

WATER WELL PLUGGING RECORD Form WWC-5P

KSA 82a-1212

ID NO.

BIU-1

1 LOCATION OF WATER WELL: Fraction ¼ NE ¼ SW ¼ ¼ Section Number 27 Township Number T 27 S Range Number 18 E W
 County: Neosho

Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here

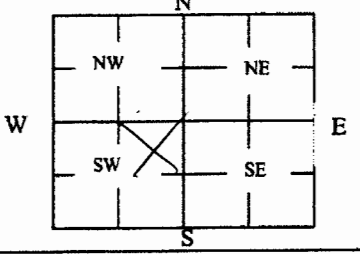
Approximately 1.5 miles SE of Downtown Chanute

Global Positioning Systems (GPS) information:
 Latitude: _____ (in decimal degrees)
 Longitude: _____ (in decimal degrees)
 Elevation: _____
 Datum: WGS84, NAD83, NAD27

Collection Method:
 GPS unit (Make/Model: _____)
 Digital Map/Photo, Topographic Map, Land Survey
 Est. Accuracy: < 3 m, 3-5 m, 5-15 m, > 15 m

2 WATER WELL OWNER: City of Chanute
 RR#, St. Address, Box #: 101 S. Lincoln, PO Bx 907
 City, State ZIP Code: Chanute, KS 66720

3 MARK WELL'S LOCATION WITH AN "X" IN SECTION BOX:



4 DEPTH OF WELL 20.35 ft.
 WELL'S STATIC WATER LEVEL 12.04 ft

WELL WAS USED AS:
 Domestic Public Water Supply Dewatering
 Irrigation Oil Field Water Supply Monitoring
 Feedlot Domestic (Lawn & Garden) Injection Well
 Industrial Air Conditioning Other _____

Was a chemical/bacteriological sample submitted to Department? Yes No

5 TYPE OF BLANK CASING USED:

- Steel RMP (SR) Wrought Fiberglass Other (Specify below) _____
 PVC ABS Asbestos-Cement Concrete Tile

Blank casing diameter 1 in. Was casing pulled? Yes No If yes, how much 20.35 feet
 Casing height above or below land surface _____ in.

6 GROUT PLUG MATERIAL: Neat cement Cement grout Bentonite Other _____

Grout Plug Intervals: From 3 ft. to 20.35 ft., From _____ ft. to _____ ft., From _____ to _____ ft.

What is the nearest source of possible contamination:

- Septic tank Seepage pit Fuel Storage Other (specify below) _____
 Sewer lines Pit privy Fertilizer storage Landfill _____
 Watertight sewer lines Sewage lagoon Insecticide storage
 Lateral lines Feedyard Abandoned water well Direction from well? West
 Cess pool Livestock pens Oil well/Gas well How many feet? _____

FROM	TO	PLUGGING MATERIALS	FROM	TO	PLUGGING MATERIALS
0	3	Native Soil			
3	20.35	Bentonite			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was plugged under my jurisdiction and was completed on (mo/day/year) 3/17/2010 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 708. This Water Well Record was completed on (mo/day/year) 7/8/10 under the business name of Aquaterra Environmental Solutions, Inc. by (signature) Anne S. Melos

INSTRUCTIONS: Use typewriter or ballpoint pen. Please press firmly and print clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Ste. 420, Topeka, Kansas 66612-1367. Telephone: 785/296-5524. Send one to Water Well Owner and retain one for your records. Visit us at <http://www.kdheks.gov/waterwell/index.html>.

Check one: White Copy Blue Copy Pink Copy

August 2, 2010

Mr. John Venneman
Public Works Supervisor
City of Chanute
101 South Lincoln
Chanute, Kansas 66720

COPY

Re: **Well Abandonment – BIP and PRB Wells**
Chanute Sanitary Landfill
Kansas Solid Waste Permit Number 274
Aquaterra Project Number 2112.10

Dear Mr. Venneman:

On March 17, 2010, Aquaterra Environmental Solutions, Inc. (Aquaterra) abandoned fifteen monitoring wells (BIU-1 through BIU-5, and BID-1 through BID-10) located at the Chanute Sanitary Landfill in Chanute, Kansas. An additional 42 monitoring wells (RBU-1 through RBU-6, RBD-1 through RBD-24, and PRB-1 through PRB-12) were abandoned by Aquaterra on June 23, 2010. This letter briefly summarizes the abandonment activities.

SITE INFORMATION

The Chanute Sanitary Landfill is located at 2201 E. 14th Street in Chanute, Neosho County, Kansas. The approximate total area of the facility property is 80 acres located in the East ½, Southwest ¼ of Section 27, Township 27 South, Range 18 East. Fifteen Bioremediation Enhancing Injection Point (BIP) wells were installed on the property during pilot test activities completed by Aquaterra in 2002/2003.

A 35-acre low concentration chlorinated aliphatic hydrocarbon (CAH) impacted groundwater plume emanating from the Chanute Sanitary Landfill was discovered in the late 1980s. Based on historical investigations at the site, the impacted groundwater traveled east/northeast from the landfill, and some of the groundwater eventually discharged via riverbank seeps into the Neosho River.

BIP pilot tests began in September 2002, in conjunction with three other remedial technologies aimed at addressing the CAH impacted groundwater plume: Permeable Reactive Barriers (PRB); Landfill Cap Drainage Improvements and Evapotranspiration (ET) - Tree Cap; and, Deep Planted Poplar Trees. In September 2002, five upgradient (BIU-1

through BIU-5) and ten downgradient (BID-1 through BID-10) mini-wells were installed around the BIPs. Based on the results of the remedial pilot testing, the BIP and PRB wells were no longer needed. KDHE requested that the BIP and PRB wells be properly abandoned.

ABANDONMENT ACTIVITIES

Aquaterra performed well abandonment activities on March 17 and June 23, 2010. The City of Chanute provided a backhoe/operator during both events, which was used to remove the PVC casing at wells BIU-1 through BIU-5, BID-1 through BID-10, RBU-1 through RBU-6, RBD-1 through RBD-24, and PRB-1 through PRB-12. The boreholes were backfilled with medium bentonite chips from the bottom of the borehole to within approximately 3 feet bgs and hydrated. Native soils were used to backfill the remaining 3 feet and bring the boreholes flush with the ground, restoring the surface to conform to current property use. Copies of the completed Water Well Plugging Records (Forms WWC-5P) are attached.

Aquaterra appreciates the opportunity to provide environmental services to the City of Chanute. If you have any questions or need additional information, please do not hesitate to contact our office at (913) 681-0030.

Sincerely,

Aquaterra Environmental Solutions, Inc.



Anne S. Melia, CHMM
Project Manager



Susan McCart, P.E., P.G.
Senior Project Manager

Attachments

Cc: Mr. Scott Yankey, KDHE-BER
KDHE-BOW, Geology Section