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January 20, 2004
BYR 2004-005

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: (a) License No. DPR-3 (Docket No. 50-29)
(b) YAEC Letter to USNRC, "Groundwater Data for YNPS," dated May 19, 2003, BYR 2003-039.

Subject: Groundwater Sampling Results for YNPS

Enclosed is the report prepared for Yankee Atomic Electric Company titled "Yankee Nuclear Power Station Report of Radionuclides in Groundwater, Third Quarter 2003, Interim." This groundwater monitoring report, covering the period between July and September of 2003, supplements the information previously submitted in Reference (b) which provided a compendium of historical groundwater monitoring data for the site. The enclosed report is being issued to disseminate quickly the results of this sampling following the implementation, in the second quarter of 2003, of an enhanced and expanded groundwater monitoring program.

Tritium concentrations in the wells established in the 1990's continue to trend downward, as confirmed with the most recent round of sampling. Several new, deeper wells were drilled during the summer of 2003. The description of the well installation and development is enclosed. Water in one of these wells had tritium concentrations as high as 48,000 pCi/L, which is significantly greater than in any of the existing wells. This well location is immediately down-gradient of the spent fuel pool, which was drained and decontaminated earlier in the fall of 2003 following spent fuel transfer to dry storage. Analysis of this well location and all other well water samples has shown no evidence of gamma ray emitters.

Based on the results of these analyses, the groundwater plume from the plant has been better defined. If necessary, a few additional wells may be installed and added to the sampling program. These additional wells may assist in defining the three dimensional aspects of the groundwater plume and would be drilled in the Spring of 2004. A comprehensive hydrogeology assessment and the results of the quarterly monitoring are also planned for submittal in this same timeframe.

NMSS01

Should you have any questions regarding this information, please contact us.

Sincerely,

YANKEE ATOMIC ELECTRIC COMPANY

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Site Manager

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TECHNICAL REPORT TITLE PAGE

Yankee Nuclear Power Station

Report of Radionuclides in Groundwater

Rev. 1

Third Quarter, 2003

(Interim)

Title

YA-REPT-00-005-03

Technical Report Number

Approvals	(Print & Sign Name)	
Preparer: E.M. Heath		Date: 1/21/04
Reviewer: Joe Darman		Date: 1/21/04
Approver (Cognizant Manager):		Date: 1/21/04

INTERIM REPORT

Yankee Rowe Nuclear Power Station Report of Radionuclides in Groundwater

Third Quarter 2003

Rev 1

EXECUTIVE SUMMARY

This interim ground water monitoring report is being issued to disseminate quickly the results of the first comprehensive ground water sampling event completed at the Yankee Rowe site from July to September 2003. Tritium concentrations in the wells established in the 1990's continue to trend downward, as confirmed with the most recent round of sampling. Several new, deeper wells were drilled during the summer of 2003. The description of their installation and development is presented here. Water in one of these wells had tritium concentrations as high as 48,000 pCi/L, which is significantly greater than in any of the existing wells. This well is immediately down-gradient of the spent fuel pool, which has since been drained. Analysis of this and all other well water samples has shown no evidence of gamma ray emitters.

Based on the results of these analyses, the groundwater plume from the plant has been better defined. A few additional wells may be installed and added to the sampling program. These additional wells will help define the three dimensional aspect of the groundwater plume. This additional drilling may occur in Spring 2004.

Introduction

During the second quarter of 2003, the radionuclide groundwater monitoring program was formalized in YNPS procedures:

- AP-8601, "Ground and Well Water Monitoring Program for the YNPS Site"
- DP-8603, "Radiochemical Data Quality Assessment"
- QAPP AP-9601, "YNPS Site Characterization and Site Release Quality Assurance Program Plan for Sample Data Quality," and
- DP-9745, "Groundwater Level Measurement and Sample Collection in Observation Wells".
- OP-8122, Monitoring Well Installation
- DP-8123, Chain of Custody

This is the first comprehensive, groundwater analysis program to be initiated at the YNPS site. It incorporates guidance for the radionuclide groundwater monitoring program from documents such as MARSSIM and MARLAP.

A standard suite of radionuclide analyses to be performed and which wells were to be analyzed for these different suites was established as part of this program. These were based on the historical site assessment process.

The program requires the comparison of data sets from each well to the historical trend and allows the inclusion of new radionuclides or wells, or deletion of radionuclides or wells based on the analytical evidence. Any program changes are formally approved and documented.

The existing wells drilled prior to 2003 were completed in the shallow glacial outwash or in unfractured till. These wells monitor the concentration of radionuclides in the groundwater to depths of about 10 to 30 feet. Deeper wells drilled during the summer of 2003 have identified tritium in deeper sand aquifers that were previously unknown, at depths up to about 100 feet below grade. The bedrock can be seen as an outcropping to the east of the RCA, and increases in depth heading in a westerly direction beneath the VC, and northerly towards Sherman Dam. The potential exists that radionuclides may have entered fractures in the bedrock and could be moving down gradient within the bedrock aquifer. However, only one of seven wells recently drilled into the bedrock contained measurable concentrations of tritium. No gamma emitters were detected in any bedrock wells.

In order to better define the plume in three-dimensional space, a series of bedrock and intermediate level wells were installed during June- September 2003. These wells are identified as MW-100 to MW-107, and are shown on Figure 1 along with the other wells drilled prior to 2003. [Note: MW-106 has not yet been drilled due to the lengthy process for reaching bedrock with the new wells. It is estimated that the depth to bedrock for this well may be greater than 300 feet and will require additional equipment. For this reason the process has been postponed until spring 2004 when equipment will be available and weather will permit safe drilling activities.]

