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United States Government

Department of Energy  
Oak Ridge Field Office

# memorandum

115.16

DATE: June 21, 1993

REPLY TO  
ATTN OF: EW-93:Hartman

SUBJECT: WAYNE INTERIM STORAGE SITE - TERMINATION OF SITE ENVIRONMENTAL REPORT

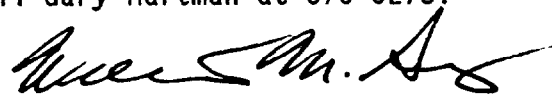
TO: Peter J. Gross, Director, Environmental Protection Division, SE-31

The Wayne Interim Storage Site (WISS) is part of the Formerly Utilized Sites Remedial Action Program.

Based upon our surveillance efforts at WISS since 1984, the data for all media sampled support the conclusion that radiological exposures from the site are not significantly different from natural background radiation (see attached figures) and are below applicable Derived Concentration Guides. In addition, no discernable trends have been identified.

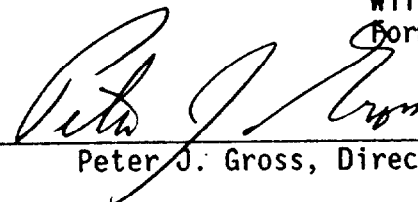
We have determined that preparation of an annual Site Environmental Report for WISS is not necessary and should be terminated. We believe this determination is appropriate and meets the requirements of DOE Order 5400.1 (see the April 9, 1993, memorandum from Gary S. Hartman to William M. Seay for details). We plan to continue collecting and interpreting annual environmental data at an appropriate level. Distribution to the public of summaries of the results of environmental data collection would also continue as part of our ongoing community relations activities. This determination was reached in consultation with members of your staff. Your concurrence with this determination may be indicated in the space provided below.

If you have any questions, please call Gary Hartman at 576-0273.



William M. Seay, Acting Director  
Former Sites Restoration Division

Concurrence:



Peter J. Gross, Director, ENVPD

6/23/93

Date

### Attachments

- cc w/attachments:
- L. M. Griffin, EH-221, 3G-092/FORS
- R. L. Natoli, EH-222, 3G-089/FORS
- J. W. Wagoner II, EM-421, TREV
- W. D. Adams, EW-90, OR
- S. M. Cange, EW-93, OR
- J. G. Hart, EW-93, OR
- S. K. Oldham, EW-93, OR
- J. P. Donnelly, SE-312, OR

WAYNE INTERIM STORAGE SITE (WISS)

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# Wayne Interim Storage Site (WISS)

