ILLINOIS ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF PUBLIC WATER SUPPLIES - PERMIT SECTION
2200 CHURCHILL ROAD - POST OFFICE BOX 19276 - SPRINGFIELD, ILLINOIS 62794-9276
217/782-1724

SCHEDULE C-1 WELL CONSTRUCTION

DRILLING ONLY (When a permit for well drilling only is requested, only Schedule C-1 need to be submitted. Schedule C-11 can be submitted at a later date when pumping equipment is to be installed.)

1. Name of Public Water Supply City of Princeton

2. Name of Project Phase I New Well Field and WTP Initial Site Improvements

3. Well Number ~~101, 102, 103, 104~~ #7, #8, #9, #10

4. Location
   a. General Description North side of Backbone Road, approximately 1 mile northeast of the City of Princeton
   b. Legal Description Approximately 1,330 feet north and 1,180 feet east of the SW/C of Section 3, T16N, R9E
   c. Latitude 41 ° 23 ' 48 " Longitude 89 ° 26 ' 46 "

5. Sources of Contamination

RECEIVED
JUN 2 2009
DIVISION OF PUBLIC WATER SUPPLIES
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

   a. Sewers, septic tank and seepage fields, privies, etc: greater than 75 feet
   b. Sewage lagoons or treatment works (within one mile): greater than 400 feet
   c. Landfill operations of any type (within one mile): none
   d. On a topographic or other map of suitable scale of each well site denote the location of the wellhead, the 1,000 foot radius around the wellhead, and the location of potential primary* and secondary* sources and potential routes* of contamination within this zone.
   e. On a separate attachment provide a summary listing of each potential primary* and secondary* source and potential route* of contamination, including the name of identity and address of the unit owner, and a brief description of the nature of the facility or unit.

6. Is Site Subject to Flooding? ☐ Yes ☒ No

   Maximum Flood Stage N/A M.S.L. & Elevation of Casing Top N/A M.S.L.

7. General Aquifer Description Sand and gravel of the Sankoty Aquifer

8. Total Depth of Well 300

9. If not in the specifications, submit the Expected Log of Well on a separate sheet. *Included in specifications.

10. Casing (material, weight, thickness) 16" diameter, new steel, 62.58 lbs, 0.375 inches thick

11. Screen (expected) 40' length, 8" diameter, 40 slot, stainless steel, Johnson

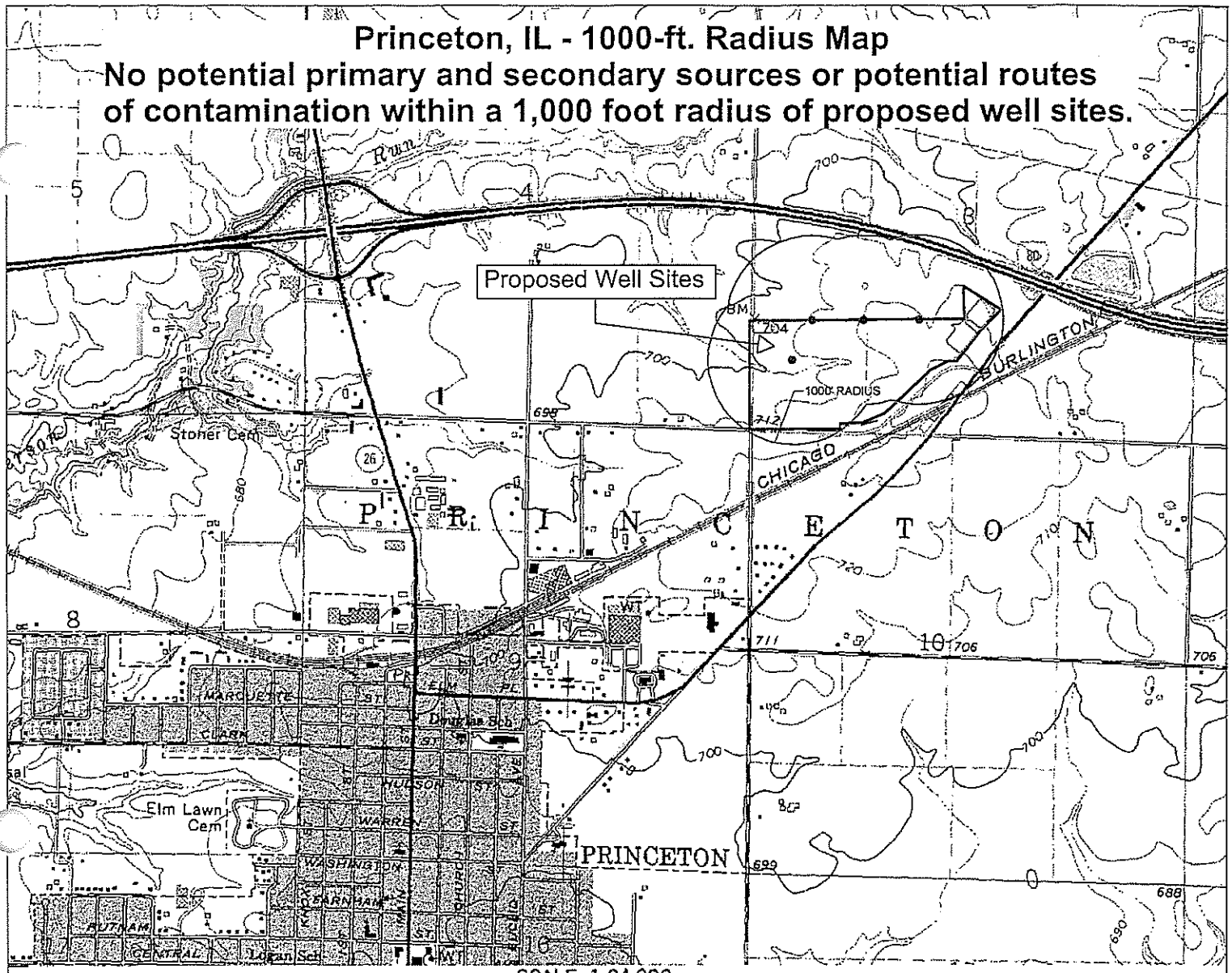
12. Grouting 0'-25'

13. Temporary Capping welded cap

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Princeton, IL - 1000-ft. Radius Map

No potential primary and secondary sources or potential routes of contamination within a 1,000 foot radius of proposed well sites.



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

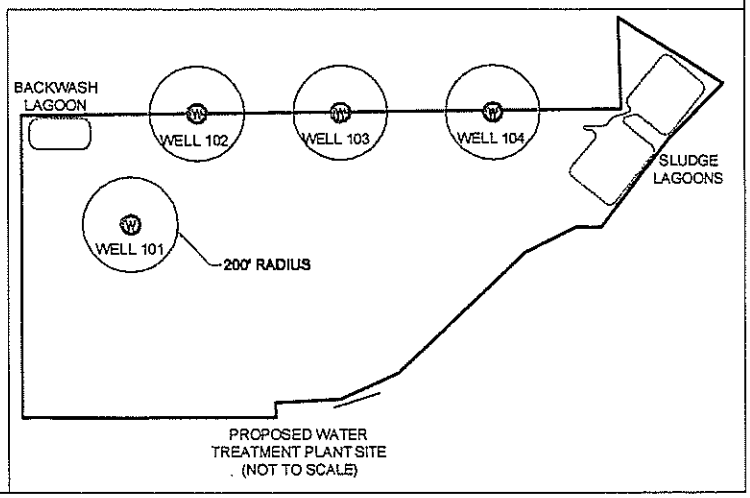
Heavy-duty ——— Light-duty - - -

Medium-duty —— Unimproved dirt - - - -

Interstate Route U. S. Route State Route

PRINCETON NORTH, ILL.
N4122.5–W8922.5/7.5

1963
PHOTOREVISED 1979
DMA 3166 IV NW–SERIES V863



WELL PRODUCTION TEST

ISWS P# 146238
Fac# 0119085O Pt# 10

Date:	August 31, 2010
City & Well No.:	City of Princeton Well #10
County:	Bureau
By:	Danielle Wallin, Farnsworth Group, Inc.
Well Owner:	City of Princeton
Consulting Engineers:	Farnsworth Group, Inc.
	.5b
Well Location (Ft. from	Approximately 1,300' N and 2,000' E of the SW/C Section 3, T16N, R9E
Sec. Corner, S, T, R, Co.):	Bureau County, Illinois
Date Well Completed:	August 6, 2010
Date of Production Test:	August 31, 2010
Length of Production Test:	Approximately 57 hours
No. of Observation Wells:	Three
Aquifer:	Sand and gravel of the Prairie Aquigroup; confluence of Paw Paw and Princeton Buried Bedrock Valleys

PUMPED WELL DATA

Well No.:	10
Depth:	305 feet
Drilling Contractor:	Kelley Dewatering, Wyoming, MI
Drill Cuttings:	Illinois State Geological Survey
Drilling Method:	Bucket rig from 0-120 ft and reverse rotary from 120-305 ft
Hole Record:	34" from 0-120 ft and 28" from 120-305 ft
Casing Record:	266 ft length, 16-inch, new steel from 1 ft above land surface to 265 ft below land surface
Screen Record:	40 ft length, 60-slot Johnson Hi-Flow 304 stainless steel from 265-305 ft
Annulus & Gravel Pack Record:	Cement grout from 0-25 ft. 3/8" crushed limestone from 25-240 ft. Bentonite seal from 240-245 ft. #2 Northern gravel pack from 245-305 ft.
Ground Elevation at Well:	720 feet (ground surface)
Measuring Point:	Top of 16" steel casing/plate/southwest side (1 foot above land surface)
Non-Pumping Water Level:	174.15 feet below Measuring Point
Measuring Equipment:	Solinst Level logger/500 ft electric dropline / rule in tenths & hundredths / 12"x9" orifice tube
Test Pump and Power:	125 hp submersible pump with generator power
Test Pump Setting:	Test pump set at 253' below land surface
Time Water Sample Collected:	Approximately 11:22 a.m. on September 2, 2010 (during well test)
Temperature of Water:	
Remarks:	

FIELD USE ONLY
WELL LOG AND DRILLING REPORT
DO NOT FILE. NOT AN OFFICIAL RECORD.

DNR 7802.05e-f Page ____ of ____ for this record.

Well ID #: _____ Job Number: _____
Notes: #10

WELL LOCATION

County _____ Township _____

City of Princeton
Owner/Builder

Address of Well Location

City _____ Zip Code +4 _____
Permit No. _____ Section: _____ and/or Lot No. _____
Use of Well _____
Coordinates of Well (Use only one of the below coordinate systems)
Latitude, Longitude Coordinates
Latitude: _____ Longitude: _____
State Plane Coordinates
N ☐ X _____ +/- _____ ft.
S ☐ Y _____ +/- _____ ft.
Elevation of Well in feet: _____ +/- _____ ft.
Datum Plane: ☐ NAD27 ☐ NAD83 Elevation Source _____
Source of Coordinates: _____

Well location written description:

Comments on water quality/quantity and well construction:

WELL TEST *

Pre-Pumping Static Level _____ ft. Date _____
Measured from _____
Pumping test method Test Pump 125 HP Sub
Test Rate 1500 gpm Duration of Test 72 hrs.
Feet of Drawdown _____ ft. Sustainable Yield _____ gpm
*(Attach a copy of the pumping test record, per section 1521.05, ORC)
Is Copy Attached? ☐ Yes ☐ No Flowing Well? ☐ Yes ☐ No

PUMP/PITLESS

Type of pump _____ Capacity _____ gpm
Pump set at _____ ft. Pitless Type _____
Pump installed by _____

I hereby certify the information given is accurate and correct to the best of my knowledge.
Drilling Firm _____
Address _____
City, State, Zip _____
Signed _____ Date _____

ODH Registration Number _____

CONSTRUCTION DETAILS

Drilling Method: Bucket Auger / Flooded Reverse
BOREHOLE/CASING (Measured from ground surface)
1 Borehole Diameter 34 inches Depth 120 ft.
Casing Diameter _____ in. Length _____ ft. Thickness _____ in.
2 Borehole Diameter 28 inches Depth 305 ft.
Casing Diameter 16 in. Length 267 ft. Thickness .375 in.
Casing Height Above Ground 2' _____ ft.
Type 1: Steel
Type 2: _____
Joints 1: Welded
Joints 2: _____

SCREEN
Diameter 16 in. Slot Size .060 in. Screen Length 40 ft.
Type Continuous Slot Material Stainless
Set Between 265 ft. and 305 ft.

GRAVEL PACK (Filter Pack)
Material/Size #2 Vol/Wt. Used 6- 3000LBS bags
Method of Installation Pour
Depth: Placed From: 305 ft. To: 245 ft.

GROUT
Material Cement Vol/Wt. Used 8 YRDS
Method of Installation Backfill From Truck
Depth: Placed From: 25 ft. To: Surf ft.

