	22.79	22.76	22.79	22.70	22.68	---	22.67	23.10	22.80
21	23.22	23.01	22.88	22.79	22.76	22.79	22.70	22.68	---	22.70	23.09	22.80
22	23.21	23.00	22.91	22.79	22.76	22.79	22.70	22.68	---	22.71	23.08	22.78
23	23.20	22.99	22.90	22.79	22.76	22.79	22.70	22.68	22.38	22.72	23.06	22.78
24	23.19	22.99	22.89	22.79	22.76	22.79	22.70	22.68	22.44	22.79	23.04	22.76
25	23.19	22.99	22.87	22.77	22.76	22.79	22.69	22.68	22.47	22.84	23.02	22.75
26	23.18	22.99	22.87	22.78	22.76	22.79	22.68	22.68	22.52	22.87	23.00	22.74
27	23.17	22.99	22.87	22.78	22.76	22.79	22.68	22.68	22.58	22.89	22.98	22.73
28	23.16	22.99	22.86	22.78	22.76	22.76	22.68	22.68	22.60	22.93	22.97	22.72
29	23.15	22.99	22.85	22.78	---	22.75	22.68	22.68	22.60	22.93	22.96	22.71
30	23.13	22.96	---	22.78	---	22.73	22.68	22.68	22.58	22.94	22.94	22.70
31	23.13	---	22.83	22.78	---	22.72	---	22.68	---	22.97	22.93	---
MAX	23.41	23.13	---	22.83	22.78	22.79	22.71	22.70	---	22.97	23.17	22.95
MIN	23.13	22.96	---	22.77	22.75	22.72	22.68	22.67	---	22.40	22.93	22.70

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=475646097372201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=475646097372201)

## GROUND-WATER LEVELS

31

## NETWORK SITES--Continued

## GRANT COUNTY

463000101575101. Local number, 135-090-23BBB1.

LOCATION.--Lat 46°30'00", long 101°57'51", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 1,080 ft, cased with 1,029 ft of 2-in diameter steel pipe, No. 12 slot screen set 1,029 to 1,047 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,362 ft. Measuring point: Top of casing 3.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 270.55 ft below land-surface datum, June 27, 1973, and August 24, 1973; lowest water level, 277.82 ft below land-surface datum, March 7, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	277.47	DEC 28	277.36	MAR 14	277.42	JUL 12	277.42	AUG 31	277.43	SEP 15	277.54
NOV 17	277.42	FEB 02	277.46								
WATER YEAR 2005		HIGHEST	277.36	DEC 28, 2004		LOWEST	277.54	SEP 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463000101575101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463000101575101)

## GRANT COUNTY--Continued

463000101575102. Local number, 135-090-23BBB2.

LOCATION.--Lat 46°30'00", long 101°57'51", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Tongue River.

WELL CHARACTERISTICS.--Drilled observation well, depth 300 ft, cased with 277 ft of 1.25-in diameter plastic pipe, screen set 277 to 283 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,366 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 150.74 ft below land-surface datum, April 15, 2004; lowest water level, 154.60 ft below land-surface datum, July 25, 1973.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	150.85	NOV 17	150.94	FEB 02	150.90	JUL 12	150.95	AUG 31	150.91	SEP 15	150.97
NOV 04	150.94	DEC 28	150.88	MAR 14	150.97						
WATER YEAR 2005		HIGHEST	150.85	OCT 14, 2004		LOWEST	150.97	MAR 14, 2005	SEP 15, 2005		

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463000101575102](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463000101575102)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
GRIGGS COUNTY

472412098261201. Local number, 145-061-04DAD1.

LOCATION.--Lat 47°24'12", long 98°26'12", Hydrologic Unit 09020203. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 102 ft of 6-in diameter plastic pipe, No. 30 slot screen set 102 to 107 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder March 1974 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for December 1970 to March 1974. From March 1974 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,470 ft. Measuring point: Top of casing 1.60 ft above land-surface datum.

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -1.17 ft below land-surface datum, September 1, 2, 7, and 8, 2001; lowest water level, 33.90 ft below land-surface datum, August 14, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 0.18 ft below land-surface datum, July 16-17; lowest water level recorded, 1.75 ft below land-surface datum, October 1-2.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.75	1.21	0.84	0.63	---	---	---	1.20	0.93	0.31	0.29	0.57
2	1.75	1.21	0.83	0.60	---	---	---	1.21	0.88	0.30	0.29	0.57
3	1.74	1.18	0.80	0.61	---	---	---	1.21	0.87	0.30	0.27	0.61
4	1.74	1.19	0.81	0.64	---	---	---	1.20	0.85	0.30	0.32	0.61
5	1.74	1.16	0.81	0.65	---	---	---	1.19	0.84	0.31	0.32	0.60
6	1.69	1.15	0.77	0.62	---	---	---	1.21	0.83	0.30	0.31	0.66
7	1.68	1.18	0.74	0.57	---	---	1.21	1.18	0.83	0.30	0.35	0.66
8	1.66	1.18	0.74	---	---	---	1.21	1.14	0.78	0.27	0.34	0.66
9	1.66	1.14	0.71	---	---	---	1.09	1.07	0.70	0.24	0.35	0.66
10	1.64	1.16	0.72	---	---	---	1.13	1.09	0.69	0.24	0.35	0.63
11	1.64	1.16	0.72	---	---	---	1.13	1.13	0.68	0.28	0.35	0.58
12	1.64	1.13	0.74	---	---	---	1.09	1.12	0.60	0.29	0.33	0.59
13	1.62	1.13	0.76	---	---	---	1.13	1.08	0.60	0.29	0.35	0.62
14	1.62	1.13	0.76	---	---	---	1.13	1.08	0.56	0.28	0.36	0.66
15	1.52	1.11	0.66	---	---	---	1.15	1.08	0.54	0.25	0.38	0.78
16	1.52	1.06	0.70	---	---	---	1.16	1.07	0.54	0.24	0.39	1.05
17	1.52	1.04	0.70	---	---	---	1.16	1.04	0.53	0.22	0.38	0.85
18	1.52	1.06	0.73	---	---	---	1.12	1.00	0.51	0.27	0.33	0.81
19	1.48	1.04	0.73	---	---	---	1.17	1.02	0.51	0.25	0.37	0.81
20	1.40	1.02	0.59	---	---	---	1.18	1.03	0.54	0.28	0.37	0.81
21	1.39	1.02	0.66	---	---	---	1.18	1.01	0.53	0.30	0.40	0.81
22	1.37	0.99	0.69	---	---	---	1.21	1.00	0.52	0.30	0.40	0.82
23	1.29	0.96	0.69	---	---	---	1.23	1.00	0.47	0.28	0.41	0.83
24	1.28	0.96	0.67	---	---	---	1.21	1.00	0.51	0.28	0.41	0.83
25	1.29	0.94	0.66	---	---	---	1.16	0.98	0.50	0.24	0.41	0.83
26	1.29	0.89	0.66	---	---	---	1.16	0.97	0.46	0.23	0.42	0.83
27	1.29	0.88	0.65	---	---	---	1.17	0.95	0.38	0.23	0.45	0.85
28	1.27	0.90	0.63	---	---	---	1.17	0.93	0.38	0.23	0.47	0.90
29	1.20	0.90	0.60	---	---	---	1.18	0.95	0.37	0.24	0.47	0.90
30	1.18	0.87	0.59	---	---	---	1.19	0.95	0.31	0.25	0.49	0.90
31	1.19	---	0.63	---	---	---	---	0.95	---	0.29	0.52	---
MAX	1.75	1.21	0.84	---	---	---	---	1.21	0.93	0.31	0.52	1.05
MIN	1.18	0.87	0.59	---	---	---	---	0.93	0.31	0.22	0.27	0.57

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472412098261201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472412098261201)

## NETWORK SITES--Continued

## GRIGGS COUNTY--Continued

472624098013101. Local number, 146-058-26BBDB.

LOCATION.--Lat 47°26'24", long 98°01'31", Hydrologic Unit 09020203. Owner: Corps of Engineers.

AQUIFER.--McVille.

WELL CHARACTERISTICS.--Augered observation well, depth 27 ft, cased from -2.6 to 19.3 ft with 2-in diameter plastic pipe, screen set 19.3 to 24.3 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,305.24 ft. Measuring point: Top of casing 2.60 ft above land-surface datum.

PERIOD OF RECORD.--December 1999 to current year.

REMARKS.--Replaces well 146-058-26CBC.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.58 ft below land-surface datum, Nov. 23, 2004; lowest water level, 19.55 ft below land-surface datum, February 7, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005											
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	10.30	JAN 03	12.01	APR 25	15.68	MAY 31	10.63	AUG 19	11.72	SEP 16	13.29
NOV 23	9.58	FEB 23	14.64								
WATER YEAR 2005		HIGHEST	9.58	NOV 23, 2004		LOWEST	15.68	APR 25, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472624098013101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472624098013101)

## GRIGGS COUNTY--Continued

473425098232901. Local number, 147-061-01CCC.

LOCATION.--Lat 47°34'25", long 98°23'29", Hydrologic Unit 09020203. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 340 ft, cased with 237 ft of 1.25-in diameter plastic pipe, No. 25 slot screen set 237 to 240 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,520.61 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.39 ft below land-surface datum, July 19, 1999; lowest water level, 96.10 ft below land-surface datum, August 12, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005									
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18	24.41	JUN 14	30.83	JUL 21	36.12	AUG 24	52.20	SEP 21	33.17
WATER YEAR 2005		HIGHEST	24.41	MAY 18, 2005		LOWEST	52.20	AUG 24, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=473425098232901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=473425098232901)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
HETTINGER COUNTY

463153102521001. Local number, 135-097-04DCA.

LOCATION.--Lat 46°31'53", long 102°52'10", Hydrologic Unit 10130204. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 1,360 ft, cased with 1,320 ft of 4-in diameter steel pipe, open ended.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,567 ft. Measuring point: Top of casing 0.80 ft above land-surface datum.

PERIOD OF RECORD.--September 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 142.39 ft below land-surface datum, June 4, 1979; lowest water level, 146.44 ft below land-surface datum, September 15, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	146.40	JAN 05	146.29	MAR 23	146.12	JUN 07	146.01	JUN 12	146.31	SEP 15	146.44
NOV 15	146.15	FEB 23	146.27								
WATER YEAR 2005		HIGHEST	146.01	JUN 07, 2005		LOWEST	146.44	SEP 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463153102521001](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463153102521001)

KIDDER COUNTY

470638099324301. Local number, 142-070-16DDD.

LOCATION.--Lat 47°06'38", long 99°32'43", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Marstonmoor Plain.

WELL CHARACTERISTICS.--Drilled observation well, depth 84 ft, cased with 70 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 70 to 73 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,809.29 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.94 ft below land-surface datum, May 23, 1997; lowest water level, 26.18 ft below land-surface datum, August 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
MAY 31	20.87	JUL 25	23.74	AUG 29	23.89	SEP 25	22.17	
WATER YEAR 2005		HIGHEST	20.87	MAY 31, 2005		LOWEST	23.89	AUG 29, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=470638099324301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=470638099324301)



## NETWORK SITES--Continued

## LaMOURE COUNTY

461958098132901. Local number, 133-060-16DAA.

LOCATION.--Lat 46°19'58", long 98°13'29", Hydrologic Unit 10160003. Owner: North Dakota State Water Commission.

AQUIFER.--LaMoure.

WELL CHARACTERISTICS.--Drilled observation well, depth 110 ft, cased with 58 ft of 6-in diameter plastic pipe, No. 25 slot screen set 58 to 63 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape October 2000 to current year. Water-level recorder November 1975 to October 2000, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,320 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.63 ft below land-surface datum, May 19, 1999; lowest water level, 26.83 ft below land-surface datum, August 20, 1990.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 24	18.54	JUN 14	18.20	JUL 27	19.17	AUG 25	19.17	SEP 21	18.92
WATER YEAR 2005		HIGHEST	18.20	JUN 14, 2005		LOWEST	19.17	JUL 27, 2005	
								AUG 25, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461958098132901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461958098132901)

## LaMOURE COUNTY--Continued

462447098432602. Local number, 134-064-22BBB2.

LOCATION.--Lat 46°24'47", long 98°43'26", Hydrologic Unit 10160004. Owner: North Dakota State Water Commission.

AQUIFER.--Edgeley.

WELL CHARACTERISTICS.--Drilled observation well, depth 40 ft, cased with 27 ft of 4-in diameter plastic pipe, screen set 27 to 32 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape January 1998 to current year. Water-level recorder January 1975 to January 1998, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,550 ft. Measuring point: Top of casing 2.40 ft above land-surface datum.

PERIOD OF RECORD.--January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.86 ft below land-surface datum, June 2, 1999; lowest water level, 19.44 ft below land-surface datum, October 11, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18	10.90	AUG 25	10.09
WATER YEAR 2005		HIGHEST	10.09
			AUG 25, 2005
		LOWEST	10.90
			MAY 18, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462447098432602](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462447098432602)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
LOGAN COUNTY

463417099271002. Local number, 136-070-26BBB2.

LOCATION.--Lat 46°34'17", long 99°27'10", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Streeter.

WELL CHARACTERISTICS.--Drilled observation well, depth 62 ft, cased with 39 ft of 6-in diameter plastic pipe, No. 25 slot screen set 39 to 44 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder November 1978 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,909.8 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.97 ft below land-surface datum, July 15, 1979; lowest water level, 27.85 ft below land-surface datum, August 29-31, 1992.

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.02 ft below land-surface datum, March 6; lowest water level, 24.35 ft below land-surface datum, September 6-8.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.90	22.48	22.24	22.19	22.10	22.09	22.19	22.23	22.27	22.70	23.86	24.24
2	22.89	22.48	22.24	22.18	22.09	22.08	22.17	22.24	22.24	22.71	23.90	24.26
3	22.87	22.45	22.23	22.18	22.10	22.08	22.16	22.24	22.24	22.77	23.95	24.27
4	22.87	22.43	22.21	22.19	22.08	22.09	22.14	22.23	22.24	22.79	24.00	24.28
5	22.85	22.43	22.21	22.19	22.08	22.09	22.18	22.22	22.27	22.79	24.02	24.32
6	22.81	22.40	22.21	22.14	22.12	22.07	22.20	22.22	22.27	22.78	24.06	24.35
7	22.80	22.40	22.21	22.14	22.12	22.09	22.19	22.21	22.28	22.82	24.08	24.35
8	22.78	22.40	22.21	22.14	22.12	22.10	22.16	22.20	22.27	22.88	24.15	24.35
9	22.78	22.40	22.20	22.14	22.10	22.10	22.14	22.21	22.29	22.91	24.16	24.34
10	22.75	22.38	22.20	22.14	22.09	22.09	22.17	22.25	22.29	22.98	24.15	24.30
11	22.74	22.38	22.20	22.12	22.08	22.09	22.17	22.28	22.28	23.04	24.14	24.27
12	22.73	22.38	22.20	22.11	22.07	22.08	22.19	22.27	22.28	23.09	24.14	24.24
13	22.70	22.38	22.26	22.16	22.05	22.10	22.21	22.23	22.28	23.12	24.14	24.18
14	22.69	22.37	22.26	22.16	22.07	22.11	22.21	22.25	22.30	23.17	24.16	24.15
15	22.65	22.37	22.19	22.16	22.09	22.11	22.21	22.25	22.31	23.22	24.19	24.11
16	22.65	22.34	22.20	22.16	22.10	22.11	22.21	22.23	22.31	23.25	24.20	24.06
17	22.65	22.33	22.20	22.16	22.11	22.10	22.21	22.20	22.31	23.31	24.22	24.01
18	22.64	22.33	22.22	22.11	22.11	22.11	22.16	22.21	22.31	23.36	24.22	23.99
19	22.59	22.33	22.22	22.12	22.09	22.11	22.21	22.24	22.37	23.41	24.21	23.95
20	22.59	22.32	22.15	22.10	22.07	22.11	22.22	22.25	22.41	23.46	24.20	23.92
21	22.59	22.31	22.21	22.12	22.08	22.12	22.22	22.25	22.41	23.51	24.18	23.89
22	22.59	22.30	22.22	22.15	22.10	22.12	22.23	22.25	22.38	23.55	24.16	23.89
23	22.57	22.26	22.22	22.11	22.10	22.13	22.23	22.25	22.39	23.60	24.10	23.85
24	22.56	22.26	22.18	22.08	22.09	22.18	22.23	22.26	22.45	23.65	24.05	23.79
25	22.56	22.26	22.17	22.10	22.09	22.18	22.18	22.26	22.49	23.68	24.01	23.79
26	22.55	22.25	22.17	22.13	22.09	22.16	22.18	22.26	22.54	23.68	24.03	23.75
27	22.54	22.25	22.17	22.13	22.08	22.14	22.20	22.26	22.59	23.68	24.10	23.72
28	22.53	22.25	22.15	22.09	22.09	22.11	22.21	22.26	22.63	23.69	24.15	23.68
29	22.51	22.25	22.14	22.11	---	22.11	22.21	22.28	22.66	23.72	24.18	23.66
30	22.48	22.25	22.12	22.11	---	22.16	22.22	22.28	22.70	23.78	24.18	23.60
31	22.48	---	22.19	22.10	---	22.19	---	22.28	---	23.83	24.21	---
MAX	22.90	22.48	22.26	22.19	22.12	22.19	22.23	22.28	22.70	23.83	24.22	24.35
MIN	22.48	22.25	22.12	22.08	22.05	22.07	22.14	22.20	22.24	22.70	23.86	23.60

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463417099271002](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463417099271002)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## LOGAN COUNTY--Continued

463240099483801. Local number, 136-073-35DDD1.

LOCATION.--Lat 46°32'40", long 99°48'38", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Napoleon.

WELL CHARACTERISTICS.--Drilled observation well, depth 282 ft, cased with 168 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 168 to 171 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,970 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.38 ft below land-surface datum, September 29, 1999; lowest water level, 34.62 ft below land-surface datum, November 18, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	30.04	JAN 27	29.94	MAR 14	30.00	APR 19	29.93	JUN 27	29.65	AUG 15	30.44
DEC 08	29.94										
WATER YEAR 2005		HIGHEST	29.65	JUN 27, 2005		LOWEST	30.44	AUG 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463240099483801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463240099483801)

## LOGAN COUNTY--Continued

463240099483802. Local number, 136-073-35DDD2.

LOCATION.--Lat 46°32'40", long 99°48'38", Hydrologic Unit 10130103. Owner: North Dakota State Water Commission.

AQUIFER.--Napoleon.

WELL CHARACTERISTICS.--Drilled observation well, depth 131 ft, cased with 118 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 118 to 121 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,970 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.56 ft below land-surface datum, July 6, 2001; lowest water level, 37.07 ft below land-surface datum, September 23, 1993.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	29.97	JAN 27	30.02	MAR 14	30.06	APR 19	29.78	JUN 27	31.11	AUG 15	32.24
DEC 08	29.85										
WATER YEAR 2005		HIGHEST	29.78	APR 19, 2005		LOWEST	32.24	AUG 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463240099483802](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463240099483802)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 McHENRY COUNTY

480913100372501. Local number, 154-077-18CCC.

LOCATION.--Lat 48°09'13", long 100°37'25", Hydrologic Unit 09010003. Owner: North Dakota State Water Commission.

AQUIFER.--New Rockford.

WELL CHARACTERISTICS.--Drilled observation well, depth 260 ft, cased with 173 ft of 4-in diameter plastic pipe, No. 18 slot screen set 173 to 178 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder May 1976 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,576.07 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.96 ft below land-surface datum, May 25, 1976; lowest water level, 75.43 ft below land-surface datum, August 1, 1994.

