Liquid Effluent Study: Ground Water Characterization Data

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1.0 INTRODUCTION

This report is a support document to the Liquid Effluent Study Final Project Report (WHC 1990c). The focus is on sampling and analysis rationale, quality assurance (QA), data validation, and sampling conditions for the groundwater quality assessment. Interpretation of the groundwater data is provided in the final project report.

2.0 SAMPLING AND ANALYSIS RATIONALE

As stated in the Liquid Effluent Study Project Plan (WHC 1990a), groundwater characterization is primarily a reconnaissance effort to assess the occurrence of contaminants in the immediate vicinity of liquid waste disposal sites. The approach was to: (1) use existing data from Resource Conservation and Recovery Act of 1976 (RCRA) monitoring projects and other operational programs, and (2) supplemental sampling from non-RCRA wells. Supplemental sampling from non-RCRA wells was necessary to provide sufficient spatial and temporal coverage to detect any contaminants that might have been associated with recent operational discharges. Relevant Hanford Site groundwater data acquired from January 1, 1989 through May 15, 1990, including the supplemental sampling results for this study, are included in Appendix A.

Because the project plan (WHC 1990a) constrained the time period for supplemental groundwater sampling to less than 1 yr and did not include the installation of new monitoring wells, the degree to which analytical results represent operational conditions is an important consideration. Groundwater data used in this report are representative of a variable portion of past operating conditions. The controlling variables for the occurrence of effluent constituents in groundwater beneath a disposal site are (1) the time required for the effluent to travel through the soil column, and (2) the mobility of the individual constituents. Constituents that have an affinity for sediments will migrate slower than those that remain with the liquid. Thus, the operating history of the waste stream/disposal facility and constituent sorptive properties must be considered in assessing the relationship between groundwater sampling results and contributing waste stream characteristics.

As specified in the project plan (WHC 1990a), all samples collected for this study were analyzed for 40 CFR 264 Appendix IX constituents and site-specific radionuclides. The Appendix IX list of analytes is a broad spectrum of organic and inorganic hazardous constituents. Site-specific radionuclides not on the Appendix IX list were selected from relevant effluent stream characterization reports (WHC 1989a).

Analytical data summary tables (Appendix A) for each disposal site list every analyte for which results were reported by the analytical laboratory (U.S. Testing Company, Inc. [U.S. Testing]). The tables present statistical summary information (average result, minimum result, maximum result) for samples collected and analyzed during the time period specified for this report (January 1, 1989 to May 15, 1990). Only a few results were

not available in time for this report. Promethium-147, for example, a site-specific constituent in some PUREX waste streams was not analyzed due to contractual problems involving U.S. Testing.

Additional analytical background information and sampling conditions are provided in the following sections. A complete well-by-well listing of results can be obtained through electronic access of the Hanford Ground Water Data Base. A hard copy listing by well is also available in the Administrative Record files.

3.0 QUALITY ASSURANCE/QUALITY CONTROL

This section presents quality controls used to ensure the reliability of groundwater analytical results. The document hierarchy which defined the quality controls is discussed first followed by general and project-specific controls and interpretations.

3.1 DOCUMENT HIERARCHY

Figure 1 presents the document hierarchy. The pertinent sections defining QA/QC of each document are summarized below.

- Liquid Effluent Study Project Plan (WHC 1990a). This plan described all activities to be accomplished during the characterization and assessment effort. The plan stated that groundwater sampling and analysis will be conducted in accordance with established protocol for RCRA compliance monitoring already in place.
- Waste Stream Characterization Report (WHC 1989a). Volume I of this report incorporated the following elements related to QA/QC:
 - Proposed sampling schedule
 - Proposed listing of analytical project parameters and procedures.

Volume IV of this report described QA/QC in Section 2.2 (Ground Water Sample Collection Procedures). All sampling activities were performed by Pacific Northwest Laboratory (PNL). Section 2.2.11 (Quality Assurance/Quality Control) described the PNL contract QA/QC program.

- Groundwater Sampling and Analysis Statement of Work (WHC 1989c and 1990a). Statements of work (SOW) were transmitted for FY 1989 and 1990 from Westinghouse Hanford to PNL to establish the requirements and sampling schedules for groundwater sampling and analysis activities. QA/QC sections were included in each SOW which (1) required a RCRA QA project plan (QAPP) that met the requirements of QAMS-005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (EPA 1983) and pertinent U.S. Department of Energy (DOE) Orders, and (2) required that all activities would be consistent with the protocols and recommendations provided in U.S. Environmental

Protection Agency's (EPA) RCRA Ground Water Monitoring Technical Enforcement Guidance Document (EPA 1986a) and Test Methods for Evaluating Solid Waste (EPA 1986b). Additionally, QC records were to be maintained with which to verify accuracy and precision of analytical data.

Analytical data used in this report for January 1989 to August 1989 were covered by the FY 1989 SOW. The wells sampled during the period of September 1989 until April 1990 (specifically for the Liquid Effluent Study; see Appendix C for complete well listing and sample dates) fell under the FY 1990 SOW.

- Groundwater Sampling and Analysis Program Management Plan (PNL 1989a and 1990a). These plans were prepared by PNL to satisfy a deliverable required in the SOW. Each program management plan describes the administration and technical management of activities contained in the related SOW.
- Quality Assurance Project Plan (PNL 1989b). A PNL-prepared document which addresses the QA controls for the various RCRA groundwater monitoring project activities. The QAPP is reviewed and approved by Westinghouse Hanford. Organizational structure, data quality objectives, procedural controls, QC checks, audits, corrective actions, reports, and records are defined.
- Analytical Laboratory Contract. QA and QC requirements in this document reflect the requirements in the SOW (WHC 1989a and 1990) and the QAPP (PNL 1989). The contract for analytical services during the time period covered in this report was given to U.S. Testing. The contract contained the following QA clauses: (1) the laboratory was to assure the integrity and validity of test results through an internal QC program which included written QC procedures, QA samples, and corrective actions, (2) the laboratory would maintain EPA Safe Drinking Water Certification, (3) the laboratory would meet QC requirements of EPA's Test Methods for Evaluating Solid Waste - Physical/Chemical Methods (EPA 1986a), (4) the laboratory would participate in interlaboratory comparisons and audits (i.e., DOE/Environmental Monitoring Laboratory Quality Assessment Program, EPA Environmental Radioactivity Laboratory intercomparisons, and EPA Water Pollution and Water Supply Performance Evaluation studies), and (5) the laboratory would produce a quarterly report of interlaboratory comparisons and QC results.
- Procedures (Laboratory). Procedures regarding internal QC requirements were contained in the U.S. Testing QC manual.
- Procedures (Sampling and Data Management). Procedures regarding PNL activities to collect representative samples, ensure the chain-of-custody of those samples, and manage analytical data received from the laboratory are contained in PNL's Procedures for Ground-Water Investigations (PNL 1989c).

Figure 1. Document Hierarchy.

3.2 QUALITY ASSURANCE PROGRAM

The PNL RCRA Quality Assurance Project Plan (PNL 1989b) defined the QA requirements for analytical work. Content of this document is summarized above. Audits and surveillances were conducted by PNL, Westinghouse Hanford, DOE, and the EPA on various aspects of this work.

3.3 QUALITY CONTROL PROGRAM

3.3.1 Groundwater Sampling and Analysis Quality Control Program

Pacific Northwest Laboratory conducts a QC program to assess the quality of data reported for groundwater samples collected under the Westinghouse Hanford SOW. The QC program is based on guidance from EPA, Region 10 and the EPA RCRA Groundwater Monitoring Technical Enforcement Guidance Document (EPA 1986a). Analytical procedures were in place at U.S. Testing for the performance of analytical work in accordance with the current edition of EPA's Test Methods for Evaluating Solid Waste (EPA 1986b). Key elements of the QC program include: (1) submission of blind standards, blanks, and duplicate samples to U.S. Testing; (2) submission of replicate samples to alternate laboratories; and (3) participation of U.S. Testing in the interlaboratory comparison programs.

Evaluation of QC samples is as follows: For blind standard samples where the concentration is known, 2.0 standard deviations (95% confidence interval) about the expected value is used as an acceptable target range. If results fall outside the 95% confidence interval, a request for data verification is warranted. Values from interlaboratory comparisons of field samples must fall within 2.8 standard deviations based on EPA Water Supply or Water Pollution Laboratory Performance Evaluation Studies to be considered equivalent analyses. This calculation takes into account the uncertainties associated with two sources of analyses.

The PNL reports the results from the QC program in monthly reports to Westinghouse Hanford and in quarterly summaries that are included in the RCRA quarterly data report which is submitted by DOE, Richland Operations Office (DOE-RL) to Washington Department of Ecology (Ecology). The quarterly summaries are discussed here (PNL 1989d,e,f; WHC 1990b,c). Prior to October 1989, the quarterly reports noted analytical anomalies. For the three quarters beginning January 1989, and ending in September 1989, the anomalies reported were: (1) sporadic occurrences of methylene chloride in volatile organic hydrocarbons and total organic halogens, (2) chromium in unfiltered samples from new wells, (3) acetone in field blanks (thought to be due to the reuse of sampling bottles), and (4) matrix interference effects for fluoride analyses. Beginning in October 1989, summaries of the QC blind standards and interlaboratory replicates were added to the quarterly reports. For the three quarters following October 1989, the only analytical anomaly reported was a continuation of the fluoride matrix interference (October through December 1989). The blind standard and replicate results are tabulated below. Reasons for unacceptable (out-of-limit) results are contained in the quarterly reports.

Quarter	Blind Standards [% , no. analyses)]	Replicates [% , no. analyses)]
Oct-Dec, 1989	92% acceptable, (113) 8% unacceptable	98.3% acceptable, (933) 1.7% unacceptable
Jan-Mar, 1990	88.7% acceptable, (53) 11.3% unacceptable	98.3% acceptable, (514) 1.7% unacceptable
Apr-Jun, 1990	100% acceptable, (71)	98.4% acceptable, (1,150) 1.6% unacceptable

3.3.2 Liquid Effluent Study Quality Control Activities

Two activities have been undertaken by Westinghouse Hanford to verify and validate the analytical results for the wells sampled for this report. These checks are in addition to the QC program conducted by PNL. The two activities are (1) a validation of select analytical results and (2) a reanalysis of inorganic samples by another laboratory.

3.3.2.1 Analytical Data Validation. The Westinghouse Hanford Office of Sample Management has conducted a data validation review of select analytical data collected for this report. The procedural steps included in the review are described in Appendix B. The validation level chosen for this review is Level B (see Appendix B for a detailed description).

In general, a Level B validation includes a systematic review of analytical data from field samples and their associated laboratory QC samples. The purpose of the review is to make determinations concerning data quality and data limitations based on a review of laboratory performance and implementation of applicable protocols. This is accomplished through documentation and the use of data qualifiers. Each step of the validation procedure is documented. A data validation coversheet is attached to each package which summarizes the entire review and gives an overall assessment of the sample. Major and minor problems are noted and data qualifiers explained. Data validation coversheets are included in Appendix B.