DRILLING LOG*

FORMATIONS INCLUDE DEPTH(S) AT WHICH WATER IS ENCOUNTERED.

Color	Texture	Formation	From	To
		Topsoil	0	2
		Brown Clay	2	30
		Gray Clay	30	65
		Gray Clay & Gravel	65	180
		Fine Sand	180	190
		Fine to Med. Sand	190	200
		Med. Coarse Sand & Gravel	200	210
		Gray Silty Clay	210	215
		Med. Coarse Sand	215	220
		Fine Silty Sand	220	225
		Fine to Med. Sand Trace Coarse	225	240
		Fine to Med. Sand Trace of Clay	240	245
		Fine Sand Trace of Clay	245	250
		Fine to Med. Sand	250	255
		Med. Coarse Sand & Gravel	255	280
		Med. Sand - Trace Coarse	280	285
		Coarse Sand Trace of Gravel	285	290
		Fine to Medium Sand & Gravel	290	300
		Coarse Sand Trace of Gravel	300	305

Bent 240-245
* 3/8 Limestone Chips From 240' to 25'

Aquifer Type (Formation producing the most water.) _____
Date of Well Completion _____ Total Depth of Well 305 ft.

FOR FIELD USE ONLY. DO NOT FILE.

ISWS P# 446238-02
Fac# 01190850 Pt# 10

Kelley DEWATERING & CONSTRUCTION CO.
5175 CLAY AVE. SW
WYOMING, MICHIGAN 49548
616-538-8010

Log of Borehole: WELL 10

Project: Princeton New Well Field

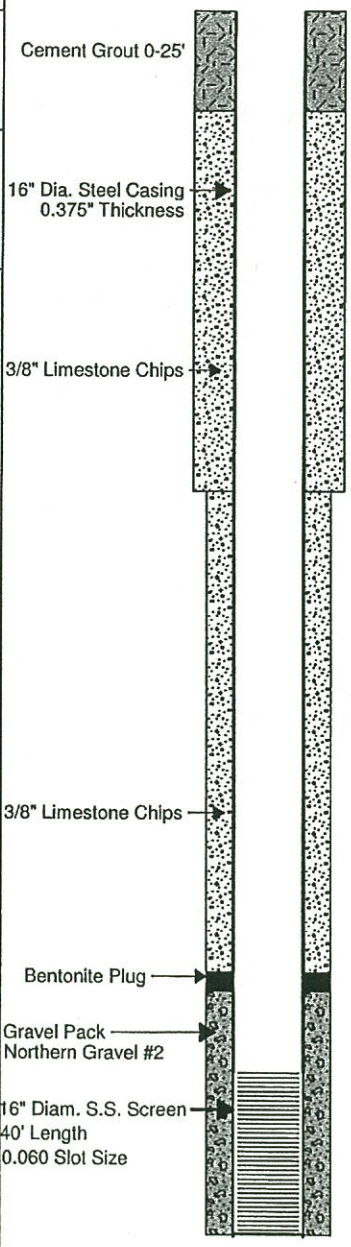
Client: City of Princeton

Location: Princeton, IL ***Project Manager:*** L. Ehorn

SUBSURFACE PROFILE

Depth Feet BGL	Description	Elevation MSL (Feet)
0	**Ground Surface**	720
	Topsoil / Brown Clay	690
50	Gray Clay	655
	Gray Clay & Gravel	540
100		
150		
	Fine Sand	530
	Fine to Med. Sand	520
200	Medium Coarse Sand & Gravel	510
	Gray Silty Clay	505
	Medium Coarse Sand	500
	Fine Silty Sand	495
	Fine to Med. Sand	480
	Fine to Med. Sand -'Trace of Clay	475
250	Fine Sand - Trace of Clay	470
	Fine to Medium Sand	465
	Medium Coarse Sand & Gravel	440
	Medium Sand - Trace Coarse	435
	Coarse Sand Trace Gravel	430
	Fine to Medium Sand & Gravel	420
300	Coasrse Sand - Trace Gravel	415

Well Completion Details



Drilled By: Kelley Dewatering & Construction Co.

Drill Method: Bucket Auger / Flooded Reverse

Drill Date: Completed - August 6, 2010

Hole Size: 34" / 28"

Datum: Mean Sea Level

ISWS P# 446238-03

Fac# 01190850 Pt# 10

City of Princeton, IL
Well #10 – Drilling Log
(Per Kelley Dewatering & Construction Co.)
Date Well Completed: August 6, 2010

Formation	From	To
Topsoil	0	2
Brown clay	2	30
Gray clay	30	65
Gray clay and gravel	65	180
Fine sand	180	190
Fine to medium sand	190	200
Medium coarse sand and gravel	200	210
Gray silty clay	210	215
Medium coarse sand	215	220
Fine silty sand	220	225
Fine to medium sand trace coarse	225	240
Fine to medium sand trace clay	240	245
Fine sand trace of clay	245	250
Fine to medium sand	250	255
Medium coarse sand and gravel	255	280
Medium sand trace coarse	280	285
Coarse sand trace of gravel	285	290
Fine to medium sand and gravel	290	300
Coarse sand trace of gravel	300	305

ISWS P# 446238-04

Fac# 01190850 Pt# 10

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Institute of Natural Resource Sustainability

Illinois State Water Survey
2204 Griffith Drive
Champaign, IL 61820

October 19, 2010

Ms. Danielle Wallin
Farnsworth Group
1144 W. Jefferson St., Suite 300
Shorewood, IL 60404

Dear Ms. Wallin:

We are enclosing a copy of the partial analysis made on a sample of water collected September 2, 2010, from the 305 foot Well Number 10 owned by the City of Princeton in Bureau County.

The analysis shows this sample to be moderately mineralized and hard. The iron content of this water is at a level which can result in the staining of porcelain and laundry. A major portion of the turbidity in this sample appears to be due to the previously soluble iron which oxidized and became insoluble after the water was exposed to air. The hardness in this sample is sufficient to cause the formation of a large amount of scale in boilers and hot water heaters, and to significantly increase consumption of soap when used for washing or laundry purposes.

The arsenic content of the raw water greatly exceeds the drinking water standard of 10 µg/L.

None of the other parameters tested appear unusual or excessive for Illinois ground water. However, our laboratory is only capable of identifying a limited number of the contaminants found in the Safe Drinking Water Act. Testing for bacteria, radionuclides, and synthetic organic contaminants, if desired, must be arranged through other laboratories. A listing of such laboratories can be found at www.epa.state.il.us/well-water/list-accredited-labs.html or in your yellow pages under "water".

If we can be of further assistance, please let us hear from you.

Very truly yours,

Kent W. Smothers
Head, Center for Chemistry & Technology
217/333-9231

jt

telephone (217) 244-5459 • *fax* (217) 333-4983 • www.isws.illinois.edu

The analytical methods used for the samples are as follows:

US EPA 200.7, Revision 4.4: Metals and Trace Elements by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry:

iron, Fe	sodium, Na	nickel, Ni	beryllium, Be
manganese, Mn	barium, Ba	copper, Cu	potassium, K
calcium, Ca	boron, B	zinc, Zn	
magnesium, Mg	chromium, Cr	aluminum, Al	

US EPA Method 300.0, Revision 2.1: Inorganic anions by Ion Chromatography

chloride, Cl	nitrate, NO_3-N	sulfate, SO_4	fluoride, F

US EPA Method 200.9: Trace Elements by Graphite Furnace Atomic Absorption Spectrometry

arsenic, As	lead, Pb

US EPA Method 150.1: pH, Electrometric

SM19, 2320-B: Alkalinity, electrometric titration, mg/L as $CaCO_3$

SM18,2540-C: Total Dissolved Solids Dried at 180°C

US EPA Method 180.1: Turbidity by Nephelometry

Hach Method 8025: Color, Platinum-Cobalt Standard Method

SM18,2150-B: Odor, Threshold Odor Test

SM18,2340-B: Hardness by Calculation

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Institute of Natural Resource Sustainability

Illinois State Water Survey
2204 Griffith Drive
Champaign, IL 61820

WATER SAMPLE DATA
LABORATORY SAMPLE NUMBER: 236338

SOURCE: MUNICIPAL DISTRIBUTION
WELL#: 10
LOCATION: PRINCETON
COUNTY: BUREAU
TOWNSHIP: 16N
RANGE: 09E
SECTION: 03
PLOT:
TREATMENT:

OWNER: CITY OF PRINCETON
WELL DEPTH: 305
DATE COLLECTED: 9/2/2010
DATE RECEIVED: 9/3/2010
FIELD TEMPERATURE (F): ND
COMMENTS: SAMPLE COLLECTED FROM ORIFICE TUBE DISCHARGE. PAGE 3 OF 3.

PARAMETER		RESULT	UNITS
Iron (Total Fe):		7.5	mg/L
Potassium (K):		2.5	mg/L
Calcium (Ca):		87	mg/L
Magnesium (Mg):		31	mg/L
Sodium (Na):		46	mg/L
Aluminum (Al):	<	37	ug/L
Arsenic (As):		23.39	ug/L
Barium (Ba):		149	ug/L
Beryllium (Be):	<	0.55	ug/L
Boron (B):		218	ug/L
Chromium (Cr):	<	5.8	ug/L
Cobalt (Co):	<	13	ug/L
Copper (Cu):	<	0.79	ug/L
Lithium (Li):	<	58	ug/L
Manganese (Mn):		54	ug/L
Molybdenum (Mo):	<	22	ug/L
Nickel (Ni):	<	14	ug/L
Strontium (Sr):		247	ug/L
Tin (Sn):	<	86	ug/L
Titanium (Ti):	<	0.56	ug/L
Vanadium (V):	<	47	ug/L
Zinc (Zn):	<	7.3	ug/L

PARAMETER		RESULT	UNITS
Fluoride (F):		0.284	mg/L
Chloride (Cl):		2.11	mg/L
Nitrate (NO3-N):	<	0.07	mg/L
Phosphorus (P):		0.49	mg/L
Sulfate (SO4):		0.495	mg/L
Sulfur (S):		0.33	mg/L
Turbidity (Lab, NTU):		95.8	NTU
Color (PCU):		27	PCU
pH (Lab):		7.52	
Alkalinity (CaCO3):		433	mg/L
Hardness (as CaCO3):		345	mg/L
Silica (SiO2):		27	mg/L
Total Dissolved Solids:		453	mg/L

ISWS P# 446238-05
Fac# 01190850 Pt# 10

< = Below detection limit (i.e. < 1.0 = less than 1.0)
mg/L = milligrams per liter
ND = Not determined/Information not available

ug/L = micrograms per Liter
hardness = (Ca mg/L * 2.497) + (Mg mg/L * 4.118)
1 mg/L = 1000 ug/L

Analyzed by: Sofia Lazovsky, Ruth Ann Nichols, Lauren F. Sievers, Kaye J. Surratt, and Daniel L. Webb

telephone (217) 244-5459 • *fax* (217) 333-4983 • www.isws.illinois.edu

WATER SAMPLE DATA QA/QC REPORT
LABORATORY SAMPLE NUMBER: 236338

P#:
AQ CODE:

SOURCE: MUNICIPAL DISTRIBUTION
WELL#: 10
LOCATION: PRINCETON
COUNTY: BUREAU
TOWNSHIP: 16N
RANGE: 09E
SECTION: 03
PLOT:
TREATMENT:

OWNER: CITY OF PRINCETON
WELL DEPTH: 305.00
DATE COLLECTED: 9/2/2010
DATE RECEIVED: 9/3/2010
TEMPERATURE (F): ND
COMMENTS: SAMPLE COLLECTED FROM ORIFICE TUBE DISCHARGE. PAGE 3 OF 3.