EXTREMES FOR CURRENT YEAR.--Highest water level, 56.78 ft below land-surface datum, May 17-18; lowest water level recorded, 71.99 ft below land-surface datum, July 24.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.64	58.86	57.97	57.75	57.37	57.18	57.13	56.93	57.04	62.75	---	67.38
2	59.64	58.86	57.97	57.71	57.34	57.15	57.08	56.93	56.91	64.21	---	65.92
3	59.55	58.69	57.93	57.66	57.31	57.15	56.99	56.93	56.92	63.54	---	64.83
4	59.54	58.97	57.95	57.69	57.31	57.13	56.99	56.89	57.86	61.84	---	63.97
5	59.46	59.18	57.97	57.69	57.28	57.13	57.06	56.89	58.65	61.00	---	63.46
6	59.31	58.91	57.92	57.56	57.40	57.12	57.09	56.90	59.31	64.28	---	63.09
7	59.25	58.74	57.87	57.48	57.40	57.11	57.09	56.88	61.76	66.71	---	62.89
8	59.24	58.74	57.87	57.48	57.40	57.11	56.97	56.86	61.43	68.29	---	62.80
9	59.25	58.59	57.88	57.55	57.31	57.11	56.86	56.87	59.69	70.26	---	62.73
10	59.14	58.54	57.89	57.55	57.27	57.09	56.99	57.02	58.94	71.43	---	62.43
11	59.13	58.54	57.89	57.52	57.20	57.09	57.01	57.08	58.39	---	---	62.17
12	59.13	58.48	57.94	57.42	57.20	57.07	57.03	57.07	58.06	---	---	62.24
13	59.06	58.41	58.03	57.64	57.15	57.09	57.07	56.91	57.88	---	---	62.30
14	59.03	58.34	58.03	57.64	57.23	57.11	57.07	56.89	59.05	---	---	62.29
15	58.89	58.32	57.78	57.64	57.31	57.11	57.01	56.89	62.19	---	---	62.06
16	58.89	58.19	57.83	57.64	57.31	57.10	57.01	56.87	63.87	---	70.51	61.86
17	58.89	58.25	57.83	57.59	57.31	57.10	57.01	56.81	64.92	---	70.84	61.61
18	58.89	58.25	57.86	57.43	57.31	57.09	56.90	56.83	65.76	---	69.36	61.49
19	58.76	58.23	57.86	57.39	57.27	57.09	57.01	57.11	66.23	---	68.49	61.36
20	58.82	58.16	57.58	57.42	57.21	57.09	57.03	59.05	64.95	67.82	68.09	61.17
21	59.01	58.16	57.83	57.46	57.20	57.08	57.03	59.34	66.60	68.67	66.68	61.11
22	59.52	58.12	57.86	57.56	57.23	57.08	57.04	58.64	67.30	70.55	66.49	61.17
23	59.68	58.09	57.86	57.50	57.23	57.06	57.04	58.03	68.12	71.97	68.92	61.17
24	59.32	58.09	57.78	57.30	57.23	57.09	56.98	57.76	69.70	---	70.34	61.03
25	59.31	58.08	57.69	57.38	57.18	57.09	56.85	57.67	68.66	---	71.47	60.99
26	59.48	58.03	57.70	57.48	57.18	57.06	56.87	57.47	66.02	---	71.46	60.87
27	59.60	58.04	57.70	57.48	57.18	57.00	56.88	57.32	63.91	---	68.22	60.81
28	59.88	58.09	57.69	57.37	57.18	56.91	56.88	57.19	63.31	---	66.44	61.50
29	59.49	58.09	57.60	57.40	---	56.89	56.90	57.16	64.59	---	66.13	61.77
30	59.04	58.05	57.60	57.40	---	57.04	56.91	57.16	63.63	---	67.51	61.29
31	58.93	---	57.70	57.37	---	57.13	---	57.14	---	---	68.08	---
MAX	59.88	59.18	58.03	57.75	57.40	57.18	57.13	59.34	69.70	---	---	67.38
MIN	58.76	58.03	57.58	57.30	57.15	56.89	56.85	56.81	56.91	---	---	60.81

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480913100372501](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480913100372501)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## McHENRY COUNTY--Continued

480725100373303. Local number, 154-078-36AAA3.

LOCATION.--Lat 48°07'25", long 100°37'33", Hydrologic Unit 09010003. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 400 ft, cased with 282 ft of 2-in plastic pipe, No. 18 slot screen set 282 to 292 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,546.96 ft. Measuring point: Top of casing 1.79 ft above land-surface datum.

PERIOD OF RECORD.--October 2001 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.33 ft below land-surface datum, May 22,2002; lowest water level, 29.09 ft below land-surface datum, August 15, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	28.72	MAR 03	28.67	MAY 11	28.59	JUN 08	28.26	JUL 19	28.46	AUG 17	28.69
NOV 22	28.59	APR 29	28.79	MAY 23	28.75	JUN 28	28.46	AUG 15	29.09	SEP 14	28.77
JAN 10	28.66										
WATER YEAR 2005		HIGHEST	28.26	JUN 08, 2005		LOWEST	29.09	AUG 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480725100373303](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480725100373303)

## McHENRY COUNTY--Continued

480725100373304. Local number, 154-078-36AAA4.

LOCATION.--Lat 48°07'25", long 100°37'33", Hydrologic Unit 09010003. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 230 ft, cased with 211 ft of 2-in plastic pipe, No. 18 slot screen set 211 to 221 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,547.29 ft. Measuring point: Top of casing 1.88 ft above land-surface datum.

PERIOD OF RECORD.--October 2001 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.36 ft below land-surface datum, May 22, 2002; lowest water level, 24.37 ft below land-surface datum, September 14, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	24.02	MAR 03	24.02	MAY 11	23.80	JUN 08	23.79	JUL 19	23.82	AUG 17	23.88
NOV 22	24.03	APR 29	24.03	MAY 23	24.02	JUN 28	23.79	AUG 15	24.10	SEP 14	24.37
JAN 10	24.04										
WATER YEAR 2005		HIGHEST	23.79	JUN 08, 2005 JUN 28, 2005		LOWEST	24.37	SEP 14, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480725100373304](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480725100373304)

## GROUND-WATER LEVELS

NETWORK SITES--Continued

McHENRY COUNTY--Continued

481948100305901. Local number, 156-077-13CCB1.

LOCATION.--Lat 48°19'48", long 100°30'59", Hydrologic Unit 09010003. Owner: North Dakota State Water Commission.

AQUIFER.--Denbigh.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 123 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 123 to 126 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,475 ft. Measuring point: Top of casing 1.70 ft above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.32 ft below land-surface datum, April 11 and July 17, 2001; lowest water level, 4.68 ft below land-surface datum, November 4, 1975.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	2.24	APR 29	2.21	MAY 19	2.13	JUN 28	2.14	AUG 17	2.03	SEP 14	2.13
NOV 22	2.08	MAY 11	2.38	JUN 08	1.86	JUL 21	2.11	AUG 19	2.15	SEP 28	2.47
MAR 02	2.19										
WATER YEAR 2005		HIGHEST	1.86	JUN 08, 2005	LOWEST		2.47	SEP 28, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481948100305901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481948100305901)

McHENRY COUNTY--Continued

481948100305902. Local number, 156-077-13CCB2.

LOCATION.--Lat 48°19'48", long 100°30'59", Hydrologic Unit 09010003. Owner: North Dakota State Water Commission.

AQUIFER.--Denbigh.

WELL CHARACTERISTICS.--Drilled observation well, depth 60 ft, cased with 53 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 53 to 56 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,475 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.05 ft below land-surface datum, June 1, 1999; lowest water level, 7.16 ft below land-surface datum, November 10, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	3.57	APR 29	3.06	MAY 19	3.18	JUN 28	2.36	AUG 17	2.40	SEP 14	3.74
NOV 22	3.50	MAY 11	3.12	JUN 08	2.01	JUL 21	1.69	AUG 19	2.65	SEP 28	4.05
MAR 02	4.60										
WATER YEAR 2005		HIGHEST	1.69	JUL 21, 2005	LOWEST		4.60	MAR 02, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481948100305902](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481948100305902)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## McINTOSH COUNTY

455807099450701. Local number, 129-072-30BBB.

LOCATION.--Lat 45°58'07", long 99°45'07", Hydrologic Unit 10130102. Owner: North Dakota State Water Commission.

AQUIFER.--Zeeland.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 123 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 123 to 126 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,968.3 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.02 ft below land-surface datum, June 27, 2005; lowest water level, 13.50 ft below land-surface datum, July 29, 1980, and July 27, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	4.96	JAN 27	4.49	MAR 14	4.41	APR 19	4.60	JUN 27	4.02	AUG 11	4.26
DEC 08	4.59										
WATER YEAR 2005		HIGHEST	4.02	JUN 27, 2005		LOWEST	4.96	OCT 18, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=455807099450701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=455807099450701)

## McINTOSH COUNTY--Continued

460411099200701. Local number, 130-069-21BBB1.

LOCATION.--Lat 46°04'11", long 99°20'07", Hydrologic Unit 10130106. Owner: North Dakota State Water Commission.

AQUIFER.--Spring Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 223 ft, cased with 177 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 177 to 180 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,033 ft. Measuring point: Top of casing 2.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.31 ft below land-surface datum, July 6, 2001; lowest water level, 54.65 ft below land-surface datum, September 20, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	49.04	JAN 27	49.10	MAR 14	49.15	APR 19	49.19	JUN 27	48.74	AUG 11	49.22
DEC 08	49.06										
WATER YEAR 2005		HIGHEST	48.74	JUN 27, 2005		LOWEST	49.22	AUG 11, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460411099200701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460411099200701)

## GROUND-WATER LEVELS

NETWORK SITES--Continued

McINTOSH COUNTY--Continued

460411099200702. Local number, 130-069-21BBB2.

LOCATION.--Lat 46°04'11", long 99°20'07", Hydrologic Unit 10130106. Owner: North Dakota State Water Commission.

AQUIFER.--Spring Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 102 ft, cased with 97 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 97 to 100 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,033 ft. Measuring point: Top of casing 2.40 ft above land-surface datum.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.64 ft below land-surface datum, July 6, 2001; lowest water level, 53.96 ft below land-surface datum, September 20, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	48.38	JAN 27	48.42	MAR 14	48.48	APR 19	48.52	JUN 27	48.54	AUG 11	48.54
DEC 08	48.42										
WATER YEAR 2005		HIGHEST	48.38	OCT 18, 2004		LOWEST	48.54	JUN 27, 2005		AUG 11, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460411099200702](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460411099200702)

McINTOSH COUNTY--Continued

461446099312801. Local number, 132-071-14DDD1.

LOCATION.--Lat 46°14'46", long 99°31'28", Hydrologic Unit 10130104. Owner: North Dakota State Water Commission.

AQUIFER.--Wishek.

WELL CHARACTERISTICS.--Drilled observation well, depth 182 ft, cased with 118 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 118 to 121 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,028 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.26 ft below land-surface datum, September 23, 1999; lowest water level, 48.60 ft below land-surface datum, August 22, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	18.18	JAN 27	17.05	APR 19	17.05	JUN 14	16.79	JUL 28	22.95	AUG 25	37.57
DEC 08	16.95	MAR 14	17.03	MAY 18	16.82	JUL 27	17.22	AUG 11	26.47	SEP 21	19.64
WATER YEAR 2005		HIGHEST	16.79	JUN 14, 2005		LOWEST	37.57	AUG 25, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461446099312801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461446099312801)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## McINTOSH COUNTY--Continued

461446099312802. Local number, 132-071-14DDD2.

LOCATION.--Lat 46°14'46", long 99°31'28", Hydrologic Unit 10130104. Owner: North Dakota State Water Commission.

AQUIFER.--Wishek.

WELL CHARACTERISTICS.--Drilled observation well, depth 50 ft, cased with 38 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 38 to 41 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,028 ft. Measuring point: Top of casing 2.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.57 ft below land-surface datum, April 29, 1997; lowest water level, 13.00 ft below land-surface datum, December 23, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	11.58	JAN 27	11.75	APR 19	10.99	JUN 14	10.84	JUL 28	11.24	AUG 25	11.43
DEC 08	11.42	MAR 14	11.51	MAY 18	11.06	JUN 27	11.22	AUG 11	10.98	SEP 21	11.38
WATER YEAR 2005		HIGHEST	10.84	JUN 14, 2005		LOWEST	11.75	JAN 27, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461446099312802](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461446099312802)

## McKENZIE COUNTY

474814103104702. Local number, 150-098-23AAB2.

LOCATION.--Lat 47°48'14", long 103°10'47", Hydrologic Unit 10110205. Owner: North Dakota State Water Commission.

AQUIFER.--Cherry Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 120 ft, cased with 98 ft of 2-in diameter plastic pipe, No. 18 slot screen set 98 to 103 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,002.58 ft. Measuring point: Top of casing 2.45 ft above land-surface datum.

PERIOD OF RECORD.--December 1979 to current year.

REMARKS.--Replacement well for well at 150-098-23AAB that was inadvertently destroyed on October 12, 2000. Water levels reflect the original well and the replacement well. Replacement well was installed on September 26, 2001.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.32 ft below land-surface datum, April 2, 1997; lowest water level, 10.31 ft below land-surface datum, September 1, 2004. Extremes for period of record are a combination of the original well and the replacement well.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	10.27	FEB 10	9.87	APR 13	9.66	JUL 20	9.28	AUG 09	9.35	AUG 16	9.65
NOV 17	10.17	MAR 14	9.75	MAY 26	9.40						
WATER YEAR 2005		HIGHEST	9.28	JUL 20, 2005		LOWEST	10.27	OCT 05, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=474814103104702](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=474814103104702)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
McLEAN COUNTY

474026100583201. Local number, 148-081-03AAB.

LOCATION.--Lat 47°40'26", long 100°58'32", Hydrologic Unit 10130101. Owner: North Dakota State Water Commission.

AQUIFER.--Horseshoe Valley.

WELL CHARACTERISTICS.--Drilled observation well, depth 60 ft, cased with 40 ft of 4-in diameter plastic pipe, slotted 35 to 40 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape October 1997 to current year. Water-level recorder December 1967 to October 1997. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for December 1967 to January 1975. From January 1975 to October 1997, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,883.4 ft. Measuring point: Top of casing 1.40 ft above land-surface datum.

PERIOD OF RECORD.--September 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.04 ft below land-surface datum, April 11, 1996; lowest water level, 14.14 ft below land-surface datum, September 3, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

	DATE	WATER LEVEL		DATE	WATER LEVEL	
	MAY 10	8.34		AUG 16	10.63	
WATER YEAR 2005	HIGHEST	8.34	MAY 10, 2005	LOWEST	10.63	AUG 16, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=474026100583201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=474026100583201)

MERCER COUNTY

472641102105901. Local number, 146-090-20CCC.

LOCATION.--Lat 47°26'41", long 102°10'59", Hydrologic Unit 10130201. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 1,860 ft, cased with 1,540 ft of 4-in diameter steel pipe, open ended.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,120 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.92 ft below land-surface datum, March 18, 1969; lowest water level, 93.33 ft below land-surface datum, September 21, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	92.78	FEB 02	92.75	MAY 25	92.91	JUL 29	93.00	AUG 16	93.24	SEP 21	93.33
NOV 18	92.68	MAR 15	92.85								
WATER YEAR 2005	HIGHEST	92.68	NOV 18, 2004	LOWEST	93.33	SEP 21, 2005					

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472641102105901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472641102105901)

## NETWORK SITES--Continued

## MORTON COUNTY

464734100543501. Local number, 138-081-09ABB1.

LOCATION.--Lat 46°47'34", long 100°54'35", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission. screen set 525 to 537 ft below land-surface datum.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 762 ft, cased with 525 ft of 2-in diameter steel pipe, No. 12 slot screen set 525 to 537 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,780 ft. Measuring point: Top of casing 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 79.83 ft below land-surface datum, March 5, 2003; lowest water level, 84.45 ft below land-surface datum, December 5, 1988.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	82.17	JAN 11	81.73	APR 21	81.81	JUN 13	81.57	AUG 16	81.64	SEP 07	81.81
NOV 19	81.94	FEB 24	81.84	JUN 01	81.50						
WATER YEAR 2005		HIGHEST	81.50	JUN 01, 2005		LOWEST	82.17	OCT 04, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464734100543501](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464734100543501)

## MORTON COUNTY--Continued

464734100543502. Local number, 138-081-09ABB2.

LOCATION.--Lat 46°47'34", long 100°54'35", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 362 ft, cased with 336 ft of 2-in diameter steel pipe, No. 12 slot screen set 336 to 348 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,780 ft. Measuring point: Top of casing 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 95.38 ft below land-surface datum, June 29, 2000; lowest water level, 101.25 ft below land-surface datum, December 4, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	96.11	JAN 11	95.75	APR 21	95.77	JUL 13	95.81	AUG 16	95.96	SEP 07	96.12
NOV 19	95.90	FEB 24	95.78	JUN 01	95.71						
WATER YEAR 2005		HIGHEST	95.71	JUN 01, 2005		LOWEST	96.12	SEP 07, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464734100543502](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464734100543502)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 MORTON COUNTY--Continued

464734100543504. Local number, 138-081-09ABB4.

LOCATION.--Lat 46°47'34", long 100°54'35", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Cannonball-Ludlow.

WELL CHARACTERISTICS.--Drilled observation well, depth 162 ft, cased with 153 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 153 to 159 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,780 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 103.02 ft below land-surface datum, March 5, 2003; lowest water level, 107.00 ft below land-surface datum, December 4, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	103.78	JAN 11	103.52	APR 21	103.67	JUL 13	103.75	AUG 16	103.84	SEP 07	103.34
NOV 19	103.70	FEB 24	103.63	JUN 01	103.54	AUG 13	103.75				
WATER YEAR 2005		HIGHEST	103.34	SEP 07, 2005		LOWEST	103.84	AUG 16, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464734100543504](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464734100543504)

MORTON COUNTY--Continued

464847101303801. Local number, 139-086-35BCC.

LOCATION.--Lat 46°48'47", long 101°30'38", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Sims.

WELL CHARACTERISTICS.--Drilled observation well, depth 140 ft, cased with 57 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 57 to 63 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,010 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.48 ft below land-surface datum, June 20, 2001; lowest water level, 29.94 ft below land-surface datum, May 8, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	19.35	JAN 26	19.68	APR 11	20.67	JUN 20	19.77	AUG 18	20.00	SEP 15	20.24
NOV 16	19.38	FEB 23	19.95	MAY 16	19.87						
WATER YEAR 2005		HIGHEST	19.35	OCT 19, 2004		LOWEST	20.67	APR 11, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464847101303801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464847101303801)

## GROUND-WATER LEVELS

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NETWORK SITES--Continued

MORTON COUNTY--Continued

464846101464502. Local number, 139-088-34BCC2.

LOCATION.--Lat 46°48'46", long 101°46'45", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 862 ft, cased with 842 ft of 2-in diameter steel pipe, No. 12 slot screen set 842 to 860 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,070 ft. Measuring point: Top of casing 4.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 109.89 ft below land-surface datum, December 4, 1975; lowest water level, 144.27 ft below land-surface datum, October 22, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	128.29	DEC 28	127.87	MAR 14	127.95	MAY 09	127.68	JUN 24	127.74	SEP 15	127.58
NOV 15	128.26	FEB 09	128.02								
WATER YEAR 2005		HIGHEST	127.58	SEP 15, 2005		LOWEST	128.29	NOV 04, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464846101464502](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464846101464502)

MORTON COUNTY--Continued

464846101464503. Local number, 139-088-34BCC3.

LOCATION.--Lat 46°48'46", long 101°46'45", Hydrologic Unit 10130203. Owner: North Dakota State Water Commission.

AQUIFER.--Tongue River.

WELL CHARACTERISTICS.--Drilled observation well, depth 302 ft, cased with 288 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 288 to 294 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,070 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.76 ft below land-surface datum, April 6, 1999; lowest water level, 34.62 ft below land-surface datum, October 4, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	23.18	NOV 15	23.19	FEB 09	23.38	MAY 09	23.53	JUN 24	23.56	SEP 15	23.38
NOV 04	23.19	DEC 28	23.23	MAR 14	23.48						
WATER YEAR 2005		HIGHEST	23.18	OCT 14, 2004		LOWEST	23.56	JUN 24, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=464846101464503](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=464846101464503)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
MOUNTRAIL COUNTY

480120101571901. Local number, 152-088-04BBBD1.

LOCATION.--Lat 48°01'20", long 101°57'19", Hydrologic Unit 10110101. Owner: North Dakota State Water Commission.

AQUIFER.--Tongue River.

WELL CHARACTERISTICS.--Drilled observation well, depth 80 ft, cased with 66 ft of 1.25-in diameter plastic pipe, screen set 66 to 71 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,094.73 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.51 ft below land-surface datum, December 16, 1999; lowest water level, 44.24 ft below land-surface datum, July 16, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 04	33.66	JUN 02	34.27	JUL 05	33.71	AUG 08	32.63	AUG 11	31.37	SEP 08	30.20
WATER YEAR 2005		HIGHEST	30.20	SEP 08, 2005		LOWEST	34.27	JUN 02, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480120101571901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480120101571901)

MOUNTRAIL COUNTY--Continued

480120101571902. Local number, 152-088-04BBBD2.

LOCATION.--Lat 48°01'20", long 101°57'19", Hydrologic Unit 10110101. Owner: North Dakota State Water Commission.

AQUIFER.--Tongue River.

