START

ENGINEERING CHANGE NOTICE

Page 1 of ____

ECN 113805

Proj. ECN 0013154

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.		4. Date
Supplemental [XX] Direct Revision [ ] Change ECN [ ] Temporary [ ] Supersedure [ ] Discovery [ ] Cancel/Void [ ]	R. B. Mercer, Geosciences Group/H4-56/6-8945		
	5. Project Title/No./Work Order No.	6. Bldg./Sys./Fac. No. LLBG	7. Impact Level 2
	8. Document Number Affected (include rev. and sheet no.) WHC-SD-EN-AP-015, Rev. 0	9. Related ECN No(s). N/A	10. Related PO No. N/A

11a. Modification Work	11b. Work Package Doc. No.	11c. Complete Installation Work	11d. Complete Restoration (Temp. ECN only)
[ ] Yes (fill out Blk. 11b) [ ] No (NA Blks. 11b, 11c, 11d)	N/A	N/A Cog. Engineer Signature & Date	N/A Cog. Engineer Signature & Date

12. Description of Change

Figures 3.1 through 3.5 (pages 146, 149, 151, 154, and 156 respectively) will be replaced by Figures 1 through 5 attached to this ECN. Locations for thirty-two additional groundwater monitoring wells are shown on these figures. The figures also show the Hanford well numbers for the sixteen newly installed wells described in the original document.

Table 3.2 (page 159) will be supplemented by Tables 1 through 5 of this ECN. These tables present the approximate coordinates, drill depths, and screen lengths for the additional wells. These coordinates are estimates and minor adjustments may be necessary to accommodate cultural features.

13a. Justification (mark one)	13b. Justification Details
Criteria Change [ ] Design Improvement [X] Environmental [ ] As-Found [ ] Facilitate Const. [ ] Const. Error/Omission [ ] Design Error/Omission [ ]	See attachment.

14. Distribution (include name, MSIN, and no. of copies)	RELEASE STAMP

A-7900-013 (11/88)

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1): 113805

15. Design Verification Required	16. Cost Impact				17. Schedule Impact (days)
	ENGINEERING		CONSTRUCTION		
☐ Yes	Additional ☐	$ ____	Additional ☐	$ ____	Improvement ☐ ____
☐ No	Savings ☐	$ ____	Savings ☐	$ ____	Delay ☐ ____

18. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

SDD/DD	☐	Seismic/Stress Analysis	☐	Tank Calibration Manual	☐
Functional Design Criteria	☐	Stress/Design Report	☐	Health Physics Procedure	☐
Operating Specification	☐	Interface Control Drawing	☐	Spares Multiple Unit Listing	☐
Criticality Specification	☐	Calibration Procedure	☐	Test Procedures/Specification	☐
Conceptual Design Report	☐	Installation Procedure	☐	Component Index	☐
Equipment Spec.	☐	Maintenance Procedure	☐	ASME Coded Item	☐
Const. Spec.	☐	Engineering Procedure	☐	Human Factor Consideration	☐
Procurement Spec.	☐	Operating Instruction	☐	Computer Software	☐
Vendor Information	☐	Operating Procedure	☐	Electric Circuit Schedule	☐
OM Manual	☐	Operational Safety Requirement	☐	ICRS Procedure	☐
FSAR/SAR	☐	IEFD Drawing	☐	Process Control Manual/Plan	☐
Safety Equipment List	☐	Cell Arrangement Drawing	☐	Process Flow Chart	☐
Radiation Work Permit	☐	Essential Material Specification	☐	Purchase Requisition	☐
Environmental Impact Statement	☐	Fac. Proc. Samp. Schedule	☐	____	☐
Environmental Report	☐	Inspection Plan	☐	____	☐
Environmental Permit	☐	Inventory Adjustment Request	☐	____	☐

19. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number/Revision
N/A		

20. Approvals

	Signature	Date
OPERATIONS AND ENGINEERING		
Cog./~~Project~~ Engineer	B.A. WILLIAMS	2/1/91
Cog./Project Engr. Mgr.	A.J. Koepp	2/1/91
QA	L.W. Vance	2-6-91
Safety	D.J. Alexander, D.J. Alexander	2-6-91
Security		
Proj.Prog./Dept. Mgr.		
Def. React. Div.		
Chem. Proc. Div.		
Def. Wst. Mgmt. Div.		
Adv. React. Dev. Div.		
Proj. Dept.		
Environ. Div.		
IRM Dept.		
Facility Rep. (Ops)		
Other		

