From: <scott.butler@exeloncorp.com>
To: <sko@nrc.gov>
Date: Fri, Feb 3, 2006 1:37 PM
Subject: FW: Response to IEPA Violation Notice

Steve - FYI - Please treat as withhold from the public as this was a Certified letter sent to the IEPA

-----Original Message-----
From: Ainger, Kenneth A.
Sent: Thursday, February 02, 2006 5:54 PM
To: O'Neill, Thomas S; Haeger, Allan R.; Meister, James R.; Nesbit, Craig; VanVranken, John; Sklenar, Scott E; Melberg, Peg; Miller, Neal F. (Brwd Communications); Polson, Keith; Ambler, Dale F.; Butler, Scott D.; 'pharvey@craworld.com'
Subject: Response to IEPA Violation Notice

Attached is our response that was submitted to the IEPA today.

<<0001041.pdf>> <<16841-00(PRES003)GN-WA002-FIGURE 1.pdf>> <<16841-00(PRES003)GN-WA004 FIGURE 2.pdf>> <<16841-00(PRES003)GN-WA005-FIGURE 3.pdf>> <<16841-00(PRES003)GN-WA006-FIGURE 4.pdf>> <<16841-00(PRES003)GN-WA007-FIGURE 5.pdf>> <<16841-00(PRES003)GN-WA003-FIGURE 6.pdf>>

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****

E-182

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Exelon. Nuclear

February 2, 2006
BW060011

Ms. Beverly Booker
Illinois Environmental Protection Agency
Bureau of Water, CAS #19
P. O. Box 19276
Springfield, IL 62794-9276

Subject: Braidwood Station
Response to Violation Notice W-2005-00537

Reference: Letter from Illinois EPA, "Violation Notice: Exelon Generation – Braidwood Station," dated December 16, 2005

Dear Ms. Booker:

In the referenced letter, the Illinois Environmental Protection Agency (Illinois EPA) issued a Violation Notice to Exelon Generation Company, LLC (Exelon) regarding groundwater quality at Braidwood Station and adjoining property. The Violation Notice is based on sampling results obtained between December 1 and December 12, 2005, that indicate the level of tritium exceeds the standards set forth in Section 12 of the Illinois Environmental Protection Act and the Illinois Pollution Control Board's regulations.

The enclosure to this letter contains Exelon's response to the Violation Notice. The response describes our actions to protect and inform the public, cease the release of tritium to groundwater, prevent future release of tritium to the groundwater, and our plans to address the elevated levels of tritium in the existing groundwater.

In accordance with 415 ILCS 5/31, "Notice; complaint; hearing;" subdivision (a)(2)(C), Exelon requests a meeting with representatives of the Illinois EPA to discuss this matter. We will contact the Illinois EPA to arrange this meeting.

This written response is being submitted within 45 days of Exelon's receipt of the Violation Notice via certified mail (i.e., December 20, 2005). By submitting this response, Exelon is not admitting that it has violated the Illinois Environmental Protection Act or the regulations of the Illinois Pollution Control Board. If you have any questions about this response, please contact Kenneth Ainger at 630 657-2800.

Respectfully,

Keith J. Polson
Site Vice President
Braidwood Station

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

ENCLOSURE

RESPONSE TO VIOLATION NOTICE W-2005-00537

I. Violation Notice Allegations

On December 16, 2005, the Illinois EPA issued the following in a violation notice to Exelon Generation Company, LLC:

Groundwater Quality

No person shall cause, threaten, or allow the release of any contaminant to resource groundwater such that treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater, or such that the existing or potential use of such groundwater is precluded. Exelon Generation – Braidwood Station must cease and decease of any further violations of the Act.

Violation Date	Violation Description
12/12/05	Sampling results indicate violations of Section 12 of the Act, the General Prohibition Against Use Impairment of Resource Groundwater, and the causing of the groundwater quality standard of tritium (20,000 pCi/L) to be exceeded during the time period and at the location(s) designated below: RW-2 10.5 ft. depth 58,621 pCi/L RW-2 20.5 ft. depth 170,024 pCi/L RW-2 25 ft. depth 223,888 pCi/L
Rule/Reg.	Section 12(a), and (d) of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 35 Ill. Adm. Code 620.301(a)(1) and (2), and 35 Ill. Adm. Code 620.410(e)(3).
12/07/05	Sampling results indicate violations of Section 12 of the Act, the General Prohibition Against Use Impairment of Resource Groundwater during the time period and at the location(s) designated below: Private well located at horse barn North of pond 1,151 pCi/L
Rule/Reg.	Section 12(a), and (d) of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, and 35 Ill. Adm. Code 620.301(a)(1) and (2).
12/06/05	Sampling results indicate violations of Section 12 of the Act, the General Prohibition Against Use Impairment of Resource Groundwater, and the causing of the groundwater quality standard of tritium (20,000 pCi/L) to be exceeded during the time period and at the location(s) designated below: VB-3-4 58,489 pCi/L VB-3-3 43,894 pCi/L VB-3-2 32,830 pCi/L VB-3-6 53,572 pCi/L P-4 33,736 pCi/L RW-2 33,736 pCi/L

Rule/Reg.	Section 12(a), and (d) of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 35 Ill. Adm. Code 620.301(a)(1) and (2), and 35 Ill. Adm. Code 620.410(e)(3).

Violation Date	Violation Description
12/01/05	Sampling results indicate violations of Section 12 of the Act, the General Prohibition Against Use Impairment of Resource Groundwater during the time period and at the location(s) designated below:
	Pond located just north of Smiley Rd. and west of the blow-down line. — 2,347 pCi/L; 2,464 pCi/L
Rule/Reg.	Section 12(a), (d), and (f) of the Act, 415 ILCS 5/12.

II. Exelon Response

The following response describes our actions to protect and inform the public, cease the release of tritium to groundwater, prevent future release of tritium to the groundwater, and our plans to address the elevated levels of tritium in the existing groundwater. In order to further assist the Illinois EPA in an understanding of site conditions, we are including in Attachment 1 a summary of key investigative data collected to date at the site. These data summaries are considered preliminary, as we are collecting additional data and continuing our evaluations, and include:

1. A base map of monitoring locations and key site features.
2. Groundwater level contour maps of the shallow and deep zones of the upper aquifer.
3. Estimated tritium concentrations presented in contour maps of the shallow and deep zones.
4. A hydrogeologic cross-section.
5. A table summarizing permanent and temporary well monitoring specifications.
6. A table summarizing sample results for tritium analyses from wells in the site area; and
7. A table summarizing tritium results from samples collected at private wells.

Protection and Notification of the Public

Exelon's first priority in response to this issue is the protection of the public. When we determined in late November 2005 that tritium in groundwater had likely migrated off the Braidwood Station property, we notified potentially affected residents. Door-to-door initial notifications were made to inform them of the status of our investigation, present them a fact sheet from the U. S. EPA regarding tritium, offer to sample their private wells for the presence of tritium, and respond to their questions and concerns. The results of the private well sample analyses, conducted by an independent laboratory, were provided to the residents. On December 12, 2005, Exelon conducted a meeting with the potentially affected local residents to update them on the status of our ongoing investigation, explain future actions and address their questions and concerns. In addition, we have met individually with a number of residents to address specific

concerns. A second round of door-to-door updates was conducted with the potentially affected residents on December 29, 2005, during which we provided those residents a copy of our December 29, 2005 news release and invited them to another update meeting which was held on January 26, 2006.

In addition to sampling private wells, Exelon obtained permission from potentially affected residents to drill temporary wells on their property and to sample water from ponds on their property to determine the migration of the tritium in groundwater. Exelon's plume characterization team continued sampling, analyzing and notifying adjoining land owners until the leading edge of the tritium was identified. Exelon has sampled over 31 private wells, drilled and sampled over 150 monitoring wells on and off the property, and sampled nearby surface water ponds offsite to laterally and vertically identify the distribution of tritium in the groundwater.

In order to identify potential users of groundwater in the down-gradient direction of flow (which is to the north) from the blowdown pipeline, Exelon initiated a comprehensive well inventory and well records search. This search is being conducted through the Illinois State Water Survey and includes groundwater users that can be identified within a one mile radius of the blowdown pipeline. The location of the wells, their use, depth and construction are being compiled for future evaluations. This well inventory, along with previously identified well users (private residences where wells have already been sampled), will form the basis of Exelon's notification list. This list will identify additional private, as well as public, water supply users that would be notified if it is determined there is a potential for impact to their water supply wells.

Cessation of Release of Tritium to Groundwater

Liquid radioactive effluent releases into the Braidwood Station circulating water blowdown line were suspended on November 23, 2005. This action was taken until additional information could be collected and testing conducted to ensure the integrity of the pipeline at all locations. Braidwood Station has not processed any liquid radioactive effluents through the circulating water blowdown pipeline since November 23, 2005.

As a result of suspending liquid radioactive effluent releases into the circulating water blowdown pipeline, temporary 20,000 gallon water storage tanks are being used to store liquid radioactive effluents onsite until new radioactive waste processing equipment is made operational.

An acoustical leak detection test was completed on January 6, 2006 to verify the integrity of the circulating water blowdown pipeline. A tethered acoustical sensor head inserted into the pipe was carried by the circulating water blowdown flow providing leak detection as it traversed along the pipeline length. The sensitivity of the sensor was determined by Exelon Engineering to detect a one gallon per minute leak under normal operating blowdown line pressure. One anomaly was identified at the end of the pipeline near the Kankakee River. This area was excavated and a visual inspection of the exposed pipe determined there was no leak.

Although there have been no liquid radioactive effluent releases through the circulating water blowdown pipeline since November 23, 2005, because the vacuum breaker valves installed along the length of the blowdown pipeline have been a source of leaks and

spills, a daily visual inspection of the blowdown pipeline is being conducted to verify no gross leakage.