Discussion

1. Method for Well Installation

The wells installed during the summer of 2003 were drilled using the rotosonic method. A rotosonic drill uses a combination of high-frequency vibration, rotation and down pressure on a string of drill rods to advance a core barrel attached to the bottom of the drill rod string. Drill rods were 10-foot lengths of heavy-walled steel pipe with threaded flush joints. After one section of drill rod was advanced to the bottom of the stroke of the drill, another rod was threaded onto the top of the string to allow drilling to proceed deeper. Drilling usually proceeded without the use of water so that the soil encountered could be sampled and characterized in its natural moisture condition. Water was injected occasionally while drilling, after collecting a soil sample, to help flush cuttings from the borehole.

Advancing the Core Barrel

The core barrel (sampler) was advanced into the earth by adding sections of drill rod until the target depth was achieved. The core barrel was removed from the borehole, generally after advancing 5 to 10 feet, to remove soil from the borehole and to retrieve samples of the soil for examination and testing. Soil cores were extruded from the core barrel into 6-mil transparent plastic sleeves, using the vibratory action of the drill. Two sizes of core barrel were used: 4-inch or 6-inch (outside) diameter. These sizes resulted in soil cores approximately 3.25 or 5.25 inches in diameter.

Advancing the Drill Casing

After advancing the core barrel, a permanent or temporary steel casing was advanced to maintain an open borehole and to isolate each water-bearing zone encountered. A total of four different casing sizes were used to drill the monitoring wells. A 10-inch diameter temporary casing was advanced from ground surface to the bottom of the first aquifer (typically encountered at a depth of 10 to 20 feet below grade) and seated a few feet into a lower-permeability aquitard below the aquifer. The 10-inch casing has threaded flush joints and various lengths of the casing were screwed together to make up a string of casing of the proper length.

An 8-inch diameter permanent casing was then driven to the bottom of the 10-inch casing. The 8-inch casing was not threaded and sections of the casing were butt-welded to make up a casing string of the proper length. The annular space between the 8-inch casing and the borehole wall was filled with cement grout as the 10-inch casing was removed. The grout was pumped to the bottom of the casing through a tremie pipe temporarily inserted in the annular space. The cement grout permanently seals the 8-inch casing in the hole, isolates the surficial aquifer from lower water-bearing units, and prevents surface water from leaking down the outside of the 8-inch casing, to potentially contaminate the surficial aquifer.

After allowing the cement grout to cure for a minimum of 24 hours, drilling proceeded inside the 8-inch casing by advancing the 6-inch diameter core barrel. Once the core barrel was advanced at least 10 feet below the bottom of the 8-inch

casing, a temporary 7 5/8-inch diameter casing was placed to the bottom of the hole, inside the 8-inch casing. The 7 5/8-inch casing has threaded flush joints and various lengths of the casing were screwed together to make up a string of casing of the appropriate length. The 6-inch core barrel was again advanced inside the 7 5/8-inch casing until the hole was deepened enough to add another 10-foot length of 7 5/8-inch casing, or until a second aquifer was encountered.

When a second aquifer was encountered the 7 5/8-inch casing was advanced to the bottom of the aquifer and seated a few feet into a lower-permeability aquitard below the aquifer. The casing was then filled with a bentonite grout, the casing was pressurized, and a volume of water slightly less than the volume of the casing was pumped into the casing. This procedure forced the grout out of the bottom and up the outside walls to seal the casing and isolate the aquifer from the soil above and below it.

By using a bentonite grout, a temporary seal was provided to isolate the aquifers encountered during drilling, but the 7 5/8-inch drilling casing could be removed after construction of the monitoring well was complete.

After setting the 7 5/8-inch casing, drilling proceeded below the casing with the 4-inch diameter core barrel. As with the larger core barrel, when ten feet or more of hole was opened with the 4-inch core barrel, temporary drill casing was advanced to the bottom to stabilize and maintain an open borehole. However, rather than advancing 7 5/8-inch casing, 5½-inch casing was used when drilling with the 4-inch core barrel. The 5 ½-inch casing has threaded flush joints and various lengths of the casing were screwed together to make up a string of casing of the appropriate length.

When a third aquifer was encountered, the 5 ½-inch casing was driven to the bottom of the aquifer and seated a few feet into a lower-permeability aquitard below the aquifer. The 5 ½-inch casing was then sealed with bentonite grout in the same manner as that used to seal the 7 5/8-inch casing. Drilling then proceeded below the 5 ½-inch casing with the 4-inch core barrel.

<u>Construction of the Well</u>

Soil borings were drilled at seven locations in the industrial area of the site, as shown on the attached map of well locations. Two or three soil borings were drilled within about 5 feet of each other at each of the seven locations. The number and depths of the subsequent borings were determined based upon the stratigraphy and concentrations of tritium detected as the first soil boring was advanced. The first soil boring drilled at each location was advanced about 15 feet into the bedrock to allow exploration of the entire thickness of sediments overlying the bedrock and identification of each discrete aquifer. The actual depth into the bedrock was determined by competency and recovery for each well.

When the target depth of each borehole was reached, a monitoring well was constructed (see Table 2). A separate borehole was drilled for each well. The general

sequence for constructing a well was as follows. A 5 or 10-foot length of 2 or 2 ½-inch diameter polyvinyl chloride (PVC) well screen with threaded flush joints and 0.010-inch machined slots was suspended at the top of the well. A pipe string consisting of a sufficient number of 10-foot lengths of the same diameter solid PVC pipe with threaded flush joints was then joined to the screen and lowered to the bottom of the borehole.