PARAMETER		Result	Units	meq/L
Iron (Total Fe):		7.5	mg/L	
Potassium (K):		2.5	mg/L	0.06
Calcium (Ca):		87	mg/L	4.34
Magnesium (Mg):		31	mg/L	2.55
Sodium (Na):		46	mg/L	2.00
Aluminum (Al):	<	37	ug/L	
Arsenic (As):		23.39	ug/L	
Barium (Ba):		149	ug/L	
Beryllium (Be):	<	0.55	ug/L	
Boron (B):		218	ug/L	
Chromium (Cr):	<	5.8	ug/L	
Cobalt (Co):	<	13	ug/L	
Copper (Cu):	<	0.79	ug/L	
Lithium (Li):	<	58	ug/L	
Manganese (Mn):		54	ug/L	
Molybdenum (Mo):	<	22	ug/L	
Nickel (Ni):	<	14	ug/L	
Strontium (Sr):		247	ug/L	
Tin (Sn):	<	86	ug/L	
Titanium (Ti):	<	0.56	ug/L	
Vanadium (V):	<	47	ug/L	
Zinc (Zn):	<	7.3	ug/L	

PARAMETER		Result	Units	meq/L
Fluoride (F):		0.284	mg/L	0.01
Chloride (Cl):		2.11	mg/L	0.06
Nitrate (NO3-N):	<	0.07	mg/L	0.00
Phosphorus (P):		0.49	mg/L	
Sulfate (SO4):		0.495	mg/L	0.01
Sulfur (S):		0.33	mg/L	

Turbidity (Lab, NTU):	95.8	NTU
Color (PCU):	27	PCU
pH (Lab):	7.52	

Alkalinity (CaCO3):	433	mg/L	8.66
Hardness (as CaCO3):	345	mg/L	
Silica (SiO2):	27	mg/L	
Total Dissolved Solids:	453	mg/L	

ISWS P# 446238-06
Fac# 01190850 Pt# 10

Major Cations Sum (meq/L): 8.96
Major Anions Sum (meq/L): 8.75
Ion Balance: Difference(c-a)= 0.208 IPD= 1.18 RPD= 2.35
TDS: Calculated= 457 Difference(m-c)= -3.71 RPD= 0.82 Ratio (m/c)= 0.99

< = Below detection limit (i.e. < 1.0 = less than 1.0)
mg/L = milligrams per liter
ND = Not determined/Information not available

hardness = (Ca mg/L * 2.497) + (Mg mg/L * 4.118) =
hardness = 217.24 + 127.66 = 344.90
ug/L = micrograms per Liter (1 mg/L = 1000 ug/L)

	PASS	FAIL	COMMENTS
Holding Time:	☐	☐	
RPD:	☐	☐	
Transcription:	☐	☐	
QA(Anions, pH,Alk,TDS):	☐	☐	

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Institute of Natural Resource Sustainability

Illinois State Water Survey
2204 Griffith Drive
Champaign, Illinois 61820

WATER SAMPLES
REQUIRED INFORMATION

Water Source: Well #10 (e.g. Private well, municipal well number, etc.) Well depth: 305' City: Princeton

Location: Approx. 2000'E & 1300'N of the SW/C Sec 3, T16N, R9E
(In feet from each of two adjoining section lines, or marked on map)

County: Bureau Township: 16N Range: 9E Section: 3

Owner: City of Princeton, Mike Eggers Phone: 815-719-0140

Address: 2 South Main St. Princeton, IL 61356
(Street, City, State, and Zip Code)

Collected by: Danielle Wallin Date: 9-2-10 Time: approx 11:22 am

Sample Collection Point: orifice tube discharge during well test
(e.g. Kitchen sink cold water tap, hydrant at well head, etc.)

Treatment? NO (Yes or No) Description: —

Send Report to: Name: Danielle Wallin, Farnsworth Group Phone: 815-744-6940
(Other than or in addition to owner)

Address: 1144 W. Jefferson St., Suite 300, Shorewood, IL 60404
(Street, City, State, and Zip Code)

REQUESTED INFORMATION

Date Drilled: 8-4-10 (completed) Log: attached
(Thicknesses and depths of formations encountered during drilling)

Size hole: 28 1/2" If reduced, where and how much: —

Casing record: 16 inch Screen record: 40 ft

Type of pump: Submersible (Submersible, shallow/deep well jet, centrifugal, etc.) Plumbing: Steel (Materials, e.g., copper, galvanized, plastic, iron)

Distance and direction from potential pollution sources: none

Gas Presence: no odor (Specific odor, other symptoms-milky water, banging pipes) Previous analysis: — new well

Prior owners: —
(Used to search our files for prior contacts, driller's log, etc.)

Intended use: municipal well
(e.g., Routine domestic, drinking-water only, irrigation, livestock (specify) watering, industrial, etc.)

Description of problem/Special users/comments:

SAMPLE NO.: 236338 RECEIVED BY: SL DATE: 09-03-10 TIME: 9:20

telephone 217-244-5459 • fax 217-333-4983 • www.isws.illinois.edu ISWS P# 446238-07

SCANNED Fac# 01190850 Pt# 10

Farnsworth GROUP

1144 W. Jefferson Street, Suite 300
Shorewood, Illinois 60404
p 815.744.6940 f 815.744.6965

www.f-w.com | www.greennavigation.com

December 13, 2010

City of Princeton
Attention: Mike Eggers
2 South Main Street
Princeton, IL 61356

Subject: City of Princeton Bureau County
Wells #7, #8, #9 and #10 Pump Test Analysis

Dear Mr. Eggers:

Kelley Dewatering performed pumping tests at the City of Princeton's Wells #7, #8, and #9 in July and August 2010. At Wells #7, #8 and #9 a constant rate-pumping test was performed for 180 minutes at a capacity of approximately 1,400-1,500 gpm. The recovery at each well was then recorded for 30 minutes after the pumping test concluded. Following the recovery test, a step-test was performed at each well at rates of approximately 1,400-1,500 gpm, 1,200-1,300 gpm, 1,000-1,100 gpm and 800-900 gpm for 20 minutes each.

On August 31, 2010 Kelley Dewatering performed a step test at Well #10 at rates of approximately 900 gpm, 1100 gpm, 1300 gpm and 1500 gpm for 20 minutes each. Following the recovery of the step test, an approximate 57 hour pumping test was performed at Well #10 at a capacity of approximately 1500 gpm. Water levels were measured through the use of a pressure transducer set in the well. Recovery was recorded for approximately 4 days after the pumping test concluded. Transducers also recorded the water levels in three observation wells (Observation Wells #1, #2 and #3) during the constant rate test and recovery period.

The pumping tests performed allows for the determination of aquifer properties including specific capacity, transmissivity and hydraulic conductivity. The use of observation wells allows for the calculation of the aquifer's storage coefficient. The step-tests performed allows for the determination of the well loss coefficient, which is an indicator of well screen development. The following summarizes the results of the data collected and calculations performed at each well:

Date of Pump Test	Well #	Measured Static Water Level*	Short Term Specific Capacity	Estimated Transmissivity	Estimated Hydraulic Conductivity	Estimated Storage Coefficient	Calculated Well Loss Coefficient
8/2/10	7	163.31 ft	71.09 gpm/ft	341,000 gpd/ft	3,000 gpd/ft^2	-	0.61 sec^2/ft^3
7/28/10	8	165.64 ft	83.28 gpm/ft	316,800 gpd/ft	3,000 gpd/ft^2	-	1.3 sec^2/ft^3
8/6/10	9	176.47 ft	63.61 gpm/ft	308,000 gpd/ft	3,000 gpd/ft^2	-	2.0 sec^2/ft^3
8/31/10	10	174.15 ft	53.67 gpm/ft	297,000 gpd/ft	2,400 gpd/ft^2	-	-
8/31/10	OB Well #1	178.24 ft	-	199,248 gpd/ft	-	3.27×10^{-4}	-
8/31/10	OB Well #2	179.14 ft	-	257,850 gpd/ft	-	3.06×10^{-4}	-
8/31/10	OB Well #3 (Well #9)	178.42 ft	-	381,170 gpd/ft	-	2.52×10^{-4}	-

**static water level from measuring point*

The calculated well loss coefficients are less than 5 sec^2/ft^3; therefore suggesting that the wells are efficient and have been properly developed.

Based on the available data and available drawdown, Wells #7, #8, #9 and #10 can be utilized at 1,000 gpm.

The drilling logs and well production test data have been included for your future reference. If you have any questions, please feel free to call.

Sincerely,

FARNSWORTH GROUP, INC.

Robert C. Kohlhase DCW
Engineering Manager

Danielle Wallin, P.G.
Professional Geologist

Enclosures

cc: Al Wehrmann, Illinois State Water Survey
Kevin Hannel, Farnsworth Group, Inc.

City of Princeton
Well #10 Step Test Data

STEP TEST #1							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Remarks*
September 1, 2010	8:59 AM		173.91	0.00			
	9:00 AM		173.91	0.00			
	9:01 AM	1	182.02	8.11	6	895	Took 4 min to adjust rate
	9:02 AM	2.5	203.82	29.91			
	9:04 AM	4	190.17	16.26			
	9:05 AM	5	189.79	15.88			
	9:06 AM	6	189.57	15.66			
	9:07 AM	7	189.47	15.56			
	9:08 AM	8					
	9:09 AM	9					
	9:10 AM	10	189.40	15.49			
	9:12 AM	12	189.32	15.41	6	~895	slightly under 6"
	9:14 AM	14	189.30	15.39			
	9:16 AM	16	189.26	15.35			
	9:18 AM	18	189.23	15.32			
	9:20 AM	20	189.21	15.30			
STEP TEST #2							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Remarks*
September 1, 2010	9:21 AM	21	194.28	20.37	9	1093	
	9:22 AM	22	194.43	20.52			
	9:23 AM	23	194.40	20.49			
	9:24 AM	24	194.44	20.53			
	9:25 AM	25	194.46	20.55			
	9:26 AM	26	194.47	20.56			
	9:27 AM	27	194.40	20.49			
	9:28 AM	28	194.46	20.55			
	9:29 AM	29	194.48	20.57			Dropline likely hung on casing
	9:30 AM	30	194.48	20.57			
	9:32 AM	32	194.49	20.58			
	9:34 AM	34	194.56	20.65	9	1093	
	9:36 AM	36	194.58	20.67			
	9:38 AM	38	194.58	20.67			
	9:40 AM	40	194.55	20.64			
STEP TEST #3							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Remarks*
September 1, 2010	9:41 AM	41	199.37	25.46	13	1303	
	9:42 AM	42	199.40	25.49			
	9:43 AM	43	199.42	25.51			
	9:44 AM	44	199.42	25.51			
	9:45 AM	45	199.42	25.51			
	9:46 AM	46	199.43	25.52			
	9:47 AM	47	199.43	25.52			
	9:48 AM	48	199.45	25.54			
	9:49 AM	49	199.46	25.55			
	9:50 AM	50	199.44	25.53			
	9:52 AM	52	199.46	25.55			
	9:54 AM	54	199.50	25.59			
	9:56 AM	56	199.47	25.56			
	9:58 AM	58	199.49	25.58			
	10:00 AM	60	199.52	25.61			

City of Princeton
Well #10 Step Test Data

STEP TEST #4							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Remarks*
September 1, 2010	10:01 AM	61	203.90	29.99			
	10:02 AM	62	204.03	30.12			
	10:03 AM	63	203.98	30.07			
	10:04 AM	64	203.96	30.05			
	10:05 AM	65	203.96	30.05			
	10:06 AM	66	203.89	29.98			
	10:07 AM	67	203.88	29.97			
	10:08 AM	68	203.89	29.98			
	10:09 AM	69	203.88	29.97			
	10:10 AM	70	203.88	29.97			
	10:12 AM	72	203.84	29.93			
	10:14 AM	74	203.83	29.92	18	1520	
	10:16 AM	76	203.82	29.91			
	10:18 AM	78	203.84	29.93			
	10:20 AM	80	203.83	29.92			
RECOVERY							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Remarks*
September 1, 2010	10:22 AM	82					
	10:24 AM	84	174.47				
	10:26 AM	86	174.72				
	10:28 AM	88	174.69				
	10:30 AM	90	174.64				
	10:41 AM	101	174.50				

