Water-Data Report 2006

452223093521801 Local number ALUS-34 33N28W06CDD 0000722086

Sand and gravel aquifers (glaciated regions)
Glacial Buried Sand & Gravel

Sherburne County, MN

LOCATION.--Lat 45°22′23″, long 93°52′18″ referenced to North American Datum of 1983, in SE ¼ SE ¼ SW ¼ sec.6, T.33 N., R.28 W., Sherburne County, MN, Hydrologic Unit 07010203.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 45.5 ft. Upper casing diameter 2 in; top of first opening 35.5 ft, bottom of last opening 45.5 ft. The well and screen are constructed of 2 inch diameter PVC.

DATUM.--Land-surface datum is 965 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, not protection post, 2.88 ft above land-surface datum, July 26, 2006, to present.

PERIOD OF RECORD.--Samples collected periodically May 2005 to present.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 1 of 18
[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
Jul												
27...	1000	Environmental	45.5	34.32	965	.37	29	9.1	732	9.4	91	7.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 2 of 18
[Remark codes: <, less than; E, estimated.]

Date	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
Jul													
27...	7.7	528	538	24.0	13.8	71.9	21.6	.94	3.94	207	.02	5.83	E.07

452223093521801 Local number ALUS-34 33N28W06CDD 0000722086—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 3 of 18
[Remark codes: <, less than; E, estimated.]

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	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)
Jul													
27...	17.9	10.3	291	E.009	13.8	E.001	13.5	.012	.8	1.8	<.20	.32	63

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 4 of 18
[Remark codes: <, less than; E, estimated.]

Date	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	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)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)
Jul													
27...	<.06	18	<.04	2.2	.06	5.7	8	<.08	1.5	3.4	2.5	1.2	.22

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 5 of 18
[Remark codes: <, less than; E, estimated.]

Date	Silver, water, fltrd, ug/L (01075)	Stront-ium, water, fltrd, ug/L (01080)	Thall-ium, water, fltrd, ug/L (01057)	Vanad-ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water, fltrd 0.7u GF ug/L (82660)	2Chloro -2',6'-diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	3,5-Di-chloro-aniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)
Jul													
27...	<.2	66.0	<.04	.80	.72	<.09	<.006	<.006	E.007	<.010	<.004	<.012	<.005

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 6 of 18
[Remark codes: <, less than; E, estimated.]

Date	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-Endosulfan, water, fltrd, ug/L (34362)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
Jul													
27...	<.006	<.005	<.011	93.5	.009	<.04	<.050	<.010	<.041	<.020	<.06	<.005	<.006

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 7 of 18
[Remark codes: <, less than; E, estimated.]

Date	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)
Jul													
27...	<.013	<.018	<.053	<.014	<.046	<.003	<.012	<.005	94.3	<.08	<.009	<.006	<.01

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 8 of 18
[Remark codes: <, less than; E, estimated.]

Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Endosulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
Jul													
27...	<.02	<.022	<.004	<.02	<.016	<.012	<.053	<.04	<.03	<.029	<.013	<.024	<.016

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 9 of 18
[Remark codes: <, less than; E, estimated.]

Date	Fonofos water, fltrd, ug/L (04095)	Hexa-zinone, water, fltrd, ug/L (04025)	Ipro-dione, water, fltrd, ug/L (61593)	Isofen-phos, water, fltrd, ug/L (61594)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)
Jul													
27...	<.005	<.026	<.026	<.011	<.039	<.027	.025	<.009	<.02	<.015	.408	E.008	<.003

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 10 of 18
[Remark codes: <, less than; E, estimated.]

Date	Myclo-butanil water, fltrd, ug/L (61599)	Oxy-fluor-fen, water, fltrd, ug/L (61600)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water, fltrd 0.7u GF ug/L (82670)	Teflu-thrin, water, fltrd, ug/L (61606)	Ter-bufos oxon sulfone water, fltrd, ug/L (61674)
Jul													
27...	<.033	<.017	<.022	<.03	<.01	<.006	<.004	<.011	<.02	<.005	<.02	<.003	<.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 11 of 18
[Remark codes: <, less than; E, estimated.]

Date	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Thio-bencarb water, fltrd 0.7u GF ug/L (82681)	trans-Propi-cona-zole, water, fltrd, ug/L (79847)	Tribu-phos, water, fltrd, ug/L (61610)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
Jul													
27...	<.02	<.01	<.010	<.03	<.035	<.009	<.03	<.03	<.08	<.04	<.04	<.04	<.02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 12 of 18
[Remark codes: <, less than; E, estimated.]

Date	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3,4 Tetramethylbenzene water unfltrd ug/L (49999)	1,2,3,5 Tetramethylbenzene water unfltrd ug/L (50000)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,3-Trimethylbenzene water unfltrd ug/L (77221)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloroethane-d4, sur Sch2090 wat unf pct rcv (99832)
Jul													
27...	<.03	<.1	<.2	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	122

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 13 of 18
[Remark codes: <, less than; E, estimated.]

Date	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	14Bromofluorobenzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)
Jul													
27...	<.03	<.04	<.03	<.1	<.03	85.6	<.05	<.04	<.06	<.50	<.05	<.08	<6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 14 of 18
[Remark codes: <, less than; E, estimated.]

Date	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)	Bromomethane water unfltrd ug/L (34413)	Carbon disulfide water unfltrd ug/L (77041)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)
Jul													
27...	<.8	<.02	<.03	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 15 of 18
[Remark codes: <, less than; E, estimated.]

Date	Dibromochloromethane water unfltrd ug/L (32105)	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Iodomethane water unfltrd ug/L (77424)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)
Jul													
27...	<.1	<.05	<.18	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 16 of 18
[Remark codes: <, less than; E, estimated.]

Date	Isopropylbenzene water unfltrd ug/L (77223)	Methyl acrylonitrile water unfltrd ug/L (81593)	Methyl acrylate, water, unfltrd ug/L (49991)	Methyl methacrylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butylbenzene water unfltrd ug/L (77342)	n-propylbenzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butylbenzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)
Jul													
27...	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 17 of 18
[Remark codes: <, less than; E, estimated.]

Date	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butylbenzene water unfltrd ug/L (77353)	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Tetrahydrofuran, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene-d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	trans-1,4-Dichloro-2-butene, wat unf ug/L (73547)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)
Jul													
27...	<.03	<.1	<.08	<.03	<.06	<1	<.02	99.0	<.03	<.09	<.7	<.10	<.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
Part 18 of 18
[Remark codes: <, less than; E, estimated.]

Date	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Di-chlor-vos, water, fltrd, ug/L (38775)	Uranium natural water, fltrd, ug/L (22703)	Sample volume, Sched 2003, ml (99972)
Jul						
27...	<.08	<.02	<.1	<.01	.29	973