## Radon-222 in Air

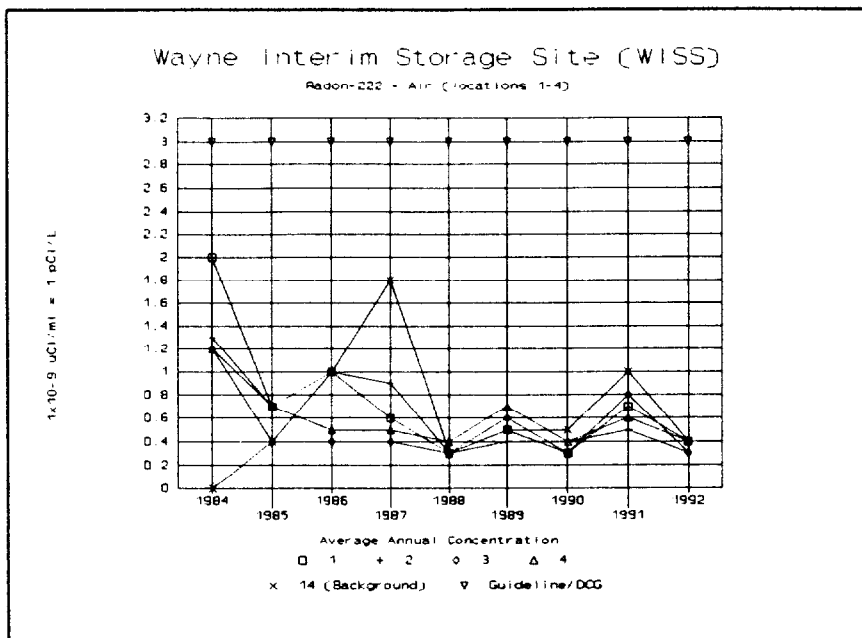


Figure 1 - Locations 1-4

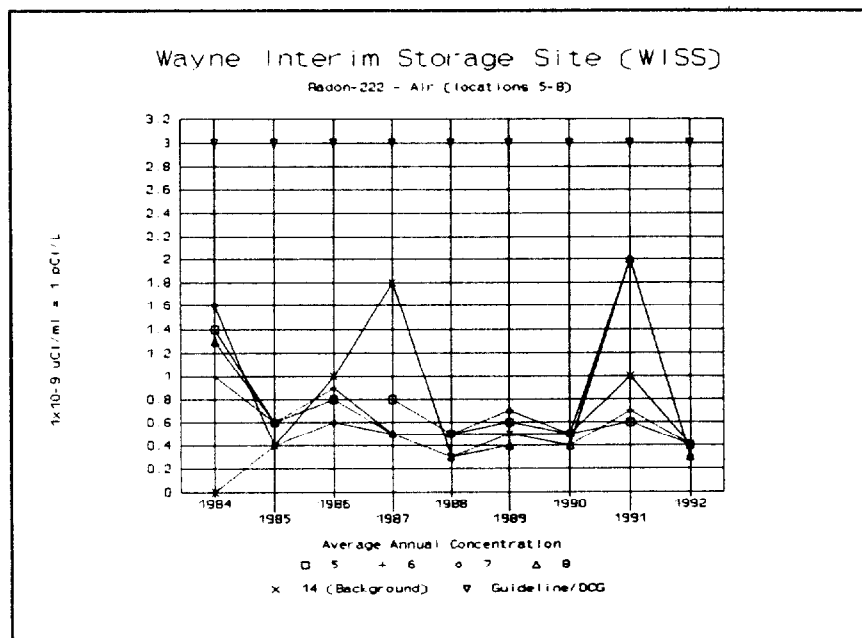


Figure 2 - Locations 5-8

# Wayne Interim Storage Site (WISS)

## Thoron in Air

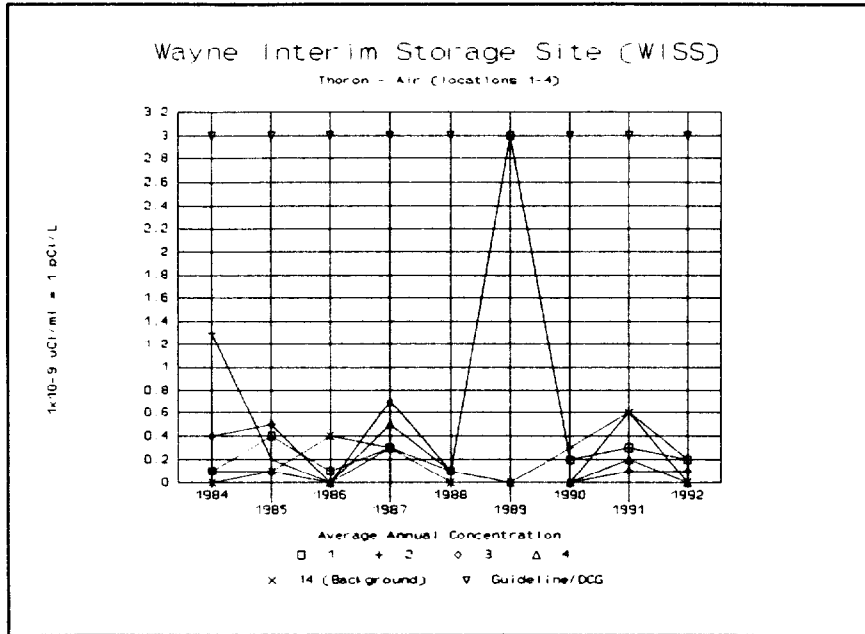


Figure 3 - Locations 1-4

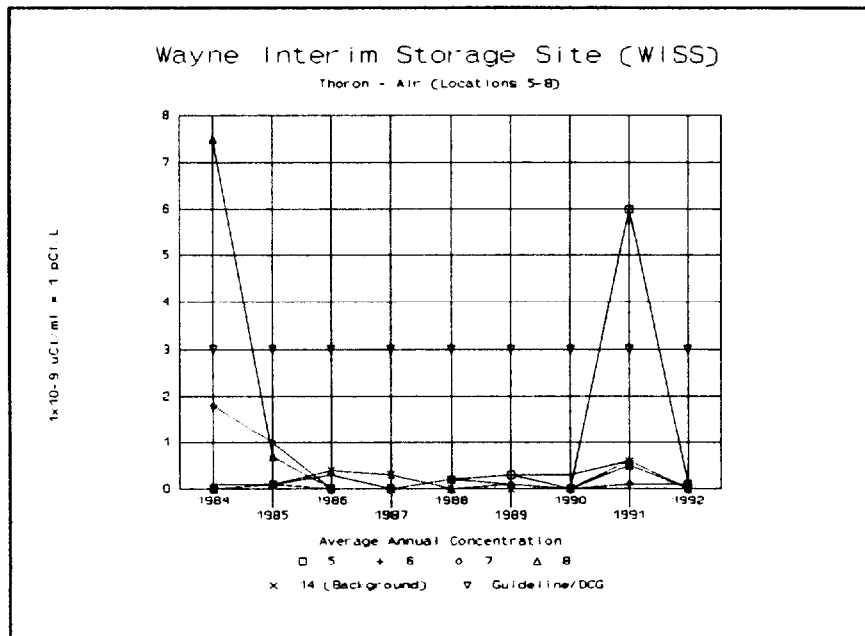


Figure 4 - Locations 5-8

# Wayne Interim Storage Site (WISS)

## Thoron in Air (continued)

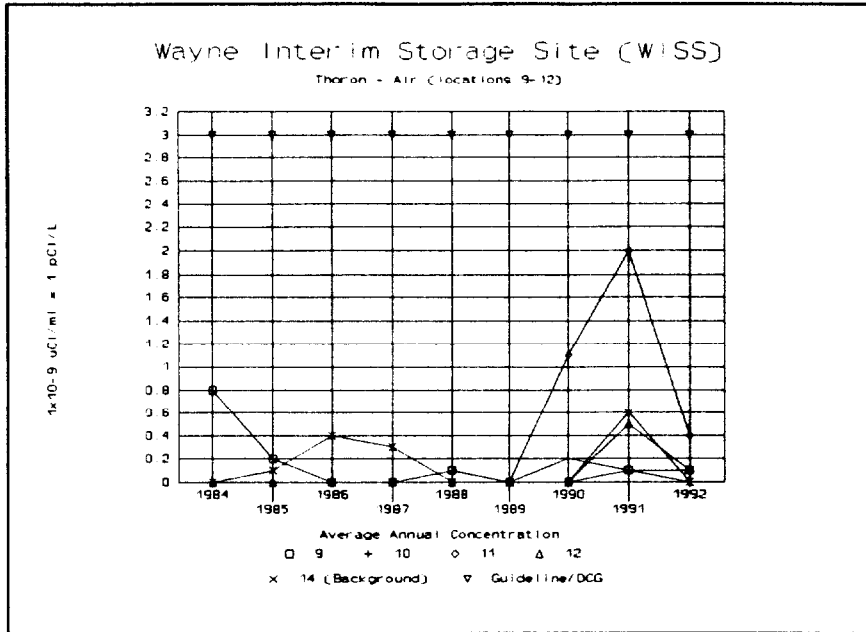


Figure 5 - Locations 9-12

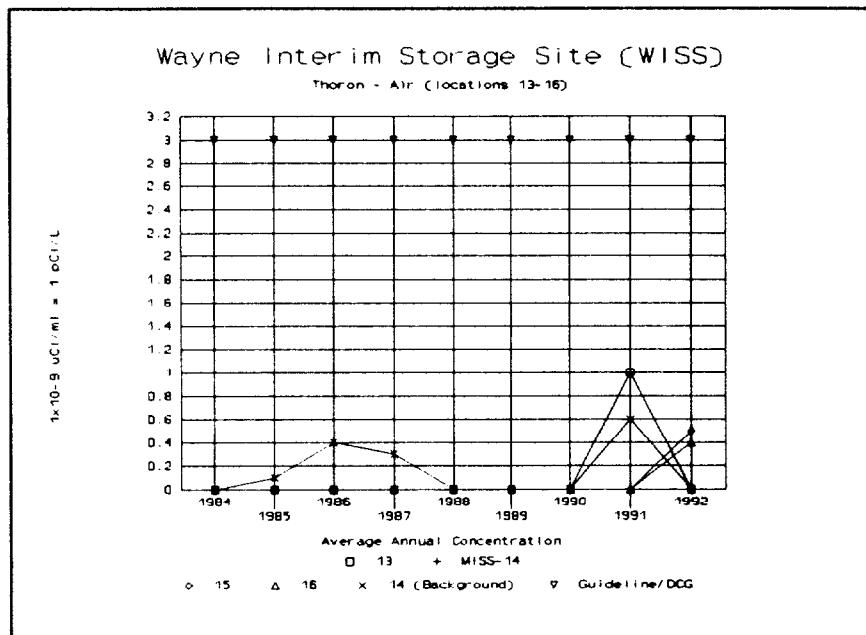


Figure 6 - Locations 13-16

# Wayne Interim Storage Site (WISS)

## External Gamma

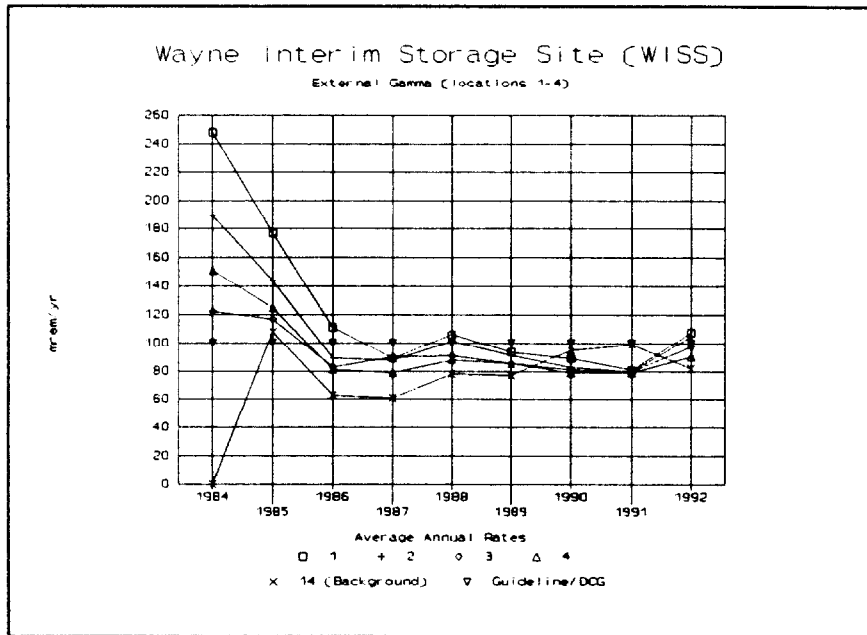


Figure 7 - Locations 1-4

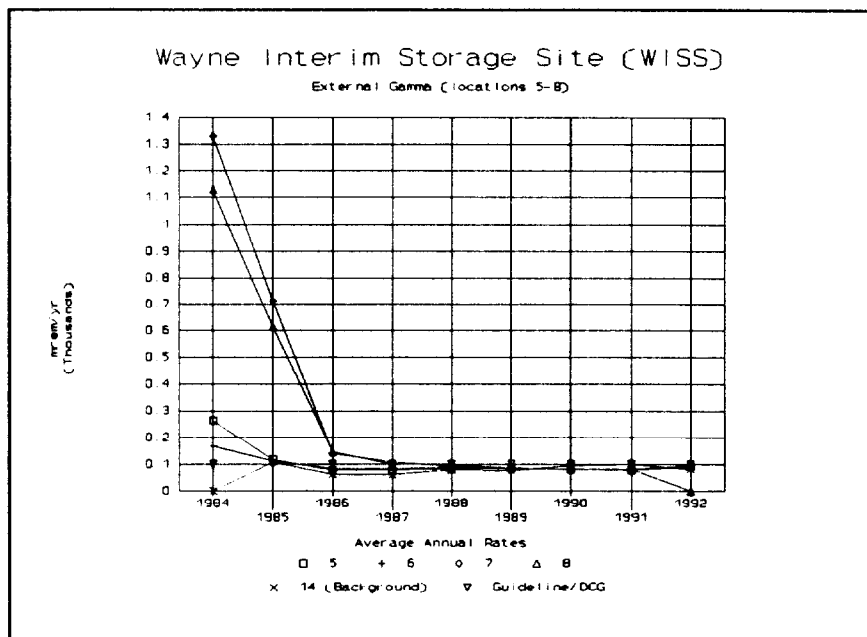


Figure 8 - Locations 5-8

Wayne Interim Storage Site (WISS)  
External Gamma (continued)