	Signature	Date
ARCHITECT-ENGINEER		
PE		
QA		
Safety		
Design		
Other		
DEPARTMENT OF ENERGY		
ADDITIONAL		

Attachment to ECN 113805

13b. Justification Details

A Part B permit application for the Hanford Site 200 Areas Low-Level Burial Grounds (LLBG) (DOE-RL-88-20) has been submitted to Ecology. This application contains locations and construction details for twenty-eight additional groundwater monitoring wells not specified in the groundwater monitoring plan for the LLBG (WHC-SD-EN-AP-015, Rev. 0). Four additional well locations and revised locations for some wells have been identified in response to comments on the permit application. All thirty-two well locations will be documented in the next revision of the permit application. These monitoring wells are necessary to bring the LLBG monitoring plan into agreement with the permit application for final status for the groundwater monitoring requirements of WAC 173-303-645.

Table 1. Low-Level Waste Management Area 1
Proposed Groundwater Monitoring Wells

Interim Well Number	Hanford Coordinates	Estimated Depth (ft)	Screen Length (ft)
E10-MW3	N 46069 W 56725	270	15
E10-MW4	N 46506 W 56725	255	10
E10-MW5	N 46795 W 56475	243	10
E10-MW6	N 46795 W 56037	242	10
E10-MW9	N 46795 W 55550	236	10

Table 2. Low-Level Waste Management Area 2
Proposed Groundwater Monitoring Wells

Interim Well Number	Hanford Coordinates	Estimated Depth (ft)	Screen Length (ft)
E12-MW1	N 46620 W 51480	209	10
E12-MW2	N 46195 W 51480	219	10
E12-MW3	N 45770 W 51480	233	15
E12-MW4	N 45345 W 51480	241	15
E12-MW5	N 45095 W 51200	249	20
E12-MW6	N 44935 W 50800	248	20
E12-MW7	N 44760 W 50360	244	20

Table 3. Low-Level Waste Management Area 3
Proposed Groundwater Monitoring Wells

Interim Well Number	Hanford Coordinates	Estimated Depth (ft)	Screen Length (ft)
W5-MW2	N 46510 W 78245	241	20
W3-MW1	N 46510 W 77770	234	20

Table 4. Low-Level Waste Management Area 4
Proposed Groundwater Monitoring Wells

Interim Well Number	Hanford Coordinates	Estimated Depth (ft)	Screen Length (ft)
W4-MW6	N 38610 W 78100	235	20
W4-MW7	N 38210 W 78100	223	20
W4-MW8	N 37950 W 76545	218	20
W4-MW9	N 39230 W 78100	245	20

Table 5. Low-Level Waste Management Area 5
Proposed Groundwater Monitoring Wells

Interim Well Number	Hanford Coordinates	Estimated Depth (ft)	Screen Length (ft)
W6-MW1	N 45584 W 75010	249	20
W6-MW2	N 45385 W 74725	452	20
W6-MW3	N 45350 W 74685	255	20
W6-MW4	N 45150 N 74400	262	20
W6-MW5	N 45970 W 73670	269	20
W6-MW6	N 46510 W 73480	270	20
W6-MW7	N 46510 W 73800	265	20
W6-MW8	N 46510 W 74052	486	20
W6-MW9	N 46510 W 74077	261	20
W6-MW10	N 46510 W 74367	261	20
W6-MW11	N 46510 W 74682	253	20
W6-MW12	N 46510 W 75000	248	20
W6-MW13	N 46510 W 75312	246	20
W6-MW14	N 46510 W 75627	245	20