The sample sets from 10 of the 90 well samples collected specifically for this study were reviewed (11%). No major problems were noted. Minor problems noted on the summary sheets are as follows:

- Direct Aqueous Injection

- Holding times - Results for eight wells were flagged as estimated due to missed holding times. This analysis was performed using a U.S. Testing procedure. The Office of Sample Management used a 28-day holding time in the evaluation. The U.S. Testing procedure specified 40 days. Only one of the samples exceeded the 40-day limit (2-E25-34).

- Herbicides

- Holding times - One well exceeded the extraction holding time (8 days out).
- Low surrogate recovery - Results for one well flagged.
- High matrix spike duplicate % recovery - Results for one well flagged.
- High matrix spike % recovery - Results for eight wells flagged.

- Hydrazine

- Low matrix spike/matrix spike duplicate % recoveries - Results for six wells flagged.

- Dioxin

- Low surrogate recovery - Results for one well flagged.

Based on this survey, it appears that no potentially serious or major violations of procedural controls occurred which would invalidate the data. The most serious problems noted were the instances in which holding times were exceeded. As explained above, in this survey it affected the results from two wells (Direct Aqueous Injection for one, Herbicides for the other).

3.4.2.2 Inorganic Sample Reanalysis. Ten archived groundwater sample sets (nitric acid preserved, including filtered and unfiltered samples) from the sampling effort conducted for the Liquid Effluent Study were reanalyzed by the PNL analytical laboratories as an independent check. The primary objective was to validate the occurrence of a large number of less-than-detection-limit metal results reported by U.S. Testing.

Reanalysis was performed by direct aqueous injection of the sample media into an inductively coupled plasma emission mass spectrometer (ICP-MS). Detection limits with ICP-MS are generally more than a factor of 10 lower than the conventional methods used for the present study. Thus, it was possible to verify the validity of the less-than-detection-limit results as well as to obtain an intercomparison for all positive occurrences.

Results of this comparison are included in Appendix D. Of the 383 metal results, 53% were reported by U.S. Testing as below detection. The ICP-MS results (Appendix D) confirm that all of the less-than-detection-limit results reported by U.S. Testing are in fact at or below the stated U.S. Testing detection limit.

A comparison of the positive results, which consist primarily of unfiltered samples (the filtered samples yield primarily less-than-detection-limit results from U. S. Testing), is shown in Figure 2. Considering that most of the results for the comparison were for unfiltered water samples, the agreement is reasonably good. For example, unfiltered samples may result in some variability due to the inhomogeneity of the sample matrix (i.e., due to nonuniform entrainment of particulates in the injected sample volume).

Figure 2. Comparison of Analytical Results for Selected Metals in Groundwater Samples Analyzed by Two Different Methods.

4.0 SAMPLING AND MONITORING WELL CONDITIONS

As noted in the project plan (WHC 1990a), a large number of older, non-RCRA wells were included in the monitoring network. These wells were used to provide the broadest possible coverage for assessing groundwater quality in the vicinity of active liquid disposal sites. However, well construction, sampling systems, and other factors may bias analytical results for certain analytes in samples from these wells.

These factors are discussed below followed by site-specific summaries of sampling conditions.

4.1 FACTORS POTENTIALLY AFFECTING ANALYTICAL RESULTS

4.1.1 Well Construction Effects

Well construction effects on analytical results are possible in both old and new wells. The problems are more prevalent in the older Hanford wells and can be attributed to a greater number of contributing factors.

Westinghouse Hanford recognized the potential inadequacies of site wells for use in regulatory compliance monitoring systems and contracted Golder Associates Inc. in May, 1989 to conduct a "fitness-for-use" evaluation of selected groundwater monitoring wells. The final report for that study was delivered in December 1989 (Golder Associates 1989). Reference to this study, however, is made throughout this section to highlight potential problems with wells associated with this study.

Older wells on the Hanford Site were constructed in accordance with acceptable standards and practices that were in force at the time of construction. Many of the wells do not meet current requirements due to (1) outdated or inappropriate construction materials (e.g., carbon-steel or galvanized casing), (2) inadequate surface and annular seals, (3) inappropriate screen location, or (4) excessive screen lengths (Golder Associates 1989). The most common analytical problem in older wells noted in this study appears to be caused by use of wells with outdated or inappropriate construction materials. For example, the occurrence of elevated metals (iron, manganese, zinc, and cadmium) particularly in unfiltered samples (see discussion in Section 4.1.2 below). Addition of an acid preservative in the field immediately upon collection of a metals sample may result in partial dissolution of particulate phases (well casing debris or corrosion products) present in the well water. The problem is exacerbated in bailed samples.

Data anomalies associated with the other three construction problems noted above are not as easily discerned in the analytical results. In the case of inadequate surface and annular seals, constituents could be more rapidly transported to the groundwater near the well which would not otherwise be present. Inappropriate screen location and excessive screen lengths could result in nonrepresentative samples.

In some new wells (RCRA compliant, stainless steel), anomalous metal results in unfiltered samples (e.g., chromium, nickel) may be due to cuttings and welding slag being introduced into the wells during casing installation. Recent installation procedures take every precaution to avoid introduction of foreign material during well installation. Filtered results can be checked against the unfiltered data to assess whether particulate metal is a likely problem.

4.1.2 Sampling Method Effects

Three sampling methods were used in collecting groundwater samples for this study. The techniques employed were bailer, electric submersible pump, and positive displacement pump. Restrictions in the use of each technique are discussed below.

The least desirable sampling method employed is the use of a bailer. Fifteen wells sampled for this study were collected with bailers. All 15 wells were older, non-stainless steel wells. The bailer collection procedure does not adequately purge the well prior to sample collection and does not allow for filtration of an aliquot of water for comparison; only unfiltered metal results are available. As a result, particulate phase materials (well casing corrosion debris, installation residues, and sedimentary material) may be entrained in the sample. A study to demonstrate the effects of this sampling technique on analytical results was conducted on well 2-W18-17 at the 216-Z-20 Crib.

Wells at this facility had carbon steel casings and were not equipped with dedicated submersible sample pumps (i.e., only unfiltered samples were initially obtained with a bailer). A followup resampling effort for this study was conducted on April 20, 1990, at one of the two wells (2-W18-17) and involved installation of a temporary submersible pump and time series sampling for selected constituents (trace metals and plutonium) during purgewater removal. A time series plot of unfiltered sample results is shown in Figure 3. The typical result for bailed samples would be represented by the time zero concentrations. Iron and aluminum appear to be correlated with the turbidity time-response plot while manganese, zinc, and nickel appear to decline in a regular manner with increasing purgewater removal. Plutonium was below detection in all samples. At the end of the pumping period (after removal of approximately three borehole volumes of purgewater), filtered samples were also collected in which all of the metals were at or below detection limits.

The results summarized in Figure 3 and discussed above, demonstrate the type of false positive results that can occur when sampling from carbon steel casing wells, and the bias introduced by routine bailer sampling from Hanford wells. In the latter case, only unfiltered samples are obtained. When particulate debris in the unfiltered samples is acidified (i.e., the prescribed preservative added), various metals are released to solution. Particulates can include both corrosion products from the casing as well as sedimentary material dislodged during sample recovery. The latter mechanism could account for the elevated aluminum (i.e., dissolution of aluminosilicate mineral phases).

Figure 3. Time Series Concentrations of Selected Metals During Purgewater Removal at Well 299-W18-27.

Electric submersible pumps are the standard sample collection method in older wells. The problem with the collection of volatile organic compounds using this method has been well discussed in the literature. A study reported by Liikala et al. (1988) using two onsite wells and different sampling techniques indicates no significant statistical difference in concentrations for four chlorinated hydrocarbons between the three techniques. Based on the results of this study, volatile organic compound results reported in this study are not expected to be affected by the use of a submersible pump in sample collection.

Positive displacement pumps are the preferred method of sample collection. No analytical anomalies are expected in samples collected using this method.

4.1.3 Studies Related to Data Quality

Two comparison studies have been conducted in conjunction with the liquid effluent study to try to discern the effects on analytical results based on (1) different well types, and (2) different sampling methods. The problem of data quality has been examined by the direct comparison of groundwater chemical data for RCRA and non-RCRA wells that are in reasonable proximity to one another and that are screened at approximately the same interval. The results of these studies and the comparisons are presented below.

The first well pair consist of 3-1-3 and 3-1-7, located approximately 650 ft southeast of the 300 Area process trench. Well 3-1-3 is a carbon steel well completed in 1950 to a depth of 102 ft. It is plugged at a depth of 75 ft and the casing is perforated between 25 and 70 ft. Well 3-1-7 was drilled approximately 20 ft from well 3-1-3 for the purpose of direct comparison of concentrations of volatile organics in different well types and with different sampling techniques (Liikala et al. 1988). Well 3-1-7 was completed in 1985 to a depth of 75 ft with stainless steel casing and screen. The screened interval is between 25 and 70 ft.

In the study reported by Liikala et al. (1988), the two wells were sampled over a 4-wk interval using three different sampling techniques. The sampling techniques used during the test included the use of a submersible pump, a bladder pump, and a bailer. Four chlorinated hydrocarbons, perchloroethylene (PCE), 1,1,1-trichloroethane (111-TCA), trichloroethylene (TCE), and chloroform were detected in both wells during the test. Statistical analyses of the test results indicate no significant differences in chlorinated hydrocarbon concentration between samples collected with different techniques or between wells with different construction materials.

Wells 3-1-3 and 3-1-7 were resampled as part of the effluent study on November 21, 1989. For this study, the stainless steel well was equipped with a Hydrostar positive displacement piston sample pump while a submersible pump was used in the carbon steel well. The concentrations of constituents above detection limits in the two wells are listed in Table 1. The concentrations for the two wells are plotted in Figure 4, indicating good constituent agreement between the two wells. The only significant deviation indicating a difference between the wells is for unfiltered iron

which is higher in the non-RCRA well with a carbon steel casing. Filtered iron was below the contractual detection limit (30 ppb) in both wells. It is interesting to note that concentrations for chloroform and TOX are almost identical in the two sets of analyses, confirming the results of Liikala et al. (1988).

Table 1. Constituents Above Detection Level
in Wells 3-1-3 and 3-1-7.

Constituent	3-1-3	3-1-7	Units
Alkalinity	56,000	56,000	(a)
Alpha, HDL	82.5	63.9	pCi/L
Barium	22	22	ppb
Barium, filtered	21	21	ppb
Boron	17	19	ppb
Boron, filtered	18	17	ppb
Calcium	23,400	23,600	ppb
Calcium, filtered	22,200	22,000	ppb
Chloride	24,600	22,500	ppb
Chloroform	17	17	ppb
Gross beta	22	18.4	pCi/L
Iron	135	53	ppb
Lithium	15	14	ppb
Lithium, filtered	16	14	ppb
Magnesium	4,430	4,420	ppb
Magnesium, filtered	4,220	4,250	ppb
Nitrate	1,100	1,200	ppb
Potassium	2,680	2,740	ppb
Potassium, filtered	2,520	2,660	ppb
Silicon	6,380	6,710	ppb
Silicon, filtered	6,020	6,320	ppb
Sodium	11,700	12,300	ppb
Sodium, filtered	11,100	12,000	ppb
Strontium	109	108	ppb
Strontium, filtered	104	103	ppb
Sulfate	17,000	17,000	ppb
TDS	138,000	115,000	ppb
TOX, LDL	36	37	ppb
Uranium	66.4	56.1	ppb

^aAlkalinity is reported in terms of milligrams/liter
of CaCO₃--

Figure 4. Plot of Constituent Concentrations in Non-RCRA Well 3-1-3 Versus Constituent Concentrations in RCRA Well 3-1-7.

