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U.S. Nuclear Regulatory Commission
Washington, DC 20555

19 August 2002
DCS-NRC-000106

Subject: Docket Number 070-03098
Duke Cogema Stone & Webster
Mixed Oxide Fuel Fabrication Facility
Old F-Area Seepage Basin Operable Unit
Groundwater Mixing Zone Scoping Summary (U)

References: P. S. Hastings (DCS) letter to NRC Document Control Desk, DCS-NRC-000072, dated 13 November 2001, *Update to Responses to NRC Clarification Request for MFFF ER*

On 13 November 2001 DCS submitted the reference letter, *Update to Responses to NRC Clarification Request for MFFF ER.* This letter transmitted a copy of the Corrective Action Plan for the Old F-Area Seepage Basin (OFASB) that the U.S. Department of Energy (DOE) had submitted to the South Carolina Department of Health and Environmental Control (SCDHEC). The Corrective Action Plan proposed additional monitoring and characterization of the groundwater in the vicinity of the OFASB. On 07 August 2002, DOE submitted the results of the additional sampling to the SCDHEC. We are forwarding that document to NRC as an enclosure to this letter.

On 14 August 2002, the OFASB Operable Unit (OU) Core Team, consisting of representatives from SCDHEC, DOE, and U.S. Environmental Protection Agency, met to discuss the results of the sampling. Also discussed were the future use of the OFASB OU Mixing Zone and the potential of a larger groundwater OU. The Core Team will confer with their respective agencies and reconvene in the future to issue a recommendation on the future use of the OFASB OU Mixing Zone. We will keep NRC apprised of future developments.

If you have any questions, please call me at (704) 373-7820 or Mary Birch at (704) 382-1401.

Sincerely,

Peter S. Hastings, P.E.
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NMSS01Public

Enclosure: *Old F-Area Seepage Basin Operable Unit, Groundwater Mixing Zone Scoping Summary*, including transmittal e-mail, L. Wells to C. Gorman, dated 07 August 2002

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08/07/02 04:03 PM
From: Leslie Wells

To: C. Gorman et al [SC DHEC and EPA e-mail addresses redacted]

cc: [SRS e-mail addresses redacted]

Subject: Scoping Summary for the Old F-Area Seepage Basin OU Groundwater Mixing Zone

Attached, please find the Scoping Summary for the Old F-Area Seepage Basin OU Groundwater Mixing Zone. Hard copies of this document are also being sent to you via Federal Express.

This information will be the topic of discussion at the August 14 Core Team meeting in Aiken beginning at 9:30 a.m.

WSRC-RP-2001-4187
August 2002

OLD F-AREA SEEPAGE BASIN OPERABLE UNIT GROUNDWATER MIXING ZONE SCOPING SUMMARY (U)

Westinghouse Savannah River Company
Savannah River Site
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1.0 Status of the Old F-Area Seepage Basin Operable Unit

In August 2001, the Savannah River Site (SRS) notified the Department of Energy (DOE-SR), the South Carolina Department of Health and Environmental Control (SCDHEC), and the US Environmental Protection Agency (USEPA) that contaminants had exceeded predicted levels in several wells that monitor groundwater quality near the Old F-Area Seepage Basin Operable Unit (OFASB OU).

A Core Team of representatives from DOE-SR, SCDHEC, and USEPA met in September 2001 to examine data and to recommend a plan for corrective action. To better understand whether other sources may contribute to the observed contamination, the team agreed that SRS should collect and analyze groundwater from areas immediately upgradient and sidegradient to OFASB OU. SRS submitted a Plan for Corrective Action (WSRC, 2001) in October 2001 and a Sampling and Analysis Plan (WSRC, 2002) in January 2002; these documents described the collection plan, analytical strategy, and schedule for the upgradient and sidegradient characterization. SRS completed this sampling using direct push technology in January 2002; resultant data indicate the existence of upgradient contaminant sources.

This document summarizes monitoring well data, includes the results of the recent depth discrete groundwater sampling, and provides a basis for Core Team decision-making regarding maintenance of the mixing zone and/or establishment of a new groundwater operable unit.

2.0 Background

The Old F-Area Seepage Basin was an unlined basin that operated from 1954 to 1969. Discharges to the basin included wastewater, occasional cooling water, collected rainfall, and spent nitric acid etching solutions containing uranium. The OFASB OU is included in Appendix C of the SRS Federal Facility Agreement (FFA). The OFASB OU comprises the seepage basin, associated soil and vegetation, an adjacent ditch, a pipeline, and a groundwater unit. In March 1997, USEPA and SCDHEC approved a Record of Decision (ROD) for OFASB OU. The final remedial action selected for the OFASB OU includes (WSRC, 1999):

- In-situ stabilization of contaminated material (source control)
- Construction of a low-permeability cover over the stabilized material
- Implementation of a groundwater mixing zone
- Implementation of institutional controls to limit access to and to restrict future use

SRS submitted a groundwater mixing zone application in 1997 (WSRC, 1997); the application was approved in 1998. In 1999, SRS established a well network to monitor the groundwater unit. The network includes three plume assessment wells, three intermediate wells, and four compliance boundary wells (Figure 1).

The groundwater mixing zone application included a site-specific groundwater flow and transport model (WSRC, 1998), which was used to predict contaminant concentrations expected at the compliance boundary wells. Predicted concentrations were screened against maximum contaminant levels (MCLs) for contaminants of interest. Results indicated that, except for iodine-129, contaminants of interest would remain lower than their respective MCLs in the compliance boundary wells. Iodine-129 was predicted to slightly exceed the MCL at the compliance boundary in the future, and then decline steadily.

Mixing zone concentrations limits (MZCLs) were calculated for the plume assessment wells, which are located between the OFASB and the compliance boundary. Table 1 summarizes the contaminants of interest and applicable groundwater standards.

In accordance with the mixing zone application, the monitoring network is sampled twice annually for constituents of concern (COCs; iodine-129, nitrate, strontium-90, tritium, total uranium), for contaminants that require further evaluation (lead, radium-226, and radium-228), and for radionuclide indicator parameters (gross alpha activity and non-volatile beta activity).

SRS initially sampled the OFASB OU well network in September 2000, establishing a baseline for post-remedial-action groundwater conditions and providing the basis for checking the predictions of the mixing zone application. Data from the September 2000 sampling event indicate that several MCLs were exceeded in three compliance boundary wells. These exceedances were confirmed by the results of two subsequent sampling events, conducted in January and September 2001. Pending the resolution of mixing zone issues (MCL exceedances, possible upgradient sources, etc.), the regular biannual sampling of the OFASB mixing zone well network is suspended.

This document summarizes groundwater quality in the area near the OFASB OU, including recent and historical monitoring well data and depth discrete data collected during the special sidegradient and upgradient characterization program completed in January 2002.

3.0 Problem Warranting Action

Samples collected in September 2000 (3Q2000) from three compliance boundary wells exceeded applicable MCLs for iodine-129, strontium-90, tritium, and/or nitrate. Samples from two plume assessment wells also exceeded MCLs for lead and radium-226, signaling that these constituents should be evaluated for inclusion in the mixing zone contaminant transport model.

In accordance with the mixing zone application, the well network was resampled. Data from the January 2001 (1Q2001) resampling event confirm the previous exceedances and indicate additional exceedances for lead and nitrate.

Data from the September 2001 (3Q2001) analyses reconfirm the iodine-129, strontium-90, tritium, and nitrate exceedances along the compliance boundary; the data do not confirm previous observations of elevated lead and radium-226 in plume assessment wells.

Table 2 summarizes the exceedances noted in the three datasets collected to date for the mixing zone wells.

3.1 Scope of Problem

The contaminant plume defined in the mixing zone application and transport model is limited to the Upper Three Runs Aquifer (UTRA), and extends in the direction of groundwater flow from the old seepage basin downgradient toward the compliance boundary. The distance from the basin to the compliance boundary is approximately 400 meters (~1300 feet). Groundwater travel time between the basin and the compliance boundary is approximately 10-12 years (WSRC, 1998).

Data from the three most recent sampling events show that MCLs have been exceeded in three compliance boundary wells (and, as previously recognized, in the plume assessment wells), but that no intermediate wells exceed MCLs. Furthermore, no MZCLs have been contravened in any plume assessment well. (Refer to Tables 3, 4, and 5 for 3Q2000, 1Q2001, and 3Q2001 data, respectively.)

The magnitudes of several contaminants increase to the east along the compliance boundary, away from the modeled flow lines emanating from OFASB. For example, tritium activities along the compliance boundary increase steadily and dramatically in an eastward direction (Figure 2). A similar pattern exists for nitrate (Figure 3) and possibly for iodine-129 and gross alpha activity (Figures 4 and 5, respectively). This recurring pattern suggests the presence of contamination derived from sources other than OFASB.

The distributions of other contaminants, for example, strontium-90 (Figure 6) and perhaps non-volatile beta activity (Figure 7), suggest the presence of multiple contaminant sources and possibly commingled plumes originating from OFASB and from upgradient sources.

Uncertainty about the existence of upgradient sources was described in the mixing zone application (WSRC, 1997). And recent historical data demonstrate the presence of contamination, especially tritium, in groundwater upgradient from OFASB OU (Figure 8). However, the current configuration of wells at OFASB and in F-Area makes it difficult to determine the presence (and, therefore, the extent) of upgradient

and sidegradient contamination and the degree to which upgradient and sidegradient contamination may have commingled with plumes derived from OFASB. The Core Team recognized this limitation and agreed that additional characterization was required. The team approved SRS's proposal to collect and analyze groundwater from area upgradient and sidegradient areas (Figure 9). At each of 11 sample locations, two depth discrete groundwater samples were obtained from the Lower Aquifer Zone of the UTRA. Samples were analyzed for constituents of concern identified in the mixing zone application, for radionuclide indicator constituents, and also for volatile organic compounds (VOCs), which are known to have been used in F-Area. Data generated from analyses of these samples are attached at Table 6.

Analyses of depth-discrete groundwater samples obtained from areas immediately upgradient and sidegradient from OFASB OU show that groundwater contamination exceeds MCLs for gross alpha activity, non-volatile beta activity, tritium activity, and, to a lesser extent, nitrate (Figures 10, 11, 12, and 13, respectively). In these sidegradient and upgradient areas, at least one measured contaminant exceeds it applicable MCL (or similar standard) in every sample and in both discrete sample zones of the Upper Three Runs Aquifer. At several locations, shallower groundwater samples are more contaminated than the deeper samples, but this pattern is not true at every sample location or for every contaminant. No strontium-90 or iodine-129 exceedances are evident in these areas (Figures 14 and 15), but historical monitoring well data do show significantly elevated iodine-129 activities in an area approximately 1,200 meters (~4,000 feet) upgradient. Trichloroethylene concentrations are up to 85 UGL in the sidegradient area and up to 26 UGL in the upgradient area (Figure 16).

4.0 OFASB OU Strategy

SRS proposes to convene the Core Team, review data, and reach consensus on a plan for further technical and programmatic actions, including:

- maintenance of the mixing zone and Record of Decision for OFASB OU
- creation of an expanded F-Area Groundwater OU

5.0 References

WSRC, 1997. *Groundwater Mixing Zone Application for the Old F-Area Seepage Basin (U)*, WSRC-RP-97-39, Rev. 1, March 1997, Westinghouse Savannah River Company, Aiken, SC

WSRC, 1998. *Old F-Area Seepage Basin Transport Analyses In Support of a SCDHEC Mixing Zone Application*, WSRC-TR-98-00307, Rev. 0, September 1998, Westinghouse Savannah River Company, Aiken, SC

WSRC, 1999. *Corrective Measures Implementation/Remedial Design/Remedial Action Work Plan for Old F-Area Seepage Basin (904-49G) (U)*, WSRC-RP-97-854, Rev. 1.2, Westinghouse Savannah River Company, Aiken, SC

WSRC, 2001. *Old F-Area Seepage Basin Groundwater Mixing Zone Plan for Corrective Action (U)*, WSRC-RP-2001-4239, Westinghouse Savannah River Company, Aiken, SC

WSRC, 2002. *Sampling and Analysis Plan for the Old F-Area Seepage Basin Mixing Zone (U)*, WSRC-RP-2002-4005, Westinghouse Savannah River Company, Aiken, SC

Constituents of Concern	MCL	MZCL
tritium ^{3}H	20,000 pCi/L	216,000 pCi/L
iodine-129 ^{129}I	1 pCi/L	48 pCi/L
nitrate NO_3	10 mg/L	20 9 mg/L
strontium-90 ^{90}Sr	8 pCi/L	146 pCi/L
total uranium U_{total}	30* µg/L	83 µg/L
Constituents Requiring Further Evaluation	**MCL**	**MZCL**
lead Pb	15 µg/L	not calculated
radium-226 ^{226}Ra	5 pCi/L	not calculated
radium-228 ^{228}Ra	5 pCi/L	not calculated
Radionuclide Indicator Parameters	**MCL**	**MZCL**
gross alpha activity	15 pCi/L	not calculated
non-volatile beta activity	4 mrem/year total effective dose	not calculated

* The groundwater mixing zone application cited 20 µg/L as the proposed MCL for U_{total}. The MCL for U_{total} is 30 µg/L.

Table 1. Constituents of Interest, MCLs, and MZCLs for OFASB OU.

Well	Monitoring Network Significance	3Q2000 Exceedances	1Q2001 Exceedances	3Q2001 Exceedances	Applicable Standard
FNB-3	Plume Assessment	Pb = 17.6 µg/l	Pb = 39.5 µg/l		not calculated
FNB-5	Plume Assessment	^{226}Ra = 6.36 pCi/l	^{226}Ra = 7.67 pCi/ml Pb = 18.1 µg/l (J)		
FNB-13	Compliance Boundary	^{129}I = 2.65 pCi/l (J) ^{90}Sr = 14.7 pCi/l ^{3}H = 68,700 pCi/l	^{129}I = 1.86 pCi/l (J) ^{90}Sr = 29 5 pCi/l ^{3}H = 64,900 pCi/l	^{129}I = 3.79 pCi/l (J) ^{90}Sr = 28 7 pCi/l ^{3}H = 62,200 pCi/l	MCL ^{129}I = 1 pCi/l MCL ^{90}Sr = 8pCi/l MCL ^{3}H = 20,000 pCi/l
FNB-14	Compliance Boundary	^{129}I = 2.63 pCi/l (J) ^{3}H = 94,600 pCi/l	^{129}I = 2.82 pCi/l (J) N = 11 mg/l ^{3}H = 101,000 pCi/l	^{3}H = 65,700 pCi/l	MCL ^{129}I = 1 pCi/l MCL N = 10 mg/l MCL ^{3}H = 20,000 pCi/l
FNB-15	Compliance Boundary	^{129}I = 5 69 pCi/l N = 15.3 mg/l ^{90}Sr = 9.68 pCi/l ^{3}H = 165,000 pCi/l	^{129}I = 5 5 pCi/l N = 19.3 mg/l ^{90}Sr = 10.7 pCi/l ^{3}H = 165,000 pCi/l	^{129}I = 5 88 pCi/l N = 18.3 mg/l ^{90}Sr = 16 pCi/l ^{3}H = 130,000 pCi/l	MCL ^{129}I = 1 pCi/l MCL N = 10 mg/l MCL ^{90}Sr = 8pCi/l MCL ^{3}H = 20,000 pCi/l

Table 2. Summary of Mixing Zone Exceedances.

Table 3. OFASB Mixing Zone Well Network, 3Q2000 Results

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
Plume Assessment Wells FNB-2, FNB-3, FNB-5									
D	FNB 2	5-Sep-00	GROSS ALPHA	40 7	PCL			0 72	6 62
D	FNB 2	5-Sep-00	IODINE-129	17 8	PCL			1 02	6 7
D	FNB 2	5-Sep-00	LEAD	5	UGL		U	1 83	5
S	FNB 2	5-Sep-00	NITRATE-NITRITE AS NITROGEN	10 8	MGL			0 045	0 25
D	FNB 2	5-Sep-00	NONVOLATILE BETA	163	PCL			1 18	9 84
RD	FNB 2	5-Sep-00	PH	4	PH				
D	FNB 2	5-Sep-00	RADIUM-226	0 45	PCL		U	0 771	1 745
D	FNB 2	5-Sep-00	RADIUM-228	1 88	PCL		U	0 775	1 731
D	FNB 2	5-Sep-00	RADIUM-228	3 31	PCL		U	1 02	2 376
RD	FNB 2	5-Sep-00	SPECIFIC CONDUCTANCE	133	USCM				
D	FNB 2	5-Sep-00	STRONTIUM-90	95 9	PCL			0 768	4 668
D	FNB 2	5-Sep-00	TRITIUM	84400	PCL			556	3956
RD	FNB 2	5-Sep-00	TURBIDITY	5 4	NTU				
D	FNB 2	5-Sep-00	URANIUM	61 3	UGL		U	11 9	50
D	FNB 3	6-Sep-00	GROSS ALPHA	7.24	PCL			1 03	3 81
D	FNB 3	6-Sep-00	GROSS ALPHA	7 54	PCL			1 1	4 04
D	FNB 3	6-Sep-00	GROSS ALPHA	10 2	PCL			0 79	4 33
D	FNB 3	6-Sep-00	GROSS ALPHA	9 43	PCL			0 863	4 363
D	FNB 3	6-Sep-00	IODINE-129	1.77	PCL		U	7 31	14 89
D	FNB 3	6-Sep-00	IODINE-129	2 72	PCL		U	7 79	15 99
D	FNB 3	6-Sep-00	IODINE-129	0 118	PCL		U	0 717	1.875
D	FNB 3	6-Sep-00	IODINE-129	1 3	PCL		J	1.24	3 68
D	FNB 3	6-Sep-00	IODINE-129	1 52	PCL		U	1 64	3 52
D	FNB 3	6-Sep-00	LEAD	9 57	UGL			1 83	5
D	FNB 3	6-Sep-00	LEAD	7 9	UGL		J	4 7	47
D	FNB 3	6-Sep-00	LEAD	17.6	UGL			1 83	5
S	FNB 3	6-Sep-00	NITRATE-NITRITE AS NITROGEN	4 47	MGL			0 027	0 15
S	FNB 3	6-Sep-00	NITRATE-NITRITE AS NITROGEN	4 38	MGL			0 027	0 15
S	FNB 3	6-Sep-00	NITRATE-NITRITE AS NITROGEN	4300	UGL			20	200
D	FNB 3	6-Sep-00	NONVOLATILE BETA	22 71	PCL			1 71	5 69
D	FNB 3	6-Sep-00	NONVOLATILE BETA	22 65	PCL			1.74	5 76
D	FNB 3	6-Sep-00	NONVOLATILE BETA	23 8	PCL			1 4	5 3
D	FNB 3	6-Sep-00	NONVOLATILE BETA	23 2	PCL			1 49	5 43
RD	FNB 3	6-Sep-00	PH	5	PH				
D	FNB 3	6-Sep-00	RADIUM-226	1 24	PCL		J	0 583	1 655
D	FNB 3	6-Sep-00	RADIUM-226	0 983	PCL		J	0 603	1 593
D	FNB 3	6-Sep-00	RADIUM-228	5 4	PCL		R	4 93	11 25
D	FNB 3	6-Sep-00	RADIUM-228	4 17	PCL		R	5 25	11 75
D	FNB 3	6-Sep-00	RADIUM-228	0 52	PCL		U	0 991	1 953
D	FNB 3	6-Sep-00	RADIUM-228	1 41	PCL		J	1 16	2 428
RD	FNB 3	6-Sep-00	SPECIFIC CONDUCTANCE	58	USCM				
D	FNB 3	6-Sep-00	STRONTIUM-90	6 3	PCL			1 1	3 08
D	FNB 3	6-Sep-00	STRONTIUM-90	6 03	PCL			1 27	3 47
D	FNB 3	6-Sep-00	STRONTIUM-90	7 84	PCL		J	0 893	2 403
D	FNB 3	6-Sep-00	STRONTIUM-90	7 43	PCL		J	0 872	2 31
D	FNB 3	6-Sep-00	TRITIUM	21800	PCL			531	2263
D	FNB 3	6-Sep-00	TRITIUM	20000	PCL			528	2190
D	FNB 3	6-Sep-00	TRITIUM	21500	PCL			529	2247
D	FNB 3	6-Sep-00	TRITIUM	18 36	PCML			1 12	3 78
D	FNB 3	6-Sep-00	TRITIUM	18 49	PCML			1.12	3 78
D	FNB 3	6-Sep-00	TRITIUM	21 5	PCML			0 529	2 247
RD	FNB 3	6-Sep-00	TURBIDITY	1 5	NTU				
D	FNB 3	6-Sep-00	URANIUM	10 77	UGL			0 03	0 35
D	FNB 3	6-Sep-00	URANIUM	11 27	UGL			0 03	0 37
D	FNB 3	6-Sep-00	URANIUM	50	UGL		U	11 9	50
D	FNB 3	6-Sep-00	URANIUM	19	UGL		J	11 9	50
D	FNB 5	5-Sep-00	GROSS ALPHA	23 9	PCL			0 656	5 296
D	FNB 5	5-Sep-00	IODINE-129	3 38	PCL		J	1 3	4 18
D	FNB 5	5-Sep-00	LEAD	5	UGL		U	1 83	5
S	FNB 5	5-Sep-00	NITRATE-NITRITE AS NITROGEN	14 9	MGL			0 09	0 5