WELL CHARACTERISTICS.--Drilled observation well, depth 89 ft, cased with 82 ft of 1.25-in diameter plastic pipe, screen set 82 to 87 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,095 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.86 ft below land-surface datum, November 30, 1999; lowest water level, 45.12 ft below land-surface datum, July 16, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 04	35.05	JUN 02	36.27	JUL 05	35.89	AUG 08	35.97	AUG 11	33.24	SEP 08	31.90
WATER YEAR 2005		HIGHEST	31.90	SEP 08, 2005		LOWEST	36.27	JUN 02, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480120101571902](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480120101571902)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## NELSON COUNTY

474806098133401. Local number, 150-059-20AAA.

LOCATION.--Lat 47°48'06", long 98°13'34", Hydrologic Unit 09020203. Owner: North Dakota State Water Commission.

AQUIFER.--McVille.

WELL CHARACTERISTICS.--Drilled observation well, depth 340 ft, cased with 247 ft of 4-in diameter plastic pipe, No. 20 slot screen set 247 to 253 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape May 1998 to current year. Water-level recorder August 1968 to December 1997. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for August 1968 to September 1970. From October 1970 to December 1997, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,474 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.16 ft below land-surface datum, April 25, 1996; lowest water level, 47.39 ft below land-surface datum, January 28, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03	44.93	MAY 31	44.43	JUL 11	44.54	AUG 10	44.92	SEP 07	45.15
WATER YEAR 2005		HIGHEST	44.43	MAY 31, 2005		LOWEST	45.15	SEP 07, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=474806098133401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=474806098133401)

## NELSON COUNTY--Continued

480138098074101. Local number, 153-058-32DBB.

LOCATION.--Lat 48°01'38", long 98°07'41", Hydrologic Unit 09020307. Owner: North Dakota State Water Commission.

AQUIFER.--Pierre Shale.

WELL CHARACTERISTICS.--Drilled observation well, depth 120 ft, cased with 120 ft of 5-in diameter steel pipe, slotted 110 to 120 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,510 ft. Measuring point: Top of casing 1.45 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.80 ft below land-surface datum, August 26, 1999; lowest water level, 31.20 ft below land-surface datum, August 28, 1969.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	7.63	JAN 07	7.48	MAY 31	7.34	AUG 19	7.41	SEP 16	7.79	SEP 27	7.91
DEC 15	7.55	APR 26	7.77	JUL 11	6.97						
WATER YEAR 2005		HIGHEST	6.97	JUL 11, 2005		LOWEST	7.91	SEP 27, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480138098074101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480138098074101)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 OLIVER COUNTY

470642101162701. Local number, 142-084-24BBA.

LOCATION.--Lat 47°06'42", long 101°16'27", Hydrologic Unit 10130101. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 1,295 ft, cased with 966 ft of 4-in diameter steel pipe, open ended.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,006 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 197.04 ft below land-surface datum, December 8, 1972; lowest water level, 203.86 ft below land-surface datum, August 19, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	203.70	JAN 11	203.61	APR 15	203.80	MAY 20	203.79	JUL 08	203.71	AUG 19	203.86
NOV 16	203.67	FEB 24	203.80								
WATER YEAR 2005		HIGHEST	203.61	JAN 11, 2005		LOWEST	203.86	AUG 19, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=470642101162701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=470642101162701)

PEMBINA COUNTY

485425097550502. Local number, 163-056-29CDD2.

LOCATION.--Lat 48°54'25", long 97°55'05", Hydrologic Unit 09020313. Owner: North Dakota State Water Commission.

AQUIFER.--Pembina River.

WELL CHARACTERISTICS.--Drilled observation well, depth 40 ft, cased with 20 ft of 4-in diameter steel pipe, No. 24 slot screen set 20 to 25 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 957 ft. Measuring point: Top of casing 0.60 ft above land-surface datum.

PERIOD OF RECORD.--October 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.82 ft below land-surface datum, May 1, 1997; lowest water level, 7.31 ft below land-surface datum, September 7, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 05	3.63	JUN 02	3.45	JUL 14	3.67	AUG 11	5.06	SEP 08	5.36
WATER YEAR 2005		HIGHEST	3.45	JUN 02, 2005		LOWEST	5.36	SEP 08, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485425097550502](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485425097550502)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## PIERCE COUNTY

475139099484801. Local number, 151-072-36AAA1.

LOCATION.--Lat 47°51'39", long 99°48'48", Hydrologic Unit 09020202. Owner: North Dakota State Water Commission.

AQUIFER.--New Rockford.

WELL CHARACTERISTICS.--Drilled observation well, depth 320 ft, cased with 213 ft of 4-in diameter plastic pipe, screen set 213 to 238 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape November 2000 to current year. Water-level recorder November 1967 to November 2000. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for November 1967 to July 1974. From August 1974 to November 2000, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,602 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 68.26 ft below land-surface datum, March 10-11, 1977; lowest water level, 86.32 ft below land-surface datum, August 22-27, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	75.89	JAN 19	75.83	APR 21	76.11	JUN 07	76.56	JUL 12	76.70	SEP 13	78.58
NOV 15	75.67	FEB 28	75.74	MAY 10	76.28	JUN 28	76.70	AUG 16	78.14		

WATER YEAR 2005      HIGHEST    75.67    NOV 15, 2004      LOWEST    78.58    SEP 13, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=475139099484801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=475139099484801)

## PIERCE COUNTY--Continued

482033099594901. Local number, 156-073-12CCC.

LOCATION.--Lat 48°20'33", long 99°59'49", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 120 ft, cased with 72.5 ft of 4-in diameter plastic pipe, screen set 72.5 to 77.5 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,550 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -1.51 ft below land-surface datum, May 7, 1997; lowest water level, 7.57 ft below land-surface datum, March 12, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
(READINGS ABOVE LAND SURFACE INDICATED BY "-")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	0.50	JAN 25	1.36	MAR 15	1.96	APR 21	1.14	JUN 28	-0.04	AUG 16	-0.62
DEC 09	0.48										

WATER YEAR 2005      HIGHEST    -0.62    AUG 16, 2005      LOWEST    1.96    MAR 15, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=482033099594901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=482033099594901)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 PIERCE COUNTY--Continued

483054100071901. Local number, 158-073-17BBB.

LOCATION.--Lat 48°30'54", long 100°07'19", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Lake Souris.

WELL CHARACTERISTICS.--Drilled observation well, depth 180 ft, cased with 56 ft of 1.25-in diameter plastic pipe, screen set 56 to 59 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,508 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -0.30 ft below land-surface datum, June 22, 1999; lowest water level, 8.62 ft below land-surface datum, August 12, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	2.60	JAN 26	3.20	MAR 15	4.10	APR 21	3.98	JUN 28	2.26	AUG 16	1.17
DEC 09	2.66										
WATER YEAR 2005		HIGHEST	1.17	AUG 16, 2005		LOWEST	4.10	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483054100071901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483054100071901)

RAMSEY COUNTY

480449099002402. Local number, 153-065-09DDD2.

LOCATION.--Lat 48°04'49", long 99°00'24", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 140 ft, cased with 117 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 117 to 120 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,458 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft below land-surface datum, August 29, 2005; lowest water level, 35.57 ft below land-surface datum, November 20, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	9.18	JAN 27	9.44	APR 28	9.44	MAY 24	9.46	JUL 05	9.00	AUG 29	8.88
DEC 15	9.42	MAR 09	9.50								
WATER YEAR 2005		HIGHEST	8.88	AUG 29, 2005		LOWEST	9.50	MAR 09, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480449099002402](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480449099002402)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## RAMSEY COUNTY--Continued

480817099013201. Local number, 154-065-21CCC.

LOCATION.--Lat 48°08'17", long 99°01'32", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 127 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 127 to 133 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,473 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.62 ft below land-surface datum, March 9, 2005; lowest water level, 45.28 ft below land-surface datum, February 14, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	20.97	JAN 27	21.25	APR 28	21.50	MAY 24	21.42	JUL 05	20.89	AUG 29	20.71
DEC 15	21.14	MAR 09	20.62								
WATER YEAR 2005		HIGHEST	20.62	MAR 09, 2005		LOWEST	21.50	APR 28, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=480817099013201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=480817099013201)

## RAMSEY COUNTY--Continued

481929098392601. Local number, 156-062-20BBB.

LOCATION.--Lat 48°19'29", long 98°39'26", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Pierre Shale.

WELL CHARACTERISTICS.--Drilled observation well, depth 60 ft, cased with 60 ft of 4-in diameter plastic pipe, slotted 48 to 58 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,495 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.56 ft below land-surface datum, November 24, 1993; lowest water level, 15.84 ft below land-surface datum, November 14, 1990.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	8.45	DEC 17	8.40	FEB 24	10.19	MAY 25	9.60	JUL 07	5.76	SEP 30	7.54
NOV 01	8.28	JAN 07	8.76	APR 29	10.67						
WATER YEAR 2005		HIGHEST	5.76	JUL 07, 2005		LOWEST	10.67	APR 29, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481929098392601](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481929098392601)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
RANSOM COUNTY

461838097553402. Local number, 133-058-25BBA2.

LOCATION.--Lat 46°18'38", long 97°55'34", Hydrologic Unit 09020105. Owner: North Dakota State Water Commission.

AQUIFER.--Englevale.

WELL CHARACTERISTICS.--Drilled observation well, depth 60 ft, cased with 34 ft of 5-in diameter plastic pipe, No. 15 slot screen set 34 to 38 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder June 1982 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,315.3 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--June 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.87 ft below land-surface datum, April 15, 1997; lowest water level, 12.73 ft below land-surface datum, August 28-29, 1985.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 2.56 ft below land-surface datum, July 8; lowest water level recorded, 6.21 ft below land-surface datum, October 2.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.20	5.39	5.10	5.10	5.32	5.42	5.31	4.74	4.48	3.06	3.31	3.30
2	6.21	5.39	5.10	5.14	5.32	5.42	5.31	4.74	4.48	3.04	3.31	3.32
3	6.20	5.38	5.07	5.16	5.32	5.42	5.27	4.75	4.46	3.01	3.33	3.34
4	6.20	5.35	5.06	5.20	5.30	5.42	5.25	4.75	4.35	2.94	3.33	3.26
5	6.20	5.33	5.06	5.20	5.27	5.42	5.23	4.75	4.34	2.94	3.33	3.30
6	6.18	5.30	5.04	5.20	5.28	5.38	5.23	4.73	4.34	2.94	3.33	3.31
7	6.17	5.30	5.02	5.23	5.28	5.32	5.23	4.73	4.35	2.95	3.34	3.33
8	6.17	5.30	5.02	5.23	5.28	5.34	5.21	4.67	4.21	2.95	3.34	3.33
9	6.17	5.28	5.00	5.26	5.28	5.35	5.16	4.61	4.19	2.69	3.34	3.32
10	6.16	5.25	4.99	5.26	5.29	5.35	5.15	4.48	4.19	2.73	3.33	3.34
11	6.15	5.26	4.99	5.26	5.30	5.35	5.15	4.50	4.19	2.75	3.33	3.34
12	6.15	5.25	4.98	5.26	5.30	5.32	5.04	4.50	3.98	2.78	3.28	3.34
13	6.15	5.25	5.03	5.28	5.29	5.34	5.01	4.44	3.98	2.81	3.28	3.35
14	6.14	5.24	5.03	5.31	5.29	5.34	5.00	4.40	3.81	2.84	3.29	3.35
15	6.10	5.22	5.01	5.33	5.31	5.34	4.94	4.40	3.79	2.88	3.30	3.36
16	6.10	5.18	4.99	5.35	5.31	5.34	4.93	4.41	3.79	2.94	3.30	---
17	6.10	5.17	4.99	5.36	5.32	5.34	4.93	4.42	3.76	2.99	3.30	---
18	6.09	5.17	5.00	5.36	5.32	5.36	4.88	4.42	3.75	3.04	3.20	---
19	6.07	5.16	5.00	5.34	5.33	5.38	4.86	4.44	3.71	3.13	3.19	---
20	6.06	5.14	4.98	5.33	5.35	5.38	4.83	4.47	3.71	3.16	3.12	---
21	6.06	5.13	5.04	5.33	5.37	5.38	4.83	4.49	3.62	3.20	3.13	---
22	6.06	5.13	5.08	5.37	5.39	5.38	4.80	4.52	3.62	3.23	3.14	---
23	6.03	5.10	5.10	5.37	5.40	5.38	4.79	4.52	3.61	3.24	3.15	---
24	5.94	5.10	5.10	5.33	5.40	5.37	4.79	4.54	3.61	3.29	3.20	---
25	5.95	5.10	5.12	5.33	5.40	5.36	4.76	4.50	3.62	3.30	3.20	---
26	5.96	5.10	5.13	5.32	5.41	5.37	4.73	4.48	3.62	3.20	3.17	---
27	5.97	5.10	5.13	5.32	5.41	5.35	4.74	4.46	3.52	3.25	3.18	---
28	5.97	5.10	5.13	5.32	5.41	5.32	4.74	4.46	3.53	3.24	3.21	---
29	5.97	5.10	5.13	5.32	---	5.28	4.75	4.48	3.54	3.27	3.22	---
30	5.67	5.10	5.10	5.32	---	5.27	4.74	4.48	3.06	3.28	3.24	---
31	5.39	---	5.10	5.32	---	5.31	---	4.48	---	3.31	3.27	---
MAX	6.21	5.39	5.13	5.37	5.41	5.42	5.31	4.75	4.48	3.31	3.34	---
MIN	5.39	5.10	4.98	5.10	5.27	5.27	4.73	4.40	3.06	2.69	3.12	---

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461838097553402](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461838097553402)

## GROUND-WATER LEVELS

55

## NETWORK SITES--Continued

## RANSOM COUNTY--Continued

462400097552502. Local number, 134-058-24CDC2.

LOCATION.--Lat 46°24'00", long 97°55'25", Hydrologic Unit 09020105. Owner: North Dakota State Water Commission.

AQUIFER.--Englevale.

WELL CHARACTERISTICS.--Drilled observation well, depth 60 ft, cased with 54.5 ft of 4-in diameter plastic pipe, No. 20 slot screen set 54.5 to 59.5 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder April 1968 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for April 1968 to July 1968. From July 1968 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,343.2 ft. Measuring point: Top of casing 1.10 ft above land-surface datum.

PERIOD OF RECORD.--April 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.30 ft below land-surface datum, July 2 and 3, 1998; lowest water level, 27.08 ft below land-surface datum, September 11-13, 1990.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.29 ft below land-surface datum, July 10-11; lowest water level, 21.74 ft below land-surface datum, October 1-2 and 4.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.74	21.32	20.84	20.77	20.74	20.71	20.62	20.36	20.28	19.48	19.92	19.77
2	21.74	21.28	20.82	20.77	20.73	20.71	20.61	20.36	20.25	19.45	19.93	19.81
3	21.73	21.24	20.81	20.77	20.72	20.71	20.58	20.36	20.25	19.41	19.95	19.82
4	21.74	21.20	20.82	20.79	20.71	20.71	20.55	20.36	20.23	19.41	19.97	19.76
5	21.73	21.18	20.82	20.79	20.69	20.72	20.56	20.34	20.22	19.41	20.01	19.75
6	21.71	21.15	20.78	20.76	20.73	20.69	20.58	20.35	20.20	19.40	20.08	19.75
7	21.70	21.17	20.78	20.77	20.73	20.69	20.57	20.33	20.18	19.38	20.16	19.75
8	21.70	21.16	20.77	20.77	20.73	20.68	20.54	20.32	20.15	19.37	20.21	19.74
9	21.70	21.12	20.76	20.78	20.70	20.68	20.51	20.32	20.09	19.33	20.23	19.72
10	21.69	21.13	20.77	20.78	20.69	20.65	20.52	20.29	20.09	19.30	20.14	19.70
11	21.68	21.13	20.77	20.77	20.69	20.65	20.52	20.30	20.07	19.31	20.08	19.72
12	21.68	21.08	20.79	20.74	20.69	20.63	20.49	20.28	20.03	19.31	20.03	19.72
13	21.67	21.07	20.80	20.80	20.68	20.64	20.49	20.25	20.01	19.36	20.00	19.71
14	21.67	21.06	20.80	20.81	20.69	20.65	20.48	20.23	19.98	19.42	19.98	19.71
15	21.64	21.05	20.74	20.82	20.70	20.65	20.46	20.23	19.94	19.48	19.96	19.72
16	21.64	21.02	20.76	20.82	20.70	20.64	20.45	20.22	19.92	19.52	19.95	19.72
17	21.64	20.99	20.76	20.82	20.71	20.64	20.45	20.20	19.89	19.57	19.93	19.71
18	21.63	20.99	20.78	20.79	20.71	20.64	20.41	20.21	19.86	19.61	19.90	19.72
19	21.61	20.98	20.78	20.79	20.70	20.65	20.40	20.25	19.85	19.66	19.88	19.72
20	21.61	20.95	20.72	20.77	20.69	20.65	20.40	20.27	19.84	19.72	19.85	19.71
21	21.60	20.95	20.77	20.77	20.70	20.65	20.39	20.25	19.80	19.82	19.84	19.71
22	21.59	20.93	20.79	20.81	20.73	20.65	20.39	20.25	19.77	19.86	19.84	19.73
23	21.56	20.91	20.80	20.80	20.73	20.64	20.39	20.27	19.73	19.86	19.82	19.73
24	21.55	20.91	20.78	20.74	20.73	20.63	20.37	20.29	19.73	19.84	19.80	19.72
25	21.54	20.88	20.78	20.75	20.72	20.63	20.34	20.28	19.73	19.86	19.80	19.72
26	21.54	20.86	20.79	20.78	20.72	20.63	20.33	20.27	19.71	19.83	19.79	19.71
27	21.53	20.85	20.79	20.78	20.70	20.60	20.34	20.24	19.65	19.79	19.76	19.70
28	21.51	20.86	20.77	20.76	20.71	20.58	20.34	20.25	19.64	19.75	19.76	19.72
29	21.49	20.86	20.74	20.76	---	20.57	20.34	20.28	19.61	19.73	19.76	19.72
30	21.44	20.84	20.72	20.76	---	20.59	20.35	20.29	19.51	19.80	19.75	19.68
31	21.39	---	20.77	20.74	---	20.62	---	20.29	---	19.89	19.74	---
MAX	21.74	21.32	20.84	20.82	20.74	20.72	20.62	20.36	20.28	19.89	20.23	19.82
MIN	21.39	20.84	20.72	20.74	20.68	20.57	20.33	20.20	19.51	19.30	19.74	19.68

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462400097552502](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462400097552502)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
RENVILLE COUNTY

484500101294901. Local number, 161-084-24DDD.

LOCATION.--Lat 48°45'00", long 101°29'49", Hydrologic Unit 09010005. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 662 ft, cased with 470 ft of 2-in diameter steel pipe, No. 12 slot screen set 470 to 488 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,619 ft. Measuring point: Top of casing 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.95 ft below land-surface datum, July 17, 1980; lowest water level, 38.35 ft below land-surface datum, October 3, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	37.95	MAR 02	37.74	APR 27	37.66	JUN 30	37.53	JUL 27	37.79	AUG 17	37.56
NOV 19	37.62	MAR 30	37.41	MAY 17	37.41						
WATER YEAR 2005		HIGHEST	37.41	MAR 30, 2005		MAY 17, 2005		LOWEST	37.95	OCT 13, 2004	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484500101294901](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484500101294901)

RICHLAND COUNTY

460358096581401. Local number, 130-050-17DDD.

LOCATION.--Lat 46°03'58", long 96°58'14", Hydrologic Unit 09020105. Owner: North Dakota State Water Commission.

AQUIFER.--Milnor Channel.

WELL CHARACTERISTICS.--Drilled observation well, depth 57.6 ft, cased with 57.6 ft of 1.25-in diameter plastic pipe, slotted 47 to 57.6 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,083.18 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.49 ft below land-surface datum, July 6, 2005; lowest water level, 6.57 ft below land-surface datum, September 9, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 04	1.60	JUN 01	1.20	JUL 06	0.49	AUG 09	0.66	SEP 07	0.67
WATER YEAR 2005		HIGHEST	0.49	JUL 06, 2005		LOWEST	1.60	MAY 04, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460358096581401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460358096581401)

## GROUND-WATER LEVELS

57

## NETWORK SITES--Continued

## RICHLAND COUNTY--Continued

462425096441202. Local number, 134-048-20ADD2.

LOCATION.--Lat 46°24'25", long 96°44'12", Hydrologic Unit 09020105. Owner: North Dakota State Water Commission.

AQUIFER.--Colfax (also known as Wahpeton Sand Plain aquifer).

