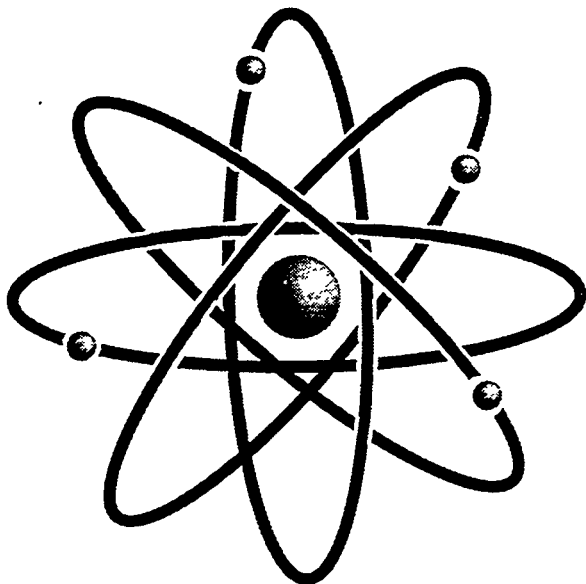




R-Area Reactor 1993 Annual Groundwater Monitoring Report

Publication Date: September 1994

Authorized Derivative Classifier:

Joseph P. Kanfleiter, Engineer 10-4-94

UNCLASSIFIED

Does Not Contain Unclassified
Controlled Nuclear Information

MASTER

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808



Prepared for the U.S. Department of Energy Under Contract Number DE-AC09-89SR18035

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

JR

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

This report has been reproduced directly from the best available copy.

Available to DOE and DOE contractors from the Office of Scientific and Technical Information, P. O. Box 62, Oak Ridge, TN 37831; prices available from (615) 576-8401.

Available to the public from the National Technical Information Service, U. S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

Table of Contents

Executive Summary	iii
Savannah River Site History	1
Process Overview	3
Reactor Area Processes	7
Assembly	7
Inside the Reactor	9
Post-Irradiation Cooling	11
Disassembly	12
Heavy-Water Purification	14
Storage and Disposal of Waste	14
High-Level Waste	14
Transuranic Waste	15
Low-Level Waste	15
Hazardous Waste	15
Mixed Waste	15
Sanitary Waste	17
R-Area History	18
R Reactor	18
Reactor Modifications	19
Reactor Shutdown	19
1964-Present	21
Burning/Rubble Pits	21
Ash Basin	21
Acid/Caustic Basin	21
Seepage Basins	22
Par Pond	22
Bingham Pump Outage Pits	22
Environmental Data	24
Well Series P in R Area	25
Acid/Caustic Basin (RAC Well Series)	26
DWS and Indicator Parameters	26
Flag 2 Criteria	26
Ash Basin/Coal Pile (RCP Well Series)	28
1993 Data	29
Disassembly Basin (RDB Well Series)	29
DWS and Indicator Parameters	29
Flag 2 Criteria	30
Time Series Plots	30
1993 Data	32

Burning/Rubble Pits (RRP Well Series).....	32
DWS and Indicator Parameters	32
Flag 2 Criteria	33
1993 Data	33
Seepage Basins (RSA, RSB, RSC, RSD, RSE, and RSF Well Series)	34
DWS and Indicator Parameters	34
Flag 2 Criteria	35
1993 Data	41
References	50
Glossary	55
Appendix A: Final Primary Drinking Water Standards.....	A-1
Appendix B: Flagging Criteria.....	B-1
Appendix C: Groundwater Monitoring Results for Individual Wells during 1993	C-1
Appendix D: Time Series Plots	D-1

Executive Summary

Groundwater was sampled and analyzed during 1993 from wells monitoring the following locations in R Area: well cluster P20 east of R Area (one well each in the water table and the McBean formation), the R-Area Acid/Caustic Basin (the four water-table wells of the RAC series), the R-Area Ash Basin/Coal Pile (one well of the RCP series in the Congaree formation and one in the water table), the R-Area Disassembly Basin (the three water-table wells of the RDB series), the R-Area Burning/Rubble Pits (the four water-table wells of the RRP series), and the R-Area Seepage Basins (numerous water-table wells in the RSA, RSB, RSC, RSD, RSE, and RSF series).

Lead was the only constituent detected above its 50 µg/L standard in any but the seepage basin wells; it exceeded that level in one RDB well and in 23 of the seepage basin wells. Cadmium exceeded its drinking water standard (DWS) in 30 of the seepage basin wells, as did mercury in 10. Nitrate-nitrite was above DWS once each in two seepage basin wells.

Tritium was above DWS in six seepage basin wells, as was gross alpha activity in 22. Nonvolatile beta exceeded its screening standard in 29 wells.

Extensive radionuclide analyses were requested during 1993 for the RCP series and most of the seepage basin wells. Strontium-90 in eight wells was the only specific radionuclide other than tritium detected above DWS; it appeared to account for about one-half of the nonvolatile beta activity in those wells.

R-Area Reactor

Savannah River Site History

In September 1949, the Soviet Union completed successful testing of its first atomic weapon. In response to this development, the United States Department of Defense began planning for a more diversified stockpile of nuclear armaments. In January 1950, President Harry Truman directed the United States Atomic Energy Commission (AEC) to increase research on all forms of nuclear defense, particularly the "super" or hydrogen weapon.

On June 12, 1950, the AEC contracted with E.I. du Pont de Nemours and Company to design, construct, and operate the Savannah River Plant for the purpose of producing materials for use in nuclear and thermonuclear weapons. Site surveys began in July 1950. The plant is located in Aiken, Barnwell, and Allendale counties in South Carolina, southeast of Augusta, Georgia (Figure 1).

Construction of the complex began in February 1951, and the heavy water processing plant became the first facility in operation in August 1952. R Reactor was the first production unit to achieve criticality (December 28, 1953) and was followed by P, L, K, and C Reactors, respectively.

In 1975, the duties of the AEC were transferred to the newly established Energy Research and Development Administration and the Nuclear Regulatory Commission. In 1976, these two agencies evolved into the Department of Energy (DOE), which has overseen all functions of the facility since that year. Du Pont operated the complex through March 1989. On April 1, 1989, Westinghouse Savannah River Company (WSRC) became the operating contractor, and the Savannah River Plant was renamed the Savannah River Site (SRS).

During the period of weapons-grade material production, the SRS complex consisted of a heavy water production and rework facility, a fuel and target fabrication plant, five reactors, two chemical separations plants, and a number of waste management facilities. As of August 1994, all SRS production reactors are inactive. C, L, P, and R Reactors are in shutdown status, and K Reactor remains in cold standby.

Recent functions of the SRS complex have included the recycling of nuclear components and the production of isotopes for medical applications and nonweapons use in the nation's space program. In addition to these tasks, SRS' environmental restoration and waste management activities have been expanded.

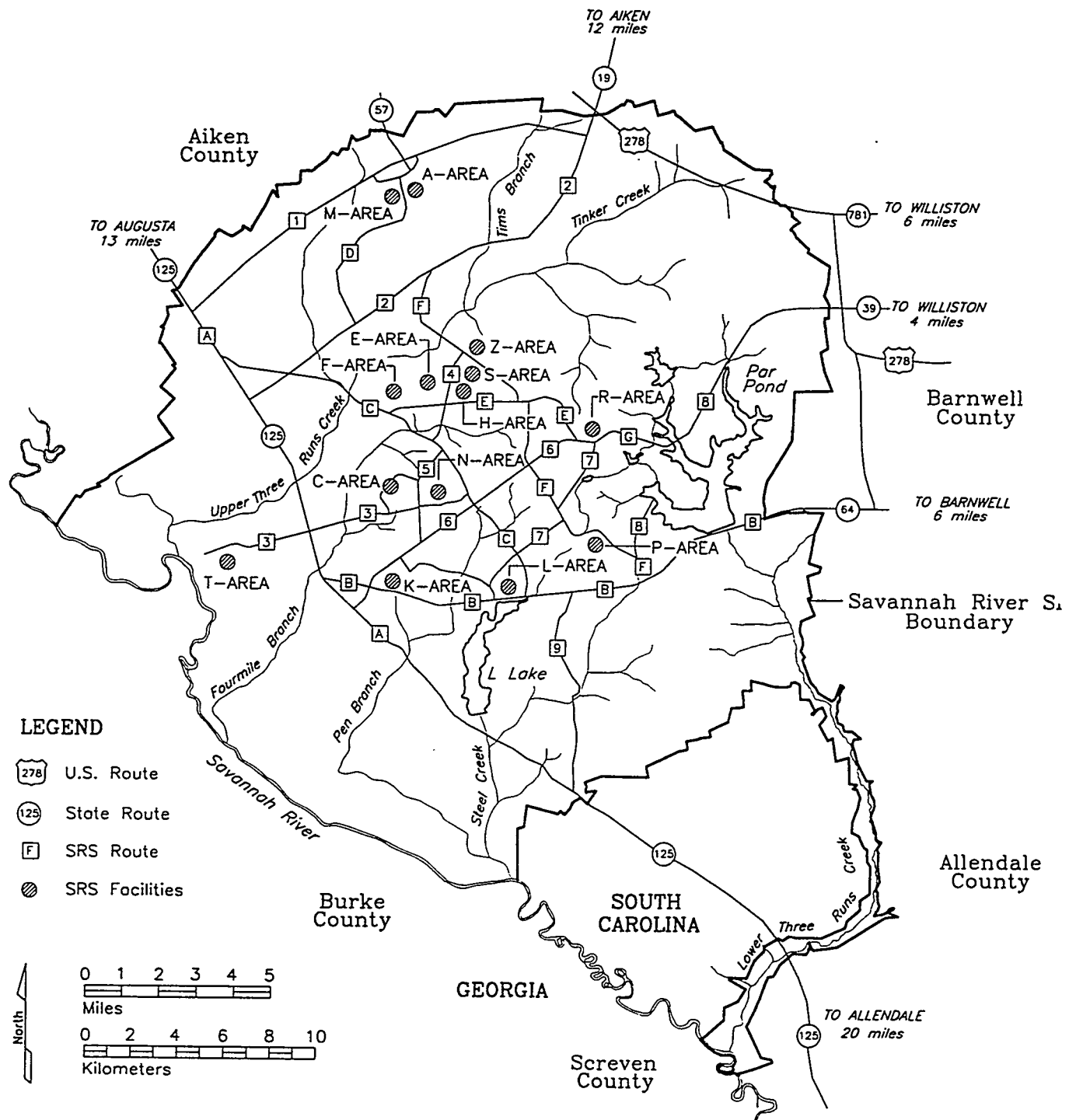


Figure 1. Savannah River Site and Its Environs

Process Overview

The primary materials produced at the Savannah River Site during operation were plutonium (Pu-238 and Pu-239) and tritium (H-3). These products were produced by absorption of neutrons in neptunium (Np-237), uranium (U-238), and lithium (Li-6).

The production process consisted of

- Fabrication of fuel and target materials into elements/assemblies
- Irradiation of these assemblies in the reactors
- Separation of transuranic elements, tritium, and residual uranium from waste byproducts produced by irradiation
- Recovery and purification of heavy water used as a coolant and neutron moderator
- Storage, processing, and disposal of waste

Figure 2 provides an overview of the production process.

During reactor operation, neutrons caused uranium-235 atoms to split into lighter atoms (fission). In addition, each fissioned uranium-235 atom released two to three neutrons. This surge of released neutrons, which split more uranium-235 atoms, resulted in a chain reaction that generated enormous amounts of energy.

Some neutrons from the chain reaction were captured by uranium-238 atoms. When a uranium atom captured a neutron, the atom became an artificial and unstable isotope known as uranium-239. The uranium-239 emitted a beta particle to form neptunium-239, which in turn emitted another beta particle to form plutonium-239.

Reactors were moderated and heat generated by fissioning was cooled by recirculating heavy water (deuterium oxide or D₂O). The combination of high moderating ability and low neutron absorption provided by heavy water permitted flexibility in designing different charges to produce different products. Heat was removed from the heavy water in the reactor coolant system's heat exchangers by a once-through flow of "light" water (H₂O) from either the Savannah River or one of two man-made reservoirs, Par Pond or L Lake. Figure 3 illustrates the site-wide flow of cooling water from its surface water sources to the reactor buildings and back to surface water.

At the conclusion of controlled fissioning, fuel and target assemblies were moved from the reactor core to a large pool of water in the reactor building to permit decay of short-lived fission products before the assemblies were delivered to one of the chemical separations plants within the SRS complex.

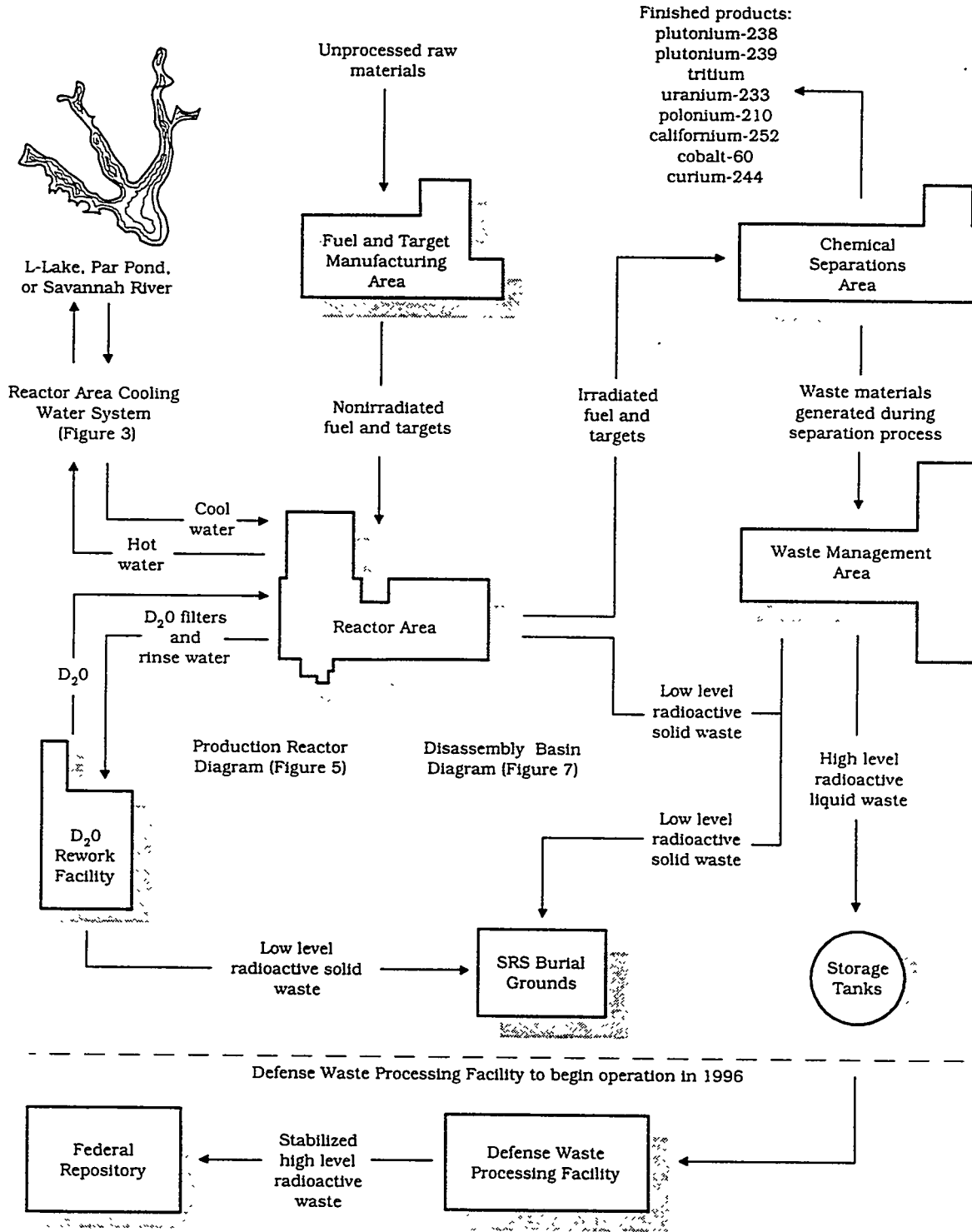


Figure 2. Production Process Diagram

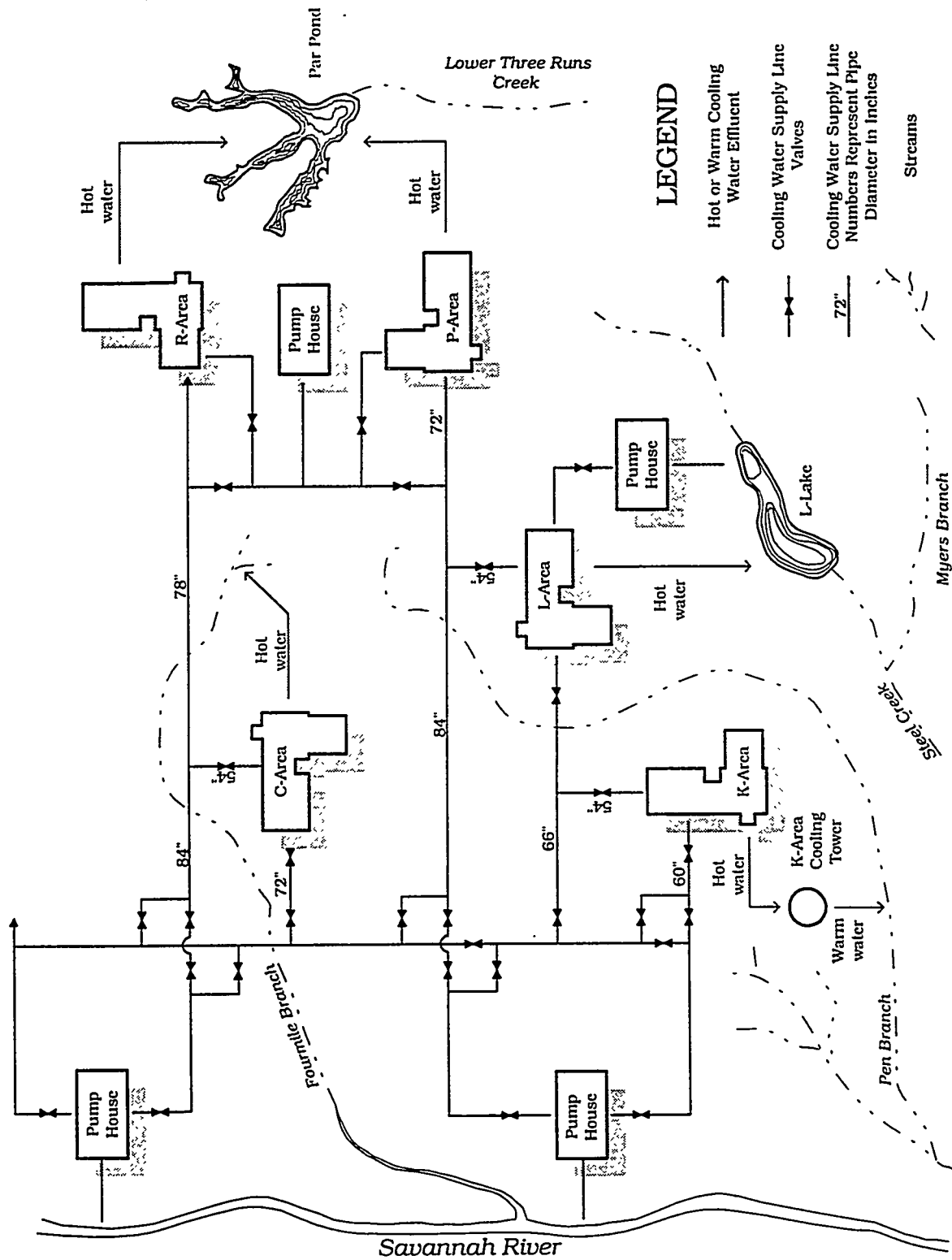


Figure 3. Cooling Water Supply Diagram

Reactor-produced materials were processed in the Separations Area. Target rods were processed to obtain the desired radioactive products, which were compressed in cylinders (tritium) or converted into solids (plutonium) for shipment to other DOE facilities. Gases were extracted from irradiated reactor elements in an electric furnace in the tritium facilities. Several purification steps produced high-purity tritium.

Aluminum cladding on the uranium target slugs was dissolved in sodium hydroxide solution, followed by dissolution of the target material in nitric acid. Spent uranium fuel also was dissolved in nitric acid. After this dissolution, the subsequent nitric acid solution was treated by a solvent extraction process to yield solutions of plutonium, uranium, or neptunium. This method also produced both high- and low-heat liquid wastes containing fission products. Additional processing transformed plutonium, uranium, and other higher Z (atomic number) products from solution to solid for shipment, recycling, or processing.

Liquid radioactive wastes produced by the chemical processing were partially concentrated and stored in large underground tanks in the Separations Area, and low-level radioactive solid wastes were disposed of in the centrally located burial grounds.

Reactor Area Processes

All five SRS reactors were production reactors used to fabricate nuclear materials for both government and civilian uses. They were designed to produce thermal neutrons that could be used to create a large amount of isotopes.

The two main products were plutonium (produced by the absorption of neutrons in the uranium-238 isotope) and tritium (produced by the absorption of neutrons in the lithium-6 isotope). Other products manufactured at SRS included uranium-233, plutonium-238, curium-244, polonium-210, cobalt-60, and californium-252.

The reactor buildings are large, reinforced concrete structures designed to be blast-resistant and reinforced for seismic activity. Heavy concrete shielding and a confinement system were used within each building to protect personnel from radiation and to minimize atmospheric radioactive releases. A cross section of a reactor building is provided in Figure 4. Each building contained four major process areas:

- The assembly area containing the fuel and target receiving areas, assembly and testing areas, and fuel storage areas
- The production reactor and its supporting operational and safety systems
- The disassembly area consisting of a pool (basin) for the storage and disassembly of irradiated fuel and target elements
- A purification-system area containing heavy-water moderator/coolant (D₂O) purification facilities

Assembly

New fuel for use in the reactor process was received, assembled, inspected, tested, and stored in the reactor building's assembly area. The fuel and target fabrication facility manufactured fuel, target, control, and safety rods for use in the production reactors. Fuel and target materials were organized into the proper operating configurations in the assembly area.

During the production process, fuel assemblies produced neutrons for the target assemblies, causing nuclear reactions that eventually produced the desired materials. Fuel rods consisted of extruded enriched-uranium fuel slugs arrayed in aluminum casing. Target rods usually consisted of uranium or lithium (depending on the product to be produced) inside a lithium-aluminum alloy jacket. Aluminum was used because of its low neutron absorption rate, good heat transfer ability, and ability to be easily processed.

Control rods were used to regulate neutron exchange, and safety rods provided immediate shutdown in case of adverse conditions. Control rods were composed of either cadmium or lithium-aluminum depending on the desired product to be

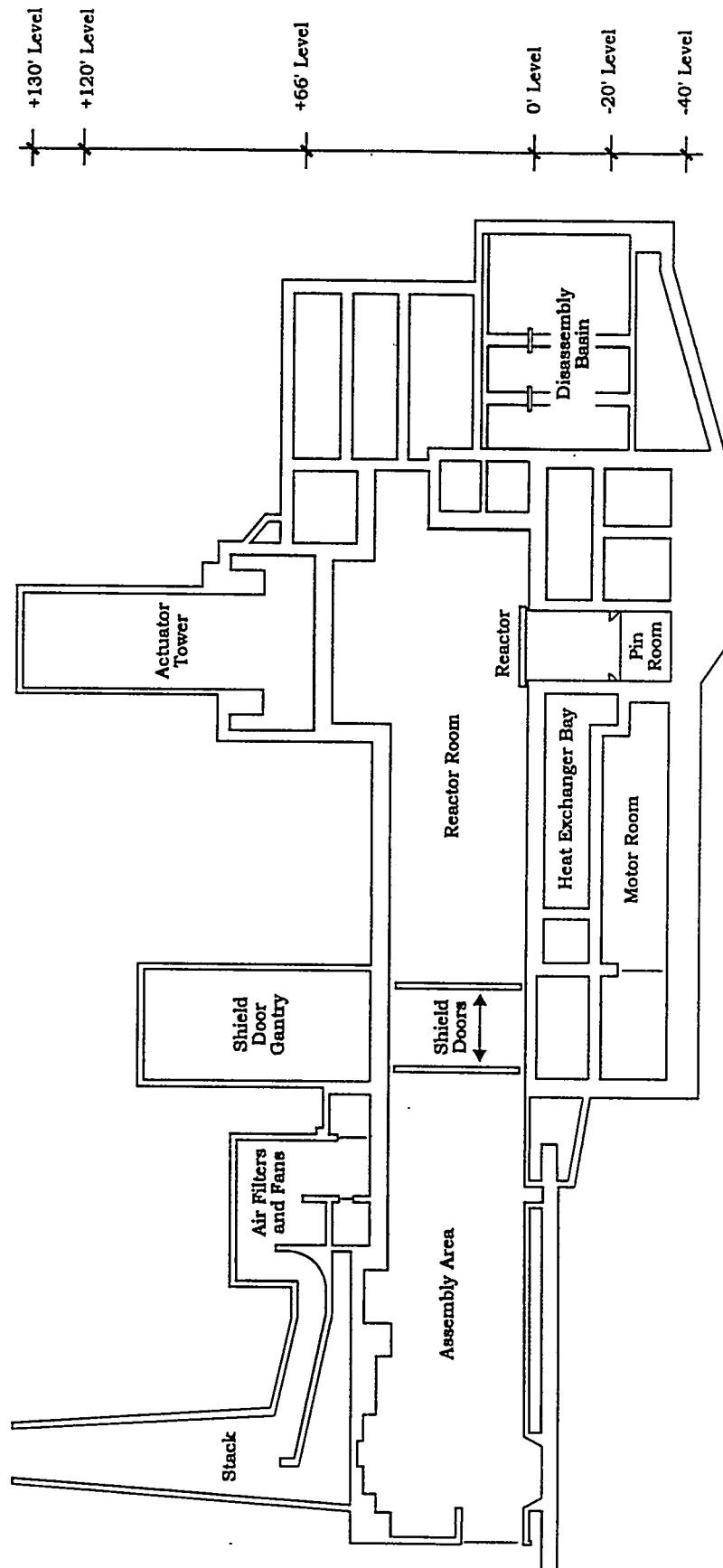


Figure 4. Schematic Cross Section of Reactor

manufactured. Safety rods were fabricated from cadmium and were designed as safeguards against reactor core damage. Cadmium was used in safety and control rods because of its high neutron absorption rate.

Equipment in the assembly area included an inlet conveyor, a charge machine, a discharge machine, and a deposit-and-exit conveyor. The charge and discharge machines were cranes that could perform similar functions, but only the discharge machine could supply heavy- or light-water cooling to an irradiated assembly as it was being removed from the reactor vessel. The charge machine transported assemblies from the assembly area to the reactor.

Inside the Reactor

The reactor area was located in the central portion of the reactor building and housed the reactor, actuator system, heat exchangers, process pumps and piping, motors, crane and reactor control rooms, crane wash and maintenance areas, and auxiliary equipment and service facilities.

Process monitoring and control of the reactor was accomplished in the central control room. Reactivity instruments, controls, and assembly flow and temperature monitors were grouped together at one end of the control room, and instruments for hydraulic and auxiliary systems were at the opposite end.

The nuclear fission process took place within reactor vessels, 4.5 m x 5 m cylinders composed of 1/2-in. stainless steel plate and containing a lattice of fuel and target assemblies, control rods, and instrumentation submerged in the primary heavy-water moderator/coolant. Figure 5 illustrates the process.

The reactor vessels were designed so that D₂O coolant entered through six nozzles at the top of the reactor into a plenum, flowed down coolant channels in the fuel and target assemblies, and discharged into the bulk moderator. Coolant then left through six nozzles at the bottom of the reactor vessel. A gas plenum and top radiation shield were located between the inlet water plenum and the reactor vessel. A radiation shield located under each reactor vessel provided flow and temperature monitoring for each fuel and target position. Figure 6 illustrates a reactor tank.

The assemblies and rods were arranged within a lattice framework to provide the most effective nuclear fission environment. Reactor lattices consisted of approximately 600 fuel and target rods and additional safety rod and control rod clusters that were housed in the reactor tank. Fuel and target rods were arranged in various loading patterns within the reactor to form a charge to initiate the nuclear process. As charging began, the fuel and targets were lifted by the charging machine and inserted into holes in the reactor tank lattice. The flow of D₂O and H₂O was raised to operating levels to moderate the reaction and cool the fuel rods. Safety rods were then extracted by the discharging crane in a predetermined order, followed by the control rods.

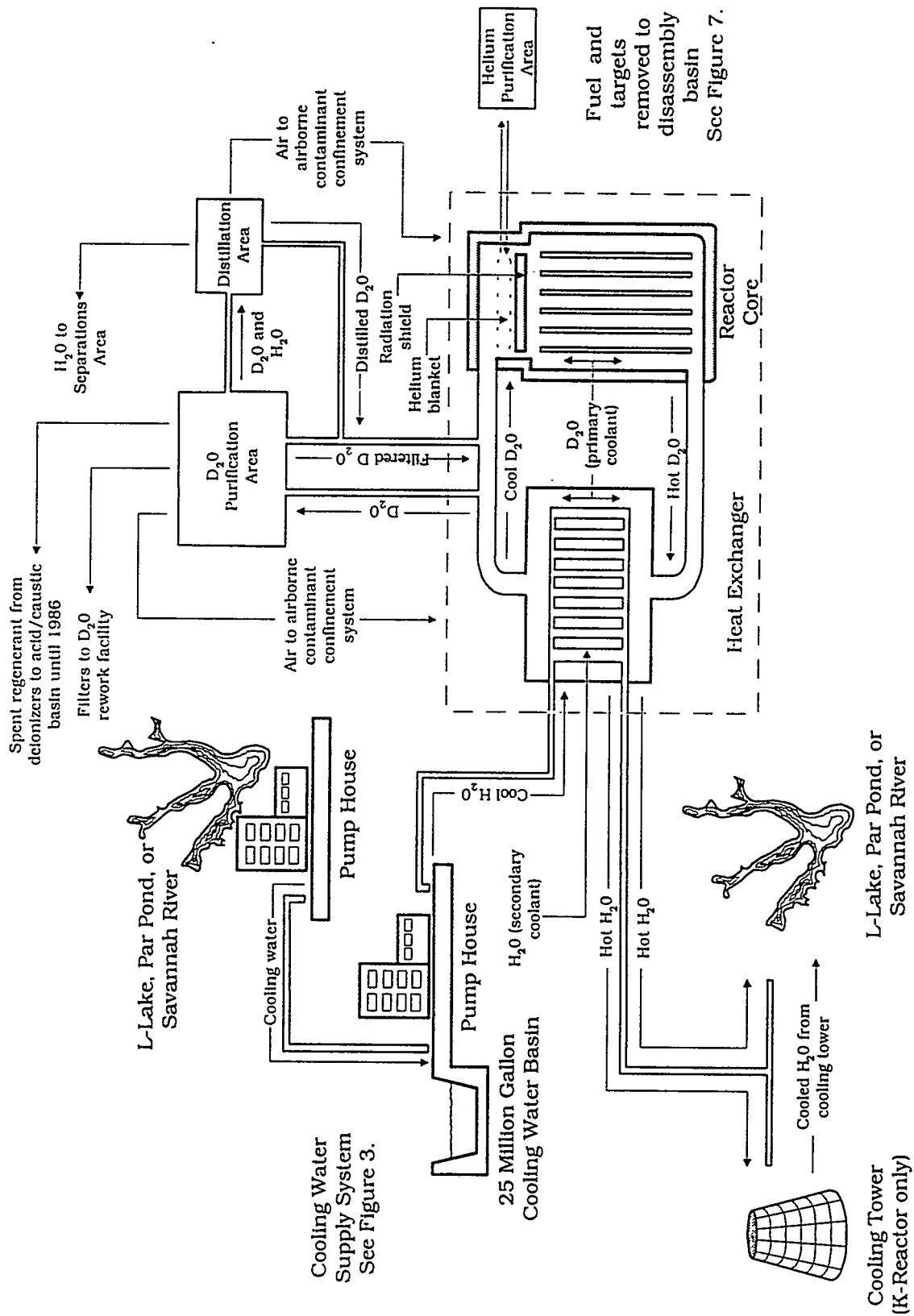


Figure 5. Reactor Cooling System Diagram

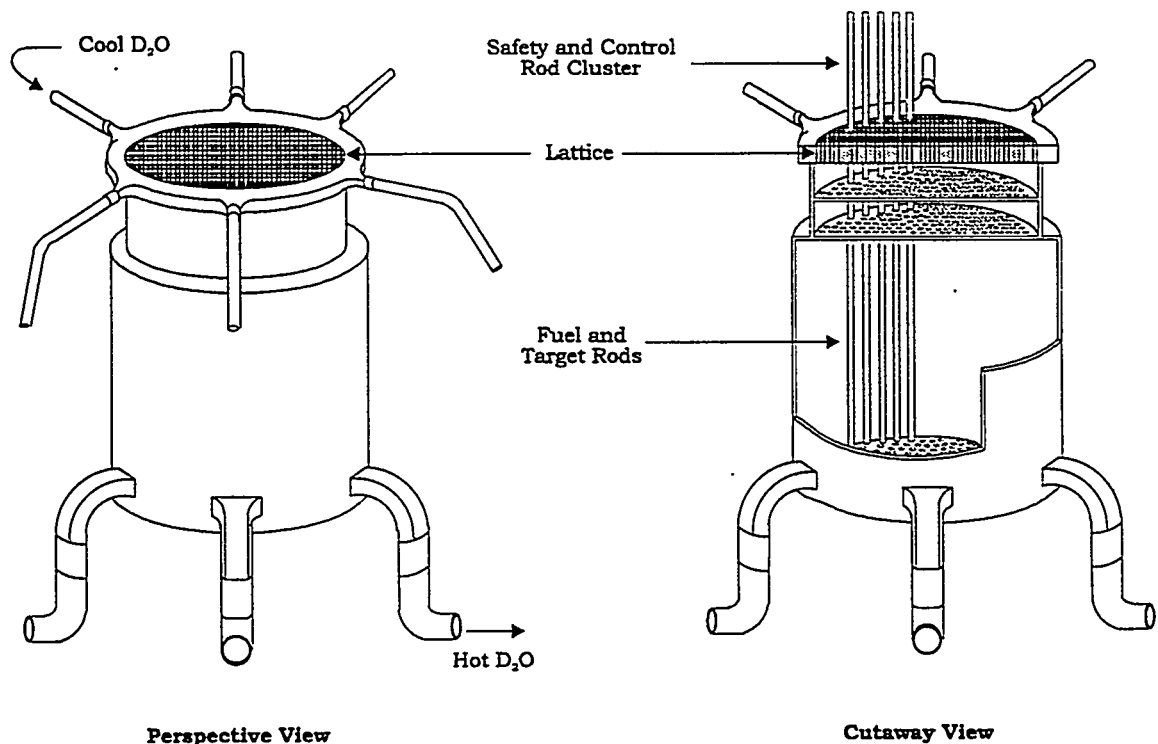


Figure 6. Reactor Tank

When the safety and control rod clusters were lifted by the discharging machine, the nuclear reaction began. The number and rate at which the rods were removed were closely specified. After the achievement of criticality, the rate of the reaction was raised by adjusting the control rod pattern.

Neutron-absorbing control rods were inserted into the core to regulate power levels by controlling flux, or flow of neutrons, in the reactor. Each fuel and target position contained control rods that could be moved individually or in groups. Two half-length rods in each position controlled the vertical flux distribution, and full-length rods controlled power and radial flux distribution.

Safety rods provided a primary rapid-shutdown system to prevent core damage to the reactor. They were designed to drop into the reactor core within one second upon indication of adverse conditions. Each reactor had a supply of 66 neutron-absorbing cadmium safety rods.

Post-Irradiation Cooling

Following irradiation, fuel and target assemblies were allowed to decay to a specified heat-generation rate prior to assembly discharge. After sufficient heat-generation-rate decay, the discharge machine removed all assemblies from the reactor vessel and rinsed all fuel and target rods with light water. The rinsing

process allowed heavy water reclamation from the discharged assemblies and minimum carryover of tritiated water to the disassembly basin. The rinse water was collected in a discharge machine water pan and sent to a rinse collection tank. The rinse water was periodically removed from the tank, placed in drums, and transported to the heavy-water rework facility for removal of light water.

Cooling began automatically when an irradiated assembly was completely withdrawn from the reactor. Cooling could also be enacted if an assembly stuck during withdrawal. Both heavy and light cooling water were available on the discharge machine during the discharge operation.

The discharge machine transported irradiated assemblies to the deposit-and-exit conveyor, housed in a water-filled canal, which transported them beneath the reactor-room wall to a water-filled disassembly basin for temporary storage.

Disassembly

The disassembly basin was used to cool and disassemble all components used in the reaction process. Figure 7 illustrates the flow of cooling water and contaminants associated with activities at the disassembly basin.

The irradiated assemblies were held in the disassembly basin to permit decay of unwanted radionuclides generated by the fission process. Assemblies and components were cooled by natural convection during storage in the disassembly basin. In addition to cooling functions, the water within the basin served to shield personnel from radiation.

After sufficient heat-level decay, the assemblies were disassembled underwater, using submerged power tools. Disassembled components were stored in the basin and allowed to decay until their heat levels were acceptable for movement to the Separations Area.

The disassembled components were then moved from the basin to a transfer bay where they were deposited in shielded shipping casks. These casks were transported to the Separations Area by rail or tractor-trailer.

Discharged assemblies were often covered by a thin liquid film from the reactor vessel. This liquid film contained activated corrosion products, particulate activities, tritium, and other radioisotopes that could escape from irradiated assemblies. Assembly corrosion, cooling, and disassembly of the components added to the contamination of the disassembly basin water.

Due to the transfer of radiation from the irradiated materials to the disassembly basin water, biannual purging of the basin water was necessary to reduce the accumulation of tritium and any other radioactive substances. During disassembly basin purging, basin cooling water was passed through two deionizer beds, monitored, and discharged to a low-level seepage basin.

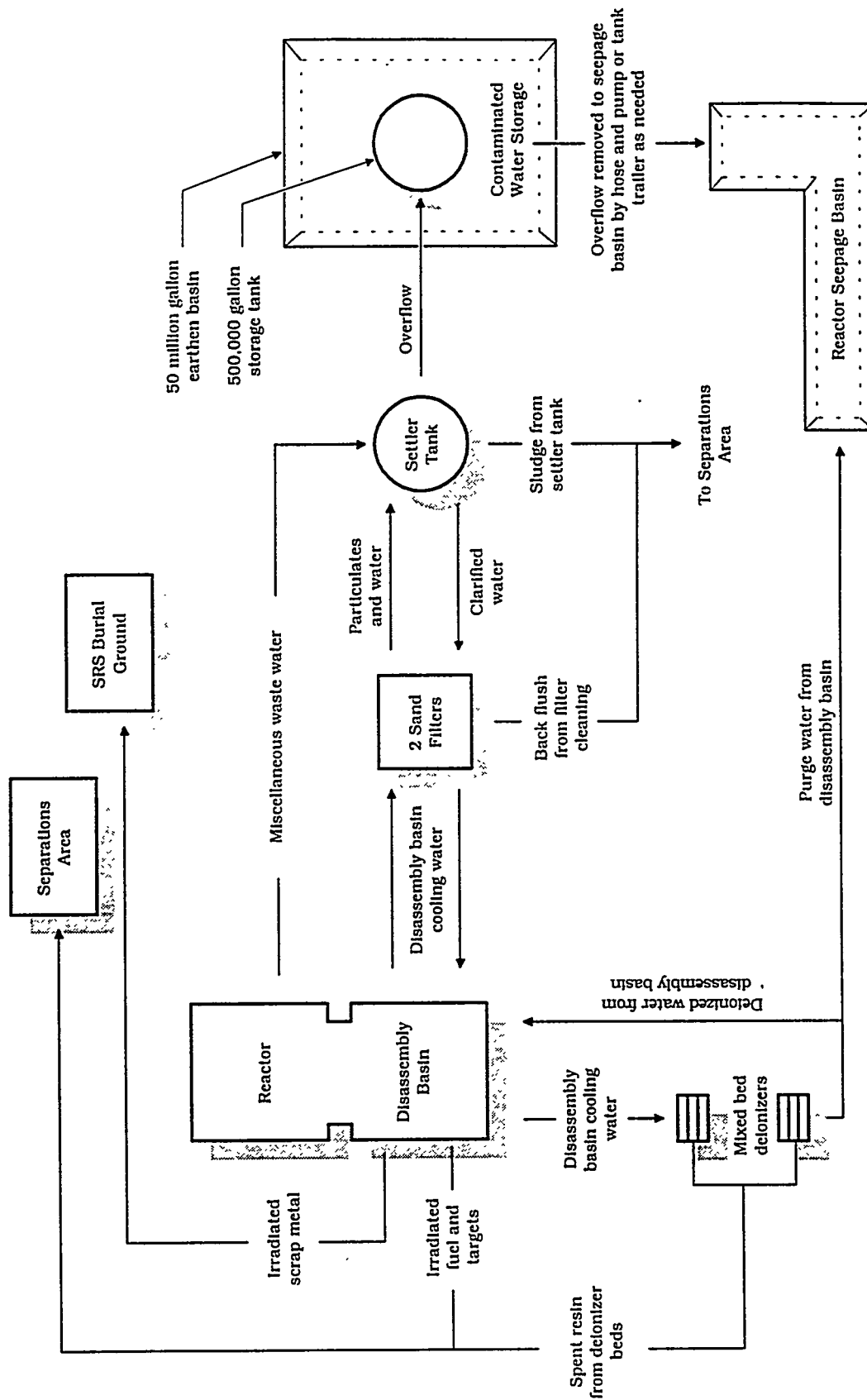


Figure 7. Disassembly Basin Diagram

Immediately after discharge, the fuel tubes were temporarily stored in a vertical array under water in the disassembly basin. The fuel tubes were subsequently emptied, collected, and stored in buckets.

Heavy-Water Purification

The function of the reactor building purification system area was to purify and recirculate the heavy water used as reactor coolant throughout the entire irradiation process.

During production, heavy-water moderator/coolant was subjected to several impurities, including the corrosion of aluminum cladding on fuel and target rods, the massing of neutron-absorbing substances that would otherwise be used in nuclear materials production, molecular decomposition of the heavy water into deuterium and oxygen as a result of radiation, neutron activation of component or suspended corrosion products and impurities, and accumulation of light water in the moderator.

During the production phase, heavy-water moderator/coolant was continuously purified through a system of filters in the reactor area. A side stream of heavy water was continuously diverted from the reactor circulating system and sent through a purification system, which circulated the primary coolant/moderator through a prefilter, a deionizer, and an afterfilter located in a shielded purification area. Most of the side stream was returned to the reactor system; the remainder was transported to a distillation area for light water removal.

The deionizer contained mixed-bed ion exchange resin for removal of both cations and anions. The filters retained particles larger than 10 micrometers in diameter. The prefilter removed suspended solids, and the afterfilter retained any resin that might have passed through the deionizer.

Storage and Disposal of Waste

SRS stores or disposes of six categories of waste:

- High-level waste
- Transuranic waste
- Low-level waste
- Hazardous waste
- Mixed waste
- Sanitary waste

High-Level Waste

The reactor areas did not produce or store high-level waste.

Transuranic Waste

Transuranic waste (TRU) is produced in radiological materials areas (RMAs) such as the reactor areas. TRU is defined as radioactive waste containing transuranic elements above specified concentrations. It decays slowly, thus requiring isolation for thousands of years. TRU waste comprises a variety of materials including miscellaneous trash and equipment. It is stored in the Separations Area.

Low-Level Waste

Low-level waste is any radioactive waste not classified as high-level or transuranic waste. It was generated by reactor operations, isotope production, and research and development projects.

Low-level reactor-produced waste includes contaminated equipment such as resins contaminated with carbon-14, irradiated reactor hardware that does not contain spent fuel, and spent lithium-aluminum targets. Other examples of low-level waste include pipe, rags, paper, filters, tools, protective clothing, and suspect materials used within a radiological materials area that cannot be proven to be uncontaminated.

Low-level radioactive solid wastes were disposed of in the centrally located Separations Areas' burial grounds.

Hazardous Waste

Hazardous waste is defined as any toxic, corrosive, reactive, or ignitable solid material that could damage the environment or pose a risk to human health.

Procedures to screen for radioactivity have been approved at SRS for liquids and solids originating either inside or outside an RMA. If approved for shipment, these wastes may be transported offsite for treatment and disposal. Wastes that fail the screening process must be recategorized as mixed waste.

Mixed Waste

Mixed waste is a combination of radioactive and hazardous wastes and is produced both inside and outside an RMA. Disposal in the Separations Area burial grounds of mixed wastes from reactor operations, including tritiated pump oil, lead used for shielding, and cadmium from control rods, safety rods, and shielding, was discontinued in March 1986. Mixed waste storage buildings within the boundaries of the burial grounds have been receiving such waste since March 1987.

Sanitary Waste

Sanitary waste is neither radioactive nor hazardous. Solid sanitary waste from throughout SRS is disposed of in the landfill; liquid sanitary waste, including sewage and industrial waste, is treated in SRS sewage treatment plants.

R-Area History

R Area (Figure 8) is in the northeast portion of the Savannah River Site. A timeline of major activities in the area is shown in Figure 9.

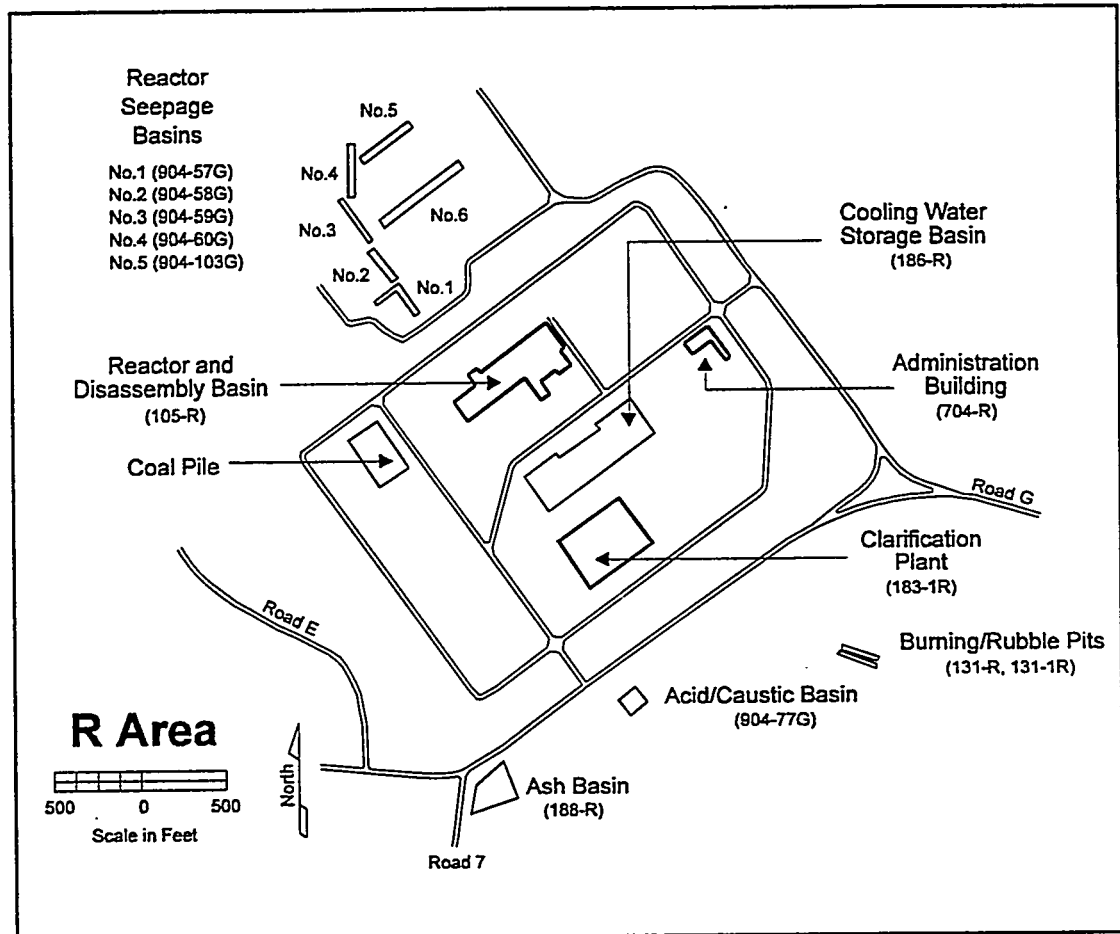


Figure 8. R Area

R Reactor

R Reactor was the first SRS production unit to achieve criticality (December 28, 1953). It produced plutonium and tritium for national defense until 1964, when it was placed in shutdown status. Equipment for operation and control of the reactor was upgraded several times to meet current standards.

Reactor Modifications

Cooling Systems

Each SRS reactor received major modifications to primary and secondary cooling systems beginning in 1957. Heat exchangers and larger heavy-water pumps (Bingham pumps) were installed at each production facility.

Ventilation Exhaust System

The ventilation exhaust system was modified in 1960–61 to remove airborne contaminants, particularly iodine-131, by providing moisture separators, particulate filters, and halogen adsorbers (carbon) in process area ventilation exhaust.

Emergency Cooling System

The emergency cooling system (ECS) received upgrades in 1962-63. A 50-million-gallon earthen cooling basin was constructed for ECS usage.

Remote Detection and Control System (REDAC)

A remote detection and control system (REDAC) installed in 1962-63 permitted system parameters to be monitored and other functions, such as the addition of light water if necessary, to be handled remotely (from another building) after an area evacuation.

Reactor Shutdown

R Reactor was placed in shutdown status in 1964 due to poor operating condition. Four major defects were found:

1. An effluent nozzle was leaking D₂O into the annular cavity in the reactor. Remote television inspection of the nozzle revealed a crack-like line believed to be the source of the leak.
2. The effluent nozzle had been patched at three locations in 1962. At that time, four additional cracked areas were identified but not repaired. A 1964 inspection revealed many discolored, pitted, and crack-like areas in the nozzle material adjacent to each of the three patches. The extent of corrosion was deemed more severe in 1964 than that observed in 1962.
3. Deionized water was leaking from a pipe into the bottom of the reactor vessel. A similar leak at a different location had been repaired in 1960.
4. The top shield had a small leak that was estimated to have existed since R-Reactor startup. Light water originally leaked from the shield into the

1950 through 1965

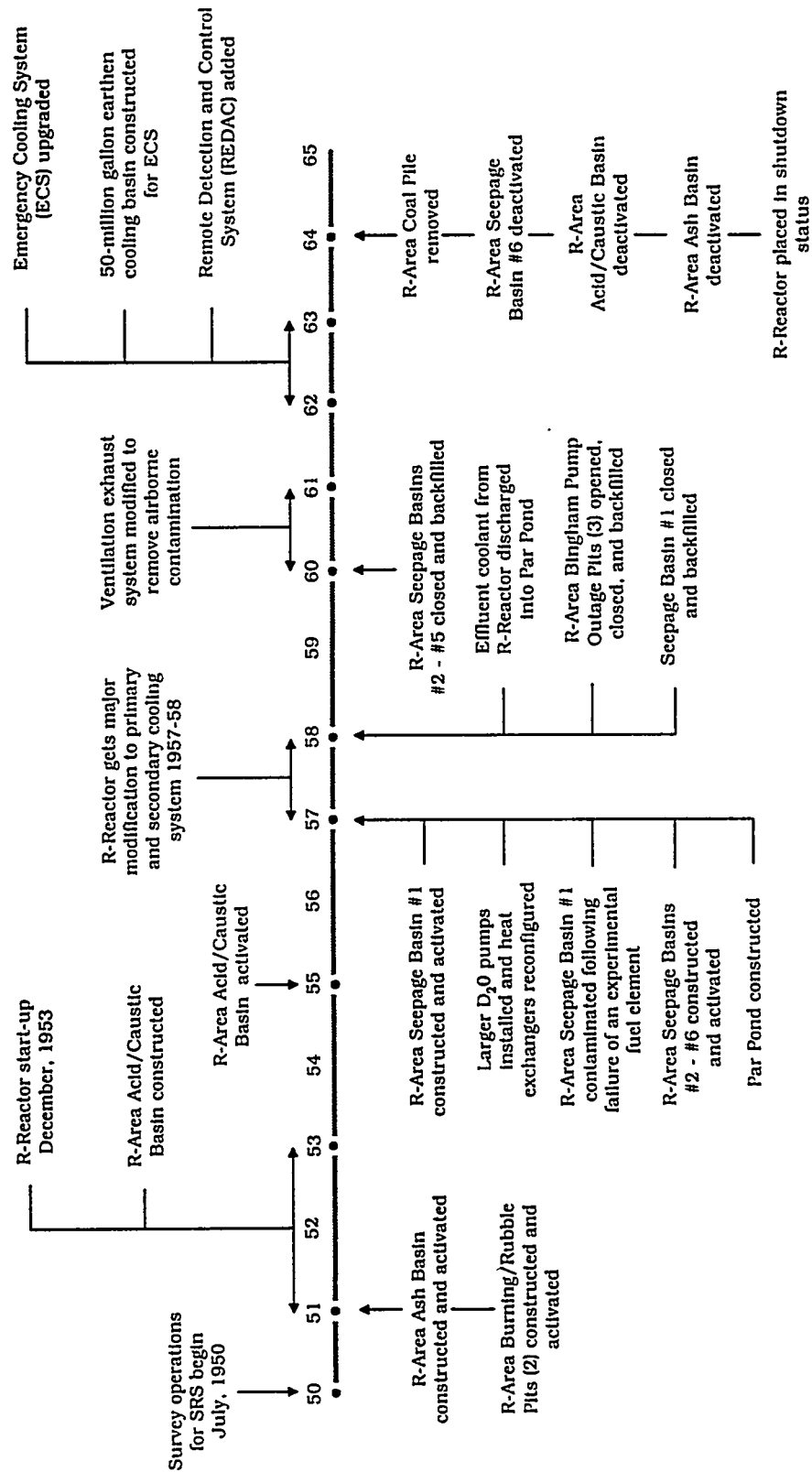


Figure 9. Time Line for R Area

reactor moderator. The pressure in the top shield was adjusted to reverse the leakage direction in 1955, and from then until shutdown the leakage was controlled. The point of leakage was thought to be a weld at the outer periphery of the bottom of a permanent tube position.

1964-Present

Since shutdown in 1964, there has been extensive cannibalization of equipment at R Reactor. No habitability systems are operable. There is only limited lighting with no emergency power. The reactor vessel has been emptied, there are no fuel assemblies in the disassembly basin, and the reactor fluid system has been drained. There are 60,000 gallons of moderator stored in drums, and 8,771 drums of depleted uranium oxide are stored in the area.

Burning/Rubble Pits

An abundance of construction debris necessitated the construction and activation of burning/rubble pits in R Area (Figure 8 and Maps 1 through 10) in 1951. The pits received burnable waste materials such as paper, plastics, wood, rubber, rags, cardboard, oil, degreasers, and drummed solvents. The collected waste materials were incinerated monthly.

Incineration of waste materials in all burning/rubble pits throughout the SRS complex was discontinued in October 1973. A layer of soil was placed over the remainder of the burning pit waste, and the pits began receiving only rubble. Allowable rubble waste included nonsalvageable materials such as bricks, concrete, tile, asphalt, plastics, rubber, wallboard, concrete, empty galvanized steel barrels, and cans.

When pit 131-R reached its capacity, it was closed and covered with soil to grade level. Burning/Rubble Pit 131-1R, which received small quantities of rubble, was not backfilled. All burning/rubble pits in the SRS complex were covered by 1981.

Ash Basin

The R-Area Ash Basin (Figure 8 and Maps 1 through 10) was constructed in 1953 to receive fly and bottom ash from the R-Area powerhouse. Each powerhouse was a coal-operated facility that supplied power to the reactor areas. The R-Area Ash Basin was deactivated in 1964.

Acid/Caustic Basin

The R-Area Acid/Caustic Basin (Figure 8 and Maps 1 through 10) was constructed in 1955 to receive spent regenerant solutions from the water treatment facilities. Wastes discharged to the Acid/Caustic Basin included dilute sulfuric acid and sodium hydroxide used to regenerate ion exchange units, water

rinses of the ion exchange units both before and after regeneration, steam condensate from the heater in sodium hydroxide storage tanks, and rainfall runoff from storage tank spill containment enclosures. The spent dilute solutions were transported to the acid/caustic basin through acid-resistant sewers.

The basins discharged into local surface streams, and the daily discharges normally equaled the daily influent flows to the basins.

Seepage Basins

The first R-Area seepage basin (Figure 8 and Maps 1 through 10) was constructed and put into operation in 1957. The seepage basin was designed to receive low-level radioactive purge water from the R-Area disassembly basin. The water purge was necessary to keep the tritium concentration in the disassembly basin water below the level that ensured safe working conditions.

In November 1957, an experimental fuel element failed during calorimeter tests, and approximately 200 curies of strontium-90 and 1,000 curies of cesium-137 were released to the basin. To minimize activity released to the environment, four additional R-Area seepage basins were constructed that same year, and the excess water stored in basin 1 was pumped into these units. A sixth and final seepage basin was constructed in 1958.

R-Area Seepage Basin 1 was deactivated and backfilled in January 1958 because of leakage to an abandoned sewer system. In 1960, basins 2 through 5 were deactivated and backfilled. The ground above the five basins was treated with herbicide and covered with asphalt. A kaolinite dike was constructed around basin 1 and the northwest end of basin 3 to contain lateral movement of the radioactive contamination. Basin 6 was last used in 1964 and was backfilled in 1977.

Par Pond

Par Pond was constructed in 1957 for discharge and recycling of effluent coolant from the P and R Reactors. When it became operational in 1958, Par Pond eliminated the thermal effects of P and R operation on secondary coolant water returned to the Savannah River.

Bingham Pump Outage Pits

Normally, all radioactive solid waste generated in the reactor areas was sent to the solid waste burial ground, but an exception to this practice was made during the cooling system modifications initiated at all reactor areas in 1957. Three Bingham pump outage pits were installed at R Area for disposal of debris contaminated with low-level radioactivity. The pits were filled with miscellaneous construction equipment such as pipes, cables, ladders, drums, and boxes of

miscellaneous hardware. All waste materials with high levels of contamination were sent to the radioactive solid waste burial ground. The Bingham pump outage pits were backfilled with clean soil in 1958.

Environmental Data

This report consolidates groundwater monitoring data from 1989 to 1993 to determine the potential contaminants of concern and the potential extent of contamination.

Although there are data for the wells in this area prior to 1989, the data sets are spotty. In addition, the flagging system (see Appendix B) that assures follow-up analysis of constituents that appear above predetermined levels was refined in 1989. Data prior to 1989 can be found in the SRS annual environmental reports.

There are a number of difficulties in characterizing the groundwater data for this area:

- Data for the monitoring wells in R Area are inconsistent.
- Constituents of concern have not been identified and tracked.
- Constituents have not been regularly sampled in all wells in a series.
- Constituents have not been sampled at regular intervals.
- Except for two wells (P 20C and RCP 1A), all wells in R Area are screened in the water table.

Despite these difficulties, some patterns can be discovered from the data for the past five years. In order to determine constituents of concern, four ways of viewing the groundwater monitoring data are presented:

- Tables of constituents that have appeared above the primary drinking water standards (DWS) or indicator parameters from 1989 to 1993¹
- Tables of constituents that have appeared above Flag 2 criteria from 1989 to 1993
- Time series plots (Appendix D) for potential constituents of concern
- Results for all constituents analyzed for individual wells for all four quarters of 1993

In the tables of constituents that have appeared above the DWS or indicator parameters, there are two sets of standards: the primary drinking water standards applicable during the year under discussion and the indicator parameters (values above those usually found in background wells at SRS).

The DWS for 1993 are presented in Appendix A. The indicator parameters are the following:

- Specific conductance equal to or greater than 100 $\mu\text{S}/\text{cm}$
- Alkalinity (as CaCO_3) at values equal to or greater than 100 mg/L
- Total dissolved solids (TDS) at values equal to or greater than 200 mg/L

¹ The absence of a dot for a particular year or quarter in the tables of constituents above standards may mean either that the constituent was not scheduled for analysis during the time period or that it was analyzed for and was below its standard.

- pH at values equal to or below 4.0 or equal to or above 8.5

The selection of these values as standards for comparison is somewhat arbitrary; however, these values exceed levels usually found in background wells at SRS. The occurrence of elevated alkalinity (as CaCO_3), specific conductance, pH, and TDS within a single well may indicate leaching of the grouting material used in well construction rather than degradation of the groundwater.

In the tables of analytes that have appeared above Flag 2 criteria, the standards are those that were applicable during the year under discussion. Flag 2 criteria have changed frequently during the years and can be found in the individual Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) quarterly reports. Flag 2 criteria for 1993 are presented in Appendix B. Despite the problems presented by the changing flagging criteria and the lack of focus on individual wells, the benefits of looking at the Flag 2 criteria summaries are twofold:

- First, once a constituent appears above Flag 2, it is scheduled for regular sampling according to predetermined rules. Therefore, if a constituent appears once in the Flag 2 tables below and then does not reappear, the single appearance in the table may be an anomaly. It is the pattern of appearances above Flag 2 that is the focus of these tables and not the specific analyte levels or wells.
- Second, unlike the DWS tables below, the Flag 2 tables focus on the quarterly schedule of analyses.

Time series plots (Appendix D) provide another way of looking at the data for selected constituents. Trends in the plots are discussed in the sections below.

Finally, Table 1 at the end of this section presents maximum results for constituents exceeding the DWS in individual R-Area wells during 1993.

R Area is located on a groundwater mound with water flowing horizontally away from the southern reactor seepage areas. Flow is toward Mill Creek to the northwest and Par Pond and its tributaries to the southeast and northeast. There is a downward gradient also as detected by the P 20 and RCP cluster wells.

Well Series P in R Area

The P well series comprises a large group of baseline hydrogeologic investigation well clusters scattered throughout the site. There are four of these wells (P 20B, 20C, 20D, and 20TD), known as the R-Area Bedrock Exploration Hydrology Wells, in R Area. Two of these wells (P 20C and P 20D) were added to the groundwater monitoring program for sampling and analysis during 1993. P 20C is screened in the McBean formation, and P 20D is screened in the water table.

Beginning second quarter 1993, cadmium, gross alpha, lead, nonvolatile beta, pH, specific conductance, and tritium analyses were requested to support the Remedial Investigation (RI) Program for the R-Reactor Seepage Basins.

During second, third and fourth quarters, the volume of water purged from these wells was estimated because flowmeters were not present. During the third quarter, field notes indicate that well identification signs were missing.

Data from these wells show aluminum and iron above Flag 2 criteria in 1993. See Table 1 at the end of this section for maximum results for individual wells for 1993.

Acid/Caustic Basin (RAC Well Series)

Groundwater beneath the R-Area Acid/Caustic Basin (Figure 8 and Maps 1 through 10) has been monitored by the RAC well series since 1983. Horizontal flow in the upper saturated zone beneath the basin is to the south toward Par Pond tributaries. All wells at the basin are water table wells.

DWS and Indicator Parameters

Analytes Over DWS or Indicator Parameters in Well Series RAC

Analyte	1989	1990	1991	1992	1993
Gross alpha	•			•	
Lead	•			•	
Specific conductance	•	•		•	
Total radium	•	•			

The DWS table shows no consistent constituents of concern at this site.

Flag 2 Criteria

Analytes Over Flag 2 Criteria in Well Series RAC

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Gross alpha		•		•						
Iron		•								
Lead	•	•	•				•			
Manganese		•					•			
Total organic halogens		•								
Total radium		•		•	•		•			

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
						•		•		Aluminum
				•						Gross alpha
	•		•		•	•				Iron
•	•	•	•		•					Lead
						•				Manganese
										Total organic halogens
										Total radium

Lead appears as a consistent constituent of concern in the Flag 2 table for this site.

Time Series Plots

Measured levels of selected constituents are plotted over time to illustrate historical trends and significant concentrations in each well series. (See time series plots in Appendix D.) The time series plots indicate the following.

Conductivity remained relatively constant in RAC 2 and RAC 4, but fluctuated in RAC 1 and RAC 3. Measurements ranged from approximately 30 to 170 $\mu\text{S}/\text{cm}$ in RAC 1 and from approximately 20 to 120 $\mu\text{S}/\text{cm}$ in RAC 3.

Gross alpha activity in RAC 1 exceeded the 15 pCi/L DWS three times during sampling, reaching a maximum level of approximately 25 pCi/L during fourth quarter 1984 sampling. RAC 2 levels ranged from approximately 2 to approximately 85 pCi/L, and RAC 3 ranged from approximately 1 to 25 pCi/L. RAC 4 remained consistently below the DWS criterion.

Lead concentrations in all RAC wells fluctuated throughout the reporting period. RAC 1 and RAC 2 were highest late in 1986. RAC 3 and RAC 4 concentrations ranged from approximately detection limit to 56 and 38 $\mu\text{g}/\text{L}$, respectively.

All nonvolatile beta activity in RAC wells remained consistently below the DWS of 50 pCi/L, although activity in RAC 2 was observed at approximately 48 pCi/L during second quarter 1989 sampling.

Field pH levels in the RAC wells fluctuated between approximately 3.5 and 5.5 pH units until first quarter 1987. Since that time, pH levels have been measured between 4.5 and 5.5 pH units.

1993 Data

RAC wells were scheduled for comprehensive analyses in the first and third quarters of 1993. During the third quarter, these wells were sampled for aluminum, gross alpha, iron, lead, and manganese due to earlier Flag 1 or 2 designation. Field analyses were performed quarterly. During the second quarter, turbidity in RAC 1 exceeded 1,000 NTU. No analytes exceeded DWS during 1993.

Ash Basin/Coal Pile (RCP Well Series)

The two RCP wells were installed during 1990, but were not sampled until 1992. Horizontal groundwater flow in the water table appears to be generally westward toward the headwaters of Mill Creek. RCP 1A is screened in the Congaree formation; RCP 1D is screened in the water table.

Water elevations from the two RCP wells indicate a downward vertical gradient beneath the coal pile boundaries, suggesting a potential for downward migration of groundwater from the upper saturated zone to the Congaree-Fourmile zone.

DWS and Indicator Parameters

Analytes Over the DWS or Indicator Parameters in Well Series RCP

Analyte	1989	1990	1991	1992	1993
Specific conductance				•	•

Groundwater data from 1992-1993 indicate specific conductance above its indicator parameter.

Flag 2 Criteria

Analytes Over Flag 2 Criteria in Well Series RCP

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Iron										
Manganese										
pH										
Specific conductance										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
					•	•	•	•	•	Aluminum
					•	•	•	•	•	Iron
				•	•	•	•	•	•	Manganese
									•	pH
									•	Specific conductance

The Flag 2 table shows that iron and manganese have appeared above their flagging criteria several times since late 1992.

Time Series Plots

The time series plots in Appendix D indicate the following.

Conductivity was measured between approximately 75 and 275 $\mu\text{S}/\text{cm}$ in RCP 1D and at approximately 800 $\mu\text{S}/\text{cm}$ in RCP 1A during fourth quarter 1993.

All mercury concentrations in RCP 1D were measured below the 2 µg/L DWS.

Field pH levels in RCP 1D were measured between approximately 5 and 6 pH units, and RCP 1A was measured at approximately 11 pH units during fourth quarter 1993.

No tritium activities exceeded the 20 pCi/mL DWS during the reporting period.

1993 Data

The RCP wells were scheduled each quarter of 1993 for comprehensive analyses. The analyses were to be used for groundwater assessment in relation to the R-Reactor Seepage Basins. During first quarter, manganese was scheduled due to an earlier Flag 2 designation. Sampling for aluminum, iron, lead, and manganese was scheduled for the third quarter because of earlier Flag 1 or 2 designation.

According to field notes, the slow pump rate of RCP 1A made sampling during first quarter impossible. RCP 1D ran dry after approximately 10 gallons of light brown water were purged, and turbidity for the well varied. During the second quarter, RCP 1D ran dry after 15 gallons of orange-brown water were purged.

RCP 1A was not sampled during the third quarter because of mechanical problems, and RCP 1D ran dry after 13 gallons of brown water were purged. RCP 1D also ran dry during the fourth quarter after 11 gallons of brown water were purged.

Groundwater data from 1993 indicate specific conductance above its indicator parameter. Iron consistently exceeded its Flag 2 criterion.

Disassembly Basin (RDB Well Series)

The R-Area Disassembly Basin groundwater has been monitored by the three wells of the RDB well series since 1990. The disassembly basin is near the top of the groundwater mound and the horizontal groundwater flow direction is not clearly defined.

DWS and Indicator Parameters

Analytes Over the DWS or Indicator Parameters in Well Series RDB

Analyte	1989	1990	1991	1992	1993
Alkalinity		•	•	•	•
Lead				•	•
Specific conductance		•	•	•	•
Total dissolved solids					•
Total radium		•			
Tritium		•	•		

The DWS table shows that alkalinity and specific conductance have been consistently above their indicator parameters since 1990.

Flag 2 Criteria

Analytes Over Flag 2 Criteria in Well Series RDB

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Calcium										
Iron					.	.	.	.	.	
Lead					.					
Manganese					.	.	.	.	.	
Total radium					.					
Tritium					.	.	.	.	.	

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
						.		.		Aluminum
										Calcium
.		.	.	.	.	.	.	.	.	Iron
					.	.	.	.		Lead
.		.	.	.	.	.	.	.	.	Manganese
										Total radium
										Tritium

The Flag 2 table shows that iron, lead, and manganese have frequently been above their Flag 2 criteria.

Time Series Plots

The time series plots (Appendix D) indicate the following.

Conductivity in RDB wells fluctuated greatly during sampling. Measurements in all wells ranged from approximately 100 $\mu\text{S}/\text{cm}$ in RDB 3D during first quarter 1993 to 360 $\mu\text{S}/\text{cm}$ in RDB 2D during second quarter 1993.

All gross alpha in RDB wells remained within the 1 to 3 pCi/L range with the exception of RDB 3D, which was measured at approximately 4 pCi/L during third quarter 1993.

No nonvolatile beta activities exceeded the DWS of 50 pCi/L. Nonvolatile beta in RDB 2D was measured between approximately 4 and 11 pCi/L.

Mercury concentrations were observed below the 2 $\mu\text{g}/\text{L}$ DWS during the reporting period.

Field pH levels in RDB wells were measured between approximately 6 and 7 pH units during sampling.

1993 Data

During each quarter of 1993, comprehensive analyses were requested for the RDB wells, except that herbicides/pesticides, major ions, phenols, total organic halogens, and tritium were scheduled for sampling only in the first quarter. Alpha spectroscopy plutonium, gamma PHA, and strontium-90 were also scheduled for each quarter. During third quarter, aluminum was scheduled for analysis due to earlier Flag 2 designation. Analyses were to be used for groundwater assessment in relation to the R-Reactor Seepage Basins.

All three wells ran dry during each quarter: first quarter, RDB 1D ran dry after 14.5 gallons of light brown water were purged, RDB 2D after approximately 20 gallons of brown water in which turbidity varied, and RDB 3D after approximately 15 gallons of light brown water.

During second quarter, RDB 1D ran dry after 12.5 gallons of brown water were purged, RDB 2D after 15.5 gallons of brown water, and RDB 3D after 13.5 gallons of brown water. During sampling in the third quarter, RDB 1D ran dry after 13 gallons of brown water were purged, RDB 2D after 12 gallons of yellow brown water, and RDB 3D after 14 gallons of yellow brown water.

During fourth quarter, RDB 1D ran dry after 13 gallons of light brown water were purged, RDB 2D after 17 gallons of brown water, and RDB 3D after 12 gallons of brown water.

Quarterly data from 1993 show lead exceeding the drinking standard in well RDB 1D. (See Table 1 at the end of this section.)

Burning/Rubble Pits (RRP Well Series)

Groundwater below the R-Area Burning/Rubble Pits has been monitored by the four wells of the RRP well series since 1983. Horizontal groundwater flow in the upper saturated zone beneath the pits is to the southeast, toward two small ponds which drain into Par Pond to the east.

DWS and Indicator Parameters

Analytes Over the DWS or Indicator Parameters in Well Series RRP

Analyte	1989	1990	1991	1992	1993
Chloroethene (Vinyl chloride)			•		
Lead			•		
Specific conductance					•

The DWS table shows no consistent constituents of concern at this site.

Flag 2 Criteria

Analytes Over Flag 2 Criteria in Well Series RRP

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Chloroethene (Vinyl Chloride)										
1,1-Dichloroethane										
Iron		.					.		.	
Lead									.	
Manganese		.							.	
Silica									.	
Total organic halogens									.	

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
.										Chloroethene (Vinyl chloride)
.										1,1-Dichloroethane
.		.		.		.				Iron
										Lead
										Manganese
										Silica
										Total organic halogens

The Flag 2 table shows no consistent pattern at this site.

Time Series Plots

Conductivity in RRP wells remained between approximately 10 and 55 $\mu\text{S}/\text{cm}$ during the reporting period until third quarter 1993 sampling, measurements for when RRP 2, RRP 3, and RRP 4 greatly increased.

Lead concentrations in RRP wells varied greatly during sampling. For example, RRP 1 concentrations ranged from approximately 45 $\mu\text{g}/\text{L}$ during fourth quarter 1984 to approximately 8 $\mu\text{g}/\text{L}$ during third quarter 1992.

No mercury concentrations were detected above the DWS.

Nonvolatile beta activities in RRP wells were consistently detected below the DWS of 50 pCi/L. RRP 4 had the highest level of activity, measuring approximately 11 pCi/L in first quarter 1985.

Field pH levels in RRP wells were between approximately 3.5 and 5.5 pH units. All pH levels decreased during first quarter 1986, fourth quarter 1986, and third quarter 1990 sampling.

Tritium activities in all RRP wells greatly exceeded the 20 pCi/L DWS, ranging from approximately 1,000 to 3,000 pCi/mL.

1993 Data

The RRP wells were scheduled for comprehensive analyses during first quarter 1993 only. Copper and GCMS VOA analyses were requested in the first quarter for RCRA Facility Investigation/Remedial Investigation (RFI/RI) site

investigations. During third quarter, iron and lead were scheduled for sampling due to earlier Flag 2 designations.

Specific conductance was found to be above standard in 1993.

Seepage Basins (RSA, RSB, RSC, RSD, RSE, and RSF Well Series)

R-Area seepage basin groundwater has been monitored by the RSA, RSB, RSC, RSD, RSE, and RSF well series since 1961. However, these well series did not receive routine comprehensive analyses before 1992 or 1993, making it difficult to examine contaminant patterns over time. Currently, there are four wells monitored in the RSA series, three in the RSB series, nine in the RSC series, 13 in the RSD series, 20 in the RSE series, and three in the RSF series.

Water-table gradients vary greatly in the vicinity of the six seepage basins. Basin 2 seems to sit astride a water table divide. In the vicinity of basins 3, 4, 5, and 6 there appears to be a slight depression in the groundwater flow gradient. Beneath basins 3, 4, 5, and 6 and the northern portion of basin 2, horizontal flow direction in the upper saturated zone appears to vary between north and northwest, toward Mill Creek.

DWS and Indicator Parameters

Analytes Over the DWS or Indicator Parameters in the Seepage Basin Well Series

Analyte	1989	1990	1991	1992	1993
Cadmium		•	•	•	•
Gross alpha	•	•	•	•	•
Lead				•	•
Mercury				•	•
Nitrate-nitrite as nitrogen					•
Nonvolatile beta	•	•	•	•	•
pH	•	•	•	•	•
Potassium-40				•	
Specific conductance	•	•	•	•	•
Strontium-90				•	•
Total alpha-emitting radium				•	•
Total radium		•	•		
Tritium	•	•	•	•	•

During 1989-1993, gross alpha, nonvolatile beta, and tritium were consistently detected above the DWS in R-Area Reactor Seepage Basin wells. Specific conductance and pH consistently exceeded indicator parameters. Cadmium has been above its DWS since 1990.

Flag 2 Criteria

Analytes Over Flag 2 Criteria in Well Series RSA

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium								•	•	
Iron										
Lead										
Manganese										
Mercury										
Nonvolatile beta	•									
Potassium-40										
Strontium-90										
Total alpha-emitting radium										
Total organic carbon										
Total radium									•	
Tritium										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
			•	•	•	•		•		Aluminum
•			•	•	•	•	•	•		Cadmium
			•	•		•	•	•		Iron
			•			•	•	•		Lead
			•			•				Manganese
			•		•	•				Mercury
										Nonvolatile beta
				•		•				Potassium-40
				•	•					Strontium-90
				•						Total alpha-emitting radium
				•						Total organic carbon
								•		Total radium
										Tritium

The Flag 2 table for RSA wells does not show consistent contamination over the reporting period.

Analytes Over Flag 2 Criteria in Well Series RSB

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium						•				
Chromium						•				
Gross alpha			•			•				
Iron										
Lead						•				
Manganese										
Mercury										
Nonvolatile beta						•				
Total alpha-emitting radium										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
•		•	•	•	•	•	•	•	•	Aluminum
										Cadmium

										Chromium
										Gross alpha
										Iron
										Lead
										Manganese
										Mercury
										Nonvolatile beta
										Total alpha-emitting radium

The Flag 2 table for RSB wells shows consistent results above criteria for cadmium in 1992-93, and for gross alpha, iron, and lead in 1993.

Analytes Over Flag 2 Criteria in Well Series RSC

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium										
Gross alpha										
Iron										
Lead										
Manganese										
Mercury										
Nonvolatile beta										
Specific conductance										
Total organic carbon										
Total organic halogens										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
										Aluminum
										Cadmium
										Gross alpha
										Iron
										Lead
										Manganese
										Mercury
										Nonvolatile beta
										Specific conductance
										Total organic carbon
										Total organic halogens

The Flag 2 table for RSC wells shows gross alpha and cadmium consistently above criteria during 1993.

Analytes Over Flag 2 Criteria in Well Series RSD

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium						•			•	
Gross alpha		•								
Iron										
Lead										
Manganese										
Mercury										
Nonvolatile beta	•	•	•	•	•	•	•	•	•	
Strontium-90										
Total alpha-emitting radium										
Total organic halogens										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
						•		•		Aluminum
•		•	•	•		•	•	•	•	Cadmium
•				•		•	•	•	•	Gross alpha
			•	•	•	•	•	•	•	Iron
						•		•		Lead
						•		•		Manganese
					•	•				Mercury
•		•		•		•	•	•	•	Nonvolatile beta
				•	•	•	•	•	•	Strontium-90
					•	•		•		Total alpha-emitting radium
								•		Total organic halogens

The Flag 2 table for RSD wells shows contamination with nonvolatile beta nearly every quarter of the reporting period, with strontium-90 during the latter half of 1992 and all of 1993, and with cadmium and iron almost every quarter of 1992-1993.

Analytes Over Flag 2 Criteria in Well Series RSE

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium						•		•	•	
Gross alpha				•		•				
Iron										
Lead										
Manganese										
Mercury										
Nitrate-nitrite as nitrogen										
Nonvolatile beta	•	•	•	•	•	•	•	•	•	
Strontium-90										
Total alpha-emitting radium										
Total organic carbon										
Total organic halogens						•		•		
Total radium						•				
Tritium			•		•			•	•	

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
						•		•		Aluminum
•		•	•	•	•	•	•	•	•	Cadmium
•		•		•		•	•	•	•	Gross alpha
				•		•	•	•	•	Iron
					•	•	•	•	•	Lead
			•	•	•	•	•	•		Manganese
					•	•				Mercury
							•	•		Nitrate-nitrite as nitrogen
•		•	•	•		•	•	•	•	Nonvolatile beta
				•	•	•	•	•	•	Strontium-90
					•	•	•			Total alpha-emitting radium
			•					•		Total organic carbon
				•						Total organic halogens
										Total radium
•		•	•	•	•	•	•	•		Tritium

The Flag 2 table for RSE wells shows consistent trends for gross alpha, nonvolatile beta, tritium, strontium-90, cadmium, iron, lead, and manganese.

Analytes Over Flag 2 Criteria in Well Series RSF

Analyte	1q89	2q89	3q89	4q89	1q90	2q90	3q90	4q90	1q91	2q91
Aluminum										
Cadmium		•								
Iron										
Mercury										
pH	•	•	•	•	•	•	•	•		•
Total alpha-emitting radium										
Total organic carbon										
Tritium										

3q91	4q91	1q92	2q92	3q92	4q92	1q93	2q93	3q93	4q93	Analyte
						•		•		Aluminum
										Cadmium
						•	•	•		Iron
								•		Mercury
						•	•		•	pH
									•	Total alpha-emitting radium
				•						Total organic carbon
•		•	•	•	•		•	•		Tritium

The Flag 2 table for RSF wells shows consistent trends for pH and tritium, with iron and aluminum appearing in 1993.

Time Series Plots

Cadmium concentrations in RSA wells fluctuated during the reporting period, ranging up to approximately 80 µg/L in RSA 9 during third quarter 1992. In RSB wells, cadmium concentrations in RSB 7 exceeded the DWS several times, reaching approximately 60 µg/L during fourth quarter 1991. RSB 8 and RSB 9 exceeded the DWS criterion during fourth quarter 1993. In the RSD wells,

cadmium concentration in RSD 1 and RSD 2A exceeded the DWS several three times during sampling, and cadmium concentrations in RSD 2C increased to approximately 23 µg/L during fourth quarter 1993.

Cadmium concentrations increased in RSE 1A, RSE 1B, RSE 1C, and RSE 2 during fourth quarter 1992. Cadmium levels in RSE 9 rose to approximately 160 µg/L.

Conductivity in the RSA wells remained relatively constant with the exception of first quarter 1988, when RSA 8, RSA 9, and RSA 10 reached high levels. In the RSB wells, RSB 7 conductivity was unusually high during first quarter 1988. Conductivity in RSB 9 fluctuated during the reporting period, ranging from approximately 30 to 90 µS/cm.

In the RSC wells, conductivity in RSC 5 measured approximately 2,500 µS/cm during third quarter 1992 sampling. Conductivity levels in other wells were relatively constant. Conductivity in most RSD wells remained below 100 µS/cm during the reporting period, with the exception of RSD 1, RSD 9, and RSD 11, which were higher during various quarters.

In RSE wells 1 through 8, all conductivity levels were below 100 µS/cm with the exception of one reading for RSE 5 of approximately 250 µS/cm during first quarter 1988. In RSE wells 9 through 25, there were some high readings during first quarter 1988, 1991, and second quarter 1993.

In the RSF wells, conductivity in RSF 1 fluctuated during 1987 through 1989 sampling, reaching a high of approximately 720 µS/cm during first quarter 1988. RSF 2 and RSF 3 levels remained relatively constant during the reporting period.

No gross alpha activity in RSA wells exceeded the 15 pCi/L DWS criterion. In the RSB wells, gross alpha activity in RSB 7 exceeded DWS during third quarter 1989 and second quarter 1990, RSB 8 exceeded DWS during all quarters of 1993, and RSB 9 reached a high of approximately 75 pCi/L during second quarter 1993.

Gross alpha activities in all RSC wells increased during 1992 and 1993 sampling. RSC 10 reached approximately 114 pCi/L during first quarter 1993. Gross alpha activity in RSD wells 1 through 5 remained relatively constant with the exception of RSD 2C, which exceeded the 15 pCi/L DWS approximately five times during sampling, greatly exceeding the DWS during fourth quarter 1991.

Gross alpha activity in RSD wells 6 through 11 remained relatively constant with the exception of RSD 6 and RSD 8, each exceeding the DWS several times during sampling. In RSE wells 1A through 6, RSE 4A, RSE 4C, and RSE 6 all exceeded the DWS during third quarter 1991. Gross alpha activity in RSE 6 increased to approximately 280 pCi/L during first quarter 1993. Gross alpha activity in RSE wells 7 through 25 remained relatively constant during sampling until fourth quarter 1989, when RSE 8 exceeded the DWS. RSE 10, RSE 11, RSE 18, and RSE 19 all exceeded DWS from 1991 to 1994.

No gross alpha activity in RSF wells exceeded the 15 pCi/L DWS during sampling. RSF 3 reached approximately 8.5 pCi/L during fourth quarter 1987.

Lead concentrations in RSA 7, RSA 8, and RSA 9 wells all exceeded the 50 µg/L DWS during 1993 sampling. All RSB wells exceeded DWS during 1993 sampling. RSB 9 reached a high of approximately 500 µg/L during first quarter 1993. All RSC wells, with the exceptions of RSC 2 and RSC 4, exceeded the DWS during 1993 sampling. Lead concentrations in most RSD wells increased during 1993 sampling, with RSD 6 reaching approximately 290 µg/L during first quarter 1993.

Lead concentrations in RSE wells 1A through 6 remained stable throughout sampling with the exception of RSE 6, which was measured at approximately 1,900 µg/L during first quarter 1993. Lead concentrations in RSE wells 7 through 25 remained relatively constant until 1993, when RSE 18 and RSE 19 exceeded the DWS during second and third quarters.

Mercury levels in RSA 9 reached a high of approximately 8.5 µg/L during fourth quarter 1992 and decreased to approximately 2.5 µg/L during the following sampling quarter.

Mercury concentrations in RSB 8 and RSB 9 were measured below the DWS criterion of 2 µg/L during 1993 sampling. Mercury in RSB 7 exceeded DWS during second and fourth quarters 1992. In the RSC wells, mercury concentrations in RSC 2, RSC 5, and RSC 9 significantly decreased from first to second quarter 1993. All three of these wells were measured above the 2 µg/L DWS during first quarter sampling.

Mercury concentration in RSD 3 exceeded the DWS during fourth quarter 1992. RSD 2C also exceeded the DWS, measuring approximately 5.5 µg/L during first quarter 1993. In RSE wells 1A through 6, mercury concentrations in RSE 1A, RSE 1B, RSE 1C, RSE 2, and RSE 3A noticeably decreased from fourth quarter 1992 to first quarter 1993. RSE 4A and RSE 6 exceeded the DWS during first quarter 1993 sampling, and concentrations in RSE 4A greatly decreased during second quarter 1993. Mercury levels in RSE 13 and RSE 25 were measured above the DWS during first quarter 1993, while generally, mercury in RSE wells 7 through 25 decreased from first to second quarter 1993.

Nonvolatile beta activity in RSA wells remained consistently below the 50 pCi/L DWS criterion, with the exception of an anomalous reading for RSA 10 of approximately 90 pCi/L during first quarter 1989. Nonvolatile beta activity in RSB wells remained consistently below the DWS with the exception of an anomalous reading for RSB 7 of approximately 120 pCi/L during second quarter 1990. Nonvolatile beta activity in RSC 4 decreased sharply during fourth quarter 1983. All other RSC wells remained at relatively consistent levels until 1993, when both RSC 4 and RSC 10 exceeded the DWS.

In RSD wells 1 through 5, nonvolatile beta activity in RSD 2C fluctuated throughout the reporting period, ranging from approximately 7,900 pCi/L during

third quarter 1979 to approximately detection limit during first quarter 1983. RSD 2B was measured at approximately 4,500 pCi/L during third quarter 1987 sampling, exceeding the 50 pCi/L DWS criterion. Nonvolatile beta activity in RSD wells 6 through 11 fluctuated greatly throughout the reporting period. Activity in RSD 8 reached a high of approximately 2,800 pCi/L during fourth quarter 1979 sampling. Other wells exceeding the 50 pCi/L DWS included RSD 6 and RSD 7.

In RSE wells 1A through 6, nonvolatile beta activity in RSE 6 consistently exceeded the 50 pCi/L DWS, measuring approximately 30,000 pCi/L during first quarter 1982 sampling. RSE 1B, RSE 4B, and RSE 4C exceeded the DWS during various quarters. Nonvolatile beta activity in RSE wells 7 through 25 remained relatively constant during sampling, with the exception of several fluctuations in RSE 11, and apparently anomalous increases in RSE 13 during first quarter 1988 and RSE 10 during first quarter 1993.

No RSF wells exceeded the DWS for nonvolatile beta during the reporting period.

Field pH levels in RSA wells fluctuated throughout the reporting period. Levels in all wells ranged from approximately 3.5 to 7 pH units. All pH levels decreased during first quarter 1992. RSB pH levels fluctuated between approximately 4.5 and 8 pH units during the reporting period.

RSC pH levels were between approximately 4 and 7 pH units. RSC 9 decreased during third quarter 1991. RSD pH levels were consistently measured between approximately 4 and 7.5 pH units. Most RSD pH levels increased during second quarter 1989, fourth quarter 1990, fourth quarter 1991, and first quarter 1992.

In RSE wells 1 through 7, pH levels increased during first quarter 1988, first quarter 1989, third quarter 1991, and fourth quarter 1992. In RSE wells 8 through 25, pH levels generally fluctuated between 3.5 and 7. RSE 9 reached a low of approximately 3.5 during first quarter 1988.

RSF pH levels were relatively consistent throughout sampling. RSF 1 was measured between approximately 9 and 12 pH units. RSF 2 was consistently measured between 5 and 6 pH units, and RSF 3 between approximately 6 and 7.

Tritium activities in many of the R-Area Seepage Basin wells consistently exceeded the 20 pCi/mL DWS during sampling.

1993 Data

Quarterly data for 1993 indicate that gross alpha consistently exceeded DWS in wells RSB 8 and RSC 9, and cadmium was above the DWS in well RSC 3 for all four quarters. Wells RSC 7 and RSC 10 showed high amounts of lead during first quarter monitoring. Nonvolatile beta was consistently above the DWS in wells RSD 2A, RSD 2C, RSD 4, RSD 5, RSD 6, RSD 7, RSD 8, RSD 10, RSE 4A, RSE 4C, RSE 11, RSE 13, and RSE 19. See Table 1 at the end of this section.

For the RSA well series, comprehensive analyses were scheduled during the first quarter of 1993 only. Cadmium, gross alpha, iron, manganese, mercury, nonvolatile beta, total organic halogens, and tritium analyses were scheduled due to earlier Flag 2 designations. Those analytes plus aluminum, lead, radium, and total organic carbon were scheduled during the third quarter due to earlier Flag 2 designations.

During each quarter of 1993, cadmium, gross alpha, and nonvolatile beta analyses were requested for well RSA 6 to define plumes accurately. Water elevation was also requested for RSA 6 to define groundwater flow. Analyses of RSA 7, 8, 9, and 10 were requested for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) investigation.

According to field notes, RSA 6 had not been installed during the first quarter of 1993. In the remaining quarters, several RSA wells ran dry during sampling. During second quarter, RSA 7 ran dry after 32 gallons of water were purged, RSA 8 ran dry after 33 gallons and an elbow cracked on the pump outlet. RSA 9 ran dry after 31 gallons, and RSA 10 ran dry after 17 gallons.

During third quarter, RSA 7 again ran dry after 16 gallons of water were purged, RSA 9 ran dry after 18 gallons, and RSA 10 ran dry after 9 gallons. In fourth quarter, RSA 8 ran dry after 2.5 gallons and RSA 9 ran dry after 2.3 gallons were purged.

For the RSB well series, comprehensive analyses were scheduled during the first quarter of 1993 only. Cadmium, gross alpha, iron, manganese, mercury, nonvolatile beta, total organic carbon, total organic halogens, and tritium analyses were scheduled during first quarter due to earlier Flag 2 designation. Those analytes plus aluminum, lead, and radium were scheduled for third quarter due to earlier Flag 2 designations.

During first quarter, turbidity for all RSB wells was measured above 1,000 NTU. During the second quarter, RSB 7 ran dry after 15 gallons of water were purged.

Turbidity was measured above 1,000 NTU for RSB 8 during third quarter. During fourth quarter sampling, RSB 7 ran dry after about one-half gallon was purged, water was muddy in RSB 8, and turbidity for RSB 9 was measured above 1,000 NTU.

For the RSC well series, comprehensive analyses were scheduled for the first quarter of 1993 only.

Cadmium, gross alpha, iron, nitrate as nitrogen, nonvolatile beta, manganese, mercury, total organic carbon, total organic halogens, and tritium analyses were scheduled during first quarter due to earlier Flag 2 designation. Those analytes plus aluminum, lead, and radium were scheduled for third quarter due to earlier Flag 2 designations.

Cadmium, gross alpha, and nonvolatile beta were requested each quarter to define plumes accurately, and water elevations were requested to define groundwater flow.

According to field notes for first quarter 1993, well RSC 1 had been destroyed and sampling was impossible. During that quarter, the turbidity of RSC 4, 5, and 10 was measured above 1,000 NTU.

Turbidity was also measured above 1,000 NTU for RSC 2, 5, and 9 during third quarter and for RSC 2, 3, 4, 5, 6, 7, 8, and 9 during fourth quarter.

For the RSD well series, comprehensive analyses were scheduled for the first quarter of 1993 only. Cadmium, gross alpha, iron, manganese, mercury, nonvolatile beta, total organic carbon, total organic halogens, and tritium analyses were scheduled for first quarter due to earlier Flag 2 designations. Those analytes plus aluminum, lead, and radium were scheduled for third quarter due to earlier Flag 2 designations.

Cadmium, gross alpha, and nonvolatile beta analyses were requested for all wells except RSD 1 and 3 during each quarter to define plumes accurately. Water elevations for those wells were also requested to define groundwater flow. Analyses of RSD 1 and 3 were requested for CERCLA investigation.

During the first quarter of 1993, RSD 2B ran dry during sampling and turbidity was measured above 1,000 NTU. Turbidity was high in wells RSD 6, 8, 9, and 10 also. During second quarter, RSD 1 ran dry after 17 gallons of water were purged, RSD 2B was bailed dry and sampled after recovery, and RSD 3 ran dry after 26 gallons were purged. RSD 1 and RSD 3 ran dry after 16 gallons were purged during third quarter, and turbidity was measured above 1,000 NTU for wells RSD 8, 9, and 11. During fourth quarter, RSD 1 ran dry after 1.4 gallons were purged, water in RSD 2A was black, and water in RSD 2C, where turbidity was measured above 1,000 NTU, was milky brown. Turbidity was also high in RSD 5, 9, and 10. Water in RSD 9 was muddy and was cloudy in RSD 10 and 11.

For the RSE well series, comprehensive analyses were scheduled for the first quarter of 1993 only. Cadmium, gross alpha, iron, manganese, mercury, nonvolatile beta, total organic carbon, total organic halogens, and tritium analyses were scheduled for first quarter due to earlier Flag 2 designations. Those analytes plus aluminum, lead, and radium were scheduled for third quarter due to earlier Flag 2 designations.

During first quarter, RSE 24 and 25 were scheduled for lead analysis, in addition to the other comprehensive analyses scheduled, due to earlier Flag 2 designation. Aluminum analysis was not scheduled during third quarter.

Cadmium, gross alpha, and nonvolatile beta analyses were requested each quarter for RSE 4A, 4B, 4C, 5, 6, 11, 12, 13, 18, and 19 to define plumes accurately. The water elevation of those wells was also requested for definition of groundwater flow.

Comprehensive analyses of RSE 1A, 1B, 1C, 2, 3A, 7, 8, 9, 10, 24, and 25 were requested for CERCLA investigation.

During first quarter, turbidity was measured above 1,000 NTU for RSE 3A and 4B, and RSE 4A, 4B, 4C, and 6 ran dry during sampling. Sampling of RSE 12 was impossible because a sample bailer was stuck in the well. RSE 13 ran dry after 10 gallons of water were purged, RSE 24 ran dry after approximately 40 gallons, and RSE 25 ran dry after approximately 29.5 gallons. RSE 24 and 25 did not have well identification signs, according to field notes.

During second quarter, several RSE wells ran dry during sampling: RSE 1A ran dry after 23 gallons of water were purged, RSE 1B after 18 gallons, RSE 1C after 19 gallons, RSE 2 after 22 gallons, RSE 3A after 18 gallons, RSE 7 after 18 gal, RSE 8 after 29 gallons, RSE 9 after 19 gallons, RSE 10 after 27 gallons, RSE 24 after 35.5 gallons, and RSE 25 after approximately 27.5 gallons of (light brown) water were purged.

Sampling of RSE 12 was again impossible because of a sample bailer stuck in the well. Several wells ran dry during third quarter sampling, including RSE 2 after 27 gallons, RSE 3A after 16 gallons, RSE 24 after 33 gallons, and RSE 25 after 26.5 gallons. Turbidity of RSE 19 was measured above 1,000 NTU.

During fourth quarter, RSE 12 was again not sampled because of maintenance or access problems. Wells that ran dry during fourth quarter sampling included RSE 1A after 1.4 gallons, RSE 1B after .8 gallon, RSE 1C after 1.2 gallons, RSE 2 after 1.5 gallons, RSE 3A after 1.4 gallons, RSE 9 after .9 gallon, RSE 24 after 32 gallons, and RSE 25 after 26.5 gallons. High turbidity was measured in RSE 18 and 19 during fourth quarter.

RSE 6, as part of the partial implementation of the purge-water containment program, was scheduled for analyses but not sampled during 1993. Only water-level measurements were taken for RSE 6.

For the RSF well series, comprehensive analyses were scheduled for the first quarter of 1993. Cadmium, gross alpha, iron, lead, manganese, mercury, nonvolatile beta, total organic carbon, total organic halogens, and tritium analyses were scheduled for first quarter due to earlier Flag 1 or 2 designations. Those analytes plus aluminum and radium were scheduled for third quarter due to earlier Flag 2 designations. Analyses of most other comprehensives were requested for all quarters for CERCLA investigation.

During first quarter, RSF 1 ran dry after approximately 41 gallons of water were purged and RSF 3 after approximately 37 gallons were purged. According to field notes, well identification signs were missing for the RSF wells.

RSF 1 and RSF 3 ran dry during second quarter sampling, RSF 1 after approximately 40 gallons were purged and RSF 3 after approximately 34 gallons. RSF 3 also ran dry during third quarter after 32 gallons of water were purged.

During fourth quarter, RSF 1 ran dry after 35 gallons were purged and RSF 3 after 31 gallons. Field notes indicate that no well identification sign was present for RSF 2.

Table 1. Maximum Results for Constituents Exceeding the DWS in 1993

<u>Well</u>	<u>Constituent</u>	<u>Unit</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>DWS</u>
RDB 1D	Lead	µg/L	—	129	146	—	50
RSA 7	Lead	µg/L	51	—	89	—	50
	Mercury	µg/L	3.9	—	—	—	2
RSA 8	Lead	µg/L	—	113	—	—	50
RSA 9	Mercury	µg/L	2.5	—	—	—	2
	Strontium-90	pCi/L	9.1E+00	—	—	—	8E+00
	Tritium	pCi/mL	—	—	1.1E+02	—	2E+01
RSB 7	Cadmium	µg/L	6.3	—	—	—	5
RSB 8	Cadmium	µg/L	—	—	7.1	13	5
	Gross alpha	pCi/L	3.1E+01	2.0E+01	1.8E+01	4.8E+01	1.5E+01
	Lead	µg/L	148	—	133	—	50
	Nonvolatile beta	pCi/L	—	—	—	5.3E+01	5E+01
RSB 9	Cadmium	µg/L	6.7	5.3	—	12	5
	Gross alpha	pCi/L	7.8E+01	—	—	—	1.5E+01
	Lead	µg/L	568	—	73	—	50
RSC 2	Lead	µg/L	104	—	107	—	50
	Mercury	µg/L	4.7	—	—	—	2
	Gross alpha	pCi/L	8.8E+01	1.6E+01	—	2.3E+01	1.5E+01
RSC 3	Cadmium	µg/L	15	6.1	8.8	10	5
	Lead	µg/L	165	—	—	—	50
RSC 4	Cadmium	µg/L	—	5.7	9.4	35	5
	Gross alpha	pCi/L	2.6E+01	—	—	3.8E+01	1.5E+01
	Nonvolatile beta	pCi/L	—	—	—	5.5E+01	5E+01
RSC 5	Cadmium	µg/L	8.4	—	—	—	5
	Lead	µg/L	105	—	96	—	50
	Mercury	µg/L	11	—	2.3	—	2
	Gross alpha	pCi/L	2.2E+01	—	—	—	1.5E+01
RSC 6	Cadmium	µg/L	—	6.2	19	10	5
RSC 7	Cadmium	µg/L	—	7.7	8.8	9.1	5
	Lead	µg/L	365	—	141	—	50
	Gross alpha	pCi/L	5.8E+01	—	—	—	1.5E+01

A dash means that a constituent was not analyzed or, if analyzed, did not exceed DWS.

Table 1. Maximum Results for Constituents Exceeding the DWS in 1993,
Continued

Well	Constituent	Unit	1Q93	2Q93	3Q93	4Q93	DWS
RSC 8	Cadmium	µg/L	12	—	—	8.5	5
	Gross alpha	pCi/L	2.8E+01	—	—	2.7E+01	1.5E+01
	Lead	µg/L	150	—	105	—	50
RSC 9	Cadmium	µg/L	11	8.7	5.9	10	5
	Gross alpha	pCi/L	5.0E+01	3.4E+01	1.5E+01	7.1E+01	1.5E+01
	Lead	µg/L	399	—	334	—	50
	Mercury	µg/L	5.0	—	—	—	2
RSC 10	Cadmium	µg/L	12	—	—	5.1	5
	Gross alpha	pCi/L	1.1E+02	—	—	—	1.5E+01
	Lead	µg/L	930	—	170	—	50
	Nonvolatile beta	pCi/L	6.7E+01	—	—	—	5E+01
RSD 1	Nonvolatile beta	pCi/L	5.6E+01	—	—	6.1E+01	5E+01
	Strontium-90	pCi/L	3.1E+01	2.7E+01	2.1E+01	1.8E+01	8E+00
RSD 2A	Cadmium	µg/L	24	12	6.6	20	5
	Lead	µg/L	246	—	—	—	50
	Nonvolatile beta	pCi/L	2.9E+02	3.0E+02	2.5E+02	3.2E+02	5E+01
RSD 2B	Cadmium	µg/L	5.6	8.4	—	—	5
	Nonvolatile beta	pCi/L	6.3E+02	4.1E+02	—	—	5E+01
RSD 2C	Cadmium	µg/L	—	7.1	6.1	23	5
	Gross alpha	pCi/L	—	4.5E+01	—	7.3E+01	1.5E+01
	Mercury	µg/L	5.5	—	—	—	2
	Nonvolatile beta	pCi/L	5.5E+03	5.2E+03	6.4E+03	3.4E+03	5E+01
RSD 3	Lead	µg/L	—	—	116	52	50
RSD 4	Cadmium	µg/L	5.5	6.8	—	7.9	5
	Nonvolatile beta	pCi/L	3.1E+02	1.3E+02	2.4E+02	3.3E+02	5E+01
RSD 5	Cadmium	µg/L	—	5.1	17	—	5
	Lead	µg/L	68	—	—	—	50
	Gross alpha	pCi/L	1.6E+01	—	—	2.3E+01	1.5E+01
	Nonvolatile beta	pCi/L	4.6E+02	1.9E+02	1.6E+02	5.1E+02	5E+01
RSD 6	Cadmium	µg/L	15	7.2	—	9.6	5
	Gross alpha	pCi/L	6.0E+01	—	—	2.0E+01	1.5E+01
	Lead	µg/L	285	—	—	—	50
	Nonvolatile beta	pCi/L	3.3E+02	1.4E+02	1.3E+02	2.1E+02	5E+01
RSD 7	Gross alpha	pCi/L	—	1.8E+01	—	—	1.5E+01
	Lead	µg/L	62	—	78	—	50
	Nonvolatile beta	pCi/L	1.3E+02	9.0E+01	8.8E+01	1.7E+02	5E+01
RSD 8	Cadmium	µg/L	—	—	5.6	6.5	5
	Lead	µg/L	69	—	214	—	50

Table 1. Maximum Results for Constituents Exceeding the DWS in 1993,
Continued

<u>Well</u>	<u>Constituent</u>	<u>Unit</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>DWS</u>
	Gross alpha	pCi/L	—	—	3.4E+01	—	1.5E+01
	Nonvolatile beta	pCi/L	7.6E+02	1.1E+03	8.4E+02	6.5E+02	5E+01
RSD 9	Cadmium	µg/L	—	9.6	5.0	8.5	5
	Lead	µg/L	109	—	56	—	50
	Nonvolatile beta	pCi/L	—	—	7.7E+01	—	5E+01
RSD 10	Cadmium	µg/L	—	—	5.0	—	5
	Lead	µg/L	—	—	67	—	50
	Nonvolatile beta	pCi/L	9.3E+01	6.5E+01	1.4E+02	7.7E+01	5E+01
RSD 11	Cadmium	µg/L	—	8.4	—	—	5
	Lead	µg/L	78	—	57	—	50
RSE 1A	Nonvolatile beta	pCi/L	—	5.3E+02	3.0E+02	1.4E+02	5E+01
	Strontium-90	pCi/L	—	2.5E+02	1.3E+02	4.9E+01	8E+00
	Tritium	pCi/mL	—	2.1E+02	—	—	2E+01
RSE 1B	Gross alpha	pCi/L	2.9E+01	—	—	—	1.5E+01
	Nonvolatile beta	pCi/L	—	7.5E+01	6.2E+01	5.8E+01	5E+01
	Strontium-90	pCi/L	—	4.7E+01	1.5E+01	2.8E+01	8E+00
	Tritium	pCi/mL	—	1.1E+04	—	—	2E+01
RSE 1C	Nitrate-nitrite as nitrogen	µg/L	—	—	98,000	—	10,000
	Nonvolatile beta	pCi/L	—	2.6E+02	—	—	5E+01
	Strontium-90	pCi/L	—	1.0E+02	—	—	8E+00
	Tritium	pCi/mL	—	3.2E+03	—	—	2E+01
RSE 2	Nonvolatile beta	pCi/L	—	9.7E+01	—	—	5E+01
	Strontium-90	pCi/L	—	4.6E+01	2.1E+01	—	8E+00
RSE 3A	Gross alpha	pCi/L	1.8E+01	—	—	6.0E+01	1.5E+01
	Nonvolatile beta	pCi/L	—	—	—	5.3E+01	5E+01
	Strontium-90	pCi/L	—	1.6E+01	—	—	8E+00
RSE 4A	Mercury	µg/L	2.8	—	—	—	2
	Nonvolatile beta	pCi/L	8.2E+02	8.1E+02	9.1E+01	1.7E+02	5E+01
RSE 4B	Cadmium	µg/L	6.1	8.3	—	—	5
	Gross alpha	pCi/L	—	2.2E+01	—	—	1.5E+01
	Nonvolatile beta	pCi/L	—	1.2E+03	—	—	5E+01
RSE 4C	Cadmium	µg/L	5.5	—	—	7.5	5
	Nonvolatile beta	pCi/L	3.5E+02	8.2E+02	1.6E+02	1.6E+02	5E+01
RSE 5	Cadmium	µg/L	27	45	—	—	5
	Nonvolatile beta	pCi/L	8.0E+01	1.3E+02	—	—	5E+01

Table 1. Maximum Results for Constituents Exceeding the DWS in 1993,
Continued

Well	Constituent	Unit	1Q93	2Q93	3Q93	4Q93	DWS
RSE 6	Cadmium	µg/L	12	6.9	—	—	5
	Lead	µg/L	1,960	—	—	—	50
	Mercury	µg/L	2.5	—	—	—	2
	Gross alpha	pCi/L	2.8E+02	1.4E+02	—	—	1.5E+01
	Nonvolatile beta	pCi/L	1.6E+04	2.9E+04	—	—	5E+01
RSE 9	Cadmium	µg/L	12	—	—	18	5
RSE 10	Gross alpha	pCi/L	1.7E+01	—	—	—	1.5E+01
	Nitrate-nitrite as nitrogen	µg/L	—	25,600	—	—	10,000
	Nonvolatile beta	pCi/L	5.5E+01	1.7E+04	6.0E+03	—	5E+01
	Strontium-90	pCi/L	—	9.1E+03	1.9E+03	—	8E+00
	Tritium	pCi/mL	4.4E+01	—	2.1E+01	—	2E+01
RSE 11	Cadmium	µg/L	5.3	6.6	—	—	5
	Gross alpha	pCi/L	1.8E+01	—	—	—	1.5E+01
	Nonvolatile beta	pCi/L	1.0E+03	8.4E+02	8.7E+02	8.2E+02	5E+01
RSE 13	Cadmium	µg/L	7.7	5.3	—	—	5
	Mercury	µg/L	2.2	—	—	—	2
	Nonvolatile beta	pCi/L	2.2E+02	3.2E+02	1.6E+02	9.4E+01	5E+01
RSE 18	Cadmium	µg/L	17	9.4	17	48	5
	Gross alpha	pCi/L	4.2E+01	3.0E+01	1.9E+01	8.0E+01	1.5E+01
	Lead	µg/L	124	—	51	—	50
	Nonvolatile beta	pCi/L	—	—	—	5.5E+01	5E+01
RSE 19	Cadmium	µg/L	13	5.7	8.4	—	5
	Gross alpha	pCi/L	2.8E+01	—	1.8E+01	4.3E+01	1.5E+01
	Lead	µg/L	273	—	127	—	50
	Nonvolatile beta	pCi/L	1.3E+02	6.3E+01	1.3E+02	1.5E+02	5E+01
RSF 1	Tritium	pCi/mL	—	2.3E+01	3.3E+01	—	2E+01
RSF 3	Mercury	µg/L	—	—	2.8	—	2

References

- Arnett, Margaret W., Linda K. Karapatakis, Albert R. Mamatey, James L. Todd, eds. 1992. *Savannah River Site Environmental Report for 1991*, WSRC-TR-92-186, Westinghouse Savannah River Company, Aiken, SC.
- Arnett, Margaret W., Linda K. Karapatakis, Albert R. Mamatey, eds. 1993. *Savannah River Site Environmental Report for 1992*, WSRC-TR-93-075, Westinghouse Savannah River Company, Aiken, SC.
- Buckner, M. R. 1988. *SRP Reactor Safety Evolution*, DPST-83-718 R2, E. I. du Pont de Nemours & Company, Savannah River Laboratory, Aiken, SC.
- Cummins, Carol L., Donna K. Martin, James L. Todd, eds. 1990. *Savannah River Site Environmental Report for 1989*, WSRC-IM-90-60, Vol. I, Text, Westinghouse Savannah River Company, Aiken, SC.
- Cummins, Carol L., Donna K. Martin, James L. Todd, eds. 1991. *Savannah River Site Environmental Report for 1990*, WSRC-IM-91-28, Westinghouse Savannah River Company, Aiken, SC.
- Davis, H. Allen, Donna K. Martin, James L. Todd, eds. 1988. *Savannah River Site Environmental Report for 1988*, WSRC-RP-89-59-1, Vol. I, Text, Westinghouse Savannah River Company, Aiken, SC.
- Dukes, E. K. 1984. *The Savannah River Plant Environment*, DP-1642, E. I. du Pont de Nemours & Company, Savannah River Laboratory, Aiken, SC.
- Gladden, J. B., W. L. Specht, J. A. Bowers, N. V. Halverson, H. E. Mackey, and E. W. Wilde. 1988. *Compliance of the Savannah River Plant L-Reactor Cooling System with Environmental Regulations—Demonstration in Accordance with Section 316(a) of the Clean Water Act—November 1985/December 1987*, DP-1766, E. I. du Pont de Nemours & Company, Savannah River Laboratory, Aiken, SC.
- Huber, L. A., W. F. Johnson, and I. W. Marine. 1987. *Environmental Information Document: Burning/Rubble Pits*, DPST-85-690, E. I. du Pont de Nemours & Company, Savannah River Laboratory, Aiken, SC.
- King, C. M. and J. R. Cook. 1987. *Environmental and Waste Management Concern: Neptunium-237 (²³⁷Np)*. Draft, Savannah River Laboratory, E. I. du Pont de Nemours and Company, Aiken, SC.
- Langley, T. M., and W. L. Marter. 1973. *The Savannah River Plant Site*, DP-1323, E. I. du Pont de Nemours & Company, Savannah River Plant Laboratory, Aiken, SC.

Pekalla, R. O., C. E. Jewell, W. G. Holmes, and I. W. Marine. 1986. *Environmental Information Document: Bingham Pump Outage Pits*, DPST-85-695 (draft), E. I. du Pont de Nemours & Company, Savannah River Laboratory, Aiken, SC.

Pekalla, R. O., C. E. Jewell, W. G. Holmes, and I. W. Marine. 1987. *Environmental Information Document: Reactor Seepage Basins*, DPST-85-707, Savannah River Laboratory, E. I. du Pont de Nemours & Company, Aiken, SC.

Pekalla, R. O., C. E. Jewell, V. Price, and H. W. Bledsoe. 1987. *Environmental Information Document: L-Area Oil and Chemical Basin*, DPST-85-700, Savannah River Laboratory, E. I. du Pont de Nemours & Company, Aiken, SC.

U. S. Department of Energy. 1984. *Final Environmental Impact Statement—L-Reactor Operation—Savannah River Plant, Aiken, South Carolina, Vol. I*, DOE/EIS-0108, U. S. Department of Energy, Washington, D.C.

U. S. Department of Energy. 1990. *Final Environmental Impact Statement: Continued Operation of K-, L-, and P-Reactors—Savannah River Site, Aiken, South Carolina, Vol. I*, DOE/EIS-0147, U. S. Department of Energy, Washington, D.C.

U. S. Department of Energy. 1994. *Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Draft Environmental Impact Statement, Vol. I*, DOE/EIS-0203-D, U. S. Department of Energy, Washington, D.C.

U. S. Department of Energy. 1994. *Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Draft Environmental Impact Statement, Vol. I, Appendix C, Savannah River Site Spent Nuclear Fuel Management Program*, DOE/EIS-0203-D, U. S. Department of Energy, Washington, D.C.

U. S. Department of Energy. 1994. *Proceedings for the Decommissioning and Deactivation Strategies Seminar for Savannah River Site (SRS) Reactors and Other Facilities*, CONF-931267, U. S. Department of Energy, Washington, D.C.

Ward, J. W., and W. F. Johnson. 1986. *Environmental Information Document: Acid/Caustic Basins*, DPST-85-705 (draft), Savannah River Laboratory, E. I. du Pont de Nemours & Company, Aiken, SC.

Westinghouse Savannah River Company. 1989a. *Savannah River Site's Groundwater Monitoring Program First Quarter, 1989*, ESH-EMS-890043, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1989b. *Savannah River Site's Groundwater Monitoring Program Second Quarter, 1989*, ESH-EMS-890044, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1989c. *Savannah River Site's Groundwater Monitoring Program Third Quarter, 1989*, ESH-EMS-890045, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1989d. *Savannah River Site's Groundwater Monitoring Program Fourth Quarter, 1989*, ESH-EMS-890046, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1990. *Savannah River Site's Groundwater Monitoring Program First Quarter, 1990*, ESH-EMS-90-0131, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1991a. *Savannah River Site's Groundwater Monitoring Program Second Quarter, 1990*, ESH-EMS-900132, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1991b. *Savannah River Site's Groundwater Monitoring Program Third Quarter, 1990*, ESH-EMS-900133, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1991c. *Savannah River Site's Groundwater Monitoring Program Fourth Quarter, 1990*, ESH-EMS-900134, Environmental Monitoring (Health Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1991d. *Savannah River Site's Groundwater Monitoring Program First Quarter, 1991*, ESH-EMS-910087, Environmental Monitoring (Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1992a. *Savannah River Site Environmental Report for 1992—Summary Pamphlet*, WSRC-TR-93-076, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1992b. *Savannah River Site's Groundwater Monitoring Program Second Quarter, 1991*, ESH-EMS-910088, Environmental Monitoring (Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1992c. *Savannah River Site's Groundwater Monitoring Program Third Quarter, 1991*, ESH-EMS-910089, Environmental Monitoring (Protection Department) and Exploration Resources, Savannah River Site, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1992d. *Savannah River Site's Groundwater Monitoring Program Fourth Quarter, 1991*, (U), ESH-EMS-910090, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, June, 1992.

Westinghouse Savannah River Company. 1992e. *Savannah River Site's Groundwater Monitoring Program First Quarter, 1992*, (U), ESH-EMS-920035, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, October, 1992.

Westinghouse Savannah River Company. 1992f. *Savannah River Site's Groundwater Monitoring Program, Second Quarter, 1992*, (U), ESH-EMS-920036, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, October, 1992.

Westinghouse Savannah River Company. 1993a. *RFI/RI Phase II Plan, L-Area Oil and Chemical Basin*, WSRC-RP-90-1028, Rev. 2, Addendum, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1993b. *Savannah River Site's Groundwater Monitoring Program Third Quarter, 1992*, (U), ESH-EMS-920037, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, February, 1993.

Westinghouse Savannah River Company. 1993c. *Savannah River Site's Groundwater Monitoring Program Fourth Quarter, 1992*, (U), ESH-EMS-920038, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, May, 1993.

Westinghouse Savannah River Company. 1993d. *Savannah River Site's Groundwater Monitoring Program First Quarter, 1993*, (U), ESH-EMS-930096, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, August, 1993.

Westinghouse Savannah River Company. 1993e. *Savannah River Site's Groundwater Monitoring Program Second Quarter, 1993, (U)*, ESH-EMS-930097, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, October, 1993.

Westinghouse Savannah River Company. 1993f. *Working Strategy to Address Groundwater Contamination at the Reactor Areas—Savannah River Site*, WSRC-RP-93-1261, Westinghouse Savannah River Company, Aiken, SC.

Westinghouse Savannah River Company. 1994a. *Savannah River Site's Groundwater Monitoring Program Third Quarter, 1993, (U)*, ESH-EMS-930098, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, February, 1994.

Westinghouse Savannah River Company. 1994b. *Savannah River Site's Groundwater Monitoring Program Fourth Quarter, 1993*, ESH-EMS-930099, Environmental Protection Department, Environmental Monitoring Section, Westinghouse Savannah River Company, Aiken, SC, June 1994.

Glossary

ANION - ion or group of ions having a negative charge and characteristically moving toward a positive electrode.

BOTTOM ASH - Mineral matter in fossil fuels such as coal or lignite that is converted during combustion to a fused, glassy ash that does not contribute to air pollution.

CATION - ion or group of ions having a positive charge and characteristically moving toward a negative electrode.

CLADDING - protective metal layer covering fuel, target, control, and safety rods.

CONTROL ROD - neutron-absorbing cadmium or lithium-aluminum rod used to regulate the nuclear fission process within the reactor vessel.

CRITICALITY - point at which a nuclear reactor is self-sustaining.

DISCHARGING MACHINE - Remotely or automatically operated device that withdraws fuel and target assemblies from a reactor, cools them, and conveys them to the deposit-and-exit conveyor.

FISSION - nuclear reaction in which an atomic nucleus, especially a heavy nucleus, splits into fragments (usually two fragments of comparable mass) with the release of energy.

FLUX - rate of neutron flow.

FLY ASH - Mineral matter from fossil fuels such as coal or lignite, converted during combustion to a fused, glassy ash small enough to enter the furnace flue, escape through the stack, and enter the atmosphere.

FUEL ROD - protective metal rod containing pellets of fuel for a nuclear reactor.

HEAVY WATER - deuterium oxide (D₂O).

HIGH-LEVEL WASTE - The highly radioactive waste material resulting from the reprocessing of spent nuclear fuel. This includes any solid waste derived from the liquid waste produced directly in reprocessing. High-level waste contains a combination of transuranic waste and fission products in concentrations requiring permanent isolation.

LATTICE - spatial arrangement of fissionable and nonfissionable materials in a nuclear reactor.

LOW-LEVEL WASTE - includes low-activity waste (solid waste radiating <200 mrem/hr at 5 cm from an unshielded container), intermediate-level waste (solid waste radiating >200 mrem/hr at 5 cm), intermediate-level tritium waste (solid waste containing 10 Curies of tritium per container and radiating <200 mrem/hr at 5 cm), long-lived waste, and soil suspected of being contaminated.

MODERATOR - substance used in a nuclear reactor to slow down fast neutrons and increase the likelihood of fission.

PLENUM - enclosure in which water, air, or other gas is at a pressure greater than that of the outside atmosphere.

POISON - substance that absorbs neutrons without any fission resulting and thereby lowers the reactivity of a nuclear reactor.

PRIMARY COOLANT - deuterium oxide (D₂O), or heavy water, used as a cooling source and neutron moderator throughout the production process.

REACTIVITY INSTRUMENTS - instrumentation that monitors the deviation of a nuclear reactor from the critical state.

REWORK - to recycle or reprocess; refers here to heavy water (D₂O).

SAFETY ROD - neutron-absorbing cadmium rod used as a safeguard against reactor core damage.

SCRAM - a sudden shutting down of a nuclear reactor, usually by dropping safety rods, when a predetermined neutron flux or other dangerous condition occurs.

SECONDARY COOLANT - water drawn from the Savannah River, Par Pond, or L Lake and used to receive heat from the primary coolant.

TARGET ROD - lithium-aluminum rod containing materials to be irradiated by the fuel rod.

TRANSURANIC WASTE - waste contaminated with alpha-emitting transuranic radionuclides (having an atomic number greater than 92; e.g., plutonium-239) with half lives greater than 20 years in concentrations greater than 200 nC/g. TRU waste may also contain RCRA-regulated materials.

Appendix A. Final Primary Drinking Water Standards

Analyte	Unit	Level	Status	Source
Antimony	µg/L	6	Final	EPA, 1993
Arsenic	µg/L	50	Final	EPA, 1993
Asbestos	fibers/L	7,000,000	Final	EPA, 1993
Barium	µg/L	2,000	Final	EPA, 1993
Benzene	µg/L	5	Final	EPA, 1993
Benzo[a]pyrene	µg/L	0.2	Final	EPA, 1993
Beryllium	µg/L	4	Final	EPA, 1993
Bis(2-ethylhexyl) phthalate	µg/L	6	Final	EPA, 1993
Bromodichloromethane	µg/L	100	Final	EPA, 1993
Bromoform	µg/L	100	Final	EPA, 1993
2-sec-Butyl-4,6-dinitrophenol	µg/L	7	Final	EPA, 1993
Cadmium	µg/L	5	Final	EPA, 1993
Carbon tetrachloride	µg/L	5	Final	EPA, 1993
Chlordane	µg/L	2	Final	EPA, 1993
Chlorobenzene	µg/L	100	Final	EPA, 1993
Chloroethene (Vinyl chloride)	µg/L	2	Final	EPA, 1993
Chloroform	µg/L	100	Final	EPA, 1993
Chromium	µg/L	100	Final	EPA, 1993
Copper	µg/L	1,300	Final	EPA, 1993
Cyanide	µg/L	200	Final	EPA, 1993
Dibromochloromethane	µg/L	100	Final	EPA, 1993
1,2-Dibromo-3-chloropropane	µg/L	0.2	Final	EPA, 1993
1,2-Dibromoethane	µg/L	0.05	Final	EPA, 1993
1,2-Dichlorobenzene	µg/L	600	Final	EPA, 1993
1,4-Dichlorobenzene	µg/L	75	Final	EPA, 1993
1,2-Dichloroethane	µg/L	5	Final	EPA, 1993
1,1-Dichloroethylene	µg/L	7	Final	EPA, 1993
1,2-Dichloroethylene	µg/L	50	Final	EPA, 1993
cis-1,2-Dichloroethylene	µg/L	70	Final	EPA, 1993
trans-1,2-Dichloroethylene	µg/L	100	Final	EPA, 1993
Dichloromethane (Methylene chloride)	µg/L	5	Final	EPA, 1993
2,4-Dichlorophenoxyacetic acid	µg/L	70	Final	EPA, 1993
1,2-Dichloropropane	µg/L	5	Final	EPA, 1993
Endrin	µg/L	2	Final	EPA, 1993
Ethylbenzene	µg/L	700	Final	EPA, 1993
Fluoride	µg/L	4,000	Final	EPA, 1993
Gross alpha ¹	pCi/L	1.5E+01	Final	EPA, 1993
Heptachlor	µg/L	0.4	Final	EPA, 1993

¹ The standard given is for gross alpha including radium-226 but excluding radon and uranium.

<u>Analyte</u>	<u>Unit</u>	<u>Level</u>	<u>Status</u>	<u>Source</u>
Heptachlor epoxide	µg/L	0.2	Final	EPA, 1993
Hexachlorobenzene	µg/L	1	Final	EPA, 1993
Hexachlorocyclopentadiene	µg/L	50	Final	EPA, 1993
Lead	µg/L	50	Final	SCDHEC, 1981
Lindane	µg/L	0.2	Final	EPA, 1993
Mercury	µg/L	2	Final	EPA, 1993
Methoxychlor	µg/L	40	Final	EPA, 1993
Nickel	µg/L	100	Final	EPA, 1993
Nitrate as nitrogen	µg/L	10,000	Final	EPA, 1993
Nitrate-nitrite as nitrogen	µg/L	10,000	Final	EPA, 1993
Nitrite as nitrogen	µg/L	1,000	Final	EPA, 1993
Nonvolatile beta	pCi/L	5E+01	Interim final	EPA, 1977
PCB 1016	µg/L	0.5	Final	EPA, 1993
PCB 1221	µg/L	0.5	Final	EPA, 1993
PCB 1232	µg/L	0.5	Final	EPA, 1993
PCB 1242	µg/L	0.5	Final	EPA, 1993
PCB 1248	µg/L	0.5	Final	EPA, 1993
PCB 1254	µg/L	0.5	Final	EPA, 1993
PCB 1260	µg/L	0.5	Final	EPA, 1993
PCB 1262	µg/L	0.5	Final	EPA, 1993
Pentachlorophenol	µg/L	1	Final	EPA, 1993
Selenium	µg/L	50	Final	EPA, 1993
Strontium-89/90 ²	pCi/L	8E+00	Final	EPA, 1993
Strontium-90	pCi/L	8E+00	Final	EPA, 1993
Styrene	µg/L	100	Final	EPA, 1993
2,3,7,8-TCDD	µg/L	0.00003	Final	EPA, 1993
Tetrachloroethylene	µg/L	5	Final	EPA, 1993
Thallium	µg/L	2	Final	EPA, 1993
Toluene	µg/L	1,000	Final	EPA, 1993
Toxaphene	µg/L	3	Final	EPA, 1993
2,4,5-TP (Silvex)	µg/L	50	Final	EPA, 1993
1,2,4-Trichlorobenzene	µg/L	70	Final	EPA, 1993
1,1,1-Trichloroethane	µg/L	200	Final	EPA, 1993
1,1,2-Trichloroethane	µg/L	5	Final	EPA, 1993
Trichloroethylene	µg/L	5	Final	EPA, 1993
Tritium	pCi/mL	2E+01	Final	EPA, 1993
Xylenes	µg/L	10,000	Final	EPA, 1993

References

EPA (U.S. Environmental Protection Agency), 1977. *National Interim Primary Drinking Water Regulations*, EPA-570/9-76-003. Washington, DC.

² When the laboratories report results for strontium-89/90, the drinking water standard for strontium-90 is applied.

EPA (U.S. Environmental Protection Agency), 1993. *National Primary Drinking Water Regulations, Code of Federal Regulations, Section 40, Part 141*, pp. 592-732. Washington, DC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1981. *State Primary Drinking Water Regulations, R.61-58.5*. Columbia, SC.

Appendix B. Flagging Criteria

The Savannah River Site Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) flagging criteria are as follows:

- Flag 2 criteria for constituents equal the Safe Drinking Water Act (SDWA) final Primary Drinking Water Standard (PDWS), the SDWA proposed PDWS, or the SDWA Secondary Drinking Water Standard (SDWS). If a constituent does not have a drinking water standard, the Flag 2 criterion equals 10 times the method detection limit (MDL) calculated as the 90th percentile detection limit obtained recently by one of the primary analytical laboratories.
- Flag 1 criteria for constituents equal one-half of the final PDWS, one-half the proposed PDWS, or one-half the SDWS. If a constituent does not have a drinking water standard, the Flag 1 criterion equals 5 times the MDL calculated as the 90th percentile detection limit obtained recently by one of the primary analytical laboratories.
- Flag 0 criteria are assigned to constituent levels below Flag 1 criteria, constituent levels below the sample detection limits, or constituents having no flagging criteria.

The following parameters are exceptions to the flagging rules:

- EPD/EMS sets flagging criteria for specific conductance and pH. No flags are set for alkalinity, calcium, carbonate, magnesium, potassium, silica, sodium, total dissolved solids, total phosphates (as P), and total phosphorus. Analyses for these parameters are conducted as part of the biennial comprehensive analyses or by special request.
- Aesthetic parameters such as color, corrosivity, Eh, odor, surfactants, and turbidity are not assigned flagging criteria but are analyzed by special request.
- Common laboratory contaminants and cleaners such as dichloromethane (methylene chloride), ketones, phthalates, and toluene are not assigned flagging criteria unless they have primary drinking water standards. These constituents are analyzed by special request.