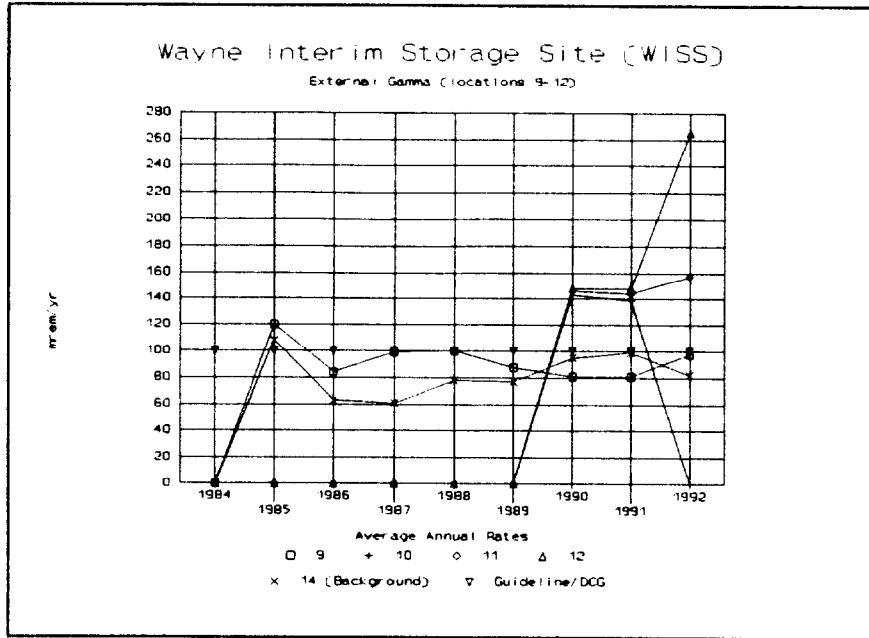


Figure 9 - Locations 9-12

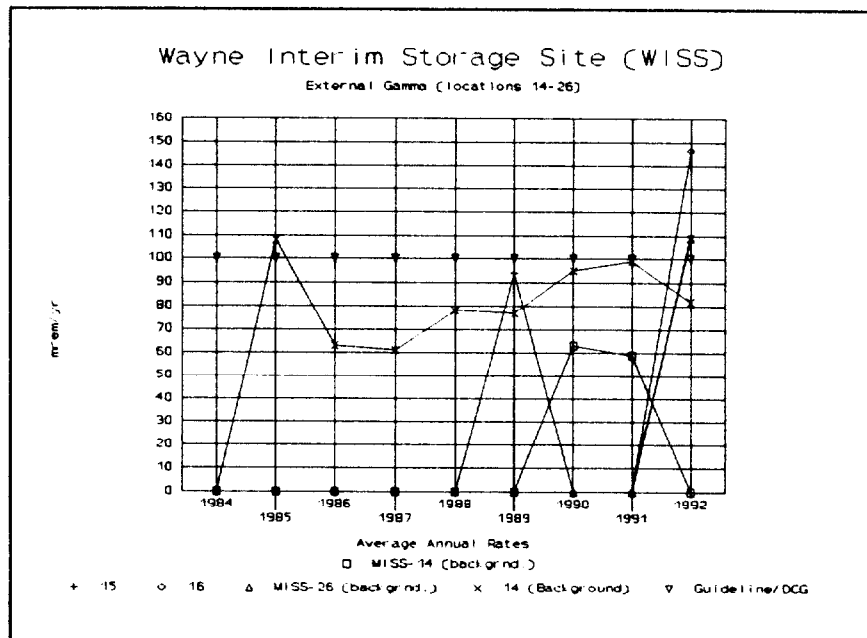


Figure 10 - Locations 14-26

# Wayne Interim Storage Site (WISS)

## Uranium-234/235 in Sediment

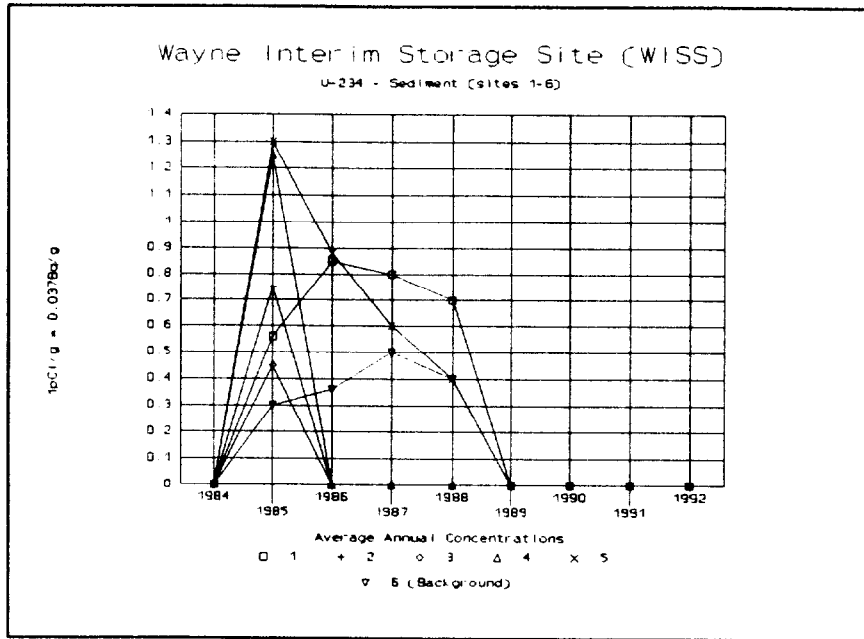


Figure 11 - U-234 / Locations 1-5

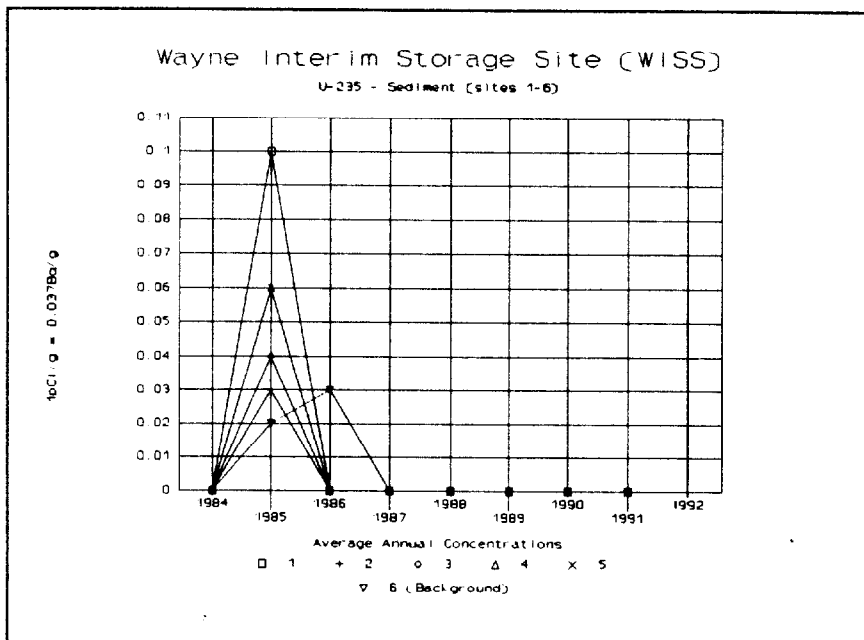


Figure 12 - U-235 / Locations 1-5



Wayne Interim Storage Site (WISS)  
Uranium-238 / Total Uranium in Sediment

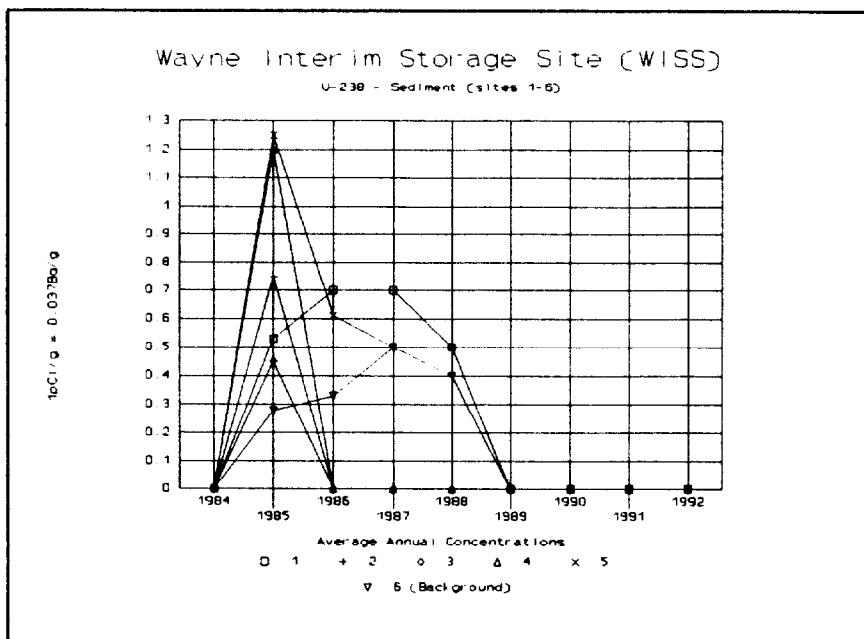


Figure 13 - U-238 / Locations 1-5

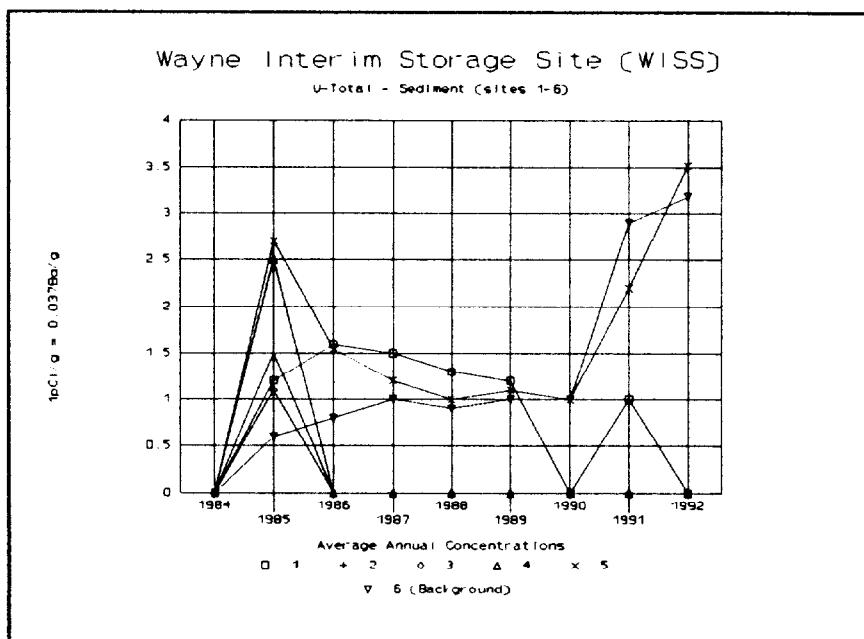