WELL CHARACTERISTICS.--Drilled observation well, depth 260 ft, cased with 130 ft of 5-in diameter steel pipe, No. 15 slot screen set 130 to 135 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder June 1980 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 941.8 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.20 ft below land-surface datum, June 18, 1980; lowest water level, 20.25 ft below land-surface datum, October 4 and 11, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.42 ft below land-surface datum, August 25-26; lowest water level, 20.25 ft below land-surface datum, October 4 and 11.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.20	20.08	20.01	19.94	---	19.69	19.76	19.77	19.71	19.55	19.66	19.53
2	20.20	20.08	20.01	19.91	---	19.69	19.76	19.78	19.70	19.55	19.65	19.55
3	20.22	20.07	19.99	19.92	---	19.69	19.74	19.78	19.69	19.54	19.65	19.55
4	20.25	20.06	19.99	19.94	---	19.69	19.73	19.78	19.68	19.58	19.68	19.49
5	20.23	20.06	19.99	19.94	---	19.69	19.74	19.77	19.65	19.60	19.71	19.49
6	20.21	20.05	19.96	19.89	---	19.66	19.77	19.78	19.65	19.59	19.71	19.50
7	20.21	20.11	19.94	19.88	---	19.69	19.76	19.77	19.65	19.59	19.69	19.51
8	20.23	20.11	19.94	19.88	---	19.70	19.75	19.72	19.59	19.59	19.69	19.50
9	20.24	20.10	19.92	19.87	---	19.70	19.71	19.72	19.60	19.58	19.68	19.49
10	20.24	20.13	19.95	19.86	---	19.66	19.74	19.75	19.60	19.59	19.62	19.47
11	20.25	20.13	19.95	19.84	---	19.66	19.73	19.78	19.60	19.60	19.62	19.49
12	20.24	20.13	19.96	19.80	---	19.66	19.69	19.78	19.55	19.62	19.61	19.47
13	20.24	20.13	20.02	19.85	---	19.67	19.73	19.74	19.55	19.65	19.62	19.46
14	20.24	20.14	20.02	19.85	---	19.68	19.73	19.71	19.52	19.63	19.63	19.48
15	20.18	20.13	19.95	19.86	---	19.68	19.74	19.72	19.54	19.63	19.65	19.48
16	20.20	20.10	19.99	19.86	---	19.67	19.75	19.72	19.55	19.63	19.66	19.49
17	20.21	20.10	19.99	19.88	---	19.67	19.75	19.70	19.56	19.61	19.65	19.48
18	20.20	20.12	20.02	19.84	---	19.68	19.72	19.69	19.58	19.62	19.63	19.50
19	20.19	20.11	20.02	---	---	19.69	19.74	19.67	19.61	19.65	19.57	19.50
20	20.21	20.09	19.89	---	---	19.70	19.76	19.69	19.62	19.65	19.57	19.49
21	20.20	20.09	19.97	---	---	19.72	19.76	19.69	19.62	19.67	19.60	19.49
22	20.18	20.06	20.00	---	---	19.72	19.78	19.68	19.62	19.67	19.60	19.50
23	20.08	20.05	20.00	---	---	19.71	19.79	19.70	19.60	19.67	19.60	19.51
24	20.10	20.05	19.98	---	---	19.74	19.79	19.70	19.65	19.64	19.59	19.49
25	20.13	20.03	19.97	---	---	19.75	19.72	19.70	19.66	19.64	19.58	19.48
26	20.14	20.00	19.98	---	19.69	19.74	19.73	19.66	19.65	19.62	19.44	19.47
27	20.14	20.01	19.98	---	19.68	19.72	19.74	19.66	19.64	19.62	19.45	19.46
28	20.14	20.04	19.96	---	19.69	19.69	19.75	19.66	19.64	19.61	19.47	19.48
29	20.08	20.04	19.94	---	---	19.67	19.75	19.69	19.64	19.64	19.49	19.48
30	20.02	20.02	19.92	---	---	19.70	19.76	19.71	19.53	19.63	19.48	19.44
31	20.04	---	19.94	---	---	19.75	---	19.71	---	19.65	19.49	---
MAX	20.25	20.14	20.02	---	---	19.75	19.79	19.78	19.71	19.67	19.71	19.55
MIN	20.02	20.00	19.89	---	---	19.66	19.69	19.66	19.52	19.54	19.44	19.44

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462425096441202](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462425096441202)

## GROUND-WATER LEVELS

## NETWORK SITES--Continued

## RICHLAND COUNTY--Continued

462633097163402. Local number, 134-052-06CCD2.

LOCATION.--Lat 46°26'33", long 97°16'34", Hydrologic Unit 09020204. Owner: North Dakota State Water Commission.

AQUIFER.--Sheyenne Delta.

WELL CHARACTERISTICS.--Drilled observation well, depth 283 ft, cased with 40 ft of 4-in diameter plastic pipe, slotted 30 to 40 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder September 1963 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for May 1965 to September 1966. From September 1966 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,067.03 ft. Measuring point: Top of casing 0.65 ft above land-surface datum.

PERIOD OF RECORD.--September 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.78 ft below land-surface datum, May 13, 1972; lowest water level, 9.07 ft below land-surface datum, February 22, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1.59 ft below land-surface datum, June 29-30; lowest water level, 6.06 ft below land-surface datum, March 4-5.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.34	3.08	3.97	4.92	5.76	5.99	4.60	3.97	4.24	1.87	3.87	---
2	4.34	3.08	3.95	5.03	5.70	6.02	4.44	4.03	4.35	1.95	3.87	---
3	4.47	3.07	3.92	5.15	5.63	6.02	4.31	4.07	4.35	2.06	3.87	---
4	4.51	3.14	3.94	5.22	5.54	6.06	4.15	4.10	4.31	2.16	3.31	3.18
5	4.50	3.14	3.94	5.24	5.48	6.06	4.04	4.15	4.18	2.22	3.48	---
6	4.57	3.27	3.90	5.28	5.47	6.01	4.02	4.22	4.39	2.32	3.69	3.05
7	4.57	3.31	3.89	5.42	5.47	5.88	3.93	4.22	4.39	2.43	3.83	3.11
8	4.66	3.32	3.86	5.42	5.47	5.86	3.81	4.20	4.35	2.44	4.00	3.15
9	4.69	3.32	3.81	5.53	5.63	5.81	3.66	3.95	3.95	2.45	4.00	3.21
10	4.76	3.46	3.84	5.53	5.73	5.68	3.66	3.61	3.98	2.62	3.24	3.45
11	4.76	3.49	3.81	5.52	5.78	5.68	3.67	3.80	3.98	2.68	3.24	3.45
12	4.77	3.49	3.78	5.54	5.78	5.55	3.28	3.80	2.24	2.78	3.20	3.49
13	4.85	3.49	3.97	5.59	5.78	5.55	3.22	3.41	2.24	2.85	3.37	3.58
14	4.85	3.49	4.00	5.60	5.78	5.57	3.22	3.29	1.84	2.90	3.52	3.67
15	4.71	3.49	4.01	5.64	5.78	5.57	3.27	3.27	1.92	3.00	3.67	---
16	4.74	3.49	4.04	5.71	5.78	5.57	3.29	3.39	2.02	3.04	3.75	3.81
17	4.78	3.49	4.03	5.78	5.77	5.57	3.29	3.39	2.11	3.22	3.77	3.86
18	4.78	3.51	4.24	5.79	5.77	5.58	3.35	3.15	2.26	3.27	3.49	3.85
19	4.79	3.51	4.28	5.84	5.70	5.63	3.46	3.33	2.34	3.37	3.24	3.83
20	4.83	3.51	4.34	5.81	5.82	5.63	3.53	3.54	2.38	3.47	3.08	3.93
21	4.80	3.57	4.52	5.80	5.88	5.61	3.57	3.66	2.45	3.55	3.23	3.99
22	4.78	3.57	4.64	5.79	5.95	5.59	3.69	3.86	2.53	3.56	3.37	4.08
23	4.68	3.58	4.72	5.79	5.99	5.53	3.72	3.95	2.72	3.56	3.51	4.10
24	4.43	3.64	4.77	5.80	5.99	5.49	3.72	3.95	2.78	3.68	3.63	4.08
25	4.44	3.64	4.87	5.80	5.99	5.47	3.78	3.79	2.85	3.68	3.61	3.84
26	4.47	3.64	4.87	5.83	5.99	5.39	3.82	3.82	2.85	3.15	2.69	3.91
27	4.48	3.64	4.87	5.83	5.99	5.30	3.83	3.90	2.38	3.27	2.84	4.04
28	4.48	3.64	4.87	5.81	5.99	5.15	3.87	3.93	2.46	3.33	2.98	4.15
29	4.42	3.65	4.86	5.79	---	4.94	3.92	4.08	2.46	3.51	3.08	4.14
30	3.96	3.76	4.84	5.78	---	4.77	3.97	4.14	1.76	3.65	3.20	4.24
31	3.08	---	4.87	5.76	---	4.67	---	4.21	---	3.79	3.36	---
MAX	4.85	3.76	4.87	5.84	5.99	6.06	4.60	4.22	4.39	3.79	4.00	---
MIN	3.08	3.07	3.78	4.92	5.47	4.67	3.22	3.15	1.76	1.87	2.69	---

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462633097163402](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462633097163402)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## RICHLAND COUNTY--Continued

463422097115602. Local number, 136-052-22DDD2.

LOCATION.--Lat 46°34'22", long 97°11'56", Hydrologic Unit 09020204. Owner: North Dakota State Water Commission.

AQUIFER.--Sheyenne Delta.

WELL CHARACTERISTICS.--Drilled observation well, depth 26.9 ft, cased with 26.4 ft of 4-in diameter plastic pipe, slotted 17 to 26.4 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder October 1963 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for July 1965 to September 1966. From September 1966 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,050 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft below land-surface datum, July 9, 1975; lowest water level, 9.35 ft below land-surface datum, March 1-10, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level, 2.87 ft below land-surface datum, June 30; lowest water level, 6.69 ft below land-surface datum, February 24 to March 6.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.78	4.64	5.43	6.13	6.58	6.69	6.19	5.38	5.20	3.28	5.61	4.92
2	5.81	4.65	5.43	6.19	6.58	6.69	6.19	5.38	5.26	3.46	5.63	4.98
3	5.86	4.72	5.43	6.23	6.57	6.69	6.18	5.41	5.26	3.64	5.68	4.99
4	5.89	4.78	5.48	6.25	6.56	6.69	6.16	5.42	5.28	3.83	5.71	4.50
5	5.89	4.82	5.48	6.25	6.54	6.69	6.14	5.41	5.28	3.96	5.75	4.50
6	5.89	4.91	5.45	6.29	6.52	6.69	6.13	5.41	5.16	4.10	5.83	4.21
7	5.90	4.96	5.47	6.33	6.51	6.55	6.11	5.41	5.19	4.21	5.89	4.27
8	5.95	4.99	5.47	6.33	6.51	6.56	6.06	5.40	5.07	4.26	5.94	4.36
9	5.97	4.97	5.45	6.37	6.55	6.57	6.01	5.39	4.77	4.17	5.94	4.41
10	5.98	5.09	5.46	6.37	6.59	6.56	5.98	5.28	4.86	4.31	5.26	4.60
11	6.00	5.09	5.46	6.37	6.59	6.55	5.95	5.30	---	4.43	5.23	4.70
12	6.00	5.10	5.48	6.39	6.59	6.54	5.80	5.30	---	4.54	4.95	4.79
13	6.03	5.10	5.51	6.42	6.59	6.54	5.65	5.23	---	4.66	5.01	4.88
14	6.03	5.14	5.51	6.42	6.59	6.55	5.50	5.09	---	4.77	5.13	4.95
15	6.03	5.13	5.53	6.47	6.59	6.57	5.38	4.95	---	4.89	5.24	5.01
16	6.06	5.13	5.56	6.47	6.59	6.57	5.33	4.91	---	4.93	5.35	5.09
17	6.07	5.17	5.56	6.47	6.59	6.60	5.21	4.93	---	5.06	5.41	5.13
18	6.07	5.20	5.67	6.51	6.59	6.64	5.13	4.86	---	5.12	5.40	5.16
19	6.09	5.19	5.67	6.54	6.59	6.64	5.09	4.78	---	5.20	4.40	5.17
20	6.09	5.21	5.75	6.56	6.64	6.64	5.11	4.83	---	5.30	4.11	5.23
21	6.11	5.22	5.84	6.56	6.64	6.64	5.11	4.86	---	5.36	4.26	5.27
22	6.11	5.23	5.90	6.56	6.64	6.61	5.20	4.96	---	5.40	4.38	5.32
23	6.09	5.23	5.95	6.56	6.68	6.55	5.22	5.03	---	5.40	4.55	5.36
24	6.01	5.23	6.02	6.58	6.69	6.49	5.21	5.06	4.42	5.44	4.71	5.39
25	5.97	5.23	6.11	6.58	6.69	6.46	5.24	5.05	4.50	5.45	4.75	5.39
26	5.95	5.28	6.11	6.58	6.69	6.40	5.28	5.04	4.52	5.31	4.09	5.39
27	5.92	5.33	6.11	6.58	6.69	6.36	5.32	5.04	4.48	5.34	4.16	5.41
28	5.92	5.35	6.11	6.58	6.69	6.32	5.32	5.09	4.48	5.34	4.31	5.46
29	5.89	5.35	6.11	6.58	---	6.26	5.36	5.12	4.48	5.40	4.42	5.46
30	5.72	5.39	6.11	6.58	---	6.22	5.36	5.18	3.13	5.49	4.55	5.50
31	4.71	---	6.13	6.58	---	6.19	---	5.20	---	5.54	4.72	---
MAX	6.11	5.39	6.13	6.58	6.69	6.69	6.19	5.42	---	5.54	5.94	5.50
MIN	4.71	4.64	5.43	6.13	6.51	6.19	5.09	4.78	---	3.28	4.09	4.21

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463422097115602](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463422097115602)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
ROLETTE COUNTY

484731099504104. Local number, 161-071-03CDD4.

LOCATION.--Lat 48°47'31", long 99°50'41", Hydrologic Unit 09010004. Owner: Public Health Service.

AQUIFER.--Shell Valley.

WELL CHARACTERISTICS.--Drilled observation well, depth 42 ft, cased with 28.3 ft of 8-in diameter steel pipe, No. 40 slot screen set 28.3 to 38.3 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape February 2002 to current year. Water-level recorder August 1979 to February 2002. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for November 1974 to August 1979. From August 1979 to February 2002, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,752 ft. Measuring point: Top of casing 1.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.05 ft below land-surface datum, August 15, 1999; lowest water level, 26.19 ft below land-surface datum, February 24, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11	12.82	JUN 08	12.53	JUL 14	11.81	AUG 17	10.80	SEP 14	10.95
WATER YEAR 2005		HIGHEST	10.80	AUG 17, 2005		LOWEST	12.82	MAY 11, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484731099504104](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484731099504104)

ROLETTE COUNTY--Continued

484310099572401. Local number, 161-072-35CDC.

LOCATION.--Lat 48°43'10", long 99°57'24", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Shell Valley.

WELL CHARACTERISTICS.--Drilled observation well, depth 77 ft, cased with 70 ft of 5-in diameter plastic pipe, No. 15 slot screen set 70 to 75 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape February 2002 to current year. Water-level recorder November 1982 to September 2001, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,630 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.33 ft below land-surface datum, May 21, 1983; lowest water level, 42.93 ft below land-surface datum, December 14-20, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11	34.08	JUN 08	34.05	JUL 14	34.07	AUG 17	33.71	SEP 14	33.12
WATER YEAR 2005		HIGHEST	33.12	SEP 14, 2005		LOWEST	34.08	MAY 11, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484310099572401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484310099572401)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## ROLETTE COUNTY--Continued

485707100053701. Local number, 163-073-11CCC1.

LOCATION.--Lat 48°57'07", long 100°05'37", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 715 ft, cased with 406 ft of 2-in diameter steel pipe, No. 12 slot screen set 406 to 412 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,123 ft. Measuring point: Top of casing 3.37 ft above land-surface datum.

PERIOD OF RECORD.--September 1978 to November 2001, April 2003 to current year.

REMARKS.--Well casing appears to have failed causing break in period of record from December 2001 to March 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.89 ft below land-surface datum, September 23, 2004; lowest water level, 63.80 ft below land-surface datum, November 23, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	45.68	JAN 26	54.65	MAR 15	49.94	APR 21	60.18	JUN 28	53.18	AUG 16	50.44
DEC 09	59.41										
WATER YEAR 2005		HIGHEST	45.68	OCT 19, 2004		LOWEST	60.18	APR 21, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485707100053701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485707100053701)

## ROLETTE COUNTY--Continued

485707100053702. Local number, 163-073-11CCC2.

LOCATION.--Lat 48°57'07", long 100°05'37", Hydrologic Unit 09010004. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 295 ft, cased with 269 ft of 2-in diameter steel pipe, No. 12 slot screen set 269 to 275 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 2,123 ft. Measuring point: Top of casing 3.40 ft above land-surface datum.

PERIOD OF RECORD.--September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.47 ft below land-surface datum, June 28, 2005; lowest water level, 64.15 ft below land-surface datum, November 23, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	28.38	JAN 26	31.19	MAR 15	30.84	APR 21	30.57	JUN 28	26.47	AUG 16	29.12
DEC 09	31.11										
WATER YEAR 2005		HIGHEST	26.47	JUN 28, 2005		LOWEST	31.19	JAN 26, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485707100053702](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485707100053702)

GROUND-WATER LEVELS  
NETWORK SITES--Continued

SARGENT COUNTY

460120097591803. Local number, 129-058-06AAA3.

LOCATION.--Lat 46°01'20", long 97°59'18", Hydrologic Unit 10160003. Owner: North Dakota State Water Commission.

AQUIFER.--Oakes.

WELL CHARACTERISTICS.--Drilled observation well, depth 65 ft, cased with 52 ft of 6-in diameter plastic pipe, 4 in No. 25 slot screen set 52 to 57 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder November 1993 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,313 ft. Measuring point: Top of casing 1.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--This well replaces NDSWC 9619A drilled on July 1, 1976, which collapsed in September 1993. The new well was drilled on October 3, 1993, by the North Dakota State Water Commission and instrumented on November 3, 1993.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.99 ft below land-surface datum, May 17, 2003; lowest water level, 14.58 ft below land-surface datum, August 23, 1995.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 2.40 ft below land-surface datum, July 8-9; lowest water level, 9.61 ft below land-surface datum, August 8.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.32	5.29	5.45	5.95	---	---	5.88	5.30	4.62	---	8.44	5.87
2	7.28	5.21	5.44	5.98	---	6.61	5.83	5.32	4.62	---	8.45	5.81
3	7.19	5.11	5.38	6.05	---	6.61	5.80	5.35	4.61	---	5.53	5.73
4	7.19	5.11	5.40	6.09	---	6.64	5.72	5.35	4.51	---	5.88	5.05
5	7.16	5.09	5.40	6.09	---	6.64	5.67	5.58	4.51	---	8.97	4.99
6	7.12	5.11	5.35	6.09	---	6.55	5.67	5.72	4.22	---	9.36	5.02
7	7.08	5.14	5.35	6.21	---	6.41	5.63	5.82	4.22	---	9.37	5.02
8	7.08	5.13	5.35	6.22	---	6.35	5.52	5.86	4.00	2.64	9.61	5.02
9	7.08	5.09	5.32	6.26	---	6.30	5.44	5.57	3.96	2.57	9.52	4.92
10	7.06	5.19	5.32	6.26	---	6.21	5.43	4.84	3.96	2.68	6.67	5.15
11	7.32	5.19	5.32	6.26	---	6.21	5.37	4.88	---	2.75	6.48	5.22
12	7.39	5.17	5.40	6.26	---	6.18	5.13	4.88	---	2.78	5.67	5.19
13	7.25	5.17	5.51	6.26	---	6.20	5.04	4.51	---	2.88	5.55	5.09
14	7.17	5.17	5.51	6.26	---	6.20	4.97	4.39	---	5.79	5.51	5.10
15	7.04	5.17	5.48	---	---	6.20	4.98	4.38	---	5.94	5.85	5.21
16	7.04	5.13	5.52	6.26	---	6.20	4.98	4.42	---	6.18	5.99	5.27
17	7.04	5.15	5.52	6.26	---	6.20	4.98	4.46	---	6.54	8.89	5.32
18	7.04	5.19	5.61	6.40	---	6.26	4.98	4.47	---	6.76	5.98	5.32
19	7.02	5.16	5.61	6.41	---	6.27	5.04	4.58	---	7.05	5.45	5.32
20	7.01	5.22	5.63	6.41	---	6.27	5.06	4.66	---	7.17	4.71	5.34
21	6.99	5.23	5.75	6.41	---	6.26	5.08	4.66	---	4.64	4.67	5.39
22	6.96	5.21	5.82	6.41	---	6.26	5.13	4.69	---	4.68	5.00	5.42
23	6.91	5.23	5.85	6.41	---	6.24	5.15	4.73	---	4.68	5.14	5.43
24	6.64	5.25	5.85	6.33	---	6.19	5.15	4.75	---	4.52	5.08	5.43
25	6.56	5.25	5.91	---	---	6.19	5.15	4.56	---	4.54	4.98	5.38
26	6.50	5.26	5.92	6.34	---	6.15	5.19	4.62	---	4.10	4.94	5.23
27	6.45	5.26	5.92	---	---	6.09	5.24	4.57	---	4.15	5.09	5.29
28	6.39	5.32	5.93	---	---	6.00	5.27	4.60	---	4.28	8.01	5.32
29	6.30	5.38	5.93	---	---	5.90	5.27	4.63	---	4.54	8.78	5.32
30	6.14	5.37	5.90	---	---	5.88	5.29	4.65	---	7.56	8.98	5.33
31	5.45	---	5.95	---	---	5.88	---	4.69	---	7.98	6.30	---
MAX	7.39	5.38	5.95	---	---	---	5.88	5.86	---	---	9.61	5.87
MIN	5.45	5.09	5.32	---	---	---	4.97	4.38	---	---	4.67	4.92

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460120097591803](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460120097591803)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## SARGENT COUNTY--Continued

461003097191501. Local number, 131-053-10CCC.

LOCATION.--Lat 46°10'03", long 97°19'15", Hydrologic Unit 09020105. Owner: North Dakota State Water Commission.