Monitoring wells less than about 100 feet deep were constructed of 2-inch diameter schedule 40 PVC pipe and well screen. Deeper wells were constructed of 2 ½-inch diameter schedule 80 PVC pipe and well screen. The length of the well screen was determined based upon the thickness of the aquifer in which it was placed.

After the well screen and riser pipe were placed in the borehole, a # 0 (medium-grained) clean quartz sand was poured into the annular space between the well screen and borehole. Enough sand was added to bring the level of the top of the sand to about 2 feet above the top of the screen. One or more sections of drill casing (5 ½ or 7 5/8-inch diameter) were then withdrawn so that the top of the sand pack around the well screen extended about one foot inside the bottom of the casing.

Next, approximately ¼-inch diameter pellets consisting of bentonite clay, which were machine-formed and coated with a slow-dissolving film, were poured into the annular space above the sand pack. Enough of the pellets were added to form a low-permeability seal above the sand pack about 2 feet thick. The drill casing was again withdrawn a few feet, such that the top of the bentonite seal was at the bottom of the casing. The remainder of the annular space from the top of the pellets to ground surface was permanently sealed by filling with a cement grout.

Each of the monitoring wells was developed after allowing the grout to cure for a minimum of one week. Development is a process of surging and pumping the well to remove fine-grained material from the screen zone and facilitate flow of ground water from the formation to the well. Each well was purged until the water discharged from the well was relatively clear, or showed no improvement in clarity after several hours of development. In general, more than three well volumes of ground water were removed from each well during the development process.

A road box with its top surface completed at grade level will be permanently installed over each well head. The road box is constructed of a cylindrical steel frame, with a bolt-on circular plate steel lid twelve inches in diameter. The box is suitable for withstanding heavy vehicle traffic. The road box will be centered on the well and an approximately 2-foot cube of concrete will be poured around it to permanently secure the box in place.

2. Radionuclides Selected for Analysis

The radionuclides selected for groundwater analysis fall into four distinct types based on the type of analyses to be performed. These are identified in Table 1. The suites were determined based on known contaminants from plant spills and leaks, and

historical evidence from other plant site decommissioning activities. No isotopes with half lives shorter than about 1 year have been selected for analysis, since it has been 12 years since the last operation of the plant. This means that the activity of isotopes with less than one year half life would be less than 2.44×10^{-2}% of their activity in 1991.

3. Methods Selected for Analysis

   Suite A consists of only gamma emitting radionuclides. These radionuclides are analyzed by HP(Ge) detectors to at least the MDC specified in Table 1. This was chosen as a method to assess contamination levels, with minimum degree of uncertainty since no chemical separation is required to perform the analysis for these isotopes.

   Suite B was selected as a monitoring suite for all wells, looking at tritium (the most prevalent of the contaminants) and gross alpha and beta contamination levels that may provide insight as to other locations to look for contamination. Tritium is being performed by liquid scintillation analysis (LSC) and the gross alpha/beta by proportional counting.

   Suite C represents one set of the hard-to-detect (HTD) radionuclides. Extensive sample preparation and chemical separation is required for these analyses and several of them take as long as two weeks to complete the analysis. Each of the radionuclides in Suite C is analyzed by LSC.

   Suite D is the second set of HTD radionuclides. These are the transuranic elements and also require a great deal of sample preparation and chemical separations. With the exception of ^{241}Pu (LSC), all these radionuclides are determined by high-resolution alpha spectrometry. It should be noted that the alpha particle energies for ^{239}Pu and ^{240}Pu are so close together that they cannot be resolved using this method of analysis. The result of the analysis represents the sum of the activities of the two radionuclides.

4. Sampling of Wells/Water Sources

   Sampling of the wells listed in Figure 1 took place between July 14, 2003 and August 4, 2003 (with the exception of wells labeled MW-100 through MW-105 and MW-107, which were sampled the first week in September). The method used for sampling was the low-flow method, which is identified in site procedure DP-9745. This method uses a slow pumping rate that minimizes the turbulence of the water influent to the well, thus minimizing carry over of solid materials into the water column being sampled. The pumped ground water was monitored until approximately three well volumes had been flushed or until the chemistry parameters of

   - Dissolved oxygen,
   - pH,
   - Oxidation/Reduction potential,
   - Temperature
   - Conductivity and

- Turbidity,

had all stabilized to within established bounds. This procedure ensures that the water being sampled is representative of the groundwater in the aquifer. The monitoring of these parameters was performed with a Yellow Springs Instrument Corp. Model 63 Analyzer.

Wells MW-100 to 107 were sampled for tritium, gamma and non-radiological parameters during the drilling process (this occurred in the time frame June-August 2003). As each aquifer was encountered during drilling, ground water from that depth was sampled. Sampling was completed after drilling into the aquifer with the core barrel, but before advancing the temporary casing through the aquifer and sealing it with grout. If the depth to the aquifer was less than about 50 feet below grade, the sample was obtained using a new, disposable bailer constructed of high-density polyethylene for each sample.

If the depth to the aquifer was greater than about 50 feet, a 1 ½-inch diameter submersible pump was lowered inside the drill casing to the aquifer and the sample was pumped. Regardless of the method of collecting the sample, the volume of water standing in the casing was first calculated and three casing volumes were removed before collecting the sample. This procedure was followed to assure that a ground water sample representative of conditions in the aquifer was collected.

A one-gallon polyethylene bottle was filled with sample. This ground water was analyzed in the on-site laboratory for tritium by liquid scintillation and for gamma-emitting radionuclides by gamma spectrometry.

Three 40-milliliter glass vials were also filled with sample. This ground water was analyzed by an off-site lab for volatile organic compounds (VOCS) by U.S. EPA Method 8260.