Figure 14 - U-Total / Locations 1-5

Wayne Interim Storage Site (WISS)  
Radium-226 in Sediment

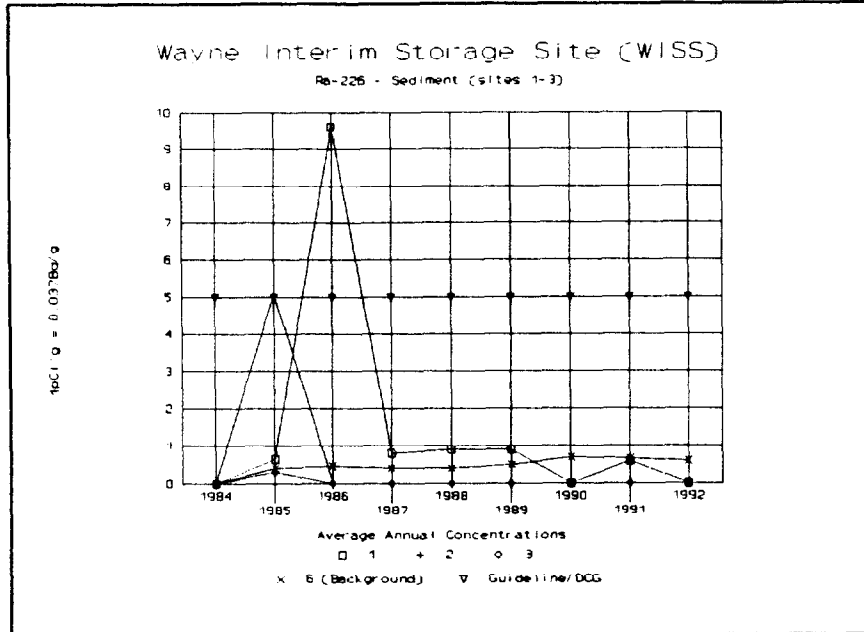


Figure 15 - Locations 1-3

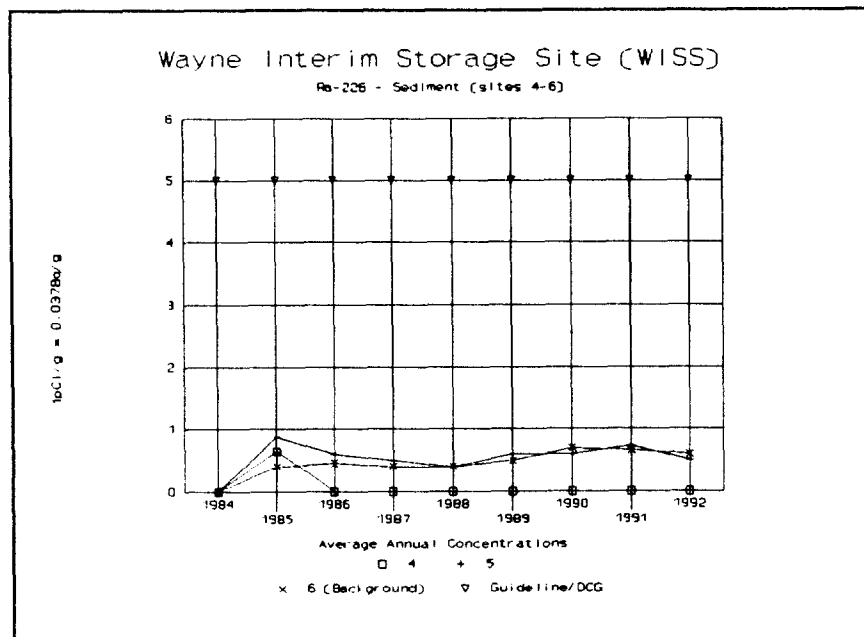


Figure 16 - Locations 4-6

Wayne Interim Storage Site (WISS)  
Radium-228 in Sediment

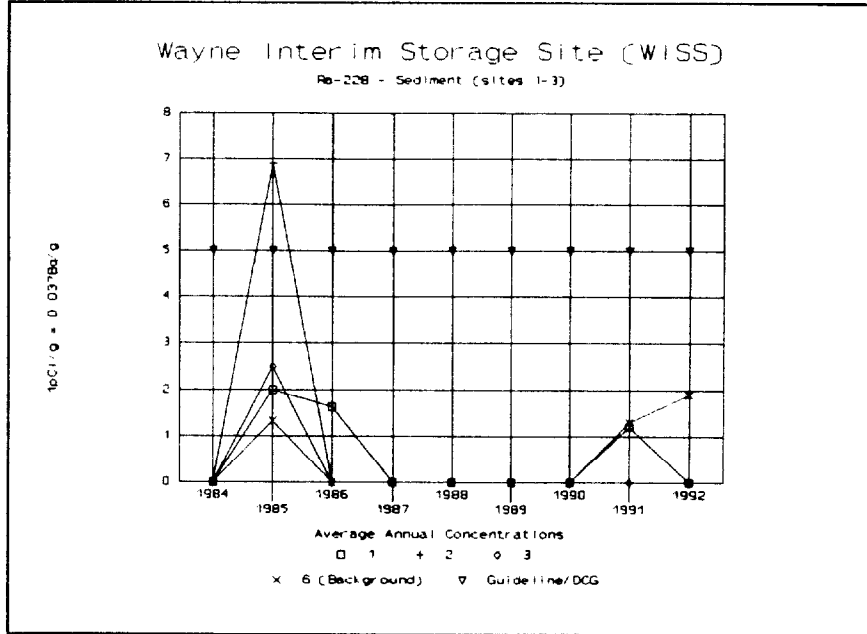


Figure 17 - Locations 1-3

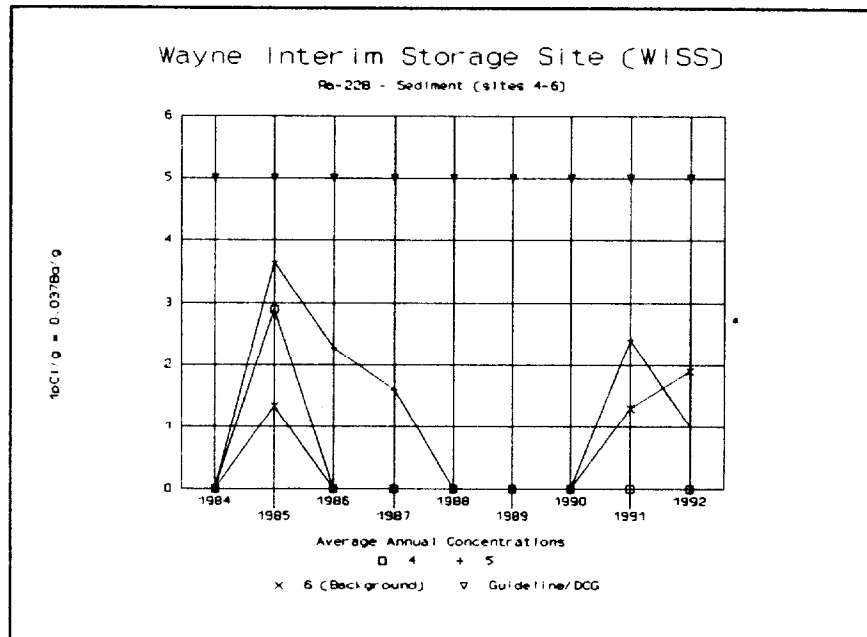


Figure 18 - Locations 4-6

Wayne Interim Storage Site (WISS)  
Thorium-230 in Sediment

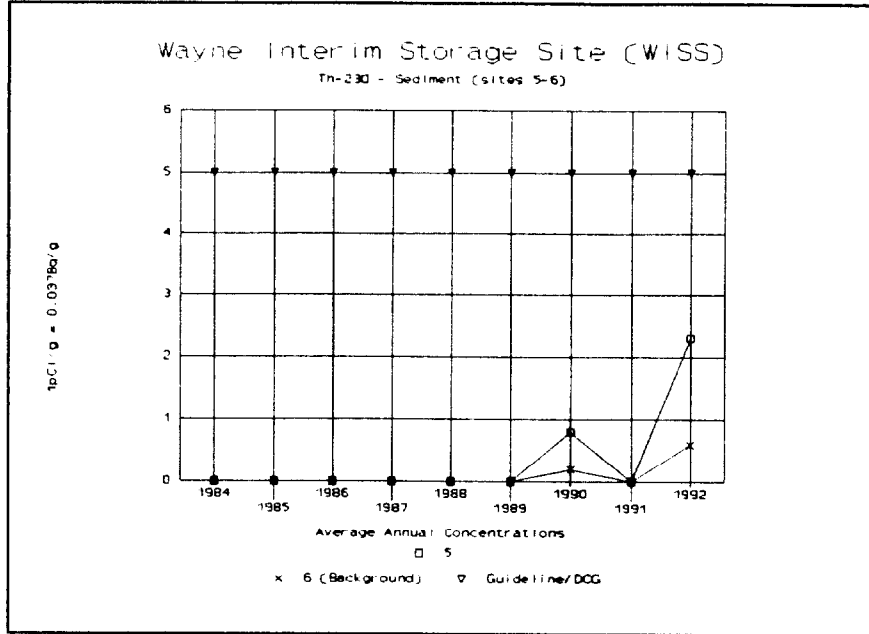