The second well pair sampled is made up of wells 2-E34-1 and 2-E34-2 located at the low level waste burial ground in the 200 East Area. Well 2-E34-1 was completed in June of 1961 to a depth of 245 ft. It has a carbon steel casing that is perforated between 215 and 230 ft. Well 2-E34-2 was completed in September of 1987 to a depth of 242 ft. It was completed with 4-in. stainless steel casing with stainless steel screen between depths of 220 and 240 ft.

Well 2-E34-1 was sampled on December 4, 1989, and well 2-E34-2 was sampled on November 27, 1989. The concentrations of constituents above detection limits in the two wells are listed in Table 2. The concentrations for the two wells are plotted in Figure 5. Analytical values for filtered metals were not reported for well 2-E34-1, and thus, are not included in the comparison. The data indicate good agreement between the two wells, the major differences being higher iron, chromium, and nickel concentrations in the RCRA compliant well (2-E34-2). These three elements are the principal components of stainless steel and may be a result of stainless steel particulates left in the well during completion. Alternately, they may be a result of stainless steel corrosion brought about by the relatively high chloride content of the local groundwater.

The data available to date, with the exception of higher iron, chromium, and nickel in RCRA compliant well 2-E34-2, indicate that there is little or no difference between the chemistry of groundwater samples collected from older non-RCRA wells and of groundwater samples from more recent RCRA compliant groundwater monitoring wells. The lack of differences in chemical compositions of groundwater samples from the two types of wells is probably attributable to the thorough purging of the wells prior to sampling. The groundwater sampled is in contact with the well materials for too short a time for appreciable reaction to occur at the low temperatures of the groundwater.

Table 2. Constituents Above Detection Level in Wells
2-E34-1 and 2-E34-2.

Constituent	2-E34-1	2-E34-2	Units
Alkalinity	94,000	97,000	(a)
Alpha, HDL	1.1	1.2	pCi/L
Aluminum	500	329	ppb
Arsenic	5	7	ppb
Barium	24	35	ppb
Boron	15	22	ppb
Calcium	42,400	44,400	ppb
Chloride	12,000	11,500	ppb
Chloroform	5	5	ppb
Conductivity, Lab.	447	458	μ mho
Gross Beta	8.7	9.7	pCi/L
Chromium	10	46	ppb
Iron	345	948	ppb
Magnesium	12,300	12,500	ppb
Manganese	26	24	ppb
Nickle	10	46	ppb
Nitrate	10,000	12,000	ppb
Potassium	8,070	7,130	ppb
Silicon	19,700	19,400	ppb
Sodium	23,900	24,100	ppb
Specific Conductivity	438	487	μ mho
Strontium	219	216	ppb
⁹⁰ Sr	-0.2	0.3	pCi/L
TOX, LDL	3	5	ppb
Sulfate	96,700	100,000	ppb
TDS	289,000	286,000	ppb
Tritium	3,480	3,340	ppb
Turbidity	1.6	5	NTU
Uranium	1.3	1.7	pCi/L
Vanadium	19	21	ppb
Zinc	5	8	ppb
pH, field	7.4	7.6	
pH, laboratory	7.7	7.8	

^aAlkalinity is reported in terms of milligrams/liter
of CaCO₃--

Figure 5. Plot of Constituent Concentrations in Non-RCRA Well 2-E34-1 Versus Constituent Concentrations in RCRA Well 2E34-2.

4.2 SITE SUMMARIES

Available information on well and sampling conditions that may have a bearing on sample representativeness is summarized in the following subsections.

- 100-D Ponds - Because there are no groundwater monitoring wells in close proximity to the 100-D Ponds, groundwater quality cannot be evaluated with respect to the effluent stream constituents at this time. Future monitoring wells for the facility are proposed for the RCRA program (Tri-Party Agreement milestone M24-16; Change No. M24-89-1).
- 1324N/NA Pond - Eighteen wells were sampled during the period of interest for the effluent study, of which eight were RCRA-compliant wells. Appendix IX (or equivalent) constituents as well as additional indicator parameters were measured during the period for these wells. One additional non-RCRA-compliant well was sampled only for indicator parameters. It is important to note that six of the non-RCRA-compliant wells used in this study were sampled by bailer, for which anomalous or elevated metal concentrations are expected. A fitness-for-use evaluation (Golder Associates 1989) indicated that six of the non-RCRA well (1-N-16, 1-N-17, 1-N-21, and 1-N-23 through 1-N-25) require remediation.
- 1325N Crib - Eleven non-RCRA wells and one RCRA well were sampled in March, November, and December 1989, for the list of Appendix IX constituents and radionuclides. Abbreviated sampling was performed on one additional non-RCRA-compliant well (1-N-39). The 11 non-RCRA wells sampled are older wells constructed with carbon steel casing, which are subject to corrosion. The fitness-for-use evaluation (Golder Associates 1989) recommends that well 1-N-41 be remediated. Available documentation for the RCRA-compliant well indicates that water level in the well is approximately 40 ft above the screened interval, providing a substantial column of stagnant water in the casing.
- 216-A-8 Crib - Two non-RCRA-compliant wells were sampled on January 9, 1990, for the list of Appendix IX constituents and radionuclides. Only bailed, unfiltered samples were obtained; thus, elevated metal concentrations are expected due to partial dissolution of particulate phases (i.e., sediment and well casing corrosion products). Indicator parameters were also available from operational monitoring and related sampling programs. The fitness-for-use evaluation (Golder Associates 1989) recommends that one of the wells (2-E25-6) be remediated.
- 216-A-29 Ditch - A RCRA interim-status groundwater monitoring program was in place for this facility at the time the effluent study was initiated (Smith and Gorst 1990). This ongoing program was augmented with one sampling event for Appendix IX and site-specific constituents. Six RCRA-compliant wells were sampled, four of which were equipped with Hydrostar sample pumps and two with submersible pumps.

- 216-A-30 Crib - The 216-A-30 Crib is monitored by two non-RCRA-compliant groundwater monitoring wells. Well 2-E25-11 is at the head end of the crib and well 2-E16-2 is at the lower end. Samples from these two wells were collected with a bailer, and anomalously high results for metals are expected. The fitness-for-use evaluation (Golder Associates 1989) recommends that one of the wells (2-E16-2) be remediated and contends that the other well (2-E25-11) may meet RCRA standards but requires agency confirmation.
- 216-A-36B Crib - A total of seven wells were sampled for Appendix IX and site-specific radioactive constituents. Two non-RCRA-compliant wells (2-E17-5 and -9) equipped with submersible pumps were sampled on May 16, 1989. Five RCRA-compliant wells equipped with Hydrostars were sampled on May 12, 1989 (2-E17-17), on May 15, 1989 (2-E17-14 and 2-E17-16), on May 17, 1989 (2-E17-15), and on May 19, 1989 (2-E17-18). Other indicator constituents were available from the operational monitoring program.
- 216-A-37-1 Crib - Four non-RCRA-compliant wells (which included one bailer sampled well) were sampled for this study between January 3 and January 9, 1990, for Appendix IX and site-specific constituents. Other results from operational and RCRA programs during the time period of interest were also included in the analytical summary. According to the fitness-for-use evaluation (Golder Associates 1989), three of the four wells (2-E25-17, 2-E25-19, and 2-E25-20) may meet RCRA standards but require agency confirmation. One of these wells (2-E25-17) has approximately 2 ft of water above the screen.
- 216-A-37-2 Crib - Four non-RCRA-compliant wells equipped with submersible pumps were sampled, on December 14, 1989 (2-E25-22), on December 20, 1989 (2-E25-24), on January 29, 1990 (2-E25-23), and on April 16, 1990 (2-E25-21), for Appendix IX and site-specific radioactive constituents. Other indicator constituents were available from the operational monitoring program. According to a recent well-fitness evaluation (Golder Associates 1989), one of the wells (2-E25-22) requires remediation, and the remaining three may meet RCRA standards but require agency confirmation.
- 216-A-45 Crib - Two RCRA-compliant wells equipped with submersible pumps were sampled on April 17, 1990 (2-E17-12) and November 30, 1989 (2-E17-13) for Appendix IX and site-specific radioactive constituents. Other indicator constituents were available from the operational monitoring program. Both of the wells have between a 2- and 5-ft column of water above the screened interval (Golder Associates 1989).
- 216-B-3 Pond System - Thirteen wells were included in the groundwater sampling network, of which, all but two (6-42-40A and 6-42-40B) were considered RCRA-compliant wells. The two non-RCRA-compliant wells included one bailed well (6-42-40A) for which anomalously high metal concentrations are to be expected. Two of the wells considered RCRA compliant (6-43-43 and 2-E32-4) require a variance from the State, but meet present criteria established

in the Washington Administrative Codes (Golder Associates 1989). The augmented sampling for the effluent study was conducted between December 6, 1989 and January 26, 1990 for which Appendix IX and site-specific radionuclides were analyzed.

- 216-B-55 Crib - Groundwater in the vicinity of the 216-B-55 Crib has been monitored as a part of the Hanford Groundwater Monitoring Program and the Operations Area Monitoring Program for a number of years. Two wells, 299-E28-12 and 299-E28-13, have been sampled over the operational history of the facility. Neither of these wells is constructed to current RCRA standards. One of the wells (2-E28-12) was sampled by bailer, for which elevated metal results are expected. The fitness-for-use evaluation (Golder Associates 1989) recommends that both of the wells be remediated. As a part of this study, the wells were sampled and analyzed for an extended list of analytes.
- 216-B-62 Crib - Two non-RCRA-compliant wells (2-E28-18 and 2-E28-21) equipped with submersible pumps were sampled on January 11, 1990 for Appendix IX and site-specific radioactive constituents. Other indicator constituents were available from the operational monitoring program. According to the evaluation performed by Golder Associates (1989), both of the wells meet the criteria for RCRA wells described in the Washington Administrative Codes, but require agency approval.
- 216-B-63 Ditch - Because there are no groundwater monitoring wells in close proximity to the 216-B-63 Ditch, groundwater quality cannot be evaluated at this time. Future monitoring wells for the facility will be proposed as part of the Westinghouse Hanford RCRA program.
- 216-C-7 Crib - Because there are no groundwater monitoring wells in close proximity to the 216-C-7 Crib, groundwater quality cannot be evaluated with respect to effluent stream constituents at this time. Future monitoring wells for the facility will be proposed as part of the Westinghouse Hanford RCRA program.
- 216-S-10 Ditch - Because there are no groundwater monitoring wells in close proximity to the 216-S-10 Ditch, groundwater quality cannot be evaluated. Six RCRA-compliant monitoring wells were proposed for the facility, but not completed in time to be incorporated in this assessment.
- 216-S-26 Crib - One non-RCRA compliant well equipped with a submersible pump was sampled January 11, 1990 for Appendix IX and site-specific radioactive constituents. Evaluation of the well fitness-for-use (Golder Associates 1989) recommends that the well undergo remediation. Other indicator constituents were available from the operational monitoring program.
- 216-T-1 Ditch - Because there are no groundwater monitoring wells in close proximity to the 216-T-1 Ditch, groundwater quality cannot be evaluated with respect to effluent stream constituents at this time. Given the average volume of effluent discharge and

the presence of a caliche layer, the potential presence and composition of a perched water zone should be considered in plans for future site monitoring of this facility.