In addition, Exelon has completed the following activities.

- Installation and sampling of over 30 shallow (approximately 15 ft. deep) and over 20 deep (approximately 25 ft. deep) monitoring points adjacent to the blowdown pipeline.
- Laboratory analyses of over 60 samples for tritium as a direct indicator of leakage from the blowdown pipeline and 45 samples for chloride and sodium which have been established as an indicator of the Braidwood Station cooling lake water flowing in the blowdown pipeline.
- Measurement of water levels along the blowdown pipeline and comparison with the regional, shallow groundwater table to determine if significant leaks are creating a mounding effect on the water table.
- Comparison of the three dimensional distribution of tritium in the groundwater to the plumes located south of Smiley Road to determine if it correlates with an on-going, or active release from the blowdown pipeline.

The above activities have relied upon groundwater data collected to date near and down-gradient of the blowdown pipeline. None of the data have indicated to Exelon and to its hydrogeologic experts that tritium measured in the groundwater on and off property has come from an active leak in the circulating water blowdown pipeline or vacuum breakers.

Prevention of Future Release of Tritium to Groundwater

Exelon is taking several actions, as described below, to prevent future releases of tritium into the groundwater. These include a potential design change involving discharge of liquid effluent into an additional circulating water blowdown pipeline, a project to significantly reduce the overall liquid discharge of tritium from Braidwood Station, and, in the event of a future spill, procedure changes to create a more effective response to minimize the impact to the environment.

Liquid effluents will not be introduced into the current circulating water blowdown pipeline unless leakage from this pipeline and vacuum breaker valves can be prevented with a high level of confidence. Exelon is currently exploring options for an alternate pipeline for discharge of liquid radioactive effluents that would maintain the current discharge point, but eliminate concerns with the existing circulating water blowdown pipeline and vacuum breaker valves.

Additionally, a project is underway at Braidwood Station to minimize liquid radioactive effluent releases into the circulating water blowdown pipeline in the future with the installation of new water processing equipment in the radioactive waste system. These improvements include state-of-the-art technologies in reverse osmosis and an additional unit to recycle existing liquid radioactive waste inventory into water that meets our quality requirements for the reactor coolant system. Also, Braidwood Station intends to install a means of converting liquid effluents to gaseous effluents.

Exelon is also looking into methods of reducing the production of tritium through various changes in reactor core configuration and primary water chemistry. These include potential changes in the reactor fuel rod design, "burnable poisons" in the reactor core, and fuel cycle length. Exelon is also partnering with its vendors to explore possible new technologies in tritium separation.

Finally, in the event of a future spill, the following actions are being taken to improve Exelon's response and minimize the impact to the environment.

1. A corporate environmental manager was assigned the action to institutionalize Exelon's tritium environmental spill response knowledge. The manager will utilize input from the various functional areas to develop an integrated set of procedures to mitigate and remediate spills with the potential to contain radioactive isotopes. Appropriate personnel will be trained on these procedures. A review of the effectiveness of the procedure development and training will be conducted at a suitable interval following completion.

2. The knowledge of Braidwood Station personnel regarding environmental regulations and reporting requirements will be enhanced with additional training. Training programs for personnel in the Operations, Chemistry/Environmental, and Radiation Protection Departments will be analyzed to determine additional knowledge requirements to address low level radioactivity spill reporting and personnel will be trained and tested on the changes. General training for all employees will be reviewed to identify any needed changes.

3. Exelon's applicable procedures/programs will be reviewed to ensure the Illinois regulations governing radioactive contamination of groundwater are correctly reflected and implemented in those documents.

Plans to Address Elevated Levels of Tritium in Existing Groundwater

Exelon proposes to address the elevated levels of tritium in existing groundwater through the Illinois EPA's Site Remediation Program (SRP). Participation in the SRP will include the following.

1. Conduct of a focused site investigation to characterize the extent of contamination. The investigation will focus on tritium. Since November 2005, Exelon has conducted extensive sampling as described above, and is currently evaluating the results to determine if additional sampling is necessary. A well survey, as described above, consistent with SRP rules and Illinois EPA policy, will also be included. Prior to submitting the final Site Investigation Report, Exelon will contact the Illinois EPA SRP staff to obtain input on any additional needs. The Site Investigation Report will be submitted as soon as possible, but no later than March 24, 2006.

2. Development of remedial objectives. As part of this step, Exelon will not only evaluate compliance with Part 620.410(e)(3), but risk to the public as well. Work on developing a Remedial Objectives Report (ROR) will commence as soon as possible, and will be submitted no later than 30 days after Illinois EPA approval of the Site Investigation Report.

3. Preparation of a Remedial Action Plan. Based on the results of the Site Investigation and the Remedial Objectives Report, a Remedial Action Plan (RAP) will be prepared and submitted. Options are currently being evaluated which include pumping areas of high concentration and returning these waters to the circulating water system. The RAP will include a schedule for all activities from startup to completion, and also provide for quarterly reports. This plan will be submitted within 30 days of approval of the Remedial Objectives Report.

4. Submission of a Remedial Action Completion Report (RACR). Once the RAP is approved, the final remedial design will commence within 30 days and the final RACR will be submitted within 30 days of completion.

The site has not yet been precisely identified, but generally is shown as the area on figures 4 and 5. Areas separate from this site, to the east along the routing of the blowdown pipeline, are currently being investigated.

As part of the overall strategy to address this issue, a community relations plan is being implemented. The plan builds on Braidwood Station's existing community outreach program that has been used, as described above in this response, to conduct multiple communications to keep the public informed. Exelon intends to continue this effort. The community relations plan includes development of a website with access to a fact sheet on the Braidwood tritium issue, a telephone hotline for interested members of the public to acquire information on the issue, and an upcoming community information night. The actions in our community relations plan may be adjusted over time, as the circumstances of this issue evolve. Our current community relations action plan will be submitted by March 1, 2006.

Attachment 1

Summary of Key Investigative Data

Figure 1	Groundwater Monitoring Locations
Figure 2	Average Groundwater Contours Shallow – January 2006
Figure 3	Average Groundwater Contours Deep – January 2006
Figure 4	Estimated Tritium Results Shallow Groundwater Zone
Figure 5	Estimated Tritium Results Deep Groundwater Zone
Figure 6	Site Specific Hydrogeologic Profile
Table 1	Monitoring Well Construction Specifications
Table 2	Summary of Tritium Results in Monitoring Wells
Table 3	Summary of Tritium Results at Private Wells

TABLE 1

MONITORING WELL
CONSTRUCTION SPECIFICATIONS
EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
MW-101	10.0	599.49	2	PVC[3]	5 to 10	602.77	594.49	589.49	3.28
MW-102	11.0	602.42	2	PVC	6 to 11	605.70	596.42	591.42	3.28
MW-103	8.0	595.72	2	PVC	3 to 8	598.84	592.72	587.72	3.12
MW-104	8.0	596.60	2	PVC	3 to 8	598.80	593.60	588.60	2.20
MW-105	16.0	597.29	2	PVC	11 to 16	600.74	586.29	581.29	3.45
MW-105D	24.0	597.22	1	PVC	19 to 24	598.20	578.22	573.22	0.98
MW-106	16.0	599.60	2	PVC	11 to 16	602.73	588.60	583.60	3.13
MW-106D	27.0	599.70	1	PVC	22 to 27	601.81	577.70	572.70	2.11
MW-107	16.0	599.85	2	PVC	11 to 16	603.24	588.85	583.85	3.39
MW-108	16.0	599.76	2	PVC	11 to 16	603.10	588.76	583.76	3.34
MW-109	16.0	598.81	2	PVC	11 to 16	601.23	587.81	582.81	2.42
MW-110	20.0	604.01	3	PVC	9.5 to 19.5	607.27	594.01	584.01	3.26
MW-111	16.0	603.29	4	PVC	5.5 to 15.5	607.20	597.29	587.29	3.91
MW-111D	26.5	603.17	1	PVC	21.5 to 26.5	605.05	581.67	576.67	1.88
MW-112	16.0	598.57	5	PVC	5.5 to 15.6	602.62	592.57	582.57	4.05
MW-112D	26.5	598.61	1	PVC	21.5 to 26.5	600.85	577.11	572.11	2.24
MW-113	16.0	596.10	6	PVC	5.5 to 15.7	599.77	590.10	580.10	3.67
MW-113D	24.0	596.14	1	PVC	19 to 24	596.90	577.14	572.14	0.76
VB-2-1	15.0	601.27	1	PVC	10 to 15	605.71	591.27	586.27	4.44
VB-2-2	15.0	596.82	1	PVC	10 to 15	600.16	586.82	581.82	3.34
VB-2-2D	29.5	596.49	1	PVC	24.5 to 29.5	598.95	571.99	566.99	2.46
VB-2-3	15.0	595.95	1	PVC	10 to 15	600.16	585.95	580.95	4.21
VB-2-4	15.0	596.08	1	PVC	10 to 15	600.82	586.08	581.08	4.74
VB-2-5	15.0	595.76	1	PVC	10 to 15	599.82	585.76	580.76	4.06
VB-2-5D	24.0	595.76	1	PVC	19 to 24	596.78	576.76	571.76	1.02
VB-2-6	15.0	596.01	1	PVC	10 to 15	601.44	586.01	581.01	5.43
VB-2-6D	24.0	596.01	1	PVC	19 to 24	596.77	577.01	572.01	0.76
VB-2-7	15.0	600.51	1	PVC	10 to 15	602.04	590.51	585.51	1.53