<u>Analyte</u>	<u>Unit</u>	<u>Flag 1</u>	<u>Flag 2</u>	<u>Source*</u>
Acenaphthene	µg/L	50	100	EPA Method 8270
Acenaphthylene	µg/L	50	100	EPA Method 8270
Acetone	µg/L	500	1,000	EPA Method 8240
Acetonitrile (Methyl cyanide)	µg/L	500	1,000	EPA Method 8240
Acetophenone	µg/L	50	100	EPA Method 8270
2-Acetylaminofluorene	µg/L	50	100	EPA Method 8270

<u>Analyte</u>	<u>Unit</u>	<u>Flag 1</u>	<u>Flag 2</u>	<u>Source^a</u>
Acrolein	µg/L	100	200	EPA Method 8240
Acrylonitrile	µg/L	100	200	EPA Method 8240
Actinium-228	pCi/L	1.64E+03	3.27E+03	Proposed PDWS (EPA, 1991)
Alachlor	µg/L	1	2	Final PDWS (EPA, 1993a)
Aldicarb ^b	µg/L	1.5	3	Final PDWS (EPA, 1993a)
Aldicarb sulfone ^b	µg/L	1	2	Final PDWS (EPA, 1993a)
Aldicarb sulfoxide ^b	µg/L	2	4	Final PDWS (EPA, 1993a)
Aldrin	µg/L	0.25	0.5	EPA Method 8080
Alkalinity (as CaCO ₃)		No flag	No flag	Set by EPD/EMS
Allyl chloride	µg/L	250	500	EPA Method 8240
Aluminum	µg/L	25	50	SDWS (EPA, 1993b)
Aluminum, dissolved	µg/L	25	50	SDWS (EPA, 1993b)
Aluminum, total recoverable	µg/L	25	50	SDWS (EPA, 1993b)
Americium-241	pCi/L	3.17E+00	6.34E+00	Proposed PDWS (EPA, 1991)
Americium-243	pCi/L	3.19E+00	6.37E+00	Proposed PDWS (EPA, 1991)
4-Aminobiphenyl	µg/L	50	100	EPA Method 8270
Ammonia	µg/L	500	1,000	APHA Method 417B
Ammonia nitrogen	µg/L	500	1,000	EPA Method 350.1
Aniline	µg/L	50	100	EPA Method 8270
Anthracene	µg/L	50	100	EPA Method 8270
Antimony	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony, dissolved	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony, total recoverable	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony-125	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Aramite	µg/L	50	100	EPA Method 8270
Arsenic	µg/L	25	50	Final PDWS (EPA, 1993a)
Arsenic, dissolved	µg/L	25	50	Final PDWS (EPA, 1993a)
Arsenic, total recoverable	µg/L	25	50	Final PDWS (EPA, 1993a)
Asbestos	Fibers/L	3,500,000	7,000,000	Final PDWS (EPA, 1993a)
Atrazine	µg/L	1.5	3	Final PDWS (EPA, 1993a)
Azobenzene	µg/L	50	100	EPA Method 625
Barium	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium, dissolved	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium, total recoverable	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium-140 ^c	pCi/L	4.5E+01	9E+01	Interim Final PDWS (EPA, 1977)
Benzene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
alpha-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
beta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
delta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
Benzidine	µg/L	250	500	EPA Method 8270
Benzo[a]anthracene	µg/L	0.05	0.1	Proposed PDWS (EPA, 1990)
Benzo[b]fluoranthene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Benzo[k]fluoranthene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Benzoic acid	µg/L	250	500	EPA Method 8270
Benzo[g,h,i]perylene	µg/L	50	100	EPA Method 8270
Benzo[a]pyrene	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
1,4-Benzoquinone	µg/L	50	100	EPA Method 8270
Benzyl alcohol	µg/L	50	100	EPA Method 8270
Beryllium	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium, dissolved	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium, total recoverable	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium-7	pCi/L	3E+03	6E+03	Interim Final PDWS (EPA, 1977)
Bis(2-chloroethoxy) methane	µg/L	50	100	EPA Method 8270
Bis(2-chloroethyl) ether	µg/L	50	100	EPA Method 8270
Bis(2-chloroisopropyl) ether	µg/L	50	100	EPA Method 8270
Bis(chloromethyl) ether	µg/L	50	100	EPA Method 8270
Bis(2-ethylhexyl) phthalate	µg/L	3	6	Final PDWS (EPA, 1993a)
Bismuth-214	pCi/L	9.4E+03	1.89E+04	Proposed PDWS (EPA, 1991)
Boron	µg/L	150	300	EPA Method 6010
Boron, dissolved	µg/L	150	300	EPA Method 6010

<u>Analyte</u>	<u>Unit</u>	<u>Flag 1</u>	<u>Flag 2</u>	<u>Source*</u>
Boron, total recoverable	µg/L	150	300	EPA Method 6010
Bromide	µg/L	5,000	10,000	EPA Method 800.0
Bromodichloromethane	µg/L	50	100	Final PDWS (EPA, 1993a)
Bromoform	µg/L	50	100	Final PDWS (EPA, 1993a)
Bromomethane (Methyl bromide)	µg/L	5	10	EPA Method 8240
4-Bromophenyl phenyl ether	µg/L	50	100	EPA Method 8270
2-sec-Butyl-4,6-dinitrophenol	µg/L	3.5	7	Final PDWS (EPA, 1993a)
Butylbenzyl phthalate		No flag	No flag	Set by EPD/EMS
Cadmium	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Cadmium, dissolved	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Cadmium, total recoverable	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Calcium		No flag	No flag	Set by EPD/EMS
Calcium, dissolved		No flag	No flag	Set by EPD/EMS
Calcium, total recoverable		No flag	No flag	Set by EPD/EMS
Carbon disulfide	µg/L	5	10	EPA Method 8240
Carbofuran	µg/L	20	40	Final PDWS (EPA, 1993a)
Carbon tetrachloride	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Carbon-14	pCi/L	1E+03	2E+03	Interim Final PDWS (EPA, 1977)
Carbonate		No flag	No flag	Set by EPD/EMS
Cerium-141 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Cerium-144	pCi/L	1.31E+02	2.61E+02	Proposed PDWS (EPA, 1991)
Cesium-134 ^d	pCi/L	4.07E+01	8.13E+01	Proposed PDWS (EPA, 1991)
Cesium-137	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Chlordane	µg/L	1	2	Final PDWS (EPA, 1993a)
Chloride	µg/L	125,000	250,000	SDWS (EPA, 1993b)
4-Chloroaniline	µg/L	50	100	EPA Method 8270
Chlorobenzene	µg/L	50	100	Final PDWS (EPA, 1993a)
Chlorobenzilate	µg/L	50	100	EPA Method 8270
Chloroethane	µg/L	5	10	EPA Method 8240
Chloroethene (Vinyl chloride)	µg/L	1	2	Final PDWS (EPA, 1993a)
Chloroethyl vinyl ether	µg/L	5	10	EPA Method 8240
2-Chloroethyl vinyl ether	µg/L	5	10	EPA Method 8240
Chloroform	µg/L	50	100	Final PDWS (EPA, 1993a)
4-Chloro-m-cresol	µg/L	50	100	EPA Method 8270
Chloromethane (Methyl chloride)	µg/L	5	10	EPA Method 8240
2-Chloronaphthalene	µg/L	50	100	EPA Method 8240
2-Chlorophenol	µg/L	50	100	EPA Method 8270
4-Chlorophenyl phenyl ether	µg/L	50	100	EPA Method 8270
Chloroprene	µg/L	1,000	2,000	EPA Method 8240
Chromium	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium, dissolved	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium, total recoverable	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium-51 ^c	pCi/L	3E+03	6E+03	Interim Final PDWS (EPA, 1977)
Chrysene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Cobalt	µg/L	20	40	EPA Method 6010
Cobalt, dissolved	µg/L	20	40	EPA Method 6010
Cobalt, total recoverable	µg/L	20	40	EPA Method 6010
Cobalt-57	pCi/L	5E+02	1E+03	Interim Final PDWS (EPA, 1977)
Cobalt-58 ^d	pCi/L	4.5E+03	9E+03	Interim Final PDWS (EPA, 1977)
Cobalt-60	pCi/L	5E+01	1E+02	Interim Final PDWS (EPA, 1977)
Color		No flag	No flag	Set by EPD/EMS
Copper	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Copper, dissolved	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Copper, total recoverable	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Corrosivity		No flag	No flag	Set by EPD/EMS
m-Cresol (3-Methylphenol)	µg/L	50	100	EPA Method 8270
o-Cresol (2-Methylphenol)	µg/L	50	100	EPA Method 8270
p-Cresol (4-Methylphenol)	µg/L	50	100	EPA Method 8270
Curium-242	pCi/L	6.65E+01	1.33E+02	Proposed PDWS (EPA, 1991)
Curium-243	pCi/L	4.15E+00	8.3E+00	Proposed PDWS (EPA, 1991)
Curium-243/244 ^c	pCi/L	4.15E+00	8.3E+00	Proposed PDWS (EPA, 1991)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Curium-244	pCi/L	4.92E+00	9.84E+00	Proposed PDWS (EPA, 1991)
Curium-245/246 ^c	pCi/L	3.12E+00	6.23E+00	Proposed PDWS (EPA, 1991)
Curium-246	pCi/L	3.14E+00	6.27E+00	Proposed PDWS (EPA, 1991)
Cyanide	µg/L	100	200	Final PDWS (EPA, 1993a)
Dalapon ^b	µg/L	100	200	Final PDWS (EPA, 1993a)
p,p'-DDD	µg/L	0.5	1	EPA Method 8080
p,p'-DDE	µg/L	0.5	1	EPA Method 8080
p,p'-DDT	µg/L	0.5	1	EPA Method 8080
Di-n-butyl phthalate		No flag	No flag	Set by EPD/EMS
Di-n-octyl phthalate		No flag	No flag	Set by EPD/EMS
Diallate	µg/L	50	100	EPA Method 8270
Dibenz[a,h]anthracene	µg/L	0.15	0.3	Proposed PDWS (EPA, 1990)
Dibenzofuran	µg/L	50	100	EPA Method 8270
Dibromochloromethane	µg/L	50	100	Final PDWS (EPA, 1993a)
1,2-Dibromo-3-chloropropane	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
1,2-Dibromoethane	µg/L	0.025	0.05	Final PDWS (EPA, 1993a)
Dibromomethane	µg/L	5	10	EPA Method 8240
(Methylene bromide)				
1,2-Dichlorobenzene	µg/L	300	600	Final PDWS (EPA, 1993a)
1,3-Dichlorobenzene	µg/L	50	100	EPA Method 8270
1,4-Dichlorobenzene	µg/L	37.5	75	Final PDWS (EPA, 1993a)
3,3'-Dichlorobenzidine	µg/L	50	100	EPA Method 8270
trans-1,4-Dichloro-2-butene	µg/L	150	300	EPA Method 8240
Dichlorodifluoromethane	µg/L	5	10	EPA Method 8240
1,1-Dichloroethane	µg/L	5	10	EPA Method 8240
1,2-Dichloroethane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
1,1-Dichloroethylene	µg/L	3.5	7	Final PDWS (EPA, 1993a)
1,2-Dichloroethylene	µg/L	25	50	Final PDWS (EPA, 1993a)
cis-1,2-Dichloroethylene	µg/L	35	70	Final PDWS (EPA, 1993a)
trans-1,2-Dichloroethylene	µg/L	50	100	Final PDWS (EPA, 1993a)
Dichloromethane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
(Methylene chloride)				
2,4-Dichlorophenol	µg/L	50	100	EPA Method 8270
2,6-Dichlorophenol	µg/L	50	100	EPA Method 8270
2,4-Dichlorophenoxyacetic acid	µg/L	35	70	Final PDWS (EPA, 1993a)
1,2-Dichloropropane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
cis-1,3-Dichloropropene	µg/L	5	10	EPA Method 8240
trans-1,3-Dichloropropene	µg/L	5	10	EPA Method 8240
Di(2-ethylhexyl) adipate	µg/L	200	400	Final PDWS (EPA, 1993a)
Dieldrin	µg/L	2.5	5	EPA Method 8080
Diethyl phthalate		No flag	No flag	Set by EPD/EMS
Dimethoate	µg/L	50	100	EPA Method 8270
p-Dimethylaminoazobenzene	µg/L	50	100	EPA Method 8270
p-(Dimethylamino)ethylbenzene	µg/L	50	100	EPA Method 8270
7,12-Dimethylbenz[a]anthracene	µg/L	50	100	EPA Method 8270
3,3'-Dimethylbenzidine	µg/L	50	100	EPA Method 8270
a,a-Dimethylphenethylamine	µg/L	50	100	EPA Method 8270
2,4-Dimethyl phenol	µg/L	50	100	EPA Method 8270
Dimethyl phthalate		No flag	No flag	Set by EPD/EMS
1,3-Dinitrobenzene	µg/L	50	100	EPA Method 8270
2,4-Dinitrophenol	µg/L	250	500	EPA Method 8270
2,4-Dinitrotoluene	µg/L	50	100	EPA Method 8270
2,6-Dinitrotoluene	µg/L	50	100	EPA Method 8270
Diquat dibromide ^b	µg/L	10	20	Final PDWS (EPA, 1993a)
1,4-Dioxane	µg/L	50	100	EPA Method 8270
Diphenylamine	µg/L	50	100	EPA Method 8270
1,2-Diphenylhydrazine	µg/L	50	100	EPA Method 8270
Dissolved organic carbon	µg/L	5,000	10,000	EPA Method 9060
Disulfoton	µg/L	50	100	EPA Method 8270
Eh		No flag	No flag	Set by EPD/EMS

Analyte	Unit	Flag 1	Flag 2	Source ^a
Endosulfan I	µg/L	0.5	1	EPA Method 8080
Endosulfan II	µg/L	0.5	1	EPA Method 8080
Endosulfan sulfate	µg/L	0.5	1	EPA Method 8080
Endothall ^b	µg/L	50	100	Final PDWS (EPA, 1993a)
Endrin	µg/L	1	2	Final PDWS (EPA, 1993a)
Endrin aldehyde	µg/L	0.5	1	EPA Method 8080
Endrin ketone		No flag	No flag	Set by EPD/EMS
Ethylbenzene	µg/L	350	700	Final PDWS (EPA, 1993a)
Ethyl methacrylate	µg/L	50	100	EPA Method 8270
Ethyl methanesulfonate	µg/L	50	100	EPA Method 8270
Europium-152	pCi/L	3E+01	6E+01	Interim Final PDWS (EPA, 1977)
Europium-154	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Europium-155	pCi/L	3E+02	6E+02	Interim Final PDWS (EPA, 1977)
Famphur	µg/L	50	100	EPA Method 8270
Fluoranthene	µg/L	50	100	EPA Method 8270
Fluorene	µg/L	50	100	EPA Method 8270
Fluoride	µg/L	2,000	4,000	Final PDWS (EPA, 1993a)
Glyphosate ^b	µg/L	350	700	Final PDWS (EPA, 1993a)
Gross alpha	pCi/L	7.5E+00	1.5E+01	Final PDWS (EPA, 1993a)
Heptachlor	µg/L	0.2	0.4	Final PDWS (EPA, 1993a)
Heptachlor epoxide	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
Heptachlorodibenzo-p-dioxin isomers	µg/L	0.00325	0.0065	EPA Method 8280
1,2,3,4,6,7,8-HPCDD	µg/L	0.00325	0.0065	EPA Method 8280
Heptachlorodibenzo-p-furan isomers	µg/L	0.00225	0.0045	EPA Method 8280
1,2,3,4,6,7,8-HPCDF	µg/L	0.00225	0.0045	EPA Method 8280
Hexachlorobenzene	µg/L	0.5	1	Final PDWS (EPA, 1993a)
Hexachlorobutadiene	µg/L	50	100	EPA Method 8270
Hexachlorocyclopentadiene	µg/L	25	50	Final PDWS (EPA, 1993a)
Hexachlorodibenzo-p-dioxin isomers	µg/L	0.00225	0.0045	EPA Method 8280
1,2,3,4,7,8-HXCDD	µg/L	0.00225	0.0045	EPA Method 8280
Hexachlorodibenzo-p-furan isomers	µg/L	0.002	0.004	EPA Method 8280
1,2,3,4,7,8-HXCDF	µg/L	0.002	0.004	EPA Method 8280
Hexachloroethane	µg/L	50	100	EPA Method 8270
Hexachlorophene	µg/L	250	500	EPA Method 8270
Hexachloropropene	µg/L	50	100	EPA Method 8270
2-Hexanone	µg/L	50	100	EPA Method 8240
Indeno[1,2,3-c,d]pyrene	µg/L	50	100	EPA Method 8270
Iodine	µg/L	250	500	APHA Method 415A
Iodine-129	pCi/L	5E-01	1E+00	Interim Final PDWS (EPA, 1977)
Iodine-131 ^c	pCi/L	1.5E+00	3E+00	Interim Final PDWS (EPA, 1977)
Iodomethane (Methyl iodide)	µg/L	75	150	EPA Method 8240
Iron	µg/L	150	300	SDWS (EPA, 1993b)
Iron, dissolved	µg/L	150	300	SDWS (EPA, 1993b)
Iron, total recoverable	µg/L	150	300	SDWS (EPA, 1993b)
Iron-55 ^c	pCi/L	1E+03	2E+03	Interim Final PDWS (EPA, 1977)
Iron-59 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Isobutyl alcohol	µg/L	500	1,000	EPA Method 8240
Isodrin	µg/L	50	100	EPA Method 8270
Isophorone	µg/L	50	100	EPA Method 8270
Isosafrole	µg/L	50	100	EPA Method 8270
Kepone	µg/L	50	100	EPA Method 8270
Lanthanum-140 ^c	pCi/L	3E+01	6E+01	Interim Final PDWS (EPA, 1977)
Lead	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead, dissolved	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead, total recoverable	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead-212	pCi/L	6.2E+01	1.23E+02	Proposed PDWS (EPA, 1991)
Lindane	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Lithium	µg/L	25	50	EPA Method 6010
Lithium, dissolved	µg/L	25	50	EPA Method 6010
Lithium, total recoverable	µg/L	25	50	EPA Method 6010
Magnesium		No flag	No flag	Set by EPD/EMS
Magnesium, dissolved		No flag	No flag	Set by EPD/EMS
Magnesium, total recoverable		No flag	No flag	Set by EPD/EMS
Manganese	µg/L	25	50	SDWS (EPA, 1993b)
Manganese, dissolved	µg/L	25	50	SDWS (EPA, 1993b)
Manganese, total recoverable	µg/L	25	50	SDWS (EPA, 1993b)
Manganese-54	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Mercury	µg/L	1	2	Final PDWS (EPA, 1993a)
Mercury, dissolved	µg/L	1	2	Final PDWS (EPA, 1993a)
Mercury, total recoverable	µg/L	1	2	Final PDWS (EPA, 1993a)
Methacrylonitrile	µg/L	250	500	EPA Method 8240
Methapyrilene	µg/L	50	100	EPA Method 8270
Methoxychlor	µg/L	20	40	Final PDWS (EPA, 1993a)
3-Methylcholanthrene	µg/L	50	100	EPA Method 8270
2-Methyl-4,6-dinitrophenol	µg/L	250	500	EPA Method 8270
Methyl ethyl ketone		No flag	No flag	Set by EPD/EMS
Methyl isobutyl ketone		No flag	No flag	Set by EPD/EMS
Methyl methacrylate	µg/L	50	100	EPA Method 8270
Methyl methanesulfonate	µg/L	50	100	EPA Method 8270
2-Methylnaphthalene	µg/L	50	100	EPA Method 8270
Molybdenum	µg/L	250	500	EPA Method 6010
Molybdenum, dissolved	µg/L	250	500	EPA Method 6010
Molybdenum, total recoverable	µg/L	250	500	EPA Method 6010
Naphthalene	µg/L	50	100	EPA Method 8270
1,4-Naphthoquinone	µg/L	50	100	EPA Method 8270
1-Naphthylamine	µg/L	50	100	EPA Method 8270
2-Naphthylamine	µg/L	50	100	EPA Method 8270
Neptunium-237	pCi/L	3.53E+00	7.06E+00	Proposed PDWS (EPA, 1991)
Nickel	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel, dissolved	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel, total recoverable	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel-59 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Nickel-63 ^c	pCi/L	2.5E+01	5E+01	Interim Final PDWS (EPA, 1977)
Niobium-95 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Nitrate as nitrogen	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Nitrate-nitrite as nitrogen	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Nitrite as nitrogen	µg/L	500	1,000	Final PDWS (EPA, 1993a)
m-Nitroaniline	µg/L	50	100	EPA Method 8270
o-Nitroaniline	µg/L	50	100	EPA Method 8270
p-Nitroaniline	µg/L	50	100	EPA Method 8270
Nitrobenzene	µg/L	50	100	EPA Method 8270
Nitrogen by Kjeldahl method	µg/L	500	1,000	EPA Method 351.2
2-Nitrophenol	µg/L	50	100	EPA Method 8270
4-Nitrophenol	µg/L	50	100	EPA Method 8270
4-Nitroquinoline-1-oxide	µg/L	50	100	EPA Method 8270
N-Nitrosodi-n-butylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodiethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodimethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodiphenylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodipropylamine	µg/L	50	100	EPA Method 8270
N-Nitrosomethylethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosomorpholine	µg/L	50	100	EPA Method 8270
N-Nitrosopiperidine	µg/L	50	100	EPA Method 8270
N-Nitrosopyrrolidine	µg/L	50	100	EPA Method 8270
5-Nitro-o-toluidine	µg/L	50	100	EPA Method 8270
Nonvolatile beta	pCi/L	2.5E+01	5E+01	Interim Final PDWS (EPA, 1977)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Octachlorodibenzo-p-dioxin isomers	µg/L	0.005	0.01	EPA Method 8280
Octachlorodibenzo-p-furan isomers	µg/L	0.005	0.01	EPA Method 8280
Odor		No flag	No flag	Set by EPD/EMS
Oil & Grease	µg/L	5,000	10,000	EPA Method 413.1
Oxamyl ^b	µg/L	100	200	Final PDWS (EPA, 1993a)
Parathion	µg/L	0.25	0.5	EPA Method 8080
Parathion methyl	µg/L	0.25	0.5	EPA Method 8080
PCB 1016	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1221	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1232	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1242	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1248	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1254	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1260	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1262	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
Pentachlorobenzene	µg/L	50	100	EPA Method 8270
Pentachlorodibenzo-p-dioxin isomers	µg/L	0.00275	0.0055	EPA Method 8280
1,2,3,7,8-PCDD	µg/L	0.00275	0.0055	EPA Method 8280
Pentachlorodibenzo-p-furan isomers	µg/L	0.00275	0.0055	EPA Method 8280
1,2,3,7,8-PCDF	µg/L	0.00275	0.0055	EPA Method 8280
Pentachloroethane	µg/L	50	100	EPA Method 8270
Pentachloronitrobenzene	µg/L	50	100	EPA Method 8270
Pentachlorophenol	µg/L	0.5	1	Final PDWS (EPA, 1993a)
pH	pH	8	10	Set by EPD/EMS
pH	pH	4	3	Set by EPD/EMS
Phenacetin	µg/L	50	100	EPA Method 8270
Phenanthrene	µg/L	50	100	EPA Method 8270
Phenol	µg/L	50	100	EPA Method 8270
Phenols	µg/L	25	50	EPA Method 420.1
p-Phenylenediamine	µg/L	50	100	EPA Method 8270
Phorate	µg/L	0.5	1	EPA Method 8080
Picloram ^b	µg/L	250	500	Final PDWS (EPA, 1993a)
2-Picoline	µg/L	50	100	EPA Method 8270
Plutonium-238	pCi/L	3.51E+00	7.02E+00	Proposed PDWS (EPA, 1991)
Plutonium-239	pCi/L	3.11E+01	6.21E+01	Proposed PDWS (EPA, 1991)
Plutonium-239/240 ^c	pCi/L	3.11E+01	6.21E+01	Proposed PDWS (EPA, 1991)
Plutonium-240	pCi/L	3.11E+01	6.22E+01	Proposed PDWS (EPA, 1991)
Plutonium-241 ^c	pCi/L	3.13E+01	6.26E+01	Proposed PDWS (EPA, 1991)
Plutonium-242 ^c	pCi/L	3.27E+01	6.54E+01	Proposed PDWS (EPA, 1991)
Potassium		No flag	No flag	Set by EPD/EMS
Potassium, dissolved		No flag	No flag	Set by EPD/EMS
Potassium, total recoverable		No flag	No flag	Set by EPD/EMS
Potassium-40	pCi/L	1.5E+02	3E+02	Proposed PDWS (EPA, 1986)
Promethium-144	pCi/L	5E+01	1E+02	EPA Method 901.1
Promethium-146	pCi/L	5E+01	1E+02	EPA Method 901.1
Promethium-147	pCi/L	5.24E+03	5.24E+03	Proposed PDWS (EPA, 1991)
Pronamid	µg/L	50	100	EPA Method 8270
Propionitrile	µg/L	1,000	2,000	EPA Method 8240
Pyrene	µg/L	50	100	EPA Method 8270
Pyridine	µg/L	50	100	EPA Method 8270
Radium (alpha-emitting) ^f	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radium-226	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radium-228	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radon-222	pCi/L	1.5E+02	3E+02	Proposed PDWS (EPA, 1991)
Ruthenium-103 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Ruthenium-106	pCi/L	1.5E+01	3E+01	Interim Final PDWS (EPA, 1977)
Safrole	µg/L	50	100	EPA Method 8270
Selenium	µg/L	25	50	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Selenium, dissolved	µg/L	25	50	Final PDWS (EPA, 1993a)
Selenium, total recoverable	µg/L	25	50	Final PDWS (EPA, 1993a)
Silica		No flag	No flag	Set by EPD/EMS
Silica, dissolved		No flag	No flag	Set by EPD/EMS
Silica, total recoverable		No flag	No flag	Set by EPD/EMS
Silver	µg/L	50	100	SDWS (EPA, 1993b)
Silver, dissolved	µg/L	50	100	SDWS (EPA, 1993b)
Silver, total recoverable	µg/L	50	100	SDWS (EPA, 1993b)
Simazine ^b	µg/L	2	4	Final PDWS (EPA, 1993a)
Sodium		No flag	No flag	Set by EPD/EMS
Sodium, dissolved		No flag	No flag	Set by EPD/EMS
Sodium, total recoverable		No flag	No flag	Set by EPD/EMS
Sodium-22	pCi/L	2.33E+02	4.66E+02	Proposed PDWS (EPA, 1991)
Specific conductance	µS/cm	250	500	Set by EPD/EMS
Strontium-89	pCi/L	1E+01	2E+01	Interim Final PDWS (EPA, 1977)
Strontium-89/90 ^c	pCi/L	4E+00	8E+00	Final PDWS (EPA, 1993a)
Strontium-90	pCi/L	4E+00	8E+00	Final PDWS (EPA, 1993a)
Styrene	µg/L	50	100	Final PDWS (EPA, 1993a)
Sulfate	µg/L	200,000	400,000	Proposed PDWS (EPA, 1990)
Sulfide	µg/L	5,000	10,000	EPA Method 9030
Sulfotep	µg/L	50	100	EPA Method 8270
Surfactants		No flag	No flag	Set by EPD/EMS
2,3,7,8-TCDD	µg/L	0.000015	0.00003	Final PDWS (EPA, 1993a)
2,3,7,8-TCDF	µg/L	0.002	0.004	EPA Method 8280
Technetium-99	pCi/L	4.5E+02	9E+02	Interim Final PDWS (EPA, 1977)
1,2,4,5-Tetrachlorobenzene	µg/L	50	100	EPA Method 8270
Tetrachlorodibenzo-p-dioxin isomers	µg/L	0.00225	0.0045	EPA Method 8280
Tetrachlorodibenzo-p-furan isomers	µg/L	0.002	0.004	EPA Method 8280
1,1,1,2-Tetrachloroethane	µg/L	5	10	EPA Method 8240
1,1,2,2-Tetrachloroethane	µg/L	5	10	EPA Method 8240
Tetrachloroethylene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
2,3,4,6-Tetrachlorophenol	µg/L	50	100	EPA Method 8270
Thallium	µg/L	1	2	Final PDWS (EPA, 1993a)
Thallium, dissolved	µg/L	1	2	Final PDWS (EPA, 1993a)
Thallium, total recoverable	µg/L	1	2	Final PDWS (EPA, 1993a)
Thionazin	µg/L	50	100	EPA Method 8270
Thorium-228	pCi/L	6.25E+01	1.25E+02	Proposed PDWS (EPA, 1991)
Thorium-230	pCi/L	3.96E+01	7.92E+01	Proposed PDWS (EPA, 1991)
Thorium-232	pCi/L	4.4E+01	8.8E+01	Proposed PDWS (EPA, 1991)
Thorium-234	pCi/L	2E+02	4.01E+02	Proposed PDWS (EPA, 1991)
Tin	µg/L	10	20	EPA Method 282.2
Tin, dissolved	µg/L	10	20	EPA Method 282.2
Tin, total recoverable	µg/L	10	20	EPA Method 282.2
Tin-113 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Toluene	µg/L	500	1,000	Final PDWS (EPA, 1993a)
o-Toluidine	µg/L	50	100	EPA Method 8270
Total carbon	µg/L	5,000	10,000	EPA Method 9060
Total coliform		0	0	Final PDWS (EPA, 1993a)
Total dissolved solids		No flag	No flag	Set by EPD/EMS
Total hydrocarbons	µg/L	5,000	10,000	EPA Method 418.1
Total inorganic carbon	µg/L	5,000	10,000	EPA Method 9060
Total organic carbon	µg/L	5,000	10,000	EPA Method 9060
Total organic halogens	µg/L	25	50	EPA Method 9020
Total organic nitrogen	µg/L	500	1,000	APHA Method 420
Total petroleum hydrocarbons	µg/L	5,000	10,000	EPA Method 418.1
Total phosphates (as P)		No flag	No flag	Set by EPD/EMS
Total phosphorus		No flag	No flag	Set by EPD/EMS
Toxaphene	µg/L	1.5	3	Final PDWS (EPA, 1993a)
2,4,5-TP (Silvex)	µg/L	25	50	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Tributyl phosphate	µg/L	50	100	EPA Method 8270
1,2,4-Trichlorobenzene	µg/L	35	70	Final PDWS (EPA, 1993a)
1,1,1-Trichloroethane	µg/L	100	200	Final PDWS (EPA, 1993a)
1,1,2-Trichloroethane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Trichloroethylene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Trichlorofluoromethane	µg/L	5	10	EPA Method 8240
2,4,5-Trichlorophenol	µg/L	50	100	EPA Method 8270
2,4,6-Trichlorophenol	µg/L	50	100	EPA Method 8270
2,4,5-Trichlorophenoxyacetic acid	µg/L	2.5	5	EPA Method 8150
1,2,3-Trichloropropane	µg/L	5	10	EPA Method 8240
O,O,O-Triethyl phosphorothioate	µg/L	50	100	EPA Method 8270
1,3,5-Trinitrobenzene	µg/L	50	100	EPA Method 8270
Tritium	pCi/mL	1E+01	2E+01	Final PDWS (EPA, 1993a)
Turbidity ^b		No flag	No flag	Set by EPD/EMS
Uranium	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium, dissolved	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium, total recoverable	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium alpha activity	pCi/L	1.5E+01	3E+01	Proposed PDWS (EPA, 1991)
Uranium-233/234 ^c	pCi/L	6.9E+00	1.38E+01	Proposed PDWS (EPA, 1991)
Uranium-234	pCi/L	6.95E+00	1.39E+01	Proposed PDWS (EPA, 1991)
Uranium-235	pCi/L	7.25E+00	1.45E+01	Proposed PDWS (EPA, 1991)
Uranium-238	pCi/L	7.3E+00	1.46E+01	Proposed PDWS (EPA, 1991)
Vanadium	µg/L	40	80	EPA Method 6010
Vanadium, dissolved	µg/L	40	80	EPA Method 6010
Vanadium, total recoverable	µg/L	40	80	EPA Method 6010
Vinyl acetate	µg/L	5	10	EPA Method 8240
Xylenes	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Yttrium-88	pCi/L	5E+01	1E+02	EPA Method 901.1
Zinc	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc, dissolved	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc, total recoverable	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc-65	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Zirconium-95 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Zirconium/Niobium-95 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)

- ^a References for dated sources are at the end of this appendix.
- ^b EMS is currently unable to perform this analysis.
- ^c EMS discontinued monitoring this radionuclide because it is inappropriate for the SRS groundwater monitoring program.
- ^d EPD/EMS set this flagging criterion using the 1991 proposed PDWS because the final PDWS in 1977 may have been in error.
- ^e For double radionuclide analyses where each separate radionuclide has its own standard, the more stringent standard is used.
- ^f The applied standard is for radium-226.
- ^g The primary maximum contaminant level range for turbidity is 1-5 TU, which is inappropriate for the SRS groundwater monitoring program.

References

EPA (U.S. Environmental Protection Agency), 1977. **National Interim Primary Drinking Water Regulations**, EPA-570/9-76-003. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1986. *Water Pollution Control; National Primary Drinking Water Regulations, Radionuclides (Proposed)*. Federal Register, September 30, 1986, pp. 34835-34862. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1990. *National Primary and Secondary Drinking Water Regulations; Synthetic Organic Chemicals and Inorganic Chemicals (Proposed Rule)*. **Federal Register**, July 25, 1990, pp. 30369-30448. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1991. *National Primary Drinking Water Regulations; Radionuclides; Proposed Rule*. **Federal Register**, July 18, 1991, pp. 33052-33127. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1993a. *National Primary Drinking Water Regulations*. **Code of Federal Regulations**, Section 40, Part 141, pp. 592-732. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1993b. *National Secondary Drinking Water Regulations*. **Code of Federal Regulations**, Section 40, Part 143, pp. 774-777. Washington, DC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1981. *State Primary Drinking Water Regulations*, R.61-58.5. Columbia, SC.

Appendix C. Groundwater Monitoring Results for Individual Wells during 1993

WELL P 20C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N56067.7 E76814.0	33.275077 °N 81.573452 °W	147.8-137.8 ft msl	289.1 ft msl	4" PVC		McBean

SAMPLE DATE 06/10/93 09/09/93 12/08/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation		241.1	238.7	237.6	ft msl
Depth to water		48.1	50.4	51.5	ft
pH		6.4	6.5	6.3	pH
Sp. conductance		70	73	69	µS/cm
Water temperature		20.9	20.5	20.0	°C
Alkalinity as CaCO ₃		22	25	28	mg/L
Turbidity		1	1	1	NTU
Volume purged		3.4	3.6	3.7	Well vol.
Sampling code			X		

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable		22	<20	<20		µg/L	GE	0
		Arsenic, total recoverable		2.9	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable		31	32	31		µg/L	GE	0
		Boron, total recoverable			<30	<30		µg/L	GE	0
		Cadmium, total recoverable		<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable		7,240	6,940	6,610		µg/L	GE	0
		Chloride		2,350	2,110	2,140		µg/L	GE	0
		Chromium, total recoverable		<4.0	<4.0	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid		<0.30				µg/L		
		Endrin		<0.0060				µg/L		
		Fluoride		<100	<100	<100		µg/L	GE	0
		Gross alpha		3.6E+00	<2.0E+00	2.6E+00		pCi/L	GE	0
		Iron, total recoverable		4,030	4,120	3,950		µg/L	GE	2
		Lead, total recoverable		<3.0	<3.0	<3.0	J1	µg/L	GE	0
		Lindane		<0.0050				µg/L		
		Lithium, total recoverable			10	9.1		µg/L	GE	0
		Magnesium, total recoverable		297	290	282		µg/L	GE	0
		Manganese, total recoverable		17	16	15		µg/L	GE	0
		Mercury, total recoverable		<0.20	0.24	<0.20		µg/L	GE	0
		Methoxychlor		<0.50				µg/L		
		Nitrate-nitrite as nitrogen		<50	<50	<50		µg/L	GE	0
		Nonvolatile beta		7.3E+00	3.1E+00	2.8E+00		pCi/L	GE	0
●		pH		6.3	6.3	6.5	J	pH	GE	0
		Phenols		<5.0	<5.0	<5.0		µg/L	GE	0
		Potassium, total recoverable		1,780	1,850	1,810		µg/L	GE	0
		Radium, total alpha-emitting		1.5E+00	1.9E+00	1.6E+00		pCi/L	GE	0
		Selenium, total recoverable		<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable		17,000	16,400	16,100		µg/L	GE	0
		Silver, total recoverable		<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable		2,150	2,070	1,970		µg/L	GE	0
		Specific conductance		60	54	61		µS/cm	GE	0
		Sulfate		1,110	1,050	<1,000		µg/L	GE	0
		Total activity		4.4E+03	6.4E+03			pCi/L		
		Total dissolved solids		42,000	49,000	50,000		µg/L	GE	0
		Total organic carbon		<1,000	1,280	<1,000		µg/L	GE	0
		Total organic halogens		<5.0	<5.0	<5.0		µg/L	GE	0
		Total phosphates (as P)		<50	<50	<50		µg/L	GE	0
		Toxaphene		<0.24				µg/L		
		2,4,6-TP (Silvex)		<0.090				µg/L		
		Tritium		<7.0E-01	<7.0E-01	<7.0E-01		pCi/mL	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL P 20D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N56075.2 E76784.5	33.275045 °N 81.573545 °W	244.1-225.1 ft msl	289.3 ft msl	4" PVC		Water Table

<u>SAMPLE DATE</u>	06/10/93	09/09/93	12/08/93
--------------------	----------	----------	----------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation		273.4	269.5	267.3	ft msl
Depth to water		15.9	19.8	22.0	ft
pH		6.2	5.9	5.7	pH
Sp. conductance		34	35	35	µS/cm
Water temperature		22.4	21.0	21.4	°C
Alkalinity as CaCO ₃		7	7	8	mg/L
Turbidity		2	1	1	NTU
Volume purged		3.0	3.6	3.9	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable		66	68	44		µg/L	GE	1
		Arsenic, total recoverable		< 2.0	< 2.0	< 2.0		µg/L	GE	0
		Barium, total recoverable		11	6.1	7.1		µg/L	GE	0
		Boron, total recoverable			< 30	< 30		µg/L	GE	0
		Cadmium, total recoverable		< 2.0	< 2.0	< 2.0		µg/L	GE	0
		Calcium, total recoverable		3,970	3,690	3,570		µg/L	GE	0
		Chloride		1,350	1,340	1,550		µg/L	GE	0
		Chromium, total recoverable		< 4.0	< 4.0	< 4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid		< 0.30				µg/L		
		Endrin		< 0.0060				µg/L		
		Fluoride		< 100	< 100	< 100		µg/L	GE	0
		Gross alpha		< 2.0E + 00	< 2.0E + 00	< 2.0E + 00		pCi/L	GE	0
		Iron, total recoverable		15	8.2	< 4.0		µg/L	GE	0
		Lead, total recoverable		< 3.0	< 3.0	< 3.0	J1	µg/L	GE	0
		Lindane		< 0.0050				µg/L		
		Lithium, total recoverable			< 5.0	< 5.0		µg/L	GE	0
		Magnesium, total recoverable		555	499	458		µg/L	GE	0
		Manganese, total recoverable		6.4	4.1	3.4		µg/L	GE	0
		Mercury, total recoverable		< 0.20	< 0.20	< 0.20		µg/L	GE	0
		Methoxychlor		< 0.50				µg/L		
		Nitrate-nitrite as nitrogen		1,200	1,380	1,200		µg/L	GE	0
		Nonvolatile beta		< 2.0E + 00	< 2.0E + 00	< 2.0E + 00		pCi/L	GE	0
•		pH		6.1	6.1	6.0	J	pH	GE	0
		Phenols		< 5.0	< 5.0	< 5.0		µg/L	GE	0
		Potassium, total recoverable		< 500	< 500	< 500		µg/L	GE	0
		Radium, total alpha-emitting		1.0E + 00	< 1.0E + 00	< 1.0E + 00		pCi/L	GE	0
		Selenium, total recoverable		< 2.0	< 2.0	< 2.0	J1	µg/L	GE	0
		Silica, total recoverable		6,250	6,320	6,450		µg/L	GE	0
		Silver, total recoverable		< 2.0	< 2.0	< 2.0		µg/L	GE	0
		Sodium, total recoverable		1,040	1,200	1,250		µg/L	GE	0
		Specific conductance		30	32	33		µS/cm	GE	0
		Sulfate		< 1,000	< 1,000	< 1,000		µg/L	GE	0
		Total activity		3.4E + 03	3.1E + 03			pCi/L		
		Total dissolved solids		20,000	30,000	27,000		µg/L	GE	0
		Total organic carbon		< 1,000	1,090	< 1,000		µg/L	GE	0
		Total organic halogens		< 5.0	< 5.0	< 5.0		µg/L	GE	0
		Total phosphates (as P)		< 50	< 50	< 50		µg/L	GE	0
		Toxaphene		< 0.24				µg/L		
		2,4,5-TP (Silvex)		< 0.090				µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well P 20D continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Tritium		2.2E+00	2.1E+00	2.2E+00		pCi/mL	GE	0

WELL RAC 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N55107.3 E74570.7	33.269295 °N 81.577499 °W	277.3-247.3 ft msl	283.6 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/19/93	06/10/93	09/14/93	12/16/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	275.4	273.9	272.6	273.4	ft msl
Depth to water	8.2	9.7	11.0	10.2	ft
pH	5.1	4.8	4.7	4.8	pH
Sp. conductance	69	61	94	103	µS/cm
Water temperature	18.3	21.0	21.4	19.1	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	9	13	19	8	NTU
Volume purged	2.9	3.0	5.2	2.9	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Alkalinity (as CaCO ₃)	1.9					mg/L		
		Aluminum, total recoverable	76		138			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	20					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	4,420					µg/L		
		Chloride	2,670					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00		2.0E+00			pCi/L		
		Iron, total recoverable	1,640		151			µg/L		
		Lead, total recoverable	5.4		5.4			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,110					µg/L		
		Manganese, total recoverable	15		25			µg/L		
		Mercury, total recoverable	<0.20					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	2,540					µg/L		
		Nonvolatile beta	2.2E+00					pCi/L		
		pH	5.1					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	584					µg/L		
		Radium, total alpha-emitting	<1.0E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	7,140					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	3,720					µg/L		
		Specific conductance	58					µS/cm		
		Sulfate	7,930					µg/L		
		Total dissolved solids	41,000					µg/L		
		Total organic carbon	1,630					µg/L		
		Total organic halogens	<5.0					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RAC 1 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	7.9E-01					pCi/mL		

WELL RAC 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N55026.3	33.269091 °N	273.4-243.4 ft msl	280.4 ft msl	4" PVC	S	Water Table
E74555.5	81.577382 °W					

SAMPLE DATE	03/21/93	06/10/93	09/14/93	12/16/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	273.7	272.3	271.7	272.6	ft msl
Depth to water	6.7	8.1	8.7	7.8	ft
pH	5.3	4.5	4.7	4.8	pH
Sp. conductance	72	63	62	60	µS/cm
Water temperature	15.9	18.1	20.4	18.0	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	1	2	4	3	NTU
Volume purged	2.6	12.5	6.9	11.9	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Alkalinity (as CaCO ₃)	2.9					mg/L		
		Aluminum, total recoverable	123		135			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	41					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	3,500					µg/L		
		Chloride	1,910					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	2.7E+00		2.2E+00			pCi/L		
		Iron, total recoverable	9.2		85			µg/L		
		Lead, total recoverable	11		19			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,940					µg/L		
		Manganese, total recoverable	52		30			µg/L		
		Mercury, total recoverable	<0.20					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	3,650					µg/L		
		Nonvolatile beta	<2.0E+00					pCi/L		
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	633					µg/L		
		Radium, total alpha-emitting	<1.0E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	6,260					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,720					µg/L		
		Specific conductance	60					µS/cm		
		Sulfate	7,840					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RAC 2 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Total dissolved solids	44,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	5.2					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01					pCi/mL		

WELL RAC 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N55015.3 E74667.5	33.269250 °N 81.577066 °W	272.3-242.3 ft msl	279.3 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/19/93 06/10/93 09/14/93 12/16/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	273.9	272.1	271.4	272.1	ft msl
Depth to water	5.4	7.2	7.9	7.2	ft
pH	5.1	5.0	4.9	4.8	pH
Sp. conductance	35	37	57	38	µS/cm
Water temperature	15.6	18.4	19.6	18.0	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	2	4	4	2	NTU
Volume purged	11.2	3.9	13.0	12.4	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Alkalinity (as CaCO ₃)	5.8					mg/L		
		Aluminum, total recoverable	247		40			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	45					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	840					µg/L		
		Chloride	3,070					µg/L		
		Chromium, total recoverable	6.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<6.0E-01		2.0E+00			pCi/L		
		Iron, total recoverable	106		34			µg/L		
		Lead, total recoverable	13		5.9			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,170					µg/L		
		Manganese, total recoverable	27		20			µg/L		
		Mercury, total recoverable	0.23					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate as nitrogen	352					µg/L		
		Nitrate-nitrite as nitrogen	300					µg/L		
		Nonvolatile beta	2.2E+00					pCi/L		
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,220					µg/L		
		Radium-226	<1.8E-01					pCi/L		
		Radium-228	1.3E+00					pCi/L		
		Radium, total alpha-emitting	1.1E+00					pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RAC 3 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	4,460					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,850					µg/L		
		Specific conductance	31					µS/cm		
		Sulfate	1,610					µg/L		
		Total dissolved solids	26,000					µg/L		
		Total organic carbon	1,260					µg/L		
		Total organic halogens	11					µg/L		
		Total phosphates (as P)	81					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.2E+00					pCi/mL		

WELL RAC 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N54984.0 E74588.8	33.269052 °N 81.577212 °W	268.2-238.2 ft msl	279 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/21/93	06/10/93	09/14/93	12/16/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	273.5	272.0	270.9	271.4	ft msl
Depth to water	5.6	7.0	8.1	7.6	ft
pH	4.8	4.4	4.6	4.7	pH
Sp. conductance	50	47	59	54	µS/cm
Water temperature	18.5	19.1	19.2	17.8	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	1	1	1	5	NTU
Volume purged	3.0	4.6	3.9	7.4	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Alkalinity (as CaCO ₃)	<1.0					mg/L		
		Aluminum, total recoverable	60		73			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	22					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	1,040					µg/L		
		Chloride	2,640					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00		<2.0E+00			pCi/L		
		Iron, total recoverable	20		39			µg/L		
		Lead, total recoverable	<3.0		<3.0			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,090					µg/L		
		Manganese, total recoverable	8.3		26			µg/L		
		Mercury, total recoverable	0.33					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,970					µg/L		
		Nonvolatile beta	<2.0E+00					pCi/L		
		pH	4.9					pH		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RAC 4 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.5E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	8,470					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	3,420					µg/L		
		Specific conductance	38					µS/cm		
		Sulfate	2,730					µg/L		
		Total dissolved solids	29,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01					pCi/mL		

WELL RCP 1A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N56968.1	33.272872 °N	56.8-46.8 ft msl	296.9 ft msl	4" PVC	S	Congaree
E74238.3	81.581985 °W					

SAMPLE DATE 03/19/93 09/13/93 12/27/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	195.0		194.0	193.6	ft msl
Depth to water	101.9		102.9	103.3	ft
pH				11.6	pH
Sp. conductance				818	µS/cm
Water temperature				19.7	°C
Alkalinity as CaCO ₃				198	mg/L
Turbidity				1	NTU
Volume purged				2.5	Well vol.
Sampling code	P				

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Antimony-125				<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable				<2.0		µg/L	GE	0
		Barium, total recoverable				173		µg/L	GE	0
		Cadmium, total recoverable				<2.0		µg/L	GE	0
		Calcium, total recoverable				66,200		µg/L	GE	0
		Cerium-144				<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134				<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137				<1.0E+01	Y3	pCi/L	CN	0
		Chloride				1,820		µg/L	GE	0
		Chromium, total recoverable				<4.0		µg/L	GE	0
		Cobalt-57				<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60				<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable				<4.0		µg/L	GE	0
		Europium-152				<5.0E+01	Y3	pCi/L	CN	0
		Europium-154				<2.5E+01	Y3	pCi/L	CN	0
		Europium-155				<2.5E+01	Y3	pCi/L	CN	0
		Fluoride				266		µg/L	GE	0
		Gross alpha				<2.0E+00		pCi/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RCP 1A continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Iron, total recoverable				8.0		µg/L	GE	0
		Lead, total recoverable				<3.0		µg/L	GE	0
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Magnesium, total recoverable				256		µg/L	GE	0
		Manganese, total recoverable				4.3		µg/L	GE	0
		Manganese-54				<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable				<0.20		µg/L	GE	0
		Nickel, total recoverable				<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen				<50		µg/L	GE	0
		Nonvolatile beta				1.4E+01		pCi/L	GE	0
•		pH				12	J	pH	GE	2
		Plutonium-238				<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240				<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable				17,000		µg/L	GE	0
		Potassium-40				<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144				<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146				<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting				1.2E+00		pCi/L	GE	0
		Ruthenium-106				<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable				<2.0	J1	µg/L	GE	0
		Silver, total recoverable				<2.0		µg/L	GE	0
		Sodium, total recoverable				9,700		µg/L	GE	0
		Sodium-22				<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance				719		µS/cm	GE	2
		Strontium-90				<2.0E+00	Y3	pCi/L	CN	0
		Sulfate				9,170		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total activity				-3.6E+03	J	pCi/L	EM	0
		Total dissolved solids				203,000		µg/L	GE	0
		Total organic carbon				<1,000		µg/L	GE	0
		Total phosphates (as P)				<50		µg/L	GE	0
		Total suspended solids				1,000		µg/L	GE	0
		Tritium				<7.0E-01		pCi/mL	GE	0
		Yttrium-88				<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable				16		µg/L	GE	0
		Zinc-65				<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RCP 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N56967.9 E74223.5	33.272847 °N 81.582024 °W	281.3-261.3 ft msl	296.8 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/19/93	06/10/93	09/09/93	12/27/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	284.8	284.2	281.4	279.4	ft msl
Depth to water	12.0	12.6	15.4	17.4	ft
pH	5.6	5.3	5.4	5.4	pH
Sp. conductance	281	210	103	110	μS/cm
Water temperature	18.4	23.3	23.4	19.7	°C
Alkalinity as CaCO ₃	7	8	8	11	mg/L
Turbidity	82	228	113	122	NTU
Volume purged	0.8	1.1	1.1	1.1	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228			509	<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	488					μg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		μg/L	GE	0
		Barium, total recoverable	12	9.5	7.4	10		μg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		μg/L	GE	0
		Calcium, total recoverable	3,480	3,160	875	875		μg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Chloride	6,070	6,480	6,930	7,000		μg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		μg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	<4.0	<4.0	4.3	<4.0		μg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					μg/L		
		Endrin	<0.0060					μg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		μg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	3.3E+00		pCi/L	GE	0
		Iron, total recoverable	635	1,520	754	421		μg/L	GE	2
		Lead, total recoverable	6.0	17	19	22		μg/L	GE	2
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					μg/L		
		Magnesium, total recoverable	3,890	3,500	1,700	1,160		μg/L	GE	0
		Manganese, total recoverable	294	268	101	41		μg/L	GE	1
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	0.79	0.81	0.65	0.62		μg/L	GE	0
		Methoxychlor	<0.50					μg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0	4.1		μg/L	GE	0
		Nitrate-nitrite as nitrogen	3,900	3,800	3,150	2,800		μg/L	GE	0
		Nonvolatile beta	<2.0E+00	<2.0E+00	<2.0E+00	3.0E+00		pCi/L	GE	0
		pH	5.5	5.5	5.5	5.9	J	pH	GE	0
		Phenols	<5.0					μg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		μg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RCP 1D continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	1.4E+00	1.2E+00	<1.0E+00	1.5E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	8,080					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	38,700	30,100	13,500	13,500		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	231	190	99	87		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	73,200	54,000	7,870	2,580		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	165,000	139,000	56,000	58,000	V	µg/L	GE	0
		Total organic carbon	<1,000	<1,000	1,010	<1,000		µg/L	GE	0
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	60	90	<50	<50		µg/L	GE	0
		Total suspended solids	65,000	98,000	58,000	82,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	2.2E+00	3.1E+00	2.9E+00	2.8E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	9.7	17	18	41		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

WELL RDB 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57097.3 E74844.5	33.274146 °N 81.580639 °W	285.5-265.5 ft msl	292.4 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/19/93	06/10/93	09/09/93	12/27/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	287.6	285.0	286.0	285.6	ft msl
Depth to water	4.8	7.4	6.4	6.8	ft
pH	7.3	6.2	6.4	6.4	pH
Sp. conductance	165	121	115	152	µS/cm
Water temperature	15.1	22.7	23.7	17.9	°C
Alkalinity as CaCO ₃	51	44	29	28	mg/L
Turbidity	72	311	51	48	NTU
Volume purged	1.2	1.1	1.0	1.1	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	563		335			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	19	23	19	22		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	19,300	19,800	13,500	18,900		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RDB 1D continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Chloride	1,100	1,080	7,810	11,700		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	7.8	54	35	9.4		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	2.4E+00	<2.0E+00	<2.0E+00	2.6E+00		pCi/L	GE	0
		Iron, total recoverable	646	2,370	1,850	1,180		µg/L	GE	2
		Lead, total recoverable	16	129	146	33		µg/L	GE	2
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,300	1,310	1,070	1,480		µg/L	GE	0
		Manganese, total recoverable	9.0	118	42	29		µg/L	GE	1
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	6.3	<4.0	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	480	<50	840	2,020		µg/L	GE	0
		Nonvolatile beta	2.6E+00	2.6E+00	<2.0E+00	5.1E+00		pCi/L	GE	0
		pH	6.9	6.6	6.4	6.6	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	1,340	1,430	1,680	1,830		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	1.1E+00	<1.0E+00	1.1E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	7,840					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	10,000	1,950	3,840	2,120		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	141	106	105	136		µS/cm	GE	0
		Strontium-90	<2.1E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	7,630	5,090	5,860	3,440		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	114,000	89,000	74,000	102,000	V	µg/L	GE	0
		Total organic carbon	<1,000	<1,000	1,360	<1,000		µg/L	GE	0
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	70	130	60	<50		µg/L	GE	0
		Total suspended solids	48,000	121,000	36,000	31,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	2.0E+00	3.1E+00	2.2E+00	1.7E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	189	229	156	83		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RDB 2D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N56879.8 E74782.2	33.273563 °N 81.580381 °W	285.7-265.7 ft msl	292.6 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/19/93	06/10/93	09/09/93	12/27/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	286.5	284.0	285.2	284.9	ft msl
Depth to water	6.1	8.6	7.4	7.7	ft
pH	6.9	6.5	6.6	6.7	pH
Sp. conductance	308	365	351	284	µS/cm
Water temperature	16.0	21.4	23.7	18.8	°C
Alkalinity as CaCO ₃	110	169	182	123	mg/L
Turbidity	68	104	249	71	NTU
Volume purged	1.8	1.5	1.0	1.5	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	168		533			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	33	40	44	31		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	46,500	65,500	60,700	40,000		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Chloride	987	1,520	1,120	1,380		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	<4.0	<4.0	9.3	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	2.7E+00	<2.0E+00	2.2E+00		pCi/L	GE	0
		Iron, total recoverable	12,600	13,800	15,800	12,300		µg/L	GE	2
		Lead, total recoverable	<3.0	<3.0	<3.0	<3.0		µg/L	GE	0
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	4,790	7,020	6,280	4,060		µg/L	GE	0
		Manganese, total recoverable	133	122	138	126		µg/L	GE	2
		Manganese-54	1.7E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	<50	<50	<50	<50		µg/L	GE	0
		Nonvolatile beta	6.1E+00	7.3E+00	8.4E+00	3.9E+00		pCi/L	GE	0
		pH	6.7	6.8	6.6	6.7	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	1,460	1,520	1,890	1,540		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RDB 2D continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	<1.0E+00	1.1E+00	1.5E+00	1.1E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	2,950					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	1,420	1,640	1,750	1,470		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	240	318	331	239		µS/cm	GE	0
		Strontium-90	2.2E+00	<2.0E+00	2.7E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	17,700	16,900	11,000	6,250		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	153,000	196,000	247,000	137,000	V	µg/L	GE	0
		Total organic carbon	1,970	2,680	<1,000	3,440		µg/L	GE	0
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	90	70	140	60		µg/L	GE	0
		Total suspended solids	40,000	71,000	98,000	58,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	8.5E-01	1.5E+00	1.9E+00	2.7E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	<2.0	2.9	13	18		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

WELL RDB 3D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N56881.9 E74899.0	33.273758 °N 81.580077 °W	285.8-265.8 ft msl	292.7 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/19/93 06/10/93 09/09/93 12/27/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	284.6	282.5	282.3	281.3	ft msl
Depth to water	8.1	10.2	10.4	11.4	ft
pH	6.5	5.9	6.2	6.5	pH
Sp. conductance	97	111	135	206	µS/cm
Water temperature	15.4	21.7	21.0	18.1	°C
Alkalinity as CaCO ₃	12	42	66	77	mg/L
Turbidity	40	103	269	74	NTU
Volume purged	1.5	1.6	1.4	1.4	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	109		413			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	16	26	29	29		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	10,100	12,400	12,200	14,400		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RDB 3D continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Chloride	705	1,070	924	1,070		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	32	35	57	9.8		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	3.9E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	1,050	8,890	18,600	22,700		µg/L	GE	2
		Lead, total recoverable	8.6	9.1	31	8.4		µg/L	GE	1
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,160	1,500	1,380	1,430		µg/L	GE	0
		Manganese, total recoverable	61	383	355	360		µg/L	GE	2
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0	4.1		µg/L	GE	0
		Nitrate-nitrite as nitrogen	770	70	<50	<50		µg/L	GE	0
		Nonvolatile beta	2.2E+00	2.6E+00	2.1E+00	3.3E+00		pCi/L	GE	0
		pH	6.4	6.2	6.2	6.5	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	1,610	1,310	1,500	1,630		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	<1.0E+00	1.3E+00	<1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	3,880					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	4,740	1,580	1,070	1,090		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	77	80	90	118		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	6,880	5,760	3,190	1,380		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	56,000	52,000	51,000	66,000	V	µg/L	GE	0
		Total organic carbon	<1,000	<1,000	4,930	2,430		µg/L	GE	0
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	21,000	57,000	93,000	50,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	9.4E-01	2.4E+00	3.2E+00	3.5E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	133	173	236	615		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RRP 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N54563.5 E75634.6	33.269826 °N 81.573641 °W	272.4-242.4 ft msl	284.4 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/18/93 05/30/93 09/09/93 12/16/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	271.6	269.8	265.6	264.8	ft msl
Depth to water	12.8	14.6	18.8	19.6	ft
pH	4.9	4.6	4.9	4.6	pH
Sp. conductance	23	23	25	25	µS/cm
Water temperature	18.3	18.5	18.6	18.9	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	2	2	1	1	NTU
Volume purged	6.9	4.7	8.0	13.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	<20					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	19					µg/L		
		Benzene	<1.0					µg/L		
		Bromodichloromethane	<1.0					µg/L		
		Bromoform	<1.0					µg/L		
		Bromomethane (Methyl bromide)	<1.0					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	409					µg/L		
		Carbon tetrachloride	<1.0					µg/L		
		Chloride	1,670					µg/L		
		Chlorobenzene	<1.0					µg/L		
		Chloroethane	<1.0					µg/L		
		Chloroethene (Vinyl chloride)	<1.0					µg/L		
		2-Chloroethyl vinyl ether	<1.0					µg/L		
		Chloroform	<1.0					µg/L		
		Chloromethane (Methyl chloride)	<1.0					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Copper, total recoverable	<4.0					µg/L		
		Dibromochloromethane	<1.0					µg/L		
		1,1-Dichloroethane	<1.0					µg/L		
		1,2-Dichloroethane	<1.0					µg/L		
		1,1-Dichloroethylene	<1.0					µg/L		
		trans-1,2-Dichloroethylene	<1.0					µg/L		
		Dichloromethane (Methylene chloride)	<1.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		1,2-Dichloropropane	<1.0					µg/L		
		cis-1,3-Dichloropropene	<1.0					µg/L		
		trans-1,3-Dichloropropene	<1.0					µg/L		
		Endrin	<0.0060					µg/L		
		Ethylbenzene	<1.0					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00					pCi/L		
		Iron, total recoverable	108		150			µg/L		
		Lead, total recoverable	14		7.2			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	743					µg/L		
		Manganese, total recoverable	2.1					µg/L		
		Mercury, total recoverable	<0.20					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RRP 1 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Methoxychlor	<0.50							
		Nitrate-nitrite as nitrogen	1.070					µg/L		
		Nonvolatile beta	<2.0E+00					µg/L		
		pH	5.0					pCi/L		
		Phenols	<5.0					pH		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.3E+00					µg/L		
		Selenium, total recoverable	<2.0					pCi/L		
		Silica, total recoverable	5.160					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	893					µg/L		
		Specific conductance	20					µg/L		
		Sulfate	<1,000					µS/cm		
		1,1,2,2-Tetrachloroethane	<1.0					µg/L		
		Tetrachloroethylene	<1.0					µg/L		
		Toluene	<1.0					µg/L		
		Total dissolved solids	22,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		1,1,1-Trichloroethane	<1.0					µg/L		
		1,1,2-Trichloroethane	<1.0					µg/L		
		Trichloroethylene	<1.0					µg/L		
		Trichlorofluoromethane	<1.0					µg/L		
		Tritium	1.2E+00					pCi/mL		

WELL RRP 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N54468.3	33.269933 °N	272.5-242.5 ft msl	284.5 ft msl	4" PVC	S	Water Table
E75829.8	81.572943 °W					

SAMPLE DATE	03/21/93	05/30/93	09/09/93	12/16/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	270.7	269.0	264.6	263.8	ft msl
Depth to water	13.8	15.5	19.9	20.7	ft
pH	5.0	4.6	4.8	4.7	pH
Sp. conductance	18	16	173	17	µS/cm
Water temperature	20.2	19.0	20.1	19.9	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	3	2	2	7	NTU
Volume purged	2.6	11.9	15.9	27.2	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	22							
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	9.5					µg/L		
		Benzene	<1.0					µg/L		
		Bromodichloromethane	<1.0					µg/L		
		Bromoform	<1.0					µg/L		
		Bromomethane (Methyl bromide)	<1.0					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.
 ● = exceeded holding time for 4th quarter 1993.
 ■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RRP 2 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Calcium, total recoverable	254					µg/L		
		Carbon tetrachloride	<1.0					µg/L		
		Chloride	1,060					µg/L		
		Chlorobenzene	<1.0					µg/L		
		Chloroethane	<1.0					µg/L		
		Chloroethene (Vinyl chloride)	<1.0					µg/L		
		2-Chloroethyl vinyl ether	<1.0					µg/L		
		Chloroform	<1.0					µg/L		
		Chloromethane (Methyl chloride)	<1.0					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Copper, total recoverable	15					µg/L		
		Dibromochloromethane	<1.0					µg/L		
		1,1-Dichloroethane	<1.0					µg/L		
		1,2-Dichloroethane	<1.0					µg/L		
		1,1-Dichloroethylene	<1.0					µg/L		
		trans-1,2-Dichloroethylene	<1.0					µg/L		
		Dichloromethane (Methylene chloride)	1.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		1,2-Dichloropropane	<1.0					µg/L		
		cis-1,3-Dichloropropene	<1.0					µg/L		
		trans-1,3-Dichloropropene	<1.0					µg/L		
		Endrin	<0.0060					µg/L		
		Ethylbenzene	<1.0					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00					pCi/L		
		Iron, total recoverable	121		32			µg/L		
		Lead, total recoverable	9.0		<3.0			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	177					µg/L		
		Manganese, total recoverable	6.7					µg/L		
		Mercury, total recoverable	<0.20					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	440					µg/L		
		Nonvolatile beta	<2.0E+00					pCi/L		
		pH	5.1					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	943					µg/L		
		Radium, total alpha-emitting	1.0E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	4,530					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	500					µg/L		
		Specific conductance	12					µS/cm		
		Sulfate	1,220					µg/L		
		1,1,2,2-Tetrachloroethane	<1.0					µg/L		
		Tetrachloroethylene	<1.0					µg/L		
		Toluene	<1.0					µg/L		
		Total dissolved solids	13,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	6.2					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		1,1,1-Trichloroethane	<1.0					µg/L		
		1,1,2-Trichloroethane	<1.0					µg/L		
		Trichloroethylene	<1.0					µg/L		
		Trichlorofluoromethane	<1.0					µg/L		
		Tritium	<7.0E-01					pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RRP 3

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N54303.0 E75853.0	33.269605 °N 81.572561 °W	268.1-238.1 ft msl	280.1 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/18/93	05/30/93	09/09/93	12/17/93
-------------	----------	----------	----------	----------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	270.4	268.4	263.6	262.9	ft msl
Depth to water	9.7	11.7	16.5	17.1	ft
pH	5.3	5.1	5.0	5.2	pH
Sp. conductance	14	14	129	13	µS/cm
Water temperature	18.4	18.3	20.2	21.0	°C
Alkalinity as CaCO ₃	1	1	0	2	mg/L
Turbidity	10	3	2	3	NTU
Volume purged	7.9	2.6	3.1	2.9	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	23					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	8.9					µg/L		
		Benzene	<1.0					µg/L		
		Bromodichloromethane	<1.0					µg/L		
		Bromoform	<1.0					µg/L		
		Bromomethane (Methyl bromide)	<1.0					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		
		Calcium, total recoverable	586					µg/L		
		Carbon tetrachloride	<1.0					µg/L		
		Chloride	749					µg/L		
		Chlorobenzene	<1.0					µg/L		
		Chloroethane	<1.0					µg/L		
		Chloroethene (Vinyl chloride)	<1.0					µg/L		
		2-Chloroethyl vinyl ether	<1.0					µg/L		
		Chloroform	<1.0					µg/L		
		Chloromethane (Methyl chloride)	<1.0					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Copper, total recoverable	68					µg/L		
		Dibromochloromethane	<1.0					µg/L		
		1,1-Dichloroethane	<1.0					µg/L		
		1,2-Dichloroethane	<1.0					µg/L		
		1,1-Dichloroethylene	<1.0					µg/L		
		trans-1,2-Dichloroethylene	<1.0					µg/L		
		Dichloromethane (Methylene chloride)	<1.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		1,2-Dichloropropane	<1.0					µg/L		
		cis-1,3-Dichloropropene	<1.0					µg/L		
		trans-1,3-Dichloropropene	<1.0					µg/L		
		Endrin	<0.0060					µg/L		
		Ethylbenzene	<1.0					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00					pCi/L		
		Iron, total recoverable	866		209			µg/L		
		Lead, total recoverable	19		5.5			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	169					µg/L		
		Manganese, total recoverable	5.7					µg/L		
		Mercury, total recoverable	<0.20					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RRP 3 continued

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	<50					µg/L		
		Nonvolatile beta	3.0E+00					pCi/L		
		pH	5.5					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	609					µg/L		
		Radium, total alpha-emitting	<1.0E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	4,120					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	495					µg/L		
		Specific conductance	13					µS/cm		
		Sulfate	1,810					µg/L		
		1,1,2,2-Tetrachloroethane	<1.0					µg/L		
		Tetrachloroethylene	<1.0					µg/L		
		Toluene	<1.0					µg/L		
		Total dissolved solids	18,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	60					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,6-TP (Silvex)	<0.090					µg/L		
		1,1,1-Trichloroethane	<1.0					µg/L		
		1,1,2-Trichloroethane	<1.0					µg/L		
		Trichloroethylene	<1.0					µg/L		
		Trichlorofluoromethane	<1.0					µg/L		
		Tritium	<7.0E-01					pCi/mL		

WELL RRP 4

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N54294.5	33.269375 °N	268.3-238.3 ft msl	280.2 ft msl	4" PVC	S	Water Table
E75723.3	81.572886 °W					

<u>SAMPLE DATE</u>	<u>03/21/93</u>	<u>05/30/93</u>	<u>09/09/93</u>	<u>12/17/93</u>
--------------------	-----------------	-----------------	-----------------	-----------------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	269.5	267.4	263.3	262.9	ft msl
Depth to water	10.7	12.8	16.9	17.3	ft
pH	5.1	4.5	4.6	4.7	pH
Sp. conductance	18	17	193	20	µS/cm
Water temperature	18.3	18.0	18.3	18.3	°C
Alkalinity as CaCO ₃	0	0	0	0	mg/L
Turbidity	2	4	9	1	NTU
Volume purged	3.1	11.1	9.0	9.0	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	<20					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	5.5					µg/L		
		Benzene	<1.0					µg/L		
		Bromodichloromethane	<1.0					µg/L		
		Bromoform	<1.0					µg/L		
		Bromomethane (Methyl bromide)	<1.0					µg/L		
		Cadmium, total recoverable	<2.0					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RRP 4 continued

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Calcium, total recoverable	237					µg/L		
		Carbon tetrachloride	<1.0					µg/L		
		Chloride	1,610					µg/L		
		Chlorobenzene	<1.0					µg/L		
		Chloroethane	<1.0					µg/L		
		Chloroethene (Vinyl chloride)	<1.0					µg/L		
		2-Chloroethyl vinyl ether	<1.0					µg/L		
		Chloroform	<1.0					µg/L		
		Chloromethane (Methyl chloride)	<1.0					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Copper, total recoverable	<4.0					µg/L		
		Dibromochloromethane	<1.0					µg/L		
		1,1-Dichloroethane	<1.0					µg/L		
		1,2-Dichloroethane	<1.0					µg/L		
		1,1-Dichloroethylene	<1.0					µg/L		
		trans-1,2-Dichloroethylene	<1.0					µg/L		
		Dichloromethane (Methylene chloride)	<1.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		1,2-Dichloropropane	<1.0					µg/L		
		cis-1,3-Dichloropropene	<1.0					µg/L		
		trans-1,3-Dichloropropene	<1.0					µg/L		
		Endrin	<0.0060					µg/L		
		Ethylbenzene	<1.0					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E + 00					pCi/L		
		Iron, total recoverable	395		58			µg/L		
		Lead, total recoverable	<3.0		3.1			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	193					µg/L		
		Manganese, total recoverable	2.1					µg/L		
		Mercury, total recoverable	<0.20					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	<50					µg/L		
		Nonvolatile beta	<2.0E + 00					pCi/L		
		pH	5.1					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.2E + 00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	4,950					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	934					µg/L		
		Specific conductance	12					µS/cm		
		Sulfate	1,000					µg/L		
		1,1,2,2-Tetrachloroethane	<1.0					µg/L		
		Tetrachloroethylene	<1.0					µg/L		
		Toluene	<1.0					µg/L		
		Total dissolved solids	17,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		1,1,1-Trichloroethane	<1.0					µg/L		
		1,1,2-Trichloroethane	<1.0					µg/L		
		Trichloroethylene	<1.0					µg/L		
		Trichlorofluoromethane	<1.0					µg/L		
		Tritium	<7.0E-01					pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSA 6

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58159.0 E75000.0	33.276749 °N 81.582289 °W	270.0-() ft msl	312.3 ft msl	3" Steel	B	Water Table

SAMPLE DATE 02/23/93

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation					ft msl
Depth to water					ft
pH					pH
Sp. conductance					µS/cm
Water temperature					°C
Alkalinity as CaCO ₃					mg/L
Turbidity					NTU
Volume purged					Well vol.
Sampling code	P				

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
----------	----------	----------------	-------------	-------------	-------------	-------------	------------	-------------	------------	-------------

WELL RSA 7

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58065.7 E75195.9	33.276861 °N 81.581592 °W	289.5-269.6 ft msl	312.4 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/04/93 05/18/93 07/27/93 12/04/93

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	300.4	294.9	284.9		ft msl
Depth to water	12.0	17.5	27.5		ft
pH	4.8	6.6	7.0		pH
Sp. conductance	32	97	29		µS/cm
Water temperature	17.5	22.5	23.8		°C
Alkalinity as CaCO ₃					mg/L
Turbidity	350	135	74		NTU
Volume purged	1.0	1.9	1.6		Well vol.
Sampling code		X		Dry D	

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	5,870		122			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Arsenic, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Barium, total recoverable	41	16	12			µg/L		
		Cadmium, total recoverable	2.7	<2.0	<2.0			µg/L		
		Calcium, total recoverable	1,690	805	596			µg/L		
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01			pCi/L		
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Chloride	1,390	1,780	1,920			µg/L		
		Chromium, total recoverable	<4.0	22	<4.0			µg/L		
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSA 7 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01			pCi/L		
		Copper, total recoverable	15	<4.0	172			µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01			pCi/L		
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Fluoride	<100	<100	<100			µg/L		
		Gross alpha	8.7E+00	2.2E+00	2.5E+00			pCi/L		
		Iron, total recoverable	728	538	67			µg/L		
		Lead, total recoverable	51	<3.0	89			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,090	612	516			µg/L		
		Manganese, total recoverable	51	17	15			µg/L		
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Mercury, total recoverable	3.9	<0.20	0.97			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	34	7.9			µg/L		
		Nitrate-nitrite as nitrogen	690	910	970			µg/L		
		Nonvolatile beta	9.1E+00	1.2E+01	3.4E+00			pCi/L		
		pH	4.9	4.5	5.2			pH		
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	<500	<500	<500			µg/L		
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02			pCi/L		
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01			pCi/L		
		Radium, total alpha-emitting	5.5E+00	3.1E+00	4.6E+00			pCi/L		
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01			pCi/L		
		Selenium, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Silica, total recoverable	13,100					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Sodium, total recoverable	860	1,200	1,380			µg/L		
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Specific conductance	22	15	22			µS/cm		
		Strontium-90	7.8E+00	<2.0E+00	<1.4E+01			pCi/L		
		Sulfate	1,780	1,580	1,330			µg/L		
		Total dissolved solids	33,000	14,000	20,000			µg/L		
		Total organic carbon	<1,000	<1,000	<1,000			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50	70	<50			µg/L		
		Total suspended solids	341,000	349,000	73,000			µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	<7.0E-01	1.1E+00			pCi/mL		
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Zinc, total recoverable	104	49	70			µg/L		
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSA 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58068.3 E75402.3	33.277204 °N 81.581053 °W	285.5-265.6 ft msl	312.3 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/04/93 05/18/93 07/29/93 12/05/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	297.3	293.8	285.3	280.3	ft msl
Depth to water	15.0	18.5	27.0	32.0	ft
pH	5.4	6.2	5.9	5.3	pH
Sp. conductance	31	30	26	33	µS/cm
Water temperature	17.3	23.6	24.0	14.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	360	340	254	29	NTU
Volume purged	1.0	1.8	1.9	0.3	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	5,000		156			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	53	41	29	31		µg/L	GE	0
		Cadmium, total recoverable	2.3	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	3,400	2,440	1,850	2,000		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,180	1,630	1,720	1,830		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	12	14	5.6	38		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	8.4E+00	3.2E+00	<2.0E+00	3.1E+00		pCi/L	GE	0
		Iron, total recoverable	951	282	79	19		µg/L	GE	0
		Lead, total recoverable	16	113	<3.0	18		µg/L	GE	2
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	832	582	507	542		µg/L	GE	0
		Manganese, total recoverable	14	8.0	7.3	8.6		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	1.9	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	5.5	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	280	580	1,250	880		µg/L	GE	0
		Nonvolatile beta	9.4E+00	5.6E+00	<2.0E+00	4.6E+00		pCi/L	GE	0
		pH	5.2	4.5	5.6	5.5	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSA 8 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	4.4E+00	4.9E+00	1.4E+00	1.2E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	13,000					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	849	1,090	1,770	1,750		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	29	28	29	31		µS/cm	GE	0
		Strontium-89				<2.0E+00	Y3	pCi/L	CN	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	4,310	3,610	2,330	2,140		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	29,000	16,000	20,000	24,000		µg/L	GE	0
		Total organic carbon	1,070	<1,000	4,020	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		10			µg/L		
		Total phosphates (as P)	360	270	320	<50		µg/L	GE	0
•		Total suspended solids	3.3E+06	1.3E+06	36,000	27,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	<7.0E-01	2.0E+00	3.4E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	45	59	31	65		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

WELL RSA 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58123.8 E75616.2	33.277675 °N 81.580597 °W	284.5-264.6 ft msl	311.7 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/05/93	05/18/93	07/27/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	294.7	292.7	282.7	277.2	ft msl
Depth to water	17.0	19.0	29.0	34.5	ft
pH	5.0	5.9	6.5	5.6	pH
Sp. conductance	28	21	29	30	µS/cm
Water temperature	17.4	24.6	24.1	20.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	360	150	269	22	NTU
Volume purged	1.0	1.7	1.5	0.2	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	1,760		1,480			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	44	21	28	21		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	4,160	2,090	3,430	2,980		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSA 9 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	871	922	1,320	1,190		µg/L	GE	0
		Chromium, total recoverable	<4.0	4.2	10.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	8.0	<4.0	13	5.8		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	4.6E+00	2.1E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	377	165	1,070	50		µg/L	GE	0
		Lead, total recoverable	8.5	<3.0	23	5.3		µg/L	GE	0
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	701	385	468	422		µg/L	GE	0
		Manganese, total recoverable	48	21	23	21		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	2.5	<0.20	0.23	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	11	18	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	140	<50	50	80		µg/L	GE	0
		Nonvolatile beta	9.0E+00	4.4E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		pH	5.4	4.6	5.3	5.4	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	4.1E+00	1.6E+00	1.3E+00	1.4E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	8,140					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	831	749	820	899		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	21	22	25	25		µS/cm	GE	0
		Strontium-90	9.1E+00	<2.0E+00	<2.0E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	4,450	4,140	3,320	2,280		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	24,000	18,000	20,000	21,000		µg/L	GE	0
		Total organic carbon	2,010	<1,000	2,270	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	670	70	<50	<50		µg/L	GE	0
		Total suspended solids	2.4E+06	200,000	236,000	236,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	<7.0E-01	1.1E+02	2.7E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	57	87	73	56		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSA 10

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58172.8 E75389.3	33.277414 °N 81.581290 °W	288.7-268.8 ft msl	311.3 ft msl	4" PVC	S	Water Table

<u>SAMPLE DATE</u>	03/05/93	05/18/93	07/27/93	12/04/93
--------------------	----------	----------	----------	----------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	289.3	287.3	281.3		ft msl
Depth to water	22.0	24.0	30.0		ft
pH	4.9	6.0	6.6		pH
Sp. conductance	31	30	35		µS/cm
Water temperature	16.0	24.6	24.4		°C
Alkalinity as CaCO ₃					mg/L
Turbidity	210	21	193		NTU
Volume purged	1.0	1.4	1.1		Well vol.
Sampling code		X		Dry D	

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	477		167			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Arsenic, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Barium, total recoverable	25	27	14			µg/L		
		Cadmium, total recoverable	3.6	<2.0	<2.0			µg/L		
		Calcium, total recoverable	618	1,040	1,470			µg/L		
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01			pCi/L		
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Chloride	1,570	1,600	2,010			µg/L		
		Chromium, total recoverable	<4.0	<4.0	<4.0			µg/L		
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01			pCi/L		
		Copper, total recoverable	4.3	5.5	8.3			µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01			pCi/L		
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01			pCi/L		
		Fluoride	<100	<100	<100			µg/L		
		Gross alpha	4.8E+00	2.5E+00	<2.0E+00			pCi/L		
		Iron, total recoverable	79	195	81			µg/L		
		Lead, total recoverable	<3.0	8.0	12			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,100	1,070	643			µg/L		
		Manganese, total recoverable	25	15	24			µg/L		
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Mercury, total recoverable	0.74	0.27	<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	12	5.4			µg/L		
		Nitrate-nitrite as nitrogen	2,160	1,930	1,300			µg/L		
		Nonvolatile beta	1.1E+01	<2.0E+00	<2.0E+00			pCi/L		
		pH	4.9	4.6	5.3			pH		
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.6E+00	<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240	<1.2E+00	<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	<500	<500	<500			µg/L		
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02			pCi/L		
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSA 10 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01			pCi/L		
		Radium, total alpha-emitting	5.7E+00	2.0E+00	2.7E+00			pCi/L		
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01			pCi/L		
		Selenium, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Silica, total recoverable	6,030					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Sodium, total recoverable	1,680	1,810	2,000			µg/L		
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Specific conductance	28	30	26			µS/cm		
		Strontium-90	3.6E+00	<2.0E+00	<2.0E+00			pCi/L		
		Sulfate	<1,000	<1,000	<1,000			µg/L		
		Total dissolved solids	33,000	14,000	19,000			µg/L		
		Total organic carbon	<1,000	2,570	1,840			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	560	270	<50			µg/L		
		Total suspended solids	2.0E+06	39,000	174,000			µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.0E+00	1.1E+00	2.3E+00			pCi/mL		
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01			pCi/L		
		Zinc, total recoverable	89	74	104			µg/L		
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01			pCi/L		

WELL RSB 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57692.8 E75044.3	33.275789 °N 81.581268 °W	292.6-272.7 ft msl	309 ft msl	4" PVC	S	Water Table

SAMPLE DATE	02/22/93	05/21/93	07/27/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	293.5	291.0	287.0	283.0	ft msl
Depth to water	15.5	18.0	22.0	26.0	ft
pH	5.4	6.3	6.8	5.7	pH
Sp. conductance	23	64	31	24	µS/cm
Water temperature	20.6	23.9	24.4	23.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		15	64	303	NTU
Volume purged	1.9	1.2	1.2	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	7,880		234			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	24	13	3.7	4.2		µg/L	GE	0
		Cadmium, total recoverable	6.3	2.3	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	546	3,060	245	146		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,540	1,620	1,620	1,600		µg/L	GE	0
		Chromium, total recoverable	<4.0	4.1	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSB 7 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	24	13	187	89		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	4.3E+00	2.4E+00	2.8E+00	2.2E+00		pCi/L	GE	0
		Iron, total recoverable	565	496	67	27		µg/L	GE	0
		Lead, total recoverable	44	31	48	26		µg/L	GE	2
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,050	765	365	400		µg/L	GE	0
		Manganese, total recoverable	21	16	6.1	6.4		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	1.6	0.50	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Neptunium-237	<4.5E+01					pCi/L		
		Nickel, total recoverable	<4.0	20	13	5.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	1.150	1,220	1,350	1,340		µg/L	GE	0
		Nonvolatile beta	8.3E+00	2.8E+00	3.8E+00	<2.0E+00		pCi/L	GE	0
•		pH	4.1	5.2	5.3	4.0	J	pH	GE	1
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium-226	<2.2E+02					pCi/L		
		Radium, total alpha-emitting	5.3E+00	1.5E+01	7.8E+00	2.4E+00		pCi/L	GE	0
		Ruthenium-103	<1.0E+01					pCi/L		
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	14,600					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	1,080	1,700	1,540	1,580		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	21	20	22	28		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Thorium-228	<4.0E+02					pCi/L		
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	32,000	25,000	17,000	31,000		µg/L	GE	0
		Total organic carbon	<1,000	2,790	<1,000	<1,000		µg/L	GE	0
		Total organic halogens	6.4		<5.0			µg/L		
		Total phosphates (as P)	170	2,250	<50	<50		µg/L	GE	0
•		Total suspended solids	7.7E+06	1.6E+07	95,000	112,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.4E+00	9.5E-01	2.0E+00	1.5E+00		pCi/mL	GE	0
		Uranium-235	<1.5E+01					pCi/L		
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	2,710	2,350	1,460	1,780		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSB 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57612.9 E75178.2	33.275830 °N 81.580760 °W	294.3-274.3 ft msl	305.8 ft msl	4" Steel	B	Water Table

SAMPLE DATE 02/19/93 05/03/93 07/21/93 11/14/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	295.8	295.8	285.8	285.3	ft msl
Depth to water	10.0	10.0	20.0	20.5	ft
pH	6.0	6.1	6.2	5.1	pH
Sp. conductance	26	28	34	31	µS/cm
Water temperature	12.8	19.6	24.0	25.2	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		325		87	NTU
Volume purged	1.7	0.9	1.6	1.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	7,520		9,730			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	115					µg/L		
■		Cadmium, total recoverable	4.2	3.6	7.1	13		µg/L	GE	2
		Calcium, total recoverable	4,050					µg/L		
		Chloride	1,660					µg/L		
		Chromium, total recoverable	4.4					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
■		Gross alpha	3.1E+01	2.0E+01	1.8E+01	4.8E+01		pCi/L	GE	2
		Iron, total recoverable	3,760		7,260			µg/L		
		Lead, total recoverable	148		133			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,990					µg/L		
		Manganese, total recoverable	1,780		2,390			µg/L		
		Mercury, total recoverable	0.38		0.28			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	260		1,020			µg/L		
■		Nonvolatile beta	2.1E+01	1.5E+01	1.5E+01	5.3E+01		pCi/L	GE	2
		pH	5.2					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	785					µg/L		
		Radium, total alpha-emitting	9.1E+00		7.7E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	14,500					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	603					µg/L		
		Specific conductance	21					µS/cm		
		Sulfate	3,070					µg/L		
		Total dissolved solids	18,000					µg/L		
		Total organic carbon	1,700		2,620			µg/L		
		Total organic halogens	8.7		18			µg/L		
		Total phosphates (as P)	1,080					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		1.6E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSB 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57527.9 E75378.3	33.275969 °N 81.580068 °W	264.9-() ft msl	305.6 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/19/93	05/14/93	07/15/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	294.6	293.1	286.6	284.1	ft msl
Depth to water	11.0	12.5	19.0	21.5	ft
pH	6.0	6.1	5.8	5.6	pH
Sp. conductance	69	78	45	42	µS/cm
Water temperature	13.7	18.8	23.5	19.7	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		145	86	1000	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	2,510		185			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	44					µg/L		
■		Cadmium, total recoverable	6.7	5.3	4.6	12		µg/L	GE	2
		Calcium, total recoverable	7,400					µg/L		
		Chloride	1,700					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	106					µg/L		
		Gross alpha	7.8E + 01	2.7E + 00	< 2.0E + 00	8.3E + 00		pCi/L	GE	1
		Iron, total recoverable	1,200		6,380			µg/L		
		Lead, total recoverable	568		73			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	1,480					µg/L		
		Manganese, total recoverable	595		83			µg/L		
		Mercury, total recoverable	1.0		< 0.20			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	560		700			µg/L		
		Nonvolatile beta	1.8E + 01	2.0E + 00	< 2.0E + 00	8.4E + 00		pCi/L	GE	0
		pH	6.0					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	682					µg/L		
		Radium, total alpha-emitting	4.9E + 00		1.0E + 00			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	9,930					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	2,270					µg/L		
		Specific conductance	20					µS/cm		
		Sulfate	< 5,000					µg/L		
		Total dissolved solids	31,000					µg/L		
		Total organic carbon	< 1,000		< 1,000			µg/L		
		Total organic halogens	< 5.0		< 5.0			µg/L		
		Total phosphates (as P)	1,590					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	1.8E + 00		2.8E + 00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSC 1

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58111.6 E74389.4	33.275648 °N 81.583806 °W	266.9-() ft msl	306 ft msl	1.5" Steel	B	Water Table

SAMPLE DATE 02/12/93

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation					ft msl
Depth to water					ft
pH					pH
Sp. conductance					µS/cm
Water temperature					°C
Alkalinity as CaCO ₃					mg/L
Turbidity					NTU
Volume purged					Well vol.
Sampling code	P				

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
----------	----------	----------------	-------------	-------------	-------------	-------------	------------	-------------	------------	-------------

WELL RSC 2

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58543.0 E74378.6	33.276585 °N 81.584671 °W	281.9-261.9 ft msl	302 ft msl	4" Steel	B	Water Table

SAMPLE DATE 02/12/93 04/29/93 07/13/93 11/21/93

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	283.0	284.5	281.0	277.0	ft msl
Depth to water	19.0	17.5	21.0	25.0	ft
pH	5.6	5.4	5.2	5.7	pH
Sp. conductance	64	70	49	34	µS/cm
Water temperature	17.8	16.0	23.5	18.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	630	410		1000	NTU
Volume purged	1.9	0.9	1.0	0.9	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	4,910		5,230			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	57					µg/L		
		Cadmium, total recoverable	3.9	3.0	2.1	4.8		µg/L	GE	1
		Calcium, total recoverable	11,600					µg/L		
		Chloride	2,500					µg/L		
		Chromium, total recoverable	7.8					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.030					µg/L		
		Fluoride	< 100					µg/L		
■		Gross alpha	8.8E+01	1.6E+01	7.9E+00	2.3E+01		pCi/L	GE	2
		Iron, total recoverable	2,530		4,480			µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSC 2 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Lead, total recoverable	104		107			µg/L		
		Lindane	<0.025					µg/L		
		Magnesium, total recoverable	1,400					µg/L		
		Manganese, total recoverable	433		462			µg/L		
		Mercury, total recoverable	4.7		1.3			µg/L		
		Methoxychlor	<2.5					µg/L		
		Nitrate-nitrite as nitrogen	240		150			µg/L		
		Nonvolatile beta	1.3E+01	1.2E+01	1.0E+01	2.7E+01		pCi/L	GE	1
		pH	6.5					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	9.1E+00		1.1E+01			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	15,200					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,000					µg/L		
		Specific conductance	71					µS/cm		
		Sulfate	1,300					µg/L		
		Total dissolved solids	62,000					µg/L		
		Total organic carbon	1,800		2,570			µg/L		
		Total organic halogens	5.2		89			µg/L		
		Total phosphates (as P)	1,420					µg/L		
		Toxaphene	<1.2					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.1E+00		2.2E+00			pCi/mL		

WELL RSC 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58724.7	33.277511 °N	278.6-258.6 ft msl	301.3 ft msl	4" Steel	B	Water Table
E74699.7	81.584178 °W					

SAMPLE DATE	03/12/93	05/06/93	07/22/93	11/20/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	283.3	283.3	278.8	277.8	ft msl
Depth to water	18.0	18.0	22.5	23.5	ft
pH	5.4	4.8	6.3	5.7	pH
Sp. conductance	49	59	51	34	µS/cm
Water temperature	15.3	24.0		17.6	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	400	35	728	1000	NTU
Volume purged	0.8	0.8	0.8	0.8	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	42,300		10,900			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	123					µg/L		
■		Cadmium, total recoverable	15	6.1	8.8	10		µg/L	GE	2
		Calcium, total recoverable	11,400					µg/L		
		Chloride	2,410					µg/L		
		Chromium, total recoverable	22					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSC 3 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Gross alpha	1.2E+01	<2.0E+00	6.6E+00	1.4E+01		pCi/L	GE	1
		Iron, total recoverable	4,760		6,150			µg/L		
		Lead, total recoverable	165		41			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	4,820					µg/L		
		Manganese, total recoverable	353		92			µg/L		
		Mercury, total recoverable	0.63		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	220		70			µg/L		
		Nonvolatile beta	8.6E+00	3.2E+00	7.5E+00	1.6E+01		pCi/L	GE	0
		pH	5.7					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	7.2E+00		5.0E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	45,200					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,380					µg/L		
		Specific conductance	42					µS/cm		
		Sulfate	<1,000					µg/L		
		Total dissolved solids	40,000					µg/L		
		Total organic carbon	1,020		2,840			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	1,580					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		2.2E+00			pCi/mL		

WELL RSC 4

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58900.3 E75097.8	33.278548 °N 81.583470 °W	288.6-268.6 ft msl	300.3 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/16/93	04/29/93	07/14/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	291.3	290.3	280.3	275.8	ft msl
Depth to water	9.0	10.0	20.0	24.5	ft
pH	5.2	5.9	5.8	5.5	pH
Sp. conductance	45	48	29	33	µS/cm
Water temperature	16.5	18.3	22.3	19.0	°C
Alkalinity as CaCO ₃		280	100	1000	mg/L
Turbidity		0.9	0.8	0.6	NTU
Volume purged	1.7				Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	363		1,330			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	47					µg/L		
■		Cadmium, total recoverable	2.3	5.7	9.4	35		µg/L	GE	2
		Calcium, total recoverable	2,510					µg/L		
		Chloride	2,900					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSC 4 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
	■	Gross alpha	2.6E + 01	8.0E + 00	2.5E + 00	3.8E + 01		µg/L	GE	2
		Iron, total recoverable	269		1,040			pCi/L		
		Lead, total recoverable	3.3		11			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	412					µg/L		
		Manganese, total recoverable	7.7		13			µg/L		
		Mercury, total recoverable	0.92		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	210		80			µg/L		
	■	Nonvolatile beta	1.9E + 01	5.7E + 00	4.1E + 00	5.5E + 01		pCi/L	GE	2
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.5E + 01		1.9E + 00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	5,390					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,450					µg/L		
		Specific conductance	30					µS/cm		
		Sulfate	1,300					µg/L		
		Total dissolved solids	27,000					µg/L		
		Total organic carbon	1,290		13,100			µg/L		
		Total organic halogens	16		51			µg/L		
		Total phosphates (as P)	2,050					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.1E + 00		2.1E + 00			pCi/mL		

WELL RSC 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58901.2 E75484.9	33.279181 °N 81.582452 °W	278.3-258.3 ft msl	304.9 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/16/93	04/29/93	07/14/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	284.4	282.4	274.9	271.9	ft msl
Depth to water	20.5	22.5	30.0	33.0	ft
pH	5.5	5.8	5.6	6.4	pH
Sp. conductance	139	152	184	494	µS/cm
Water temperature	17.3	18.5	21.9	18.6	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		300		1000	NTU
Volume purged	1.6	0.8	0.7	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	29,800		20,800			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	141					µg/L		
		Cadmium, total recoverable	8.4	2.4	4.7	<10		µg/L	GE	0
		Calcium, total recoverable	41,400					µg/L		
		Chloride	5,400					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSC 6 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Calcium, total recoverable	6,410					µg/L		
		Chloride	2,380					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00	<2.0E+00	3.2E+00	1.2E+01		pCi/L	GE	1
		Iron, total recoverable	1,400		3,820			µg/L		
		Lead, total recoverable	38		37			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,250					µg/L		
		Manganese, total recoverable	173		307			µg/L		
		Mercury, total recoverable	0.27		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	<50		100			µg/L		
		Nonvolatile beta	5.2E+00	<2.0E+00	3.7E+00	2.4E+01		pCi/L	GE	0
		pH	5.7					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	<1.0E+00		2.3E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	8,090					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,830					µg/L		
		Specific conductance	53					µS/cm		
		Sulfate	2,070					µg/L		
		Total dissolved solids	36,000					µg/L		
		Total organic carbon	1,570		15,200			µg/L		
		Total organic halogens	<5.0		9.9			µg/L		
		Total phosphates (as P)	90					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		8.9E-01			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSC 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58200.1 E75686.2	33.277958 °N 81.580561 °W	283.4-263.4 ft msl	307.8 ft msl	4" Steel	B	Water Table

SAMPLE DATE 03/15/93 05/14/93 07/20/93 11/20/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	292.8	291.3	282.8	277.8	ft msl
Depth to water	15.0	16.5	25.0	30.0	ft
pH	6.4	5.7	5.7	5.6	pH
Sp. conductance	133	118	48	38	µS/cm
Water temperature	13.5	18.6	22.7	17.4	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	140	42	782	1000	NTU
Volume purged	0.9	0.9	0.9	0.5	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	7,140		4,060			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	110					µg/L		
■		Cadmium, total recoverable	4.3	7.7	8.8	9.1		µg/L	GE	2
		Calcium, total recoverable	18,100					µg/L		
		Chloride	2,410					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	5.8E+01	<2.0E+00	3.9E+00	6.8E+00		pCi/L	GE	0
		Iron, total recoverable	14,500		30,300			µg/L		
		Lead, total recoverable	365		141			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,380					µg/L		
		Manganese, total recoverable	201		40			µg/L		
		Mercury, total recoverable	0.56		0.93			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,210		2,900			µg/L		
		Nonvolatile beta	1.7E+01	5.1E+00	6.2E+00	1.3E+01		pCi/L	GE	0
		pH	6.5					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,920					µg/L		
		Radium, total alpha-emitting	1.1E+01		4.9E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	12,500					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	2,120					µg/L		
		Specific conductance	108					µS/cm		
		Sulfate	2,110					µg/L		
		Total dissolved solids	109,000					µg/L		
		Total organic carbon	<1,000		10,900			µg/L		
		Total organic halogens	<5.0		15			µg/L		
		Total phosphates (as P)	800					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		1.1E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSC 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57818.1 E75684.0	33.277109 °N 81.579826 °W	299.3-271.3 ft msl	308.8 ft msl	4" Steel	B	Water Table

SAMPLE DATE	03/15/93	05/14/93	07/22/93	11/20/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	301.8	301.8	291.8	288.8	ft msl
Depth to water	7.0	7.0	17.0	20.0	ft
pH	5.8	5.4	6.4	5.8	pH
Sp. conductance	53	44	33	35	µS/cm
Water temperature	13.5	20.0		18.4	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	150	25	822	1000	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	5,850		6,100			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	108					µg/L		
■		Cadmium, total recoverable	12	2.6	4.5	8.5		µg/L	GE	2
		Calcium, total recoverable	12,400					µg/L		
		Chloride	701					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		
■		Gross alpha	2.8E + 01	2.3E + 00	8.3E + 00	2.7E + 01		pCi/L	GE	2
		Iron, total recoverable	8,350		29,900			µg/L		
		Lead, total recoverable	150		105			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	2,070					µg/L		
		Manganese, total recoverable	304		85			µg/L		
		Mercury, total recoverable	0.48		0.33			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	< 50		< 50			µg/L		
		Nonvolatile beta	9.0E + 00	< 2.0E + 00	8.4E + 00	3.7E + 01		pCi/L	GE	1
		pH	5.9					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	510					µg/L		
		Radium, total alpha-emitting	5.6E + 00		5.7E + 00			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	14,100					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	528					µg/L		
		Specific conductance	43					µS/cm		
		Sulfate	6,770					µg/L		
		Total dissolved solids	56,000					µg/L		
		Total organic carbon	2,010		3,710			µg/L		
		Total organic halogens	8.4		13			µg/L		
		Total phosphates (as P)	800					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	< 7.0E-01		1.2E + 00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSC 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N59241.2 E74565.3	33.278435 °N 81.585534 °W	271.6-251.6 ft msl	301.8 ft msl	4" Steel	B	Water Table

SAMPLE DATE 02/12/93 04/29/93 07/13/93 11/21/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	276.8	279.3	274.3	271.8	ft msl
Depth to water	25.0	22.5	27.5	30.0	ft
pH	5.9	5.5	5.0	5.8	pH
Sp. conductance	83	104	59	53	µS/cm
Water temperature	20.4	17.0	22.0	18.6	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	650	440		1000	NTU
Volume purged	1.5	0.8	0.9	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	5,730		6,740			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	178					µg/L		
■		Cadmium, total recoverable	11	8.7	5.9	10		µg/L	GE	2
		Calcium, total recoverable	22,600					µg/L		
		Chloride	4,400					µg/L		
		Chromium, total recoverable	6.8					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	177					µg/L		
■		Gross alpha	5.0E+01	3.4E+01	1.5E+01	7.1E+01		pCi/L	GE	2
		Iron, total recoverable	3,370		6,210			µg/L		
		Lead, total recoverable	399		334			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,960					µg/L		
		Manganese, total recoverable	4,170		4,740			µg/L		
		Mercury, total recoverable	5.0		0.68			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	<50		80			µg/L		
		Nonvolatile beta	2.1E+01	1.3E+01	9.5E+00	3.9E+01		pCi/L	GE	1
		pH	6.4					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,520					µg/L		
		Radium, total alpha-emitting	1.2E+01		1.1E+01			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	22,700					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	2,800					µg/L		
		Specific conductance	88					µS/cm		
		Sulfate	2,000					µg/L		
		Total dissolved solids	79,000					µg/L		
		Total organic carbon	1,130		1,130			µg/L		
		Total organic halogens	5.5		98			µg/L		
		Total phosphates (as P)	1,710					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	8.9E-01		1.8E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSC 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N59542.7 E75470.0	33.280577 °N 81.583736 °W	275.5-255.5 ft msl	297.4 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/18/93	04/28/93	07/14/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	277.9	277.4	272.4	270.4	ft msl
Depth to water	19.5	20.0	25.0	27.0	ft
pH	6.1	6.2	6.7	5.9	pH
Sp. conductance	41	48	49	52	µS/cm
Water temperature	16.3	20.1	21.5	19.2	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		77	811	795	NTU
Volume purged	1.6	0.8	0.7	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	6,400		3,380			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	644					µg/L		
■		Cadmium, total recoverable	12	3.5	3.0	5.1		µg/L	GE	2
		Calcium, total recoverable	38,800					µg/L		
		Chloride	2,450					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		
		Gross alpha	1.1E + 02	< 2.0E + 00	5.7E + 00	1.1E + 01		pCi/L	GE	1
		Iron, total recoverable	575		3,300			µg/L		
		Lead, total recoverable	930		170			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	2,710					µg/L		
		Manganese, total recoverable	585		84			µg/L		
		Mercury, total recoverable	1.4		< 0.20			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	< 50		250			µg/L		
		Nonvolatile beta	6.7E + 01	2.4E + 00	6.2E + 00	1.1E + 01		pCi/L	GE	0
		pH	6.1					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	4,420					µg/L		
		Radium, total alpha-emitting	1.6E + 01		5.6E + 00			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	25,200					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	1,720					µg/L		
		Specific conductance	38					µS/cm		
		Sulfate	2,080					µg/L		
		Total dissolved solids	33,000					µg/L		
		Total organic carbon	3,450		< 1,000			µg/L		
		Total organic halogens	19		16			µg/L		
		Total phosphates (as P)	2,640					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	< 7.0E-01		1.7E + 00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.
 ● = exceeded holding time for 4th quarter 1993.
 ■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57440.8 E75035.1	33.275216 °N 81.580803 °W	287.7-267.9 ft msl	300.5 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/08/93 05/21/93 07/27/93 12/05/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	290.5	286.5	286.5	284.5	ft msl
Depth to water	10.0	14.0	14.0	16.0	ft
pH	5.3	5.6	6.2	5.5	pH
Sp. conductance	59	52	40	37	µS/cm
Water temperature	17.0	20.1	23.3	19.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	240	95	173	77	NTU
Volume purged	0.9	1.4	1.3	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y	pCi/L	CN	0
		Aluminum, total recoverable	9,810		778			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	65	23	19	20		µg/L	GE	0
		Cadmium, total recoverable	3.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	5,090	2,570	2,450	2,760		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	3,350	2,640	2,350	2,000		µg/L	GE	0
		Chromium, total recoverable	4.6	<4.0	5.6	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	25	4.3	4.8	7.1		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	9.6E+00	5.1E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	2,650	632	686	276		µg/L	GE	1
		Lead, total recoverable	40	6.8	12	8.3		µg/L	GE	1
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,170	1,120	950	919		µg/L	GE	0
		Manganese, total recoverable	45	31	32	17		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	1.5	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	4.9	11	10	7.7		µg/L	GE	0
		Nitrate-nitrite as nitrogen	310	390	370	680		µg/L	GE	0
		Nonvolatile beta	5.6E+01	3.2E+01	2.8E+01	6.1E+01		pCi/L	GE	2
		pH	5.1	5.2	5.2	5.3	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	600	614	<500	588		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSD 1 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	6.2E+00	4.8E+00	2.9E+00	1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	21,400					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	1,980	1,950	1,370	1,040		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	42	38	38	34		µS/cm	GE	0
		Strontium-90	3.1E+01	2.7E+01	2.1E+01	1.8E+01	Y	pCi/L	CN	2
		Sulfate	7,920	6,030	4,350	1,560		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	47,000	48,000	25,000	25,000		µg/L	GE	0
		Total organic carbon	1,940	2,270	4,170	<1,000		µg/L	GE	0
		Total organic halogens	13		5.1			µg/L		
		Total phosphates (as P)	300	100	120	<50		µg/L	GE	0
		Total suspended solids	4.9E+06	2.9E+06	58,000	11,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	<7.0E-01	1.6E+00	2.3E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	246	683	361	160		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

WELL RSD 2A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57448.5	33.274869 °N		301.2 ft msl	Steel	B	Water Table
E74811.5	81.581407 °W					

SAMPLE DATE	02/23/93	05/05/93	07/19/93	11/14/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	290.7	290.2	286.2	286.2	ft msl
Depth to water	10.5	11.0	15.0	15.0	ft
pH	6.1	5.8	6.3	6.1	pH
Sp. conductance	85	120	102	117	µS/cm
Water temperature	17.1	19.5	23.3	24.1	°C
Alkalinity as CaCO ₃					
Turbidity	521	48	160	371	mg/L
Volume purged					NTU
Sampling code	X				Well vol.

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	367		69			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	29					µg/L		
		Cadmium, total recoverable	24	12	6.6	20		µg/L	GE	2
		Calcium, total recoverable	1,760					µg/L		
		Chloride	1,690					µg/L		
		Chromium, total recoverable	19					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSD 2A continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Gross alpha	<2.0E+00	<2.0E+00	6.6E+00	3.7E+00		pCi/L	GE	0
		Iron, total recoverable	59,300		29,900			µg/L		
		Lead, total recoverable	246		23			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,300					µg/L		
		Manganese, total recoverable	938		660			µg/L		
		Mercury, total recoverable	0.64		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,120		<50			µg/L		
■		Nonvolatile beta	2.9E+02	3.0E+02	2.5E+02	3.2E+02		pCi/L	GE	2
		pH	5.4					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	548					µg/L		
		Radium, total alpha-emitting	3.9E+00		3.4E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	5,720					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,530					µg/L		
		Specific conductance	50					µS/cm		
		Sulfate	<1,000					µg/L		
		Total dissolved solids	33,000					µg/L		
		Total organic carbon	<1,000		5,500			µg/L		
		Total organic halogens	<5.0		7.0			µg/L		
		Total phosphates (as P)	130					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	9.1E-01		1.7E+00			pCi/mL		

WELL RSD 2B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57468.9 E74810.7	33.274913 °N 81.581449 °W		303.6 ft msl	Steel	B	Water Table

SAMPLE DATE 02/23/93 05/05/93 07/21/93 11/14/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	290.6	291.6			ft msl
Depth to water	13.0	12.0			ft
pH	5.1	5.1			pH
Sp. conductance	28	40			µS/cm
Water temperature	17.9	19.5			°C
Alkalinity as CaCO ₃					mg/L
Turbidity		30			NTU
Volume purged			Dry	Dry	Well vol.
Sampling code	X	X	D	D	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	1,540					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	34					µg/L		
		Cadmium, total recoverable	5.6	8.4				µg/L		
		Calcium, total recoverable	1,240					µg/L		
		Chloride	2,530					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Fluoride	<100					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSD 2B continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Gross alpha	6.6E+00	<2.0E+00				pCi/L		
		Iron, total recoverable	228					µg/L		
		Lead, total recoverable	28					µg/L		
		Magnesium, total recoverable	1,020					µg/L		
		Manganese, total recoverable	7.6					µg/L		
		Mercury, total recoverable	<0.20					µg/L		
		Nitrate-nitrite as nitrogen	1,520					µg/L		
		Nonvolatile beta	6.3E+02	4.1E+02				pCi/L		
		pH	5.0					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	515					µg/L		
		Radium, total alpha-emitting	1.0E+01					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	6,550					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,510					µg/L		
		Specific conductance	35					µS/cm		
		Sulfate	1,120					µg/L		
		Total dissolved solids	26,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	12					µg/L		
		Total phosphates (as P)	120					µg/L		
		Tritium	<7.0E-01					pCi/mL		

WELL RSD 2C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57479.3	33.274936 °N		301.7 ft msl	Steel	B	Water Table
E74810.6	81.581469 °W					

SAMPLE DATE	02/23/93	05/05/93	07/21/93	11/14/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	290.7	290.7	286.7	285.7	ft msl
Depth to water	11.0	11.0	15.0	16.0	ft
pH	5.6	5.9	5.4	4.7	pH
Sp. conductance	63	70	80	74	µS/cm
Water temperature	18.8	19.5	25.4	24.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	595	18	49	1000	NTU
Volume purged					Well vol.
Sampling code	X			I	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	886		4,260			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	52					µg/L		
■		Cadmium, total recoverable	2.1	7.1	6.1	23		µg/L	GE	2
		Calcium, total recoverable	3,150					µg/L		
		Chloride	3,830					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
■		Gross alpha	<2.0E+00	4.5E+01	<2.0E+00	7.3E+01		pCi/L	GE	2
		Iron, total recoverable	84		184			µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.
 ● = exceeded holding time for 4th quarter 1993.
 ■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSD 2C continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Lead, total recoverable	<3.0		3.5			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,710					µg/L		
		Manganese, total recoverable	9.1		10			µg/L		
		Mercury, total recoverable	5.5		0.22			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	4,800		4,250			µg/L		
		Nonvolatile beta	5.5E+03	5.2E+03	6.4E+03	3.4E+03		pCi/L	GE	2
		pH	4.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,410					µg/L		
		Radium, total alpha-emitting	5.8E+01		6.5E+01			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	5,250					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	2,330					µg/L		
		Specific conductance	60					µS/cm		
		Sulfate	<1,000					µg/L		
		Total dissolved solids	49,000					µg/L		
		Total organic carbon	2,480		2,960			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	2.1E+00		2.9E+00			pCi/mL		

WELL RSD 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57451.6 E74702.3	33.274698 °N 81.581701 °W	289.1-269.3 ft msl	300.8 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/02/93 05/21/93 07/27/93 12/05/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	291.3	290.8		285.8	ft msl
Depth to water	9.5	10.0		15.0	ft
pH	5.4	5.9	6.4	5.6	pH
Sp. conductance	57	42	44	47	µS/cm
Water temperature	14.0	19.6	26.0	24.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	90	100	122	120	NTU
Volume purged	1.9	1.8		0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	1,310		754			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	23	16	17	17		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	5,480	3,970	4,200	3,630		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSD 3 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Chloride	1,390	1,140	1,820	1,210		µg/L	GE	0
		Chromium, total recoverable	<4.0	4.7	14	9.7		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	6.5	<4.0	49	171		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	3.4E+00	9.6E+00	<2.0E+00	3.5E+00		pCi/L	GE	0
■		Iron, total recoverable	3,950	830	4,500	2,840		µg/L	GE	2
		Lead, total recoverable	4.3	3.4	116	52		µg/L	GE	2
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,430	1,130	1,100	1,040		µg/L	GE	0
		Manganese, total recoverable	10	4.7	8.9	8.2		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.51	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	8.0	16	18		µg/L	GE	0
		Nitrate-nitrite as nitrogen	300	950	410	230		µg/L	GE	0
		Nonvolatile beta	3.1E+00	7.1E+00	<2.0E+00	8.6E+00		pCi/L	GE	0
•		pH	5.7	5.6	5.4	5.0	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	531		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	1.7E+00	7.2E+00	1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	3.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	6,760					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	879	909	999	888		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	45	38	41	38		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	5,900	5,310	4,700	3,790		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	31,000	42,000	30,000	31,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	2,440	1,630		µg/L	GE	0
		Total organic halogens	9.2		5.9			µg/L		
		Total phosphates (as P)	140	80	290	70		µg/L	GE	0
•		Total suspended solids	188,000	614,000	34,000	115,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	7.9E-01	1.1E+00	1.6E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	32	23	84	306		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 4

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N57441.4 E75154.6	33.275412 °N 81.580489 °W	290.6-270.6 ft msl	301.6 ft msl	4" Steel	B	Water Table

SAMPLE DATE 03/08/93 05/04/93 07/16/93 11/13/93

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	291.6	290.6	286.6	287.6	ft msl
Depth to water	10.0	11.0	15.0	14.0	ft
pH	5.6	6.0	6.2	5.4	pH
Sp. conductance	27	24	32	25	µS/cm
Water temperature	18.0	18.3	23.8	22.3	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	360	33	305	551	NTU
Volume purged	0.9	0.8	0.9	0.8	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	1,530					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	39					µg/L		
■		Cadmium, total recoverable	5.5	6.8		7.9		µg/L	GE	2
		Calcium, total recoverable	2,040					µg/L		
		Chloride	1,030					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	1.2E+01	3.6E+00	9.2E+00	1.1E+01		pCi/L	GE	1
		Iron, total recoverable	1,090					µg/L		
		Lead, total recoverable	23					µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	781					µg/L		
		Manganese, total recoverable	417					µg/L		
		Mercury, total recoverable	0.36					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	70		230			µg/L		
■		Nonvolatile beta	3.1E+02	1.3E+02	2.4E+02	3.3E+02		pCi/L	GE	2
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	551					µg/L		
		Radium, total alpha-emitting	7.2E+00		9.1E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	6,320					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	614					µg/L		
		Specific conductance	42					µS/cm		
		Sulfate	3,110					µg/L		
		Total dissolved solids	12,000					µg/L		
		Total organic carbon	1,800		1,970			µg/L		
		Total organic halogens	12		16			µg/L		
		Total phosphates (as P)	420					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,6-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01					pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57439.9 E75207.0	33.275495 °N 81.580348 °W	289.6-269.6 ft msl	301.7 ft msl	4" Steel	B	Water Table

SAMPLE DATE	03/08/93	05/04/93	07/16/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	291.2	290.2	285.7	285.7	ft msl
Depth to water	10.5	11.5	16.0	16.0	ft
pH	5.5	5.9	4.6	5.1	pH
Sp. conductance	31	30	33	29	µS/cm
Water temperature	18.6	18.5	23.2	21.9	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	370	70	243	1000	NTU
Volume purged	0.8	0.8	0.8	0.8	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	2,530		2,090			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	50					µg/L		
		Cadmium, total recoverable	3.2	5.1	17	3.4		µg/L	GE	1
		Calcium, total recoverable	2,480					µg/L		
		Chloride	1,640					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
■		Gross alpha	1.6E+01	<2.0E+00	6.1E+00	2.3E+01		pCi/L	GE	2
		Iron, total recoverable	2,020		1,890			µg/L		
		Lead, total recoverable	68		16			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,330					µg/L		
		Manganese, total recoverable	929		321			µg/L		
		Mercury, total recoverable	0.61		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	790		1,940			µg/L		
■		Nonvolatile beta	4.6E+02	1.9E+02	1.6E+02	5.1E+02		pCi/L	GE	2
		pH	5.2					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.1E+01		6.6E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	8,510					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,100					µg/L		
		Specific conductance	25					µS/cm		
		Sulfate	2,020					µg/L		
		Total dissolved solids	17,000					µg/L		
		Total organic carbon	1,260		3,420			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	370					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	9.8E-01		2.3E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57441.3 E75256.6	33.275579 °N 81.580221 °W	290.1-270.1 ft msl	302.1 ft msl	4" Steel	B	Water Table

SAMPLE DATE 03/01/93 05/04/93 07/15/93 11/13/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	289.6	288.6	284.6	286.6	ft msl
Depth to water	12.5	13.5	17.5	15.5	ft
pH	6.3	6.1	6.2	6.0	pH
Sp. conductance	39	51	36	25	µS/cm
Water temperature	18.8	19.2	24.9	20.9	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		80	313	864	NTU
Volume purged	1.7	0.8	0.8	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	6,290		1,480			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	94					µg/L		
	■	Cadmium, total recoverable	15	7.2	8.4	9.9		µg/L	GE	2
		Calcium, total recoverable	7,760					µg/L		
		Chloride	2,150					µg/L		
		Chromium, total recoverable	5.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	150					µg/L		
	■	Gross alpha	6.0E+01	4.4E+00	9.5E+00	2.0E+01		pCi/L	GE	2
		Iron, total recoverable	5,530		1,300			µg/L		
		Lead, total recoverable	285		46			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	3,180					µg/L		
		Manganese, total recoverable	2,920		1,090			µg/L		
		Mercury, total recoverable	1.6		0.62			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	850		1,100			µg/L		
	■	Nonvolatile beta	3.3E+02	1.4E+02	1.3E+02	2.1E+02		pCi/L	GE	2
		pH	5.8					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,080					µg/L		
		Radium, total alpha-emitting	1.9E+01		7.0E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	15,900					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,420					µg/L		
		Specific conductance	40					µS/cm		
		Sulfate	1,430					µg/L		
		Total dissolved solids	33,000					µg/L		
		Total organic carbon	1,020		1,930			µg/L		
		Total organic halogens	9.6		<5.0			µg/L		
		Total phosphates (as P)	620					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.4E+00		2.6E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 7

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57394.3 E75178.4	33.275347 °N 81.580335 °W	287.3-267.3 ft msl	293.4 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/25/93	05/04/93	07/19/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	287.9	287.4	283.4	284.4	ft msl
Depth to water	5.5	6.0	10.0	9.0	ft
pH	5.8	5.9	4.9	5.9	pH
Sp. conductance	22	23	26	22	µS/cm
Water temperature	13.1	20.2	22.0	22.7	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	334	180	400	573	NTU
Volume purged	1.7	0.8	0.9	0.8	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	2,540		3,370			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	26					µg/L		
		Cadmium, total recoverable	<2.0	<2.0	<2.0	2.5		µg/L	GE	0
		Calcium, total recoverable	1,430					µg/L		
		Chloride	1,500					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	5.8E+00	1.8E+01	4.5E+00	7.2E+00		pCi/L	GE	0
		Iron, total recoverable	1,240		6,360			µg/L		
		Lead, total recoverable	62		78			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	819					µg/L		
		Manganese, total recoverable	509		1,490			µg/L		
		Mercury, total recoverable	0.85		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	650		1,070			µg/L		
■		Nonvolatile beta	1.3E+02	9.0E+01	8.8E+01	1.7E+02		pCi/L	GE	2
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	1.0E+01		4.5E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	11,800					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,310					µg/L		
		Specific conductance	21					µS/cm		
		Sulfate	1,130					µg/L		
		Total dissolved solids	29,000					µg/L		
		Total organic carbon	1,550		2,340			µg/L		
		Total organic halogens	5.7		18			µg/L		
		Total phosphates (as P)	210					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.4E+00		2.3E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 8

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57394.0 E75229.6	33.275430 °N 81.580200 °W	287.3-267.3 ft msl	293 ft msl	4" Steel	B	Water Table

SAMPLE DATE	02/24/93	05/04/93	07/19/93	11/13/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	288.0		283.0	284.0	ft msl
Depth to water	5.0		10.0	9.0	ft
pH	5.8	5.7	5.6	5.8	pH
Sp. conductance	28	26	30	29	µS/cm
Water temperature	15.6	19.1	23.4	22.2	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		160		987	NTU
Volume purged	1.8		0.8	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	5,020		12,700			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	64					µg/L		
■		Cadmium, total recoverable	4.7	2.6	5.6	6.5		µg/L	GE	2
		Calcium, total recoverable	4,080					µg/L		
		Chloride	1,740					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.030					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	9.6E+00	5.7E+00	3.4E+01	1.3E+01		pCi/L	GE	1
		Iron, total recoverable	2,970		15,800			µg/L		
		Lead, total recoverable	69		214			µg/L		
		Lindane	<0.025					µg/L		
		Magnesium, total recoverable	1,670					µg/L		
		Manganese, total recoverable	1,570		7,340			µg/L		
		Mercury, total recoverable	1.6		0.32			µg/L		
		Methoxychlor	<2.5					µg/L		
		Nitrate-nitrite as nitrogen	520		1,320			µg/L		
■		Nonvolatile beta	7.6E+02	1.1E+03	8.4E+02	6.5E+02		pCi/L	GE	2
		pH	5.4					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	702					µg/L		
		Radium, total alpha-emitting	9.4E+00		3.0E+01			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	15,400					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,150					µg/L		
		Specific conductance	28					µS/cm		
		Sulfate	1,330					µg/L		
		Total dissolved solids	56,000					µg/L		
		Total organic carbon	2,230		6,190			µg/L		
		Total organic halogens	<5.0		14			µg/L		
		Total phosphates (as P)	470					µg/L		
		Toxaphene	<1.2					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.0E+00		2.5E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 9

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N57245.6 E75185.9	33.275030 °N 81.580027 °W	271.7-251.7 ft msl	292.6 ft msl	4" Steel	B	Water Table

<u>SAMPLE DATE</u>	02/17/93	04/28/93	07/13/93	11/30/93
--------------------	----------	----------	----------	----------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	286.1	285.1	282.6	283.6	ft msl
Depth to water	6.5	7.5	10.0	9.0	ft
pH	5.3	6.0	5.1	5.5	pH
Sp. conductance	50	37	27	33	µS/cm
Water temperature	12.4	17.8	24.0	17.6	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		275		1000	NTU
Volume purged	1.3	0.6	0.6	0.7	Well vol.
Sampling code					

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	1,940		2,190			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	38					µg/L		
■		Cadmium, total recoverable	3.1	9.6	5.0	8.5		µg/L	GE	2
		Calcium, total recoverable	4,310					µg/L		
		Chloride	1,350					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		
		Gross alpha	8.4E + 00	5.8E + 00	1.2E + 01	7.1E + 00		pCi/L	GE	0
		Iron, total recoverable	5,870		2,060			µg/L		
		Lead, total recoverable	109		56			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	1,300					µg/L		
		Manganese, total recoverable	383		204			µg/L		
		Mercury, total recoverable	0.62		< 0.20			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	490		490			µg/L		
		Nonvolatile beta	5.0E + 00	7.5E + 00	7.7E + 01	7.8E + 00		pCi/L	GE	0
		pH	3.5					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	< 500					µg/L		
		Radium, total alpha-emitting	5.4E + 00		6.5E + 00			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	7,190					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	736					µg/L		
		Specific conductance	62					µS/cm		
		Sulfate	3,180					µg/L		
		Total dissolved solids	48,000					µg/L		
		Total organic carbon	2,800		< 1,000			µg/L		
		Total organic halogens	6.2		12			µg/L		
		Total phosphates (as P)	300					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	8.8E-01		1.3E + 00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57246.6 E75235.8	33.275114 °N 81.579898 °W		292.5 ft msl	Steel	B	Water Table

SAMPLE DATE	02/17/93	04/28/93	07/13/93	11/30/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	286.0	285.5	282.5	285.5	ft msl
Depth to water	6.5	7.0	10.0	7.0	ft
pH	5.2	5.9	4.8	5.5	pH
Sp. conductance	32	31	27	28	µS/cm
Water temperature	17.3	17.8	26.0	17.8	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		245	563	1000	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	2,750		7,360			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	19					µg/L		
		Cadmium, total recoverable	2.9	4.7	5.0	3.8		µg/L	GE	1
		Calcium, total recoverable	1,490					µg/L		
		Chloride	1,900					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		
		Gross alpha	1.2E + 01	4.1E + 00	< 2.0E + 00	5.1E + 00		pCi/L	GE	0
		Iron, total recoverable	2,120		3,480			µg/L		
		Lead, total recoverable	32		67			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	943					µg/L		
		Manganese, total recoverable	122		412			µg/L		
		Mercury, total recoverable	0.35		0.29			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	800		740			µg/L		
■		Nonvolatile beta	9.3E + 01	6.5E + 01	1.4E + 02	7.7E + 01		pCi/L	GE	2
		pH	4.8					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	< 500					µg/L		
		Radium, total alpha-emitting	5.6E + 00		1.0E + 01			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	8,850					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	838					µg/L		
		Specific conductance	27					µS/cm		
		Sulfate	1,850					µg/L		
		Total dissolved solids	31,000					µg/L		
		Total organic carbon	< 1,000		7,710			µg/L		
		Total organic halogens	< 5.0		74			µg/L		
		Total phosphates (as P)	250					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	9.3E-01		1.5E + 00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSD 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57249.1 E75285.6	33.275200 °N 81.579771 °W		292.3 ft msl	Steel	B	Water Table

SAMPLE DATE	02/18/93	04/28/93	07/13/93	11/30/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	285.3	285.3	282.3	285.3	ft msl
Depth to water	7.0	7.0	10.0	7.0	ft
pH	5.6	6.0	5.0	5.3	pH
Sp. conductance	51	39	28	51	µS/cm
Water temperature	13.0	18.6	24.2	17.7	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	308	145		112	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	1,240		3,660			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	32					µg/L		
		Cadmium, total recoverable	3.5	8.4	4.7	3.9		µg/L	GE	1
		Calcium, total recoverable	2,370					µg/L		
		Chloride	1,840					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		
		Gross alpha	7.7E+00	2.9E+00	2.4E+00	2.8E+00		pCi/L	GE	0
		Iron, total recoverable	3,930		7,110			µg/L		
		Lead, total recoverable	78		57			µg/L		
		Lindane	< 0.0050					µg/L		
		Magnesium, total recoverable	979					µg/L		
		Manganese, total recoverable	179		519			µg/L		
		Mercury, total recoverable	0.35		< 0.20			µg/L		
		Methoxychlor	< 0.50					µg/L		
		Nitrate-nitrite as nitrogen	760		710			µg/L		
		Nonvolatile beta	1.7E+01	1.5E+01	1.0E+01	2.1E+01		pCi/L	GE	0
		pH	4.8					pH		
		Phenols	< 5.0					µg/L		
		Potassium, total recoverable	< 500					µg/L		
		Radium, total alpha-emitting	1.8E+00		7.7E+00			pCi/L		
		Selenium, total recoverable	< 2.0					µg/L		
		Silica, total recoverable	7,360					µg/L		
		Silver, total recoverable	< 2.0					µg/L		
		Sodium, total recoverable	68					µg/L		
		Specific conductance	36					µS/cm		
		Sulfate	2,830					µg/L		
		Total dissolved solids	46,000					µg/L		
		Total organic carbon	2,990		5,250			µg/L		
		Total organic halogens	< 5.0		12			µg/L		
		Total phosphates (as P)	220					µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	8.0E-01		1.2E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 1A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57734.6 E74712.7	33.275341 °N 81.582222 °W	294.8-274.8 ft msl	304.2 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/09/93	05/19/93	07/29/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	295.2	293.7	288.2	285.7	ft msl
Depth to water	9.0	10.5	16.0	18.5	ft
pH	5.0	5.7	5.7	5.5	pH
Sp. conductance	37	45	35	26	µS/cm
Water temperature	18.9	21.7	25.1	23.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	240	290	116	52	NTU
Volume purged	1.0	1.9	1.9	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	5,530		2,890			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	58	33	21	11		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	2,400	2,500	1,210	778		µg/L	GE	0
		Cerium-144		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,710	1,890	1,630	1,410		µg/L	GE	0
		Chromium, total recoverable	<4.0	11	22	<4.0		µg/L	GE	0
		Cobalt-57		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	203	392	435	165		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	6.0E+00	4.6E+00	4.2E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	444	2,330	805	58		µg/L	GE	0
		Lead, total recoverable	11	4.6	9.8	3.4		µg/L	GE	0
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,140	1,300	1,030	740		µg/L	GE	0
		Manganese, total recoverable	91	18	14	3.2		µg/L	GE	0
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.43	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	19	39	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	300	890	1,030	440		µg/L	GE	0
		Nonvolatile beta	2.1E+01	5.3E+02	3.0E+02	1.4E+02		pCi/L	GE	2
		pH	5.2	5.3	5.1	5.3	J		GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	672	<500	<500		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSE 1A continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40		<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	6.5E+00	9.3E+00	2.5E+00	1.0E+00		pCi/L	GE	0
		Ruthenium-106		<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	7,940					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	1,120	1,450	960	920		µg/L	GE	0
		Sodium-22		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	32	48	29	20		µS/cm	GE	0
	■	Strontium-90		2.5E+02	1.3E+02	4.9E+01	Y	pCi/L	CN	2
		Sulfate	5,330	4,500	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total activity				4.1E+03		pCi/L	EM	0
		Total dissolved solids	22,000	30,000	21,000	18,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	2,380	<1,000		µg/L	GE	0
		Total organic halogens	26		<5.0			µg/L		
		Total phosphates (as P)	310	100	70	<50		µg/L	GE	0
	•	Total suspended solids	912,000	710,000	450,000	32,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	2.1E+02	9.4E-01	1.8E+00		pCi/mL	GE	0
		Yttrium-88		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	18	40	81	22		µg/L	GE	0
		Zinc-65		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

WELL RSE 1B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57731.4 E74698.1	33.275310 °N 81.582255 °W	295.7-275.7 ft msl	303.3 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/09/93	05/19/93	07/29/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	296.3	293.8	288.3	286.3	ft msl
Depth to water	7.0	9.5	15.0	17.0	ft
pH	4.9	5.8	5.7	5.5	pH
Sp. conductance	26	27	25	23	µS/cm
Water temperature	18.2	21.2	24.4	22.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	390	180	117	251	NTU
Volume purged	1.0	1.5	2.1	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	6,590		132			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	41	15	10	10		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	2,010	1,160	1,150	878		µg/L	GE	0
		Cerium-144		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 1B continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cesium-137		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,180	1,500	1,450	1,400		µg/L	GE	0
		Chromium, total recoverable	<4.0	9.6	<4.0	<4.0		µg/L	GE	0
		Cobalt-57		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	13	<4.0	4.6	16		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	2.9E+01	<2.0E+00	3.8E+00	2.0E+00		pCi/L	GE	0
		Iron, total recoverable	362	1,480	82	203		µg/L	GE	1
		Lead, total recoverable	17	<3.0	<3.0	9.0	J2	µg/L	GE	1
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,230	829	737	714		µg/L	GE	0
		Manganese, total recoverable	42	7.4	3.7	4.9		µg/L	GE	0
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.71	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	13	7.1	15		µg/L	GE	0
		Nitrate-nitrite as nitrogen	380	450	590	230		µg/L	GE	0
■		Nonvolatile beta	4.4E+01	7.5E+01	6.2E+01	5.8E+01		pCi/L	GE	2
●		pH	4.9	4.9	5.1	5.4	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	541	<500	<500	<500		µg/L	GE	0
		Potassium-40		<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	8.9E+00	2.3E+00	3.3E+00	1.0E+00		pCi/L	GE	0
		Ruthenium-106		<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	14,400					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	963	1,160	1,000	955		µg/L	GE	0
		Sodium-22		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	20	25	22	20		µS/cm	GE	0
■		Strontium-90		4.7E+01	1.5E+01	2.8E+01	Y	pCi/L	CN	2
		Sulfate	2,190	2,930	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	15,000	21,000	36,000	22,000		µg/L	GE	0
		Total organic carbon	1,500	<1,000	1,510	2,300		µg/L	GE	0
		Total organic halogens	14		<5.0			µg/L		
		Total phosphates (as P)	220	<50	<50	<50		µg/L	GE	0
●		Total suspended solids	4.0E+06	377,000	1.2E+06	212,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	1.1E+04	1.1E+00	1.4E+00		pCi/mL	GE	0
		Yttrium-88		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	59	21	9.6	66		µg/L	GE	0
		Zinc-65		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 1C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57730.8 E74684.1	33.275286 °N 81.582290 °W	288.5-268.5 ft msl	303.3 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/09/93	05/19/93	07/29/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	295.3	293.8	288.3	286.3	ft msl
Depth to water	8.0	9.5	15.0	17.0	ft
pH	5.3	5.8	5.8	5.4	pH
Sp. conductance	34	31	27	22	µS/cm
Water temperature	16.4	21.9	24.7	22.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	80	90	28	26	NTU
Volume purged	0.9	1.1	1.8	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	410		816			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	16	16	15	9.2		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<1.440	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	1,630	1,440	1,160	822		µg/L	GE	0
		Cerium-144		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,180	1,360	1,220	1,420		µg/L	GE	0
		Chromium, total recoverable	<4.0	5.9	13	5.4		µg/L	GE	0
		Cobalt-57		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	4.2	<4.0	4.9	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	23		µg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	2.1E+00		pCi/L	GE	0
		Iron, total recoverable	99	658	577	176		µg/L	GE	1
		Lead, total recoverable	<3.0	<3.0	5.2	<3.0		µg/L	GE	0
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	847	838	637	540		µg/L	GE	0
		Manganese, total recoverable	6.0	3.4	6.3	3.7		µg/L	GE	0
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	6.5	19	12		µg/L	GE	0
		Nitrate-nitrite as nitrogen	60	260	98,000	70		µg/L	GE	0
		Nonvolatile beta	5.3E+00	2.6E+02	4.5E+01	4.2E+00		pCi/L	GE	0
		pH	5.3	5.2	5.1	5.1	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 1C continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40		<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	3.5E+00	3.4E+00	<1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106		<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Silica, total recoverable	5,310					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	918	1,030	911	841		µg/L	GE	0
		Sodium-22		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	21	30	18	32		µS/cm	GE	0
		Strontium-90		1.0E+02	5.6E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	2,440	2,510	<1,000	4,470		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total activity				3.5E+03		pCi/L	EM	0
		Total dissolved solids	11,000	19,000	16,000	24,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	<1,000	2,600		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	120	250	<50	<50		µg/L	GE	0
•		Total suspended solids	316,000	166,000	40,000	166,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	3.2E+03	<7.0E-01	2.1E+00		pCi/mL	GE	0
		Yttrium-88		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	30	2.9	33	30		µg/L	GE	0
		Zinc-65		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

