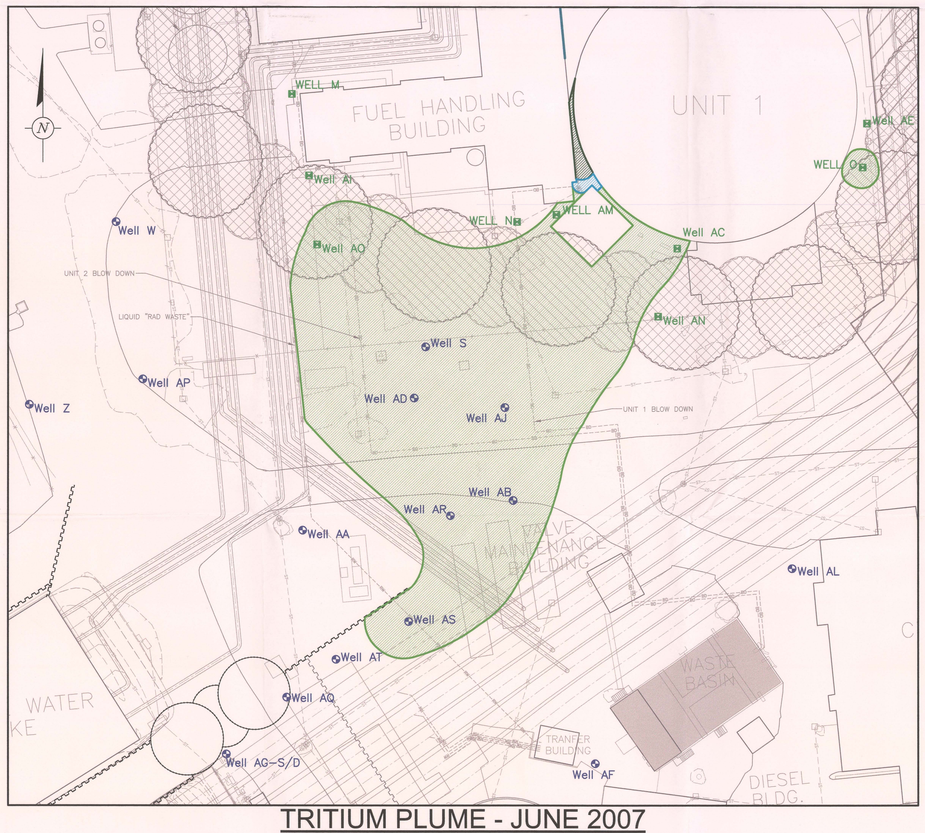
## BASELINE TRITIUM PLUME - PRE-GROUNDWATER EXTRACTION - MARCH 2004

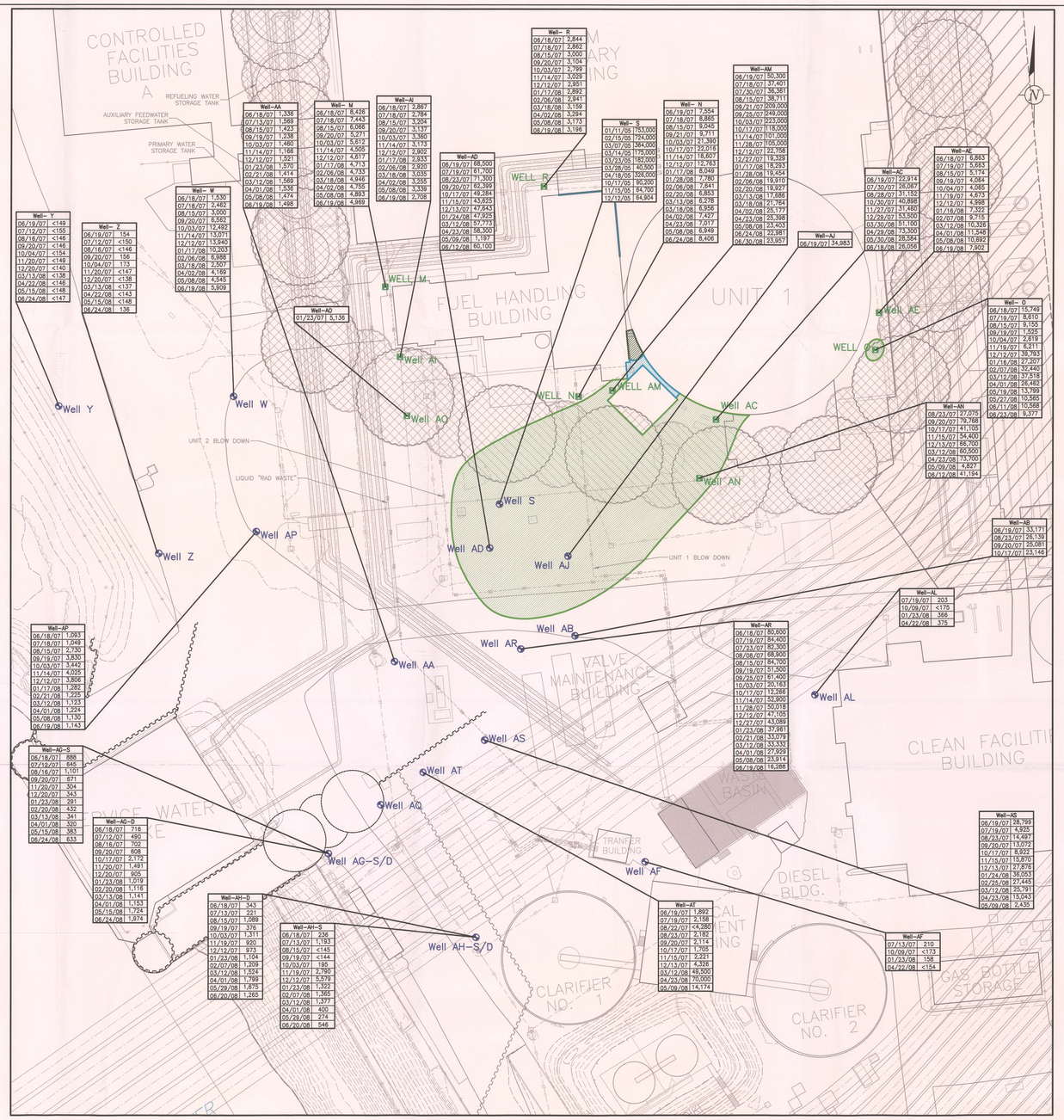
SCALE: 1"=30'




## TRITIUM PLUME - JUNE 2007

### FULL SCALE SYSTEM IN SERVICE

SCALE: 1"=30'




| Well- Y | |
|---|---|
| 06/19/07 | <149 |
| 07/12/07 | <155 |
| 08/16/07 | <146 |
| 09/20/07 | <146 |
| 10/04/07 | <154 |
| 11/20/07 | <149 |
| 12/20/07 | <140 |
| 03/13/08 | <138 |
| 04/22/08 | <146 |
| 05/15/08 | <148 |
| 06/24/08 | <147 |

| Well- Z | |
|---|---|
| 06/19/07 | 154 |
| 07/12/07 | <150 |
| 08/16/07 | <146 |
| 09/20/07 | 156 |
| 10/04/07 | 173 |
| 11/20/07 | <147 |
| 12/20/07 | <138 |
| 03/13/08 | <137 |
| 04/22/08 | <143 |
| 05/15/08 | <148 |
| 06/24/08 | 136 |

| Well- W | |
|---|---|
| 06/18/07 | 1,530 |
| 07/18/07 | 2,462 |
| 08/15/07 | 3,000 |