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EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
VB-2-7D	25.0	600.51	1	PVC	20 to 25	602.28	580.51	575.51	1.77
VB-2-8	15.0	598.18	1	PVC	10 to 15	599.05	588.18	583.18	0.87
VB-2-9	14.0	*	1	PVC	9 to 14	*	*	*	*
VB-2-9D	28.0	*	1	PVC	23 to 28	*	*	*	*
VB-3-1	15.0	596.38	1	PVC	10 to 15	600.99	586.38	581.38	4.61
VB-3-2	15.0	596.49	1	PVC	10 to 15	601.51	586.49	581.49	5.02
VB-3-3	15.0	596.27	1	PVC	10 to 15	600.03	586.27	581.27	3.76
VB-3-4	15.0	596.18	1	PVC	10 to 15	601.37	586.18	581.18	5.19
VB-3-4D	25.0	596.18	1	PVC	20 to 25	600.82	576.18	571.18	4.64
VB-3-5	15.0	*	1	PVC	10 to 15	*	*	*	*
VB-3-6	15.0	*	1	PVC	10 to 15	*	*	*	*
VB-3-7	14.5	596.24	1	PVC	9.5 to 14.5	599.49	586.74	581.74	3.25
VB-3-7D	24.0	596.24	1	PVC	19 to 24	597.04	577.24	572.24	0.80
VB-3-8	14.5	596.44	1	PVC	9.5 to 14.5	599.51	586.94	581.94	3.07
VB-3-9D	24.5	595.68	1	PVC	19.5 to 24.5	596.62	577.18	572.18	0.94
VB-3-10	13.0	596.43	1	PVC	8 to 13	599.28	588.43	583.43	2.85
VB-3-10D	23.5	596.49	1	PVC	18.5 to 23.5	598.44	577.99	572.99	1.95
VB-1-1	15.0	602.14	1	PVC	10 to 15	605.62	592.14	587.14	3.48
VB-1-1D	32.0	*	1	PVC	27 to 32	*	*	*	*
VB-1-2	15.0	599.94	1	PVC	10 to 15	604.65	589.94	584.94	4.71
VB-1-2D	28.0	*	1	PVC	23 to 28	*	*	*	*
VB-1-3	15.0	599.64	1	PVC	10 to 15	603.61	589.64	584.64	3.97
VB-1-3D	27.5	*	1	PVC	22.5 to 27.5	*	*	*	*
VB-1-4	15.0	599.32	1	PVC	10 to 15	601.50	589.32	584.32	2.18
VB-1-4D	28.0	*	1	PVC	23 to 28	*	*	*	*
VB-1-5	15.0	600.17	1	PVC	10 to 15	603.85	590.17	585.17	3.68
VB-1-5D	28.0	*	1	PVC	23 to 28	*	*	*	*
VB-1-6	15.0	*	1	PVC	10 to 15	605.34	*	*	*

TABLE 1

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CONSTRUCTION SPECIFICATIONS
EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
VB-1-6D	27.0	*	1	PVC	22 to 27	*	*	*	*
VB-1-7	15.0	*	1	PVC	10 to 15	603.62	*	*	*
VB-1-7D	26.5	600.48	1	PVC	21.5 to 26.5	602.80	578.98	573.98	2.32
VB-1-8	15.0	*	1	PVC	10 to 15	603.36	*	*	*
VB-1-8D	26.5	600.15	1	PVC	21.5 to 26.5	602.49	578.65	573.65	2.34
VB-1-9	15.0	*	1	PVC	10 to 15	601.86	*	*	*
VB-1-9D	27.0	*	1	PVC	22 to 27	*	*	*	*
RW-1	25.0	596.68	1	PVC	5 to 25	599.36	591.68	572	2.68
RW-2	24.0	596.59	1	PVC	4 to 24	599.30	591.59	571.59	2.71
RW-3	24.0	596.24	1	PVC	4 to 24	599.19	592.24	572.27	2.95
RW-4	24.0	596.31	1	PVC	4 to 24	598.77	592.31	572.31	2.46
BL-1	17.0	600.38	1	PVC	12 to 17	605.58	588.38	583.38	5.20
BL-2	14.5	600.16	1	PVC	9.5 to 14.5	604.84	590.66	585.66	4.68
BL-3	23.0	600.60	1	PVC	18 to 23	604.50	582.60	577.60	3.90
BL-4	14.5	599.76	1	PVC	10 to 15	601.91	589.76	584.76	2.15
BL-5	21.0	599.76	1	PVC	16 to 21	602.60	583.76	578.76	2.84
BL-6	16.5	597.74	1	PVC	11.5 to 16.5	601.83	586.24	581.24	4.09
BL-7	14.0	597.57	1	PVC	9 to 14	601.08	588.57	583.57	3.51
BL-8	18.0	598.53	1	PVC	13 to 18	602.29	585.53	580.53	3.76
BL-9 [5]	12.5	599.75	1	PVC	7.5 to 12.5	602.75	592.25	587.25	3.00
BL-9	21.0	599.60	1	PVC	16 to 21	602.49	583.60	578.60	2.89
BL-9D	29.0	599.65	1	PVC	24 to 29	600.36	575.65	570.65	0.71
BL-10	17.0	602.49	1	PVC	12 to 17	605.37	590.28	585.28	2.88
BL-10D	32.0	602.43	1	PVC	27 to 32	605.16	575.43	570.43	2.73
BL-11	16.5	597.47	1	PVC	11.5 to 16.5	600.65	585.97	580.97	3.18
BL-11D	28.0	597.34	1	PVC	23 to 28	599.09	574.34	569.34	1.75
BL-12	17.0	598.03	1	PVC	12 to 17	601.60	586.03	581.03	3.57
BL-12D	28.0	598.10	1	PVC	23 to 28	599.87	575.10	570.10	1.77

TABLE 1

MONITORING WELL
CONSTRUCTION SPECIFICATIONS
EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
BL-13	15.0	598.07	1	PVC	10 to 15	601.37	588.07	583.07	3.30
BL-13D	24.5	598.05	1	PVC	19.5 to 24.5	600.82	565.55	564.55	2.77
BL-14	18.0	597.34	1	PVC	13 to 18	601.26	584.34	579.34	3.92
BL-14D	26.5	597.46	1	PVC	21.5 to 26.5	599.90	575.96	570.96	2.44
BL-15	17.5	597.29	1	PVC	12.5 to 17.5	600.98	584.79	579.79	3.69
BL-15D	24.0	597.54	1	PVC	19 to 24	598.50	578.54	573.64	0.96
BL-16	17.0	597.12	1	PVC	12 to 17	600.30	585.12	580.12	3.18
BL-16D	24.0	597.28	1	PVC	19 to 24	598.17	578.28	573.28	0.89
BL-17	14.5	597.01	1	PVC	9.5 to 14.5	597.62	587.51	582.51	0.61
BL-17D	24.0	597.01	1	PVC	19 to 24	598.11	578.01	573.01	1.10
BL-18	14.5	596.82	1	PVC	9.5 to 14.5	597.59	587.32	582.32	0.77
BL-19	9.0	594.94	1	PVC	4 to 9	595.55	590.94	585.94	0.61
BL-20D	28.0	596.89	1	PVC	23 to 28	600.45	573.89	568.89	3.56
P-1	14.5	594.90	1	PVC	9.5 TO 14.5	595.59	585.40	580.40	0.69
P-2	14.5	595.65	1	PVC	9.5 TO 14.5	596.27	586.15	581.15	0.62
P-2D	23.5	595.88	1	PVC	18.5 to 23.5	596.55	577.38	572.38	0.67
P-3	14.5	595.69	1	PVC	9.5 TO 14.5	596.26	586.19	581.19	0.57
P-4	14.5	*	1	PVC	9.5 TO 14.5	597.14	*	*	*
P-4D	27.0	596.46	1	PVC	22 to 27	599.22	574.46	569.46	2.76
P-5	15.0	*	1	PVC	10 to 15	597.06	*	*	*
P-5D	27.0	596.34	1	PVC	22 to 27	599.37	574.34	569.34	3.03
P-6	14.5	*	1	PVC	9.5 to 14.5	597.85	*	*	*
P-7	14.5	599.77	1	PVC	9.5 to 14.5	600.24	590.27	585.27	0.47
P-8	14.5	595.49	1	PVC	9.5 to 14.5	596.24	585.99	580.99	0.75
P-9	14.5	598.55	1	PVC	9.5 to 14.5	599.19	589.05	584.05	0.64
P-10	14.5	596.08	1	PVC	9.5 to 14.5	596.58	586.58	581.58	0.50
P-11	14.5	595.19	1	PVC	9.5 to 14.5	596.23	585.69	580.69	1.04
P-12	14.5	595.56	1	PVC	9.5 to 14.5	596.13	586.06	581.06	0.57