Figure 19 - Th-230 - Locations 5-6

# Wayne Interim Storage Site (WISS)

## Thorium-232 in Sediment

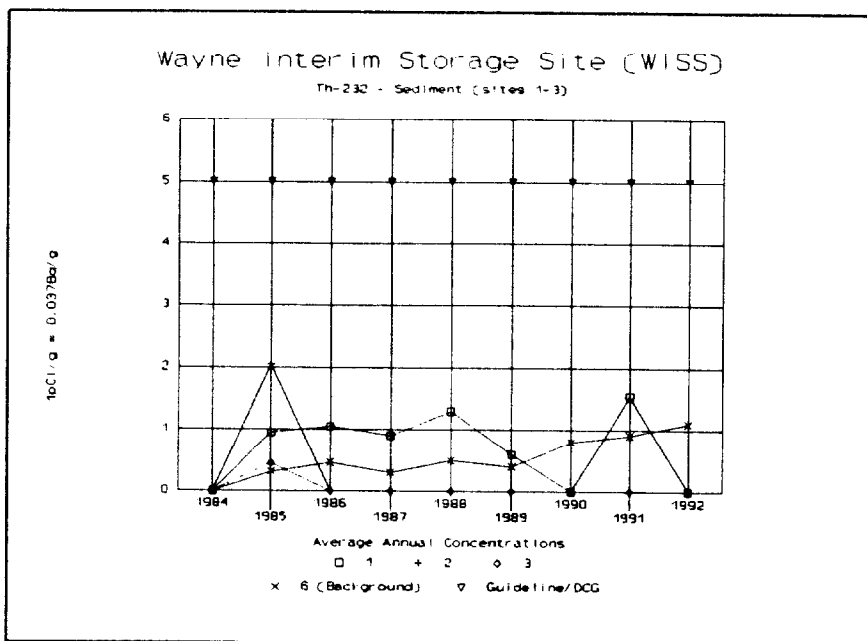


Figure 20 - Th-232 - Locations 1-3

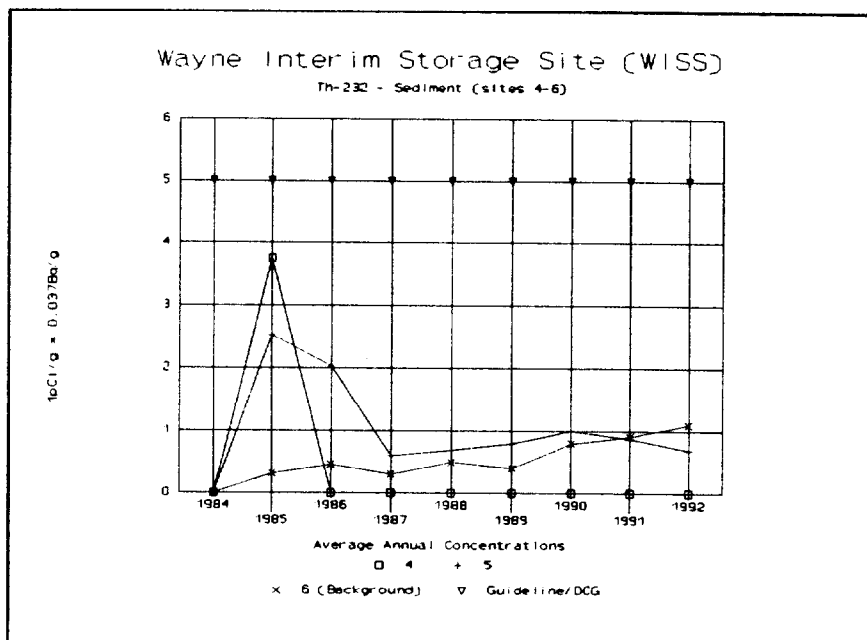


Figure 21 - Th-232 - Locations 4-6

Wayne Interim Storage Site (WISS)  
 Total Uranium in Surface Water

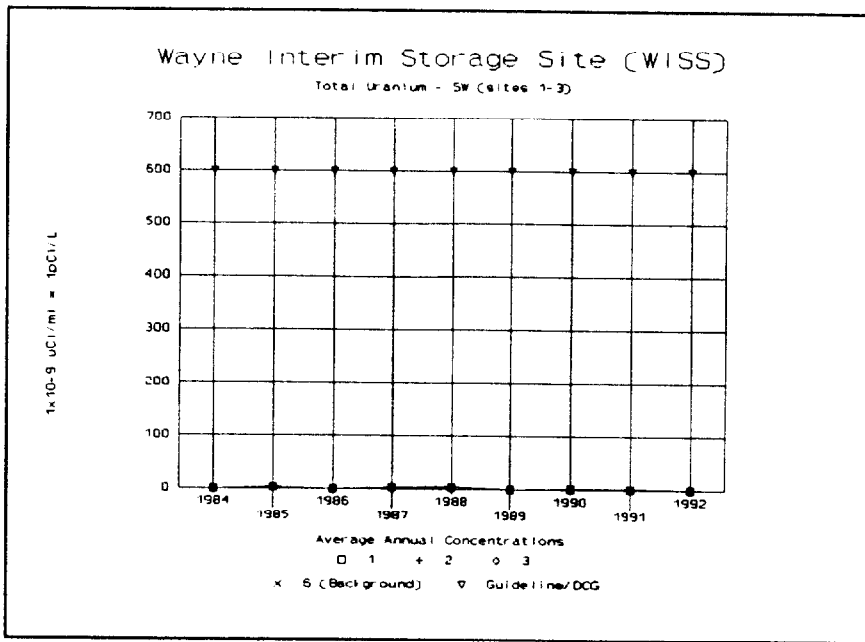


Figure 22 - Locations 1-3

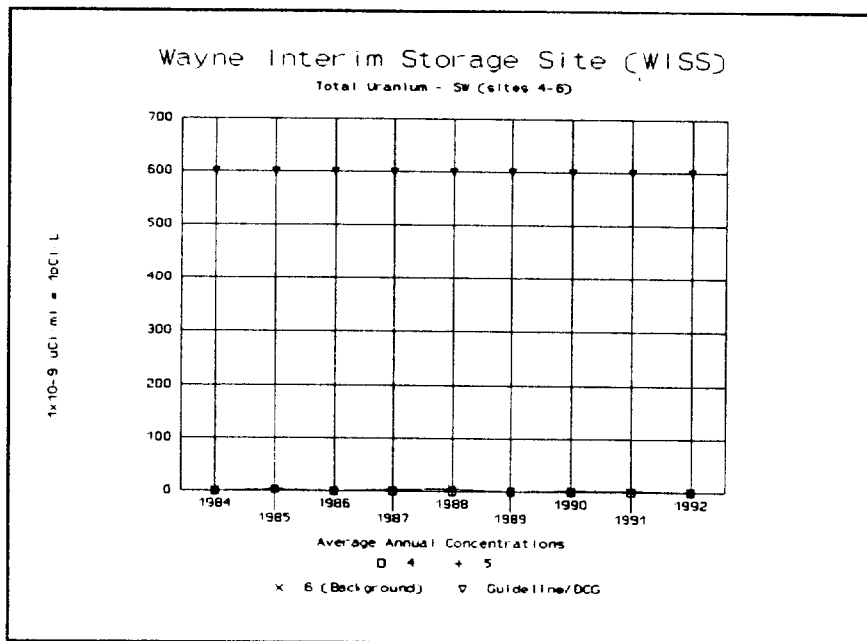


Figure 23 - Locations 4-6

Wayne Interim Storage Site (WISS)  
Radium-226 in Surface Water