WELL RSE 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57594.9 E74743.5	33.275082 °N 81.581870 °W	289.5-269.7 ft msl	302.5 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/10/93 05/21/93 07/27/93 12/05/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	293.5	292.5		283.5	ft msl
Depth to water	9.0	10.0		19.0	ft
pH	5.4	5.6	5.8	5.7	pH
Sp. conductance	46	44	38	28	µS/cm
Water temperature	19.7	21.5	28.0	22.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	360	190	34	255	NTU
Volume purged	1.0	1.5		0.2	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	1,940		640			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	41	30	23	15		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	1,830	1,800	1,220	954		µg/L	GE	0
		Cerium-144		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSE 2 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cesium-137		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,460	1,870	1,630	1,560		µg/L	GE	0
		Chromium, total recoverable	<4.0	5.9	4.9	<4.0		µg/L	GE	0
		Cobalt-57		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	9.9	4.4	22	24		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L	GE	0
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	9.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	251	2,150	373	63		µg/L	GE	0
		Lead, total recoverable	6.0	<3.0	7.8	9.8	J2	µg/L	GE	1
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,330	1,470	1,070	713		µg/L	GE	0
		Manganese, total recoverable	52	8.0	6.4	3.9		µg/L	GE	0
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.40	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	9.3	11	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	2,160	2,780	2,080	1,020		µg/L	GE	0
		Nonvolatile beta	1.3E+01	9.7E+01	2.9E+01	9.0E+00		pCi/L	GE	0
		pH	5.0	5.0	4.8	4.5	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0
		Potassium-40		<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	2.3E+00	2.9E+00	1.8E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106		<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	7,080					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	1,300	1,470	1,270	1,390		µg/L	GE	0
		Sodium-22		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	32	35	32	36		µS/cm	GE	0
		Strontium-90		4.6E+01	2.1E+01	3.7E+00	Y	pCi/L	CN	0
		Sulfate	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	22,000	33,000	20,000	24,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	2,310	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	410	100	<50	<50		µg/L	GE	0
		Total suspended solids	1.4E+06	81,000	38,000	42,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	<7.0E-01	9.3E-01	1.4E+00		pCi/mL	GE	0
		Yttrium-88		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	30	11	59	48		µg/L	GE	0
		Zinc-65		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 3A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57445.8 E74931.2	33.275058 °N 81.581086 °W	288.0-268.2 ft msl	301 ft msl	4" PVC	S	Water Table

SAMPLE DATE 02/22/93 05/21/93 07/27/93 12/05/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	289.0	286.5	285.0	283.0	ft msl
Depth to water	12.0	14.5	16.0	18.0	ft
pH	5.8	5.9	6.4	5.7	pH
Sp. conductance	64	86	63	49	µS/cm
Water temperature	19.2	20.4	25.0	24.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity		90	152	62	NTU
Volume purged	2.1	1.5	1.5	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	4,220		7,900			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	55	28	38	24		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	10,700	9,850	8,030	3,690		µg/L	GE	0
		Cerium-144		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Cesium-134		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cesium-137		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Chloride	1,380	2,830	2,950	2,630		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	11	<4.0		µg/L	GE	0
		Cobalt-57		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	22	<4.0	15	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
■		Gross alpha	1.8E+01	4.5E+00	<2.0E+00	6.0E+01		pCi/L	GE	2
		Iron, total recoverable	5,240	602	9,090	634		µg/L	GE	2
		Lead, total recoverable	37	<3.0	34	6.2	J2	µg/L	GE	0
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,120	1,610	1,560	1,190		µg/L	GE	0
		Manganese, total recoverable	180	43	113	44		µg/L	GE	1
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.63	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	5.3	8.4	29	8.5		µg/L	GE	0
		Nitrate-nitrite as nitrogen	560	1,550	160	1,290		µg/L	GE	0
■		Nonvolatile beta	3.9E+01	2.3E+01	1.4E+01	5.3E+01		pCi/L	GE	2
●		pH	5.7	6.1	5.6	5.5	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	1,250	1,360	1,400	1,380		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSE 3A continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40		< 2.5E+02	< 2.5E+02	< 2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		< 1.0E+01	< 1.0E+01	< 1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		< 2.3E+01	< 2.3E+01	< 2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	9.8E+00	3.9E+00	2.6E+00	< 1.0E+00		pCi/L	GE	0
		Ruthenium-106		< 8.0E+01	< 8.0E+01	< 8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	< 2.0	< 2.0	< 2.0	< 2.0	J1	µg/L	GE	0
		Silica, total recoverable	8,730					µg/L		
		Silver, total recoverable	< 2.0	< 2.0	< 2.0	< 2.0		µg/L	GE	0
		Sodium, total recoverable	1,280	3,140	2,850	1,500		µg/L	GE	0
		Sodium-22		< 1.0E+01	< 1.0E+01	< 1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	55	100	68	46		µS/cm	GE	0
		Strontium-90		1.6E+01	7.7E+00	6.2E+00	Y	pCi/L	CN	1
		Sulfate	12,100	9,360	5,500	2,110		µg/L	GE	0
		Thorium-234				< 1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	54,000	60,000	41,000	33,000		µg/L	GE	0
		Total organic carbon	2,770	< 1,000	3,320	1,210		µg/L	GE	0
		Total organic halogens	7.6		7.3			µg/L		
		Total phosphates (as P)	550	50	690	< 50		µg/L	GE	0
•		Total suspended solids	4.9E+06	508,000	71,000	118,000	J	µg/L	GE	0
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	9.5E-01	2.0E+00	1.9E+00	1.9E+00		pCi/mL	GE	0
		Yttrium-88		< 1.0E+01	< 1.0E+01	< 1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	297	137	233	108		µg/L	GE	0
		Zinc-65		< 2.3E+01	< 2.3E+01	< 2.3E+01	Y3	pCi/L	CN	0

WELL RSE 4A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57528.4 E75101.1	33.275518 °N 81.580799 °W	270.6-260.6 ft msl	304.6 ft msl	Steel	B	Water Table

SAMPLE DATE	02/25/93	05/03/93	07/16/93	11/14/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	292.1	292.1	288.1	284.6	ft msl
Depth to water	12.5	12.5	16.5	20.0	ft
pH	5.9	5.9	6.0	4.9	pH
Sp. conductance	44	54	56	46	µS/cm
Water temperature	15.1	21.1	25.1	21.5	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	502	45	81	420	NTU
Volume purged	0.5	0.3	0.3	0.3	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	1,360		1,990			µg/L		
		Arsenic, total recoverable	< 2.0					µg/L		
		Barium, total recoverable	40					µg/L		
		Cadmium, total recoverable	3.8	2.8	< 2.0	3.5		µg/L	GE	1
		Calcium, total recoverable	1,550					µg/L		
		Chloride	1,560					µg/L		
		Chromium, total recoverable	< 4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	< 0.30					µg/L		
		Endrin	< 0.0060					µg/L		
		Fluoride	< 100					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 4A continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Gross alpha	<2.0E+00	2.1E+00	3.3E+00	2.6E+00		pCi/L	GE	0
		Iron, total recoverable	286		932			µg/L		
		Lead, total recoverable	<3.0		<3.0			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,740					µg/L		
		Manganese, total recoverable	16		5.4			µg/L		
		Mercury, total recoverable	2.8		0.38			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	3,350		4,200			µg/L		
■		Nonvolatile beta	8.2E+02	8.1E+02	9.1E+01	1.7E+02		pCi/L	GE	2
		pH	5.0					pH		
		Phenois	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	4.4E+00		4.3E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	7,480					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,760					µg/L		
		Specific conductance	45					µS/cm		
		Sulfate	1,580					µg/L		
		Total dissolved solids	28,000					µg/L		
		Total organic carbon	<1,000		17,200			µg/L		
		Total organic halogens	<5.0		17			µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.3E+00		2.4E+00			pCi/mL		

WELL RSE 4B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57531.0	33.275516 °N		305.9 ft msl	Steel	B	Water Table
E75096.2	81.580817 °W					

SAMPLE DATE 02/25/93 05/03/93 07/16/93 11/14/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	292.4	292.4			ft msl
Depth to water	13.5	13.5			ft
pH	5.7	6.4			pH
Sp. conductance	20	24			µS/cm
Water temperature	15.2	20.8			°C
Alkalinity as CaCO ₃					mg/L
Turbidity		260			NTU
Volume purged			Dry	Dry	Well vol.
Sampling code	I	X	D	D	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	1,680					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	16					µg/L		
		Cadmium, total recoverable	6.1	8.3				µg/L		
		Calcium, total recoverable	823					µg/L		
		Chloride	1,690					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		Fluoride	<100					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSE 4B continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Gross alpha		2.2E + 01				pCi/L		
		Iron, total recoverable	175					µg/L		
		Lead, total recoverable	9.4					µg/L		
		Magnesium, total recoverable	287					µg/L		
		Manganese, total recoverable	11					µg/L		
		Mercury, total recoverable	0.34					µg/L		
		Nitrate-nitrite as nitrogen	400					µg/L		
		Nonvolatile beta		1.2E + 03				pCi/L		
		pH	5.1					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	6,090					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	919					µg/L		
		Specific conductance	21					µS/cm		
		Sulfate	1,450					µg/L		
		Total dissolved solids	14,000					µg/L		
		Total organic carbon	1,240					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	440					µg/L		
		Tritium	7.0E-01					pCi/mL		

WELL RSE 4C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57533.6	33.275515 °N		304.7 ft msl	Steel	B	Water Table
E75092.6	81.580832 °W					

SAMPLE DATE	02/25/93	05/03/93	07/16/93	11/14/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	292.2	292.2	287.7	284.7	ft msl
Depth to water	12.5	12.5	17.0	20.0	ft
pH	5.8	6.1	5.9	5.1	pH
Sp. conductance	39	37	41	34	µS/cm
Water temperature	15.6	20.0	24.1	21.8	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	144	100	9	77	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	1,400		1,070			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	23					µg/L		
■		Cadmium, total recoverable	5.5	3.7	<2.0	7.5		µg/L	GE	2
		Calcium, total recoverable	578					µg/L		
		Chloride	2,320					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E + 00	<2.0E + 00	<2.0E + 00	4.7E + 00		pCi/L	GE	0
		Iron, total recoverable	618		120			µg/L		
		Lead, total recoverable	<3.0		<3.0			µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.
 ● = exceeded holding time for 4th quarter 1993.
 ■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 4C continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,380					µg/L		
		Manganese, total recoverable	18		3.8			µg/L		
		Mercury, total recoverable	0.31		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	2,700		3,550			µg/L		
	■	Nonvolatile beta	3.5E+02	8.2E+02	1.6E+02	1.6E+02		pCi/L	GE	2
		pH	5.1					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	2.3E+00		4.0E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	7,150					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,900					µg/L		
		Specific conductance	38					µS/cm		
		Sulfate	<1,000					µg/L		
		Total dissolved solids	35,000					µg/L		
		Total organic carbon	<1,000		1,070			µg/L		
		Total organic halogens	<5.0		42			µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.5E+00		1.7E+00			pCi/mL		

WELL RSE 5

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57588.9	33.275437 °N		306 ft msl	Steel	B	Water Table
E74969.6	81.581263 °W					

SAMPLE DATE	03/01/93	05/05/93	07/21/93	11/20/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	291.5	292.0		284.0	ft msl
Depth to water	14.5	14.0		22.0	ft
pH	5.7	5.4			pH
Sp. conductance	47	60			µS/cm
Water temperature	19.0	21.0			°C
Alkalinity as CaCO ₃					mg/L
Turbidity	24	12			NTU
Volume purged			Dry	Dry	Well vol.
Sampling code			D	L	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	911					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	11					µg/L		
		Cadmium, total recoverable	27	45				µg/L		
		Calcium, total recoverable	654					µg/L		
		Chloride	4,030					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	<2.0E+00	<2.0E+00				pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 5 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Iron, total recoverable	257					µg/L		
		Lead, total recoverable	<3.0					µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	443					µg/L		
		Manganese, total recoverable	25					µg/L		
		Mercury, total recoverable	1.4					µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	2,120					µg/L		
		Nonvolatile beta	8.0E+01	1.3E+02				pCi/L		
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	2.3E+00					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	4,140					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	6,760					µg/L		
		Specific conductance	48					µS/cm		
		Sulfate	<1,000					µg/L		
		Total dissolved solids	24,000					µg/L		
		Total organic carbon	<1,000					µg/L		
		Total organic halogens	<5.0					µg/L		
		Total phosphates (as P)	<50					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	4.7E+00					pCi/mL		

WELL RSE 6

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57592.1	33.275193 °N		304.6 ft msl	Steel	B	Water Table
E74815.1	81.581676 °W					

SAMPLE DATE	03/05/93	05/05/93	07/21/93
-------------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	292.6	293.6			ft msl
Depth to water	12.0	11.0			ft
pH	6.2	5.2			pH
Sp. conductance	79	70			µS/cm
Water temperature	15.5	20.5			°C
Alkalinity as CaCO ₃					mg/L
Turbidity	60	38			NTU
Volume purged			Dry		Well vol.
Sampling code			D		

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	4,980					µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	103					µg/L		
		Cadmium, total recoverable	12	6.9				µg/L		
		Calcium, total recoverable	5,480					µg/L		
		Chloride	2,060					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.030					µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 6 continued

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Fluoride	<100					µg/L		
		Gross alpha	2.8E+02	1.4E+02				pCi/L		
		Iron, total recoverable	174					µg/L		
		Lead, total recoverable	1,960					µg/L		
		Lindane	<0.025					µg/L		
		Magnesium, total recoverable	3,030					µg/L		
		Manganese, total recoverable	18					µg/L		
		Mercury, total recoverable	2.5					µg/L		
		Methoxychlor	<2.5					µg/L		
		Nitrate-nitrite as nitrogen	4,850					µg/L		
		Nonvolatile beta	1.6E+04	2.9E+04				pCi/L		
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,240					µg/L		
		Radium, total alpha-emitting	1.3E+02					pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	5,540					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,440					µg/L		
		Specific conductance	59					µS/cm		
		Sulfate	1,970					µg/L		
		Total dissolved solids	72,000					µg/L		
		Total organic carbon	<1.000					µg/L		
		Total organic halogens	13					µg/L		
		Total phosphates (as P)	530					µg/L		
		Toxaphene	<1.2					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	2.3E+00					pCi/mL		

WELL RSE 7

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58481.5 E74783.7	33.277110 °N 81.583485 °W	286.3-266.5 ft msl	302.4 ft msl	4" PVC	S	Water Table

<u>SAMPLE DATE</u>	<u>03/12/93</u>	<u>05/19/93</u>	<u>07/29/93</u>	<u>12/04/93</u>
--------------------	-----------------	-----------------	-----------------	-----------------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	287.9	286.9	282.4		ft msl
Depth to water	14.5	15.5	20.0		ft
pH	5.4	5.4	5.6		pH
Sp. conductance	111	88	61		µS/cm
Water temperature	16.6	22.3	23.8		°C
Alkalinity as CaCO ₃					mg/L
Turbidity	240	7	293		NTU
Volume purged	0.9	1.3	1.7	Dry	Well vol.
Sampling code		X		D	

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	816		35			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01			pCi/L		
		Arsenic, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Barium, total recoverable	106	71	47			µg/L		
		Cadmium, total recoverable	2.1	<2.0	<2.0			µg/L		
		Calcium, total recoverable	7,390	5,110	4,750			µg/L		
		Cerium-144		<5.0E+01	<5.0E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WSRC-TR-94-0354
Unclassified

Well RSE 7 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cesium-134		<1.0E+01	<1.0E+01			pCi/L		
		Cesium-137		<1.0E+01	<1.0E+01			pCi/L		
		Chloride	3,530	3,770	3,020			µg/L		
		Chromium, total recoverable	<4.0	<4.0	<4.0			µg/L		
		Cobalt-57		<1.0E+01	<1.0E+01			pCi/L		
		Cobalt-60		<1.2E+01	<1.2E+01			pCi/L		
		Copper, total recoverable	<4.0	<4.0	<4.0			µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01			pCi/L		
		Europium-154		<2.5E+01	<2.5E+01			pCi/L		
		Europium-155		<2.5E+01	<2.5E+01			pCi/L		
		Fluoride	<100	<100	<100			µg/L		
		Gross alpha	5.2E+00	<2.0E+00	2.7E+00			pCi/L		
		Iron, total recoverable	6,000	553	155			µg/L		
		Lead, total recoverable	7.8	5.9	5.6			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,210	1,490	1,260			µg/L		
		Manganese, total recoverable	8,820	3,510	1,650			µg/L		
		Manganese-54		<1.0E+01	<1.0E+01			pCi/L		
		Mercury, total recoverable	0.57	<0.20	<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	8.0	7.0			µg/L		
		Nitrate-nitrite as nitrogen	290	1,090	680			µg/L		
		Nonvolatile beta	2.2E+01	<2.0E+00	1.1E+01			pCi/L		
		pH	6.0	5.4	5.5			pH		
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240		<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	1,040	760	590			µg/L		
		Potassium-40		<2.5E+02	<2.5E+02			pCi/L		
		Promethium-144		<1.0E+01	<1.0E+01			pCi/L		
		Promethium-146		<2.3E+01	<2.3E+01			pCi/L		
		Radium, total alpha-emitting	5.2E+00	3.0E+00	<1.0E+00			pCi/L		
		Ruthenium-106		<8.0E+01	<8.0E+01			pCi/L		
		Selenium, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Silica, total recoverable	6,480					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Sodium, total recoverable	2,470	2,630	2,330			µg/L		
		Sodium-22		<1.0E+01	<1.0E+01			pCi/L		
		Specific conductance	98	75	77			µS/cm		
		Strontium-90		4.4E+00	2.0E+00			pCi/L		
		Sulfate	6,650	2,950	1,820			µg/L		
		Total dissolved solids	75,000	53,000	48,000			µg/L		
		Total organic carbon	2,750	3,310	2,810			µg/L		
		Total organic halogens	37		12			µg/L		
		Total phosphates (as P)	120	74	<50			µg/L		
		Total suspended solids	718,000	9,000	261,000			µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.2E+00	9.8E-01	1.9E+00			pCi/mL		
		Yttrium-88		<1.0E+01	<1.0E+01			pCi/L		
		Zinc, total recoverable	294	156	117			µg/L		
		Zinc-65		<2.3E+01	<2.3E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 8

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58538.8 E74869.4	33.277376 °N 81.583370 °W	291.0-271.2 ft msl	302.2 ft msl	4" PVC	S	Water Table

<u>SAMPLE DATE</u>	03/12/93	05/19/93	07/29/93	12/04/93
--------------------	----------	----------	----------	----------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation	294.2	292.7	289.2		ft msl
Depth to water	8.0	9.5	13.0		ft
pH	5.2	5.5	5.5		pH
Sp. conductance	84	85	72		µS/cm
Water temperature	15.4	21.4	24.6		°C
Alkalinity as CaCO ₃					mg/L
Turbidity	350	110	12		NTU
Volume purged	1.0	2.1	2.0	Dry	Well vol.
Sampling code		X		D	

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Aluminum, total recoverable	992		125			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01			pCi/L		
		Arsenic, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Barium, total recoverable	99	99	95			µg/L		
		Cadmium, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Calcium, total recoverable	6,140	4,390	3,420			µg/L		
		Cerium-144		<5.0E+01	<5.0E+01			pCi/L		
		Cesium-134		<1.0E+01	<1.0E+01			pCi/L		
		Cesium-137		<1.0E+01	<1.0E+01			pCi/L		
		Chloride	3,960	4,280	4,510			µg/L		
		Chromium, total recoverable	<4.0	<4.0	<4.0			µg/L		
		Cobalt-57		<1.0E+01	<1.0E+01			pCi/L		
		Cobalt-60		<1.2E+01	<1.2E+01			pCi/L		
		Copper, total recoverable	4.8	<4.0	<4.0			µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01			pCi/L		
		Europium-154		<2.5E+01	<2.5E+01			pCi/L		
		Europium-155		<2.5E+01	<2.5E+01			pCi/L		
		Fluoride	<100	<100	<100			µg/L		
		Gross alpha	5.7E+00	3.3E+00	2.4E+00			pCi/L		
		Iron, total recoverable	159	294	269			µg/L		
		Lead, total recoverable	<3.0	<3.0	<3.0			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	2,100	2,110	2,020			µg/L		
		Manganese, total recoverable	427	438	477			µg/L		
		Manganese-54		<1.0E+01	<1.0E+01			pCi/L		
		Mercury, total recoverable	0.43	<0.20	<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0			µg/L		
		Nitrate-nitrite as nitrogen	4,550	4,400	4,100			µg/L		
		Nonvolatile beta	4.2E+00	4.3E+00	5.6E+00			pCi/L		
		pH	5.3	5.1	5.6			pH		
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240		<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	<500	<500	<500			µg/L		
		Potassium-40		<2.5E+02	<2.5E+02			pCi/L		
		Promethium-144		<1.0E+01	<1.0E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Unclassified

Well RSE 8 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Promethium-146		< 2.3E + 01	< 2.3E + 01			pCi/L		
		Radium, total alpha-emitting	7.6E + 00	3.6E + 00	1.5E + 00			pCi/L		
		Ruthenium-106		< 8.0E + 01	< 8.0E + 01			pCi/L		
		Selenium, total recoverable	< 2.0	< 2.0	< 2.0			µg/L		
		Silica, total recoverable	5,440					µg/L		
		Silver, total recoverable	< 2.0	< 2.0	< 2.0			µg/L		
		Sodium, total recoverable	3,830	4,060	4,030			µg/L		
		Sodium-22		< 1.0E + 01	< 1.0E + 01			pCi/L		
		Specific conductance	71	85	108			µS/cm		
		Strontium-90		< 2.0E + 00	< 2.0E + 00			pCi/L		
		Sulfate	< 1,000	< 1,000	< 1,000			µg/L		
		Total dissolved solids	45,000	67,000	64,000			µg/L		
		Total organic carbon	< 1,000	< 1,000	1,170			µg/L		
		Total organic halogens	< 5.0		< 5.0			µg/L		
		Total phosphates (as P)	140	< 50	< 50			µg/L		
		Total suspended solids	1.4E + 06	236,000	53,000			µg/L		
		Toxaphene	< 0.24					µg/L		
		2,4,5-TP (Silvex)	< 0.090					µg/L		
		Tritium	1.9E + 00	1.4E + 00	1.9E + 00			pCi/mL		
		Yttrium-88		< 1.0E + 01	< 1.0E + 01			pCi/L		
		Zinc, total recoverable	27	12	17			µg/L		
		Zinc-65		< 2.3E + 01	< 2.3E + 01			pCi/L		

WELL RSE 9

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58463.3 E74971.1	33.277375 °N 81.582956 °W	286.7-266.7 ft msl	306 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/11/93	05/18/93	07/29/93	12/05/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	286.0	286.5	282.0	277.0	ft msl
Depth to water	20.0	19.5	24.0	29.0	ft
pH	5.7	5.9	5.4	5.6	pH
Sp. conductance	42	38	44	40	µS/cm
Water temperature	21.7	25.2	26.3	23.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	240	15	19	46	NTU
Volume purged	1.0	1.5	2.0	0.1	Well vol.
Sampling code		X		X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				< 8.4E + 01	Y3	pCi/L	CN	0
		Aluminum, total recoverable	1,750		130			µg/L		
		Antimony-125		< 2.5E + 01	< 2.5E + 01	< 2.5E + 01	Y3	pCi/L	CN	0
		Arsenic, total recoverable	< 2.0	< 2.0	< 2.0	< 2.0		µg/L	GE	0
		Barium, total recoverable	8.5	6.6	8.0	9.1		µg/L	GE	0
		Cadmium, total recoverable	12	4.3	3.3	2.6		µg/L	GE	1
		Calcium, total recoverable	127	502	2,620	518		µg/L	GE	0
		Cerium-144		< 5.0E + 01	< 5.0E + 01	< 5.0E + 01	Y3	pCi/L	CN	0
		Cesium-134		< 1.0E + 01	< 1.0E + 01	< 1.0E + 01	Y3	pCi/L	CN	0
		Cesium-137		< 1.0E + 01	< 1.0E + 01	< 1.0E + 01	Y3	pCi/L	CN	0
		Chloride	2,790	2,990	2,990	2,960		µg/L	GE	0
		Chromium, total recoverable	< 4.0	< 4.0	< 4.0	< 4.0		µg/L	GE	0
		Cobalt-57		< 1.0E + 01	< 1.0E + 01	< 1.0E + 01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 9 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Cobalt-60		<1.2E+01	<1.2E+01	<1.2E+01	Y3	pCi/L	CN	0
		Copper, total recoverable	5.3	<4.0	29	10		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01	<5.0E+01	Y3	pCi/L	CN	0
		Europium-154		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Europium-155		<2.5E+01	<2.5E+01	<2.5E+01	Y3	pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	3.9E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	159	36	43	82		µg/L	GE	0
		Lead, total recoverable	5.0	5.3	11	18	J2	µg/L	GE	2
		Lead-212				<2.5E+01	Y3	pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	406	359	423	500		µg/L	GE	0
		Manganese, total recoverable	18	8.2	9.0	7.9		µg/L	GE	0
		Manganese-54		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Mercury, total recoverable	0.38	0.70	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	6.3	7.6	5.3		µg/L	GE	0
		Nitrate-nitrite as nitrogen	1,820	1,880	1,880	1,720		µg/L	GE	0
		Nonvolatile beta	2.3E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		pH	4.8	4.5	4.9	5.1	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Plutonium-239/240		<1.0E+00	<1.0E+00	<1.0E+00	Y3	pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0
		Potassium-40		<2.5E+02	<2.5E+02	<2.5E+02	Y3	pCi/L	CN	0
		Promethium-144		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Promethium-146		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0
		Radium, total alpha-emitting	1.6E+00	<1.0E+00	2.3E+00	1.1E+00		pCi/L	GE	0
		Ruthenium-106		<8.0E+01	<8.0E+01	<8.0E+01	Y3	pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	7,210					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	4,250	4,710	4,740	4,720		µg/L	GE	0
		Sodium-22		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Specific conductance	30	33	36	35		µS/cm	GE	0
		Strontium-90		<2.0E+00	6.4E+00	<2.0E+00	Y3	pCi/L	CN	0
		Sulfate	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03	Y3	pCi/L	CN	0
		Total dissolved solids	28,000	22,000	27,000	34,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	5,410	2,160		µg/L	GE	0
		Total organic halogens	<5.0		5.1			µg/L		
		Total phosphates (as P)	310	<50	80	<50		µg/L	GE	0
		Total suspended solids	542,000	37,000	28,000	34,000	J	µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.9E+00	1.7E+00	2.2E+00	2.7E+00		pCi/mL	GE	0
		Yttrium-88		<1.0E+01	<1.0E+01	<1.0E+01	Y3	pCi/L	CN	0
		Zinc, total recoverable	89	127	113	103		µg/L	GE	0
		Zinc-65		<2.3E+01	<2.3E+01	<2.3E+01	Y3	pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 10

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58420.7 E74848.3	33.277080 °N 81.583196 °W	290.5-270.7 ft msl	304.7 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/11/93	05/18/93	07/29/93	12/04/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	290.7	292.7	285.7		ft msl
Depth to water	14.0	12.0	19.0		ft
pH	5.5	5.5	5.7		pH
Sp. conductance	40	162	97		µS/cm
Water temperature	20.3	25.9	26.8		°C
Alkalinity as CaCO ₃					mg/L
Turbidity	360	12	24		NTU
Volume purged	1.0	1.9	2.0	Dry	Well vol.
Sampling code		X			

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	4,990		401			µg/L		
		Antimony-125		<2.5E+01	<2.5E+01			pCi/L		
		Arsenic, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Barium, total recoverable	56	208	94			µg/L		
		Cadmium, total recoverable	4.0	<2.0	<2.0			µg/L		
		Calcium, total recoverable	4,970	19,700	9,850			µg/L		
		Cerium-144		<5.0E+01	<5.0E+01			pCi/L		
		Cesium-134		<1.0E+01	<1.0E+01			pCi/L		
		Cesium-137		<1.0E+01	<1.0E+01			pCi/L		
		Chloride	2,380	5,150	4,270			µg/L		
		Chromium, total recoverable	<4.0	4.7	<4.0			µg/L		
		Cobalt-57		<1.0E+01	<1.0E+01			pCi/L		
		Cobalt-60		<1.2E+01	<1.2E+01			pCi/L		
		Copper, total recoverable	13	<4.0	5.2			µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152		<5.0E+01	<5.0E+01			pCi/L		
		Europium-154		<2.5E+01	<2.5E+01			pCi/L		
		Europium-155		<2.5E+01	<2.5E+01			pCi/L		
		Fluoride	<100	<100	<100			µg/L		
		Gross alpha	1.7E+01	2.8E+00	<2.0E+00			pCi/L		
		Iron, total recoverable	615	391	116			µg/L		
		Lead, total recoverable	13	5.1	6.2			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	574	2,770	1,530			µg/L		
		Manganese, total recoverable	98	239	99			µg/L		
		Manganese-54		<1.0E+01	<1.0E+01			pCi/L		
		Mercury, total recoverable	0.61	<0.20	<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	7.3	<4.0			µg/L		
		Nitrate-nitrite as nitrogen	1,510	25,600	5,100			µg/L		
		Nonvolatile beta	5.5E+01	1.7E+04	6.0E+03			pCi/L		
		pH	5.3	4.8	5.3			pH		
		Phenols	<5.0					µg/L		
		Plutonium-238		<1.0E+00	<1.0E+00			pCi/L		
		Plutonium-239/240		<1.0E+00	<1.0E+00			pCi/L		
		Potassium, total recoverable	517	3,000	1,800			µg/L		
		Potassium-40		<2.5E+02	<2.5E+02			pCi/L		
		Promethium-144		<1.0E+01	<1.0E+01			pCi/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 10 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Promethium-146		<2.3E+01	<2.3E+01			pCi/L		
		Radium, total alpha-emitting	4.1E+00	1.4E+02	5.8E+00			pCi/L		
		Ruthenium-106		<8.0E+01	<8.0E+01			pCi/L		
		Selenium, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Silica, total recoverable	10,400					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0			µg/L		
		Sodium, total recoverable	2,560	3,880	3,740			µg/L		
		Sodium-22		<1.0E+01	<1.0E+01			pCi/L		
		Specific conductance	38	150	100			µS/cm		
		Strontium-90		9.1E+03	1.9E+03			pCi/L		
		Sulfate	<1,000	2,810	1,300			µg/L		
		Total dissolved solids	33,000	125,000	74,000			µg/L		
		Total organic carbon	1,330	1,640	1,780			µg/L		
		Total organic halogens	16		22			µg/L		
		Total phosphates (as P)	810	270	<50			µg/L		
		Total suspended solids	2.9E+06	27,000	113,000			µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	4.4E+01	1.7E+01	2.1E+01			pCi/mL		
		Yttrium-88		<1.0E+01	<1.0E+01			pCi/L		
		Zinc, total recoverable	286	71	124			µg/L		
		Zinc-65		<2.3E+01	<2.3E+01			pCi/L		

WELL RSE 11

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58357.6	33.276842 °N		303.8 ft msl	Steel	B	Water Table
E74787.7	81.583234 °W					

SAMPLE DATE 03/10/93 05/06/93 07/22/93 11/20/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	294.8	293.8	288.8	280.8	ft msl
Depth to water	9.0	10.0	15.0	23.0	ft
pH	5.3	4.7	6.2	5.2	pH
Sp. conductance	71	68	59	60	µS/cm
Water temperature	19.6	22.0		17.4	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	120	90	75	533	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	2,240		2,030			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	84					µg/L		
		Cadmium, total recoverable	5.3	6.6	3.1	5.0		µg/L	GE	1
		Calcium, total recoverable	5,120					µg/L		
		Chloride	2,870					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	1.8E+01	4.7E+00	9.9E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	455		682			µg/L		
		Lead, total recoverable	4.8		<3.0			µg/L		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 11 continued

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,530					µg/L		
		Manganese, total recoverable	186		110			µg/L		
		Mercury, total recoverable	0.27		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,640		1,820			µg/L		
	■	Nonvolatile beta	1.0E + 03	8.4E + 02	8.7E + 02	8.2E + 02		pCi/L	GE	2
		pH	5.3					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,060					µg/L		
		Radium, total alpha-emitting	5.5E + 00		9.3E + 00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	5,800					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	2,040					µg/L		
		Specific conductance	60					µS/cm		
		Sulfate	6,090					µg/L		
		Total dissolved solids	33,000					µg/L		
		Total organic carbon	2,160		3,960			µg/L		
		Total organic halogens	<5.0		16			µg/L		
		Total phosphates (as P)	220					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		1.4E + 00			pCi/mL		

WELL RSE 12

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N58318.2	33.276844 °N		305.8 ft msl	Steel	B	Water Table
E74842.3	81.583013 °W					

<u>SAMPLE DATE</u>	<u>02/24/93</u>	<u>05/06/93</u>	<u>11/20/93</u>
--------------------	-----------------	-----------------	-----------------

FIELD DATA

<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Unit</u>
Water elevation					ft msl
Depth to water					ft
pH					pH
Sp. conductance					µS/cm
Water temperature					°C
Alkalinity as CaCO ₃					mg/L
Turbidity					NTU
Volume purged					Well vol.
Sampling code	P	P		P	

ANALYTICAL DATA

<u>H</u>	<u>D</u>	<u>Analyte</u>	<u>1Q93</u>	<u>2Q93</u>	<u>3Q93</u>	<u>4Q93</u>	<u>Mod</u>	<u>Unit</u>	<u>Lab</u>	<u>Flag</u>
----------	----------	----------------	-------------	-------------	-------------	-------------	------------	-------------	------------	-------------

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 13

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57507.6 E75146.7	33.275546 °N 81.580639 °W		301.2 ft msl	Steel	B	Water Table

SAMPLE DATE	02/24/93	05/03/93	07/16/93	11/14/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	293.7	293.7	288.2	287.2	ft msl
Depth to water	7.5	7.5	13.0	14.0	ft
pH	5.9	6.0	6.6	5.3	pH
Sp. conductance	29	35	28	30	µS/cm
Water temperature	13.9	19.9	23.2	22.3	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	334	25	45	35	NTU
Volume purged					Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	4,700		1,840			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	18					µg/L		
		Cadmium, total recoverable	7.7	5.3	2.3	2.5		µg/L	GE	0
		Calcium, total recoverable	1,250					µg/L		
		Chloride	1,460					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	<100					µg/L		
		Gross alpha	2.7E+00	3.1E+00	7.0E+00	3.5E+00		pCi/L	GE	0
		Iron, total recoverable	457		341			µg/L		
		Lead, total recoverable	8.4		<3.0			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	572					µg/L		
		Manganese, total recoverable	6.2		4.2			µg/L		
		Mercury, total recoverable	2.2		<0.20			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	220		590			µg/L		
■		Nonvolatile beta	2.2E+02	3.2E+02	1.6E+02	9.4E+01		pCi/L	GE	2
		pH	5.4					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	<500					µg/L		
		Radium, total alpha-emitting	3.3E+00		3.8E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	7,810					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	787					µg/L		
		Specific conductance	22					µS/cm		
		Sulfate	2,040					µg/L		
		Total dissolved solids	23,000					µg/L		
		Total organic carbon	1,050		<1,000			µg/L		
		Total organic halogens	<5.0		31			µg/L		
		Total phosphates (as P)	560					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	9.3E-01		1.5E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 18

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58247.2 E74839.5	33.276682 °N 81.582883 °W	288.1-268.1 ft msl	307.1 ft msl	4" Steel	B	Water Table

SAMPLE DATE	03/11/93	05/06/93	07/21/93	11/20/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	286.6	287.1	282.1	279.1	ft msl
Depth to water	20.5	20.0	25.0	28.0	ft
pH	6.2	6.0	5.3	5.9	pH
Sp. conductance	107	121	88	70	µS/cm
Water temperature	20.0	20.7	24.7	19.0	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	175	300	360	1000	NTU
Volume purged	0.9	0.8	0.9	0.8	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	7,210		2,110			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	162					µg/L		
■		Cadmium, total recoverable	17	9.4	17	48		µg/L	GE	2
		Calcium, total recoverable	20,600					µg/L		
		Chloride	3,740					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	130					µg/L		
■		Gross alpha	4.2E+01	3.0E+01	1.9E+01	8.0E+01		pCi/L	GE	2
		Iron, total recoverable	4,340		1,870			µg/L		
		Lead, total recoverable	124		51			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	4,060					µg/L		
		Manganese, total recoverable	3,840		2,040			µg/L		
		Mercury, total recoverable	1.5		0.72			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,150		1,020			µg/L		
■		Nonvolatile beta	2.4E+01	1.5E+01	9.1E+00	5.5E+01		pCi/L	GE	2
		pH	6.5					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,550					µg/L		
		Radium, total alpha-emitting	1.1E+01		5.7E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	17,400					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	2,560					µg/L		
		Specific conductance	95					µS/cm		
		Sulfate	1,620					µg/L		
		Total dissolved solids	64,000					µg/L		
		Total organic carbon	<1,000		2,170			µg/L		
		Total organic halogens	12		8.1			µg/L		
		Total phosphates (as P)	390					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01		<7.0E-01			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 19

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58318.4 E74791.2	33.276761 °N 81.583148 °W	282.5-262.5 ft msl	304.8 ft msl	4" Steel	B	Water Table

SAMPLE DATE 03/10/93 05/06/93 07/22/93 11/20/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	293.8	275.8	285.8	279.8	ft msl
Depth to water	11.0	29.0	19.0	25.0	ft
pH	5.3	4.7	6.1	5.3	pH
Sp. conductance	76	81	61	62	µS/cm
Water temperature	20.2	21.9		17.4	°C
Alkalinity as CaCO ₃					mg/L
Turbidity	320	35		1000	NTU
Volume purged	1.0	2.2	0.9	1.0	Well vol.
Sampling code					

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Aluminum, total recoverable	5,530		11,900			µg/L		
		Arsenic, total recoverable	<2.0					µg/L		
		Barium, total recoverable	124					µg/L		
		Cadmium, total recoverable	13	5.7	8.4	4.3		µg/L	GE	1
		Calcium, total recoverable	5,190					µg/L		
		Chloride	3,270					µg/L		
		Chromium, total recoverable	<4.0					µg/L		
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Fluoride	138					µg/L		
	■	Gross alpha	2.8E+01	3.2E+00	1.8E+01	4.3E+01		pCi/L	GE	2
		Iron, total recoverable	3,200		33,300			µg/L		
		Lead, total recoverable	273		127			µg/L		
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,490					µg/L		
		Manganese, total recoverable	985		308			µg/L		
		Mercury, total recoverable	1.2		0.52			µg/L		
		Methoxychlor	<0.50					µg/L		
		Nitrate-nitrite as nitrogen	1,590		1,430			µg/L		
	■	Nonvolatile beta	1.3E+02	6.3E+01	1.3E+02	1.5E+02		pCi/L	GE	2
		pH	5.4					pH		
		Phenols	<5.0					µg/L		
		Potassium, total recoverable	1,220					µg/L		
		Radium, total alpha-emitting	1.1E+01		4.9E+00			pCi/L		
		Selenium, total recoverable	<2.0					µg/L		
		Silica, total recoverable	7,340					µg/L		
		Silver, total recoverable	<2.0					µg/L		
		Sodium, total recoverable	1,410					µg/L		
		Specific conductance	68					µS/cm		
		Sulfate	5,600					µg/L		
		Total dissolved solids	55,000					µg/L		
		Total organic carbon	2,770		3,770			µg/L		
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	540					µg/L		
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	7.2E-01		2.0E+00			pCi/mL		

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSE 24

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57370.4 E74638.9	33.274415 °N 81.581710 °W	257.6-237.6 ft msl	294.1 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/19/93	06/10/93	09/09/93	12/27/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	285.1	283.9	280.7	278.8	ft msl
Depth to water	9.0	10.2	13.4	15.3	ft
pH	6.0	5.3	5.1	5.2	pH
Sp. conductance	37	30	29	40	µS/cm
Water temperature	17.9	22.3	23.0	18.3	°C
Alkalinity as CaCO ₃	3	2	1	2	mg/L
Turbidity	16	18	5	7	NTU
Volume purged	1.3	1.3	1.3	1.3	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	357		77			µg/L	CN	0
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		µg/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	7.2	3.4	<3.0	<3.0		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	1,970	1,150	857	838		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Chloride	787	1,010	821	966		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	15	55	24	14		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L	GE	0
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	188	193	132	61		µg/L	GE	0
		Lead, total recoverable	18	22	12	14		µg/L	GE	1
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	371	363	335	352		µg/L	GE	0
		Manganese, total recoverable	3.2	<2.0	<2.0	<2.0		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	2,240	2,060	1,920	1,840		µg/L	GE	0
		Nonvolatile beta	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		pH	6.1	5.6	5.8	6.1	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 24 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	1.1E+00	1.4E+00	<1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	6,020					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	3,130	2,620	2,610	2,720		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	27	22	24	26		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	32,000	75,000	23,000	27,000	V	µg/L	GE	0
		Total organic carbon	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	34,000	7,000	2,000	2,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.4E+00	2.2E+00	2.1E+00	2.1E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	309	95	25	36		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

WELL RSE 25

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N55824.5 E74544.5	33.270840 °N 81.578960 °W	257.5-237.5 ft msl	293.9 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/19/93 06/10/93 09/09/93 12/27/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	279.6	278.2	275.8	275.2	ft msl
Depth to water	14.3	15.7	18.1	18.7	ft
pH	6.1	5.6	5.7	5.5	pH
Sp. conductance	119	106	100	107	µS/cm
Water temperature	17.2	22.9	22.6	18.0	°C
Alkalinity as CaCO ₃	21	21	16	14	mg/L
Turbidity	39	21	11	11	NTU
Volume purged	1.2	1.1	1.2	1.2	Well vol.
Sampling code	X	X	X	X	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	91		65			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	60	50	40	40		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	11,100	10,500	7,720	7,300		µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSE 25 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Chloride	4,300	4,550	4,580	4,510		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	36	21	21	13		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	134	97	62	46		µg/L	GE	0
		Lead, total recoverable	12	7.1	6.7	6.1		µg/L	GE	0
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	1,300	1,270	1,080	1,120		µg/L	GE	0
		Manganese, total recoverable	4.7	3.0	2.5	2.4		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	4.7	<4.0	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	4,500	4,150	3,450	3,500		µg/L	GE	0
		Nonvolatile beta	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		pH	6.0	6.1	5.8	5.8	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	<500	<500	<500	<500		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	<1.0E+00	1.1E+00	1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	9,270					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	8,310	7,630	6,780	6,800		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	100	98	85	89		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	1,110	1,000	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	81,000	79,000	62,000	73,000	V	µg/L	GE	0
		Total organic carbon	<1,000	<1,000	1,190	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	25,000	8,000	5,000	6,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.6E+00	2.4E+00	2.0E+00	2.2E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	102	14	27	28		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSF 1

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N58505.3 E74869.4	33.277302 °N 81.583305 °W	238.8-228.8 ft msl	303.1 ft msl	4" PVC	S	Water Table

SAMPLE DATE 03/22/93 06/15/93 09/14/93 12/15/93

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	283.8	281.2	277.3		ft msl
Depth to water	19.3	21.9	25.8		ft
pH	10.5	10.0	9.2		pH
Sp. conductance	108	119	98		µS/cm
Water temperature	20.3	21.7	21.3		°C
Alkalinity as CaCO ₃	27	29	35		mg/L
Turbidity	2	0	0		NTU
Volume purged	1.2	1.3	3.0		Well vol.
Sampling code	X	X		P	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	709		390			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	19	19	13	18		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	11,900	16,000	15,500	12,400	J2	µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Chloride	1,100	1,200	1,040	1,270		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	8.3	<4.0	<4.0	13		µg/L	GE	0
		Lead, total recoverable	<3.0	<3.0	<3.0	<3.0		µg/L	GE	0
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	281	288	255	327		µg/L	GE	0
		Manganese, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	420	610	750	450		µg/L	GE	0
		Nonvolatile beta	2.8E+00	2.3E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
•		pH	9.9	9.9	7.3	9.7	J	pH	GE	1
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	2,080	1,370	988	1,090		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

• = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSF 1 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	1.2E+00	<1.0E+00	1.3E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	10,800					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	3,230	2,510	1,930	2,200		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	84	102	91	68		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	2,300	2,460	1,490	1,510		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	58,000	61,000	59,000	44,000		µg/L	GE	0
		Total organic carbon	1,340	<1,000	<1,000	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	4,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.5E+01	2.3E+01	3.3E+01	1.7E+01		pCi/mL	GE	1
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	<2.0	<2.0	<2.0	22		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

WELL RSF 2

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57670.4	33.275062 °N	235.3-224.8 ft msl	302.8 ft msl	4" PVC	S	Water Table
E74628.6	81.582319 °W					

SAMPLE DATE	03/22/93	06/15/93	09/14/93	12/15/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	284.1	282.9	279.4		ft msl
Depth to water	18.7	19.8	23.4		ft
pH	5.2	5.0	5.0		pH
Sp. conductance	48	48	46		µS/cm
Water temperature	19.5	19.6	19.4		°C
Alkalinity as CaCO ₃	3	0	0		mg/L
Turbidity	1	0	0		NTU
Volume purged	3.3	5.0	4.9		Well vol.
Sampling code				P	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	<20		<20			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	5.5	10	5.4	5.1		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	2,430	1,790	2,050	1,950	J2	µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSF 2 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Chloride	1,710	2,030	1,710	1,840		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	<100	<100	<100	<100		µg/L	GE	0
		Gross alpha	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	29	340	8.4	46		µg/L	GE	0
		Lead, total recoverable	<3.0	10	<3.0	<3.0		µg/L	GE	0
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	726	256	703	691		µg/L	GE	0
		Manganese, total recoverable	3.5	7.5	3.5	3.4		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	<0.20	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	<4.0	5.7	<4.0	<4.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	2,820	240	2,620	2,440		µg/L	GE	0
		Nonvolatile beta	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		pH	5.4	7.1	5.2	5.4	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	<500	900	<500	<500		µg/L	GE	0
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	<1.0E+00	<1.0E+00	1.0E+00	<1.0E+00		pCi/L	GE	0
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	7,570					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	3,800	8,890	3,900	3,710		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	42	55	39	39		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	CN	0
		Sulfate	<1,000	4,600	<1,000	<1,000		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	34,000	54,000	29,000	22,000		µg/L	GE	0
		Total organic carbon	<1,000	1,030	1,200	<1,000		µg/L	GE	0
		Total organic halogens	<5.0		<5.0			µg/L		
		Total phosphates (as P)	<50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	5,000	15,000	<1,000	1,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	1.5E+00	<7.0E-01	3.1E+00	2.1E+00		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	<2.0	7.8	<2.0	20		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

WELL RSF 3

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N57621.4 E75206.7	33.275896 °N 81.580701 °W	239.8-229.8 ft msl	307.1 ft msl	4" PVC	S	Water Table

SAMPLE DATE	03/22/93	06/15/93	09/14/93	12/15/93
-------------	----------	----------	----------	----------

FIELD DATA

Analyte	1Q93	2Q93	3Q93	4Q93	Unit
Water elevation	286.0	282.8	279.1		ft msl
Depth to water	21.1	24.3	28.0		ft
pH	6.4	6.3	6.0		pH
Sp. conductance	60	62	57		µS/cm
Water temperature	19.9	21.8	21.0		°C
Alkalinity as CaCO ₃	12	15	15		mg/L
Turbidity	12	10	10		NTU
Volume purged	1.0	1.1	1.1		Well vol.
Sampling code	X	X	X	P	

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Actinium-228				<8.4E+01		pCi/L	CN	0
		Aluminum, total recoverable	2,320		261			µg/L		
		Antimony-125	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Arsenic, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Barium, total recoverable	12	5.4	10.0	6.6		µg/L	GE	0
		Cadmium, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Calcium, total recoverable	1,610	2,230	1,620	980	J2	µg/L	GE	0
		Cerium-144	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Cesium-134	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cesium-137	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Chloride	2,220	2,060	1,640	1,900		µg/L	GE	0
		Chromium, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		Cobalt-57	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Cobalt-60	<1.2E+01	<1.2E+01	<1.2E+01	<1.2E+01		pCi/L	CN	0
		Copper, total recoverable	<4.0	<4.0	<4.0	<4.0		µg/L	GE	0
		2,4-Dichlorophenoxyacetic acid	<0.30					µg/L		
		Endrin	<0.0060					µg/L		
		Europium-152	<5.0E+01	<5.0E+01	<5.0E+01	<5.0E+01		pCi/L	CN	0
		Europium-154	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Europium-155	<2.5E+01	<2.5E+01	<2.5E+01	<2.5E+01		pCi/L	CN	0
		Fluoride	169	<100	<100	110		µg/L	GE	0
		Gross alpha	4.3E+00	<2.0E+00	<2.0E+00	<2.0E+00		pCi/L	GE	0
		Iron, total recoverable	827	15	319	98		µg/L	GE	0
		Lead, total recoverable	6.2	<3.0	11	9.5		µg/L	GE	1
		Lead-212				<2.5E+01		pCi/L	CN	0
		Lindane	<0.0050					µg/L		
		Magnesium, total recoverable	503	725	241	170		µg/L	GE	0
		Manganese, total recoverable	12	3.7	7.1	6.3		µg/L	GE	0
		Manganese-54	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Mercury, total recoverable	<0.20	<0.20	2.8	<0.20		µg/L	GE	0
		Methoxychlor	<0.50					µg/L		
		Nickel, total recoverable	7.9	<4.0	9.0	6.0		µg/L	GE	0
		Nitrate-nitrite as nitrogen	180	2,700	190	140		µg/L	GE	0
		Nonvolatile beta	3.8E+00	<2.0E+00	<2.0E+00	3.1E+00		pCi/L	GE	0
		pH	7.2	5.4	6.1	6.9	J	pH	GE	0
		Phenols	<5.0					µg/L		
		Plutonium-238	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Plutonium-239/240	<1.0E+00	<1.0E+00	<1.0E+00	<1.0E+00		pCi/L	CN	0
		Potassium, total recoverable	1,340	<500	901	886		µg/L	GE	0

Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Well RSF 3 continued

ANALYTICAL DATA

H	D	Analyte	1Q93	2Q93	3Q93	4Q93	Mod	Unit	Lab	Flag
		Potassium-40	<2.5E+02	<2.5E+02	<2.5E+02	<2.5E+02		pCi/L	CN	0
		Promethium-144	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Promethium-146	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0
		Radium, total alpha-emitting	3.0E+00	1.0E+00	1.2E+00	2.8E+01		pCi/L	GE	2
		Ruthenium-106	<8.0E+01	<8.0E+01	<8.0E+01	<8.0E+01		pCi/L	CN	0
		Selenium, total recoverable	<2.0	<2.0	<2.0	<2.0	J1	µg/L	GE	0
		Silica, total recoverable	21,400					µg/L		
		Silver, total recoverable	<2.0	<2.0	<2.0	<2.0		µg/L	GE	0
		Sodium, total recoverable	13,600	3,870	8,720	8,990		µg/L	GE	0
		Sodium-22	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Specific conductance	115	48	47	102		µS/cm	GE	0
		Strontium-90	<2.0E+00	<2.0E+00	<2.0E+00		R4	pCi/L	CN	0
		Sulfate	11,400	<1,000	4,620	6,600		µg/L	GE	0
		Thorium-234				<1.3E+03		pCi/L	CN	0
		Total dissolved solids	179,000	39,000	43,000	161,000		µg/L	GE	0
		Total organic carbon	<1,000	<1,000	<1,000	<1,000		µg/L	GE	0
		Total organic halogens	8.0		<5.0			µg/L		
		Total phosphates (as P)	<50	<50	<50	<50		µg/L	GE	0
		Total suspended solids	41,000	<1,000	6,000	45,000		µg/L	GE	0
		Toxaphene	<0.24					µg/L		
		2,4,5-TP (Silvex)	<0.090					µg/L		
		Tritium	<7.0E-01	2.1E+00	1.8E+00	7.2E-01		pCi/mL	GE	0
		Yttrium-88	<1.0E+01	<1.0E+01	<1.0E+01	<1.0E+01		pCi/L	CN	0
		Zinc, total recoverable	14	<2.0	2.4	28		µg/L	GE	0
		Zinc-65	<2.3E+01	<2.3E+01	<2.3E+01	<2.3E+01		pCi/L	CN	0

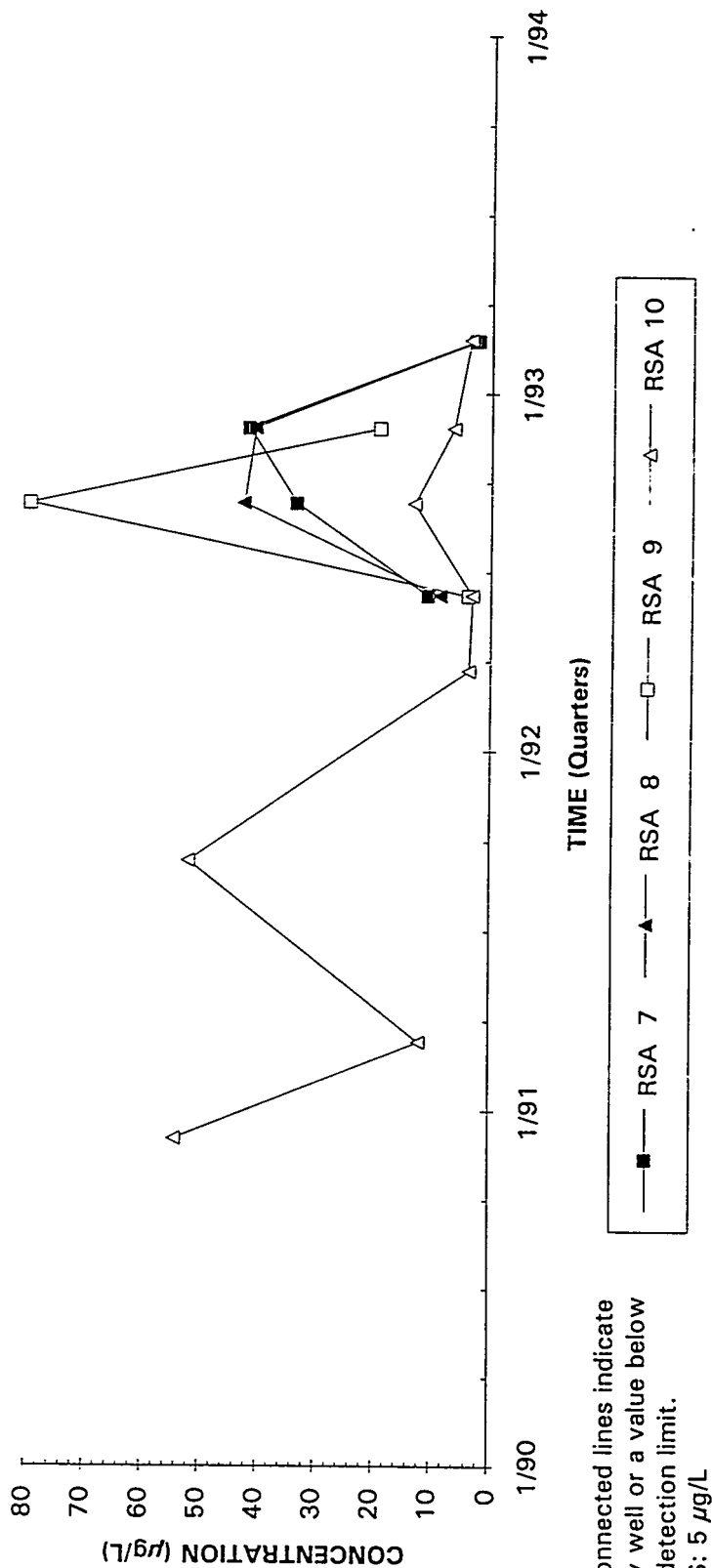
Note: Flagging levels, modifiers, and laboratories are for 4th quarter 1993 data only. See Appendix B for flagging criteria.

● = exceeded holding time for 4th quarter 1993.

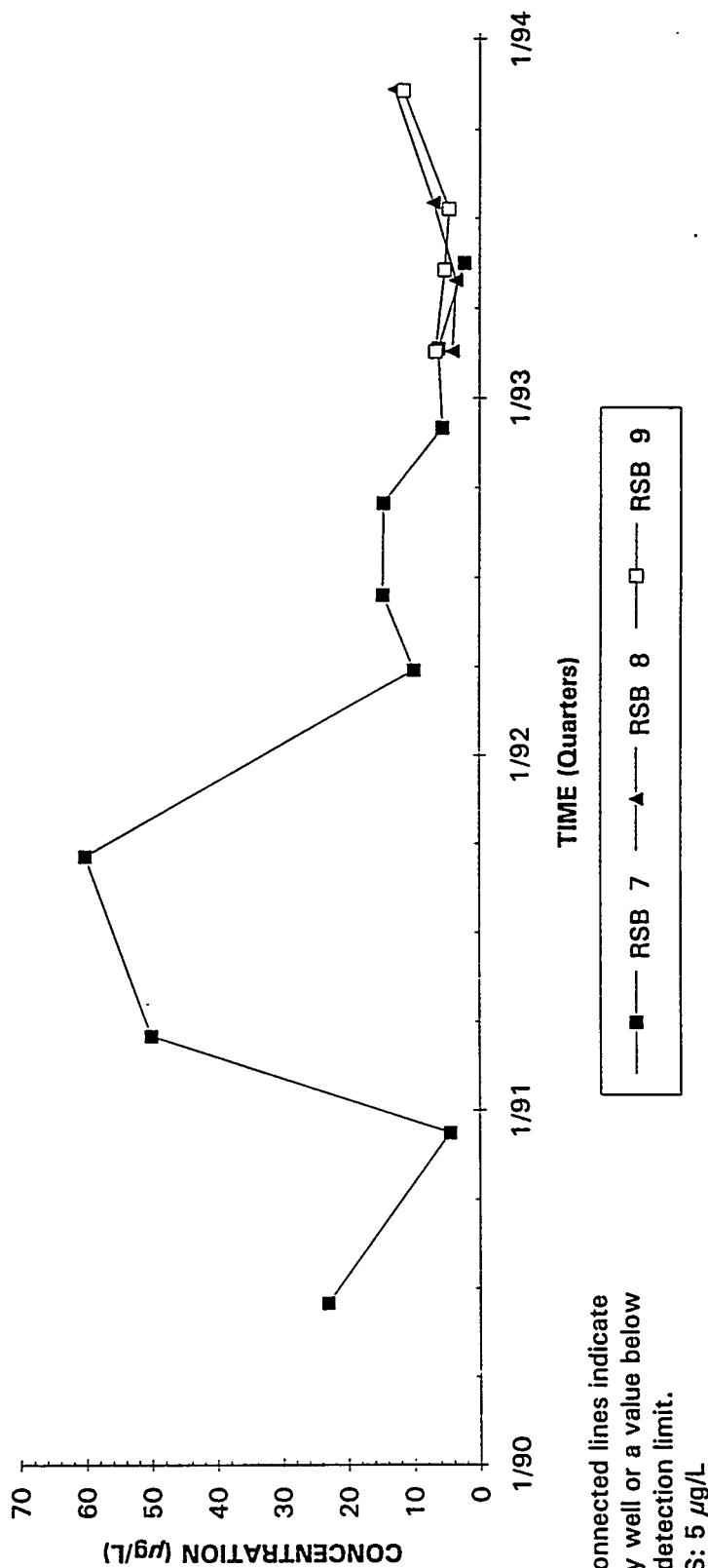
■ = exceeded screening level or final primary drinking water standard for 4th quarter 1993.

Appendix D. Time Series Plots

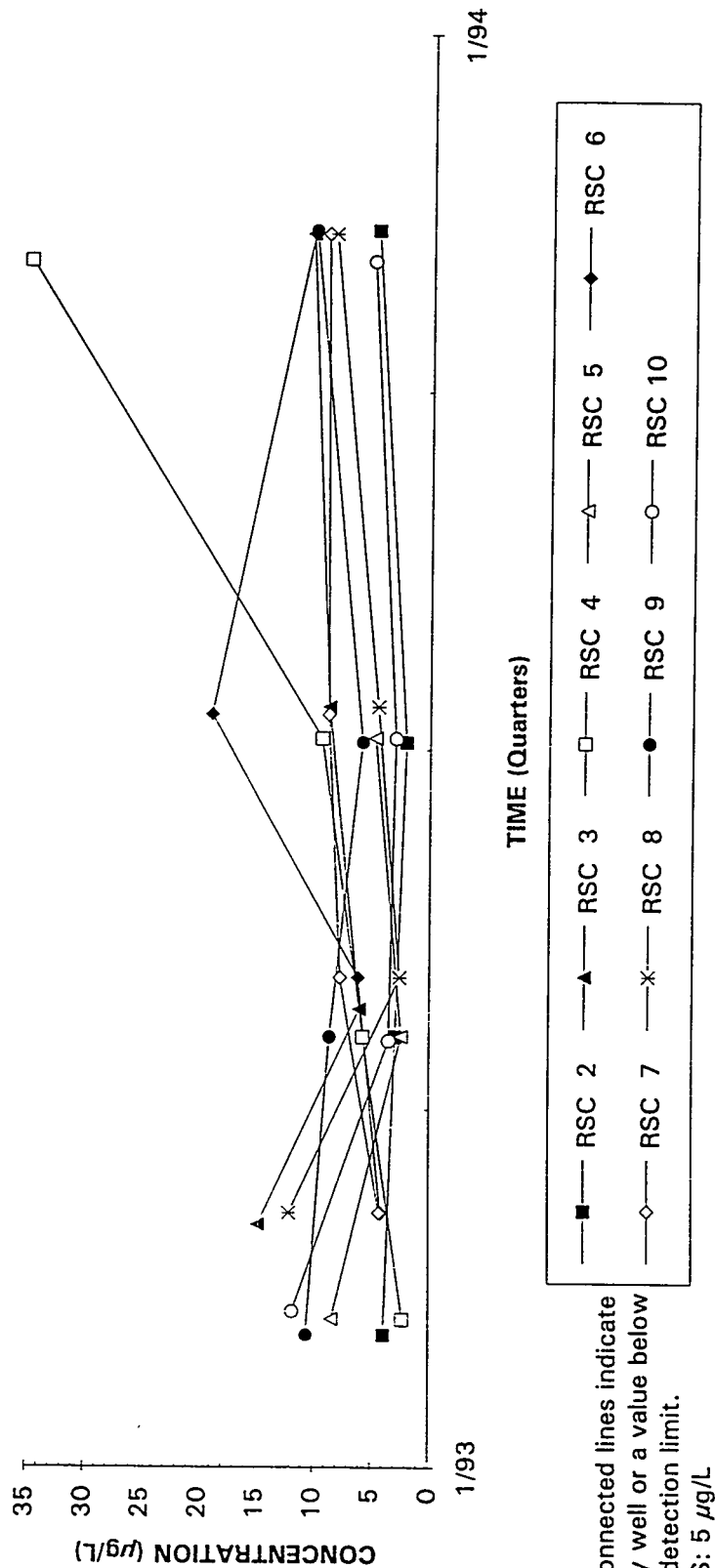
Cadmium Concentrations RSA Well Series



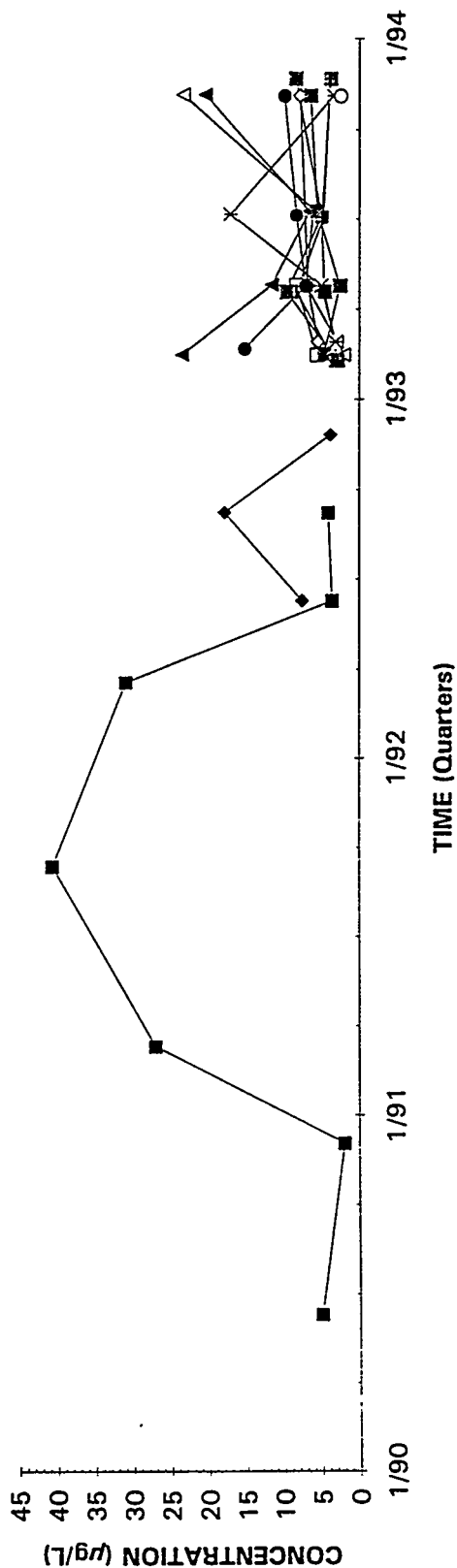
Cadmium Concentrations RSB Well Series



Cadmium Concentrations RSC Well Series

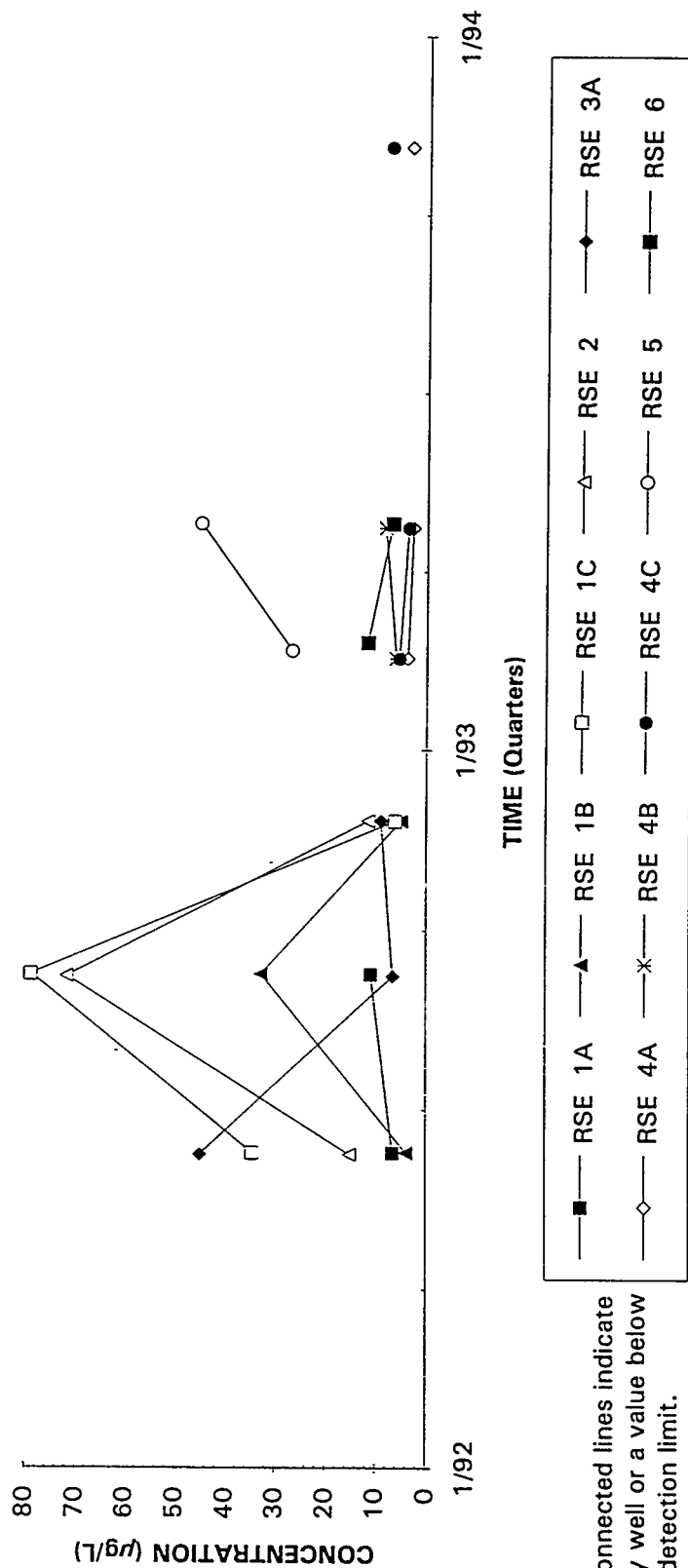


Cadmium Concentrations RSD Well Series

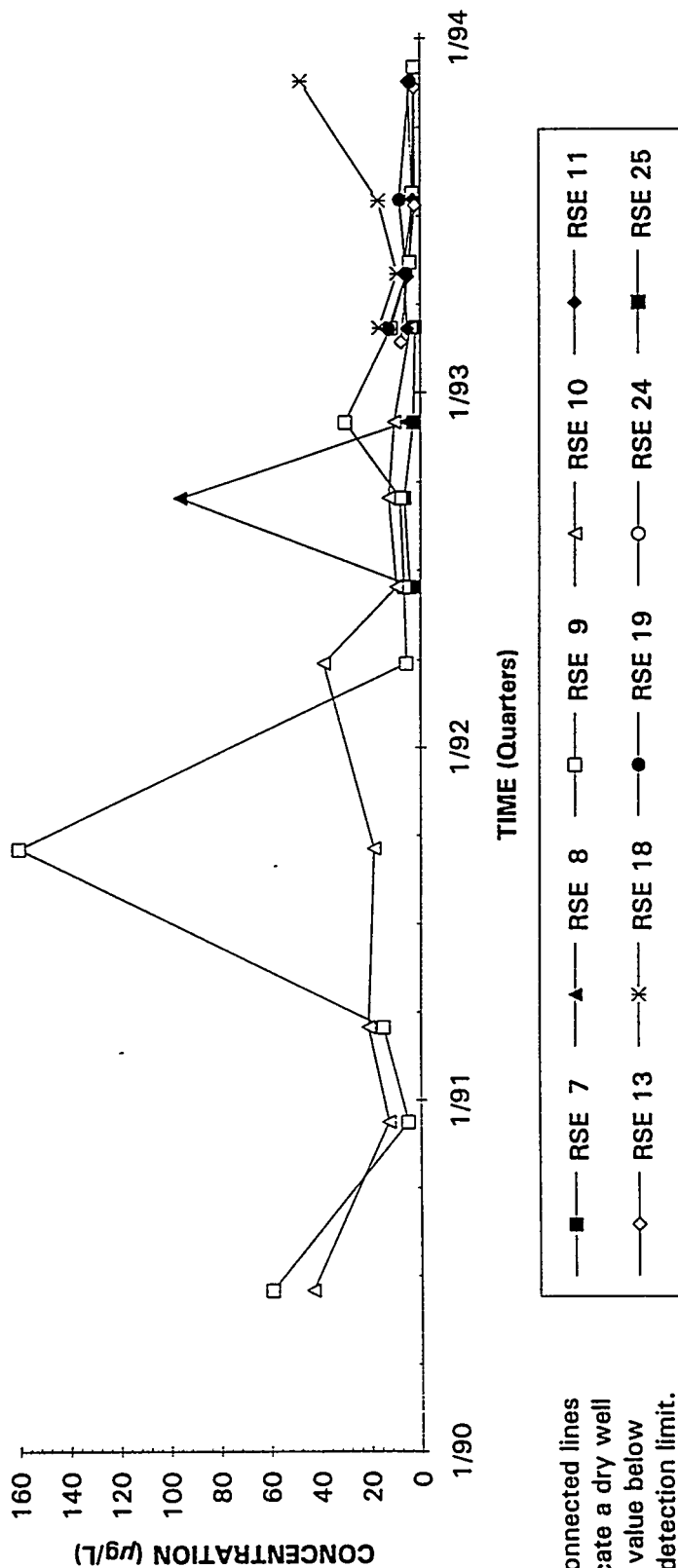


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 5 µg/L

Cadmium Concentrations RSE Well Series (1A through 6)

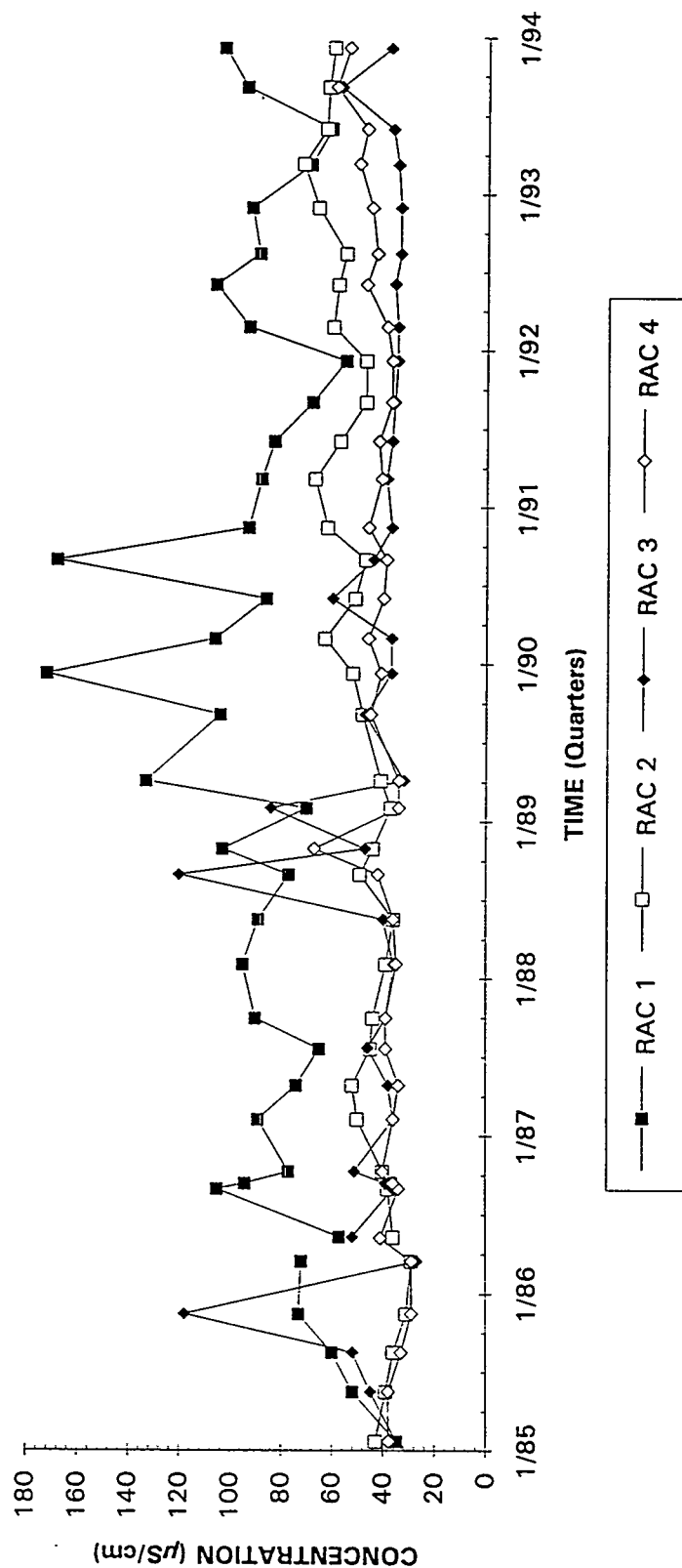


Cadmium Concentrations RSE Well Series (7 through 25)

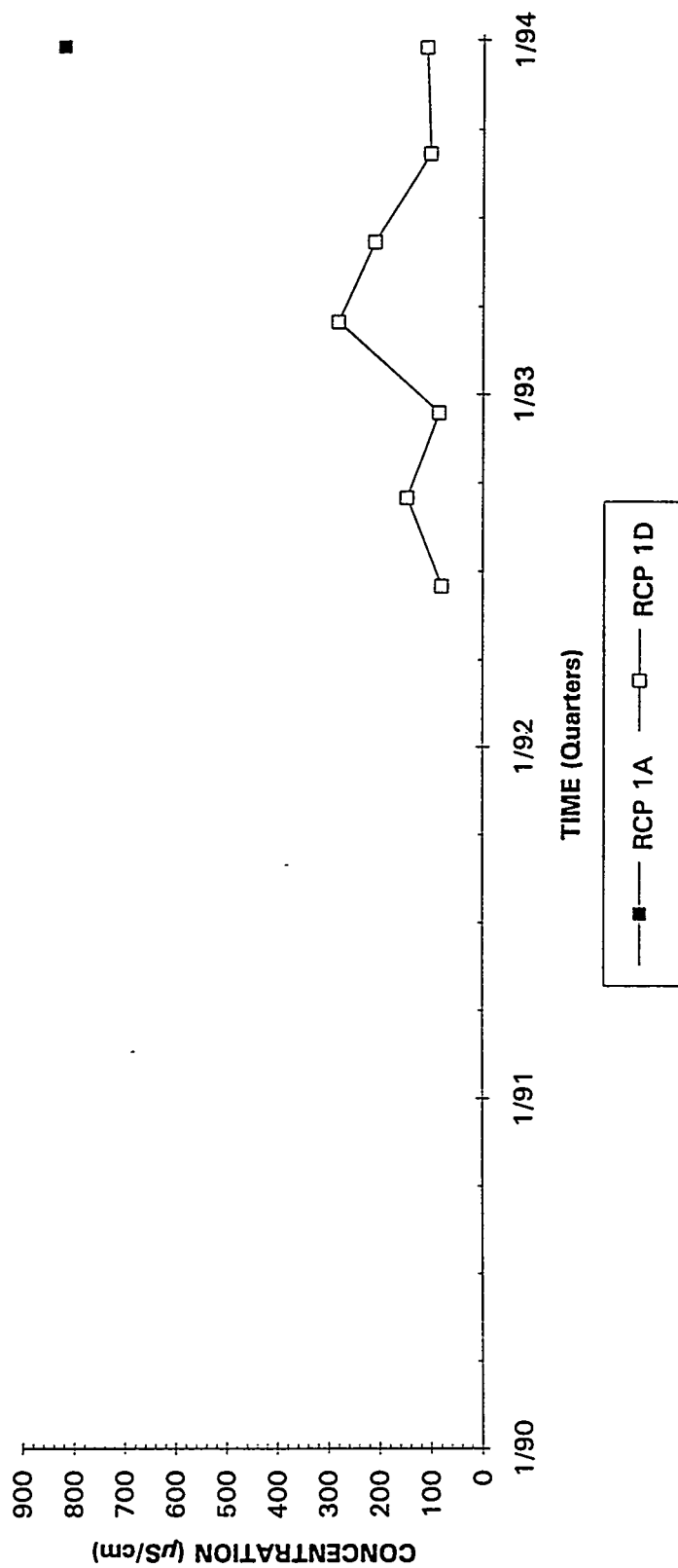


Unconnected lines
indicate a dry well
or a value below
the detection limit.
DWS: 5 µg/L

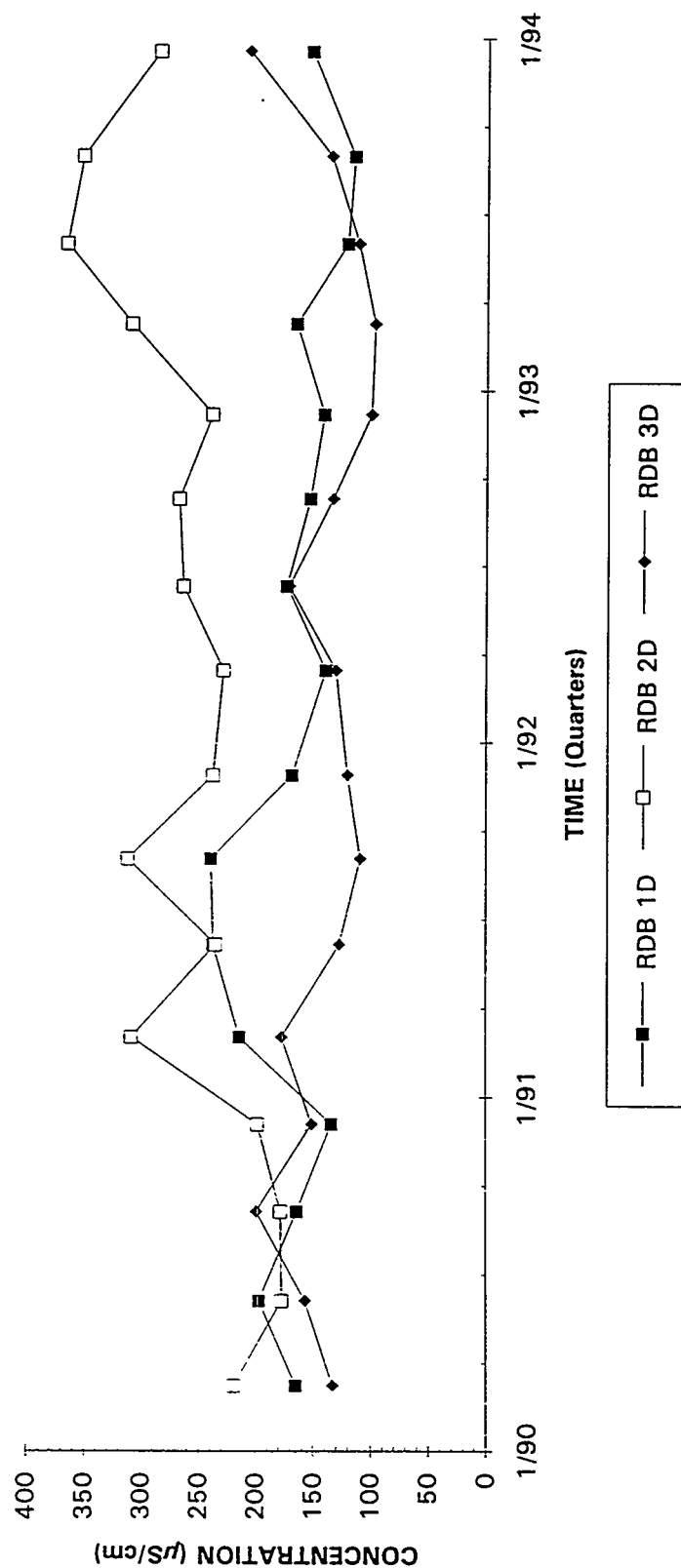
Conductivity RAC Well Series



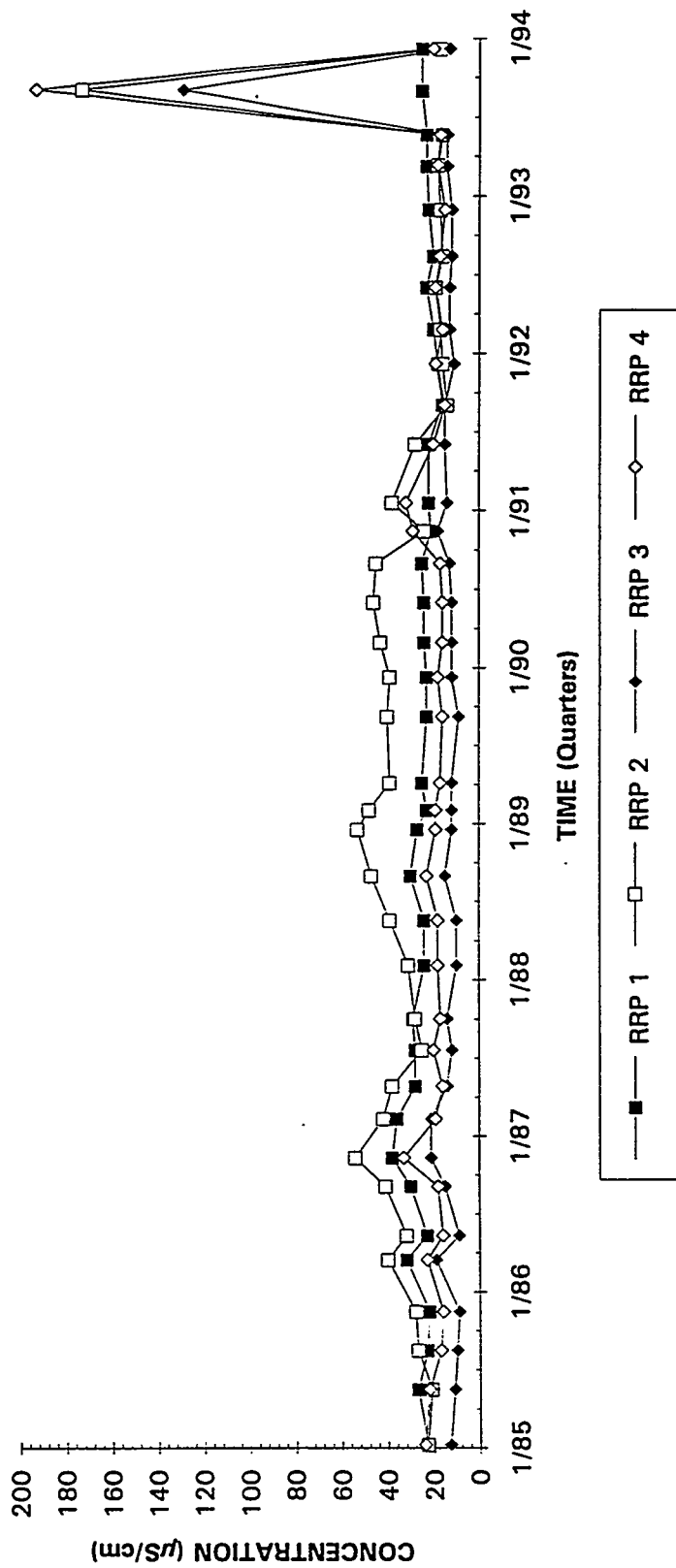
Conductivity RCP Well Series



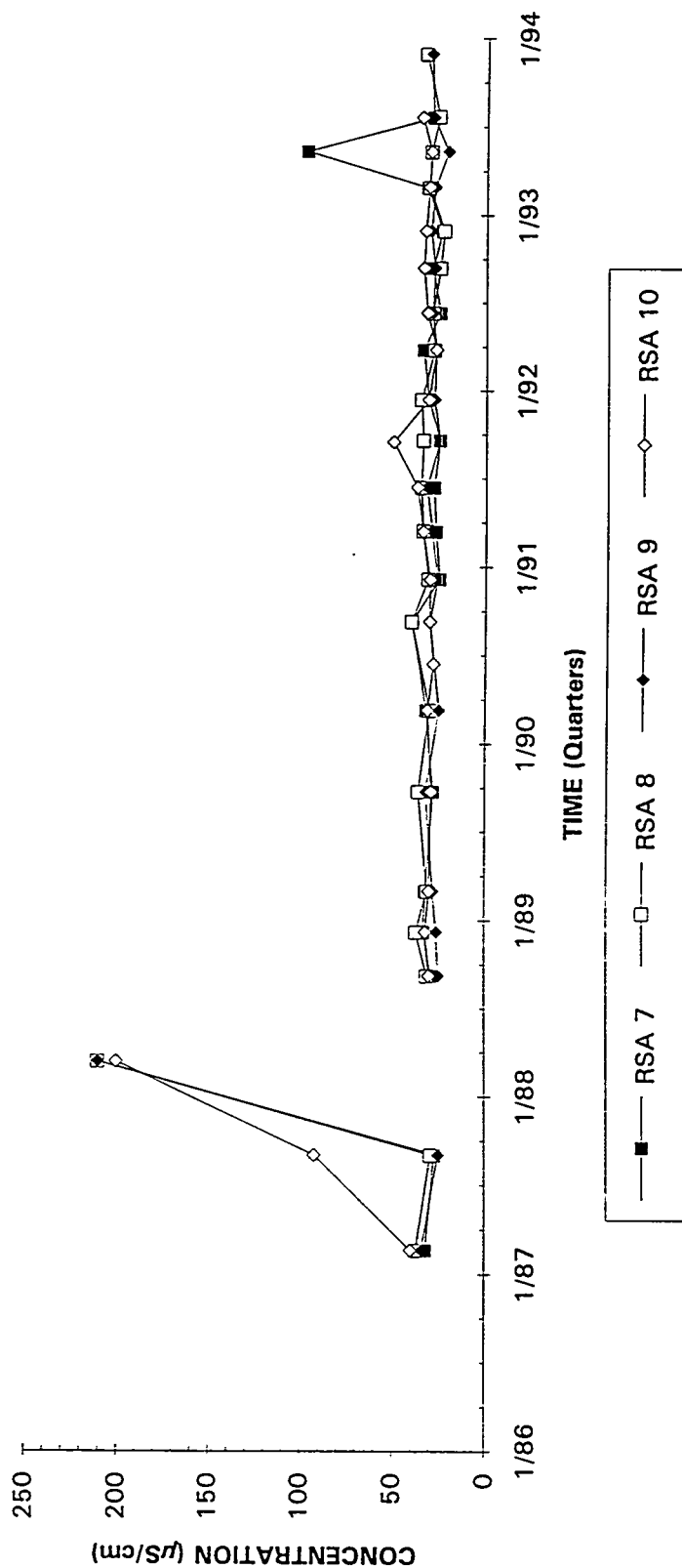
Conductivity RDB Well Series



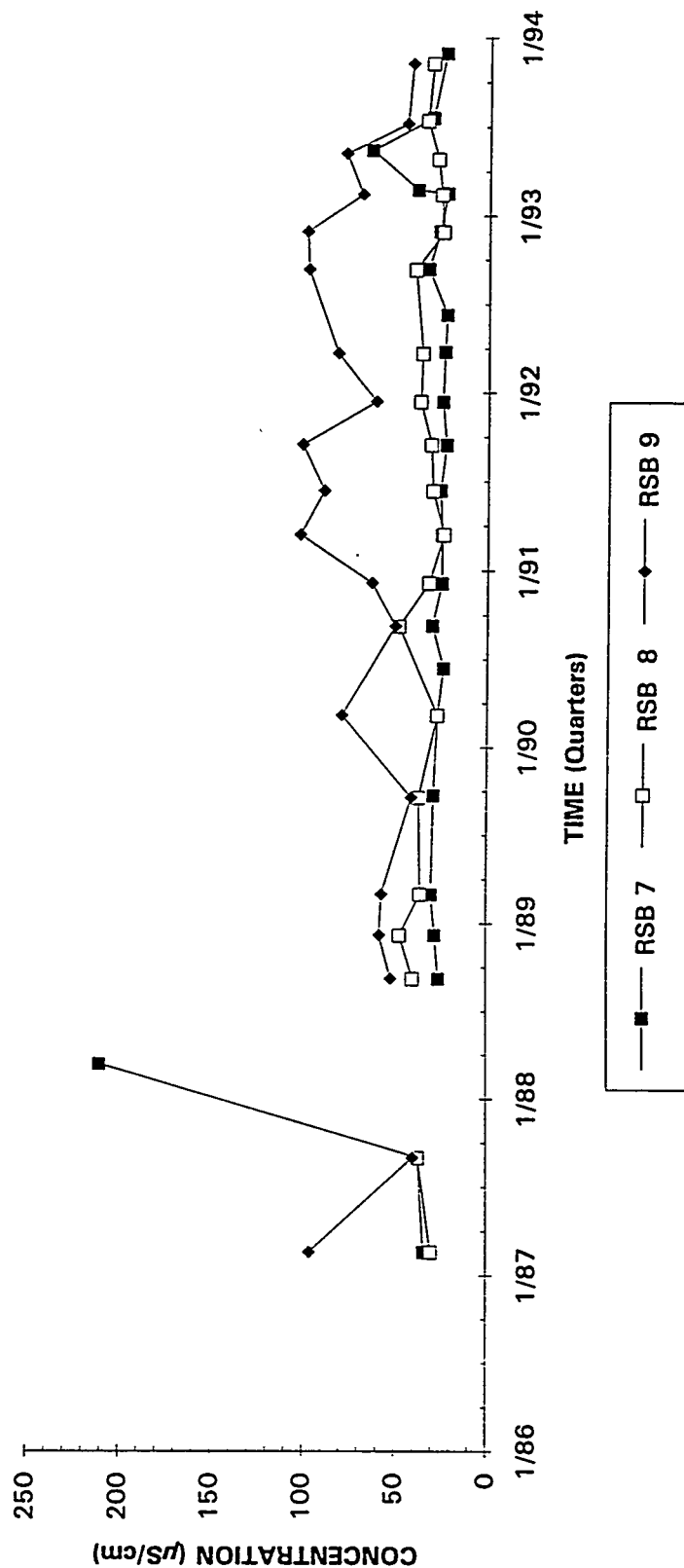
Conductivity RRP Well Series



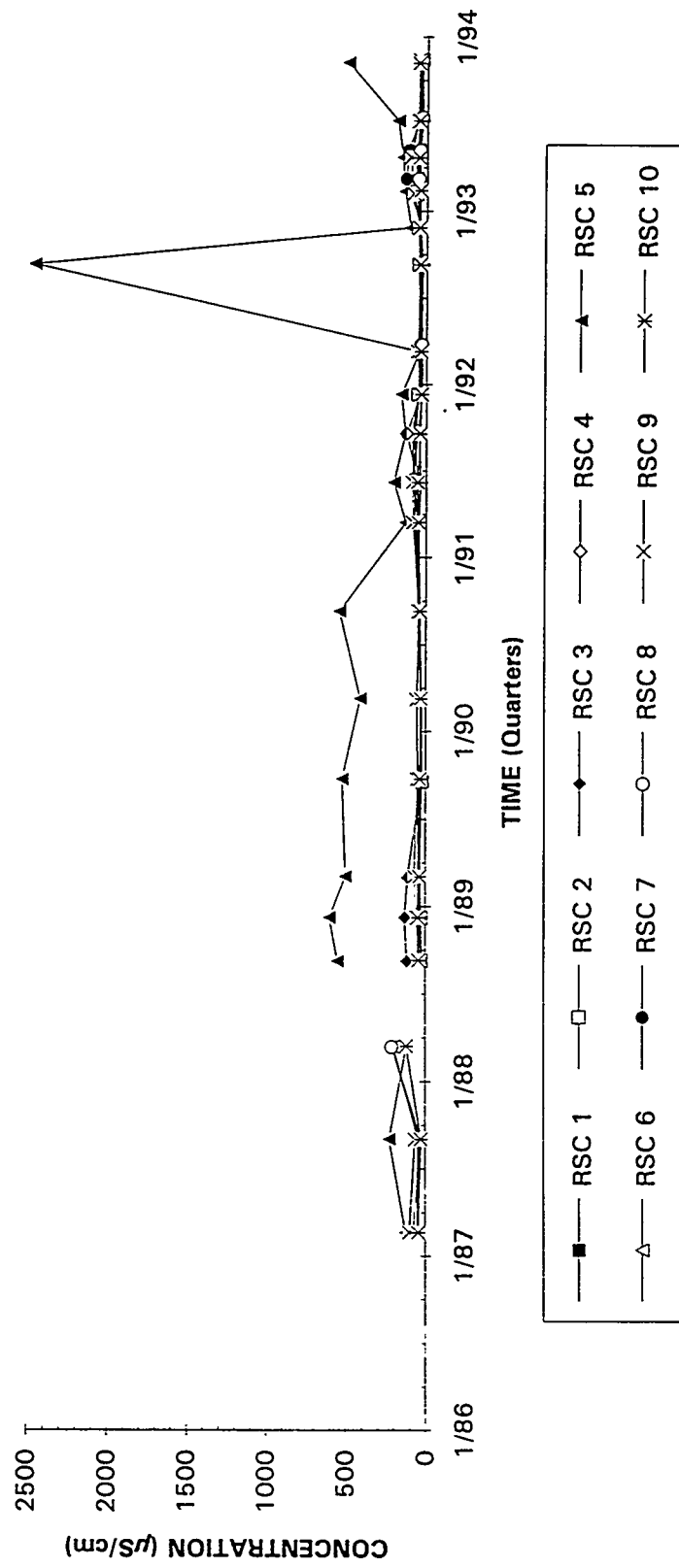
Conductivity RSA Well Series



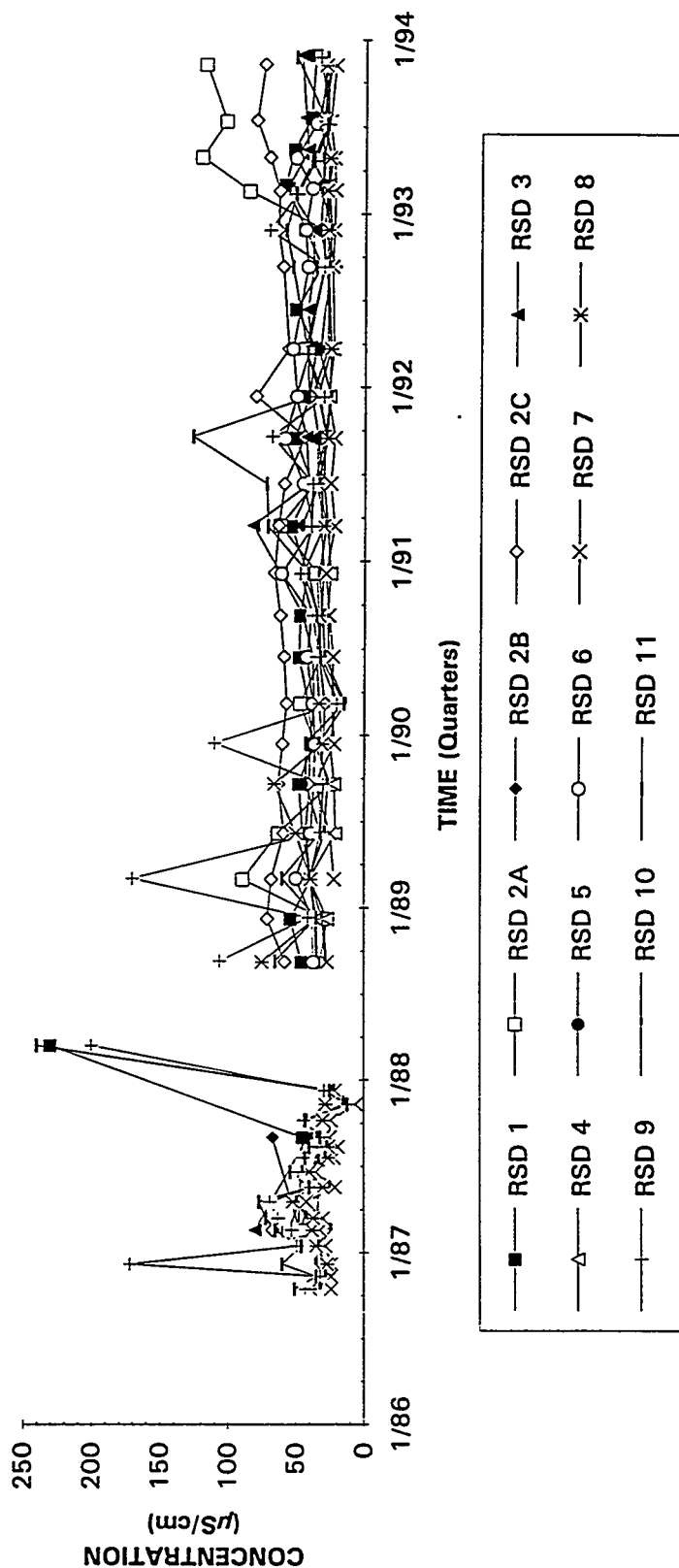
Conductivity RSB Well Series



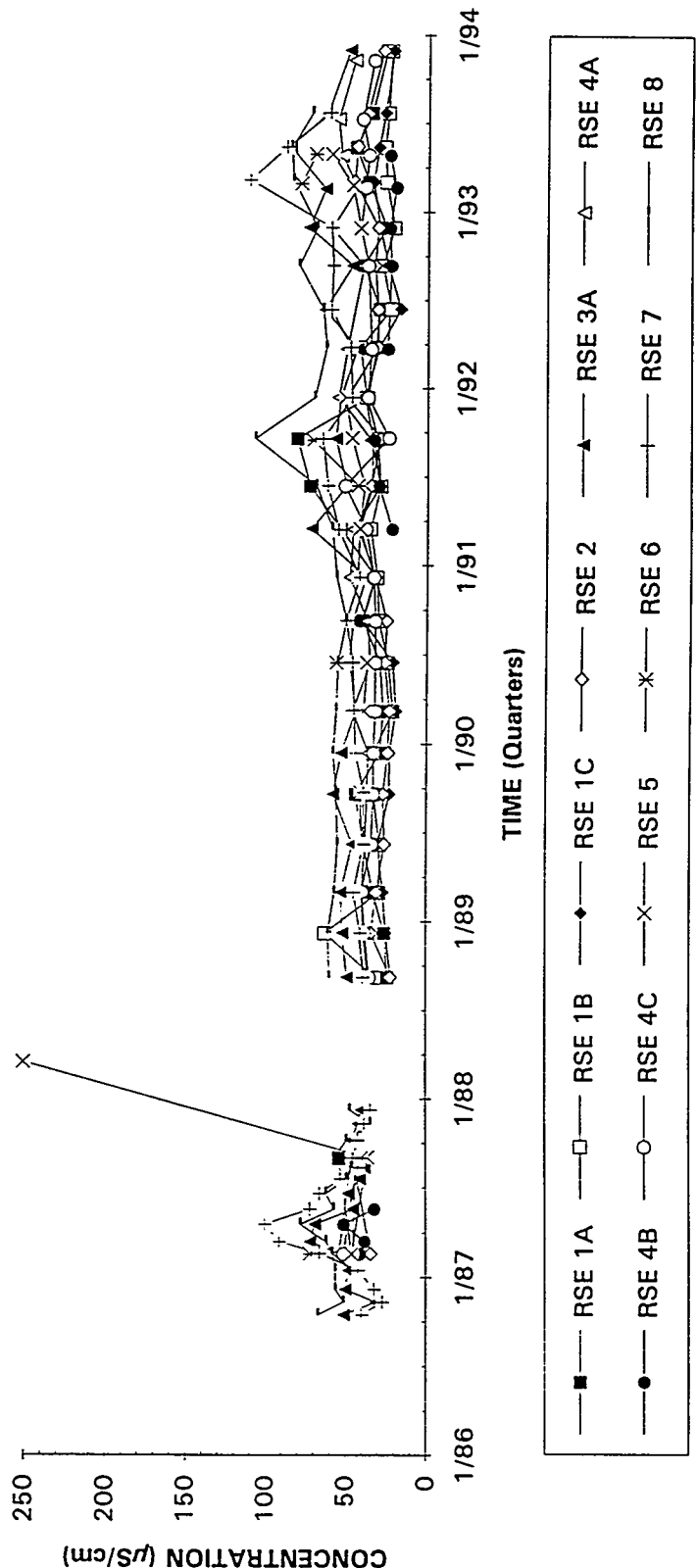
Conductivity RSC Well Series



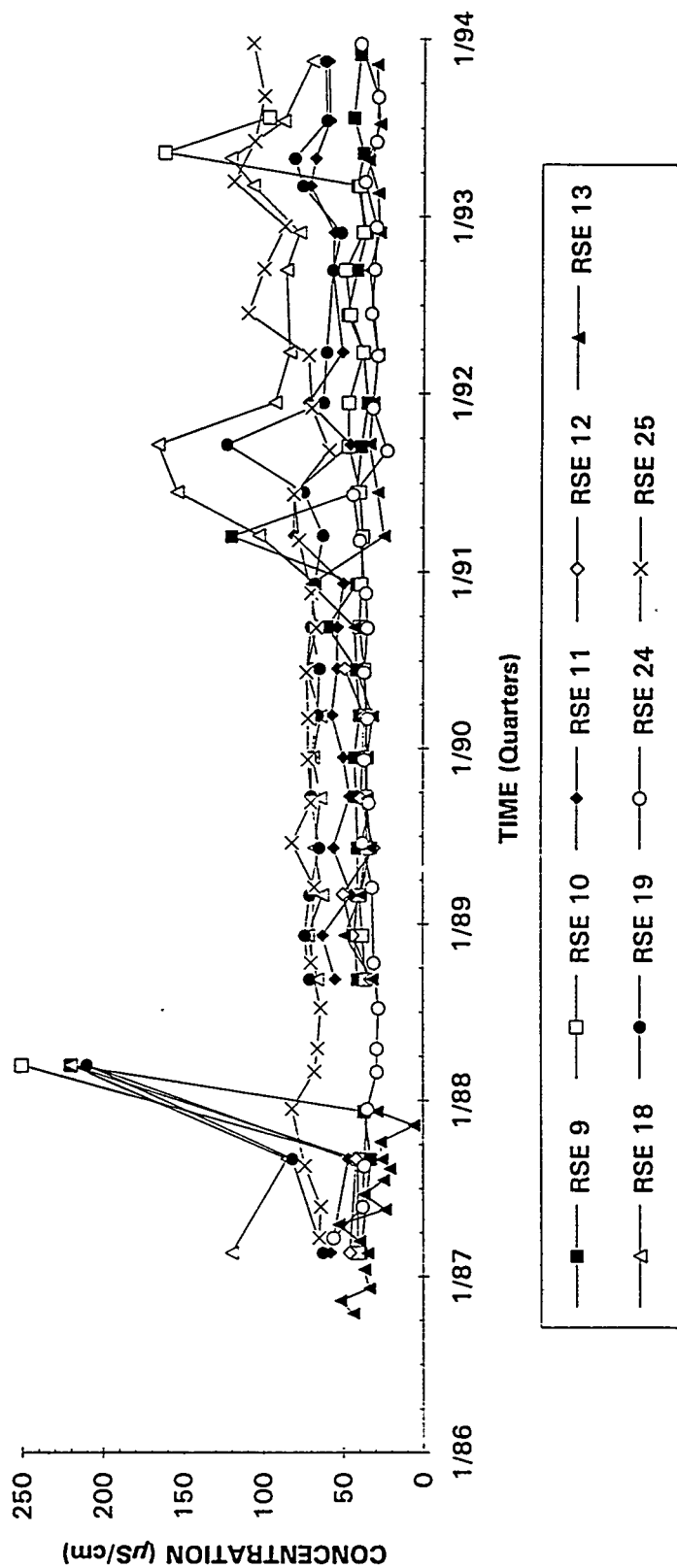
Conductivity RSD Well Series



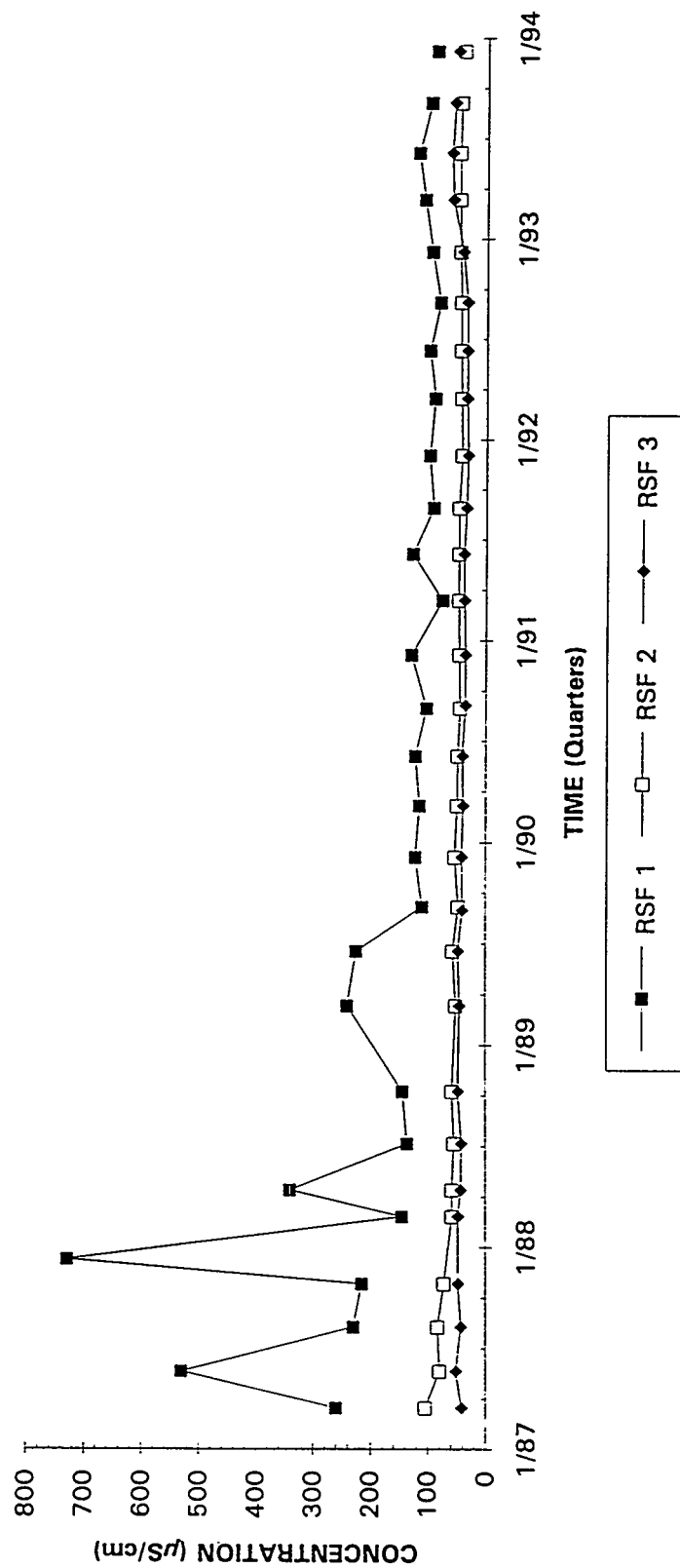
Conductivity
RSE Well Series (1 through 8)



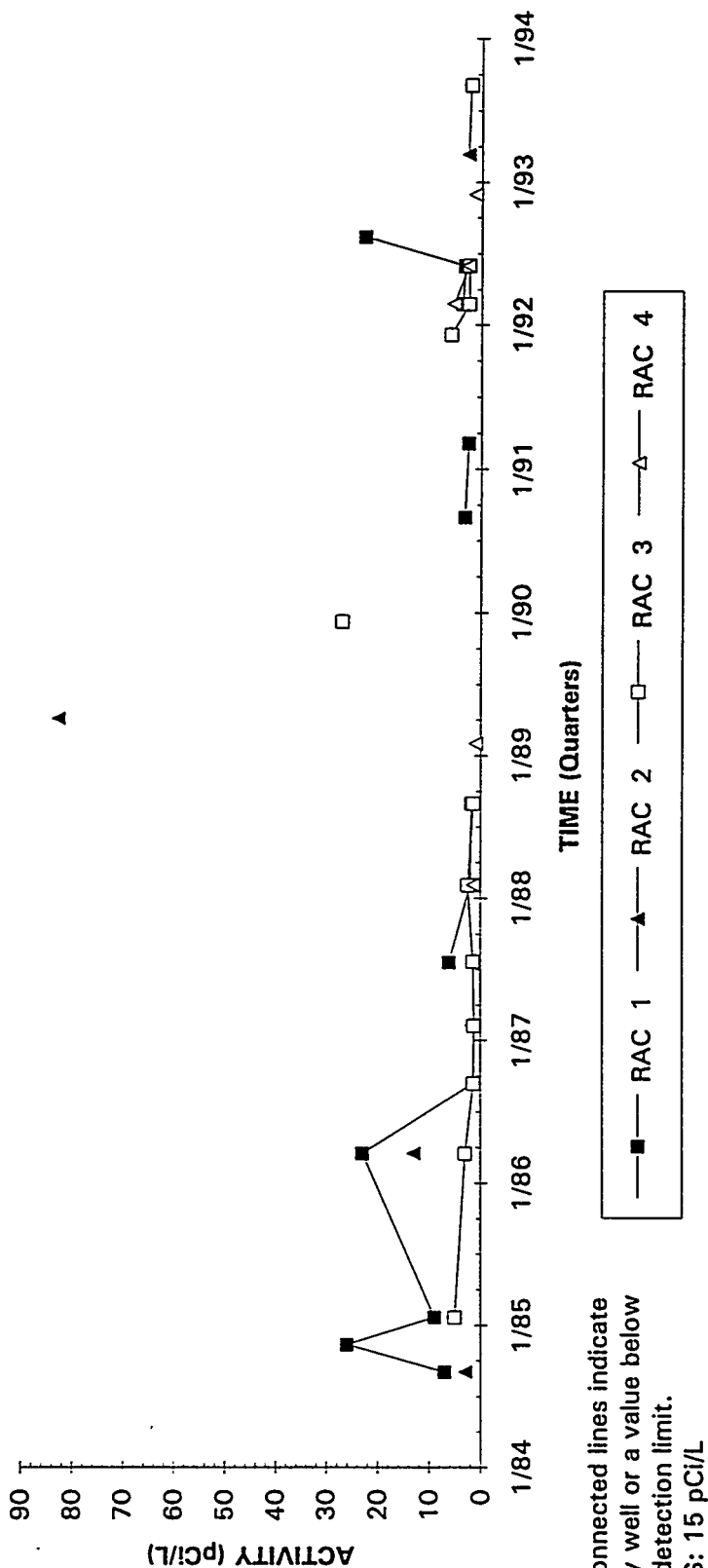
Conductivity RSE Well Series (9 through 25)



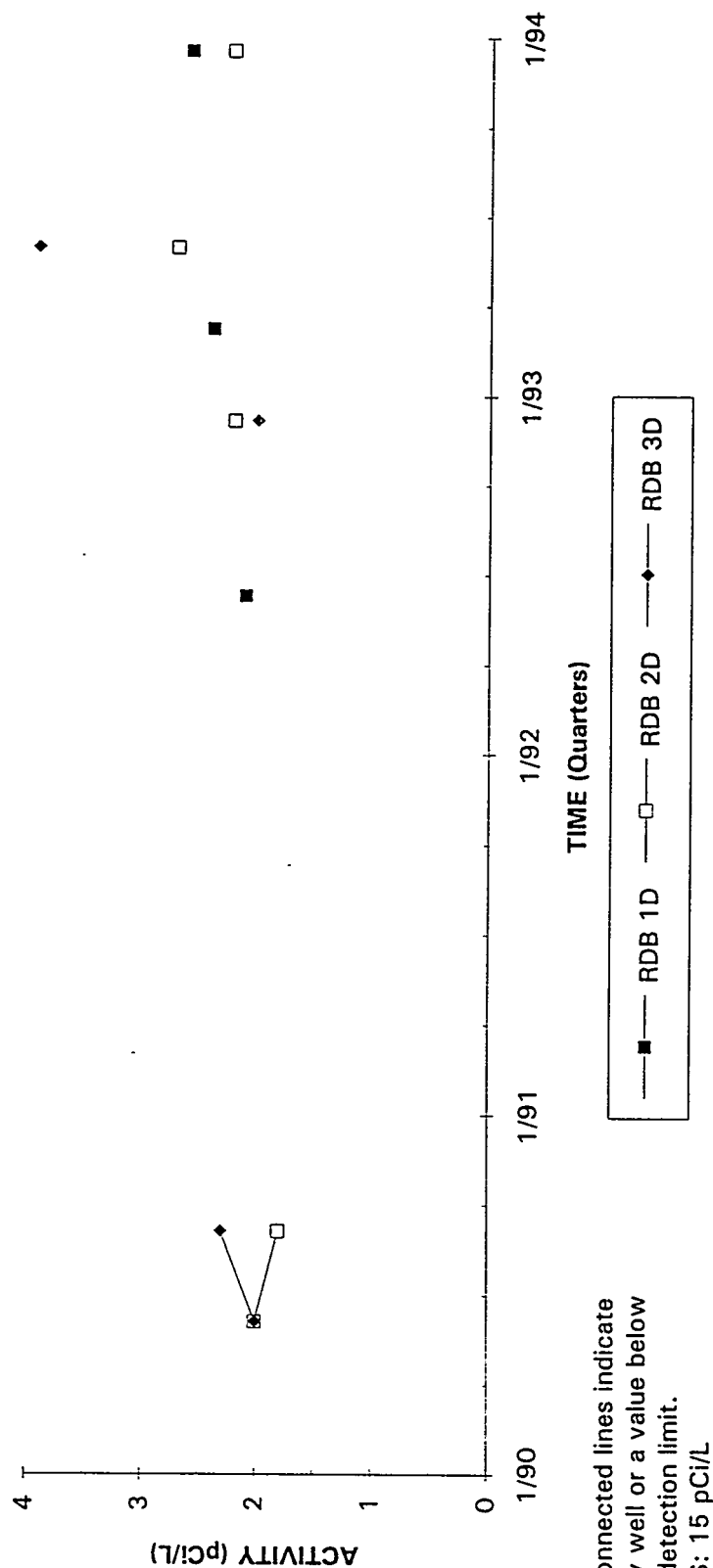
Conductivity RSF Well Series



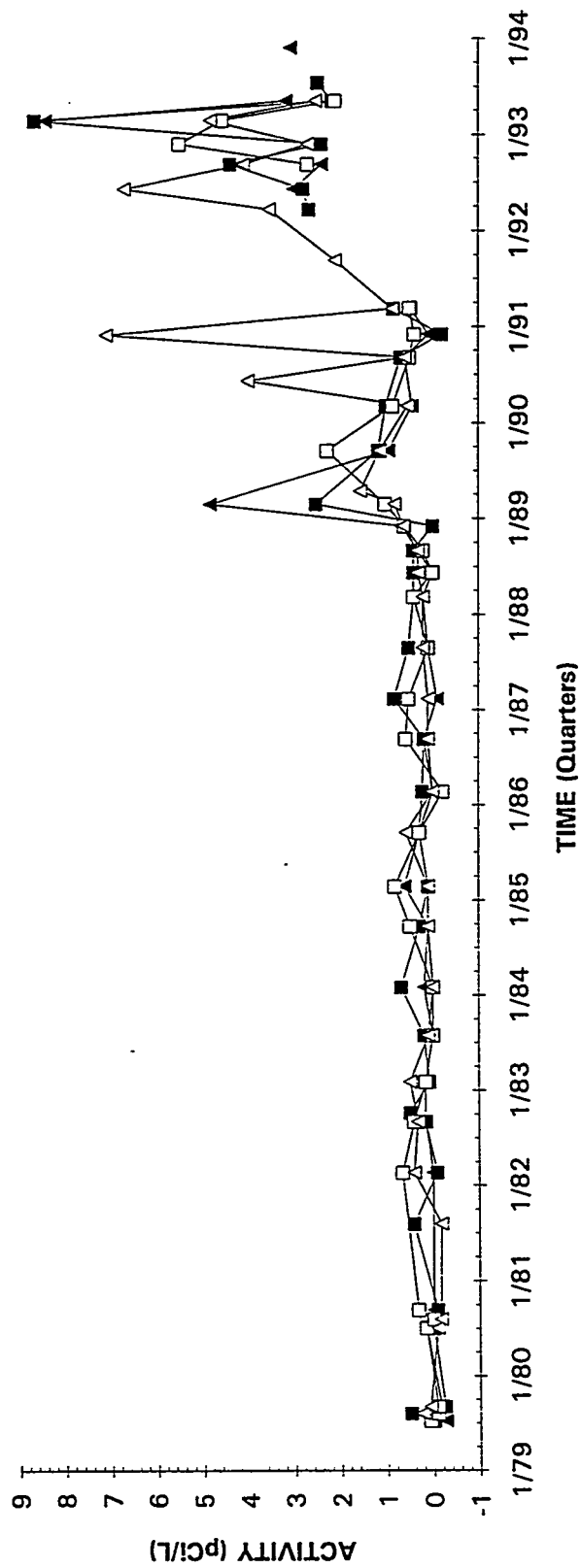
Gross Alpha Activities RAC Well Series



Gross Alpha Activities RDB Well Series

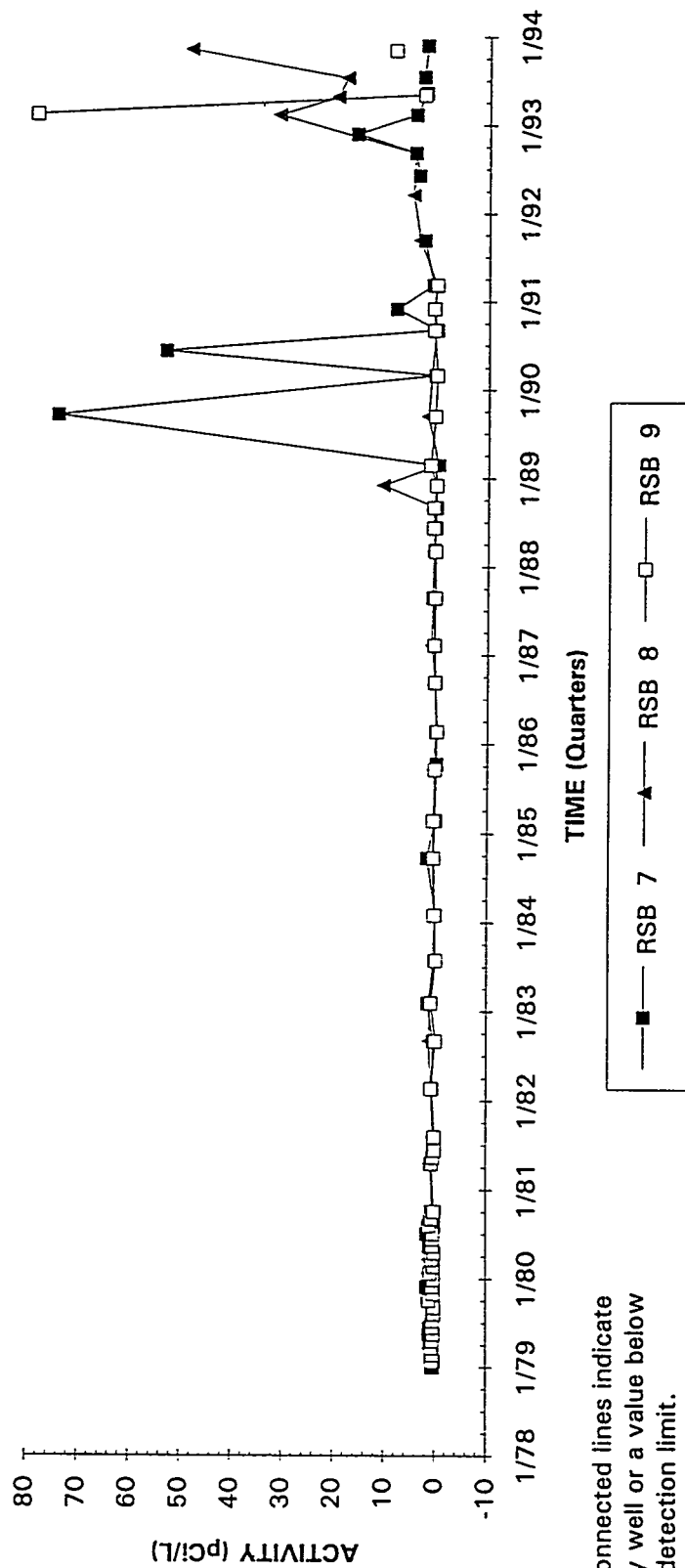


Gross Alpha Activities RSA Well Series

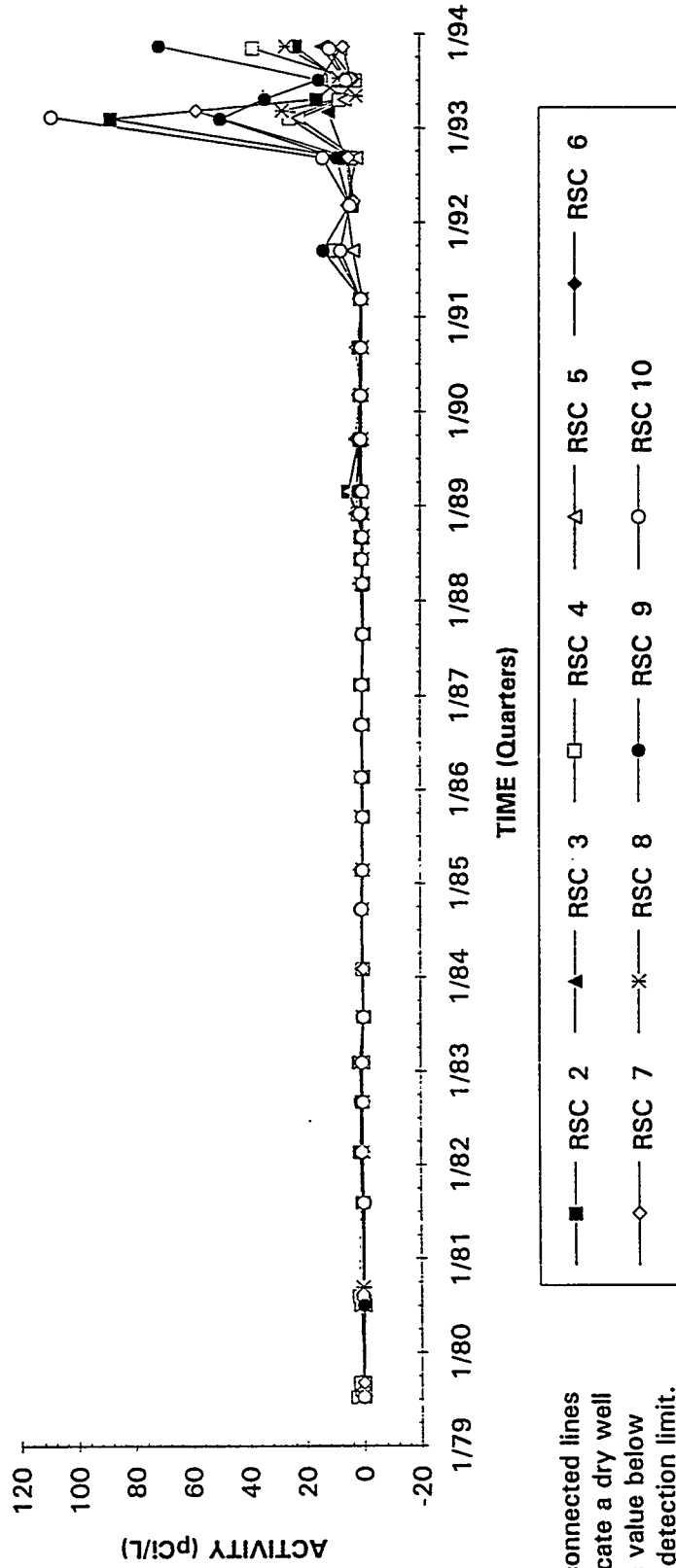


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 15 pCi/L

Gross Alpha Activities RSB Well Series

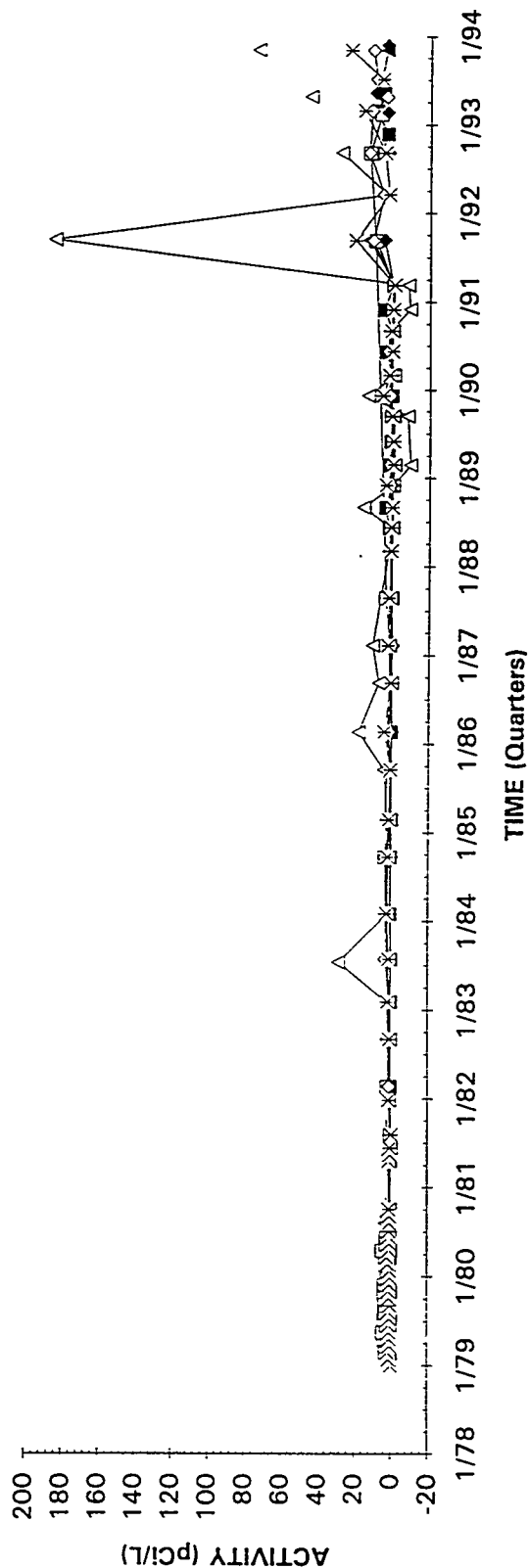


Gross Alpha Activities RSC Well Series

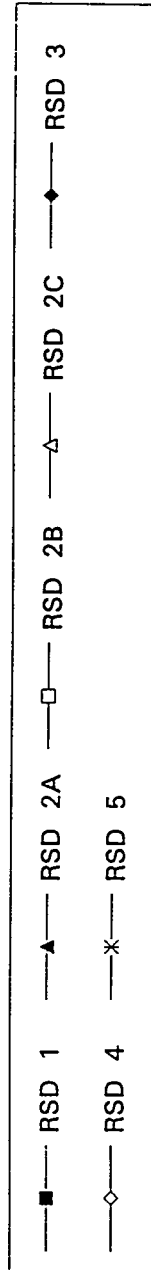


Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 15 pCi/L

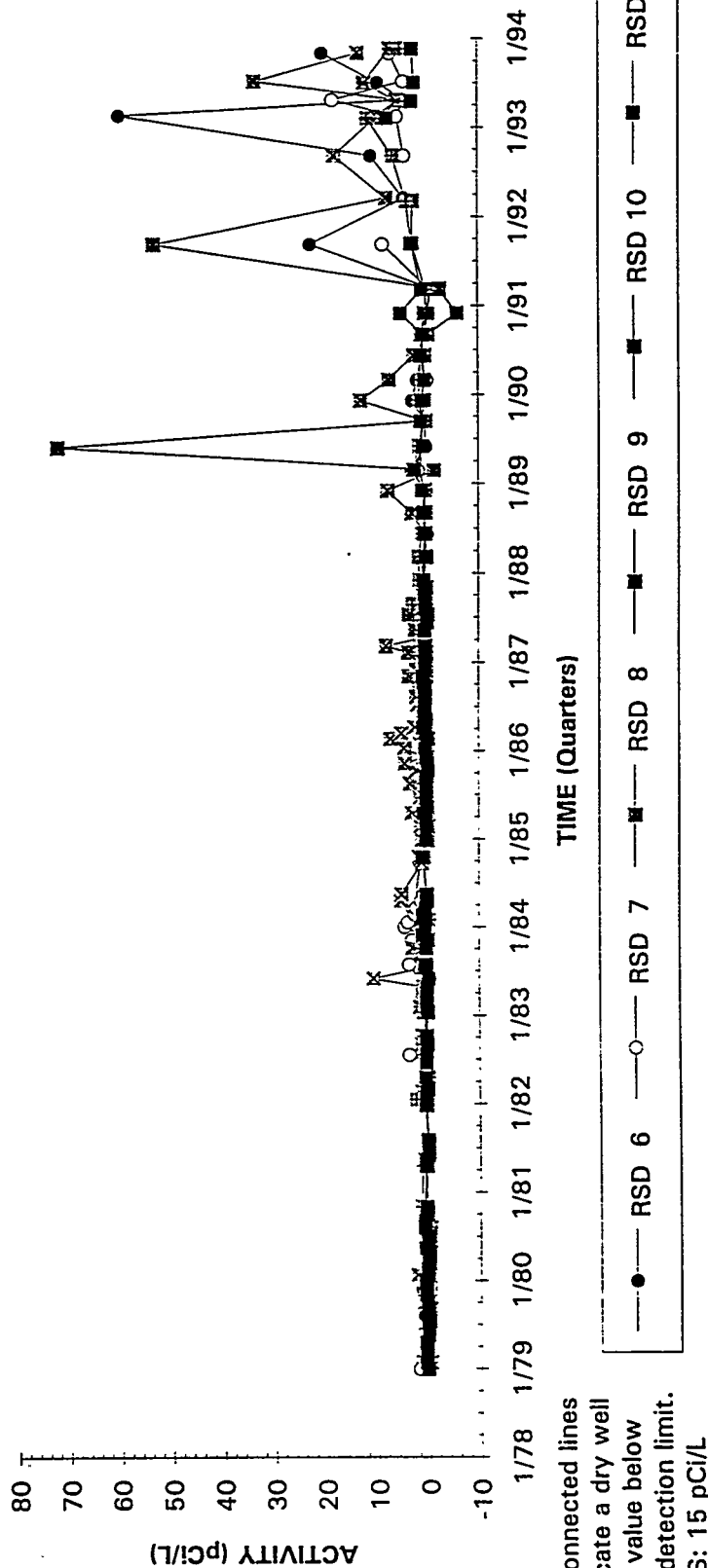
Gross Alpha Activities RSD Well Series (1 through 5)