City of Princeton
Well #10 Well Production Test Data

CONSTANT RATE PUMPING TEST							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Dropline Measurements*
August 31, 2010	12:45 PM	-	174.15				174.15' @ 12:45 PM
August 31, 2010	12:46 PM	-	174.16				
August 31, 2010	12:47 PM	-	174.16				
August 31, 2010	12:48 PM	-	174.15				
August 31, 2010	12:49 PM	-	174.15				
August 31, 2010	12:50 PM	-	174.15				
August 31, 2010	12:51 PM	-	174.15				
August 31, 2010	12:52 PM	-	174.15				
August 31, 2010	12:53 PM	-	174.16				
August 31, 2010	12:54 PM	-	174.15				
August 31, 2010	12:55 PM	-	174.15				
August 31, 2010	12:56 PM	-	174.15				
August 31, 2010	12:57 PM	-	174.16				
August 31, 2010	12:58 PM	-	174.16				
August 31, 2010	12:59 PM	-	174.16				
August 31, 2010	1:00 PM	-	174.17				
August 31, 2010	1:01 PM	0	174.16	0.00			
August 31, 2010	1:02 PM	1	201.80	27.64			
August 31, 2010	1:03 PM	2	201.51	27.35			
August 31, 2010	1:04 PM	3	201.71	27.55			
August 31, 2010	1:05 PM	4	201.75	27.59			
August 31, 2010	1:06 PM	5	201.89	27.73			
August 31, 2010	1:07 PM	6	201.95	27.79			
August 31, 2010	1:08 PM	7	201.90	27.74			
August 31, 2010	1:09 PM	8	202.09	27.93			
August 31, 2010	1:10 PM	9	201.90	27.74			
August 31, 2010	1:11 PM	10	201.99	27.83			
August 31, 2010	1:13 PM	12	201.96	27.80			
August 31, 2010	1:15 PM	14	202.24	28.08			
August 31, 2010	1:17 PM	16	201.92	27.76			
August 31, 2010	1:19 PM	18	202.13	27.97			
August 31, 2010	1:21 PM	20	202.16	28.00			
August 31, 2010	1:26 PM	25	202.13	27.97			
August 31, 2010	1:31 PM	30	202.15	27.99			
August 31, 2010	1:36 PM	35	202.19	28.03			
August 31, 2010	1:41 PM	40	202.29	28.13			
August 31, 2010	1:46 PM	45	202.35	28.20			
August 31, 2010	1:51 PM	50	202.41	28.25			
August 31, 2010	1:56 PM	55	202.28	28.12			
August 31, 2010	2:01 PM	60	202.38	28.22	18.25	1530	
August 31, 2010	2:11 PM	70	202.39	28.24			
August 31, 2010	2:21 PM	80	202.33	28.17			
August 31, 2010	2:31 PM	90	202.58	28.42			
August 31, 2010	2:41 PM	100	202.60	28.44			
August 31, 2010	2:51 PM	110	202.56	28.40			
August 31, 2010	3:01 PM	120	202.58	28.42	18.25	1530	
August 31, 2010	3:11 PM	130	202.61	28.45			
August 31, 2010	3:21 PM	140	202.58	28.42			
August 31, 2010	3:31 PM	150	202.72	28.56			
August 31, 2010	3:46 PM	165	202.61	28.45			
August 31, 2010	4:01 PM	180	202.67	28.51	18.25	1530	
August 31, 2010	4:31 PM	210	202.64	28.48			
August 31, 2010	5:01 PM	240	202.78	28.62			
August 31, 2010	5:31 PM	270	202.94	28.78			
August 31, 2010	6:01 PM	300	202.78	28.62			
August 31, 2010	6:31 PM	330	202.89	28.73			

City of Princeton
Well #10 Well Production Test Data

CONSTANT RATE PUMPING TEST							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	8:01 AM	2580	204.03	29.87	18.25	1530	
September 2, 2010	9:01 AM	2640	203.96	29.80			
September 2, 2010	10:01 AM	2700	203.89	29.73	18.25	1530	204.23' @ 10:35 AM
September 2, 2010	11:01 AM	2760	204.00	29.84	18" @ 11:22 AM		
September 2, 2010	12:01 PM	2820	204.10	29.94	18.25	1530	
September 2, 2010	1:01 PM	2880	204.11	29.95	18.25	1530	
September 2, 2010	2:01 PM	2940	204.21	30.05	18.25	1530	
September 2, 2010	3:01 PM	3000	204.03	29.87	18.25	1530	
September 2, 2010	4:01 PM	3060	204.05	29.89			
September 2, 2010	5:01 PM	3120	203.92	29.76			
September 2, 2010	6:01 PM	3180	204.08	29.92			
September 2, 2010	7:01 PM	3240	204.29	30.13	18.25" @ 7:30 PM	1530	
September 2, 2010	8:01 PM	3300	204.30	30.14			
September 2, 2010	9:01 PM	3360	204.27	30.11			
September 2, 2010	10:01 PM	3420	204.03	29.88			
September 2, 2010	10:31 PM	3450	204.15	30.00			
September 2, 2010	10:41 PM	3460	204.29	30.13			
September 2, 2010	10:42 PM	3461	204.48	30.32			
September 2, 2010	10:43 PM	3462	204.28	30.12			
September 2, 2010	10:44 PM	3463	204.10	29.94			
September 2, 2010	10:45 PM	3464	204.39	30.23			
September 2, 2010	10:46 PM	3465	204.37	30.21			
September 2, 2010	10:47 PM	3466	204.39	30.23			
September 2, 2010	10:48 PM	3467	204.23	30.07			Generator quit
RECOVERY							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	10:49 PM	1	168.18	-5.98			
September 2, 2010	10:50 PM	2	166.11	-8.05			
September 2, 2010	10:51 PM	3	168.81	-5.35			
September 2, 2010	10:52 PM	4	174.50	0.34			
September 2, 2010	10:53 PM	5	176.24	2.08			
September 2, 2010	10:54 PM	6	176.29	2.13			
September 2, 2010	10:55 PM	7	176.29	2.13			
September 2, 2010	10:56 PM	8	176.26	2.10			
September 2, 2010	10:57 PM	9	176.24	2.08			
September 2, 2010	10:58 PM	10	176.21	2.05			
September 2, 2010	11:00 PM	12	176.16	2.00			
September 2, 2010	11:02 PM	14	176.12	1.96			
September 2, 2010	11:04 PM	16	176.09	1.93			
September 2, 2010	11:06 PM	18	176.06	1.90			
September 2, 2010	11:08 PM	20	176.02	1.86			
September 2, 2010	11:13 PM	25	175.97	1.81			
September 2, 2010	11:18 PM	30	175.93	1.77			
September 2, 2010	11:23 PM	35	175.89	1.73			
September 2, 2010	11:28 PM	40	175.86	1.70			
September 2, 2010	11:33 PM	45	175.84	1.68			
September 2, 2010	11:38 PM	50	175.82	1.66			
September 2, 2010	11:43 PM	55	175.80	1.64			
September 2, 2010	11:48 PM	60	175.77	1.61			
September 2, 2010	11:58 PM	70	175.75	1.59			
September 3, 2010	12:08 AM	80	175.72	1.56			
September 3, 2010	12:18 AM	90	175.70	1.54			
September 3, 2010	12:28 AM	100	175.67	1.51			
September 3, 2010	12:48 AM	120	175.63	1.47			
September 3, 2010	1:03 AM	135	175.60	1.44			

City of Princeton
Well #10 Well Production Test Data

RECOVERY							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 3, 2010	1:18 AM	150	175.58	1.42			
September 3, 2010	1:33 AM	165	175.56	1.40			
September 3, 2010	1:48 AM	180	175.55	1.39			
September 3, 2010	2:18 AM	210	175.51	1.35			
September 3, 2010	2:48 AM	240	175.47	1.31			
September 3, 2010	3:18 AM	270	175.46	1.30			
September 3, 2010	3:48 AM	300	175.42	1.26			
September 3, 2010	4:18 AM	330	175.39	1.23			
September 3, 2010	4:48 AM	360	175.37	1.21			
September 3, 2010	5:18 AM	390	175.36	1.20			
September 3, 2010	5:48 AM	420	175.34	1.18			
September 3, 2010	6:18 AM	450	175.33	1.17			
September 3, 2010	6:48 AM	480	175.32	1.16			
September 3, 2010	7:18 AM	510	175.31	1.15			
September 3, 2010	7:48 AM	540	175.30	1.14			
September 3, 2010	8:18 AM	570	175.29	1.13			
September 3, 2010	8:48 AM	600	175.27	1.11			
September 3, 2010	9:18 AM	630	175.26	1.10			
September 3, 2010	9:48 AM	660	175.24	1.08			
September 3, 2010	10:18 AM	690	175.23	1.07			175.3' @ 10:22 AM
September 3, 2010	10:48 AM	720	175.22	1.06			
September 3, 2010	11:18 AM	750	175.21	1.05			
September 3, 2010	11:48 AM	780	175.19	1.03			
September 3, 2010	12:18 PM	810	175.18	1.02			
September 3, 2010	12:48 PM	840	175.17	1.01			
September 3, 2010	1:18 PM	870	175.16	1.00			
September 3, 2010	1:48 PM	900	175.14	0.98			
September 3, 2010	2:18 PM	930	175.14	0.98			
September 3, 2010	2:48 PM	960	175.15	0.99			
September 3, 2010	3:18 PM	990	175.14	0.98			
September 3, 2010	3:48 PM	1020	175.13	0.97			
September 3, 2010	4:18 PM	1050	175.12	0.96			
September 3, 2010	4:48 PM	1080	175.12	0.96			
September 3, 2010	5:18 PM	1110	175.11	0.95			
September 3, 2010	5:48 PM	1140	175.12	0.96			
September 3, 2010	6:18 PM	1170	175.11	0.95			
September 3, 2010	6:48 PM	1200	175.11	0.95			
September 3, 2010	7:18 PM	1230	175.12	0.96			
September 3, 2010	7:48 PM	1260	175.12	0.96			
September 3, 2010	8:18 PM	1290	175.12	0.96			
September 3, 2010	8:48 PM	1320	175.13	0.97			
September 3, 2010	9:18 PM	1350	175.12	0.96			
September 3, 2010	9:48 PM	1380	175.13	0.97			
September 3, 2010	10:18 PM	1410	175.12	0.96			
September 3, 2010	10:48 PM	1440	175.12	0.96			
September 3, 2010	11:48 PM	1500	175.11	0.95			
September 4, 2010	12:48 AM	1560	175.11	0.95			
September 4, 2010	1:48 AM	1620	175.09	0.93			
September 4, 2010	2:48 AM	1680	175.08	0.92			
September 4, 2010	3:48 AM	1740	175.08	0.92			
September 4, 2010	4:48 AM	1800	175.08	0.92			
September 4, 2010	5:48 AM	1860	175.09	0.93			
September 4, 2010	6:48 AM	1920	175.11	0.95			
September 4, 2010	7:48 AM	1980	175.11	0.95			
September 4, 2010	8:48 AM	2040	175.11	0.95			
September 4, 2010	9:48 AM	2100	175.11	0.95			
September 4, 2010	10:48 AM	2160	175.10	0.94			
September 4, 2010	11:48 AM	2220	175.09	0.93			

City of Princeton
Well #10 Well Production Test Data

RECOVERY							
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Piez. Tube (inches)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 4, 2010	12:48 PM	2280	175.08	0.92			
September 4, 2010	1:48 PM	2340	175.06	0.90			
September 4, 2010	2:48 PM	2400	175.05	0.89			
September 4, 2010	3:48 PM	2460	175.03	0.87			
September 4, 2010	4:48 PM	2520	175.00	0.84			
September 4, 2010	5:48 PM	2580	174.99	0.83			
September 4, 2010	6:48 PM	2640	174.97	0.81			
September 4, 2010	7:48 PM	2700	174.97	0.81			
September 4, 2010	8:48 PM	2760	174.97	0.81			
September 4, 2010	9:48 PM	2820	174.98	0.82			
September 4, 2010	10:48 PM	2880	174.97	0.81			

16N 9E – Sec. 3
City of Princeton
Bureau Co.

OBSERVATION WELL DATA

Observation Well No.	#1
Depth:	275 ft
Hole Record:	6-inch diameter from land surface-275 ft
Casing Record:	268 ft, 2-inch from 3 feet above land surface-265 ft
Screen Record:	10 ft, 12-slot, 2-inch Schedule 80 PVC from 265-275 ft
Measuring Equipment:	pressure transducer
Ground elevation:	Approximately 723 ft
Measuring Point:	3 ft above land surface (top of casing)
Nonpumping Water Level:	178.24 ft below MP on 8-31-10, 10:48 am (electric dropline)
Distance and Direction from Pumped Well:	145.6 ft west of Well #10

DRILLERS LOG

Formation	From	To
Topsoil	0	2
Brown Clay	2	32
Gray Clay	32	64
Gray Clay with Gravel	64	146
Green Clay – Hard	146	160
Silty Gray Clay – Trace Gravel	160	191
Fine Silty Sand (tight)	191	217
Medium Sand and Gravel	217	280