TABLE 1

MONITORING WELL
CONSTRUCTION SPECIFICATIONS
EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
P-13D	27.0	596.11	1	PVC	22 to 27	598.76	574.11	569.11	2.65
P-14	15.5	*	1	PVC	10.5 to 15.5	*	*	*	*
P-14D	28.0	*	1	PVC	23 to 28	*	*	*	*
D-1	15.0	599.64	1	PVC	10 to 15	603.69	589.64	584.64	4.05
D-1D	27.0	599.82	1	PVC	22 to 27	603.77	577.82	572.82	3.95
D-2	15.0	598.78	1	PVC	10 to 15	601.92	588.78	583.78	3.14
D-2D	27.0	598.65	1	PVC	22 to 27	601.47	576.65	571.65	2.82
D-3	15.0	599.00	1	PVC	10 to 15	602.48	589.00	584.00	3.48
D-3D	27.0	598.91	1	PVC	22 to 27	602.22	576.91	571.91	3.31
D-4	15.0	598.48	1	PVC	10 to 15	602.55	588.48	583.48	4.07
D-5	15.0	598.58	1	PVC	10 to 15	602.27	588.58	583.58	3.69
S-1	14.5	594.99	1	PVC	9.5 to 14.5	595.60	585.49	580.49	0.61
S-1D	28.0		1	PVC	23 to 28	*	*	*	*
S-2	14.5	592.72	1	PVC	9.5 to 14.5	593.32	583.22	578.22	0.60
S-2D	23.5	592.72	1	PVC	18.5 to 23.5	593.98	574.22	569.22	1.26
S-3	14.5	592.65	1	PVC	9.5 to 14.5	593.37	583.15	578.15	0.72
S-4	14.5	594.23	1	PVC	9.5 to 14.5	594.63	584.73	579.73	0.40
S-4D	24.5		1	PVC	19.5 to 24.5	*	*	*	*
S-5	14.5	592.76	1	PVC	9.5 to 14.5	593.44	583.26	578.26	0.68
S-6	14.5	594.99	1	PVC	9.5 to 14.5	595.57	585.49	580.49	0.58
S-7	13.6	*	1	PVC	8.6 to 13.36	*	*	*	*
S-7D	27.5	*	1	PVC	22.5 to 27.5	*	*	*	*
G-1	14.5	590.70	1	PVC	9.5 to 14.5	595.35	581.20	576.20	4.65
G-2	14.5	590.24	1	PVC	9.5 to 14.5	590.82	580.74	575.74	0.58
G-2D	24.0		1	PVC	19 to 24	*	*	*	*
G-3	14.5	592.34	1	PVC	9.5 to 14.5	592.93	582.84	577.84	0.59
F-1	14.0	595.27	1	PVC	9 to 14	596.25	586.27	581.27	0.98
F-1D	24.0	595.27	1	PVC	19 to 24	596.19	576.27	571.27	0.92

TABLE 1

MONITORING WELL
CONSTRUCTION SPECIFICATIONS
EXELON GENERATION
BRAIDWOOD STATION

Well Number	*Boring Total Depth (ft BGS)* [1]	*Ground Surface (NGVD)* [2]	*Well Diameter (inches)*	*Well Material*	*Screen Interval (ft BGS)*	*Top of Riser Elevation (NGVD)*	*Screen Top Elevation (NGVD)*	*Screen Bottom Elevation (NGVD)*	*Stick Up (ft AGS)* [4]
F-2D	25.0	594.05	1	PVC	20 to 25	597.26	574.05	569.05	3.21
F-3D	25.0	594.59	1	PVC	20 to 25	597.36	544.59	539.59	2.77
F-4D	29.5	*	1	PVC	24.5 to 29.5	*	*	*	*
F-5D	27.0	*	1	PVC	22 to 27	*	*	*	*
F-6D	27.5	*	1	PVC	22.5 to 27.5	*	*	*	*
F-7D	28.0	*	1	PVC	23 to 28	*	*	*	*
F-8D	26.0	*	1	PVC	21 to 26	*	*	*	*
C-1	14.0	595.00	1	PVC	9 to 14	595.78	586.00	581.00	0.78
C-1D	24.0	595.00	1	PVC	19 to 24	595.87	576.00	571.00	0.87
C-2	15.5	*	1	PVC	10.5 to 15.5	*	*	*	*
C-2D	27.5	*	1	PVC	22.5 to 27.5	*	*	*	*
A-1	15.0	*	1	PVC	10 to 15	*	*	*	*
A-1D	25.0	*	1	PVC	20 to 25	*	*	*	*

Notes

[1] ft BGS - feet below ground surface
[2] NGVD - National Geodetic Vertical Datum
[3] PVC - polyvinyl chloride
[4] above ground surface
[5] Abandoned
* ground surface not yet shot, survey data incomplete

TABLE 2

SUMMARY OF TRITIUM RESULTS
IN MONITORING WELLS
EXELON GENERATION
BRAIDWOOD STATION

Location	*Sample Name*	*Sample Date*	*3H-Tritium (pCi/L)*
A-1	GW011106-MB-A-1	1/11/2006	33
A-1D	GW011106-MB-A-1D	1/11/2006	60
BL-01	GW-111705-JK-BL-01	11/17/2005	70
BL-02	GW-111705-JK-BL-02	11/17/2005	156
BL-03	GW-111805-JK-BL-15	11/18/2005	0
BL-04	GW-111805-JK-BL-14	11/18/2005	40
BL-05	GW-111805-JK-BL-13	11/18/2005	102
BL-06	GW-111805-JK-BL-12	11/18/2005	114
BL-07	GW-111805-JK-BL-11	11/18/2005	39
BL-08	GW-111805-JK-BL-10	11/18/2005	90
BL-09	GW-012506-JL-BL-9	1/25/2006	4809
BL-09D	GW-012506-JL-BL-9D	1/25/2006	20383
BL-10	GW-010406-JL-BL-10	1/4/2006	-104
BL-10D	GW-010406-JL-BL-10D	1/4/2006	7535
BL-11	GW-010306-JL-BL-11	1/3/2006	13
BL-11D	GW-010306-JL-BL-11D	1/3/2006	-27
BL-12	GW-010306-JL-BL-12	1/3/2006	-39
BL-12D	GW-010306-JL-BL-12D	1/3/2006	-35
BL-13	GW-010306-JL-BL-13	1/3/2006	-16
BL-13D	GW-010306-JL-BL-13D	1/3/2006	9
BL-14	GW-010306-JL-BL-14	1/3/2006	-37
BL-14D	GW-010306-JL-BL-14D	1/3/2006	-91
BL-15	GW-010306-JL-BL-15	1/3/2006	146
BL-15D	GW-010306-JL-BL-15D	1/3/2006	-49
BL-16	GW-010306-JL-BL-16	1/3/2006	3364
BL-16D	GW-010306-JL-BL-16D	1/3/2006	-91
BL-17	GW-010306-JL-BL-17	1/3/2006	-44
BL-17D	GW-010306-JL-BL-17D	1/3/2006	-126
BL-18	GW-120105-DS-BL-18	12/1/2005	108
BL-19	GW-120105-DS-BL-19	12/1/2005	37
BL-20D	GW-010406-JL-BL-20D	1/4/2006	-117
C-1	GW-010306-JL-C-1	1/3/2006	-80
C-1D	GW-010306-JL-C-1D	1/3/2006	-140
C-2	GW-012406-MB-C-2	1/24/2006	-48
C-2D	GW-012406-MB-C-2D	1/24/2006	147
D-1	GW-010406-JL-D-1	1/4/2006	-13
D-1D	GW-010406-JL-D-1D	1/4/2006	-141
D-2	GW-010406-JL-D-2	1/4/2006	-165
D-2D	GW-010406-JL-D-2D	1/4/2006	-36
D-3	GW-010406-JL-D-3	1/4/2006	-168
D-3D	GW-010406-JL-D-3D	1/4/2006	5110
D-4	GW-120605-JRB-D-4	12/6/2005	91
D-5	GW-120205-MK-D-5	12/2/2005	73
Ditch at Culvert	Ditch at Culvert~12/22/05	12/22/2005	1007
Ditch by Alpha Gate	Ditch by Alpha Gate~01/12/06	1/12/2006	-30
F-1	GW-010306-JL-F-1	1/3/2006	-44
F-1D	GW-010306-JL-F-1D	1/3/2006	-56

TABLE 2

SUMMARY OF TRITIUM RESULTS
IN MONITORING WELLS
EXELON GENERATION
BRAIDWOOD STATION

Location	*Sample Name*	*Sample Date*	*3H-Tritium (pCi/L)*
F-2D	GW-011206-MB-F-2D	1/12/2006	546
F-3D	GW-011206-MB-F-3D	1/12/2006	1689
F-4D	GW-012406-MB-F-4D	1/24/2006	-22
F-5D	GW-012406-MB-F-5D	1/24/2006	1512
F-6D	GW-012406-MB-F-6D	1/24/2006	689
F-7D	GW-012406-MB-F-7D	1/24/2006	575
F-8D	GW-012406-MB-F-8D	1/24/2006	872
G-1	GW-120605-JL-G-1	12/6/2005	133
G-2	GW-120605-JL-G-2	12/6/2005	87
G-3	GW-120605-JL-G-3	12/6/2005	81
MW-101	GW-111505-JK-17-Dup	11/15/2005	162
MW-101	GW-111505-JK-17	11/15/2005	157
MW-102	MW-102	3/24/2005	58
MW-103	GW-111505-JK-13-Dup	11/15/2005	1970
MW-103	GW-111505-JK-13	11/15/2005	2497
MW-104	MW-104	7/28/2005	142
MW-105	GW-010406-JL-MW-105	1/4/2006	169
MW-105D	GW-010406-JL-MW-105D	1/4/2006	-120
MW-106	GW-010406-JL-MW-106	1/4/2006	-35
MW-106D	GW-010406-JL-MW-106D	1/4/2006	-25
MW-107	GW-111605-JK-19	11/15/2005	269
MW-108	GW-111605-JK-20	11/15/2005	91
MW-109	GW-093005-DC-03	9/30/2005	305
MW-110	GW-010406-JK-MW110	1/4/2006	-104
MW-111	GW-010406-JL-MW-111	1/4/2006	-78
MW-111D	GW010906-MB-MW111D	1/9/2006	-66
MW-112	GW-010406-JL-MW-112	1/4/2006	-127
MW-112D	GW010906-MB-MW112D	1/9/2006	-111
MW-113	GW-010306-JL-MW-113	1/3/2006	4008
MW-113D	GW-010306-JL-MW-113D	1/3/2006	4772
P-1	GW-120105-DS-P-1	12/1/2005	2484
P-10	GW-120605-JL-P-10	12/6/2005	1723
P-11	GW-120605-JL-P-11	12/6/2005	1476
P-12	GW-120605-JL-P-12	12/6/2005	1622
P-13D	GW-012506-JL-P-13D	1/25/2006	217122
P-14	GW-012406-MB-P-14	1/24/2006	2537
P-14D	GW-012406-MB-P-14D	1/24/2006	2388
P-2	GW-010306-JL-P-2	1/3/2006	2045
P-2D	GW-010306-JL-P-2D	1/3/2006	2384
P-3	GW-120205-MK-P-3	12/2/2005	3258
P-4	GW-012506-JL-P-4	1/25/2006	9588
P-4D	GW-012506-JL-P-4D	1/25/2006	38965
P-5	GW-010306-JL-P-5	1/3/2006	6166
P-5D	GW-010306-JL-P-5D	1/3/2006	2165
P-6	GW-011806-MB-P-6	1/18/2006	110
P-7	GW-120105-DS-P-7	12/1/2005	1210
P-8	GW-120605-JL-P-8	12/6/2005	2212