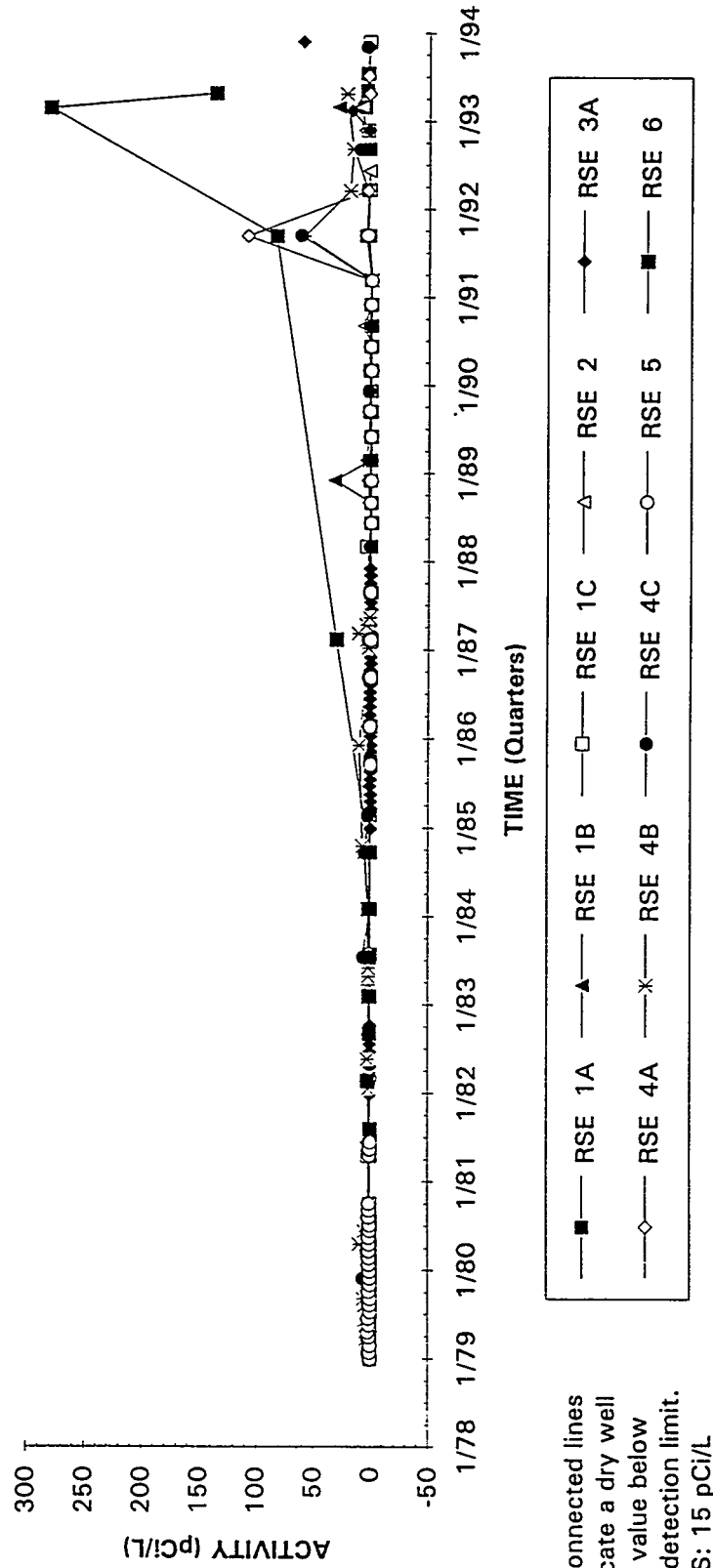
Unconnected lines
indicate a dry well
or a value below
the detection limit.
DWS: 15 pCi/L



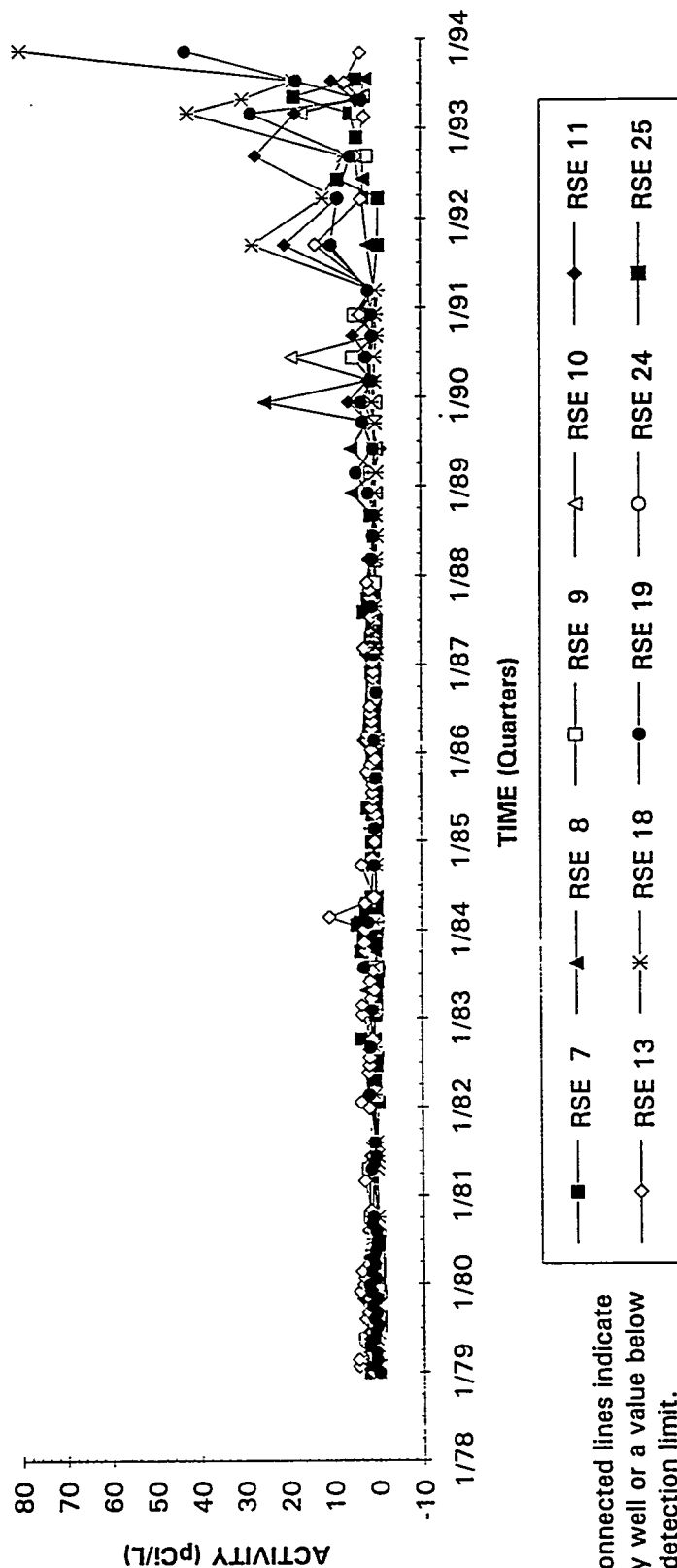
Gross Alpha Activities RSD Well Series (6 through 11)



Gross Alpha Activities RSE Well Series (1A through 6)

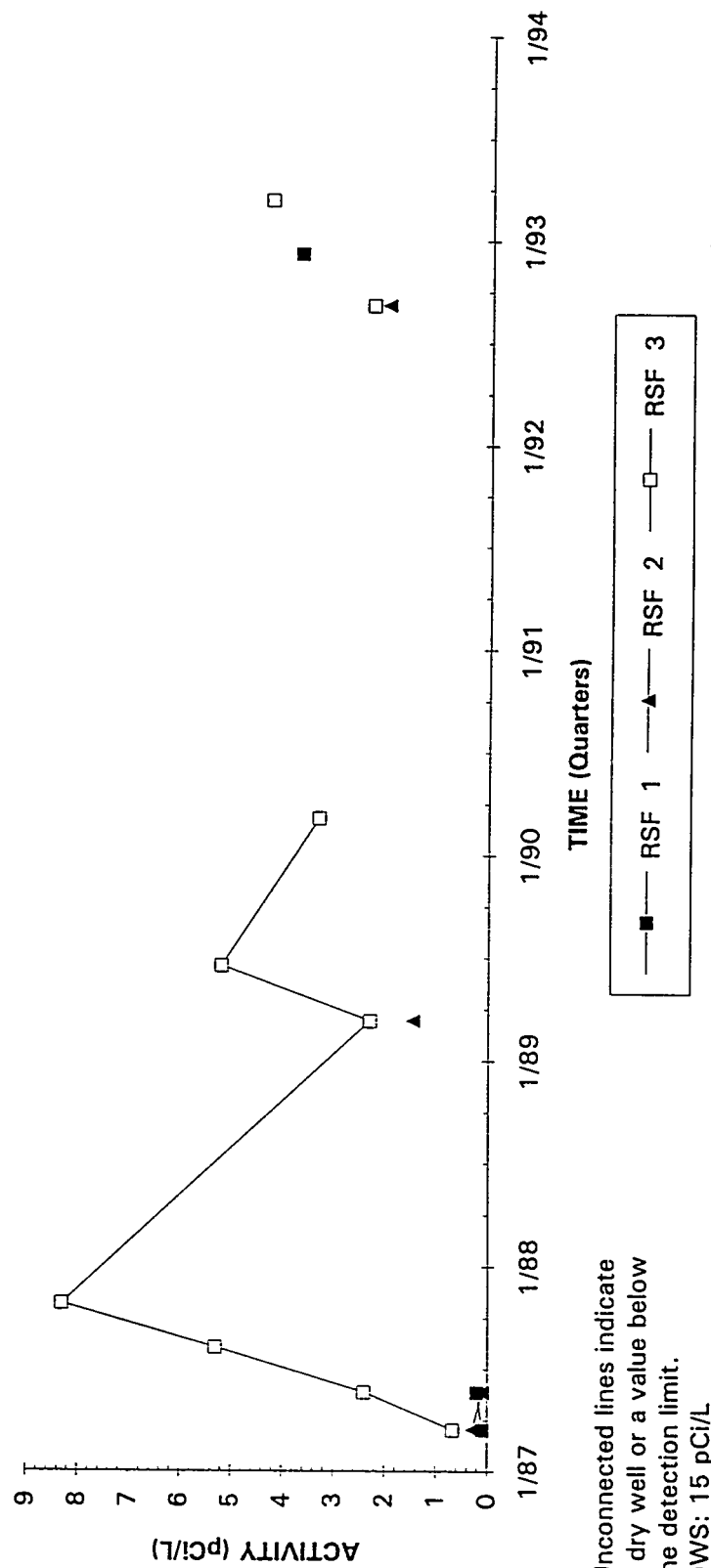


Gross Alpha Activities RSE Well Series (7 through 25)

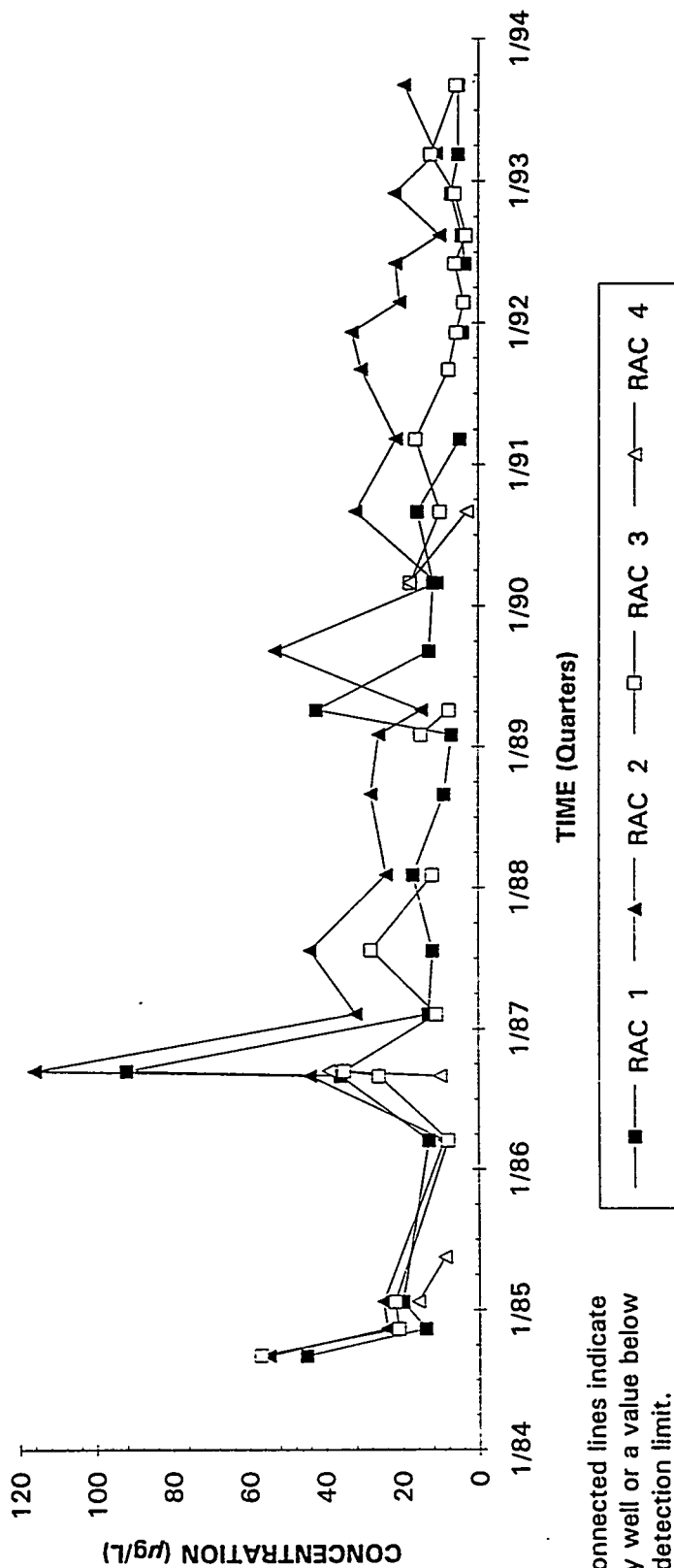


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 15 pCi/L

Gross Alpha Activities RSF Well Series

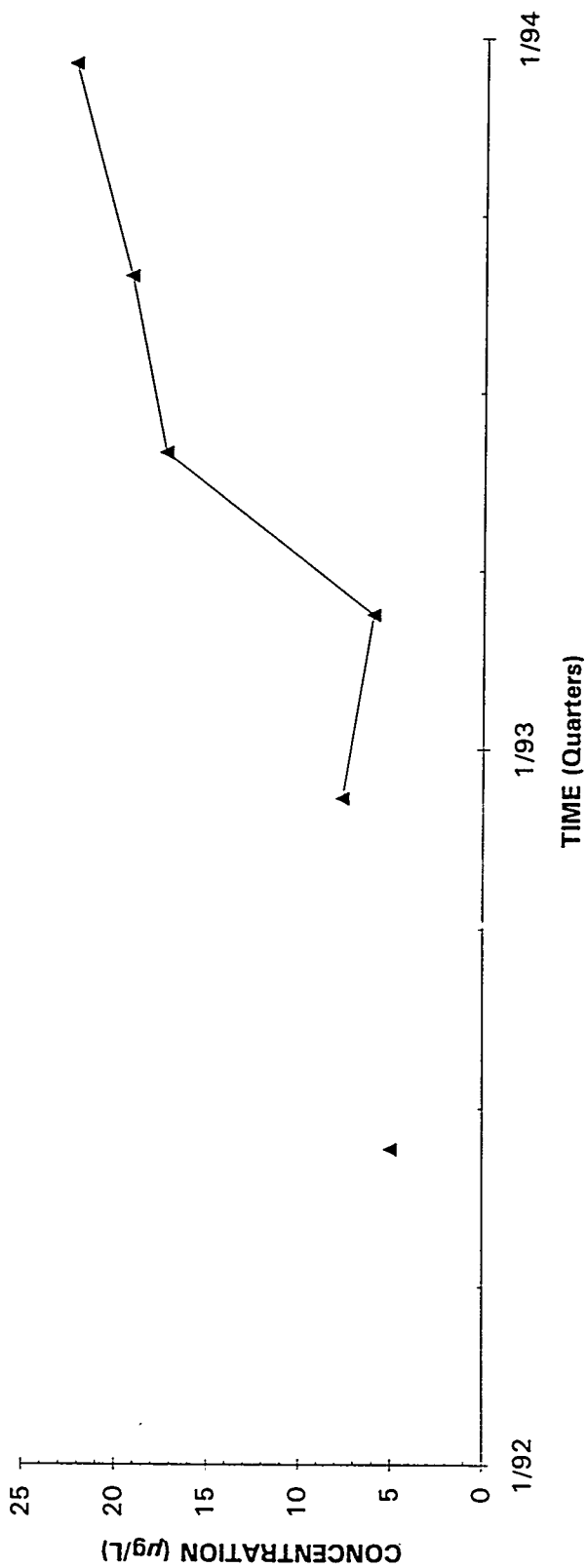


Lead Concentrations RAC Well Series



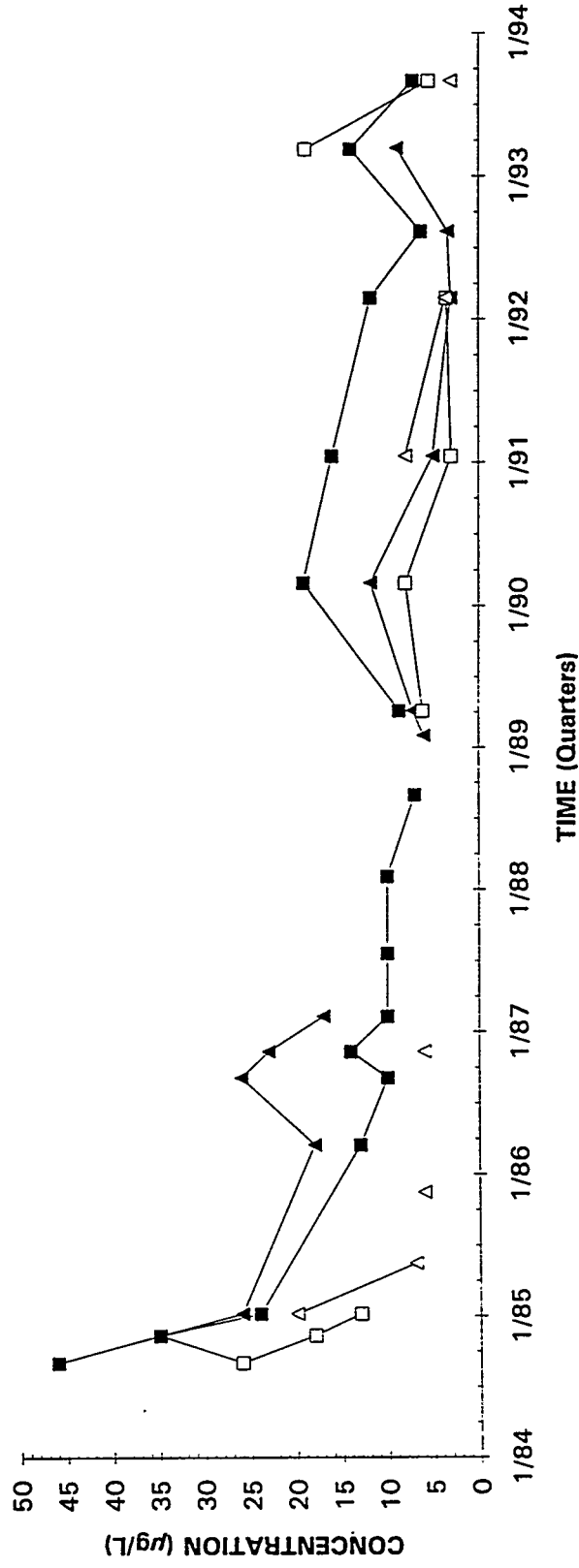
Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 µg/L

Lead Concentrations RCP Well Series

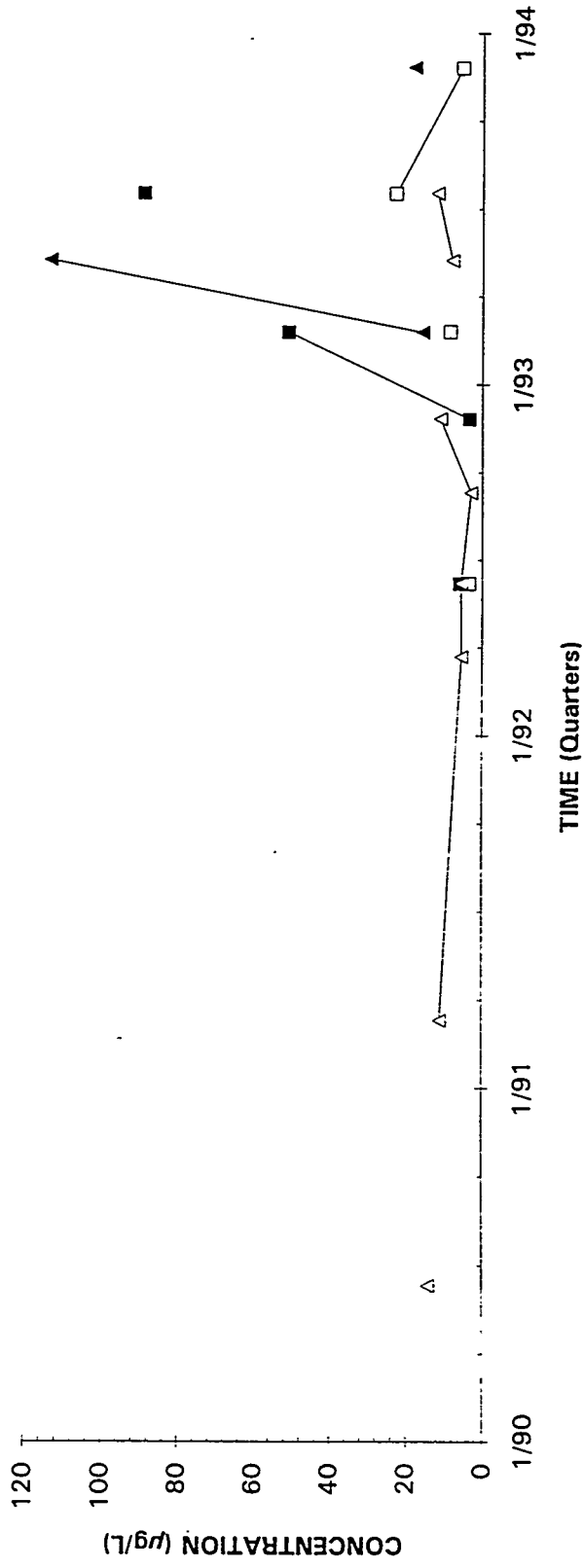


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 µg/L

Lead Concentrations RRP Well Series

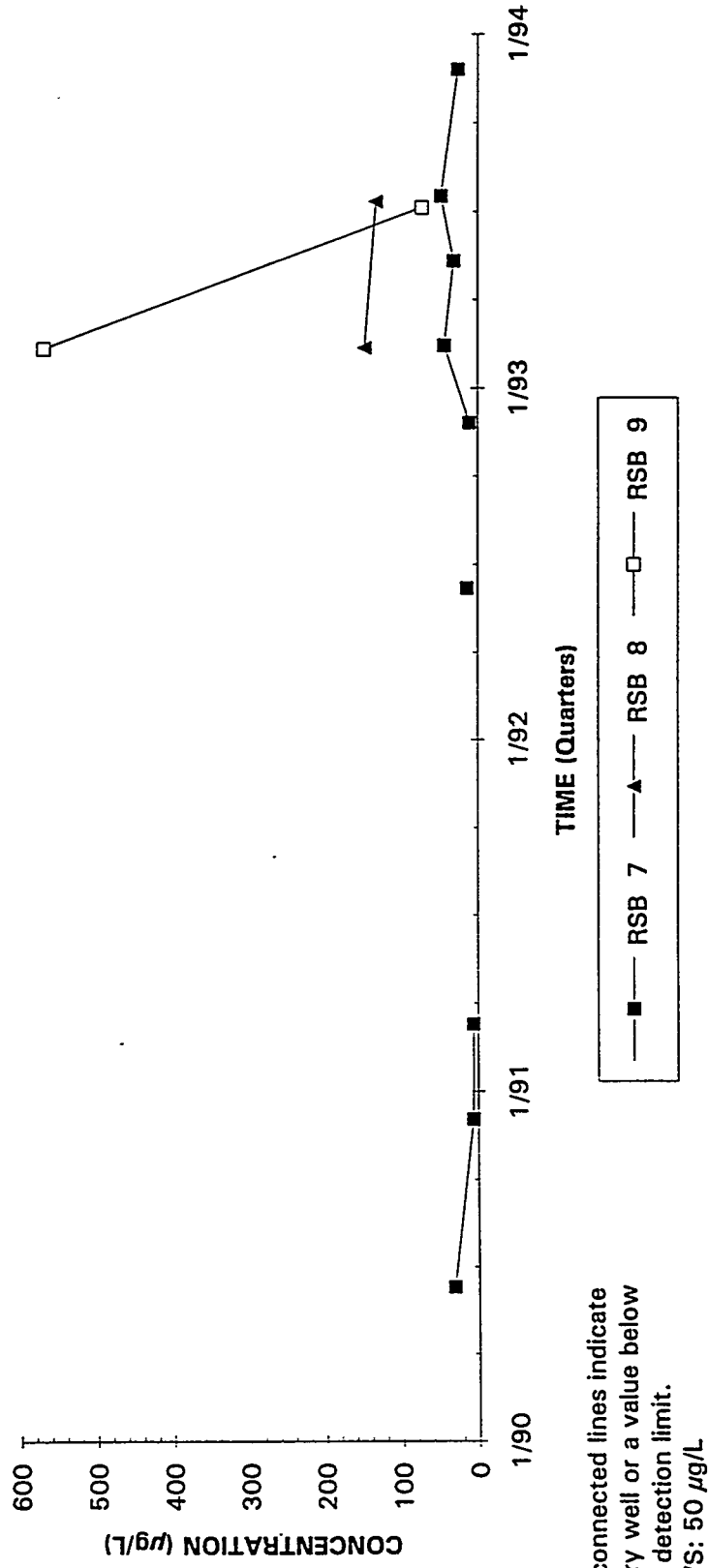


Lead Concentrations RSA Well Series

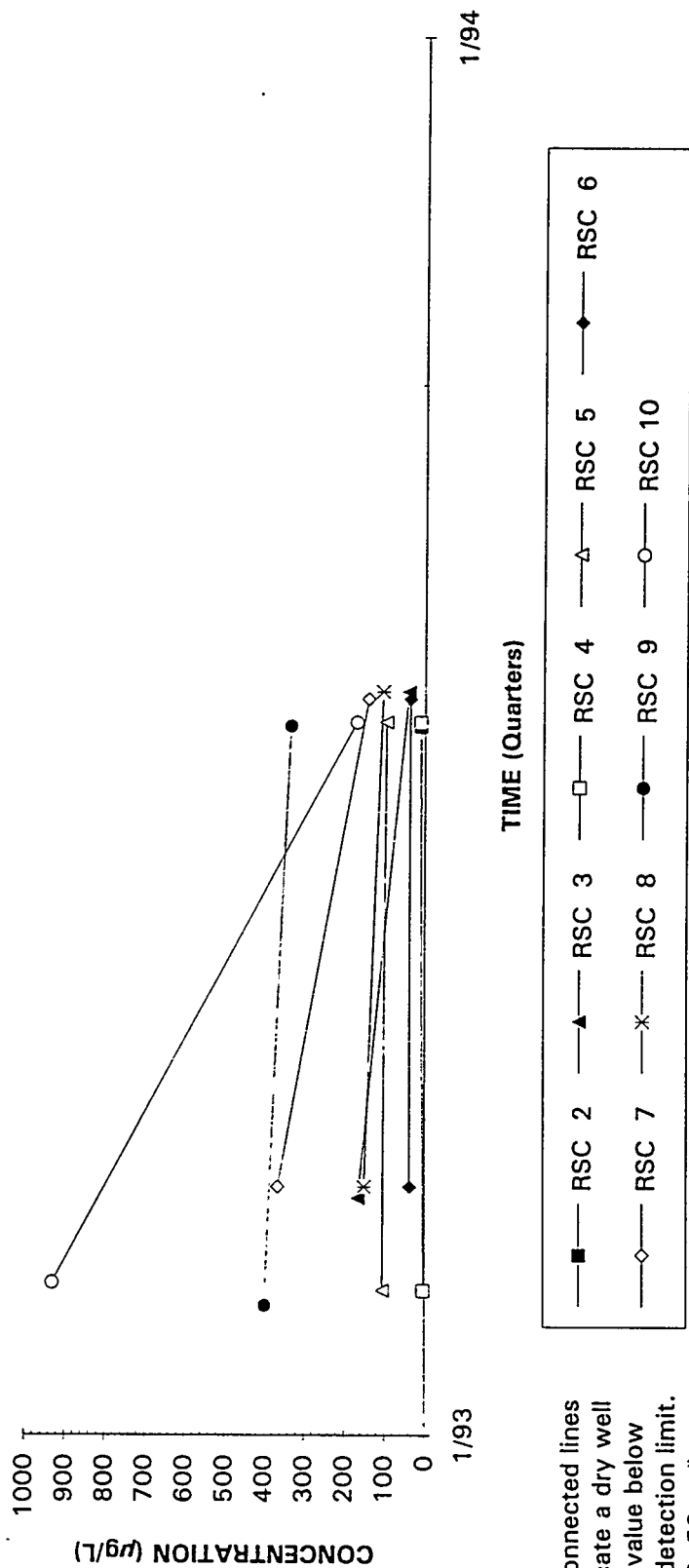


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 µg/L

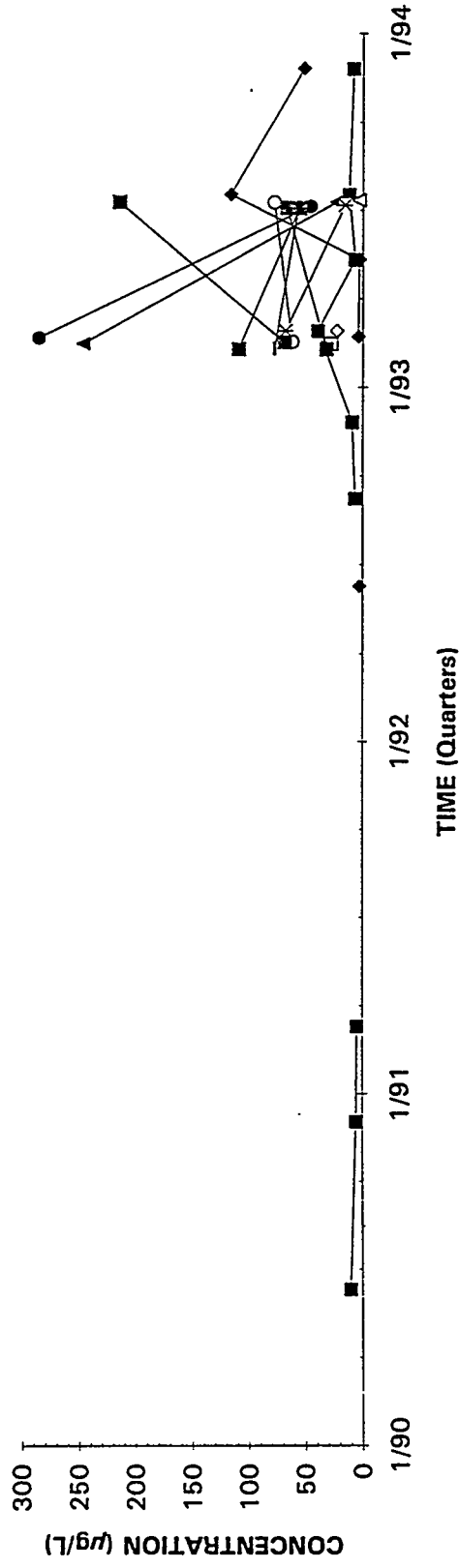
Lead Concentrations RSB Well Series



Lead Concentrations RSC Well Series

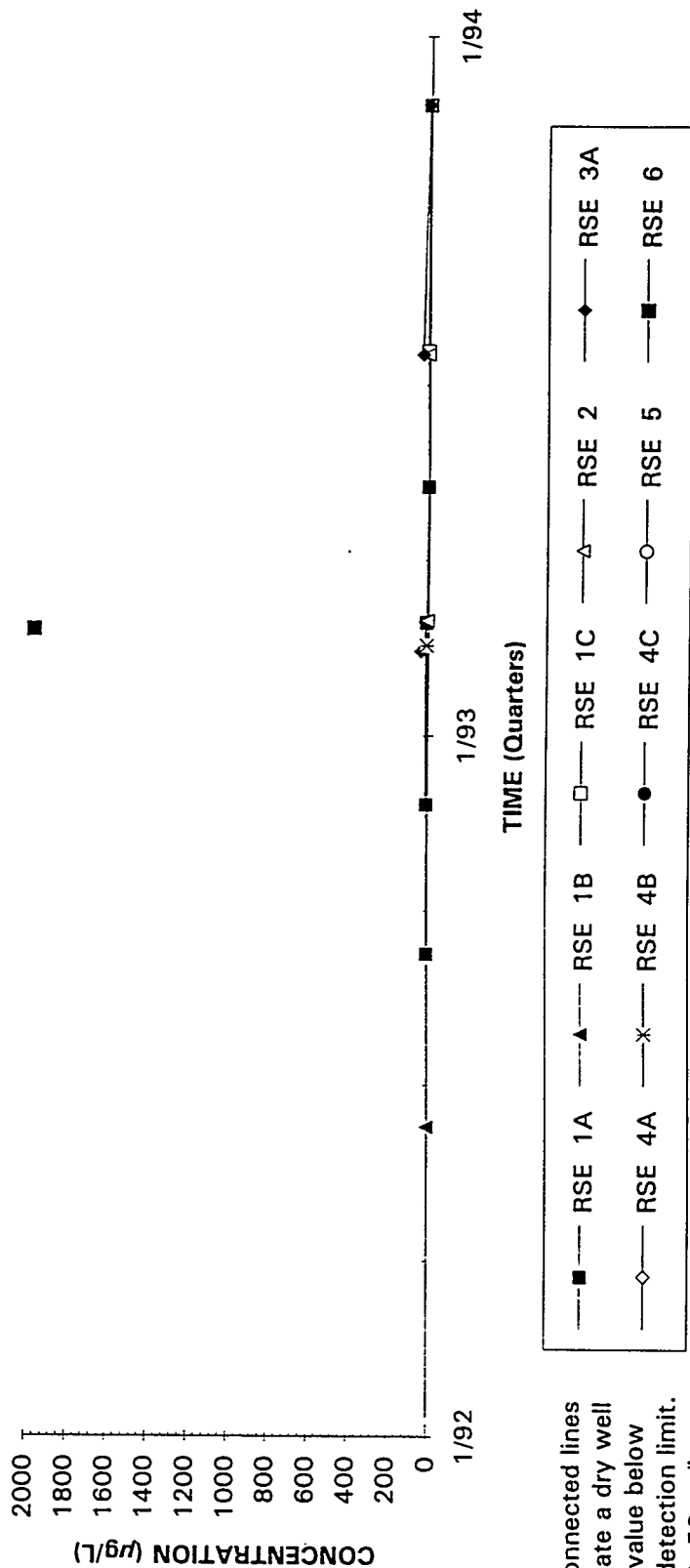


Lead Concentrations RSD Well Series

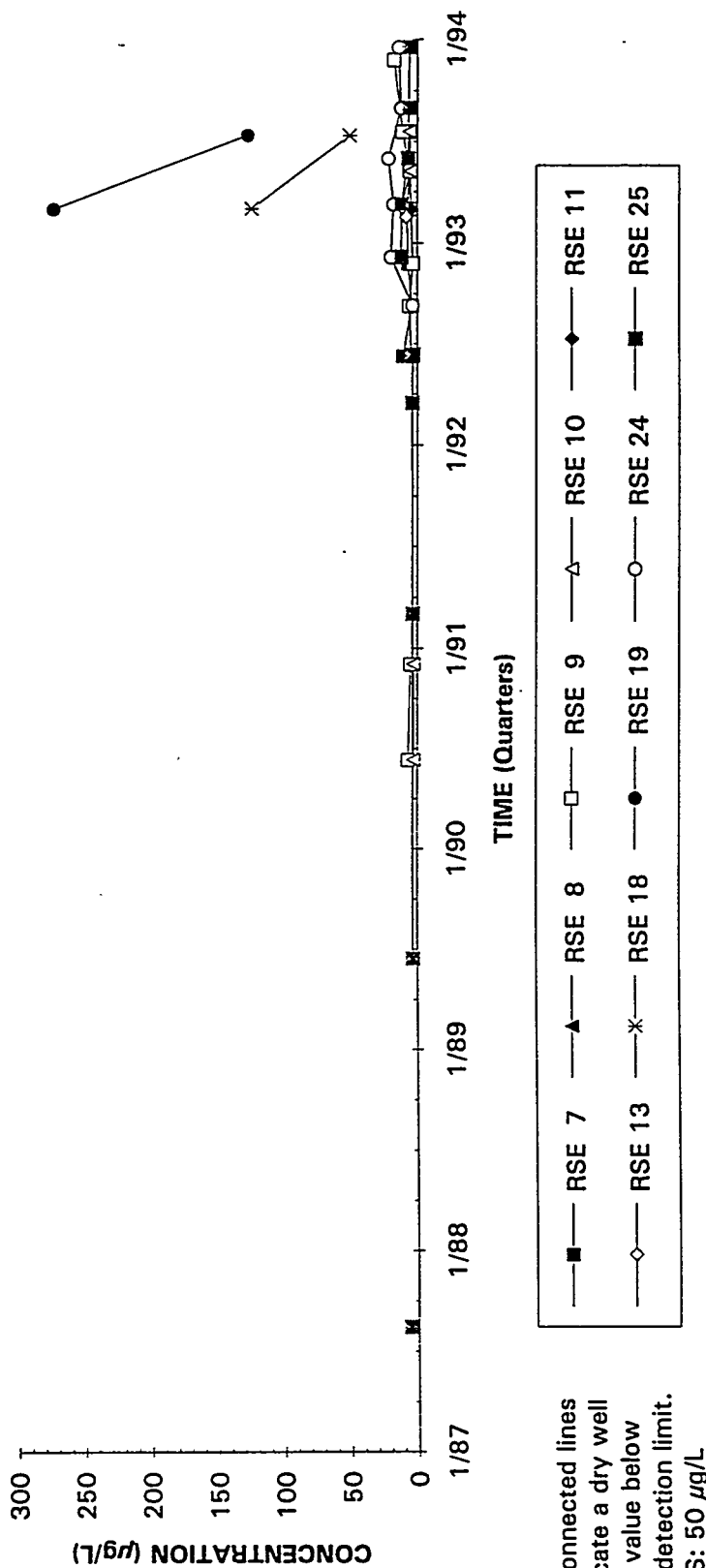


Unconnected lines
indicate a dry well
or a value below
the detection limit.
DWS: 50 µg/L

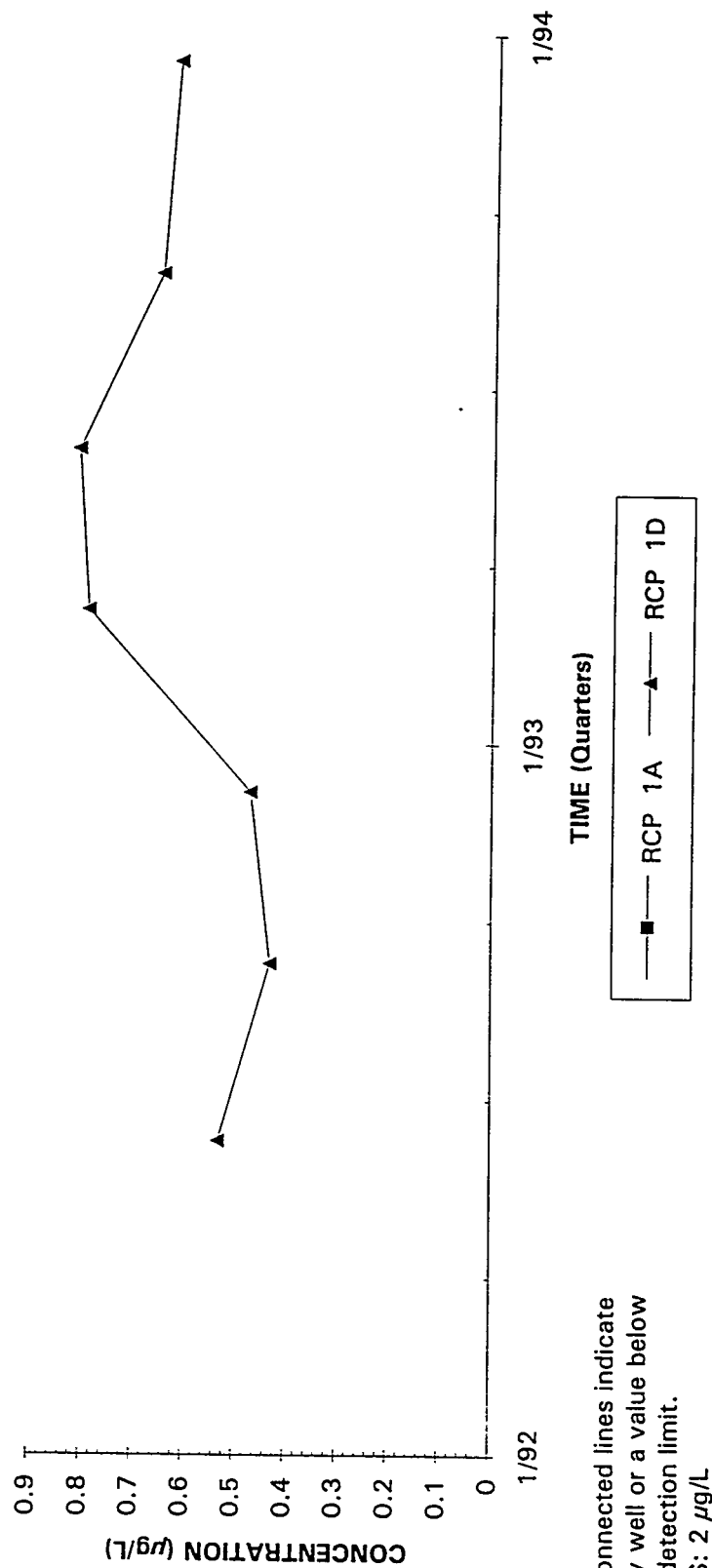
Lead Concentrations RSE Well Series (1A through 6)



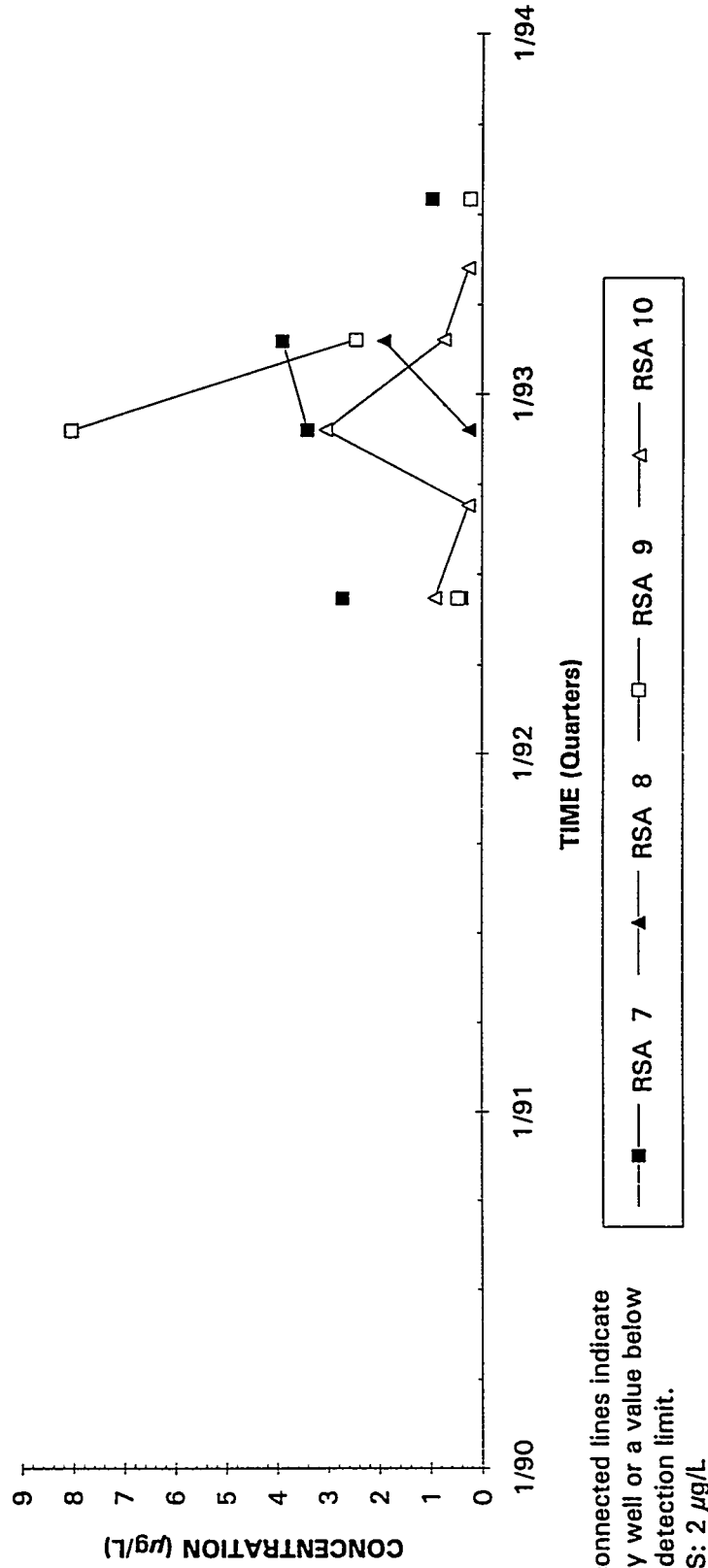
Lead Concentrations RSE Well Series (7 through 25)



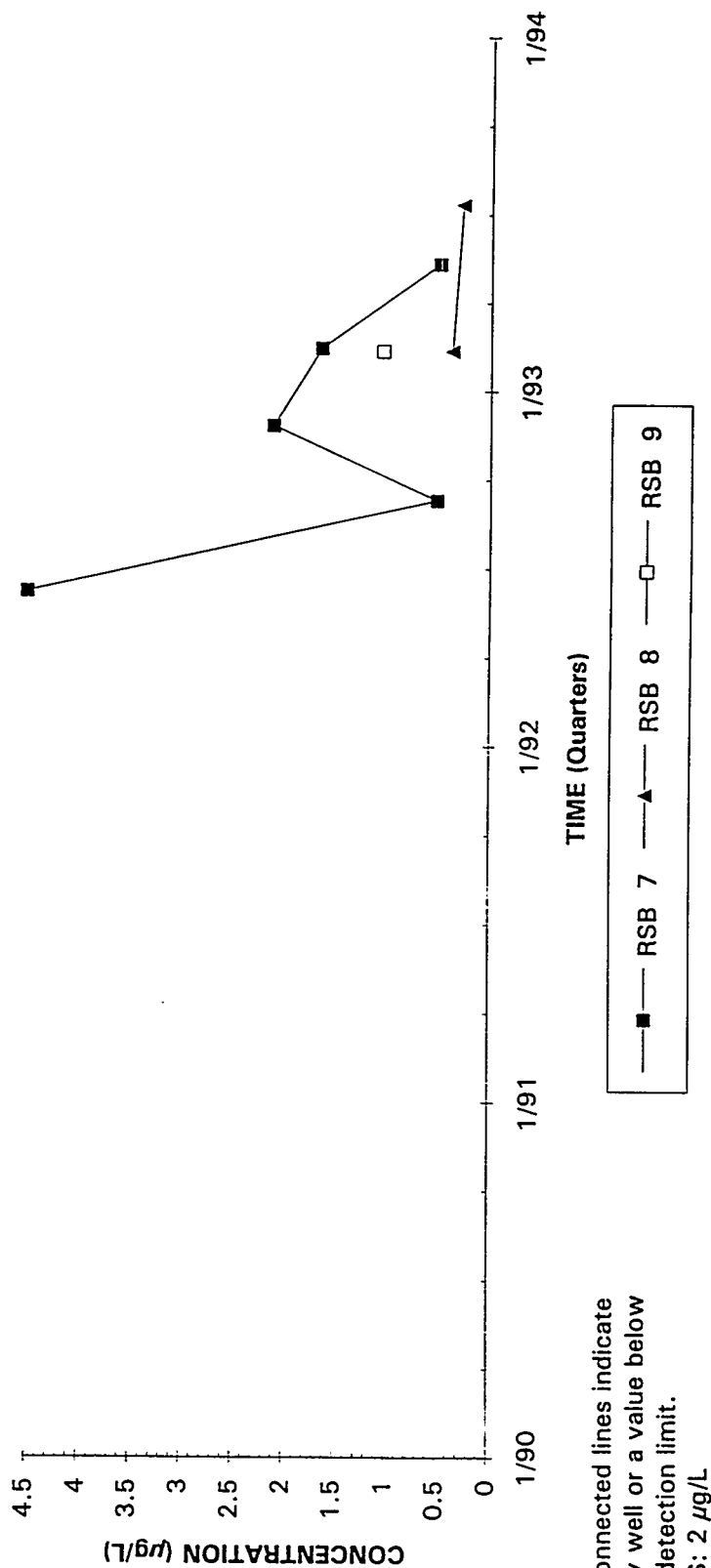
Mercury Concentrations RCP Well Series



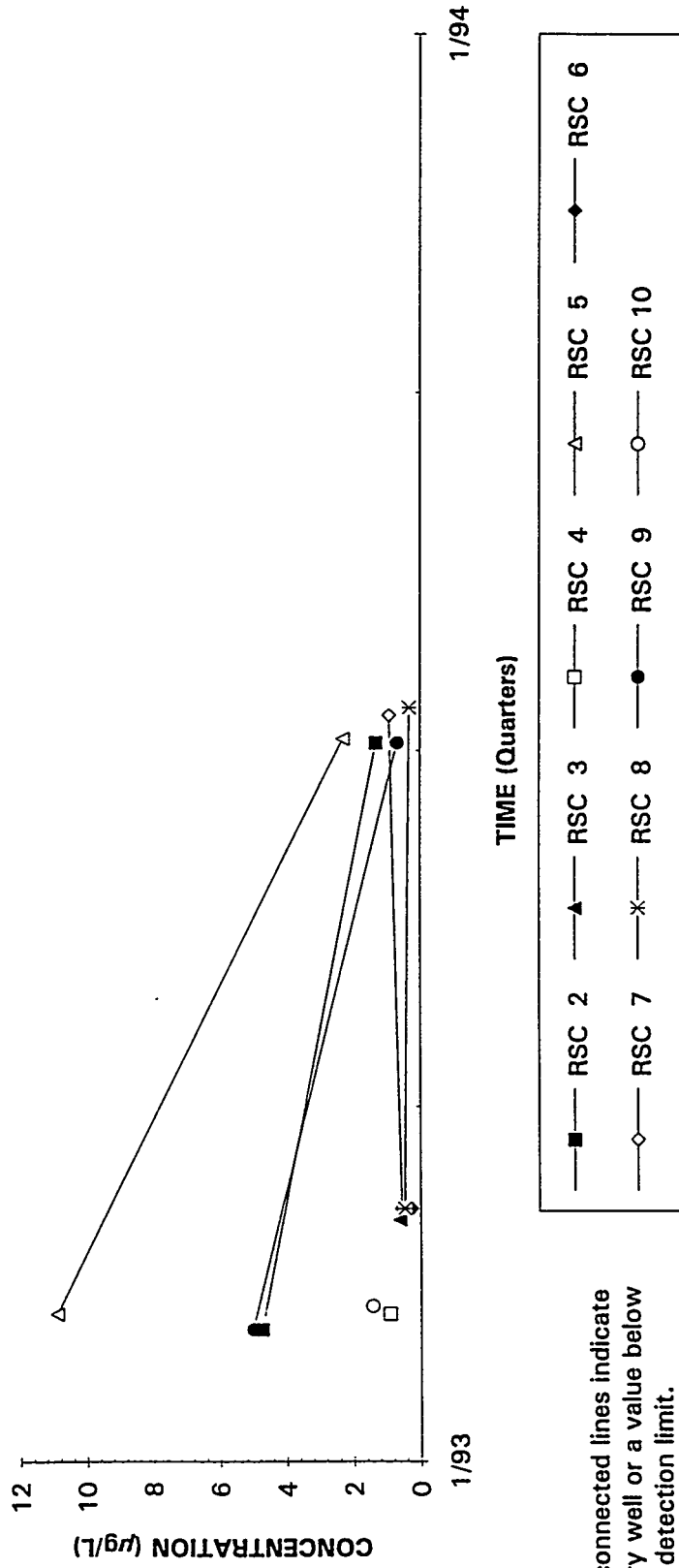
Mercury Concentrations RSA Well Series



Mercury Concentrations RSB Well Series

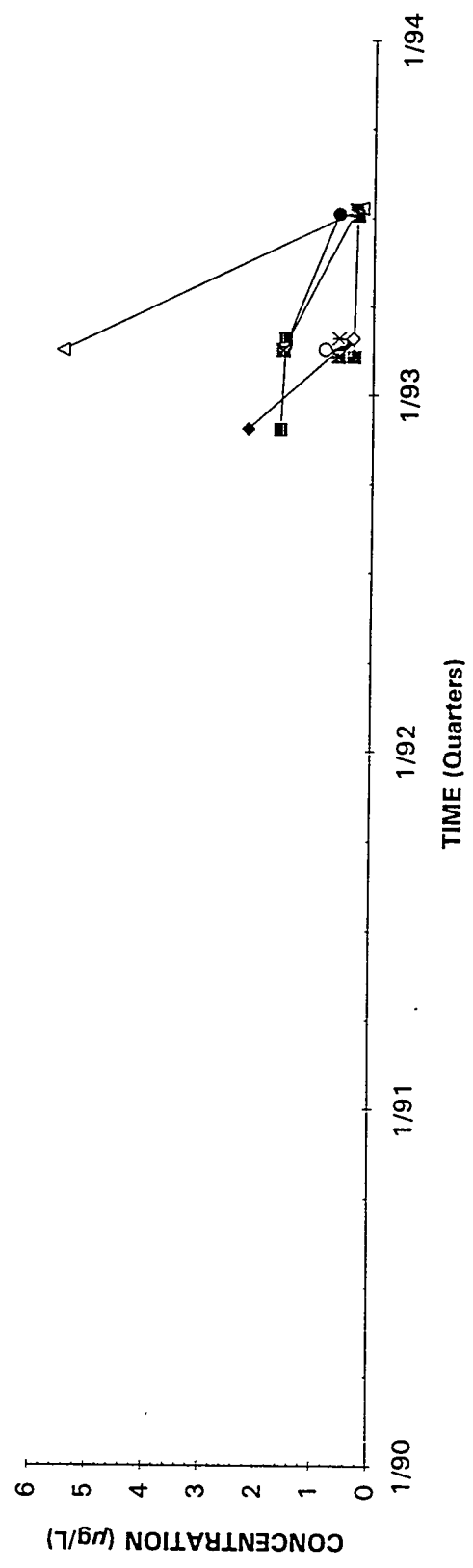


Mercury Concentrations RSC Well Series



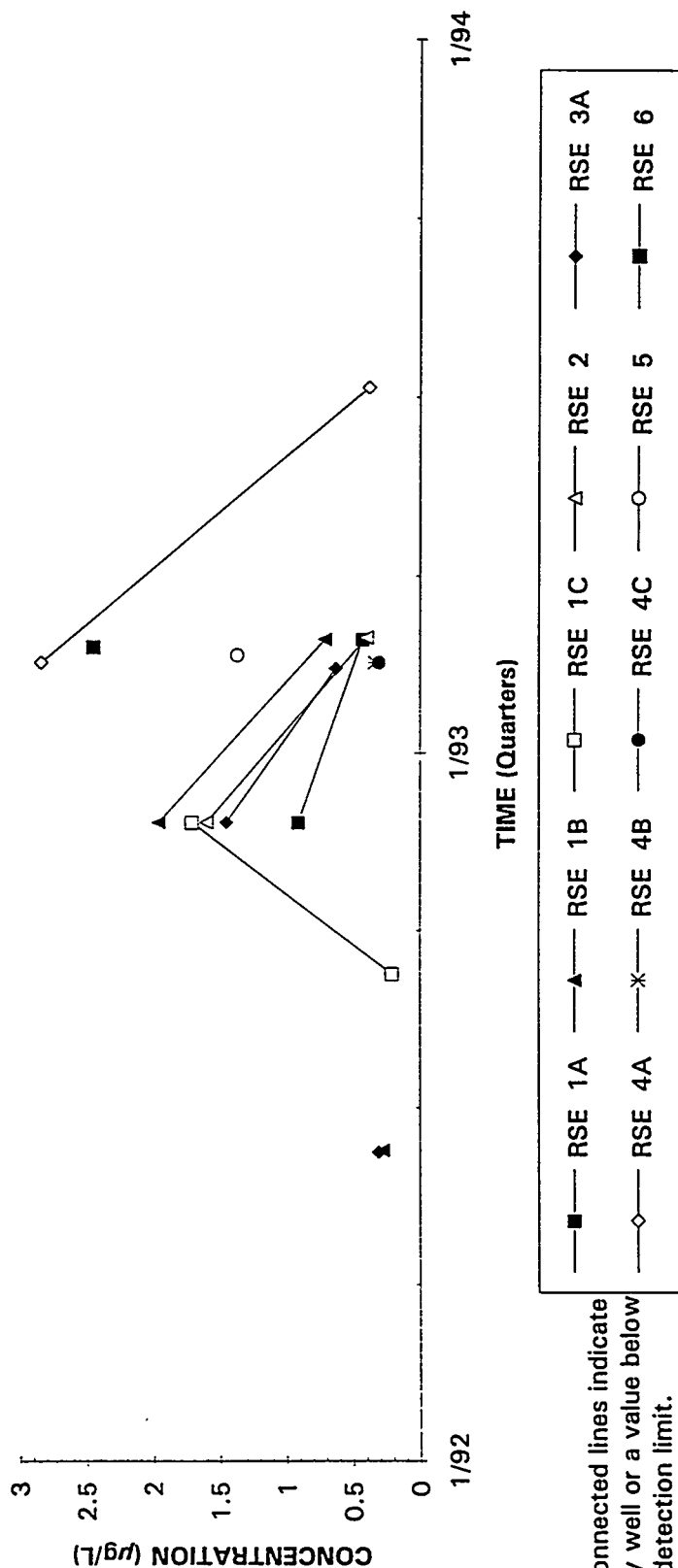
Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 2 µg/L

Mercury Concentrations RSD Well Series

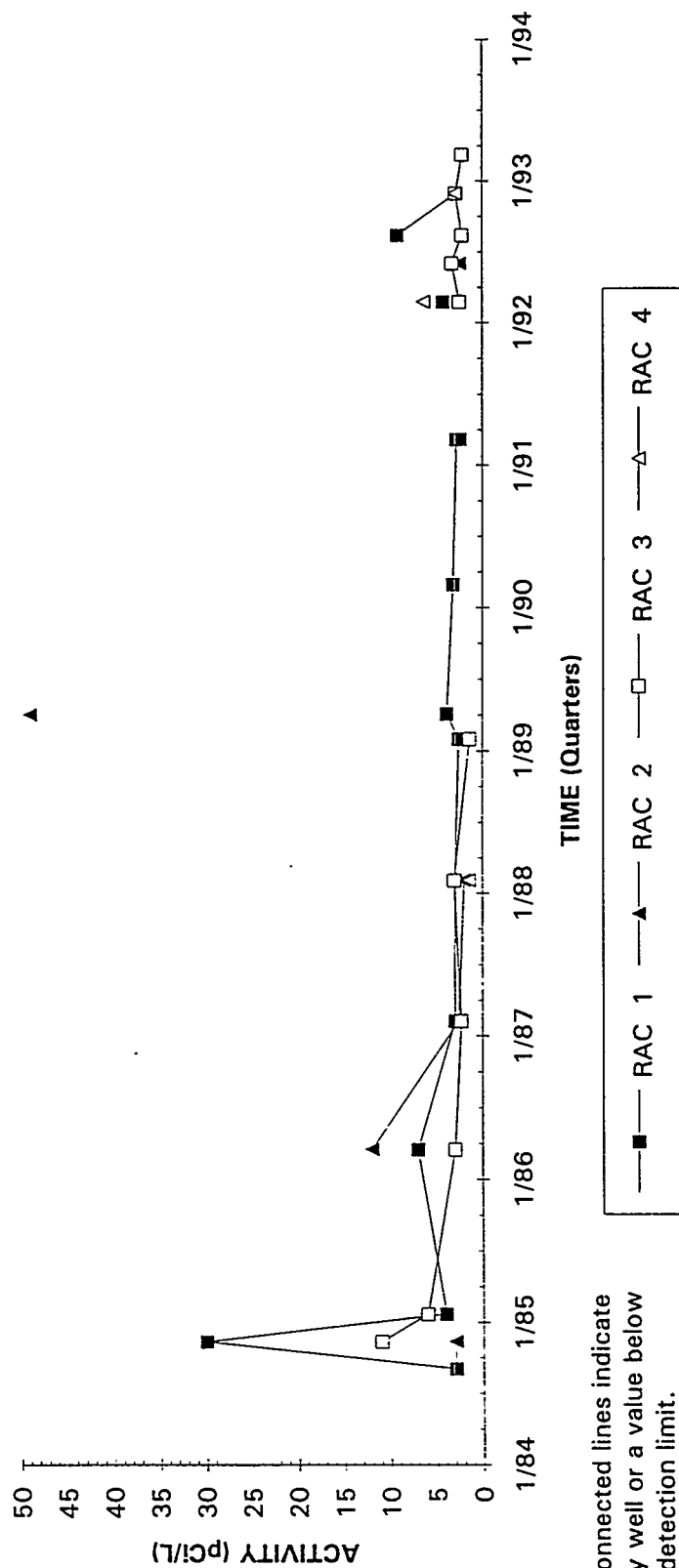


Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 2 µg/L

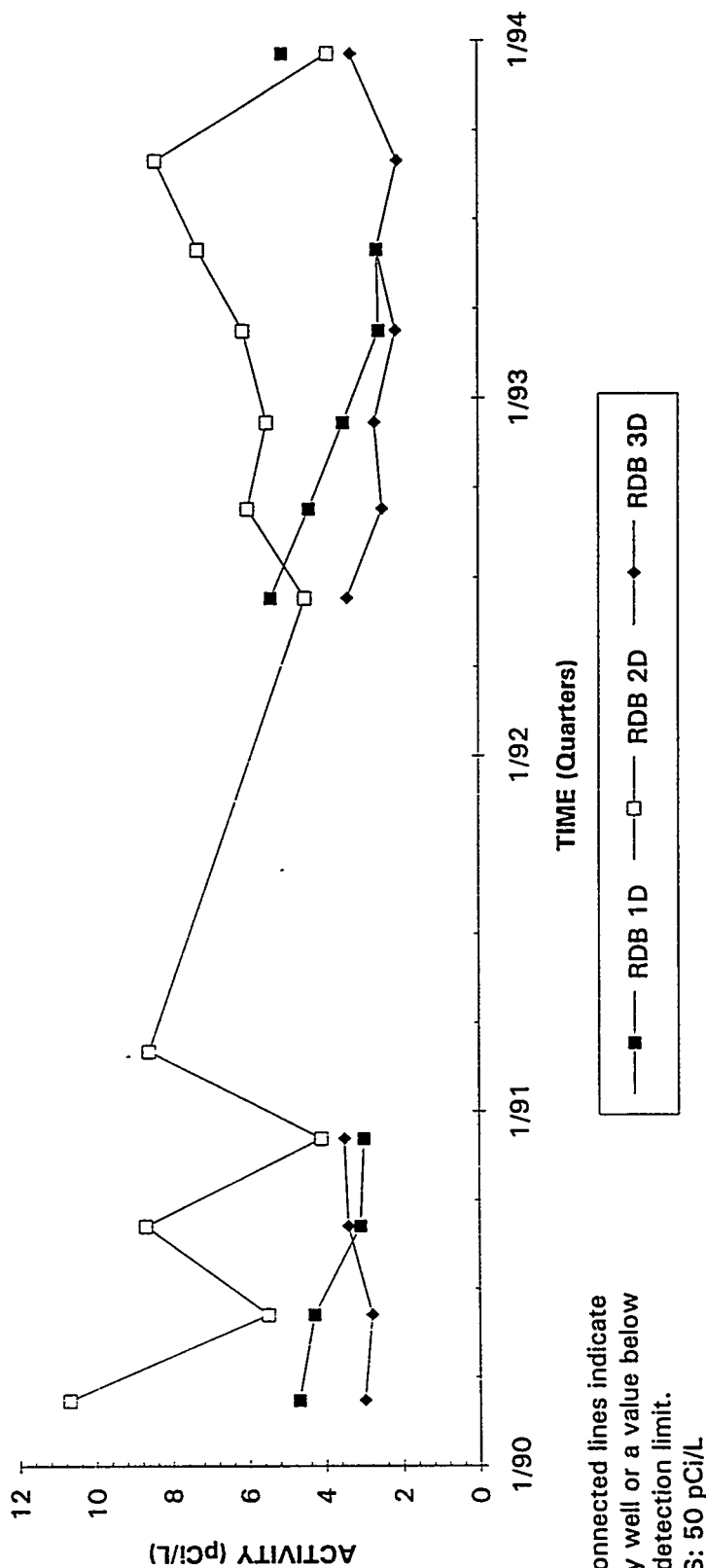
Mercury Concentrations RSE Well Series (1A through 6)



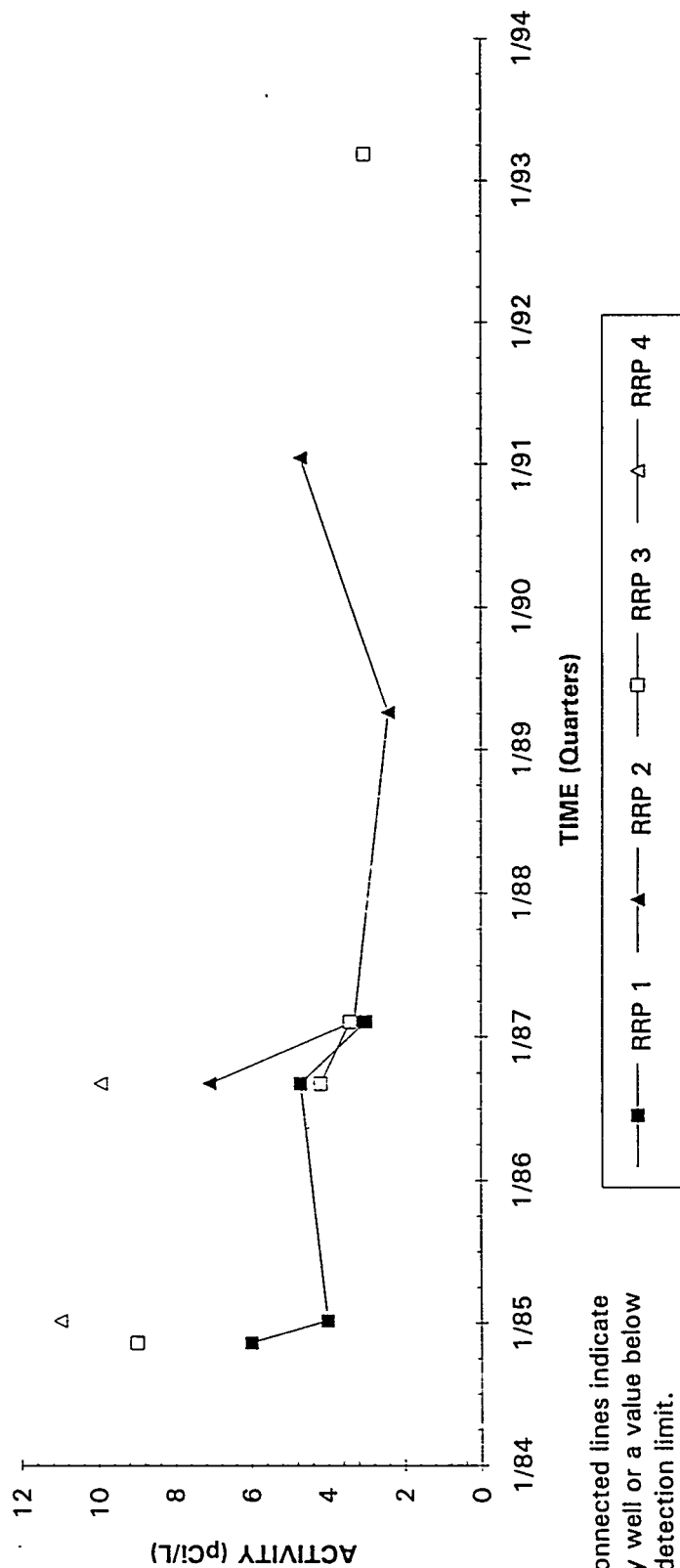
Nonvolatile Beta Activities RAC Well Series



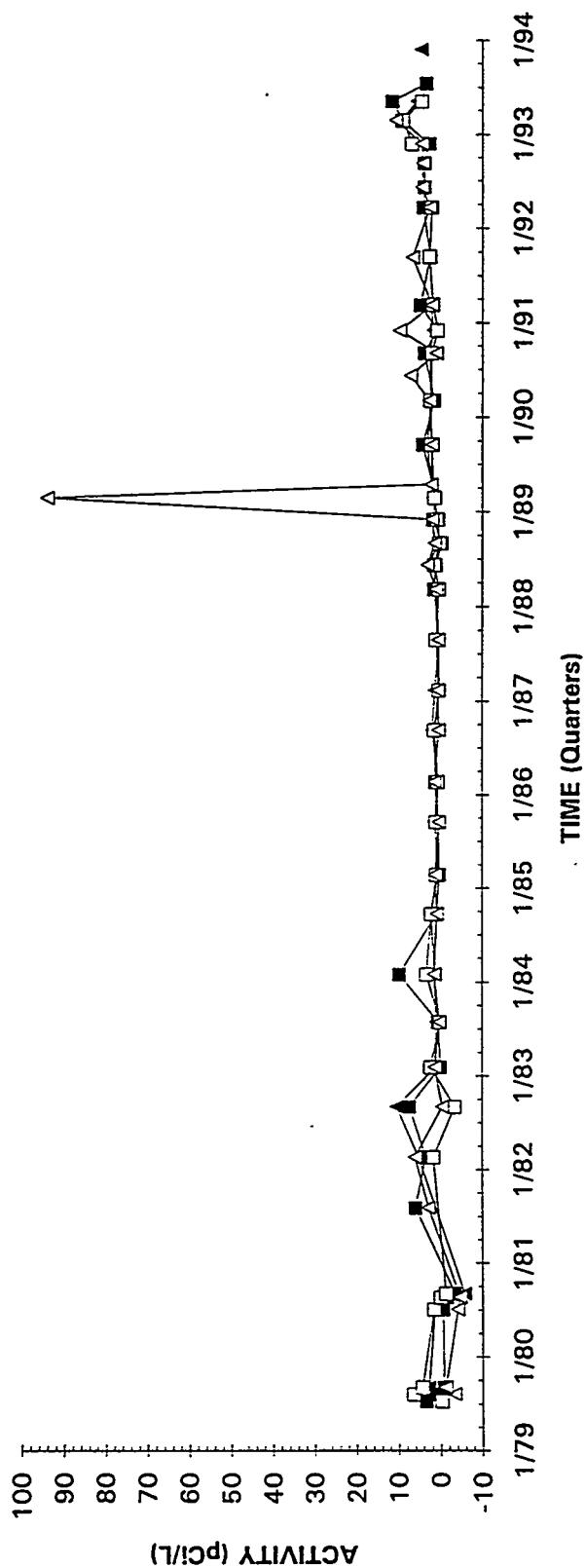
Nonvolatile Beta Activities RDB Well Series



Nonvolatile Beta Activities RRP Well Series

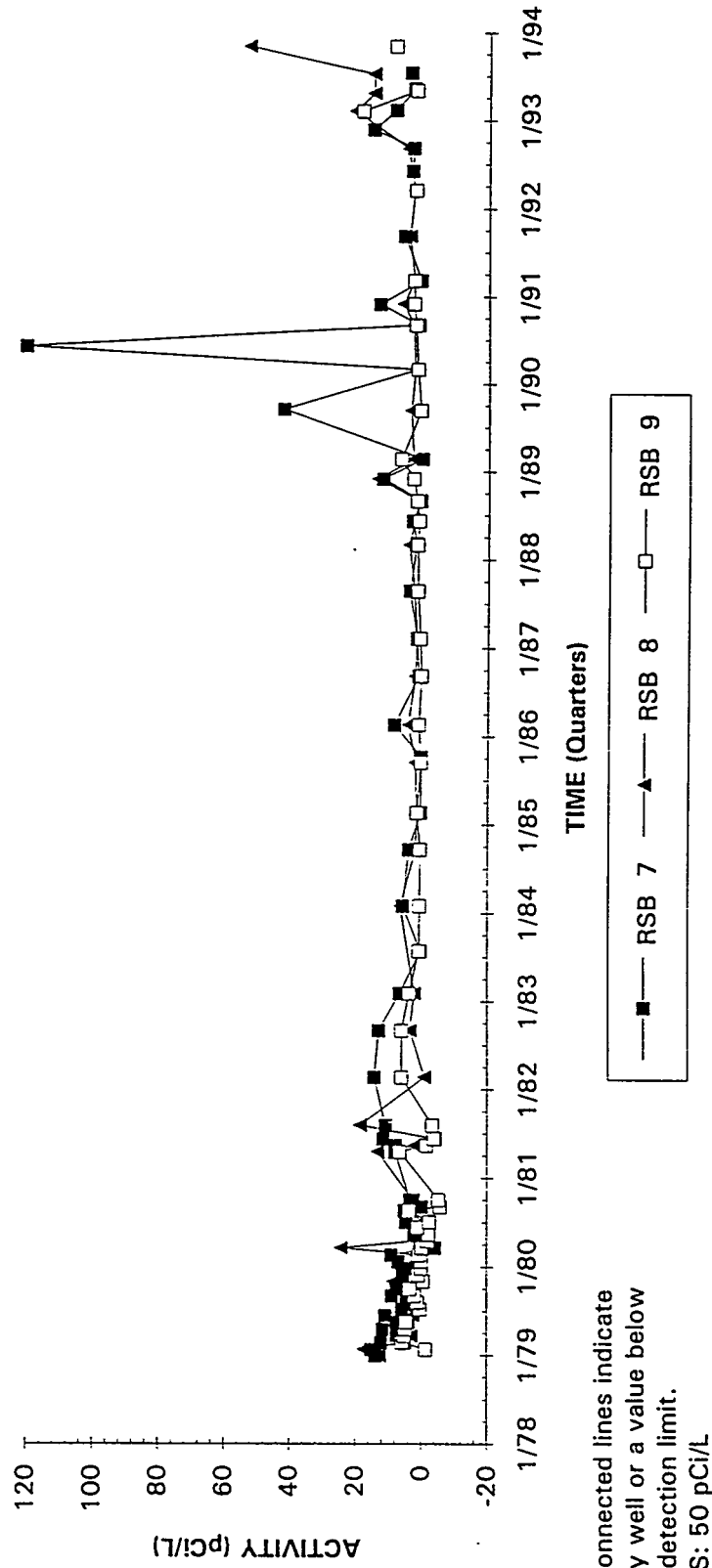


Nonvolatile Beta Activities RSA Well Series

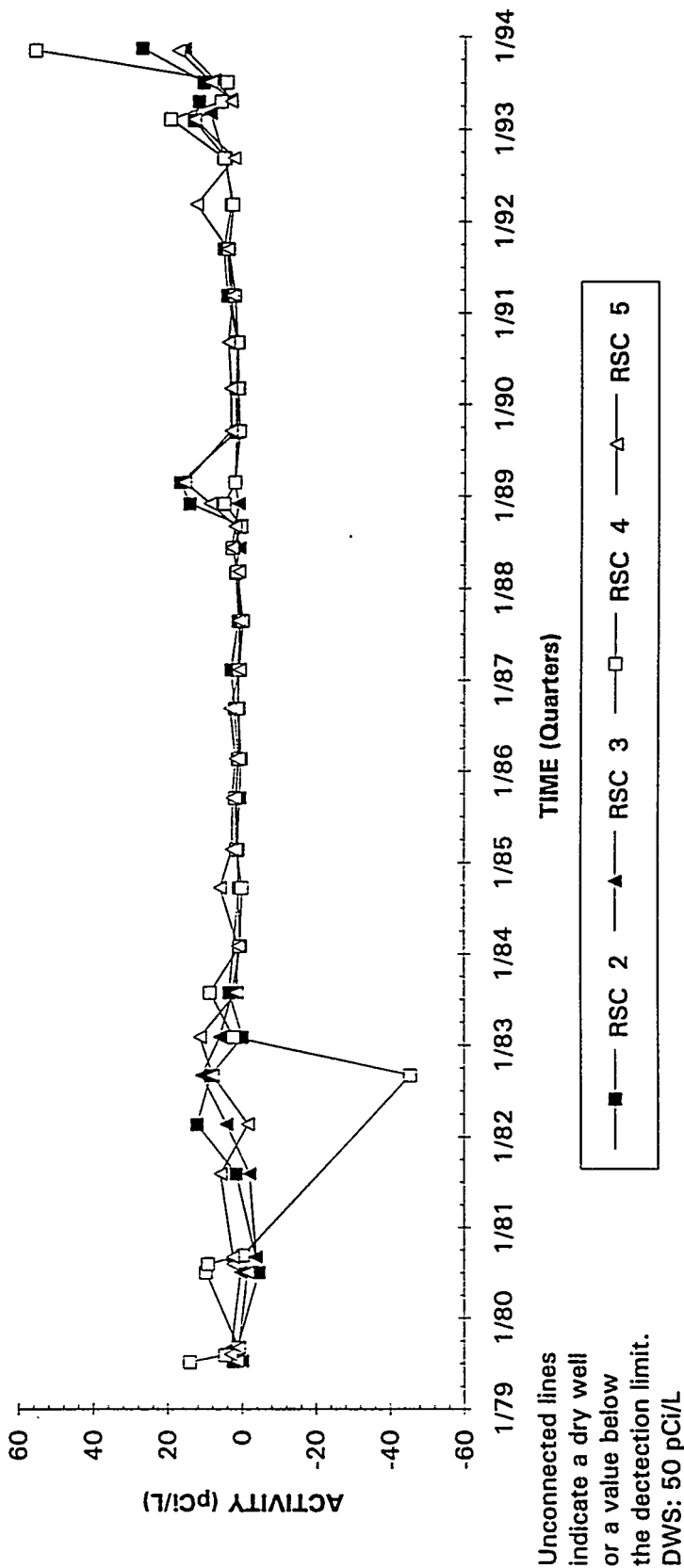


Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 50 pCi/L

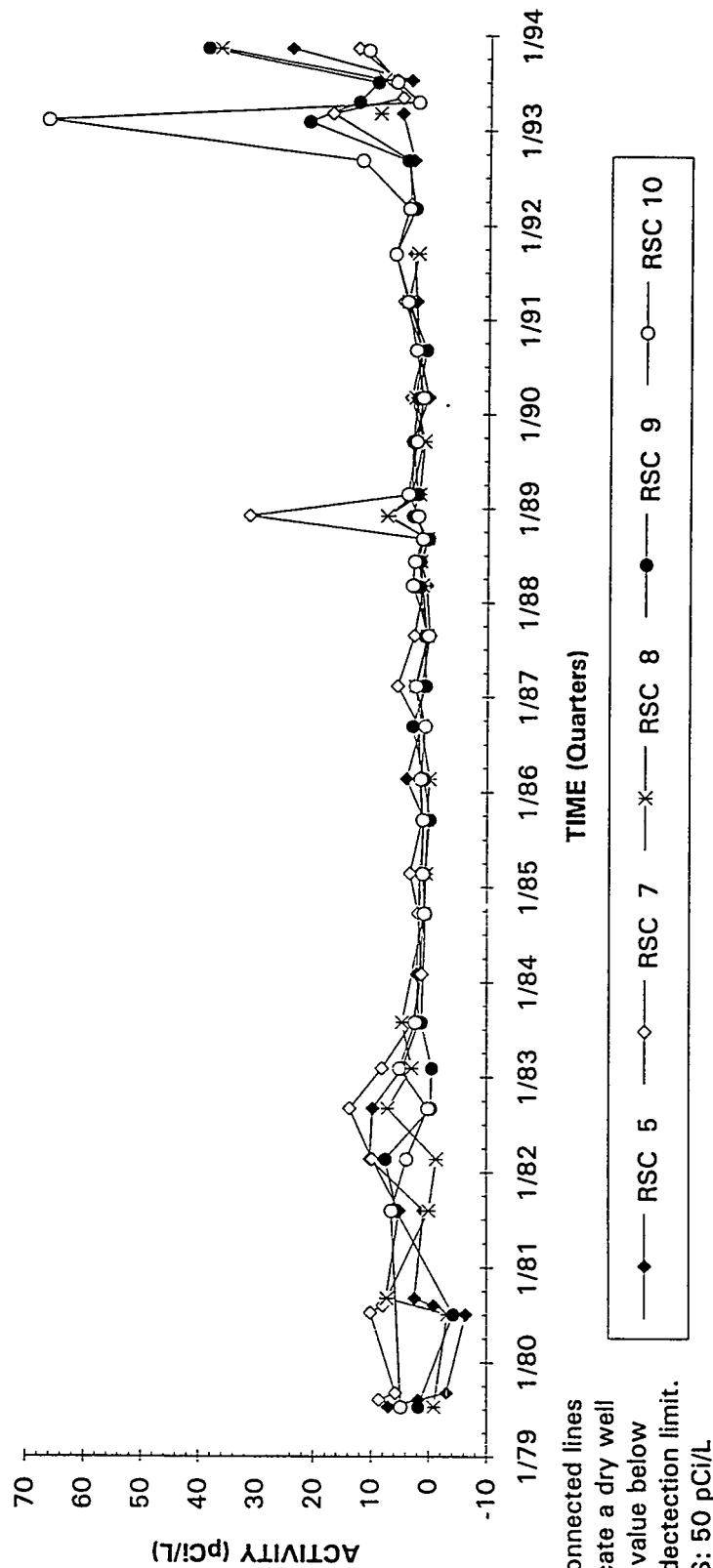
Nonvolatile Beta Activities RSB Well Series



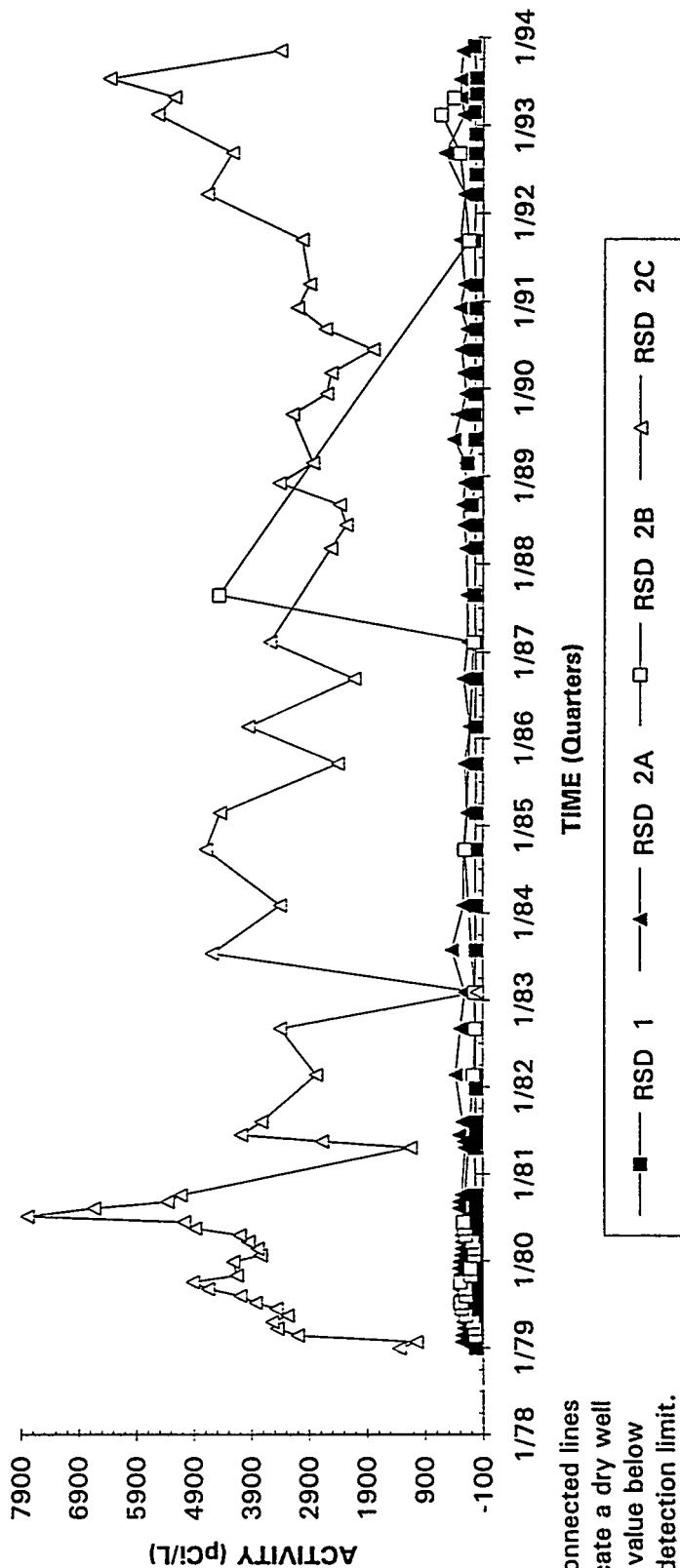
Nonvolatile Beta Activities RSC Well Series (2 through 5)



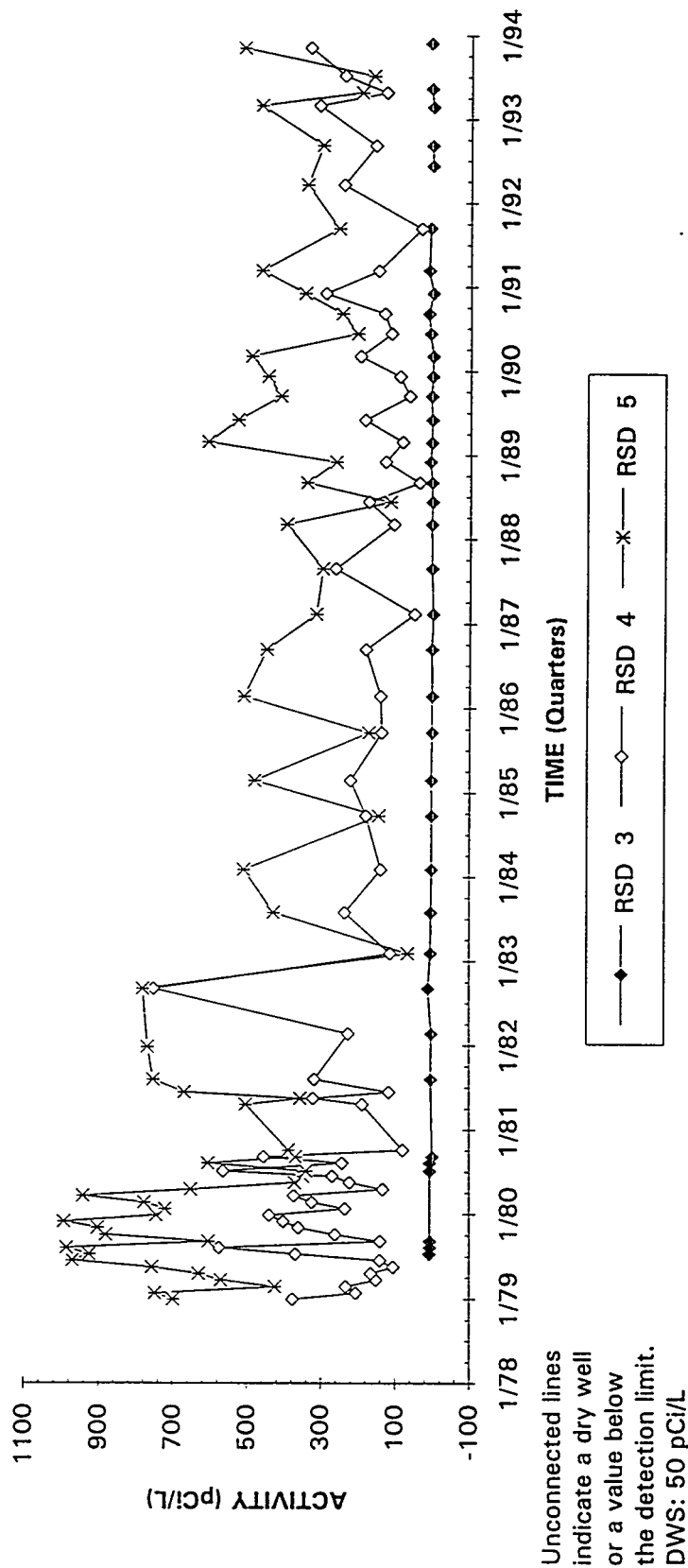
Nonvolatile Beta Activities RSC Well Series (6 through 10)



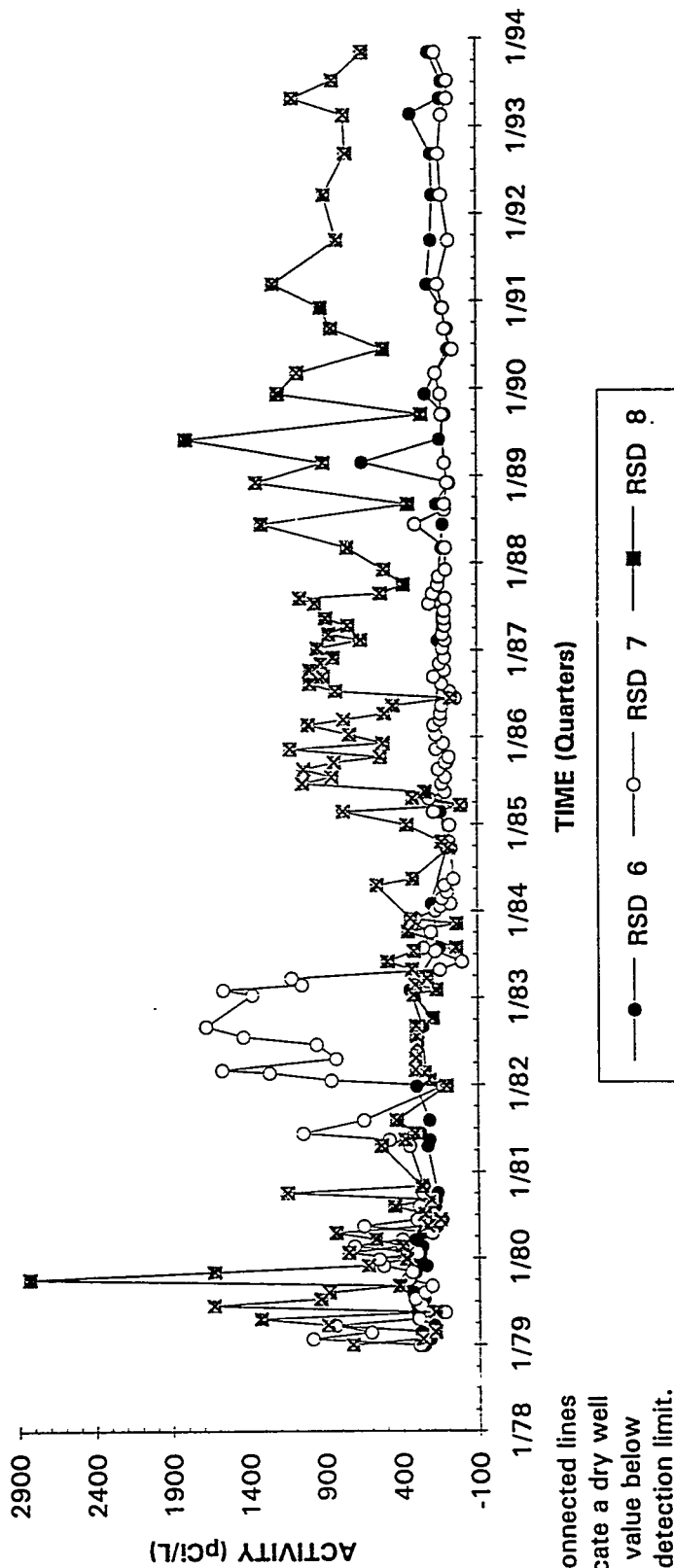
Nonvolatile Beta Activities RSD Well Series (1 through 2)



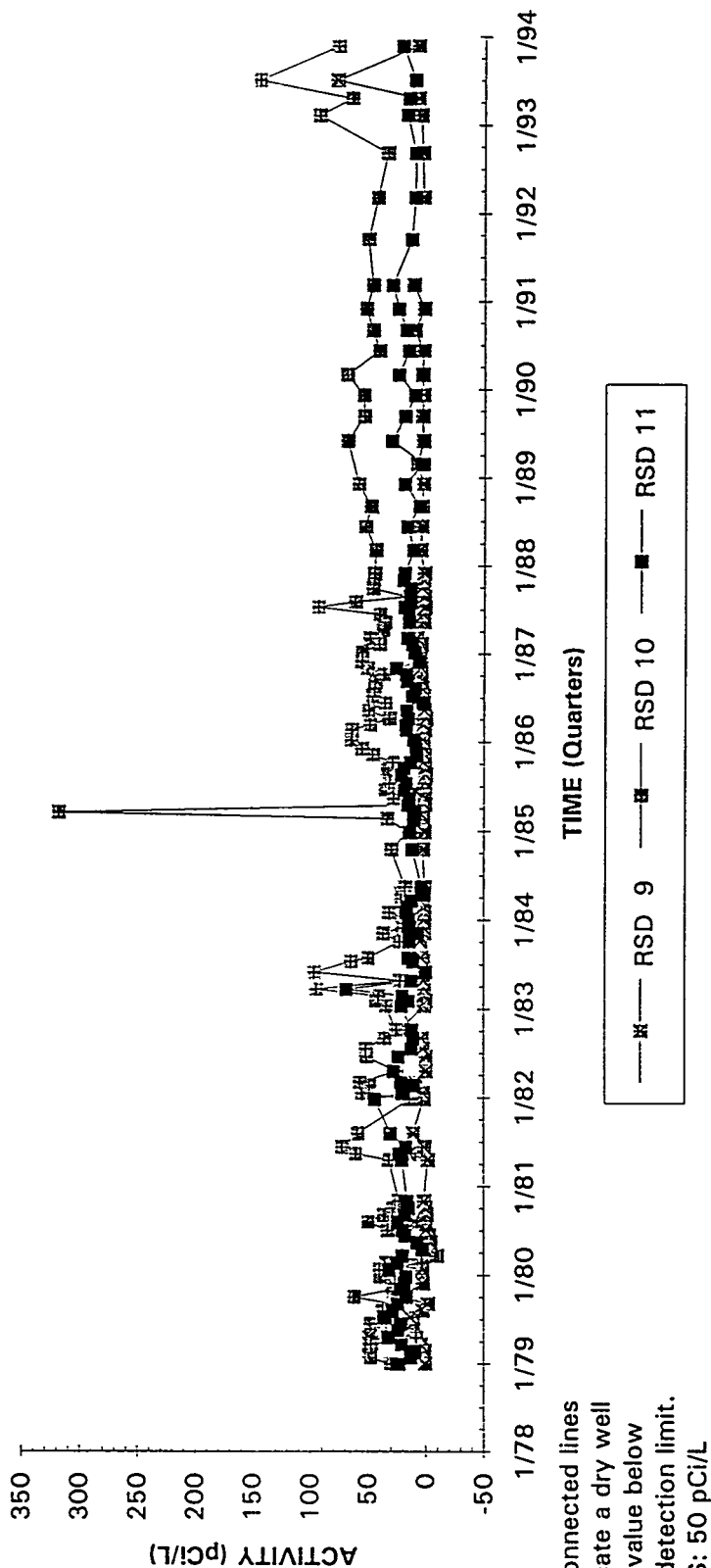
Nonvolatile Beta Activities RSD Well Series (3 through 5)



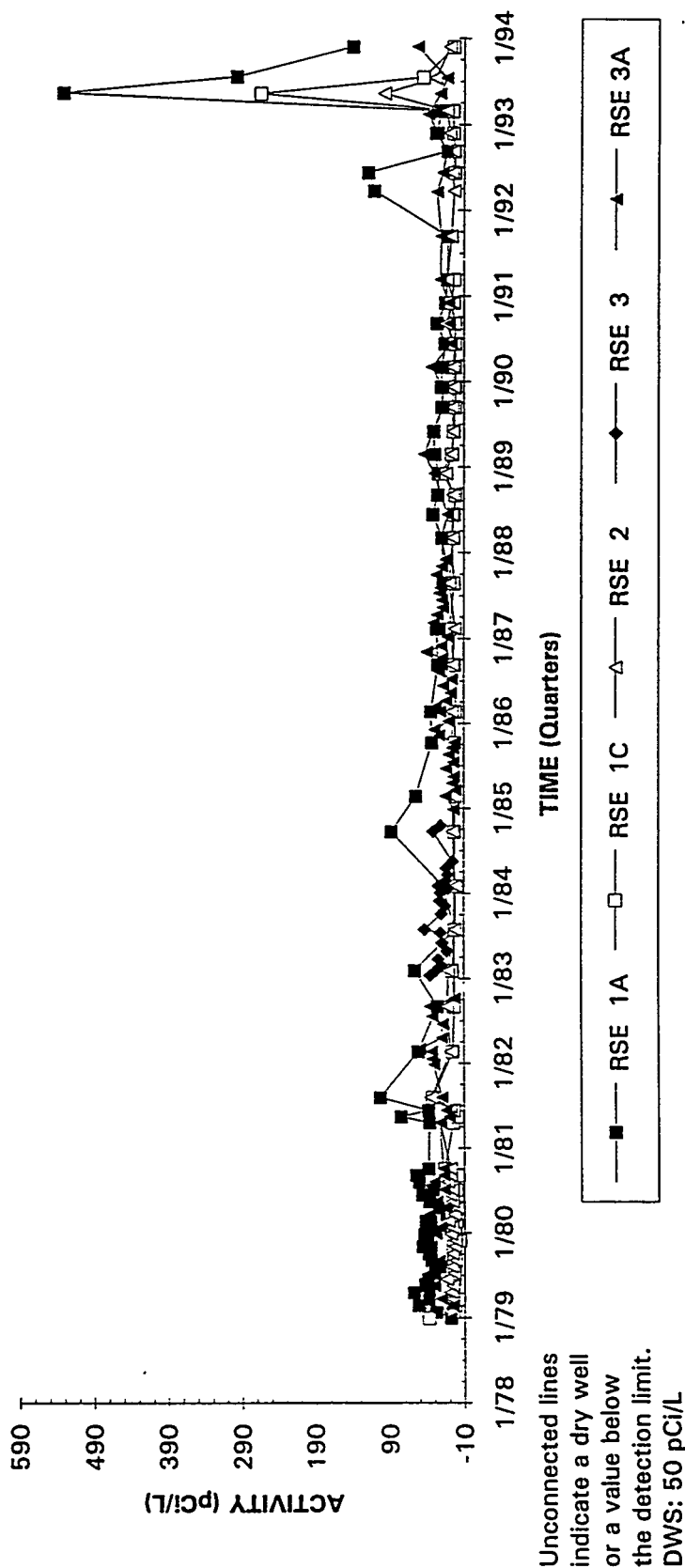
Nonvolatile Beta Activities RSD Well Series (6 through 8)



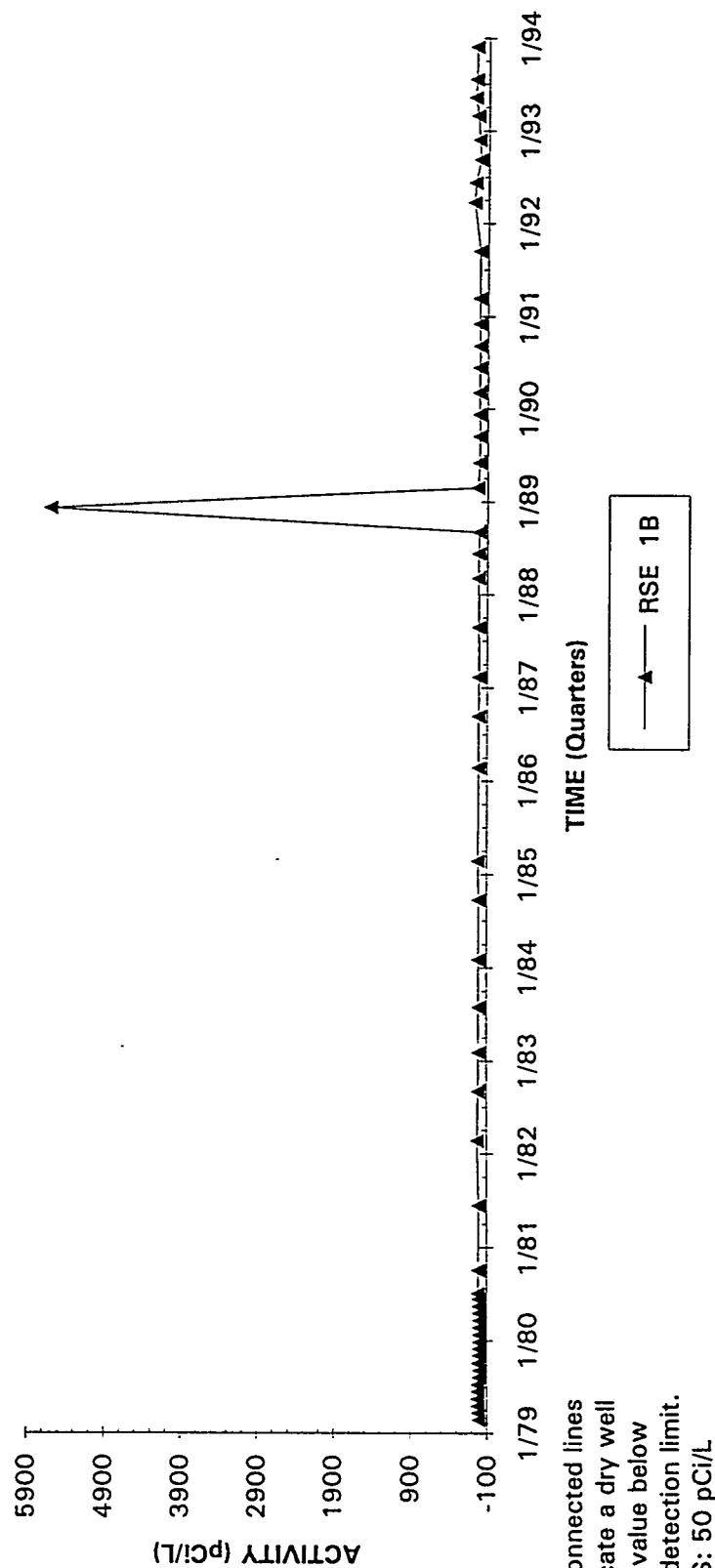
Nonvolatile Beta Activities RSD Well Series (9 through 11)



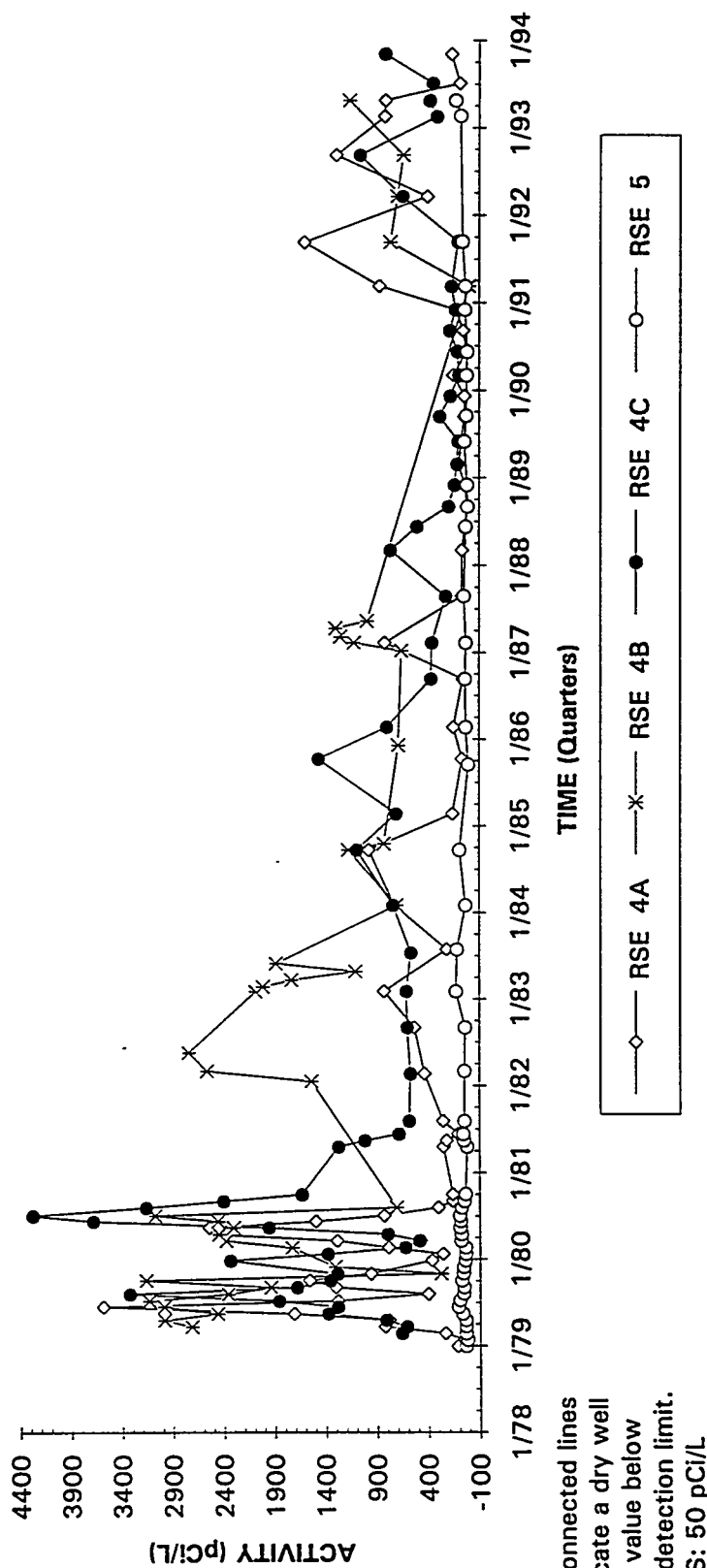
Nonvolatile Beta Activities RSE Well Series (1A through 3A)



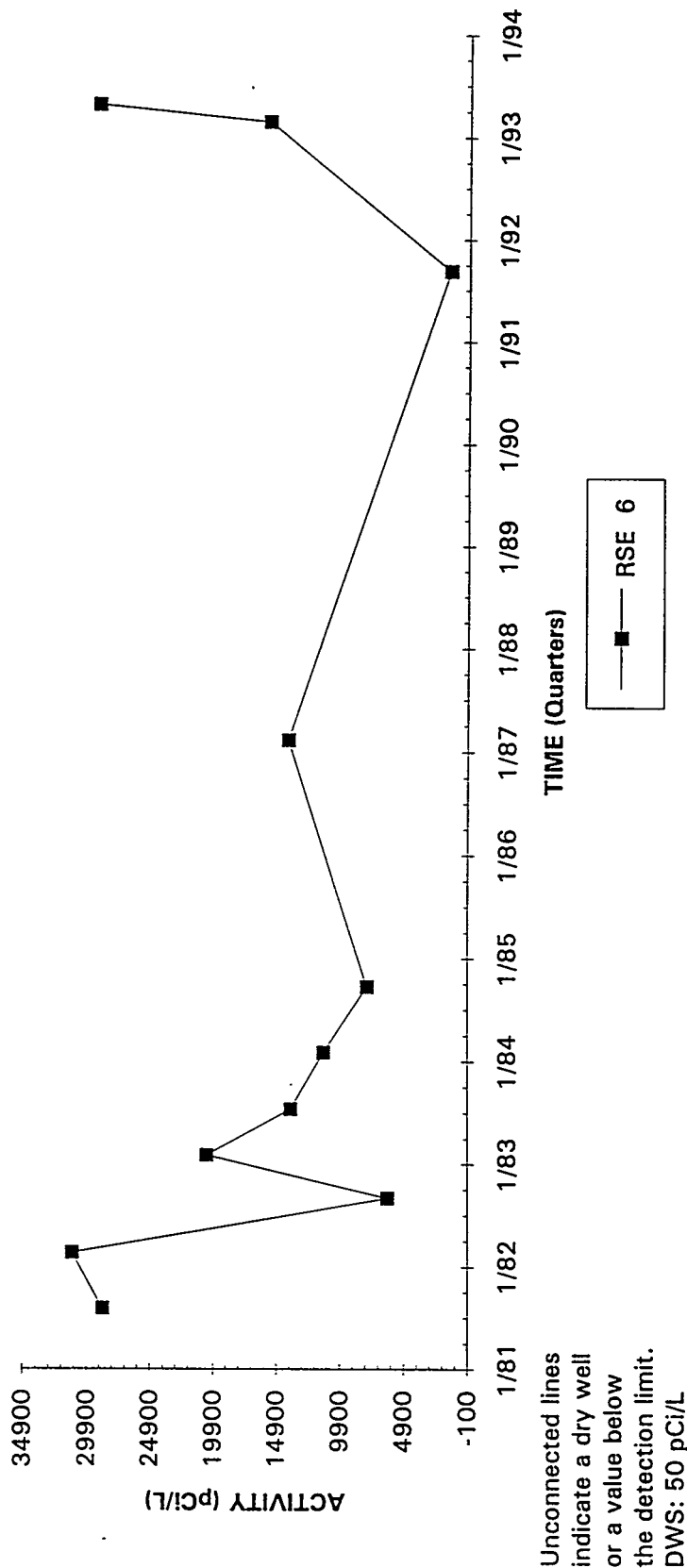
Nonvolatile Beta Activities RSE 1B



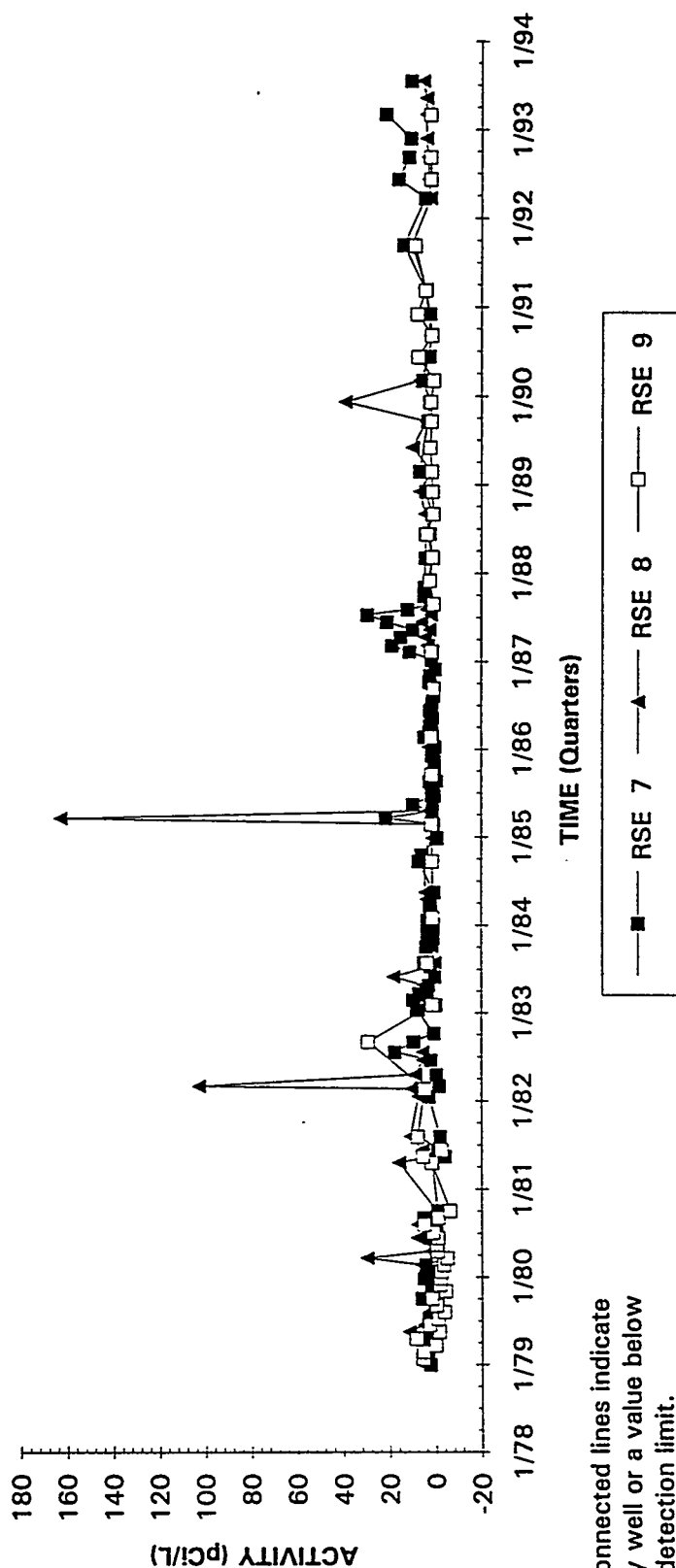
Nonvolatile Beta Activities RSE Well Series (4A through 5)



Nonvolatile Beta Activities RSE 6

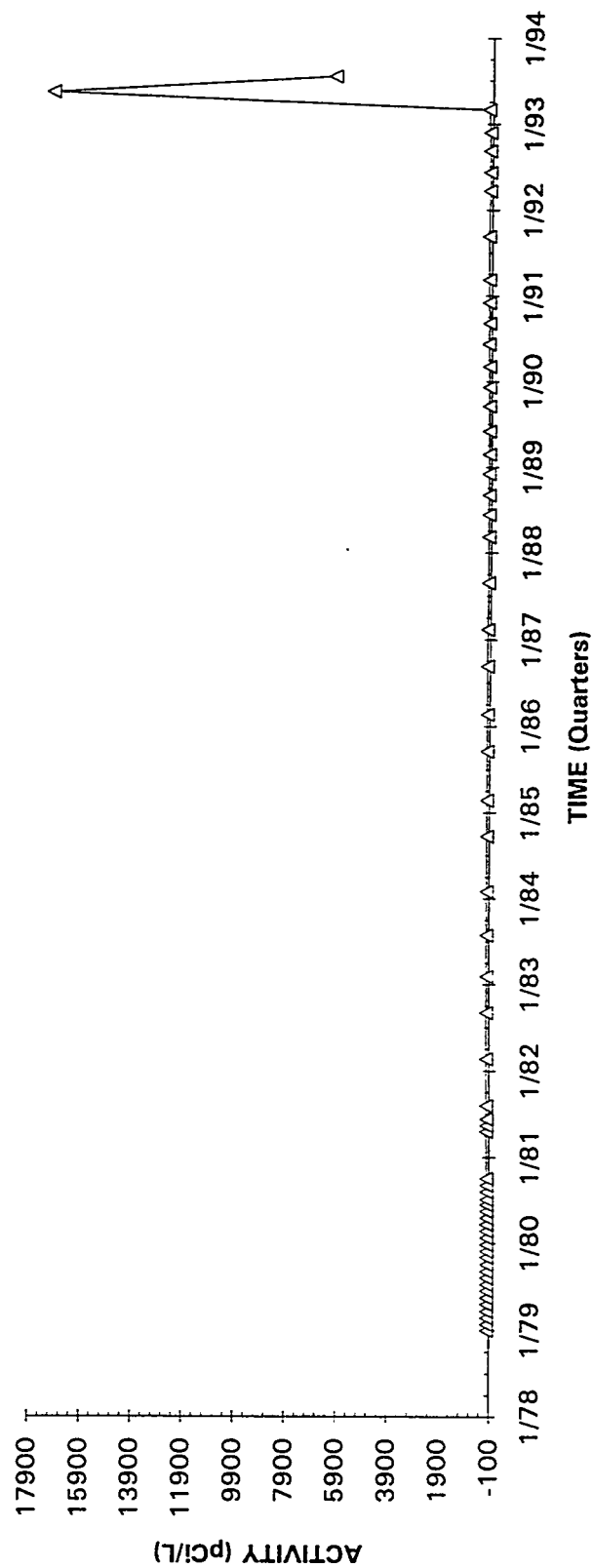


Nonvolatile Beta Activities RSE Well Series (7 through 9)



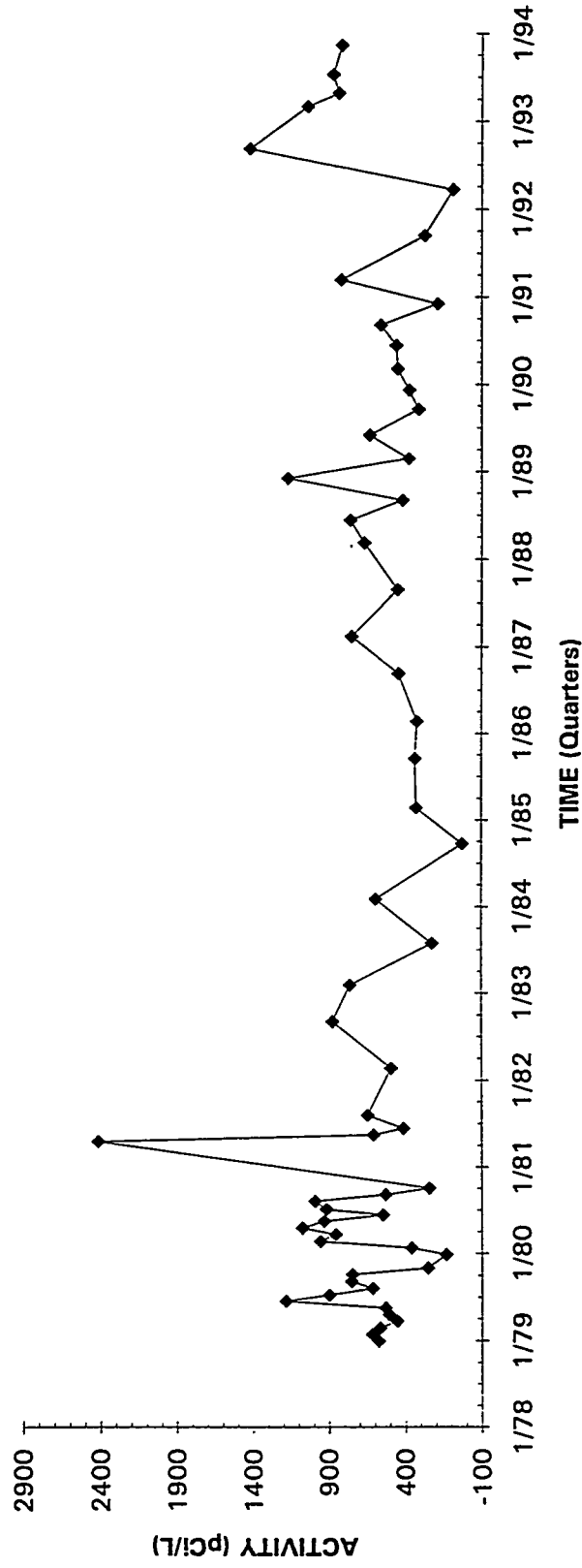
Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 pCi/L

Nonvolatile Beta Activities RSE 10



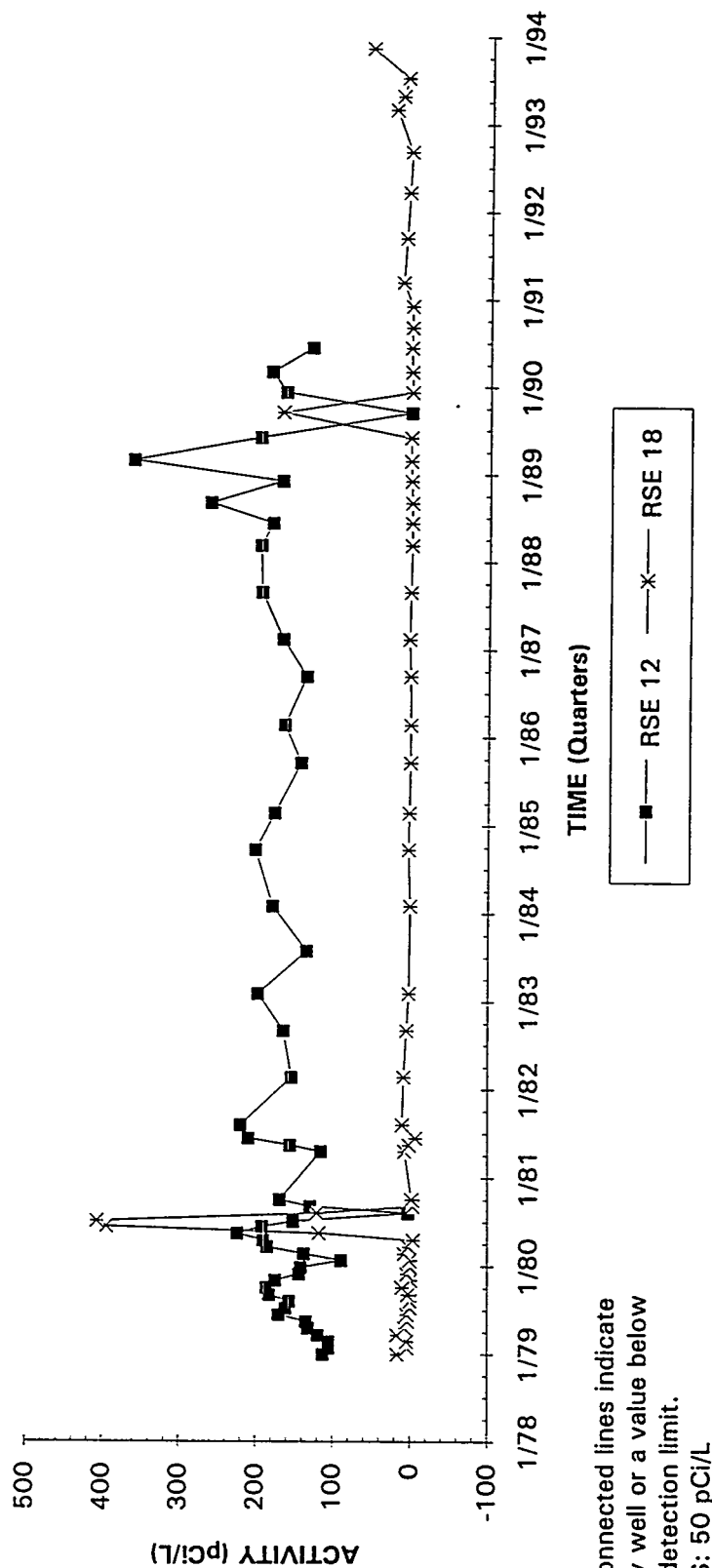
Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 pCi/L

Nonvolatile Beta Activities RSE 11

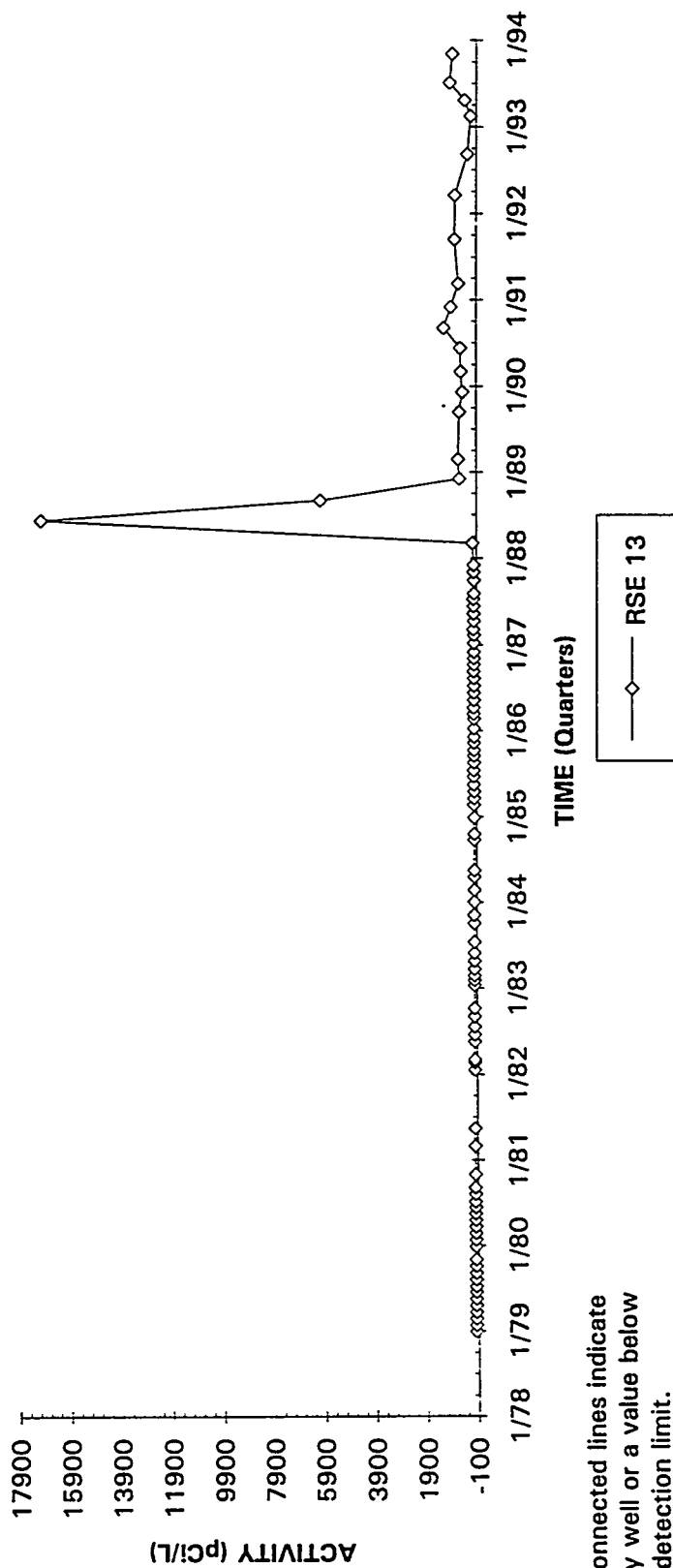


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 pCi/L

Nonvolatile Beta Activities RSE Well Series (12 and 18)