One 250-milliliter glass jar was also filled with sample. This ground water was screened in the field for VOCs by the headspace method with a PhotoVac Micro FID (portable flame ionization detector).

The analytical results from this initial ground water sampling were used for preliminary characterization of the horizontal and vertical distribution of radionuclides and to determine the screen intervals for monitoring wells constructed in each borehole.
These wells were subsequently developed and permitted to equilibrate for at least one week prior to sampling for the analytical suites described in AP-9601. They were then sampled and analyzed for the four suites of analytes in the second week in September 2003.

5. Soil Sampling and Screening Analyses
As noted in the discussion on the well installation, soil cores were extruded from the core barrel into 6-mil transparent plastic sleeves, using the vibratory action of the drill. The length of each soil core varied depending upon the density of the soil and how far the core barrel could penetrate before it could no longer overcome the resistance of the soil. Core lengths varied from about 2 to 10 feet. Cores were "bagged" in plastic sleeves and divided into sections for easier handling, if more than three feet long.

The soil was screened for the presence of radioactivity using an Eberline RM14 Frisker. The plastic sleeve containing the soil was then cut open and frisked again. Although one or two of these core samples indicated counts slightly above background, it was later determined that these greater than background count rates were due to naturally occurring radionuclides (see section on gamma analysis). While the sheathing was cut open the cores were screened for the presence of VOCs. An approximately 100-gram aliquot of soil composited from the co re was placed in a glass jar and covered with aluminum foil. If VOCs > 5 ppm were indicated by the FID, an aliquot of sample from the same depth interval was placed in a glass soil sample container and shipped to an off-site laboratory for a full suite of analyses including TPH-GRO, TPH-DRO, PCBs, VOCs, SVOC's and metals.

A detailed description of each sample was recorded in a bound field log book, which will be summarized in a complete geologic log of the entire section cored to allow characterization of the stratigraphy of the sediments penetrated.

A composite sample consisting of approximately two kilograms of soil was prepared from each 5-foot section of core, and delivered to the on-site laboratory, where it was analyzed for Suite A radionuclides by gamma ray spectrometry.

Finally, the remaining soil core was repacked in a second plastic sleeve, labeled and archived in an on-site storage container.

6. Laboratory Selected for Analysis
The Framatome-ANP Environmental Laboratory in Westborough, Massachusetts was selected to perform all the radiochemical analyses. This laboratory was on the Approved Vendors List for YNPS and has been audited on several occasions by the organization.

7. Data Description
    a. Description of Plume from Existing Data
    The data that had been accumulated from the shallow wells established during the 1990's, identified a plume that headed NW (true) from the VC center, towards the Sherman Dam. Figure 2 shows the shape of this plume as of 2001. The data trends for tritium for these wells can be seen in Figure 3,

and include the results from the most recent round of samples. These trends all display decreasing tritium concentration.

Table 3 summarizes the data from the sampling performed during the summer of 2003, which indicated the presence of the listed radionuclides at greater than 2 standard deviations based only on the counting uncertainty. It should be noted that the gamma emitting radionuclides that are noted in the table, did not have their gamma ray peak identified by the software program. This means that the activity values were based solely on the variation in the baseline counts. This indicates that these are statistical fluctuations at the background level. If the uncertainty is extended to 3 standard deviations, only gross beta and tritium contamination were present in any of the well samples.

b. Analysis of Samples From New Monitoring Wells
Monitoring Wells 100 through 105 and MW-107 were installed between June 9, 2003 and September 27, 2003. The results of the tritium analyses of the water initially purged from these wells (as a function of depth) are shown in Figure 4. Water from well MW-103 had a measured tritium concentration of 1900 pCi/L at a depth of ~95 feet. Samples from all other depths in this well were less than the MDC.

c. YNPS On Site Gamma Analyses
The YNPS Chemistry laboratory performed gamma analysis of the initial water and soil samples from these wells. Samples of soil and water were placed in 4 liter Marinelli geometries and were counted on the chemistry or radiation protection detectors to achieve MDC values for the following radionuclides (these are the site ODCM required LLD values):

Radionuclide	MDC, pCi/L	MDC, pCi/g	Count time (K-seconds) Chemistry Water	Count Time (K-seconds) Radiation Protection Water
^{137}Cs	18	0.18	10K (15K)	6K (8K)
All other gamma emitters in Table 1	15	0.15	10K (15K)	6K (8K)

The values for count times are in thousands of seconds. Values in parentheses for count times are for bedrock water samples where elevated background counts in the gamma spectrum were due to the presence of ^{228}Ac. This radionuclide is a decay product of naturally occurring $^{232}Th/^{228}Ra$ (it is also noteworthy that many of the samples displayed gross beta activity which can be associated with this naturally occurring activity, and the subsequent progeny of this decay chain).

The gamma analysis results for the new wells, for both soil and water, showed no presence of the gamma emitting radioisotopes above the critical level.

Conclusions

The preliminary assessment of the groundwater and soil data indicates that the only radionuclide identified in migration towards the Sherman Dam area is tritium. Some of the new wells had tritium concentrations that were greater than what had been measured for existing wells. This indicates that the plume may have a more complicated flow path than previously considered.

The YNPS Groundwater Monitoring Program provides guidance on the radionuclides to be analyzed, detection levels to be achieved, evaluation of results, corrective actions based upon analytical results, how to make technical changes to the program, and the frequency of sampling. The program document also references the implementation procedures such that consistency in the sampling and analysis program can be achieved.

The next round of planned quarterly groundwater sampling and analysis continued in November 2003. The November 2003 sampling results will be provided with the Spring 2004 sampling results. Additional wells may be installed in the Spring of 2004.