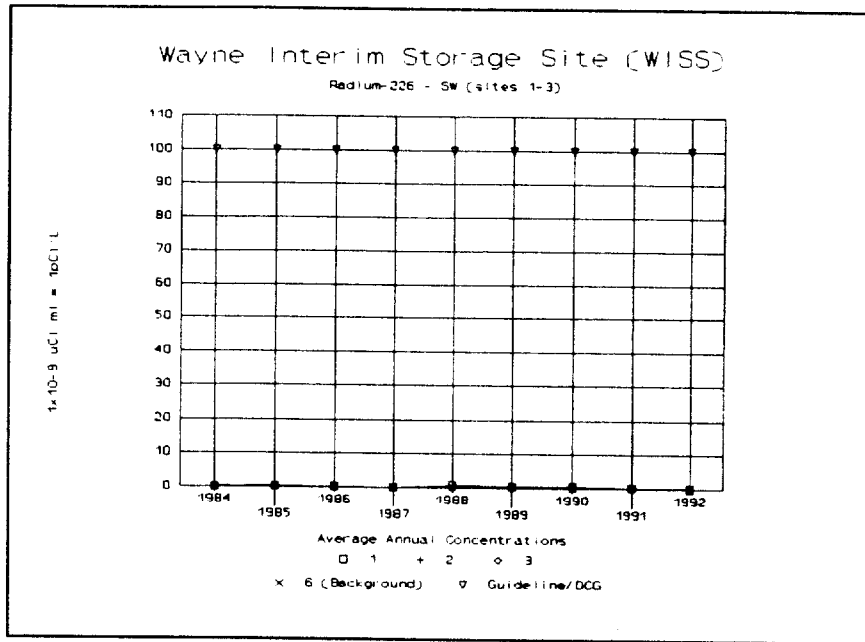


Figure 24 - Locations 1-3

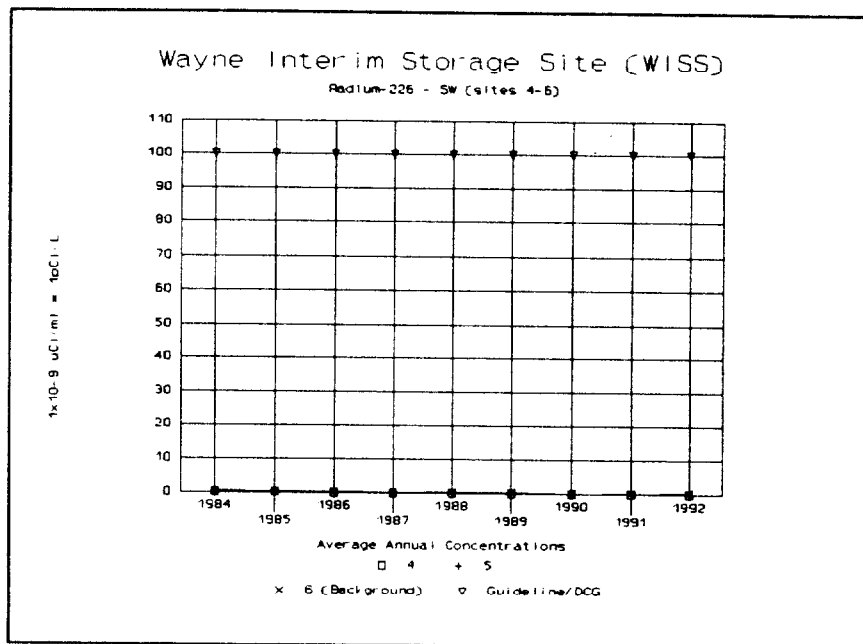


Figure 25 - Locations 4-6

Wayne Interim Storage Site (WISS)  
Radium-228 in Surface Water

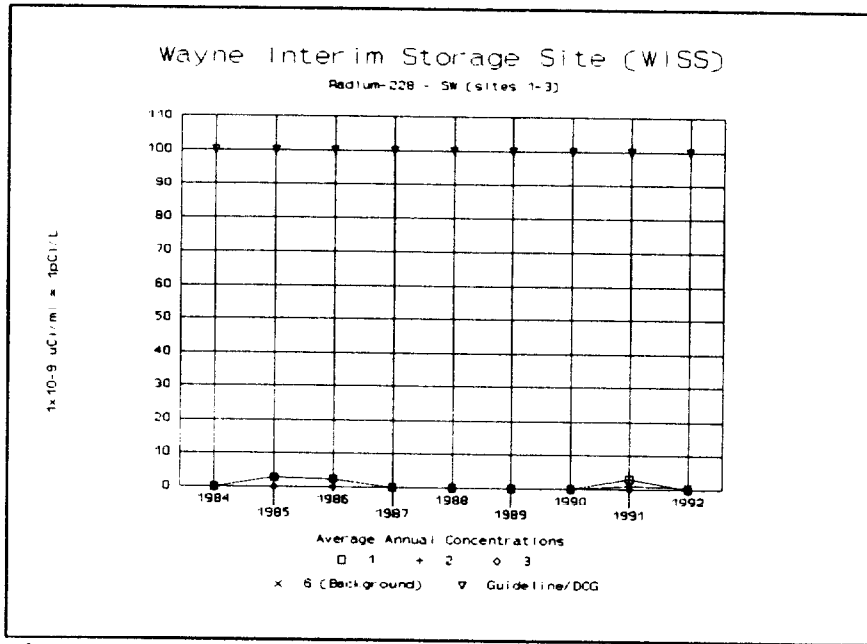


Figure 26 - Locations 1-3

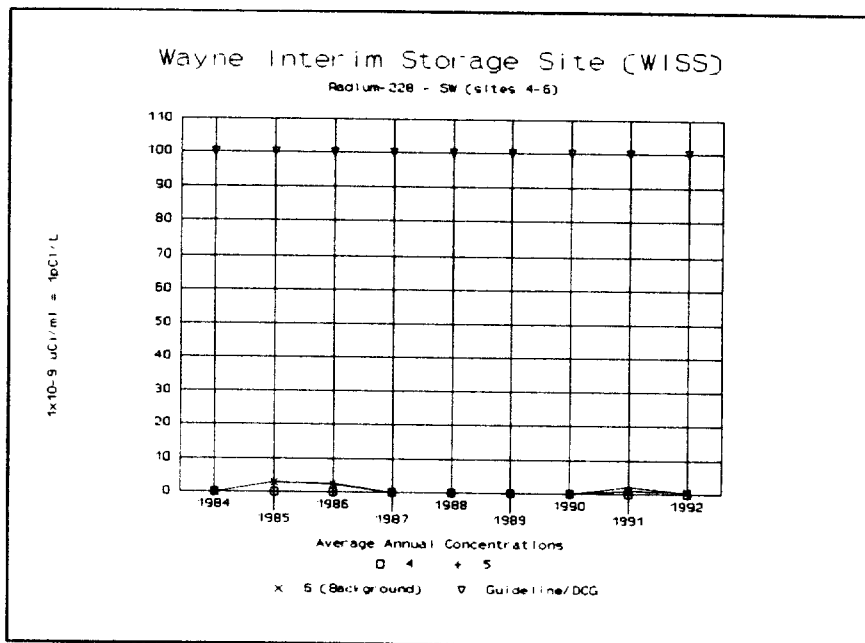


Figure 27 - Locations 4-6



Wayne Interim Storage Site (WISS)  
 Thorium-232 in Surface Water

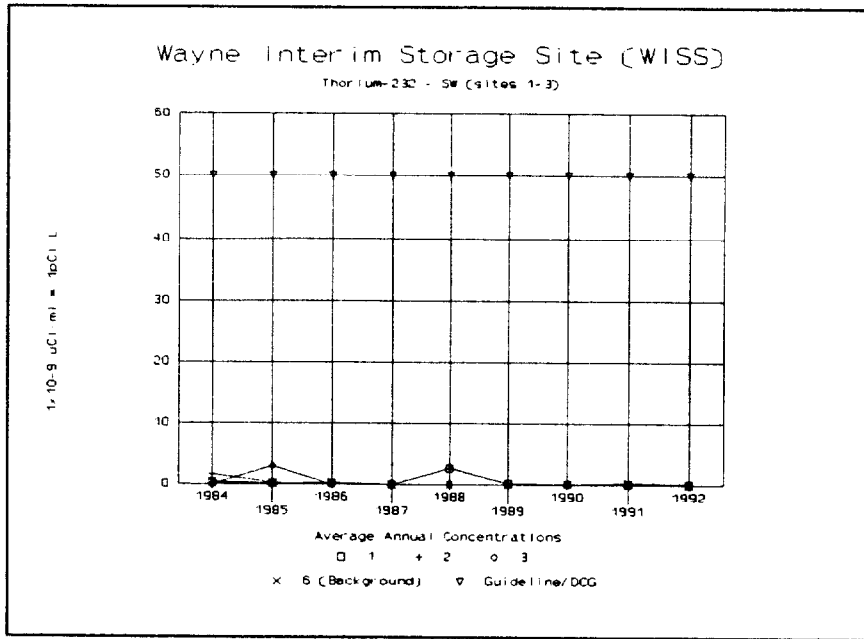


Figure 28 - Locations 1-3

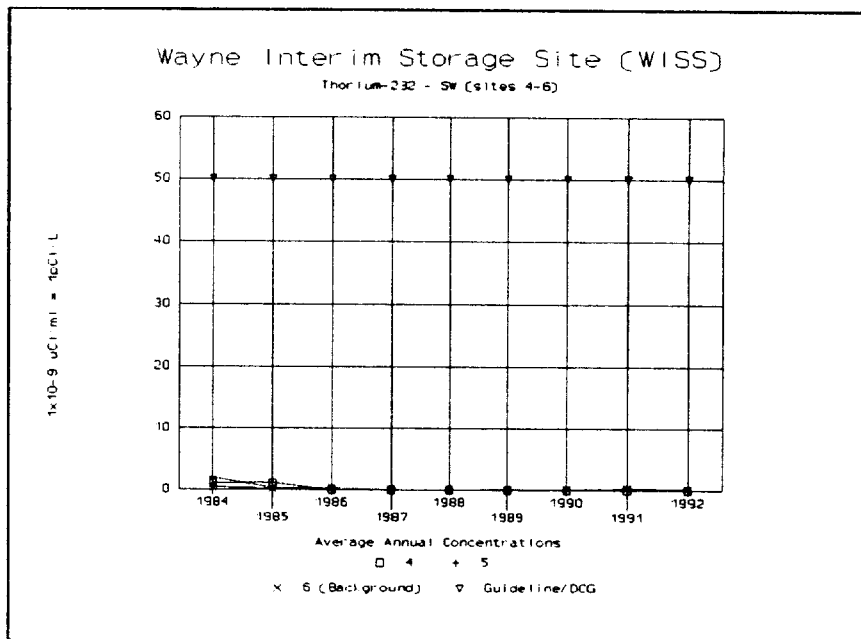
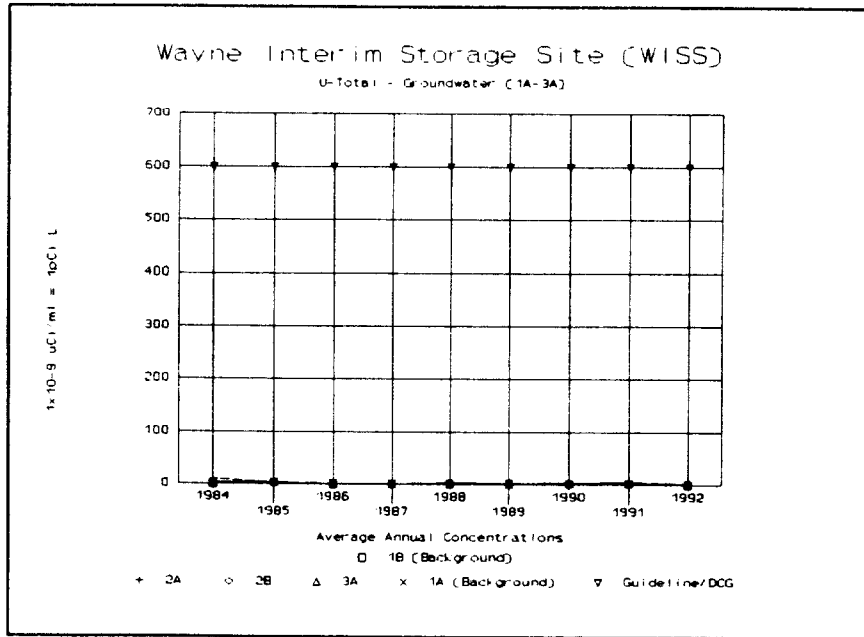