- 216-T-4-2 Ditch - Because there are no groundwater monitoring wells in close proximity to the 216-T-4-2 Ditch, groundwater quality cannot be evaluated with respect to effluent stream constituents at this time. Future monitoring wells for the facility will be proposed as part of the Westinghouse Hanford RCRA program.
- 216-U-14 Ditch - Two RCRA-compliant wells equipped with submersible pumps were sampled on November 2, 1989 for Appendix IX and site-specific radioactive constituents. In addition, one non-RCRA well was sampled by bailer on January 2, 1990 for Appendix IX and site-specific radioactive constituents.
- 216-U-17 Crib - The monitoring network for this study consisted of six RCRA-type monitoring wells equipped with submersible sample pumps. Site-specific and Appendix IX constituents were sampled between October 27 and October 31, 1989. Other indicator type parameters available from the operational monitoring program are included in the summary for this study.
- 216-W-LC Crib - One non-RCRA-compliant well (299-W14-10) was bailed and sampled on January 30, 1990 for Appendix IX and site-specific radioactive constituents. The fitness-for-use evaluation (Golder Associates 1989) recommends that this well be remediated. Other indicator constituents were available from the operational monitoring program.
- 216-Z-20 Crib - Two non-RCRA compliant wells (2-W18-17 and 2-W18-20) were sampled in January 1990, for Appendix IX and site-specific radioactive constituents. The fitness-for-use evaluation (Golder Associates 1989) indicates that approximately a 10-ft column of water exists in well 2-W18-17 above the screened interval. Wells at this facility have carbon steel casings and were not equipped with dedicated submersible sample pumps (i.e., only unfiltered samples were initially obtained with a bailer).
- 200-W Powerhouse Pond - Because there are no groundwater monitoring wells in close proximity to the 200-W Powerhouse Pond, groundwater quality cannot be evaluated at this time. Future monitoring wells for the facility will be proposed as part of the Westinghouse Hanford RCRA program.
- 2101-M Pond - Four RCRA-compliant wells (2-E18-1 through 2-E18-4) equipped with Hydrostar positive displacement pumps have been sampled on a quarterly basis from July 1988 to present. The upgradient well (2-E18-1) and one down gradient well (2-E18-3) were sampled for Appendix IX and site-specific radioactive constituents on October 31, 1989 and November 27, 1989, respectively. Other indicator constituents are available for the other two wells from the RCRA monitoring program.

- 300 Area Process Trenches - Groundwater in the vicinity of the 300 Area Process Trenches has been monitored extensively since 1985 in connection with a RCRA interim-status groundwater quality assessment for this facility (Smith and Gorst 1990). Thirty-one wells were sampled during the time period of interest for the liquid effluent study of which over half were RCRA-compliant wells. Appendix IX (or equivalent) constituents and site-specific radionuclide and chemical constituents were analyzed as well. The fitness-for-use evaluation (Golder Associates 1989) recommends that eight of the non-RCRA compliant wells be remediated. Five of the RCRA compliant wells (3-1-12, 3-1-16B, 3-1-16C, 3-1-17B, and 3-1-17C) have water columns of 5- , 60- , 130- , 70- , and 130-ft, respectively, above their screened intervals. One of the non-RCRA compliant wells (3-1-7) has approximately 65 ft of water standing in the casing above the screened interval.
- 400 Area Ponds - One non-RCRA compliant well (6-2-7) with a submersible pump was sampled on April 13, 1990 for Appendix IX and site-specific radioactive constituents. Other indicator constituents were available from the operational monitoring program.

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APPENDIX A

GROUNDWATER DATA

This appendix contains the groundwater analytical results arranged by disposal site in 27 subappendices. A site map with well locations precedes each data table; where there are no monitoring wells, only a site map is included (i.e., the absence of data tables should not be construed as missing data). All analyses performed are listed for every sample analyzed. A "Detected" and "Above Limit" column is provided for which a "yes" entry indicates a detection limit is exceeded or a standard is exceeded (see final project report for definition of standards used as well as additional statistical summary data such as the number of times an analytical result exceeds a detection limit or standard). Listing of the analyte name in the first column from the left signifies that the constituent was analyzed.

Analytes are arranged in four general categories:

- Indicator Parameters
- Drinking Water Parameters
- Groundwater Quality Parameters
- Site-Specific and Other.

The "other" parameters are primarily the Appendix IX organic analytes. Constituents within each of the above groups are arranged alphabetically.

The designation "filtered" following the analyte name indicates the sample was filtered in the field. Analyte/name entries without this designation mean the sample was not filtered.

NOTE

All analytical results listed in data tables are limited to no more than three significant figures; additional places are computer generated (additional places occur only in "average" column; max and min columns indicate correct number of significant figures).

LISTING OF SUBAPPENDICES

100-D Ponds	A1-1
1324N/NA Pond	A2-1
1324N Crib	A3-1
216-A-8 Crib	A4-1
216-A-29 Ditch	A5-1
216-A-30 Crib	A6-1
216-B-36B Crib	A7-1
216-A-37-1 Crib	A8-1
216-A-37-2 Crib	A9-1
216-A-45 Crib	A10-1
216-B-3 Pond System	A11-1
216-B-55 Crib	A12-1
216-B-62 Crib	A13-1
216-C-63 Ditch	A14-1
216-C-7 Crib	A15-1
216-S-10 Ditch	A16-1
216-S-26 Crib	A17-1
216-T-1 Ditch	A18-1
216-T-4-2 Ditch	A19-1
216-U-14 Ditch	A20-1
216-U-17 Crib	A21-1
216-W-LC Crib	A22-1
216-Z-20 Crib	A23-1
200-W Powerhouse Pond	A24-1
2101-M Pond	A25-1
300 Area Process Trenches	A26-1
400 Area Ponds	A27-1

Well Location and Site Map for 100-D Ponds

Well Location and Site Map for 1324N/NA Pond

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	263	1132.80	3890.00	210.00	700.0	YES
	Specific conductance	UMHO	1.00	YES	269	1172.59	3910.00	153.00	700.0	YES
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	118	17.50	137.00	-1.00		
	Total organic carbon	PPB	2000.00	YES	119	1212.61	5600.00	100.00		
	pH, Field Measurement		.10	YES	264	7.38	9.00	6.11	8.5	YES
	pH, Laboratory Measurement		.01	YES	281	7.53	8.90	5.86	8.5	YES
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		41	2.20	10.00	2.00	10.0	
	2,4-D	PPB	2.00		41	2.20	10.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	41	1.53	7.51	-1.83	15.0	
	Alpha-BHC	PPB	.10		41	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	88	5.50	16.00	5.00	50.0	
	Arsenic, filtered	PPB	5.00	YES	68	5.01	6.00	5.00	50.0	
	Barium	PPB	6.00	YES	88	82.42	1010.00	11.00	1000.0	YES
	Barium, filtered	PPB	6.00	YES	70	47.40	163.00	13.00	1000.0	
	Beta-BHC	PPB	.10		41	.10	.10	.10	4.0	
	Cadmium	PPB	2.00	YES	88	6.95	103.00	2.00	10.0	YES
	Cadmium, filtered	PPB	2.00	YES	70	2.09	5.00	2.00	10.0	
	Chromium	PPB	10.00	YES	88	20.60	520.00	10.00	50.0	YES
	Chromium, filtered	PPB	10.00	YES	70	12.00	81.00	10.00	50.0	YES
	Coliform (Membrane Filter)	PPB	1.00	YES	24	1.04	2.00	1.00	1.0	YES
	Coliform bacteria	MPN	2.20	YES	15	6.25	63.00	2.20	1.0	YES
	Delta-BHC	PPB	.10		40	.10	.10	.10	4.0	
	Endrin	PPB	.10		41	.10	.10	.10	.2	
	Fluoride	PPB	500.00	YES	90	1095.78	3900.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		41	.10	.10	.10	4.0	
	Gross beta	PCI/L	8.00	YES	46	61.28	1200.00	.59	50.0	YES
Lead (graphite furnace)	PPB	5.00	YES	88	5.52	16.00	5.00	50.0		
Lead, filtered	PPB	5.00		68	5.00	5.00	5.00	50.0		
Mercury	PPB	.10		85	.10	.10	.10	2.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit	
DRINKING WATER PARAMETERS										
	Mercury, filtered	PPB	.10	64	.10	.10	.10	2.0		
	Methoxychlor	PPB	3.00	41	3.00	3.00	3.00	100.0		
	Nitrate	PPB	500.00	90	8280.11	93000.00	500.00	45000.0	YES	
	Nitrate, High Detection Level	PPB	2500.00	7	4171.43	9200.00	2500.00	45000.0		
	Radium	PCI/L	1.00	41	.29	1.75	.01	100.0		
	Selenium	PPB	5.00	88	5.00	5.00	5.00	10.0		
	Selenium, filtered	PPB	5.00	68	5.00	5.00	5.00	10.0		
	Silver	PPB	10.00	88	10.00	10.00	10.00	50.0		
	Silver, filtered	PPB	10.00	70	10.00	10.00	10.00	50.0		
	Toxaphene	PPB	1.00	41	1.00	1.00	1.00	5.0		
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	90	8941.11	54600.00	1400.00	250000.0		
	Iron	PPB	30.00	88	11756.65	348000.00	30.00	300.0	YES	
	Iron, filtered	PPB	30.00	70	164.09	3590.00	30.00	300.0	YES	
	Manganese	PPB	5.00	88	319.33	4380.00	5.00	50.0	YES	
	Manganese, filtered	PPB	5.00	70	184.80	2860.00	5.00	50.0	YES	
	Phenol	PPB	10.00	24	10.00	10.00	10.00			
	Phenol, low DL	PPB	10.00	16	10.00	10.00	10.00			
	Sodium	PPB	200.00	88	190626.59	1010000.00	3840.00			
	Sodium, filtered	PP3	200.00	70	208804.00	972000.00	3740.00			
	Sulfate	PPB	500.00	90	474125.56	2180000.00	5700.00	250000.0	YES	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00	24	10.00	10.00	10.00			
	1,1,1,2-tetrachlorethane	PPB	10.00	25	10.00	10.00	10.00			
	1,1,1-trichloroethane	PPB	5.00	35	5.00	5.00	5.00	200.0		
	1,1,2,2-tetrachlorethane	PPB	5.00	25	5.00	5.00	5.00			
	1,1,2-trichloroethane	PPB	5.00	35	5.00	5.00	5.00			
	1,1-dichloroethane	PPB	5.00	35	5.00	5.00	5.00			
	1,1-dichloroethylene	PPB	10.00	25	10.00	10.00	10.00	7.0		
	1,1-dimethylhydrazine	PPB	10.00	25	10.00	10.00	10.00			