Figure 1. Locations of the Existing and New Wells Relative to Site Structures Prior to Demolition Activities

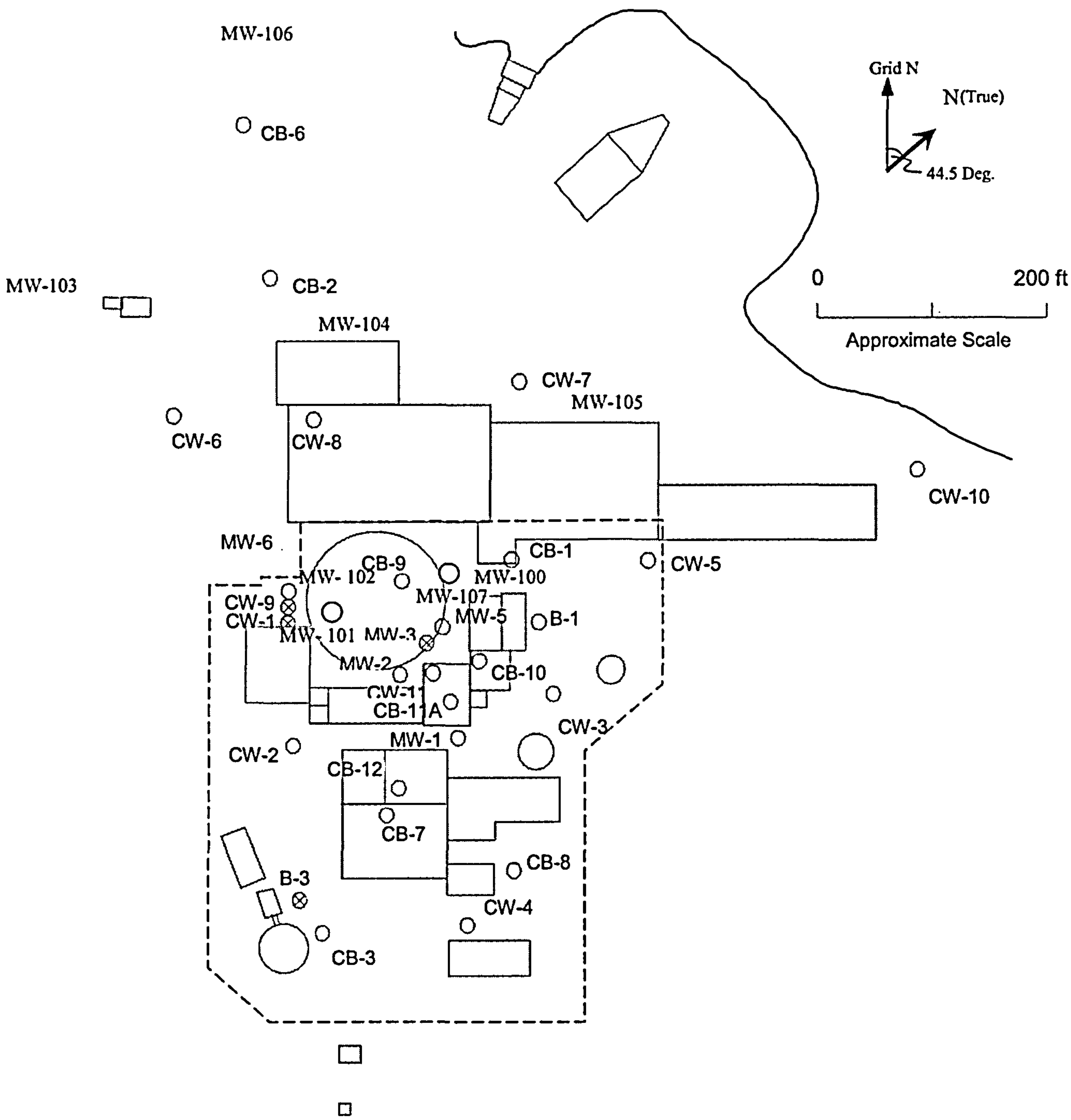
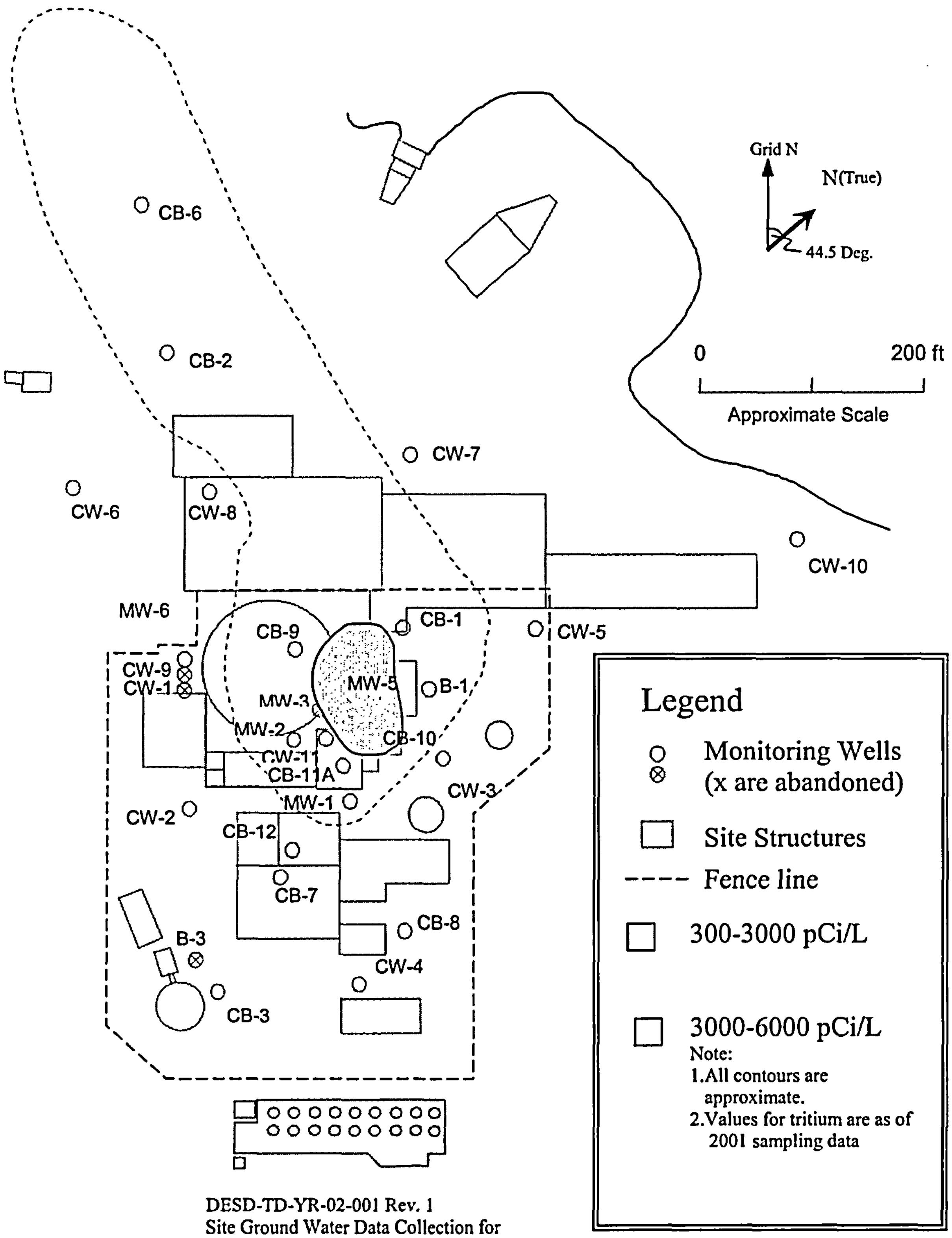