| 09/20/07 | 6,562 |
| 10/03/07 | 12,492 |
| 11/14/07 | 13,071 |
| 12/12/07 | 13,940 |
| 01/17/08 | 10,203 |
| 02/06/08 | 5,988 |
| 03/18/08 | 2,507 |
| 04/02/08 | 4,169 |
| 05/08/08 | 4,545 |
| 06/19/08 | 5,909 |

| Well-AA | |
|---|---|
| 06/18/07 | 1,336 |
| 07/13/07 | 1,569 |
| 08/15/07 | 1,423 |
| 09/19/07 | 1,238 |
| 10/03/07 | 1,460 |
| 11/14/07 | 1,166 |
| 12/12/07 | 1,521 |
| 01/23/08 | 1,570 |
| 02/21/08 | 1,414 |
| 03/12/08 | 1,569 |
| 04/01/08 | 1,536 |
| 05/08/08 | 1,474 |
| 06/19/08 | 1,498 |

| Well- M | |
|---|---|
| 06/18/07 | 8,426 |
| 07/18/07 | 7,443 |
| 08/15/07 | 6,066 |
| 09/20/07 | 5,271 |
| 10/03/07 | 5,612 |
| 11/14/07 | 4,505 |
| 12/12/07 | 4,617 |
| 01/17/08 | 4,713 |
| 02/06/08 | 4,733 |
| 03/18/08 | 4,946 |
| 04/02/08 | 4,785 |
| 05/08/08 | 4,893 |
| 06/19/08 | 4,969 |