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2,3,4-tetrachlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		25	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		25	10.00	10.00	10.00	.2	
	1,2-dibromoethane	PPB	10.00		25	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		35	5.00	5.00	5.00	5.0	
	1,2-dichloropropane	PPB	5.00		25	5.00	5.00	5.00	5.0	
	1,2-dimethylhydrazine	PPB	10.00		25	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		24	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		24	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00		25	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		25	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		24	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		25	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		24	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		24	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		24	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		25	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		24	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		25	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		24	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		24	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		24	.01	.01	.01		
	2,4,5-T	PPB	2.00		41	2.20	10.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		24	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		24	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		24	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dinitrophenol	PPB	10.00		24	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		24	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		24	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		24	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		25	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00	YES	24	10.67	26.00	10.00		
	2-acetylaminofluorene	PPB	10.00		24	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		25	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		24	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		24	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		24	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		24	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		24	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		24	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		24	10.00	19.00	10.00		
	2-picoline	PPB	10.00		24	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		24	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		24	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		24	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		24	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		24	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		24	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		24	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		24	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		24	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		24	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		24	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		24	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		24	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		24	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		24	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		24	10.00	10.00	10.00		

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Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Acenaphthalene	PPB	10.00		24	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		24	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		24	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	YES	35	9.71	10.00	5.00		
	Acetonitrile	PPB	10.00		25	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		24	10.00	10.00	10.00		
	Acrolein	PPB	10.00		25	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		24	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		25	10.00	10.00	10.00		
	Aldrin	PPB	.10		25	.10	.10	.10		
	Alkalinity		20000.00	YES	49	170183.67	637000.00	19600.00		
	Allyl Chloride	PPB	100.00		25	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		24	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		24	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	88	264.65	5110.00	150.00	50.0	YES
	Aluminum, filtered	PPB	150.00	YES	70	154.26	302.00	150.00	50.0	YES
	Amitrole	PPB	10.00		24	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	YES	36	55.58	222.00	50.00		
	Aniline	PPB	10.00		24	10.00	10.00	10.00		
	Anthracene	PPB	10.00		24	10.00	10.00	10.00		
	Antimony	PPB	100.00		88	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		70	100.00	100.00	100.00		
	Aramite	PPB	10.00		24	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1221	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1232	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1242	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1248	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1254	PPB	1.00		25	1.68	10.00	1.00	.5	
	Arochlor 1260	PPB	1.00		25	1.68	10.00	1.00	.5	
	Auramine	PPB	10.00		24	10.00	10.00	10.00		
	Benz[a]anthracene	PPB	10.00		24	10.00	10.00	10.00		

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Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benz[cl]acridine	PPB	10.00		24	10.00	10.00	10.00		
	Benzene	PPB	5.00		35	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		24	10.00	10.00	10.00		
	Benzenethoil	PPB	10.00		24	10.00	10.00	10.00		
	Benzidine	PPB	10.00		24	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		24	10.00	10.00	10.00		
	Benzo(k)Fluoranthene	PPB	10.00		24	10.00	10.00	10.00		
	Benzo[a]pyrene	PPB	10.00		24	10.00	10.00	10.00		
	Benzo[b]fluoranthene	PPB	10.00		24	10.00	10.00	10.00		
	Benzo[j]fluoranthene	PPB	10.00		24	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		24	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		24	10.00	10.00	10.00		
	Beryllium	PPB	5.00	YES	88	5.09	8.00	5.00		
	Beryllium, filtered	PPB	5.00	YES	70	5.06	8.00	5.00		
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		24	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		24	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		24	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		24	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	24	10.92	26.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		25	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	88	26.23	222.00	10.00		
	Boron, filtered	PPB	10.00	YES	70	22.20	53.00	10.00		
	Bromide	PPB	1000.00		90	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		25	5.00	5.00	5.00	100.0	
	Bromodichloromethane	PPB	5.00		25	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		25	5.00	5.00	5.00		
	Butyl benzyl phthalate	PPB	10.00		24	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	88	83664.77	302000.00	24000.00		
	Calcium, filtered	PPB	50.00	YES	70	82100.00	292000.00	25000.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		35	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00		25	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		25	2.00	2.00	2.00		

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Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Cesium-137	PCI/L	20.00		44	-22	9.19	-6.98	120.0	
	Chlordane	PPB	1.00		25	1.00	1.00	1.00	2.0	
	Chloronaphazene	PPB	10.00		24	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		24	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		25	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		24	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		25	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		25	10.00	10.00	10.00		
	Chloroform	PPB	5.00	YES	35	6.20	15.00	3.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		25	10.00	10.00	10.00		
	Chrysene	PPB	10.00		24	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		25	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		88	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		70	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		44	1.37	19.30	-8.73	200.0	
	Copper	PPB	10.00	YES	88	14.00	121.00	10.00	1000.0	
	Copper, filtered	PPB	10.00		70	10.00	10.00	10.00		
	Cresols	PPB	10.00		24	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		25	10.00	10.00	10.00		
	Cyanide	PPB	10.00		25	10.00	10.00	10.00		
	DDD	PPB	.10		25	.10	.10	.10		
	DDE	PPB	.10		25	.10	.10	.10		
	DDT	PPB	.10		25	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		24	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		24	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		24	10.00	10.00	10.00		
	Diallate	PPB	10.00		24	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		24	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		24	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		24	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		24	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		24	10.00	10.00	10.00		

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Groundwater Analysis Results for 1324-W/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzofa, ilpyrene	PPB	10.00		24	10.00	10.00	10.00	
	Dibenzofuran	PPB	10.00		24	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00		25	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		25	10.00	10.00	10.00	
	Dieldrin	PPB	.10		25	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		24	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00		25	200.00	200.00	200.00	
	Dihydrosafrole	PPB	10.00		24	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		25	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		24	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		24	10.00	10.00	10.00	
	Dioxane	PPB	500.00		25	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		24	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		25	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		25	.10	.10	.10	
	Endosulfan II	PPB	.10		25	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		25	.50	.50	.50	
	Ethanol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		25	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		25	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		24	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		25	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		24	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		25	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		24	10.00	10.00	10.00	
	Fluorene	PPB	10.00		24	10.00	10.00	10.00	
	Fluoride, Low Detection Level	PPB	20.00	YES	13	287.00	729.00	115.00	4000.0

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CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
SITE SPECIFIC AND OTHER PARAMETERS									
	Formalin	PPB	500.00		25	500.00	500.00	500.00	
	Heptachlor	PPB	.10		25	.10	.10	.10	.4
	Heptachlor epoxide	PPB	.10		25	.10	.10	.10	
	Hexachlorobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Hexachlorobutadiene	PPB	10.00		24	10.00	10.00	10.00	
	Hexachlorocyclopentadiene	PPB	10.00		24	10.00	10.00	10.00	
	Hexachloroethane	PPB	10.00		24	10.00	10.00	10.00	
	Hexachlorophene	PPB	10.00		24	10.00	10.00	10.00	
	Hexachloropropene	PPB	10.00		24	10.00	10.00	10.00	
	Hydrazine, Low Detection Level	PPB	30.00		61	30.00	30.00	30.00	
	Indeno(1,2,3-cd)pyrene	PPB	10.00		24	10.00	10.00	10.00	
	Iodomethane	PPB	10.00		25	10.00	10.00	10.00	
	Isobutyl alcohol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Isodrin	PPB	10.00		24	10.00	10.00	10.00	
	Isophorone	PPB	10.00		24	10.00	10.00	10.00	
	Isosafrole	PPB	10.00		24	10.00	10.00	10.00	
	Kepone	PPB	1.00		25	1.00	1.00	1.00	
	Kerosene	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Lithium	PPB	10.00	YES	88	10.17	14.00	10.00	
	Lithium, filtered	PPB	10.00	YES	70	10.11	14.00	10.00	
	Magnesium	PPB	50.00	YES	88	16103.41	55000.00	4830.00	
	Magnesium, filtered	PPB	50.00	YES	70	15761.14	53200.00	4830.00	
	Maleic hydrazide	PPB	500.00		24	500.00	500.00	500.00	
	Malononitrile	PPB	10.00		24	10.00	10.00	10.00	
	Melphalan	PPB	10.00		24	10.00	10.00	10.00	
	Methacrylonitrile	PPB	10.00		25	10.00	10.00	10.00	
	Methanethiol	PPB	10.00		25	10.00	10.00	10.00	
	Methapyrilene	PPB	10.00		24	10.00	10.00	10.00	
	Metholonyl	PPB	10.00		24	10.00	10.00	10.00	
	Methyl Isobutyl Ketone	PPB	10.00		35	10.00	10.00	10.00	
	Methyl bromide	PPB	10.00		25	10.00	10.00	10.00	
	Methyl chloride	PPB	10.00		25	10.00	10.00	10.00	

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Groundwater Analysis Results for 1324-W/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl ethyl ketone	PPB	10.00		35	9.77	10.00	5.00	
	Methyl methacrylate	PPB	10.00		24	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		24	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		25	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00		35	4.97	5.00	4.00	
	Methylthiouracil	PPB	10.00		24	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		88	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		70	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		24	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		25	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		24	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		24	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		25	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00	YES	24	10.08	12.00	10.00	
	Nickel	PPB	10.00	YES	88	12.85	134.00	10.00	
	Nickel, filtered	PPB	10.00		70	10.00	10.00	10.00	
	Nicotinic acid	PPB	100.00		24	100.00	100.00	100.00	
	Nitrite	PPB	1000.00	YES	90	1038.89	4500.00	1000.00	3300.0 YES
	Nitrobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		24	10.00	10.00	10.00	
	O,O-triethyl phosphorothioate	PPB	10.00		24	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		24	10.00	10.00	10.00	