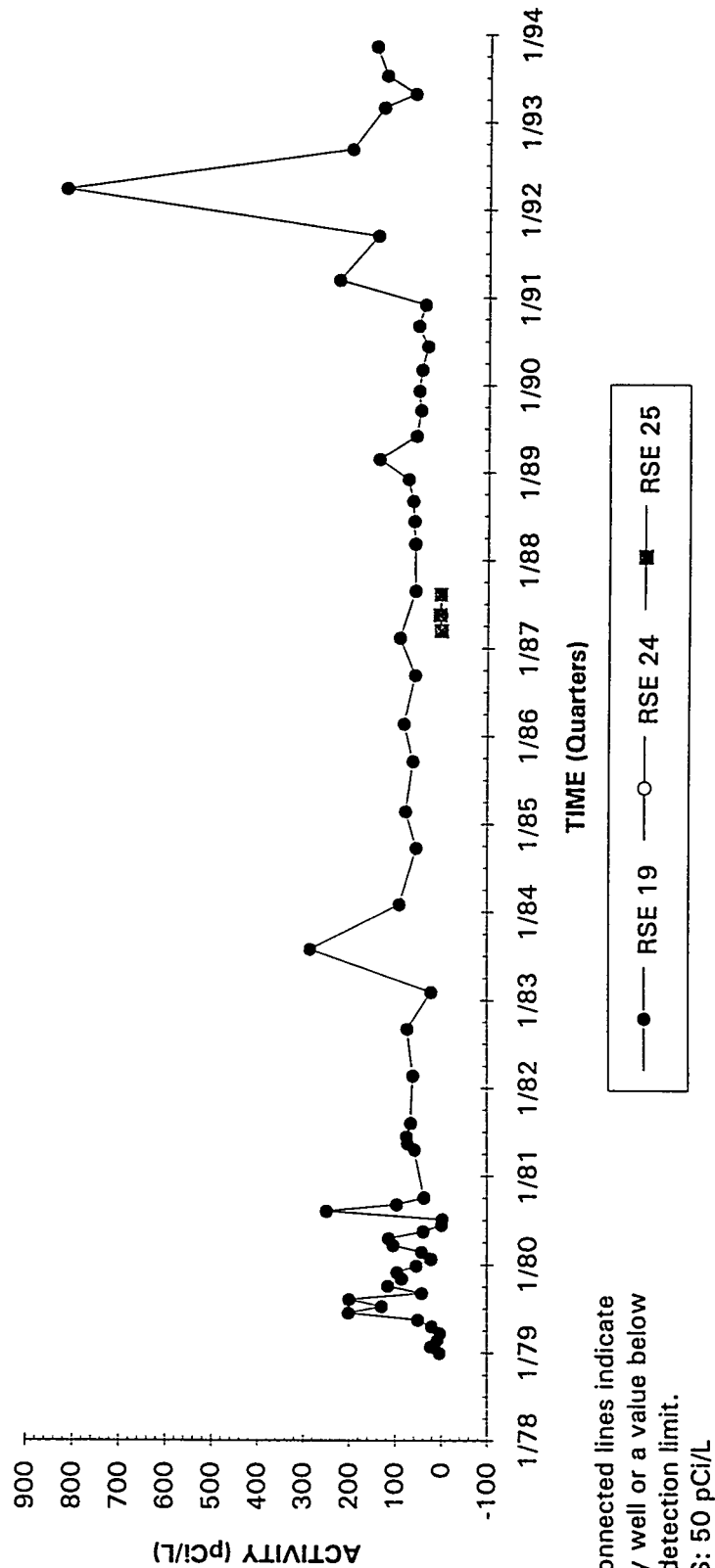


Nonvolatile Beta Activities RSE 13

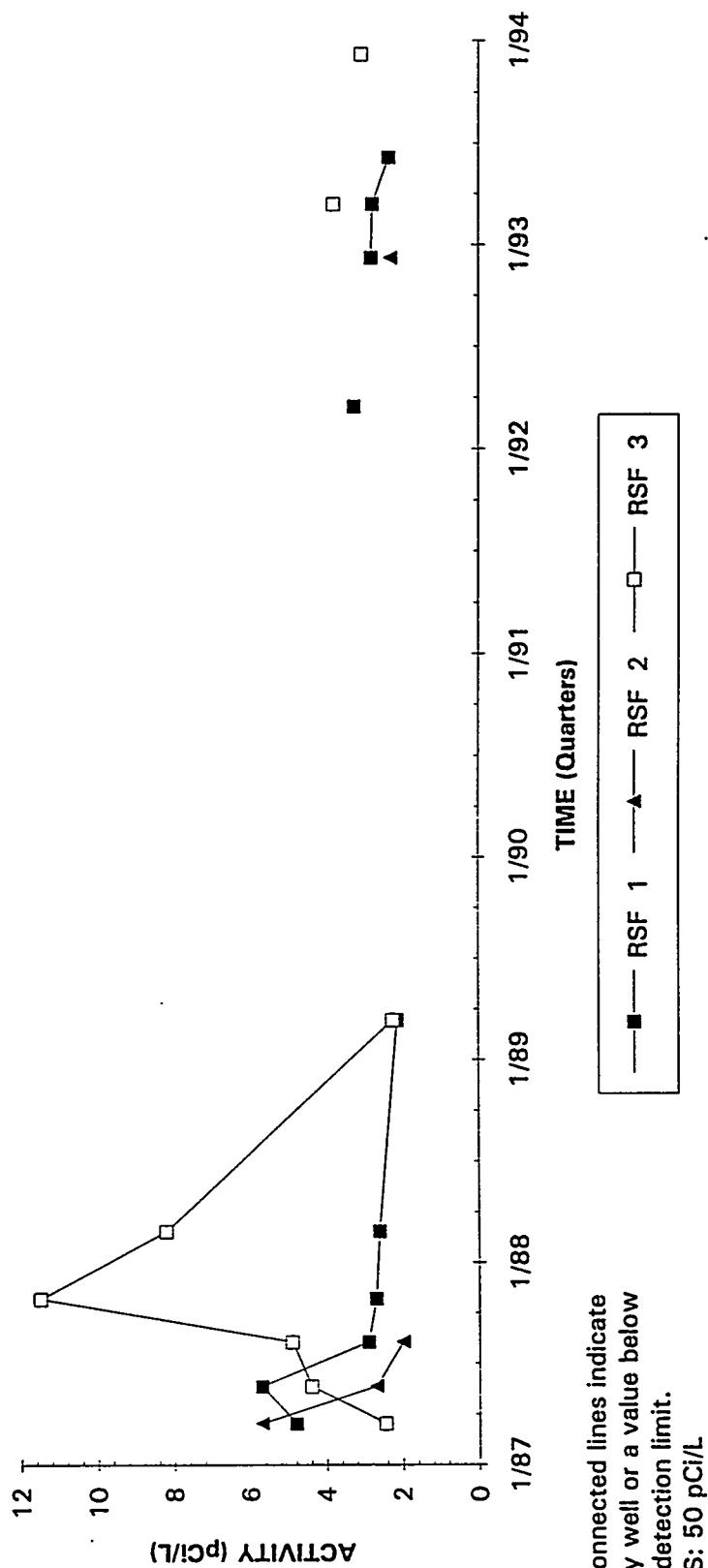


Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 50 pCi/L

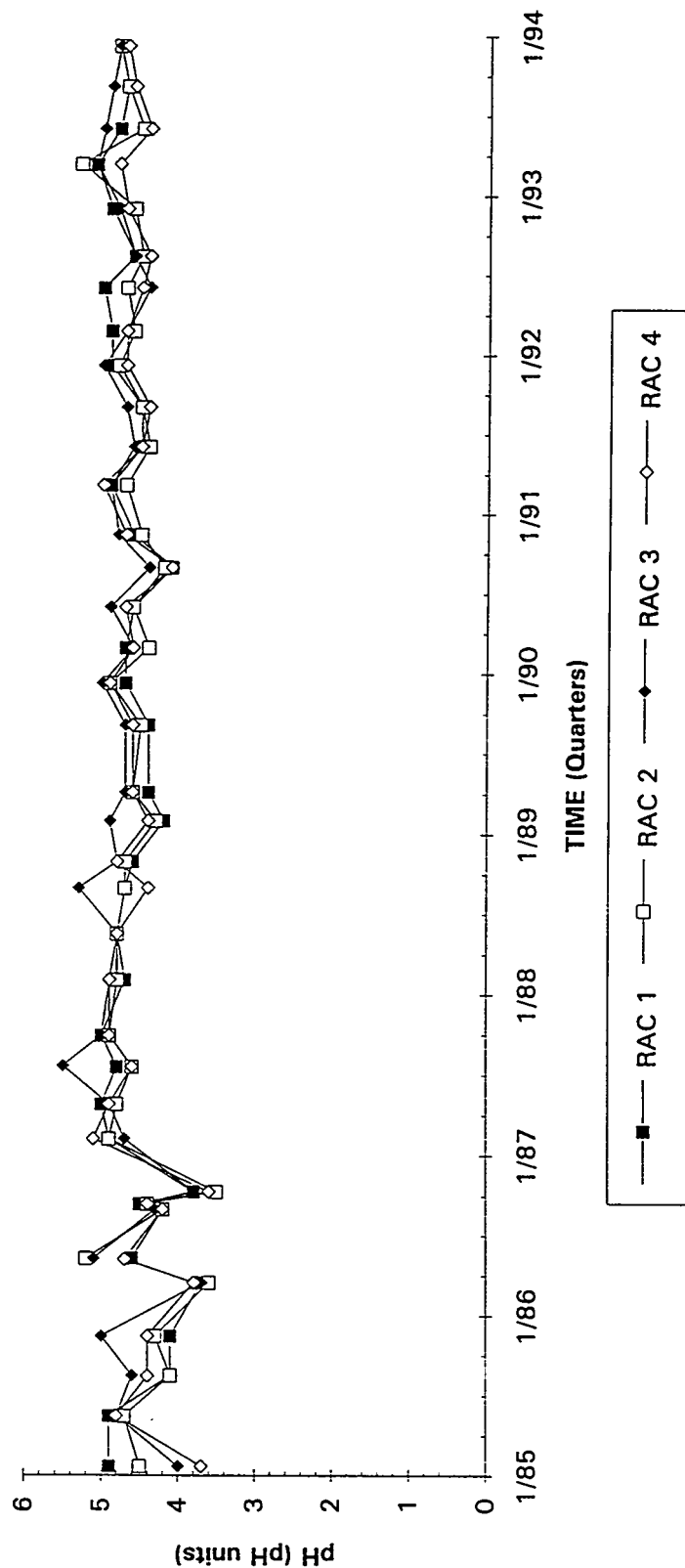
Nonvolatile Beta Activities RSE Well Series (19 through 25)



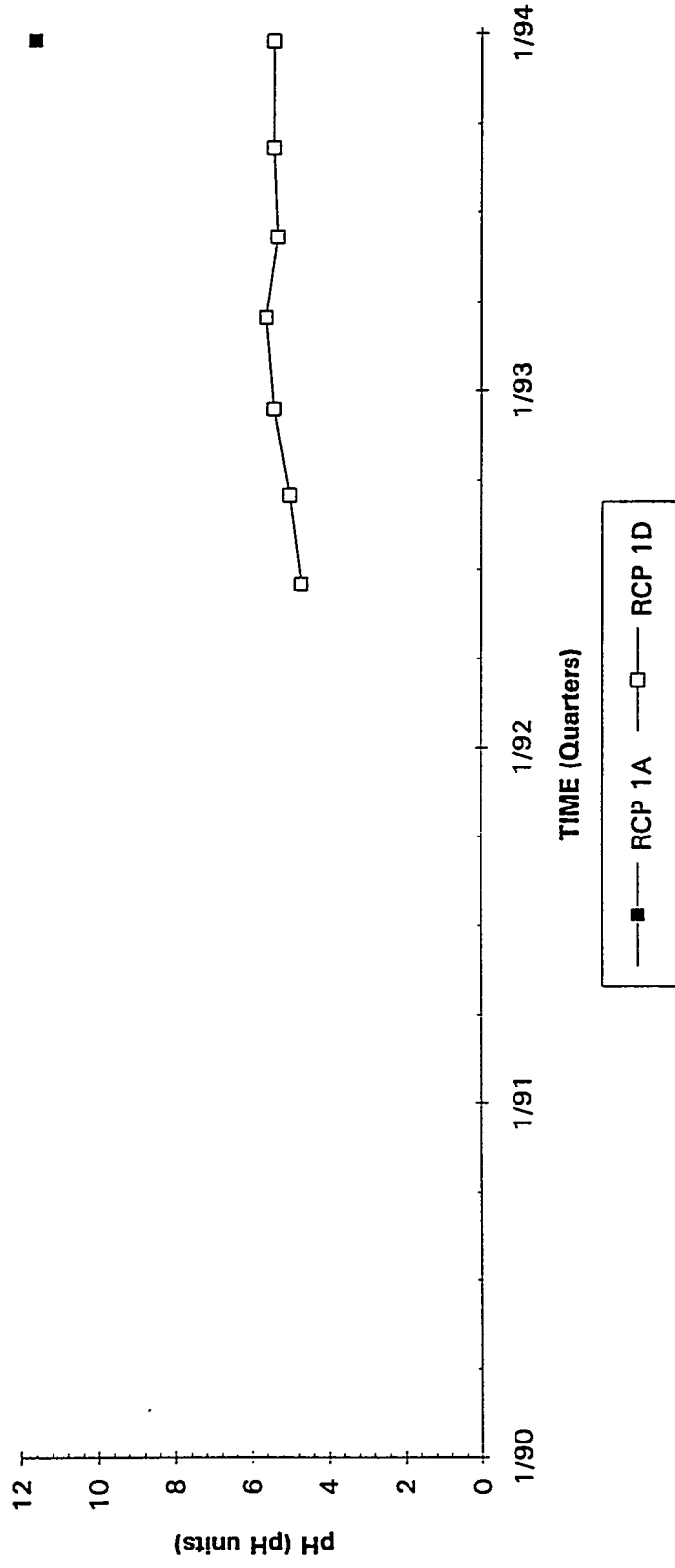
Nonvolatile Beta Activities RSF Well Series



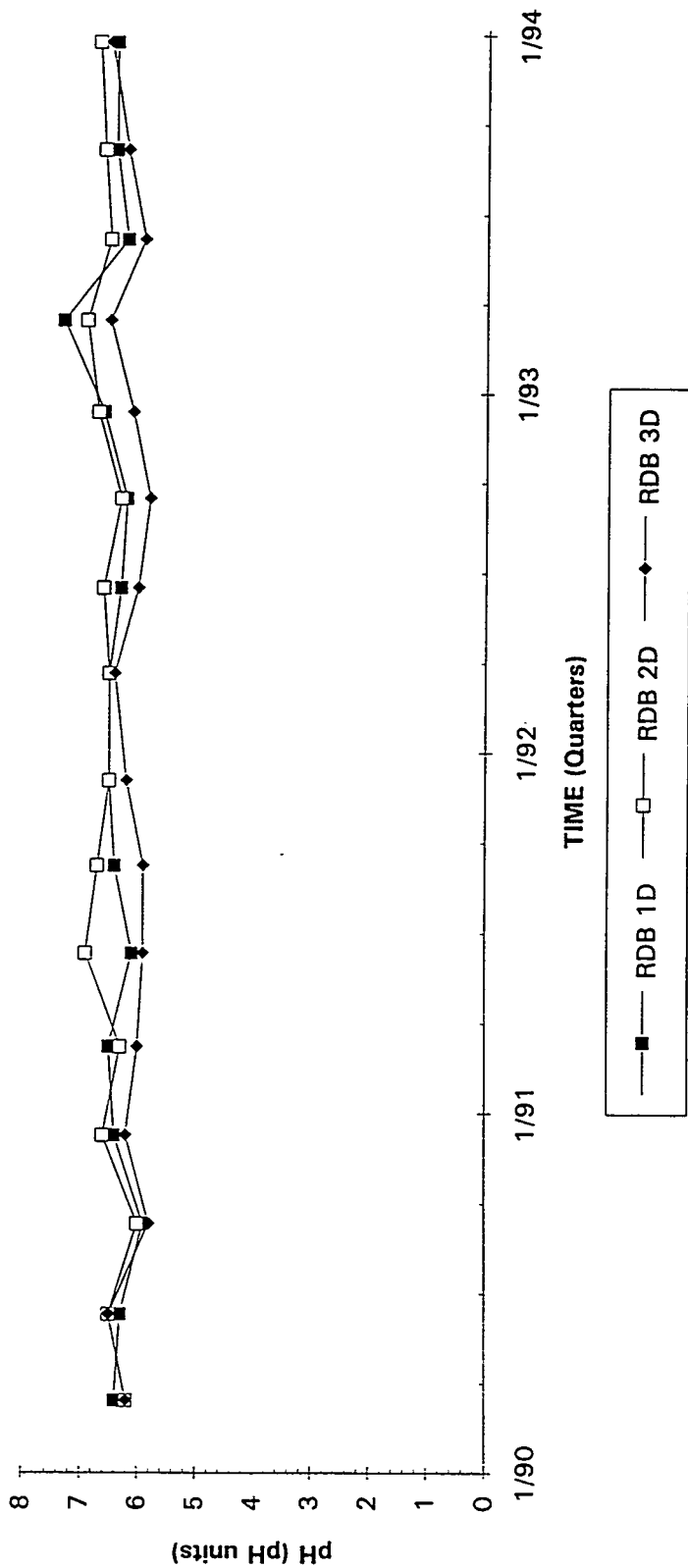
pH RAC Well Series



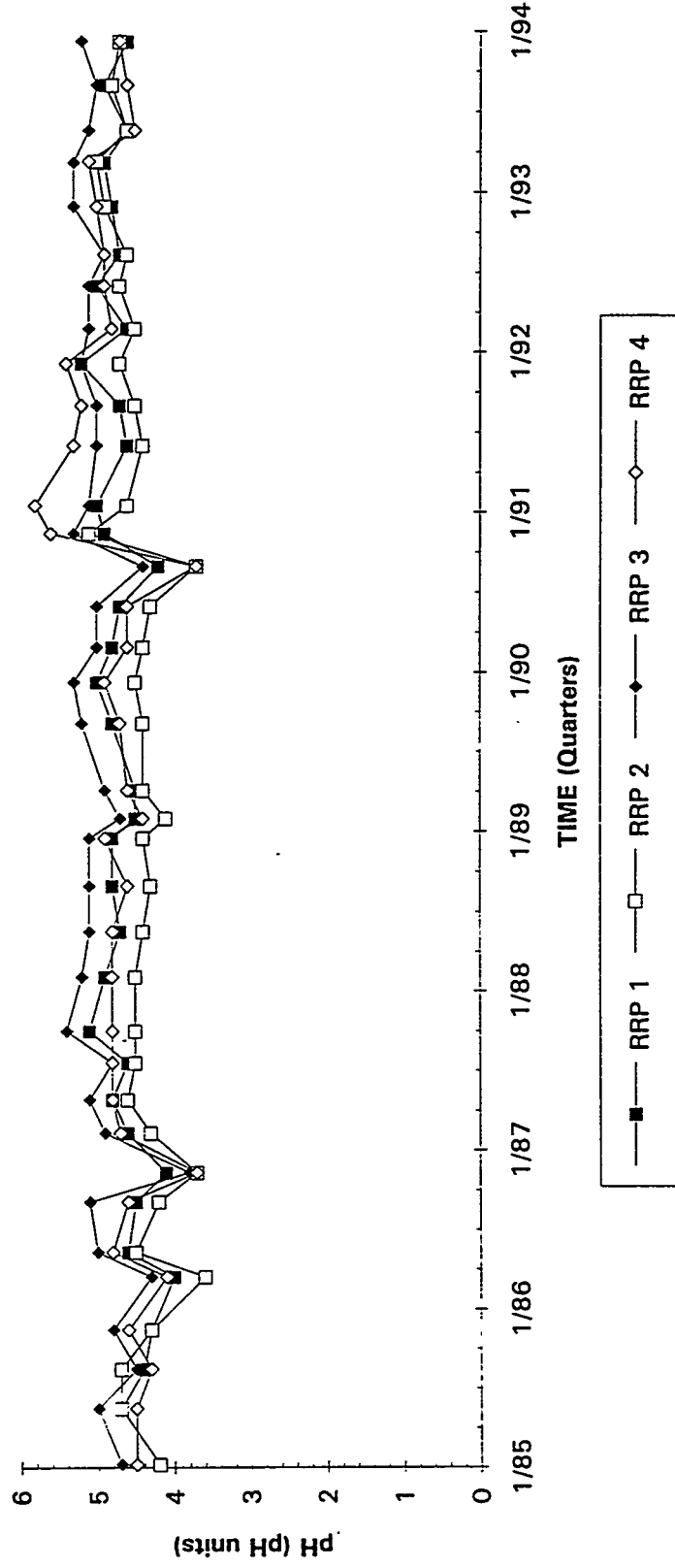
pH RCP Well Series



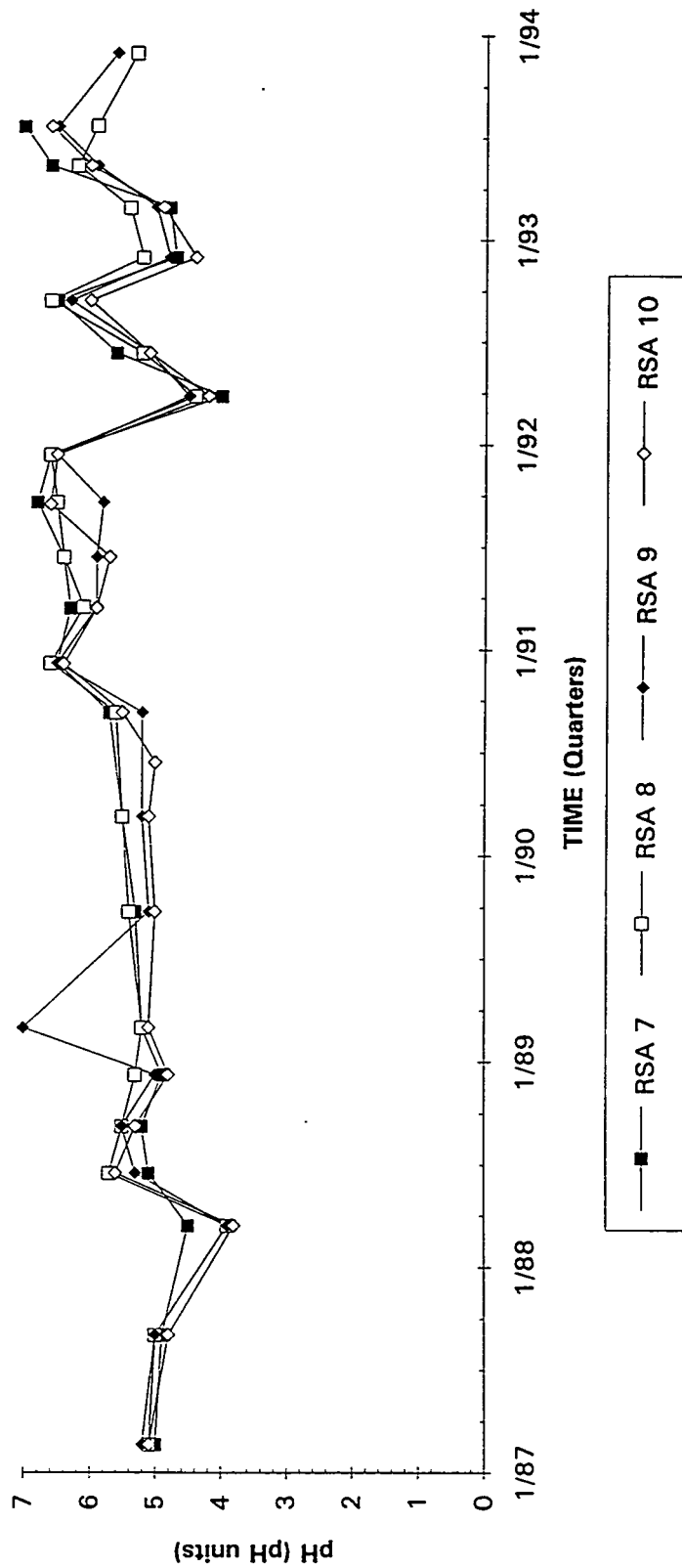
pH RDB Well Series



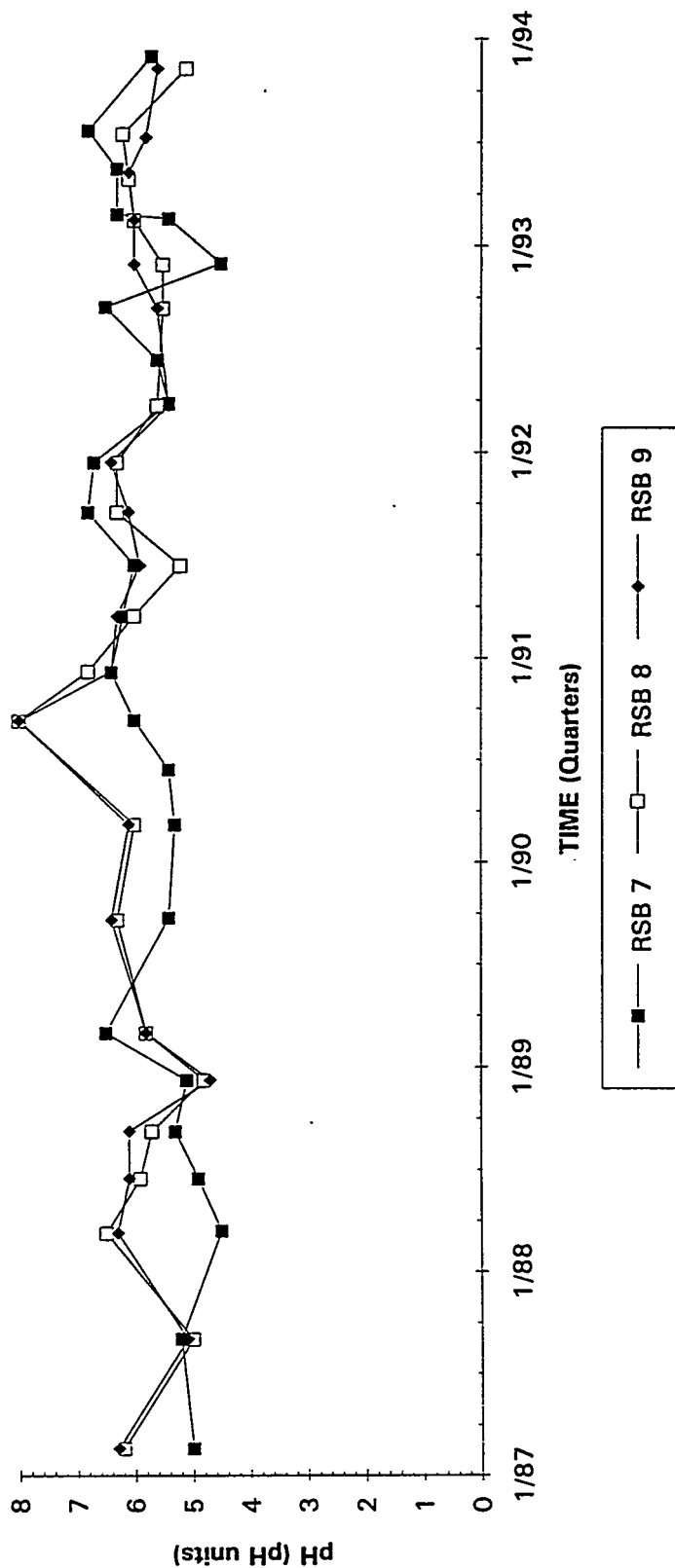
pH RRP Well Series



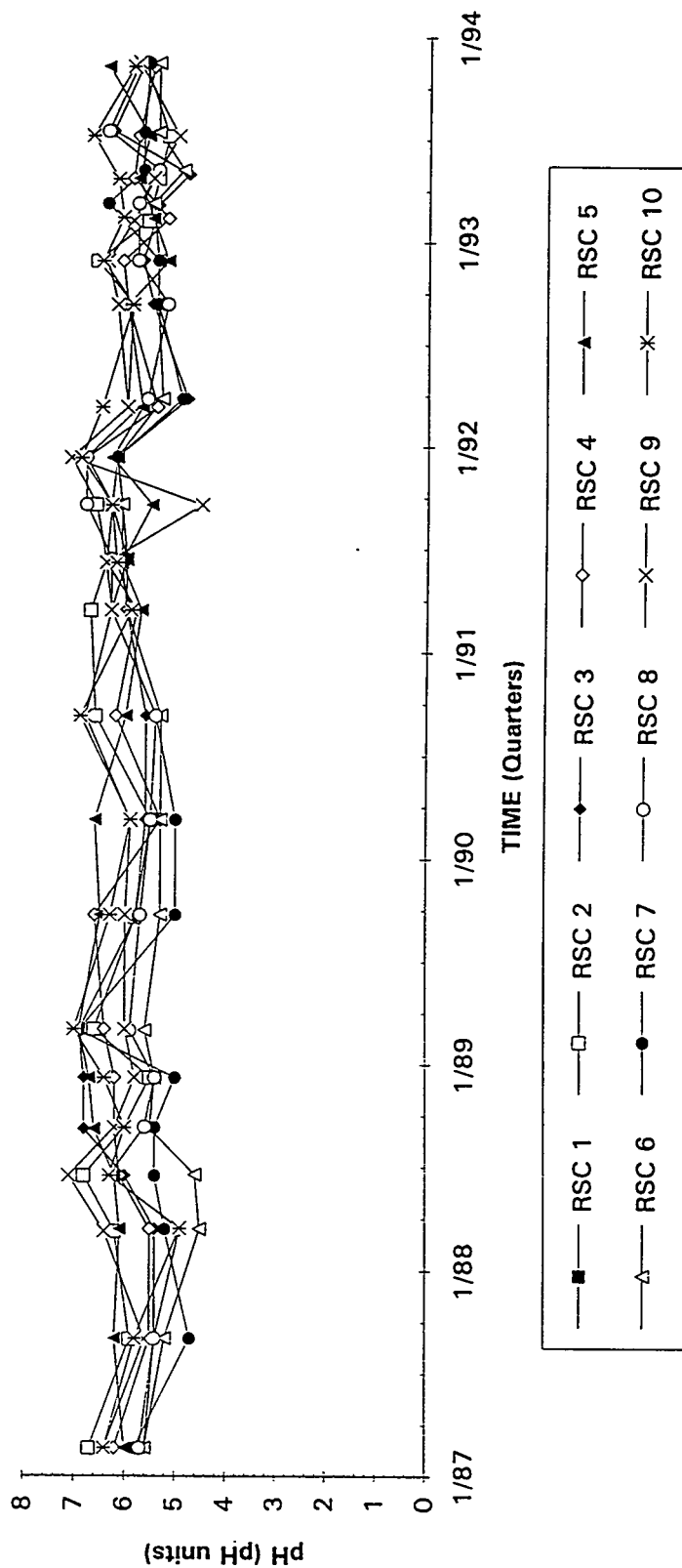
pH RSA Well Series



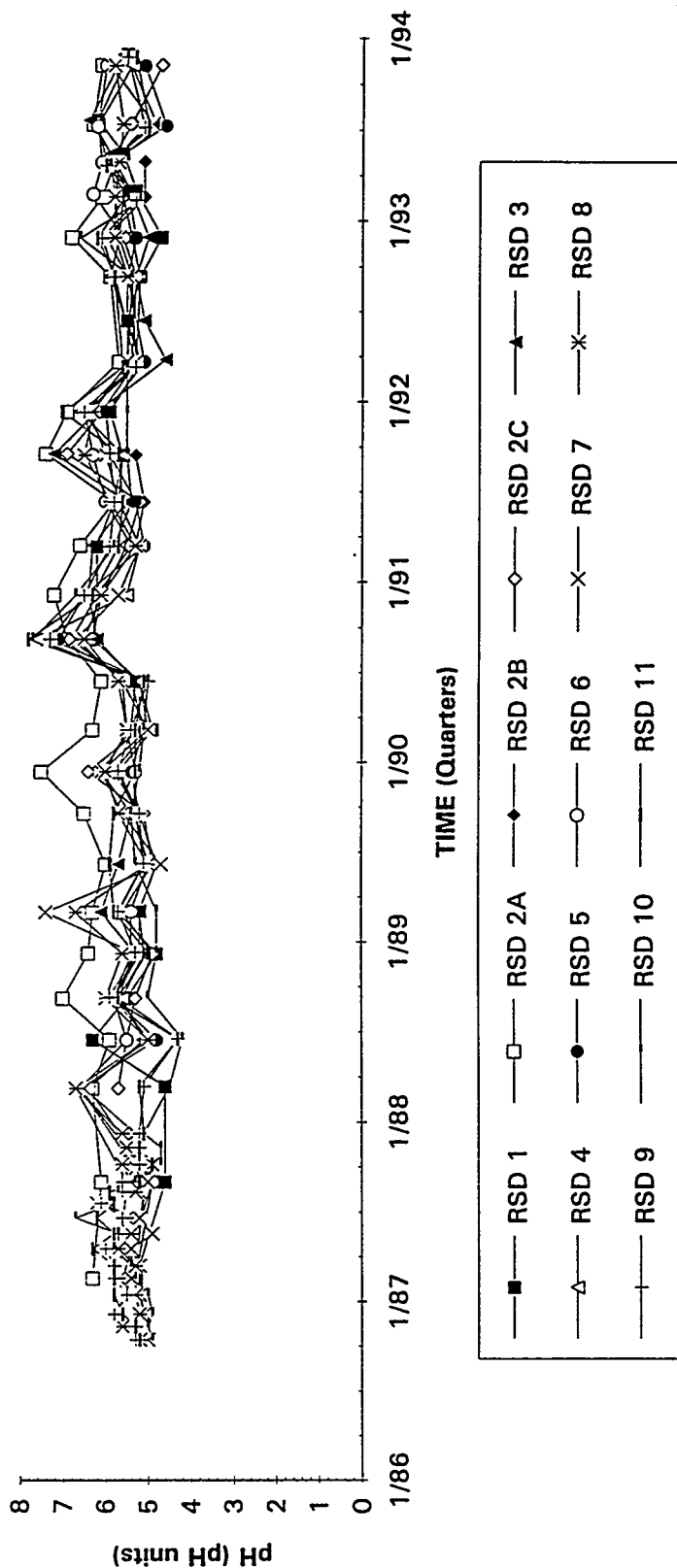
pH RSB Well Series



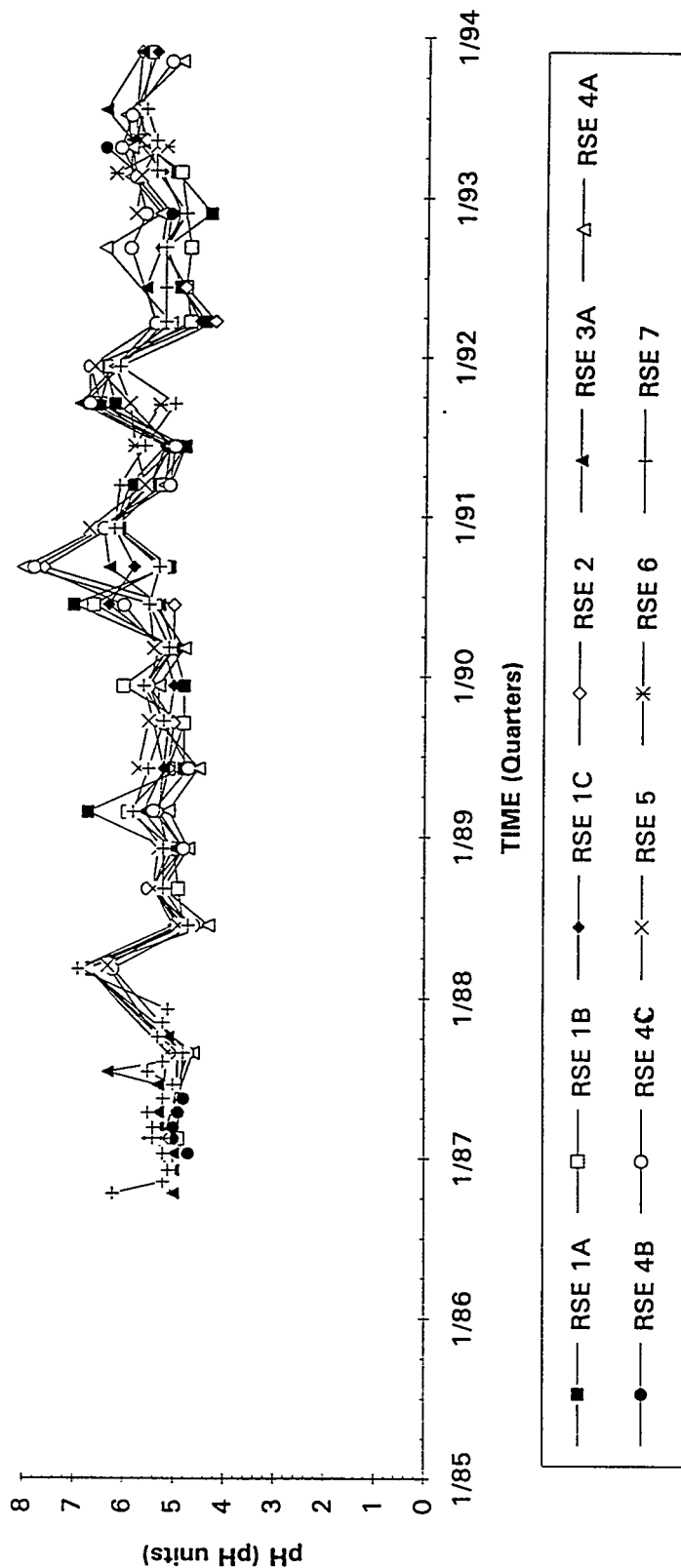
pH RSC Well Series



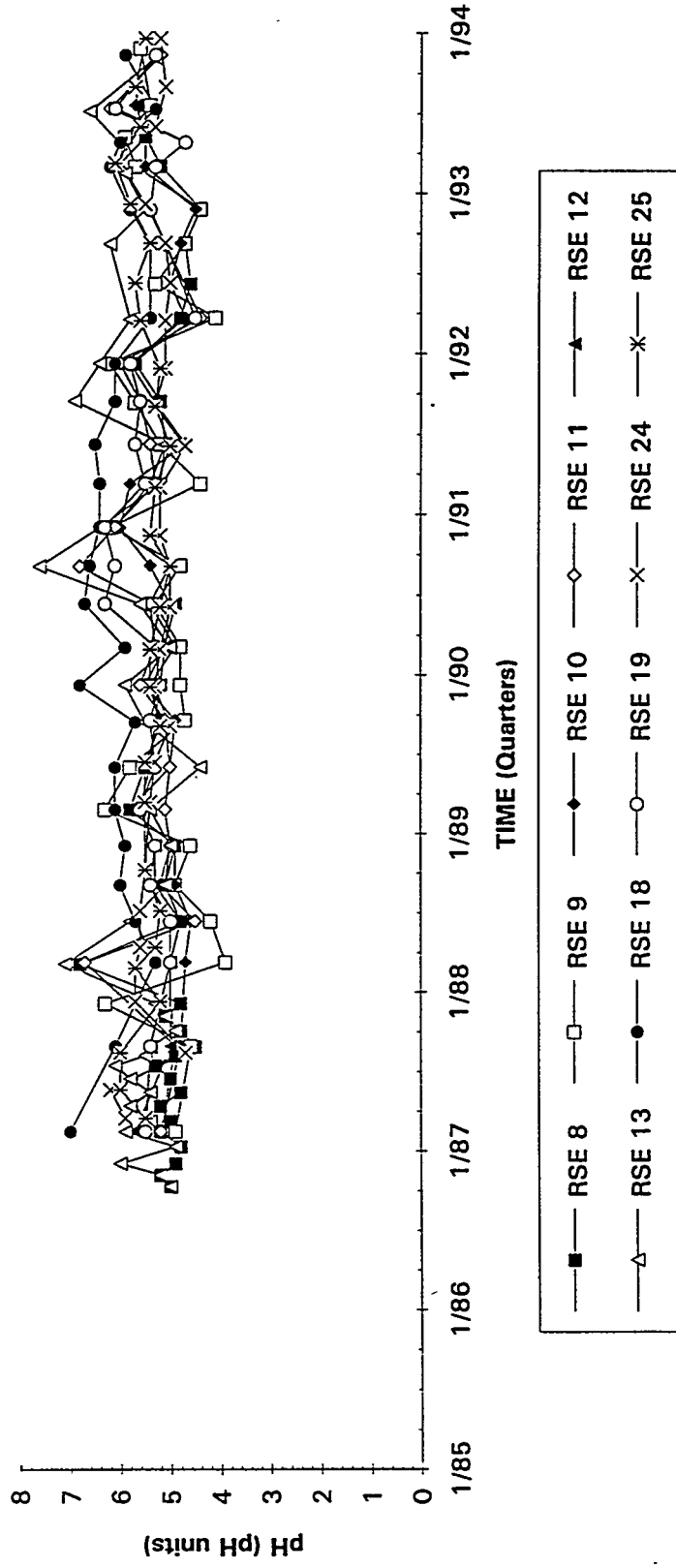
pH RSD Well Series



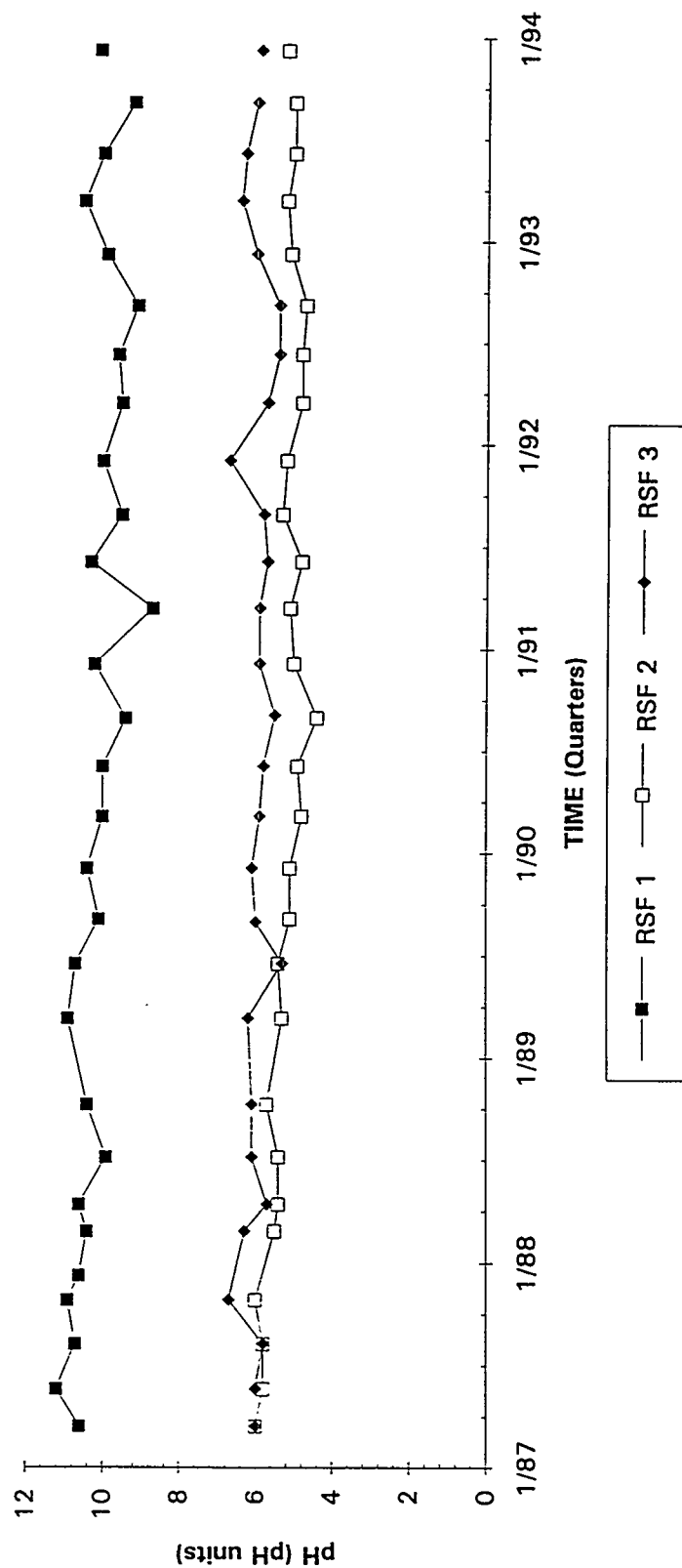
pH RSE Well Series (1 through 7)



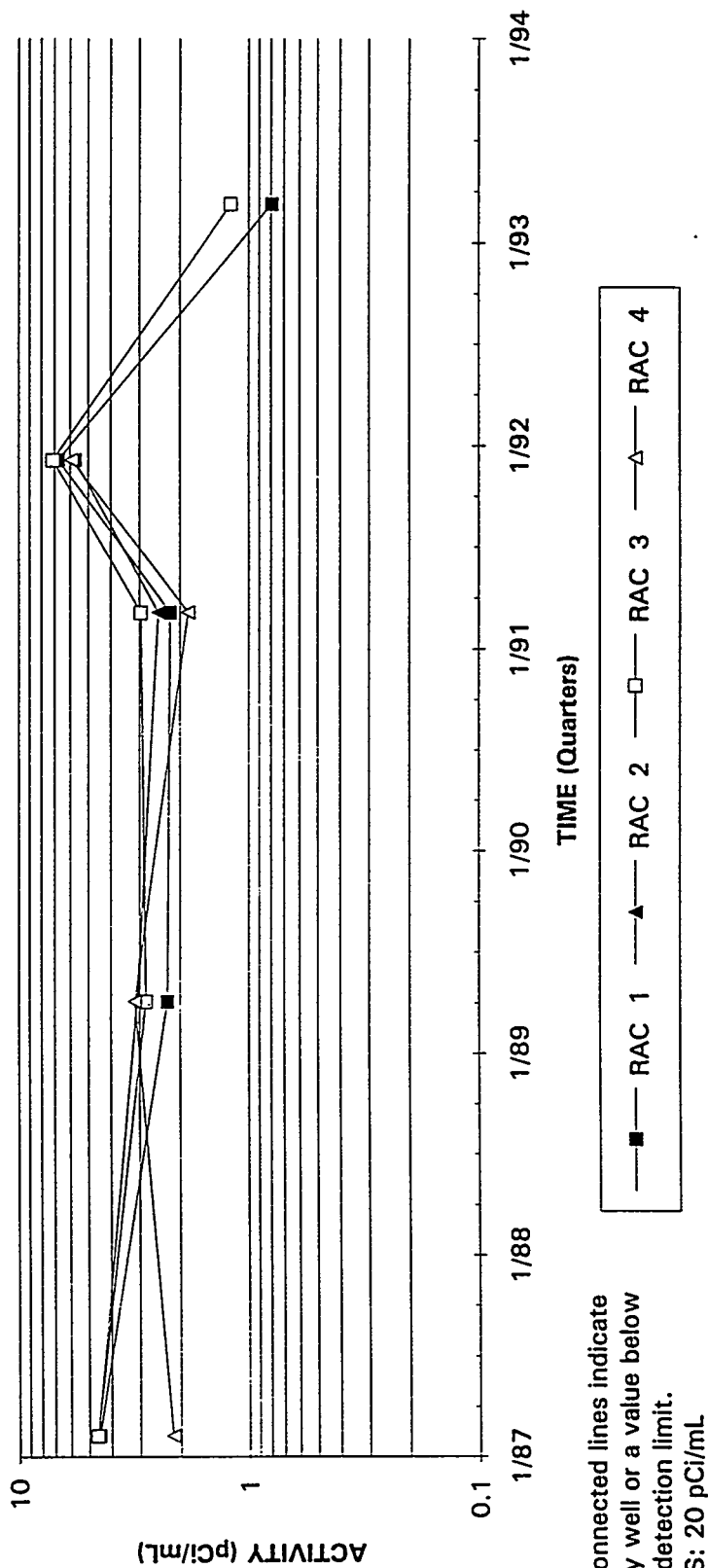
pH RSE Well Series (8 through 25)



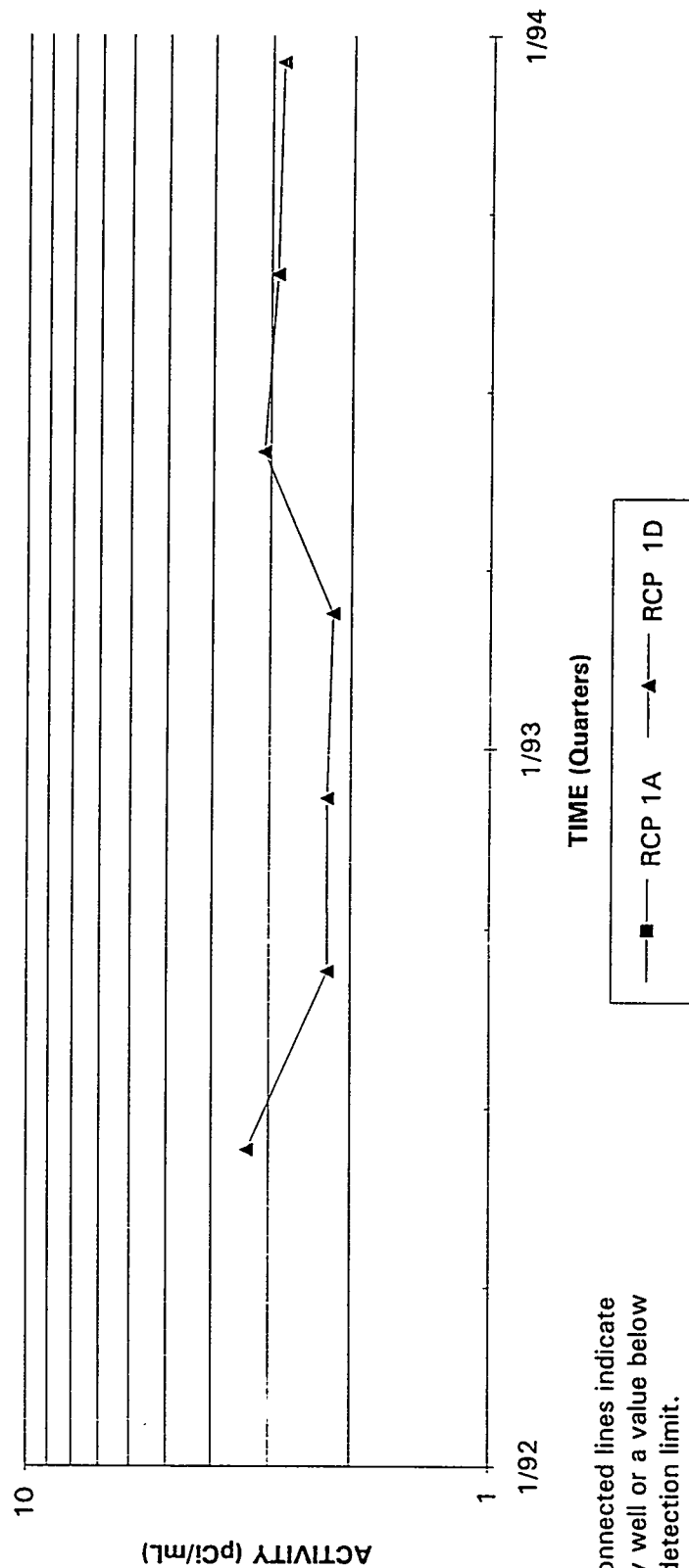
pH RSF Well Series



Tritium Activities RAC Well Series

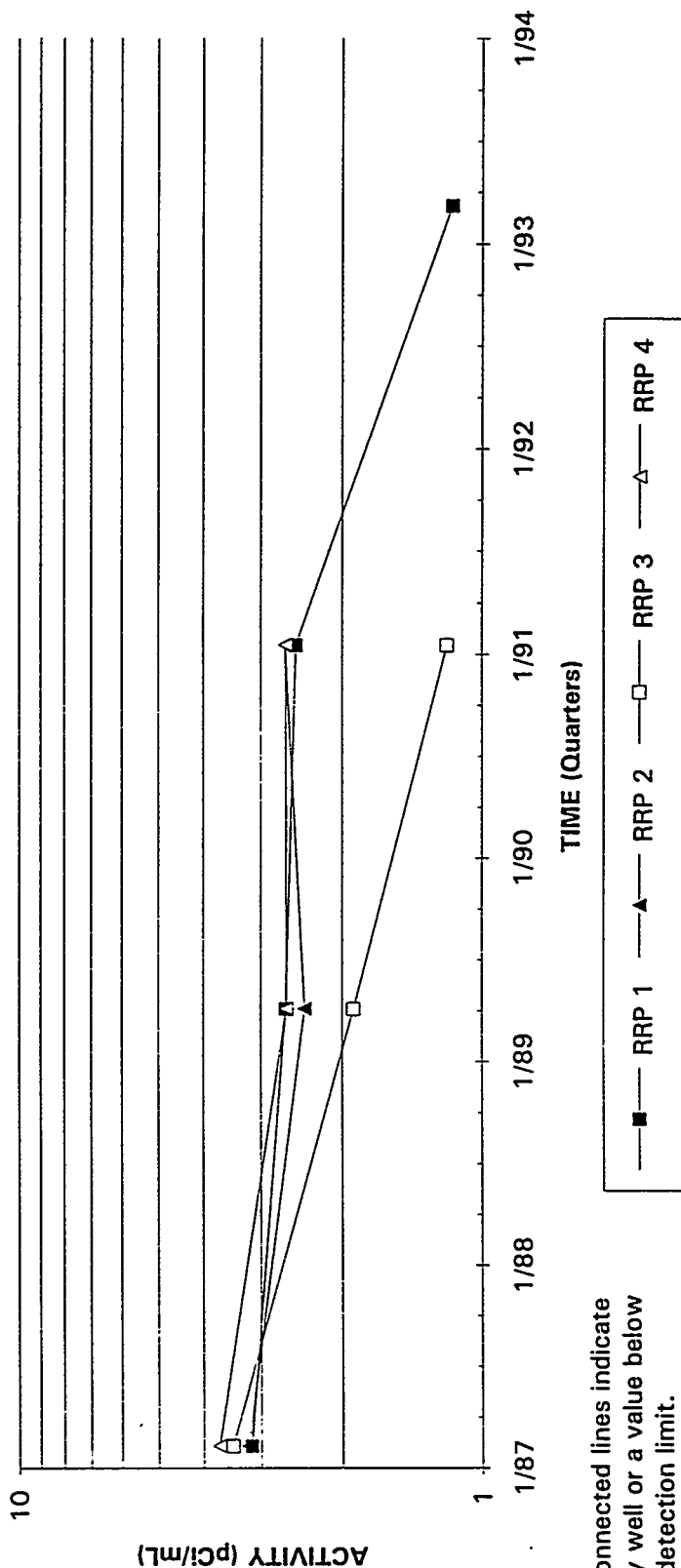


Tritium Activities RCP Well Series



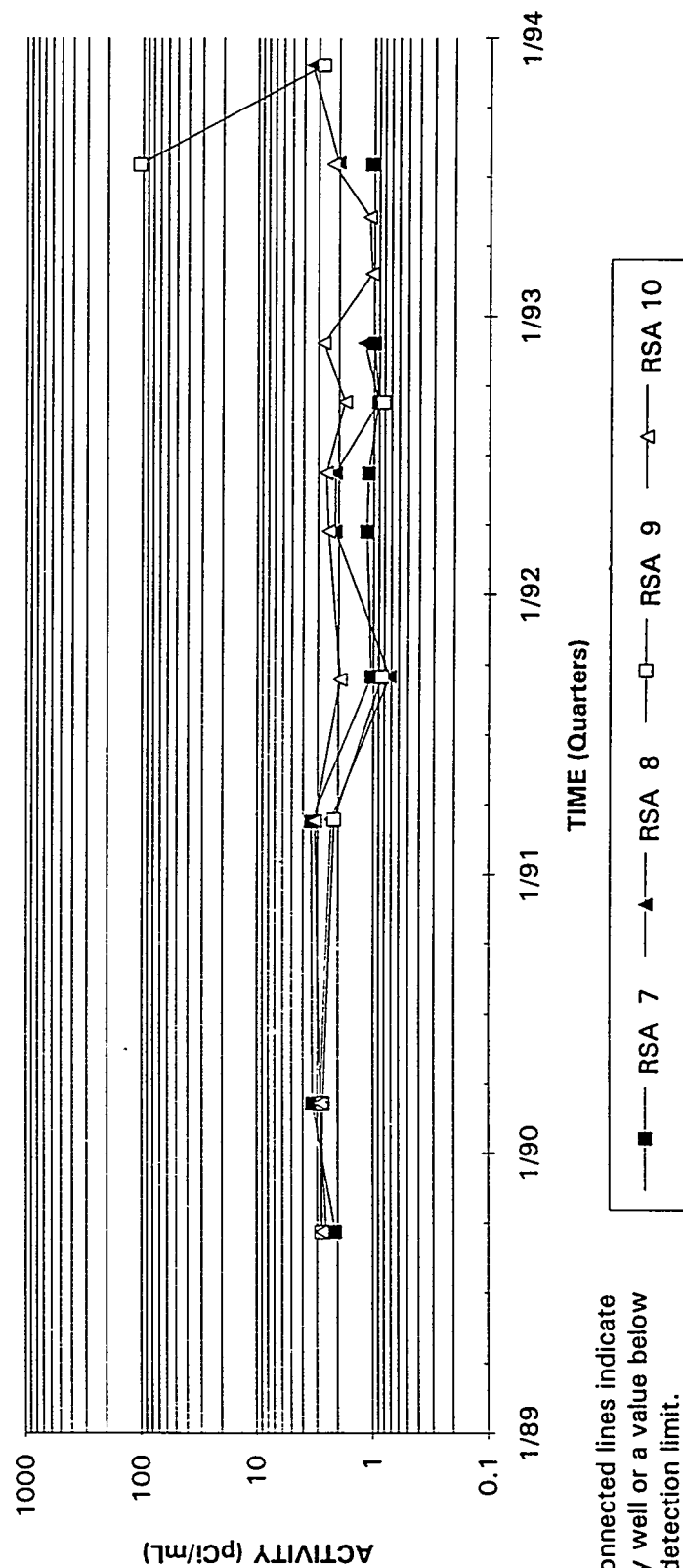
Unconnected lines indicate
a dry well or a value below
the detection limit.
DWS: 20 pCi/mL

Tritium Activities RRP Well Series



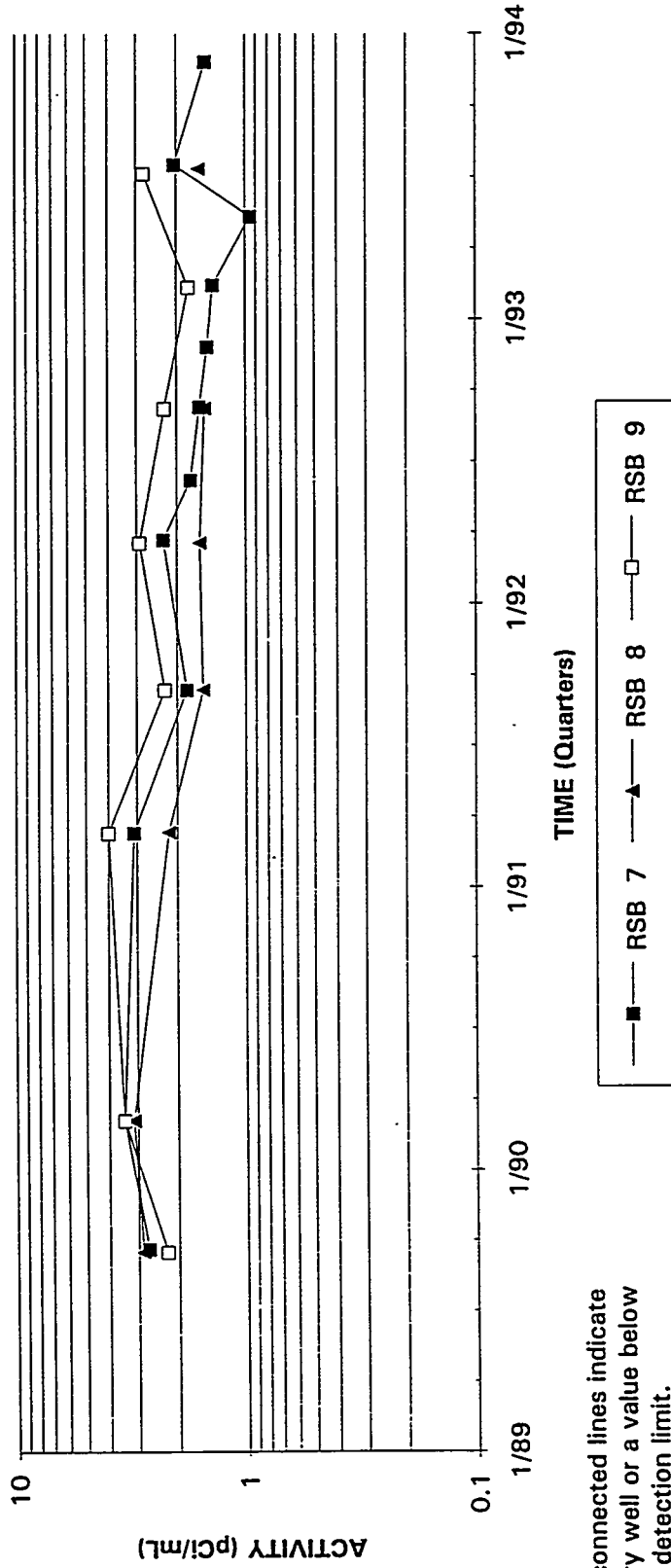
Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 20 pCi/mL

Tritium Activities RSA Well Series



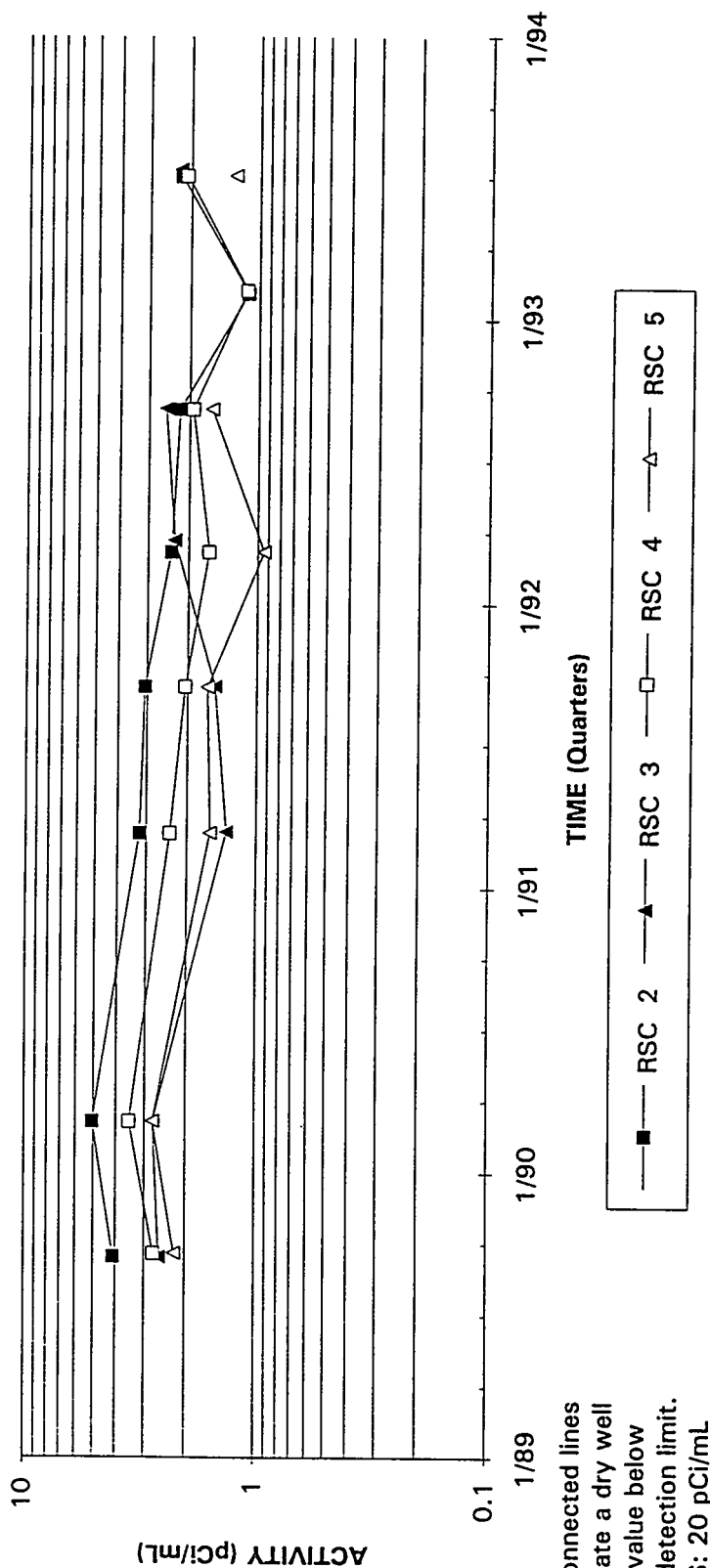
Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 20 pCi/mL

Tritium Activities RSB Well Series

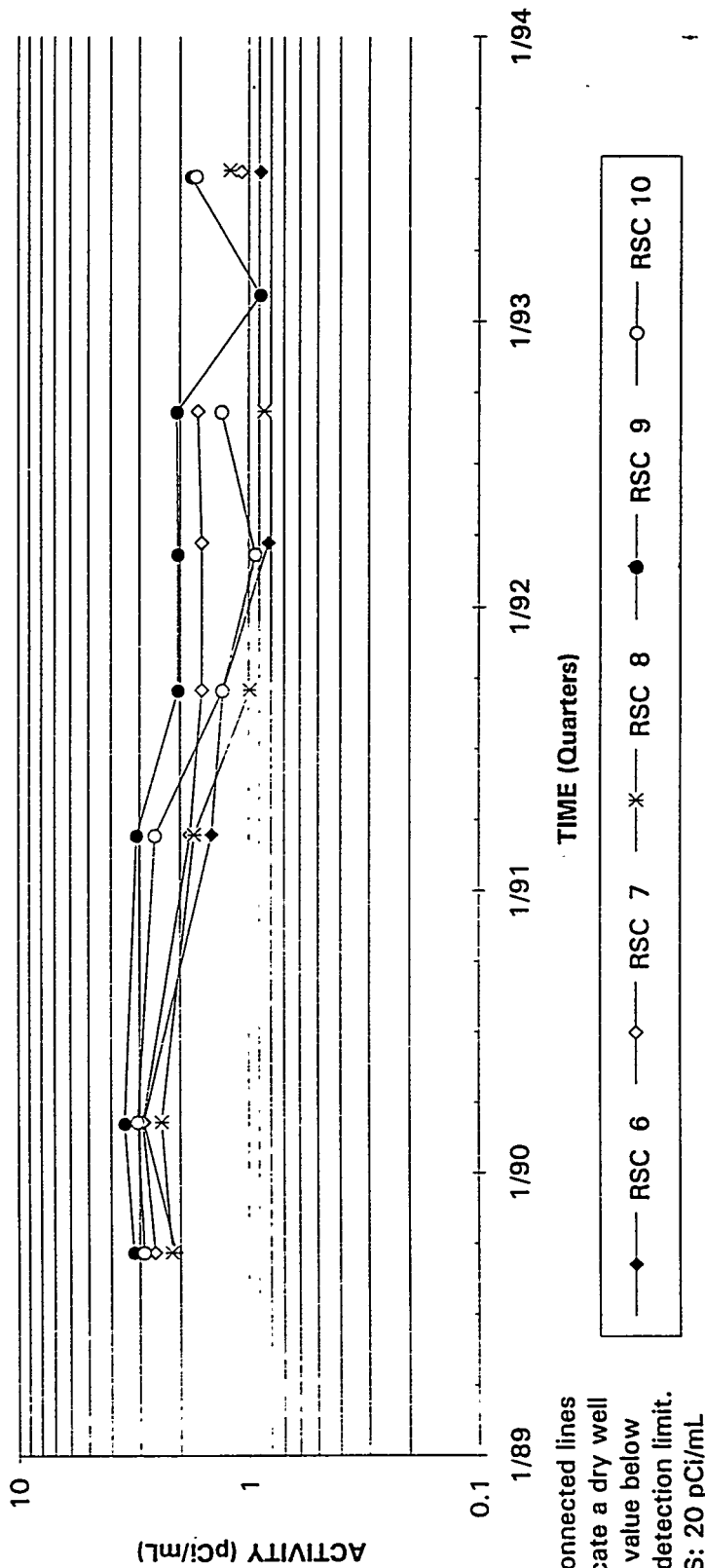


Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 20 pCi/mL

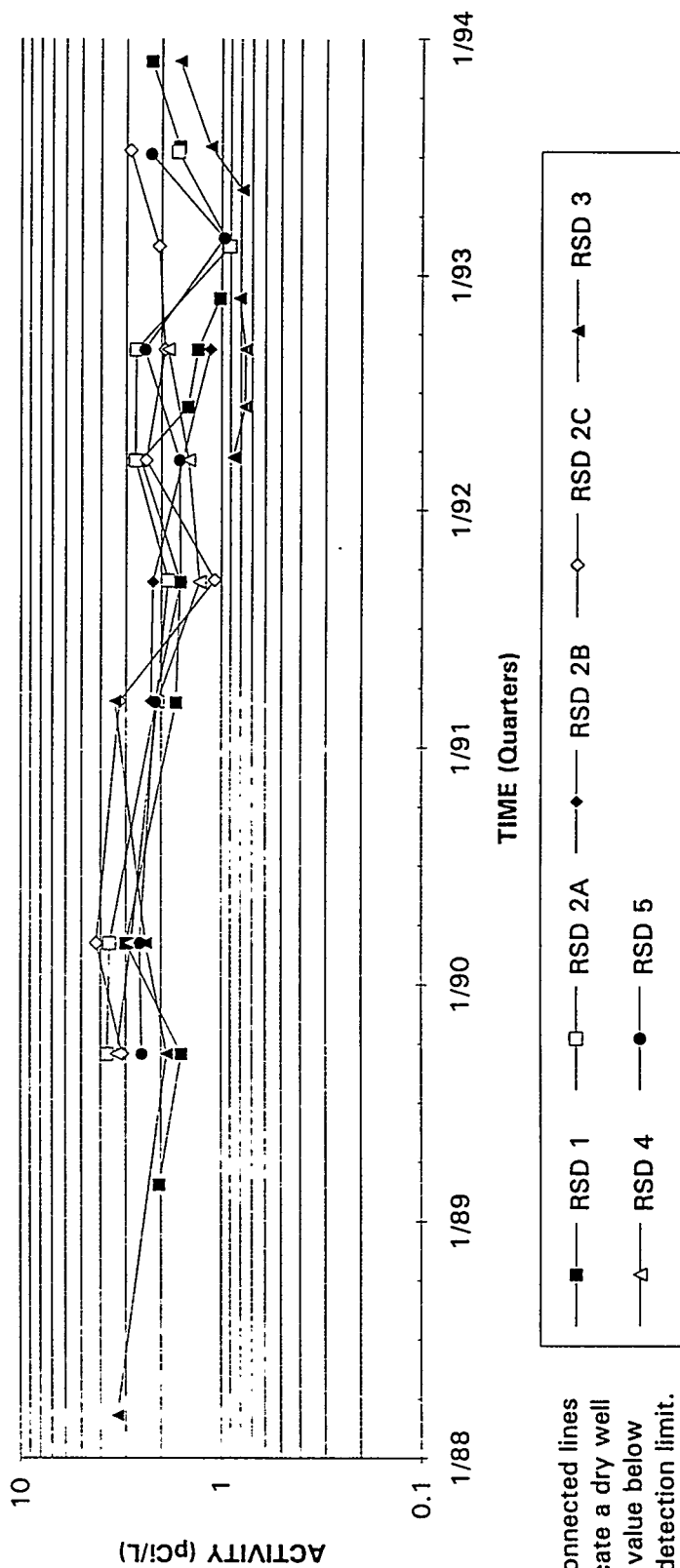
Tritium Activities RSC Well Series (2 through 5)



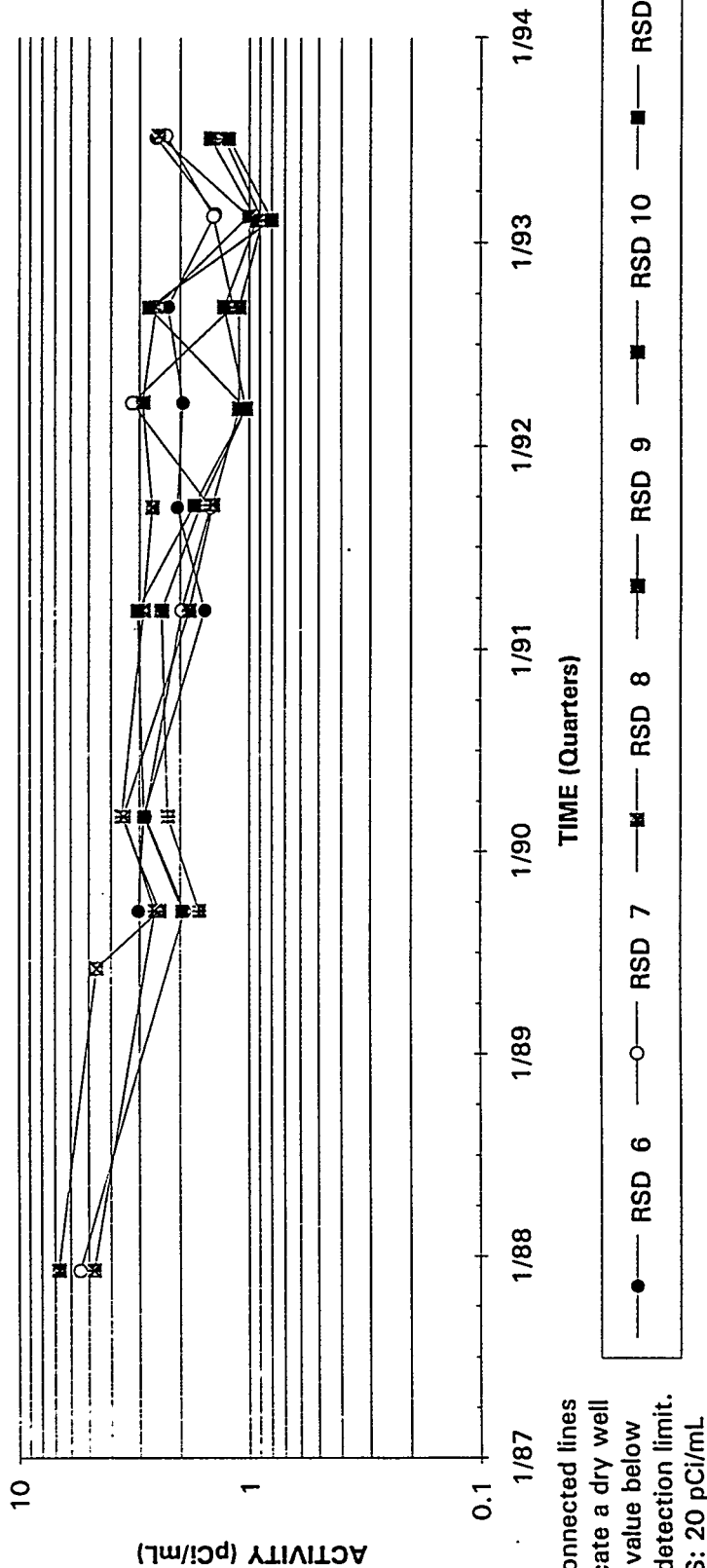
Tritium Activities RSC Well Series (6 through 10)



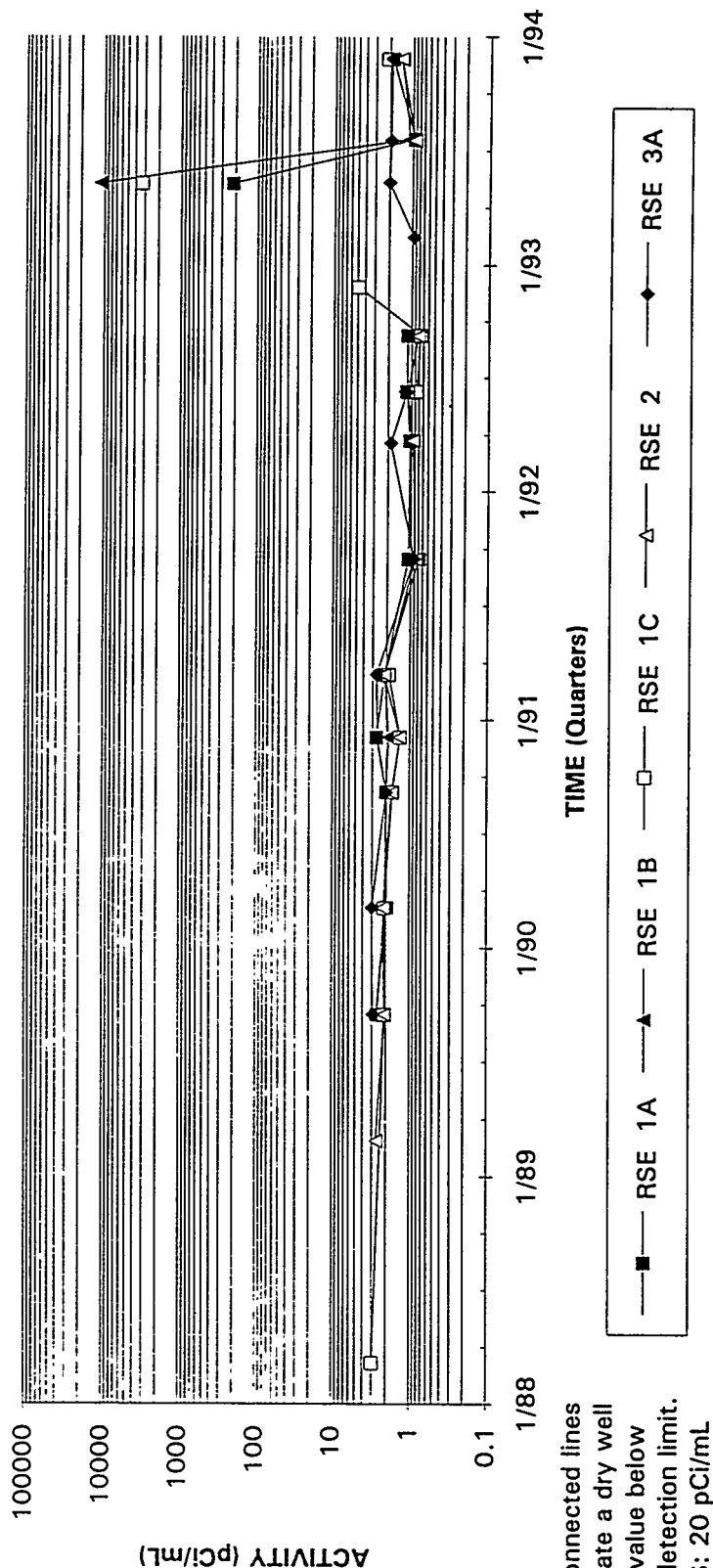
Tritium Activities RSD Well Series (1 through 5)



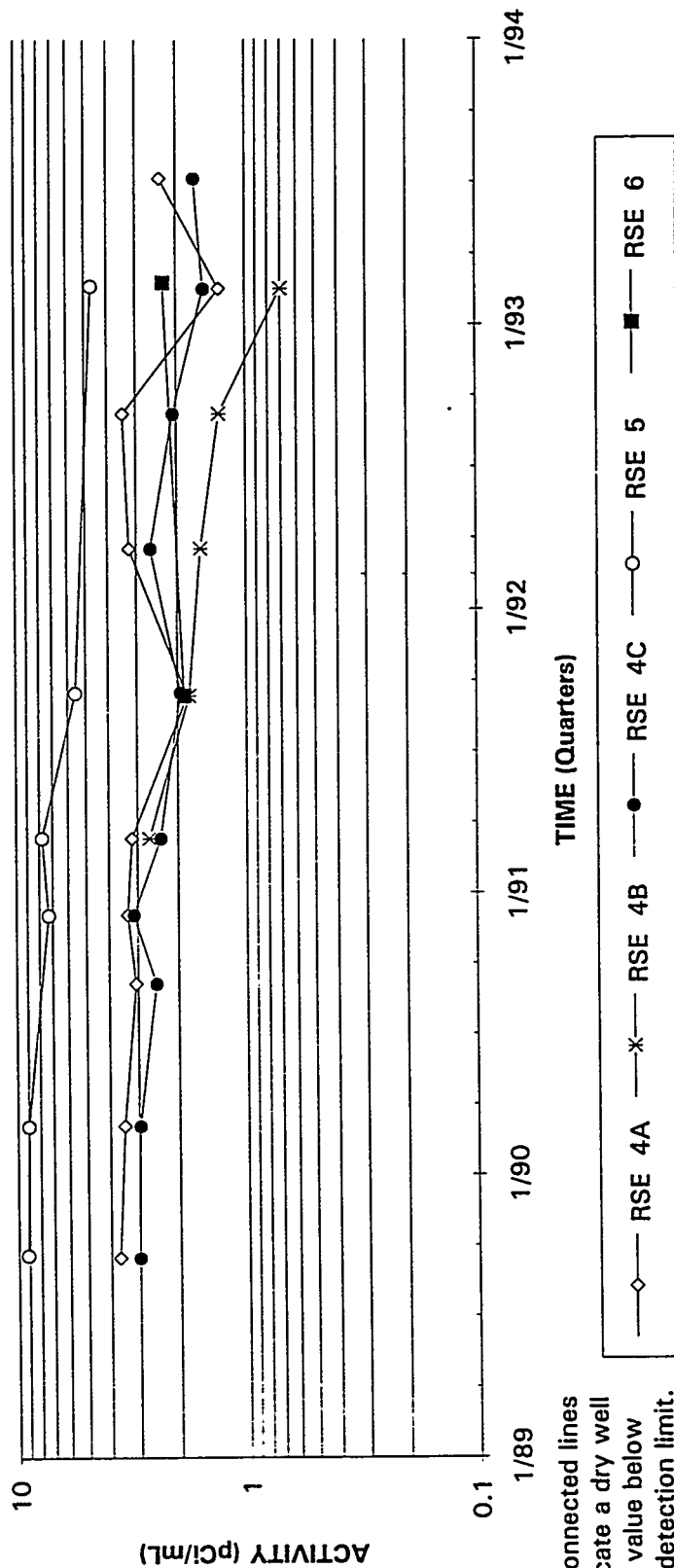
Tritium Activities RSD Well Series (6 through 11)



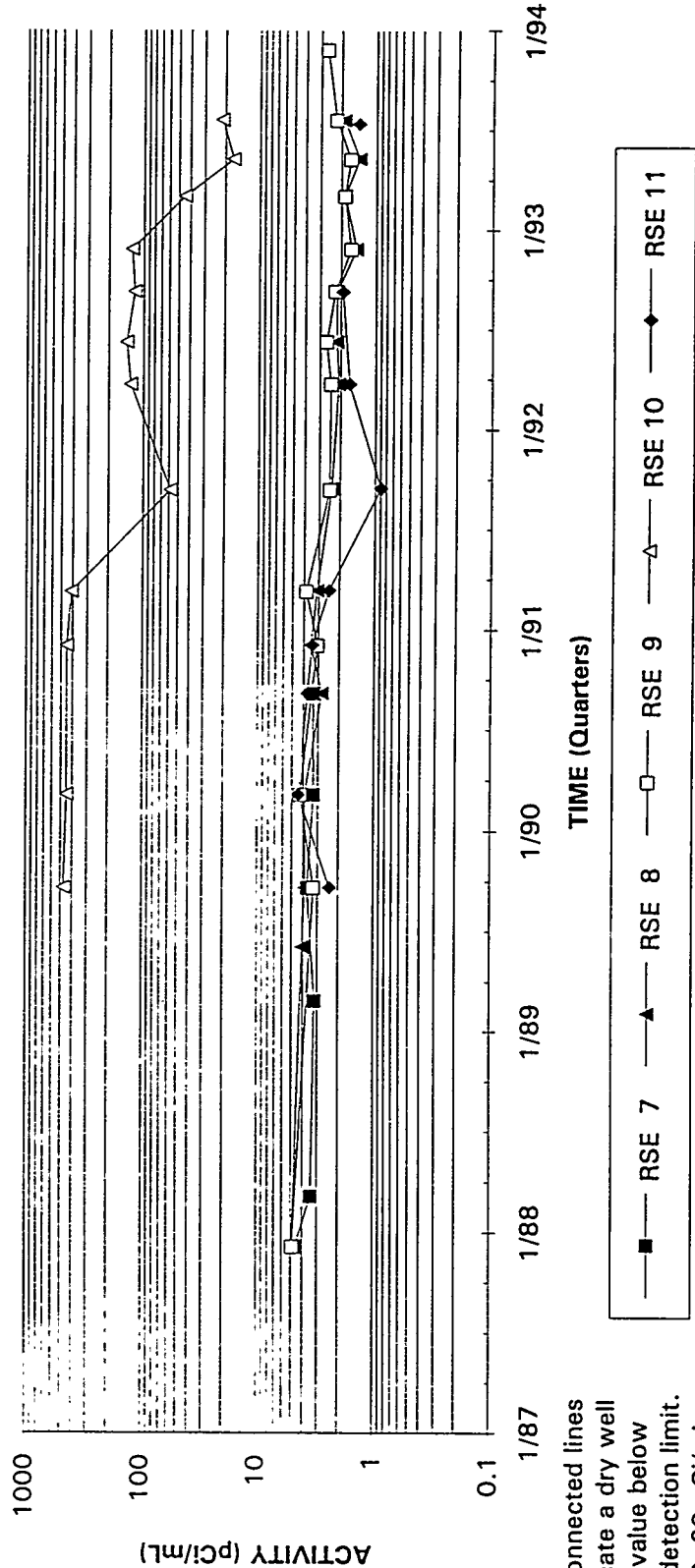
Tritium Activities RSE Well Series (1A through 3A)



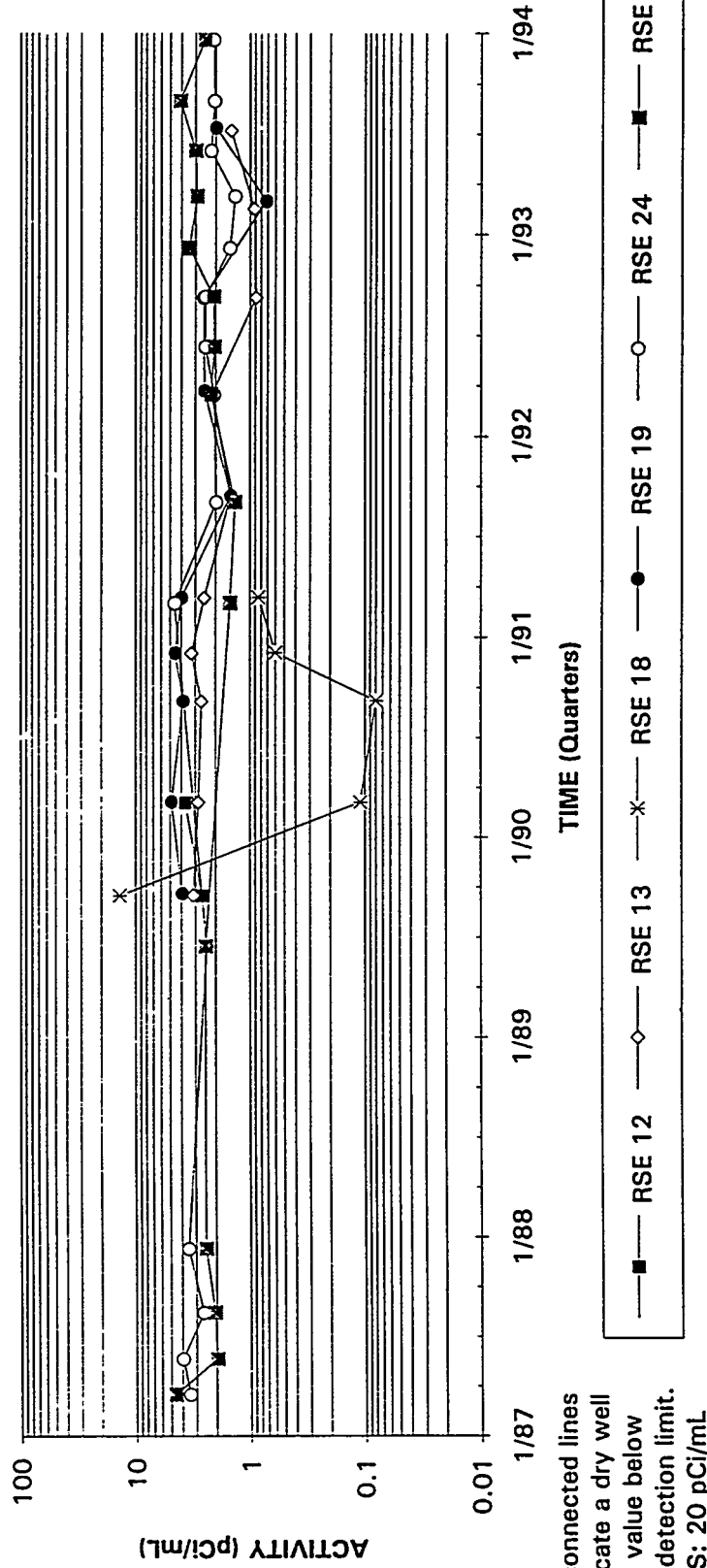
Tritium Activities RSE Well Series (4A through 6)



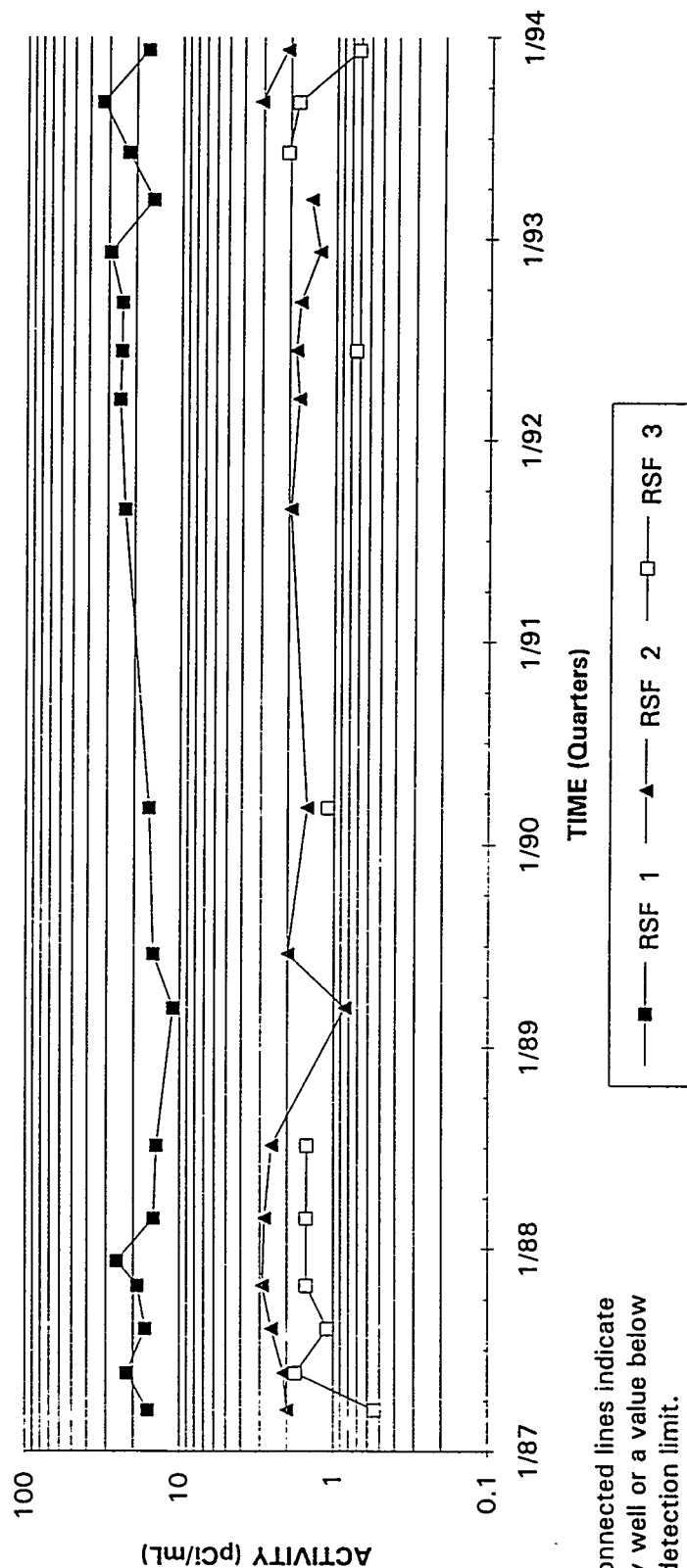
Tritium Activities RSE Well Series (7 through 11)



Tritium Activities RSE Well Series (12 through 25)

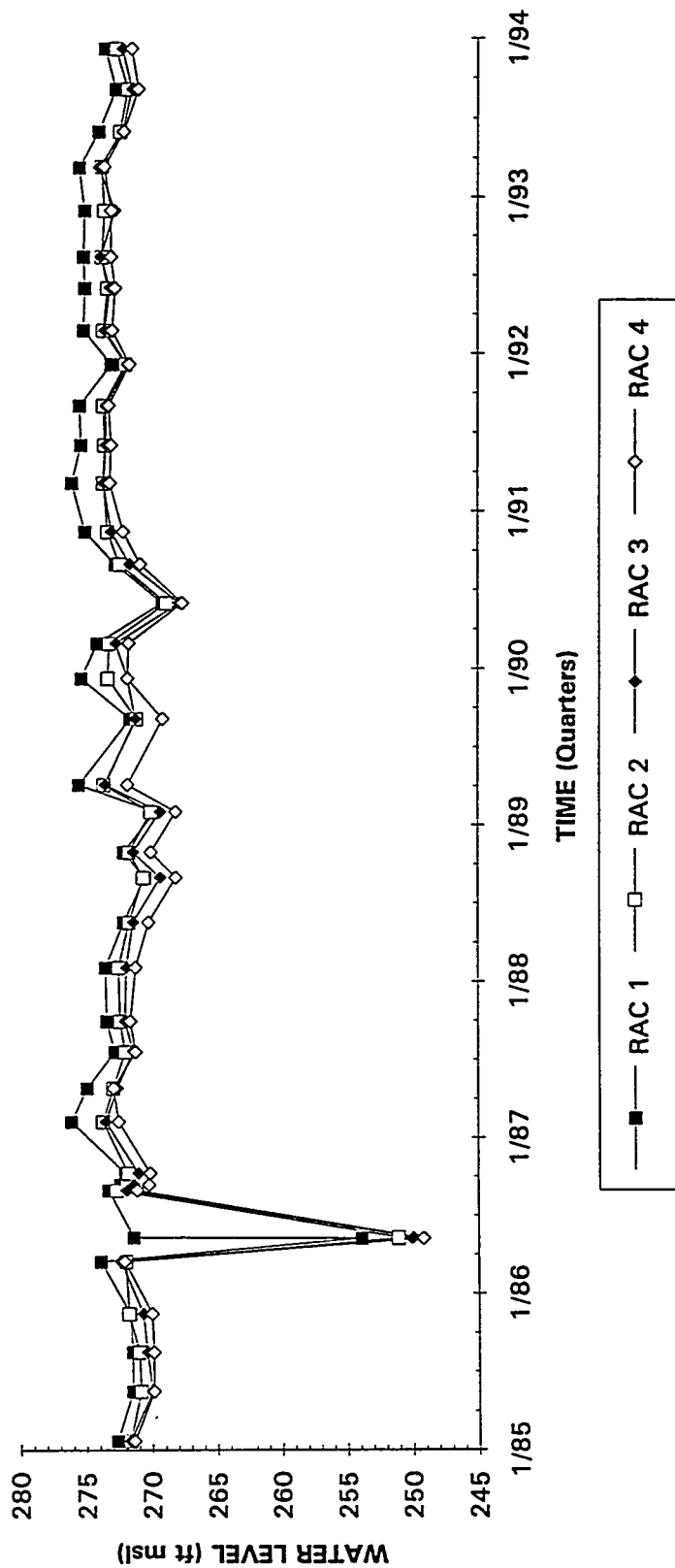


Tritium Activities RSF Well Series

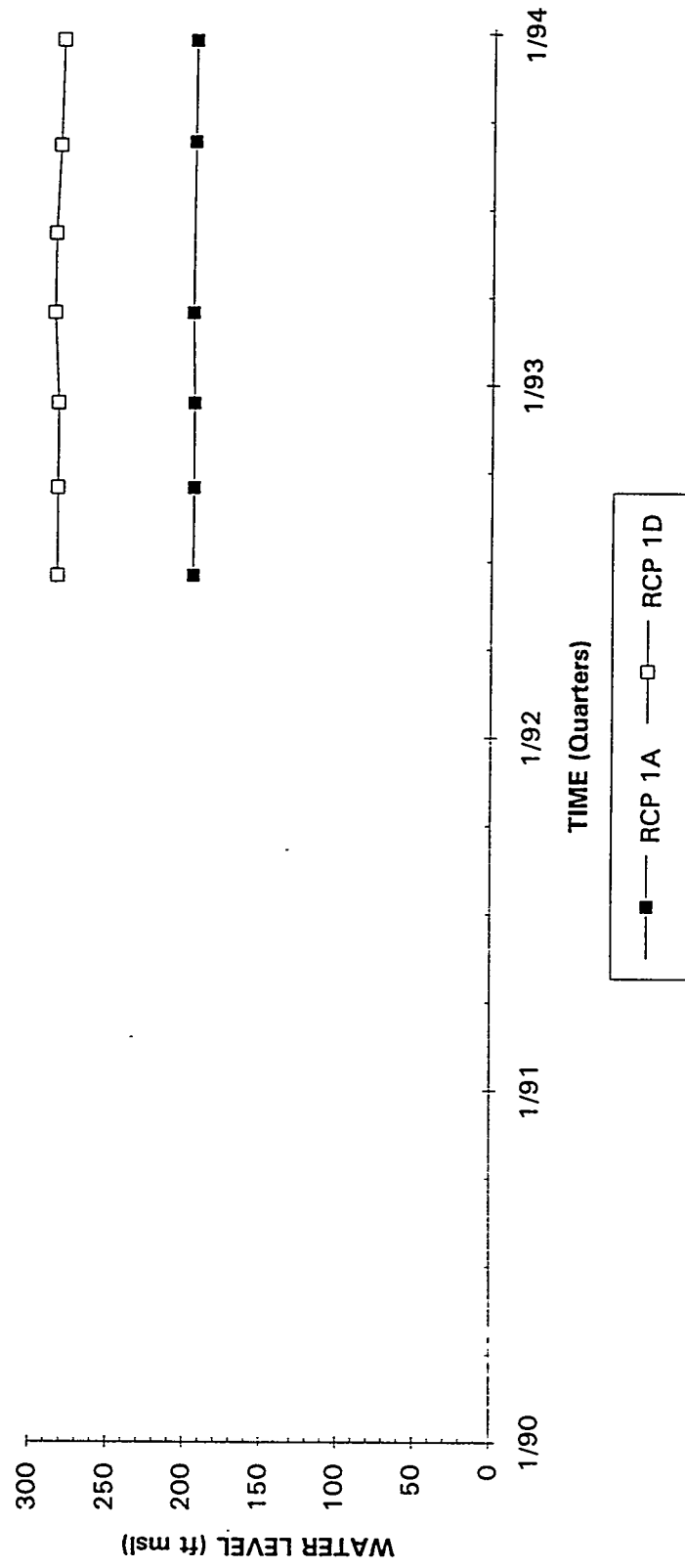


Unconnected lines indicate a dry well or a value below the detection limit.
DWS: 20 pCi/mL

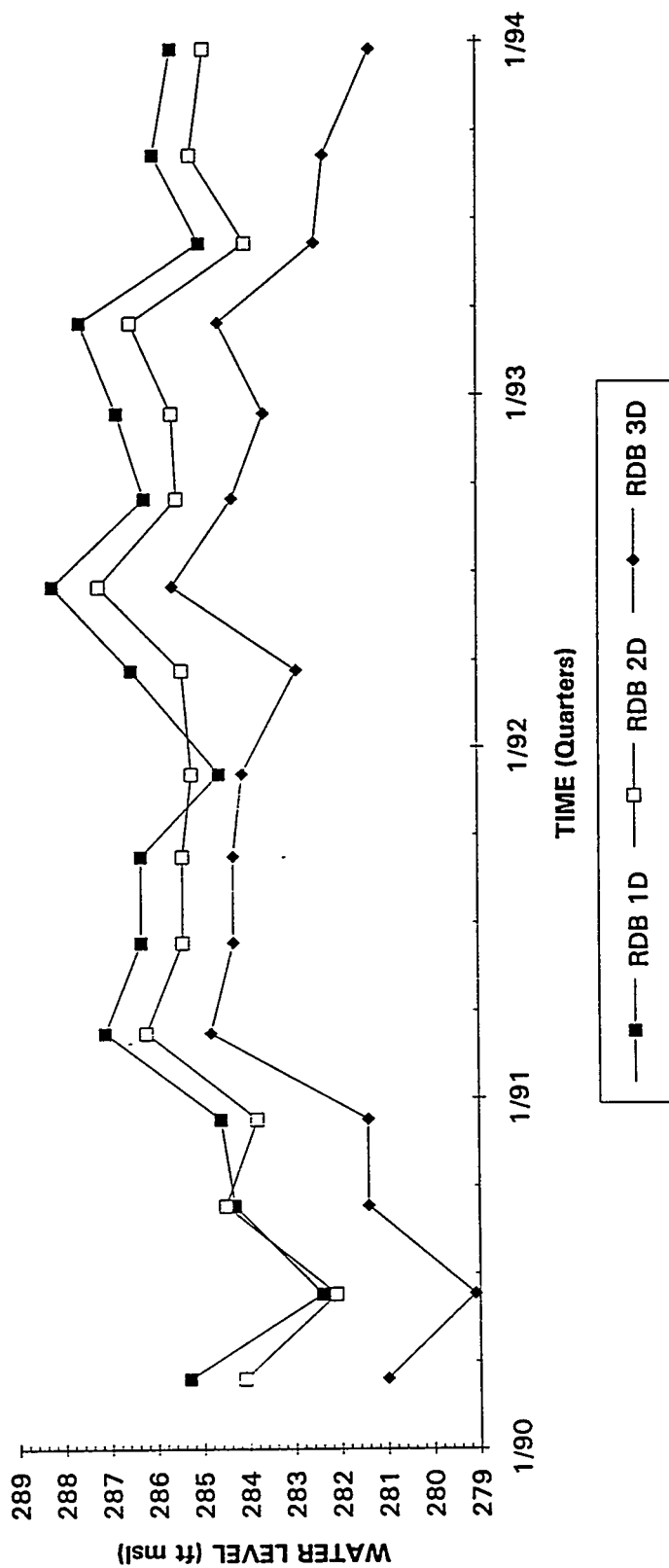
Hydrograph RAC Well Series



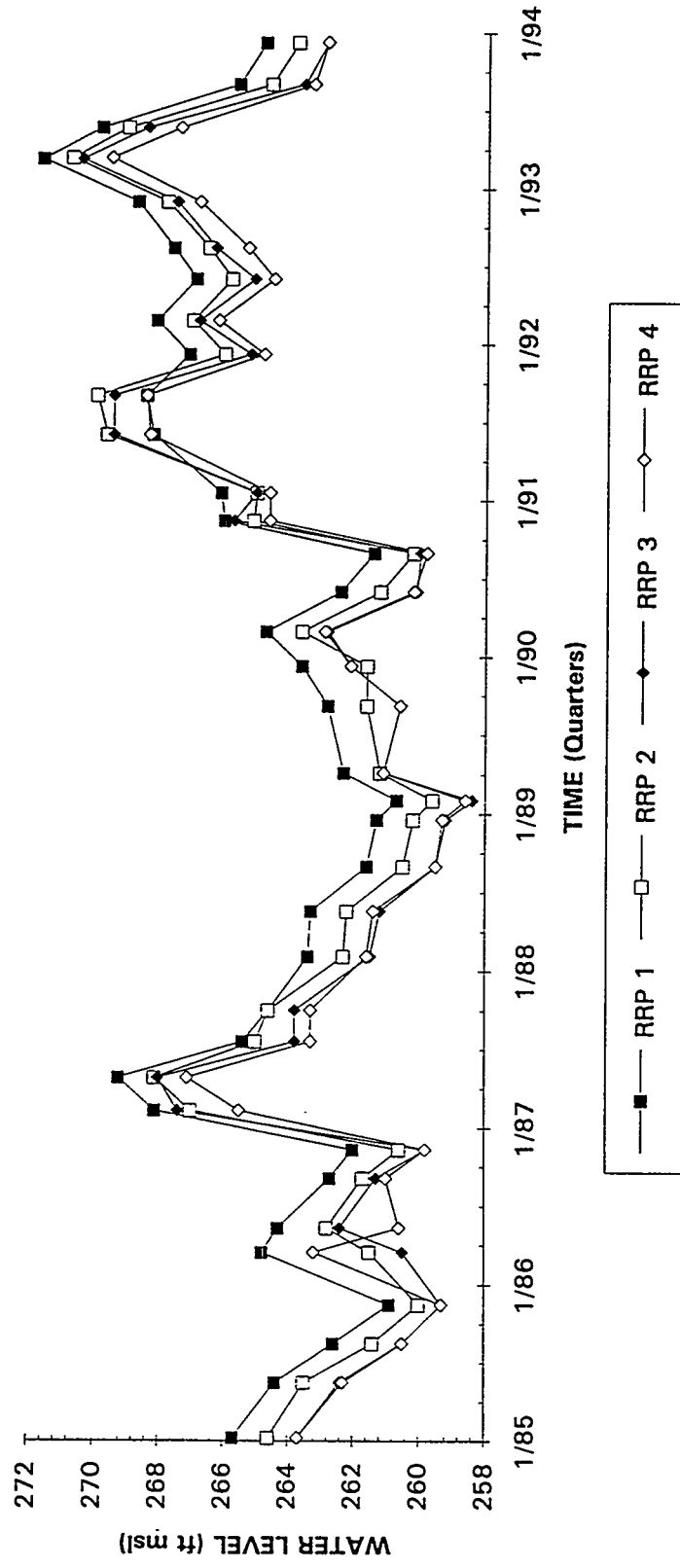
Hydrograph RCP Well Series



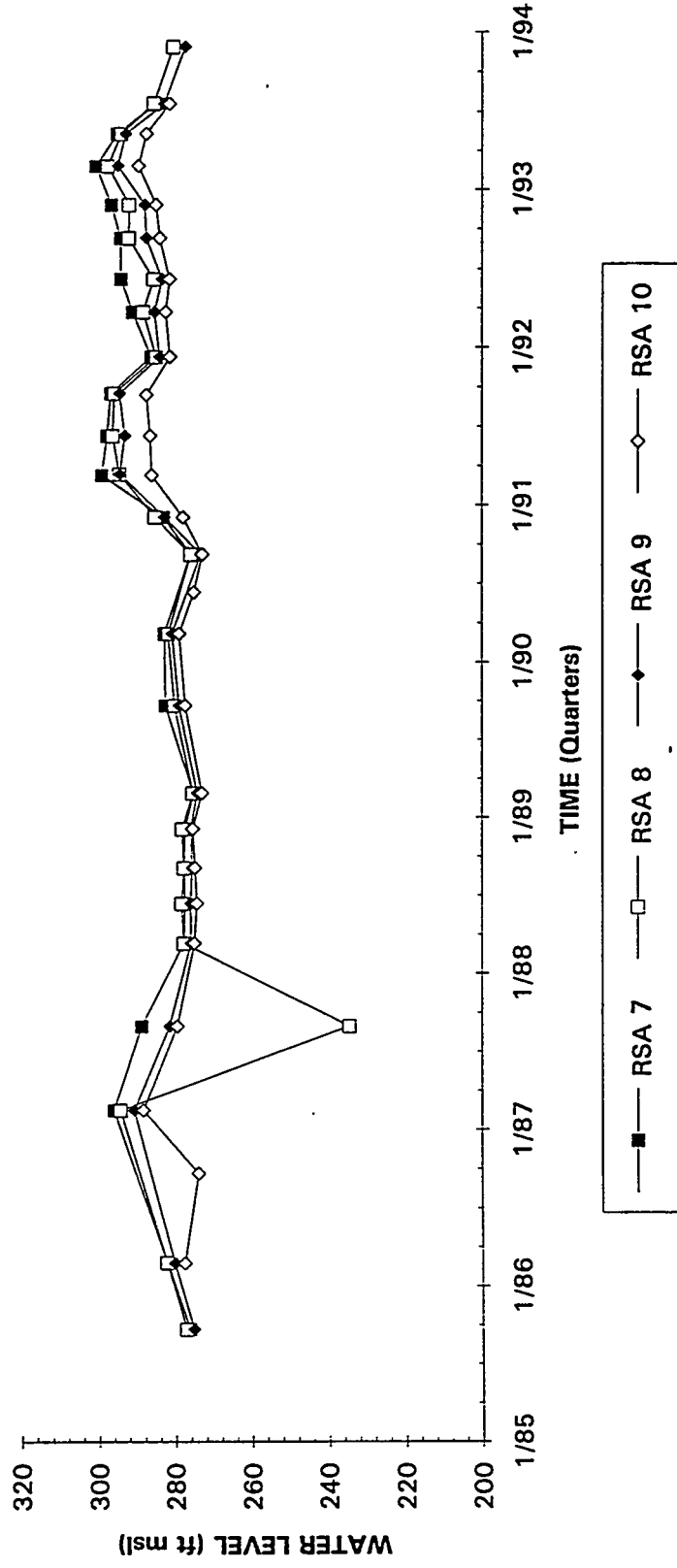
Hydrograph RDB Well Series



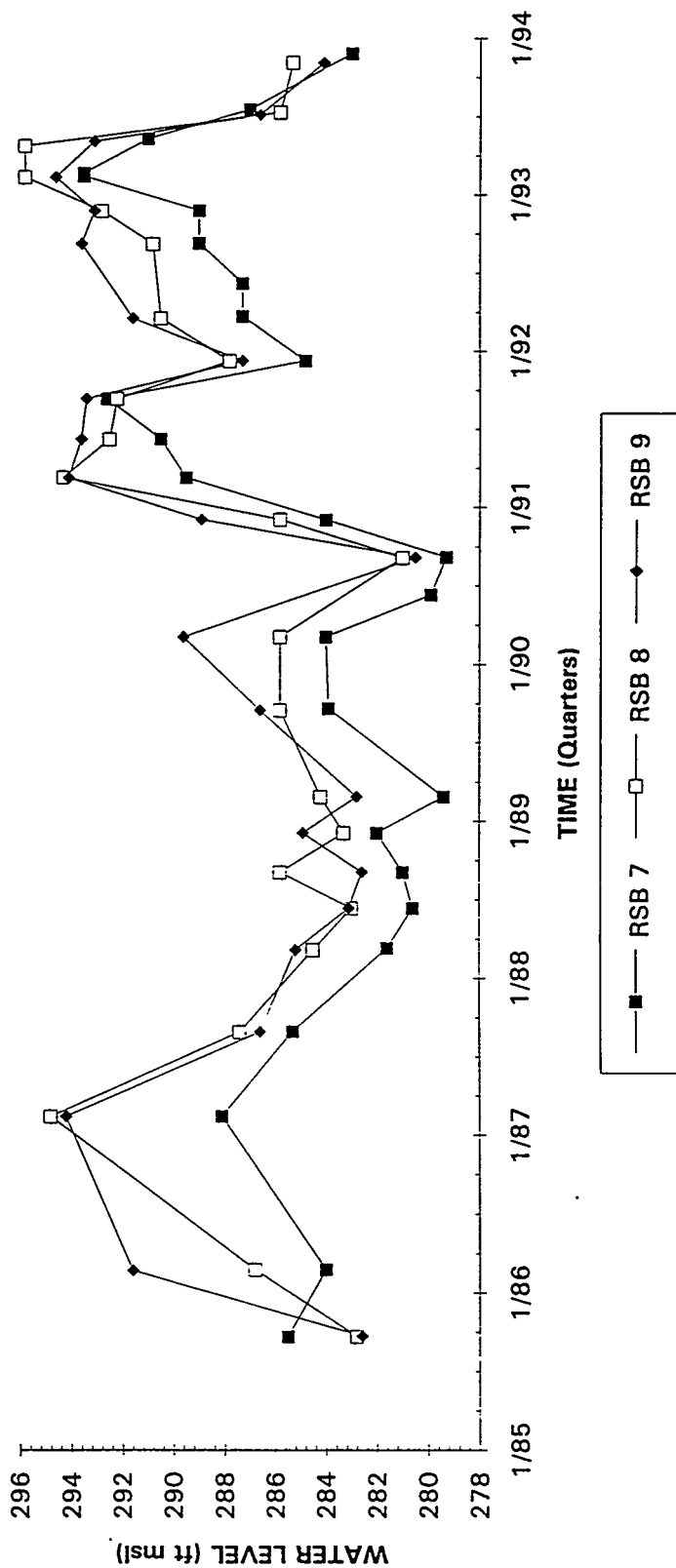
Hydrograph RRP Well Series



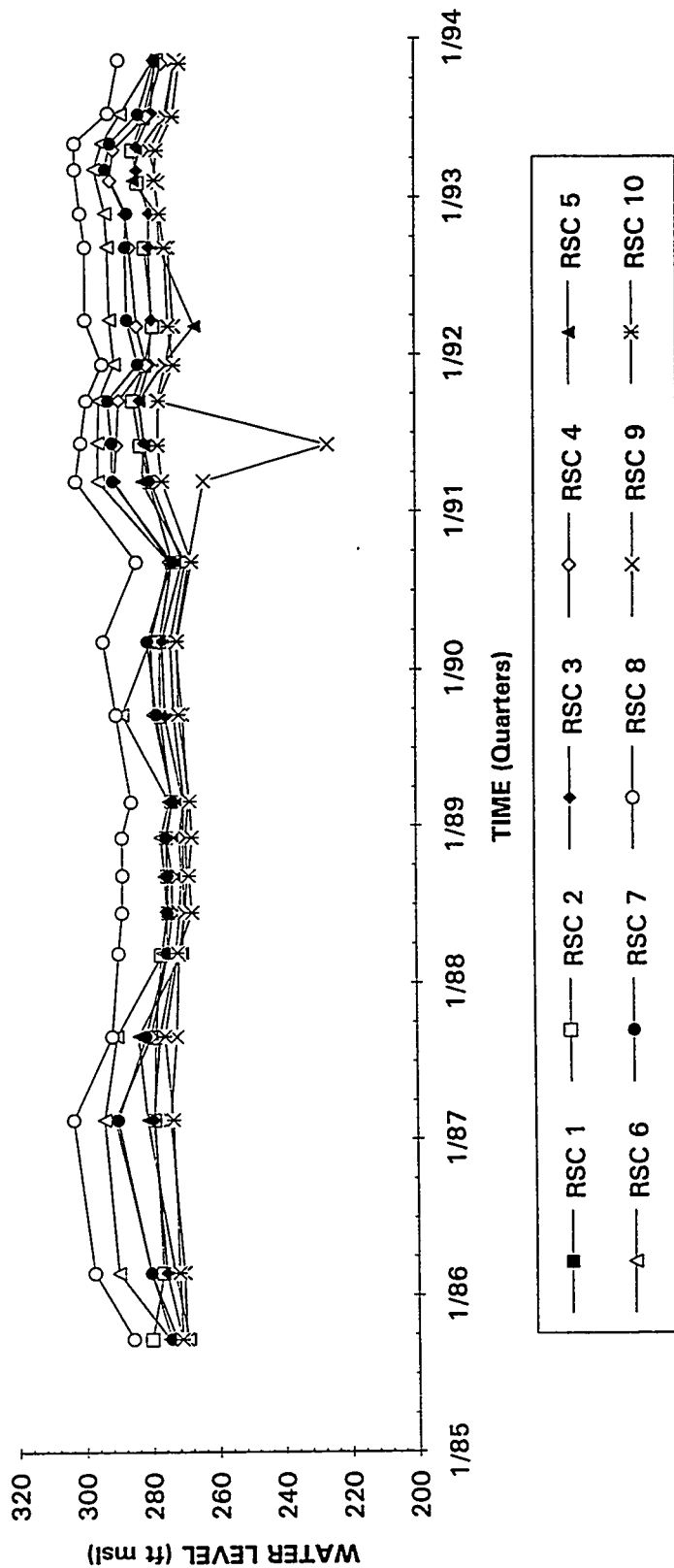
Hydrograph RSA Well Series



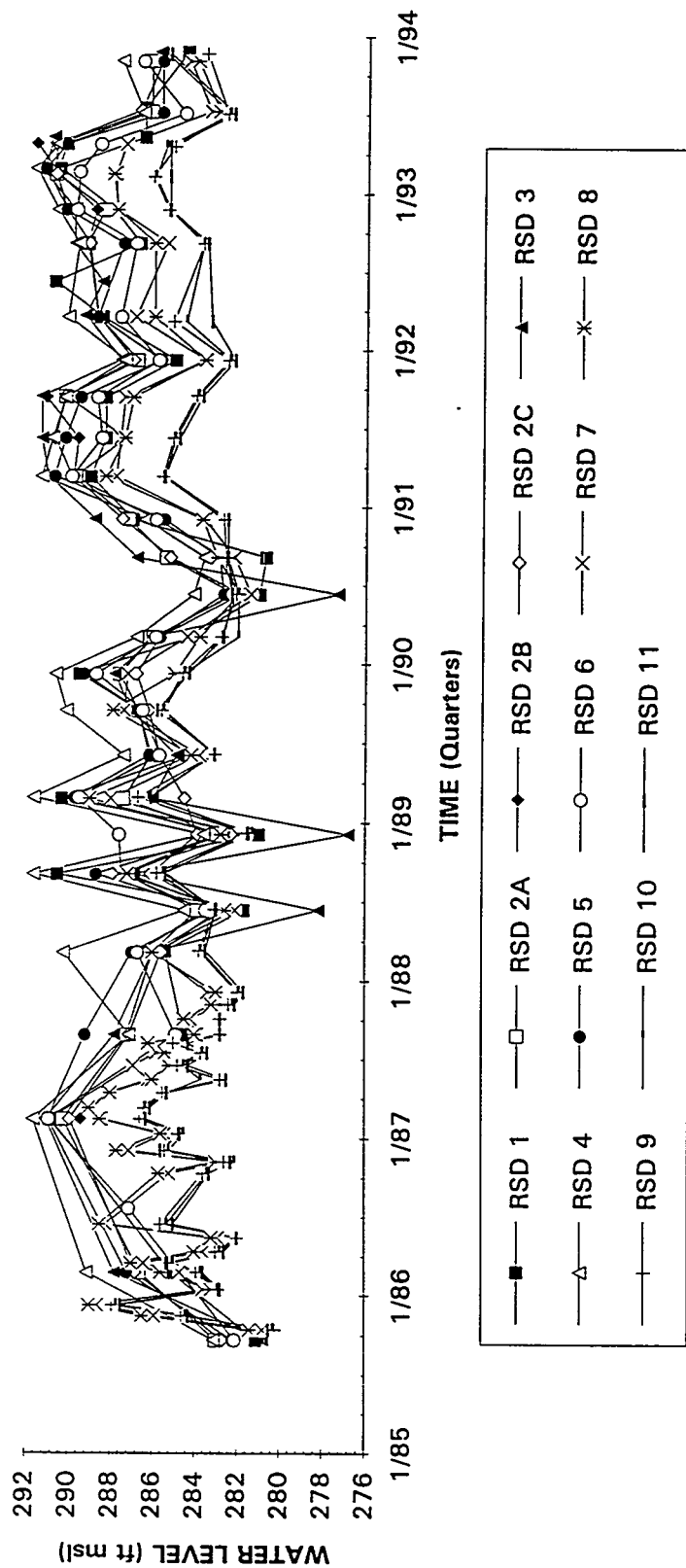
Hydrograph RSB Well Series



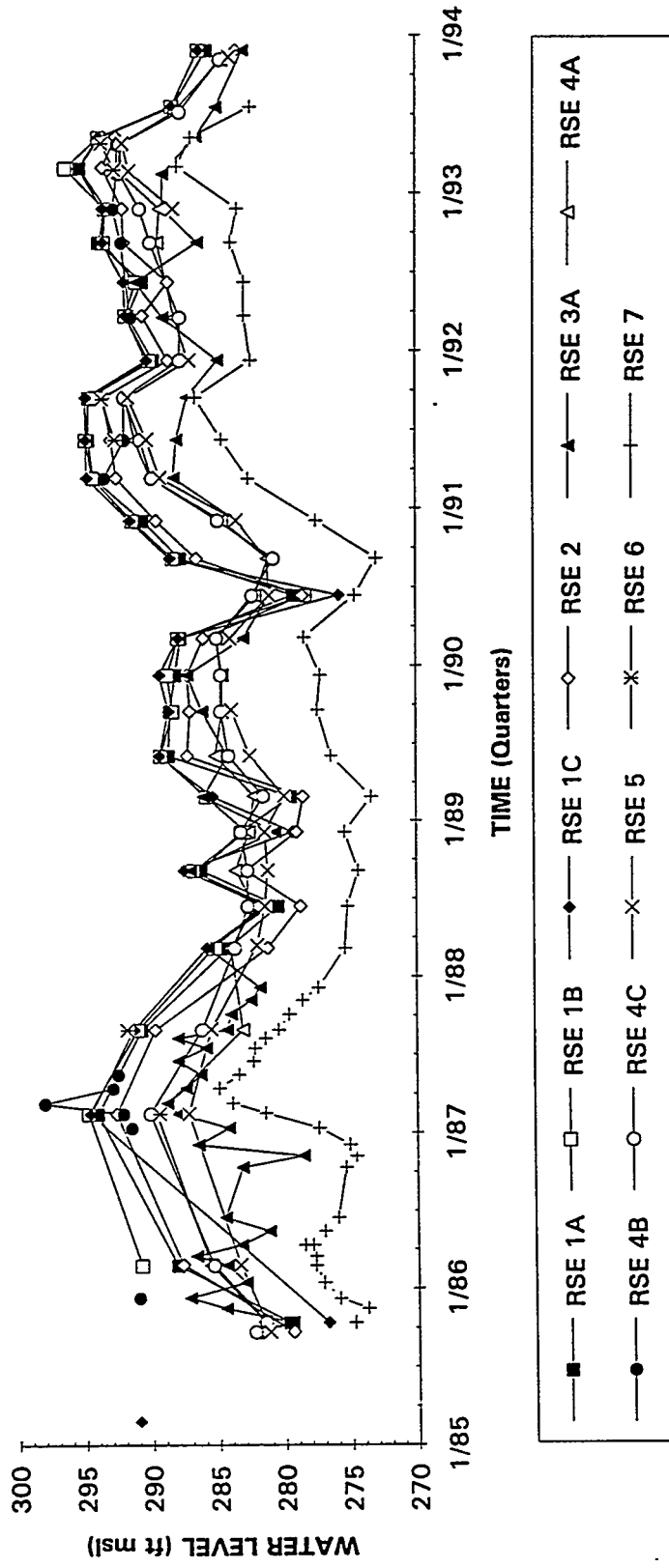
Hydrograph RSC Well Series



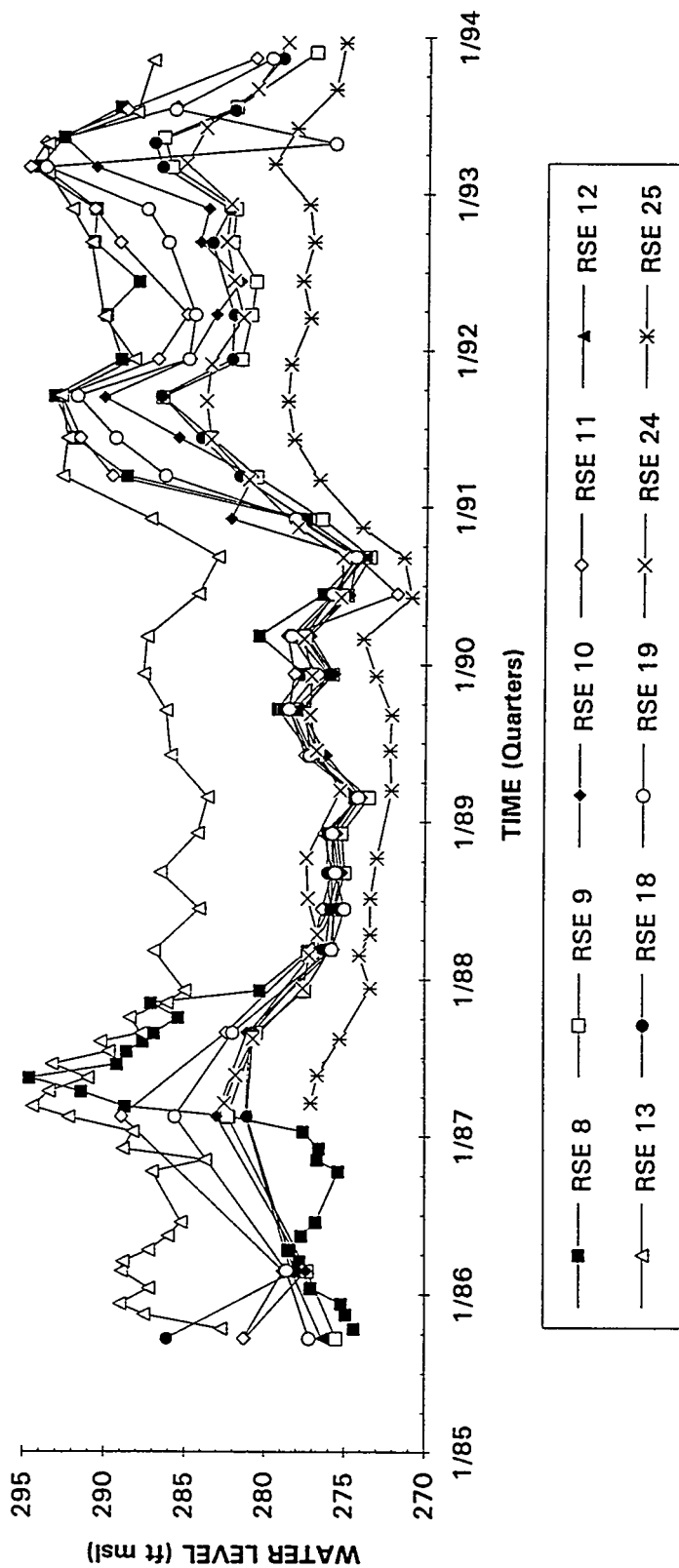
Hydrograph RSD Well Series



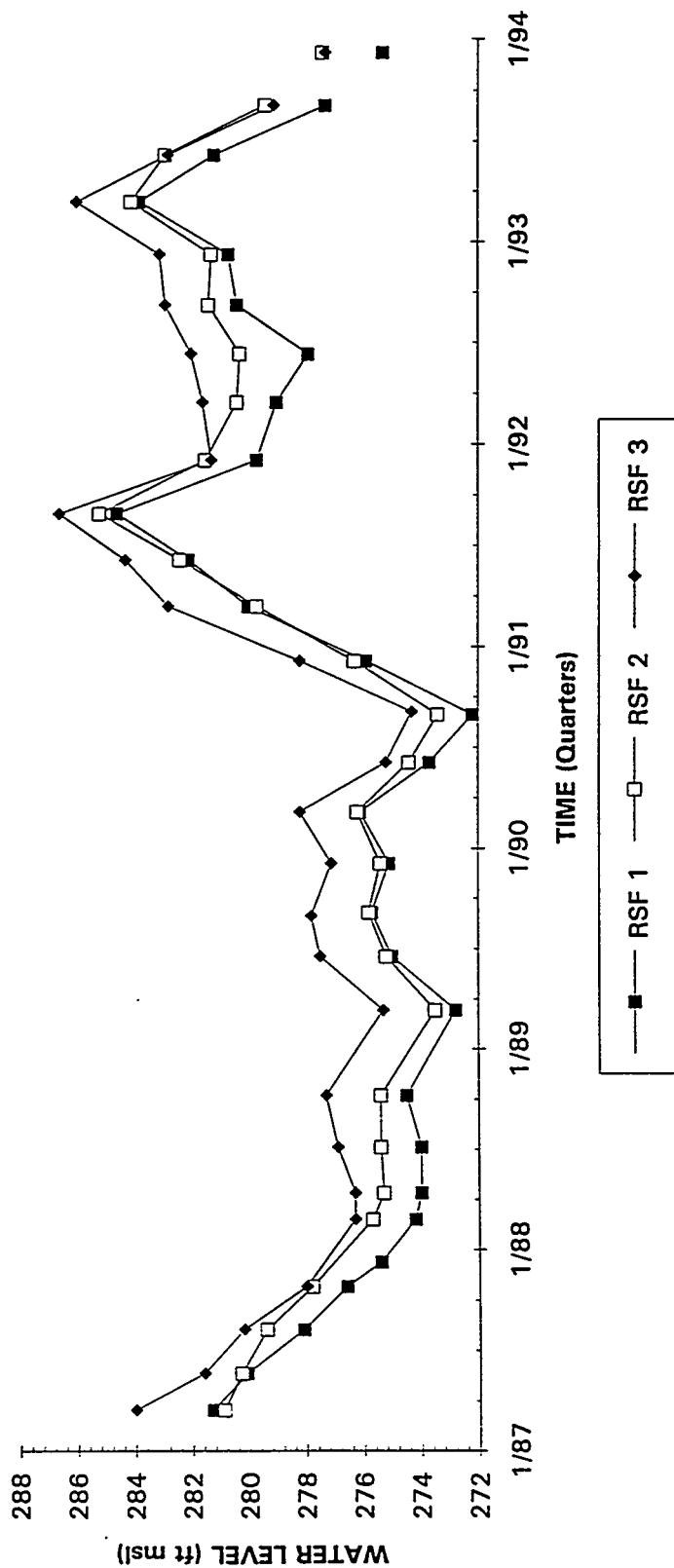
Hydrograph RSE Well Series (1 through 7)