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
D	FNB 5	5-Sep-00	NONVOLATILE BETA	79 5	PCL			1 32	7 44
RD	FNB 5	5-Sep-00	PH	4 2	PH				
D	FNB 5	5-Sep-00	RADIUM-226	6 36	PCL			0 761	3 161
D	FNB 5	5-Sep-00	RADIUM-228	3 56	PCL		U	0 949	2.267
RD	FNB 5	5-Sep-00	SPECIFIC CONDUCTANCE	165	USCM				
D	FNB 5	5-Sep-00	STRONTIUM-90	24 3	PCL			0 756	2 916
D	FNB 5	5-Sep-00	TRITIUM	92200	PCL			581	4281
RD	FNB 5	5-Sep-00	TURBIDITY	2 1	NTU				
D	FNB 5	5-Sep-00	URANIUM	40 6	UGL		JU	11 9	50
Intermediate Wells FNB-9, FNB-10, FNB-11									
D	FNB 9	5-Sep-00	GROSS ALPHA	0 292	PCL		U	0 722	1 458
D	FNB 9	5-Sep-00	IODINE-129	0 0734	PCL		U	0 673	1 447
S	FNB 9	5-Sep-00	NITRATE-NITRITE AS NITROGEN	1 08	MGL			0 009	0 05
D	FNB 9	5-Sep-00	NONVOLATILE BETA	2 02	PCL		J	1 32	2 812
RD	FNB 9	5-Sep-00	PH	5 7	PH				
RD	FNB 9	5-Sep-00	SPECIFIC CONDUCTANCE	40	USCM				
D	FNB 9	5-Sep-00	STRONTIUM-90	-1.28	PCL		U	1 56	3 304
D	FNB 9	5-Sep-00	TRITIUM	2590	PCL			529	1351
RD	FNB 9	5-Sep-00	TURBIDITY	0 9	NTU				
D	FNB 9	5-Sep-00	URANIUM	11.9	UGL		U	11.9	50
D	FNB 10	5-Sep-00	GROSS ALPHA	1 31	PCL			0.297	0 841
D	FNB 10	5-Sep-00	GROSS ALPHA	0 812	PCL			0.309	0 791
D	FNB 10	5-Sep-00	IODINE-129	-0.339	PCL		U	0 891	2 149
S	FNB 10	5-Sep-00	NITRATE-NITRITE AS NITROGEN	1.41	MGL			0 009	0 05
D	FNB 10	5-Sep-00	NONVOLATILE BETA	3 8	PCL			0 497	1 303
D	FNB 10	5-Sep-00	NONVOLATILE BETA	4 39	PCL			0 624	1.57
RD	FNB 10	5-Sep-00	PH	5 2	PH				
RD	FNB 10	5-Sep-00	SPECIFIC CONDUCTANCE	32	USCM				
D	FNB 10	5-Sep-00	STRONTIUM-90	-0.143	PCL		U	0 791	1 439
D	FNB 10	5-Sep-00	TRITIUM	3300	PCL			526	1394
RD	FNB 10	5-Sep-00	TURBIDITY	2	NTU				
D	FNB 10	5-Sep-00	URANIUM	22 2	UGL		U	11 9	50
D	FNB 11	5-Sep-00	GROSS ALPHA	0 894	PCL		U	0 912	2 162
D	FNB 11	5-Sep-00	IODINE-129	0 375	PCL		U	0 641	1.369
S	FNB 11	5-Sep-00	NITRATE-NITRITE AS NITROGEN	4 2	MGL			0 027	0 15
D	FNB 11	5-Sep-00	NONVOLATILE BETA	21 6	PCL			1 51	5 35
RD	FNB 11	5-Sep-00	PH	5 5	PH				
RD	FNB 11	5-Sep-00	SPECIFIC CONDUCTANCE	58	USCM				
D	FNB 11	5-Sep-00	STRONTIUM-90	1 09	PCL		J	0 7	1 5
D	FNB 11	5-Sep-00	TRITIUM	13200	PCL			529	1925
RD	FNB 11	5-Sep-00	TURBIDITY	1 2	NTU				
D	FNB 11	5-Sep-00	URANIUM	50	UGL		U	11 9	50
Compliance Boundary Wells FNB-12, FNB-13, FNB-14, FNB-15									
D	FNB 12	5-Sep-00	GROSS ALPHA	0 102	PCL		U	0 57	1 054
D	FNB 12	5-Sep-00	IODINE-129	0 0686	PCL		U	0 673	1 463
S	FNB 12	5-Sep-00	NITRATE-NITRITE AS NITROGEN	0 33	MGL			0 009	0 05
D	FNB 12	5-Sep-00	NONVOLATILE BETA	0 182	PCL		U	1 2	2 266
RD	FNB 12	5-Sep-00	PH	5 2	PH				
RD	FNB 12	5-Sep-00	SPECIFIC CONDUCTANCE	26	USCM				
D	FNB 12	5-Sep-00	STRONTIUM-90	-0 3	PCL		U	0 874	1 58
D	FNB 12	5-Sep-00	TRITIUM	2480	PCL			527	1339
RD	FNB 12	5-Sep-00	TURBIDITY	2 5	NTU				
D	FNB 12	5-Sep-00	URANIUM	16 1	UGL		U	11 9	50

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
D	FNB 13	5-Sep-00	GROSS ALPHA	2 27	PCL			0 532	1.97
D	**FNB 13**	**5-Sep-00**	**IODINE-129**	**2.65**	**PCL**		**J**	0 93	3 37
S	FNB 13	5-Sep-00	NITRATE-NITRITE AS NITROGEN	7.65	MGL			0 045	0 25
D	FNB 13	5-Sep-00	NONVOLATILE BETA	46 6	PCL			1.26	5 72
RD	FNB 13	5-Sep-00	PH	5 2	PH				
RD	FNB 13	5-Sep-00	SPECIFIC CONDUCTANCE	83	USCM				
D	**FNB 13**	**5-Sep-00**	**STRONTIUM-90**	**14.7**	**PCL**			0 934	2 73
D	**FNB 13**	**5-Sep-00**	**TRITIUM**	**68700**	**PCL**			537	3497
RD	FNB 13	5-Sep-00	TURBIDITY	2.1	NTU				
D	FNB 13	5-Sep-00	URANIUM	12 6	UGL		U	11.9	50
D	FNB 14	5-Sep-00	GROSS ALPHA	3 78	PCL			0 823	2 693
D	**FNB 14**	**5-Sep-00**	**IODINE-129**	**2.63**	**PCL**		**J**	0 668	3.128
S	FNB 14	5-Sep-00	NITRATE-NITRITE AS NITROGEN	9 35	MGL			0 045	0 25
D	FNB 14	5-Sep-00	NONVOLATILE BETA	9 5	PCL			1.19	3 37
RD	FNB 14	5-Sep-00	PH	4 9	PH				
RD	FNB 14	5-Sep-00	SPECIFIC CONDUCTANCE	96	USCM				
D	FNB 14	5-Sep-00	STRONTIUM-90	-0 69	PCL		U	1.35	2 604
D	**FNB 14**	**5-Sep-00**	**TRITIUM**	**94600**	**PCL**			589	4389
RD	FNB 14	5-Sep-00	TURBIDITY	1.9	NTU				
D	FNB 14	5-Sep-00	URANIUM	15 6	UGL		U	11 9	50
D	FNB 15	5-Sep-00	GROSS ALPHA	4 63	PCL			0.713	2 893
D	**FNB 15**	**5-Sep-00**	**IODINE-129**	**5.69**	**PCL**			1.01	3 95
S	**FNB 15**	**5-Sep-00**	**NITRATE-NITRITE AS NITROGEN**	**15.3**	**MGL**			0 09	0 5
D	FNB 15	5-Sep-00	NONVOLATILE BETA	41.3	PCL			1.19	5 43
RD	FNB 15	5-Sep-00	PH	5 8	PH				
RD	FNB 15	5-Sep-00	SPECIFIC CONDUCTANCE	178	USCM				
D	**FNB 15**	**5-Sep-00**	**STRONTIUM-90**	**9.68**	**PCL**			1 07	2 806
D	**FNB 15**	**5-Sep-00**	**TRITIUM**	**165000**	**PCL**			785	7325
RD	FNB 15	5-Sep-00	TURBIDITY	1.1	NTU				
D	FNB 15	5-Sep-00	URANIUM	16 1	UGL		U	11.9	50

NOTES:

PCL = picoCuries/liter PCML = picoCuries/milliliter
MGL = milligrams/liter UGL = micrograms/liter
Bold data exceed applicable standards
Shaded data exceed MCLs and may be evaluated for inclusion in the contaminant transport model.

Table 4. OFASB Mixing Zone Well Network, 1Q2001 Results

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
Plume Assessment Wells FNB-2, FNB-3, FNB-5									
D	FNB 2	29-Jan-01	GROSS ALPHA	54	PCL			1 01	7 87
D	FNB 2	29-Jan-01	IODINE-129	15 6	PCL			1 3	6 76
D	FNB 2	29-Jan-01	LEAD	5	UGL		U	3 44	5
S	FNB 2	29-Jan-01	NITRATE-NITRITE AS NITROGEN	11 8	MGL			0 069	0 5
D	FNB 2	29-Jan-01	NONVOLATILE BETA	159	PCL			1 6	9 82
S	FNB 2	29-Jan-01	PH	4 3	PH				
D	FNB 2	29-Jan-01	RADIUM-226	4 11	PCL			0 574	2.39
D	FNB 2	29-Jan-01	RADIUM-228	2 52	PCL			1	2.222
S	FNB 2	29-Jan-01	SPECIFIC CONDUCTANCE	138	USCM				
D	FNB 2	29-Jan-01	STRONTIUM-90	92 2	PCL			0 758	5 798
D	FNB 2	29-Jan-01	TRITIUM	90700	PCL			618	4118
S	FNB 2	29-Jan-01	TURBIDITY	6 7	NTU				
D	FNB 2	29-Jan-01	URANIUM	73 6	UGL		U	7 33	50
D	FNB 3	29-Jan-01	GROSS ALPHA	6 55	PCL			0 819	3 319
D	FNB 3	29-Jan-01	IODINE-129	1 01	PCL		U	1 35	2 65
D	FNB 3	29-Jan-01	LEAD	39.5	UGL			3 44	5
S	FNB 3	29-Jan-01	NITRATE-NITRITE AS NITROGEN	5 04	MGL			0 0207	0 15
D	FNB 3	29-Jan-01	NONVOLATILE BETA	16 2	PCL			1 59	4 59
S	FNB 3	29-Jan-01	PH	4 6	PH				
D	FNB 3	29-Jan-01	RADIUM-226	1 01	PCL		J	0 578	1.594
D	FNB 3	29-Jan-01	RADIUM-228	0 883	PCL		J	0 694	1 454
S	FNB 3	29-Jan-01	SPECIFIC CONDUCTANCE	64	USCM				
D	FNB 3	29-Jan-01	STRONTIUM-90	6 42	PCL			0 813	2.291
D	FNB 3	29-Jan-01	TRITIUM	18800	PCL			613	2323
S	FNB 3	29-Jan-01	TURBIDITY	1 7	NTU				
D	FNB 3	29-Jan-01	URANIUM	34 1	UGL		U	7 33	50
D	FNB 5	29-Jan-01	GROSS ALPHA	26 14	PCL			0 78	5 84
D	FNB 5	29-Jan-01	GROSS ALPHA	23 72	PCL			1 15	5 93
D	FNB 5	29-Jan-01	GROSS ALPHA	27 5	PCL			0 773	5 593
D	FNB 5	29-Jan-01	GROSS ALPHA	24 9	PCL			0 998	5 858
D	FNB 5	29-Jan-01	IODINE-129	3 35	PCL		U	4 69	11 47
D	FNB 5	29-Jan-01	IODINE-129	3 64	PCL		U	8 29	16 73
D	FNB 5	29-Jan-01	IODINE-129	3 32	PCL		J	0 888	3 488
D	FNB 5	29-Jan-01	IODINE-129	3 08	PCL		R	1 96	4
D	FNB 5	29-Jan-01	LEAD	10 2	UGL			3 44	5
D	FNB 5	29-Jan-01	LEAD	6 75	UGL			3 44	5
D	FNB 5	29-Jan-01	LEAD	18 1	UGL		J	4 7	47
S	FNB 5	29-Jan-01	NITRATE-NITRITE AS NITROGEN	13 9	MGL			0 069	0 5
S	FNB 5	29-Jan-01	NITRATE-NITRITE AS NITROGEN	14 6	MGL			0 069	0 5
S	FNB 5	29-Jan-01	NITRATE-NITRITE AS NITROGEN	14900	UGL			100	1000
D	FNB 5	29-Jan-01	NONVOLATILE BETA	77 24	PCL			1 5	7.76
D	FNB 5	29-Jan-01	NONVOLATILE BETA	76 91	PCL			1 69	7.93
D	FNB 5	29-Jan-01	NONVOLATILE BETA	60 2	PCL			1 56	6 7
D	FNB 5	29-Jan-01	NONVOLATILE BETA	62 7	PCL			1 95	7.39
S	FNB 5	29-Jan-01	PH	4 1	PH				
D	FNB 5	29-Jan-01	RADIUM-226	7.67	PCL			0 473	2.953
D	FNB 5	29-Jan-01	RADIUM-226	6.46	PCL			0 528	2 668
D	FNB 5	29-Jan-01	RADIUM-228	30 68	PCL		R	1 77	6 91
D	FNB 5	29-Jan-01	RADIUM-228	29 96	PCL		R	2	7.14
D	FNB 5	29-Jan-01	RADIUM-228	3 92	PCL			1 02	2 4
D	FNB 5	29-Jan-01	RADIUM-228	2 88	PCL			1 05	2.382
S	FNB 5	29-Jan-01	SPECIFIC CONDUCTANCE	144	USCM				
D	FNB 5	29-Jan-01	STRONTIUM-90	24 36	PCL			1 62	5 68
D	FNB 5	29-Jan-01	STRONTIUM-90	23 91	PCL			1 64	5 72
D	FNB 5	29-Jan-01	STRONTIUM-90	21 8	PCL			0 875	3 515
D	FNB 5	29-Jan-01	STRONTIUM-90	32 6	PCL			0 954	4 394
D	FNB 5	29-Jan-01	TRITIUM	77500	PCL			617	3857
D	FNB 5	29-Jan-01	TRITIUM	77400	PCL			619	3879