Figure 2. Locations of Existing Wells and the Tritium Plume as of 2001



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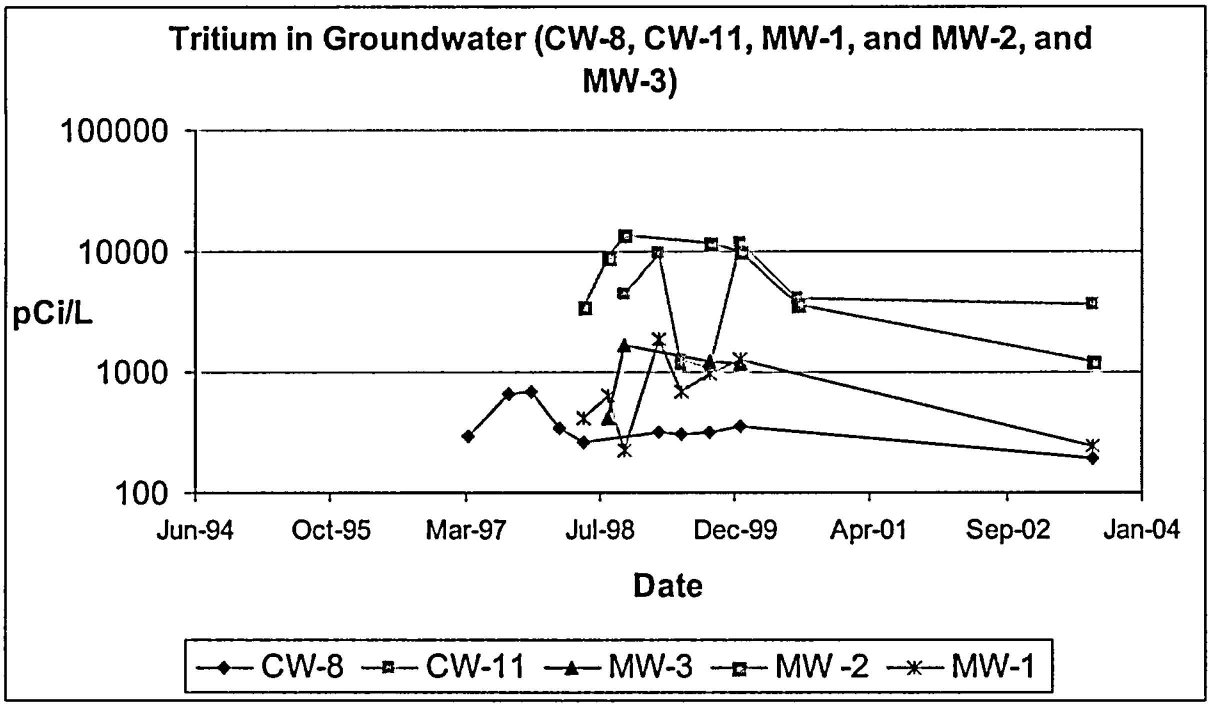
YNPS Decommissioning

Figure 3. Tritium Trend Graphs for Existing Wells (Note: MDC is ~250-300 pCi/L)