9 1 1 2 1 1 0 3 7 6

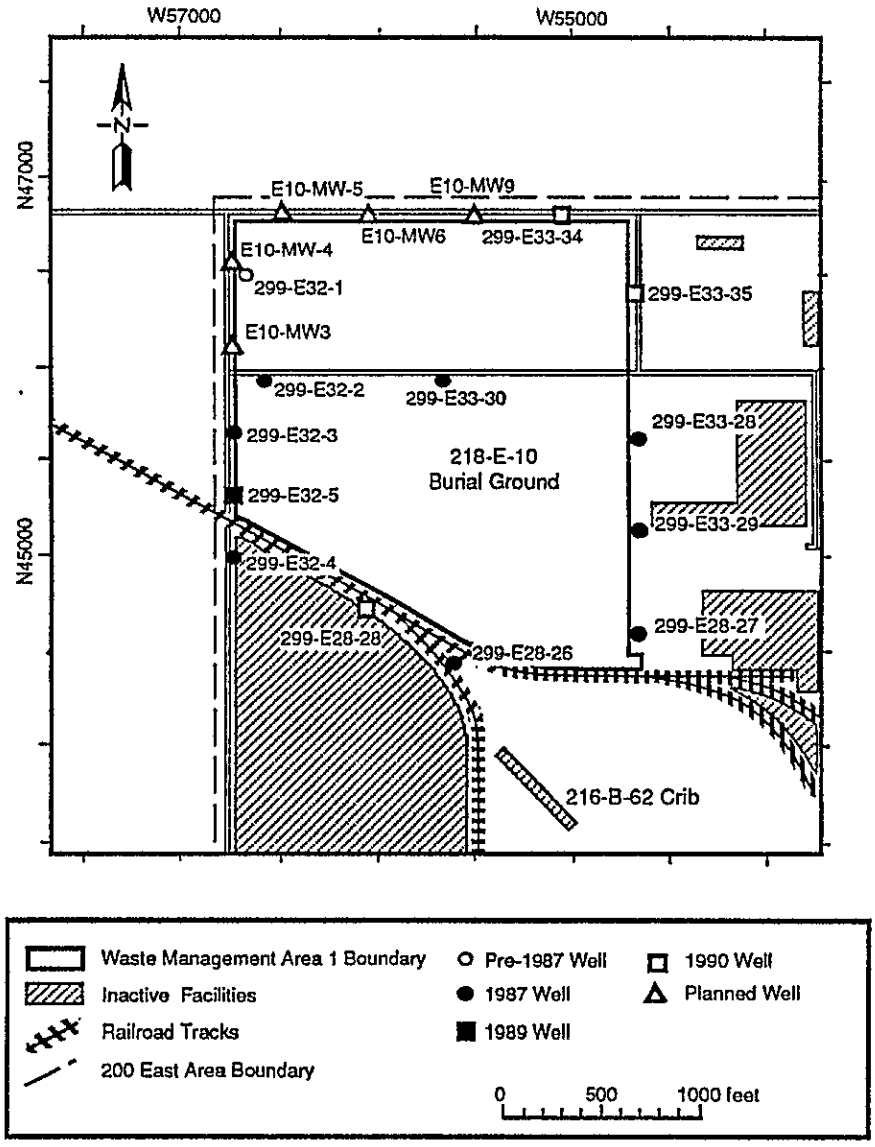

Figure 1. Well Locations for Waste Management Area 1