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
D	FNB 5	29-Jan-01	TRITIUM	70 69	PCML			1 26	6 16
D	FNB 5	29-Jan-01	TRITIUM	80 01	PCML			1 37	6 79
S	FNB 5	29-Jan-01	TURBIDITY	5 2	NTU				
D	FNB 5	29-Jan-01	URANIUM	17 04	UGL		U	0 03	1 17
D	FNB 5	29-Jan-01	URANIUM	17	UGL		U	0 03	1 19
D	FNB 5	29-Jan-01	URANIUM	57 2	UGL		U	7 33	50
D	FNB 5	29-Jan-01	URANIUM	57 7	UGL		U	7 33	50
Intermediate Wells FNB-9, FNB-10, FNB-11									
D	FNB 9	29-Jan-01	GROSS ALPHA	0 586	PCL		U	0 756	1 662
D	FNB 9	29-Jan-01	IODINE-129	0 531	PCL		U	1.81	4 07
S	FNB 9	29-Jan-01	NITRATE-NITRITE AS NITROGEN	1 32	MGL			0 0069	0 05
S	FNB 9	29-Jan-01	NITRATE-NITRITE AS NITROGEN	1 35	MGL			0 0069	0 05
D	FNB 9	29-Jan-01	NONVOLATILE BETA	2 19	PCL		J	1 59	3 346
S	FNB 9	29-Jan-01	PH	5 4	PH				
S	FNB 9	29-Jan-01	SPECIFIC CONDUCTANCE	39	USCM				
D	FNB 9	29-Jan-01	STRONTIUM-90	0 119	PCL		U	0 798	1 512
D	FNB 9	29-Jan-01	TRITIUM	2320	PCL			626	1532
S	FNB 9	29-Jan-01	TURBIDITY	4 4	NTU				
D	FNB 9	29-Jan-01	URANIUM	34 8	UGL		U	7.33	50
D	FNB 10	29-Jan-01	GROSS ALPHA	1 55	PCL		J	0 64	1 868
D	FNB 10	29-Jan-01	IODINE-129	0 799	PCL		U	0 978	2 372
S	FNB 10	29-Jan-01	NITRATE-NITRITE AS NITROGEN	1 51	MGL			0 0069	0 05
D	FNB 10	29-Jan-01	NONVOLATILE BETA	3 29	PCL		J	1 62	3 536
S	FNB 10	29-Jan-01	PH	4 8	PH				
S	FNB 10	29-Jan-01	SPECIFIC CONDUCTANCE	32	USCM				
D	FNB 10	29-Jan-01	STRONTIUM-90	-0 307	PCL		U	1 05	1 896
D	FNB 10	29-Jan-01	TRITIUM	2430	PCL			620	1526
S	FNB 10	29-Jan-01	TURBIDITY	0 9	NTU				
D	FNB 10	29-Jan-01	URANIUM	11 6	UGL		U	7.33	50
D	FNB 11	29-Jan-01	GROSS ALPHA	1 42	PCL		J	0 853	2.127
D	FNB 11	29-Jan-01	IODINE-129	0 0756	PCL		U	1 35	2.832
S	FNB 11	29-Jan-01	NITRATE-NITRITE AS NITROGEN	2 85	MGL			0 0069	0 05
D	FNB 11	29-Jan-01	NONVOLATILE BETA	6 79	PCL			1 54	3 74
S	FNB 11	29-Jan-01	PH	5 2	PH				
S	FNB 11	29-Jan-01	SPECIFIC CONDUCTANCE	46	USCM				
D	FNB 11	29-Jan-01	STRONTIUM-90	1 64	PCL		J	0 871	1.913
D	FNB 11	29-Jan-01	TRITIUM	11700	PCL			631	2073
S	FNB 11	29-Jan-01	TURBIDITY	2 9	NTU				
D	FNB 11	29-Jan-01	URANIUM	34 8	UGL		U	7.33	50
Compliance Boundary Wells FNB-12, FNB-13, FNB-14, FNB-15									
D	FNB 12	29-Jan-01	GROSS ALPHA	0 749	PCL		U	1 08	2.288
D	FNB 12	29-Jan-01	IODINE-129	0 406	PCL		U	1 59	3 084
S	FNB 12	29-Jan-01	NITRATE-NITRITE AS NITROGEN	0 25	MGL			0 0069	0 05
D	FNB 12	29-Jan-01	NONVOLATILE BETA	0 96	PCL		U	1 71	3 434
S	FNB 12	29-Jan-01	PH	5 1	PH				
S	FNB 12	29-Jan-01	SPECIFIC CONDUCTANCE	26	USCM				
D	FNB 12	29-Jan-01	STRONTIUM-90	-0 0195	PCL		U	0 82	1.522
D	FNB 12	29-Jan-01	TRITIUM	2310	PCL			618	1514
S	FNB 12	29-Jan-01	TURBIDITY	2 5	NTU				
D	FNB 12	29-Jan-01	URANIUM	50 1	UGL		U	7 33	50

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
D	FNB 13	31-Jan-01	GROSS ALPHA	1 95	PCL		J	0.719	2 159
D	**FNB 13**	**31-Jan-01**	**IODINE-129**	**1.86**	**PCL**		**J**	1 27	3 69
S	FNB 13	31-Jan-01	NITRATE-NITRITE AS NITROGEN	8 8	MGL			0 0345	0 25
S	FNB 13	31-Jan-01	NITRATE-NITRITE AS NITROGEN	8 95	MGL			0 0345	0 25
D	FNB 13	31-Jan-01	NONVOLATILE BETA	54 7	PCL			1.58	6 06
S	FNB 13	31-Jan-01	PH	5	PH				
S	FNB 13	31-Jan-01	SPECIFIC CONDUCTANCE	96	USCM				
D	**FNB 13**	**31-Jan-01**	**STRONTIUM-90**	**29 5**	**PCL**			0 513	2 195
D	**FNB 13**	**31-Jan-01**	**TRITIUM**	**64900**	**PCL**			649	3629
S	FNB 13	31-Jan-01	TURBIDITY	1 6	NTU				
D	FNB 13	31-Jan-01	URANIUM	14 3	UGL		U	7 33	50
D	FNB 14	31-Jan-01	GROSS ALPHA	4 64	PCL			0 448	2.216
D	FNB 14	31-Jan-01	GROSS ALPHA	6 37	PCL			0 622	2 682
D	**FNB 14**	**31-Jan-01**	**IODINE-129**	**2.82**	**PCL**		**J**	1.22	3 66
S	**FNB 14**	**31-Jan-01**	**NITRATE-NITRITE AS NITROGEN**	**10 9**	**MGL**			0 0345	0 25
S	**FNB 14**	**31-Jan-01**	**NITRATE-NITRITE AS NITROGEN**	**11**	**MGL**			0 0345	0 25
D	FNB 14	31-Jan-01	NONVOLATILE BETA	13	PCL			1.45	3 91
D	FNB 14	31-Jan-01	NONVOLATILE BETA	15.2	PCL			1 46	4 04
S	FNB 14	31-Jan-01	PH	4 7	PH				
S	FNB 14	31-Jan-01	SPECIFIC CONDUCTANCE	113	USCM				
D	FNB 14	31-Jan-01	STRONTIUM-90	0 259	PCL		U	0 273	0 607
D	FNB 14	31-Jan-01	STRONTIUM-90	0 21	PCL		U	0 415	0 911
D	**FNB 14**	**31-Jan-01**	**TRITIUM**	**101000**	**PCL**			664	4384
S	FNB 14	31-Jan-01	TURBIDITY	3 8	NTU				
D	FNB 14	31-Jan-01	URANIUM	13 8	UGL		U	7.33	50
D	FNB 15	31-Jan-01	GROSS ALPHA	6 11	PCL			0 653	2 753
D	**FNB 15**	**31-Jan-01**	**IODINE-129**	**5 5**	**PCL**			1.16	5 34
S	**FNB 15**	**31-Jan-01**	**NITRATE-NITRITE AS NITROGEN**	**19.3**	**MGL**			0 069	0 5
D	FNB 15	31-Jan-01	NONVOLATILE BETA	59.2	PCL			1 32	5 76
S	FNB 15	31-Jan-01	PH	5 5	PH				
S	FNB 15	31-Jan-01	SPECIFIC CONDUCTANCE	190	USCM				
D	**FNB 15**	**31-Jan-01**	**STRONTIUM-90**	**10.7**	**PCL**			0 267	0 999
D	**FNB 15**	**31-Jan-01**	**TRITIUM**	**165000**	**PCL**			662	5382
S	FNB 15	31-Jan-01	TURBIDITY	1	NTU				
D	FNB 15	31-Jan-01	URANIUM	13 7	UGL		U	7 33	50

NOTES.

PCL = picoCuries/liter PCML = picoCuries/milliliter
MGL = milligrams/liter UGL = micrograms/liter
Bold data exceed applicable standards.
Shaded data exceed MCLs and may be evaluated for inclusion in the contaminant transport model.

Table 5. OFASB Mixing Zone Well Network, 3Q2001 Results

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
Plume Assessment Wells FNB-2, FNB-3, FNB-5									
D	FNB 2	20-Sep-01	GROSS ALPHA	47 6	PCL			1	7 46
D	FNB 2	20-Sep-01	GROSS ALPHA	41.2	PCL			1 2	7 72
UU	FNB 2	20-Sep-01	GROSS ALPHA	47 6	PCL			1	7 46
UU	FNB 2	20-Sep-01	GROSS ALPHA	47 6	PCL			1	7 46
UU	FNB 2	20-Sep-01	GROSS ALPHA	41.2	PCL			1 2	7 72
D	FNB 2	20-Sep-01	IODINE-129	20 1	PCL			1 98	8 86
D	FNB 2	20-Sep-01	LEAD	5	UGL	U	U	3 44	5
VU	FNB 2	20-Sep-01	NITRATE-NITRITE AS NITROGEN	12 9	MGL			0 069	0 5
D	FNB 2	20-Sep-01	NONVOLATILE BETA	178	PCL			0 725	8 565
D	FNB 2	20-Sep-01	NONVOLATILE BETA	173	PCL			1 01	8 89
UU	FNB 2	20-Sep-01	NONVOLATILE BETA	178	PCL			0 725	8 565
UU	FNB 2	20-Sep-01	NONVOLATILE BETA	178	PCL			0 725	8 565
UU	FNB 2	20-Sep-01	NONVOLATILE BETA	173	PCL			1 01	8 89
	FNB 2	20-Sep-01	PH	4 3	PH				
D	FNB 2	20-Sep-01	RADIUM-226	4 86	PCL			0 423	1.973
D	FNB 2	20-Sep-01	RADIUM-228	3 25	PCL			0 809	1.905
	FNB 2	20-Sep-01	SPECIFIC CONDUCTANCE	146	USCM				
D	FNB 2	20-Sep-01	STRONTIUM-90	83 7	PCL			1 34	7.9
D	FNB 2	20-Sep-01	TRITIUM	83300	PCL			497	3837
	FNB 2	20-Sep-01	TURBIDITY	3.2	NTU				
D	FNB 2	20-Sep-01	URANIUM-233/234*	12 7	PCL			0 329	3.149
D	FNB 2	20-Sep-01	URANIUM-235*	1.11	PCL	J	J	0 283	1.131
D	FNB 2	20-Sep-01	URANIUM-238*	14 6	PCL			0 214	3 234
D	FNB 3	26-Sep-01	GROSS ALPHA	3 79	PCL			0 76	2 478
D	FNB 3	26-Sep-01	GROSS ALPHA	6 48	PCL			0 766	2 886
D	FNB 3	26-Sep-01	GROSS ALPHA	3 61	PCL			0 369	1.08
D	FNB 3	26-Sep-01	IODINE-129	0 416	PCL	U	U	1.19	2 352
D	FNB 3	26-Sep-01	IODINE-129	0 582	PCL	U	U	1 33	2.746
D	FNB 3	26-Sep-01	IODINE-129	0 481	PCL	J	J	0 339	0.779
D	FNB 3	26-Sep-01	IODINE-129	0 318	PCL	U	U	0 365	0 821
D	FNB 3	26-Sep-01	LEAD	24	UGL	U	U	2 4	24
D	FNB 3	26-Sep-01	LEAD	5	UGL	U	U	3 44	5
D	FNB 3	26-Sep-01	LEAD	5	UGL	U	U	3 44	5
VU	FNB 3	26-Sep-01	NITRATE-NITRITE AS NITROGEN	3 99	MGL			0 0207	0.15
VU	FNB 3	26-Sep-01	NITRATE-NITRITE AS NITROGEN	4 02	MGL			0 0207	0.15
VU	FNB 3	26-Sep-01	NITRATE-NITRITE AS NITROGEN	4250	UGL			57	570
D	FNB 3	26-Sep-01	NONVOLATILE BETA	12 9	PCL			0 695	2 715
D	FNB 3	26-Sep-01	NONVOLATILE BETA	13 4	PCL			0 819	2 919
D	FNB 3	26-Sep-01	NONVOLATILE BETA	13.1	PCL			0 493	3 27
	FNB 3	26-Sep-01	PH	5.2	PH				
D	FNB 3	26-Sep-01	RADIUM-226	2 57	PCL			0 32	1 656
D	FNB 3	26-Sep-01	RADIUM-226	1.56	PCL	J	J	0 482	1 604
D	FNB 3	26-Sep-01	RADIUM-226	1.36	PCL			0 473	1.17
D	FNB 3	26-Sep-01	RADIUM-228	1.2	PCL	J	J	0 991	2 071
D	FNB 3	26-Sep-01	RADIUM-228	1.28	PCL	J	J	0 997	2.103
D	FNB 3	26-Sep-01	RADIUM-228	1 39	PCL	J	J	0 997	2 117
D	FNB 3	26-Sep-01	RADIUM-228	1 44	PCL	U	U	2 09	4 75
	FNB 3	26-Sep-01	SPECIFIC CONDUCTANCE	59	USCM				
D	FNB 3	26-Sep-01	STRONTIUM-90	4 71	PCL		J	1 71	3 93
D	FNB 3	26-Sep-01	STRONTIUM-90	5 7	PCL		J	2 03	4 71
D	FNB 3	26-Sep-01	STRONTIUM-90	4 04	PCL			0 141	0 585
D	FNB 3	26-Sep-01	TRITIUM	8580	PCL			406	1408
D	FNB 3	26-Sep-01	TRITIUM	8970	PCL			414	1448
D	FNB 3	26-Sep-01	TRITIUM	8200	PCL			283	1040
	FNB 3	26-Sep-01	TURBIDITY	0 8	NTU				
D	FNB 3	26-Sep-01	URANIUM-233/234*	1 34	PCL		J	0 168	0 916
D	FNB 3	26-Sep-01	URANIUM-233/234*	1 05	PCL			0 184	0 882
D	FNB 3	26-Sep-01	URANIUM-233/234*	1 3	PCL		J	0 268	1 076
D	FNB 3	26-Sep-01	URANIUM-233/234*	0 902	PCL	J	J	0 385	1.39
D	FNB 3	26-Sep-01	URANIUM-233/234*	2 18	PCL	J	J	0 536	2.25
D	FNB 3	26-Sep-01	URANIUM-235*	0 089	PCL	U	U	0 089	0 291
D	FNB 3	26-Sep-01	URANIUM-235*	0 116	PCL	U	UJ	0 188	0 43

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
D	FNB 3	26-Sep-01	URANIUM-235*	0 097	PCL	U	UJ	0 296	0 584
D	FNB 3	26-Sep-01	URANIUM-235*	0 045	PCL	U	U	0 36	0 684
D	FNB 3	26-Sep-01	URANIUM-235*	-0 108	PCL	U	U	0 567	0 817
D	FNB 3	26-Sep-01	URANIUM-238*	1 75	PCL		J	0 142	0 994
D	FNB 3	26-Sep-01	URANIUM-238*	1 29	PCL			0 184	0 954
D	FNB 3	26-Sep-01	URANIUM-238*	1 69	PCL		J	0 295	1 217
D	FNB 3	26-Sep-01	URANIUM-238*	1 52	PCL			0 164	1 4
D	FNB 3	26-Sep-01	URANIUM-238*	1 71	PCL	J	J	0 566	2 1
D	FNB 5	18-Sep-01	GROSS ALPHA	18 8	PCL			1 06	5 1
VI	FNB 5	18-Sep-01	IODINE-129	3 33	PCL	R	R	1 48	3 268
D	FNB 5	18-Sep-01	LEAD	5	UGL	U	U	3 44	5
VU	FNB 5	18-Sep-01	NITRATE-NITRITE AS NITROGEN	10 8	MGL			0 069	0 5
VU	FNB 5	18-Sep-01	NITRATE-NITRITE AS NITROGEN	10 8	MGL			0 069	0.5
D	FNB 5	18-Sep-01	NONVOLATILE BETA	46 7	PCL			1 03	5 19
	FNB 5	18-Sep-01	PH	4 3	PH				
D	FNB 5	18-Sep-01	RADIUM-226	3 76	PCL			0 251	1 669
D	FNB 5	18-Sep-01	RADIUM-228	4 05	PCL			0 914	2 22
	FNB 5	18-Sep-01	SPECIFIC CONDUCTANCE	118	USCM				
D	FNB 5	18-Sep-01	STRONTIUM-90	20 3	PCL			0 943	3 563
D	FNB 5	18-Sep-01	TRITIUM	35700	PCL			421	2421
	FNB 5	18-Sep-01	TURBIDITY	2 8	NTU				
D	FNB 5	18-Sep-01	URANIUM-233/234*	3 12	PCL			0 195	1 359
D	FNB 5	18-Sep-01	URANIUM-233/234*	3 34	PCL			0 214	1 424
D	FNB 5	18-Sep-01	URANIUM-235*	0 155	PCL	U	U	0 175	0 447
D	FNB 5	18-Sep-01	URANIUM-235*	0 405	PCL	J	J	0 197	0 629
D	FNB 5	18-Sep-01	URANIUM-238*	3 69	PCL			0 176	1 444
D	FNB 5	18-Sep-01	URANIUM-238*	4 29	PCL			0 212	1 578
Intermediate Wells FNB-9, FNB-10, FNB-11									
D	FNB 9	18-Sep-01	GROSS ALPHA	0 342	PCL	U	U	0 514	1 164
D	FNB 9	18-Sep-01	IODINE-129	0 051	PCL	U	U	1 4	2 792
VU	FNB 9	18-Sep-01	NITRATE-NITRITE AS NITROGEN	1 07	MGL			0 0069	0 05
D	FNB 9	18-Sep-01	NONVOLATILE BETA	1.16	PCL	J	J	0 634	1 45
	FNB 9	18-Sep-01	PH	5 6	PH				
	FNB 9	18-Sep-01	SPECIFIC CONDUCTANCE	37	USCM				
D	FNB 9	18-Sep-01	STRONTIUM-90	0 259	PCL	U	U	0 946	1 834
D	FNB 9	18-Sep-01	TRITIUM	2270	PCL			437	1143
	FNB 9	18-Sep-01	TURBIDITY	0 2	NTU				
D	FNB 9	18-Sep-01	URANIUM-233/234*	0 215	PCL	J	J	0 181	0 489
D	FNB 9	18-Sep-01	URANIUM-235*	0 04	PCL	U	UJ	0 162	0 3108
D	FNB 9	18-Sep-01	URANIUM-238*	0 124	PCL	U	UJ	0 137	0 367
D	FNB 10	18-Sep-01	GROSS ALPHA	1 22	PCL	J	J	0 828	2 014
D	FNB 10	18-Sep-01	IODINE-129	0 282	PCL	U	U	1 46	2 826
VU	FNB 10	18-Sep-01	NITRATE-NITRITE AS NITROGEN	1 41	MGL			0 0069	0 05
D	FNB 10	18-Sep-01	NONVOLATILE BETA	2 3	PCL			0 846	2 016
	FNB 10	18-Sep-01	PH	4 9	PH				
	FNB 10	18-Sep-01	SPECIFIC CONDUCTANCE	32	USCM				
D	FNB 10	18-Sep-01	STRONTIUM-90	0 181	PCL	U	U	1 03	1 984
D	FNB 10	18-Sep-01	TRITIUM	2220	PCL			445	1155
	FNB 10	18-Sep-01	TURBIDITY	1 4	NTU				
D	FNB 10	18-Sep-01	URANIUM-233/234*	0 05	PCL	U	U	0 205	0 3928
D	FNB 10	18-Sep-01	URANIUM-235*	0 075	PCL	U	U	0 229	0 459
D	FNB 10	18-Sep-01	URANIUM-238*	0 011	PCL	U	U	0 297	0 497
D	FNB 11	18-Sep-01	GROSS ALPHA	0 735	PCL	J	J	0 636	1 55
VI	FNB 11	18-Sep-01	IODINE-129	1.46	PCL	R	R	1.31	2 81
VU	FNB 11	18-Sep-01	NITRATE-NITRITE AS NITROGEN	3 45	MGL			0 0207	0 15
D	FNB 11	18-Sep-01	NONVOLATILE BETA	6 71	PCL			0 656	2 268
	FNB 11	18-Sep-01	PH	5 2	PH				