| Well-AI | |
|---|---|
| 06/18/07 | 2,867 |
| 07/18/07 | 2,784 |
| 08/15/07 | 3,304 |
| 09/20/07 | 3,137 |
| 10/03/07 | 3,360 |
| 11/14/07 | 3,173 |
| 12/12/07 | 2,902 |
| 01/17/08 | 2,933 |
| 02/06/08 | 2,920 |
| 03/18/08 | 3,035 |
| 04/02/08 | 3,255 |
| 05/08/08 | 3,339 |
| 06/19/08 | 2,708 |

| Well-AD | |
|---|---|
| 06/19/07 | 68,500 |
| 07/19/07 | 61,700 |
| 08/23/07 | 71,300 |
| 09/20/07 | 62,399 |
| 10/17/07 | 49,284 |
| 11/15/07 | 43,625 |
| 12/13/07 | 47,643 |
| 01/24/08 | 47,925 |
| 03/12/08 | 57,773 |
| 04/23/08 | 58,300 |
| 05/09/08 | 1,197 |
| 06/12/08 | 60,100 |

| Well- R | |
|---|---|
| 06/18/07 | 2,844 |
| 07/18/07 | 2,862 |
| 08/15/07 | 3,000 |
| 09/20/07 | 3,104 |
| 10/03/07 | 2,799 |
| 11/14/07 | 3,029 |
| 12/12/07 | 2,951 |
| 01/17/08 | 2,892 |
| 02/06/08 | 2,941 |
| 03/18/08 | 3,159 |
| 04/02/08 | 3,294 |
| 05/08/08 | 3,173 |
| 06/19/08 | 3,196 |

| Well- S | |
|---|---|
| 01/11/05 | 753,000 |
| 02/15/05 | 724,000 |
| 03/07/05 | 384,000 |
| 03/14/05 | 175,000 |
| 03/23/05 | 182,000 |
| 03/28/05 | 40,500 |
| 04/18/05 | 128,000 |
| 10/17/05 | 90,200 |
| 11/15/05 | 64,700 |
| 12/12/05 | 54,904 |

| Well- N | |
|---|---|
| 06/19/07 | 7,554 |
| 07/18/07 | 8,865 |
| 08/15/07 | 9,045 |
| 09/21/07 | 9,711 |
| 10/03/07 | 21,390 |
| 10/17/07 | 22,016 |
| 11/14/07 | 18,607 |
| 12/12/07 | 12,763 |
| 01/17/08 | 8,049 |
| 01/28/08 | 7,780 |
| 02/06/08 | 7,641 |
| 02/20/08 | 6,853 |
| 03/13/08 | 6,278 |
| 03/18/08 | 6,936 |
| 04/02/08 | 7,427 |
| 04/23/08 | 7,017 |
| 05/08/08 | 6,949 |
| 06/24/08 | 8,406 |

| Well-AM | |
|---|---|
| 06/19/07 | 50,300 |
| 07/18/07 | 37,401 |
| 07/30/07 | 36,361 |
| 08/15/07 | 38,711 |
| 09/21/07 | 209,000 |
| 09/25/07 | 249,000 |
| 10/03/07 | 223,000 |
| 10/17/07 | 118,000 |
| 11/14/07 | 101,000 |
| 11/28/07 | 105,000 |
| 12/12/07 | 22,758 |
| 12/27/07 | 19,339 |
| 01/17/08 | 18,293 |
| 01/28/08 | 19,454 |
| 02/06/08 | 19,910 |
| 02/20/08 | 19,937 |
| 03/13/08 | 17,686 |
| 03/18/08 | 21,764 |
| 04/02/08 | 25,177 |
| 04/23/08 | 25,398 |
| 05/08/08 | 23,403 |
| 06/24/08 | 22,981 |
| 06/30/08 | 23,957 |

| Well-AC | |
|---|---|
| 06/19/07 | 22,914 |
| 07/30/07 | 26,087 |
| 08/28/07 | 31,152 |
| 10/30/07 | 40,898 |
| 11/27/07 | 37,460 |
| 12/29/07 | 53,500 |
| 03/30/08 | 51,100 |
| 04/28/08 | 73,300 |
| 05/30/08 | 28,584 |
| 06/18/08 | 26,056 |

| Well-AJ | |
|---|---|
| 06/19/07 | 34,983 |

| Well-AE | |
|---|---|
| 06/18/07 | 6,863 |
| 07/19/07 | 5,663 |
| 08/15/07 | 5,174 |
| 09/19/07 | 4,084 |
| 10/04/07 | 4,085 |
| 11/19/07 | 4,673 |
| 12/12/07 | 4,998 |
| 01/16/08 | 7,322 |
| 02/07/08 | 9,715 |
| 03/12/08 | 10,326 |
| 04/01/08 | 11,548 |
| 05/08/08 | 10,692 |
| 06/19/08 | 7,902 |