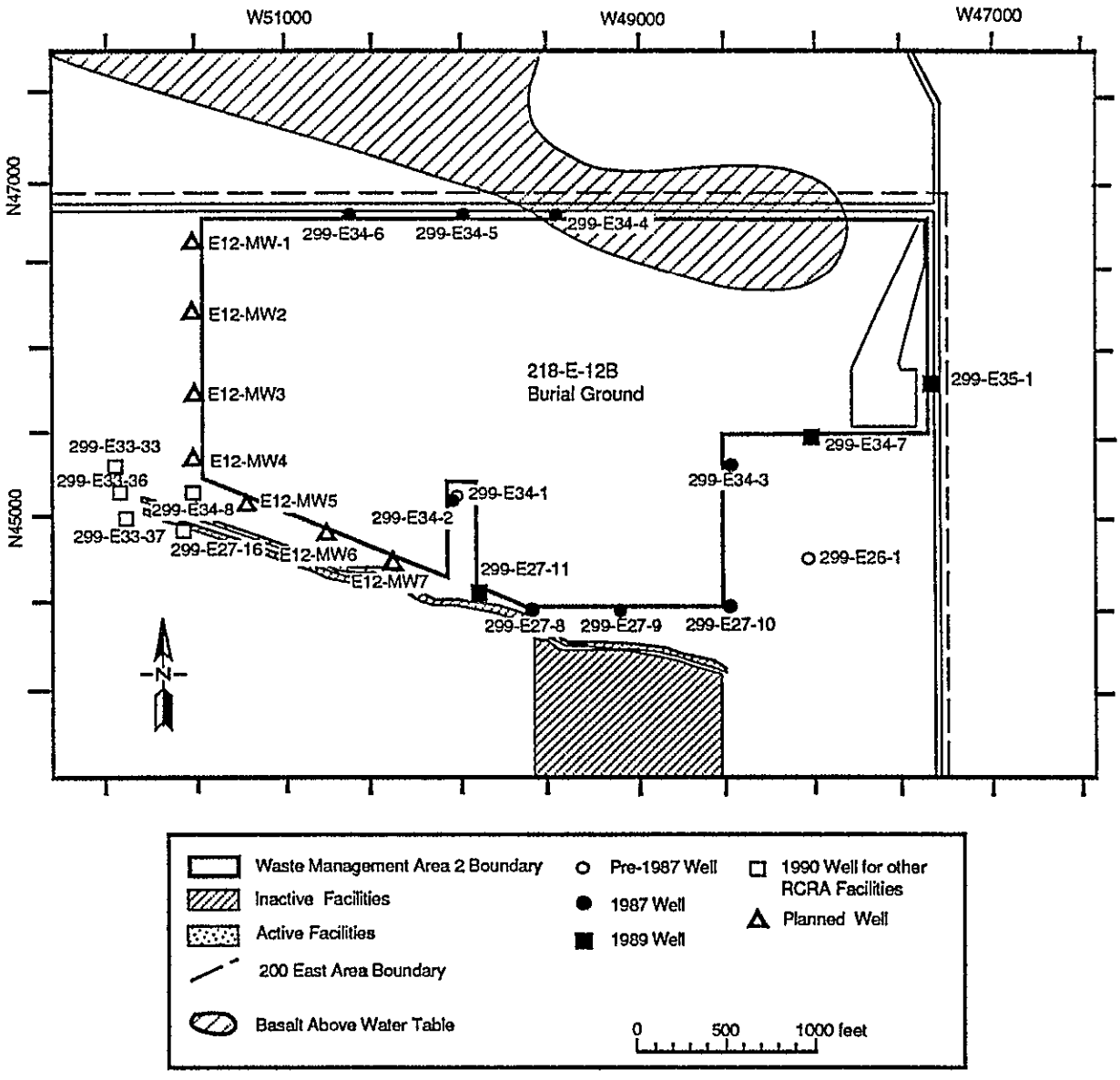

Figure 2. Well Locations for Waste Management Area 2

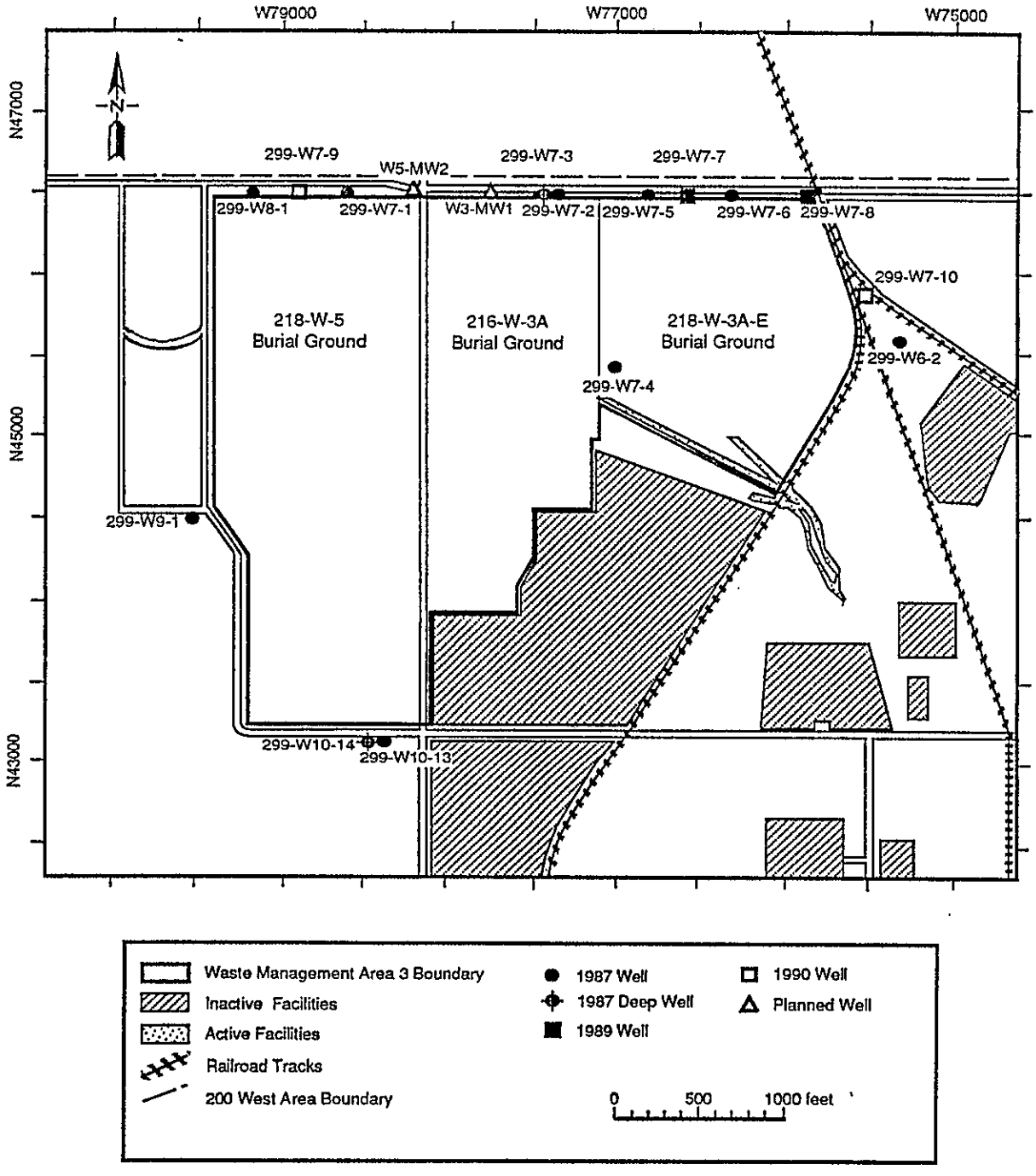