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Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	P benzoquinone	PPB	10.00		24	10.00	10.00	10.00	
	P-chloro-m-cresol	PPB	10.00		24	10.00	10.00	10.00	
	P-chloroaniline	PPB	10.00		24	10.00	10.00	10.00	
	P-dimethylaminobenzene	PPB	10.00		24	10.00	10.00	10.00	
	P-nitroaniline	PPB	10.00		24	10.00	10.00	10.00	
	PHORATE	PPB	2.00		25	2.00	2.00	2.00	
	Paraldehyde	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Parathion	PPB	2.00		25	2.00	2.00	2.00	
	Pcdd's	PPB	.01		24	.01	.01	.01	
	Pcdf's	PPB	.01		24	.01	.01	.01	
	Pentachlorobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Pentachloroethane	PPB	10.00		25	10.00	10.00	10.00	
	Pentachloronitrobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Pentachlorophenol	PPB	50.00		24	50.00	50.00	50.00	200.0
	Perchlorate	PPB	500.00		14	500.00	500.00	500.00	
	Phenacetin	PPB	10.00		24	10.00	10.00	10.00	
	Phenanthrene	PPB	10.00		24	10.00	10.00	10.00	
	Phenylenediamine	PPB	10.00		24	10.00	10.00	10.00	
	Phosphate	PPB	1000.00	YES	90	1081.11	4600.00	1000.00	
	Phthalic acid esters	PPB	10.00		24	10.00	10.00	10.00	
	Potassium	PPB	100.00	YES	88	5112.95	11200.00	1540.00	
	Potassium, filtered	PPB	100.00	YES	70	4669.00	11200.00	1650.00	
	Pronamide	PPB	10.00		24	10.00	10.00	10.00	
	Propionitrile	PPB	5.00		25	5.00	5.00	5.00	
	Pyrene	PPB	10.00		24	10.00	10.00	10.00	
	Pyridine	PPB	500.00		25	500.00	500.00	500.00	
	Reserpine	PPB	10.00		24	10.00	10.00	10.00	
	Resorcinol	PPB	10.00		24	10.00	10.00	10.00	
	Ruthenium-106	PC/L	172.50		44	9.06	95.80	-57.30	240.0
	Safrol	PPB	10.00		24	10.00	10.00	10.00	
	Silicon	PPB	50.00	YES	88	14592.50	50400.00	5570.00	
	Silicon, filtered	PPB	50.00	YES	70	13237.57	42400.00	5950.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Strontium	PPB	10.00	YES	88	351.13	1050.00	127.00	
	Strontium, filtered	PPB	10.00	YES	70	344.20	995.00	135.00	
	Strontium-90	PCI/L	5.00	YES	44	26.39	415.00	-48	40.0 YES
	Strychnine	PPB	50.00		24	50.00	50.00	50.00	
	Styrene	PPB	5.00		25	5.00	5.00	5.00	5.0
	Sulfur	PPB		YES	1	30.00	30.00	30.00	
	Sulfide	PPB	1000.00		25	1000.00	1000.00	1000.00	
	Sym-trinitrobenzene	PPB	10.00		24	10.00	10.00	10.00	
	Technetium-99	PCI/L	15.00		2	2.81	5.04	.58	4000.0
	Tetrachloroethylene	PPB	5.00		35	4.97	5.00	4.00	5.0
	Tetraethylpyrophosphate	PPB	2.00		25	2.00	2.00	2.00	
	Tetrahydrofuran	PPB	10.00	YES	35	11.43	60.00	10.00	
	Thallium	PPB	5.00		25	5.00	5.00	5.00	
	Thallium, filtered	PPB	5.00		20	5.00	5.00	5.00	
	Thioanox	PPB	10.00		24	10.00	10.00	10.00	
	Thiourea	PPB	200.00		25	200.00	200.00	200.00	
	Thiuram	PPB	10.00		24	10.00	10.00	10.00	
	Tin	PPB	30.00		88	30.00	30.00	30.00	
	Tin, filtered	PPB	30.00		70	30.00	30.00	30.00	
	Titanium	PPB	60.00	YES	88	64.41	322.00	60.00	
	Titanium, filtered	PPB	60.00		70	60.00	60.00	60.00	
	Toluene	PPB	5.00	YES	35	5.03	6.00	5.00	2000.0
	Toluenediamine	PPB	10.00		24	10.00	10.00	10.00	
	Total carbon	PPB	1000.00	YES	15	38100.00	110000.00	19800.00	
	Total dissolved solids		5000.00	YES	14	375642.86	892000.00	138000.00	500000.0 YES
	Trans-1,2-dichloroethene	PPB	5.00		35	5.00	5.00	5.00	70.0
	Tributylphosphoric Acid	PPB	10.00		24	10.00	10.00	10.00	
	Trichloroethylene	PPB	5.00		35	5.00	5.00	5.00	5.0
	Trichloromethanethiol	PPB	10.00		25	10.00	10.00	10.00	
	Trichloromono-fluoromethane	PPB	10.00		25	10.00	10.00	10.00	
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		24	10.00	10.00	10.00	
	Tritium	PCI/L	500.00	YES	45	4194.47	31100.00	-147.00	80000.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1324-N/NA Ponds (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Turbidity	NTU	.10	74	28.37	200.00	.10	5.0
	Unknown	PPB	0.00	3	29.00	41.00	21.00	YES
	Unknown Aromatic Hydrocarbon	PPB		2	23.50	25.00	22.00	
	Unknown Polycyclic Aromatic Hydrocarbon	PPB		1	28.00	28.00	28.00	
	Uranium	PCI/L	.50	46	1.85	6.46	.00	40.0
	Vanadium	PPB	5.00	88	11.82	218.00	5.00	
	Vanadium, filtered	PPB	5.00	70	6.29	15.00	5.00	
	Vinyl Acetate	PPB	5.00	25	5.00	5.00	5.00	
	Vinyl chloride	PPB	10.00	35	10.00	10.00	10.00	2.0
	Warfarin	PPB	10.00	24	10.00	10.00	10.00	
	Xylene-m	PPB	5.00	35	5.00	5.00	5.00	10000.0
	Xylene-o,p	PPB	5.00	35	5.00	5.00	5.00	10000.0
	Zinc	PPB	5.00	88	17.65	239.00	5.00	5000.0
	Zinc, filtered	PPB	5.00	70	10.09	55.00	5.00	5000.0
	Zirconium	PPB	50.00	88	50.00	50.00	50.00	
	Zirconium, filtered	PPB	50.00	70	50.00	50.00	50.00	100.0
	dibromochloromethane	PPB	5.00	25	5.00	5.00	5.00	
	m-Nitroaniline	PPB	10.00	24	10.00	10.00	10.00	
	o-Nitroaniline	PPB	10.00	24	10.00	10.00	10.00	
	o-Nitrophenol	PPB	10.00	24	10.00	10.00	10.00	
	p-Dichlorobenzene	PPB	5.00	59	7.03	10.00	5.00	750.0
	p-Nitrophenol	PPB	10.00	24	10.00	10.00	10.00