AQUIFER.--Milnor Channel.

WELL CHARACTERISTICS.--Drilled observation well, depth 140 ft, cased with 50 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 50 to 56 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,092 ft. Measuring point: Top of casing 2.20 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.80 ft below land-surface datum, July 15, 1998; lowest water level, 11.95 ft below land-surface datum, March 1, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
APR 12	7.08	MAY 05	7.12	JUN 02	6.95	
WATER YEAR 2005	HIGHEST	6.95	JUN 02, 2005	LOWEST	7.12	MAY 05, 2005

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=461003097191501](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=461003097191501)

## SHERIDAN COUNTY

474817100063801. Local number, 150-074-14CCC.

LOCATION.--Lat 47°48'17", long 100°06'38", Hydrologic Unit 09020202. Owner: North Dakota State Water Commission.

AQUIFER.--Martin.

WELL CHARACTERISTICS.--Drilled observation well, depth 235 ft, cased with 130 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 130 to 133 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,630 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.60 ft below land-surface datum, May 1, 2001; lowest water level, 29.06 ft below land-surface datum, August 19, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	21.85	JAN 25	21.91	MAR 15	22.00	APR 21	22.05	JUN 29	21.35	AUG 16	21.71
DEC 09	21.97										
WATER YEAR 2005	HIGHEST	21.35	JUN 29, 2005	LOWEST	22.05	APR 21, 2005					

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=474817100063801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=474817100063801)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
SIOUX COUNTY

460244101272701. Local number, 130-086-28CCC1.

LOCATION.--Lat 46°02'44", long 101°27'27", Hydrologic Unit 10130205. Owner: North Dakota State Water Commission.

AQUIFER.--Fox Hills.

WELL CHARACTERISTICS.--Drilled observation well, depth 580 ft, cased with 406 ft of 2-in diameter steel pipe, No. 12 slot screen set 406 to 424 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,062 ft. Measuring point: Top of casing 3.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 138.28 ft below land-surface datum, May 9, 2001; lowest water level, 140.13 ft below land-surface datum, August 27, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	138.67	DEC 29	138.60	MAR 09	138.58	AUG 31	138.58	SEP 12	138.63	SEP 14	138.43
NOV 18	138.75	JAN 31	138.71	MAY 31	138.64						
WATER YEAR 2005		HIGHEST	138.43	SEP 14, 2005		LOWEST	138.75	NOV 18, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460244101272701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460244101272701)

SIOUX COUNTY--Continued

460244101272702. Local number, 130-086-28CCC2.

LOCATION.--Lat 46°02'44", long 101°27'27", Hydrologic Unit 10130205. Owner: North Dakota State Water Commission.

AQUIFER.--Hell Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 210 ft, cased with 204 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 204 to 210 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,062 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 134.70 ft below land-surface datum, June 12, 2003; lowest water level, 136.70 ft below land-surface datum, November 29, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	135.18	DEC 29	134.92	MAR 09	134.89	AUG 31	135.00	SEP 12	135.11	SEP 14	135.15
NOV 18	135.07	JAN 31	134.99	MAY 31	134.99						
WATER YEAR 2005		HIGHEST	134.89	MAR 09, 2005		LOWEST	135.18	OCT 15, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=460244101272702](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=460244101272702)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## SIOUX COUNTY--Continued

462239100375601. Local number, 134-079-32ADD.

LOCATION.--Lat 46°22'39", long 100°37'56", Hydrologic Unit 10130102. Owner: North Dakota State Water Commission.

AQUIFER.--Strasburg.

WELL CHARACTERISTICS.--Drilled observation well, depth 340 ft, cased with 282 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 282 to 288 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,690 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.14 ft below land-surface datum, May 23, 2000; lowest water level, 78.60 ft below land-surface datum, November 20, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	73.40	JAN 11	73.62	APR 21	73.91	JUL 13	74.08	SEP 09	74.88	SEP 12	73.92
NOV 15	73.71	MAR 03	73.71	JUN 01	73.77						
WATER YEAR 2005		HIGHEST	73.40	OCT 19, 2004		LOWEST	74.88	SEP 09, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=462239100375601](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=462239100375601)

## STARK COUNTY

465755102410701. Local number, 140-095-08AAA.

LOCATION.--Lat 46°57'55", long 102°41'07", Hydrologic Unit 10130201. Owner: North Dakota State Water Commission.

AQUIFER.--Sentinel Butte.

WELL CHARACTERISTICS.--Drilled observation well, depth 160 ft, cased with 80 ft of 4-in diameter plastic pipe.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,419 ft. Measuring point: Top of casing 1.70 ft above land-surface datum.

PERIOD OF RECORD.--December 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.61 ft below land-surface datum, June 19, 1970; lowest water level, 22.64 ft below land-surface datum, February 25, 1993.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	19.24	JAN 06	19.34	MAR 16	19.67	JUL 07	16.62	JUL 29	17.36	SEP 15	18.21
NOV 15	19.24	FEB 23	19.63	JUN 08	17.81						
WATER YEAR 2005		HIGHEST	16.62	JUL 07, 2005		LOWEST	19.67	MAR 16, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=465755102410701](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=465755102410701)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
STEELE COUNTY

472024097315201. Local number, 145-054-27CDC.

LOCATION.--Lat 47°20'24", long 97°31'52", Hydrologic Unit 09020109. Owner: North Dakota State Water Commission.

AQUIFER.--Dakota.

WELL CHARACTERISTICS.--Drilled observation well, depth 820 ft, cased from 0 to 273 ft with 4-in diameter steel pipe and from 273 to 640 ft with 2 in diameter steel pipe, No. 12 slot screen set 640 to 660 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,145 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.01 ft below land-surface datum, November 27, 1979; lowest water level, 79.08 ft below land-surface datum, November 4, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	76.54	JAN 04	76.30	APR 20	76.28	MAY 16	75.93	JUN 21	75.47	AUG 04	75.68
NOV 24	76.29	FEB 24	76.35								
WATER YEAR 2005		HIGHEST	75.47	JUN 21, 2005		LOWEST	76.54	OCT 20, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472024097315201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472024097315201)

STUTSMAN COUNTY

463846098274101. Local number, 137-062-26DDD.

LOCATION.--Lat 46°38'46", long 98°27'41", Hydrologic Unit 10160003. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 240 ft, cased with 157 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 157 to 163 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,441.8 ft. Measuring point: Top of casing 1.92 ft above land-surface datum.

PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.92 ft below land-surface datum, June 8, 1999; lowest water level, 20.67 ft below land-surface datum, May 28, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 17	8.36	JUN 13	8.10	JUL 19	6.96	AUG 23	6.68	SEP 20	6.79
WATER YEAR 2005		HIGHEST	6.68	AUG 23, 2005		LOWEST	8.36	MAY 17, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=463846098274101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=463846098274101)



## GROUND-WATER LEVELS

67

## NETWORK SITES--Continued

## STUTSMAN COUNTY--Continued

465243098284801. Local number, 139-062-02CCC.

LOCATION.--Lat 46°52'43", long 98°28'48", Hydrologic Unit 10160003. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 240 ft, cased with 210 ft of 4-in diameter steel pipe, slotted 195 to 210 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder May 1967 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for May 1967 to August 1973. From August 1973 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,466.1 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.40 ft below land-surface datum, July 19, 1968; lowest water level, 45.88 ft below land-surface datum, August 17, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 36.52 ft below land-surface datum, December 3; lowest water level, 38.34 ft below land-surface datum, June 7.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.33	36.87	36.62	36.86	---	---	37.64	38.12	38.28	37.82	37.78	37.68
2	37.33	36.82	36.61	36.87	---	---	37.65	38.12	38.22	37.82	37.78	37.74
3	37.30	36.84	36.59	36.87	---	---	37.65	38.17	38.25	37.81	37.75	37.75
4	37.31	36.83	36.62	36.89	---	---	37.65	38.17	38.28	37.77	37.76	37.56
5	37.27	36.86	36.62	36.89	---	---	37.68	38.32	38.28	37.80	37.79	37.60
6	37.22	36.85	36.60	36.86	---	---	37.70	38.31	38.33	37.85	37.79	37.65
7	37.20	36.78	36.60	36.82	---	---	37.71	38.21	38.34	37.85	37.81	37.66
8	37.22	36.76	36.60	36.82	---	---	37.76	38.15	38.25	37.83	37.83	37.63
9	37.22	36.84	36.59	36.84	---	---	37.73	38.11	38.08	37.75	37.84	37.59
10	37.23	36.80	36.65	36.84	---	---	37.77	38.17	38.14	37.70	37.80	37.55
11	37.23	36.77	36.65	36.82	---	---	37.77	38.19	38.15	37.75	37.80	37.59
12	37.21	36.76	36.74	36.81	---	---	37.68	38.19	38.05	37.81	37.75	37.59
13	37.19	36.75	36.74	36.84	---	---	37.78	38.12	38.03	37.82	37.75	37.55
14	37.18	36.73	36.74	36.92	---	---	37.78	38.13	37.94	37.82	37.75	37.53
15	37.13	36.75	36.70	36.93	---	---	37.77	38.14	37.92	37.81	37.79	37.56
16	37.14	36.80	36.73	36.94	---	---	37.77	38.14	37.93	37.79	37.80	37.56
17	37.16	36.77	36.73	36.94	---	---	37.77	38.08	37.98	37.75	37.78	37.59
18	37.15	36.75	36.80	36.91	---	---	37.74	38.08	37.98	37.79	37.70	37.61
19	37.14	36.75	36.80	36.85	---	---	37.91	38.15	38.03	37.79	37.66	37.62
20	37.13	36.75	36.72	36.84	---	---	37.93	38.18	38.07	37.85	37.58	37.63
21	37.13	36.75	36.77	36.85	---	37.15	37.96	38.17	38.07	37.87	37.59	37.65
22	37.13	36.71	36.81	36.87	---	37.17	38.02	38.18	38.05	37.85	37.60	37.67
23	37.07	36.69	36.83	36.87	---	37.22	38.03	38.22	38.04	37.86	37.58	37.68
24	37.09	36.69	36.83	36.80	---	37.25	38.01	38.22	38.11	37.79	37.57	37.66
25	37.09	36.64	36.82	36.81	---	37.26	37.99	38.20	38.12	37.80	37.57	37.65
26	37.10	36.65	36.85	---	---	37.28	37.99	38.17	38.09	37.71	37.58	37.65
27	37.08	36.65	36.87	---	---	37.32	37.99	38.16	38.00	37.73	37.61	37.65
28	37.06	36.70	36.87	---	---	37.33	38.00	38.18	38.01	37.73	37.65	37.68
29	36.97	36.70	36.81	---	---	37.35	38.03	38.19	38.00	37.71	37.66	37.68
30	36.86	36.65	36.79	---	---	37.47	38.09	38.25	37.87	37.71	37.66	37.67
31	36.87	---	36.86	---	---	37.59	---	38.28	---	37.77	37.66	---
MAX	37.33	36.87	36.87	---	---	---	38.09	38.32	38.34	37.87	37.84	37.75
MIN	36.86	36.64	36.59	---	---	---	37.64	38.08	37.87	37.70	37.57	37.53

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=465243098284801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=465243098284801)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 STUTSMAN COUNTY--Continued

465757098274401. Local number, 140-062-02DDD.

LOCATION.--Lat 46°57'57", long 98°27'44", Hydrologic Unit 10160003. Owner: Ottertail Power Company.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 263 ft, cased with 207 ft of 12-in diameter steel pipe, No. 8 slot screen set 207 to 257 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder July 1984 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,480 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.04 ft below land-surface datum, January 13 and 17, 1985; lowest water level, 79.80 ft below land-surface datum, September 3, 2005.

EXTREMES FOR CURRENT YEAR.--Highest water level, 73.39 ft below land-surface datum, November 22; lowest water level, 79.80 ft below land-surface datum, September 3.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77.28	75.28	74.35	75.52	75.93	76.94	78.33	78.25	78.64	78.49	79.28	79.73
2	77.24	75.11	74.44	75.41	75.96	76.99	78.24	78.29	78.69	78.53	79.33	79.79
3	77.24	74.90	74.56	75.42	76.05	77.00	78.11	78.33	78.70	78.64	79.46	79.80
4	77.30	74.74	74.82	75.43	76.12	76.98	77.97	78.38	78.71	78.75	79.57	79.78
5	77.24	74.60	74.91	75.43	76.21	77.00	77.84	78.46	78.69	78.80	79.62	79.71
6	77.18	74.47	75.04	75.33	76.35	77.00	77.82	78.55	78.68	78.83	79.59	79.56
7	77.15	74.36	75.14	75.24	76.41	77.12	77.79	78.62	78.67	78.92	79.58	79.49
8	77.16	74.25	75.21	75.24	76.42	77.24	77.67	78.68	78.66	78.92	79.58	79.41
9	77.11	74.06	75.42	75.28	76.39	77.27	77.52	78.78	78.75	78.81	79.62	79.32
10	76.97	73.87	75.50	75.33	76.44	77.34	77.50	79.01	78.78	78.69	79.70	79.34
11	76.88	73.82	75.51	75.33	76.49	77.41	77.49	79.17	78.82	78.75	79.70	79.47
12	76.86	73.67	75.54	75.33	76.53	77.51	77.38	79.24	78.91	78.87	79.63	79.57
13	76.94	73.65	75.65	75.47	76.56	77.63	77.35	79.22	78.96	78.91	79.64	79.60
14	76.94	73.61	75.66	75.52	76.60	77.71	77.29	79.17	79.02	78.91	79.60	79.67
15	76.99	73.56	75.61	75.54	76.67	77.78	77.24	79.14	79.07	78.84	79.62	79.62
16	77.04	73.49	75.73	75.53	76.73	77.86	77.22	79.06	79.10	78.74	79.61	79.62
17	77.02	73.55	75.73	75.51	76.82	77.94	77.24	79.01	79.04	78.56	79.53	79.57
18	76.90	73.60	75.79	75.42	76.86	78.04	77.25	79.03	78.98	78.41	79.35	79.62
19	76.74	73.55	75.79	75.47	76.87	78.09	77.39	79.11	78.85	78.34	79.35	79.60
20	76.74	73.51	75.60	75.48	76.85	78.12	77.46	79.18	78.79	78.46	79.33	79.67
21	76.67	73.53	75.65	75.48	76.77	78.14	77.51	79.10	78.73	78.57	79.30	79.63
22	76.59	73.46	75.74	75.36	76.79	78.16	77.58	78.92	78.69	78.65	79.26	79.65
23	76.45	73.47	75.79	75.25	76.79	78.13	77.64	78.78	78.60	78.66	79.30	79.62
24	76.39	73.56	75.75	75.05	76.80	78.28	77.67	78.65	78.57	78.79	79.32	79.56
25	76.31	73.66	75.69	74.96	76.82	78.32	77.74	78.57	78.56	78.88	79.40	79.54
26	76.18	73.80	75.69	75.06	76.82	78.29	77.91	78.55	78.54	78.96	79.38	79.55
27	76.04	73.91	75.65	75.10	76.87	78.25	78.02	78.53	78.53	78.96	79.45	79.56
28	75.91	74.08	75.61	75.22	76.93	78.25	78.12	78.48	78.56	79.00	79.56	79.65
29	75.75	74.17	75.55	75.45	---	78.19	78.17	78.50	78.52	79.04	79.63	79.65
30	75.54	74.25	75.50	75.61	---	78.20	78.21	78.51	78.45	79.09	79.64	79.52
31	75.48	---	75.51	75.79	---	78.31	---	78.55	---	79.21	79.69	---
MAX	77.30	75.28	75.79	75.79	76.93	78.32	78.33	79.24	79.10	79.21	79.70	79.80
MIN	75.48	73.46	74.35	74.96	75.93	76.94	77.22	78.25	78.45	78.34	79.26	79.32

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=465757098274401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=465757098274401)

## GROUND-WATER LEVELS

69

## NETWORK SITES--Continued

## TOWNER COUNTY

482908099134601. Local number, 158-066-30BBB.

LOCATION.--Lat 48°29'08", long 99°13'46", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 322 ft, cased with 208 ft of 5-in diameter steel pipe, No. 40 slot screen set 208 to 213 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder April 1980 to November 1996 and October 1998 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,481 ft. Measuring point: Top of casing 1.40 ft above land-surface datum.

PERIOD OF RECORD.--June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.60 ft below land-surface datum, August 15-16, 1999; lowest water level, 13.99 ft below land-surface datum, April 11-13, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level, 8.38 ft below land-surface datum, August 31 and September 10; lowest water level, 9.39 ft below land-surface datum, May 11.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.63	8.67	8.68	8.76	8.84	9.03	9.27	9.35	9.25	8.89	8.52	8.44
2	8.62	8.67	8.68	8.72	8.84	9.05	9.26	9.36	9.21	8.86	8.51	8.48
3	8.66	8.64	8.62	8.73	8.85	9.04	9.25	9.36	9.22	8.82	8.48	8.47
4	8.68	8.65	8.70	8.77	8.85	9.06	9.23	9.35	9.22	8.88	8.51	8.43
5	8.64	8.63	8.70	8.77	8.85	9.06	9.29	9.34	9.21	8.88	8.51	8.43
6	8.62	8.65	8.63	8.71	8.92	9.04	9.31	9.35	9.24	8.87	8.48	8.49
7	8.61	8.71	8.64	8.72	8.94	9.07	9.30	9.32	9.24	8.85	8.48	8.49
8	8.65	8.71	8.64	8.72	8.94	9.08	9.26	9.29	9.18	8.82	8.50	8.48
9	8.65	8.68	8.68	8.74	8.91	9.10	9.25	9.29	9.17	8.70	8.52	8.43
10	8.66	8.73	8.68	8.74	8.90	9.09	9.28	9.37	9.17	8.69	8.52	8.40
11	8.68	8.73	8.68	8.72	8.90	9.09	9.29	9.39	9.16	8.64	8.51	8.43
12	8.66	8.71	8.73	8.70	8.88	9.10	9.29	9.38	9.14	8.65	8.49	8.45
13	8.69	8.71	8.74	8.78	8.87	9.13	9.31	9.32	9.14	8.65	8.51	8.43
14	8.67	8.71	8.74	8.80	8.92	9.14	9.31	9.34	9.12	8.62	8.50	8.44
15	8.63	8.71	8.69	8.81	8.95	9.14	9.31	9.34	9.13	8.60	8.51	8.45
16	8.64	8.68	8.73	8.83	8.96	9.15	9.32	9.31	9.14	8.58	8.53	8.47
17	8.65	8.70	8.72	8.83	9.00	9.15	9.32	9.28	9.14	8.52	8.50	8.45
18	8.65	8.72	8.77	8.77	8.99	9.19	9.27	9.25	9.12	8.54	8.44	8.46
19	8.62	8.70	8.77	8.78	8.99	9.19	9.33	9.28	9.13	8.54	8.46	8.46
20	8.65	8.70	8.66	8.78	8.97	9.19	9.33	9.30	9.17	8.56	8.49	8.47
21	8.62	8.70	8.74	8.79	8.99	9.21	9.34	9.28	9.18	8.57	8.51	8.48
22	8.61	8.66	8.78	8.84	9.01	9.21	9.37	9.24	9.16	8.57	8.51	8.49
23	8.58	8.68	8.78	8.80	9.01	9.17	9.37	9.26	9.13	8.55	8.49	8.50
24	8.60	8.68	8.75	8.76	9.01	9.21	9.34	9.26	9.17	8.53	8.47	8.47
25	8.62	8.67	8.75	8.79	9.02	9.21	9.29	9.28	9.18	8.54	8.42	8.48
26	8.65	8.64	8.75	8.84	9.02	9.19	9.30	9.27	9.15	8.55	8.41	8.48
27	8.65	8.65	8.75	8.84	9.02	9.17	9.31	9.26	9.01	8.54	8.41	8.49
28	8.63	8.69	8.74	8.81	9.03	9.13	9.32	9.26	9.02	8.53	8.42	8.53
29	8.58	8.69	8.72	8.84	---	9.14	9.32	9.28	9.01	8.54	8.43	8.51
30	8.60	8.67	8.72	8.84	---	9.21	9.34	9.28	8.88	8.51	8.42	8.46
31	8.64	---	8.76	8.84	---	9.26	---	9.28	---	8.53	8.40	---
MAX	8.69	8.73	8.78	8.84	9.03	9.26	9.37	9.39	9.25	8.89	8.53	8.53
MIN	8.58	8.63	8.62	8.70	8.84	9.03	9.23	9.24	8.88	8.51	8.40	8.40