Figure 3. Well Locations for Waste Management Area 3

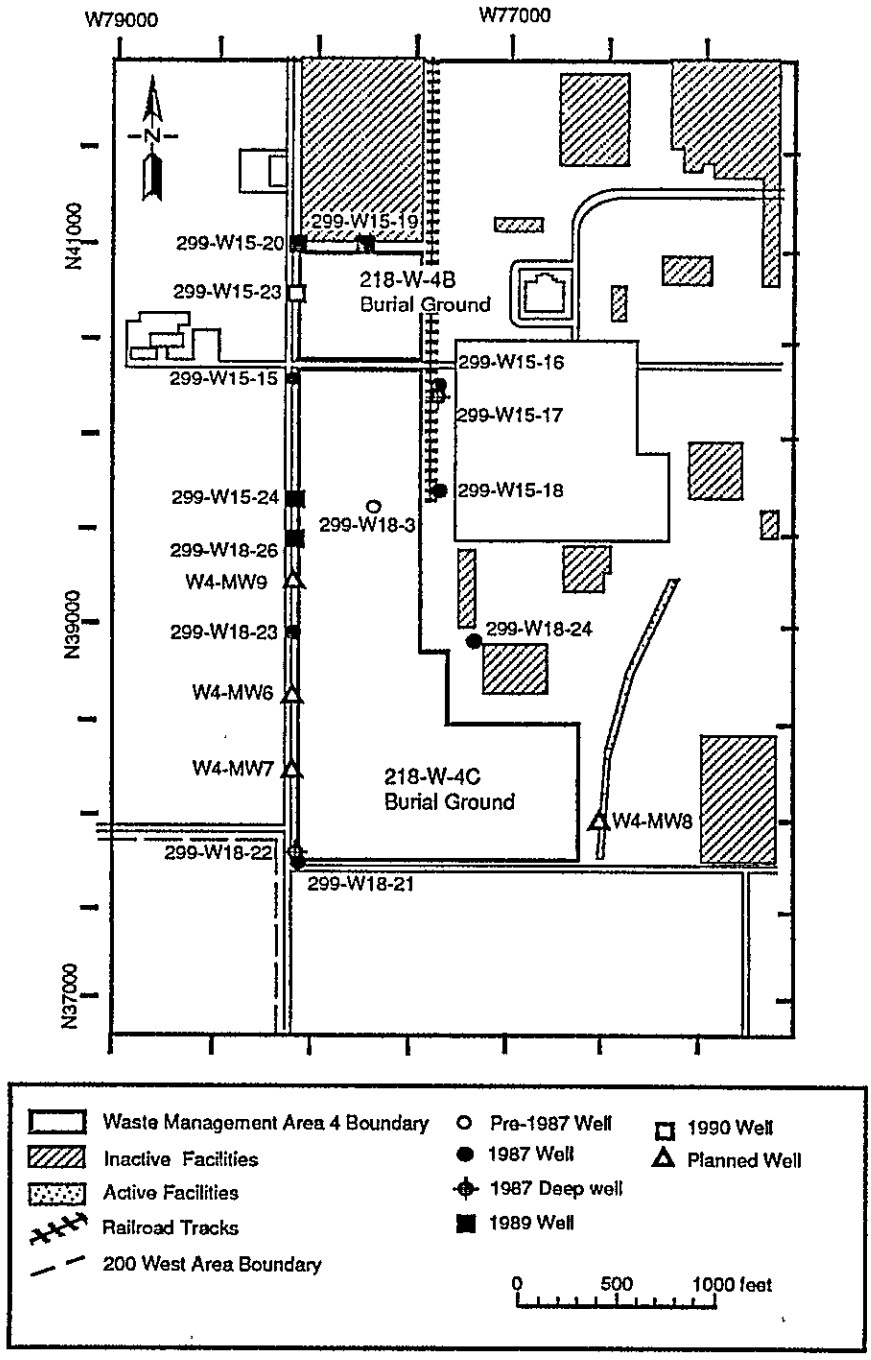

Figure 4. Well Locations