Well Location and Site Map for 1325N Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	193	165.33	390.00	106.00	700.0	
	Specific conductance	UMHO	1.00	YES	229	167.12	343.00	98.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	222	29.20	498.00	-1.00		
	Total organic carbon	PPB	2000.00	YES	207	643.48	2300.00	100.00		
	pH, Field Measurement		.10	YES	224	8.06	9.00	7.20	8.5	YES
	pH, Laboratory Measurement		.01	YES	193	8.16	8.53	7.70	8.5	YES
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		58	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		58	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00		59	.74	2.49	-.29	15.0	
	Alpha-BHC	PPB	.10		58	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	59	5.78	14.00	5.00	50.0	
	Arsenic, filtered	PPB	5.00	YES	59	5.37	7.00	5.00	50.0	
	Barium	PPB	6.00	YES	59	15.51	71.00	7.00	1000.0	
	Barium, filtered	PPB	6.00	YES	61	14.23	31.00	7.00	1000.0	
	Beta-BHC	PPB	.10		58	.10	.10	.10	4.0	
	Cadmium	PPB	2.00	YES	59	2.02	3.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00	YES	61	2.02	3.00	2.00	10.0	
	Chromium	PPB	10.00	YES	59	11.68	66.00	10.00	50.0	YES
	Chromium, filtered	PPB	10.00	YES	61	13.00	81.00	10.00	50.0	YES
	Coliform (Membrane Filter)	PPB	1.00		29	1.00	1.00	1.00	1.0	
	Coliform bacteria	MPN	2.20		27	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		58	.10	.10	.10	4.0	
	Endrin	PPB	.10		58	.10	.10	.10	.2	
	Fluoride	PPB	500.00		61	500.00	500.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		58	.10	.10	.10	4.0	
	Gross beta	PCI/L	8.00	YES	59	337.38	2970.00	.87	50.0	YES
Lead (graphite furnace)	PPB	5.00	YES	59	5.07	9.00	5.00	50.0		
Lead, filtered	PPB	5.00		59	5.00	5.00	5.00	50.0		
Mercury	PPB	.10		56	.10	.10	.10	2.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury, filtered	PPB	.10		55	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		58	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	61	6195.03	28800.00	500.00	45000.0	
	Nitrate, High Detection Level	PPB	2500.00	YES	9	5144.44	12100.00	2500.00	45000.0	
	Radium	PCI/L	1.00		58	.05	.47	-.08	100.0	
	Selenium	PPB	5.00		59	5.00	5.00	5.00	10.0	
	Selenium, filtered	PPB	5.00		59	5.00	5.00	5.00	10.0	
	Silver	PPB	10.00		59	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		61	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		58	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	61	1756.89	10300.00	600.00	250000.0	
	Iron	PPB	30.00	YES	59	593.71	13500.00	30.00	300.0	YES
	Iron, filtered	PPB	30.00	YES	61	39.90	439.00	30.00	300.0	YES
	Manganese	PPB	5.00	YES	59	12.41	240.00	5.00	50.0	YES
	Manganese, filtered	PPB	5.00	YES	61	5.20	14.00	5.00	50.0	
	Phenol	PPB	10.00		24	10.40	19.60	10.00		
	Phenol, low DL	PPB	10.00		33	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	59	3997.97	16300.00	1140.00		
	Sodium, filtered	PPB	200.00	YES	61	4222.30	17900.00	1230.00		
	Sulfate	PPB	500.00	YES	61	14424.59	55700.00	7300.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		24	10.40	19.60	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		26	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		58	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		26	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		58	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		58	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		26	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		26	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,2,3,4-tetrachlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2,3,5-tetrachlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2,3-trichlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2,3-trichloropropane	PPB	10.00		26	10.00	10.00	10.00	
	1,2,4,5-tetrachlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2,4-trichlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2-dibromo-3-chloropropane	PPB	10.00		26	10.00	10.00	10.00	.2
	1,2-dibromoethane	PPB	10.00		26	10.00	10.00	10.00	
	1,2-dichlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,2-dichloroethane	PPB	5.00		58	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00		26	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00		26	10.00	10.00	10.00	
	1,2-diphenylhydrazine	PPB	10.00		24	10.40	19.60	10.00	
	1,3,5-trichlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,3-dichlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	1,3-dichloropropane	PPB	5.00		26	5.00	5.00	5.00	
	1,4-dichloro-2-butene	PPB	10.00		26	10.00	10.00	10.00	
	1,4-naphthoquinone	PPB	10.00		24	10.40	19.60	10.00	
	1-(o-chlorophenyl) thiourea	PPB	200.00		24	200.00	200.00	200.00	
	1-Butanol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	1-Butynol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	1-Propanol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	1-acetyl-2-thiourea	PPB	200.00		24	200.00	200.00	200.00	
	1-chloro-2,3-epoxypropane	PPB	10.00		24	10.40	19.60	10.00	
	1-naphthyl-2-thiourea	PPB	200.00		24	200.00	200.00	200.00	
	1-naphthylamine	PPB	10.00		24	10.40	19.60	10.00	
	2,3,4,6-tetrachlorophenol	PPB	10.00		24	10.40	19.60	10.00	
	2,3,7,8 TCDD	PPB	.01		23	.01	.01	.01	
	2,4,5-T	PPB	2.00		58	2.00	2.00	2.00	
	2,4,5-Trichlorophenol	PPB	10.00		24	10.40	19.60	10.00	
	2,4,6-trichlorophenol	PPB	10.00		24	10.40	19.60	10.00	
	2,4-dichlorophenol	PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2,4-dinitrophenol	PPB	10.00		24	10.40	19.60	10.00	
	2,4-dinitrotoluene	PPB	10.00		24	10.40	19.60	10.00	
	2,6-dichlorophenol	PPB	10.00		24	10.40	19.60	10.00	
	2,6-dinitrotoluene	PPB	10.00		24	10.40	19.60	10.00	
	2-Hexanone	PPB	50.00		26	50.00	50.00	50.00	
	2-Methylnaphthalene	PPB	10.00		24	10.40	19.60	10.00	
	2-acetylaminofluorene	PPB	10.00		24	10.40	19.60	10.00	
	2-chloroethyl vinyl ether	PPB	5.00		26	5.00	5.00	5.00	
	2-chloronaphthalene	PPB	10.00		24	10.40	19.60	10.00	
	2-chlorophenol	PPB	10.00		24	10.40	19.60	10.00	
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		24	10.40	19.60	10.00	
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		24	10.40	19.60	10.00	
	2-methylaziridine	PPB	10.00		24	10.40	19.60	10.00	
	2-methylactonitrile	PPB	10.00		24	10.40	19.60	10.00	
	2-naphthylamine	PPB	10.00		24	10.40	19.60	10.00	
	2-picoline	PPB	10.00		24	10.40	19.60	10.00	
	2-propyn-1-ol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		24	10.40	19.60	10.00	
	3,3'-Dichlorobenzidine	PPB	10.00		24	10.40	19.60	10.00	
	3,3'-dimethoxybenzidine	PPB	10.00		24	10.40	19.60	10.00	
	3,3'-dimethylbenzidine	PPB	10.00		24	10.40	19.60	10.00	
	3-chloropropionitrile	PPB	10000.00		24	10000.00	10000.00	10000.00	
	3-methylcholanthrene	PPB	10.00		24	10.40	19.60	10.00	
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		24	10.40	19.60	10.00	
	4,6-dinitro-o-cresol and salts	PPB	10.00		24	10.40	19.60	10.00	
	4-Nitroquinoline 1-oxide	PPB	10.00		24	10.40	19.60	10.00	
	4-aminobiphenyl	PPB	10.00		24	10.40	19.60	10.00	
	4-bromophenyl phenyl ether	PPB	10.00		24	10.40	19.60	10.00	
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		24	10.40	19.60	10.00	
	5-nitro-o-toluidine	PPB	10.00		24	10.40	19.60	10.00	
	7,12-dimethylbenz[a]anthracene	PPB	10.00		24	10.40	19.60	10.00	
	7H-dibenzo[c,g]carbazole	PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Acenaphthalene	PPB	10.00		24	10.40	19.60	10.00	
	Acenaphthene	PPB	10.00		24	10.40	19.60	10.00	
	Acetone - by ABN	PPB	10.00		24	10.40	19.60	10.00	
	Acetone by VOA	PPB	10.00	YES	58	16.48	45.00	5.00	
	Acetonitrile	PPB	10.00		26	10.00	10.00	10.00	
	Acetophenone	PPB	10.00		24	10.40	19.60	10.00	
	Acrolein	PPB	10.00		26	10.00	10.00	10.00	
	Acrylamide	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Acrylonitrile	PPB	10.00		26	10.00	10.00	10.00	
	Aldrin	PPB	.10		25	.10	.10	.10	
	Alkalinity		20000.00	YES	4	95250.00	116000.00	64000.00	
	Allyl Chloride	PPB	100.00		26	100.00	100.00	100.00	
	Allyl alcohol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		24	10.40	19.60	10.00	
	Aluminum	PPB	150.00	YES	59	268.63	5550.00	150.00	50.0 YES
	Aluminum, filtered	PPB	150.00		61	150.00	150.00	150.00	50.0
	Amitrole	PPB	10.00		24	10.40	19.60	10.00	
	Ammonium ion	PPB	50.00	YES	65	50.85	90.00	50.00	
	Aniline	PPB	10.00		24	10.40	19.60	10.00	
	Anthracene	PPB	10.00		24	10.40	19.60	10.00	
	Antimony	PPB	100.00		59	100.00	100.00	100.00	
	Antimony, filtered	PPB	100.00		61	100.00	100.00	100.00	
	Antimony-125	PCI/L	48.00	YES	2	90.10	93.60	86.60	2000.0
	Aramite	PPB	10.00		24	10.40	19.60	10.00	
	Arochlor 1016	PPB	1.00	YES	31	9.64	148.00	1.00	.5 YES
	Arochlor 1221	PPB	1.00	YES	30	1.07	3.21	1.00	.5 YES
	Arochlor 1232	PPB	1.00		30	1.00	1.00	1.00	
	Arochlor 1242	PPB	1.00		30	1.00	1.00	1.00	
	Arochlor 1248	PPB	1.00		30	1.00	1.00	1.00	
	Arochlor 1254	PPB	1.00		30	1.00	1.00	1.00	
	Arochlor 1260	PPB	1.00		30	1.00	1.00	1.00	
	Auramine	PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Benz[a]anthracene	PPB	10.00		24	10.40	19.60	10.00	
	Benz[c]acridine	PPB	10.00		24	10.40	19.60	10.00	
	Benzene	PPB	5.00		58	5.00	5.00	5.00	5.0
	Benzene, dichloromethyl	PPB	10.00		24	10.40	19.60	10.00	
	Benzenethiol	PPB	10.00		24	10.40	19.60	10.00	
	Benidine	PPB	10.00		24	10.40	19.60	10.00	
	Benzo(ghi)perylene	PPB	10.00		24	10.40	19.60	10.00	
	Benzo(k)fluoranthene	PPB	10.00		24	10.40	19.60	10.00	
	Benzo[a]pyrene	PPB	10.00		24	10.40	19.60	10.00	
	Benzo[b]fluoranthene	PPB	10.00		24	10.40	19.60	10.00	
	Benzo[j]fluoranthene	PPB	10.00		24	10.40	19.60	10.00	
	Benzyl Alcohol	PPB	10.00		24	10.40	19.60	10.00	
	Benzyl chloride	PPB	10.00		24	10.40	19.60	10.00	
	Beryllium	PPB	5.00	YES	59	5.05	7.00	5.00	
	Beryllium, filtered	PPB	5.00	YES	61	5.05	8.00	5.00	
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		24	10.40	19.60	10.00	
	Bis(2-chloroethoxy) methane	PPB	10.00		24	10.40	19.60	10.00	
	Bis(2-chloroethyl) ether	PPB	10.00		24	10.40	19.60	10.00	
	Bis(2-chloroisopropyl)ether	PPB	10.00		24	10.40	19.60	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	24	10.57	19.60	10.00	
	Bis(chloromethyl) ether	PPB	5.00		26	5.00	5.00	5.00	
	Boron	PPB	10.00	YES	59	24.95	54.00	10.00	
	Boron, filtered	PPB	10.00	YES	61	24.08	50.00	10.00	
	Bromide	PPB	1000.00		61	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00		26	5.00	5.00	5.00	100.0
	Bromodichloromethane	PPB	5.00		26	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00		26	5.00	5.00	5.00	
	Butyl benzyl phthalate	PPB	10.00		24	10.40	19.60	10.00	
	Calcium	PPB	50.00	YES	59	21500.00	39400.00	17100.00	
	Calcium, filtered	PPB	50.00	YES	61	21875.41	40200.00	16600.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00		58	5.00	5.00	5.00	5.0
	Carbon disulfide	PPB	10.00		26	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
Carbon-14		PCI/L	20.00		1	1.08	1.08	1.08	2800.0
Carbophenothion		PPB	2.00		25	2.00	2.00	2.00	
Cesium-137		PCI/L	20.00		56	-18	6.95	-14.60	120.0
Chlordane		PPB	1.00		25	1.00	1.00	1.00	2.0
Chloronaphazine		PPB	10.00		24	10.40	19.60	10.00	
Chloroalkyl ethers		PPB	10.00		24	10.40	19.60	10.00	
Chlorobenzene		PPB	5.00		26	5.00	5.00	5.00	100.0
Chlorobenzene (by ABN)		PPB	10.00		24	10.40	19.60	10.00	60.0
Chlorobenzilate		PPB	300.00		25	300.00	300.00	300.00	
Chloroethane		PPB	10.00		26	10.00	10.00	10.00	
Chloroform		PPB	5.00	YES	58	6.17	21.00	3.00	100.0
Chloromethyl methyl ether		PPB	10.00		26	10.00	10.00	10.00	
Chrysene		PPB	10.00		24	10.40	19.60	10.00	
Citrus red		PPB	1000.00		24	1000.00	1000.00	1000.00	
Cobalt		PPB	20.00		59	20.00	20.00	20.00	
Cobalt, filtered		PPB	20.00		61	20.00	20.00	20.00	
Cobalt-60		PCI/L	22.50	YES	56	18.12	51.50	-3.84	200.0
Copper		PPB	10.00	YES	59	10.12	17.00	10.00	1000.0
Copper, filtered		PPB	10.00		61	10.00	10.00	10.00	1000.0
Cresols		PPB	10.00		24	10.40	19.60	10.00	
Crotonaldehyde		PPB	10.00		26	10.00	10.00	10.00	
Cyanide		PPB	10.00		25	10.00	10.00	10.00	
DDD		PPB	-10		25	-10	-10	-10	
DDE		PPB	-10		25	-10	-10	-10	
DDT		PPB	-10		25	-10	-10	-10	
Di-n-butyl phthalate		PPB	10.00		24	10.40	19.60	10.00	
Di-n-octyl phthalate		PPB	10.00		24	10.40	19.60	10.00	
Di-n-propylnitrosamine		PPB	10.00		24	10.40	19.60	10.00	
Diallate		PPB	10.00		24	10.40	19.60	10.00	
Dibenz[a,h]acridine		PPB	10.00		24	10.40	19.60	10.00	
Dibenz[a,h]anthracene		PPB	10.00		24	10.40	19.60	10.00	
Dibenz[a,j]acridine		PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzo[a,e]pyrene	PPB	10.00		24	10.40	19.60	10.00	
	Dibenzo[a,h]pyrene	PPB	10.00		24	10.40	19.60	10.00	
	Dibenzo[a,i]pyrene	PPB	10.00		24	10.40	19.60	10.00	
	Diben[ofuran	PPB	10.00		24	10.40	19.60	10.00	
	Dibromomethane	PPB	10.00		26	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		26	10.00	10.00	10.00	
	Dieldrin	PPB	.10		25	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		24	10.40	19.60	10.00	
	Diethylstilbesterol	PPB	200.00		24	200.00	200.00	200.00	
	Dihydrosofraole	PPB	10.00		24	10.40	19.60	10.00	
	Dimethoate	PPB	2.00		25	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		24	10.40	19.60	10.00	
	Dinitrobenzene	PPB	10.00		24	10.40	19.60	10.00	
	Dinoseb	PPB	10.00		24	10.40	19.60	10.00	
	Dioxane	PPB	500.00		26	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		24	10.40	19.60	10.00	
	Disulfoton	PPB	2.00		25	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		25	.10	.10	.10	
	Endosulfan II	PPB	.10		25	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		25	.50	.50	.50	
	Ethanol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		26	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		26	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		24	10.40	19.60	10.00	
	Ethylene Glycol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		26	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		24	10.40	19.60	10.00	
	Ethylenethiourea	PPB	200.00		24	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-W Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
SITE SPECIFIC AND OTHER PARAMETERS									
	Fluorene	PPB	10.00		24	10.40	19.60	10.00	
	Fluoride, Low Detection Level	PPB	20.00	YES	11	198.00	280.00	155.00	4000.0
	Formalin	PPB	500.00		26	500.00	500.00	500.00	
	Heptachlor	PPB	.10		25	.10	.10	.10	.4
	Heptachlor epoxide	PPB	.10		25	.10	.10	.10	
	Hexachlorobenzene	PPB	10.00		24	10.40	19.60	10.00	
	Hexachlorobutadiene	PPB	10.00		24	10.40	19.60	10.00	
	Hexachlorocyclopentadiene	PPB	10.00		24	10.40	19.60	10.00	
	Hexachloroethane	PPB	10.00		24	10.40	19.60	10.00	
	Hexachlorophene	PPB	10.00		24	10.40	19.60	10.00	
	Hexachloropropene	PPB	10.00		24	10.40	19.60	10.00	
	Hydrazine, Low Detection Level	PPB	30.00		51	30.00	30.00	30.00	
	Indeno(1,2,3-cd)pyrene	PPB	10.00		24	10.40	19.60	10.00	
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	-.02	.00	-.05	20.0
	Iodomethane	PPB	10.00		26	10.00	10.00	10.00	
	Isobutyl alcohol	PPB	10000.00		24	10000.00	10000.00	10000.00	
	Isodrin	PPB	10.00		24	10.40	19.60	10.00	
	Isophorone	PPB	10.00		24	10.40	19.60	10.00	
	Isosafrole	PPB	10.00		24	10.40	19.60	10.00	
	Kepone	PPB	1.00		25	1.00	1.00	1.00	
	Kerosene	PPB	10000.00		24	10400.00	19600.00	10000.00	
	Lithium	PPB	10.00		59	10.00	10.00	10.00	
	Lithium, filtered	PPB	10.00		61	10.00	10.00	10.00	
	Magnesium	PPB	50.00	YES	59	4608.64	10600.00	2790.00	
	Magnesium, filtered	PPB	50.00	YES	61	4716.07	11400.00	2660.00	
	Maleic hydrazide	PPB	500.00		24	520.00	980.00	500.00	
	Malonitrile	PPB	10.00		24	10.40	19.60	10.00	
	Melphalan	PPB	10.00		24	10.40	19.60	10.00	
	Methacrylonitrile	PPB	10.00		26	10.00	10.00	10.00	
	Methanethiol	PPB	10.00		26	10.00	10.00	10.00	
	Methapyrilene	PPB	10.00		24	10.40	19.60	10.00	
	Metholonyl	PPB	10.00		24	10.40	19.60	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl Isobutyl Ketone	PPB	10.00		58	9.95	10.00	7.00		
	Methyl bromide	PPB	10.00		26	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		26	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00	YES	58	9.67	18.00	3.00		
	Methyl methacrylate	PPB	10.00		24	10.40	19.60	10.00		
	Methyl methanesulfonate	PPB	10.00		24	10.40	19.60	10.00		
	Methyl parathion	PPB	2.00		25	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		58	4.84	5.00	3.00		
	Methylthiouracil	PPB	10.00		24	10.40	19.60	10.00		
	Molybdenum	PPB	40.00		59	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		61	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		24	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		26	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosodiethanolamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosodiethylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosodimethylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosomethylethylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosomorpholine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosomonicotine	PPB	10.00		24	10.40	19.60	10.00		
	N-nitrosopiperidine	PPB	10.00		24	10.40	19.60	10.00		
	N-phenylthiourea	PPB	500.00		24	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		24	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		24	10.40	19.60	10.00		
	Nickel	PPB	10.00	YES	59	18.07	479.00	10.00		
	Nickel, filtered	PPB	10.00	YES	61	10.26	19.00	10.00		
	Nickel-63	PCL/L	10.00		1	5.01	5.01	5.01	12000.0	
	Nicotinic acid	PPB	100.00		24	104.00	196.00	100.00		
	Nitrite	PPB	1000.00		61	1000.00	1000.00	1000.00		3300.0