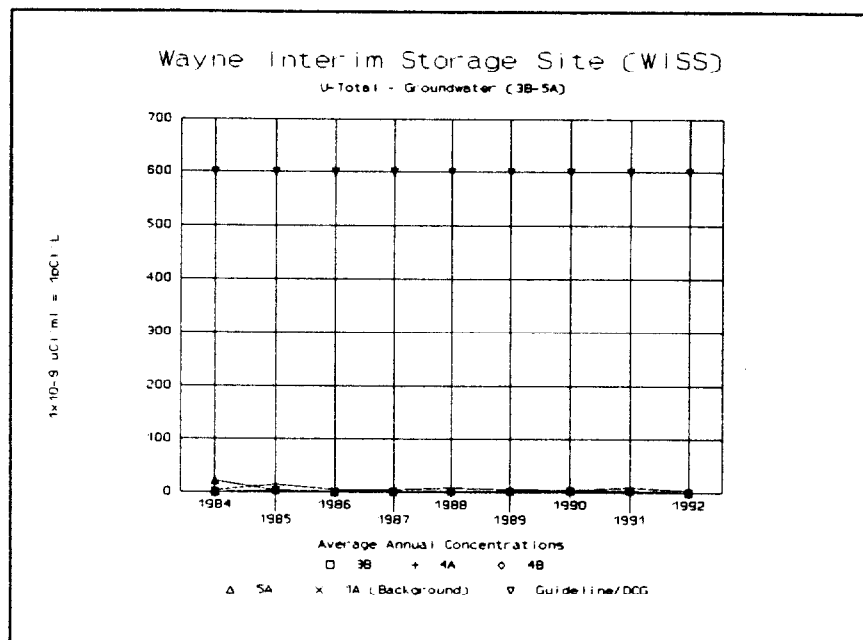
Figure 29 - Locations 4-6

# Wayne Interim Storage Site (WISS)

## Total Uranium in Groundwater



**Figure 30 - Locations 1A-3A**



**Figure 31 - Locations 3B-5A**

Wayne Interim Storage Site (WISS)  
Total Uranium in Groundwater (continued)

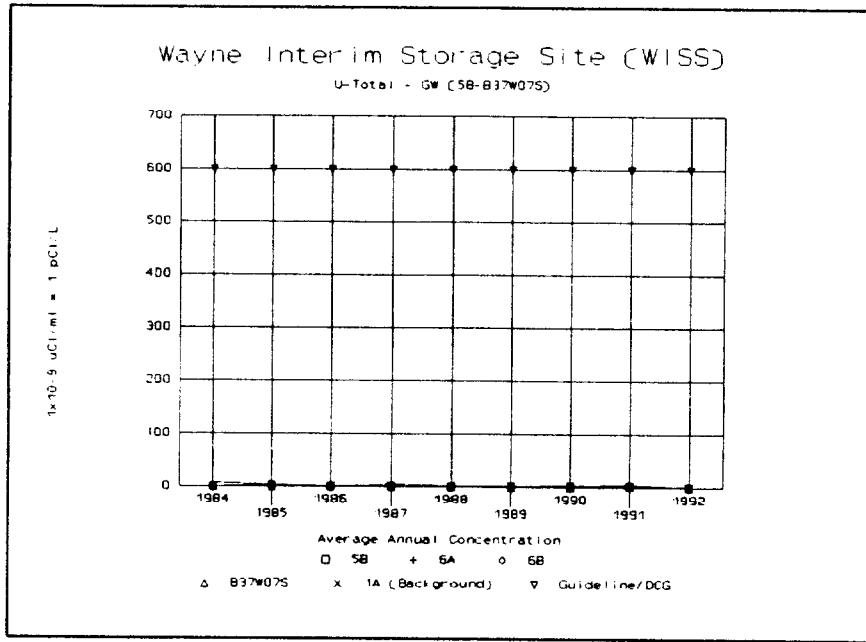


Figure 32 - Locations 5B-B37W07S

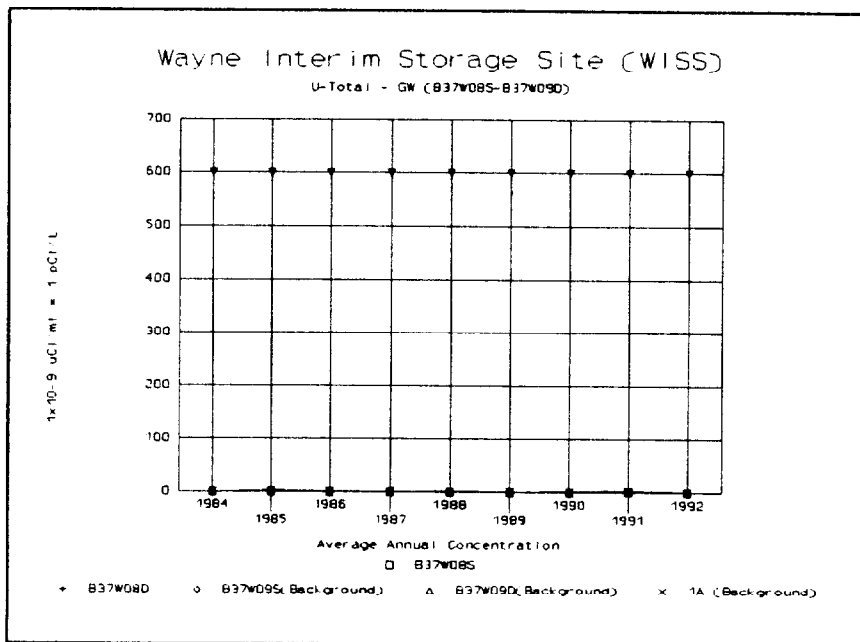


Figure 33 - Locations B37W08D-B37W09S

# Wayne Interim Storage Site (WISS)

## Radium-226 in Groundwater

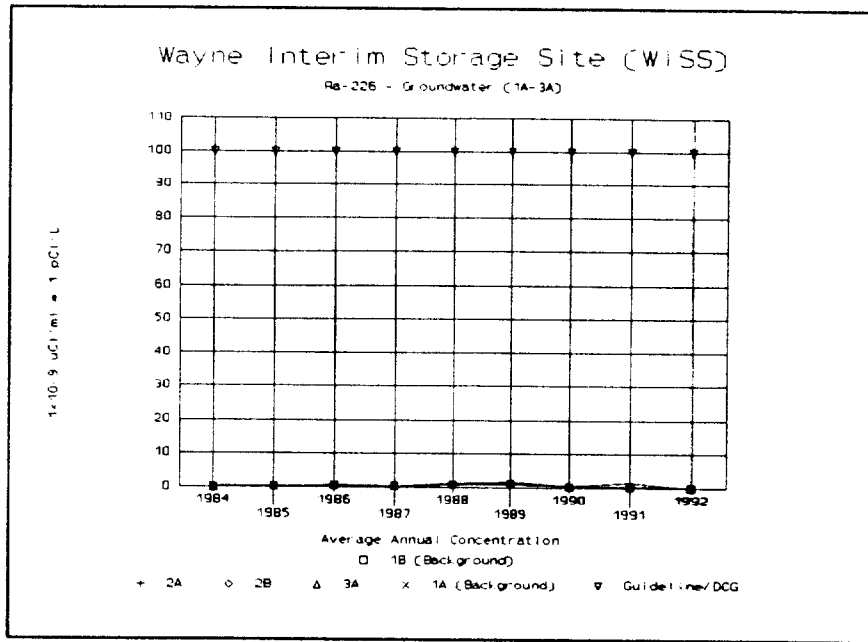


Figure 34 - Locations 1A-3A

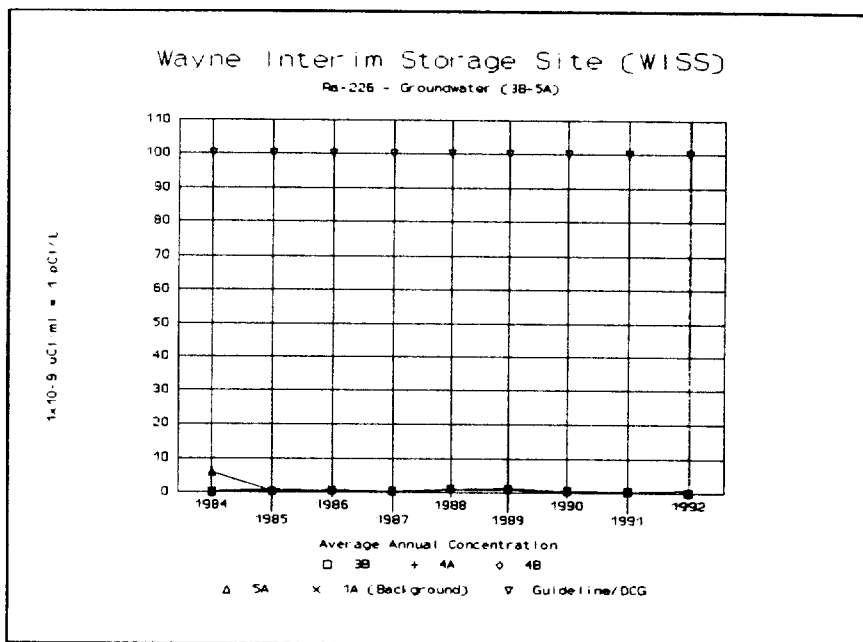


Figure 35 - Locations 3B-5A

Wayne Interim Storage Site (WISS)  
Radium-226 in Groundwater (continued)