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=482908099134601](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=482908099134601)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 TOWNER COUNTY--Continued

484209099174101. Local number, 160-067-10BBB1.

LOCATION.--Lat 48°42'09", long 99°17'41", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 402 ft, cased with 356 ft of 2-in diameter steel pipe, No. 12 slot screen set 356 to 362 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,570 ft. Measuring point: Top of casing 4.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.48 ft below land-surface datum, November 18, 2002; lowest water level, 42.98 ft below land-surface datum, June 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	28.88	JAN 26	28.24	MAR 15	28.38	APR 21	28.69	JUN 28	28.61	AUG 16	28.07
DEC 09	29.21										
WATER YEAR 2005		HIGHEST	28.07	AUG 16, 2005		LOWEST	29.21	DEC 09, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484209099174101](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484209099174101)

TOWNER COUNTY--Continued

484209099174102. Local number, 160-067-10BBB2.

LOCATION.--Lat 48°42'09", long 99°17'41", Hydrologic Unit 09020201. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 62 ft, cased with 57 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 57 to 60 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,570 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.15 ft below land-surface datum, June 9, 2004; lowest water level, 33.50 ft below land-surface datum, September 11, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	5.12	JAN 26	7.28	MAR 15	8.09	APR 21	3.05	JUN 28	2.40	AUG 16	4.30
DEC 09	5.19										
WATER YEAR 2005		HIGHEST	2.40	JUN 28, 2005		LOWEST	8.09	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=484209099174102](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=484209099174102)

## GROUND-WATER LEVELS

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NETWORK SITES--Continued

TOWNER COUNTY--Continued

485659099222801. Local number, 163-067-18AAA1.

LOCATION.--Lat 48°56'59", long 99°22'28", Hydrologic Unit 09020313. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 282 ft, cased with 252 ft of 2-in diameter steel pipe, No. 18 slot screen set 252 to 258 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,582 ft. Measuring point: Top of casing 3.04 ft above land-surface datum.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.10 ft below land-surface datum, June 22, 1999; lowest water level, 45.00 ft below land-surface datum, April 3, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	40.20	JAN 26	40.93	MAR 15	41.14	APR 21	39.74	JUN 28	39.38	AUG 16	39.20
DEC 09	40.33										
WATER YEAR 2005		HIGHEST	39.20	AUG 16, 2005		LOWEST	41.14	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485659099222801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485659099222801)

TOWNER COUNTY--Continued

485659099222802. Local number, 163-067-18AAA2.

LOCATION.--Lat 48°56'59", long 99°22'28", Hydrologic Unit 09020313. Owner: North Dakota State Water Commission.

AQUIFER.--Spiritwood.

WELL CHARACTERISTICS.--Drilled observation well, depth 142 ft, cased with 118 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 118 to 121 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,582 ft. Measuring point: Top of casing 2.80 ft above land-surface datum.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.38 ft below land-surface datum, June 22, 1999; lowest water level, 43.67 ft below land-surface datum, April 3, 1991.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	39.00	JAN 26	39.83	MAR 15	39.98	APR 21	38.61	JUN 28	38.36	AUG 16	38.14
DEC 09	39.45										
WATER YEAR 2005		HIGHEST	38.14	AUG 16, 2005		LOWEST	39.98	MAR 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=485659099222802](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=485659099222802)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
WALSH COUNTY

481234097234604. Local number, 155-053-25CDD4.

LOCATION.--Lat 48°12'35", long 97°23'44", Hydrologic Unit 09020308. Owner: U.S. Geological Survey.

AQUIFER.--Lacustrine Deposits.

WELL CHARACTERISTICS.--Drilled observation well, depth 85 ft, cased with 80 ft of 2-in diameter plastic pipe, screen set 80 to 85 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 834 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -2.00 ft below land-surface datum, Nov. 15, 1996; lowest water level, 6.84 ft below land-surface datum, June 24, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
(READINGS ABOVE LAND SURFACE INDICATED BY "--")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	-1.49	NOV 16	-1.57	JUN 01	-1.54	JUL 26	-1.86	AUG 15	-0.62
WATER YEAR 2005		HIGHEST	-1.86	JUL 26, 2005		LOWEST	-0.62	AUG 15, 2005	

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481234097234604](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481234097234604)

WALSH COUNTY--Continued

481234097234605. Local number, 155-053-25CDD5.

LOCATION.--Lat 48°12'35", long 97°23'44", Hydrologic Unit 09020308. Owner: U.S. Geological Survey.

AQUIFER.--Lacustrine Deposits.

WELL CHARACTERISTICS.--Drilled observation well, depth 25 ft, cased with 20 ft of 2-in diameter plastic pipe, screen set 20 to 25 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 834 ft. Measuring point: Top of casing 2.25 ft above land-surface datum.

PERIOD OF RECORD.--September 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.99 ft below land-surface datum, June 27, 2002; lowest water level, 7.09 ft below land-surface datum, January 19, 1995, and February 12, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	3.14	JAN 03	4.15	MAR 18	5.47	JUN 01	1.68	JUL 26	2.80	AUG 15	4.59
NOV 16	2.72	FEB 03	4.87								
WATER YEAR 2005		HIGHEST	1.68	JUN 01, 2005		LOWEST	5.47	MAR 18, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481234097234605](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481234097234605)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## WALSH COUNTY--Continued

481841097490301. Local number, 156-056-22DDD.

LOCATION.--Lat 48°18'41", long 97°49'03", Hydrologic Unit 09020308. Owner: North Dakota State Water Commission.

AQUIFER.--Fordville.

WELL CHARACTERISTICS.--Drilled observation well, depth 280 ft, cased with 52 ft of 4-in diameter plastic pipe, screen set 52 to 57 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder August 1968 to current year. Only intermittent low and EOM water levels, obtained from strip-chart recorders, are available from the Water Science Center office for August 1968 to September 1970. From October 1970 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,170 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.35 ft below land-surface datum, July 22, 1974; lowest water level, 24.26 ft below land-surface datum, June 7, 1993.

EXTREMES FOR CURRENT YEAR.--Highest water level, 18.58 ft below land-surface datum, September 10; lowest water level, 19.99 ft below land-surface datum, March 18 and 24.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.24	19.34	19.36	19.53	19.70	19.71	19.78	19.79	19.82	19.23	18.97	18.95
2	19.23	19.35	19.36	19.52	19.72	19.71	19.76	19.79	19.77	19.19	19.02	18.93
3	19.23	19.34	19.35	19.53	19.73	19.71	19.71	19.79	19.71	19.16	18.97	18.93
4	19.27	19.35	19.36	19.53	19.72	19.77	19.72	19.79	19.68	19.12	18.98	18.89
5	19.20	19.32	19.36	19.52	19.63	19.87	19.78	19.86	19.64	19.12	18.98	18.89
6	19.20	19.31	19.35	19.50	19.64	19.87	19.78	19.86	19.67	19.12	18.92	18.91
7	19.26	19.35	19.36	19.52	19.64	19.85	19.78	19.85	19.75	19.11	18.93	18.89
8	19.26	19.35	19.36	19.52	19.64	19.85	19.77	19.80	19.68	19.14	18.94	18.85
9	19.22	19.31	19.47	19.52	19.73	19.85	19.77	19.78	19.66	19.12	19.01	18.79
10	19.22	19.35	19.45	19.53	19.73	19.86	19.77	19.79	19.75	19.08	18.99	18.78
11	19.21	19.36	19.44	19.53	19.73	19.86	19.78	19.80	19.78	19.07	18.95	18.75
12	19.22	19.38	19.50	19.56	19.68	19.86	19.78	19.78	19.67	19.04	18.91	18.78
13	19.25	19.40	19.48	19.56	19.68	19.86	19.79	19.73	19.66	19.04	18.90	18.79
14	19.20	19.34	19.47	19.56	19.69	19.87	19.80	19.75	19.65	19.17	18.90	18.77
15	19.28	19.36	19.53	19.56	19.69	19.87	19.80	19.70	19.59	19.17	19.01	18.78
16	19.25	19.32	19.51	19.64	19.69	19.88	19.80	19.75	19.55	19.11	19.02	18.79
17	19.25	19.35	19.52	19.64	19.69	19.88	19.79	19.78	19.56	19.01	18.99	18.78
18	19.26	19.35	19.52	19.70	19.69	19.99	19.80	19.79	19.48	19.00	18.89	18.79
19	19.26	19.32	19.44	19.66	19.69	19.98	19.84	19.75	19.44	19.00	18.88	18.79
20	19.27	19.32	19.45	19.64	19.69	19.98	19.80	19.75	19.48	19.07	18.86	18.83
21	19.24	19.32	19.51	19.68	19.70	19.97	19.85	19.77	19.48	19.10	18.85	18.81
22	19.26	19.30	19.53	19.70	19.70	19.95	19.87	19.77	19.48	19.08	18.89	18.83
23	19.26	19.32	19.53	19.58	19.70	19.95	19.82	19.76	19.45	19.02	18.90	18.82
24	19.26	19.35	19.48	19.66	19.70	19.99	19.81	19.81	19.42	18.95	18.85	18.81
25	19.31	19.35	19.52	19.66	19.70	19.97	19.82	19.78	19.42	18.98	18.82	18.82
26	19.32	19.31	19.53	19.67	19.70	19.97	19.82	19.84	19.33	18.99	18.82	18.82
27	19.33	19.33	19.54	19.69	19.70	19.92	19.82	19.83	19.34	18.99	18.83	18.83
28	19.30	19.34	19.54	19.71	19.71	19.86	19.82	19.77	19.27	18.99	18.75	18.86
29	19.36	19.35	19.54	19.70	---	19.79	19.81	19.77	19.26	18.99	18.85	18.83
30	19.34	19.33	19.53	19.70	---	19.79	19.81	19.77	19.26	18.94	18.87	18.87
31	19.32	---	19.54	19.70	---	19.79	---	19.77	---	18.93	18.95	---
MAX	19.36	19.40	19.54	19.71	19.73	19.99	19.87	19.86	19.82	19.23	19.02	18.95
MIN	19.20	19.30	19.35	19.50	19.63	19.71	19.71	19.70	19.26	18.93	18.75	18.75

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481841097490301](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481841097490301)

GROUND-WATER LEVELS  
 NETWORK SITES--Continued  
 WALSH COUNTY--Continued

482408097443201. Local number, 157-055-21DBC.

LOCATION.--Lat 48°24'08", long 97°44'32", Hydrologic Unit 09020310. Owner: North Dakota State Water Commission.

AQUIFER.--Dakota.

WELL CHARACTERISTICS.--Drilled observation well, depth 496 ft, cased with 491 ft of 4-in diameter steel pipe, screen set 491 to 496 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 975 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 87.08 ft below land-surface datum, January 6, 2003; lowest water level, 92.09 ft below land-surface datum, June 15, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	87.30	DEC 22	88.07	MAR 18	87.88	JUN 02	87.74	JUL 19	87.88	AUG 18	87.82
NOV 16	87.84	FEB 03	87.81	MAY 03	88.01						
WATER YEAR 2005		HIGHEST	87.30	OCT 04, 2004		LOWEST	88.07	DEC 22, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=482408097443201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=482408097443201)

WALSH COUNTY--Continued

482449098095801. Local number, 157-058-18DDD.

LOCATION.--Lat 48°24'49", long 98°09'58", Hydrologic Unit 09020308. Owner: North Dakota State Water Commission.

AQUIFER.--Pierre Shale.

WELL CHARACTERISTICS.--Drilled observation well, depth 140 ft, cased with 80 ft of 4-in diameter plastic pipe, screen set 80 to 100 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,580 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -0.89 ft below land-surface datum, December 5, 1972; lowest water level, 9.89 ft below land-surface datum, November 21, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	3.21	DEC 22	4.73	MAR 18	5.96	JUN 02	0.94	JUL 22	1.38	AUG 17	1.97
NOV 16	2.82	FEB 03	6.40	MAY 05	2.43						
WATER YEAR 2005		HIGHEST	0.94	JUN 02, 2005		LOWEST	6.40	FEB 03, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=482449098095801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=482449098095801)



## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## WARD COUNTY

481058101120403. Local number, 154-082-03CDC3.

LOCATION.--Lat 48°10'58", long 101°12'04", Hydrologic Unit 09010001. Owner: North Dakota State Water Commission.

AQUIFER.--Sundre Buried Channel.

WELL CHARACTERISTICS.--Drilled observation well, depth 220 ft, cased with 170 ft of 12-in diameter steel pipe, screen set 170 to 220 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder November 1976 to current year, daily maximum and minimum recorded water levels also are available. Measured using a steel tape December 1968 to June 1973.

DATUM.--Altitude of land-surface datum is 1,544 ft. Measuring point: Top of casing 1.45 ft above land-surface datum.

PERIOD OF RECORD.--December 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.73 ft below land-surface datum, June 9, 1970; lowest water level, 64.85 ft below land-surface datum, September 28-29, 2005.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 55.02 ft below land-surface datum, December 15, may have been higher in January, February, or March; lowest water level, 64.85 ft below land-surface datum, September 28-29.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.79	58.47	56.79	56.05	---	---	---	---	---	62.61	63.50	64.02
2	59.76	58.42	56.79	55.98	---	---	---	---	---	62.32	63.50	64.06
3	59.77	58.22	56.68	55.99	---	---	---	---	---	62.09	63.62	64.06
4	59.78	58.21	56.73	56.06	---	---	---	---	---	62.05	63.69	64.01
5	59.67	58.07	56.73	56.06	---	---	---	---	---	62.30	63.70	64.08
6	59.60	57.96	56.58	55.84	---	---	---	---	---	62.36	63.67	64.20
7	59.54	58.02	56.56	55.80	---	---	---	---	---	62.38	63.68	64.22
8	59.61	58.00	56.53	55.78	---	---	---	---	---	62.45	63.72	64.21
9	59.61	57.86	56.57	55.81	---	---	---	---	---	62.45	63.68	64.12
10	59.60	57.89	56.60	55.81	---	---	---	---	---	62.54	63.65	64.09
11	59.63	57.88	56.54	55.74	---	---	---	---	---	62.67	63.65	64.20
12	59.58	57.75	56.65	55.77	---	---	---	---	---	62.74	63.63	64.23
13	59.64	57.70	56.71	55.97	---	---	---	---	---	62.75	63.53	64.25
14	59.56	57.62	56.70	55.80	---	---	---	---	---	62.81	63.63	64.25
15	59.49	57.57	56.48	55.84	---	---	---	---	---	62.84	63.70	64.15
16	59.49	57.42	56.67	55.98	---	---	---	---	---	62.84	63.72	64.24
17	59.47	57.44	56.65	55.99	---	---	---	---	---	62.78	63.70	64.29
18	59.47	57.46	55.94	55.76	---	---	---	---	---	62.50	63.62	64.13
19	59.45	57.34	55.93	55.72	---	---	---	---	---	62.77	63.32	64.22
20	59.48	57.28	55.91	---	---	---	---	---	---	63.05	63.65	64.39
21	59.40	57.28	56.14	---	---	---	---	---	63.12	63.06	63.76	64.58
22	59.40	57.10	56.23	---	---	---	---	---	63.10	63.11	63.76	64.66
23	59.34	57.08	56.27	---	---	---	---	---	63.08	63.11	63.75	64.66
24	59.46	57.08	56.15	---	---	---	---	---	63.18	63.15	63.73	64.69
25	59.48	56.95	56.05	---	---	---	---	---	63.21	63.27	63.80	64.61
26	59.26	56.92	56.06	---	---	---	---	---	63.19	63.31	63.80	64.69
27	59.03	56.95	56.07	---	---	---	---	---	62.95	63.33	63.83	64.79
28	58.83	57.00	55.98	---	---	---	---	---	62.87	63.39	63.86	64.85
29	58.60	56.96	55.88	---	---	---	---	---	62.83	63.41	63.88	64.85
30	58.49	56.82	55.86	---	---	---	---	---	62.62	63.41	63.87	64.79
31	58.43	---	56.04	---	---	---	---	---	---	63.50	63.89	---
MAX	59.79	58.47	56.79	---	---	---	---	---	---	63.50	63.89	64.85
MIN	58.43	56.82	55.86	---	---	---	---	---	---	62.05	63.32	64.01

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481058101120403](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481058101120403)

GROUND-WATER LEVELS  
NETWORK SITES--Continued  
WELLS COUNTY

472329099194401. Local number, 145-068-10BCC.

LOCATION.--Lat 47°23'29", long 99°19'44", Hydrologic Unit 10160002. Owner: North Dakota State Water Commission.

AQUIFER.--Pipestem Creek.

WELL CHARACTERISTICS.--Drilled observation well, depth 52 ft, cased with 25 ft of 1.25-in diameter plastic pipe, No. 12 slot screen set 25 to 27 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,630 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.94 ft below land-surface datum, May 2, 2001; lowest water level, 13.61 ft below land-surface datum, November 30, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	10.06	DEC 08	10.28	MAR 14	11.01	APR 20	10.91	JUN 27	9.43	AUG 15	9.90
WATER YEAR 2005		HIGHEST	9.43	JUN 27, 2005		LOWEST	11.01	MAR 14, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=472329099194401](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=472329099194401)

WELLS COUNTY--Continued

474419099371201. Local number, 149-070-09DAA1.

LOCATION.--Lat 47°44'19", long 99°37'12", Hydrologic Unit 10160001. Owner: North Dakota State Water Commission.

AQUIFER.--New Rockford.

WELL CHARACTERISTICS.--Drilled observation well, depth 283 ft, cased with 197 ft of 1.25-in diameter plastic pipe, slotted 177 to 197 ft below land-surface datum.

INSTRUMENTATION.--Measured using an electric tape.

DATUM.--Altitude of land-surface datum is 1,612.7 ft. Measuring point: Top of casing 2.16 ft above land-surface datum.

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.02 ft below land-surface datum, May 17, 2005; lowest water level, 66.65 ft below land-surface datum, March 15, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	62.31	JAN 27	62.44	APR 20	62.52	JUN 27	62.52	AUG 15	62.60	AUG 23	62.40
DEC 08	62.31	MAR 14	62.39	MAY 17	62.02						
WATER YEAR 2005		HIGHEST	62.02	MAY 17, 2005		LOWEST	62.60	AUG 15, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=474419099371201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=474419099371201)

## GROUND-WATER LEVELS

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## NETWORK SITES--Continued

## WILLIAMS COUNTY

481056103024201. Local number, 154-096-08AAA.

LOCATION.--Lat 48°10'56", long 103°02'42", Hydrologic Unit 10110101. Owner: North Dakota State Water Commission.

AQUIFER.--Hofflund.

WELL CHARACTERISTICS.--Drilled observation well, depth 120 ft, cased with 77 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 77 to 83 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 1,864.95 ft. Measuring point: Top of casing 1.87 ft above land-surface datum.

PERIOD OF RECORD.--August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.55 ft below land-surface datum, August 4, 1975; lowest water level, 34.05 ft below land-surface datum, August 11, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 30	29.35	MAY 04	29.74	JUN 02	29.90	JUL 05	31.19	AUG 11	34.05	SEP 08	32.68
WATER YEAR 2005		HIGHEST	29.74	MAY 04, 2005		LOWEST	34.05	AUG 11, 2005			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=481056103024201](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=481056103024201)

## WILLIAMS COUNTY--Continued

483016103242801. Local number, 158-099-13DDD.

LOCATION.--Lat 48°30'16", long 103°24'28", Hydrologic Unit 10110102. Owner: North Dakota State Water Commission.

AQUIFER.--Ray.