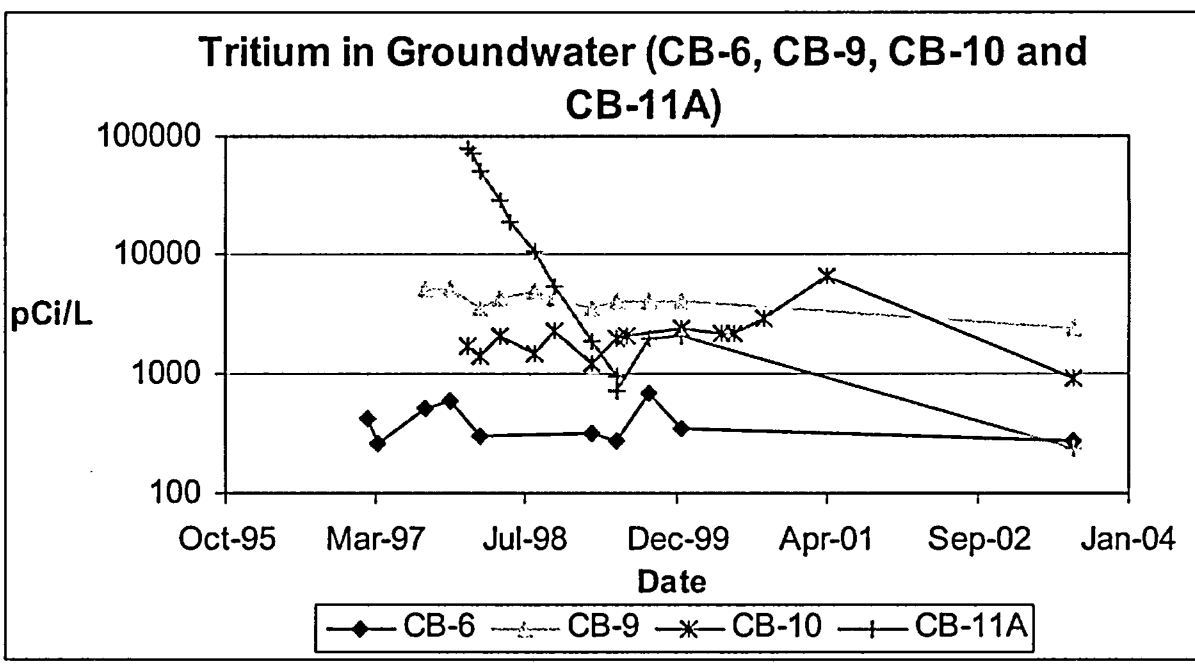


Figure 3. (Continued)

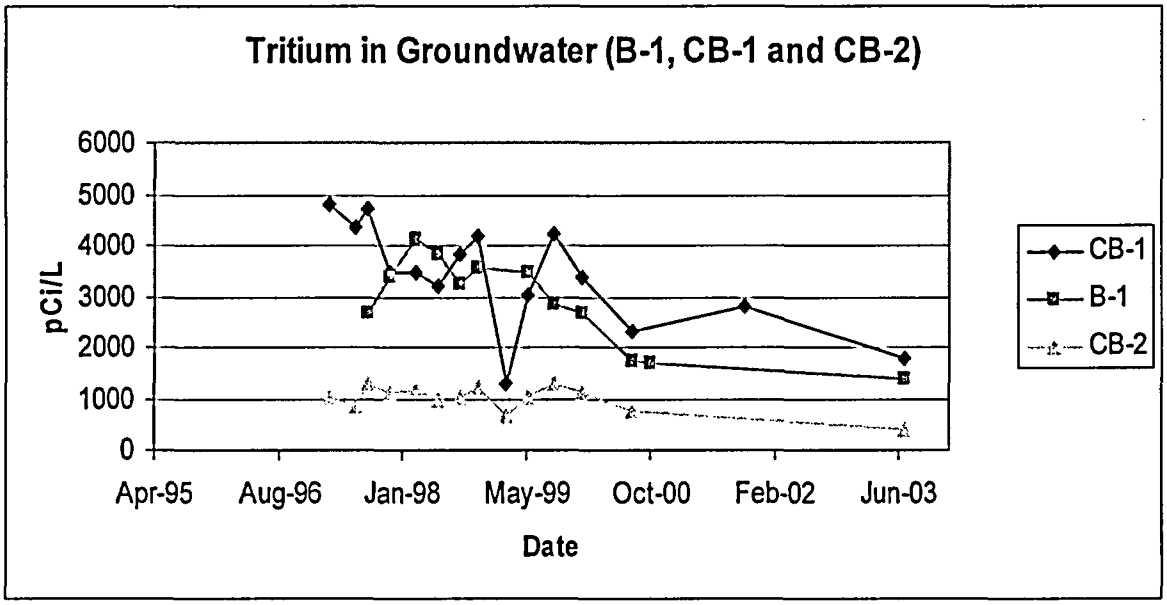


Figure 4. Tritium Concentration for "As Found" Water Samples vs Depth of New Wells