VALID	WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	LAB QUALIFIER	REVIEW QUALIFIER	DETECTION LIMIT	QUANTITATION LIMIT
	FNB 11	18-Sep-01	SPECIFIC CONDUCTANCE	50	USCM				
D	FNB 11	18-Sep-01	STRONTIUM-90	0 975	PCL	U	U	1 02	2 088
D	FNB 11	18-Sep-01	TRITIUM	14300	PCL			428	1764
	FNB 11	18-Sep-01	TURBIDITY	0 5	NTU				
D	FNB 11	18-Sep-01	URANIUM-233/234*	0 14	PCL	U	U	0 298	0 63
D	FNB 11	18-Sep-01	URANIUM-235*	0	PCL	U	U	0 111	0 111
D	FNB 11	18-Sep-01	URANIUM-238*	0 01	PCL	U	U	0 256	0 4124
Compliance Boundary Wells FNB-12, FNB-13, FNB-14, FNB-15									
D	FNB 12	19-Sep-01	GROSS ALPHA	1 88	PCL	J	J	0 657	1 893
D	FNB 12	19-Sep-01	IODINE-129	0 224	PCL	U	U	1 24	2 444
VU	FNB 12	19-Sep-01	NITRATE-NITRITE AS NITROGEN	0 35	MGL			0 0069	0 05
D	FNB 12	19-Sep-01	NONVOLATILE BETA	2 69	PCL			0 779	1 921
	FNB 12	19-Sep-01	PH	5 1	PH				
	FNB 12	19-Sep-01	SPECIFIC CONDUCTANCE	28	USCM				
D	FNB 12	19-Sep-01	STRONTIUM-90	0 285	PCL	U	U	1 1	2 082
D	FNB 12	19-Sep-01	TRITIUM	1730	PCL			425	1059
	FNB 12	19-Sep-01	TURBIDITY	1 4	NTU				
D	FNB 12	19-Sep-01	URANIUM-233/234*	0 056	PCL	U	U	0 253	0 475
D	FNB 12	19-Sep-01	URANIUM-235*	-0 015	PCL	U	U	0 195	0 2368
D	FNB 12	19-Sep-01	URANIUM-238*	-0 015	PCL	U	U	0 195	0 2366
D	FNB 13	19-Sep-01	GROSS ALPHA	1 88	PCL	J	J	0 737	2 817
D	FNB 13	19-Sep-01	IODINE-129	3 79	PCL	J	J	1 54	4 64
VU	FNB 13	19-Sep-01	NITRATE-NITRITE AS NITROGEN	9 1	MGL			0 0345	0 25
D	FNB 13	19-Sep-01	NONVOLATILE BETA	62 6	PCL			0 705	5 425
	FNB 13	19-Sep-01	PH	4 9	PH				
	FNB 13	19-Sep-01	SPECIFIC CONDUCTANCE	95	USCM				
D	FNB 13	19-Sep-01	STRONTIUM-90	28 7	PCL			1 08	4 04
D	FNB 13	19-Sep-01	TRITIUM	62200	PCL			420	3040
	FNB 13	19-Sep-01	TURBIDITY	0 4	NTU				
D	FNB 13	19-Sep-01	URANIUM-233/234*	0 117	PCL	U	U	0 3	0 604
D	FNB 13	19-Sep-01	URANIUM-235*	0 016	PCL	U	U	0 19	0 3166
D	FNB 13	19-Sep-01	URANIUM-238*	-0 007	PCL	U	U	0 161	0 1896
D	FNB 14	19-Sep-01	GROSS ALPHA	6 5	PCL			1 14	3 6
VI	FNB 14	19-Sep-01	IODINE-129	3 27	PCL	R	R	1 42	3 82
VU	FNB 14	19-Sep-01	NITRATE-NITRITE AS NITROGEN	9 45	MGL			0 0345	0 25
D	FNB 14	19-Sep-01	NONVOLATILE BETA	10 3	PCL			0 765	2 785
	FNB 14	19-Sep-01	PH	4 9	PH				
	FNB 14	19-Sep-01	SPECIFIC CONDUCTANCE	96	USCM				
D	FNB 14	19-Sep-01	STRONTIUM-90	0 06	PCL	U	U	1 12	2 138
D	FNB 14	19-Sep-01	TRITIUM	65700	PCL			432	3152
	FNB 14	19-Sep-01	TURBIDITY	0 4	NTU				
D	FNB 14	19-Sep-01	URANIUM-233/234*	-0 01	PCL	U	U	0 322	0 536
D	FNB 14	19-Sep-01	URANIUM-235*	-0 007	PCL	U	U	0 148	0 1744
D	FNB 14	19-Sep-01	URANIUM-238*	0 021	PCL	U	U	0 147	0 2596
D	FNB 15	19-Sep-01	GROSS ALPHA	9 2	PCL			1 31	4 95
D	FNB 15	19-Sep-01	IODINE-129	5 88	PCL			1 03	3 61
VU	FNB 15	19-Sep-01	NITRATE-NITRITE AS NITROGEN	18 3	MGL			0 173	1.25
D	FNB 15	19-Sep-01	NONVOLATILE BETA	57 5	PCL			1 02	5 66
	FNB 15	19-Sep-01	PH	5 3	PH				
	FNB 15	19-Sep-01	SPECIFIC CONDUCTANCE	184	USCM				
D	FNB 15	19-Sep-01	STRONTIUM-90	16	PCL			0 886	3 106
D	FNB 15	19-Sep-01	TRITIUM	130000	PCL			575	5715
	FNB 15	19-Sep-01	TURBIDITY	0 3	NTU				
D	FNB 15	19-Sep-01	URANIUM-233/234*	0 084	PCL	U	UJ	0 257	0 507
D	FNB 15	19-Sep-01	URANIUM-235*	0 069	PCL	U	UJ	0 17	0 359
D	FNB 15	19-Sep-01	URANIUM-238*	0 082	PCL	U	UJ	0 0817	0 2667

NOTES:

PCL = picoCuries/liter PCML = picoCuries/milliliter
MGL = milligrams/liter UGL = micrograms/liter
Bold data exceed applicable standards.
*Isotopic U collected instead of total U.

Table 6. Results of 1Q02 Depth Discrete Sampling at Upgradient and Sidegradient Area

CPT ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	DETECTION LIMIT	QUANTITATION LIMIT	EPA FG Code	Storet Code	EMS Code
SW-1B	15-Jan-02	GROSS ALPHA	96 1	PCL	5 19	19 63			
SW-1B	15-Jan-02	IODINE-129	0 274	PCL	1 81	3 78	U		
SW-1B	15-Jan-02	NITRATE-NITRITE AS NITROGEN	1 92	MGL	0 0069	0 050		V	
SW-1B	15-Jan-02	NONVOLATILE BETA	56 0	PCL	5 27	14 15			
SW-1B	15-Jan-02	STRONTIUM-90	0 330	PCL	0 862	1 67	U		
SW-1B	15-Jan-02	TOTAL LEAD	12 1	UGL	0 077	2 00	J		13
SW-1B	15-Jan-02	TOTAL URANIUM	12 7	UGL	0 018	0 200			
SW-1B	15-Jan-02	TRICHLOROETHYLENE	1 00	UGL	0 310	1 00	U		
SW-1B	15-Jan-02	TRITIUM	1500	PCL	495	1195			
SW-1B-A	15-Jan-02	GROSS ALPHA	45 9	PCL	1.70	9 78			
SW-1B-A	15-Jan-02	IODINE-129	0 427	PCL	1 27	2 506	U		
SW-1B-A	15-Jan-02	NITRATE-NITRITE AS NITROGEN	1.30	MGL	0 0069	0 050		V	
SW-1B-A	15-Jan-02	NONVOLATILE BETA	28.1	PCL	4 08	10 58			
SW-1B-A	15-Jan-02	STRONTIUM-90	0 260	PCL	1.26	2 396	U		
SW-1B-A	15-Jan-02	TOTAL LEAD	15 9	UGL	0 077	2 00	J		13
SW-1B-A	15-Jan-02	TOTAL URANIUM	20 6	UGL	0 018	0 200			
SW-1B-A	15-Jan-02	TRICHLOROETHYLENE	1.00	UGL	0 310	1 00	U		
SW-1B-A	15-Jan-02	TRITIUM	1470	PCL	411	1011			
SW-1C	15-Jan-02	GROSS ALPHA	20 0	PCL	1.50	5 6			
SW-1C	15-Jan-02	IODINE-129	0.952	PCL	2 13	4 77	U		
SW-1C	15-Jan-02	NITRATE-NITRITE AS NITROGEN	1.96	MGL	0 0069	0 050		V	
SW-1C	15-Jan-02	NONVOLATILE BETA	13 6	PCL	1 85	4.75			
SW-1C	15-Jan-02	STRONTIUM-90	0 095	PCL	1.44	2.702	U		
SW-1C	15-Jan-02	TOTAL LEAD	1.86	UGL	0 077	2 00	J	I	13
SW-1C	15-Jan-02	TOTAL URANIUM	3 16	UGL	0 018	0.200			
SW-1C	15-Jan-02	TRICHLOROETHYLENE	2.29	UGL	0 310	1.00			
SW-1C	15-Jan-02	TRITIUM	7340	PCL	751	2185			
SW-2B	11-Jan-02	GROSS ALPHA	10.2	PCL	3 44	10 08			
SW-2B	11-Jan-02	IODINE-129	0 620	PCL	2 69	5 43	U		
SW-2B	11-Jan-02	NITRATE-NITRITE AS NITROGEN	2 43	MGL	0 0069	0 050		V	
SW-2B	11-Jan-02	NONVOLATILE BETA	11 4	PCL	2.73	7.21			
SW-2B	11-Jan-02	STRONTIUM-90	0 0858	PCL	0 943	1.743	U		
SW-2B	11-Jan-02	TOTAL LEAD	7 85	UGL	0 077	2 00			
SW-2B	11-Jan-02	TOTAL URANIUM	3 70	UGL	0 018	0.200			
SW-2B	11-Jan-02	TRICHLOROETHYLENE	4 54	UGL	0 310	1 00			
SW-2B	11-Jan-02	TRITIUM	15100	PCL	479	1859			
SW-2C	14-Jan-02	GROSS ALPHA	16 7	PCL	4 08	13 38			
SW-2C	14-Jan-02	IODINE-129	-0 905	PCL	2 65	6 35	U		
SW-2C	14-Jan-02	NITRATE-NITRITE AS NITROGEN	1 47	MGL	0 0069	0 050		V	
SW-2C	14-Jan-02	NONVOLATILE BETA	11 2	PCL	2 60	7 06			
SW-2C	14-Jan-02	STRONTIUM-90	0 113	PCL	1 35	2 496	U		
SW-2C	14-Jan-02	STRONTIUM-90	0 134	PCL	1 33	2 456	U		
SW-2C	14-Jan-02	TOTAL LEAD	4 46	UGL	0 077	2 00			
SW-2C	14-Jan-02	TOTAL URANIUM	2 23	UGL	0 018	0 200			
SW-2C	14-Jan-02	TRICHLOROETHYLENE	4 38	UGL	0 310	1 00			
SW-2C	14-Jan-02	TRITIUM	2290	PCL	366	964			
SW-3B	10-Jan-02	GROSS ALPHA	161	PCL	7.38	31 38			
SW-3B	10-Jan-02	GROSS ALPHA	161	PCL	7 38	31 38			
SW-3B	10-Jan-02	GROSS ALPHA	161	PCL	7.38	31 38			
SW-3B	10-Jan-02	GROSS ALPHA	165	PCL	8 03	33 63			
SW-3B	10-Jan-02	IODINE-129	6 19	PCL	3 97	10 53	R		4
SW-3B	10-Jan-02	NITRATE-NITRITE AS NITROGEN	16 9	MGL	0 069	0 500		V	
SW-3B	10-Jan-02	NONVOLATILE BETA	127	PCL	8 14	23 76			
SW-3B	10-Jan-02	NONVOLATILE BETA	127	PCL	8 14	23 76			
SW-3B	10-Jan-02	NONVOLATILE BETA	127	PCL	8 14	23 76			
SW-3B	10-Jan-02	NONVOLATILE BETA	132	PCL	8 88	25 7			
SW-3B	10-Jan-02	STRONTIUM-90	0 162	PCL	0 783	1 469	U		
SW-3B	10-Jan-02	TOTAL LEAD	13 4	UGL	0 077	2 00			
SW-3B	10-Jan-02	TOTAL URANIUM	11.1	UGL	0 018	0 200			
SW-3B	10-Jan-02	TRICHLOROETHYLENE	16 6	UGL	0 310	1 00			
SW-3B	10-Jan-02	TRITIUM	2.150E+05	PCL	772	9232			

CPT ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	DETECTION LIMIT	QUANTITATION LIMIT	EPA FG Code	Storet Code	EMS Code
SW-3B-A	10-Jan-02	GROSS ALPHA	110	PCL	4 37	21 03			
SW-3B-A	10-Jan-02	GROSS ALPHA	96 7	PCL	4 25	20 15			
SW-3B-A	10-Jan-02	IODINE-129	4 50	PCL	4 11	9 23	R		4
SW-3B-A	10-Jan-02	NITRATE-NITRITE AS NITROGEN	16 9	MGL	0 069	0 500		V	
SW-3B-A	10-Jan-02	NONVOLATILE BETA	88 1	PCL	2 76	11 06			
SW-3B-A	10-Jan-02	NONVOLATILE BETA	90 9	PCL	3 25	11 87			
SW-3B-A	10-Jan-02	STRONTIUM-90	-0.112	PCL	0 757	1 339	U		
SW-3B-A	10-Jan-02	TOTAL LEAD	11 1	UGL	0 077	2 00			
SW-3B-A	10-Jan-02	TOTAL URANIUM	9 17	UGL	0 018	0 200			
SW-3B-A	10-Jan-02	TRICHLOROETHYLENE	16 4	UGL	0 310	1 00			
SW-3B-A	10-Jan-02	TRITIUM	2 160E+05	PCL	783	9283			
SW-3C	10-Jan-02	GROSS ALPHA	110	PCL	3 82	22 8			
SW-3C	10-Jan-02	IODINE-129	-0 441	PCL	1.21	2 6	U		
SW-3C	10-Jan-02	NITRATE-NITRITE AS NITROGEN	1.20	MGL	0 0069	0 050		V	
SW-3C	10-Jan-02	NONVOLATILE BETA	56 1	PCL	2.21	9 73			
SW-3C	10-Jan-02	STRONTIUM-90	0 00337	PCL	0 838	1 528	U		
SW-3C	10-Jan-02	TOTAL LEAD	39 9	UGL	0 077	2 00			
SW-3C	10-Jan-02	TOTAL URANIUM	36 5	UGL	0 018	0 200			
SW-3C	10-Jan-02	TRICHLOROETHYLENE	1.98	UGL	0.310	1 00			
SW-3C	10-Jan-02	TRITIUM	4700	PCL	388	1160			
SW-4B	11-Jan-02	GROSS ALPHA	18 6	PCL	3 79	13 07			
SW-4B	11-Jan-02	IODINE-129	1 04	PCL	0 745	2 175	J	I	
SW-4B	11-Jan-02	IODINE-129	1 04	PCL	0 745	2 175	J	I	
SW-4B	11-Jan-02	IODINE-129	1 04	PCL	0 745	2 175	J	I	
SW-4B	11-Jan-02	IODINE-129	1 83	PCL	1.26	3 3	R		4
SW-4B	11-Jan-02	NITRATE-NITRITE AS NITROGEN	6 80	MGL	0 0345	0 250		V	
SW-4B	11-Jan-02	NONVOLATILE BETA	19.2	PCL	2 08	7.44			
SW-4B	11-Jan-02	STRONTIUM-90	-0 0703	PCL	0 948	1.708	U		
SW-4B	11-Jan-02	TOTAL LEAD	56 8	UGL	0 077	2 00			
SW-4B	11-Jan-02	TOTAL URANIUM	52 3	UGL	0 018	0 200			
SW-4B	11-Jan-02	TRICHLOROETHYLENE	16 7	UGL	0 310	1.00			
SW-4B	11-Jan-02	TRITIUM	59500	PCL	405	2805			
SW-4B	11-Jan-02	TRITIUM	60200	PCL	392	2812			
SW-4C	11-Jan-02	GROSS ALPHA	15 6	PCL	3.20	11 58			
SW-4C	11-Jan-02	IODINE-129	0 0646	PCL	1 82	4 22	U		
SW-4C	11-Jan-02	NITRATE-NITRITE AS NITROGEN	8 98	MGL	0 0345	0 250		V	
SW-4C	11-Jan-02	NONVOLATILE BETA	13 0	PCL	2 28	6 84			
SW-4C	11-Jan-02	STRONTIUM-90	0 0346	PCL	0 991	1.817	U		
SW-4C	11-Jan-02	TOTAL LEAD	1.11	UGL	0 077	2.00	J	I	
SW-4C	11-Jan-02	TOTAL URANIUM	1 47	UGL	0 018	0 200			
SW-4C	11-Jan-02	TRICHLOROETHYLENE	84 9	UGL	0 310	1.00			
SW-4C	11-Jan-02	TRITIUM	66700	PCL	419	3099			
SW-5B	09-Jan-02	GROSS ALPHA	247	PCL	36 0	111			
SW-5B	09-Jan-02	IODINE-129	0 844	PCL	1 78	3 594	U		
SW-5B	09-Jan-02	NITRATE-NITRITE AS NITROGEN	7 65	MGL	0 0345	0 250		V	
SW-5B	09-Jan-02	NONVOLATILE BETA	142	PCL	47 5	105 3			
SW-5B	09-Jan-02	STRONTIUM-90	0 728	PCL	1 14	2.26	U		
SW-5B	09-Jan-02	TOTAL LEAD	120	UGL	0 077	2.00			
SW-5B	09-Jan-02	TOTAL URANIUM	95 7	UGL	0 018	0 200			
SW-5B	09-Jan-02	TRICHLOROETHYLENE	12 6	UGL	0 310	1.00			
SW-5B	09-Jan-02	TRITIUM	1 010E+05	PCL	552	4572			
SW-5C	10-Jan-02	GROSS ALPHA	13 1	PCL	4 61	13 31	J	I	
SW-5C	10-Jan-02	IODINE-129	0 00	PCL	1 71	1.71	U		
SW-5C	10-Jan-02	NITRATE-NITRITE AS NITROGEN	9 28	MGL	0 0345	0 250		V	
SW-5C	10-Jan-02	NONVOLATILE BETA	14 8	PCL	2 18	7.06			
SW-5C	10-Jan-02	STRONTIUM-90	-0 314	PCL	1 14	2 024	U		
SW-5C	10-Jan-02	TOTAL LEAD	1.12	UGL	0 077	2.00	J	I	
SW-5C	10-Jan-02	TOTAL URANIUM	1.76	UGL	0 018	0 200			
SW-5C	10-Jan-02	TRICHLOROETHYLENE	22.3	UGL	0.310	1.00			
SW-5C	10-Jan-02	TRITIUM	74400	PCL	466	3446			