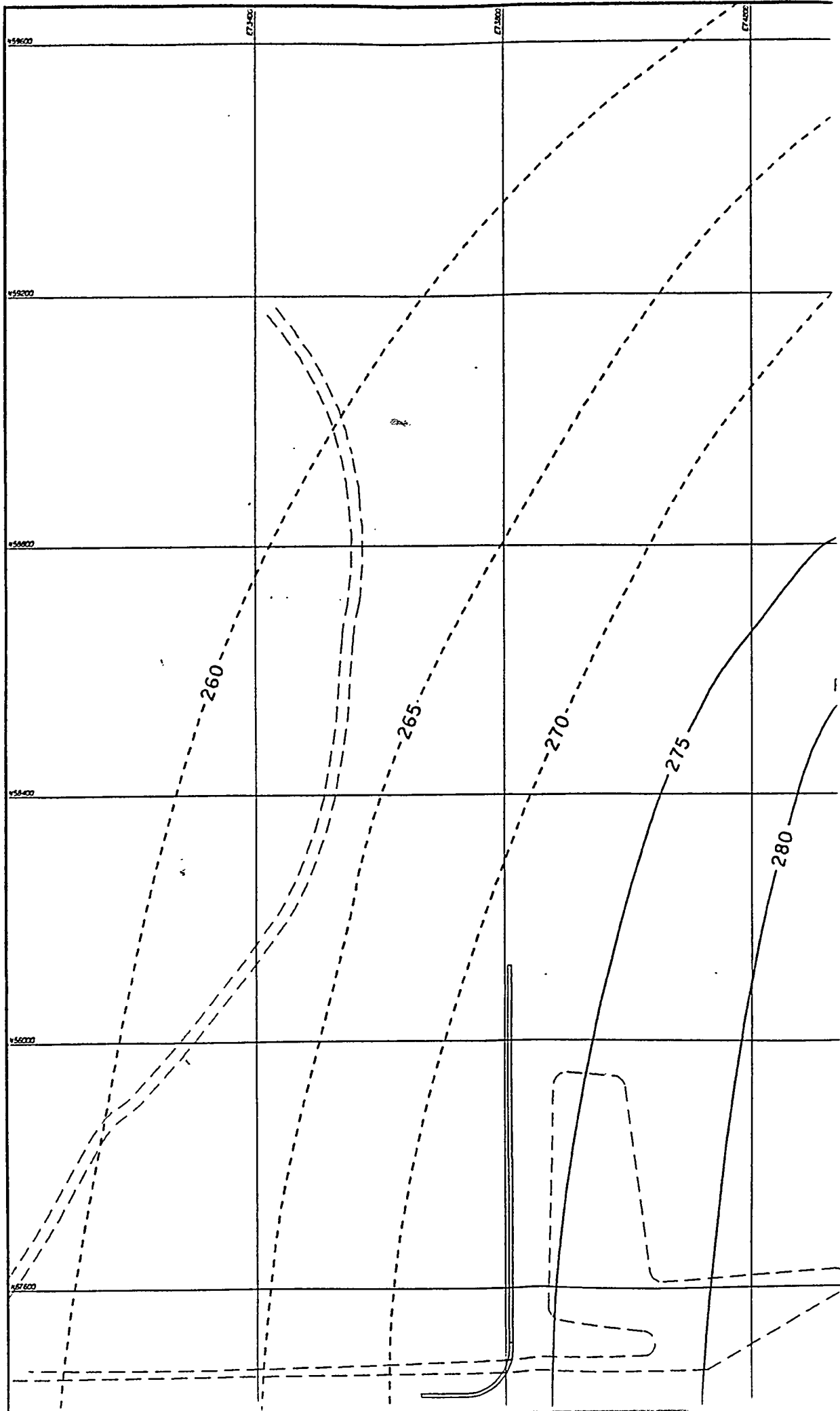


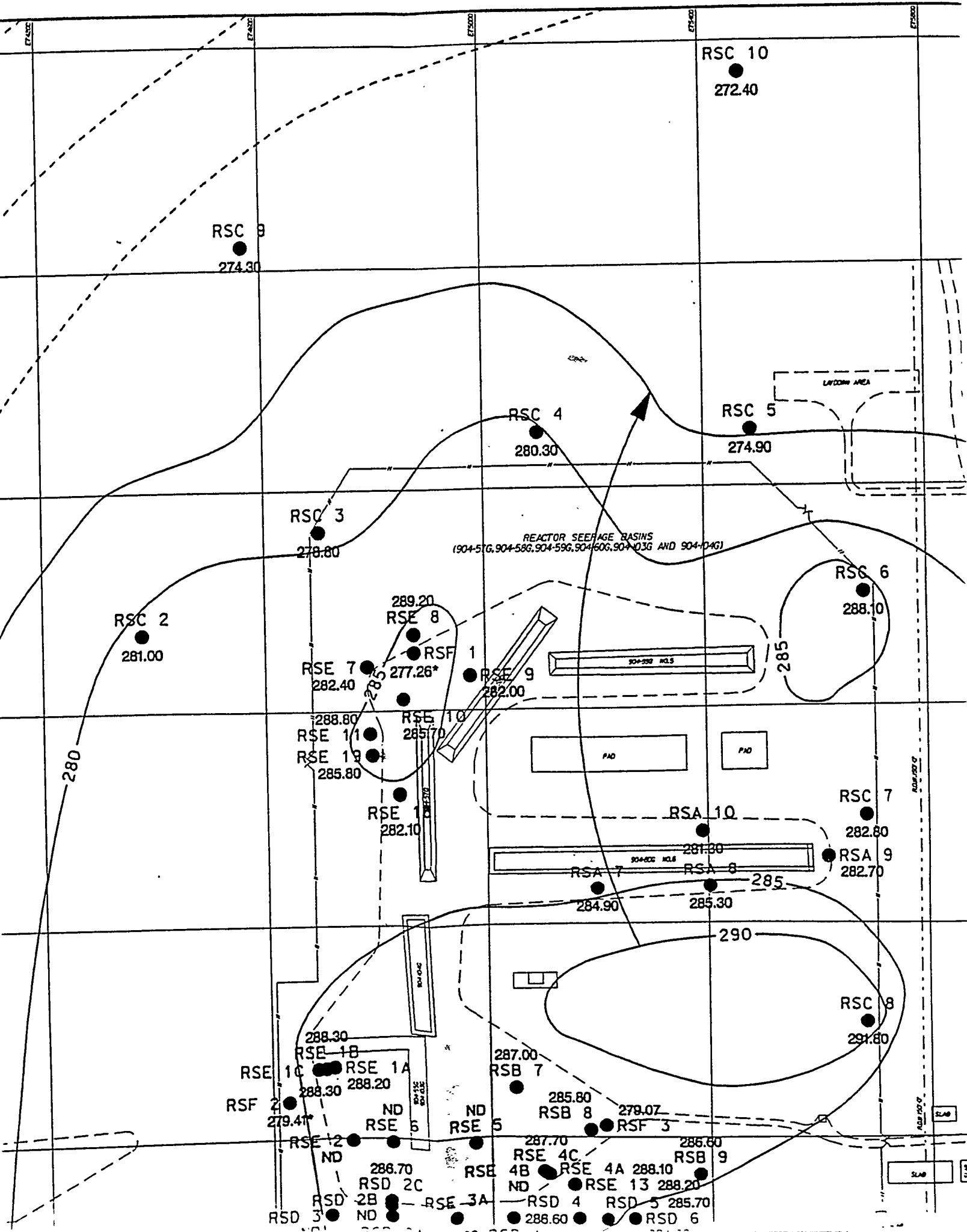
Hydrograph RSE Well Series (8 through 25)

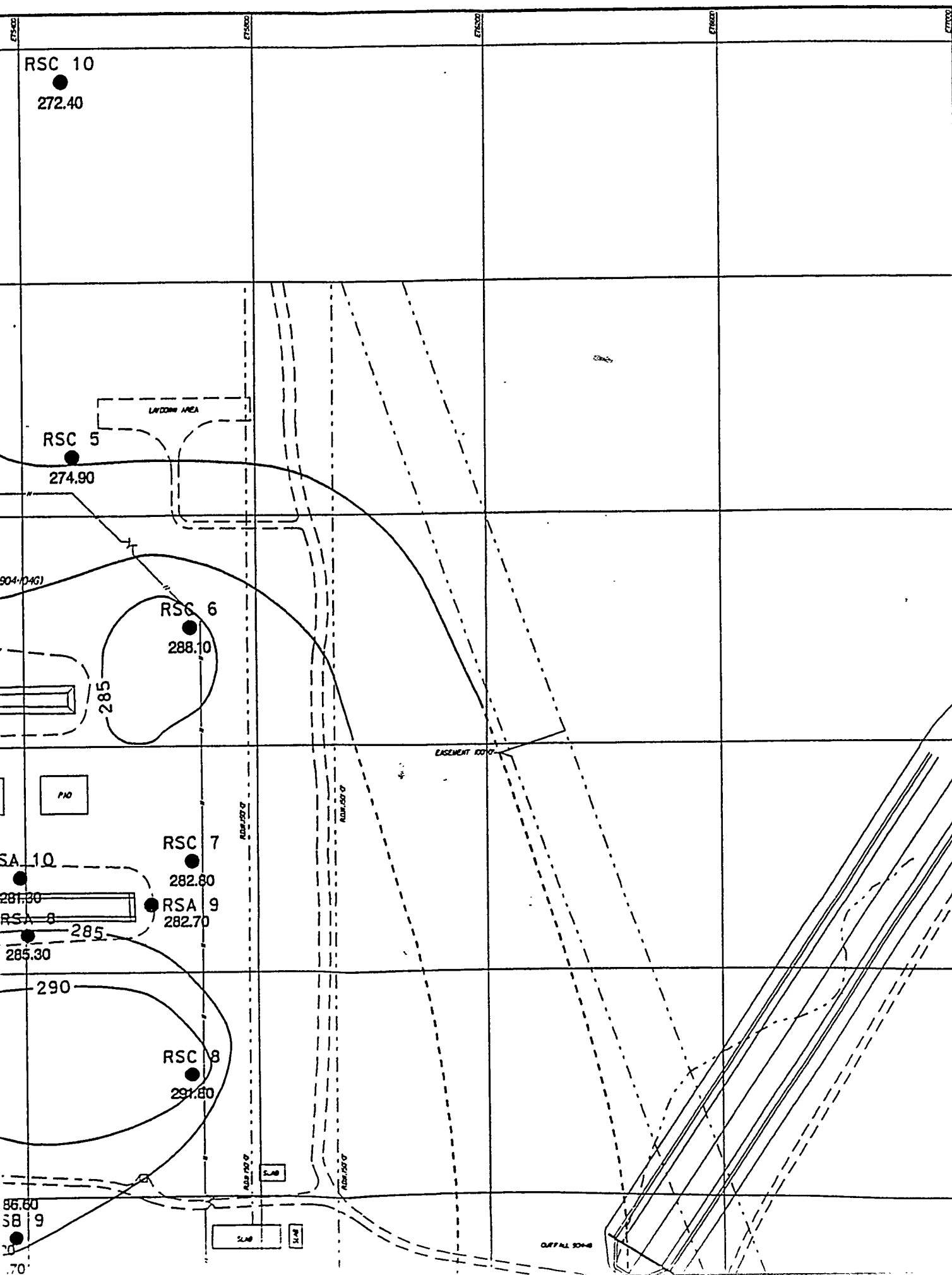


Hydrograph RSF Well Series









RSE
RSF 2
27

RS

RSE 24
280.73

RCP 1D ● RCP 1A
281.36 194.00

COAL STORAGE

SUB STA
TRANSFORMER STATION

510
(700)

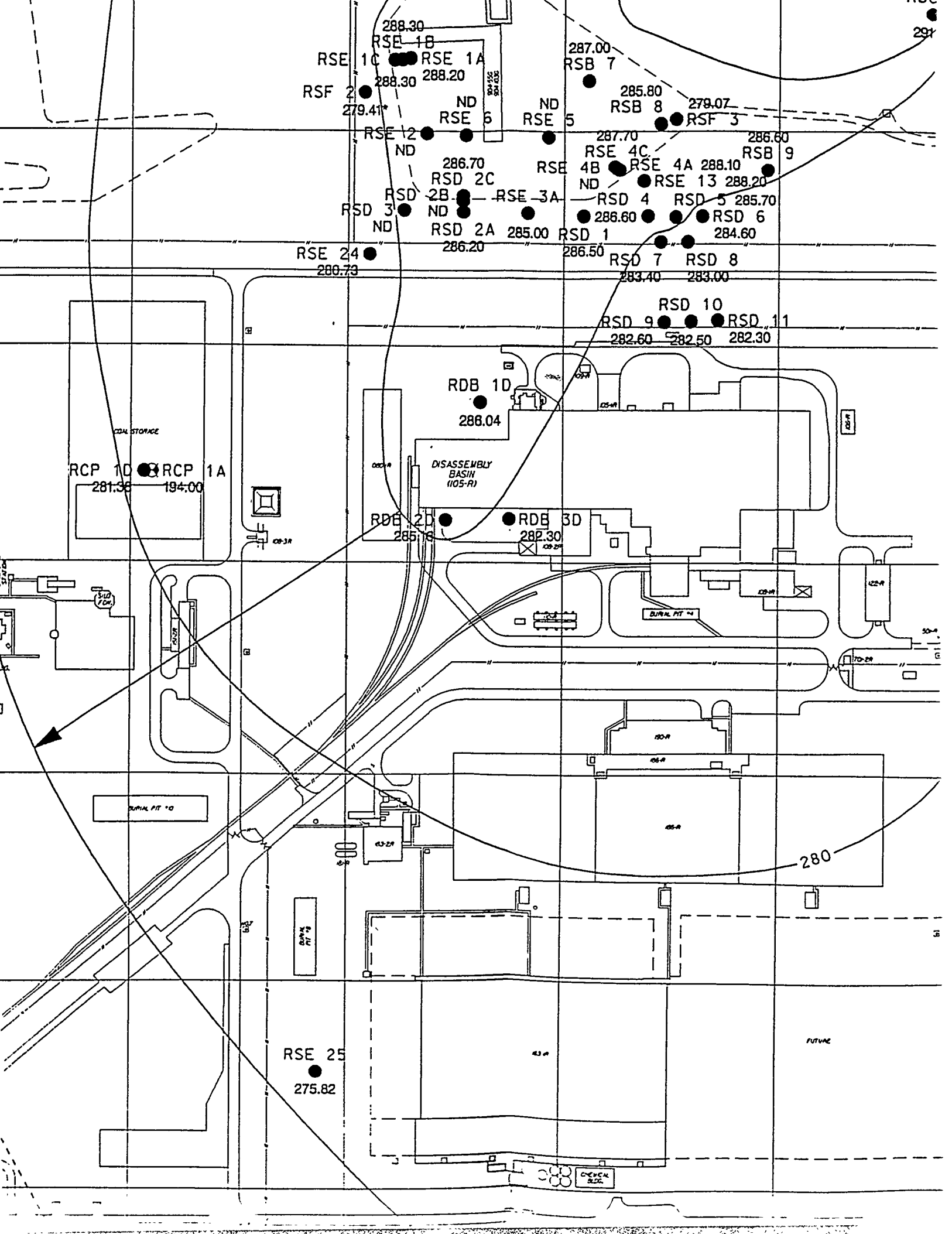
(FUTURE)
HSA

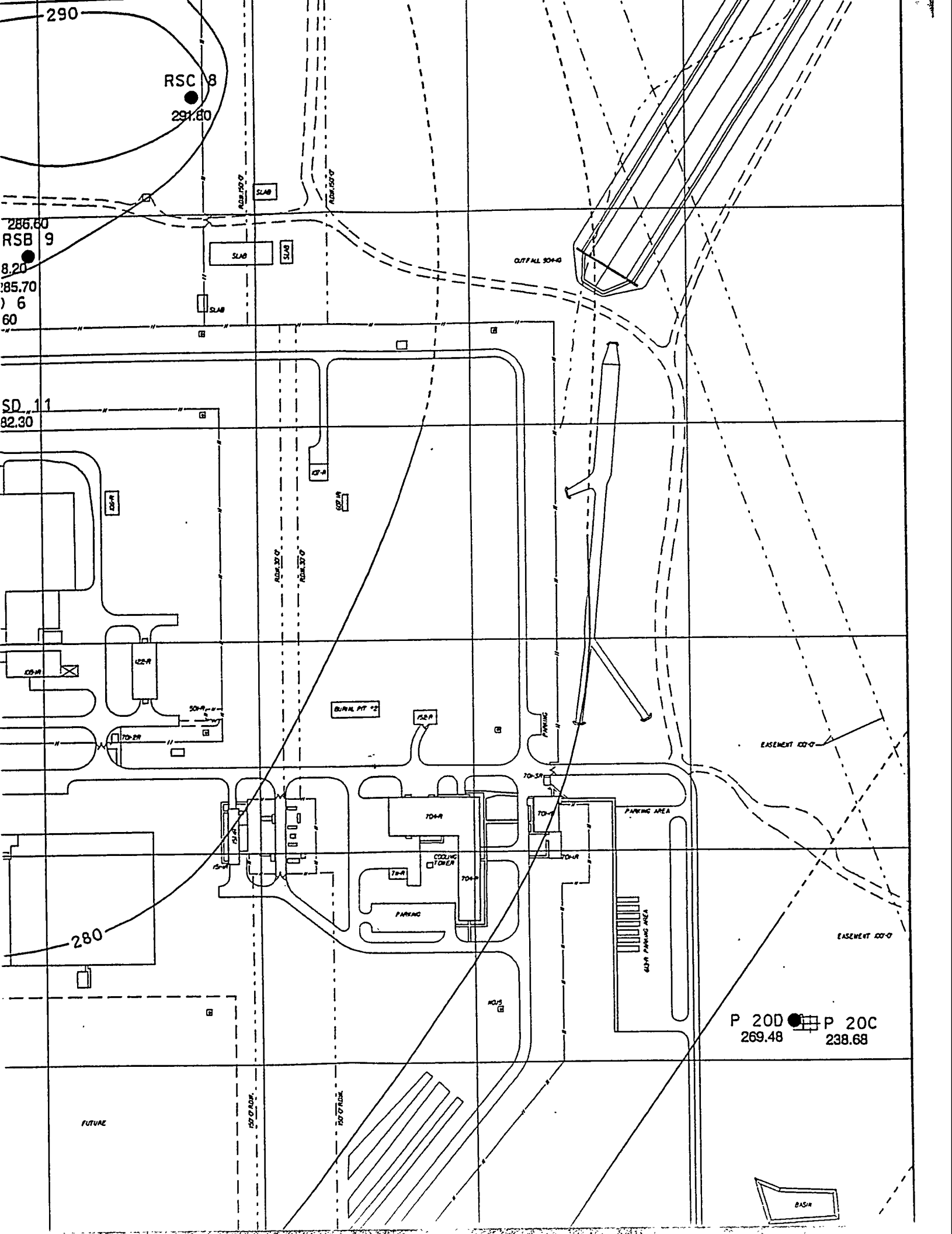
RAIL PIT 10

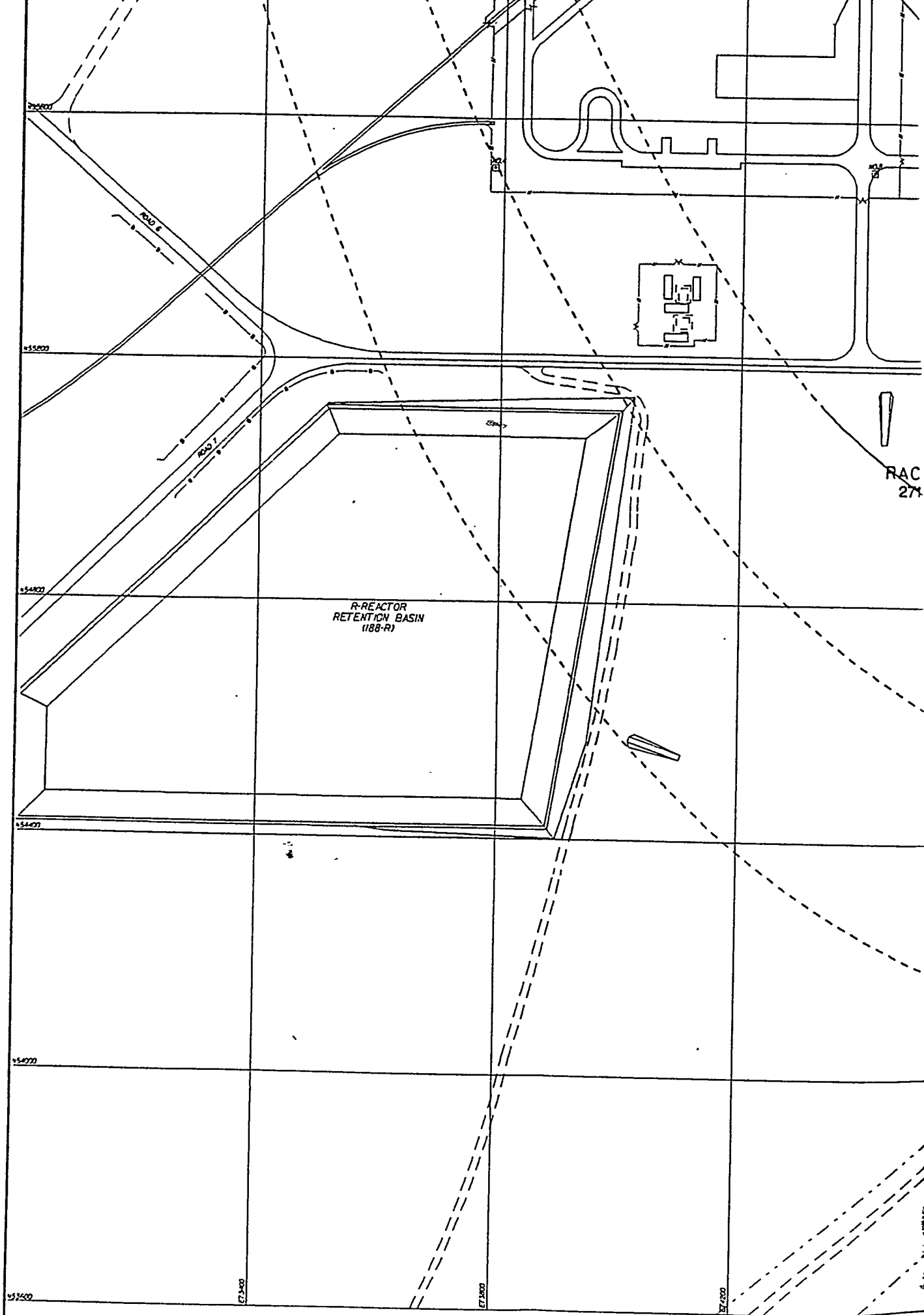
RAIL PIT 11

RSE 25
●
275.82

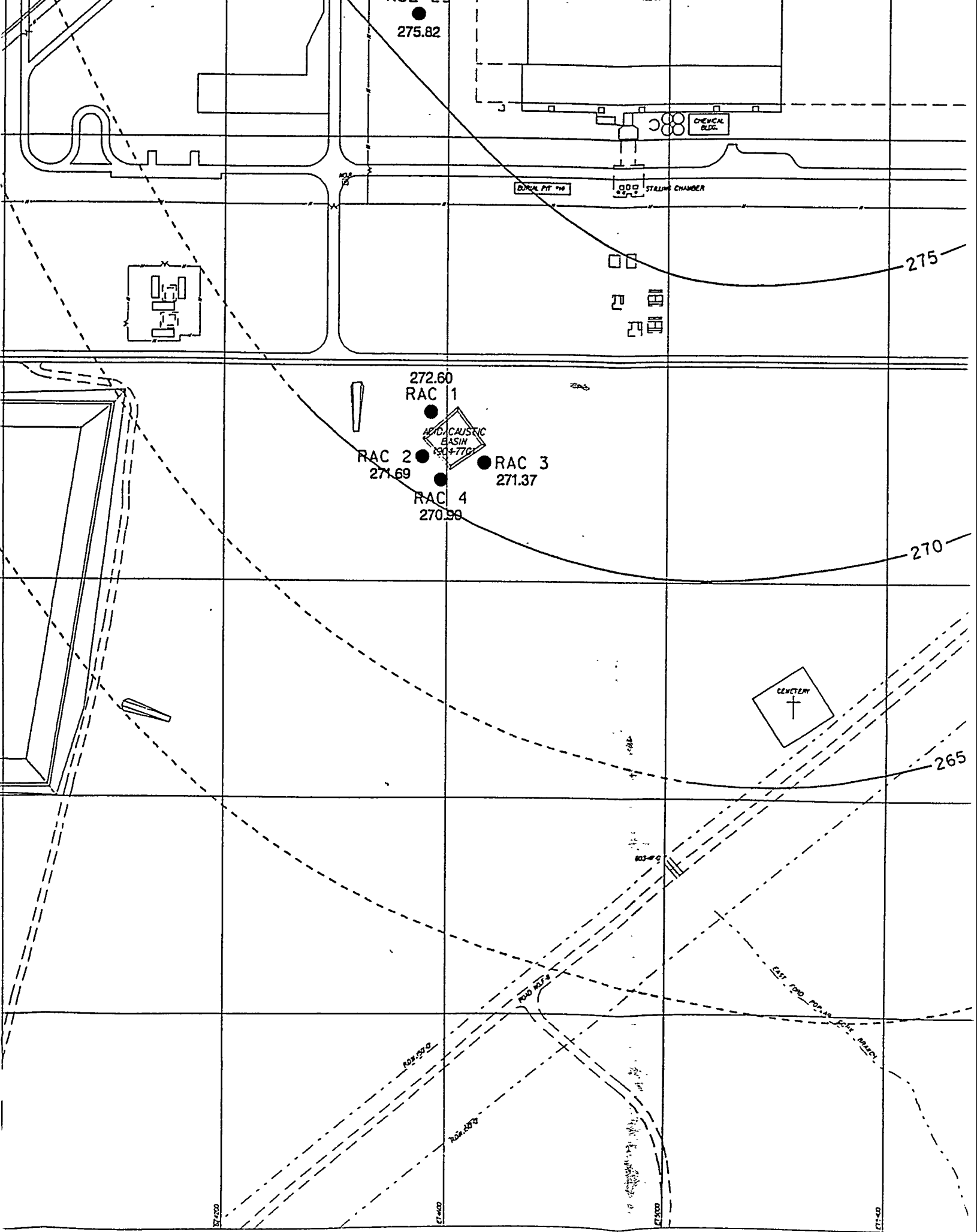
+51620
+51622
+51620
+51622
+51620
+51622
+51620







WELL SYMBOL LEGEND





5

NOTES

BASIN

275

270

RRP 1

~~265.59~~

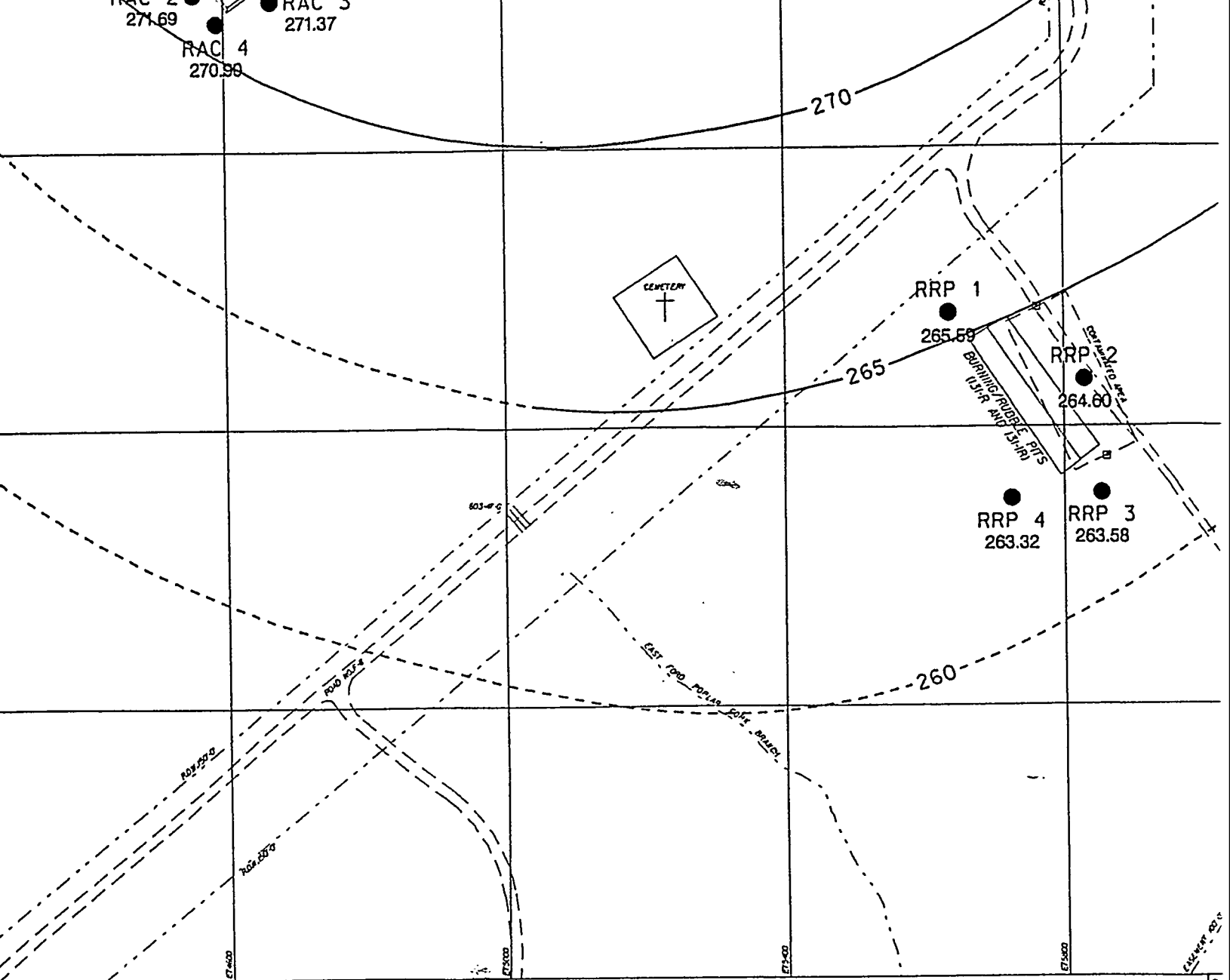
RRP 2

264.60

RRP 4
263.32

RRP 3
263.58

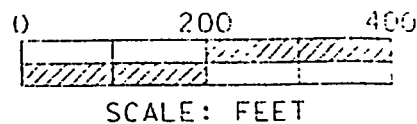
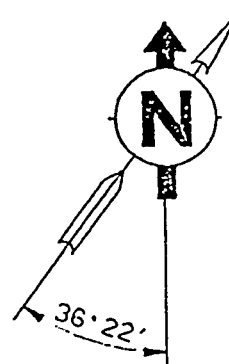
260

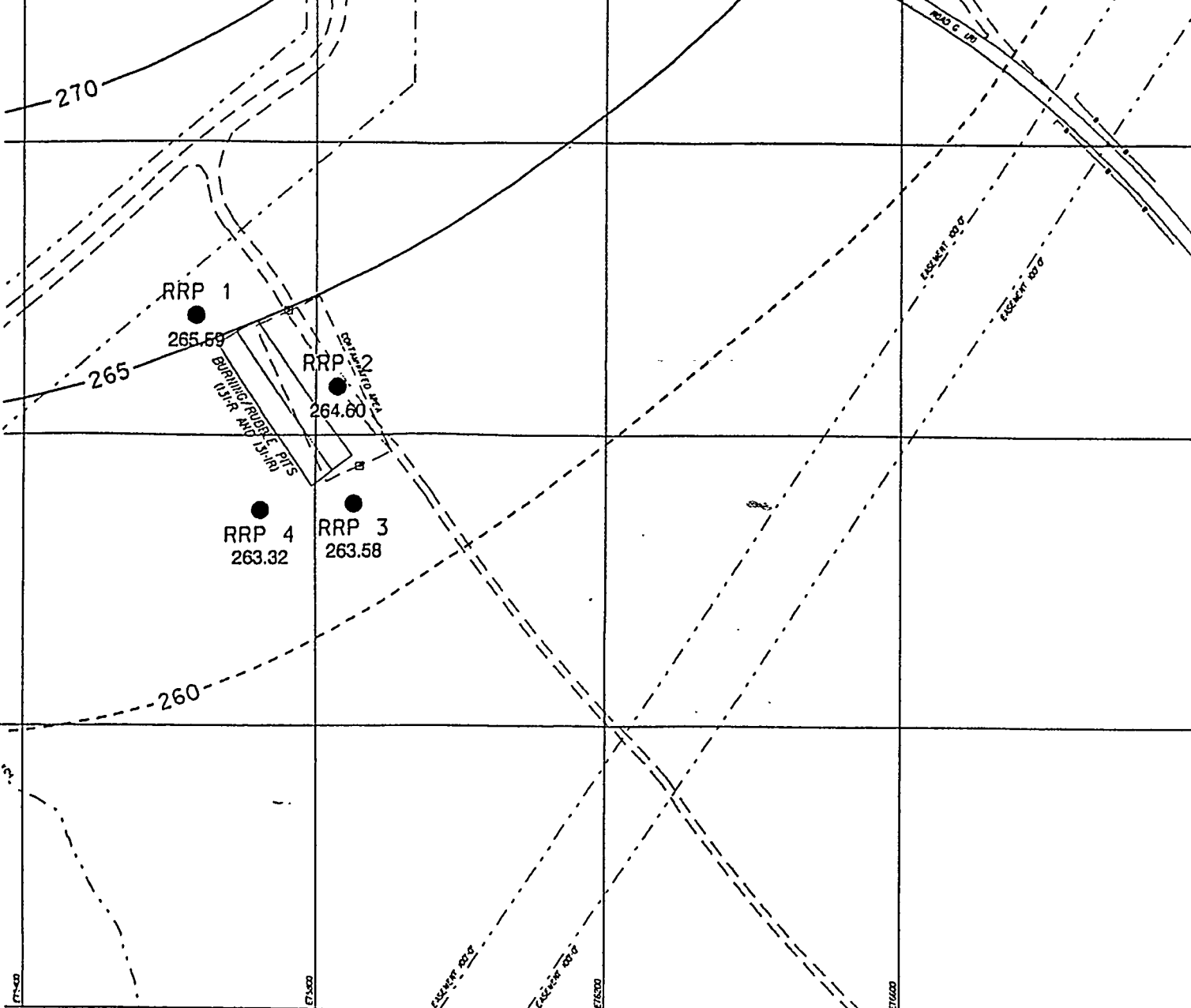


LEGEND

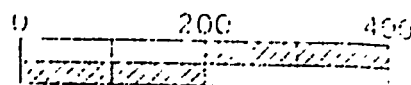
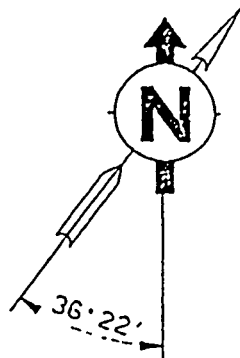
- FACILITY BOUNDARY
- ROAD
- DIRT ROAD
- STREAM
- RAILROAD
- FENCE
- PIT/BASIN
- 280 OBSERVED CONTOUR

PLANT TRUE
NORTH NORTH





PLANT TRUE
NORTH NORTH



SCALE: FEET

DWG NO. GR1117		REV. NO. 0	REV. DATE 8-15-94	AREA R-AREA
 SRS SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION  <i>'Restoring the Environment Today for a Cleaner Tomorrow'</i>		
TITLE WATER TABLE SURFACE MAP FOR R-REACTOR AREA THIRD QUARTER 1993				
CREATED BY TRACY L. MICKLEY	DATE 8-15-94	APPROVED BY NA	DATE 93	
PREPARED BY C. BUTLER	DATE 8-15-94	APPROVED BY NA	DATE 93	
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93	
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93	

A59600

A58700

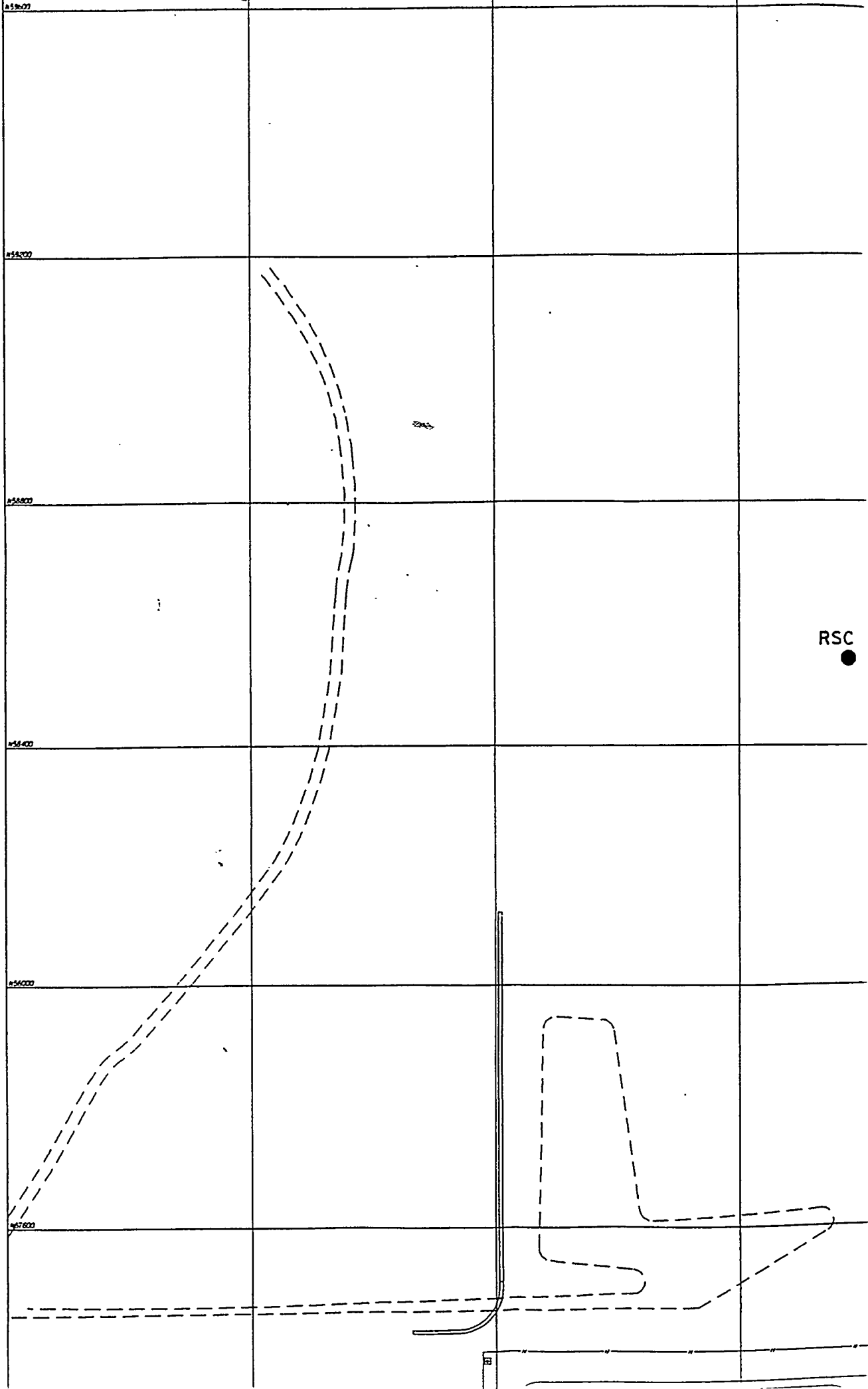
A58000

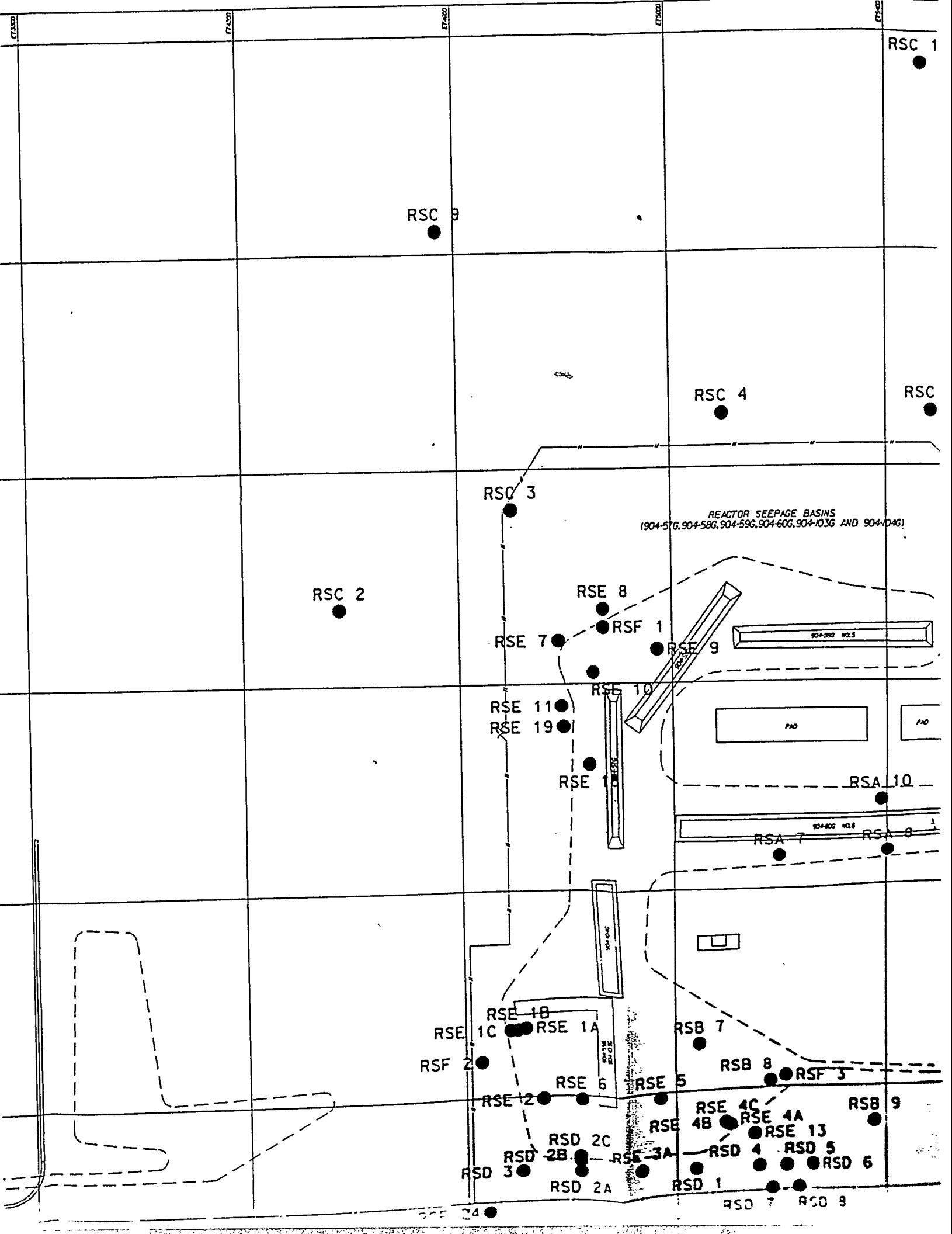
A57400

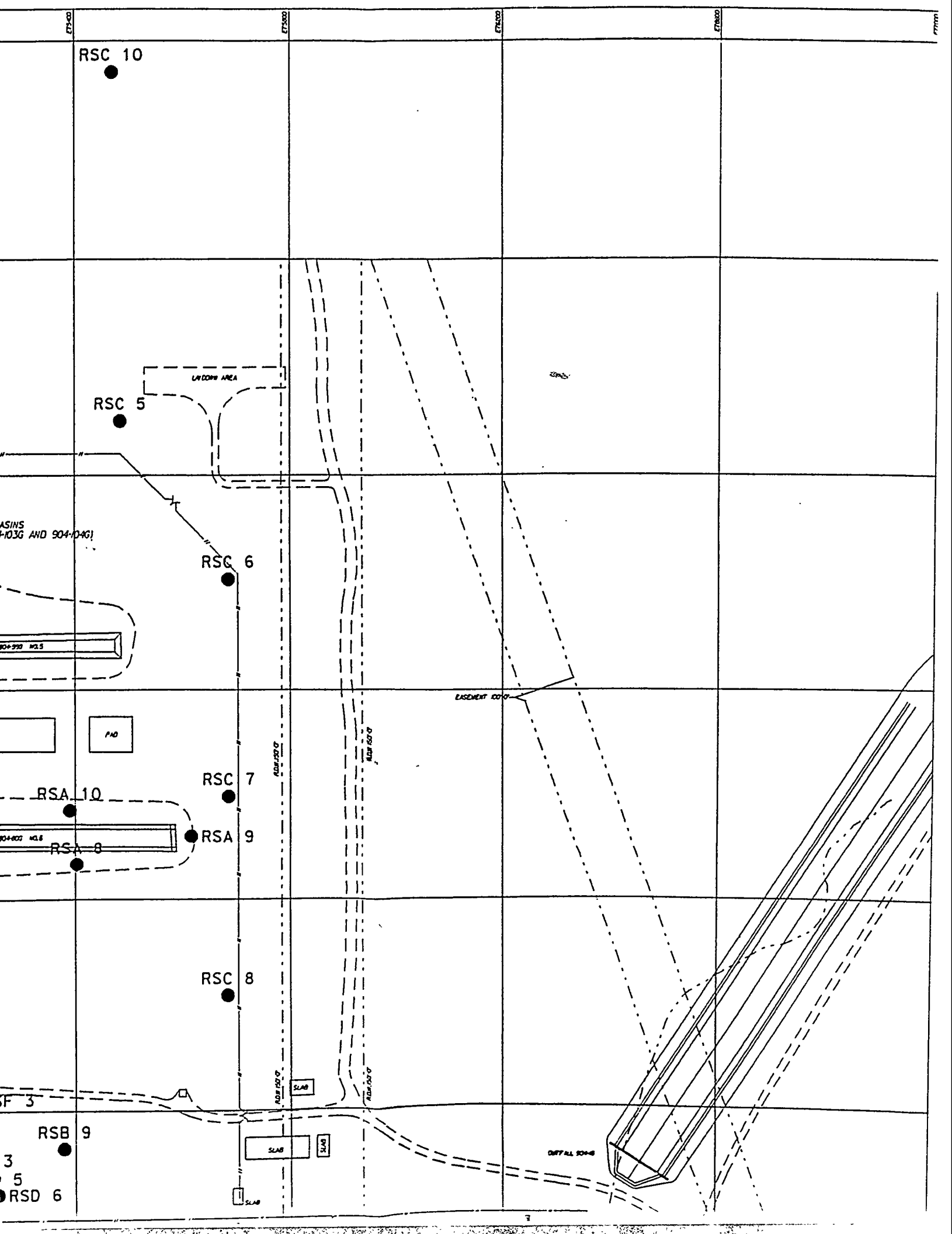
A56000

A55600

RSC

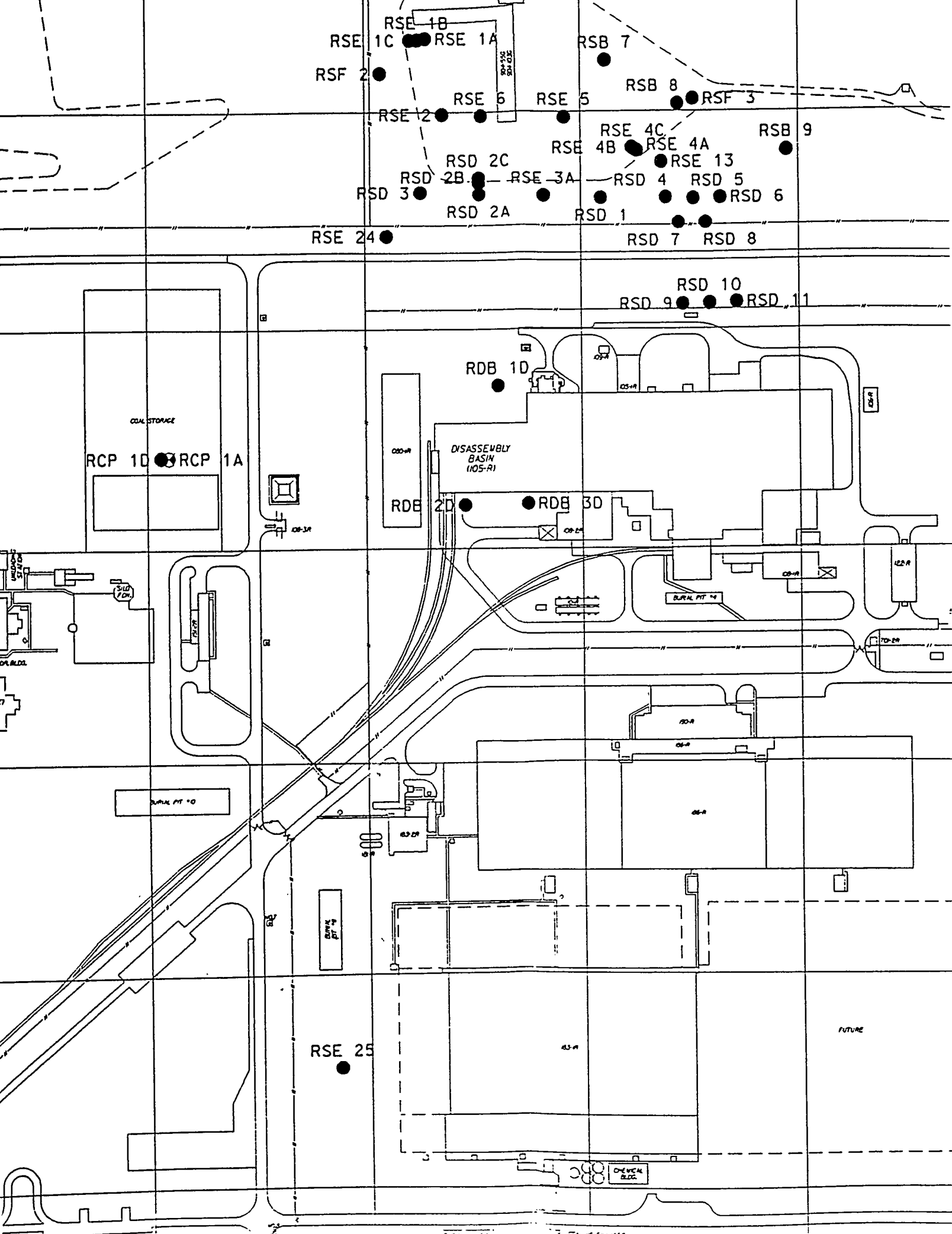






RS

6-10
XEROX
PT-10



RSC 8

RSB 9

SD 6

8

RSD 11

OUTFALL 90+0

BURN PIT #2

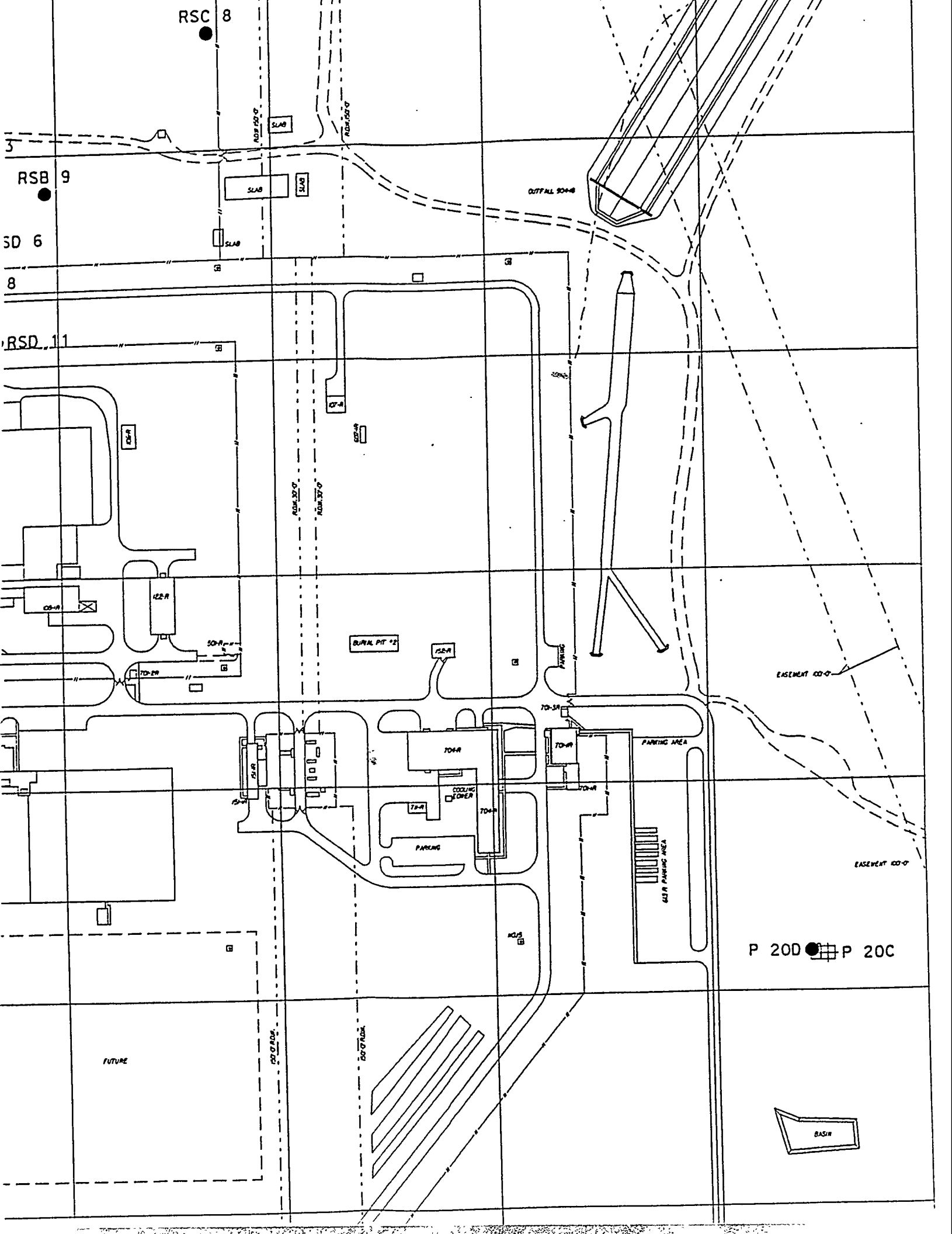
EASEMENT 100+0

EASEMENT 100+0

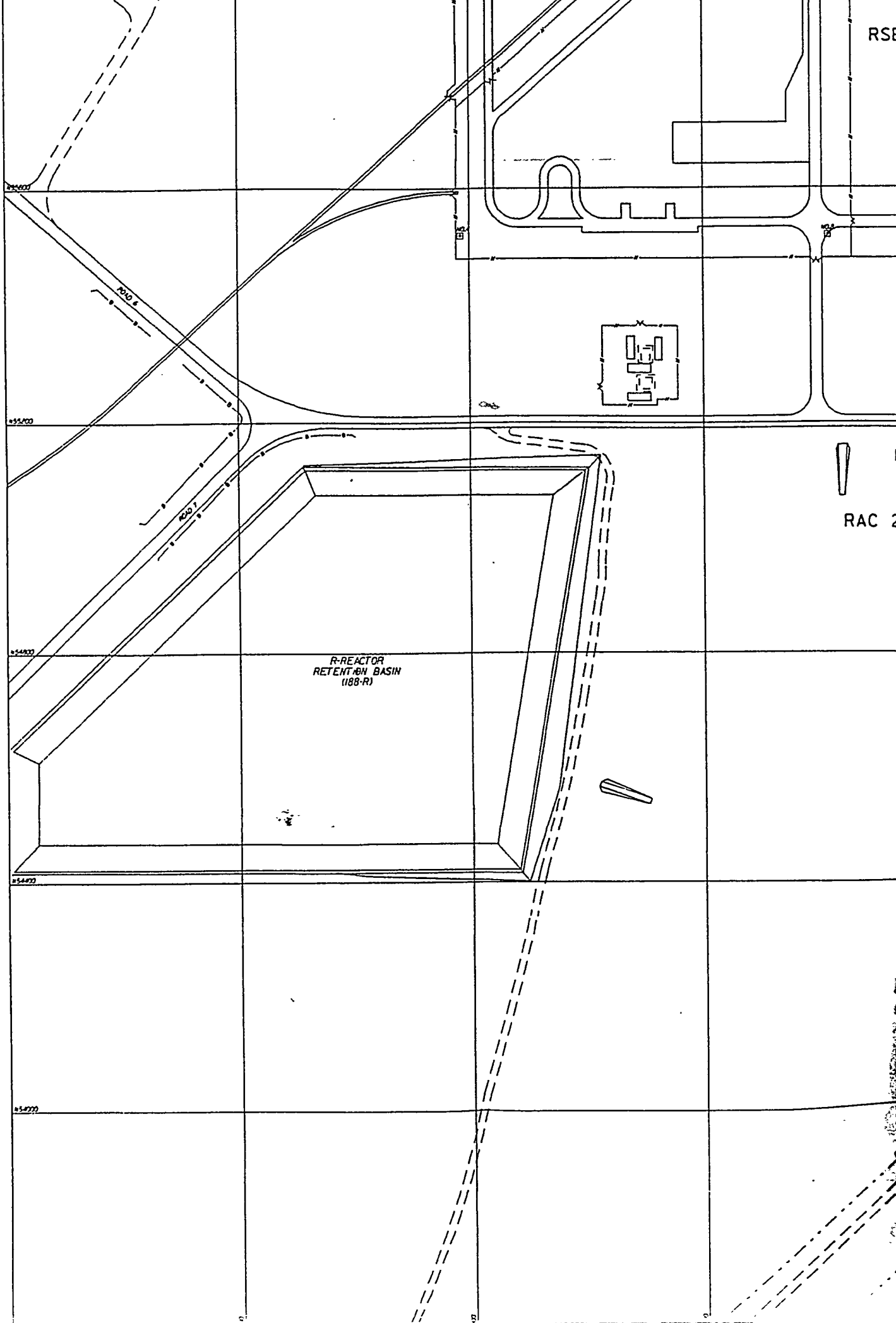
P 200 P 20C

FUTURE

BASIN

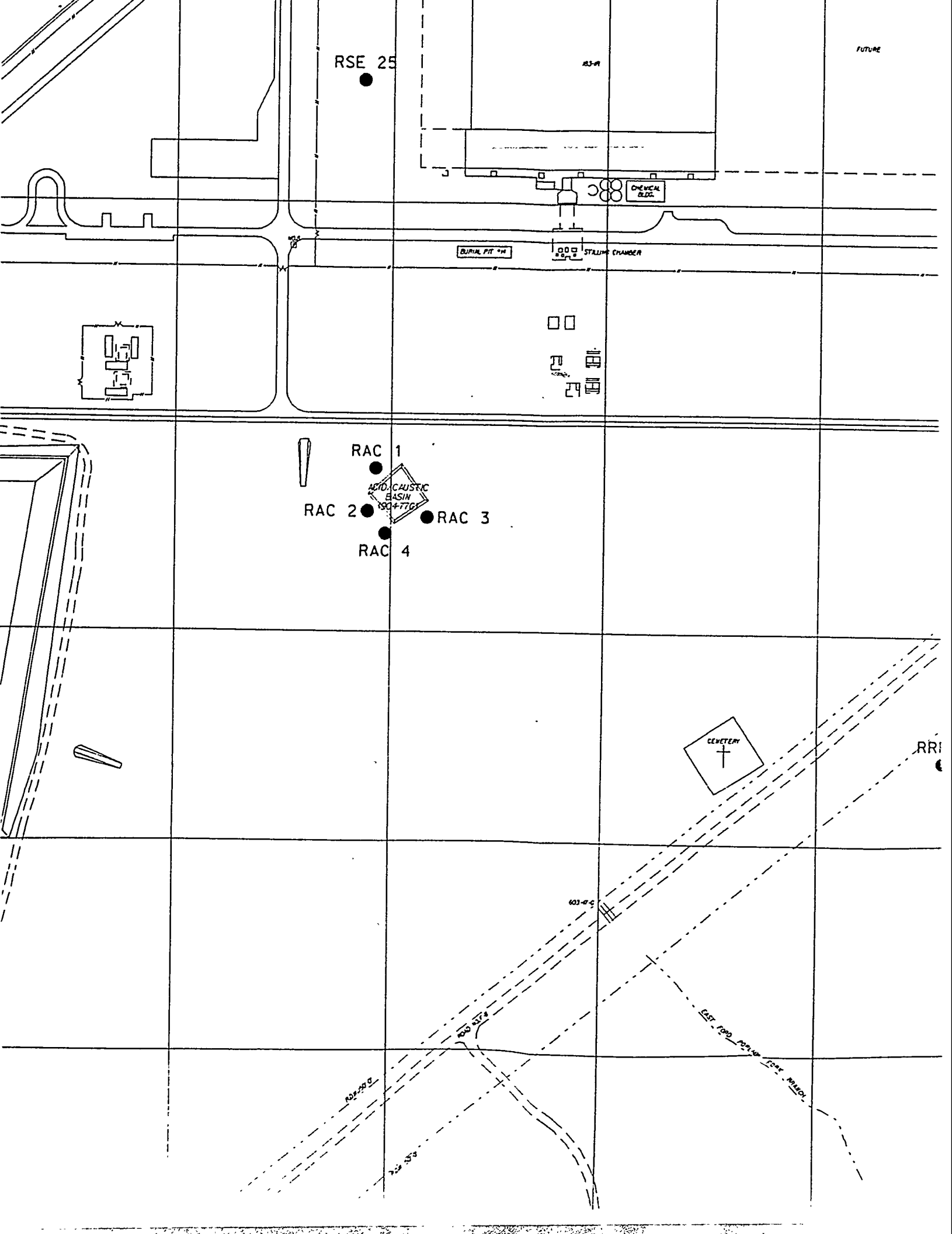


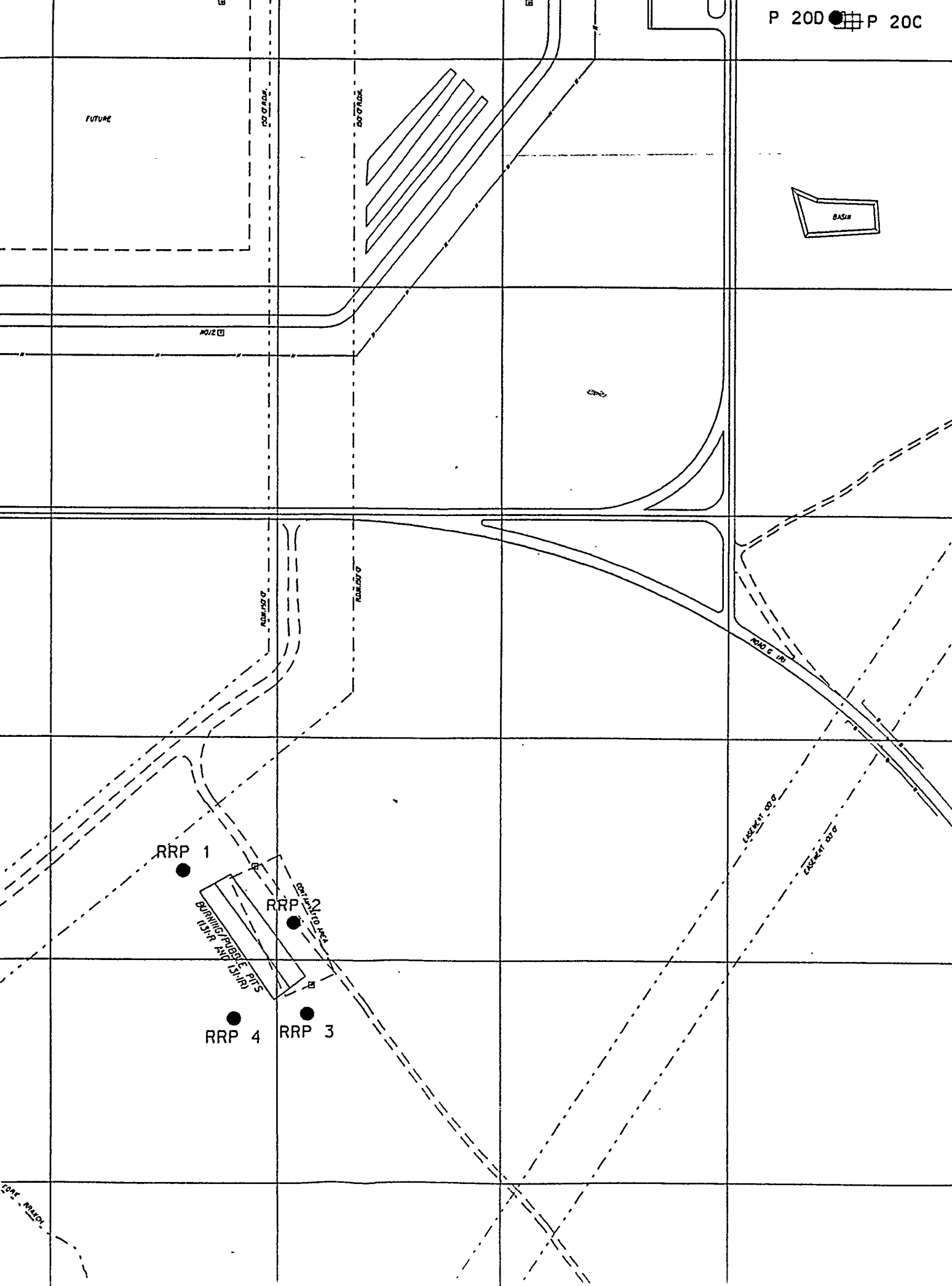
RSE

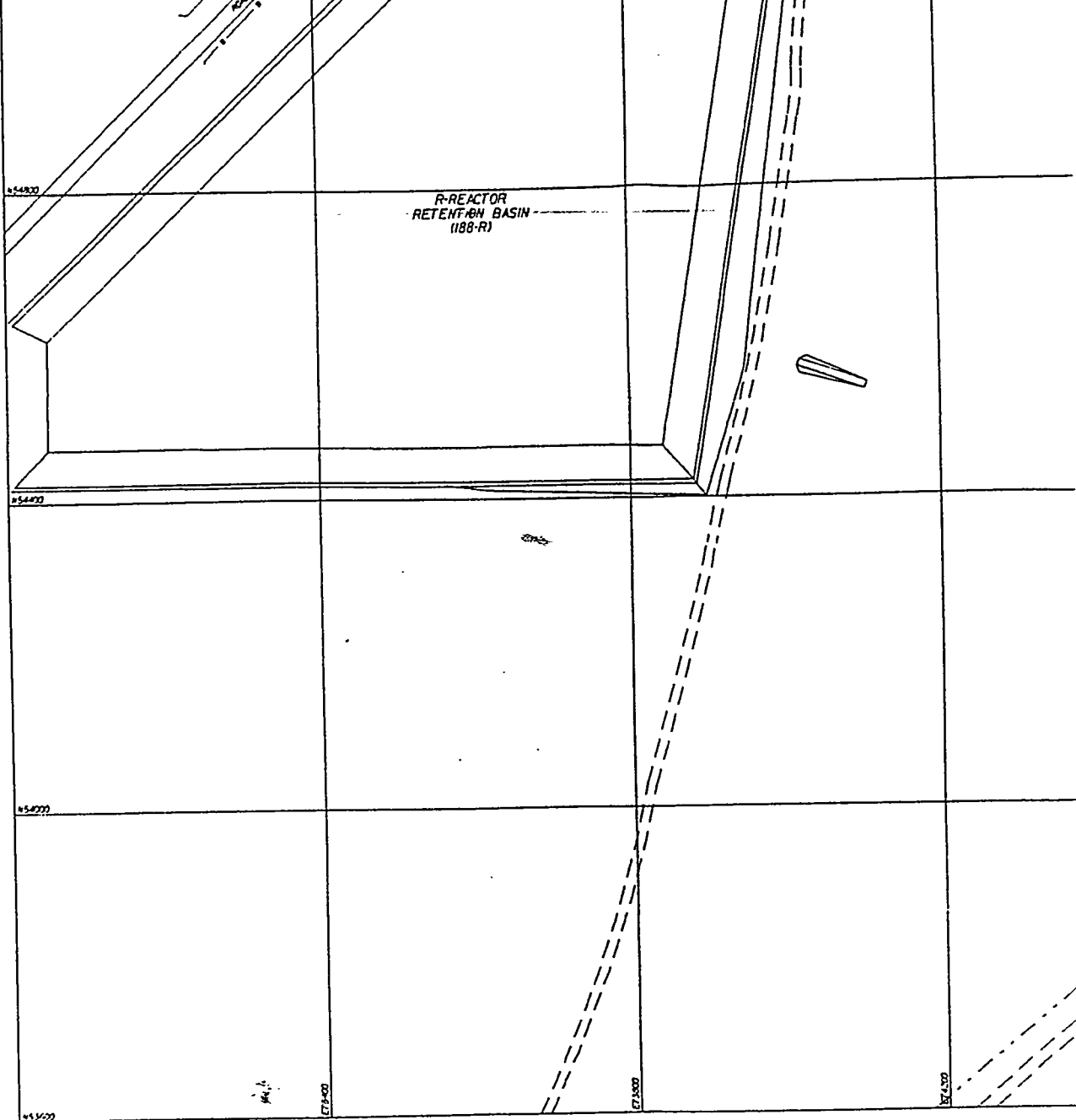


R-REACTOR
RETENTION BASIN
(188-R)

RAC 2



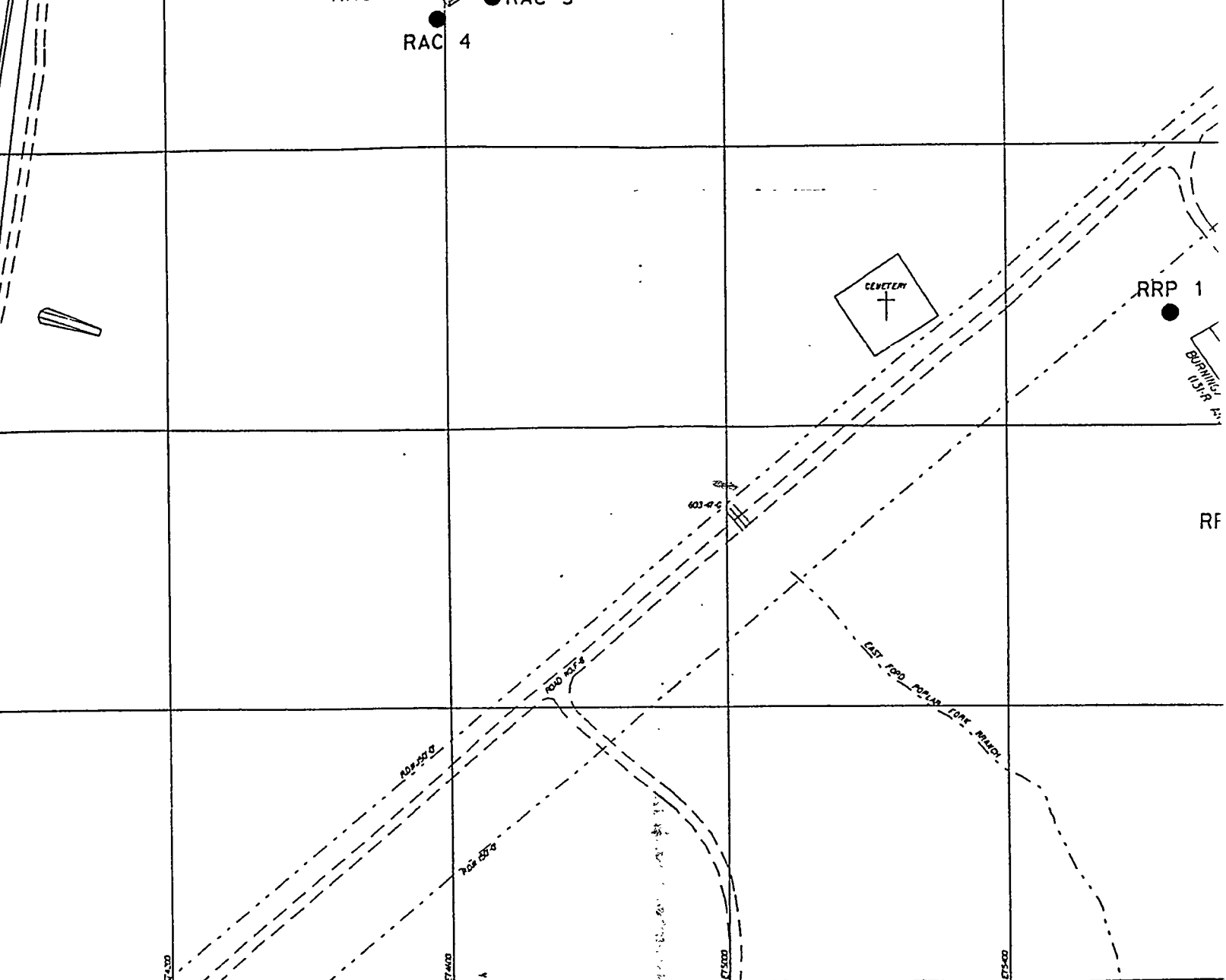




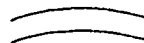
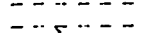
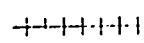
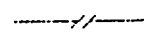
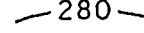
WELL SYMBOL LEGEND

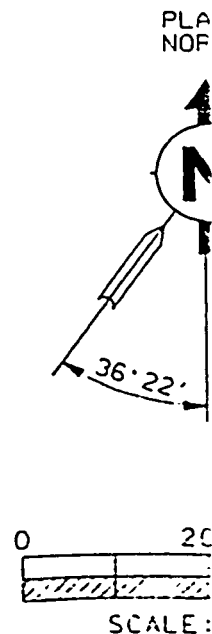
- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⌈⌋ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⌈⌋ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

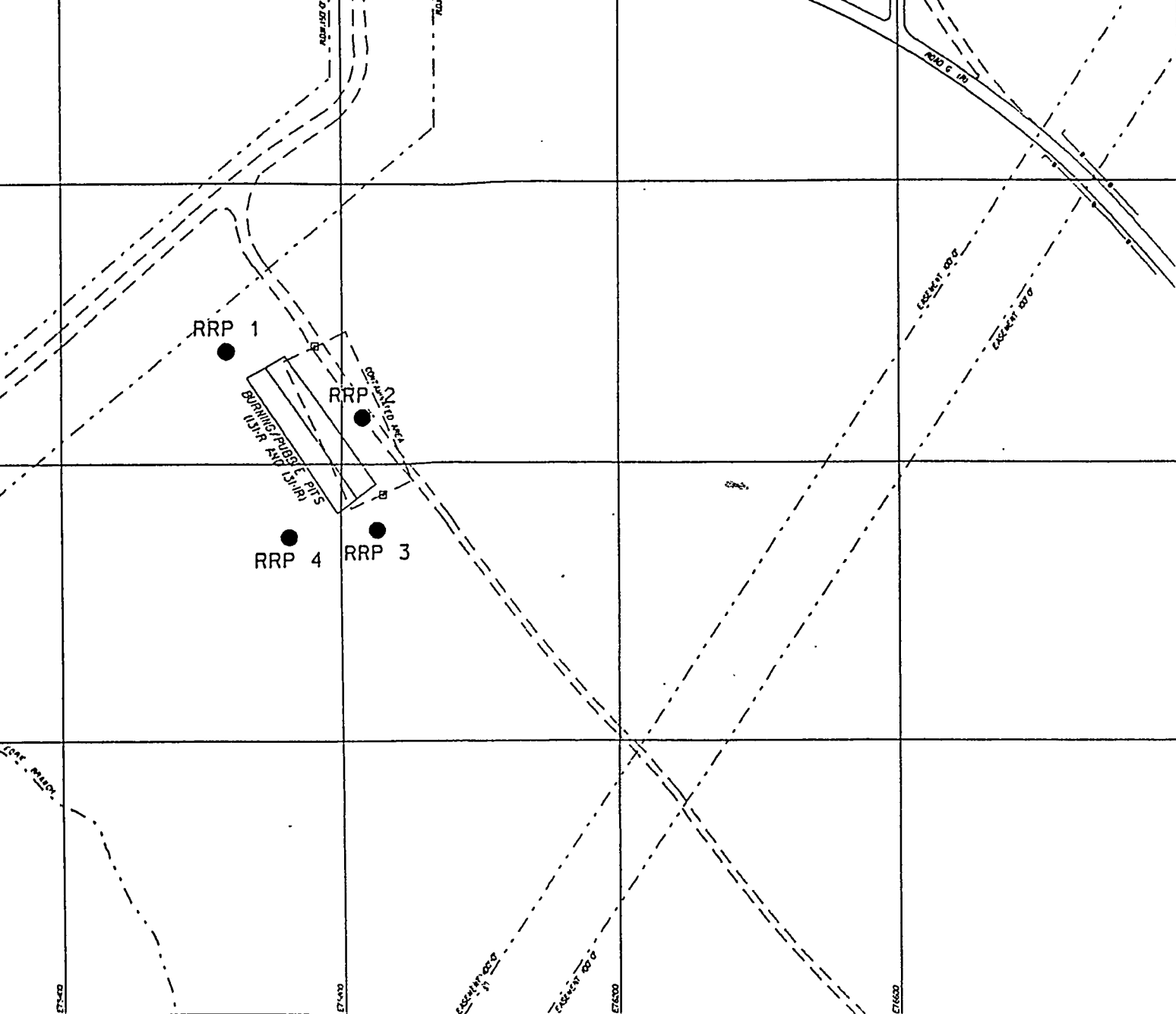
RAC 1 WELL ID



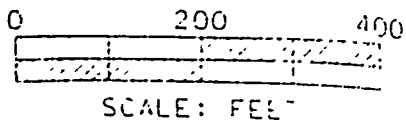
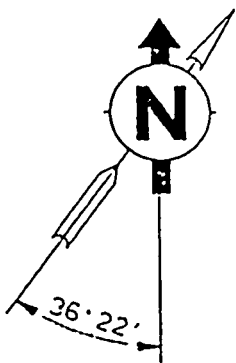
LEGEND

-  FACILITY BOUNDARY
-  ROAD
-  DIRT ROAD
-  STREAM
-  RAILROAD
-  FENCE
-  PIT/BASIN
-  280 OBSERVED CONTOUR

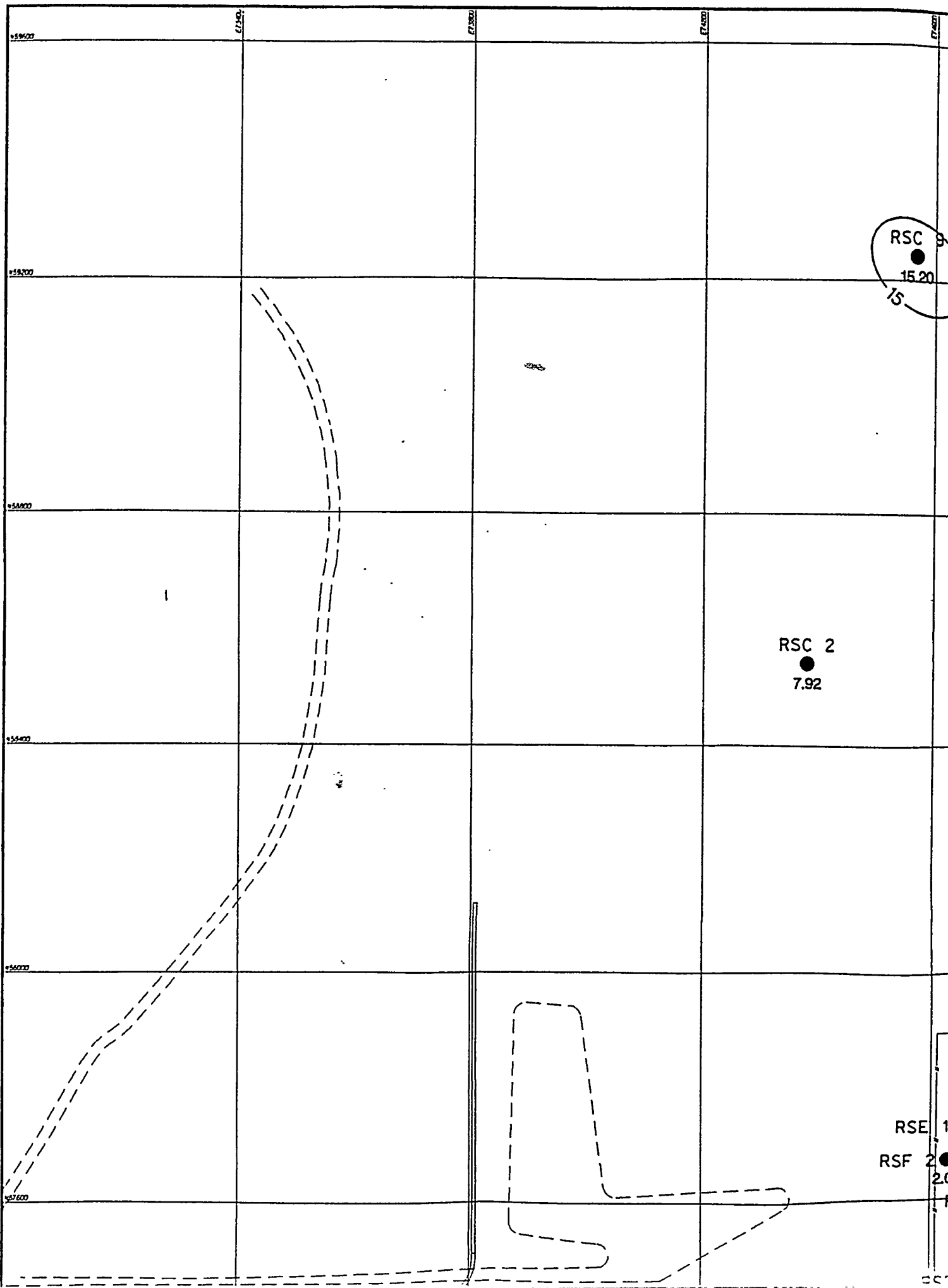


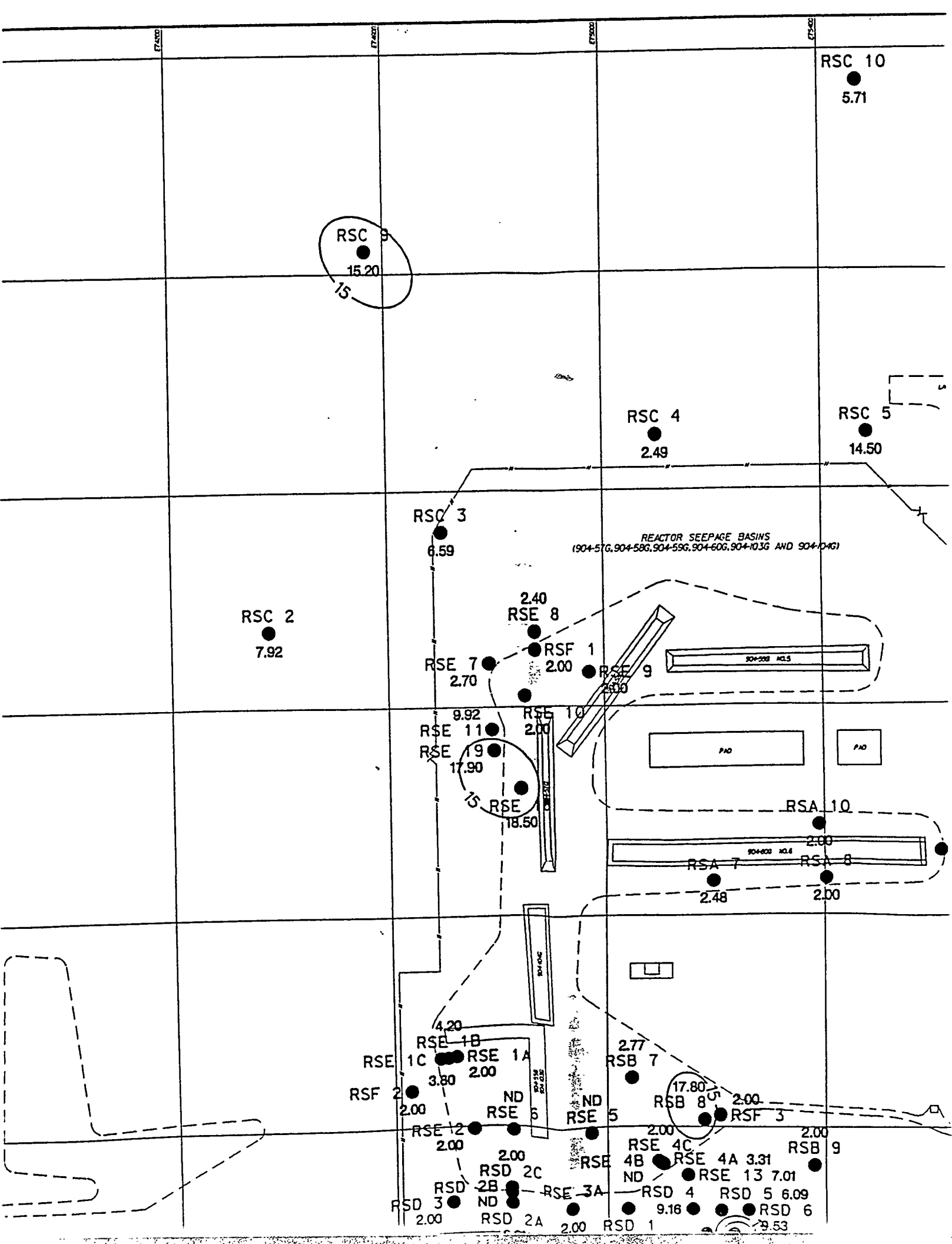


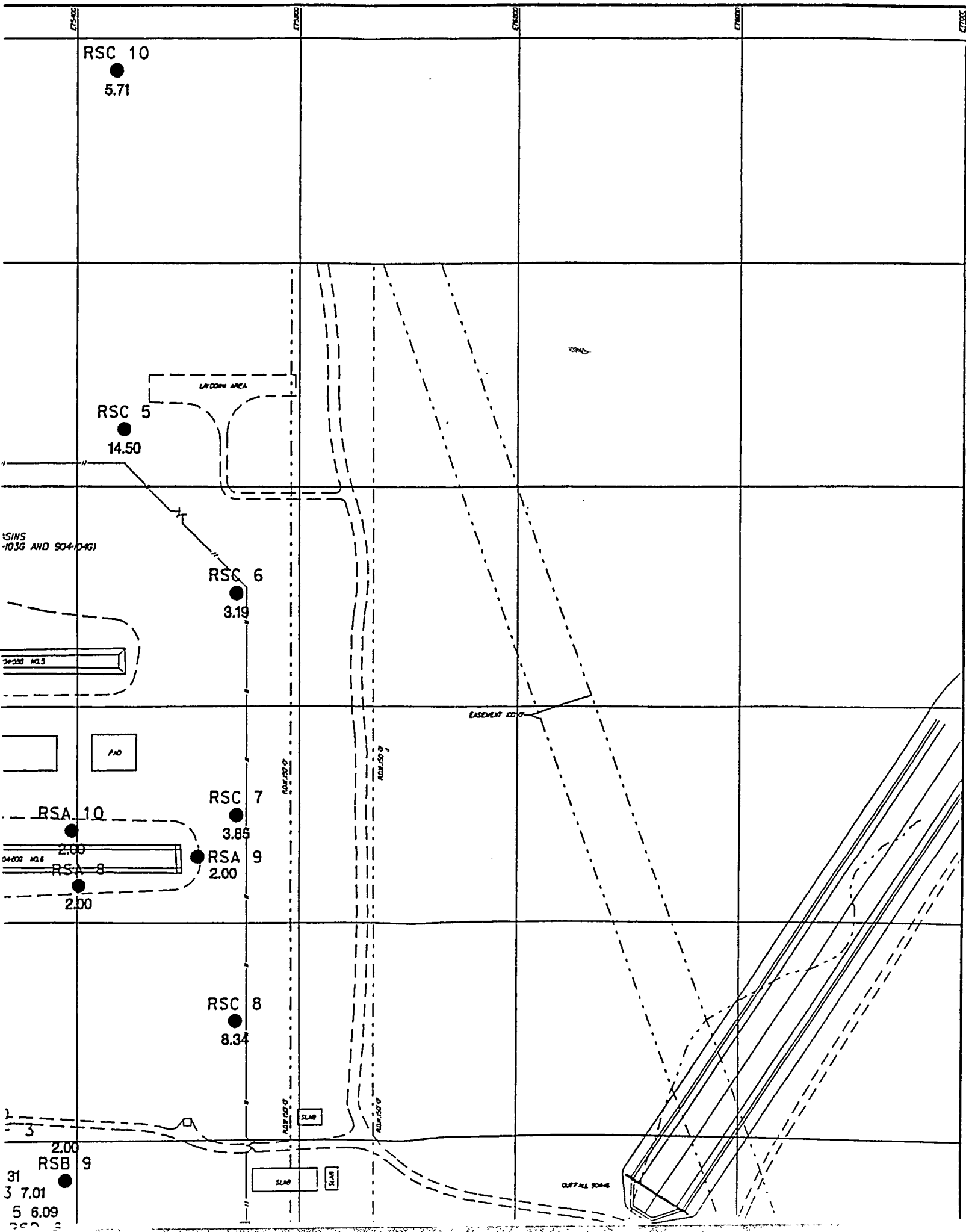
PLANT TRUE
NORTH NORTH



DWG NO. GR1108	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE WELL LOCATION MAP FOR R-REACTOR AREA			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY R. SIMS	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93







RSE
RSF 24
2.00

RS

RSE 24
2.00

COAL STORAGE
RCP 1D ● RCP 1A
NE 2.00

SUB STA
CHLDR BLDG

FUTURE
RCP-4

SURF. PIT #10

SURF. PIT #9

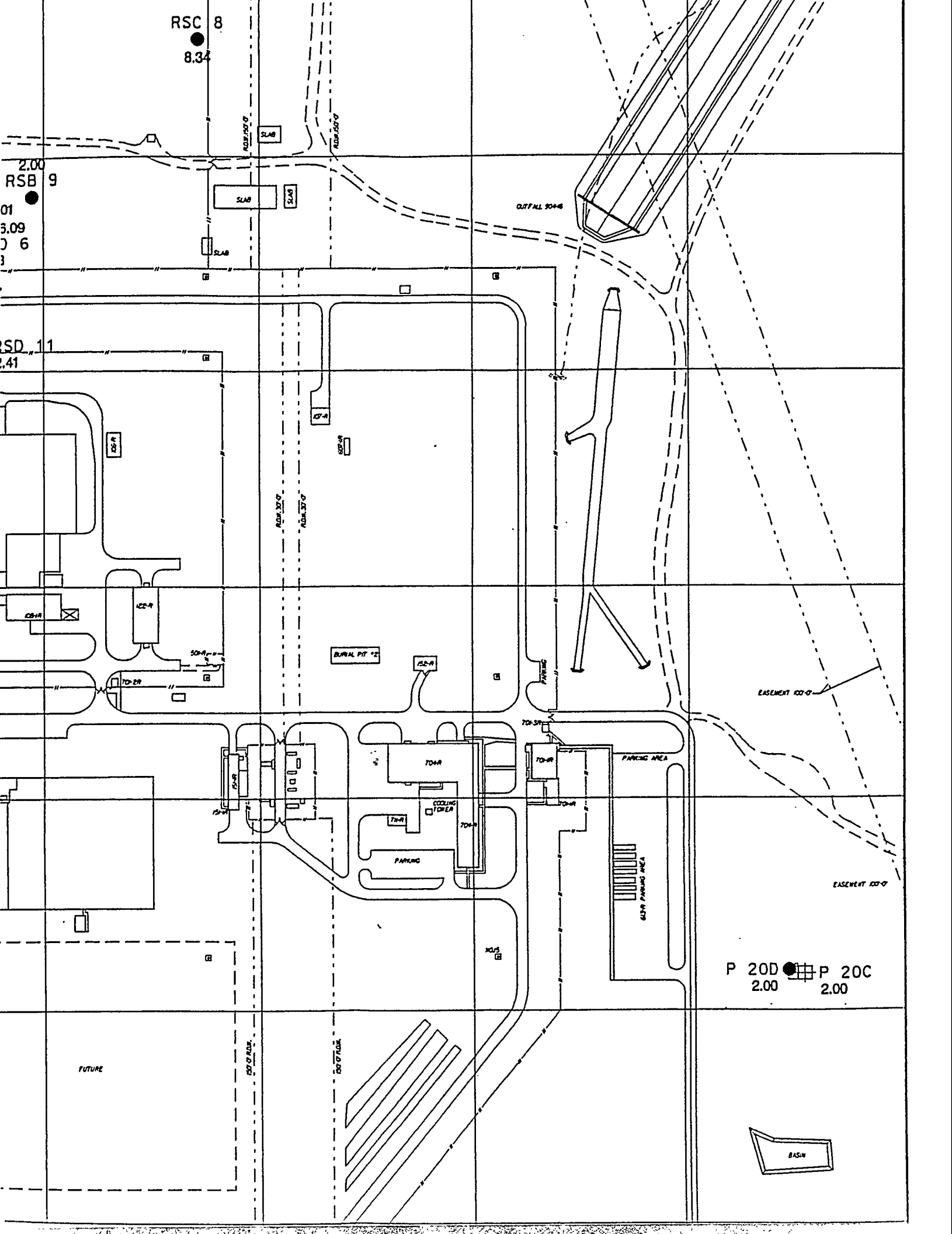
RSE 25
●
2.00

RSC 8
8.34

2.00
RSB 9

01
3.09
0 6
3

SD 11
41

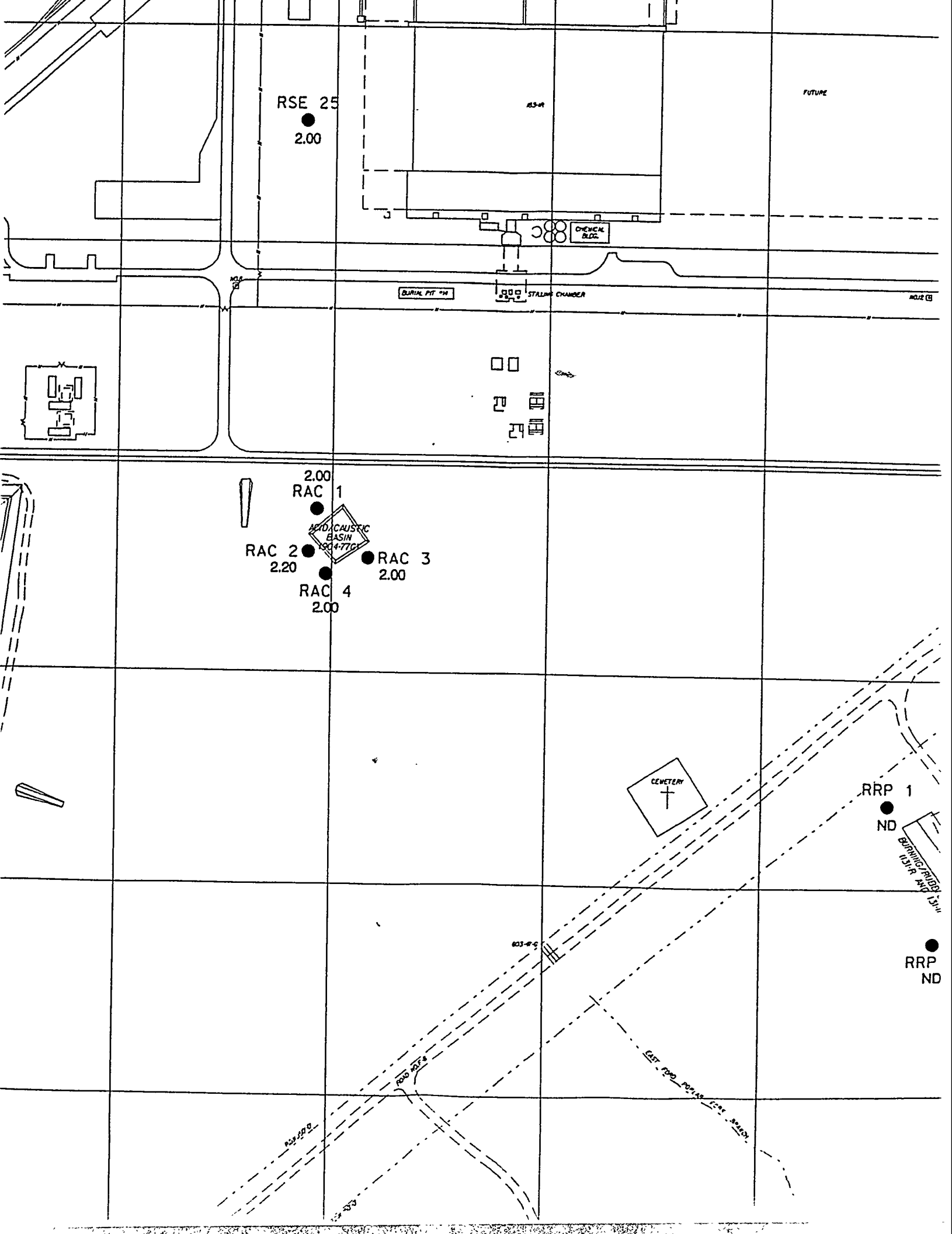


RSE 2!

2.00

2.00
RAC
RAC 2
2.20
RAC
2.00

R-REACTOR
RETENTION BASIN
(188-R)



FUTURE

100' OF ROAD

100' OF ROAD

BASIN

ROAD 12

100' OF ROAD

100' OF ROAD

ROAD 12

100' OF ROAD

100' OF ROAD

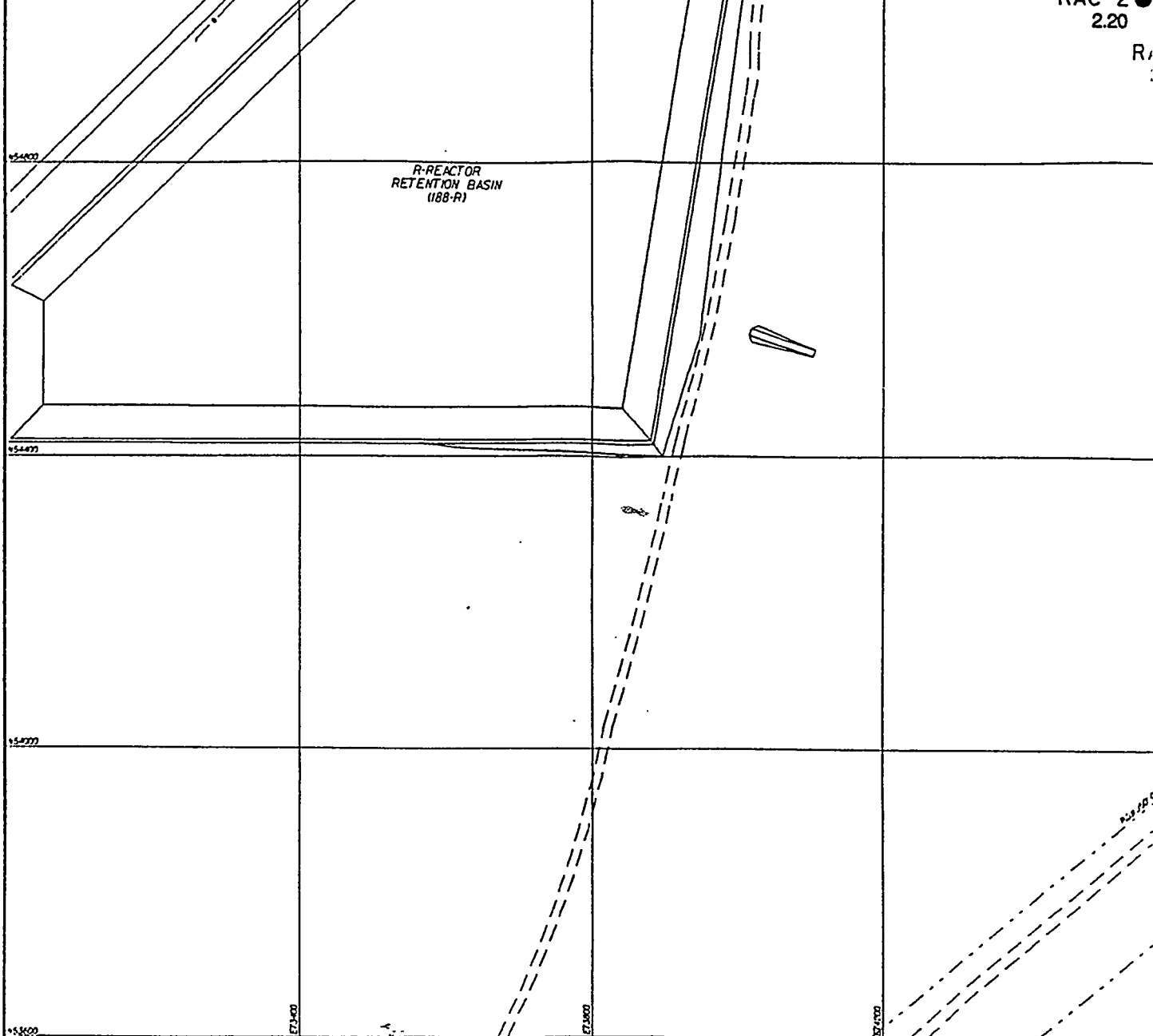
RRP 1
ND

RRP 2
ND

RRP 4
ND

RRP 3
ND

BURNING RUBBLE PITS
(151-R AND 151-RR)



WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

CONTOUR LEGEND

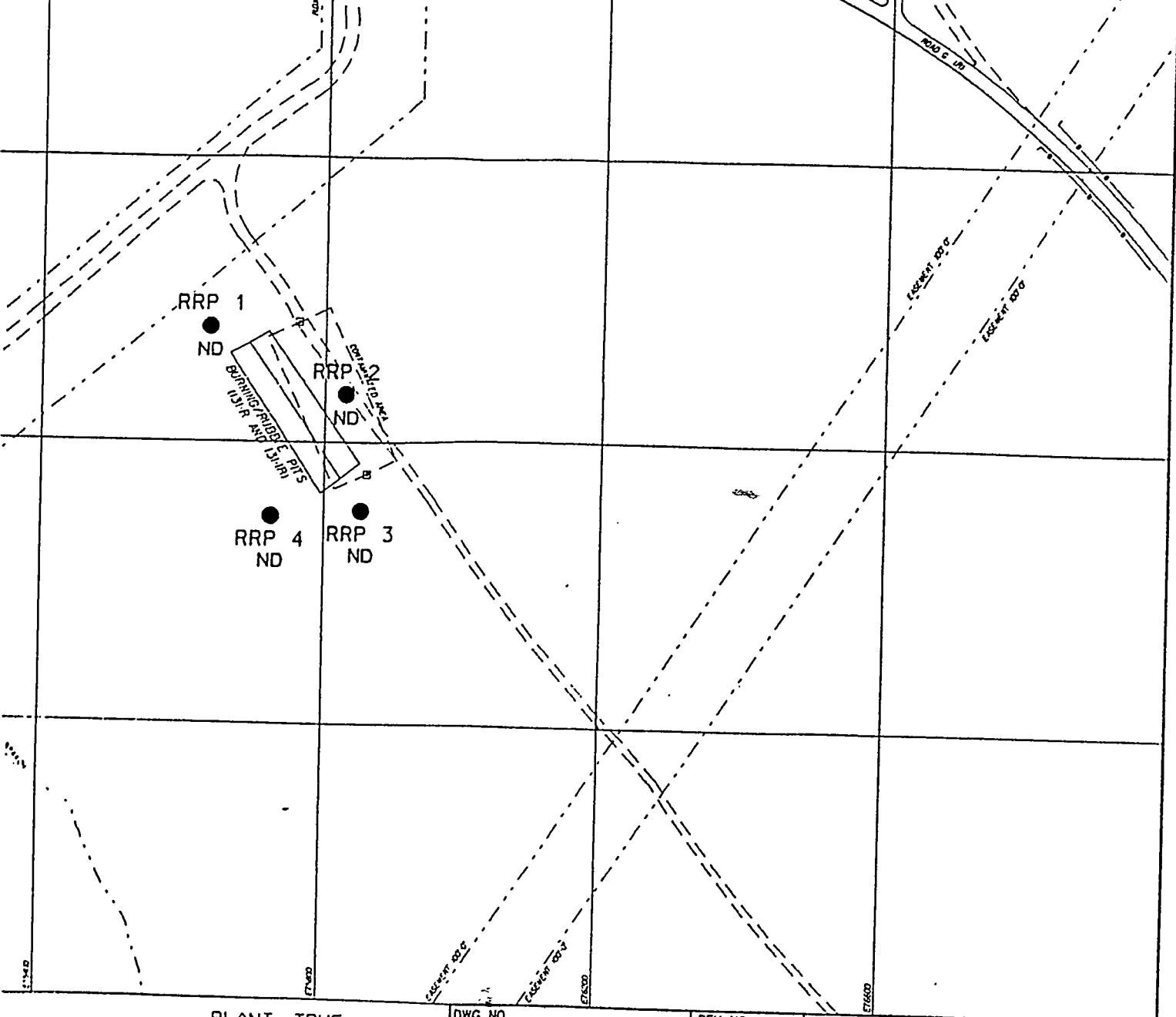
CONTOURS: 15, 30

UNITS: pCi/l

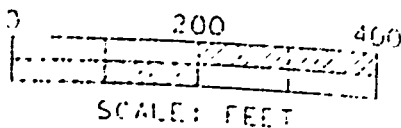
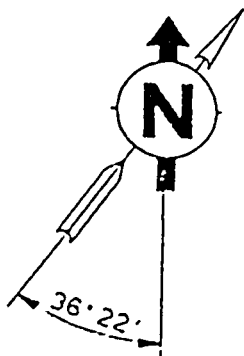
PDWS: 15 pCi/l

2.00: DENOTES CONCENTRATIONS AT OR LESS THAN DETECTION LIMIT

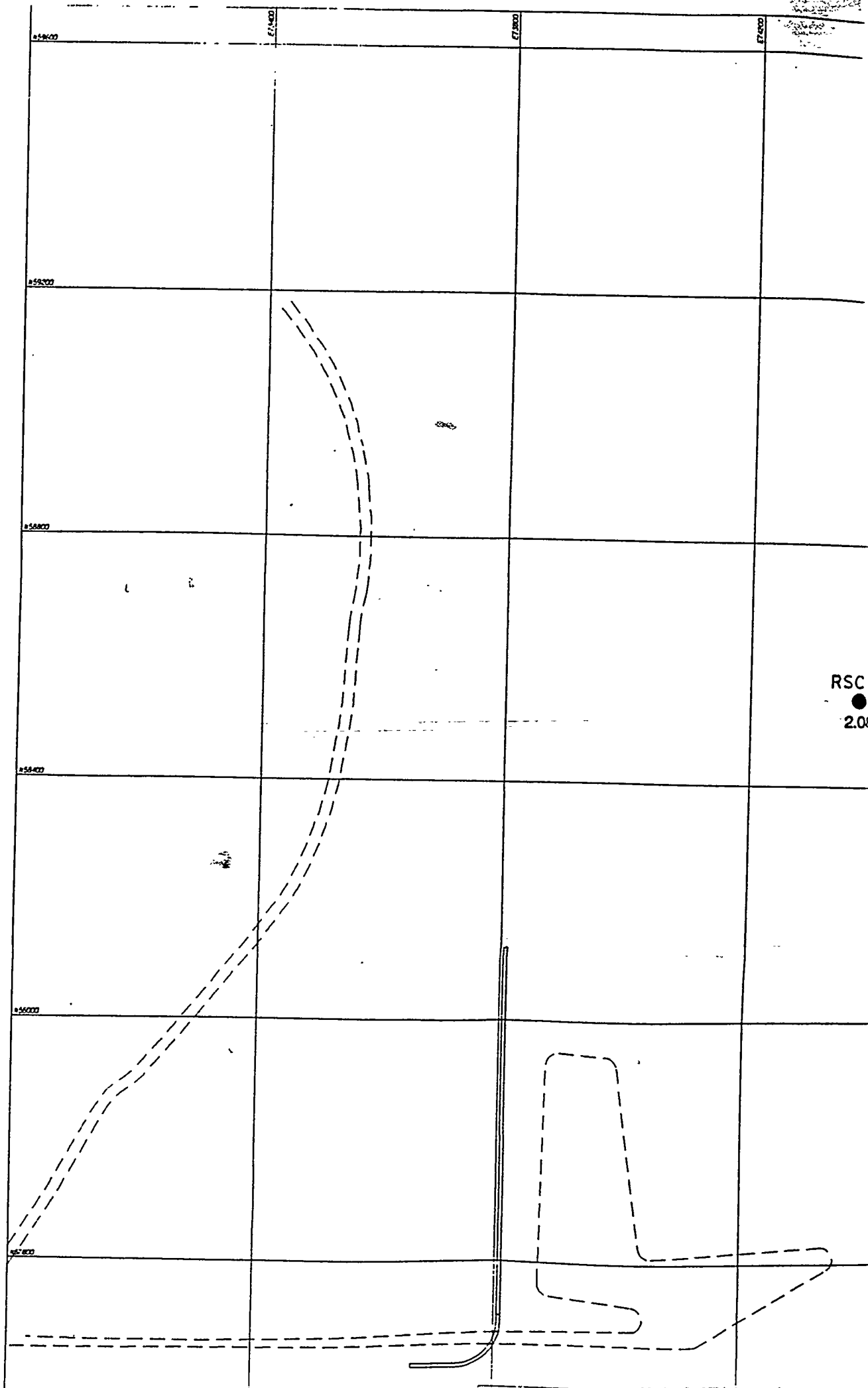
ND: NO DATA

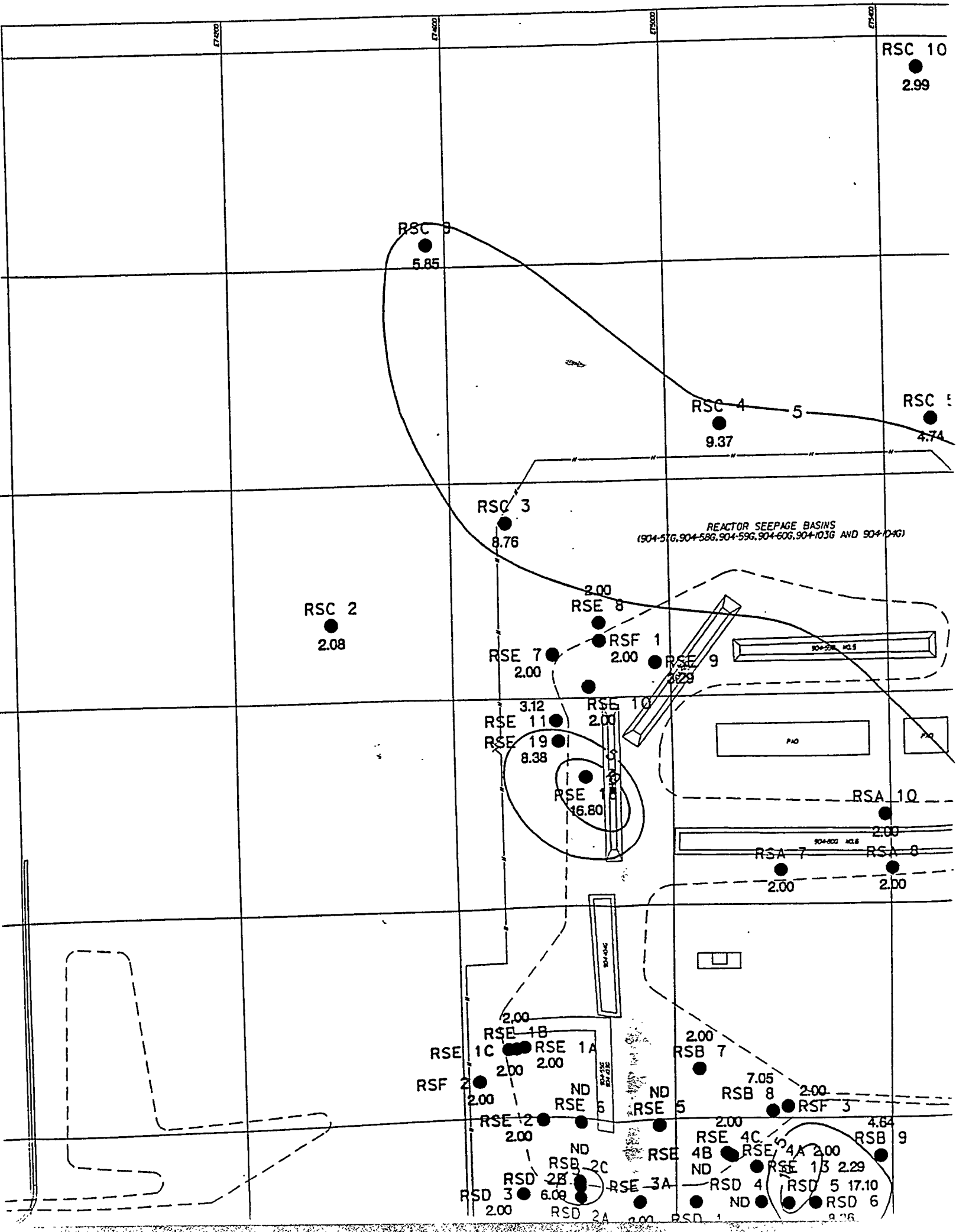


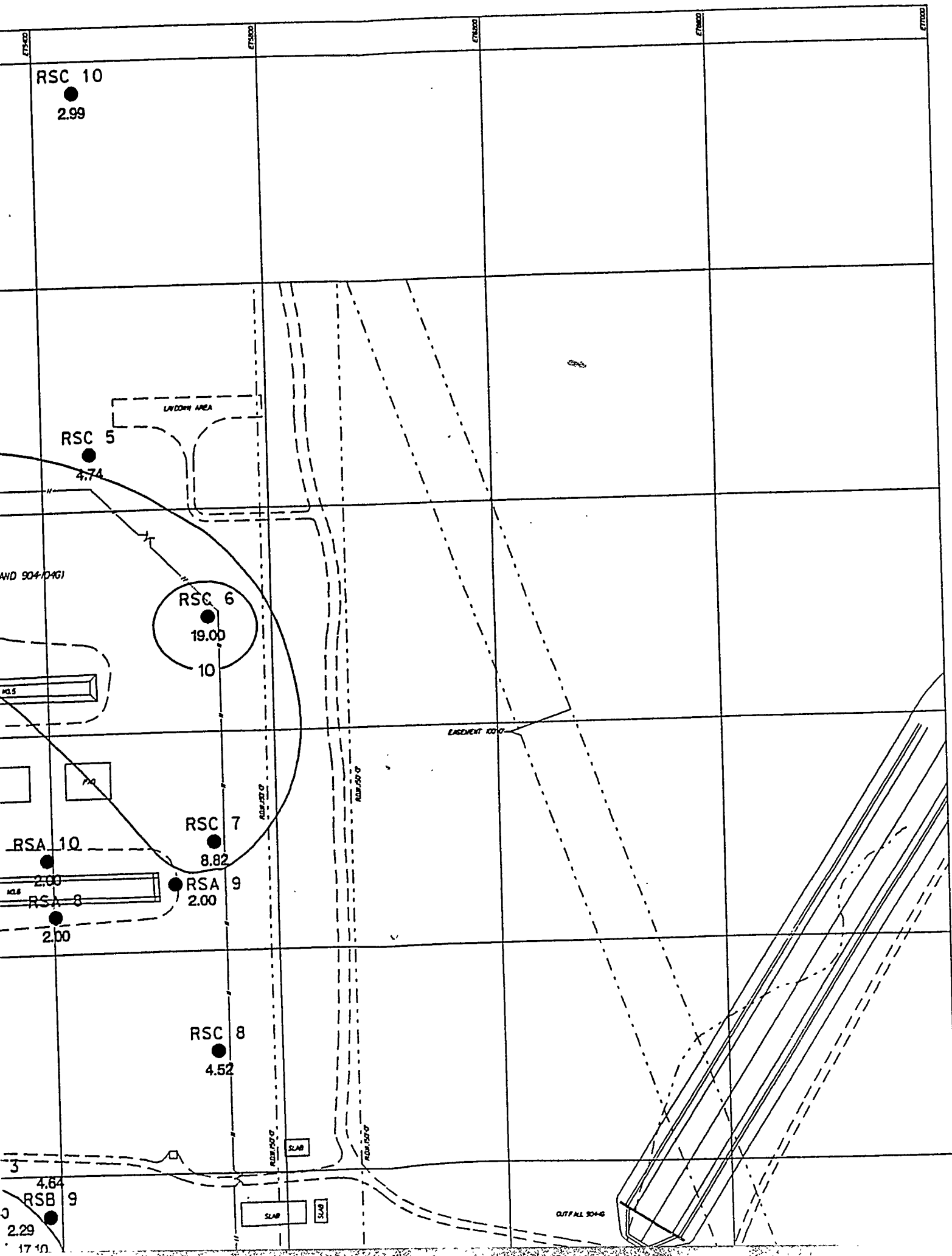
PLANT TRUE
NORTH NORTH



DWG NO. GR1109	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE GROSS ALPHA ACTIVITIES FOR R-REACTOR AREA THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93







RS
RSE 1C
RSF 2 ● 2
2.00
RSE 2

R
RSD 3
2.00

RSE 24 ●
2.00

COAL STORAGE
RCP 1D ● RCP 1A
NE 2.00

RDE

SUB STA

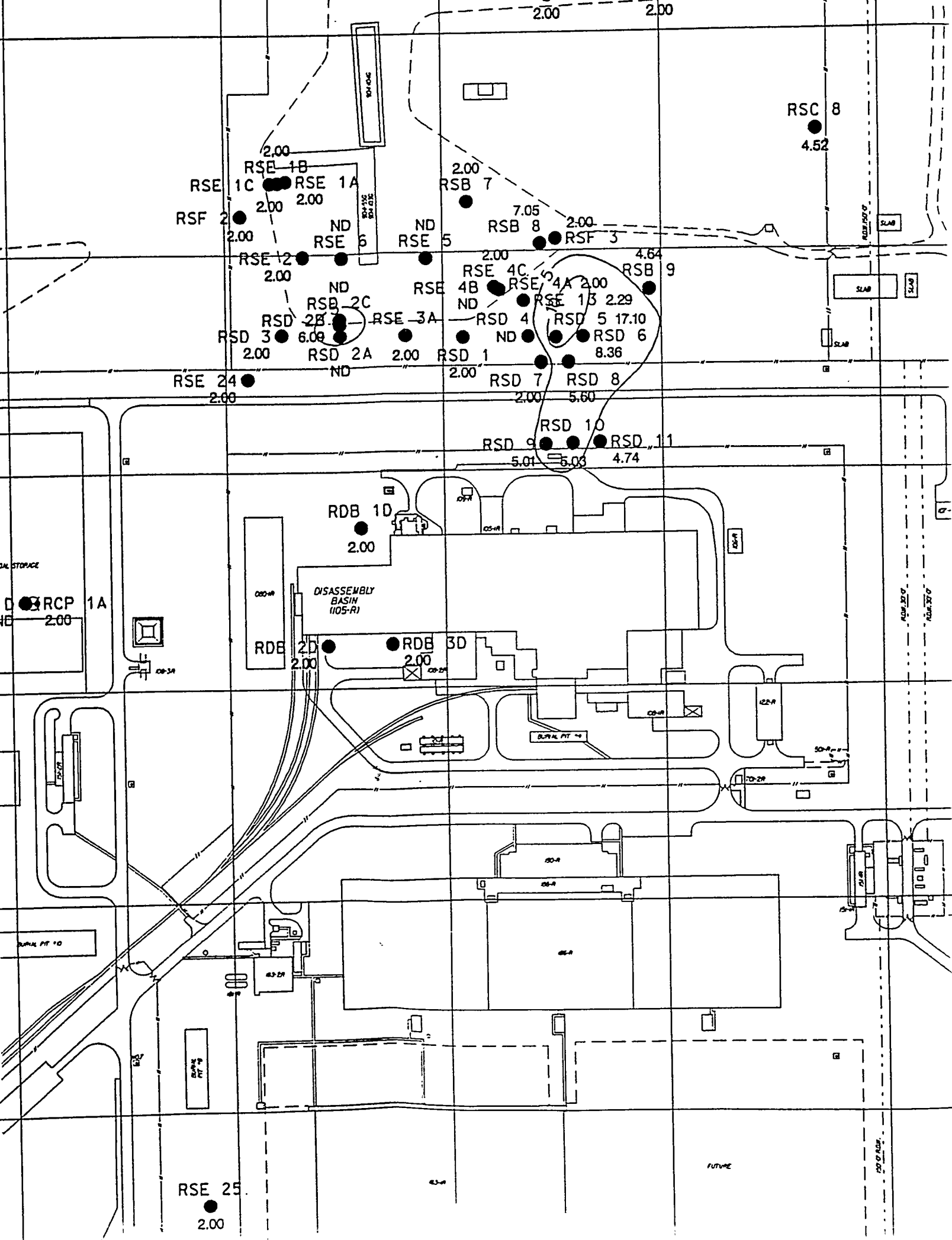
UNION STATION

CHURCH BLDG

(FUTURE)
MS-R

DRAIN PIT 10

RSE 25 ●
2.00



2.00

RSC 8

4.52

4.64
RSB 9

29

17.10

0 6

3

SD 11

74

OUTFALL 5046

BURIAL PIT-12

152-R

704-R

724-R

COOLING TOWER

704-R

70-SR

70-R

70-R

PARKING AREA

63-R PARKING AREA

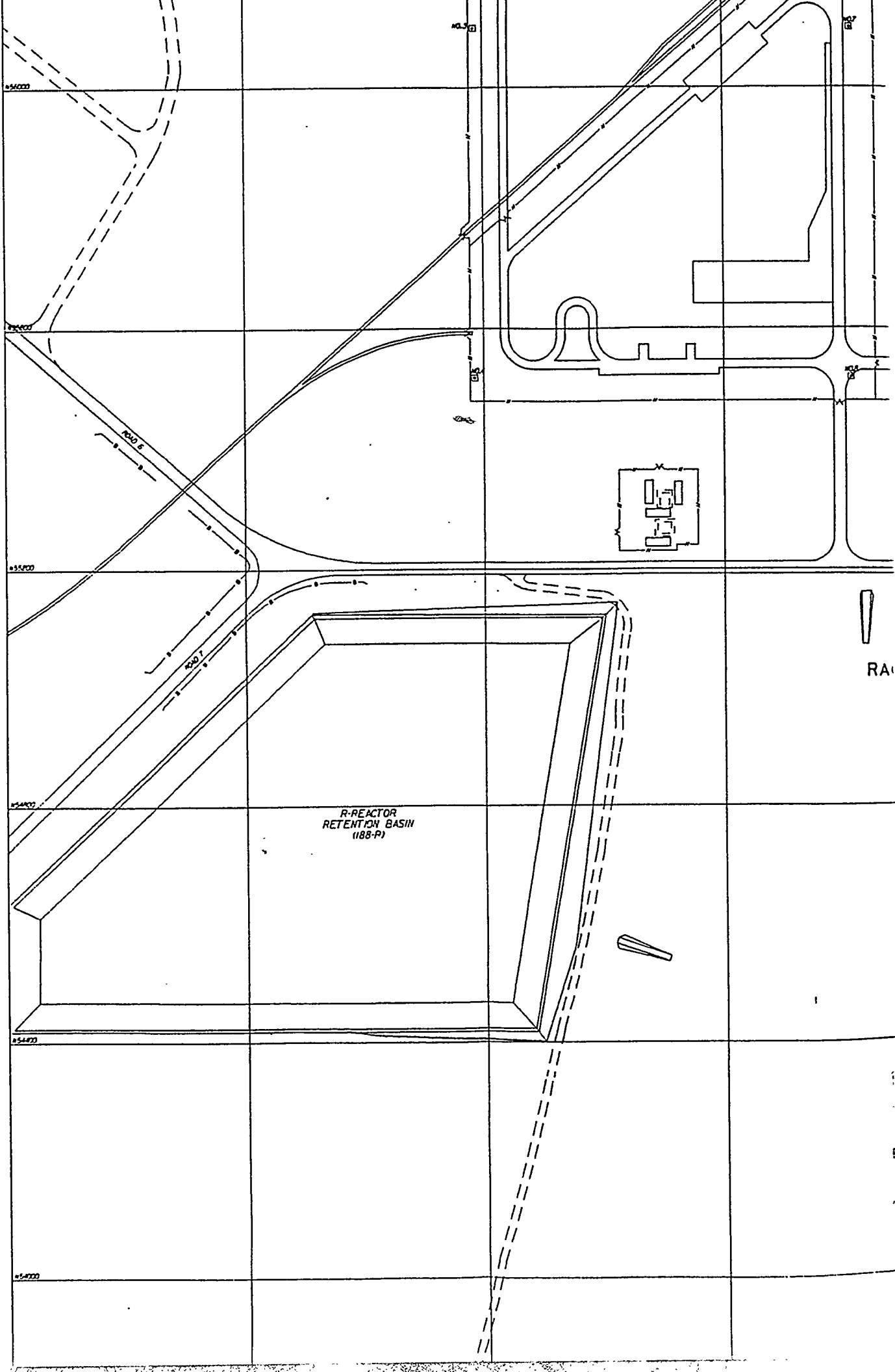
EASEMENT 100'-0"

EASEMENT 100'-0"

P 200 ● 2.00

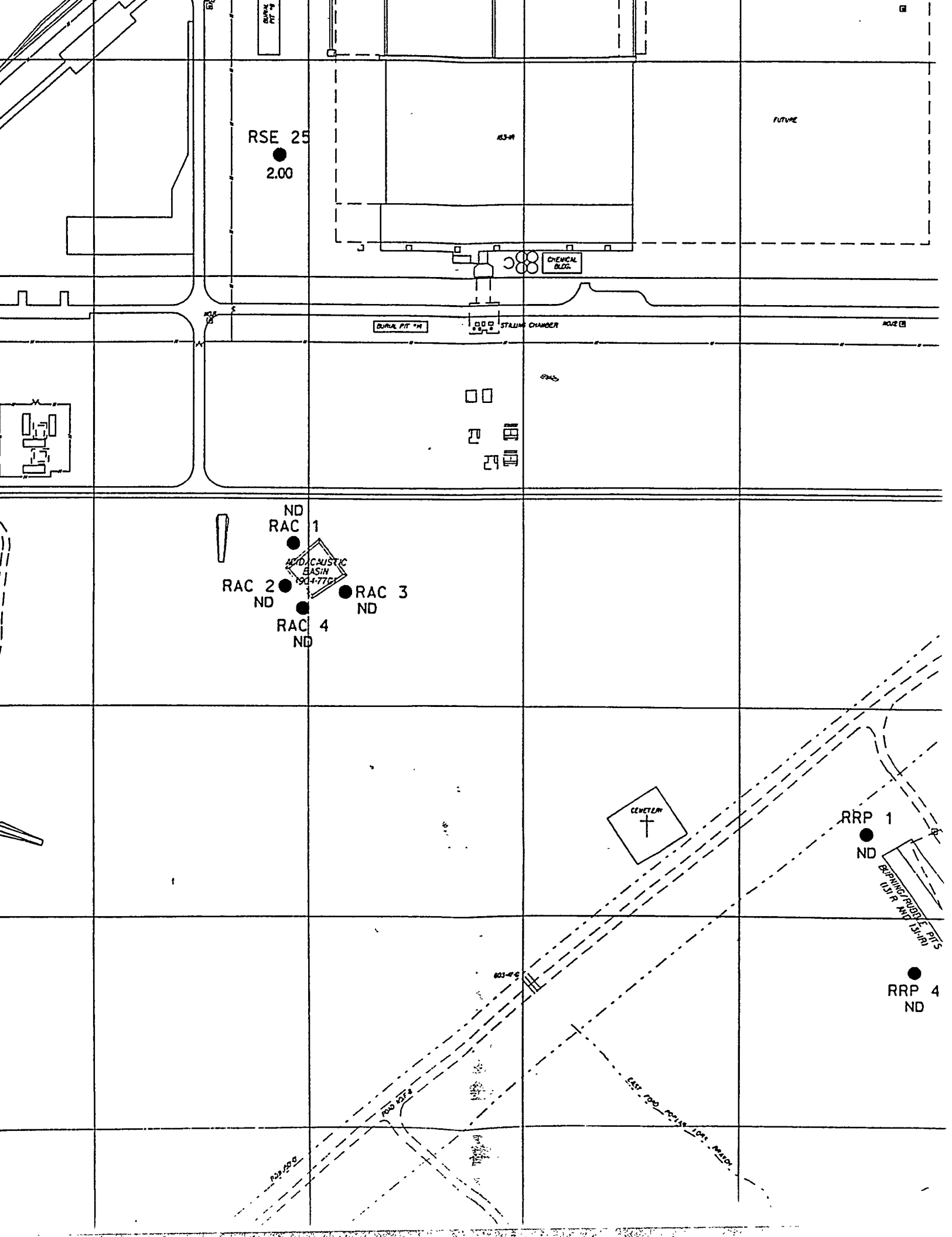
P 20C □ 2.00

FUTURE



R-REACTOR
RETENTION BASIN
(188-R)

RA



P 20D ● P 20C
2.00 2.00

FUTURE

BASIN

RRP 1
ND

RRP 2
ND

RRP 4
ND

RRP 3
ND

BRIDGING/FIBRE PITS
(LJ/R AND LJ/R)

CONCRETE WALL

ROAD C (10)

EASEMENT 100-0

60-00 PARKING A

NO. 5

NO. 2 (B)

NO. 1 (A)

NO. 3 (A)

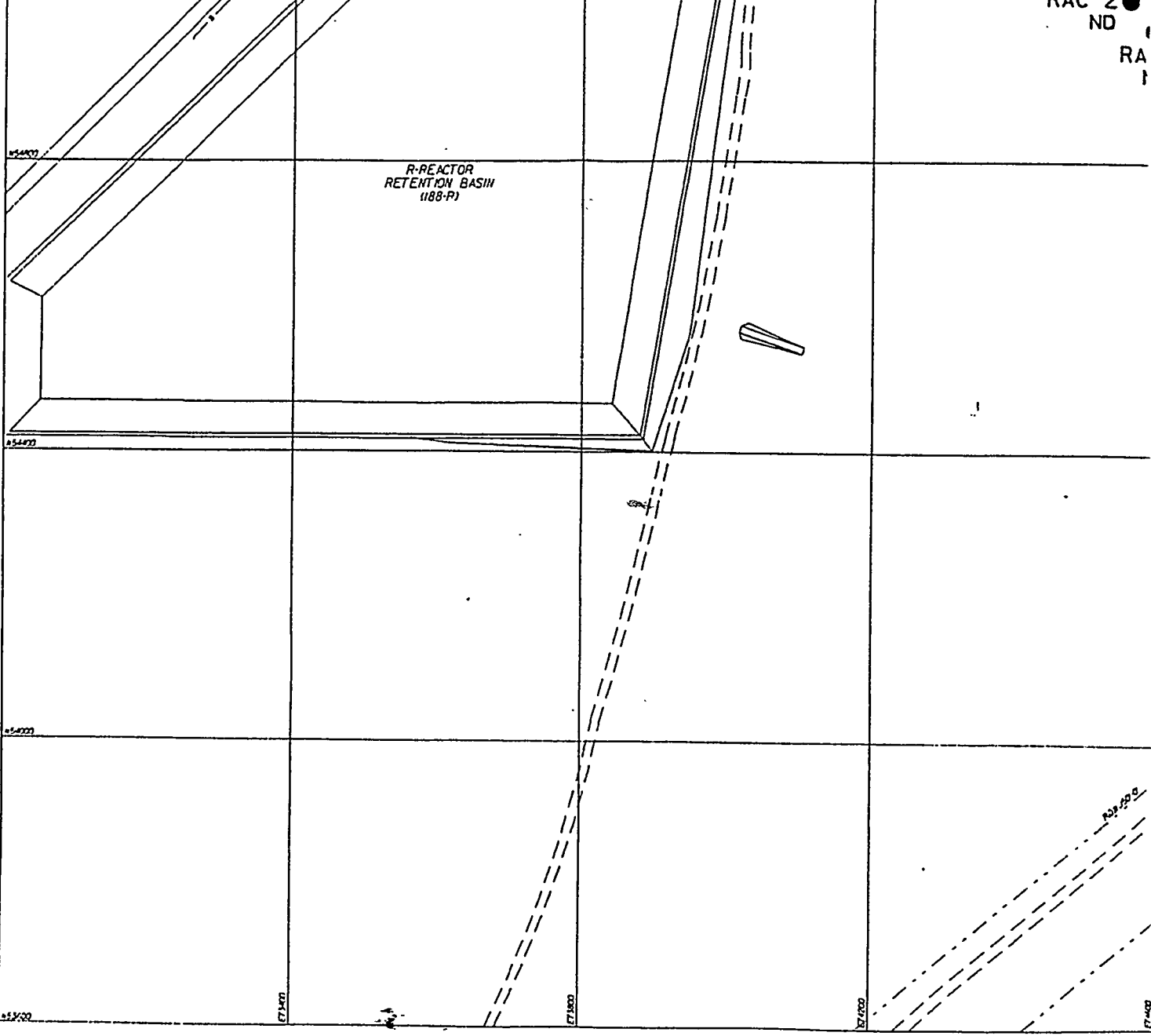
NO. 4 (A)

NO. 5 (A)

ROAD C (10)