P453498

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
August 31, 2010	12:40 PM	-	178.11			178.24' @ 10:48 AM
August 31, 2010	12:41 PM	-	178.10			
August 31, 2010	12:42 PM	-	178.10			
August 31, 2010	12:43 PM	-	178.10			
August 31, 2010	12:44 PM	-	178.10			
August 31, 2010	12:45 PM	-	178.10			
August 31, 2010	12:46 PM	-	178.09			
August 31, 2010	12:47 PM	-	178.09			
August 31, 2010	12:48 PM	-	178.10			
August 31, 2010	12:49 PM	-	178.10			
August 31, 2010	12:50 PM	-	178.10			
August 31, 2010	12:51 PM	-	178.10			
August 31, 2010	12:52 PM	-	178.10			
August 31, 2010	12:53 PM	-	178.09			
August 31, 2010	12:54 PM	-	178.10			
August 31, 2010	12:55 PM	-	178.09			
August 31, 2010	12:56 PM	-	178.09			
August 31, 2010	12:57 PM	-	178.09			
August 31, 2010	12:58 PM	-	178.09			
August 31, 2010	12:59 PM	-	178.09			
August 31, 2010	1:00 PM	-	178.09			
August 31, 2010	1:01 PM	0	178.09	0		
August 31, 2010	1:02 PM	1	179.73	1.64		
August 31, 2010	1:03 PM	2	180.12	2.03		
August 31, 2010	1:04 PM	3	180.34	2.26		
August 31, 2010	1:05 PM	4	180.48	2.39		
August 31, 2010	1:06 PM	5	180.58	2.50		
August 31, 2010	1:07 PM	6	180.66	2.57		
August 31, 2010	1:08 PM	7	180.73	2.64		
August 31, 2010	1:09 PM	8	180.78	2.69		
August 31, 2010	1:10 PM	9	180.82	2.73		
August 31, 2010	1:11 PM	10	180.85	2.76		
August 31, 2010	1:13 PM	12	180.90	2.82		
August 31, 2010	1:15 PM	14	180.96	2.87		
August 31, 2010	1:17 PM	16	180.99	2.90		
August 31, 2010	1:19 PM	18	181.03	2.94		
August 31, 2010	1:21 PM	20	181.05	2.96		
August 31, 2010	1:26 PM	25	181.11	3.03		
August 31, 2010	1:31 PM	30	181.16	3.07		
August 31, 2010	1:36 PM	35	181.19	3.10		
August 31, 2010	1:41 PM	40	181.22	3.13		
August 31, 2010	1:46 PM	45	181.24	3.15		
August 31, 2010	1:51 PM	50	181.25	3.17		
August 31, 2010	1:56 PM	55	181.28	3.19		
August 31, 2010	2:01 PM	60	181.29	3.20		
August 31, 2010	2:11 PM	70	181.31	3.22		
August 31, 2010	2:21 PM	80	181.34	3.25		
August 31, 2010	2:31 PM	90	181.36	3.27		
August 31, 2010	2:41 PM	100	181.38	3.29		
August 31, 2010	2:51 PM	110	181.40	3.31		
August 31, 2010	3:01 PM	120	181.42	3.33		
August 31, 2010	3:16 PM	135	181.44	3.35		
August 31, 2010	3:31 PM	150	181.46	3.38		
August 31, 2010	3:46 PM	165	181.48	3.40		

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
August 31, 2010	4:01 PM	180	181.51	3.42		
August 31, 2010	4:31 PM	210	181.54	3.45		
August 31, 2010	5:01 PM	240	181.57	3.48		
August 31, 2010	5:31 PM	270	181.59	3.50		
August 31, 2010	6:01 PM	300	181.61	3.52		
August 31, 2010	6:31 PM	330	181.63	3.54		
August 31, 2010	7:01 PM	360	181.65	3.56		
August 31, 2010	7:31 PM	390	181.67	3.58		
August 31, 2010	8:01 PM	420	181.68	3.59		
August 31, 2010	8:31 PM	450	181.71	3.62		
August 31, 2010	9:01 PM	480	181.74	3.65		
August 31, 2010	9:31 PM	510	181.76	3.67		
August 31, 2010	10:01 PM	540	181.78	3.69		
August 31, 2010	10:31 PM	570	181.80	3.71		
August 31, 2010	11:01 PM	600	181.83	3.74		
August 31, 2010	11:31 PM	630	181.86	3.77		
September 1, 2010	12:01 AM	660	181.87	3.79		
September 1, 2010	12:31 AM	690	181.88	3.79		
September 1, 2010	1:01 AM	720	181.89	3.81		
September 1, 2010	1:31 AM	750	181.89	3.80		
September 1, 2010	2:01 AM	780	181.90	3.81		
September 1, 2010	2:31 AM	810	181.98	3.89		
September 1, 2010	3:01 AM	840	182.00	3.91		
September 1, 2010	3:31 AM	870	182.01	3.92		
September 1, 2010	4:01 AM	900	182.02	3.94		
September 1, 2010	4:31 AM	930	182.05	3.96		
September 1, 2010	5:01 AM	960	182.06	3.98		
September 1, 2010	5:31 AM	990	182.07	3.98		
September 1, 2010	6:01 AM	1020	182.09	4.00		
September 1, 2010	6:31 AM	1050	182.11	4.02		
September 1, 2010	7:01 AM	1080	182.12	4.03		
September 1, 2010	7:31 AM	1110	182.11	4.02		
September 1, 2010	8:01 AM	1140	182.13	4.05	1530	
September 1, 2010	8:31 AM	1170	182.14	4.05		
September 1, 2010	9:01 AM	1200	182.17	4.08	1530	
September 1, 2010	9:31 AM	1230	182.19	4.10		
September 1, 2010	10:01 AM	1260	182.20	4.11	1530	
September 1, 2010	10:31 AM	1290	182.21	4.12		
September 1, 2010	11:01 AM	1320	182.23	4.15	1530	
September 1, 2010	11:31 AM	1350	182.24	4.16		
September 1, 2010	12:01 PM	1380	182.26	4.17	1530	
September 1, 2010	12:31 PM	1410	182.28	4.19		
September 1, 2010	1:01 PM	1440	182.27	4.18	1530	
September 1, 2010	2:01 PM	1500	182.29	4.20		
September 1, 2010	3:01 PM	1560	182.29	4.20		182.29' @ 3:00 PM
September 1, 2010	4:01 PM	1620	182.30	4.22	1530	
September 1, 2010	5:01 PM	1680	182.32	4.23		
September 1, 2010	6:01 PM	1740	182.33	4.24		
September 1, 2010	7:01 PM	1800	182.36	4.27		
September 1, 2010	8:01 PM	1860	182.37	4.28	1530	
September 1, 2010	9:01 PM	1920	182.40	4.32		
September 1, 2010	10:01 PM	1980	182.42	4.33		
September 1, 2010	11:01 PM	2040	182.44	4.35		
September 2, 2010	12:01 AM	2100	182.45	4.36		

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	1:01 AM	2160	182.46	4.37		
September 2, 2010	2:01 AM	2220	182.46	4.37		
September 2, 2010	3:01 AM	2280	182.48	4.39		
September 2, 2010	4:01 AM	2340	182.48	4.39		
September 2, 2010	5:01 AM	2400	182.48	4.40	1530	
September 2, 2010	6:01 AM	2460	182.50	4.41		
September 2, 2010	7:01 AM	2520	182.50	4.41		
September 2, 2010	8:01 AM	2580	182.50	4.41	1530	
September 2, 2010	9:01 AM	2640	182.53	4.44		
September 2, 2010	10:01 AM	2700	182.54	4.45	1530	182.60' @ 10:46 AM
September 2, 2010	11:01 AM	2760	182.55	4.46		
September 2, 2010	12:01 PM	2820	182.57	4.48	1530	
September 2, 2010	1:01 PM	2880	182.56	4.47	1530	
September 2, 2010	2:01 PM	2940	182.55	4.46	1530	
September 2, 2010	3:01 PM	3000	182.57	4.48	1530	
September 2, 2010	4:01 PM	3060	182.57	4.48		
September 2, 2010	5:01 PM	3120	182.55	4.47		
September 2, 2010	6:01 PM	3180	182.56	4.47		
September 2, 2010	7:01 PM	3240	182.58	4.49	1530	
September 2, 2010	8:01 PM	3300	182.61	4.52		
September 2, 2010	9:01 PM	3360	182.65	4.57		
September 2, 2010	10:01 PM	3420	182.68	4.59		
September 2, 2010	10:31 PM	3450	182.69	4.61		
September 2, 2010	10:41 PM	3460	182.71	4.62		
September 2, 2010	10:42 PM	3461	182.71	4.62		
September 2, 2010	10:43 PM	3462	182.71	4.62		
September 2, 2010	10:44 PM	3463	182.71	4.62		
September 2, 2010	10:45 PM	3464	182.71	4.62		
September 2, 2010	10:46 PM	3465	182.71	4.62		
September 2, 2010	10:47 PM	3466	182.71	4.62		
September 2, 2010	10:48 PM	3467	182.71	4.62		Generator quit
RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	10:49 PM	1	180.61			
September 2, 2010	10:50 PM	2	179.69			
September 2, 2010	10:51 PM	3	179.51			
September 2, 2010	10:52 PM	4	179.81			
September 2, 2010	10:53 PM	5	179.95			
September 2, 2010	10:54 PM	6	179.95			
September 2, 2010	10:55 PM	7	179.93			
September 2, 2010	10:56 PM	8	179.90			
September 2, 2010	10:57 PM	9	179.88			
September 2, 2010	10:58 PM	10	179.86			
September 2, 2010	11:00 PM	12	179.80			
September 2, 2010	11:02 PM	14	179.76			
September 2, 2010	11:04 PM	16	179.73			
September 2, 2010	11:06 PM	18	179.70			
September 2, 2010	11:08 PM	20	179.67			
September 2, 2010	11:13 PM	25	179.62			
September 2, 2010	11:18 PM	30	179.57			
September 2, 2010	11:23 PM	35	179.54			
September 2, 2010	11:28 PM	40	179.52			

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	11:33 PM	45	179.49			
September 2, 2010	11:38 PM	50	179.46			
September 2, 2010	11:43 PM	55	179.44			
September 2, 2010	11:48 PM	60	179.43			
September 2, 2010	11:58 PM	70	179.40			
September 3, 2010	12:08 AM	80	179.37			
September 3, 2010	12:18 AM	90	179.34			
September 3, 2010	12:28 AM	100	179.32			
September 3, 2010	12:38 AM	110	179.30			
September 3, 2010	12:48 AM	120	179.28			
September 3, 2010	1:03 AM	135	179.26			
September 3, 2010	1:18 AM	150	179.24			
September 3, 2010	1:33 AM	165	179.22			
September 3, 2010	1:48 AM	180	179.20			
September 3, 2010	2:18 AM	210	179.17			
September 3, 2010	2:48 AM	240	179.14			
September 3, 2010	3:18 AM	270	179.11			
September 3, 2010	3:48 AM	300	179.08			
September 3, 2010	4:18 AM	330	179.06			
September 3, 2010	4:48 AM	360	179.04			
September 3, 2010	5:18 AM	390	179.03			
September 3, 2010	5:48 AM	420	179.01			
September 3, 2010	6:18 AM	450	179.00			
September 3, 2010	6:48 AM	480	178.99			
September 3, 2010	7:18 AM	510	178.99			
September 3, 2010	7:48 AM	540	178.98			
September 3, 2010	8:18 AM	570	178.96			
September 3, 2010	8:48 AM	600	178.94			
September 3, 2010	9:18 AM	630	178.92			
September 3, 2010	9:48 AM	660	178.91			
September 3, 2010	10:18 AM	690	178.91			
September 3, 2010	10:48 AM	720	178.89			
September 3, 2010	11:18 AM	750	178.87			
September 3, 2010	11:48 AM	780	178.86			
September 3, 2010	12:18 PM	810	178.86			
September 3, 2010	12:48 PM	840	178.83			
September 3, 2010	1:18 PM	870	178.83			
September 3, 2010	1:48 PM	900	178.81			
September 3, 2010	2:18 PM	930	178.80			
September 3, 2010	2:48 PM	960	178.82			
September 3, 2010	3:18 PM	990	178.81			
September 3, 2010	3:48 PM	1020	178.78			
September 3, 2010	4:18 PM	1050	178.79			
September 3, 2010	4:48 PM	1080	178.80			
September 3, 2010	5:18 PM	1110	178.79			
September 3, 2010	5:48 PM	1140	178.79			
September 3, 2010	6:18 PM	1170	178.78			
September 3, 2010	6:48 PM	1200	178.79			
September 3, 2010	7:18 PM	1230	178.80			
September 3, 2010	7:48 PM	1260	178.79			
September 3, 2010	8:18 PM	1290	178.79			
September 3, 2010	8:48 PM	1320	178.81			
September 3, 2010	9:18 PM	1350	178.80			
September 3, 2010	9:48 PM	1380	178.80			