CPT ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	DETECTION LIMIT	QUANTITATION LIMIT	EPA FG Code	Storet Code	EMS Code
SW-6B	14-Jan-02	GROSS ALPHA	72 1	PCL	4 32	18 02			
SW-6B	14-Jan-02	IODINE-129	-0 173	PCL	2 65	5 57	U		
SW-6B	14-Jan-02	NITRATE-NITRITE AS NITROGEN	1 29	MGL	0 0069	0 050		V	
SW-6B	14-Jan-02	NONVOLATILE BETA	52 8	PCL	2 58	9 2			
SW-6B	14-Jan-02	STRONTIUM-90	-0 0181	PCL	0 904	1.652	U		
SW-6B	14-Jan-02	TOTAL LEAD	18 0	UGL	0 077	2.00			
SW-6B	14-Jan-02	TOTAL URANIUM	7 07	UGL	0 018	0 200			
SW-6B	14-Jan-02	TRICHLOROETHYLENE	1 00	UGL	0 310	1 00	U		
SW-6B	14-Jan-02	TRITIUM	2770	PCL	372	1010			
SW-6C	14-Jan-02	GROSS ALPHA	5 40	PCL	4 42	10 68	J	I	
SW-6C	14-Jan-02	IODINE-129	-0 228	PCL	1.60	3 29	U		
SW-6C	14-Jan-02	NITRATE-NITRITE AS NITROGEN	1 27	MGL	0 0069	0 050		V	
SW-6C	14-Jan-02	NONVOLATILE BETA	12 6	PCL	2 17	6 69			
SW-6C	14-Jan-02	STRONTIUM-90	0 130	PCL	0 780	1 456	U		
SW-6C	14-Jan-02	TOTAL LEAD	31 9	UGL	0 077	2 00			
SW-6C	14-Jan-02	TOTAL URANIUM	19 0	UGL	0 018	0 200			
SW-6C	14-Jan-02	TRICHLOROETHYLENE	5 75	UGL	0.310	1.00			
SW-6C	14-Jan-02	TRITIUM	10400	PCL	396	1450			
SW-7B	14-Jan-02	GROSS ALPHA	73 3	PCL	7 92	26 02			
SW-7B	14-Jan-02	IODINE-129	-0 0762	PCL	2 90	6 68	U		
SW-7B	14-Jan-02	NITRATE-NITRITE AS NITROGEN	3 60	MGL	0 0207	0 150		V	
SW-7B	14-Jan-02	NONVOLATILE BETA	40 4	PCL	4 26	12 54			
SW-7B	14-Jan-02	STRONTIUM-90	-0 192	PCL	1.21	2.168	U		
SW-7B	14-Jan-02	TOTAL LEAD	3 43	UGL	0 077	2 00			
SW-7B	14-Jan-02	TOTAL URANIUM	2 30	UGL	0 018	0 200			
SW-7B	14-Jan-02	TRICHLOROETHYLENE	2 09	UGL	0 310	1 00			
SW-7B	14-Jan-02	TRITIUM	10700	PCL	385	1431			
SW-7C	15-Jan-02	GROSS ALPHA	13 5	PCL	1.39	5 15			
SW-7C	15-Jan-02	IODINE-129	0 164	PCL	2 48	5 02	U		
SW-7C	15-Jan-02	IODINE-129	-0 49	PCL	4 62	10 84	U		
SW-7C	15-Jan-02	NITRATE-NITRITE AS NITROGEN	0 970	MGL	0 0069	0 050		V	
SW-7C	15-Jan-02	NITRATE-NITRITE AS NITROGEN	1 00	MGL	0 0069	0 050		V	
SW-7C	15-Jan-02	NONVOLATILE BETA	15 8	PCL	2 41	6 11			
SW-7C	15-Jan-02	STRONTIUM-90	0 089	PCL	0 907	1 707	U		
SW-7C	15-Jan-02	TOTAL LEAD	4 22	UGL	0 077	2 00	J		13
SW-7C	15-Jan-02	TOTAL URANIUM	2 32	UGL	0 018	0 200			
SW-7C	15-Jan-02	TRICHLOROETHYLENE	1 99	UGL	0 310	1 00			
SW-7C	15-Jan-02	TRITIUM	2430	PCL	406	1084			
SW-7C	15-Jan-02	TRITIUM	2720	PCL	411	1117			
SW-8B	16-Jan-02	GROSS ALPHA	153	PCL	2.11	19 57			
SW-8B	16-Jan-02	IODINE-129	0 174	PCL	1 67	3 482	U		
SW-8B	16-Jan-02	NITRATE-NITRITE AS NITROGEN	1 64	MGL	0 0069	0 050		V	
SW-8B	16-Jan-02	NONVOLATILE BETA	105	PCL	4 52	14 82			
SW-8B	16-Jan-02	STRONTIUM-90	-0 0528	PCL	1.36	2 516	U		
SW-8B	16-Jan-02	TOTAL LEAD	22 4	UGL	0 077	2 00	J		13
SW-8B	16-Jan-02	TOTAL URANIUM	20 3	UGL	0 018	0 200			
SW-8B	16-Jan-02	TRICHLOROETHYLENE	1 00	UGL	0 310	1 00	U		
SW-8B	16-Jan-02	TRITIUM	2180	PCL	409	1061			
SW-8C	16-Jan-02	GROSS ALPHA	30 3	PCL	0 836	6 136			
SW-8C	16-Jan-02	IODINE-129	0 605	PCL	1 33	2 598	U		
SW-8C	16-Jan-02	NITRATE-NITRITE AS NITROGEN	2 19	MGL	0 0069	0 050		V	
SW-8C	16-Jan-02	NONVOLATILE BETA	24 0	PCL	1.55	4 95			
SW-8C	16-Jan-02	STRONTIUM-90	-0 324	PCL	1.57	2 87	U		
SW-8C	16-Jan-02	TOTAL LEAD	2 46	UGL	0 077	2 00	J		13
SW-8C	16-Jan-02	TOTAL URANIUM	2 85	UGL	0 018	0 200			
SW-8C	16-Jan-02	TRICHLOROETHYLENE	2 13	UGL	0 310	1.00			
SW-8C	16-Jan-02	TRITIUM	6910	PCL	400	1346			

CPT ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	DETECTION LIMIT	QUANTITATION LIMIT	EPA FG Code	Storet Code	EMS Code
SW-9B	16-Jan-02	GROSS ALPHA	256	PCL	17 1	62 7			
SW-9B	16-Jan-02	IODINE-129	0 287	PCL	1 76	3 666	U		
SW-9B	16-Jan-02	NITRATE-NITRITE AS NITROGEN	2 38	MGL	0 0069	0 050		V	
SW-9B	16-Jan-02	NONVOLATILE BETA	181	PCL	18 3	48 7			
SW-9B	16-Jan-02	STRONTIUM-90	-0 0372	PCL	1 23	2 284	U		
SW-9B	16-Jan-02	STRONTIUM-90	0 170	PCL	1 20	2 264	U		
SW-9B	16-Jan-02	TOTAL LEAD	103	UGL	0 385	10 0	J		13
SW-9B	16-Jan-02	TOTAL URANIUM	26 3	UGL	0 090	1 00			
SW-9B	16-Jan-02	TRICHLOROETHYLENE	0 732	UGL	0 310	1 00	J	I	
SW-9B	16-Jan-02	TRITIUM	3130	PCL	419	1149			
SW-9C	16-Jan-02	GROSS ALPHA	2 15	PCL	0 515	1 777			
SW-9C	16-Jan-02	IODINE-129	-0 0796	PCL	0 993	2 045	U		
SW-9C	16-Jan-02	NITRATE-NITRITE AS NITROGEN	1 07	MGL	0 0069	0 050		V	
SW-9C	16-Jan-02	NONVOLATILE BETA	2 75	PCL	1 52	3 31	J	I	
SW-9C	16-Jan-02	STRONTIUM-90	-0 142	PCL	1 22	2 246	U		
SW-9C	16-Jan-02	TOTAL LEAD	0 290	UGL	0 077	2 00	J	I	13
SW-9C	16-Jan-02	TOTAL URANIUM	0 120	UGL	0 018	0 200	J	I	
SW-9C	16-Jan-02	TRICHLOROETHYLENE	6 85	UGL	0 310	1 00			
SW-9C	16-Jan-02	TRITIUM	1310	PCL	395	971			
ER-10B	18-Jan-02	NITRATE-NITRITE AS NITROGEN	10 8	MGL	0 069	0 500		V	
ER-10B	18-Jan-02	GROSS ALPHA	69 8	PCL	4 47	17 39			
ER-10B	18-Jan-02	IODINE-129	0 486	PCL	2 62	5 32	U		
ER-10B	18-Jan-02	NONVOLATILE BETA	87.3	PCL	5 77	16 27			
ER-10B	18-Jan-02	STRONTIUM-90	0 0701	PCL	0 785	1 435	U		
ER-10B	18-Jan-02	STRONTIUM-90	-0 0795	PCL	1 15	2 038	U		
ER-10B	18-Jan-02	TOTAL LEAD	37 8	UGL	0 077	2 00			
ER-10B	18-Jan-02	TOTAL URANIUM	10 7	UGL	0 018	0 200		V	
ER-10B	18-Jan-02	TRICHLOROETHYLENE	25 8	UGL	0 310	1 00			
ER-10B	18-Jan-02	TRITIUM	17700	PCL	544	2032			
ER-10B	18-Jan-02	TRITIUM	18700	PCL	555	2093			
ER-10C	18-Jan-02	GROSS ALPHA	21 7	PCL	1 78	6 7			
ER-10C	18-Jan-02	IODINE-129	-0 062	PCL	1 32	2 608	U		
ER-10C	18-Jan-02	NITRATE-NITRITE AS NITROGEN	8 45	MGL	0 0345	0 250		V	
ER-10C	18-Jan-02	NONVOLATILE BETA	43 3	PCL	1.95	6 53			
ER-10C	18-Jan-02	STRONTIUM-90	0 0105	PCL	0 807	1 455	U		
ER-10C	18-Jan-02	TOTAL LEAD	17 6	UGL	0 077	2 00			
ER-10C	18-Jan-02	TOTAL URANIUM	13 1	UGL	0 018	0 200		V	
ER-10C	18-Jan-02	TRICHLOROETHYLENE	22 1	UGL	0 310	1 00			
ER-10C	18-Jan-02	TRITIUM	14200	PCL	510	1816			
ER-11B	16-Jan-02	GROSS ALPHA	95 2	PCL	3 85	18 43			
ER-11B	16-Jan-02	IODINE-129	0 269	PCL	1 86	3 9	U		
ER-11B	16-Jan-02	NITRATE-NITRITE AS NITROGEN	10 9	MGL	0 0345	0 250		V	
ER-11B	16-Jan-02	NONVOLATILE BETA	126	PCL	5 00	16 42			
ER-11B	16-Jan-02	STRONTIUM-90	-0 162	PCL	1 32	2 43	U		
ER-11B	16-Jan-02	TOTAL LEAD	4 09	UGL	0 077	2 00	J		13
ER-11B	16-Jan-02	TOTAL URANIUM	3 87	UGL	0 018	0 200			
ER-11B	16-Jan-02	TRICHLOROETHYLENE	13 7	UGL	0 310	1 00			
ER-11B	16-Jan-02	TRITIUM	4660	PCL	410	1224			
ER-11C	17-Jan-02	NITRATE-NITRITE AS NITROGEN	3 72	MGL	0 0207	0 150		V	
ER-11C	17-Jan-02	NITRATE-NITRITE AS NITROGEN	3 75	MGL	0 0207	0 150		V	
ER-11C	17-Jan-02	TRICHLOROETHYLENE	3 82	UGL	0 310	1 00			
ER-11C	17-Jan-02	TRITIUM	1560	PCL	510	1212			