TABLE 2

SUMMARY OF TRITIUM RESULTS
IN MONITORING WELLS
EXELON GENERATION
BRAIDWOOD STATION

Location	*Sample Name*	*Sample Date*	*3H-Tritium (pCi/L)*
P-9	GW-121305-JL-P-9-recount	12/13/2005	27
P-9	GW-121305-JL-P-9	12/13/2005	111
PW-6P	Pond~12/08/05	12/8/2005	142
RW-1	RW-1~12/04/05	12/4/2005	7855
RW-2	GW-121305-JL-RW2@20'	12/13/2005	171166
RW-2	GW-121305-JL-RW2@25'	12/13/2005	246442
RW-2	GW-121305-JL-RW2@10'	12/13/2005	54111
RW-3	GW-120205-JL-RW-3	12/2/2005	197
RW-4	GW-120205-JL-RW-4	12/2/2005	380
S-1	GW-120605-JL-S-1	12/6/2005	83
S-2	GW-010306-JL-S-2	1/3/2006	62
S-2D	GW-010306-JL-S-2D	1/3/2006	-2
S-3	GW-120605-JL-S-3	12/6/2005	57
S-4	GW-120605-JL-S-4	12/6/2005	1086
S-5	GW-120605-JL-S-5	12/6/2005	1874
S-6	GW-120605-JL-S-6	12/6/2005	411
S-7	GW-012406-MB-S-7	1/24/2006	1373
S-7D	GW-012406-MB-S-7D	1/24/2006	1546
SG-1	SG-1	7/28/2005	61.3
SG-2	SG-2	7/28/2005	1970
SG-3	SG-3	7/28/2005	-21.4
SW-1	Lake #1~11/30/05	11/30/2005	2464
SW-2	GW-012506-JL-SW-2	1/25/2006	2441
SW-3	GW-120205-NW-FTL-Lake	12/2/2005	96
SW-4	GW-120205-SE-FTL- Lake	12/2/2005	83
VB-1	VB-1~05/27/2005	5/27/2005	51295
VB-1-1	GW-010406-JL-VB1-1	1/4/2006	425
VB-1-1D	GW-010406-JL-VB1-1D	1/4/2006	-132
VB-1-2	GW-111705-JK-VB1-2	11/17/2005	337
VB-1-2D	GW-011306-MB-VB1-2D	1/13/2006	238
VB-1-3	GW-111605-DC-VB1-3	11/15/2005	206
VB-1-3D	GW-011306-MB-VB1-3D	1/13/2006	19431
VB-1-4	GW-111605-DC-VB1-4	11/15/2005	384
VB-1-4D	GW-011306-MB-VB1-4D	1/13/2006	7424
VB-1-5	GW-111605-DC-VB1-5	11/15/2005	130
VB-1-5D	GW-011306-JL-VB1-5D	1/13/2006	22928
VB-1-6	GW-112205-JL-VB1-6	11/22/2005	95
VB-1-6D	GW-011306-JL-VB1-6D	1/13/2006	41
VB-1-7	GW-112205-JL-VB1-7	11/22/2005	140
VB-1-7D	GW010906-MB-VB1-7D	1/9/2006	-116
VB-1-8	GW-112205-JL-VB1-8	11/22/2005	57
VB-1-8D	GW010906-MB-VB1-8D	1/9/2006	10877
VB-1-9	GW-112205-JL-VB1-9	11/22/2005	107
VB-1-9D	GW-011306-MB-VB1-9D	1/13/2006	3370
VB-2-1	GW-111505-DC-VB2-1-Dup	11/15/2005	2.38
VB-2-2	GW-010406-JL-VB2-2	1/4/2006	5232
VB-2-2D	GW-010406-JL-VB2-2D	1/4/2006	4037

TABLE 2

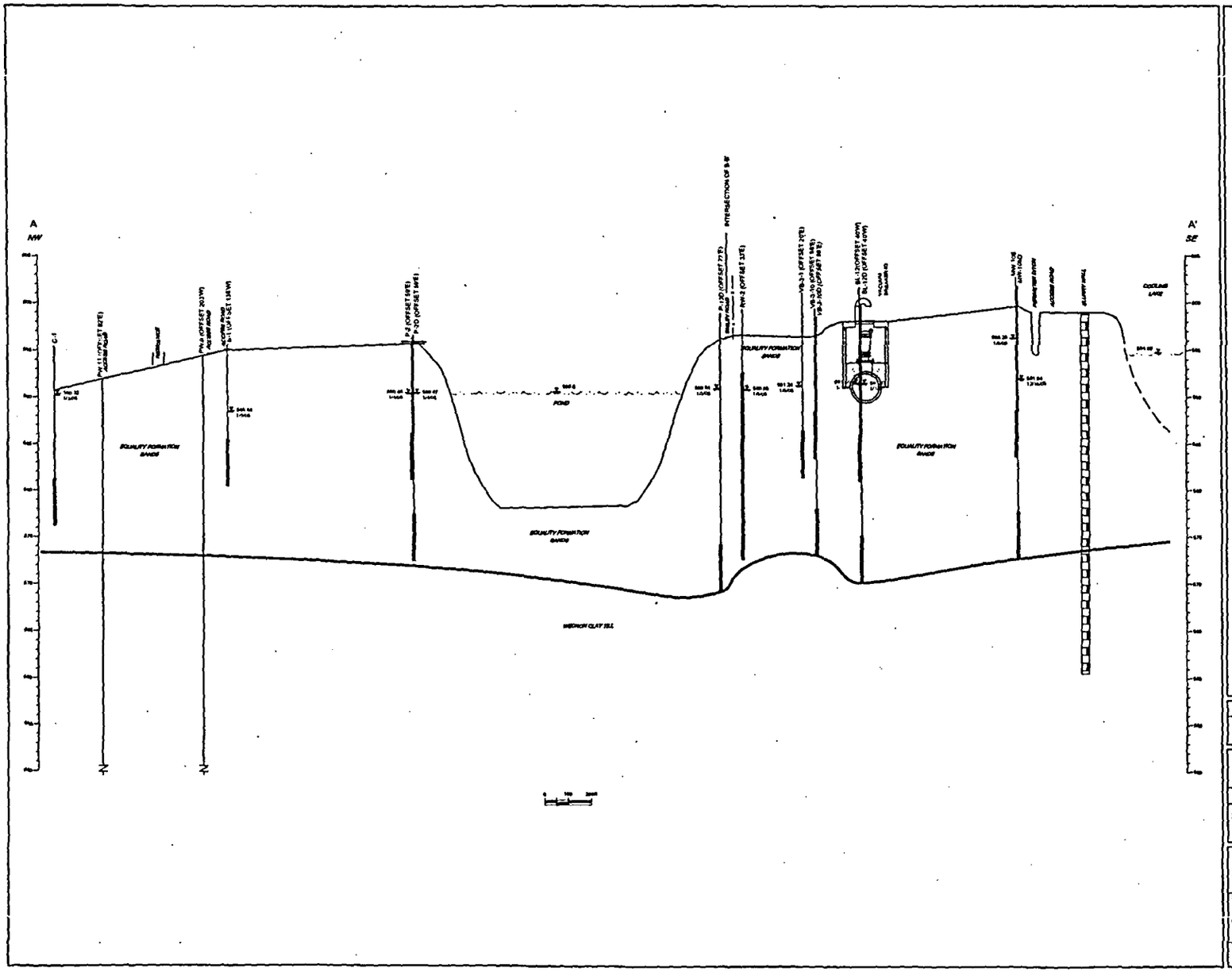
SUMMARY OF TRITIUM RESULTS
IN MONITORING WELLS
EXELON GENERATION
BRAIDWOOD STATION