EASEMENT 100-0

EASEMENT 100-0



WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

CONTOUR LEGEND

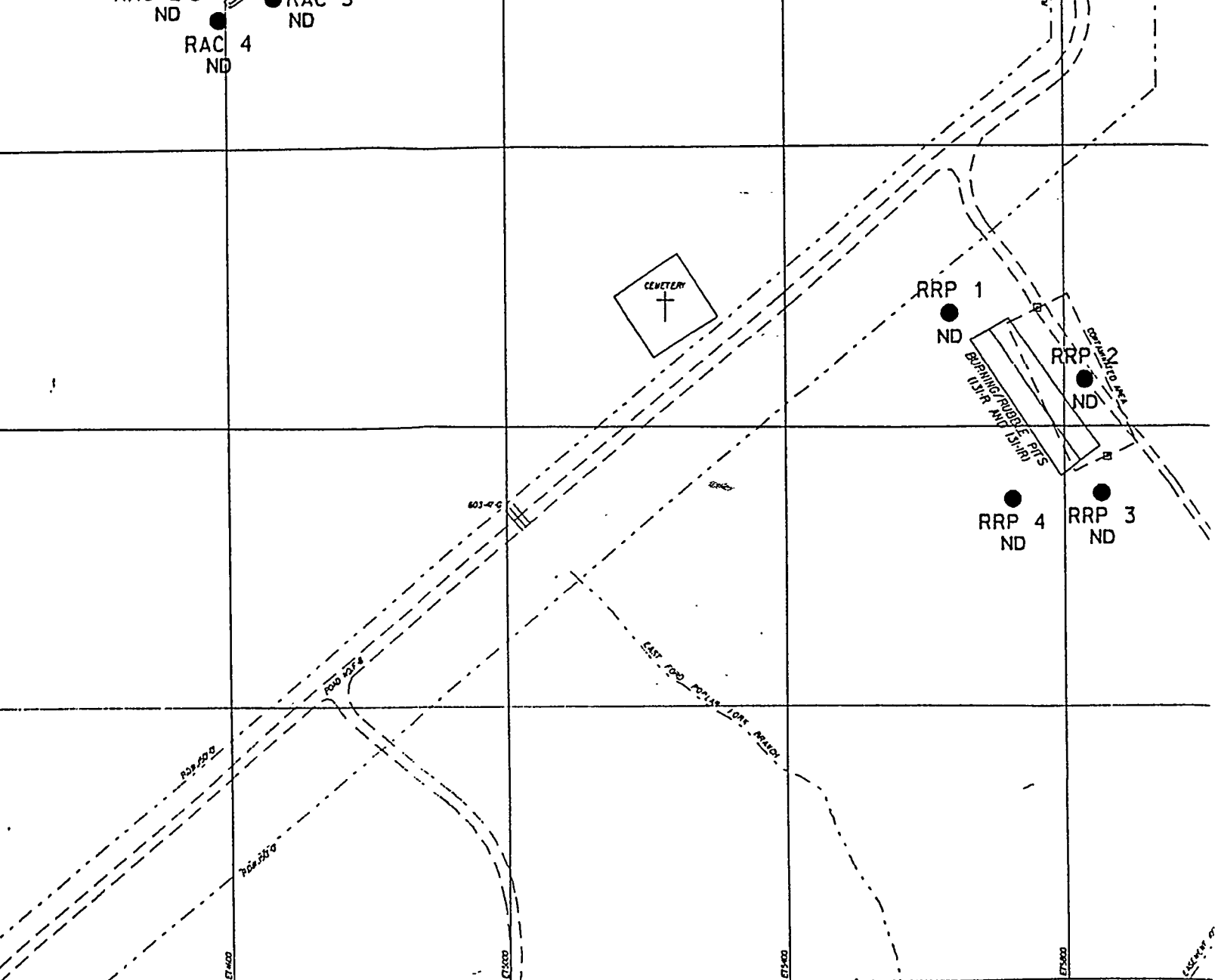
CONTOURS: 5, 10

UNITS: ug/l

PDWS: 5 ug/l

2.00: DENOTES CONCENTRATIONS AT OR LESS THAN DETECTION LIMIT

ND: NO DATA



RAC 4
ND

ND

ND

CENETER

RRP 1

NE

RRP 12

A 15

RRP 4
ND

RRP 3
ND

BURNING/RUBBLE
(131-R AND 131-11)

2000

603-44

15

82-500

पंजीत

~~EAST - 100 - POLICE - 100 - MARCH~~

007423

000000

005400

57500

2000

LEGEND

FACILITY BOUNDARY

ROAD

DIRT ROAD

STREAM

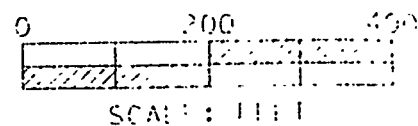
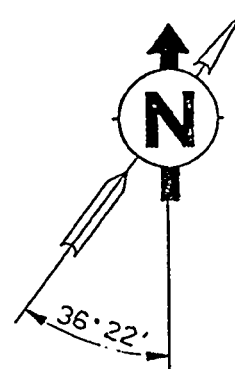
RAILROAD

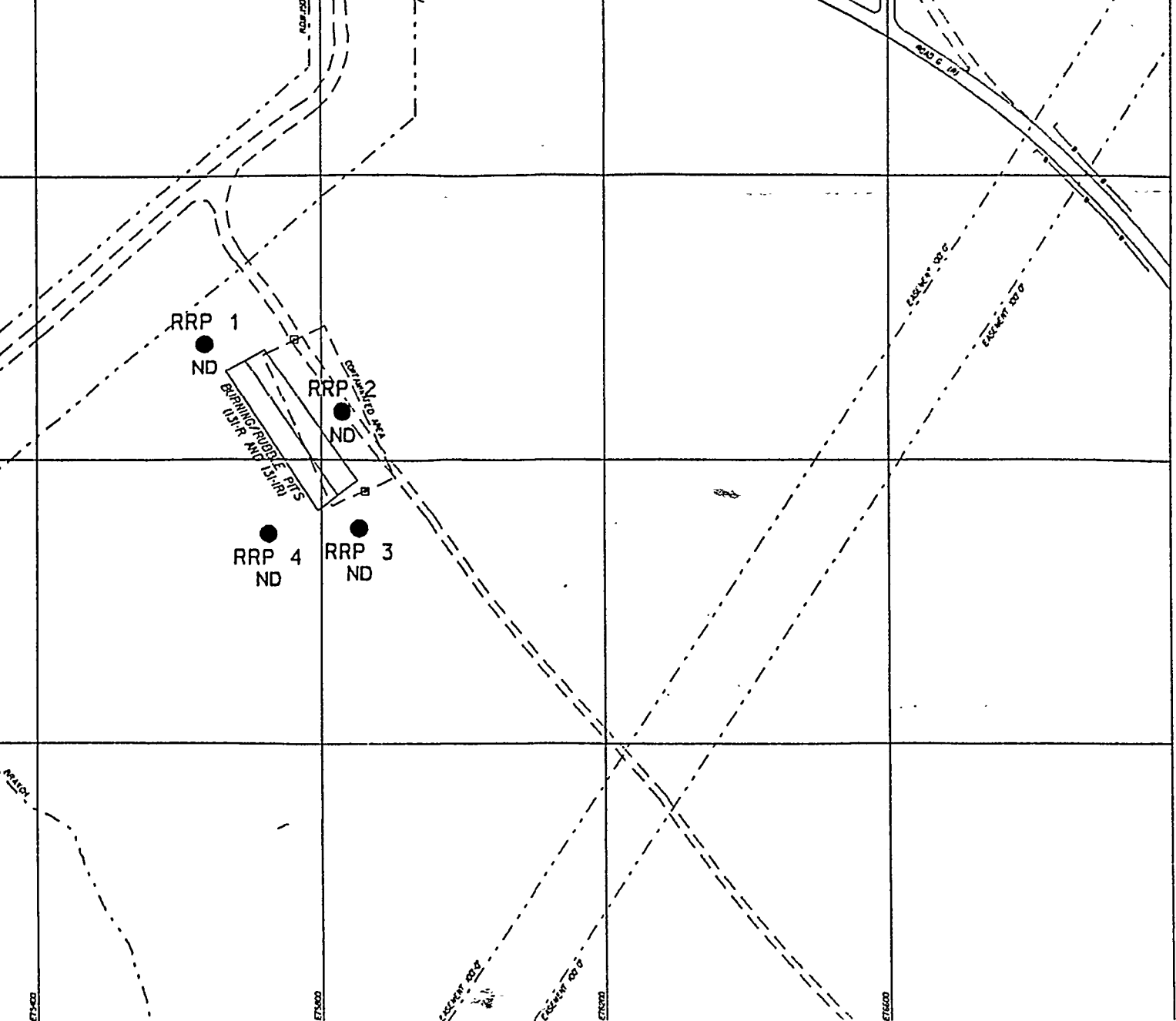
FENCE

PIT/BASIN

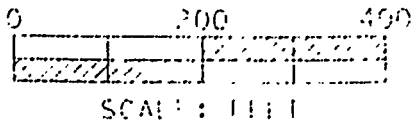
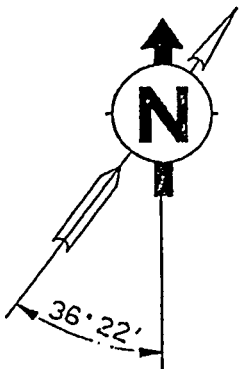
-280— OBSERVED CONTOUR

PLANT TRUE
NORTH NORTH

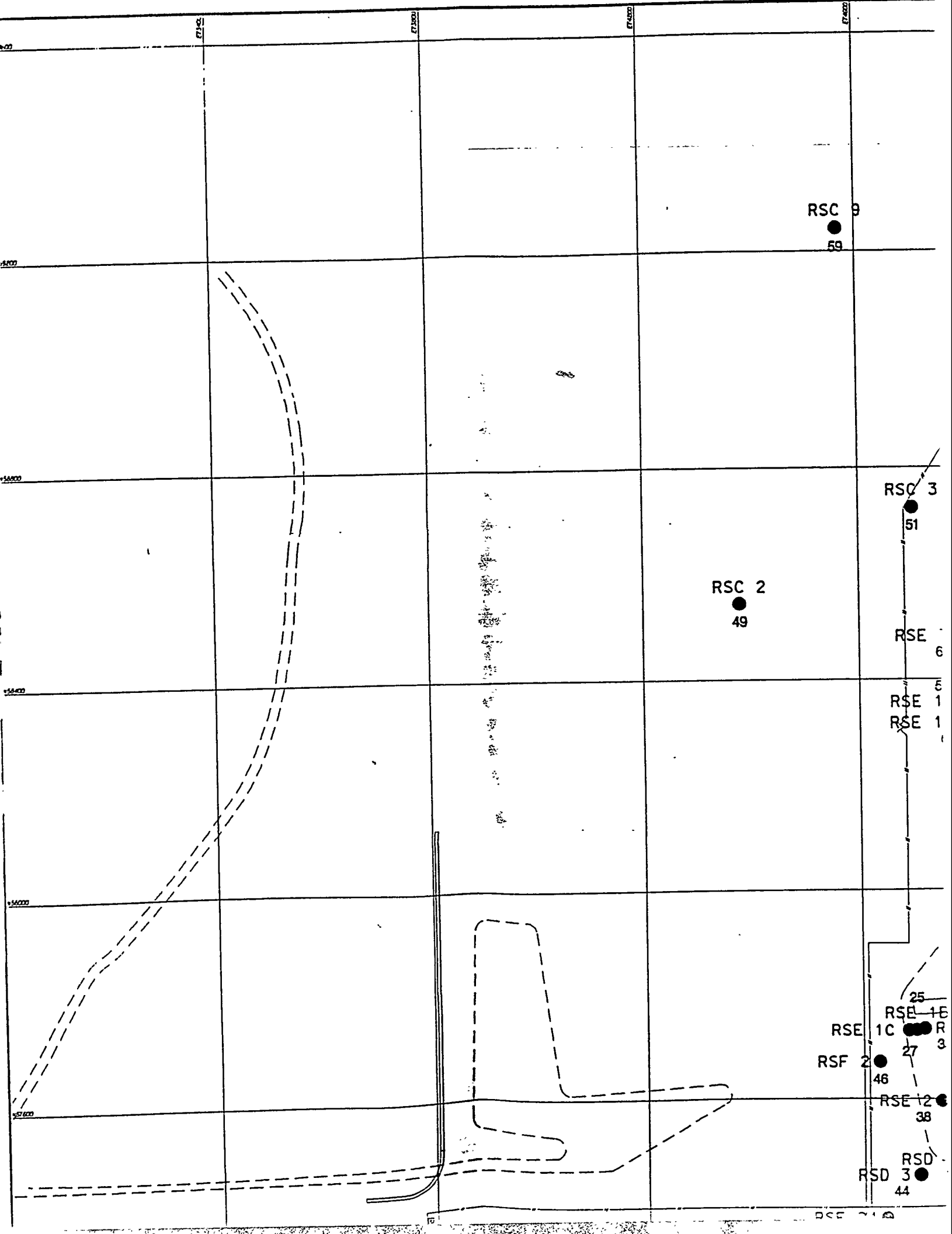


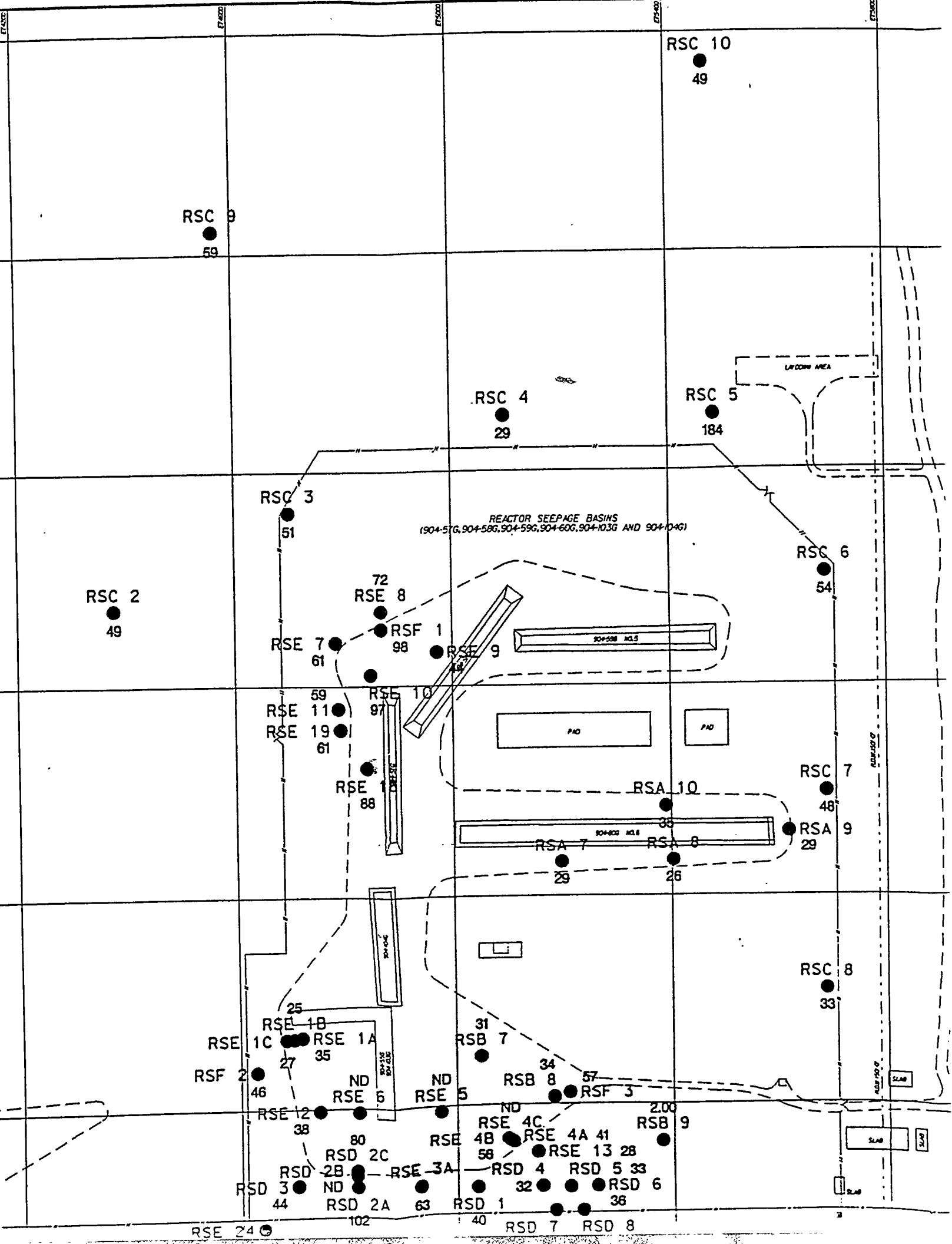


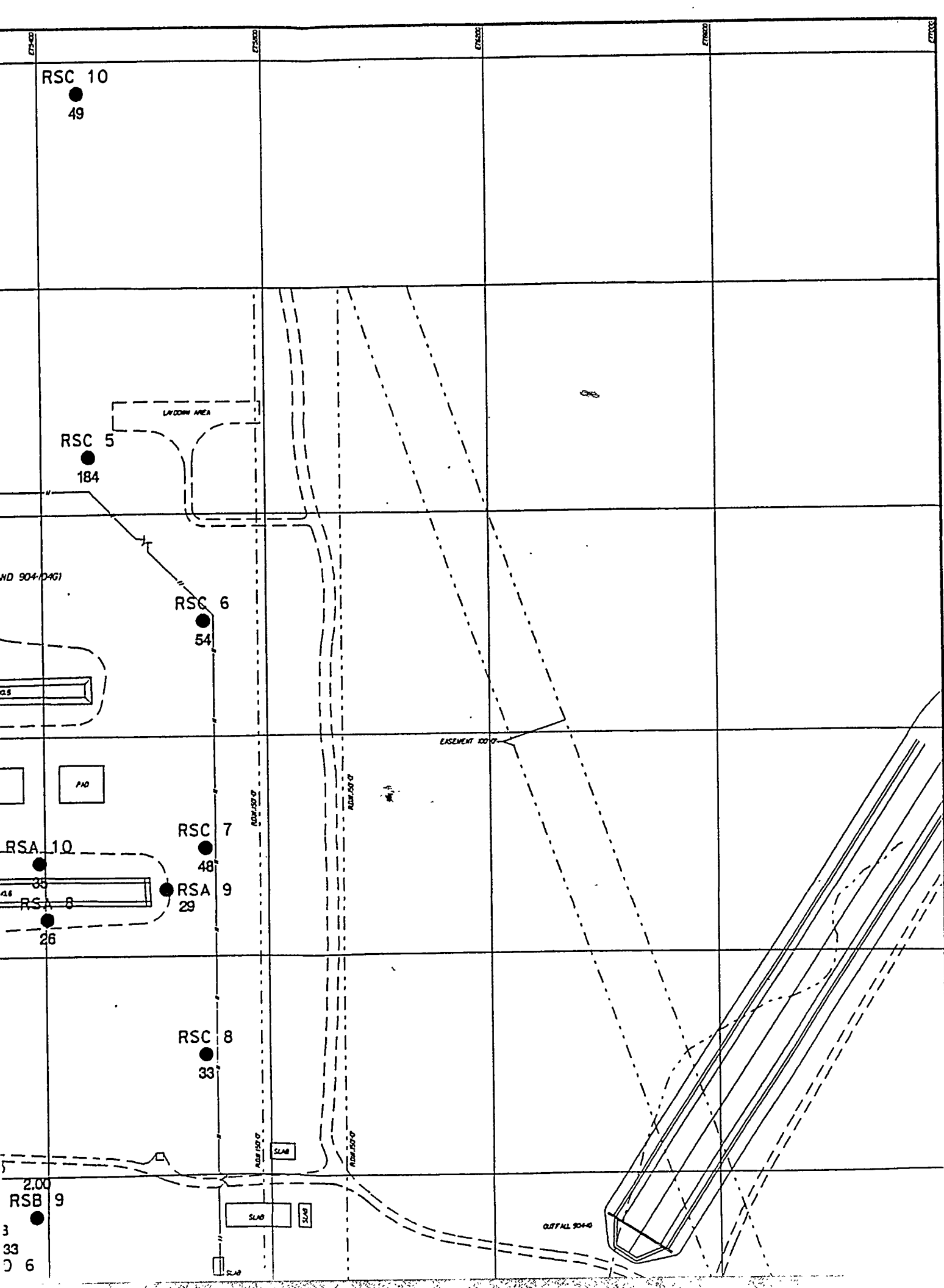
PLANT TRUE
NORTH NORTH



DWG NO. GR1110	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE CADMIUM CONCENTRATIONS FOR R-REACTOR AREA WATER TABLE AQUIFER THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93







RSE 1

RSF 2

46

RSC

RSE 24

29

COAL STORAGE

RCP 1D RCP 1A

NE 103

CP-34

SUB STA

UNION

DR

SOLD

7 DR

CHLDR BLDG

IF FUTURE

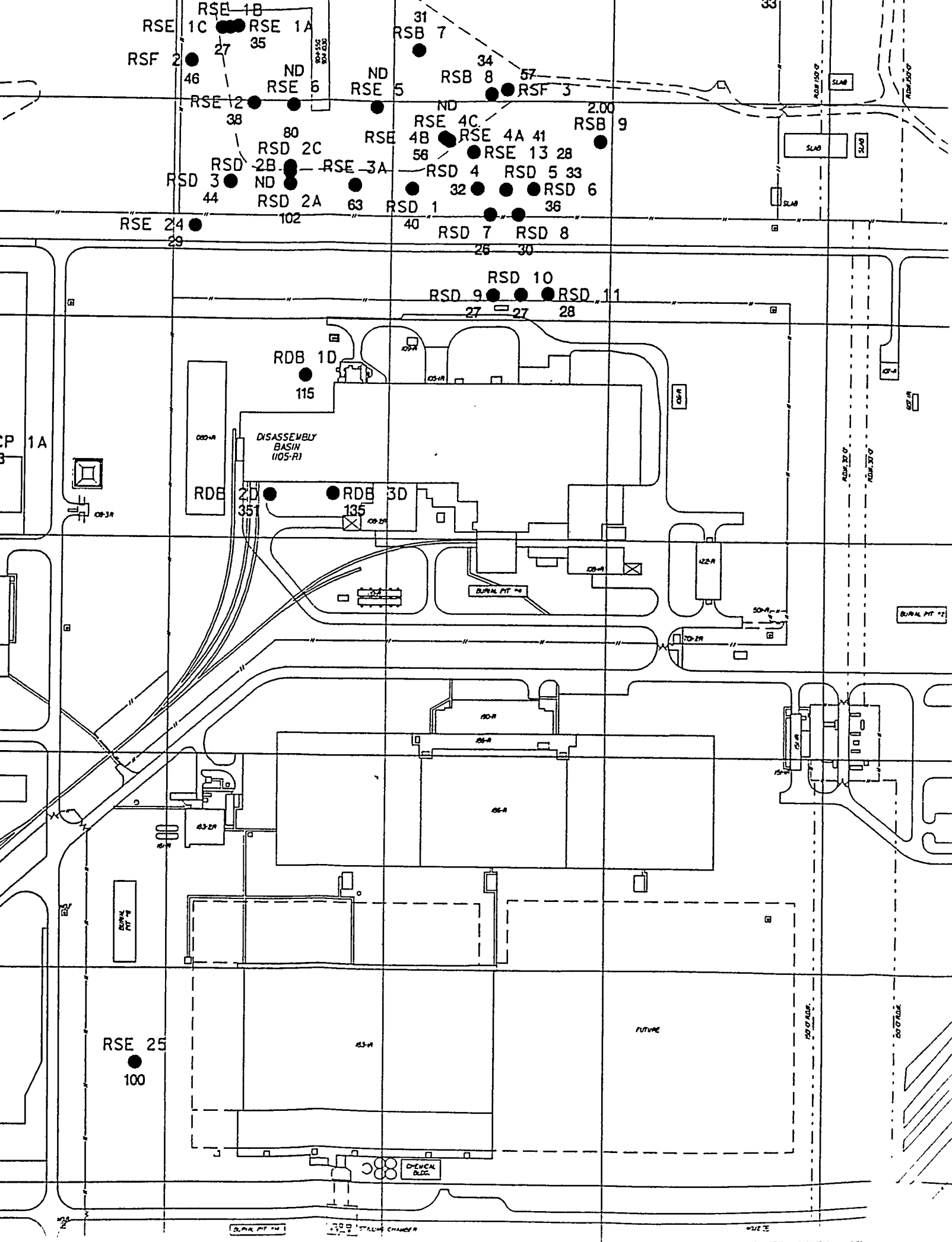
25-A

25-A

25-A

RSE 25

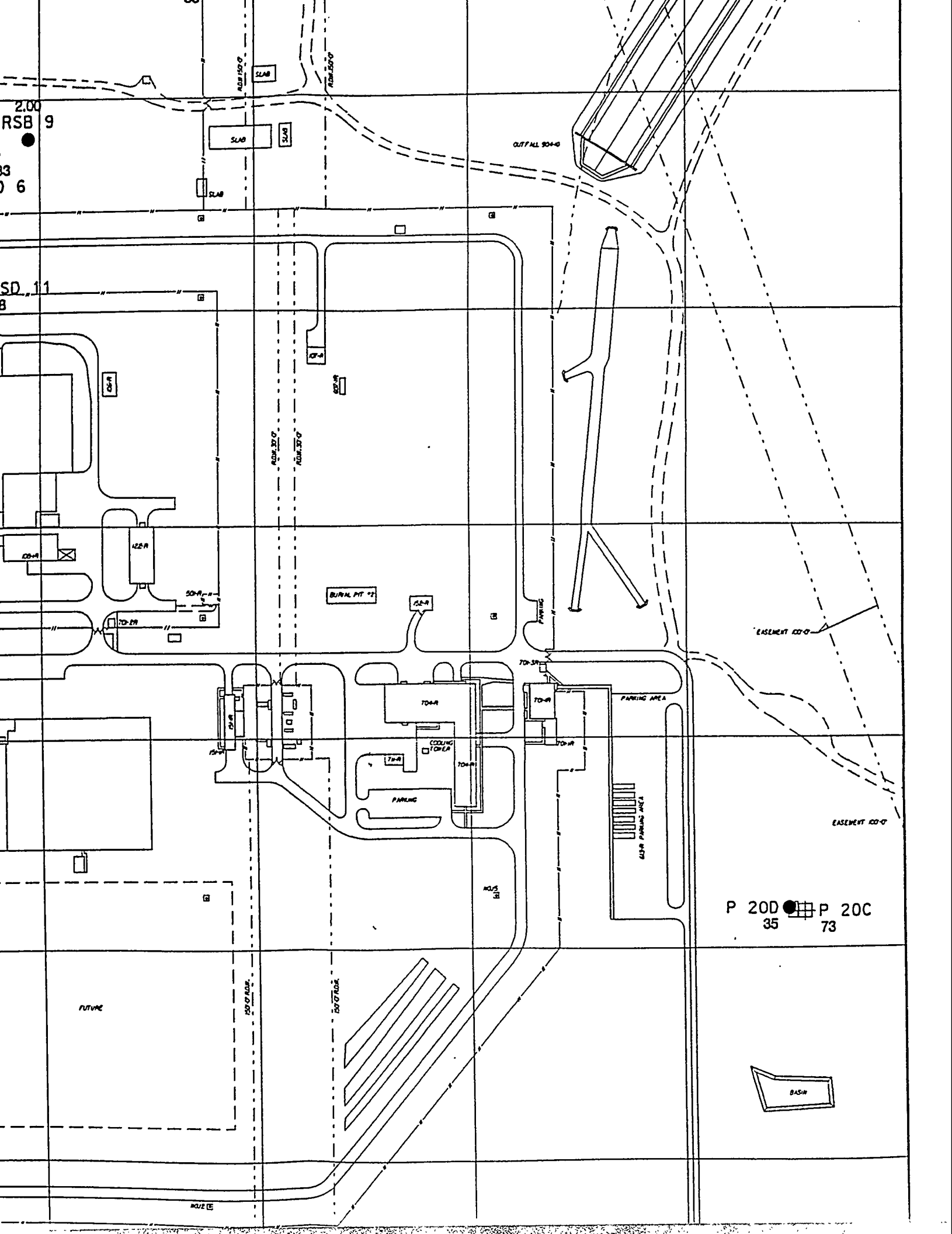
100



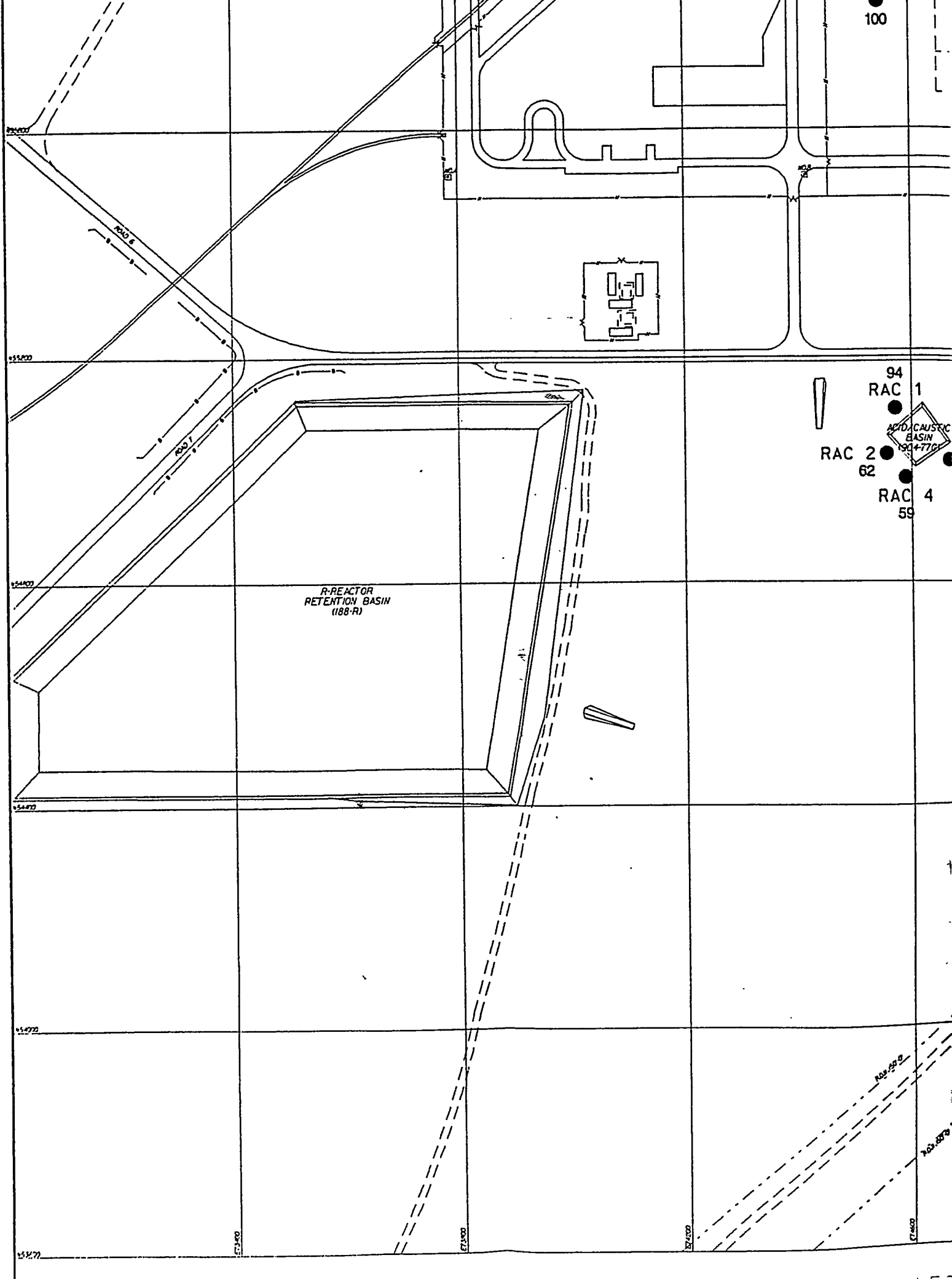
2.00
RSB 9

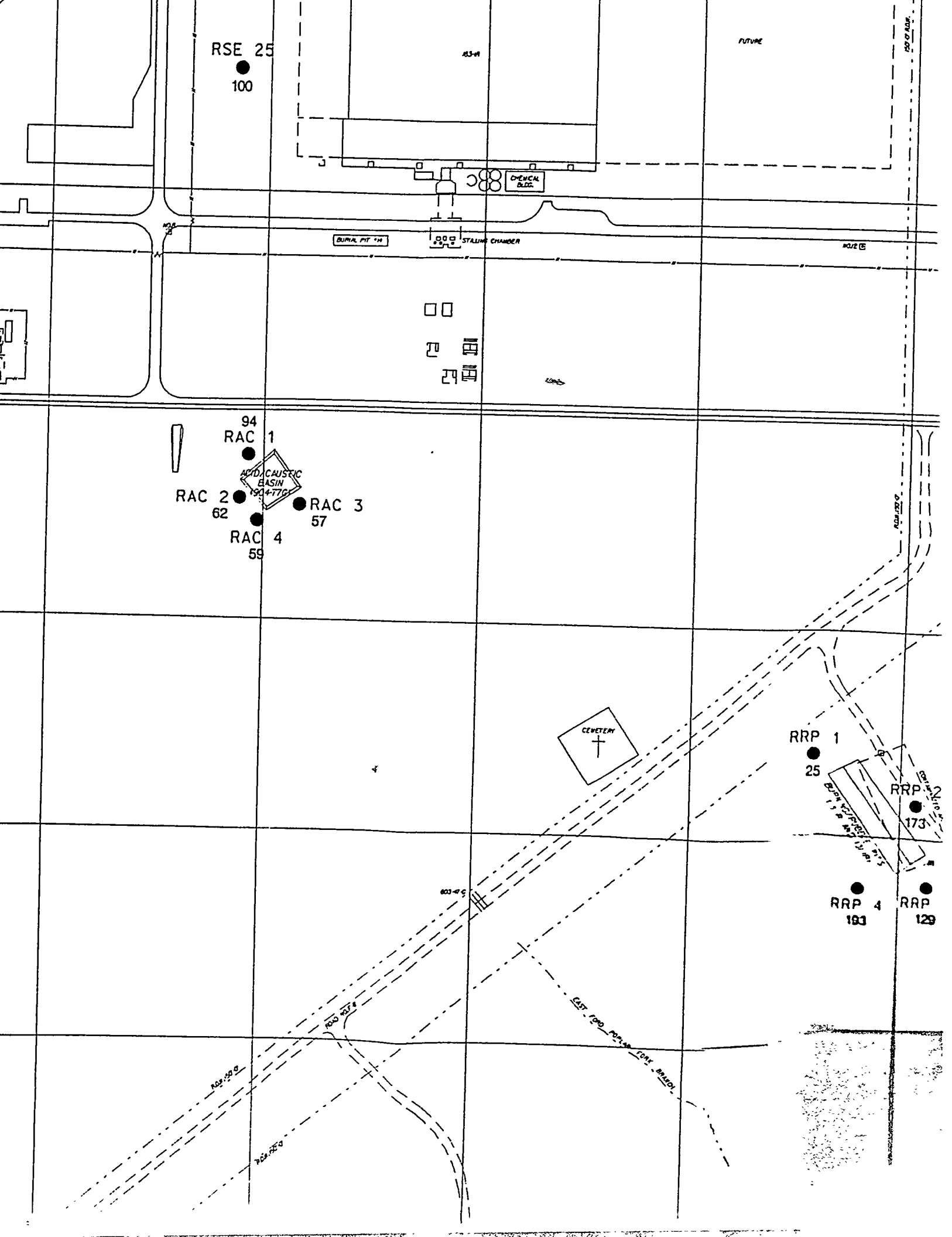
33
6

SD 11
8



P 20D 35 P 20C 73

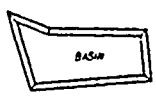




FUTURE

DO OF ALB.

DO OF ALB.



NO. 12 (E)

NO. 12 (E)

NO. 12 (E)

NO. 12 (E)

NO. 12 (E)

NO. 12 (E)

RRP 1
25

RRP 2
173

RRP 4
193

RRP 3
129

BURNING RUBBLE PITS
(131-R AND 151-R)

CONTAMINATED AREA

ROAD NO. 12 (E) CONT. BRIDGE

R-REACTOR
RETENTION BASIN
(188-R)

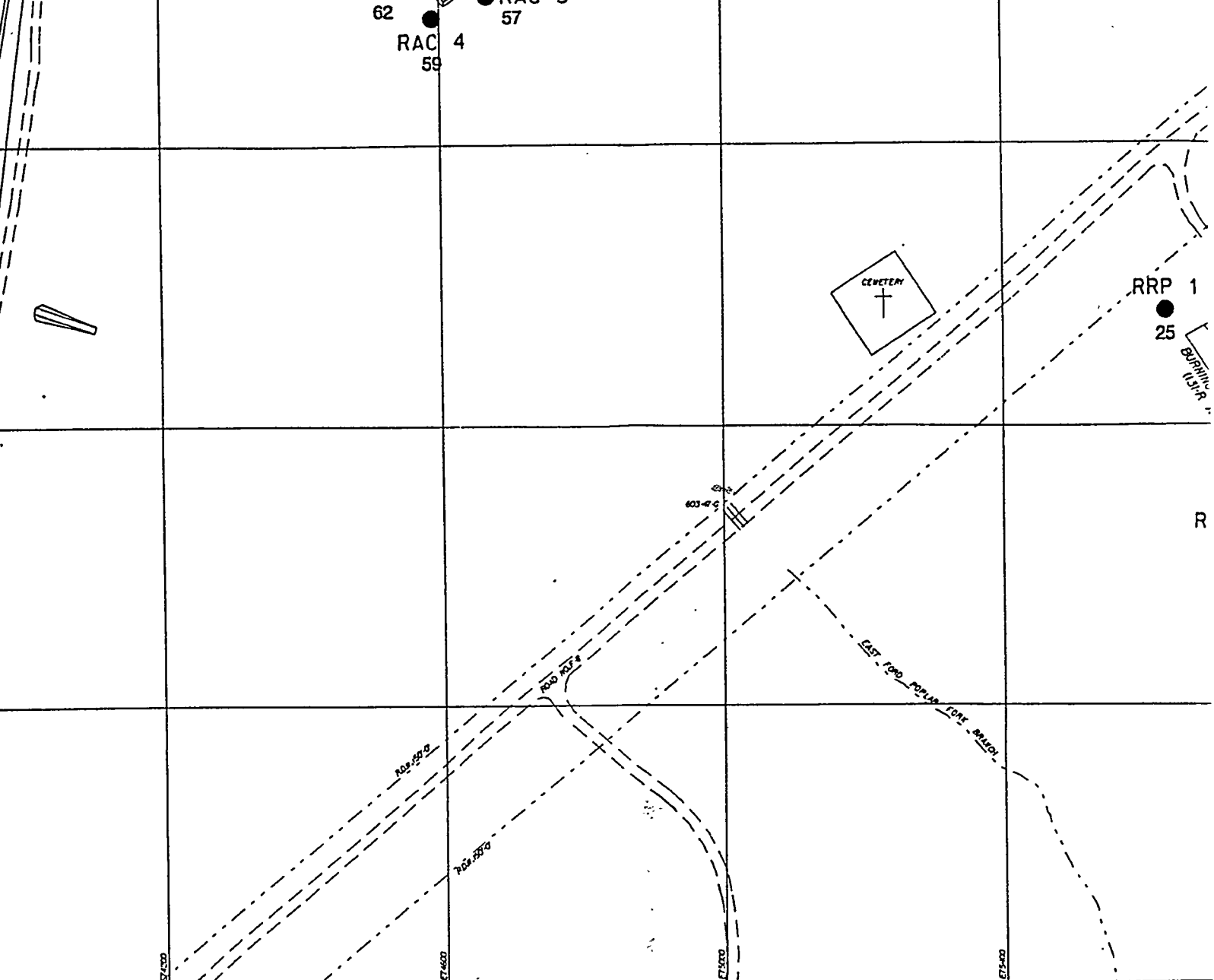
WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ||| MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⬢ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

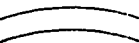
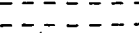
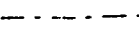
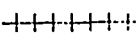
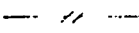
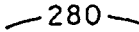
RAC 1 WELL ID

LEC

-
-
-
-
- +++
-
- ⬢
- 2

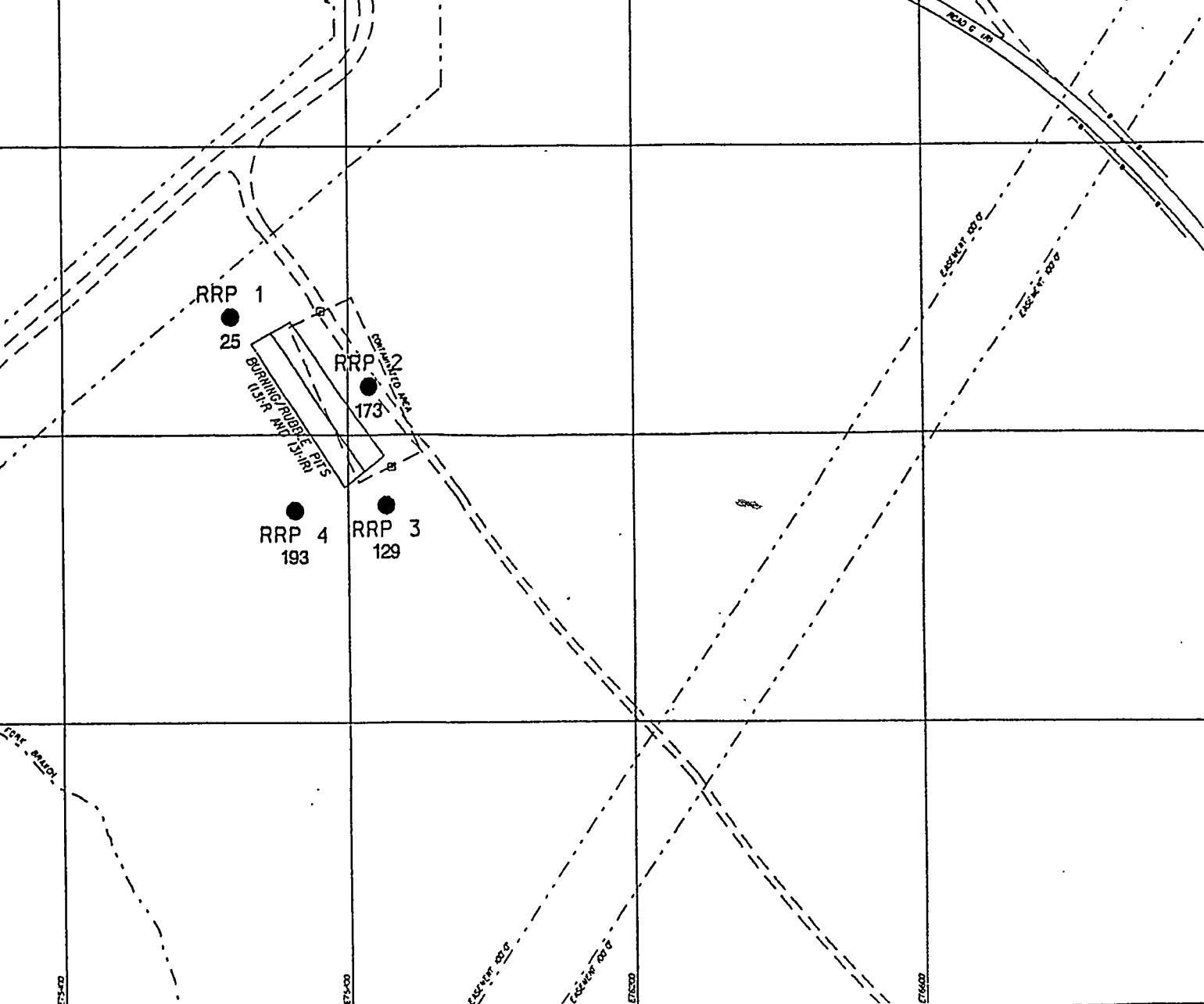


LEGEND

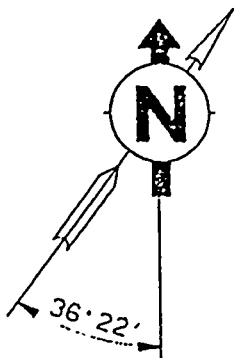
-  FACILITY BOUNDARY
-  ROAD
-  DIRT ROAD
-  STREAM
-  RAILROAD
-  FENCE
-  PIT/BASIN
-  280 OBSERVED CONTOUR



0 20
SCALE



PLANT TRUE
NORTH NORTH



0 200 400

SCALE: FEET

DWG NO. GR1111	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
SAFETY • RESPONSIBILITY • SECURITY SRS SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION "Restoring the Environment Today for a Cleaner Tomorrow"	
TITLE SPECIFIC CONDUCTANCE VALUES FOR R-REACTOR AREA GROUNDWATER MONITORING WELLS THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93

#59077

67500

67300

67100

#58200

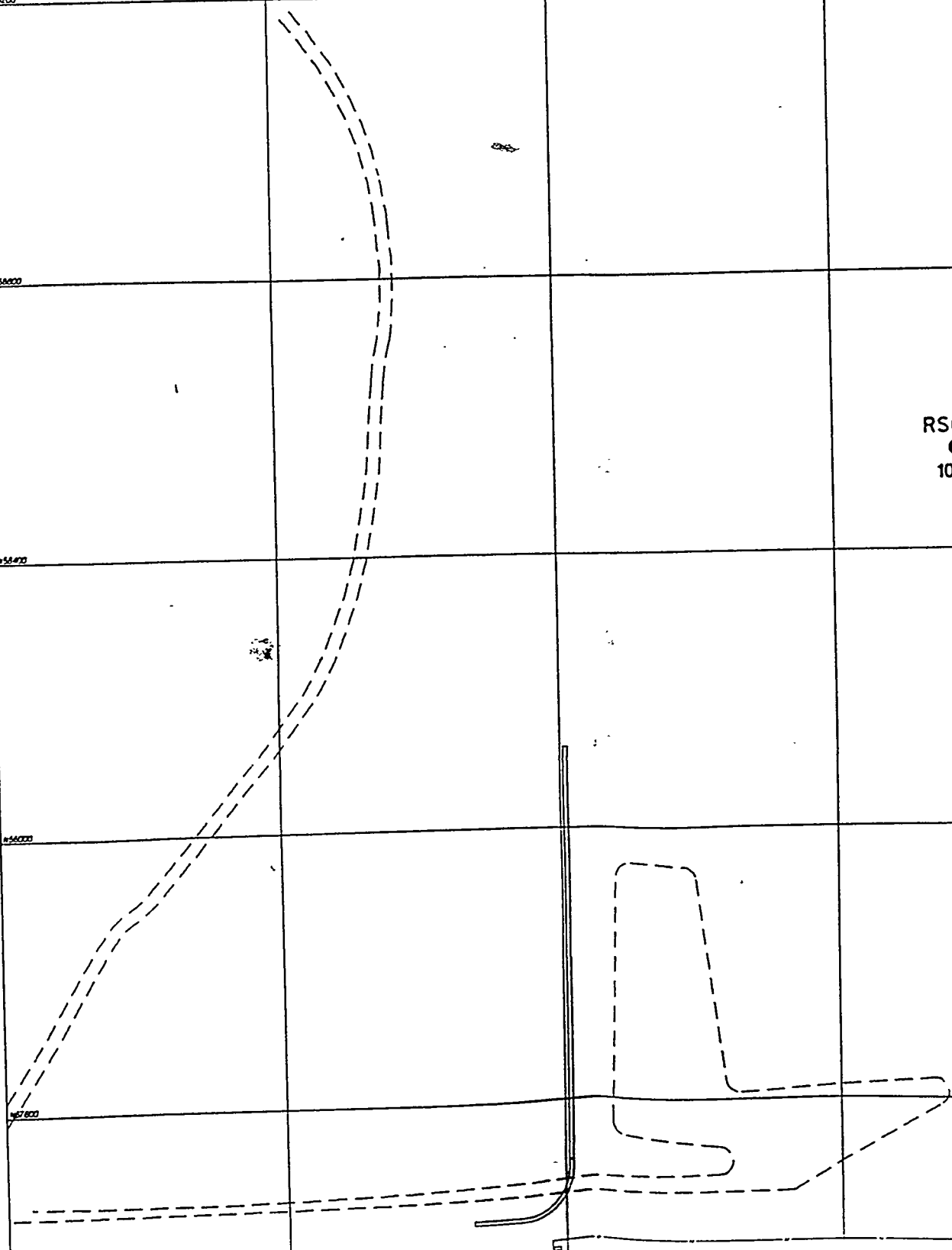
#56000

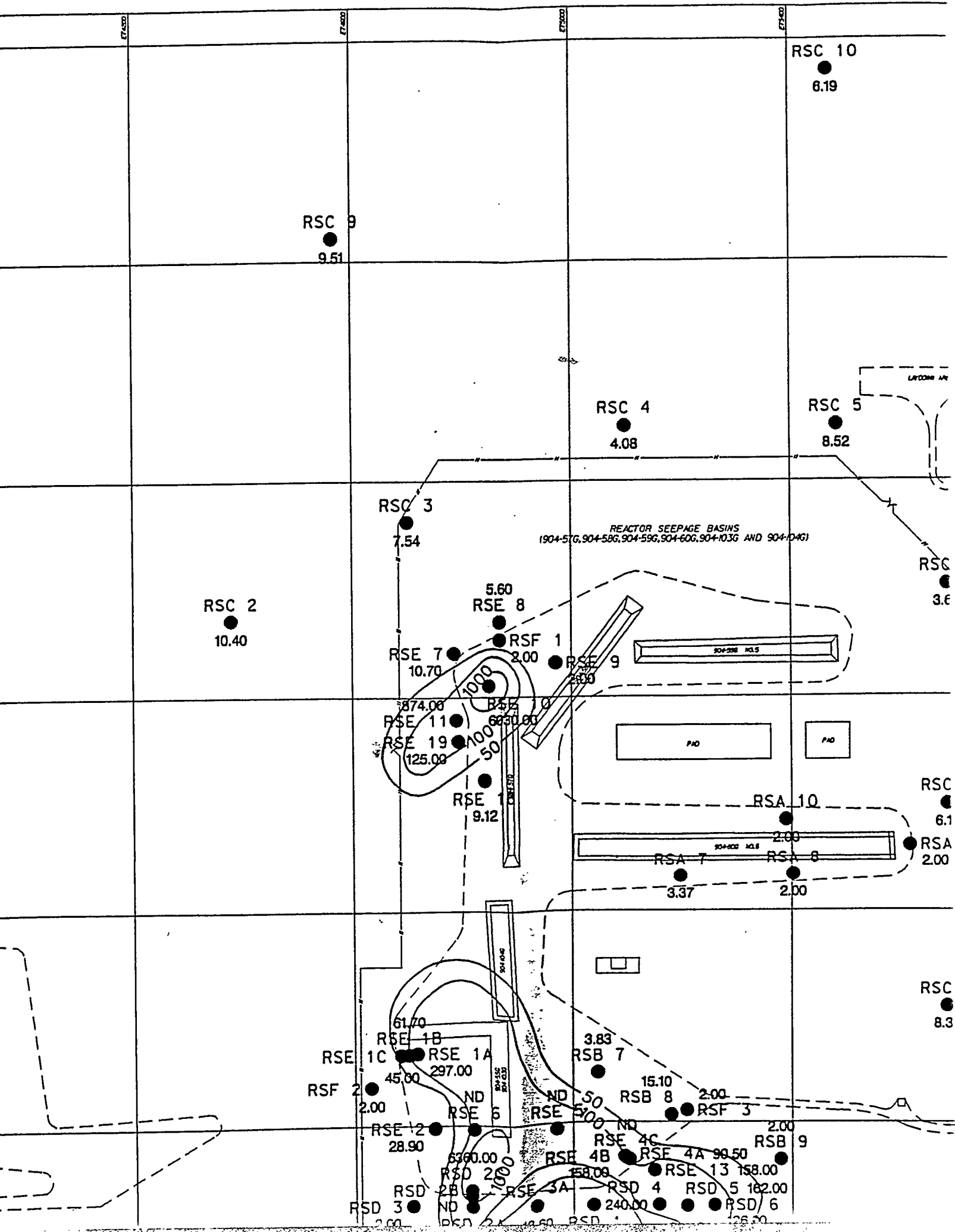
#56400

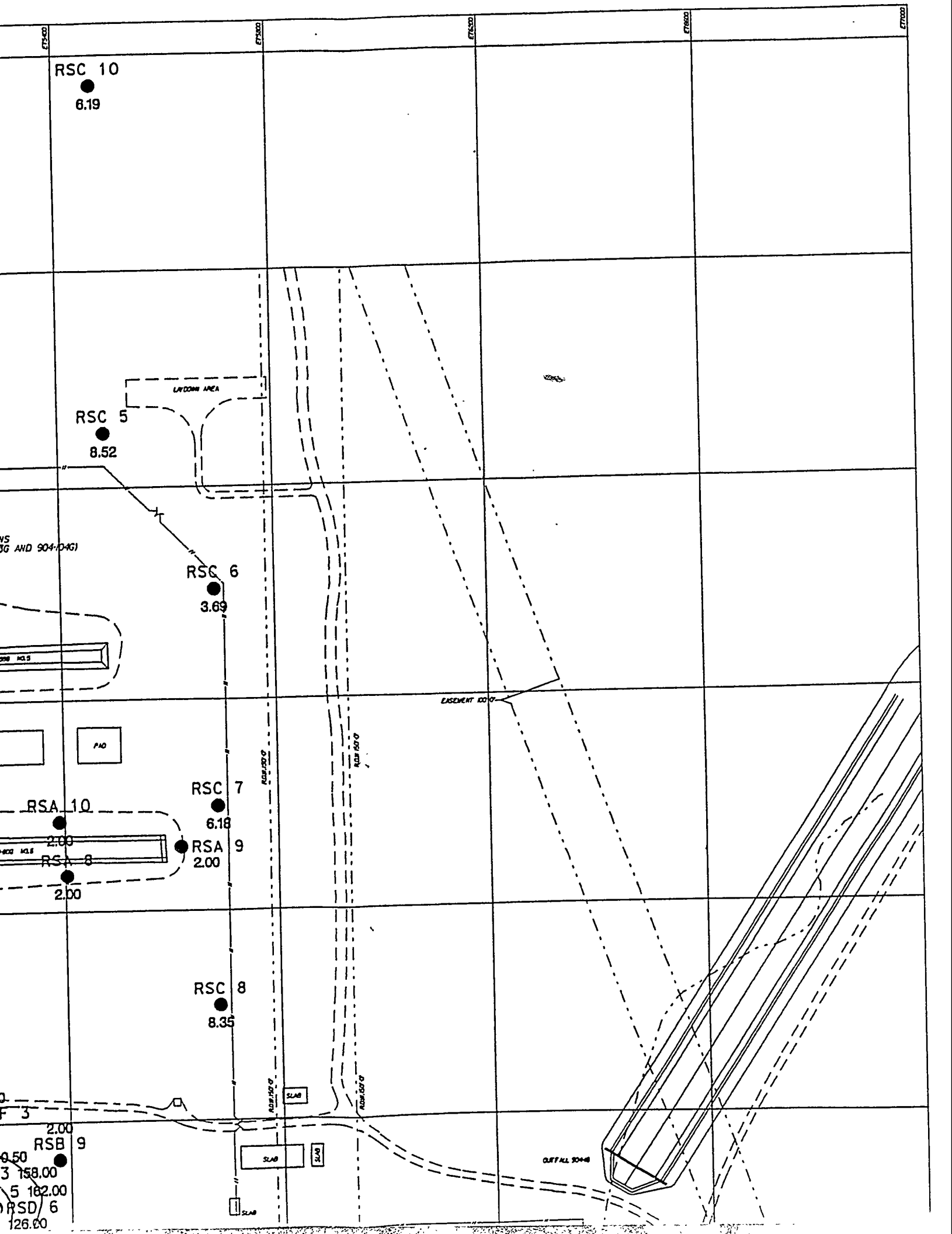
#54000

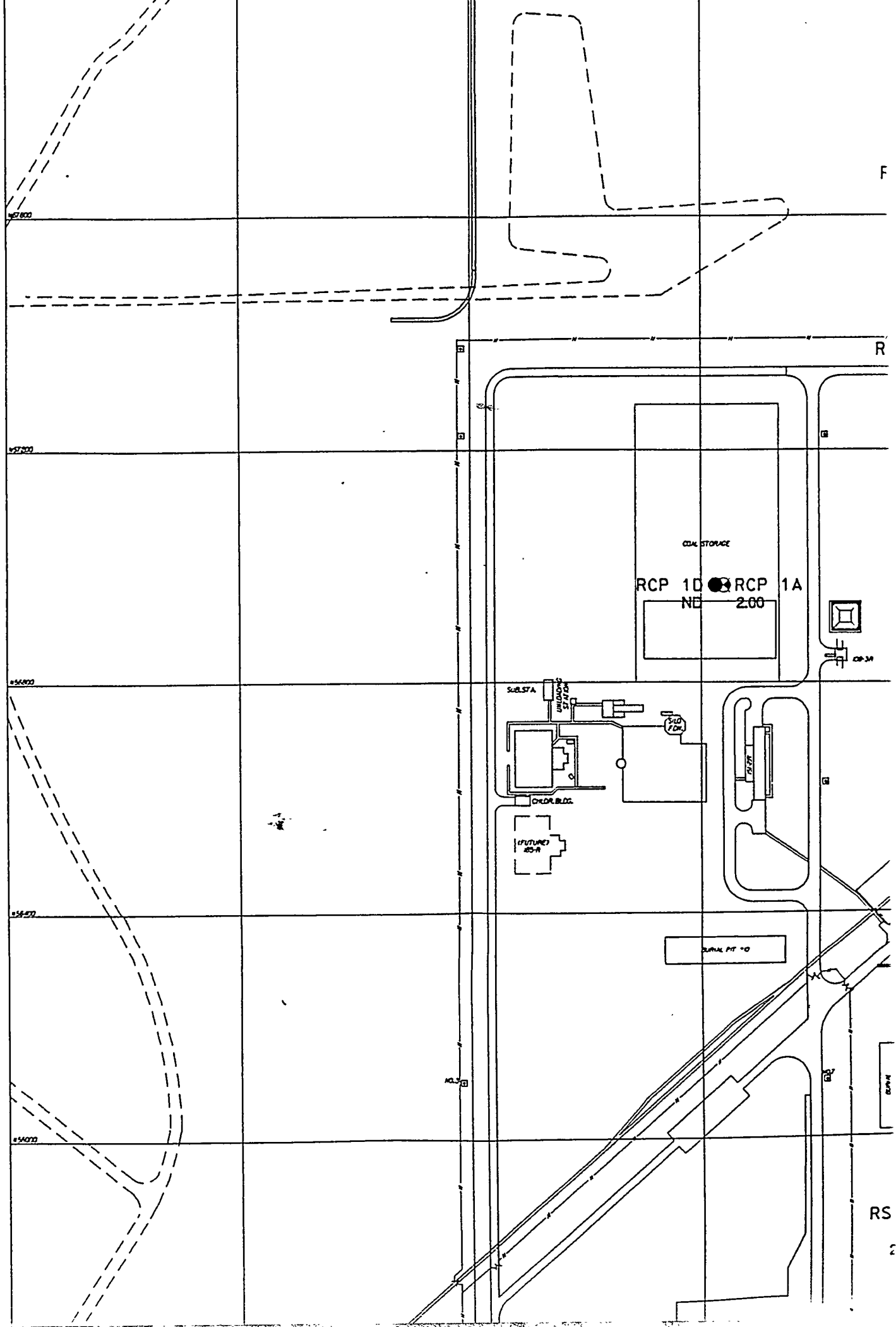
#57800

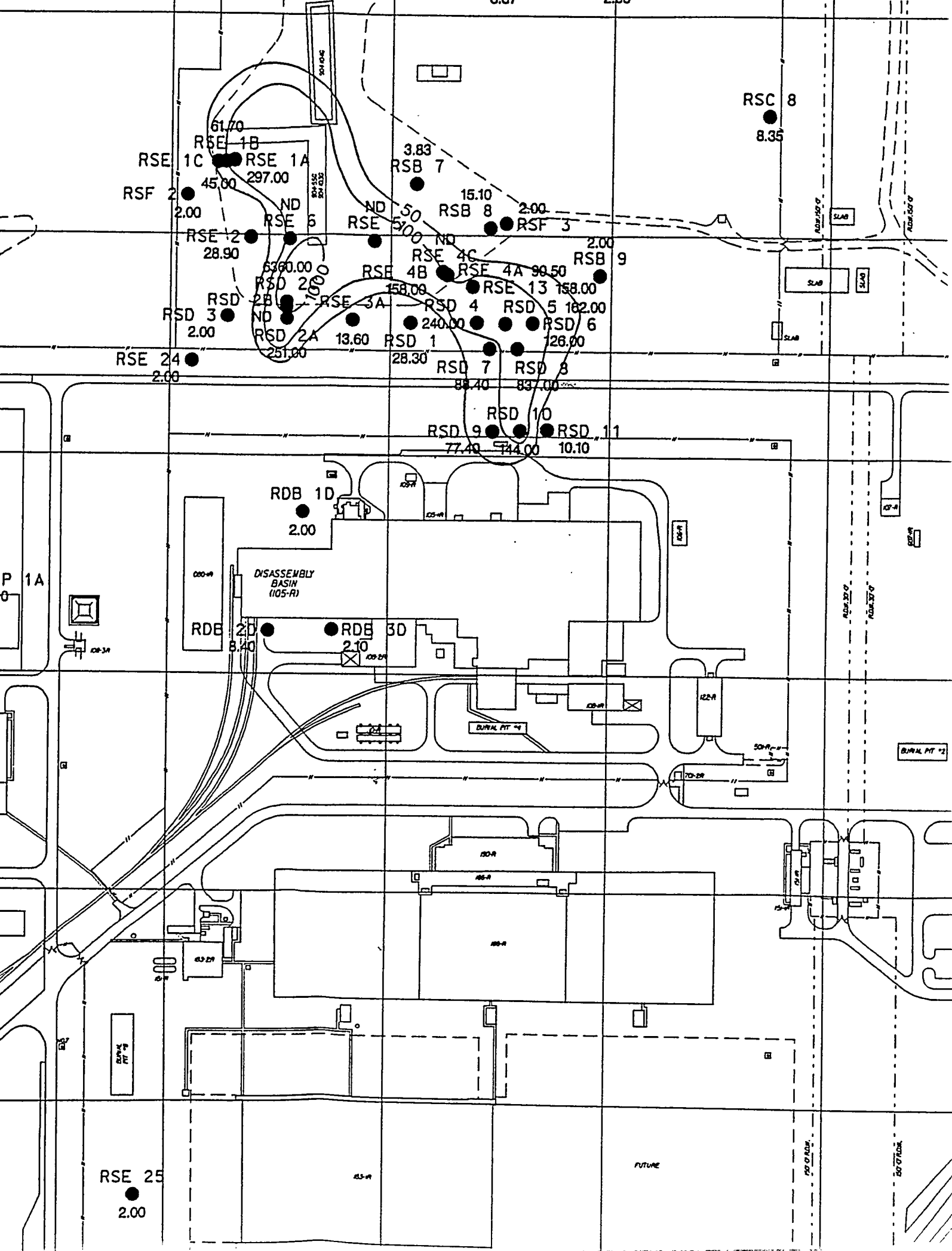
RSC 2
●
10.40

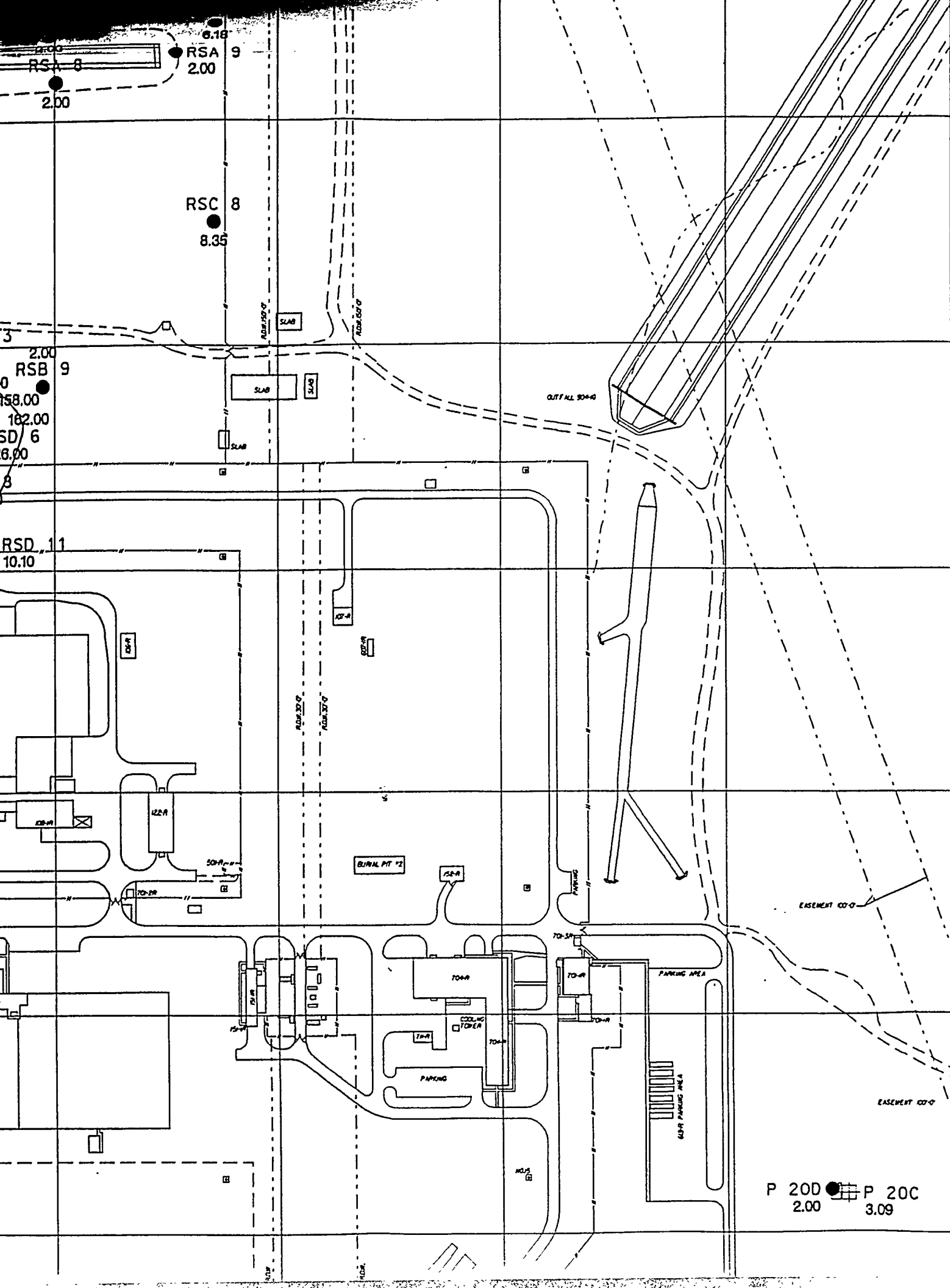


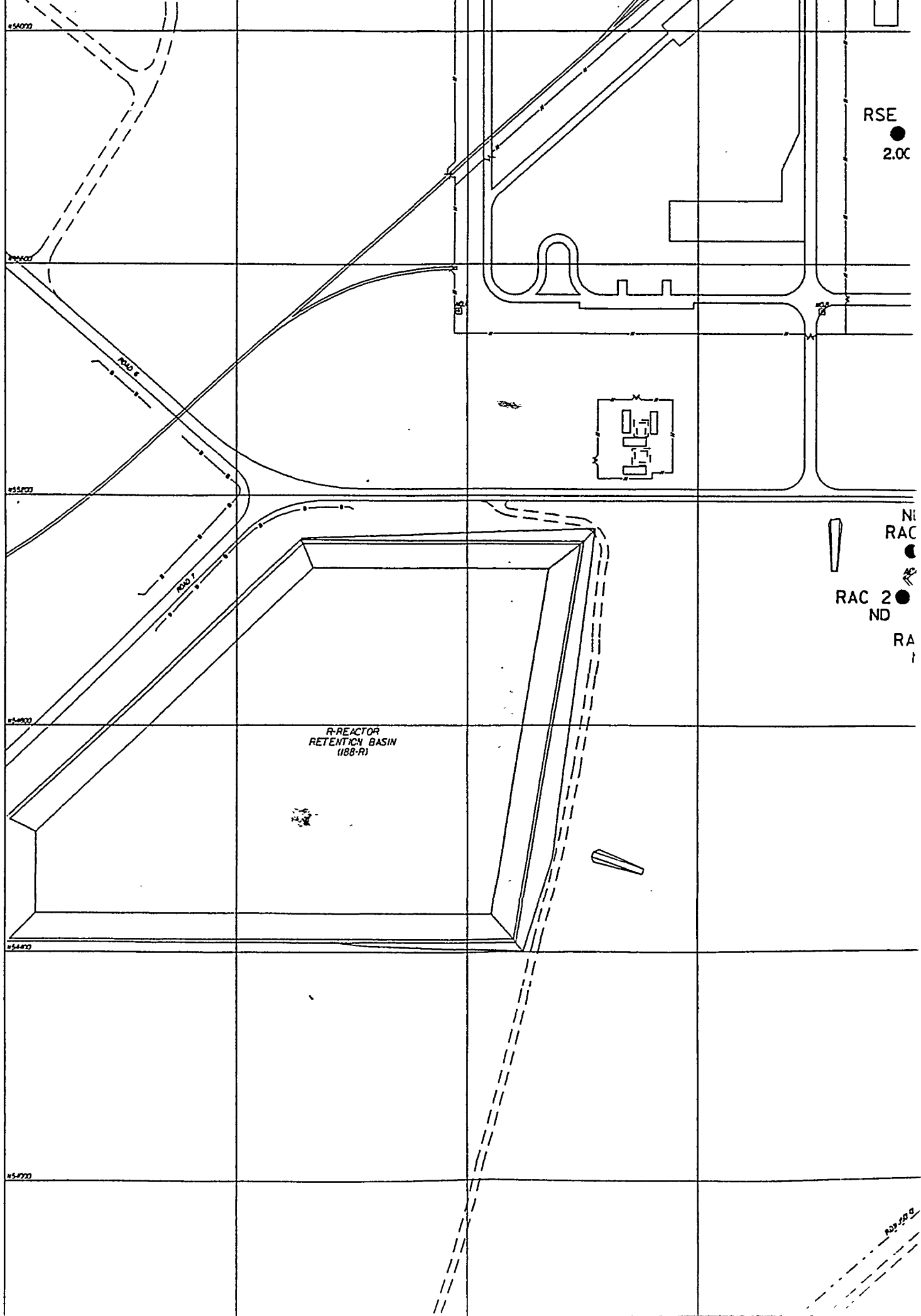


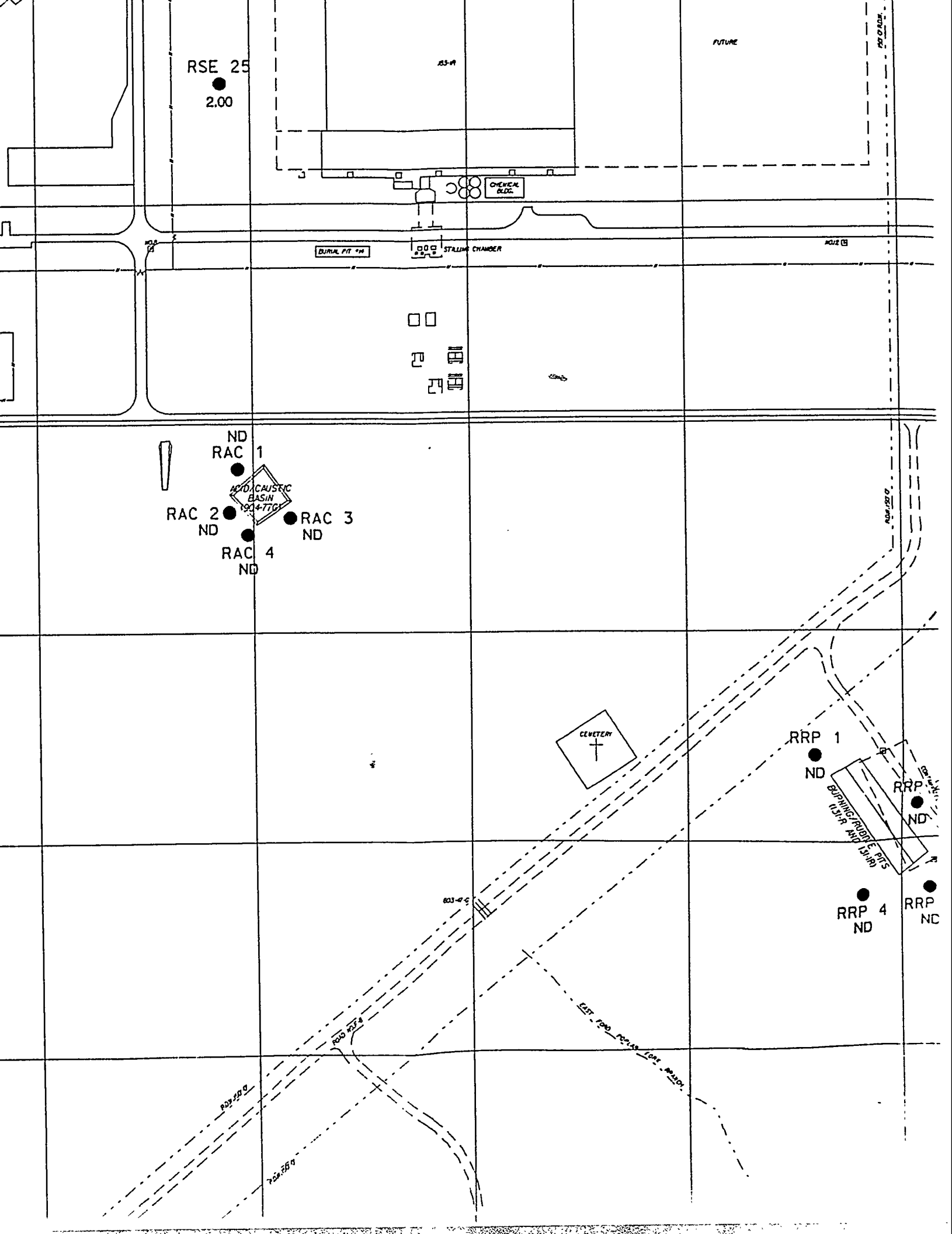












RSE 25

2.00

65-11

FUTURE

OVERALL BLDG.

BURIAL PIT 011

STALING CHAMBER

NO. 12

ND

RAC 1

ACID CAUSTIC
BASIN
(904-770)

RAC 2

ND

RAC 3

ND

RAC 4

ND

CEMETERY

RRP 1

ND

RRP

ND

RRP 4

ND

RRP NC

BURNING/ROBBER RPS
(1311R AND 1311RD)

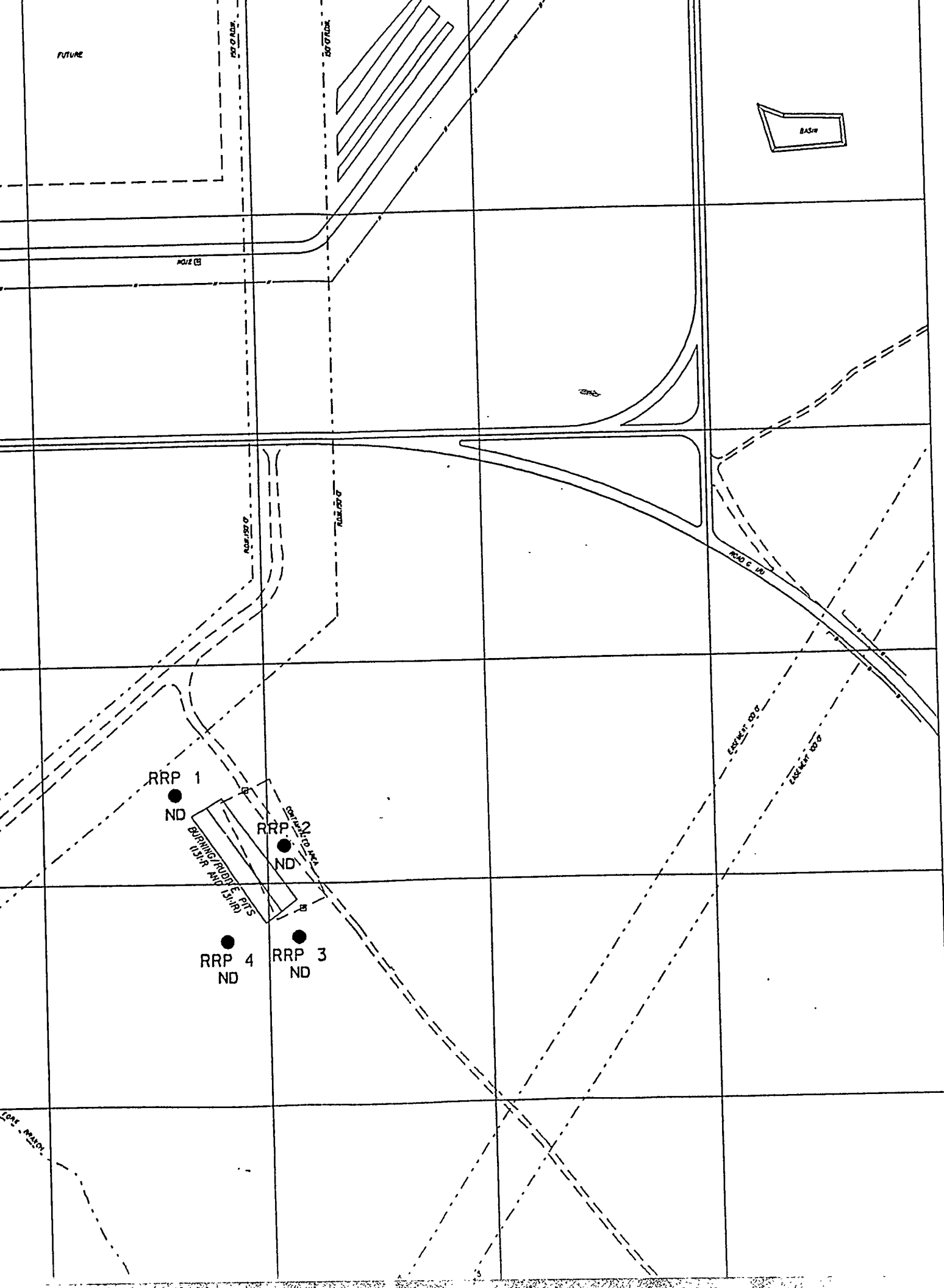
603-11

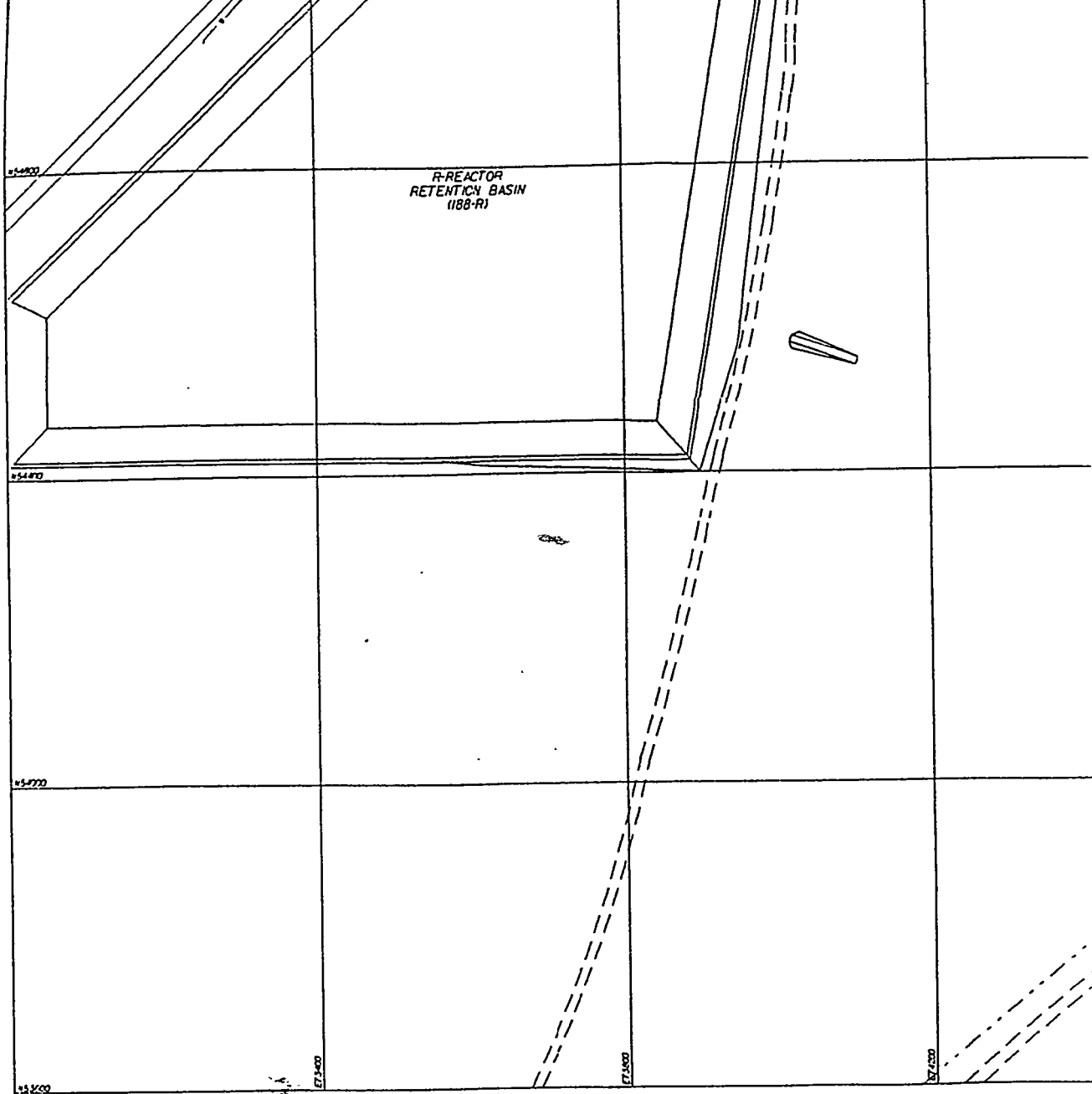
POX 250 g

POX 250 g

POX 250 g

EST. 1000 POX 250 g LONG. 1000 g





WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

CONTOUR LEGEND

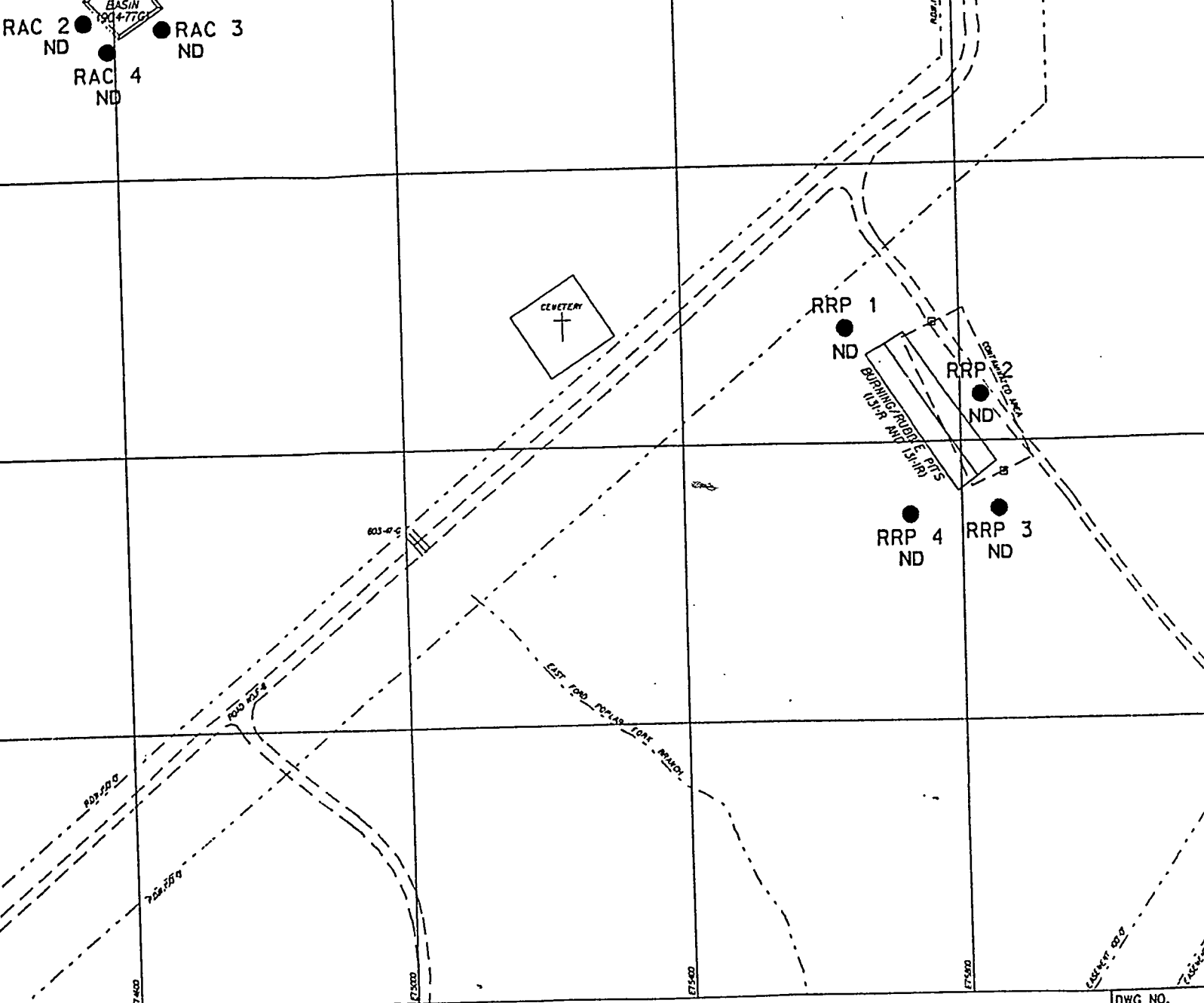
CONTOURS: 50, 100, 1000

UNITS: pCi/l

PDWS: 50 pCi/l

2.00: DENOTES CONCENTRATIONS AT OR LESS THAN DETECTION LIMIT

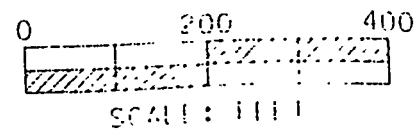
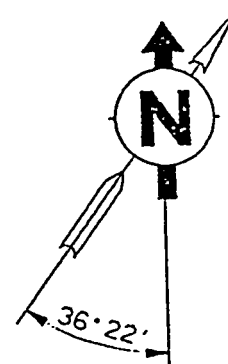
ND: NO DATA



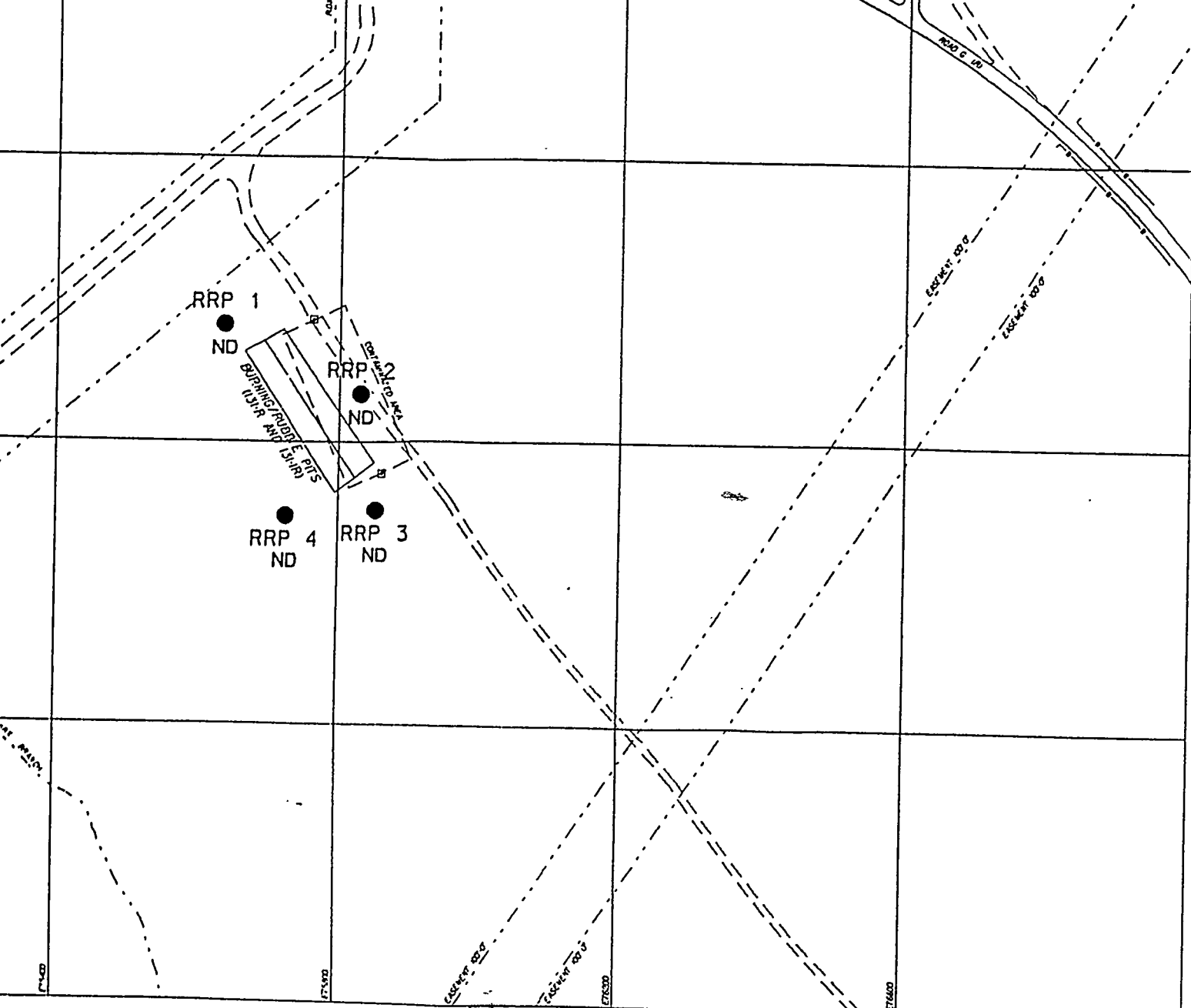
LEGEND

- FACILITY BOUNDARY
- ROAD
- DIRT ROAD
- STREAM
- RAILROAD
- FENCE
- PIT/BASIN
- OBSERVED CONTOUR

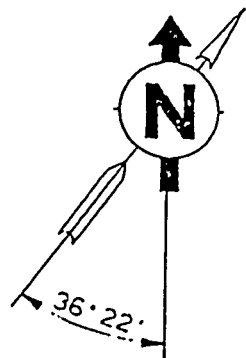
PLANT TRUE
NORTH



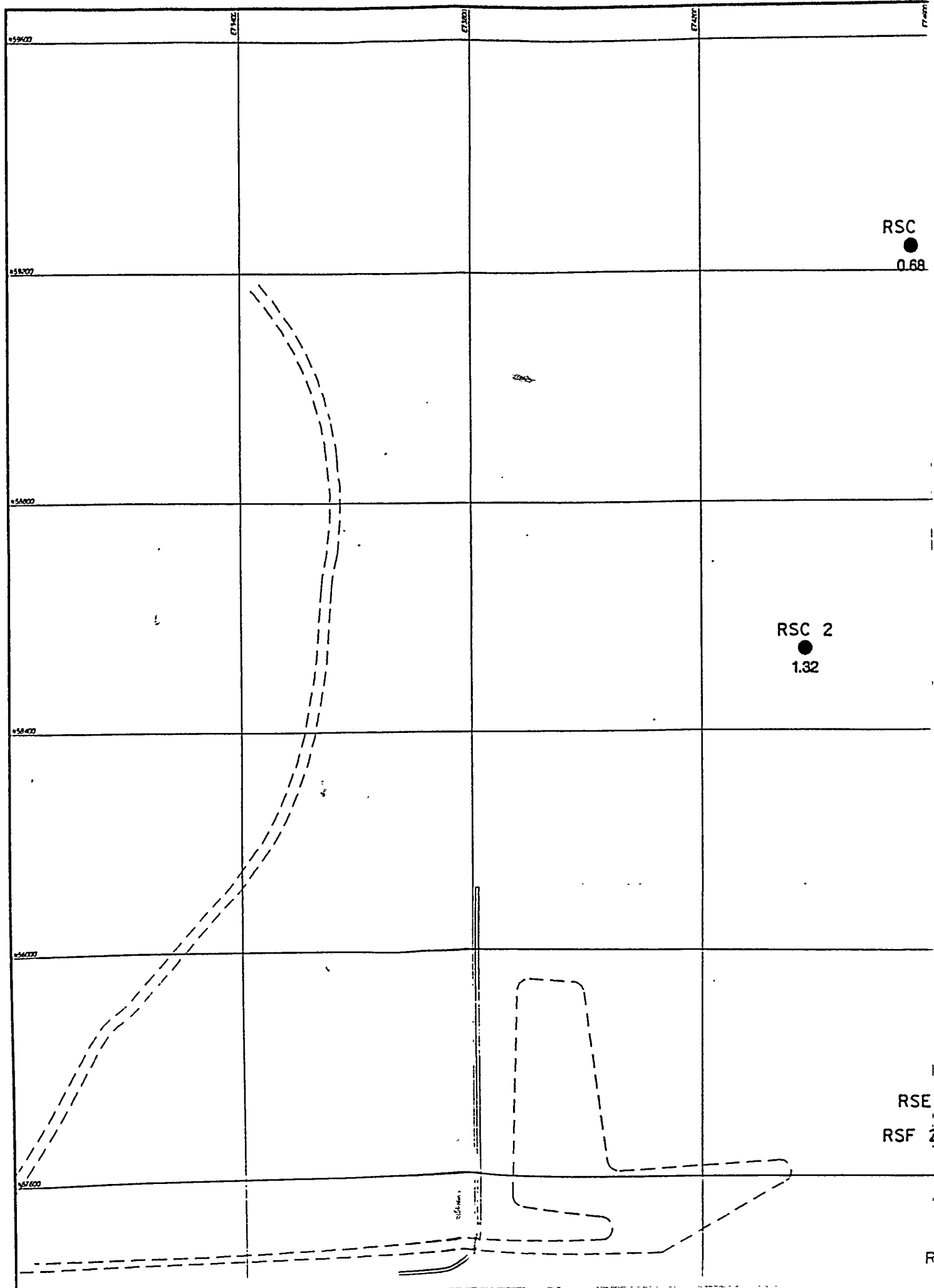
DWG NO.	GR111
SAFETY • RESPC	
SAVANN.	
TITLE	
CREATED BY	TRACY L.
PREPARED BY	C. BUTLER
APPROVED BY	NA
APPROVED BY	NA

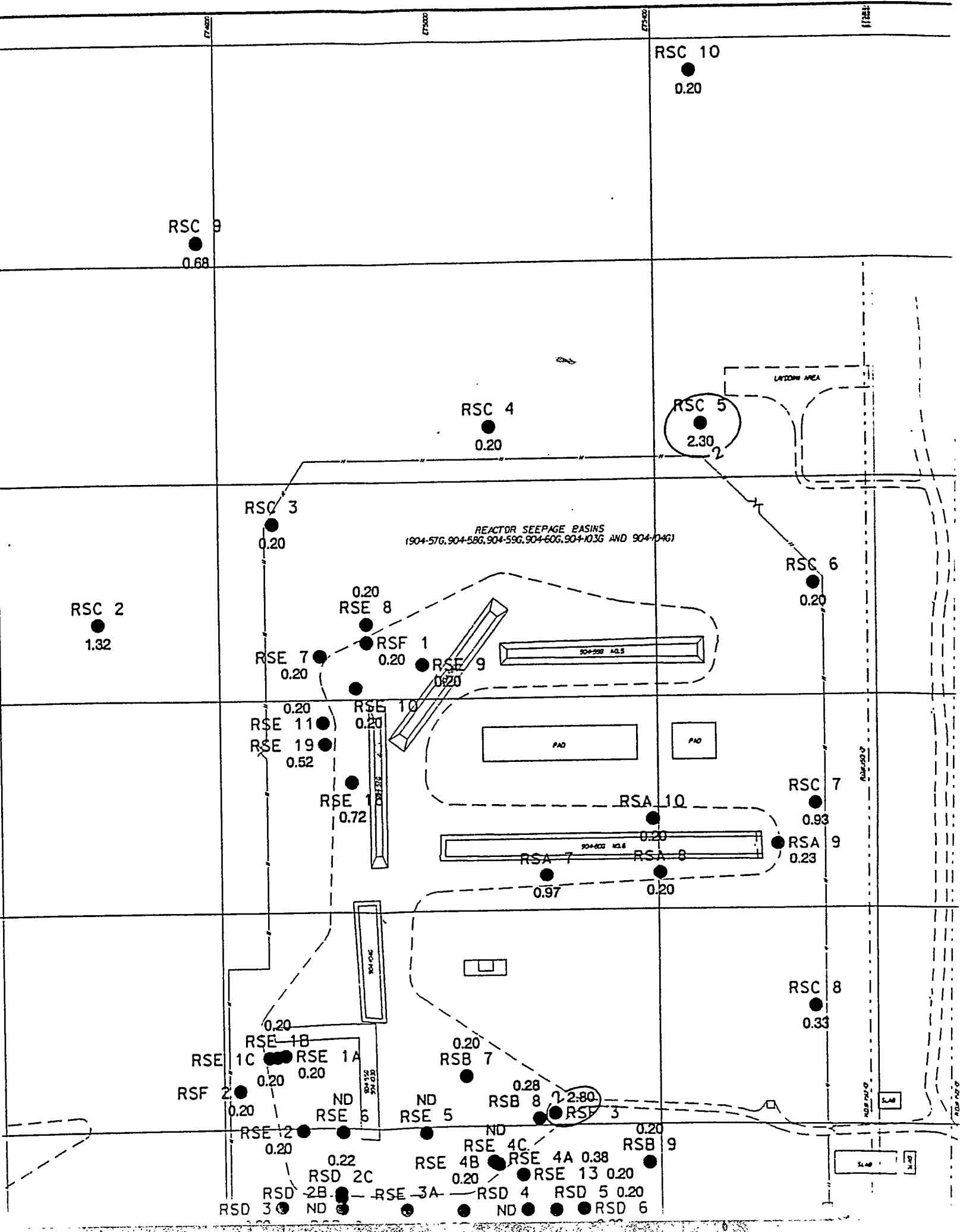


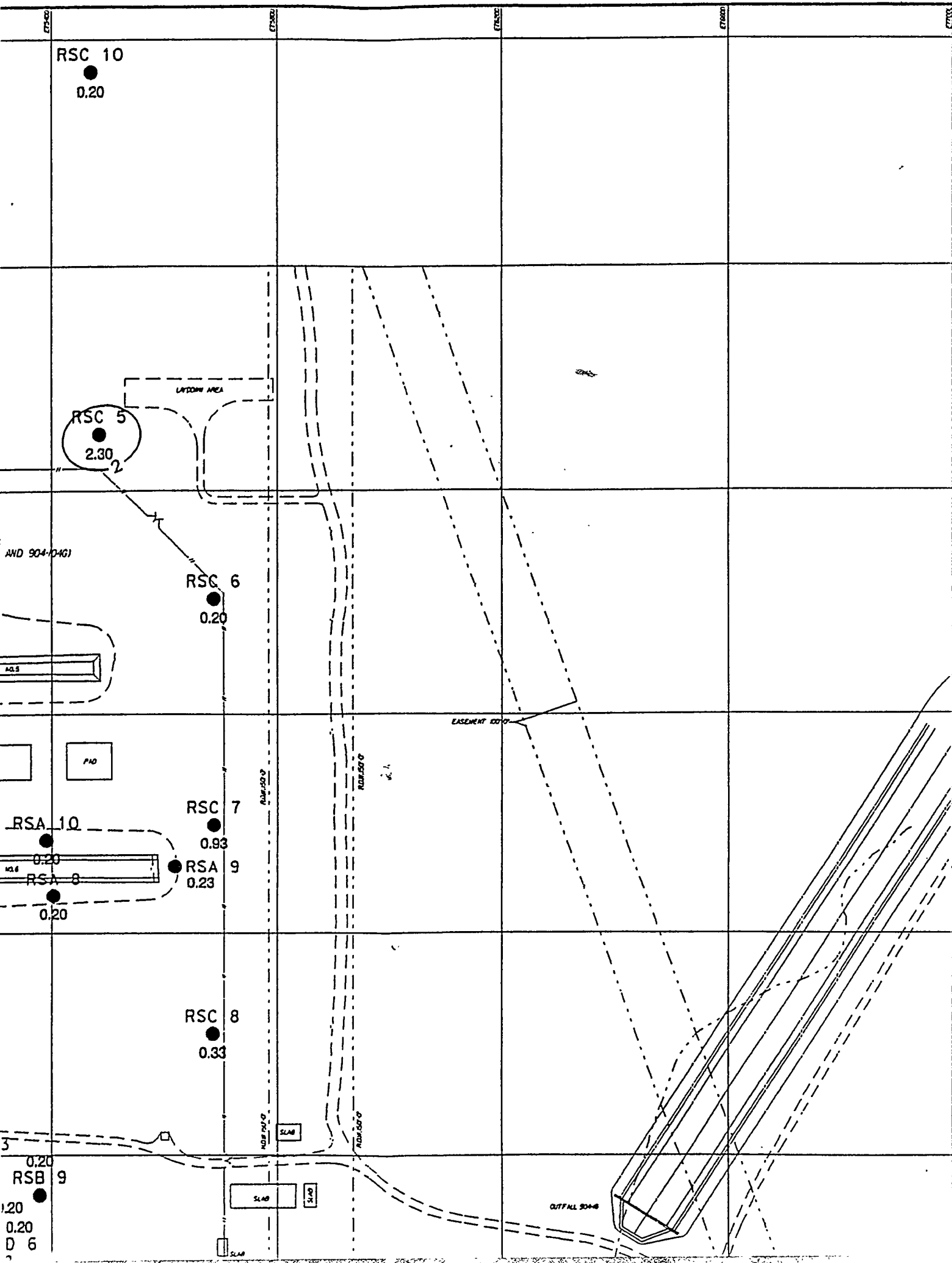
PLANT TRUE
NORTH NORTH

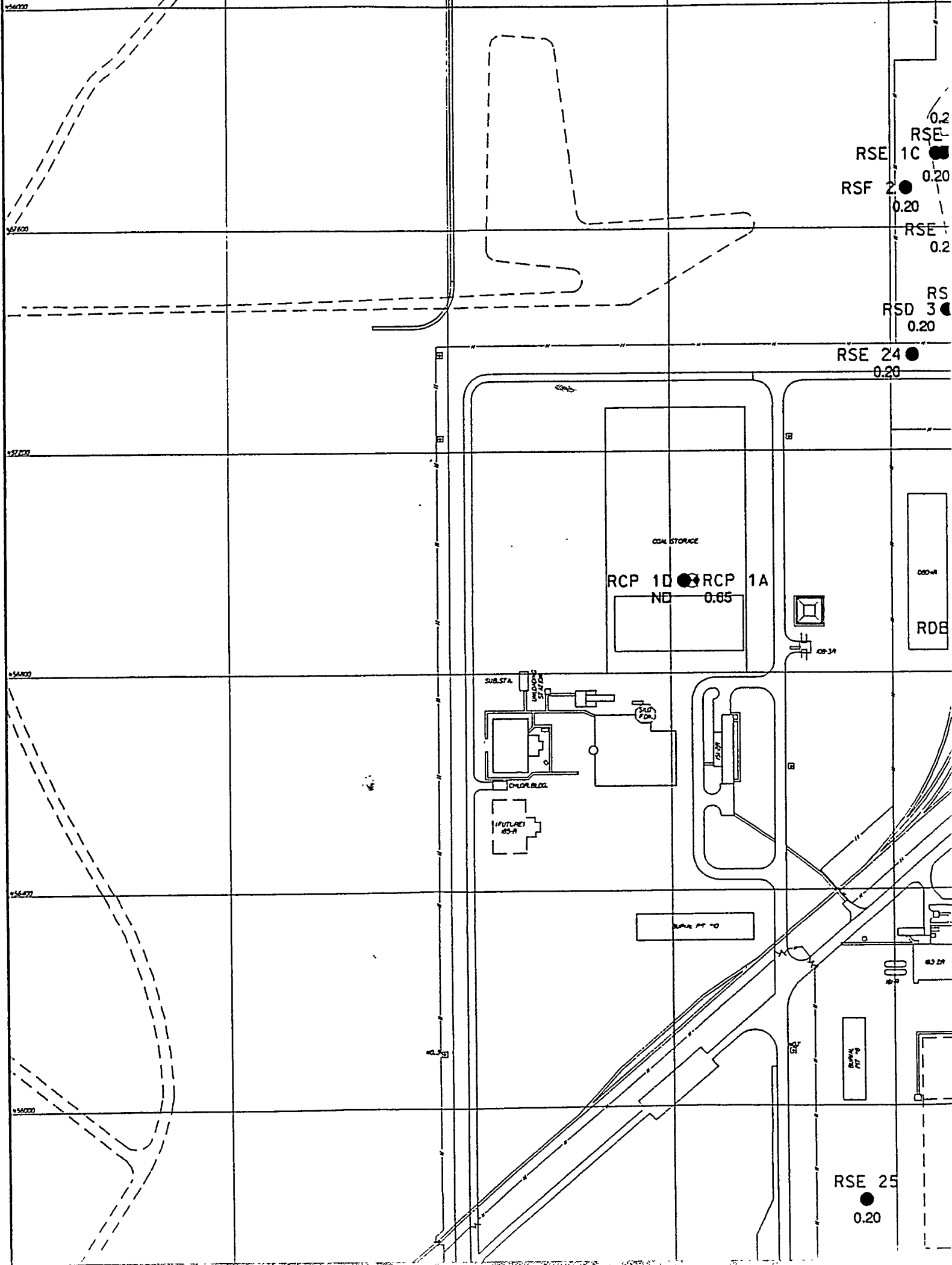


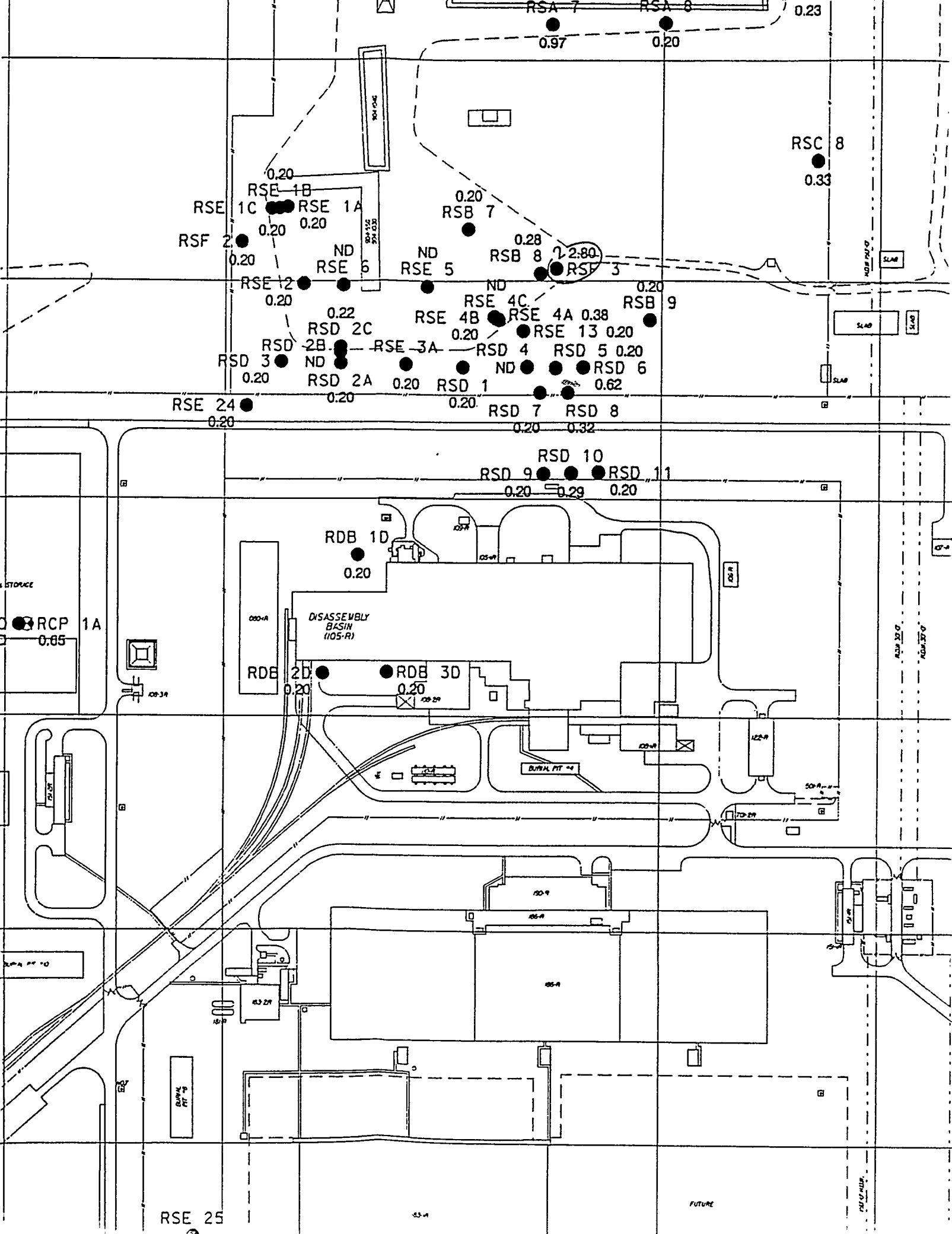
DWG NO. GR1112	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE NONVOLATILE BETA ACTIVITY FOR R-REACTOR AREA WATER TABLE AQUIFER THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93

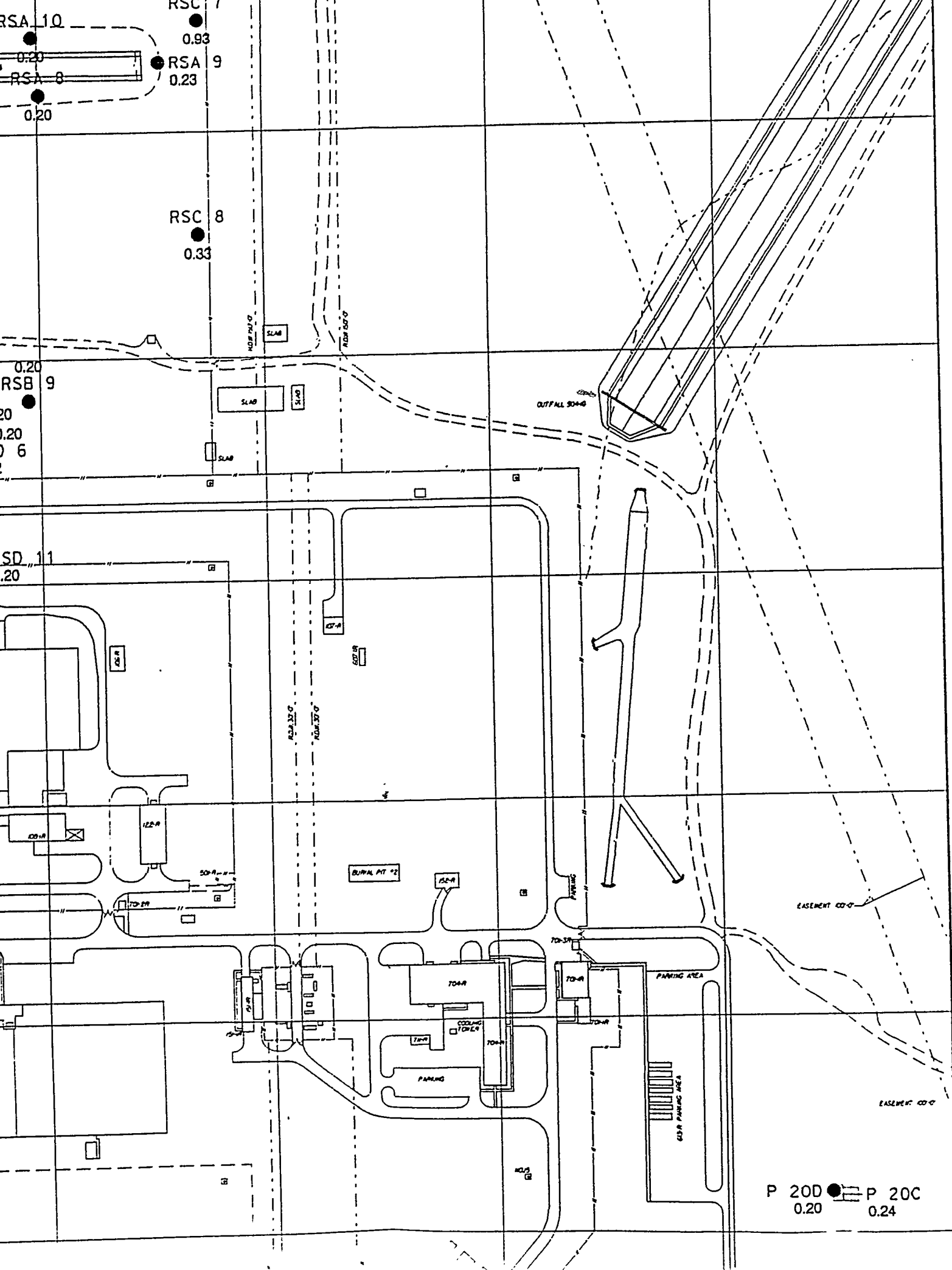


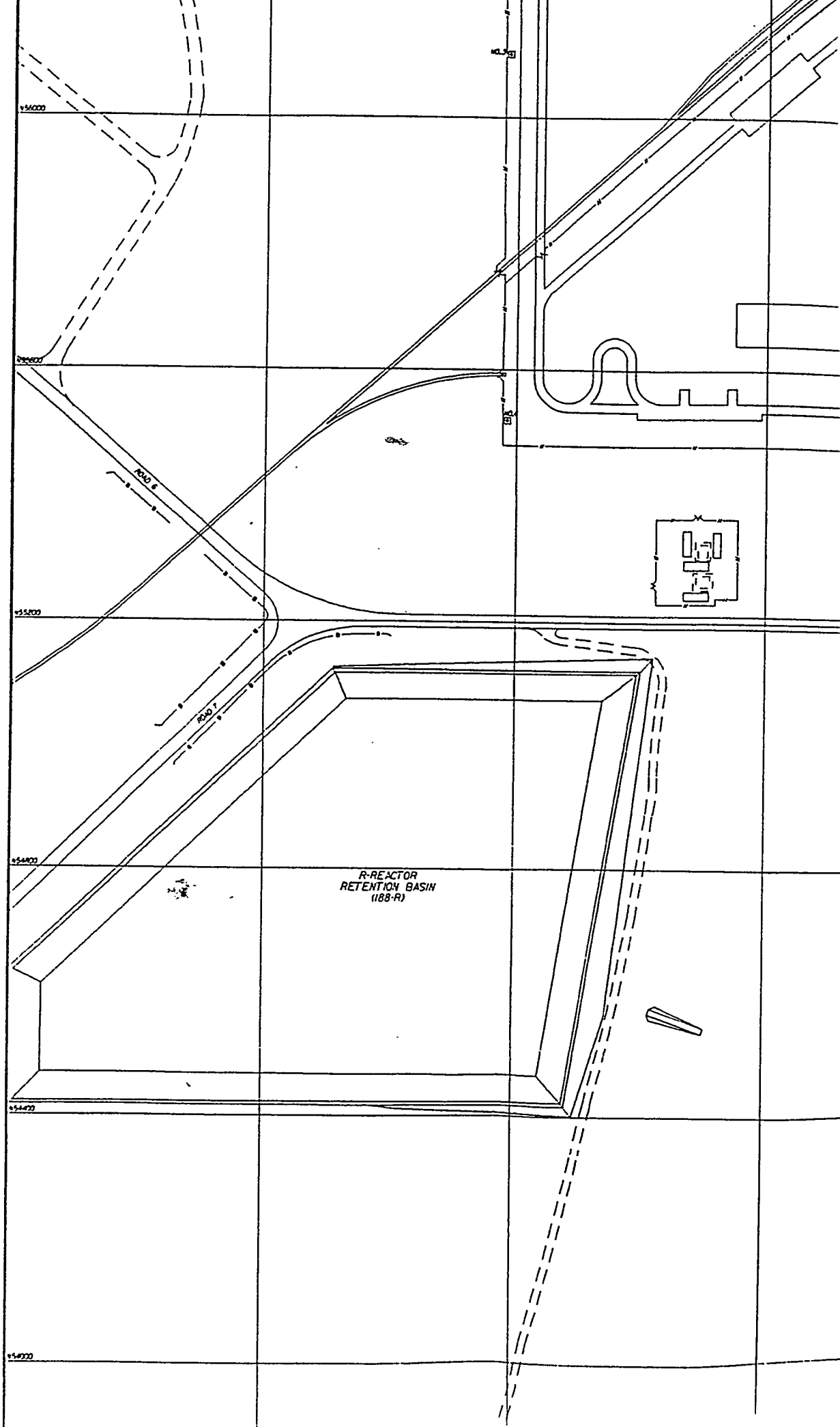


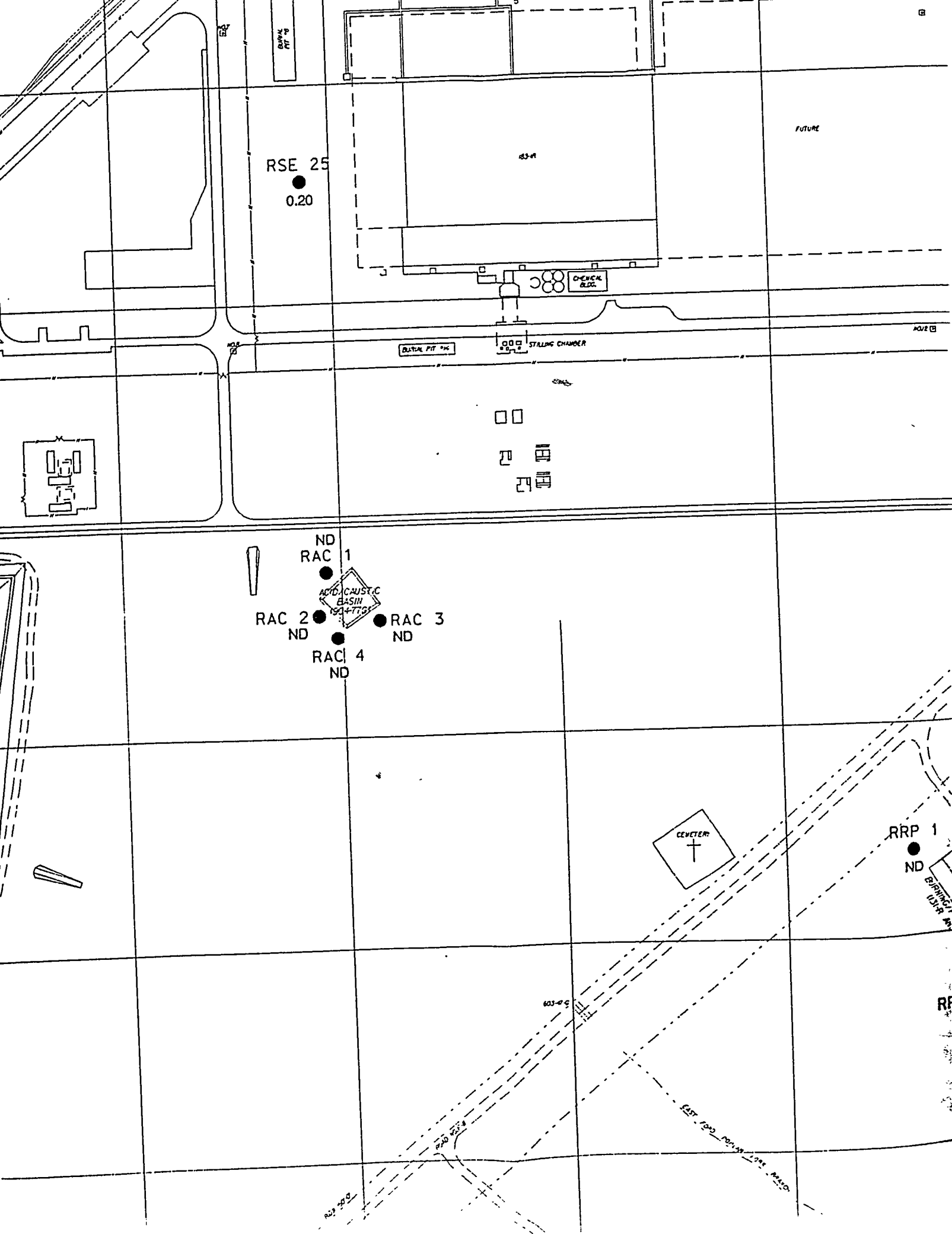












P 200 0.20 P 20C 0.24

FUTURE

BASIN

RRP 1

ND

RRP

ND

RRP 4

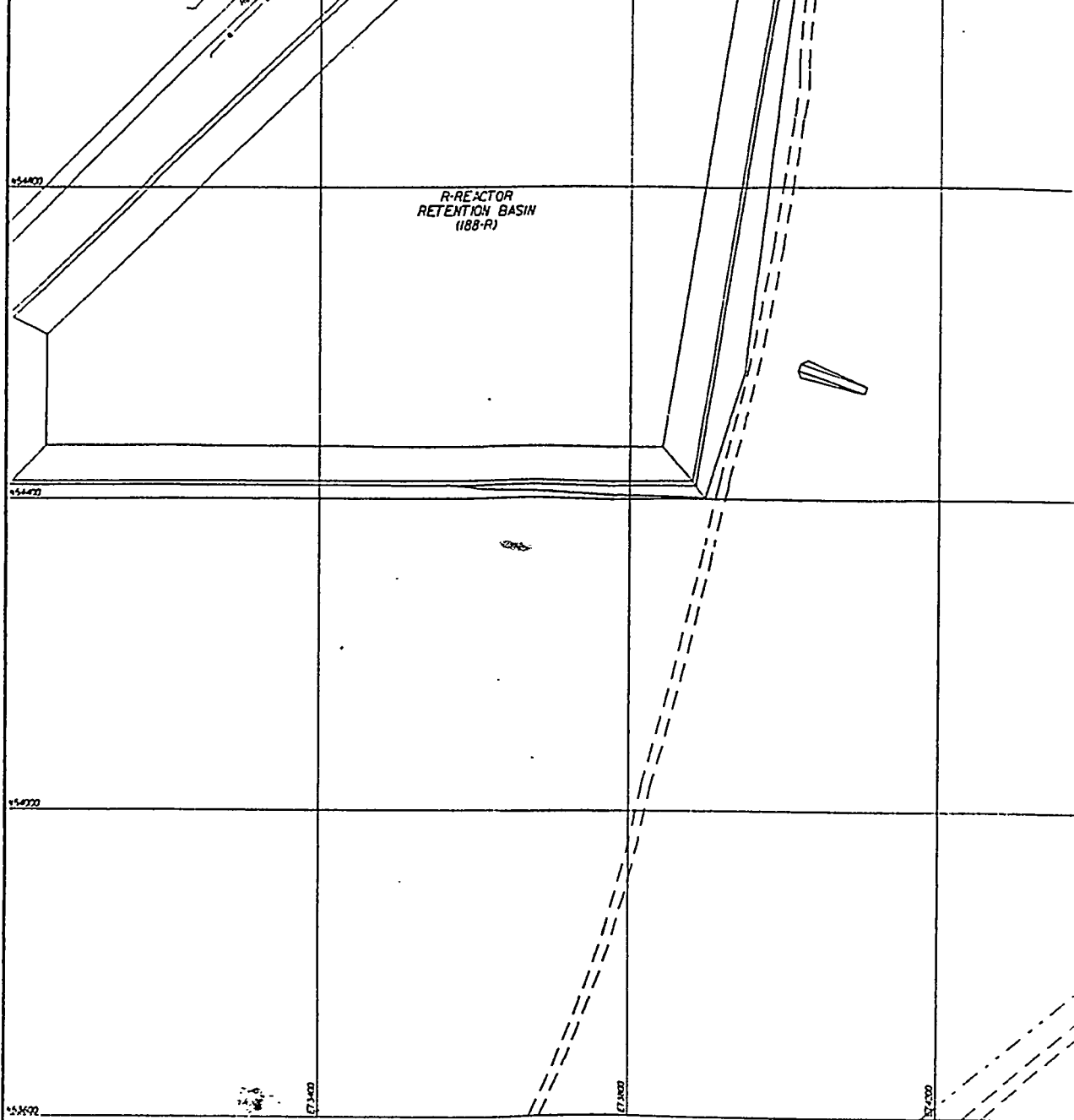
ND

RRP 3

ND

BIRNING/PUBLIC PITS
101R AND 101R

2015-10-15



WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ COUGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

CONTOUR LEGEND

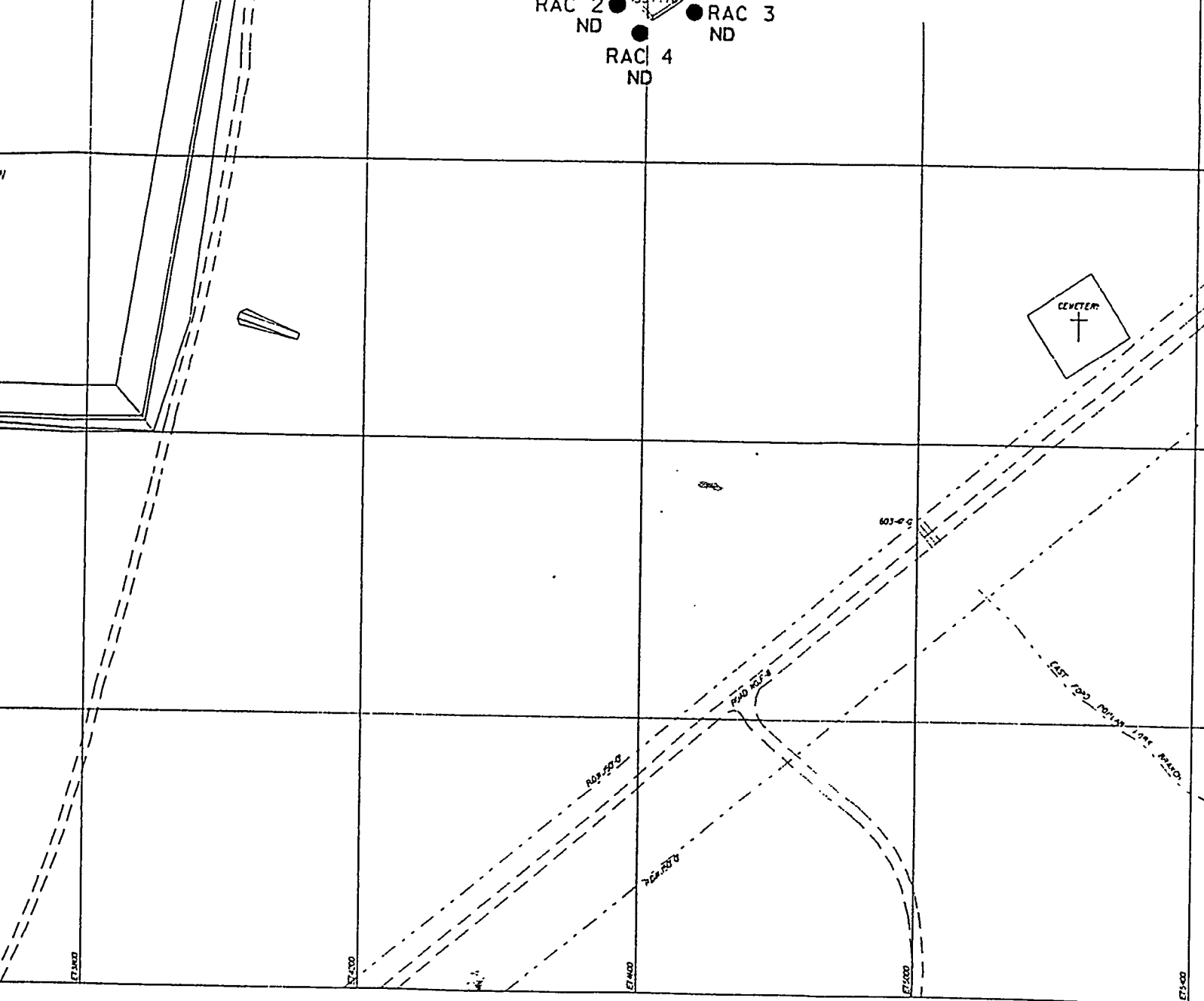
CONTOURS: 2

UNITS: ug/l

PDWS: 2 ug/l

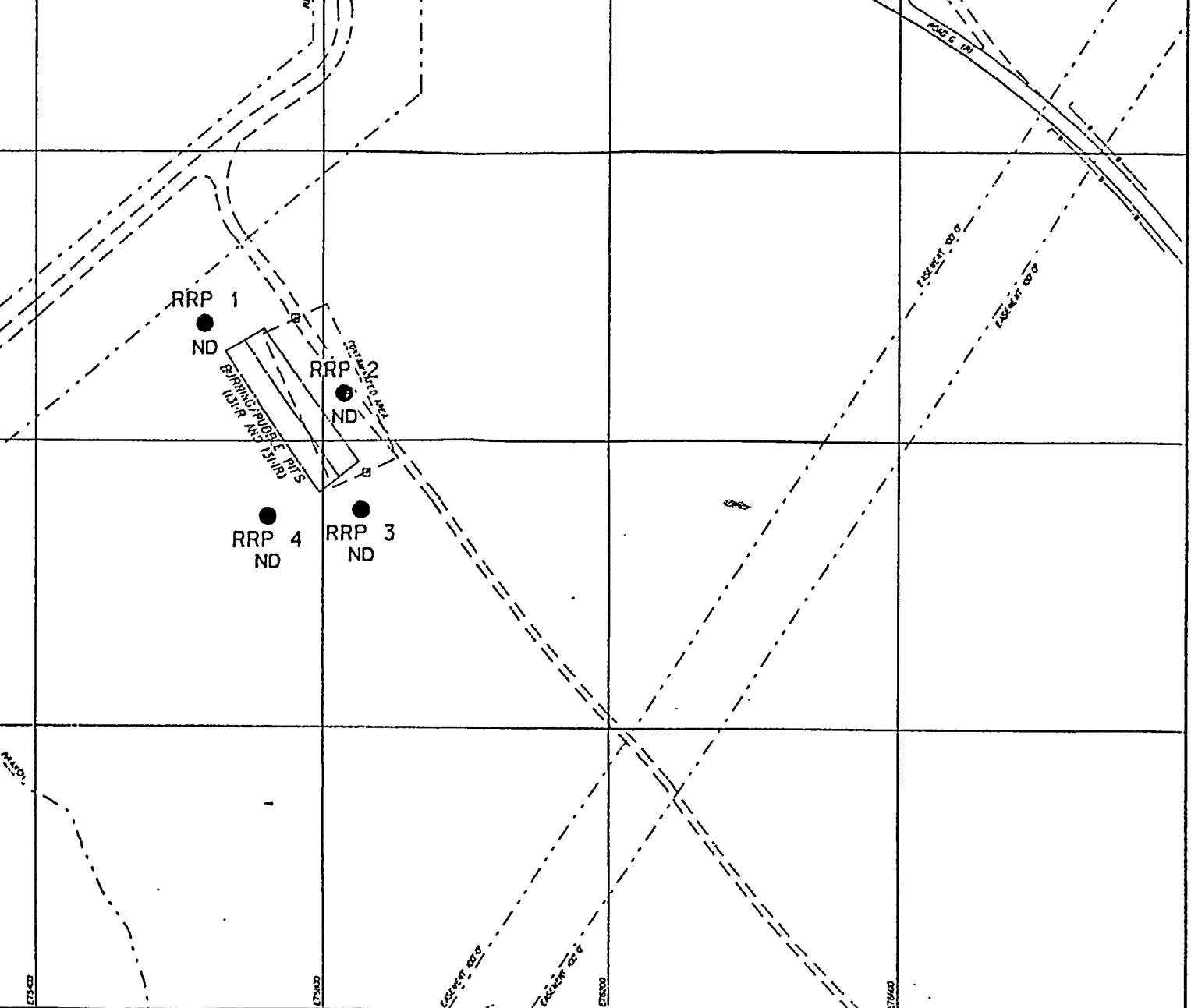
0.20: DENOTES CONCENTRATIONS AT OR LESS THAN DETECTION LIMIT

ND: NO DATA

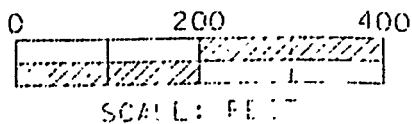
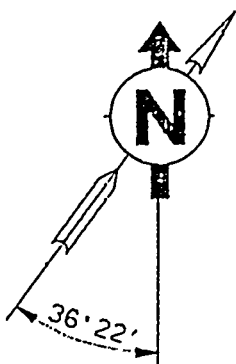


LEGEND

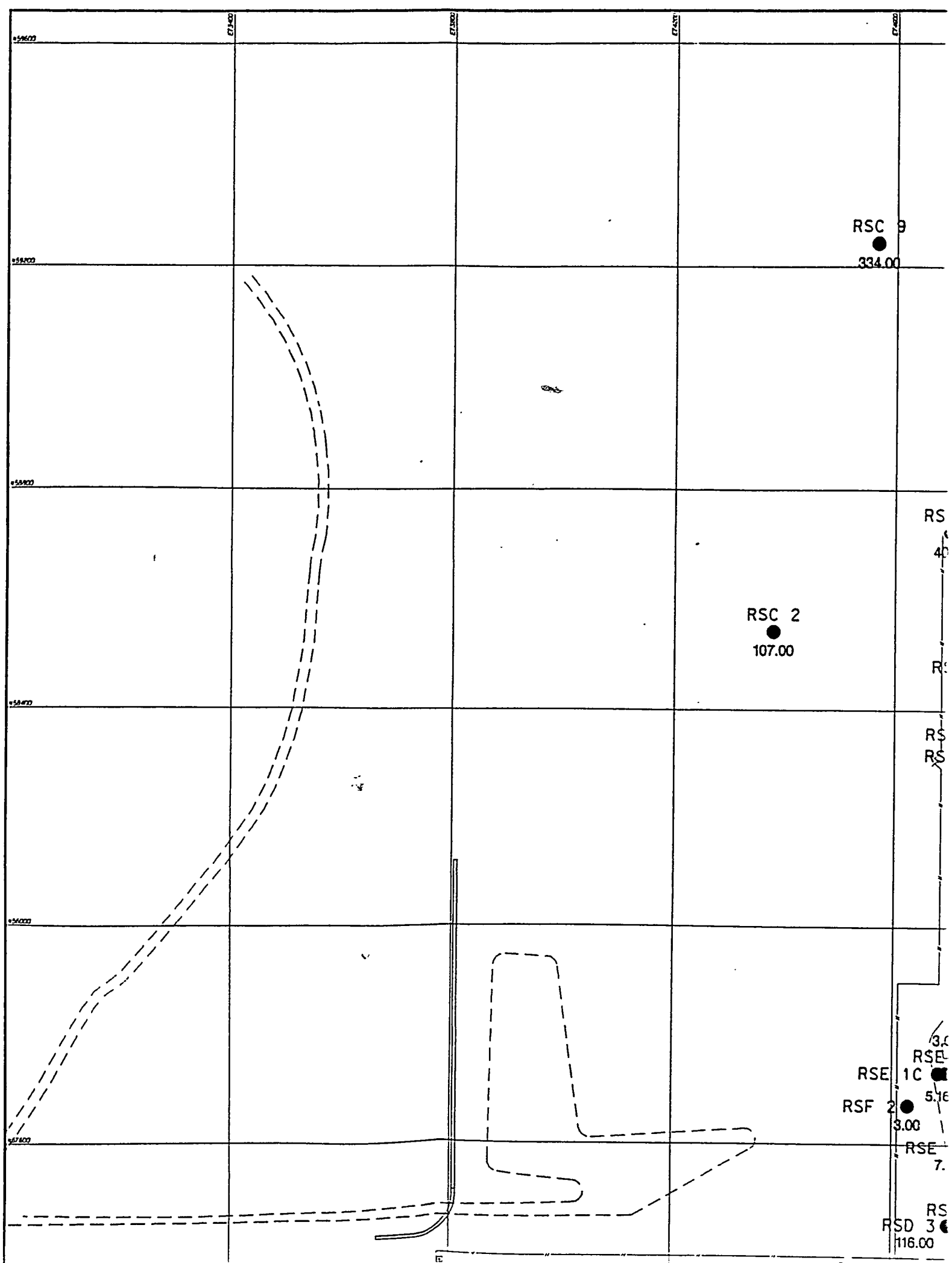
- | | | |
|---------------------------------|---------|-------------------|
| WELLS | — | FACILITY BOUNDARY |
| WELLS | — | ROAD |
| WELLS | - - - - | DIRT ROAD |
| | - - - - | STREAM |
| | +++++ | RAILROAD |
| | - - - - | FENCE |
| | | PIT/BASIN |
| AT OR LESS THAN DETECTION LIMIT | —280— | OBSERVED CONTOUR |

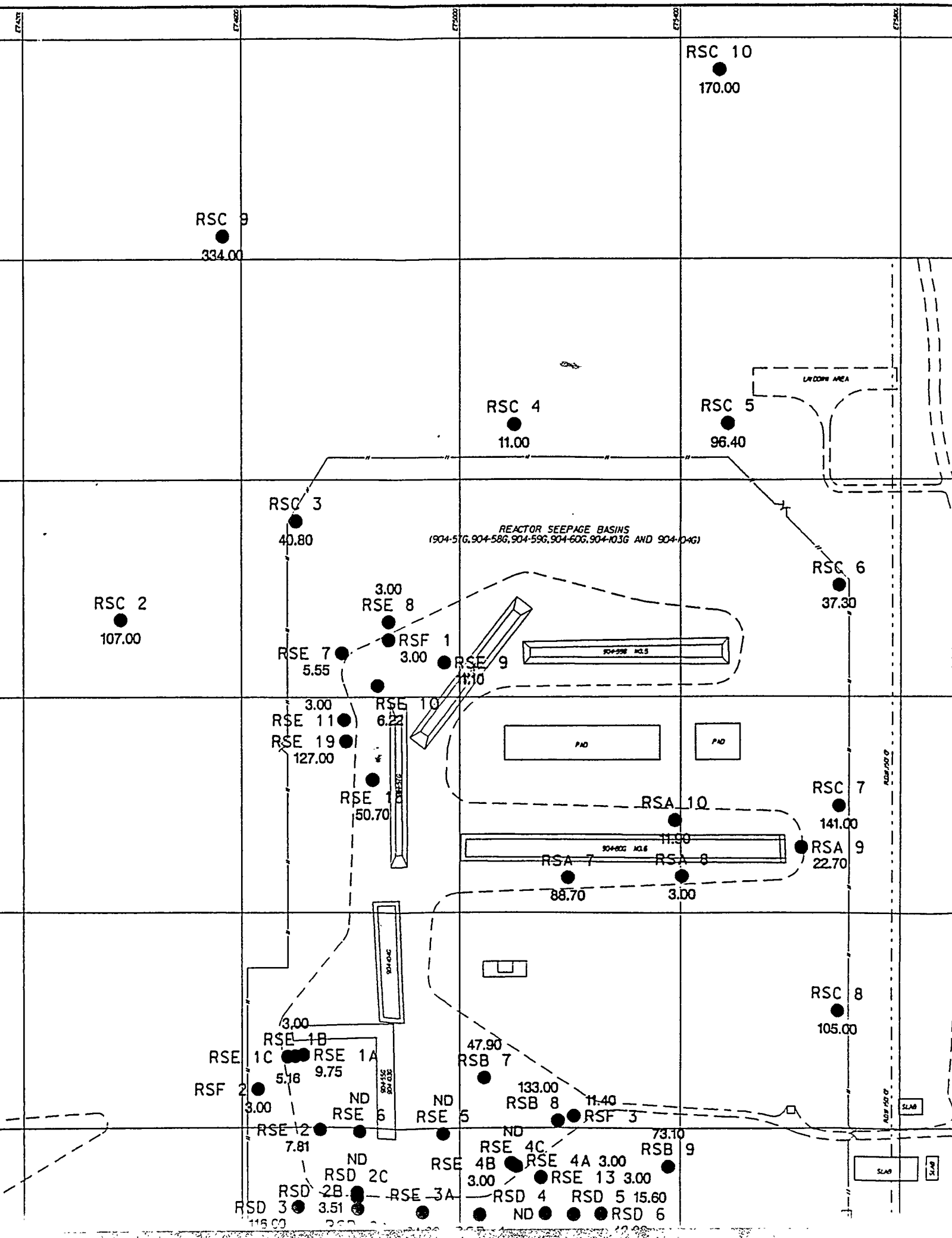


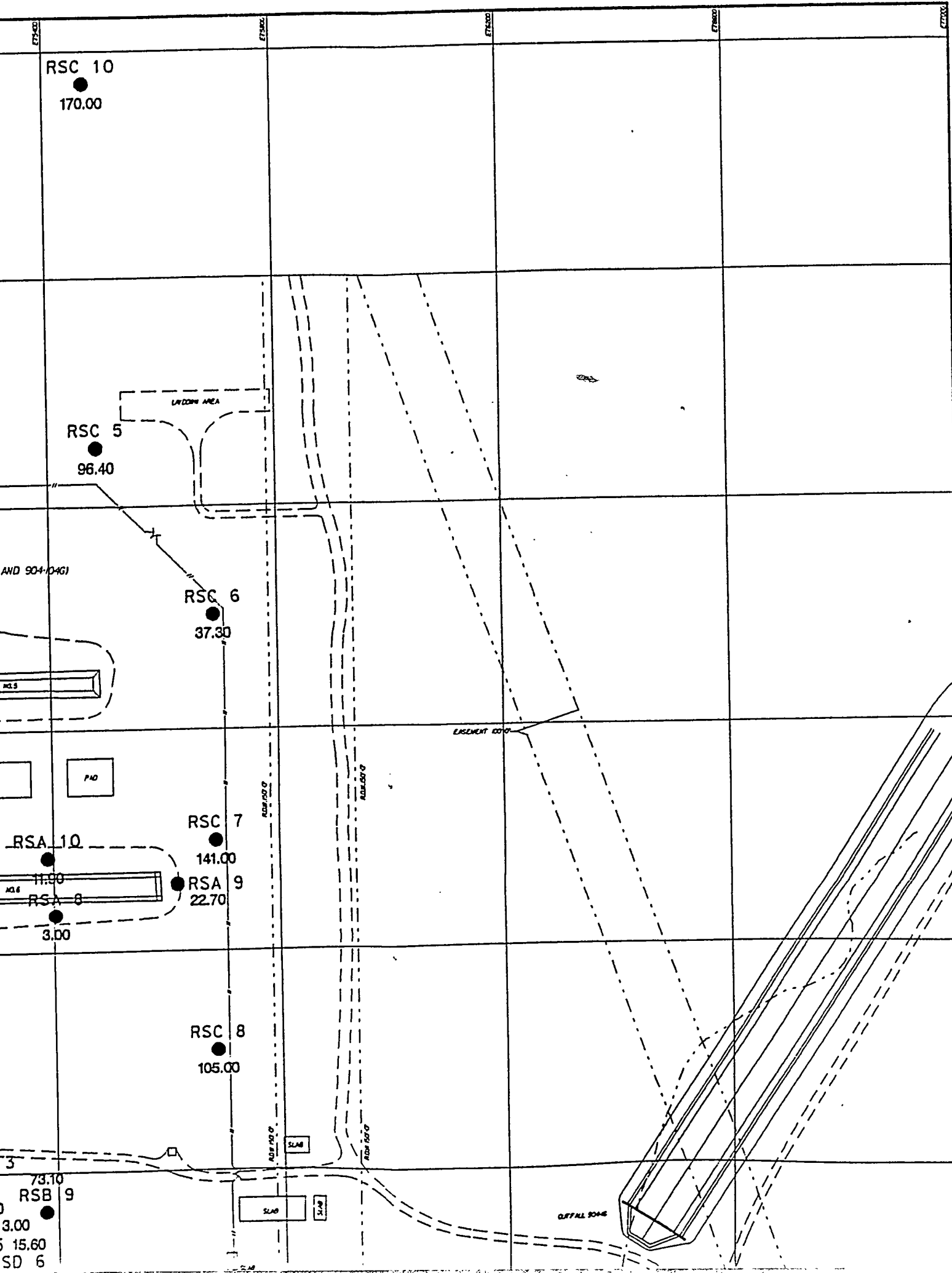
PLANT TRUE
NORTH NORTH



DWG NO. GR1113	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE MERCURY CONCENTRATIONS FOR R-REACTOR AREA WATER TABLE AQUIFER THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93







RSE
RSF 2

RSF

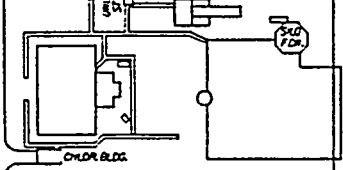
RSE 24
12.30

COAL STORAGE

RCP 1D ● RCP 1A
NE 19.20



SUB. STA.