NOTES:
"B" samples = shallower LAZ UTRA
"C" samples = deeper LAZ UTRA

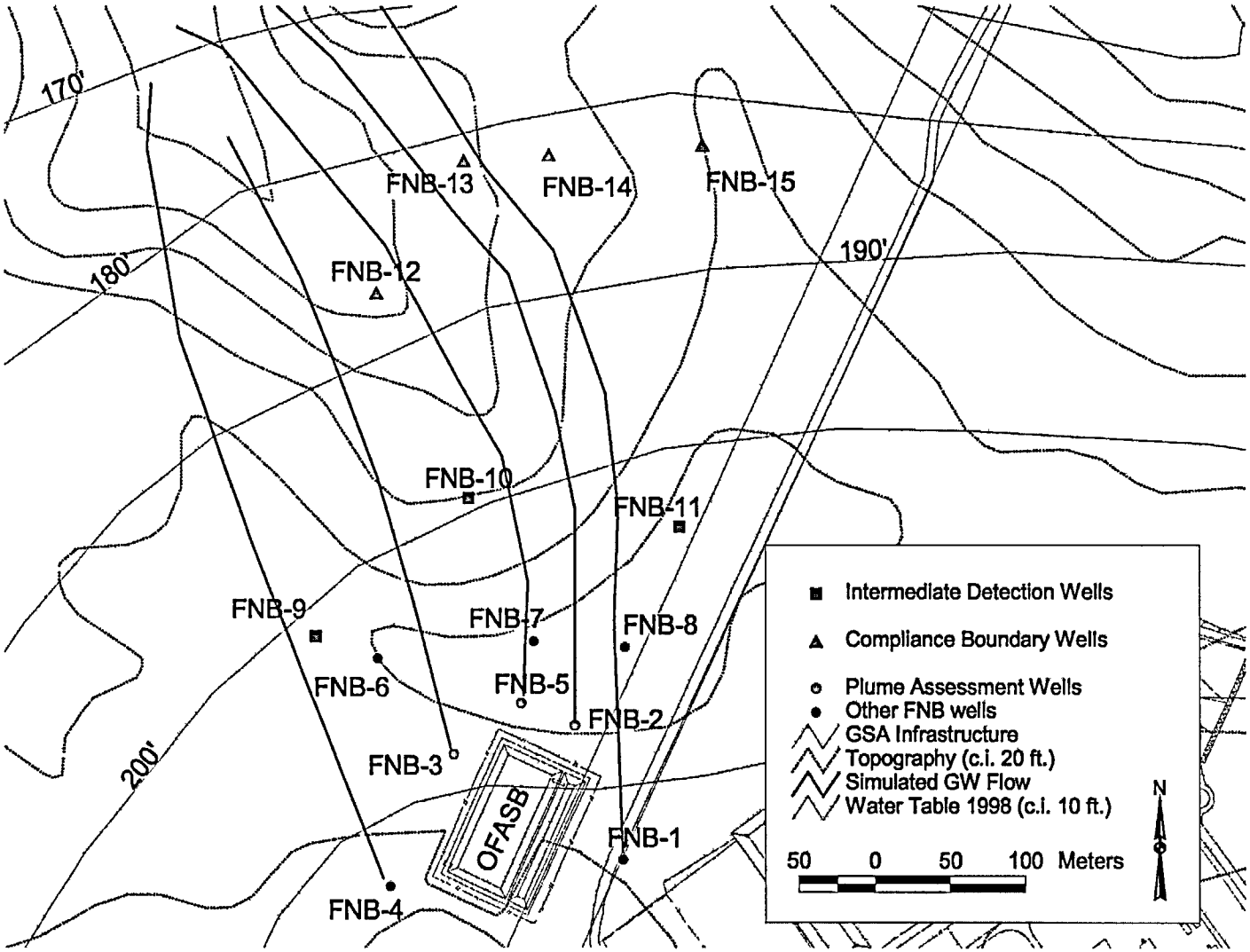

Figure 1. Mixing Zone Wells and Other FNB Wells at OFASB OU

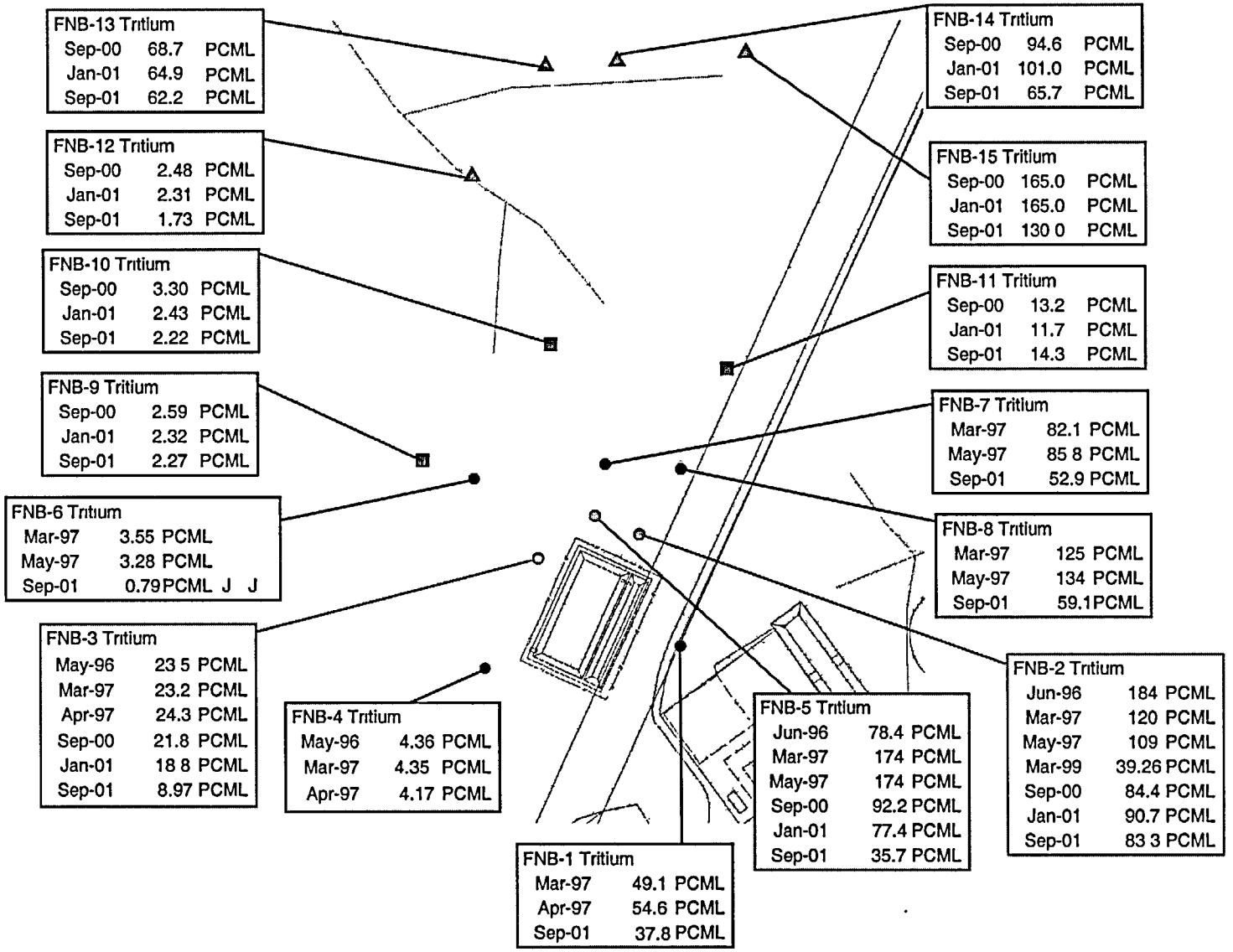

Figure 2. Tritium Activities in FNB Wells

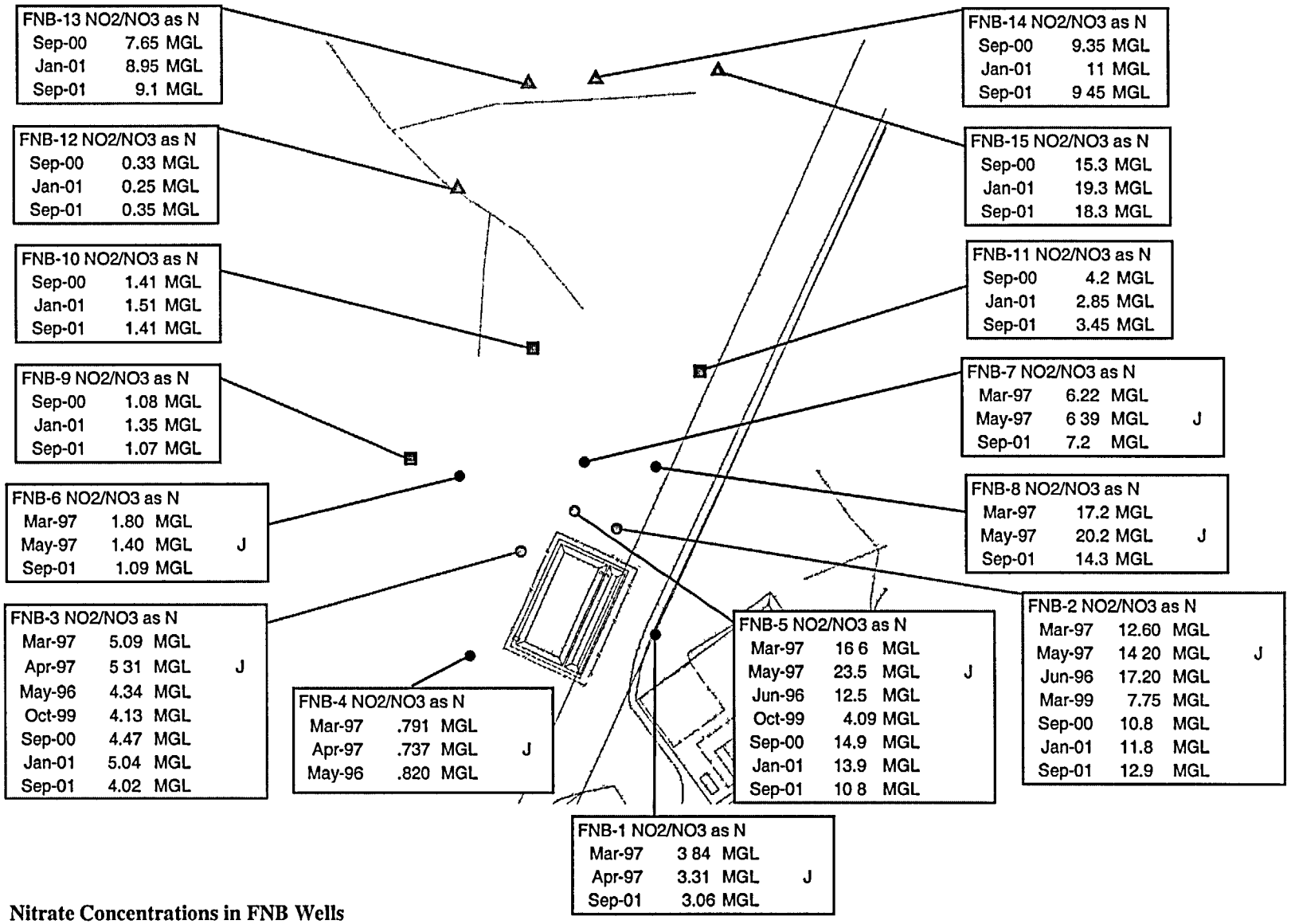

Figure 3. Nitrate Concentrations in FNB Wells

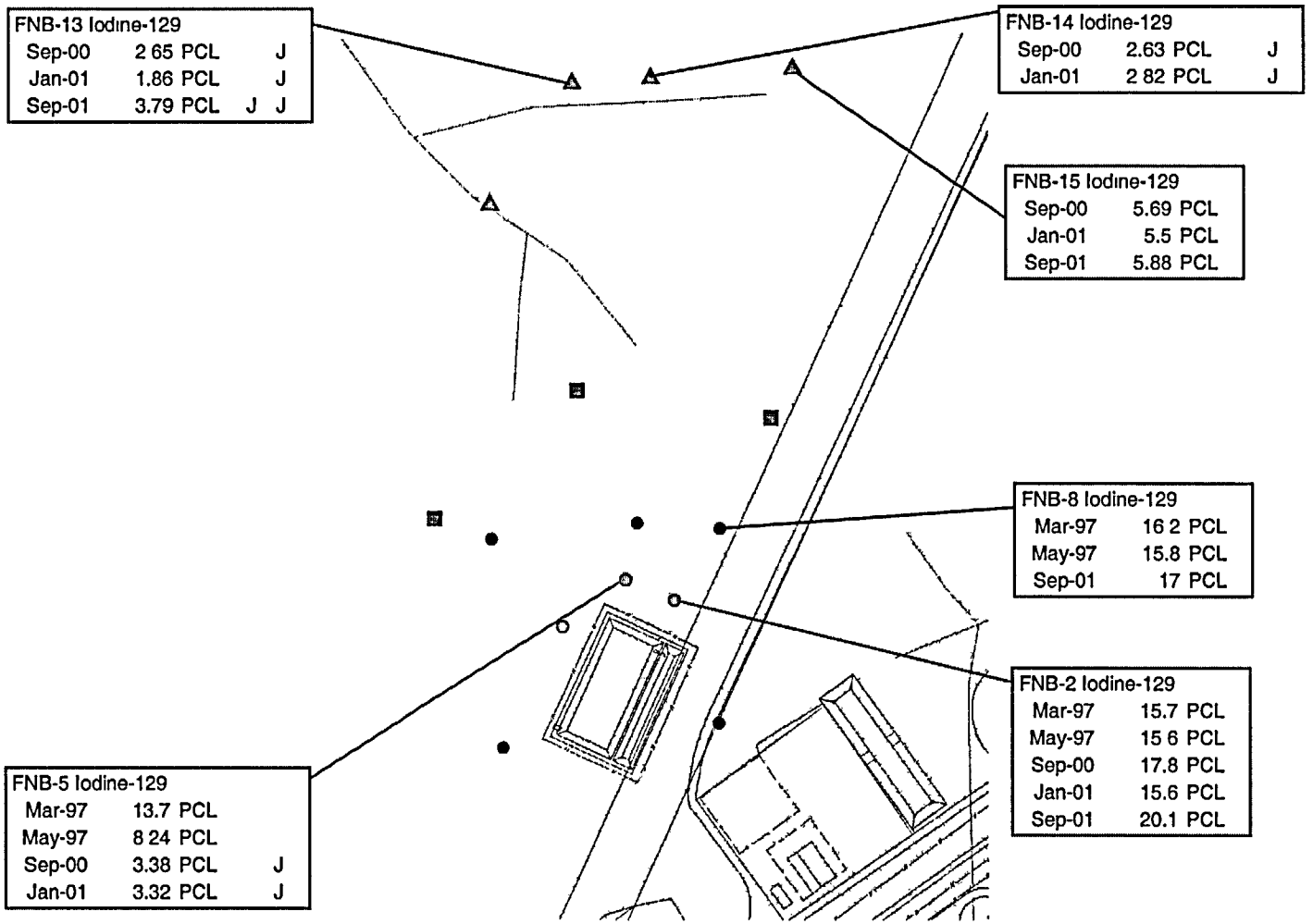

Figure 4. Iodine-129 Activities in FNB Wells

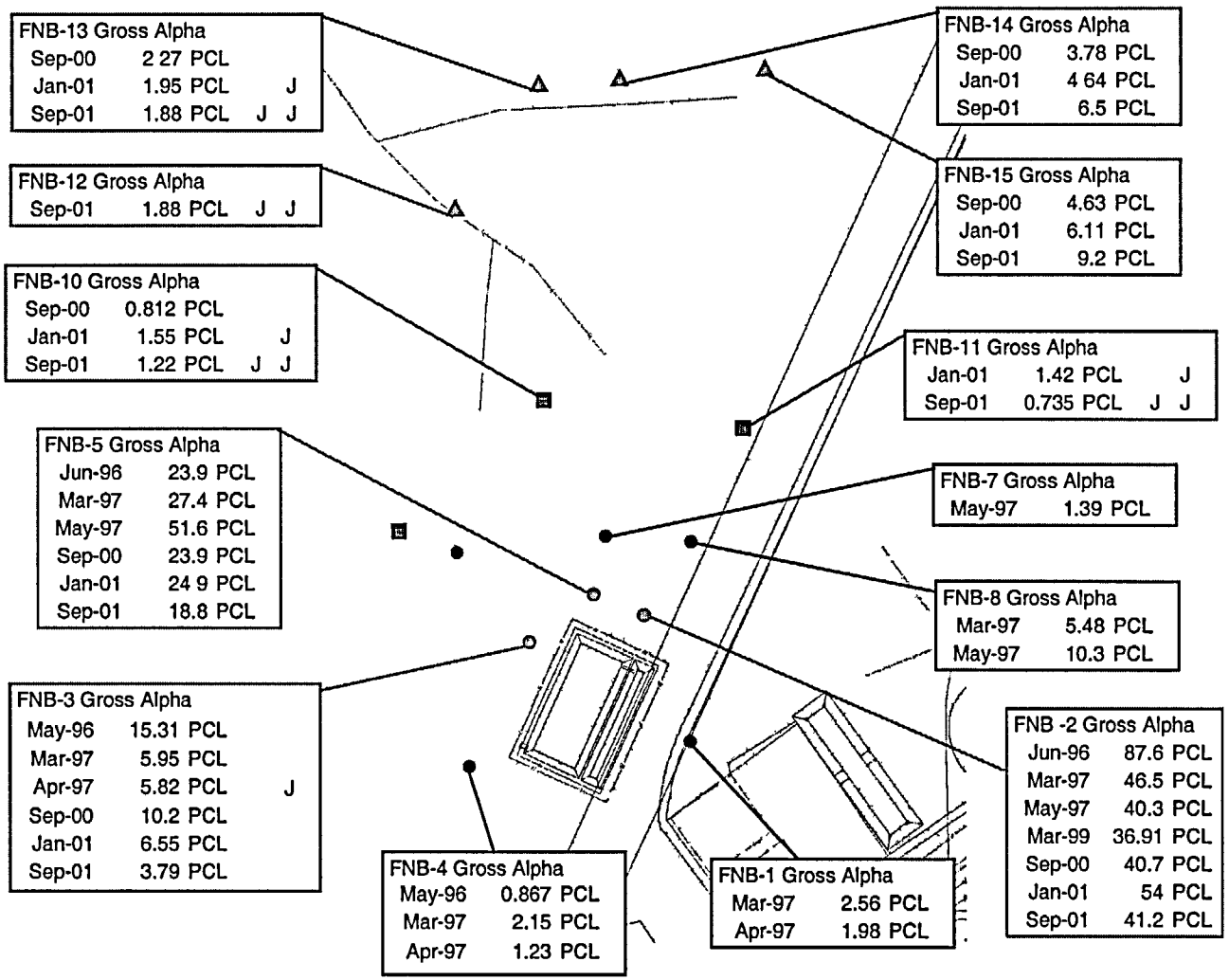

Figure 5. Gross Alpha Activities in FNB Wells

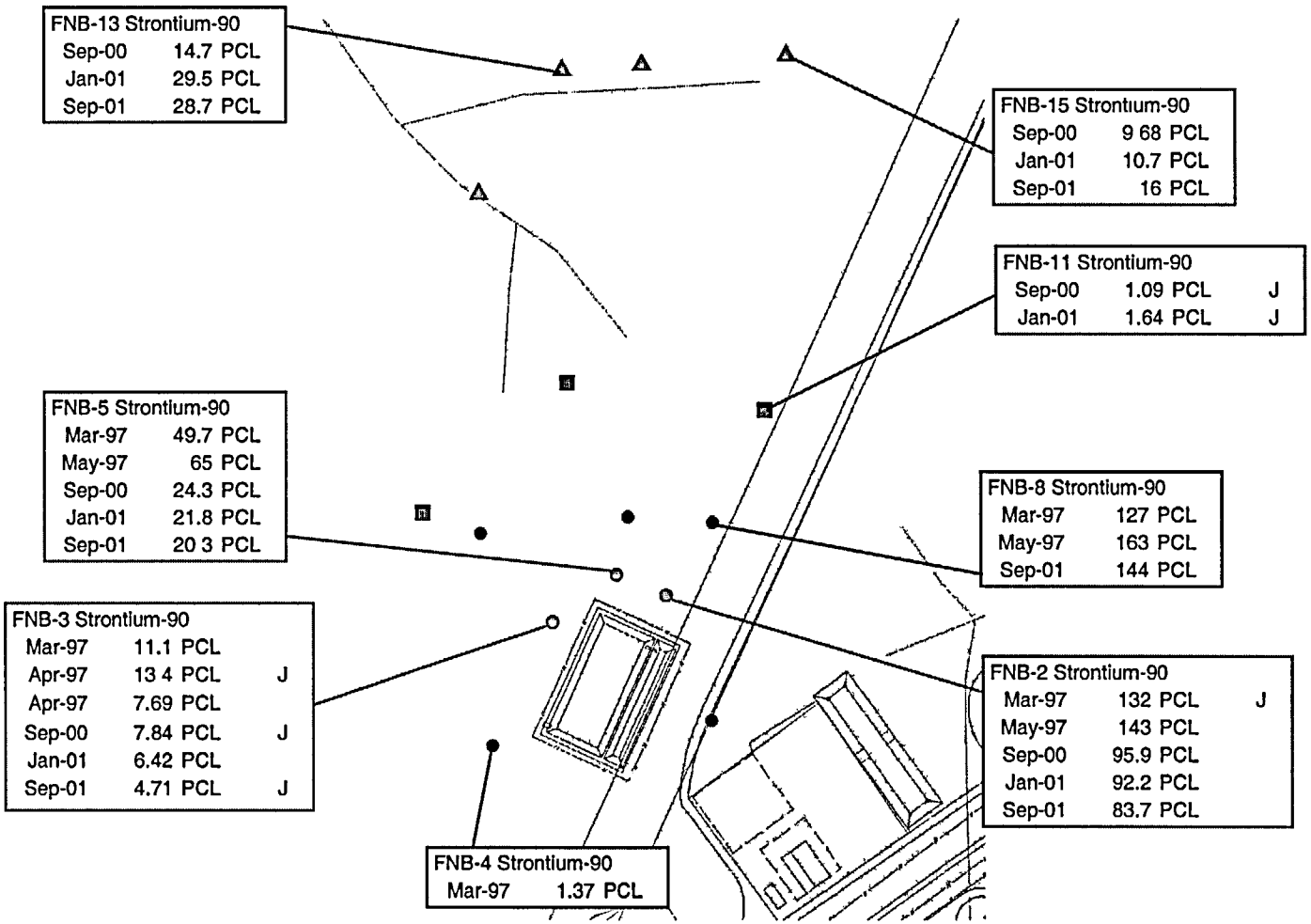

Figure 6. Strontium-90 Activities in FNB Wells