WELL CHARACTERISTICS.--Drilled observation well, depth 294 ft, cased with 255 ft of 1.25-in diameter plastic pipe, No. 18 slot screen set 255 to 257 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,243 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

PERIOD OF RECORD.--July 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 133.63 ft below land-surface datum, August 30, 2005; lowest water level, 146.09 ft below land-surface datum, November 8, 1965.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	134.28	FEB 09	134.03	MAY 12	134.00	JUL 19	133.72	AUG 09	133.95	AUG 30	133.63
NOV 16	134.12	MAR 08	133.91	JUN 21	133.89						
WATER YEAR 2005		HIGHEST	133.63	AUG 30, 2005		LOWEST	134.28	OCT 13, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483016103242801](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483016103242801)

## GROUND-WATER LEVELS

NETWORK SITES--Continued

WILLIAMS COUNTY--Continued

483127103373102. Local number, 158-100-08DAA2.

LOCATION.--Lat 48°31'27", long 103°37'31", Hydrologic Unit 10110102. Owner: North Dakota State Water Commission.

AQUIFER.--Little Muddy.

WELL CHARACTERISTICS.--Drilled observation well, depth 94 ft, cased with 78 ft of 4-in diameter plastic pipe, slotted 68 to 78 ft below land-surface datum.

INSTRUMENTATION.--Water-level recorder August 1966 to current year, daily maximum and minimum recorded water levels also are available.

DATUM.--Altitude of land-surface datum is 1,997.8 ft. Measuring point: Top of casing 1.43 ft above land-surface datum.

PERIOD OF RECORD.--August 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.24 ft below land-surface datum, May 4, 1976; lowest water level, 31.70 ft below land-surface datum, August 27, 2003.

EXTREMES FOR CURRENT YEAR.--Highest water level, 27.19 ft below land-surface datum, April 8; lowest water level, 31.43 ft below land-surface datum, August 17.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.16	28.38	28.04	27.91	27.73	27.64	27.39	27.68	28.57	28.31	30.91	30.00
2	29.05	28.33	28.03	27.86	27.72	27.67	27.31	27.63	28.11	28.23	31.17	29.76
3	29.00	28.33	28.00	27.86	27.73	27.66	27.31	27.85	28.02	28.22	30.43	30.65
4	28.99	28.33	28.03	27.88	27.69	27.68	27.29	27.91	27.97	28.22	30.14	30.77
5	28.87	28.24	28.03	27.86	27.73	27.66	27.36	28.22	29.12	28.25	30.13	30.80
6	28.85	28.30	28.00	27.76	27.74	27.63	27.36	28.25	29.58	29.49	30.59	30.70
7	28.83	28.31	28.00	27.85	27.75	27.63	27.30	28.00	29.58	29.50	31.07	30.81
8	28.84	28.25	27.97	27.82	27.71	27.56	27.22	28.00	28.31	29.75	30.42	30.82
9	28.85	28.25	28.03	27.83	27.68	27.56	27.25	27.87	28.12	30.07	30.34	29.88
10	28.82	28.29	28.03	27.82	27.70	27.56	27.36	27.78	28.02	30.40	30.40	29.99
11	28.80	28.26	28.00	27.77	27.68	27.53	27.36	27.78	27.94	30.40	30.39	30.01
12	28.72	28.20	28.04	27.84	27.66	27.53	27.30	27.72	27.87	29.65	30.66	29.94
13	28.72	28.18	28.04	27.87	27.67	27.53	27.31	27.65	27.85	30.04	30.91	29.93
14	28.61	28.17	28.00	27.85	27.71	27.52	27.30	27.66	28.01	30.48	30.31	30.12
15	28.61	28.16	27.97	27.83	27.72	27.50	27.30	27.78	28.47	30.45	31.31	30.32
16	28.60	28.16	27.99	27.83	27.72	27.50	27.30	28.15	29.22	30.30	31.13	30.32
17	28.56	28.17	27.92	27.79	27.72	27.48	27.28	28.27	29.37	30.41	31.43	29.85
18	28.55	28.17	27.99	27.79	27.70	27.49	27.30	28.14	29.93	30.33	31.30	29.74
19	28.55	28.13	27.95	27.79	27.67	27.49	27.32	28.07	30.09	29.37	30.19	29.64
20	28.55	28.13	27.95	27.76	27.67	27.48	27.32	28.00	30.18	29.65	29.92	29.79
21	28.48	28.12	27.97	27.87	27.71	27.47	27.42	27.98	29.93	29.76	30.45	30.03
22	28.48	28.13	27.98	27.87	27.71	27.47	27.92	27.98	28.93	29.76	30.81	29.98
23	28.43	28.13	27.98	27.72	27.70	27.45	28.64	27.75	28.90	30.13	31.22	29.61
24	28.46	28.08	27.83	27.72	27.68	27.47	28.85	27.74	28.90	30.80	30.68	29.61
25	28.44	28.04	27.92	27.77	27.68	27.46	28.48	27.71	29.14	30.86	30.46	29.59
26	28.43	28.07	27.92	27.77	27.68	27.38	28.27	27.69	29.00	30.28	30.04	29.81
27	28.40	28.07	27.92	27.75	27.69	27.32	28.50	27.67	28.64	30.48	29.77	30.08
28	28.36	28.08	27.84	27.76	27.70	27.31	28.52	27.70	28.55	30.56	30.52	30.14
29	28.35	28.07	27.82	27.76	---	27.32	27.81	28.03	28.43	29.74	31.10	29.83
30	28.35	28.03	27.84	27.73	---	27.38	27.71	29.40	28.36	30.77	31.31	29.60
31	28.36	---	27.91	27.74	---	27.41	---	29.58	---	30.77	30.86	---
MAX	29.16	28.38	28.04	27.91	27.75	27.68	28.85	29.58	30.18	30.86	31.43	30.82
MIN	28.35	28.03	27.82	27.72	27.66	27.31	27.22	27.63	27.85	28.22	29.77	29.59

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483127103373102](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483127103373102)

## GROUND-WATER LEVELS

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NETWORK SITES--Continued

WILLIAMS COUNTY--Continued

483700103191501. Local number, 159-098-10AAD.

LOCATION.--Lat 48°37'00", long 103°19'15", Hydrologic Unit 10110102. Owner: North Dakota State Water Commission.

AQUIFER.--West Wildrose.

WELL CHARACTERISTICS.--Drilled observation well, depth 260 ft, cased with 214 ft of 1.25-in diameter plastic pipe, slotted 200 to 214 ft below land-surface datum.

INSTRUMENTATION.--Measured using a steel tape.

DATUM.--Altitude of land-surface datum is 2,225 ft. Measuring point: Top of casing 3.30 ft below land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 139.83 ft below land-surface datum, August 9, 2005; lowest water level, 153.81 ft below land-surface datum, November 8, 1965.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	146.58	FEB 09	146.28	MAY 12	146.22	JUL 19	146.09	AUG 09	139.83	AUG 30	146.18
NOV 16	146.43	MAR 08	146.21	JUN 21	146.13						
WATER YEAR 2005		HIGHEST	139.83	AUG 09, 2005		LOWEST	146.58	OCT 13, 2004			

Period of record hydrograph is available at:

[http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site\\_no=483700103191501](http://nwis.waterdata.usgs.gov/nd/nwis/gwlevels/?site_no=483700103191501)

## GROUND-WATER QUALITY

## NETWORK SITES

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local ident- ifier	County	Station number	Geo- logic unit	Depth of well, feet below LSD (72008)	Date	Time	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (00095)
131-102-07DDD3	Bowman	461039103282803	125TRVL	138	08-10-05	1130	8.5	8.8	2040	1990
163-093-17DDD	Burke	485618102455401	112CLMB	76	07-28-05	1000	7.8	7.7	3640	3590
161-103-02CCB	Divide	484746104015901	112SKJL	96	07-28-05	1400	7.5	7.9	998	968
163-097-34ABB	Divide	485432103151701	112CRSB	378	07-28-05	1145	8.1	8.3	1890	1790
145-095-22DAD2	Dunn	472144102453402	112KILDR	160	08-09-05	1630	7.8	8.1	1470	1440
135-090-23BBB2	Grant	463000101575102	125TRGV	283	09-15-05	1120	8.1	8.9	2180	2130
150-098-23AAB2	McKenzie	474814103104702	112CRCK	103	08-09-05	1400	8.1	8.3	2180	2120
138-081-09ABB1	Morton	464734100543501	211FXHL	537	09-07-05	1230	8.2	8.4	3730	3770
138-081-09ABB2	Morton	464734100543502	211HLCK	348	09-07-05	1340	8.9	8.9	2400	2390
138-081-09ABB4	Morton	464734100543504	125CBLD	159	09-07-05	1430	8.1	8.4	3650	3870
139-086-35BCC	Morton	464847101303801	112SIMS	63	09-15-05	1400	7.8	8.7	2450	2160
152-088-04BBBD1	Mountrail	480120101571901	125SNLB	71	08-08-05	1300	7.3	7.7	2700	2630
152-088-04BBBD2	Mountrail	480120101571902	125SNLB	87	08-08-05	1345	8.1	8.2	2260	2190
161-084-24DDD	Renville	484500101294901	211FXHL	488	07-27-05	1500	7.6	7.5	13300	13000
130-086-28CCC2	Sioux	460244101272702	211HLCK	210	09-12-05	1400	8.5	8.8	2080	2040
134-079-32ADD	Sioux	462239100375601	112SBRG	288	09-12-05	1100	7.9	8.6	1610	1570
158-099-13DDD	Williams	483016103242801	112RAY	257	08-09-05	1045	8.0	8.2	1930	1870
159-098-10AAD	Williams	483700103191501	112WWLD	214	08-09-05	0900	8.1	8.4	3660	3560

Local ident- ifier	Date	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)
131-102-07DDD3	08-10-05	18.0	10.0	2.37	<1.00	2.20	62	453	99	425	1.9
163-093-17DDD	07-28-05	15.0	9.5	502	209	15.7	2	219	18	324	19.7
161-103-02CCB	07-28-05	19.5	10.5	61.0	22.9	4.70	4	131	53	403	18.8
163-097-34ABB	07-28-05	18.0	10.5	35.5	19.0	8.10	14	420	84	984	65.5
145-095-22DAD2	08-09-05	20.5	9.5	42.7	17.7	7.10	9	279	76	607	1.1
135-090-23BBB2	09-15-05	19.5	10.0	3.91	1.90	2.40	50	487	98	746	4.8
150-098-23AAB2	08-09-05	20.5	9.5	22.2	9.50	4.70	22	496	91	939	1.9
138-081-09ABB1	09-07-05	20.0	11.0	6.62	4.70	4.90	62	850	98	927	639
138-081-09ABB2	09-07-05	20.5	12.0	<2.00	<1.00	2.90	84	583	99	997	202
138-081-09ABB4	09-07-05	24.0	10.0	25.9	23.7	5.40	28	828	91	795	21.1
139-086-35BCC	09-15-05	28.5	13.0	38.4	34.9	6.00	13	472	80	635	5.0
152-088-04BBBD1	08-08-05	22.5	10.0	157	129	14.1	4	286	40	647	148
152-088-04BBBD2	08-08-05	22.5	10.0	37.4	34.1	9.30	13	456	80	837	12.6
161-084-24DDD	07-27-05	19.5	10.5	84.7	20.6	17.4	82	3240	96	154	4470
130-086-28CCC2	09-12-05	15.0	11.5	4.99	<1.00	1.90	47	442	98	687	19.9
134-079-32ADD	09-12-05	18.5	10.0	15.7	6.70	3.90	19	353	91	740	5.5
158-099-13DDD	08-09-05	18.5	9.5	136	80.6	7.50	4	218	41	666	2.5
159-098-10AAD	08-09-05	16.5	10.0	87.6	44.0	7.30	16	758	80	824	10.3

## GROUND-WATER QUALITY

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## NETWORK SITES--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local ident- ifier	Date	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Alum- inum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
163-093-17DDD	07-28-05	.22	29.6	2120	3280	<50	<1	14.3	7.6	<1	400
161-103-02CCB	07-28-05	.37	28.2	116	598	<50	<1	11.8	44.2	<1	230
163-097-34ABB	07-28-05	1.06	19.2	.3	1140	<50	<1	22.7	958	<1	340
145-095-22DAD2	08-09-05	.47	22.6	206	920	<50	<1	11.0	29.7	<1	260
135-090-23BBB2	09-15-05	2.62	4.93	370	1320	--	--	3.1	--	--	--
150-098-23AAB2	08-09-05	3.51	22.8	271	1370	<50	<1	<1.0	18.4	<1	200
138-081-09ABB1	09-07-05	.58	15.9	59.9	2120	<50	<1	17.0	29.1	<1	4050
138-081-09ABB2	09-07-05	2.96	6.25	<.3	1390	<50	<1	3.9	4.5	<1	3760
138-081-09ABB4	09-07-05	2.06	8.31	1100	2480	<50	<1	2.8	21.4	<1	2780
139-086-35BCC	09-15-05	.48	29.3	595	1530	--	--	3.0	--	--	--
152-088-04BBBD1	08-08-05	.13	15.0	752	1880	<50	<1	3.0	32.7	<1	320
152-088-04BBBD2	08-08-05	.16	10.6	424	1480	<50	<1	2.4	22.7	<1	400
161-084-24DDD	07-27-05	.26	7.64	1.0	7930	<50	<1	74.4	3640	<1	3450
130-086-28CCC2	09-12-05	2.29	17.0	278	1160	--	--	4.2	--	--	--
134-079-32ADD	09-12-05	1.22	26.3	136	966	--	--	11.5	--	--	--
158-099-13DDD	08-09-05	.25	23.2	505	1350	<50	<1	8.2	19.7	<1	530
159-098-10AAD	08-09-05	.26	23.8	1220	2620	<50	<1	8.2	19.2	<1	280

Local ident- ifier	Date	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
163-093-17DDD	07-28-05	<1	<1	3.0	4170	<1	--	3610	--	--	27.2
161-103-02CCB	07-28-05	<1	1	1.7	3530	<1	--	170	--	--	2.71
163-097-34ABB	07-28-05	<1	5	4.8	400	<1	--	50	--	--	7.47
145-095-22DAD2	08-09-05	<1	2	3.8	190	<1	--	200	--	--	2.27
135-090-23BBB2	09-15-05	--	--	--	100	<1	70	30	<.20	7	--
150-098-23AAB2	08-09-05	<1	27	5.5	780	<1	--	20	--	--	1.22
138-081-09ABB1	09-07-05	<1	<1	11.3	<10	<1	--	20	--	--	<1
138-081-09ABB2	09-07-05	<1	9	3.5	<10	1.95	--	<10	--	--	<1
138-081-09ABB4	09-07-05	<1	6	5.0	280	<1	--	60	--	--	1.32
139-086-35BCC	09-15-05	--	--	--	200	<1	80	80	<.20	1	--
152-088-04BBBD1	08-08-05	<1	2	3.9	1030	<1	--	580	--	--	7.94
152-088-04BBBD2	08-08-05	<1	3	6.6	110	<1	--	80	--	--	2.23
161-084-24DDD	07-27-05	2.21	<1	46.8	4330	<1	--	130	--	--	7.09
130-086-28CCC2	09-12-05	--	--	--	130	10.7	80	40	<.20	14	--
134-079-32ADD	09-12-05	--	--	--	330	<1	190	100	<.20	4	--
158-099-13DDD	08-09-05	<1	2	3.2	170	<1	--	1130	--	--	8.77
159-098-10AAD	08-09-05	<1	3	10.0	110	<1	--	330	--	--	4.72

Local ident- ifier	Date	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)
163-093-17DDD	07-28-05	11	<1	--	<1.0	23.0
161-103-02CCB	07-28-05	7	<1	--	<1.0	4.1
163-097-34ABB	07-28-05	16	<1	--	<1.0	6.7
145-095-22DAD2	08-09-05	6	<1	--	<1.0	5.6
135-090-23BBB2	09-15-05	8	--	100	--	--
150-098-23AAB2	08-09-05	<1	<1	--	<1.0	4.0
138-081-09ABB1	09-07-05	61	<1	--	<1.0	<1
138-081-09ABB2	09-07-05	15	<1	--	<1.0	3.0
138-081-09ABB4	09-07-05	12	<1	--	<1.0	4.0
139-086-35BCC	09-15-05	12	--	1540	--	--
152-088-04BBBD1	08-08-05	12	<1	--	<1.0	6.5
152-088-04BBBD2	08-08-05	10	<1	--	<1.0	12.7
161-084-24DDD	07-27-05	303	<1	--	<1.0	12.4
130-086-28CCC2	09-12-05	13	--	100	--	--
134-079-32ADD	09-12-05	8	--	140	--	--
158-099-13DDD	08-09-05	10	<1	--	<1.0	107
159-098-10AAD	08-09-05	15	<1	--	<1.0	93.5

&lt; -- Less than

## GROUND-WATER QUALITY

## SPIRIT LAKE RESERVATION SITES

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local ident- i- fier	County	Station number	Geo- logic unit	Depth of well, feet below LSD (72008)	Date	Time	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unfl- trd lab, uS/cm 25 degC (90095)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
150-064-14DDD	Eddy	474813098480601	112TOKO	55	07-11-05	1040	7.6	478	74.7	21.8
150-064-16DDD	Eddy	474814098504101	112TOKO	62	07-11-05	1000	7.5	723	97.9	30.9
150-063-11CCC	Eddy	474906098413801	112WRCK	22.6	06-16-05	1440	7.7	354	60.7c	15.8c
150-063-16BBB3	Eddy	474906098441203	112WRCK	19.2	06-21-05	1145	7.5	502	76.8	22.4
150-063-12BBC2	Eddy	474948098402102	112WRCK	15.2	06-17-05	1400	7.8	257	43.7	11.3
150-062-01DDD2	Eddy	474954098313002	112WRCK	11.6	06-16-05	1330	7.0	563	69.6c	38.3c
150-062-11AAA	Eddy	474957098323801	112WRCK	11.7	06-16-05	1250	7.4	561	110c	17.6c
150-062-03DDD2	Eddy	474959098335502	112WRCK	11.5	06-16-05	1200	7.3	486	73.5c	29.8c
150-063-01DCC	Eddy	474959098393601	112WRCK	15	06-17-05	1245	7.2	979	111c	77.5c
150-063-02DDD2	Eddy	474959098402302	112WRCK	15.7	06-21-05	1035	7.6	468	80.2	20.7
150-063-04DDD	Eddy	474959098425801	112WRCK	18	06-21-05	1115	7.4	622	103	33.4
150-063-04CCC	Eddy	474959098441301	112WRCK	12	06-21-05	1250	7.5	404	68.3	23.0
150-063-05CCC	Eddy	474959098453201	112WRCK	15	06-21-05	1315	7.5	777	99.4	43.0
150-064-05DDDD	Eddy	474959098520001	112TOKO	90	07-13-05	1105	8.2	912	8.55	1.98
150-063-04CBB	Eddy	475024098441401	112WRCK	20	06-21-05	1215	7.4	367	62.3	18.3
150-063-02AAA	Eddy	475050098402101	112WRCK	11.3	06-17-05	1130	7.4	455	71.1	19.4c
150-064-02AAAA	Eddy	475050098555101	112WRCK	75	07-12-05	1210	7.6	523	41.9	10.6
151-062-33CCC	Benson	475051098362701	112WRCK	15.8	06-17-05	1305	7.6	444	75.2c	18.9c
151-062-32CCC	Benson	475051098374501	112WRCK	16	06-17-05	0950	7.7	323	53.2	13.8
151-063-36DDD	Benson	475051098390801	112WRCK	12	06-17-05	1335	7.1	1190	158c	90.5c
151-063-34DAD	Benson	475107098414001	112WRCK	15.4	06-17-05	1200	7.6	466	71.0c	17.6c
151-065-36CBBB	Benson	475115098554901	112TOKO	120	07-11-05	1525	8.3	873	5.45	1.72
151-063-32BBC	Benson	475130098453201	112WRCK	15.8	06-21-05	1335	7.6	412	52.6c	26.0c
151-064-32BBBB	Benson	475142098531601	112TOKO	54	07-12-05	1240	7.5	479	70.7	18.7
151-063-27CCC	Benson	475143098425601	112WRCK	22.5	06-21-05	1410	7.3	779	125	41.5
151-064-34BBBB	Benson	475143098504201	112TOKO	94	07-13-05	1210	7.7	354	58.7	14.4
151-064-29DDDD	Benson	475143098520201	112WRCK	66	07-12-05	1200	7.5	480	77.8c	20.1c
151-063-26DDA	Benson	475156098402301	112WRCK	11.9	06-17-05	1055	7.8	289	51.5	11.9
151-064-30AAAA	Benson	475209098531801	112TOKO	34	07-19-05	1235	7.6	642	87.1	27.6
151-064-28AAAD	Benson	475230098504301	112TOKO	58	07-19-05	1220	7.5	477	68.3	17.6
151-064-28BBBB	Benson	475234098515901	112TOKO	58	07-13-05	1250	7.7	332	42.8	8.29
151-065-25BBBB	Benson	475234098554901	112TOKO	43	07-12-05	1130	7.7	388	60.9	14.6
151-063-28AAA	Benson	475235098425801	112WRCK	15.8	07-06-05	1005	7.5	450	67.3	25.7c
151-064-19CDCC	Benson	475236098541301	112TOKO	110	07-11-05	1415	7.7	399	58.5	13.2
151-064-24ADD	Benson	475303098464901	112WRCK	12	07-06-05	1245	7.4	731	88.9c	24.9c
151-065-20BBBB	Benson	475326099010001	112TOKO	59.5	07-20-05	1020	7.5	705	92.6	26.6
151-064-20BBBB	Benson	475327098531601	112TOKO	60	07-12-05	1320	7.4	470	73.0	21.4
151-063-14DDD2	Benson	475328098402302	112WRCK	15.1	06-17-05	1020	7.8	364	60.0	16.4
151-064-20AAAA	Benson	475328098520001	112TOKO	56	07-13-05	1315	7.7	295	48.5	13.3
151-066-14DDAA	Benson	475340099033601	112TOKO	70	07-20-05	1230	7.4	828	108	28.5
151-064-16DADD	Benson	475341098504301	112TOKO	97	07-19-05	1040	7.7	407	60.1	13.5
151-062-16ADA2	Benson	475403098351202	112WRCK	29	07-06-05	1110	7.7	449	80.2c	17.0c
151-065-13AAAB	Benson	475419098543701	112TOKO	72	07-13-05	0950	7.5	482	78.8c	17.1c
151-065-12CCC	Benson	475419098554801	112TOKO	70	07-08-05	1110	7.5	454	76.4c	16.8c
151-065-18BBBB	Benson	475419099021701	112TOKO	140	07-20-05	1120	7.4	867	95.9	24.4
151-063-07CCC	Benson	475420098464801	112WRCK	50.5	07-06-05	1205	7.5	458	75.5c	20.9c
151-064-17BBBB	Benson	475420098531601	112TOKO	97	07-13-05	1030	7.7	345	58.7	11.3
151-065-03AAA	Benson	475603098570901	112TOKO	80	07-08-05	1030	7.4	491	75.0	18.8
151-065-01BBBB	Benson	475604098555001	112TOKO	87	07-12-05	1030	7.5	405	68.8	17.1
152-065-31CBBB	Benson	475628099021701	112TOKO	60	07-20-05	1050	7.4	1410	157	41.6
152-065-36CBBB	Benson	475630098555001	112TOKO	123	07-12-05	1000	7.5	408	61.0	12.0
152-064-32BBBB	Benson	475656098531601	112TOKO	80	07-12-05	0915	7.5	474	76.8	20.6
152-065-27DDD2	Benson	475657098571002	112TOKO	45	07-08-05	0945	7.6	521	87.0c	23.4c