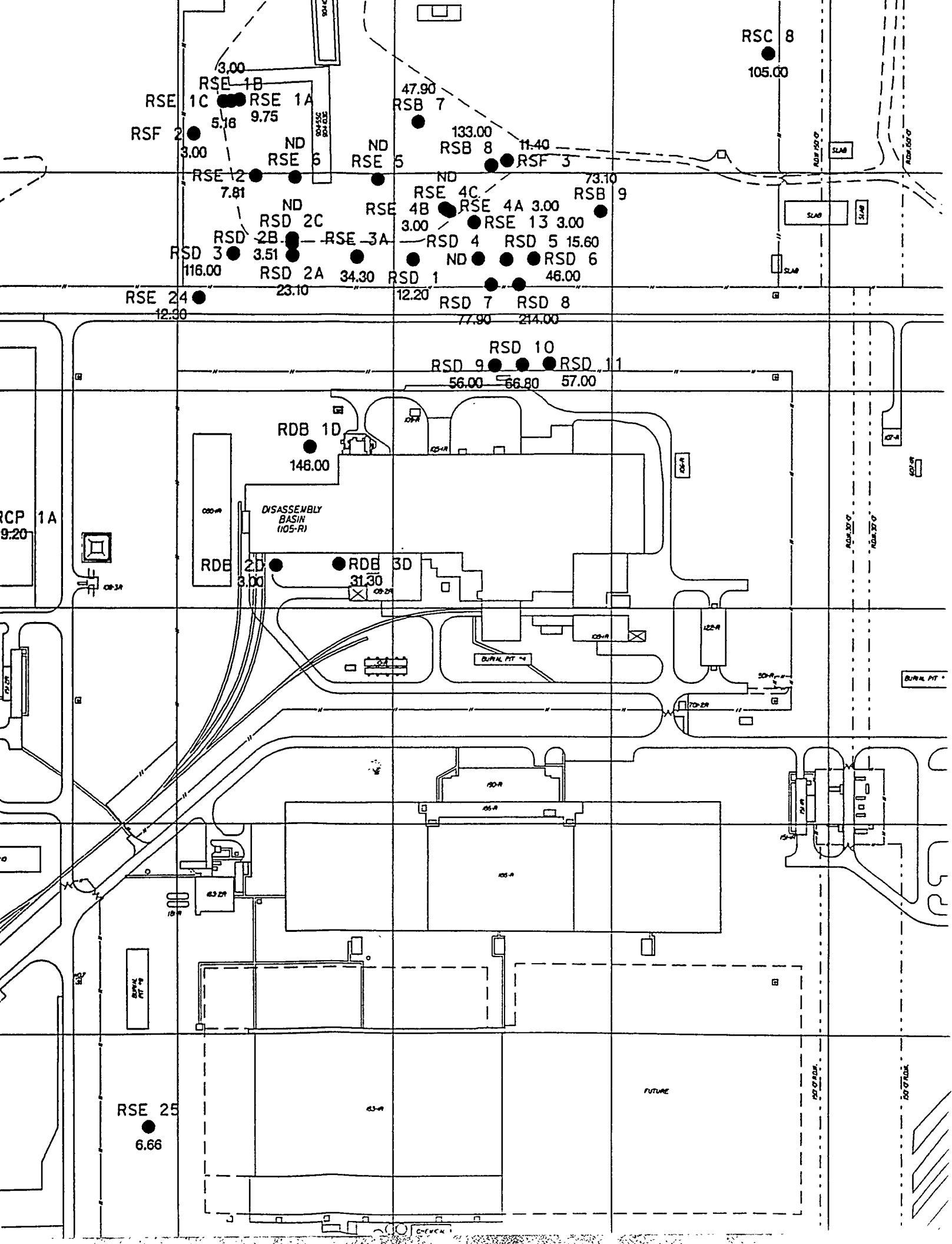


FUTURE
Bldg

RAIL PIT 10

RAIL PIT

RSE 25
●
6.66



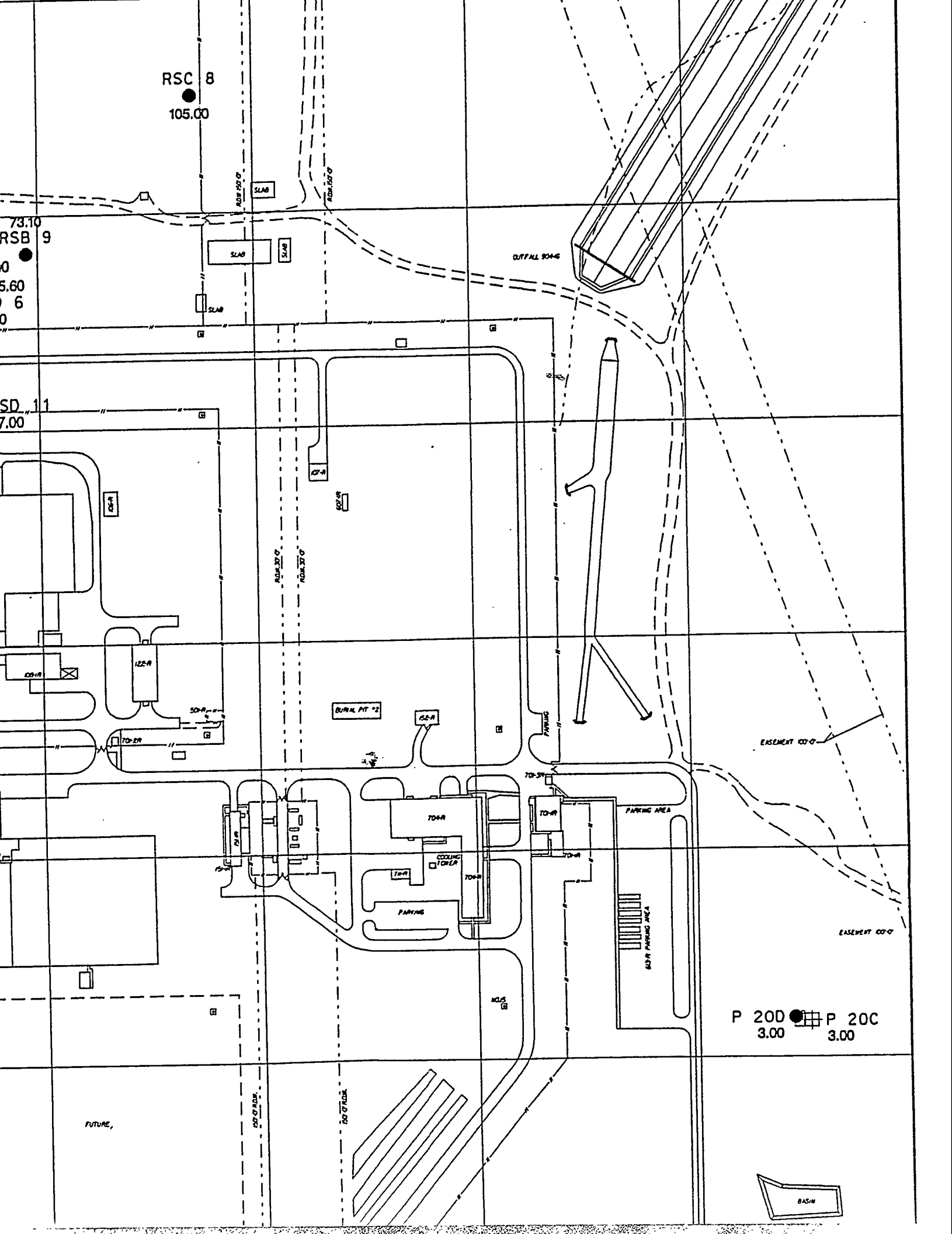
RSC 8

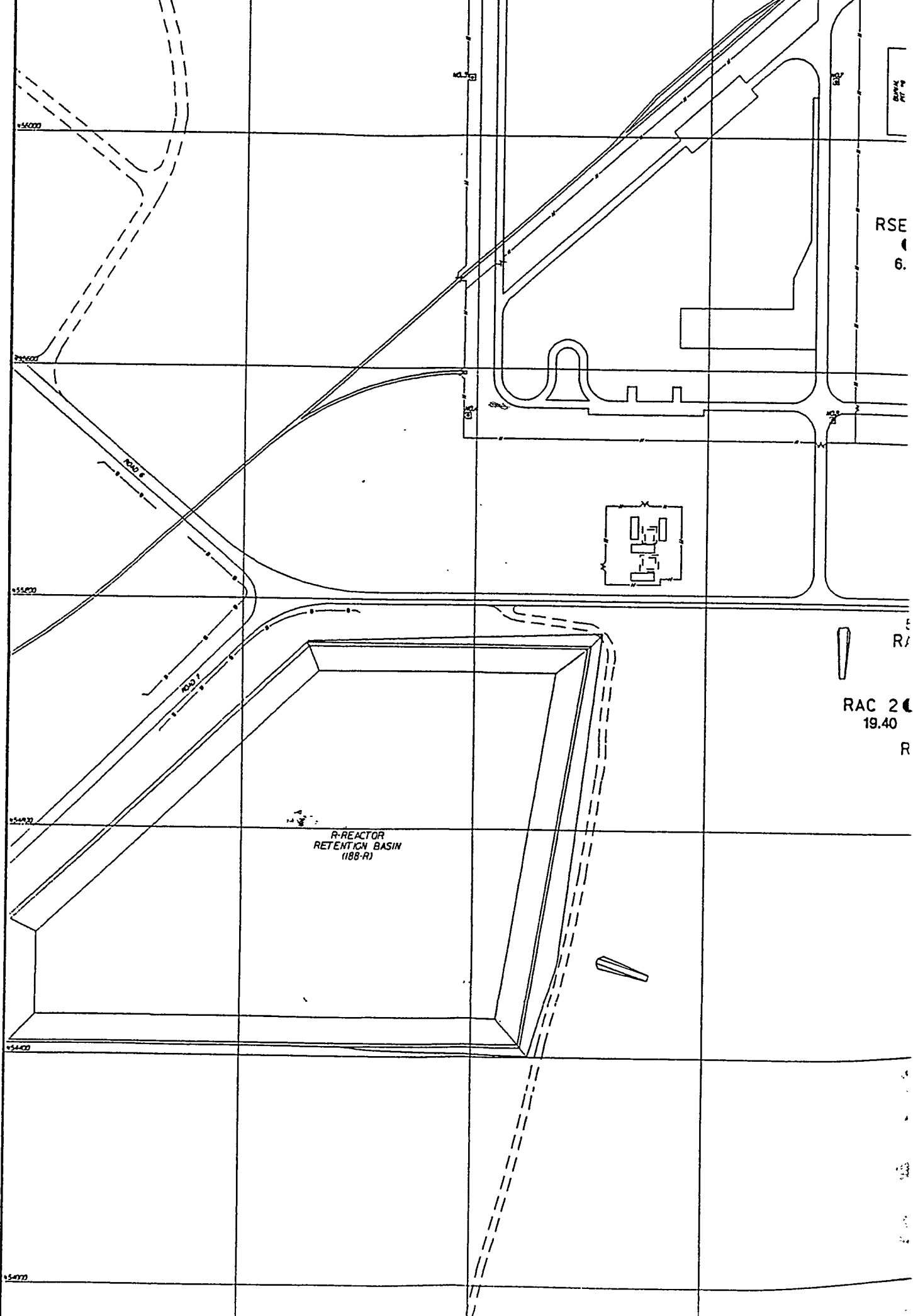
105.00

73.10
RSB 9

5.60
6
0

SD 11
7.00

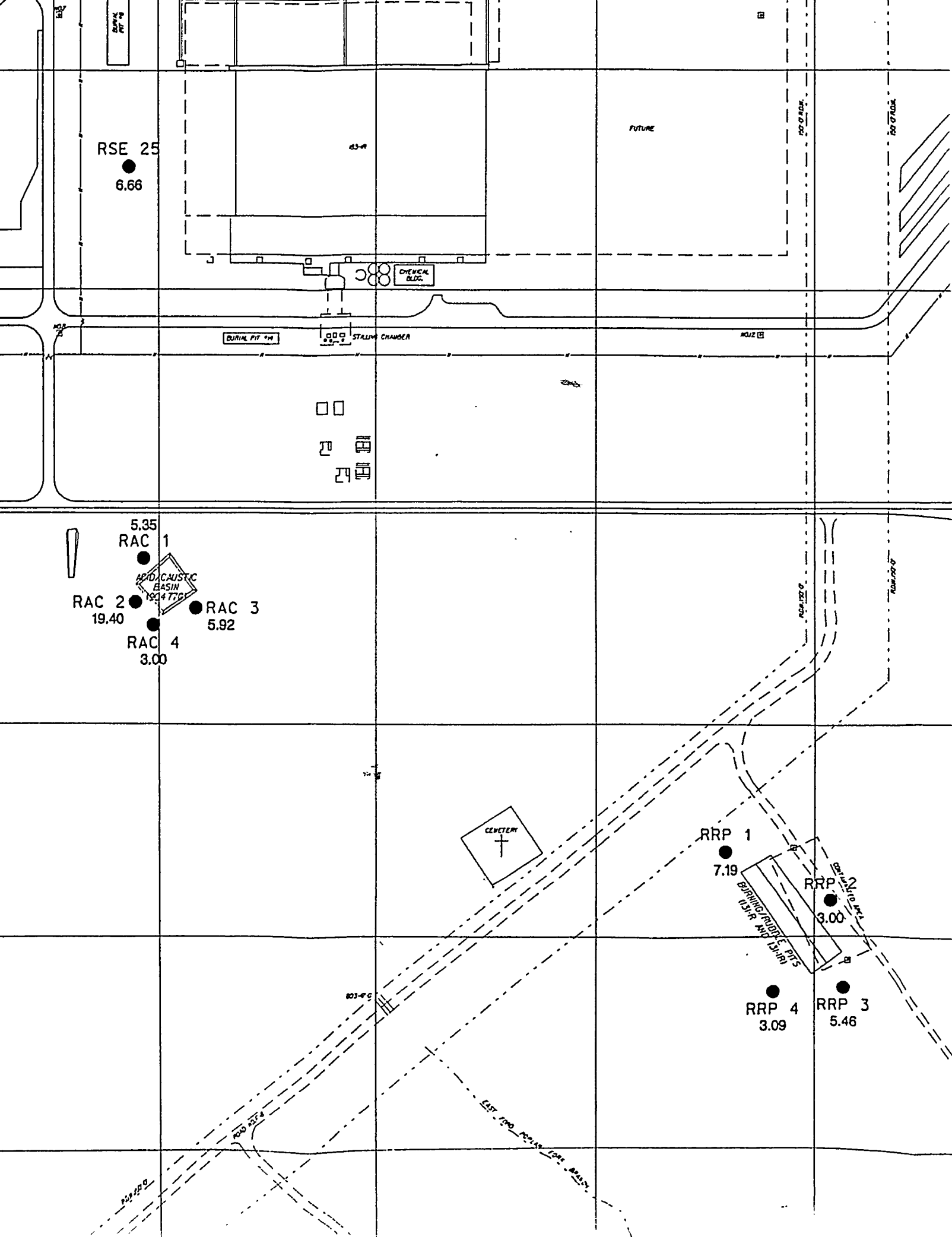


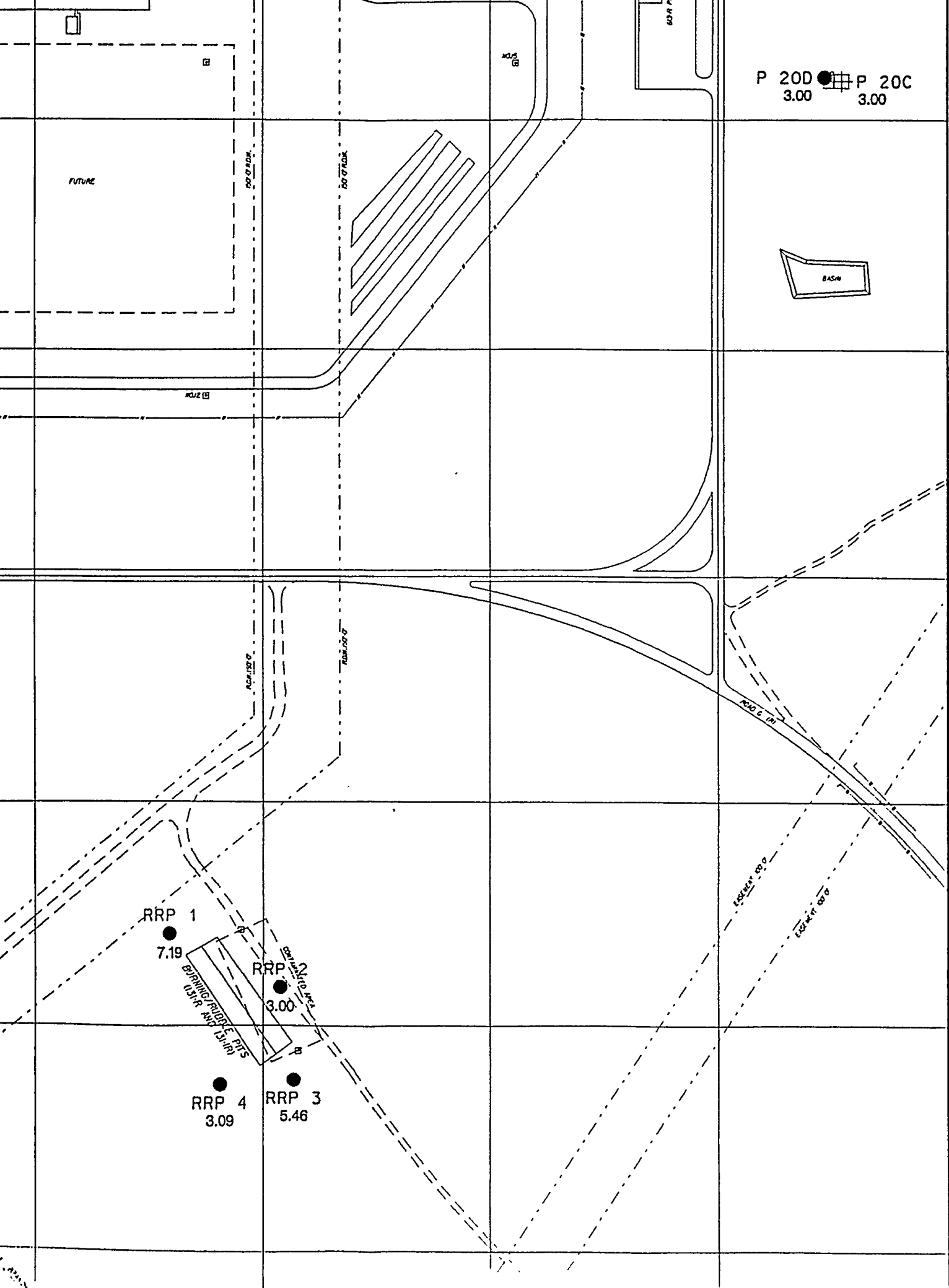


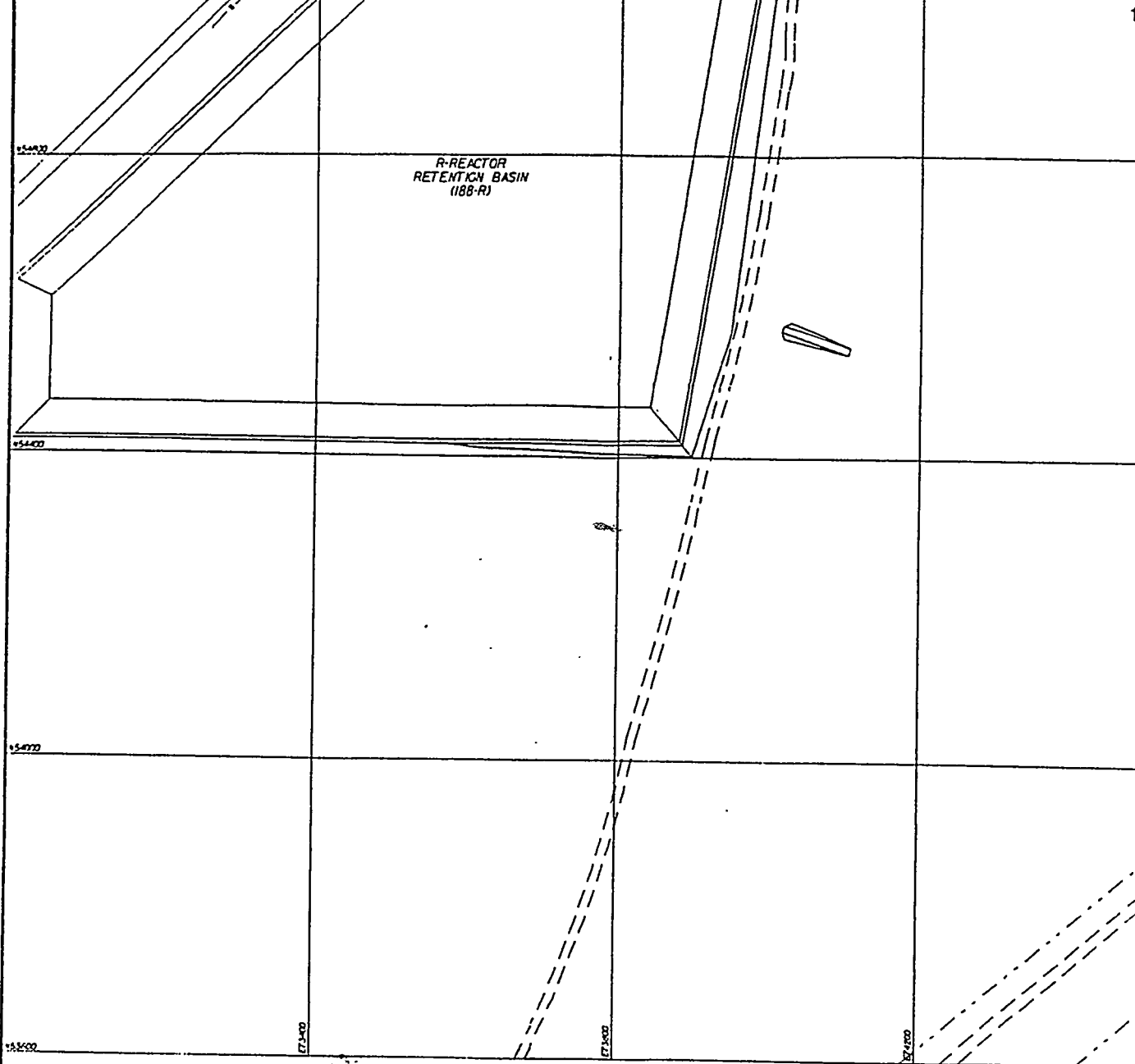
RSE
6.

RAC 2
19.40
R

R-REACTOR
RETENTION BASIN
(188-R)







WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊕ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊙ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

CONTOUR LEGEND

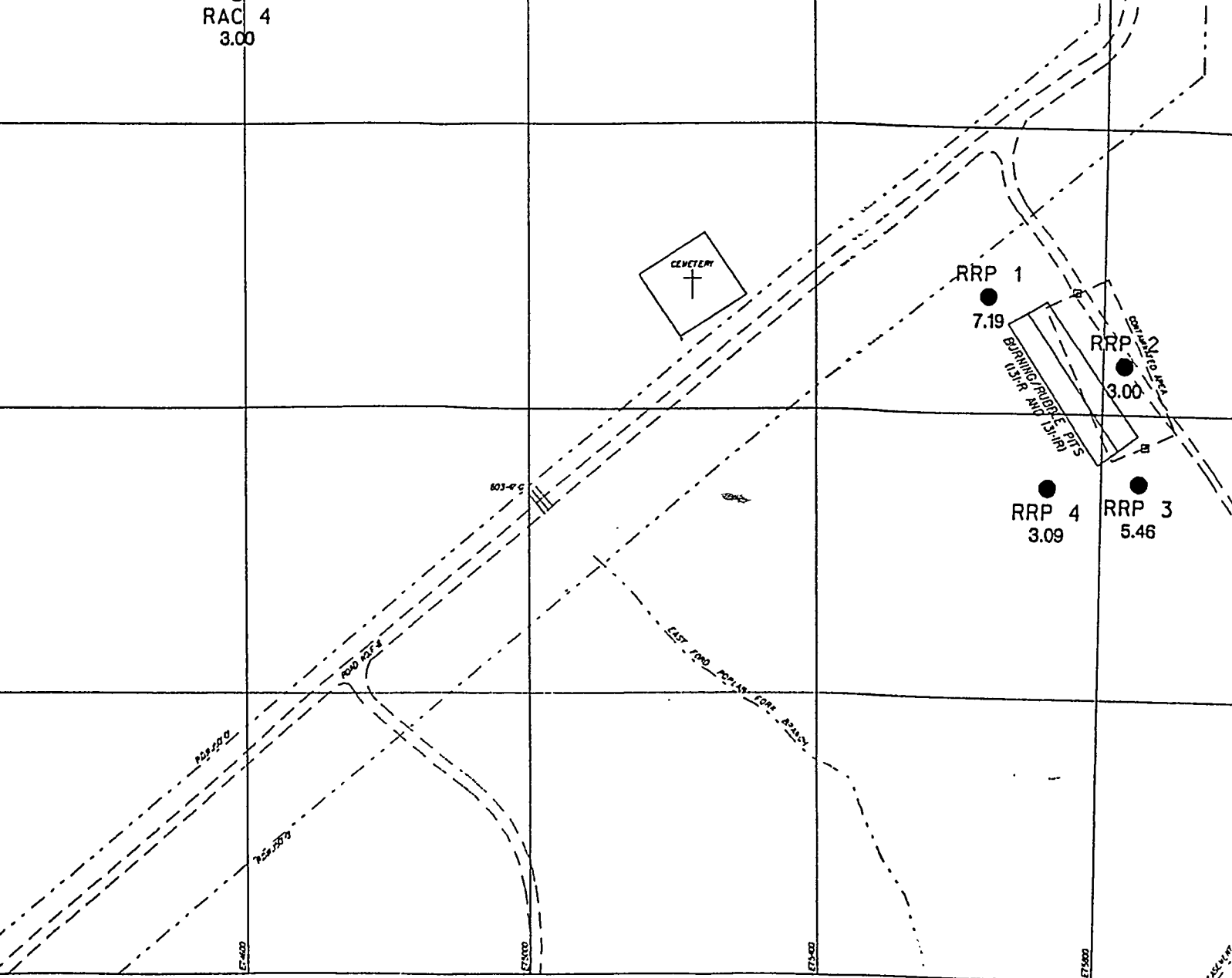
UNITS: ug/l

PDWS: 50 ug/l

3.00: DENOTES CONCENTRATIONS AT OR LESS THAN DETECTION LIMIT

ND: NO DATA

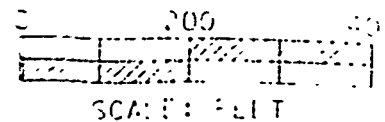
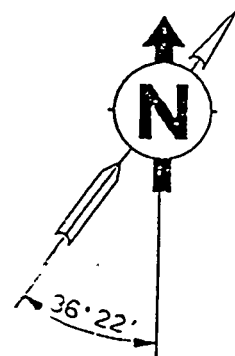
RAC 4
3.00



LEGEND

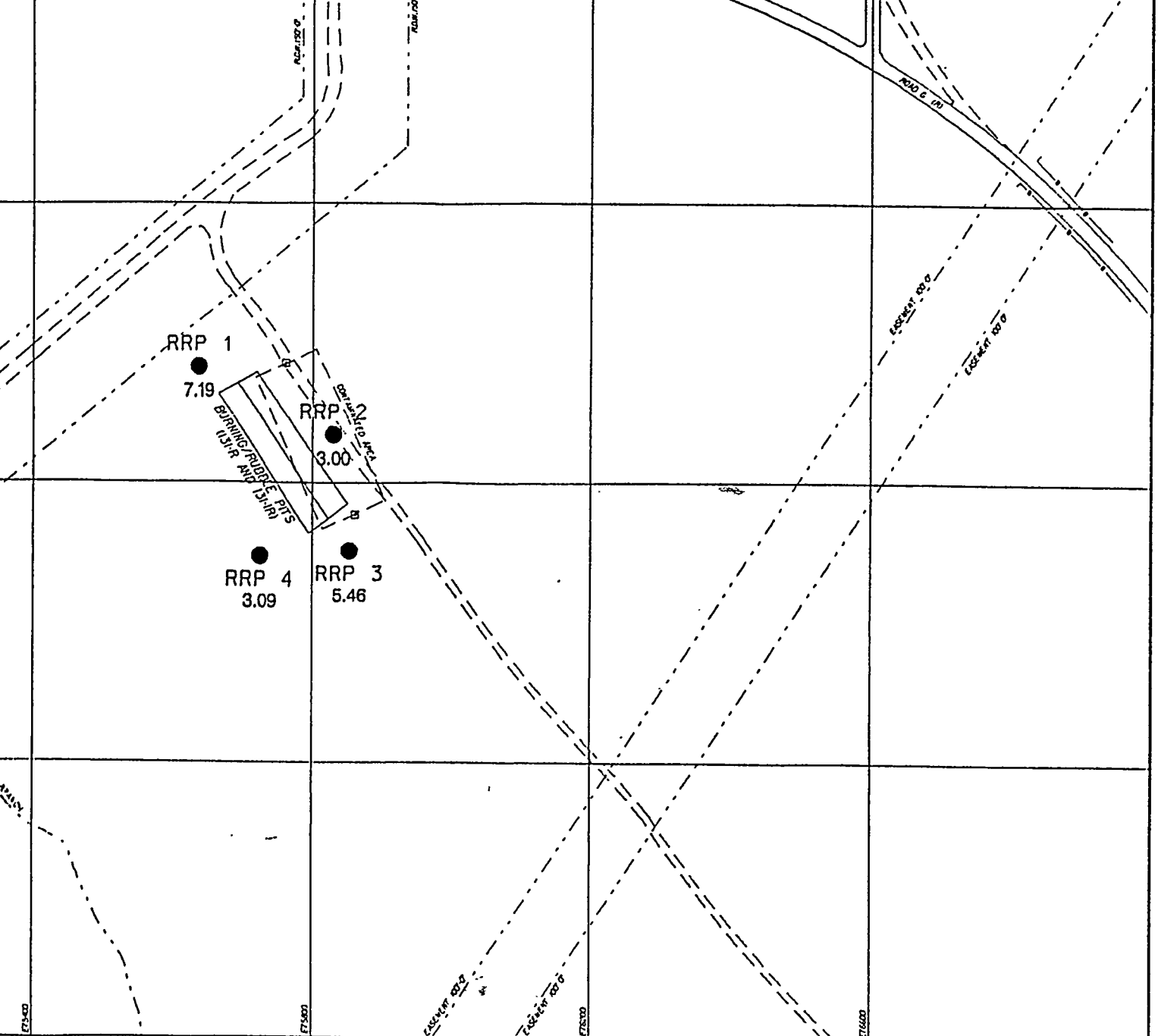
- FACILITY BOUNDARY
- ROAD
- DIRT ROAD
- STREAM
- RAILROAD
- FENCE
- PIT/BASIN
- 280 OBSERVED CONTOUR

PLANT TRUE
NORTH NORTH

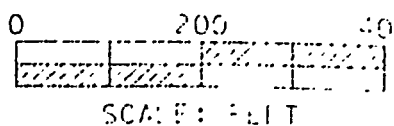
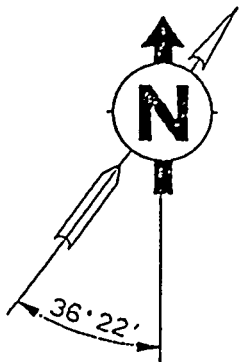


LIMIT

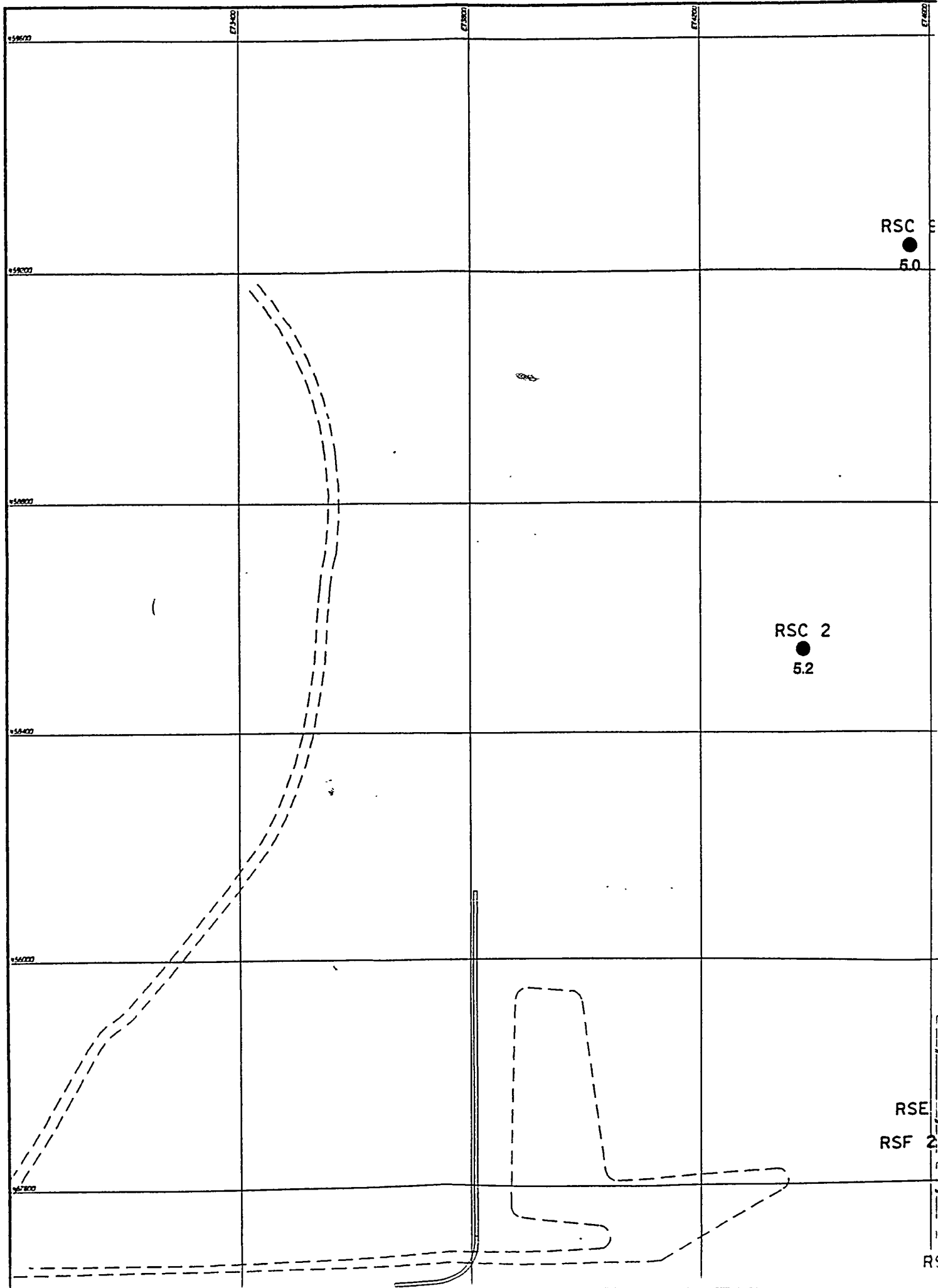
CF
T
E
C
N
I
C
A
N

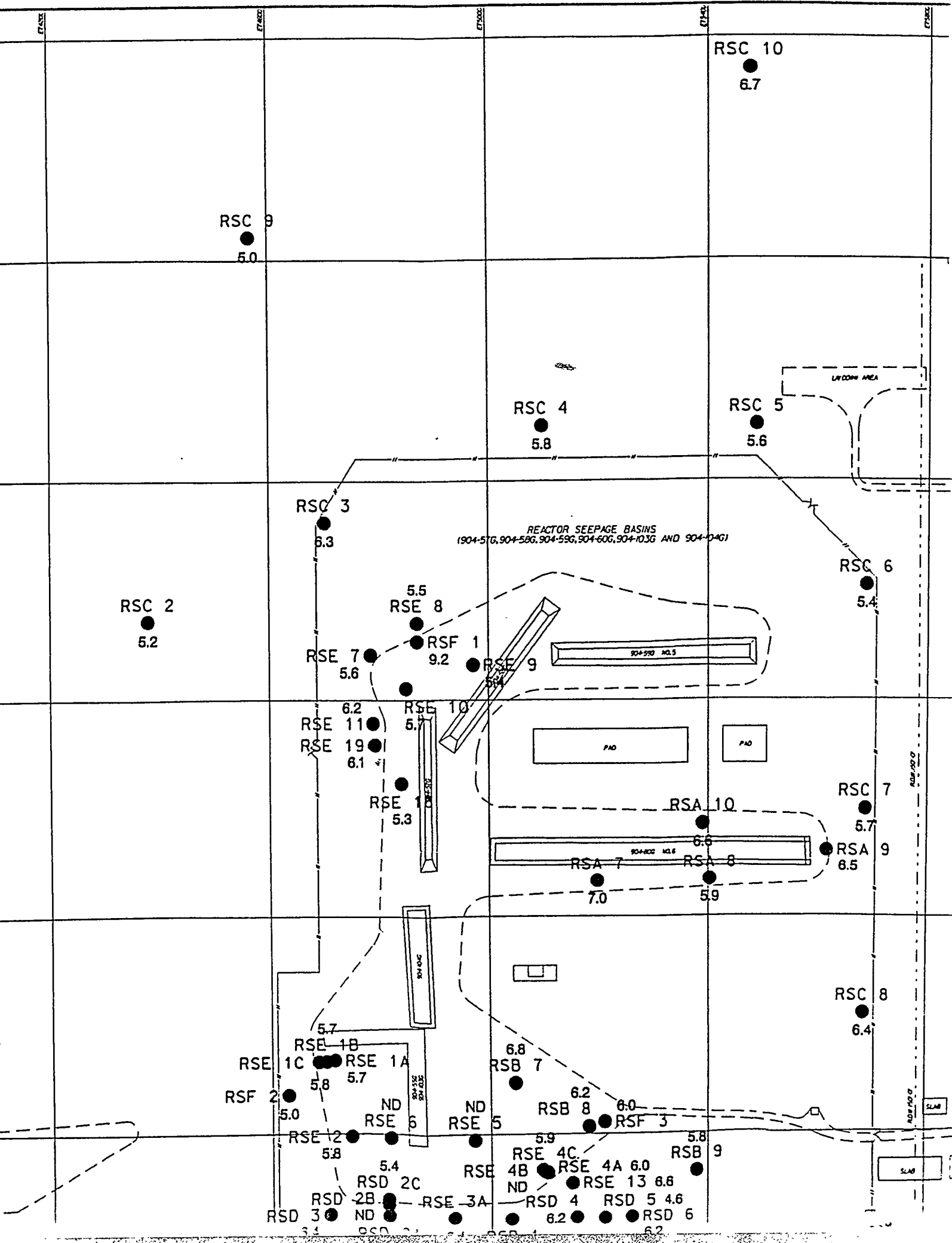


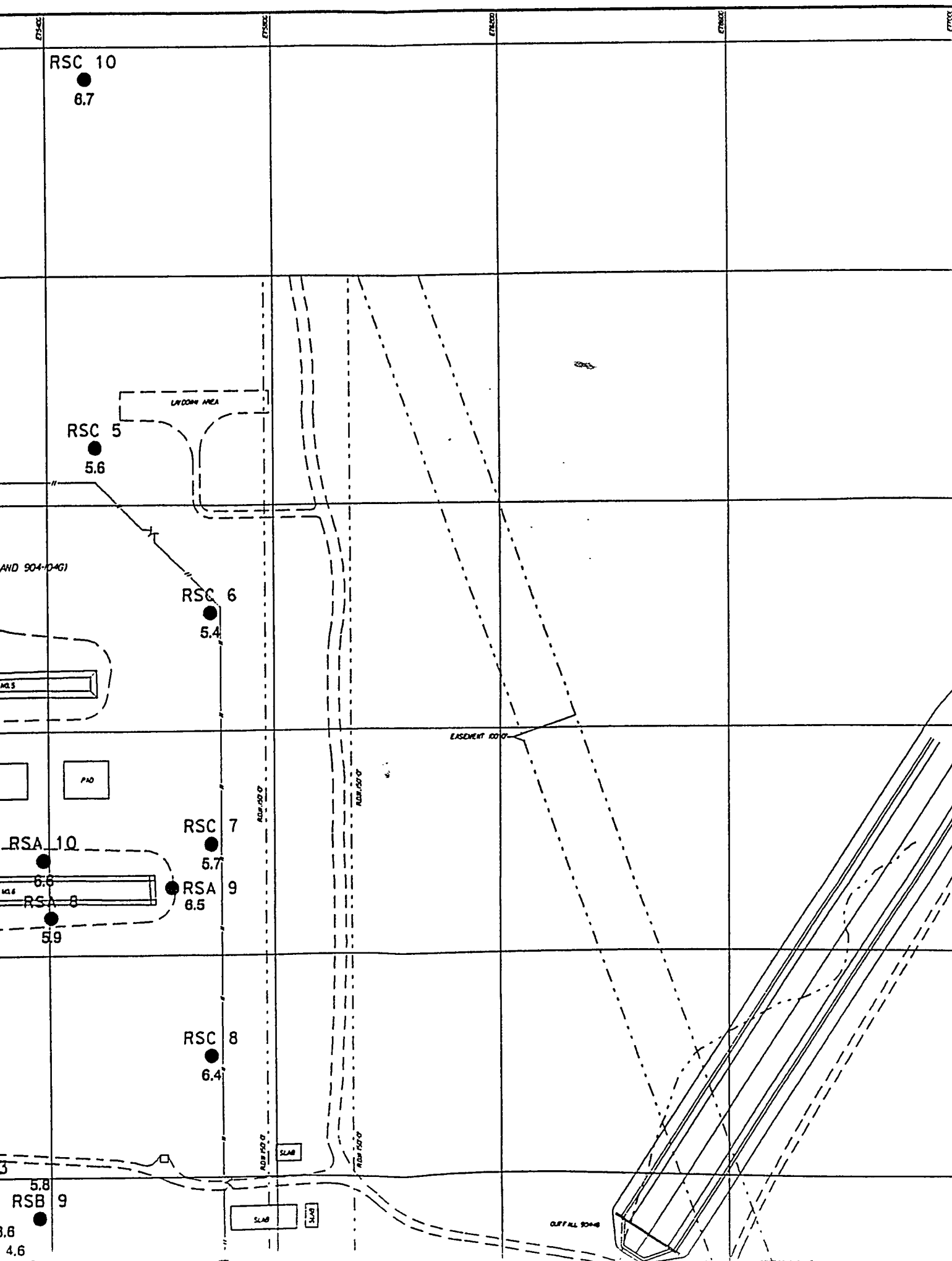
PLANT TRUE
NORTH NORTH

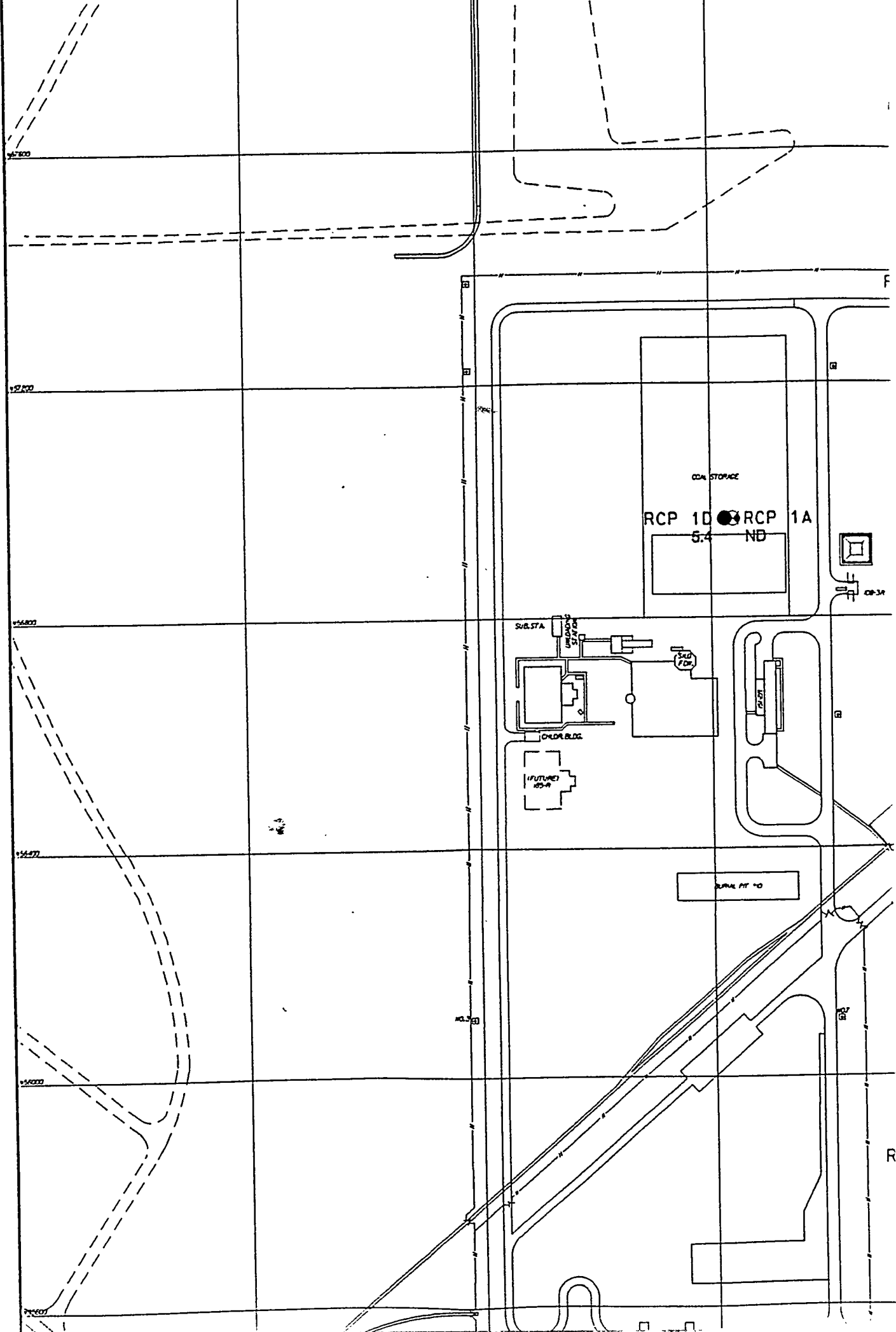


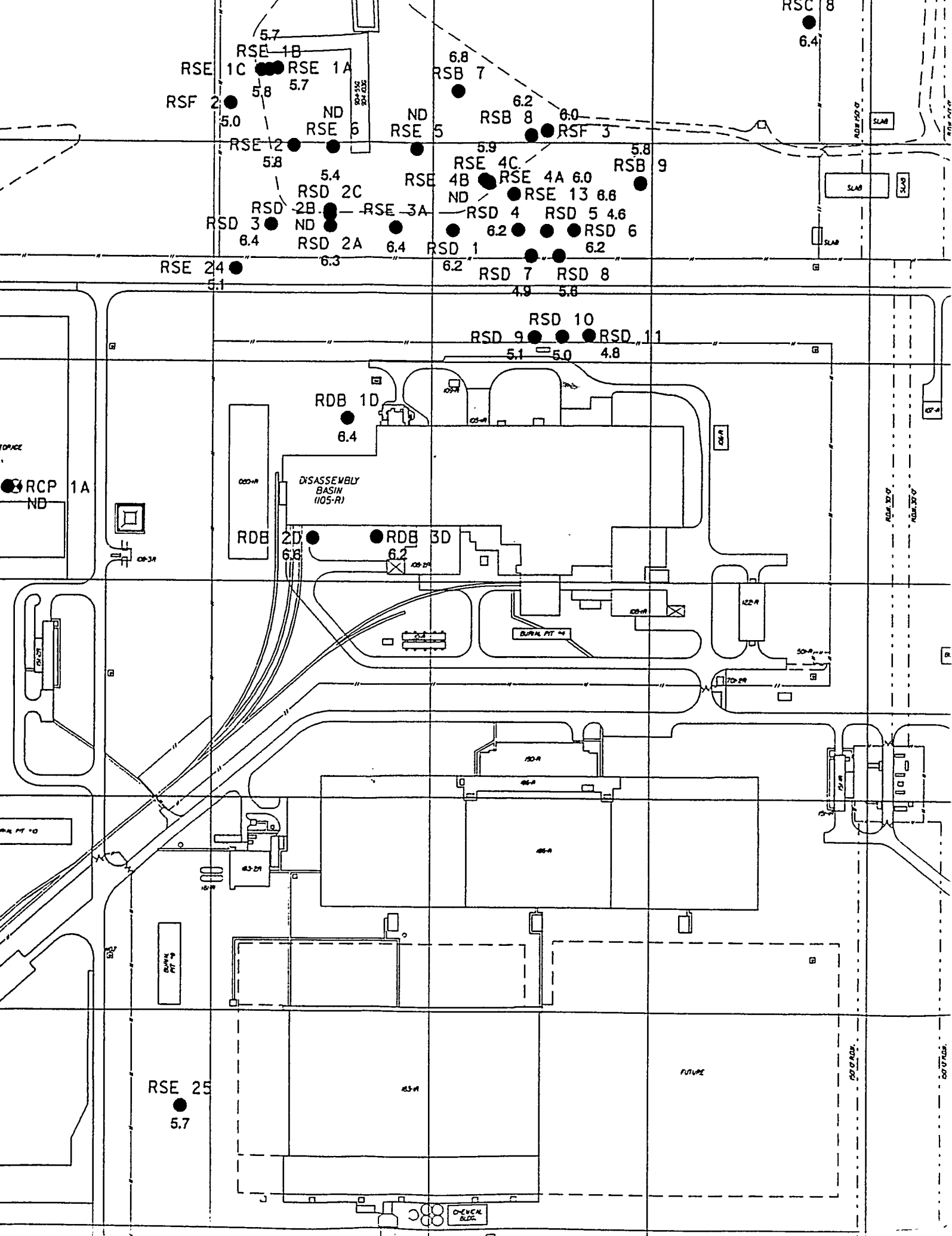
DWG NO. GR1114	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE LEAD CONCENTRATIONS FOR R-REACTOR AREA GROUNDWATER MONITORING WELLS THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93

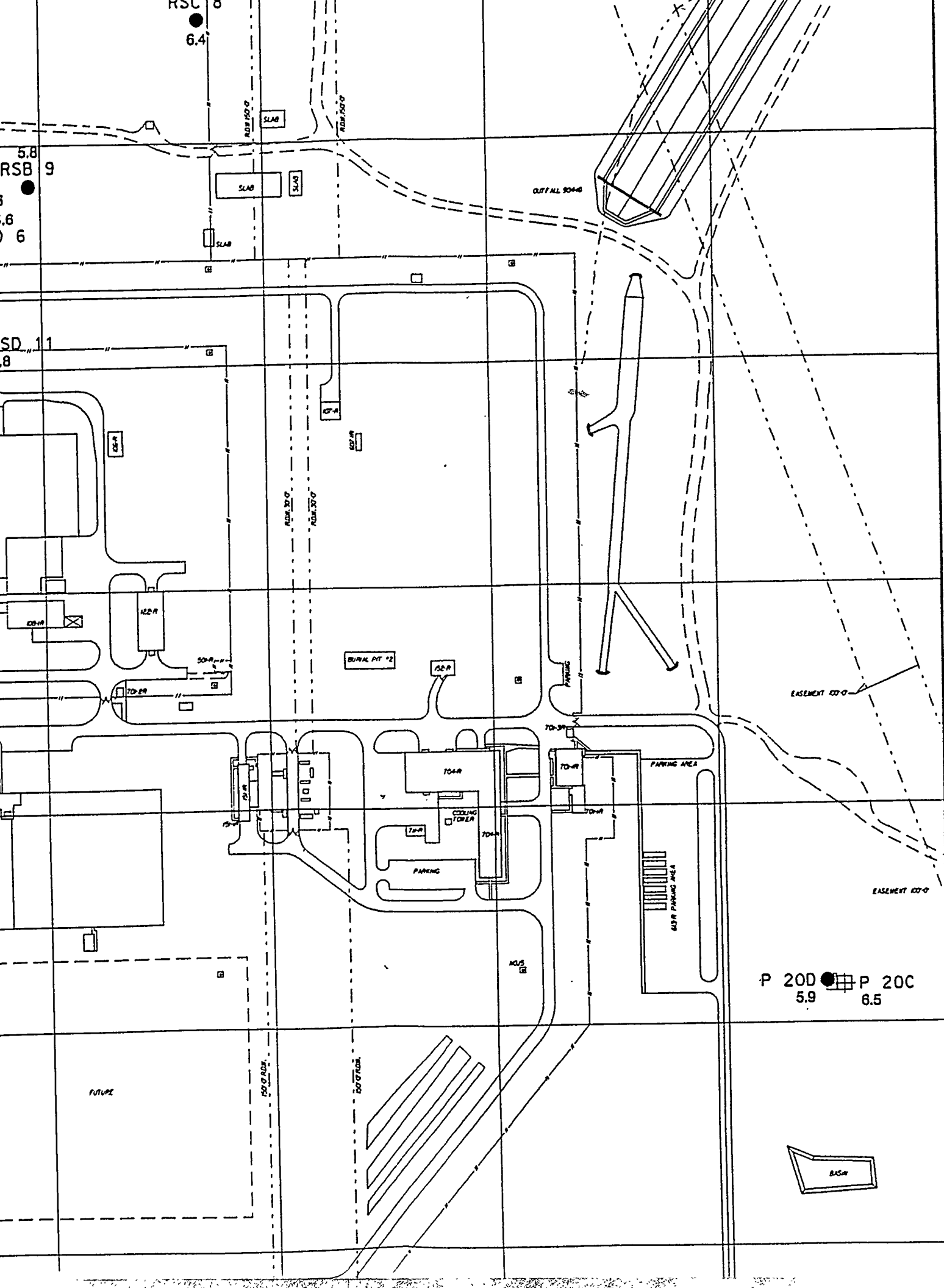












RSC 8

6.4

5.8
RSB 9

6.6
6

SD 11
8

BURIAL PIT #2

152'-0"

70'-0"

PARKING AREA

60'-0" PARKING AREA

EASEMENT 100'-0"

EASEMENT 100'-0"

P 200
5.9

P 20C
6.5

FUTURE

60'-0" x 100'-0"

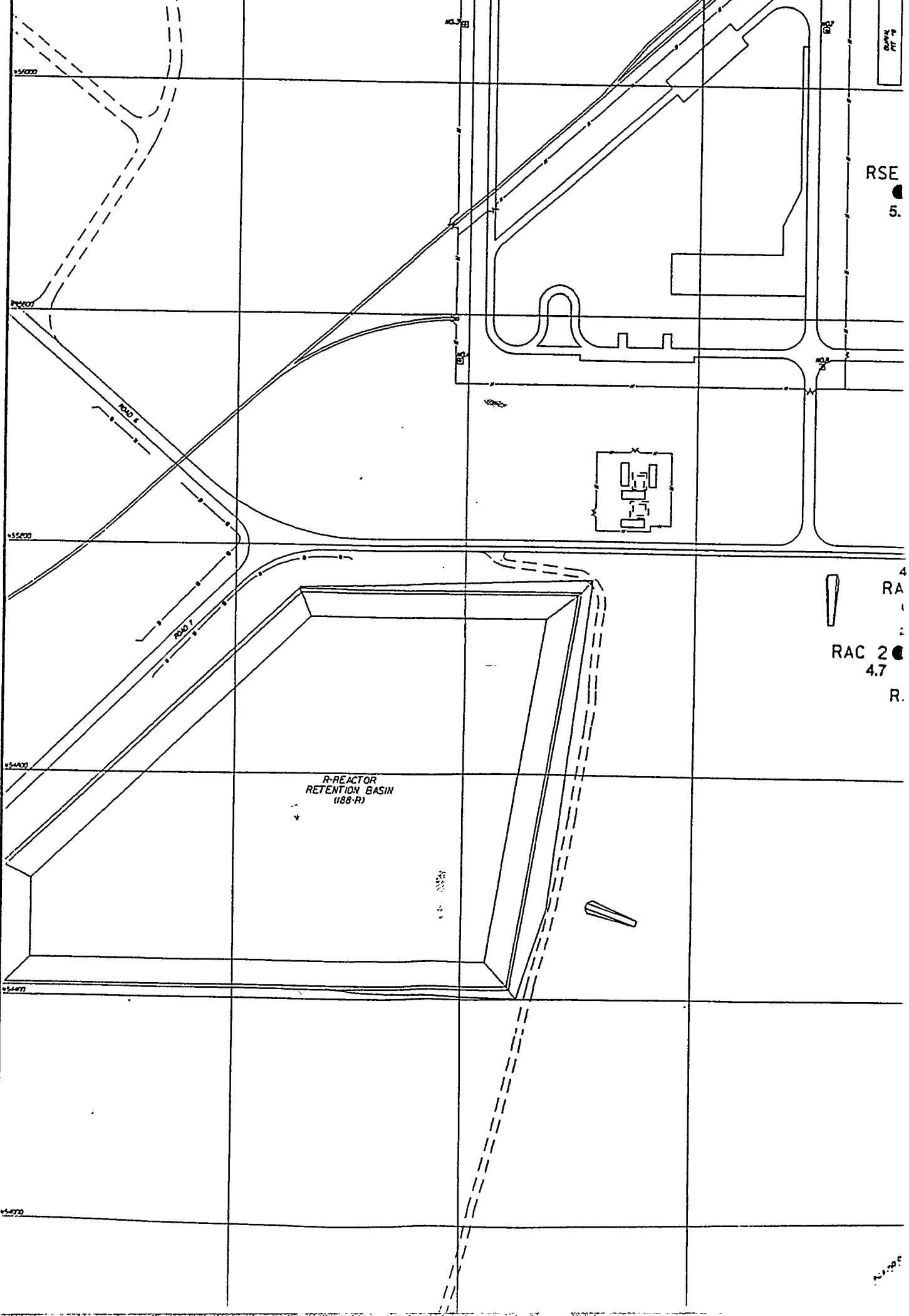
60'-0" x 100'-0"

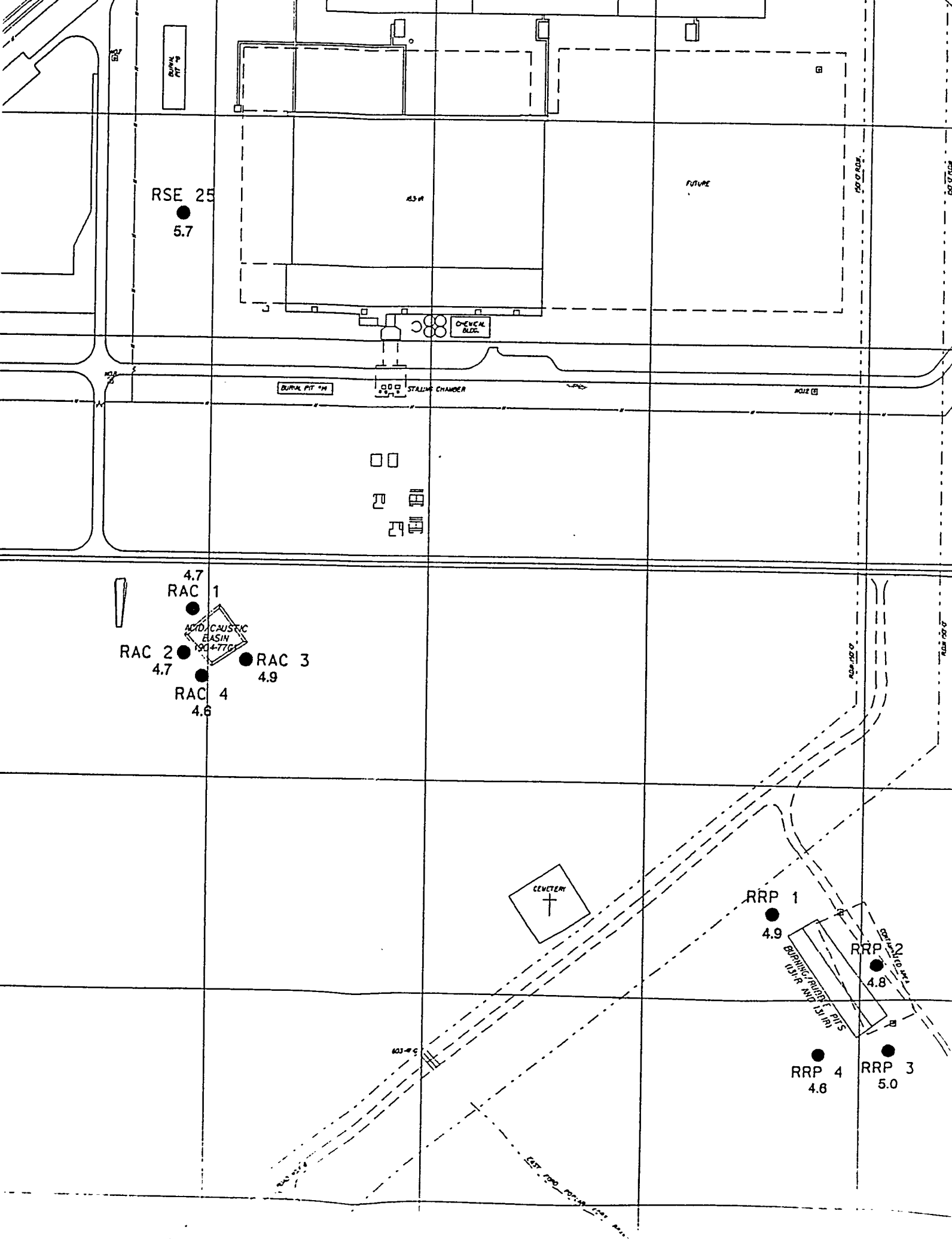
BASIN

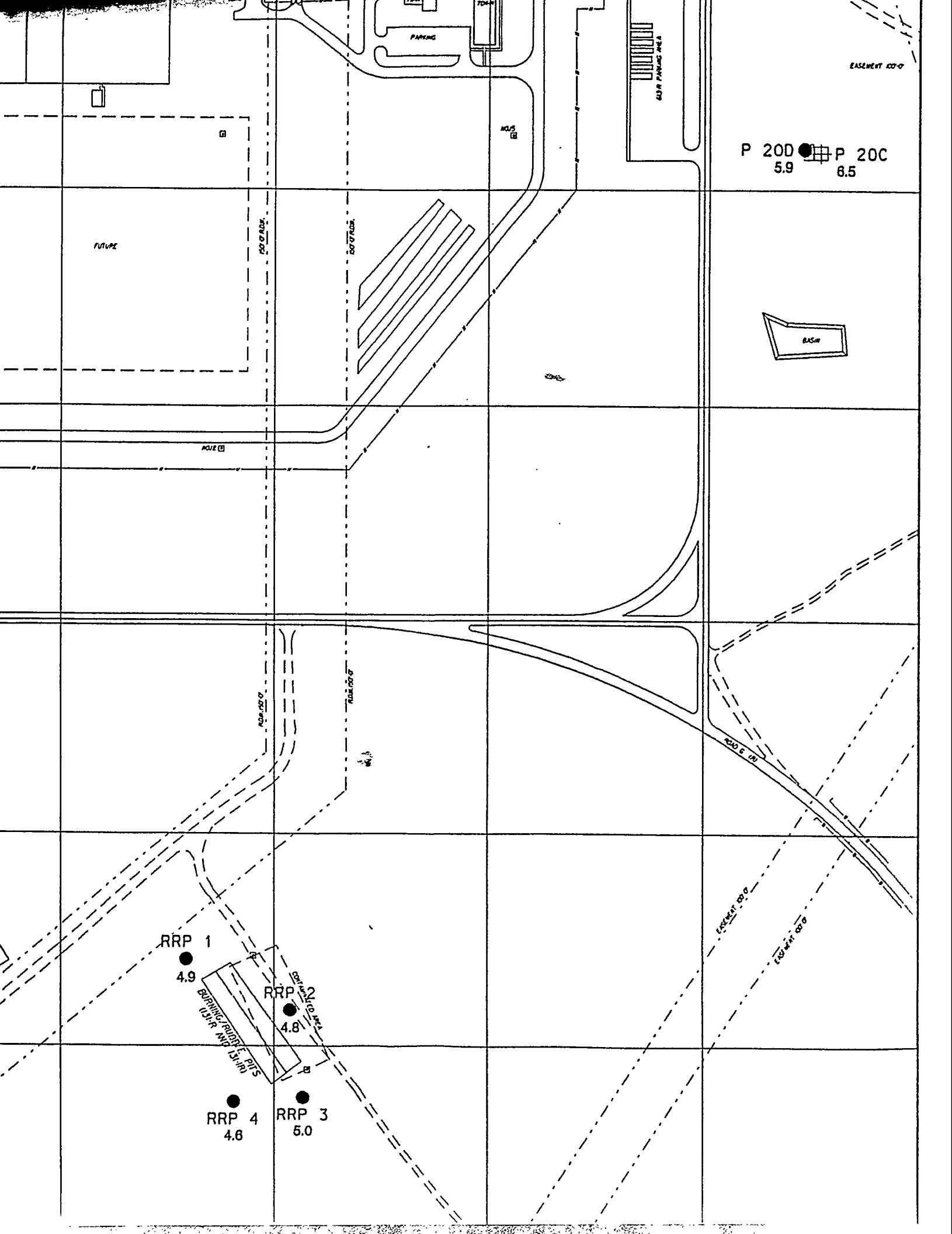
RSE
5.

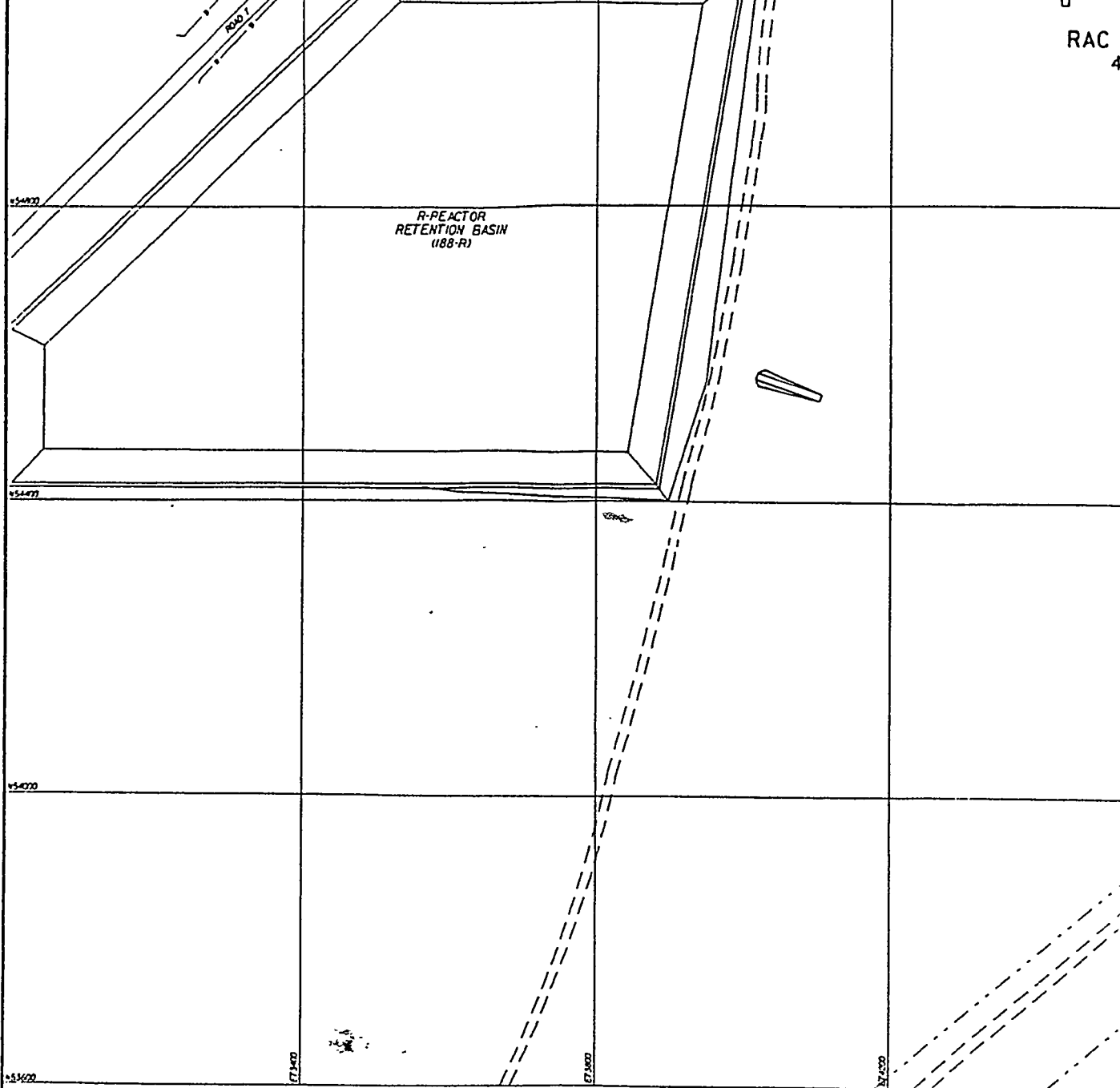
4
RA
RAC 2
4.7
R.

R-REACTOR
RETENTION BASIN
(188-R)





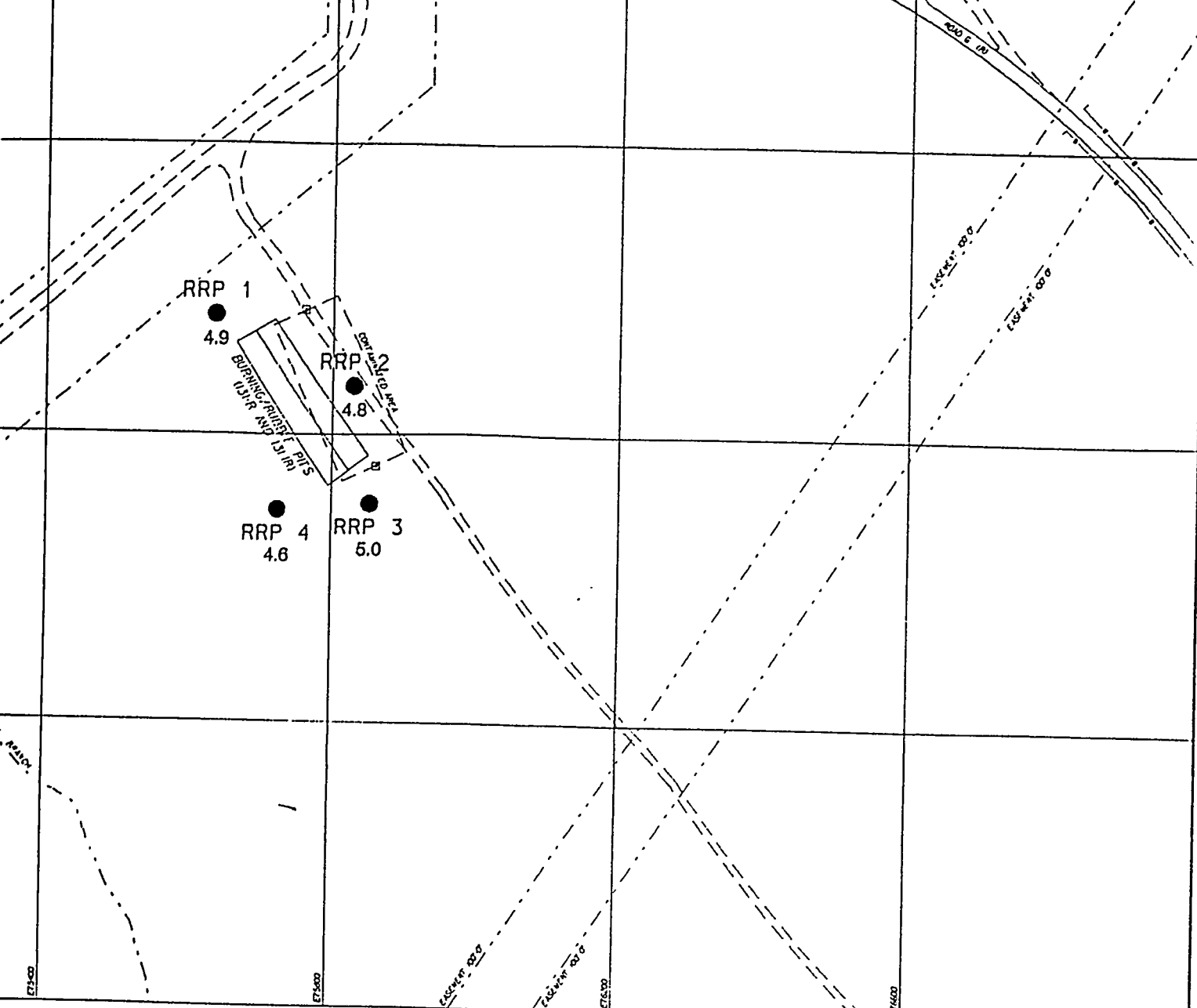




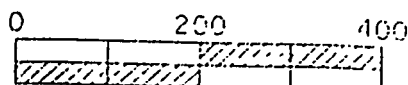
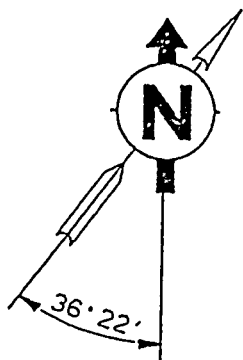
WELL SYMBOL LEGEND

- WATER TABLE AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ MCBEAN AQUIFER
GROUNDWATER MONITORING WELLS
- ⊞ CONGAREE AQUIFER
GROUNDWATER MONITORING WELLS

RAC 1 WELL ID

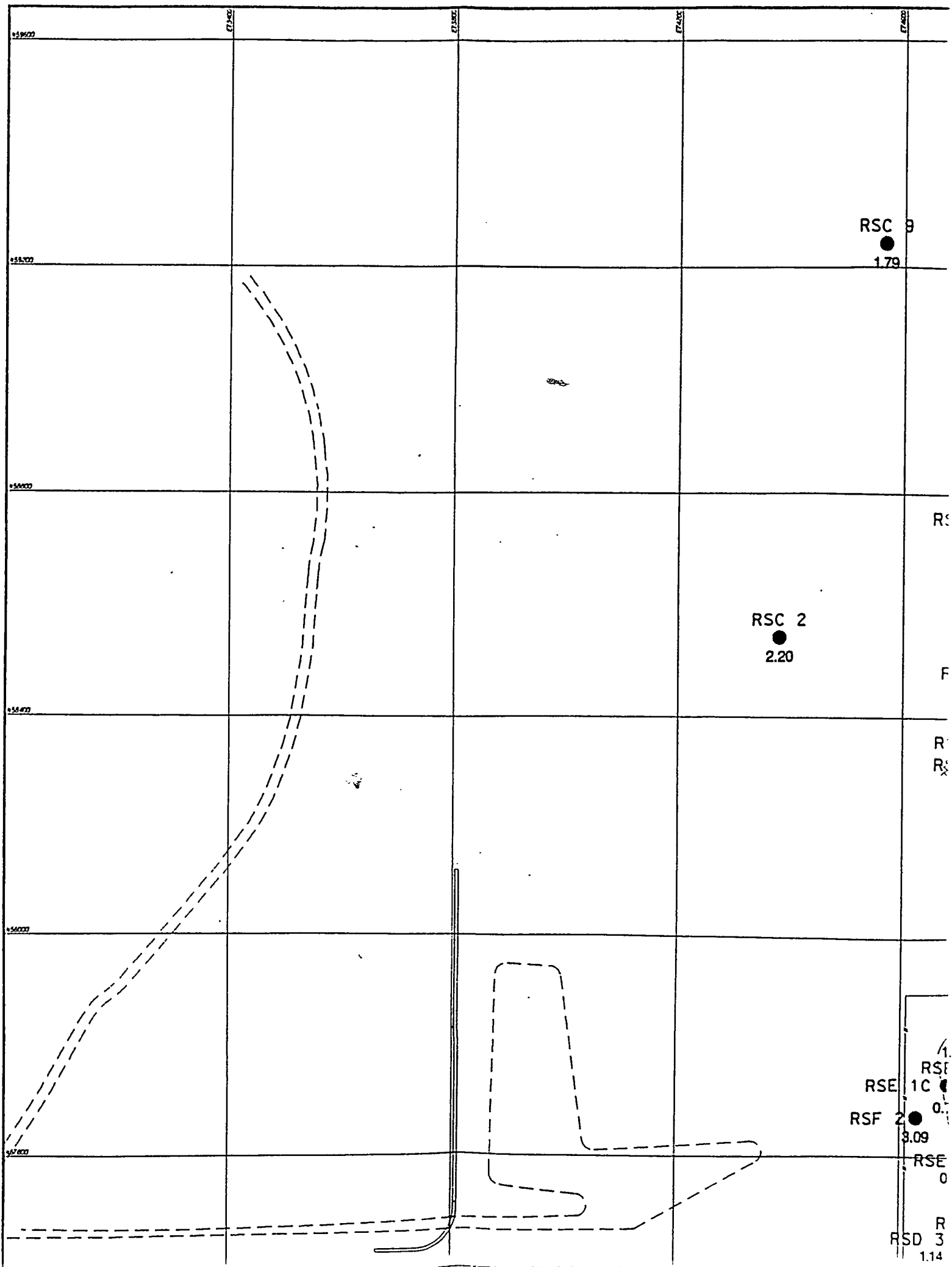


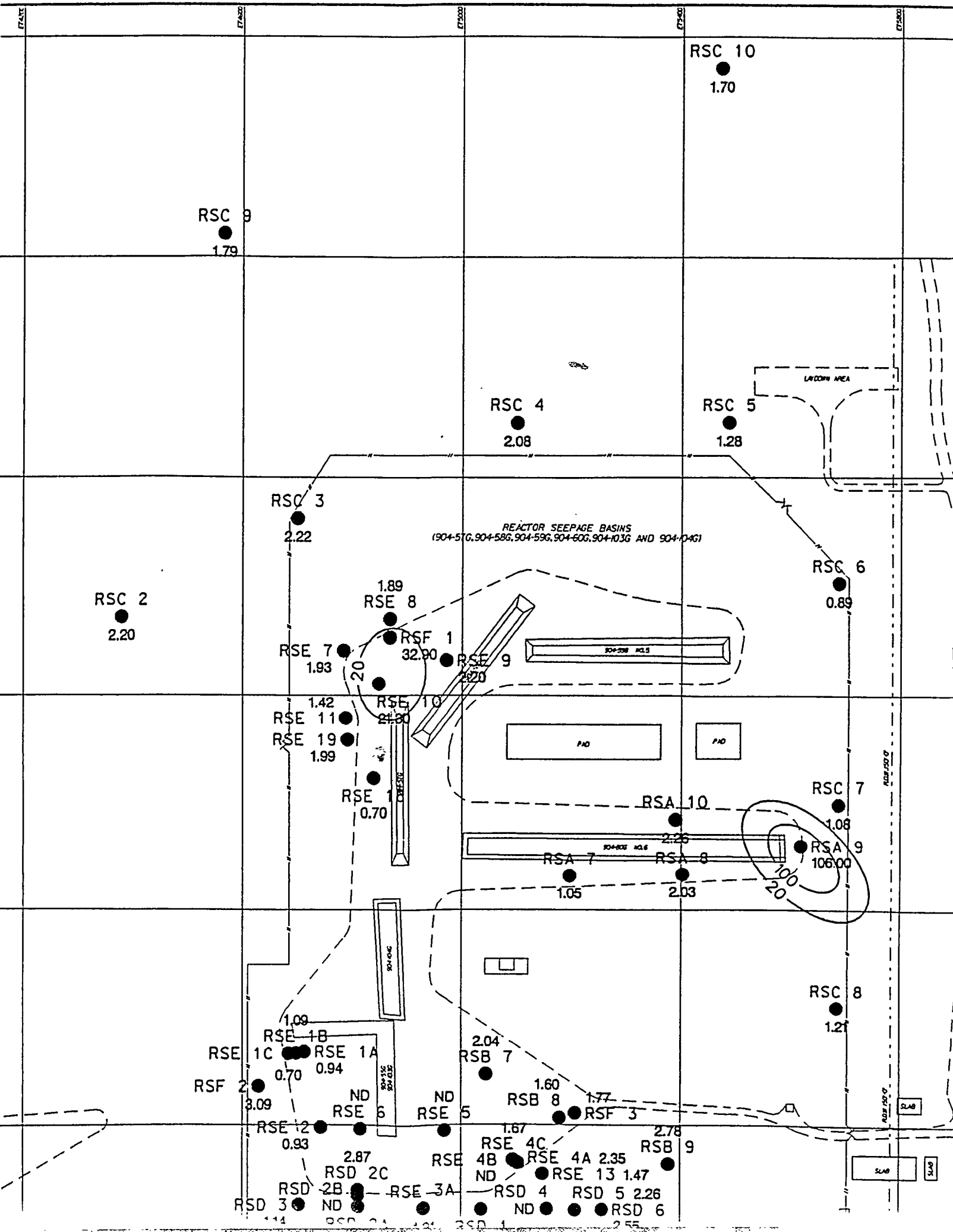
PLANT TRUE
NORTH NORTH

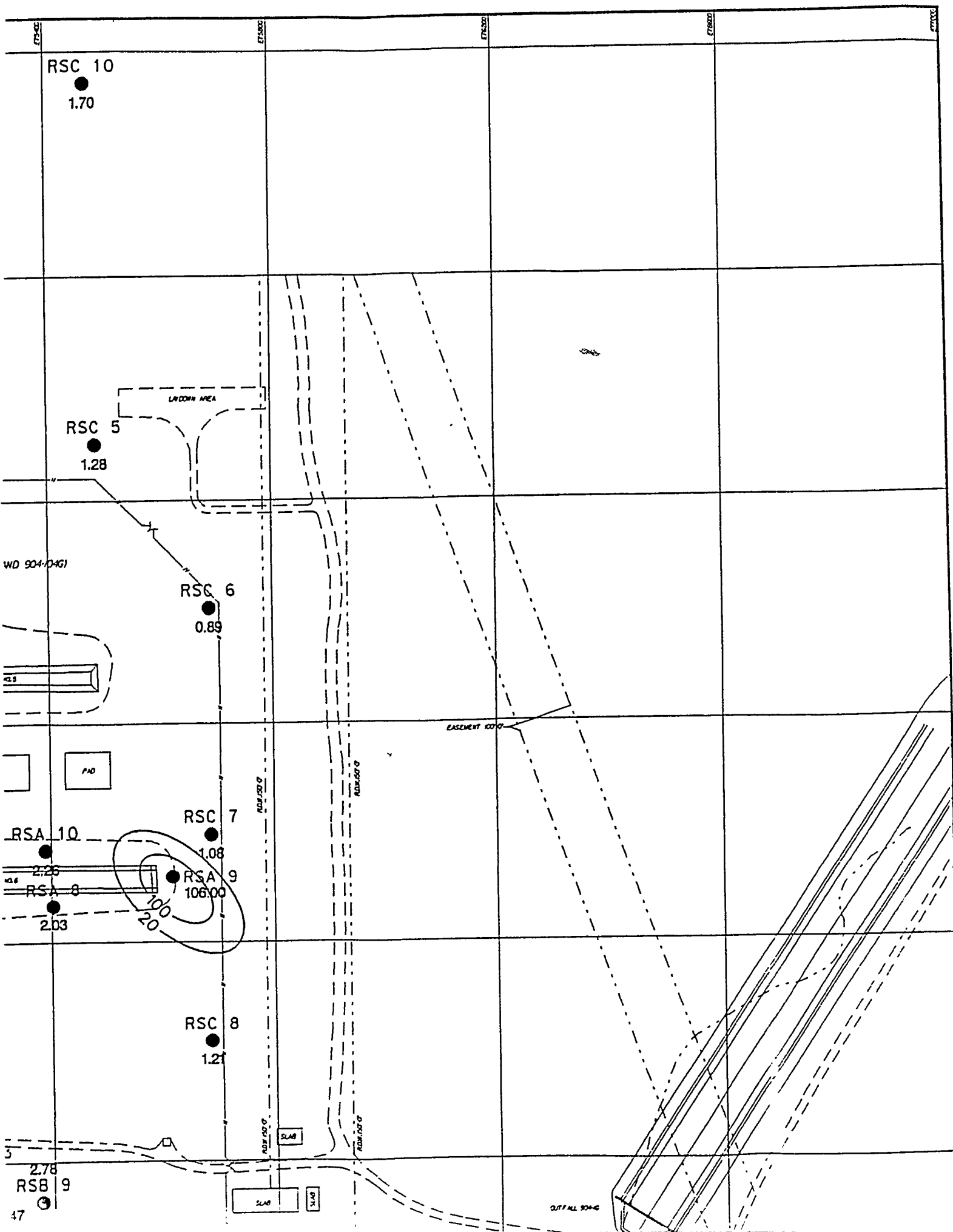


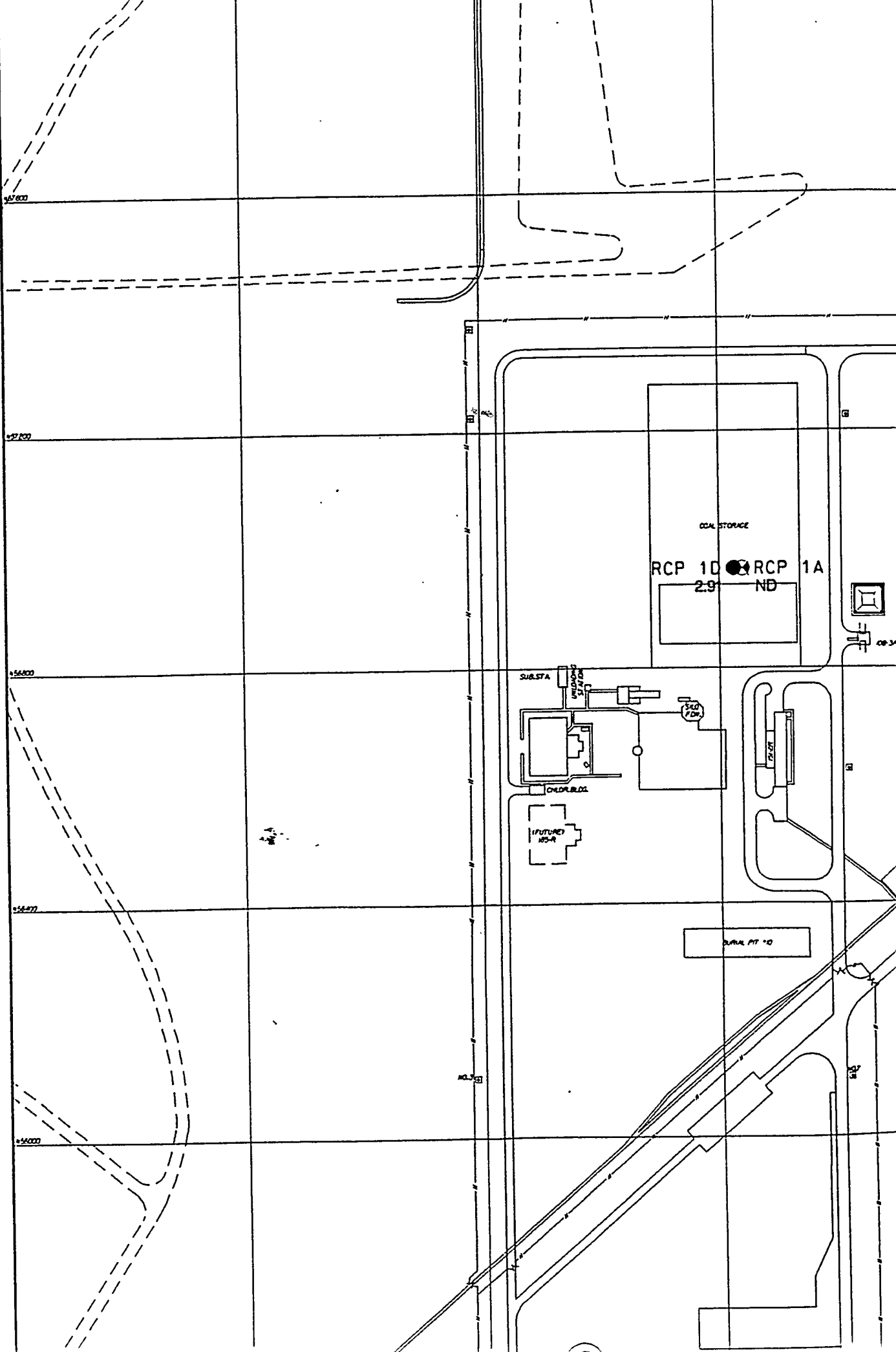
SCALE: FEET

DWG. NO. GR1115	REV. NO. 0	REV. DATE 8-10-94	AREA R-AREA
TITLE ph VALUES FOR R-REACTOR AREA GROUNDWATER MONITORING WELLS THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLE	DATE 8-10-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-10-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93

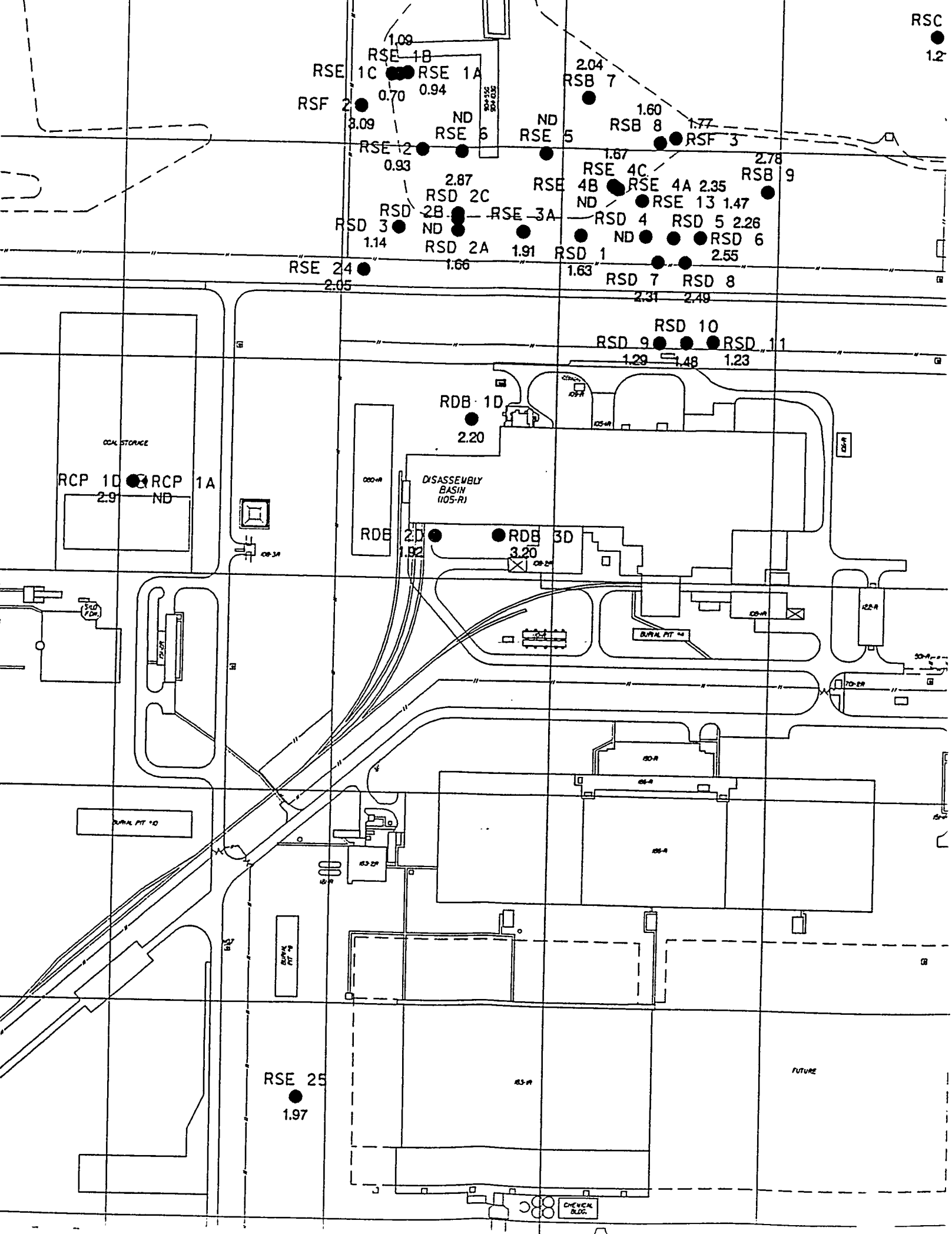


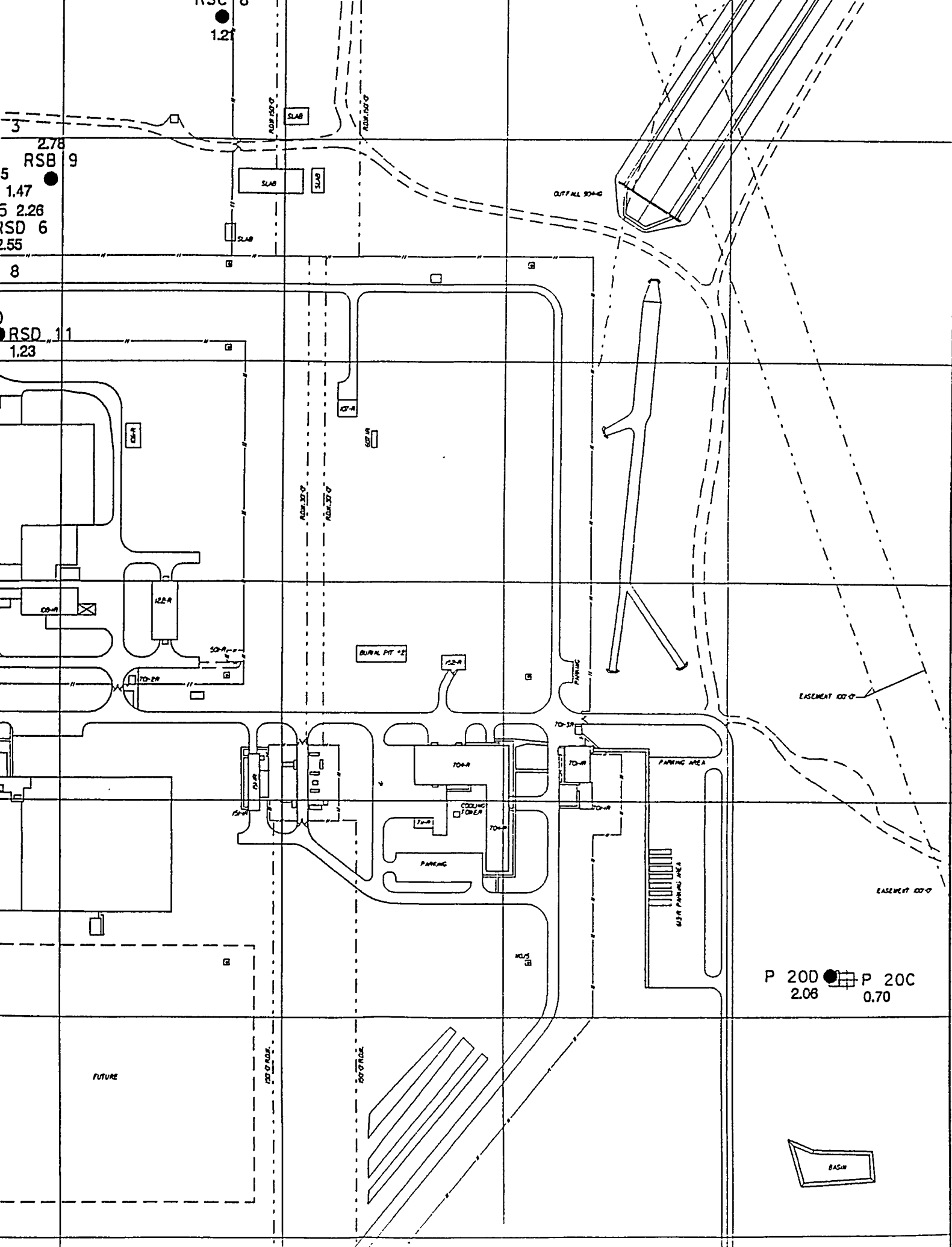




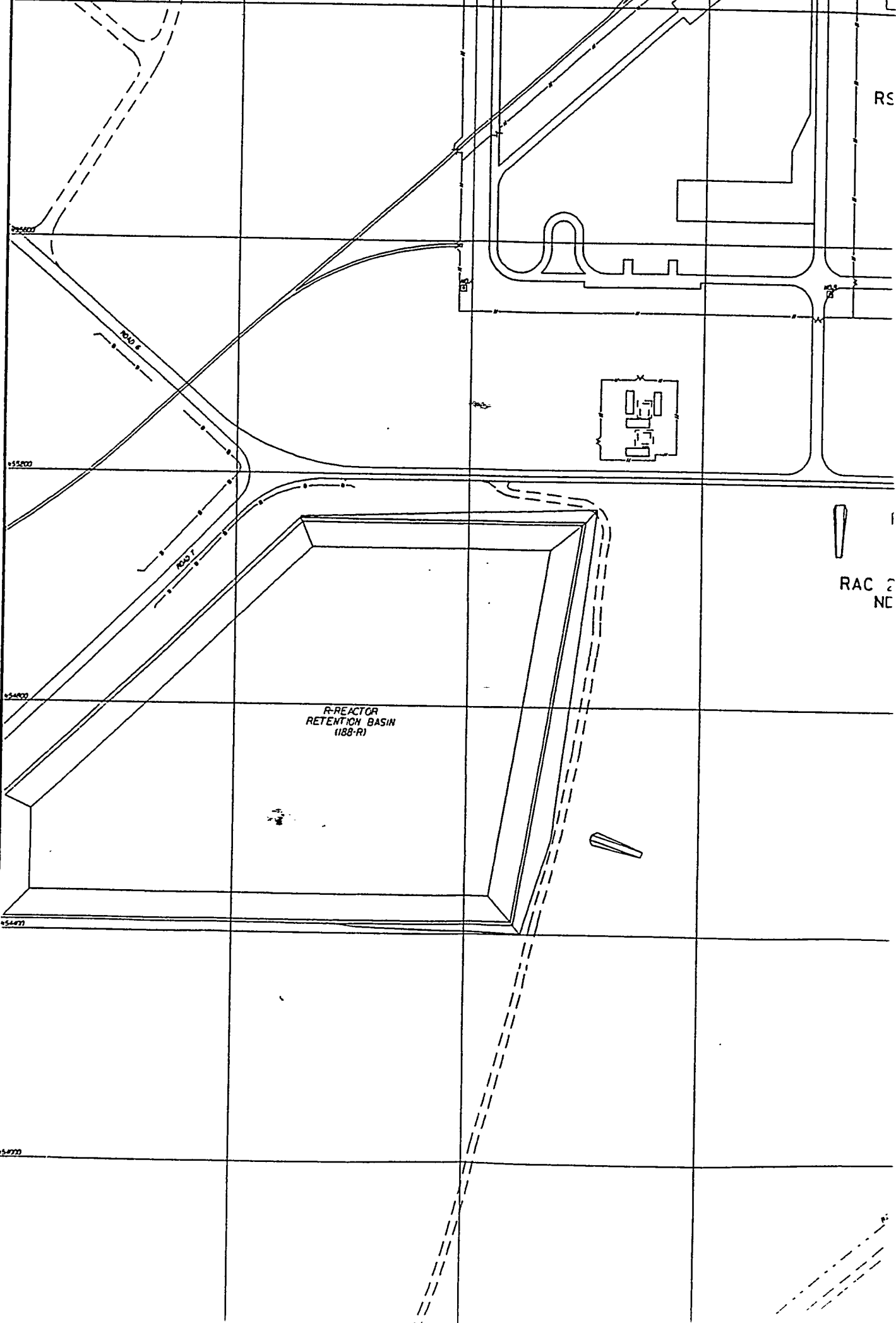


RSC
1.2

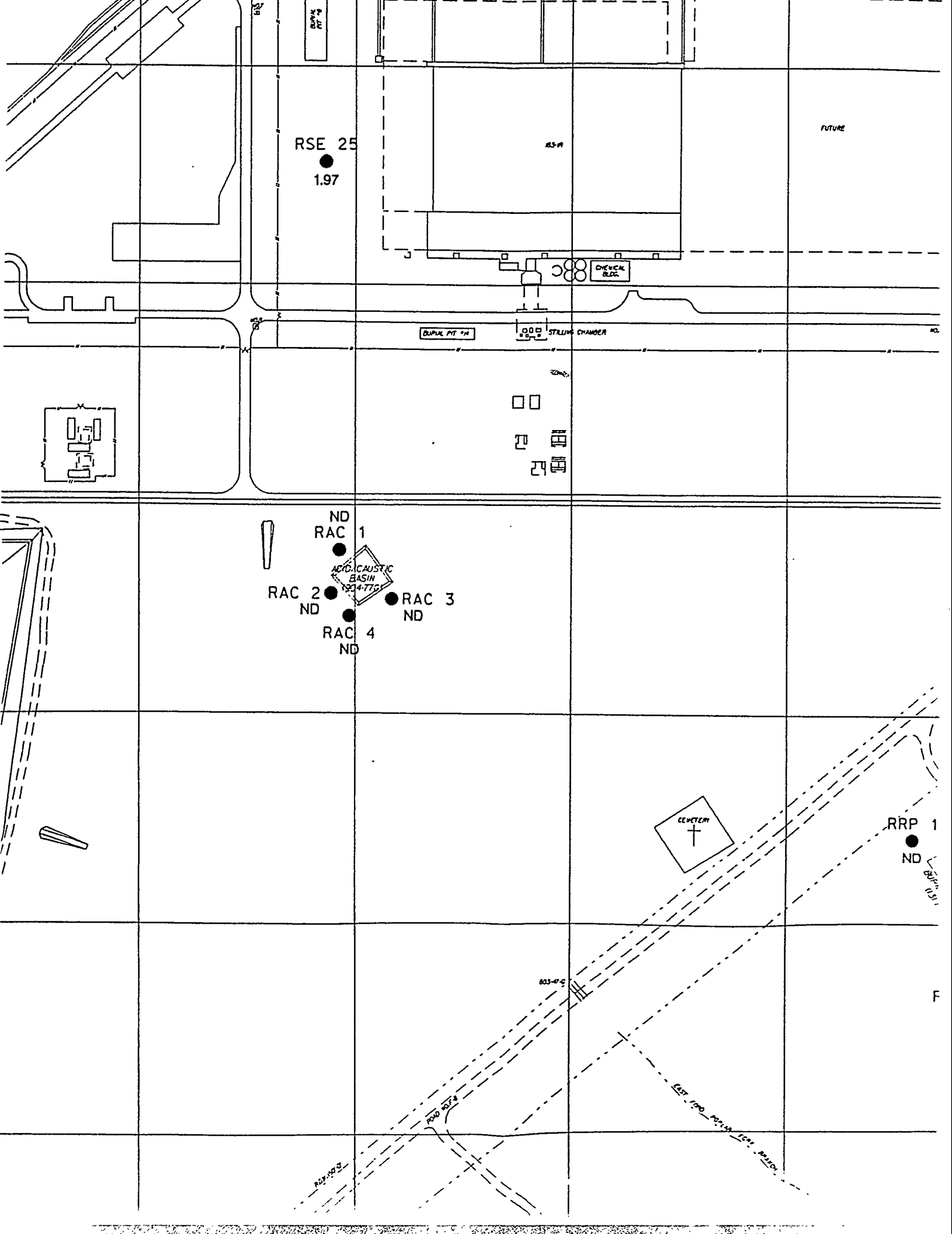


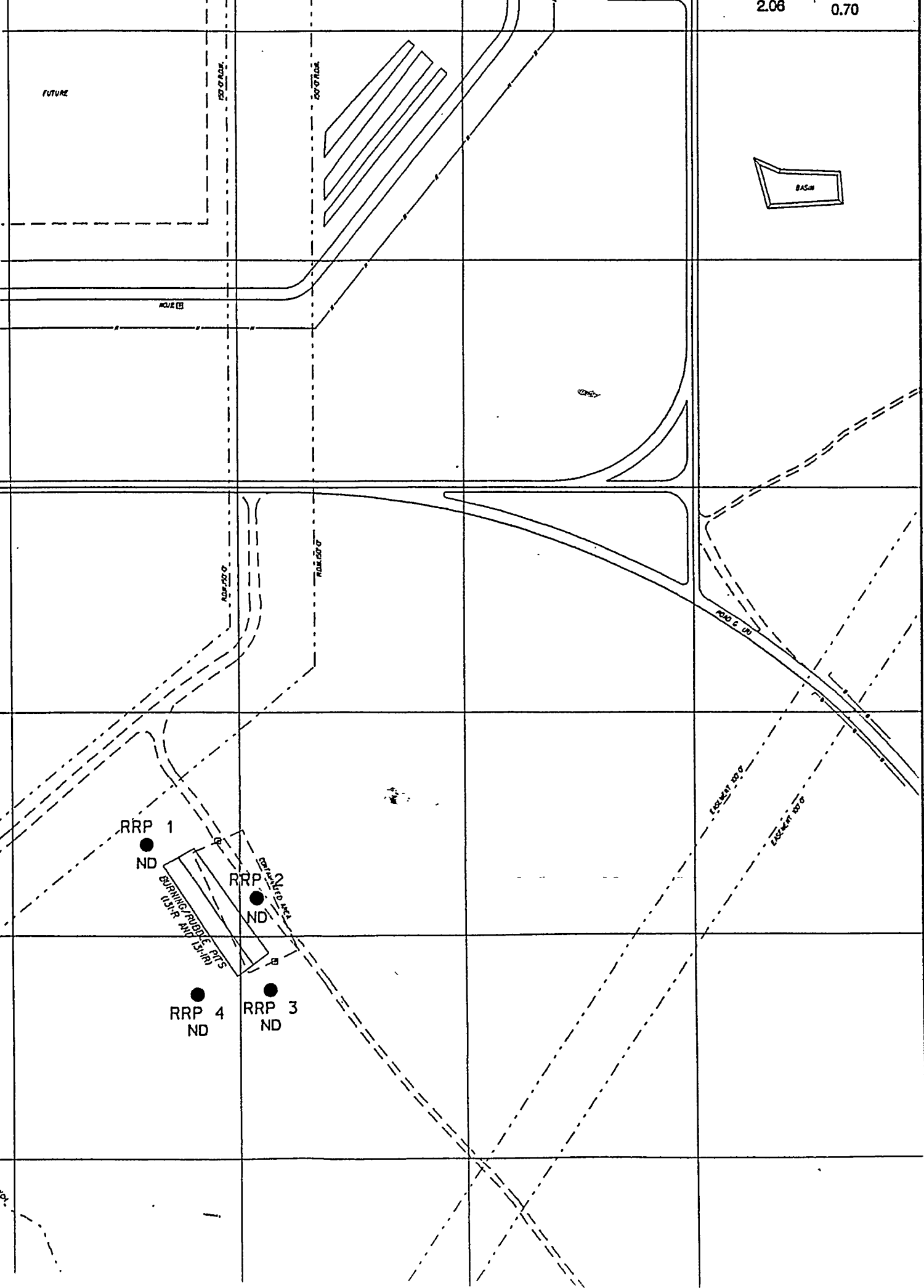


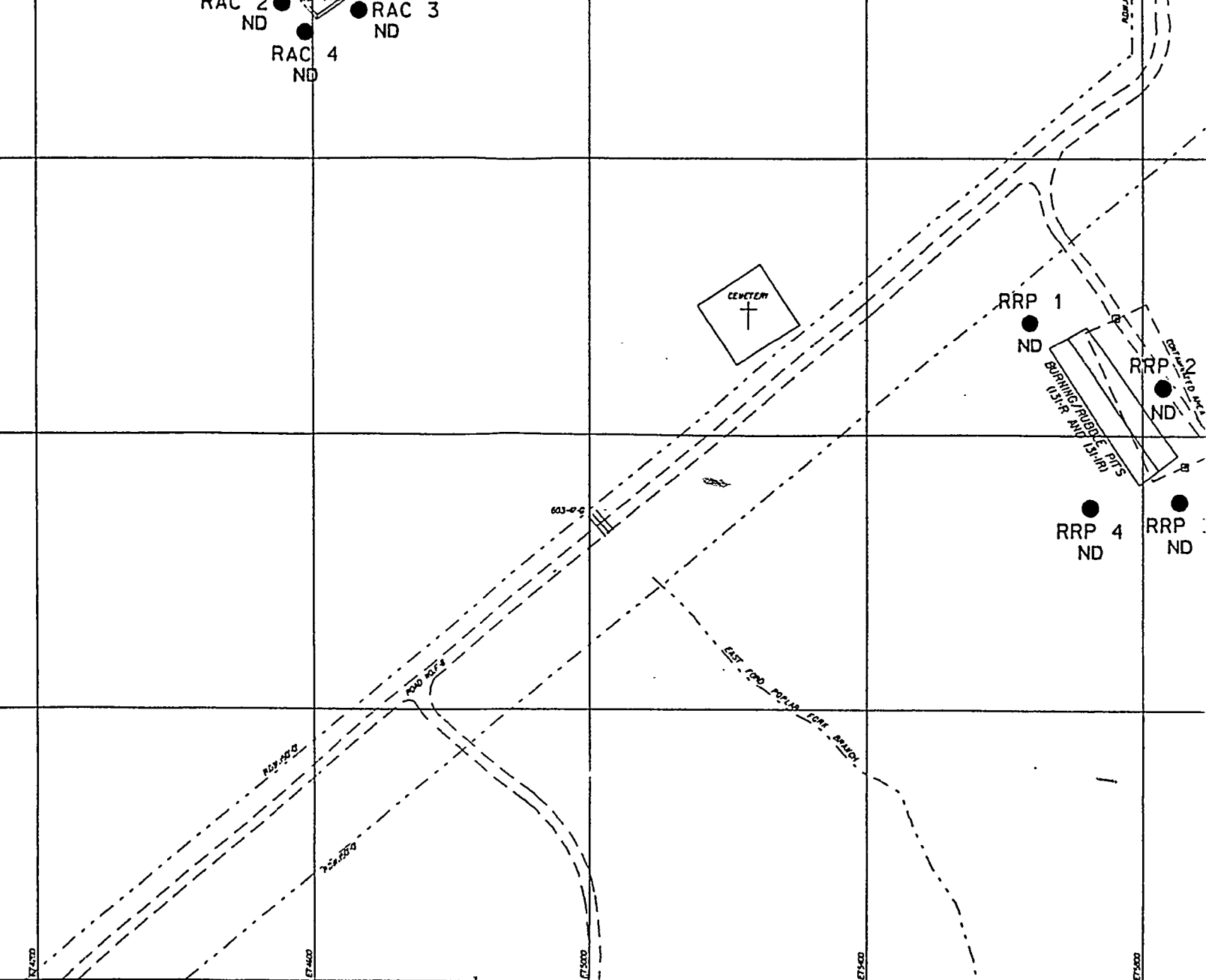
RS



RAC 2
NC



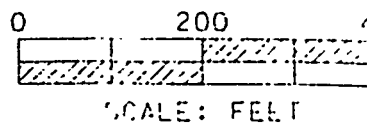
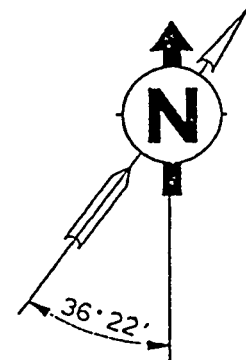




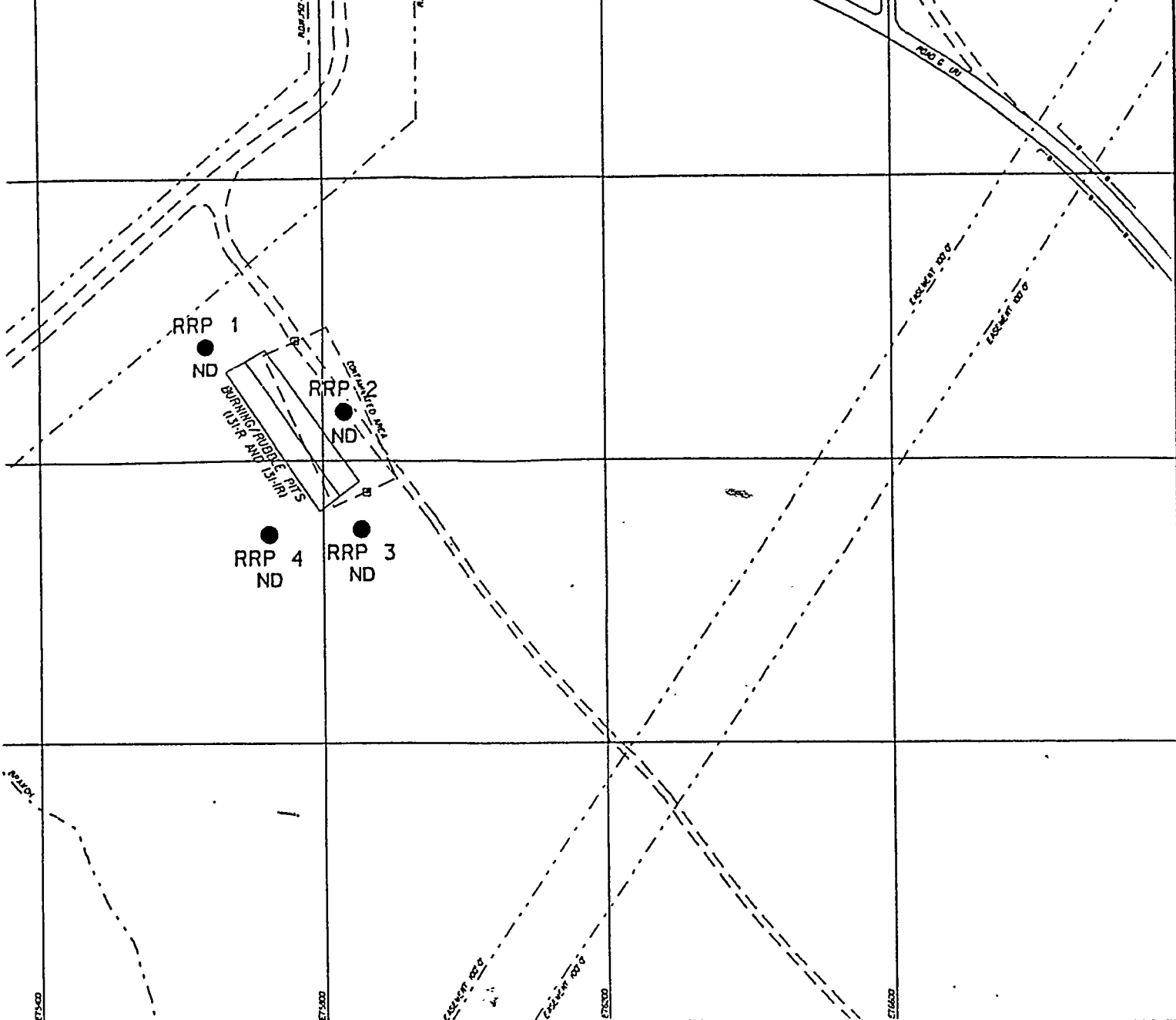
LEGEND

- FACILITY BOUNDARY
- ROAD
- - - DIRT ROAD
- - - STREAM
- + + + + + RAILROAD
- - - FENCE
- ▨ PIT/BASIN
- 280 — OBSERVED CONTOUR

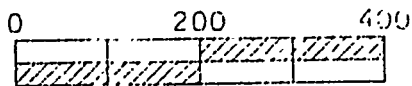
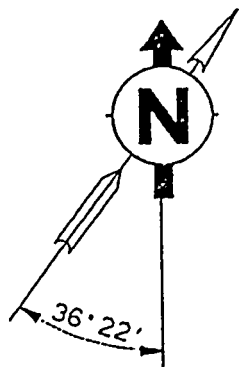
PLANT TRUE NORTH



TION LIMIT



PLANT TRUE
NORTH NORTH



SCALE: FEET

DWG NO. GR1116	REV. NO. 0	REV. DATE 8-15-94	AREA R-AREA
TITLE TRITIUM ACTIVITIES FOR R-REACTOR AREA WATER TABLE AQUIFER THIRD QUARTER 1993			
CREATED BY TRACY L. MICKLEY	DATE 8-1-94	APPROVED BY NA	DATE 93
PREPARED BY C. BUTLER	DATE 8-15-94	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93
APPROVED BY NA	DATE 93	APPROVED BY NA	DATE 93