for Waste Management Area 4

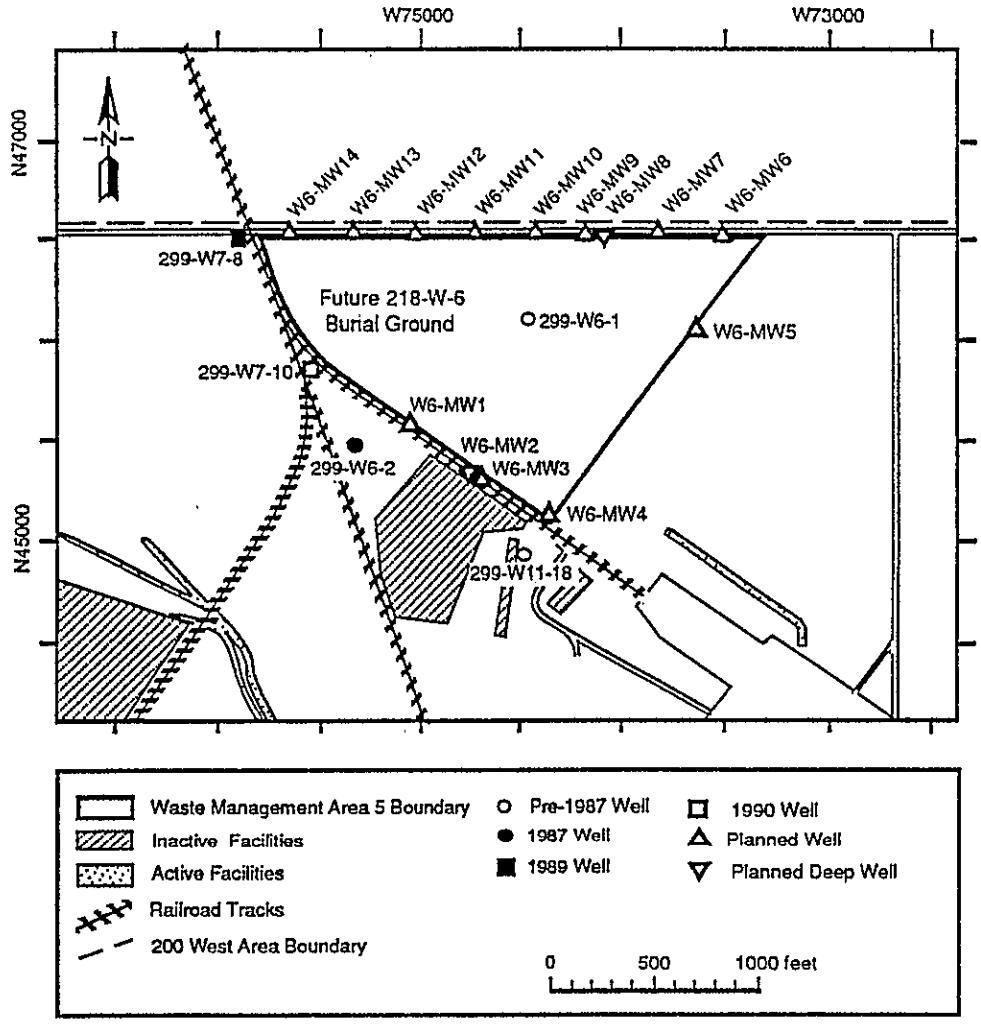

Figure 5. Well Locations for Waste Management Area 5