| Well- O | |
|---|---|
| 06/18/07 | 15,749 |
| 07/19/07 | 8,610 |
| 08/15/07 | 9,155 |
| 09/19/07 | 7,535 |
| 10/04/07 | 2,619 |
| 11/19/07 | 6,211 |
| 12/12/07 | 39,793 |
| 01/16/08 | 27,207 |
| 02/07/08 | 32,440 |
| 03/12/08 | 37,518 |
| 04/01/08 | 26,462 |
| 05/19/08 | 13,769 |
| 05/27/08 | 10,565 |
| 06/11/08 | 10,568 |
| 06/23/08 | 9,377 |

| Well-AN | |
|---|---|
| 08/23/07 | 27,075 |
| 09/20/07 | 79,768 |
| 10/17/07 | 41,105 |
| 11/15/07 | 54,400 |
| 12/13/07 | 66,700 |
| 03/12/08 | 60,500 |
| 04/23/08 | 73,700 |
| 05/09/08 | 4,827 |
| 06/12/08 | 41,194 |

| Well-AB | |
|---|---|
| 06/19/07 | 33,171 |
| 08/23/07 | 26,139 |
| 09/20/07 | 25,081 |
| 10/17/07 | 23,146 |

| Well-AL | |
|---|---|
| 07/19/07 | 203 |
| 10/09/07 | <175 |
| 01/23/08 | 366 |
| 04/22/08 | 375 |

| Well-AP | |
|---|---|
| 06/18/07 | 1,093 |
| 07/18/07 | 1,048 |
| 08/15/07 | 2,730 |
| 09/19/07 | 3,830 |
| 10/03/07 | 3,442 |
| 11/14/07 | 4,025 |
| 12/12/07 | 3,806 |
| 01/17/08 | 1,282 |
| 02/21/08 | 1,225 |
| 03/12/08 | 1,123 |
| 04/01/08 | 1,224 |
| 05/08/08 | 1,130 |
| 06/19/08 | 1,143 |

| Well-AR | |
|---|---|
| 06/18/07 | 80,600 |
| 07/19/07 | 84,400 |
| 07/23/07 | 82,300 |
| 08/08/07 | 68,900 |
| 08/15/07 | 84,700 |
| 09/19/07 | 51,500 |
| 09/23/07 | 61,400 |
| 10/03/07 | 20,163 |
| 10/17/07 | 12,268 |
| 11/14/07 | 52,900 |
| 11/28/07 | 50,018 |
| 12/12/07 | 47,103 |
| 12/27/07 | 43,089 |
| 01/23/08 | 37,961 |
| 02/21/08 | 33,079 |
| 03/12/08 | 33,332 |
| 04/01/08 | 27,929 |
| 05/08/08 | 23,914 |
| 06/19/08 | 16,285 |

| Well-AS | |
|---|---|
| 06/19/07 | 28,799 |
| 07/19/07 | 4,925 |
| 08/23/07 | 14,497 |
| 09/20/07 | 13,072 |
| 10/17/07 | 8,922 |
| 11/15/07 | 15,870 |
| 12/13/07 | 27,876 |
| 01/24/08 | 36,033 |
| 02/25/08 | 27,445 |
| 03/12/08 | 25,791 |
| 04/23/08 | 15,043 |
| 05/09/08 | 2,435 |

| Well-AT | |
|---|---|
| 06/19/07 | 1,892 |
| 07/19/07 | 2,158 |
| 08/22/07 | <4,280 |
| 08/23/07 | 2,182 |
| 09/20/07 | 2,114 |
| 10/17/07 | 1,705 |
| 11/15/07 | 2,221 |
| 12/13/07 | 4,326 |
| 03/12/08 | 46,500 |
| 04/23/08 | 70,000 |
| 05/09/08 | 14,174 |

| Well-AF | |
|---|---|
| 07/13/07 | 210 |
| 10/09/07 | <173 |
| 01/23/08 | 158 |
| 04/22/08 | <154 |

| Well-AQ | |
|---|---|
| 01/23/07 | 5,136 |

| Well-AQ-S | |
|---|---|
| 06/18/07 | 888 |
| 07/12/07 | 645 |
| 08/16/07 | 1,101 |
| 09/20/07 | 671 |
| 11/20/07 | 304 |
| 12/20/07 | 343 |
| 01/23/08 | 291 |
| 02/20/08 | 432 |
| 03/13/08 | 341 |
| 04/01/08 | 320 |
| 05/15/08 | 383 |
| 06/24/08 | 633 |