Location	*Sample Name*	*Sample Date*	*3H-Tritium (pCi/L)*
VB-2-3	GW-111505-DC-VB2-3-Dup	11/15/2005	3460
VB-2-3	GW-111505-DC-VB2-3	11/15/2005	3940
VB-2-4	GW-111505-DC-VB2-4-Dup	11/15/2005	3350
VB-2-4	GW-111505-DC-VB2-4	11/15/2005	3664
VB-2-5	GW-010306-JL-VB2-5	1/3/2006	3834
VB-2-5D	GW-010306-JL-VB2-5D	1/3/2006	102
VB-2-6	GW-010306-JL-VB-2-6	1/3/2006	1412
VB-2-6D	GW-010306-JL-VB-2-6D	1/3/2006	44
VB-2-7	GW-010406-JL-VB2-7	1/4/2006	-60
VB-2-7D	GW-010406-JL-VB2-7D	1/4/2006	-53
VB-2-8	GW-121405-JS-VB-2-8	12/14/2005	-103
VB-2-9	GW-011206-MB-VB2-9	1/12/2006	78
VB-2-9D	GW-011206-MB-VB2-9D	1/12/2006	-65
VB-3	VB-3~05/11/2005	5/11/2005	1521
VB-3-1	GW-111505-DC-VB3-1	11/15/2005	5959
VB-3-1	GW-111505-DC-VB3-1-Dup	11/15/2005	5460
VB-3-10	GW-010306-JL-VB3-10	1/3/2006	12076
VB-3-10D	GW-010306-JL-VB3-10D	1/3/2006	108736
VB-3-2	GW-111505-DC-VB3-2	11/15/2005	32830
VB-3-3	GW-111605-DC-VB3-3	11/16/2005	43894
VB-3-4	GW-010306-JL-VB3-4	1/3/2006	29286
VB-3-4D	GW-010306-JL-VB3-4D	1/3/2006	790
VB-3-5	GW-112205-JL-VB3-5	11/22/2005	95
VB-3-6	GW-112205-JL-VB3-6	11/22/2005	53572
VB-3-7	GW-010306-JL-VB3-7	1/3/2006	-126
VB-3-7D	GW-010306-JL-VB3-7D	1/3/2006	-205
VB-3-8	GW-120205-MK-VB-3-8	12/2/2005	171
VB-3-9D	GW-010406-JL-VB3-9D	1/4/2006	19605

TABLE 3

SUMMARY OF TRITIUM RESULTS
AT PRIVATE WELLS
EXELON GENERATION
BRAIDWOOD STATION

Location	*Sample Date*	*3H-Tritium (pCi/L)*
PW-1	11/30/2005	-26
PW-2	11/30/2005	48
PW-3	11/30/2005	25
PW-4	12/2/2005	43
PW-5	1/19/2006	-12
PW-7	12/7/2005	-58
PW-8	12/8/2005	1367
PW-9	12/5/2005	142
PW-10	12/7/2005	72
PW-11	12/5/2005	99
PW-12	12/7/2005	44
PW-13	12/7/2005	-62
PW-14	12/14/2005	-118
PW-15	12/14/2005	-51



DRAFT

SCALE VERIFICATION

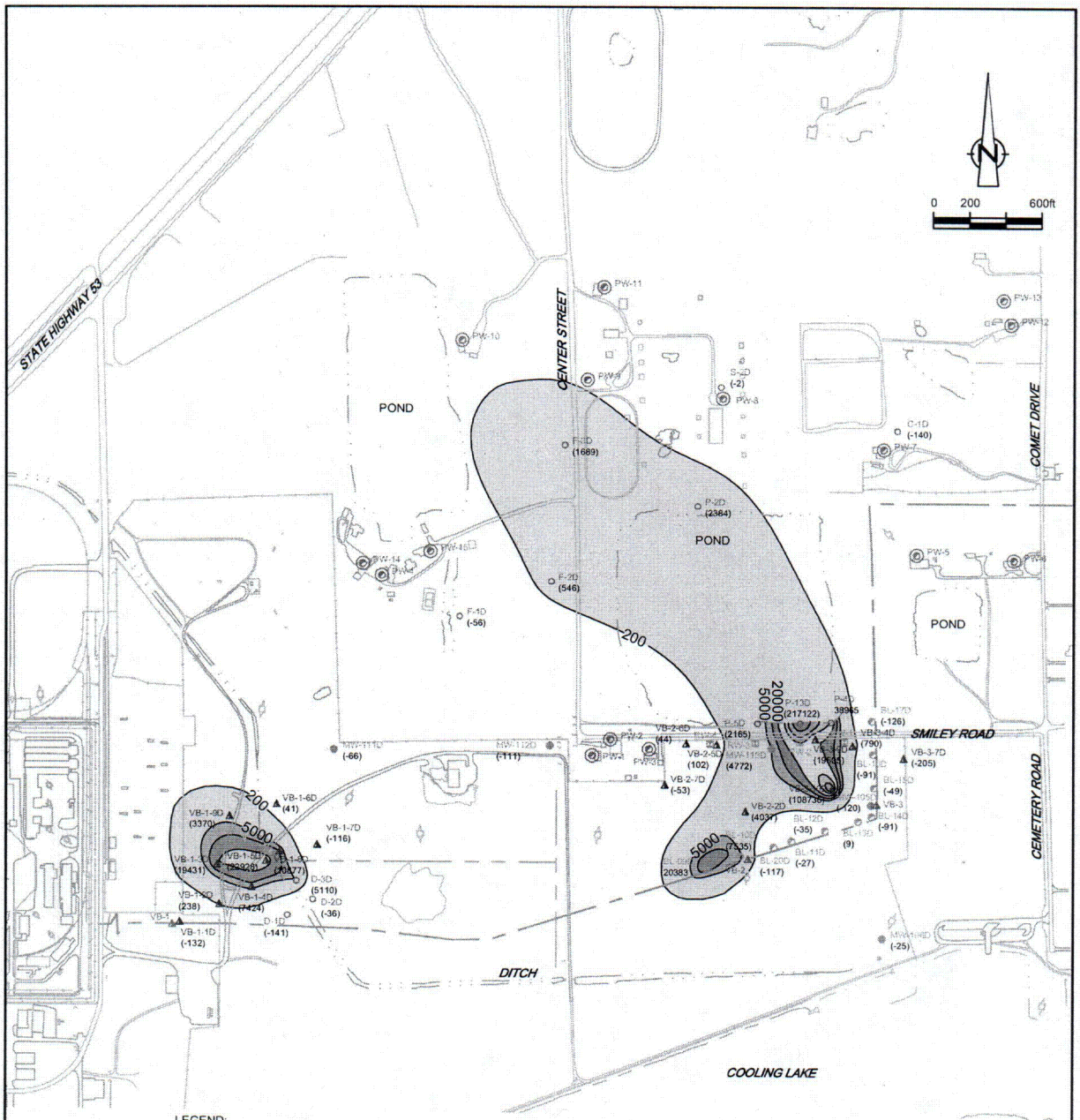
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY

BRAIDWOOD STATION
BRACEVILLE, ILLINOIS

SITE SPECIFIC HYDROGEOLOGIC PROFILE
JANUARY 2006 (A-A')

CONESTOGA-ROVERS & ASSOCIATES

Project Manager: P. HARVEY	Prepared By: D. SMITH	Date: JANUARY 2006	
Scale: HORIZONTAL 1"=80' VERTICAL 1"=5'	Project No.: 16841-00	Report No.: PRES003	Drawing No.: 6



LEGEND:

	EXISTING FENCE LINE/APPROXIMATE PROPERTY LINE
	EXISTING PERIMETER DITCH LIMITS
	FEEDER DITCH
	BLOW DOWN LINE
BL-17D	DEEP BLOW DOWN LINE SAMPLING LOCATION
VB-3	VACUUM BREAKER LOCATION
VB-3-7D	DEEP VACUUM BREAKER SAMPLING LOCATION
MW-112D	DEEP MONITORING WELL LOCATION
PW-5	PRIVATE WELL LOCATION
P-4D	DEEP TEMPORARY WELL LOCATION
PW-6P	POND SAMPLING LOCATION
RW-2	DEEP RECOVERY WELL LOCATION
(2,484)	TRITIUM RESULT IN GROUNDWATER
200	TRITIUM CONTOUR

	TRITIUM RESULTS 200,000 TO 250,000 (PICOCURRIES/LITER)
	TRITIUM RESULTS 100,000 TO 200,000
	TRITIUM RESULTS 60,000 TO 100,000
	TRITIUM RESULTS 40,000 TO 60,000
	TRITIUM RESULTS 20,000 TO 40,000
	TRITIUM RESULTS 10,000 TO 20,000
	TRITIUM RESULTS 5,000 TO 10,000
	TRITIUM RESULTS 200 TO 5,000
	TRITIUM RESULTS 0 TO 200