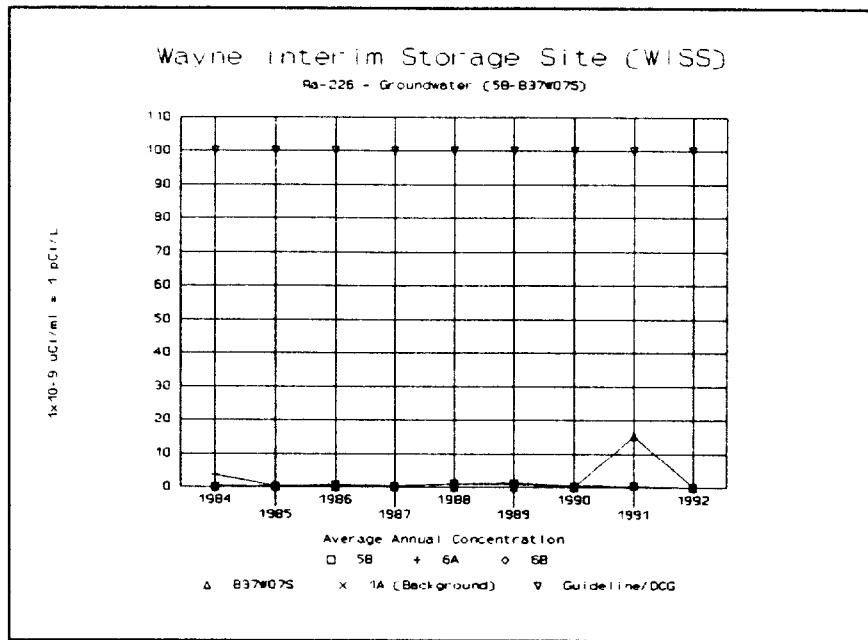


Figure 36 - Locations 5B-B37W07S

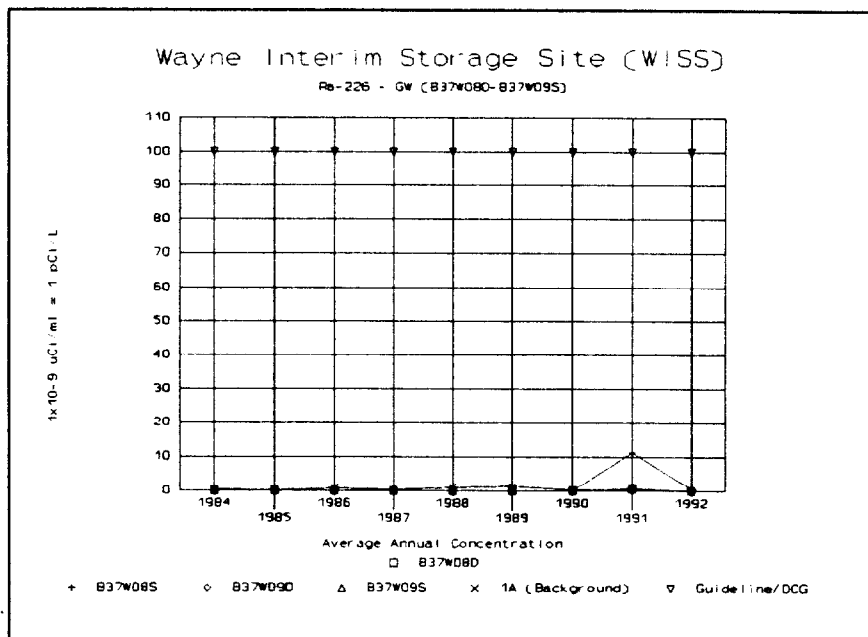


Figure 37 - Locations B37W08D-B37W09S

Wayne Interim Storage Site (WISS)  
 Thorium-232 in Groundwater

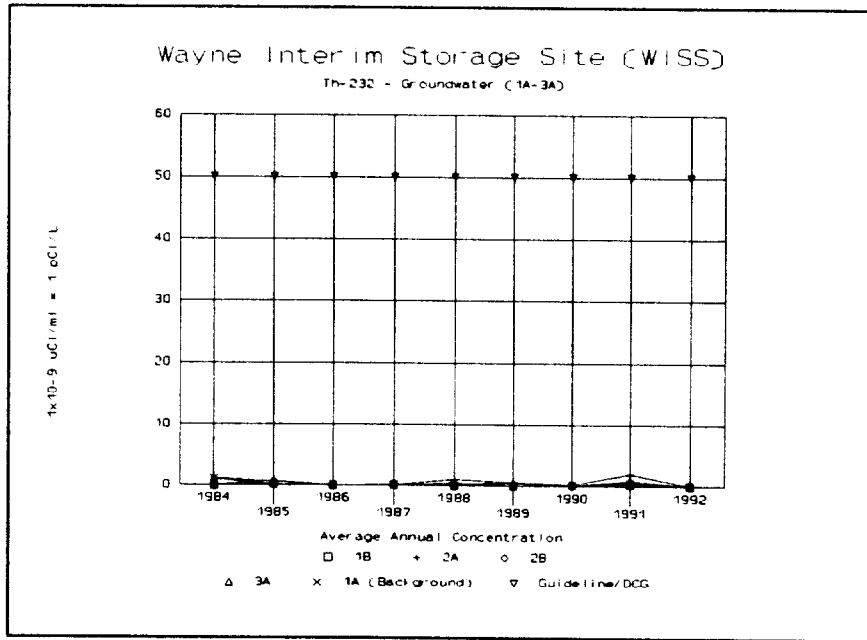


Figure 38 - Locations 1A-3A

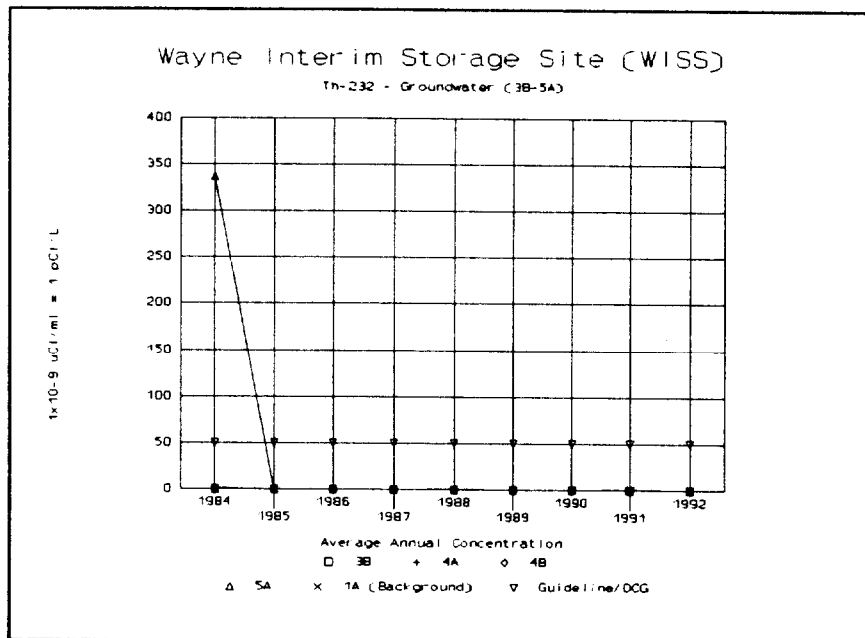
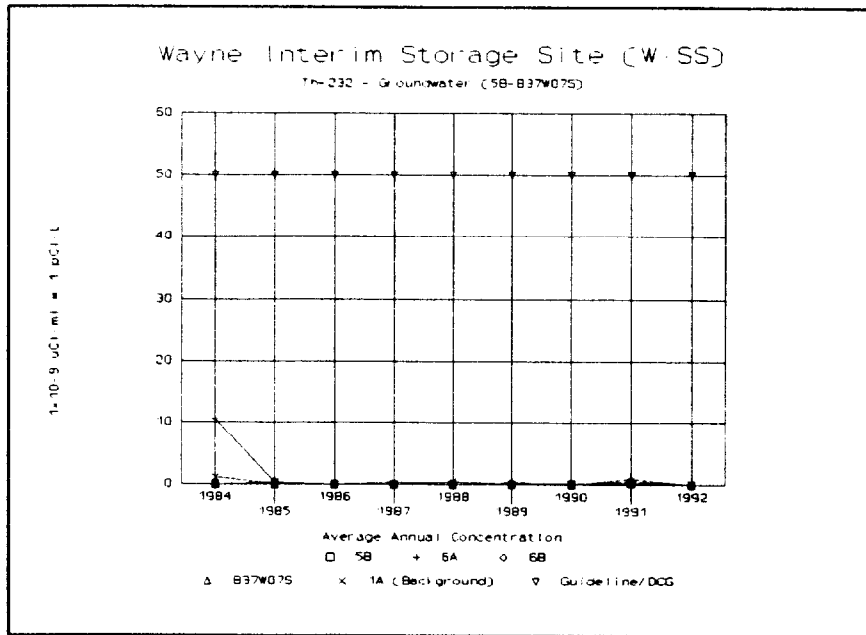
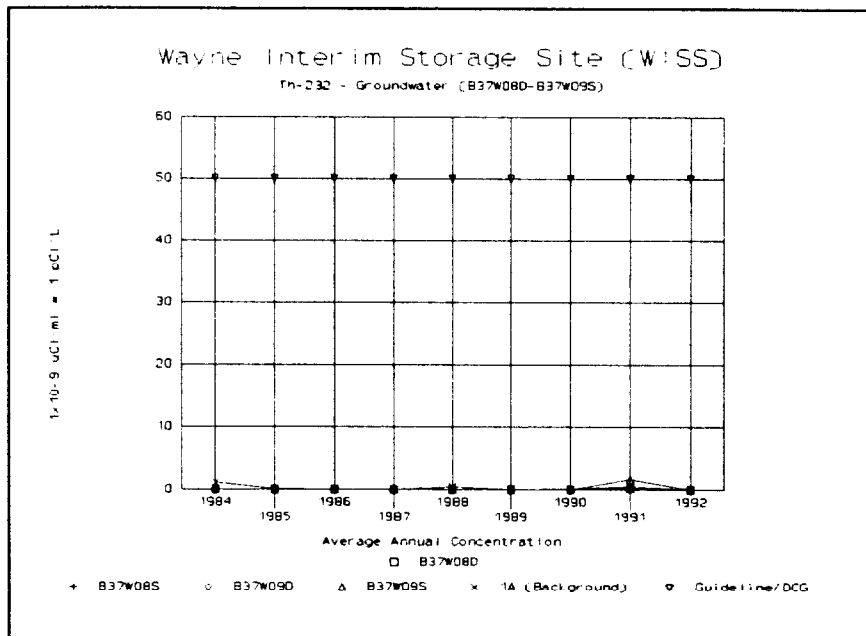


Figure 39 - Locations 3B-5A

Wayne Interim Storage Site (WISS)  
 Thorium-232 in Groundwater (continued)



**Figure 40 - Locations 5B-B37W07S**



**Figure 41 - Locations B37W08D-B37W09S**