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 3, 2010	10:18 PM	1410	178.80			
September 3, 2010	10:48 PM	1440	178.79			
September 3, 2010	11:48 PM	1500	178.79			
September 4, 2010	12:48 AM	1560	178.78			
September 4, 2010	1:48 AM	1620	178.77			
September 4, 2010	2:48 AM	1680	178.76			
September 4, 2010	3:48 AM	1740	178.76			
September 4, 2010	4:48 AM	1800	178.76			
September 4, 2010	5:48 AM	1860	178.77			
September 4, 2010	6:48 AM	1920	178.79			
September 4, 2010	7:48 AM	1980	178.79			
September 4, 2010	8:48 AM	2040	178.79			
September 4, 2010	9:48 AM	2100	178.79			
September 4, 2010	10:48 AM	2160	178.79			
September 4, 2010	11:48 AM	2220	178.78			
September 4, 2010	12:48 PM	2280	178.77			
September 4, 2010	1:48 PM	2340	178.74			
September 4, 2010	2:48 PM	2400	178.73			
September 4, 2010	3:48 PM	2460	178.71			
September 4, 2010	4:48 PM	2520	178.68			
September 4, 2010	5:48 PM	2580	178.67			
September 4, 2010	6:48 PM	2640	178.66			
September 4, 2010	7:48 PM	2700	178.65			
September 4, 2010	8:48 PM	2760	178.66			
September 4, 2010	9:48 PM	2820	178.66			
September 4, 2010	9:49 PM	2821	178.66			
September 4, 2010	9:50 PM	2822	178.67			
September 4, 2010	9:51 PM	2823	178.67			
September 4, 2010	9:52 PM	2824	178.66			
September 4, 2010	9:53 PM	2825	178.66			
September 4, 2010	9:54 PM	2826	178.66			
September 4, 2010	9:55 PM	2827	178.66			
September 4, 2010	9:56 PM	2828	178.67			
September 4, 2010	9:57 PM	2829	178.66			
September 4, 2010	9:58 PM	2830	178.66			
September 4, 2010	9:59 PM	2831	178.66			
September 4, 2010	10:00 PM	2832	178.67			
September 4, 2010	10:01 PM	2833	178.66			
September 4, 2010	10:02 PM	2834	178.67			
September 4, 2010	10:03 PM	2835	178.66			
September 4, 2010	10:04 PM	2836	178.66			
September 4, 2010	10:05 PM	2837	178.66			
September 4, 2010	10:06 PM	2838	178.66			
September 4, 2010	10:07 PM	2839	178.66			
September 4, 2010	10:08 PM	2840	178.66			
September 4, 2010	10:09 PM	2841	178.67			
September 4, 2010	10:10 PM	2842	178.66			
September 4, 2010	10:11 PM	2843	178.66			
September 4, 2010	10:12 PM	2844	178.66			
September 4, 2010	10:13 PM	2845	178.66			
September 4, 2010	10:14 PM	2846	178.67			
September 4, 2010	10:15 PM	2847	178.67			
September 4, 2010	10:16 PM	2848	178.67			
September 4, 2010	10:17 PM	2849	178.67			

City of Princeton
Well #10 Well Production Test
Observation Well #1 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 4, 2010	10:18 PM	2850	178.67			
September 4, 2010	10:19 PM	2851	178.67			
September 4, 2010	10:20 PM	2852	178.67			
September 4, 2010	10:21 PM	2853	178.67			
September 4, 2010	10:22 PM	2854	178.67			
September 4, 2010	10:23 PM	2855	178.67			
September 4, 2010	10:24 PM	2856	178.67			
September 4, 2010	10:25 PM	2857	178.67			
September 4, 2010	10:26 PM	2858	178.67			
September 4, 2010	10:27 PM	2859	178.67			
September 4, 2010	10:28 PM	2860	178.67			
September 4, 2010	10:29 PM	2861	178.67			
September 4, 2010	10:30 PM	2862	178.67			
September 4, 2010	10:31 PM	2863	178.67			
September 4, 2010	10:32 PM	2864	178.67			
September 4, 2010	10:33 PM	2865	178.67			
September 4, 2010	10:34 PM	2866	178.67			
September 4, 2010	10:35 PM	2867	178.67			
September 4, 2010	10:36 PM	2868	178.67			
September 4, 2010	10:37 PM	2869	178.67			
September 4, 2010	10:38 PM	2870	178.67			
September 4, 2010	10:39 PM	2871	178.67			
September 4, 2010	10:40 PM	2872	178.67			
September 4, 2010	10:41 PM	2873	178.67			
September 4, 2010	10:42 PM	2874	178.67			
September 4, 2010	10:43 PM	2875	178.67			
September 4, 2010	10:44 PM	2876	178.67			
September 4, 2010	10:45 PM	2877	178.67			
September 4, 2010	10:46 PM	2878	178.67			
September 4, 2010	10:47 PM	2879	178.67			
September 4, 2010	10:48 PM	2880	178.67			

16N 9E – Sec. 3
City of Princeton
Bureau Co.

OBSERVATION WELL DATA

Observation Well No.	#2
Depth:	275 ft
Hole Record:	6-inch diameter from land surface-275 ft
Casing Record:	268 ft, 2-inch from 3 feet above land surface-265 ft
Screen Record:	10 ft, 12-slot, 2-inch Schedule 80 PVC from 265-275 ft
Measuring Equipment:	pressure transducer
Ground elevation:	Approximately 725 feet
Measuring Point:	3 ft above land surface (top of casing)
Nonpumping Water Level:	179.14 ft below MP on 8-31-10, 12:40 pm (electric dropline)
Distance and Direction from Pumped Well:	284.6 ft west of Well #10

DRILLERS LOG

Formation	From	To
Topsoil	0	2
Brown Clay	2	35
Gray Clay	35	67
Gray Clay & Gravel	67	143
Green Clay – Hard	143	159
Silty Gray Clay / Trace Gravel	159	190
Fine Silty Sand – Tight	190	218
Medium Sand & Gravel	218	281

P453499

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
August 31, 2010	12:40 PM	-				179.14' @ 12:40 PM
August 31, 2010	12:41 PM	-				
August 31, 2010	12:42 PM	-				
August 31, 2010	12:43 PM	-				
August 31, 2010	12:44 PM	-				
August 31, 2010	12:45 PM	-				
August 31, 2010	12:46 PM	-				
August 31, 2010	12:47 PM	-				
August 31, 2010	12:48 PM	-				
August 31, 2010	12:49 PM	-				
August 31, 2010	12:50 PM	-				
August 31, 2010	12:51 PM	-				
August 31, 2010	12:52 PM	-				
August 31, 2010	12:53 PM	-				
August 31, 2010	12:54 PM	-				
August 31, 2010	12:55 PM	-				
August 31, 2010	12:56 PM	-				
August 31, 2010	12:57 PM	-				
August 31, 2010	12:58 PM	-				
August 31, 2010	12:59 PM	-				
August 31, 2010	1:00 PM	-				
August 31, 2010	1:01 PM	0	179.15	0.00		
August 31, 2010	1:02 PM	1	179.77	0.62		
August 31, 2010	1:03 PM	2	180.21	1.05		
August 31, 2010	1:04 PM	3	180.43	1.27		
August 31, 2010	1:05 PM	4	180.58	1.43		
August 31, 2010	1:06 PM	5	180.68	1.53		
August 31, 2010	1:07 PM	6	180.77	1.61		
August 31, 2010	1:08 PM	7	180.83	1.68		
August 31, 2010	1:09 PM	8	180.89	1.74		
August 31, 2010	1:10 PM	9	180.93	1.78		
August 31, 2010	1:11 PM	10	180.97	1.82		
August 31, 2010	1:13 PM	12	181.03	1.87		
August 31, 2010	1:15 PM	14	181.08	1.93		
August 31, 2010	1:17 PM	16	181.12	1.97		
August 31, 2010	1:19 PM	18	181.16	2.00		
August 31, 2010	1:21 PM	20	181.19	2.03		
August 31, 2010	1:26 PM	25	181.25	2.09		
August 31, 2010	1:31 PM	30	181.29	2.14		
August 31, 2010	1:36 PM	35	181.32	2.17		
August 31, 2010	1:41 PM	40	181.35	2.20		
August 31, 2010	1:46 PM	45	181.38	2.23		
August 31, 2010	1:51 PM	50	181.40	2.25		
August 31, 2010	1:56 PM	55	181.41	2.26		
August 31, 2010	2:01 PM	60	181.43	2.28		
August 31, 2010	2:11 PM	70	181.46	2.31		
August 31, 2010	2:21 PM	80	181.50	2.34		
August 31, 2010	2:31 PM	90	181.52	2.36		
August 31, 2010	2:41 PM	100	181.54	2.38		

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
August 31, 2010	2:51 PM	110	181.56	2.40		
August 31, 2010	3:01 PM	120	181.58	2.43		
August 31, 2010	3:16 PM	135	181.61	2.45		
August 31, 2010	3:31 PM	150	181.63	2.47		
August 31, 2010	3:46 PM	165	181.65	2.49		
August 31, 2010	4:01 PM	180	181.68	2.52		
August 31, 2010	4:31 PM	210	181.71	2.56		
August 31, 2010	5:01 PM	240	181.74	2.59		
August 31, 2010	5:31 PM	270	181.78	2.63		
August 31, 2010	6:01 PM	300	181.81	2.65		
August 31, 2010	6:31 PM	330	181.83	2.68		
August 31, 2010	7:01 PM	360	181.86	2.71		
August 31, 2010	7:31 PM	390	181.88	2.73		
August 31, 2010	8:01 PM	420	181.91	2.76		
August 31, 2010	9:00 PM	479	181.95	2.80		
August 31, 2010	9:01 PM	480	181.94	2.79		
August 31, 2010	9:31 PM	510	181.98	2.82		
August 31, 2010	10:01 PM	540	181.99	2.84		
August 31, 2010	10:31 PM	570	182.01	2.85		
August 31, 2010	11:01 PM	600	182.03	2.87		
August 31, 2010	11:31 PM	630	182.05	2.89		
September 1, 2010	12:01 AM	660	182.07	2.91		
September 1, 2010	12:31 AM	690	182.09	2.94		
September 1, 2010	1:01 AM	720	182.10	2.94		
September 1, 2010	1:31 AM	750	182.12	2.97		
September 1, 2010	2:01 AM	780	182.13	2.98		
September 1, 2010	2:31 AM	810	182.14	2.99		
September 1, 2010	3:01 AM	840	182.15	3.00		
September 1, 2010	3:31 AM	870	182.18	3.02		
September 1, 2010	4:01 AM	900	182.19	3.04		
September 1, 2010	4:31 AM	930	182.20	3.05		
September 1, 2010	5:01 AM	960	182.23	3.07		
September 1, 2010	5:31 AM	990	182.24	3.09		
September 1, 2010	6:01 AM	1020	182.25	3.09		
September 1, 2010	6:31 AM	1050	182.27	3.11		
September 1, 2010	7:01 AM	1080	182.27	3.12		
September 1, 2010	7:31 AM	1110	182.29	3.13		
September 1, 2010	8:01 AM	1140	182.29	3.13	1530	
September 1, 2010	8:31 AM	1170	182.30	3.15		
September 1, 2010	9:01 AM	1200	182.32	3.16	1530	
September 1, 2010	9:31 AM	1230	182.33	3.18		
September 1, 2010	10:01 AM	1260	182.34	3.19	1530	
September 1, 2010	10:31 AM	1290	182.36	3.20		
September 1, 2010	11:01 AM	1320	182.36	3.20	1530	
September 1, 2010	11:31 AM	1350	182.37	3.22		
September 1, 2010	12:01 PM	1380	182.38	3.22	1530	
September 1, 2010	12:31 PM	1410	182.39	3.24		
September 1, 2010	1:01 PM	1440	182.41	3.26	1530	
September 1, 2010	2:01 PM	1500	182.43	3.27		182.39' @ 2:46 PM
September 1, 2010	3:01 PM	1560	182.45	3.29		
September 1, 2010	4:01 PM	1620	182.47	3.32	1530	

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
September 1, 2010	5:01 PM	1680	182.50	3.34		
September 1, 2010	6:01 PM	1740	182.50	3.35		
September 1, 2010	7:01 PM	1800	182.53	3.38		
September 1, 2010	8:01 PM	1860	182.54	3.39	1530	
September 1, 2010	9:01 PM	1920	182.56	3.41		
September 1, 2010	10:01 PM	1980	182.58	3.42		
September 1, 2010	11:01 PM	2040	182.61	3.45		
September 2, 2010	12:01 AM	2100	182.62	3.47		
September 2, 2010	1:01 AM	2160	182.64	3.49		
September 2, 2010	2:01 AM	2220	182.65	3.50		
September 2, 2010	3:01 AM	2280	182.67	3.52		
September 2, 2010	4:01 AM	2340	182.69	3.53		
September 2, 2010	5:01 AM	2400	182.72	3.56	1530	
September 2, 2010	6:01 AM	2460	182.73	3.58		
September 2, 2010	7:01 AM	2520	182.74	3.58		
September 2, 2010	8:01 AM	2580	182.75	3.60	1530	
September 2, 2010	9:01 AM	2640	182.76	3.60		
September 2, 2010	10:01 AM	2700	182.78	3.63	1530	
September 2, 2010	11:01 AM	2760	182.79	3.64		182.64' @ 10:55 AM
September 2, 2010	12:01 PM	2820	182.81	3.65	1530	
September 2, 2010	1:01 PM	2880	182.83	3.67	1530	
September 2, 2010	2:01 PM	2940	182.83	3.68	1530	
September 2, 2010	3:01 PM	3000	182.85	3.69	1530	
September 2, 2010	4:01 PM	3060	182.87	3.71		
September 2, 2010	5:01 PM	3120	182.87	3.72		
September 2, 2010	6:01 PM	3180	182.89	3.73		
September 2, 2010	7:01 PM	3240	182.90	3.75	1530	
September 2, 2010	8:01 PM	3300	182.89	3.74		
September 2, 2010	9:01 PM	3360	182.93	3.78		
September 2, 2010	10:01 PM	3420	182.95	3.80		
September 2, 2010	10:31 PM	3450	182.94	3.78		
September 2, 2010	10:41 PM	3460	182.94	3.79		
September 2, 2010	10:42 PM	3461	182.94	3.79		
September 2, 2010	10:43 PM	3462	182.94	3.79		
September 2, 2010	10:44 PM	3463	182.95	3.80		
September 2, 2010	10:45 PM	3464	182.94	3.79		
September 2, 2010	10:46 PM	3465	182.95	3.80		
September 2, 2010	10:47 PM	3466	182.94	3.79		
September 2, 2010	10:48 PM	3467	182.95	3.80		Generator Quit
RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
September 2, 2010	10:49 PM	1	182.37			
September 2, 2010	10:50 PM	2	181.49			
September 2, 2010	10:51 PM	3	181.10			
September 2, 2010	10:52 PM	4	181.08			
September 2, 2010	10:53 PM	5	181.15			
September 2, 2010	10:54 PM	6	181.15			
September 2, 2010	10:55 PM	7	181.13			
September 2, 2010	10:56 PM	8	181.10			