## SPIRIT LAKE RESERVATION SITES-Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local identifier	Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
150-064-14DDD	07-11-05	2.69	.3	9.85	7	132@c	2.96	.2	27.9	59.5	279
150-064-16DDD	07-11-05	6.90	.7	32.5	16	181@c	9.23	.3	29.7	88.1	406
150-063-11CCC	06-16-05	1.48c	.1	2.48c	2	180@c	.42	.2	28.9	8.5	231
150-063-16BBB3	06-21-05	1.40	.2	9.62	7	170@c	2.48	.1	26.4	45.1	287
150-063-12BBC2	06-17-05	.78	.0	1.17	2	160@c	<.20	E.1n	24.3	2.2	--
150-062-01DDD2	06-16-05	8.05c	.2	10.3c	6	291@c	<.20	.1	23.9	31.9	--
150-062-11AAA	06-16-05	.84	.1	3.55c	2	194@c	1.06	.2	24.1	17.2	303
150-062-03DDD2	06-16-05	2.49c	.1	3.03c	2	235@c	<.20	E.1n	26.7	1.7	--
150-063-01DDCC	06-17-05	3.08c	.3	15.2c	5	461@c	4.65	.2	28.9	2.7	525
150-063-02DDD2	06-21-05	.89	.1	4.56	3	128@c	10.1	.2	27.5	82.1	303
150-063-04DDD	06-21-05	3.00	.1	5.06	3	192@c	4.97	E.1n	25.9	22.7	350
150-063-04CCC	06-21-05	1.19	.1	4.73	4	164@c	.40	.2	24.6	17.1	238
150-063-05CCC	06-21-05	3.57	.7	32.9	14	244@c	14.3	.2	28.3	89.8	458
150-064-05DDDD	07-13-05	4.57	18	221	93	482@c	6.73	.7	27.9	52.4	615
150-063-04CBB	06-21-05	.62	.1	4.46	4	124@c	<.20	.2	28.5	5.5	--
150-063-02AAA	06-17-05	.24c	.2	6.34c	5	179@c	1.69	.2	24.3	8.5	249
150-064-02AAAA	07-12-05	7.00	3	71.4	50	262@c	2.17	.4	32.6	40.1	365
151-062-33CCC	06-17-05	.41	.1	2.48c	2	168@c	.54	.2	24.1	12.7	236
151-062-32CCC	06-17-05	.67	.2	5.51	6	185@c	.25	.2	25.3	5.5	216
151-063-36DDD	06-17-05	1.33c	.2	13.9c	4	524@c	<.20	.7	34.7	1.8	--
151-063-34DAD	06-17-05	2.04	.4	14.8c	11	149@c	1.26	.2	25.0	12.8	234
151-065-36CBBB	07-11-05	4.24	20	207	95	394@c	27.8	.7	28.6	60.4	574
151-063-32BBC	06-21-05	1.56c	.5	18.0c	14	178@c	.89c	.3	26.5	8.3c	243
151-064-32BBBB	07-12-05	4.81	.3	12.7	10	156@c	2.27	.3	27.7	58.1	290
151-063-27CCC	06-21-05	4.45	.4	20.6	8	305@c	22.7	.2	29.1	61.3	489
151-064-34BBBB	07-13-05	3.03	.1	4.46	4	181@c	1.25	.1	29.7	25.0	246
151-064-29DDDD	07-08-05	3.35c	.2	6.70c	5	106@c	1.69	.2	27.8	33.4	259
151-063-26DDA	06-17-05	E.14n	.1	2.08	--	172@c	<.20	.1	21.7	2.5	--
151-064-30DAAA	07-19-05	8.76	.4	18.0	10	248@c	2.20	.3	35.7	60.3	391
151-064-28AAAD	07-19-05	3.67	.2	6.32	5	202@c	1.77	.2	29.4	38.5	288
151-064-28BBBB	07-13-05	6.87	.9	24.5	26	187@c	.98	.2	40.3d	14.5	252
151-065-25BBBB	07-12-05	4.68	.2	6.06	6	262@c	1.11	.2	27.7	17.8	291
151-063-28AAA	07-06-05	2.27	.2	7.13c	5	163@c	.89	.3	27.3	13.1	259
151-064-19CDCC	07-11-05	6.34	.5	15.2	14	163@c	1.27	.2	35.5	29.7	259
151-064-24ADD	07-06-05	5.23c	1	57.3c	27	328@c	7.34	.3	30.4	52.1	464
151-065-20BBBB	07-20-05	5.42	.5	20.6	11	178@c	9.68	.2	29.6	88.1	380
151-064-20BBBB	07-12-05	4.58	.2	7.09	5	158@c	.65	.3	22.0	25.6	254
151-063-14DDDD2	06-17-05	1.52	.1	3.83	4	216@c	<.20	.2	26.9	21.1	--
151-064-20AAAA	07-13-05	2.34	.1	3.09	4	169@c	.65	.1	29.4	14.5	214
151-066-14DDAA	07-20-05	5.40	.8	36.3	17	225@c	4.51	.2	29.3	153	501
151-064-16DADD	07-19-05	4.37	.3	8.52	8	172@c	1.59	.2	31.6	21.7	246
151-062-16ADA2	07-06-05	.54	.3	10.2c	8	139@c	.74	.1	21.2	5.2	221
151-065-13AAAB	07-13-05	3.36c	.2	8.82	7	174@c	2.02	.2	23.3	71.3	336
151-065-12CCC	07-08-05	4.37c	.2	7.72c	6	169@c	1.61	.2	26.9	58.3	294
151-065-18BBBB	07-20-05	6.03	2	64.7	29	221@c	26.2	.3	29.0	110	491
151-063-07CCC	07-06-05	2.02	.1	3.65c	3	142@c	<.20	.1	26.6	49.3	--
151-064-17BBBB	07-13-05	4.18	.2	6.82	7	169@c	2.05	.1	30.5	26.1	242
151-065-03AAA	07-08-05	3.82	.4	16.5	12	128@c	2.61	.2	29.5	43.0	268
151-065-01BBBB	07-12-05	1.80	.1	2.47	2	178@c	.91	.2	29.0	19.0	247
152-065-31CBBB	07-20-05	10.4	2	124	32	239@c	51.9	.2	27.7	349d	907
152-065-36CBBB	07-12-05	4.52	.6	20.1	17	135@c	1.90	.2	29.5	19.4	231
152-064-32BBBB	07-12-05	3.16	.1	5.29	4	155@c	1.14	.2	28.8	35.2	264
152-065-27DDDD2	07-08-05	2.99c	.2	6.88c	5	209@c	<.20	.2	26.9	40.0	--

## GROUND-WATER QUALITY

## SPIRIT LAKE RESERVATION SITES-Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local ident- i- fier	Date	Residue	Ammonia	Nitrite			Organic	Ortho-	Phos-	Total	
		on evap. at 180degC wat flt mg/L (70300)	+ org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	+ nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	nitro- gen, water, unfltrd mg/L (00605)	phos- phate, water, fltrd, mg/L as P (00671)	phorus, water, unfltrd mg/L (00665)	nitro- gen, water, unfltrd mg/L (00600)
150-064-14DDD	07-11-05	341	.11	<.04	--	.07	<.008	--	.04	.05	.18
150-064-16DDD	07-11-05	506	.65	.50	--	<.06	<.008	.14	.02	.08	--
150-063-11CCC	06-16-05	241	.17	<.04	--	.95	<.008	--	.03	.20	1.1
150-063-16BBB3	06-21-05	334	E.07n	<.04	--	.06	<.008	--	E.01n	<.04	--
150-063-12BCC2	06-17-05	165	<.10	<.04	--	1.18	<.008	--	<.02	<.04	--
150-062-01DDD2	06-16-05	374	.32	<.04	--	<.06	<.008	--	.02	E.02n	--
150-062-11AAA	06-16-05	373	.16	<.04	2.79	2.80	.009	--	E.01n	<.04	3.0
150-062-03DDD2	06-16-05	325	.42	<.04	--	<.06	<.008	--	<.02	<.04	--
150-063-01DDCC	06-17-05	652	.52	<.04	--	<.06	<.008	--	.02	.10	--
150-063-02DDD2	06-21-05	369	.14	<.04	--	<.06	<.008	--	.05	.06	--
150-063-04DDD	06-21-05	417	.18	<.04	--	8.17d	<.008	--	.04	.06	8.3
150-063-04CCC	06-21-05	278	.10	<.04	--	E.06n	<.008	--	.05	.05	--
150-063-05CCC	06-21-05	541	.30	<.04	--	<.06	<.008	--	<.02	.06	--
150-064-05DDDD	07-13-05	640	.75	.55	--	<.06	<.008	.20	.48	.49	--
150-063-04CBB	06-21-05	263	.12	<.04	--	.29	<.008	--	<.02	<.04	.41
150-063-02AAA	06-17-05	301	.19	<.04	--	2.22	E.004n	--	.03	.05	2.4
150-064-02AAAA	07-12-05	372	.88	.73	--	<.06	<.008	.15	.10	.14	--
151-062-33CCC	06-17-05	295	E.07n	<.04	--	.08	<.008	--	E.01n	E.04n	--
151-062-32CCC	06-17-05	210	E.10n	<.04	--	<.06	<.008	--	.10	.12	--
151-063-36DDD	06-17-05	816	1.1	.11	--	<.06	<.008	.96	.04	.09	--
151-063-34DAD	06-17-05	301	.10	<.04	--	<.06	<.008	--	<.02	E.02n	--
151-065-36CBBB	07-11-05	592	.84	.61	--	<.06	<.008	.23	.45	.47	--
151-063-32BBC	06-21-05	292	.11	<.04	--	.60	<.008	--	<.02	<.04	.72
151-064-32BBB3	07-12-05	335	.17	.09	--	<.06	<.008	.08	.02	.04	--
151-063-27CCC	06-21-05	545	.30	.05	--	<.06	<.008	.24	.03	.28	--
151-064-34BBBB	07-13-05	257	.21	.13	--	<.06	<.008	.08	.05	.07	--
151-064-29DDDD	07-08-05	337	.14	E.02n	5.60	5.63d	.030	--	<.02	<.04	5.8
151-063-26DDA	06-17-05	187	E.06n	<.04	--	<.06	<.008	--	.07	.05	--
151-064-30DAAA	07-19-05	431	.20	.04	--	.51	<.008	.16	.07	.10	.70
151-064-28AAAD	07-19-05	288	.22	.16	--	<.06	<.008	.07	.03	.04	--
151-064-28BBBB	07-13-05	258	.48	.45	--	<.06	<.008	.03	.16	.16	--
151-065-25BBBB	07-12-05	264	.73	.21	--	<.06	<.008	.52	.06	.96	--
151-063-28AAA	07-06-05	316	.15	<.04	3.91	3.93	.019	--	.07	.08	4.1
151-064-19CDCC	07-11-05	288	.47	.34	--	<.06	<.008	.13	.07	.12	--
151-064-24ADD	07-06-05	506	.56	.21	--	<.06	<.008	.35	E.01n	.28	--
151-065-20BBBB	07-20-05	460	.25	.16	--	<.06	<.008	.09	E.01n	.05	--
151-064-20BBBB	07-12-05	309	.11	<.04	--	.91	<.008	--	E.01n	E.03n	1.0
151-063-14DDD2	06-17-05	244	E.06n	<.04	--	.57	<.008	--	.05	.07	--
151-064-20AAAA	07-13-05	215	E.09n	.04	--	.14	<.008	--	.10	.11	--
151-066-14DDAA	07-20-05	561	.48	.41	--	<.06	<.008	.06	<.02	.05	--
151-064-16DADD	07-19-05	253	.36	.26	--	<.06	<.008	.10	.06	.08	--
151-062-16ADA2	07-06-05	298	E.09n	<.04	--	.48	<.008	--	<.02	E.02n	--
151-065-13AAAB	07-13-05	358	.10	<.04	5.91	5.99d	.080	--	E.01n	E.03n	6.1
151-065-12CCC	07-08-05	325	E.06n	<.04	--	<.06	<.008	--	E.01n	<.04	--
151-065-18BBBB	07-20-05	570	.39	.34	--	<.06	<.008	.05	.03	.08	--
151-063-07CCC	07-06-05	330	.10	<.04	6.14	6.19d	.049	--	.06	.07	6.3
151-064-17BBBB	07-13-05	248	.27	.21	--	<.06	<.008	.06	.07	.08	--
151-065-03AAA	07-08-05	351	.23	.18	--	<.06	<.008	.04	.03	E.04n	--
151-065-01BBBB	07-12-05	271	.13	<.04	--	.08	<.008	--	.08	.17	.21
152-065-31CBBB	07-20-05	996	.65	.51	--	.10	<.008	.14	E.01n	.06	.76
152-065-36CBBB	07-12-05	280	.53	.42	--	<.06	<.008	.11	.05	.06	--
152-064-32BBB3	07-12-05	317	.18	<.04	--	<.06	<.008	--	.04	.26	--
152-065-27DDD2	07-08-05	377	.33	<.04	14.7	14.7d	.029	--	.02	.09	15

## SPIRIT LAKE RESERVATION SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Local ident- i- fier	Date	Arsenic water unfltrd ug/L (01002)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)
150-064-14DDD	07-11-05	5	11	220
150-064-16DDD	07-11-05	47	836	466
150-063-11CCC	06-16-05	9	<6	.8
150-063-16BBB3	06-21-05	E2n	<6	8.1
150-063-12BBC2	06-17-05	5	<6	.7
150-062-01DDD2	06-16-05	E2n	127c	439c
150-062-11AAA	06-16-05	5	60c	560c
150-062-03DDD2	06-16-05	E2n	<6	2080c
150-063-01DDCC	06-17-05	2	5100	394c
150-063-02DDD2	06-21-05	E1n	<6	E.6n
150-063-04DDD	06-21-05	E2n	<6	60.2
150-063-04CCC	06-21-05	<2	E6n	7.3
150-063-05CCC	06-21-05	<2	204	202
150-064-05DDDD	07-13-05	29	38	29.2
150-063-04CBB	06-21-05	E2n	<6	E.3n
150-063-02AAA	06-17-05	<2	<6c	212c
150-064-02AAAA	07-12-05	41	346	227
151-062-33CCC	06-17-05	E1n	17	210c
151-062-32CCC	06-17-05	6	9	310
151-063-36DDD	06-17-05	8	2700c	1140c
151-063-34DAD	06-17-05	E1n	<6	5.9c
151-065-36CBBB	07-11-05	15	16	30.7
151-063-32BBC	06-21-05	E1n	<6c	1.0c
151-064-32BBBB	07-12-05	7	294	446
151-063-27CCC	06-21-05	7	87	384
151-064-34BBBB	07-13-05	11	174	389
151-064-29DDDD	07-08-05	4	<6c	160c
151-063-26DDA	06-17-05	4	7	150
151-064-30DAAA	07-19-05	30	7	43.8
151-064-28AAAD	07-19-05	12	52	610
151-064-28BBBB	07-13-05	38	31	270
151-065-25BBBB	07-12-05	44	69	383
151-063-28AAA	07-06-05	2	<6c	1.5c
151-064-19CDCC	07-11-05	22	20	59.0
151-064-24ADD	07-06-05	18	254c	692c
151-065-20BBBB	07-20-05	14	264	402
151-064-20BBBB	07-12-05	<2	E3n	107
151-063-14DDD2	06-17-05	6	<6	E.5n
151-064-20AAAA	07-13-05	6	8	134
151-066-14DDAA	07-20-05	6	262	850
151-064-16DADD	07-19-05	18	12	387
151-062-16ADA2	07-06-05	<2	<6c	.7c
151-065-13AAAB	07-13-05	2	E6n	19.1c
151-065-12CCC	07-08-05	4	323c	219c
151-065-18BBBB	07-20-05	15	328	410
151-063-07CCC	07-06-05	2	<6c	34.4c
151-064-17BBBB	07-13-05	23	22	472
151-065-03AAA	07-08-05	14	373	503c
151-065-01BBBB	07-12-05	5	10	27.0
152-065-31CBBB	07-20-05	25	19	330
152-065-36CBBB	07-12-05	26	25	363
152-064-32BBBB	07-12-05	7	11	23.4
152-065-27DDD2	07-08-05	3	9	22.1c

&lt; -- Less than

E -- Estimated

@ -- Holding time exceeded

c -- See laboratory comment

d -- Diluted sample: method hi range exceeded

n -- Below the LRL and above the LT-MDL

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## Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	$2.54 \times 10^1$	millimeter (mm)
	$2.54 \times 10^{-2}$	meter (m)
foot (ft)	$3.048 \times 10^{-1}$	meter (m)
mile (mi)	$1.609 \times 10^0$	kilometer (km)
Area		
acre	$4.047 \times 10^3$	square meter (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometer (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometer (km <sup>2</sup> )
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer (km <sup>2</sup> )
Volume		
gallon (gal)	$3.785 \times 10^0$	liter (L)
	$3.785 \times 10^{-3}$	cubic meter (m <sup>3</sup> )
	$3.785 \times 10^0$	cubic decimeter (dm <sup>3</sup> )
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^{-2}$	cubic meter (m <sup>3</sup> )
	$2.832 \times 10^1$	cubic decimeter (dm <sup>3</sup> )
cubic foot per second per day [(ft <sup>3</sup> /s)/d]	$2.447 \times 10^3$	cubic meter (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometer (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometer (km <sup>3</sup> )
Flow		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second (L/s)
	$2.832 \times 10^{-2}$	cubic meter per second (m <sup>3</sup> /s)
	$2.832 \times 10^1$	cubic decimeter per second (dm <sup>3</sup> /s)
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second (L/s)
	$6.309 \times 10^{-5}$	cubic meter per second (m <sup>3</sup> /s)
	$6.309 \times 10^{-2}$	cubic decimeter per second (dm <sup>3</sup> /s)
million gallons per day (Mgal/d)	$4.381 \times 10^{-2}$	cubic meter per second (m <sup>3</sup> /s)
	$4.381 \times 10^1$	cubic decimeter per second (dm <sup>3</sup> /s)
Mass		
ton (short)	$9.072 \times 10^{-1}$	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