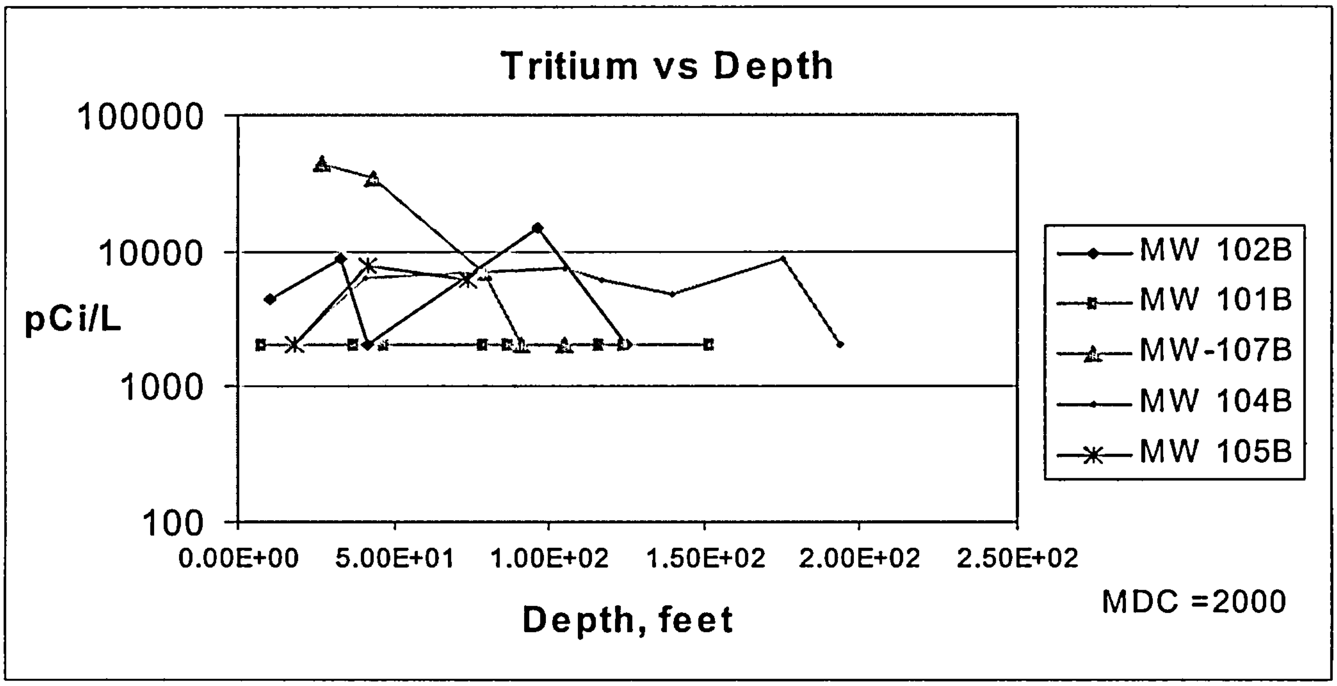


Table 1. Radionuclide Suites and the Respective MDC Required for Each Radionuclide

Suite	Radionuclide	MDC, pCi/L	Method of Analysis
A	^{60}Co	50	Gamma Spectrometry
	^{54}Mn	25	Gamma Spectrometry
	^{94}Nb	25	Gamma Spectrometry
	^{108m}Ag	25	Gamma Spectrometry
	^{125}Sb	25	Gamma Spectrometry
	^{134}Cs	25	Gamma Spectrometry
	^{137}Cs	10	Gamma Spectrometry
	^{152}Eu	25	Gamma Spectrometry
	^{154}Eu	25	Gamma Spectrometry
	^{155}Eu	25	Gamma Spectrometry
B	^{3}H	500	LSC
	Gross Alpha	5	Gas Proportional Counting
	Gross Beta	5	Gas Proportional Counting
C	^{14}C	200	LSC
	^{55}Fe	200	LSC
	^{63}Ni	200	LSC
	^{90}Sr	5	LSC
D	^{238}Pu	5	Alpha Spectrometry
	$^{239+240}Pu$	5	Alpha Spectrometry
	^{241}Pu	15	LSC
	^{241}Am	5	Alpha Spectrometry
	^{243}Cm	5	Alpha Spectrometry
	^{244}Cm	5	Alpha Spectrometry

Table 2. Tritium Concentrations (pCi/L) from "as found" Water Samples of the New Wells

Well	MW-100A	MW-100B	MW-101C	MW-101B	MW-102A	MW102B	MW102C
^3H	<2,000	<2,000	<2,000	<2,000	8,700	<2,000	14,800
Depth, feet	20	43	99	152	33	130	99

Well	MW-103A	MW-103B	MW-103C
^3H	<2,000	<2,000	1,900
Depth, feet	25	295	125

Well	MW-104B	MW-104C	MW-105C	MW-105B	MW-107D	MW-107B	MW-107C
^3H	<2,000	7290	7,720	6,030	9,150	< 2000	48,000
Depth, ft	194	97	37	74	80	110	32

Table 3. Summary of Radionuclide Concentrations in Groundwater Samples for Third Quarter 2003 Round of Sampling Data (all values are in units of pCi/Liter)

Well Designations	^3H	Gross Alpha	Gross Beta
B-1	1.36E+3	2.80E+00	9.16E+00
CB-1	1.76E+03	*	1.35E+01
CB-2	4.11E+2	*	1.62E+1
CB-3	*	4.5E+0	2.48E+1
CB-8	*	3.9E+0	1.32E+1
CW-2	*	9.2E+0	4.25E+1
CW-10	*	4.2E+0	1.16E+1
CB-9	2.33E+3	*	6.7E+0
CB-10	9.0E+2	*	*
CW-11	3.67E+3	*	8.6E+0
MW-1	*	3.3E+0	3.39E+1
MW-2	1.25E+3	*	8.3E+0
MW-5	3.81E+3	*	9.0E+0
MW-6	*	5.64E+0	1.05E+1

Well Designations	^3H	Gross Alpha	Gross Beta
CB-4	*	*	1.41E+1
CB-6	*	*	1.90E+1
CB-7	*	*	2.6E+1
CB-11A	*	*	1.31E+1
CW-3	*	*	1.83E+1
CW-4	*	*	1.77E+1
CW-5	*	*	1.28E+1
CW-6	*	*	1.10E+1
CW-7	*	*	1.13E+1
CW-8	*	*	1.11E+1
CWF-2	*	*	7.37E+0
SP-1	*	*	9.98E+0

*Denotes value was less than the critical level for that analysis