| Well-AG-D | |
|---|---|
| 06/18/07 | 716 |
| 07/12/07 | 490 |
| 08/16/07 | 702 |
| 09/20/07 | 608 |
| 10/17/07 | 2,172 |
| 11/20/07 | 1,491 |
| 12/20/07 | 905 |
| 01/23/08 | 1,019 |
| 02/20/08 | 1,116 |
| 03/13/08 | 1,141 |
| 04/01/08 | 1,153 |
| 05/15/08 | 1,724 |
| 06/24/08 | 1,974 |

| Well-AH-D | |
|---|---|
| 06/18/07 | 343 |
| 07/13/07 | 221 |
| 08/15/07 | 1,089 |
| 09/19/07 | 376 |
| 10/03/07 | 1,311 |
| 11/19/07 | 920 |
| 12/12/07 | 973 |
| 01/23/08 | 1,104 |
| 02/07/08 | 1,209 |
| 03/12/08 | 1,524 |
| 04/01/08 | 1,799 |
| 05/29/08 | 1,675 |
| 06/20/08 | 1,265 |

| Well-AH-S | |
|---|---|
| 06/18/07 | 236 |
| 07/13/07 | 1,193 |
| 08/15/07 | <145 |
| 09/19/07 | <144 |
| 10/03/07 | 195 |
| 11/19/07 | 2,790 |
| 12/12/07 | 5,579 |
| 01/23/08 | 1,322 |
| 02/07/08 | 1,365 |
| 03/12/08 | 1,377 |
| 04/01/08 | 400 |
| 05/29/08 | 274 |
| 06/20/08 | 546 |

## TRITIUM PLUME - JUNE 2008

### GROUNDWATER EXTRACTION SYSTEM IN SERVICE

SCALE: 1"=30'

LEGEND:

WELL R — MONITORING WELL SCREENED IN THE SHALLOW, WATER-BEARING UNIT WITHIN THE LIMITS OF THE COFFERDAM.

WELL S — MONITORING WELL SCREENED IN THE SHALLOW, WATER-BEARING UNIT OUTSIDE THE LIMITS OF THE COFFERDAM.

- LIMIT OF GROUNDWATER WITH TRITIUM ABOVE 1,000,000 pCi/L
- LIMIT OF GROUNDWATER WITH TRITIUM ABOVE 500,000 pCi/L
- LIMIT OF GROUNDWATER WITH TRITIUM ABOVE 100,000 pCi/L
- LIMIT OF GROUNDWATER WITH TRITIUM ABOVE THE NEW JERSEY GROUNDWATER QUALITY CRITERION (20,000 pCi/L)
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SEISMIC GAP (STYROFOAM)
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE – EXTENDS FROM ABOVE THE WATER TABLE THROUGH THE KIRKWOOD FORMATION
- SHEET PILE – DOES NOT EXTEND TO AN ELEVATION ABOVE THE WATER TABLE.
- LOCATION OF THRUST BLOCK (DASHED WHERE INFERRED)

NOTES:

1. CONTOURS FOR THE BASELINE TRITIUM PLUME ARE BASED ON DATA GENERATED DURING THE REMEDIAL INVESTIGATION.
2. WELL AQ SAMPLING DISCONTINUED AS WELL IS ISOLATED FROM GROUNDWATER FLOW
3. WELL S OUT OF SERVICE DUE TO LOW YIELD.

Path\Name: G:\PROJECT\PSEG\Salem - Unit 1 - Tritium\NP000571.0007 - Continued Reporting and Recovery\CADD\NPN\NPN 15\TU-21 - CW Tritium Plume 6-08.dwg
Plot Date\Time: 11/24/2008 10:41 AM Current Plotstyle: ------- Page Set Up Name: ------
Acad Version: 17.0s (LMS Tech) User Name: Sharpe, Christopher

| | |
|---|---|
| Area Manager | R. GAN |
| Project Director | P. MILIONIS |
| Task Manager | C. SHARPE |
| Technical Review | C. SHARPE |

0 30 60 90 SCALE: 1"=30'

0 40 80 120 SCALE: 1"=40'

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PSEG NUCLEAR, LLC
SALEM GENERATING STATION

# GROUNDWATER TRITIUM RESULTS

HANCOCK'S BRIDGE, NEW JERSEY

Project Number: NP000571.0006
Date: 10 SEPTEMBER, 2008
Figure: 1

01-D01