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
September 2, 2010	10:57 PM	9	181.08			
September 2, 2010	10:58 PM	10	181.05			
September 2, 2010	11:00 PM	12	181.00			
September 2, 2010	11:02 PM	14	180.96			
September 2, 2010	11:04 PM	16	180.92			
September 2, 2010	11:06 PM	18	180.88			
September 2, 2010	11:08 PM	20	180.86			
September 2, 2010	11:13 PM	25	180.79			
September 2, 2010	11:18 PM	30	180.75			
September 2, 2010	11:23 PM	35	180.72			
September 2, 2010	11:28 PM	40	180.68			
September 2, 2010	11:33 PM	45	180.66			
September 2, 2010	11:38 PM	50	180.64			
September 2, 2010	11:43 PM	55	180.61			
September 2, 2010	11:48 PM	60	180.60			
September 2, 2010	11:58 PM	70	180.57			
September 3, 2010	12:08 AM	80	180.54			
September 3, 2010	12:18 AM	90	180.51			
September 3, 2010	12:28 AM	100	180.49			
September 3, 2010	12:38 AM	110	180.48			
September 3, 2010	12:48 AM	120	180.46			
September 3, 2010	1:03 AM	135	180.44			
September 3, 2010	1:18 AM	150	180.41			
September 3, 2010	1:33 AM	165	180.39			
September 3, 2010	1:48 AM	180	180.37			
September 3, 2010	2:18 AM	210	180.35			
September 3, 2010	2:48 AM	240	180.32			
September 3, 2010	3:18 AM	270	180.29			
September 3, 2010	3:48 AM	300	180.27			
September 3, 2010	4:18 AM	330	180.26			
September 3, 2010	4:48 AM	360	180.24			
September 3, 2010	5:18 AM	390	180.21			
September 3, 2010	5:48 AM	420	180.19			
September 3, 2010	6:18 AM	450	180.19			
September 3, 2010	6:48 AM	480	180.17			
September 3, 2010	7:18 AM	510	180.15			
September 3, 2010	7:48 AM	540	180.14			
September 3, 2010	8:18 AM	570	180.13			
September 3, 2010	8:48 AM	600	180.12			
September 3, 2010	9:18 AM	630	180.10			
September 3, 2010	9:48 AM	660	180.09			
September 3, 2010	10:18 AM	690	180.09			
September 3, 2010	10:48 AM	720	180.08			179.98' @ 10:39 AM
September 3, 2010	11:18 AM	750	180.06			
September 3, 2010	11:48 AM	780	180.05			
September 3, 2010	12:18 PM	810	180.06			
September 3, 2010	12:48 PM	840	180.04			
September 3, 2010	1:18 PM	870	180.02			
September 3, 2010	1:48 PM	900	180.02			
September 3, 2010	2:18 PM	930	180.02			
September 3, 2010	2:48 PM	960	180.00			

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
September 3, 2010	3:18 PM	990	179.99			
September 3, 2010	3:48 PM	1020	179.98			
September 3, 2010	4:18 PM	1050	179.97			
September 3, 2010	4:48 PM	1080	179.97			
September 3, 2010	5:18 PM	1110	179.96			
September 3, 2010	5:48 PM	1140	179.96			
September 3, 2010	6:18 PM	1170	179.95			
September 3, 2010	6:48 PM	1200	179.94			
September 3, 2010	7:18 PM	1230	179.93			
September 3, 2010	7:48 PM	1260	179.93			
September 3, 2010	8:18 PM	1290	179.92			
September 3, 2010	8:48 PM	1320	179.92			
September 3, 2010	9:18 PM	1350	179.91			
September 3, 2010	9:48 PM	1380	179.90			
September 3, 2010	10:18 PM	1410	179.90			
September 3, 2010	10:48 PM	1440	179.90			
September 3, 2010	11:48 PM	1500	179.88			
September 4, 2010	12:48 AM	1560	179.88			
September 4, 2010	1:48 AM	1620	179.87			
September 4, 2010	2:48 AM	1680	179.86			
September 4, 2010	3:48 AM	1740	179.85			
September 4, 2010	4:48 AM	1800	179.84			
September 4, 2010	5:48 AM	1860	179.83			
September 4, 2010	6:48 AM	1920	179.82			
September 4, 2010	7:48 AM	1980	179.82			
September 4, 2010	8:48 AM	2040	179.82			
September 4, 2010	9:48 AM	2100	179.80			
September 4, 2010	10:48 AM	2160	179.79			
September 4, 2010	11:48 AM	2220	179.79			
September 4, 2010	12:48 PM	2280	179.79			
September 4, 2010	1:48 PM	2340	179.78			
September 4, 2010	2:48 PM	2400	179.77			
September 4, 2010	3:48 PM	2460	179.77			
September 4, 2010	4:48 PM	2520	179.76			
September 4, 2010	5:48 PM	2580	179.75			
September 4, 2010	6:48 PM	2640	179.75			
September 4, 2010	7:48 PM	2700	179.74			
September 4, 2010	8:48 PM	2760	179.73			
September 4, 2010	9:48 PM	2820	179.73			
September 4, 2010	9:49 PM	2821	179.73			
September 4, 2010	9:50 PM	2822	179.73			
September 4, 2010	9:51 PM	2823	179.73			
September 4, 2010	9:52 PM	2824	179.73			
September 4, 2010	9:53 PM	2825	179.73			
September 4, 2010	9:54 PM	2826	179.73			
September 4, 2010	9:55 PM	2827	179.73			
September 4, 2010	9:56 PM	2828	179.73			
September 4, 2010	9:57 PM	2829	179.73			
September 4, 2010	9:58 PM	2830	179.73			
September 4, 2010	9:59 PM	2831	179.73			
September 4, 2010	10:00 PM	2832	179.73			

City of Princeton
Well #10 Well Production Test
Observation Well #2 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurement*
September 4, 2010	10:01 PM	2833	179.73			
September 4, 2010	10:02 PM	2834	179.73			
September 4, 2010	10:03 PM	2835	179.73			
September 4, 2010	10:04 PM	2836	179.73			
September 4, 2010	10:05 PM	2837	179.73			
September 4, 2010	10:06 PM	2838	179.73			
September 4, 2010	10:07 PM	2839	179.73			
September 4, 2010	10:08 PM	2840	179.73			
September 4, 2010	10:09 PM	2841	179.73			
September 4, 2010	10:10 PM	2842	179.73			
September 4, 2010	10:11 PM	2843	179.73			
September 4, 2010	10:12 PM	2844	179.73			
September 4, 2010	10:13 PM	2845	179.73			
September 4, 2010	10:14 PM	2846	179.73			
September 4, 2010	10:15 PM	2847	179.73			
September 4, 2010	10:16 PM	2848	179.73			
September 4, 2010	10:17 PM	2849	179.73			
September 4, 2010	10:18 PM	2850	179.73			
September 4, 2010	10:19 PM	2851	179.73			
September 4, 2010	10:20 PM	2852	179.72			
September 4, 2010	10:21 PM	2853	179.73			
September 4, 2010	10:22 PM	2854	179.73			
September 4, 2010	10:23 PM	2855	179.72			
September 4, 2010	10:24 PM	2856	179.72			
September 4, 2010	10:25 PM	2857	179.73			
September 4, 2010	10:26 PM	2858	179.72			
September 4, 2010	10:27 PM	2859	179.72			
September 4, 2010	10:28 PM	2860	179.72			
September 4, 2010	10:29 PM	2861	179.72			
September 4, 2010	10:30 PM	2862	179.72			
September 4, 2010	10:31 PM	2863	179.73			
September 4, 2010	10:32 PM	2864	179.73			
September 4, 2010	10:33 PM	2865	179.72			
September 4, 2010	10:34 PM	2866	179.73			
September 4, 2010	10:35 PM	2867	179.73			
September 4, 2010	10:36 PM	2868	179.72			
September 4, 2010	10:37 PM	2869	179.73			
September 4, 2010	10:38 PM	2870	179.72			
September 4, 2010	10:39 PM	2871	179.72			
September 4, 2010	10:40 PM	2872	179.72			
September 4, 2010	10:41 PM	2873	179.72			
September 4, 2010	10:42 PM	2874	179.72			
September 4, 2010	10:43 PM	2875	179.72			
September 4, 2010	10:44 PM	2876	179.73			
September 4, 2010	10:45 PM	2877	179.72			
September 4, 2010	10:46 PM	2878	179.72			
September 4, 2010	10:47 PM	2879	179.73			
September 4, 2010	10:48 PM	2880	179.73			

16N 09E - Sec. 3
City of Princeton
Bureau Co.

OBSERVATION WELL DATA

Observation Well No.	#3 (Well #9)
Depth:	275 ft
Hole Record:	34-inch from 0-100 ft and 28 ½" from 100-310 ft
Casing Record:	267 ft, 16-inch new steel from 2 ft above land surface to 265 ft
Screen Record:	40 ft, 80-slot stainless steel from 265-305 ft
Measuring Equipment:	pressure transducer
Ground elevation:	Approximately 723 feet
Measuring Point:	3.75 ft above finished floor / measured from bottom of southern access pipe
Nonpumping Water Level:	178.42 ft below MP on 8-31-10, 11:02 am (electric dropline)
Distance and Direction from Pumped Well:	649 ft west of Well #10

DRILLERS LOG

Formation	From	To
Topsoil	0	2
Brown clay	2	30
Gray clay	30	65
Gray clay and gravel	65	140
Silty gray clay trace gravel	140	190
Fine to medium sand trace gravel	190	200
Gravel - trace of sand	200	245
Fine to medium sand some gravel	245	255
Medium/coarse sand trace gravel	255	282
Coarse sand some gravel	282	292
Gray clay	292	294
Coarse sand some gravel	294	310

P-446237

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
August 31, 2010	12:40 PM	-	178.49			178.42' @ 11:02 AM
August 31, 2010	12:41 PM	-	178.49			
August 31, 2010	12:42 PM	-	178.49			
August 31, 2010	12:43 PM	-	178.49			
August 31, 2010	12:44 PM	-	178.49			
August 31, 2010	12:45 PM	-	178.48			
August 31, 2010	12:46 PM	-	178.49			
August 31, 2010	12:47 PM	-	178.48			
August 31, 2010	12:48 PM	-	178.48			
August 31, 2010	12:49 PM	-	178.48			
August 31, 2010	12:50 PM	-	178.48			
August 31, 2010	12:51 PM	-	178.48			
August 31, 2010	12:52 PM	-	178.48			
August 31, 2010	12:53 PM	-	178.48			
August 31, 2010	12:54 PM	-	178.48			
August 31, 2010	12:55 PM	-	178.48			
August 31, 2010	12:56 PM	-	178.48			
August 31, 2010	12:57 PM	-	178.48			
August 31, 2010	12:58 PM	-	178.48			
August 31, 2010	12:59 PM	-	178.48			
August 31, 2010	1:00 PM	-	178.48			
August 31, 2010	1:01 PM	0	178.47	0		
August 31, 2010	1:02 PM	1	178.53	0.06		
August 31, 2010	1:03 PM	2	178.75	0.28		
August 31, 2010	1:04 PM	3	178.91	0.44		
August 31, 2010	1:05 PM	4	179.04	0.56		
August 31, 2010	1:06 PM	5	179.13	0.66		
August 31, 2010	1:07 PM	6	179.21	0.73		
August 31, 2010	1:08 PM	7	179.27	0.79		
August 31, 2010	1:09 PM	8	179.32	0.85		
August 31, 2010	1:10 PM	9	179.36	0.89		
August 31, 2010	1:11 PM	10	179.40	0.93		
August 31, 2010	1:13 PM	12	179.46	0.99		
August 31, 2010	1:15 PM	14	179.51	1.04		
August 31, 2010	1:17 PM	16	179.56	1.08		
August 31, 2010	1:19 PM	18	179.59	1.11		
August 31, 2010	1:21 PM	20	179.62	1.14		
August 31, 2010	1:26 PM	25	179.68	1.20		
August 31, 2010	1:31 PM	30	179.72	1.25		
August 31, 2010	1:36 PM	35	179.75	1.28		
August 31, 2010	1:41 PM	40	179.78	1.31		
August 31, 2010	1:46 PM	45	179.80	1.33		
August 31, 2010	1:51 PM	50	179.82	1.35		
August 31, 2010	1:56 PM	55	179.84	1.36		
August 31, 2010	2:01 PM	60	179.86	1.38		