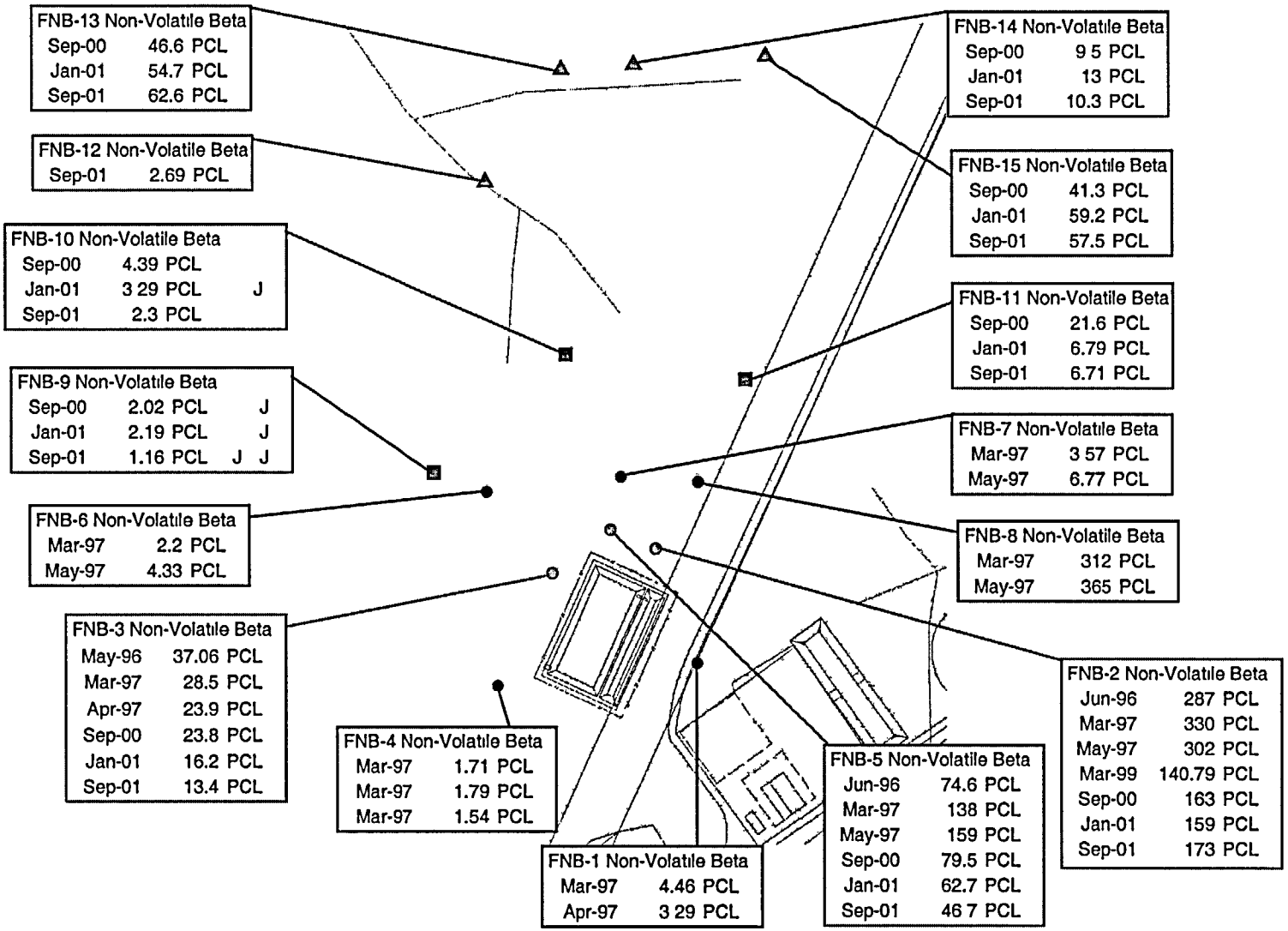

Figure 7. Non-Volatile Beta Activities in FNB Wells

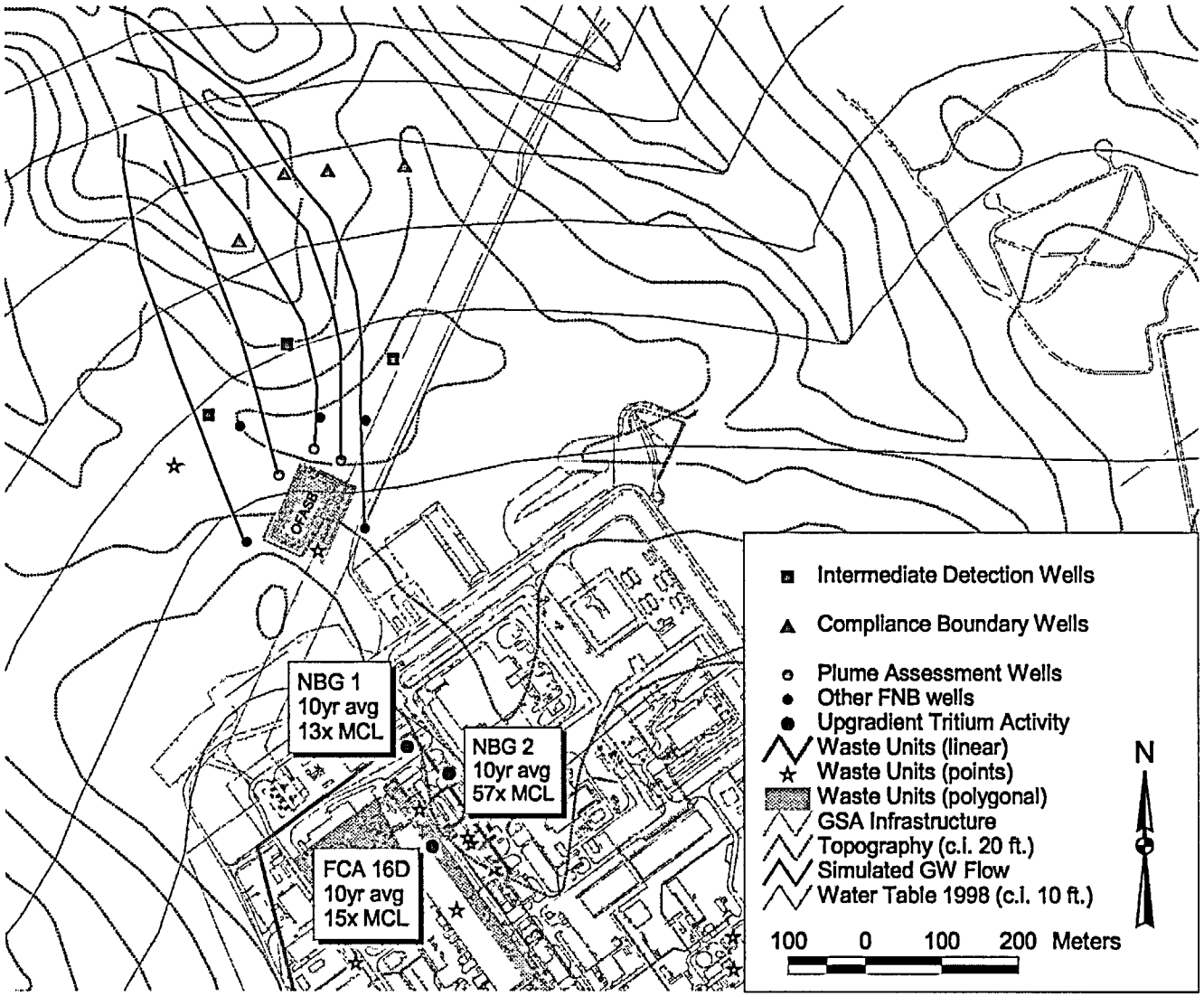

Figure 8. Groundwater Contamination (Tritium) Upgradient from OFASB OU

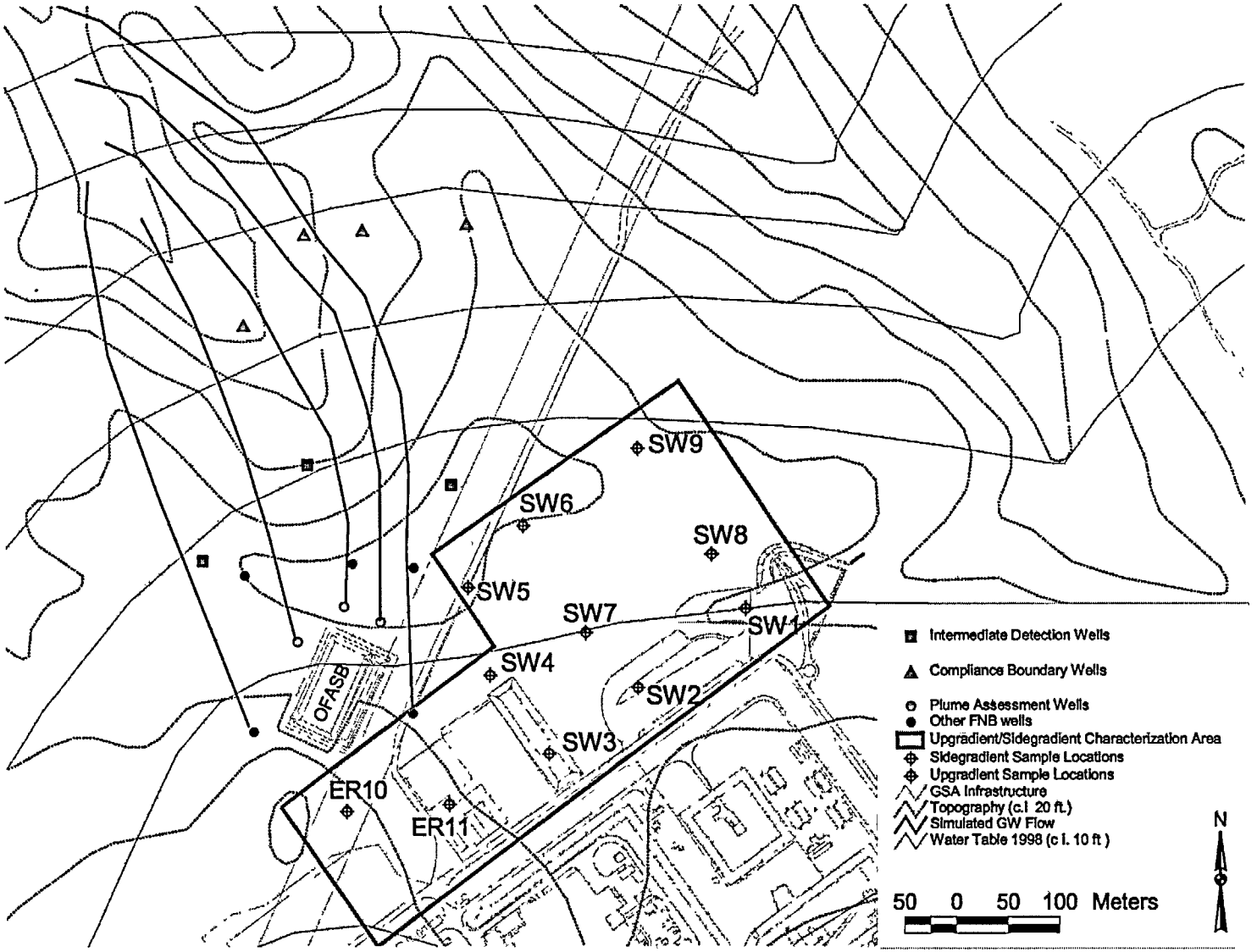

Figure 9. Upgradient/Sidegradient Characterization Area

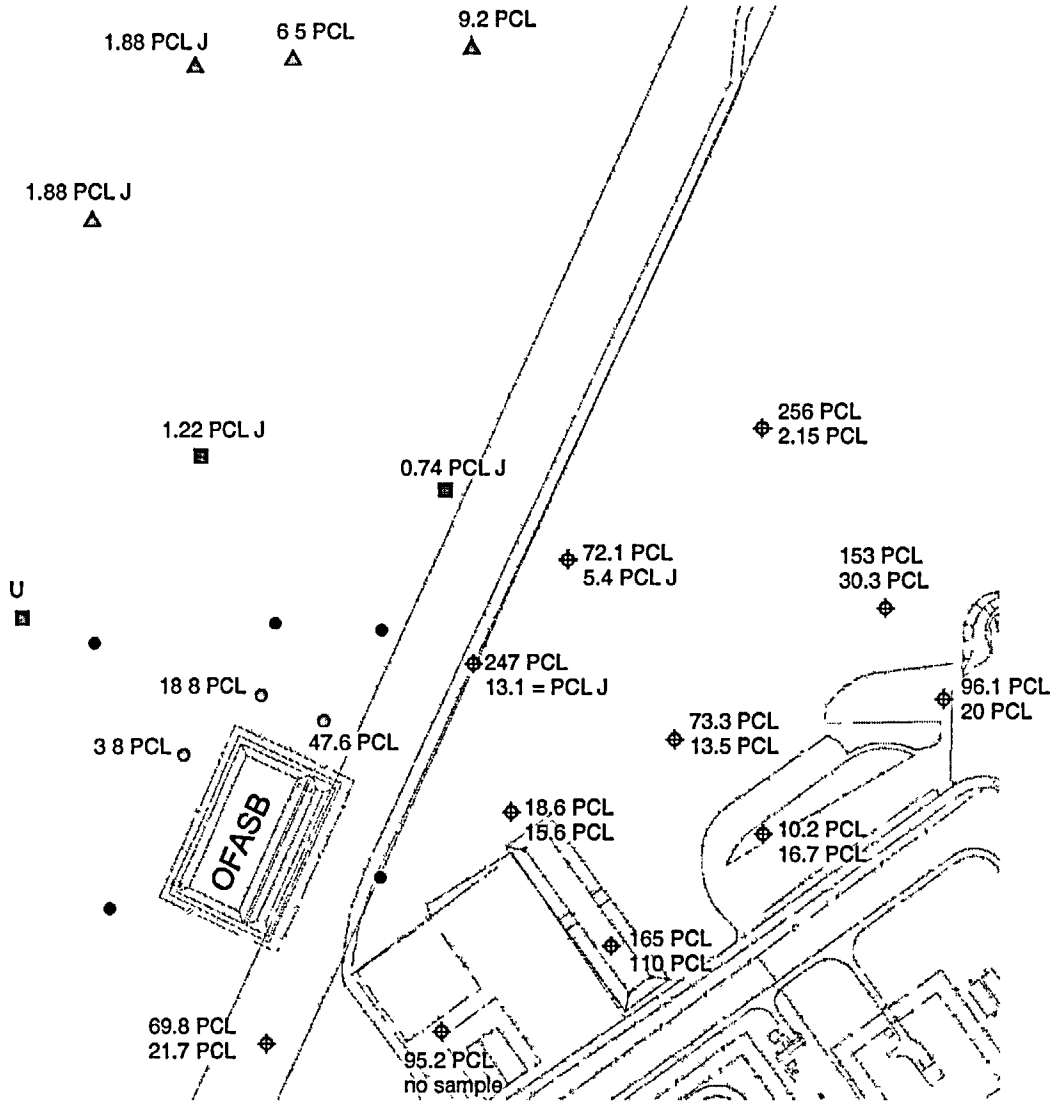

Figure 10. Gross Alpha Activities in UTRA -- Upgradient and Sidegradient Characterization Area

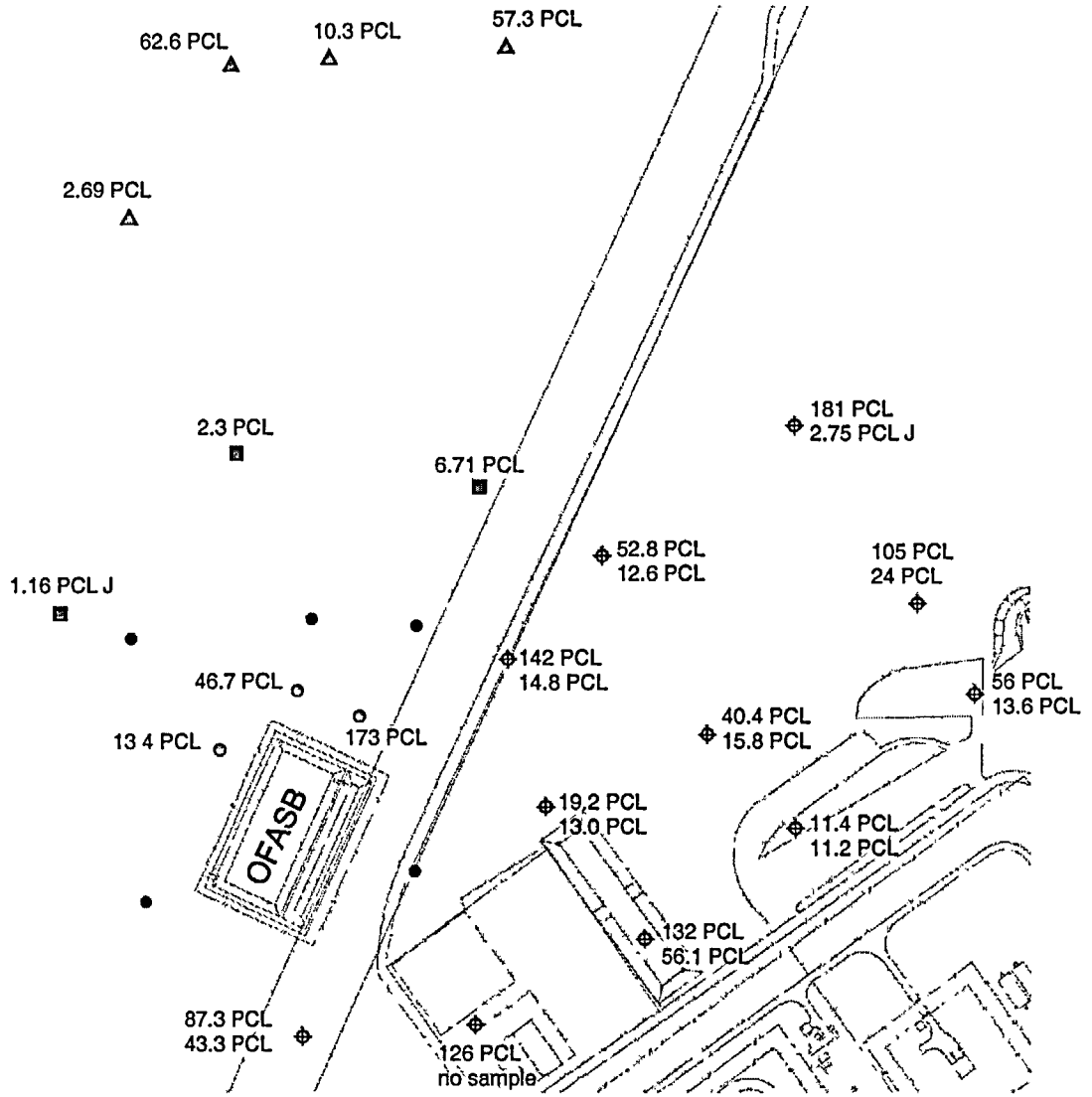

Figure 11. Non-Volatile Beta Activities in UTRA -- Upgradient and Sidegradient Characterization Area