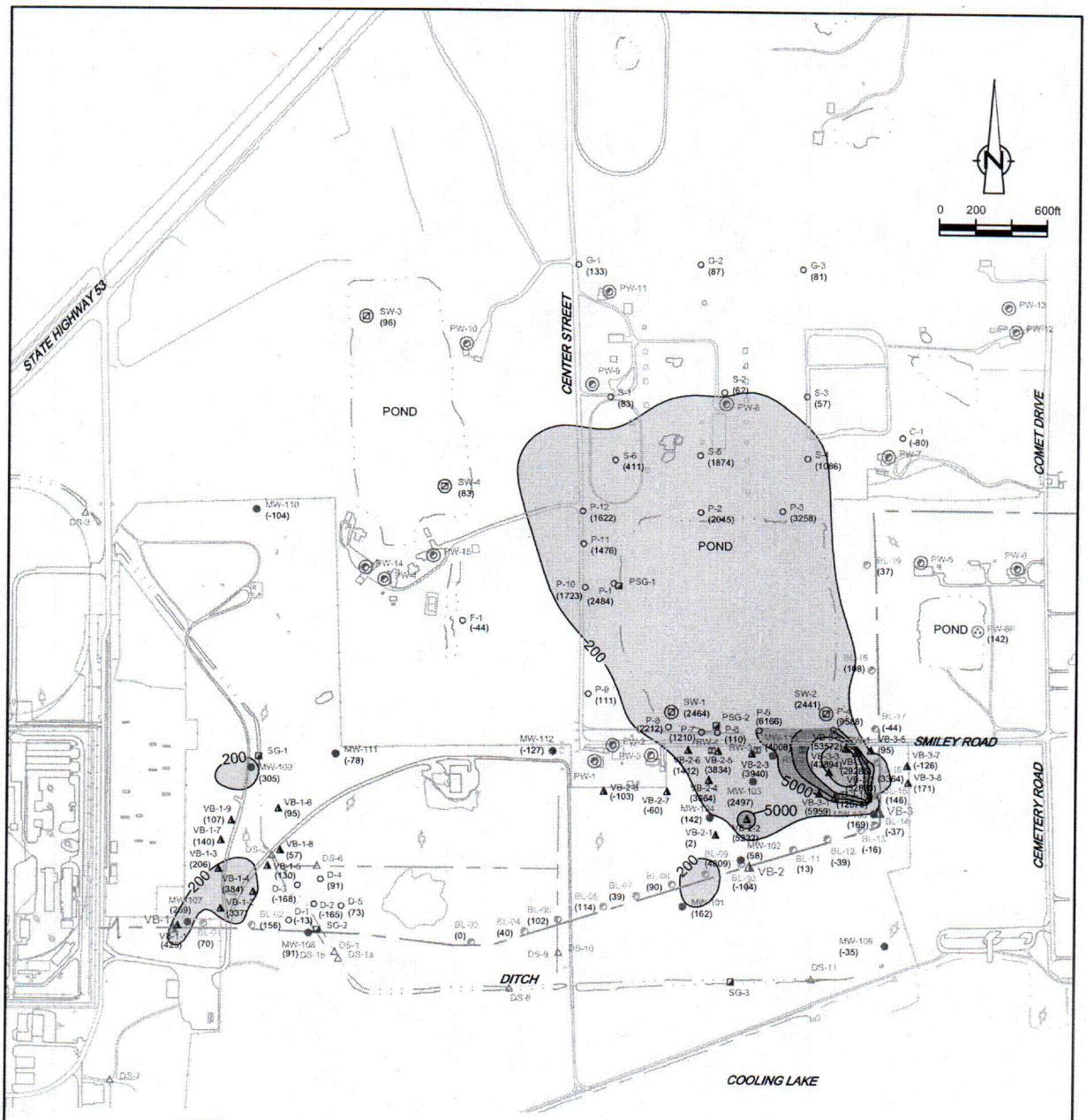
DRAFT

NOTE:
BACKGROUND TRITIUM CONCENTRATION: 200 PCI/L
DRINKING WATER STANDARD FOR TRITIUM: 20,000 PCI/L
TRITIUM DATA FOR SAMPLES COLLECTED THROUGH JANUARY 25, 2006. CONTOURS WERE GENERATED USING LOG VALUES.

figure 5

ESTIMATED TRITIUM RESULTS
DEEP GROUNDWATER ZONE
BRAIDWOOD STATION
Braceville, Illinois

16841-00(PRES003)GN-WA007 JAN 30/2006



LEGEND:

- EXISTING FENCE LINE/APPROXIMATE PROPERTY LINE
- EXISTING PERIMETER DITCH LIMITS
- FEEDER DITCH
- BLOW DOWN LINE
- BL-19 SHALLOW BLOW DOWN LINE SAMPLING LOCATION
- VB-3 VACUUM BREAKER LOCATION
- VB-3-7 VACUUM BREAKER SAMPLING LOCATION
- MW-105 SHALLOW MONITORING WELL LOCATION
- PW-5 PRIVATE WELL LOCATION
- P-11 SHALLOW TEMPORARY WELL LOCATION
- PSG-1 STAFF GAUGE LOCATION
- DS-6 DITCH SAMPLING LOCATION
- SW-2 SURFACE WATER SAMPLING LOCATION
- RW-3 SHALLOW RECOVERY WELL LOCATION
- PW-6P POND SAMPLING LOCATION

- TRITIUM RESULTS 200,000 TO 250,000 (PICOCURRIES/LITER)
- TRITIUM RESULTS 10,000 TO 200,000
- TRITIUM RESULTS 60,000 TO 100,000
- TRITIUM RESULTS 40,000 TO 60,000
- TRITIUM RESULTS 20,000 TO 40,000
- TRITIUM RESULTS 10,000 TO 20,000
- TRITIUM RESULTS 5,000 TO 10,000
- TRITIUM RESULTS 200 TO 5,000
- TRITIUM RESULTS 0 TO 200

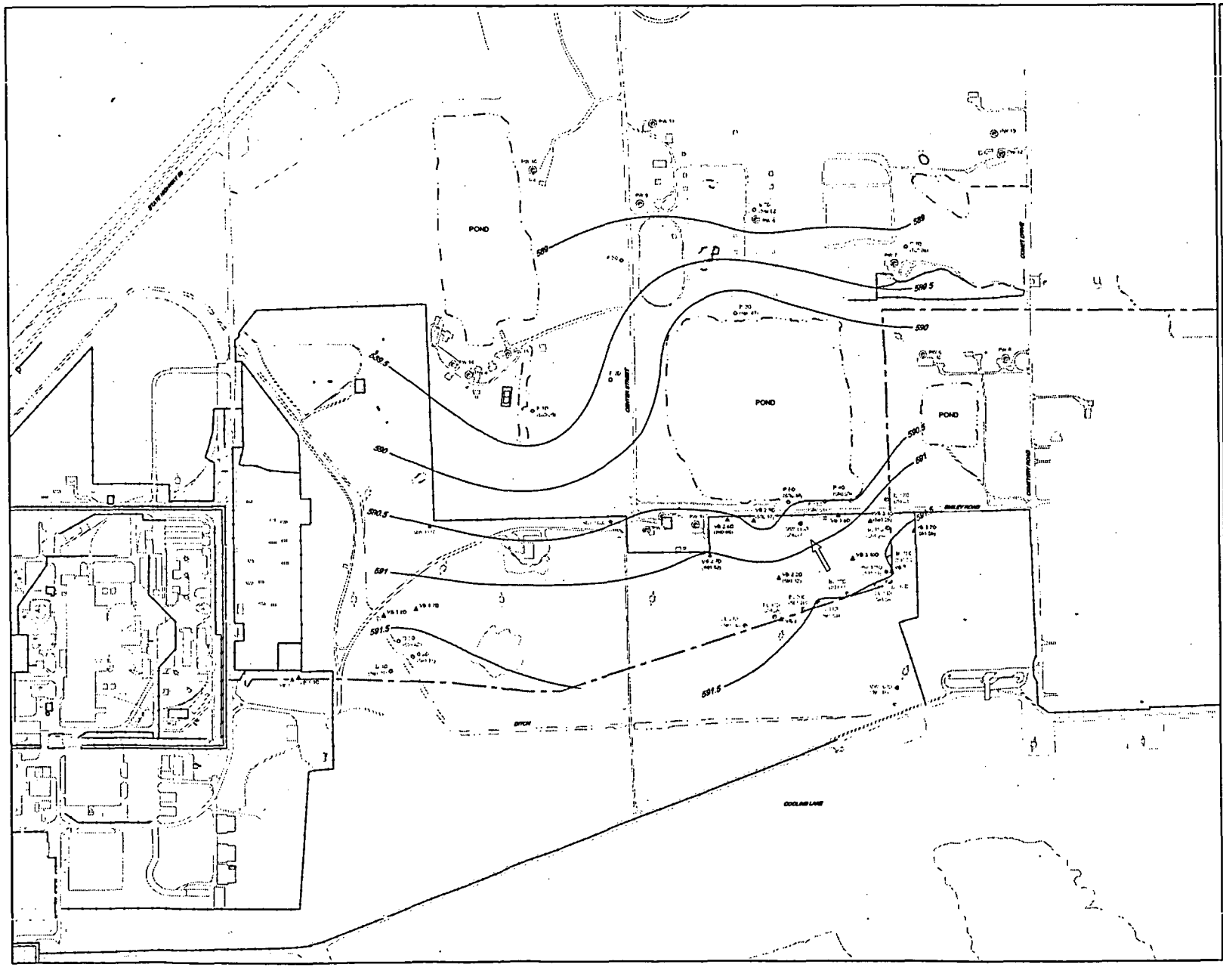
NOTE:
BACKGROUND TRITIUM CONCENTRATION: 200 pCi/L
DRINKING WATER STANDARD FOR TRITIUM: 20,000 pCi/L
TRITIUM DATA FOR SAMPLES COLLECTED THROUGH JANUARY 25, 2006. CONTOURS WERE GENERATED USING LOG VALUES.

figure 4

ESTIMATED TRITIUM RESULTS
SHALLOW GROUNDWATER ZONE
BRAIDWOOD STATION
Braceville, Illinois

DRAFT

16841-00(PRES003)GN-WA006 JAN 30/2006



LEGEND

- EXISTING FENCE (APPROXIMATE PROPERTY LINE)
- BLOW DOWN LINE
- BLOW DOWN LINE SAMPLING LOCATION
- VACUUM BREAKER LOCATION
- VACUUM BREAKER SAMPLING LOCATION
- MONITORING WELL LOCATION
- PRIVATE WELL LOCATION
- TEMPORARY WELL LOCATION
- RECOVERY WELL LOCATION
- GROUNDWATER ELEVATION (ft AMSL)
- 591 GROUNDWATER ELEVATION CONTOUR (ft AMSL)
- GROUNDWATER FLOW (AMSL) DIR