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
August 31, 2010	2:11 PM	70	179.88	1.41		
August 31, 2010	2:21 PM	80	179.90	1.43		
August 31, 2010	2:31 PM	90	179.92	1.44		
August 31, 2010	2:41 PM	100	179.93	1.46		
August 31, 2010	2:51 PM	110	179.95	1.48		
August 31, 2010	3:01 PM	120	179.97	1.49		
August 31, 2010	3:16 PM	135	179.98	1.51		
August 31, 2010	3:31 PM	150	180.00	1.53		
August 31, 2010	3:46 PM	165	180.02	1.55		
August 31, 2010	4:01 PM	180	180.03	1.56		
August 31, 2010	4:31 PM	210	180.06	1.58		
August 31, 2010	5:01 PM	240	180.08	1.61		
August 31, 2010	5:31 PM	270	180.10	1.62		
August 31, 2010	6:01 PM	300	180.11	1.64		
August 31, 2010	6:31 PM	330	180.13	1.66		
August 31, 2010	7:01 PM	360	180.14	1.67		
August 31, 2010	7:31 PM	390	180.15	1.68		
August 31, 2010	8:01 PM	420	180.17	1.69		
August 31, 2010	8:31 PM	450	180.19	1.71		
August 31, 2010	9:01 PM	480	180.21	1.73		
August 31, 2010	9:31 PM	510	180.22	1.75		
August 31, 2010	10:01 PM	540	180.24	1.77		
August 31, 2010	10:31 PM	570	180.26	1.79		
August 31, 2010	11:01 PM	600	180.28	1.81		
August 31, 2010	11:31 PM	630	180.30	1.83		
September 1, 2010	12:01 AM	660	180.32	1.84		
September 1, 2010	12:31 AM	690	180.33	1.85		
September 1, 2010	1:01 AM	720	180.33	1.86		
September 1, 2010	1:31 AM	750	180.33	1.86		
September 1, 2010	2:01 AM	780	180.34	1.87		
September 1, 2010	2:31 AM	810	180.40	1.92		
September 1, 2010	3:01 AM	840	180.41	1.94		
September 1, 2010	3:31 AM	870	180.42	1.95		
September 1, 2010	4:01 AM	900	180.44	1.97		
September 1, 2010	4:31 AM	930	180.46	1.99		
September 1, 2010	5:01 AM	960	180.47	2.00		
September 1, 2010	5:31 AM	990	180.49	2.01		
September 1, 2010	6:01 AM	1020	180.50	2.02		
September 1, 2010	6:31 AM	1050	180.50	2.03		
September 1, 2010	7:01 AM	1080	180.52	2.05		
September 1, 2010	7:31 AM	1110	180.52	2.04		
September 1, 2010	8:01 AM	1140	180.54	2.06	1530	
September 1, 2010	8:31 AM	1170	180.54	2.07		
September 1, 2010	9:01 AM	1200	180.56	2.09	1530	
September 1, 2010	9:31 AM	1230	180.59	2.11		

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 1, 2010	10:01 AM	1260	180.60	2.12	1530	
September 1, 2010	10:31 AM	1290	180.60	2.13		
September 1, 2010	11:01 AM	1320	180.62	2.15	1530	
September 1, 2010	11:31 AM	1350	180.63	2.16		
September 1, 2010	12:01 PM	1380	180.65	2.17	1530	
September 1, 2010	12:31 PM	1410	180.66	2.19		
September 1, 2010	1:01 PM	1440	180.66	2.18	1530	
September 1, 2010	2:01 PM	1500	180.67	2.19		
September 1, 2010	2:32 PM	1531	180.67	2.20		180.67' @ 2:32 PM
September 1, 2010	3:01 PM	1560	180.67	2.20	1530	
September 1, 2010	4:01 PM	1620	180.68	2.20		
September 1, 2010	5:01 PM	1680	180.69	2.22		
September 1, 2010	6:01 PM	1740	180.70	2.23		
September 1, 2010	7:01 PM	1800	180.72	2.25	1530	
September 1, 2010	8:01 PM	1860	180.73	2.26		
September 1, 2010	9:01 PM	1920	180.76	2.29		
September 1, 2010	10:01 PM	1980	180.78	2.30		
September 1, 2010	11:01 PM	2040	180.79	2.32		
September 2, 2010	12:01 AM	2100	180.80	2.33		
September 2, 2010	1:01 AM	2160	180.81	2.34		
September 2, 2010	2:01 AM	2220	180.81	2.34		
September 2, 2010	3:01 AM	2280	180.82	2.35		
September 2, 2010	4:01 AM	2340	180.82	2.35	1530	
September 2, 2010	5:01 AM	2400	180.82	2.35		
September 2, 2010	6:01 AM	2460	180.83	2.35		
September 2, 2010	7:01 AM	2520	180.83	2.36	1530	
September 2, 2010	8:01 AM	2580	180.84	2.36		
September 2, 2010	9:01 AM	2640	180.85	2.38	1530	
September 2, 2010	10:01 AM	2700	180.86	2.39		
September 2, 2010	11:01 AM	2760	180.87	2.40	1530	180.94' @ 11:08 AM
September 2, 2010	12:01 PM	2820	180.89	2.42	1530	
September 2, 2010	1:01 PM	2880	180.88	2.41	1530	
September 2, 2010	2:01 PM	2940	180.88	2.40	1530	
September 2, 2010	3:01 PM	3000	180.89	2.42		
September 2, 2010	4:01 PM	3060	180.89	2.41		
September 2, 2010	5:01 PM	3120	180.87	2.40		
September 2, 2010	6:01 PM	3180	180.88	2.40	1530	
September 2, 2010	7:01 PM	3240	180.89	2.42		
September 2, 2010	8:01 PM	3300	180.91	2.43		
September 2, 2010	9:01 PM	3360	180.95	2.48		
September 2, 2010	10:01 PM	3420	180.98	2.51		
September 2, 2010	10:31 PM	3450	181.00	2.52		
September 2, 2010	10:41 PM	3460	181.00	2.53		
September 2, 2010	10:42 PM	3461	181.00	2.53		
September 2, 2010	10:43 PM	3462	181.00	2.53		

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

CONSTANT RATE PUMPING TEST						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	10:44 PM	3463	181.00	2.53		
September 2, 2010	10:45 PM	3464	181.00	2.53		
September 2, 2010	10:46 PM	3465	181.01	2.53		
September 2, 2010	10:47 PM	3466	181.01	2.53		
September 2, 2010	10:48 PM	3467	181.01	2.53		
RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 2, 2010	10:49 PM	1	180.98			
September 2, 2010	10:50 PM	2	180.68			
September 2, 2010	10:51 PM	3	180.41			
September 2, 2010	10:52 PM	4	180.25			
September 2, 2010	10:53 PM	5	180.19			
September 2, 2010	10:54 PM	6	180.15			
September 2, 2010	10:55 PM	7	180.12			
September 2, 2010	10:56 PM	8	180.08			
September 2, 2010	10:57 PM	9	180.05			
September 2, 2010	10:58 PM	10	180.03			
September 2, 2010	11:00 PM	12	179.98			
September 2, 2010	11:02 PM	14	179.93			
September 2, 2010	11:04 PM	16	179.90			
September 2, 2010	11:06 PM	18	179.87			
September 2, 2010	11:08 PM	20	179.84			
September 2, 2010	11:13 PM	25	179.79			
September 2, 2010	11:18 PM	30	179.74			
September 2, 2010	11:23 PM	35	179.71			
September 2, 2010	11:28 PM	40	179.68			
September 2, 2010	11:33 PM	45	179.65			
September 2, 2010	11:38 PM	50	179.63			
September 2, 2010	11:43 PM	55	179.61			
September 2, 2010	11:48 PM	60	179.60			
September 2, 2010	11:58 PM	70	179.57			
September 3, 2010	12:08 AM	80	179.54			
September 3, 2010	12:18 AM	90	179.52			
September 3, 2010	12:28 AM	100	179.50			
September 3, 2010	12:38 AM	110	179.48			
September 3, 2010	12:48 AM	120	179.46			
September 3, 2010	1:03 AM	135	179.44			
September 3, 2010	1:18 AM	150	179.42			
September 3, 2010	1:33 AM	165	179.41			
September 3, 2010	1:48 AM	180	179.39			
September 3, 2010	2:18 AM	210	179.37			
September 3, 2010	2:48 AM	240	179.34			
September 3, 2010	3:18 AM	270	179.32			

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 3, 2010	3:48 AM	300	179.29			
September 3, 2010	4:18 AM	330	179.27			
September 3, 2010	4:48 AM	360	179.26			
September 3, 2010	5:18 AM	390	179.25			
September 3, 2010	5:48 AM	420	179.23			
September 3, 2010	6:18 AM	450	179.22			
September 3, 2010	6:48 AM	480	179.21			
September 3, 2010	7:18 AM	510	179.21			
September 3, 2010	7:48 AM	540	179.21			
September 3, 2010	8:18 AM	570	179.20			
September 3, 2010	8:48 AM	600	179.18			
September 3, 2010	9:18 AM	630	179.16			
September 3, 2010	9:48 AM	660	179.15			
September 3, 2010	10:18 AM	690	179.15			
September 3, 2010	10:48 AM	720	179.14			179.18' @ 10:50 AM
September 3, 2010	11:18 AM	750	179.12			
September 3, 2010	11:48 AM	780	179.11			
September 3, 2010	12:18 PM	810	179.10			
September 3, 2010	12:48 PM	840	179.09			
September 3, 2010	1:18 PM	870	179.08			
September 3, 2010	1:48 PM	900	179.07			
September 3, 2010	2:18 PM	930	179.07			
September 3, 2010	2:48 PM	960	179.07			
September 3, 2010	3:18 PM	990	179.06			
September 3, 2010	3:48 PM	1020	179.06			
September 3, 2010	4:18 PM	1050	179.05			
September 3, 2010	4:48 PM	1080	179.06			
September 3, 2010	5:18 PM	1110	179.06			
September 3, 2010	5:48 PM	1140	179.05			
September 3, 2010	6:18 PM	1170	179.05			
September 3, 2010	6:48 PM	1200	179.06			
September 3, 2010	7:18 PM	1230	179.06			
September 3, 2010	7:48 PM	1260	179.06			
September 3, 2010	8:18 PM	1290	179.07			
September 3, 2010	8:48 PM	1320	179.08			
September 3, 2010	9:18 PM	1350	179.08			
September 3, 2010	9:48 PM	1380	179.08			
September 3, 2010	10:18 PM	1410	179.07			
September 3, 2010	10:48 PM	1440	179.07			
September 3, 2010	11:48 PM	1500	179.07			
September 4, 2010	12:48 AM	1560	179.06			
September 4, 2010	1:48 AM	1620	179.05			
September 4, 2010	2:48 AM	1680	179.05			
September 4, 2010	3:48 AM	1740	179.05			
September 4, 2010	4:48 AM	1800	179.05			
September 4, 2010	5:48 AM	1860	179.06			

City of Princeton
Well #10 Well Production Test
Observation Well #3 Data

RECOVERY						
Date	*Time*	*t (minutes)*	*Depth to Water (ft)*	*Drawdown (ft)*	*Pump Rate (gpm)*	*Dropline Measurements*
September 4, 2010	6:48 AM	1920	179.08			
September 4, 2010	7:48 AM	1980	179.08			
September 4, 2010	8:48 AM	2040	179.08			
September 4, 2010	9:48 AM	2100	179.09			
September 4, 2010	10:48 AM	2160	179.09			
September 4, 2010	11:48 AM	2220	179.08			
September 4, 2010	12:48 PM	2280	179.06			
September 4, 2010	1:48 PM	2340	179.04			
September 4, 2010	2:48 PM	2400	179.03			
September 4, 2010	3:48 PM	2460	179.01			
September 4, 2010	4:48 PM	2520	178.99			
September 4, 2010	5:48 PM	2580	178.98			
September 4, 2010	6:48 PM	2640	178.97			
September 4, 2010	7:48 PM	2700	178.97			
September 4, 2010	8:48 PM	2760	178.97			
September 4, 2010	9:48 PM	2820	178.98			
September 4, 2010	10:48 PM	2880	178.98			