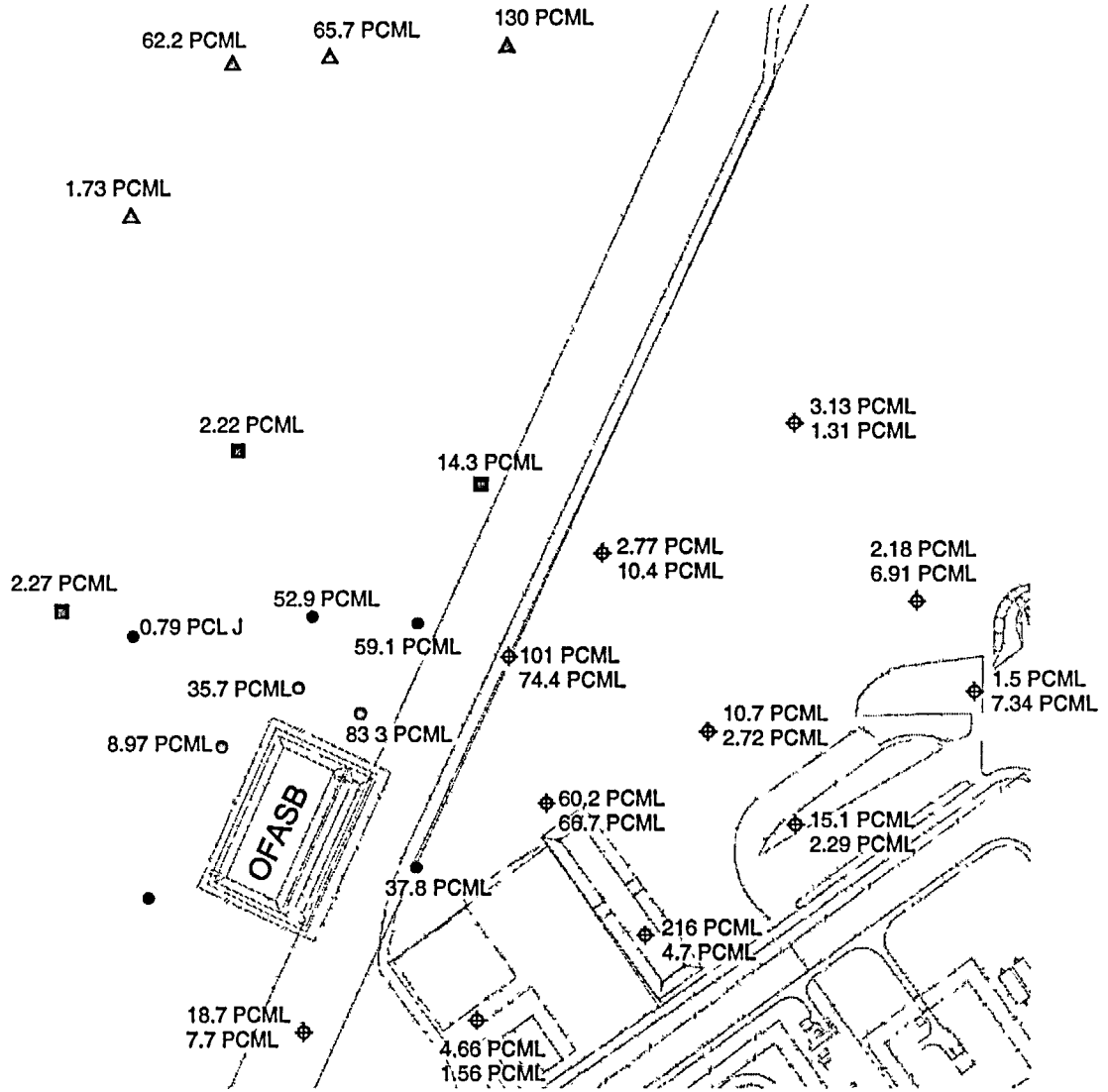

Figure 12. Tritium Activities in UTRA -- Upgradient and Sidegradient Characterization Area

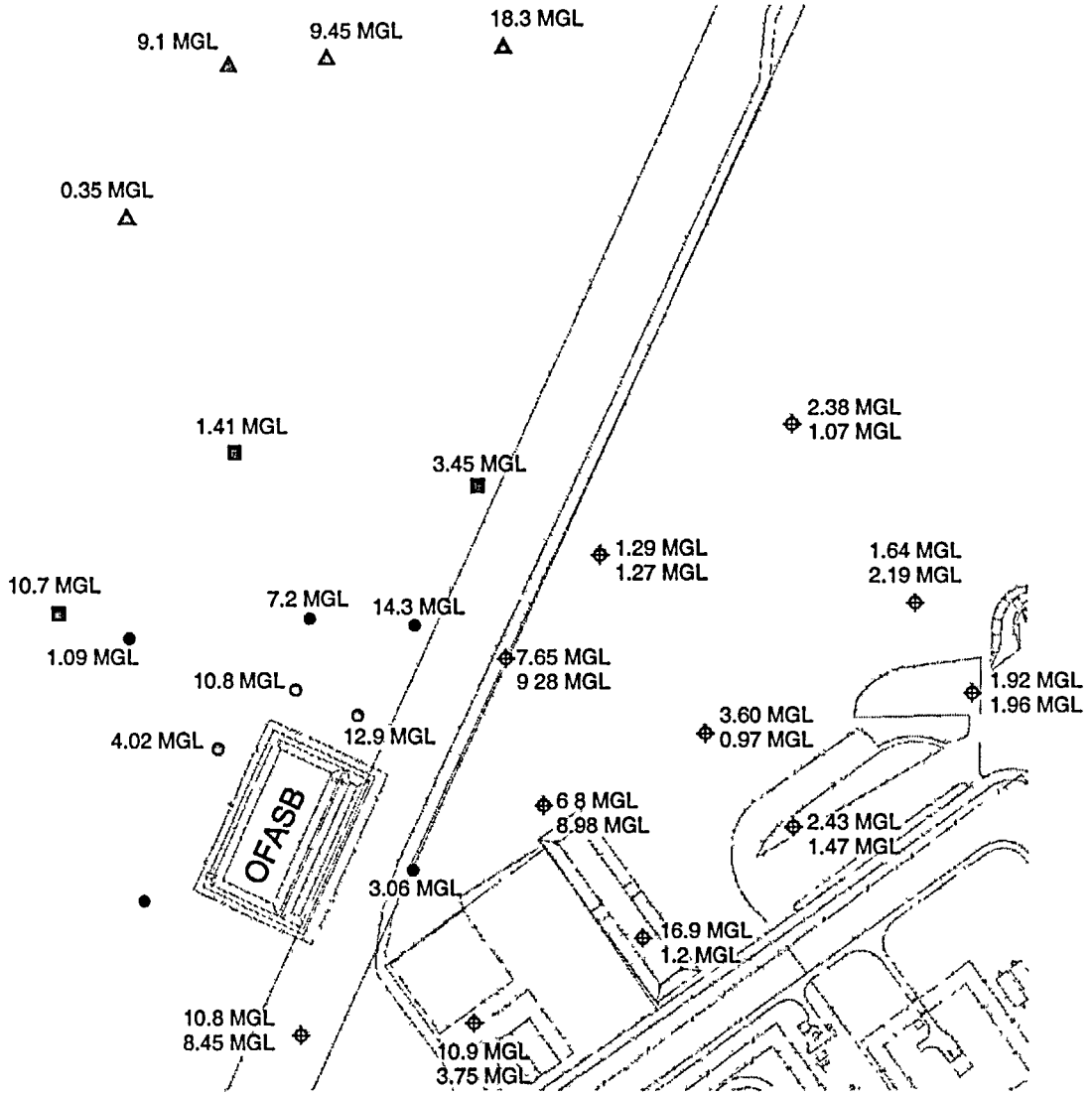

Figure 13. Nitrate Concentrations in UTRA -- Upgradient and Sidegradient Characterization Area

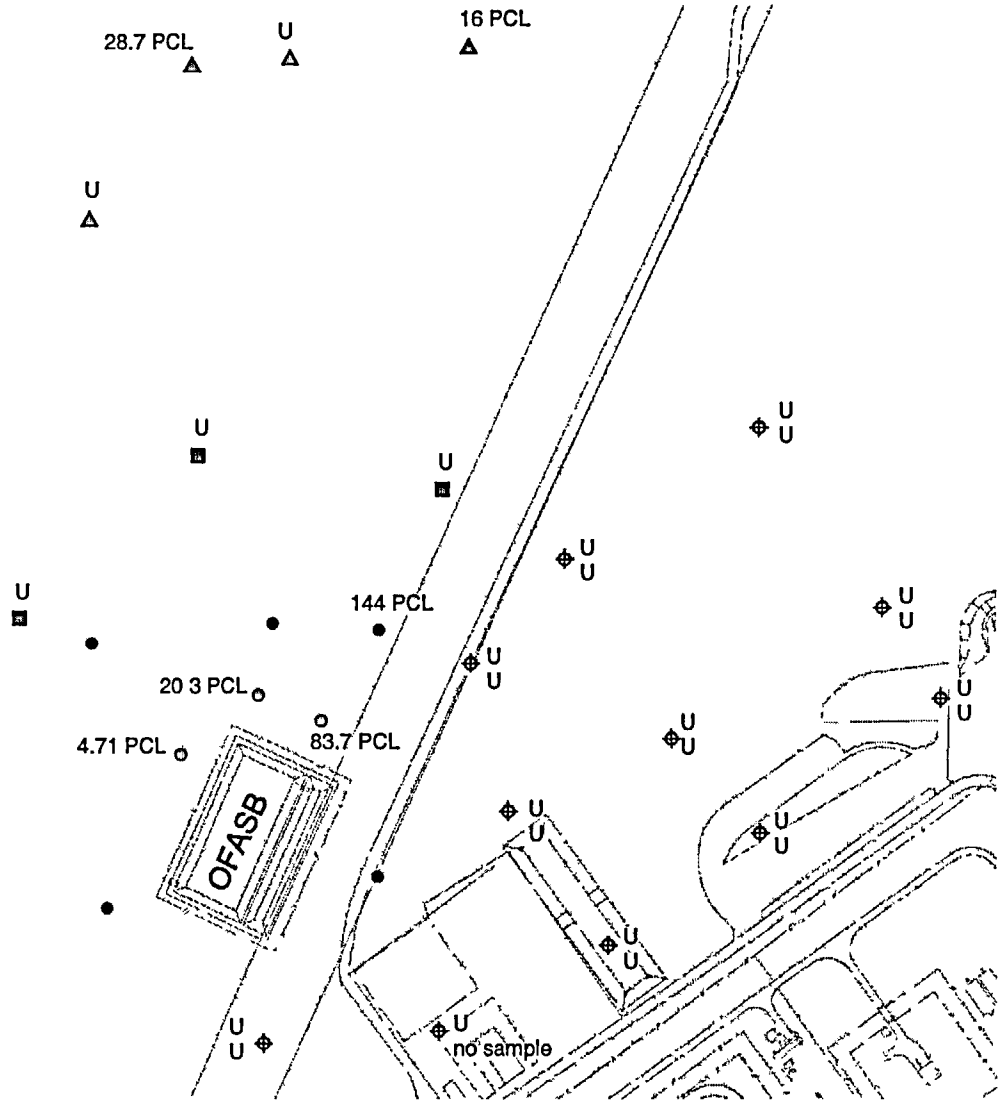

Figure 14. Strontium-90 Activities in UTRA -- Upgradient and Sidegradient Characterization Area

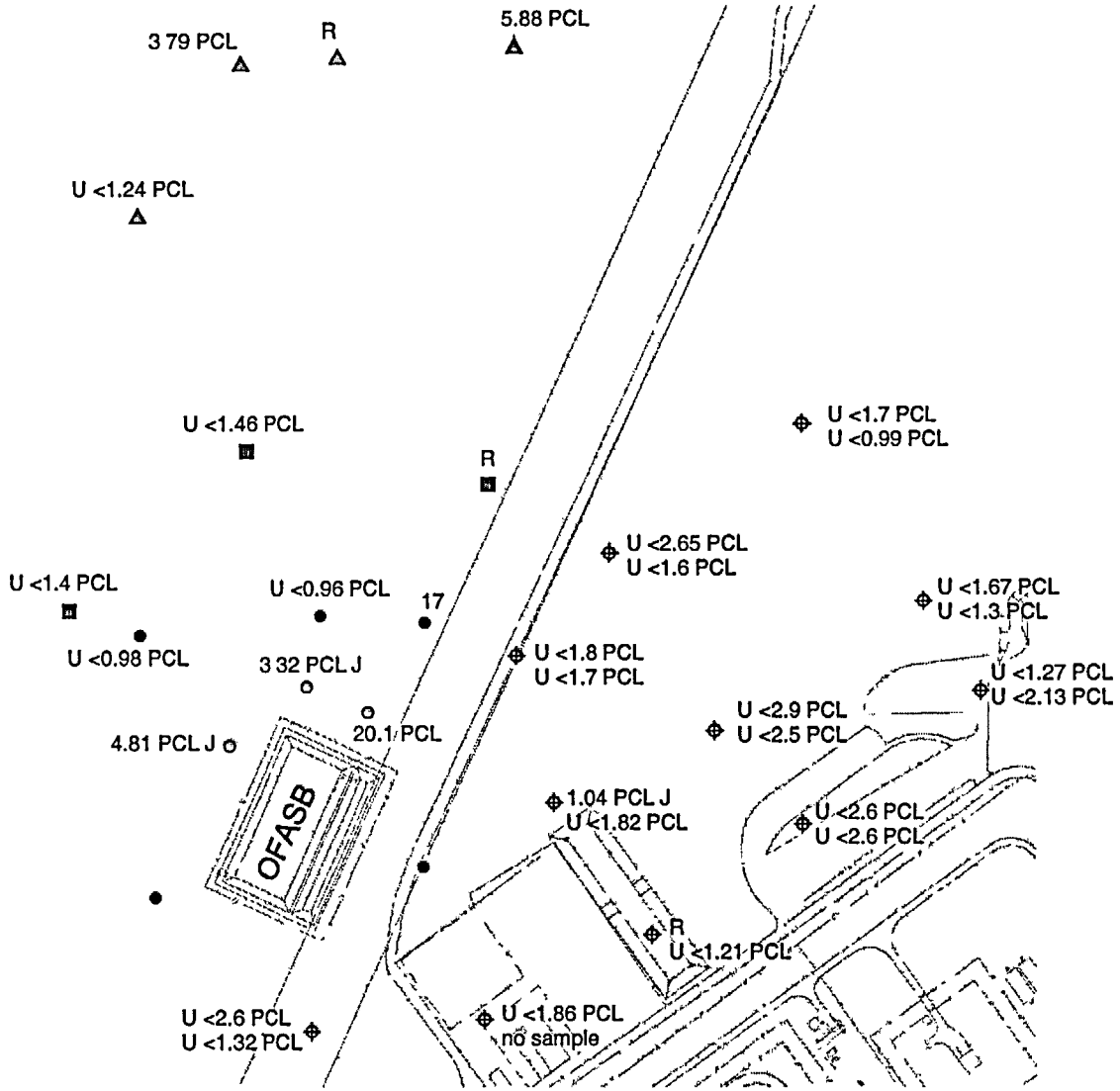

Figure 15. Iodine-129 Activities in UTRA -- Upgradient and Sidegradient Characterization Area

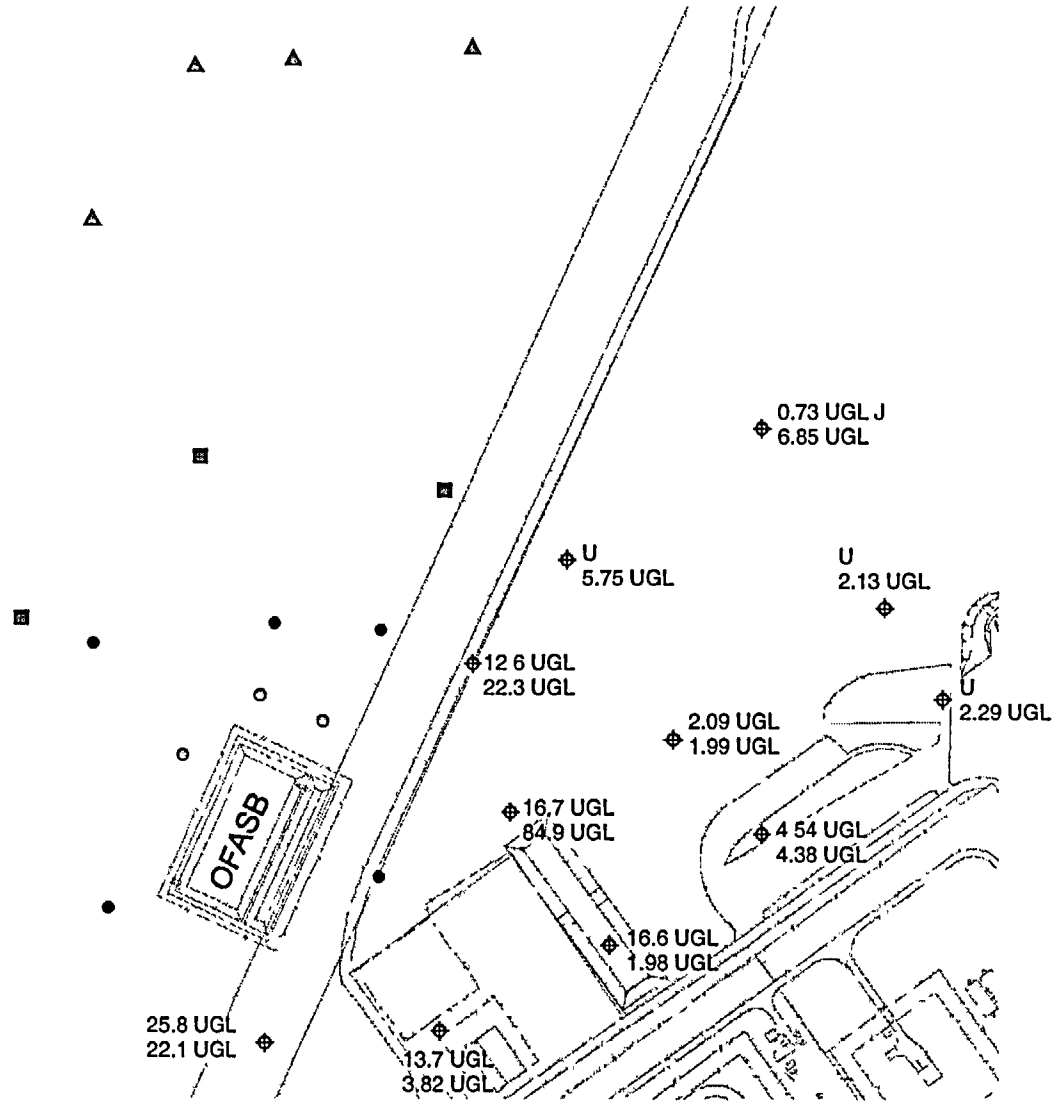

Figure 16. Trichloroethylene Concentrations in UTRA -- Upgradient and Sidegradient Characterization Area