DRAFT

SCALE VERIFICATION

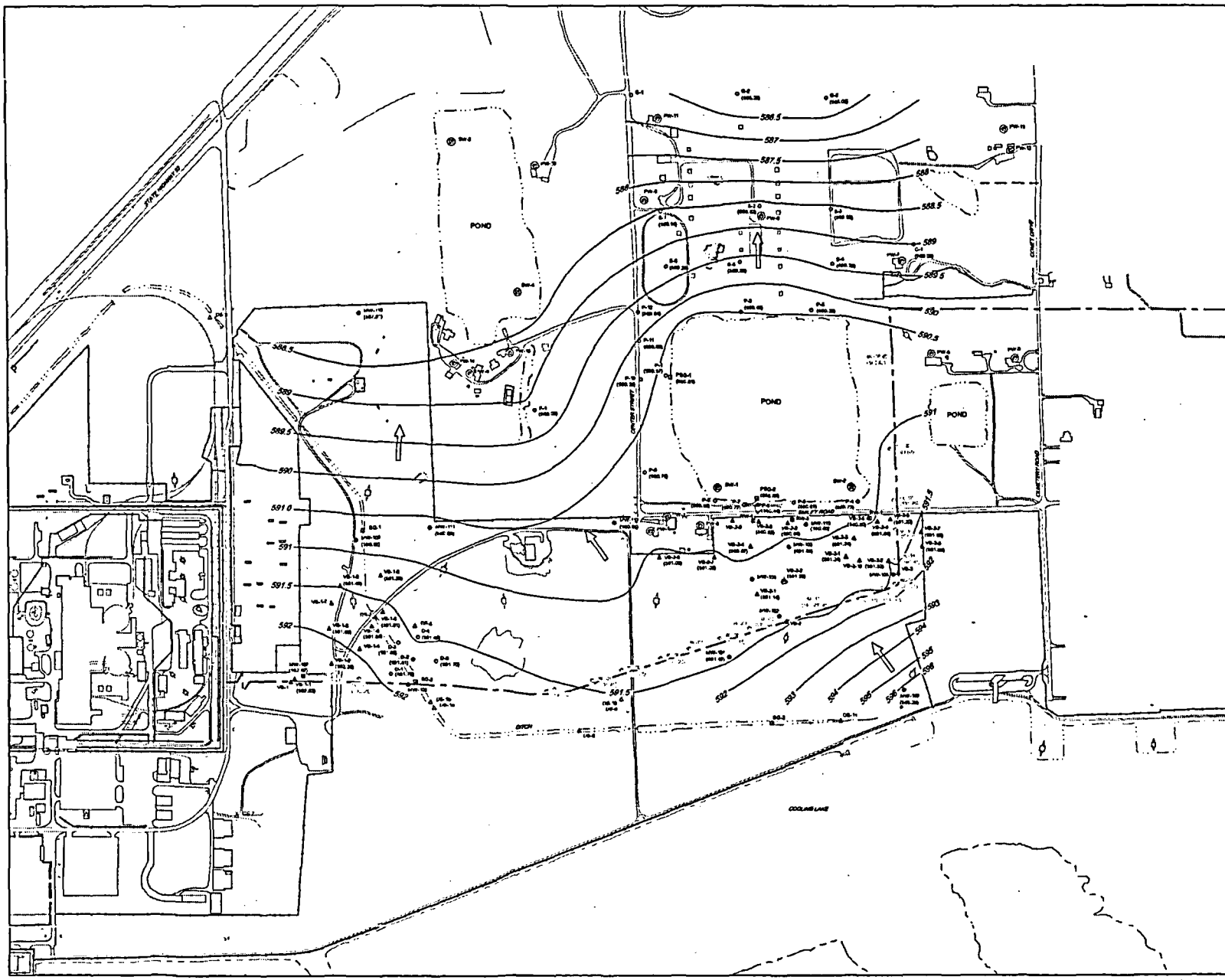
THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY

BRAIDWOOD STATION
BRACEVILLE, ILLINOIS

AVERAGE GROUNDWATER CONTOURS
DEEP - JANUARY 2006

CONESTOGA-ROVERS & ASSOCIATES

P. HARVEY	N. SMITH	JANUARY 2006
1"=1000'	16841-00	PRES003	figure 3



LEGEND

- EXISTING FENCE LINE(APPROXIMATE PROPERTY LINE)
- BLOW DOWN LINE
- BLOW DOWN LINE SAMPLING LOCATION
- VB-3 ▲ VACUUM BREAKER LOCATION
- VB-3-7 ▲ VACUUM BREAKER SAMPLING LOCATION
- MW-10 ⊗ MONITORING WELL LOCATION
- PW-1 ⊗ PRIVATE WELL LOCATION
- P-11 ⊗ TEMPORARY WELL LOCATION
- PSG-1 ■ STAFF GAUGE LOCATION
- DS-1 ▲ DITCH SAMPLING LOCATION
- SW-2 ⊗ SURFACE WATER SAMPLING LOCATION
- PN-2 ⊗ POND SAMPLING LOCATION
- RW-1 ⊗ RECOVERY WELL LOCATION
- (583.23) GROUNDWATER ELEVATION (5 AMSL)
- 591 GROUNDWATER ELEVATION CONTOUR (5 AMSL)
- GROUNDWATER FLOW DIRECTION

DRAFT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

BRAIDWOOD STATION
BRACEVILLE, ILLINOIS

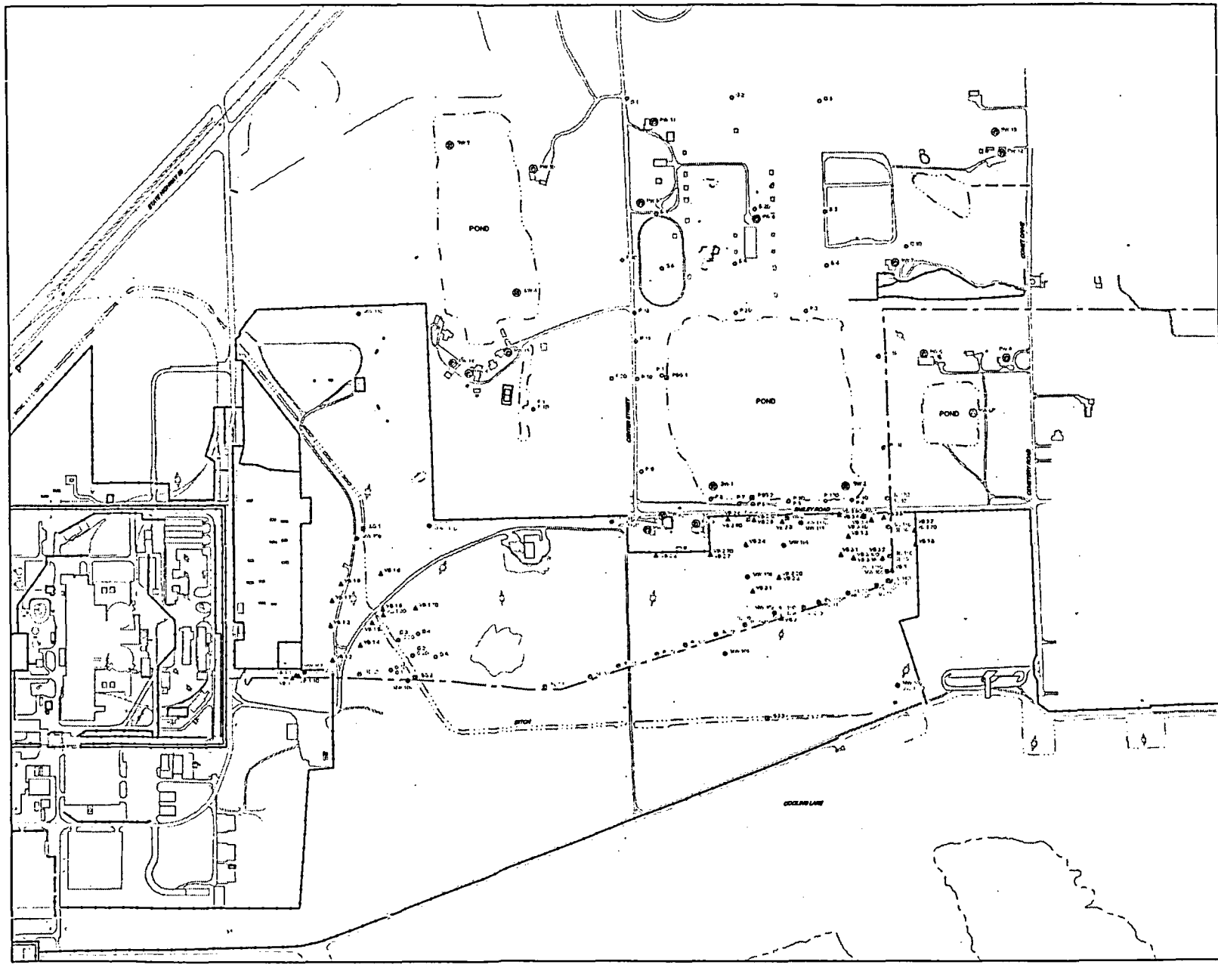
AVERAGE GROUNDWATER CONTOURS
SHALLOW - JANUARY 2006

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager: P. HARVEY	Examined By: M. SMITH	Date: JANUARY 2006	
Scale: 1"=400'	Project No.: 16841-00.	Report No.: PRES003	Drawing No.: figure 2

16841-00PRES003GR-WARDA JAN 31/2006



LEGEND

- EXISTING FENCE LINE
- BLOW DOWN LINE
- SHALLOW BLOW DOWN LINE SAMPLING LOCATION
- DEEP BLOW DOWN LINE SAMPLING LOCATION
- VACUUM BREAKER LOCATION
- VACUUM BREAKER SAMPLING LOCATION
- SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- PRIVATE WELL LOCATION
- SHALLOW TEMPORARY WELL LOCATION
- DEEP TEMPORARY WELL LOCATION
- STAFF GAUGE LOCATION
- SURFACE WATER SAMPLING LOCATION
- POND SAMPLING LOCATION
- SHALLOW RECOVERY WELL LOCATION
- DEEP RECOVERY WELL LOCATION

DRAFT

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY

BRAIDWOOD STATION
BRACEVILLE, ILLINOIS

GROUNDWATER MONITORING LOCATIONS

CONESTOGA-ROVERS & ASSOCIATES

Project Manager	Reviewed By	Date
P. HARVEY	R. SMITH	JANUARY 2006
Scale	Project No.	Drawing No.
16841-00	PRES003	1