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Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Nitrobenzene	PPB	10.00		24	10.40	19.60	10.00		
	Nitrosopyrrolidine	PPB	10.00		24	10.40	19.60	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		24	10.40	19.60	10.00		
	O-toluidine hydrochloride	PPB	10.00		24	10.40	19.60	10.00		
	P benzoquinone	PPB	10.00		24	10.40	19.60	10.00		
	P-chloro-m-cresol	PPB	10.00		24	10.40	19.60	10.00		
	P-chloroaniline	PPB	10.00		24	10.40	19.60	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		24	10.40	19.60	10.00		
	P-nitroaniline	PPB	10.00		24	10.40	19.60	10.00		
	PHORATE	PPB	2.00		25	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		24	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		25	2.00	2.00	2.00		
	Pcdd's	PPB	.01		23	.01	.01	.01		
	Pcdf's	PPB	.01		23	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		24	10.40	19.60	10.00		
	Pentachloroethane	PPB	10.00		26	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		24	10.40	19.60	10.00		
	Pentachlorophenol	PPB	50.00		24	52.00	98.00	50.00	200.0	
	Perchlorate	PPB	500.00		12	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		24	10.40	19.60	10.00		
	Phenanthrene	PPB	10.00		24	10.40	19.60	10.00		
	Phenylenediamine	PPB	10.00		24	10.40	19.60	10.00		
	Phosphate	PPB	1000.00		61	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		24	10.40	19.60	10.00		
	Plutonium-238	PCI/L	.10		3	.00	.00	.01	1.6	
	Plutonium-239/40	PCI/L	.10		3	.00	.00	.00	1.2	
	Potassium	PPB	100.00	YES	59	2509.49	4690.00	1330.00		
	Potassium, filtered	PPB	100.00	YES	61	2531.97	5000.00	1230.00		
	Pronamide	PPB	10.00		24	10.40	19.60	.00		
	Propionitrile	PPB	5.00		26	5.00	5.00	5.00		
	Pyrene	PPB	10.00		24	10.40	19.60	10.00		
	Pyridine	PPB	500.00		26	500.00	500.00	500.00		

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Groundwater Analysis Results for 1325-N Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Reserpine	PPB	10.00		24	10.40	19.60	10.00		
	Resorcinol	PPB	10.00		24	10.40	19.60	10.00		
	Ruthenium-106	PCI/L	172.50		56	9.87	65.40	-86.80	240.0	
	Safrol	PPB	10.00		24	10.40	19.60	10.00		
	Silicon	PPB	50.00	YES	59	9728.31	27300.00	4800.00		
	Silicon, filtered	PPB	50.00	YES	61	9542.95	15800.00	4540.00		
	Strontium	PPB	10.00	YES	59	117.24	235.00	72.00		
	Strontium, filtered	PPB	10.00	YES	61	120.56	271.00	70.00		
	Strontium-90	PCI/L	5.00	YES	56	195.37	1750.00	-48	40.0	YES
	Strychnine	PPB	50.00		24	52.00	98.00	50.00		
	Styrene	PPB	5.00		26	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		24	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		24	10.40	19.60	10.00		
	Technetium-99	PCI/L	15.00		6	3.61	6.73	-38	4000.0	
	Tetrachloroethylene	PPB	5.00		58	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		25	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		58	9.97	10.00	8.00		
	Thallium	PPB	5.00		25	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		25	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		24	10.40	19.60	10.00		
	Thiourea	PPB	200.00		24	200.00	200.00	200.00		
	Thiuram	PPB	10.00		24	10.40	19.60	10.00		
	Tin	PPB	30.00		59	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		61	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	59	66.22	420.00	60.00		
	Titanium, filtered	PPB	60.00		61	60.00	60.00	60.00		
	Toluene	PPB	5.00		58	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		24	10.40	19.60	10.00		
	Total carbon	PPB	1000.00	YES	23	15417.39	23900.00	11400.00		
	Total dissolved solids	PPB	5000.00	YES	12	105041.67	227000.00	70000.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00		58	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		24	10.40	19.60	10.00		

Groundwater Analysis Results for 1325-N Crib (1989-1990)

A3-14

N42000

Water Table too Flat to Generalize
Ground Water Flow Direction

N41800

N41800

N41400

N41200

- Ground Water Monitoring Wells
- Vadose Zone Monitoring Wells
- (Numbers in Parentheses are Tank Farm ID Numbers for Wells)

AGL\216-A-8.DWG

Well Location and Site Map for 216-A-8 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
CONTAMINATION INDICATOR PARAMETERS									
Conductivity, Laboratory	UMHO		1.00	YES	4	234.00	242.00	220.00	700.0
Specific conductance	UMHO		1.00	YES	4	222.75	256.00	203.00	700.0
Total Organic Halogen, Low Det. Level	PPB		10.00		4	4.00	6.00	2.00	
Total organic carbon	PPB		2000.00		2	700.00	700.00	700.00	
pH, Field Measurement			.10	YES	4	8.27	8.64	7.80	8.5 YES
pH, Laboratory Measurement			.01	YES	4	7.75	7.80	7.60	8.5
DRINKING WATER PARAMETERS									
2,4,5-TP silvex	PPB		2.00		2	2.00	2.00	2.00	10.0
2,4-D	PPB		2.00		2	2.00	2.00	2.00	100.0
Alpha, High Detection Level	PCI/L		4.00		10	2.52	3.80	.66	15.0
Alpha-BHC	PPB		.10		2	.10	.10	.10	4.0
Arsenic	PPB		5.00	YES	2	18.00	21.00	15.00	50.0
Barium	PPB		6.00	YES	2	265.50	289.00	242.00	1000.0
Beta-BHC	PPB		.10		2	.10	.10	.10	4.0
Cadmium	PPB		2.00	YES	2	68.00	81.00	55.00	10.0 YES
Chromium	PPB		10.00	YES	2	141.50	153.00	130.00	50.0 YES
Coliform bacteria	MPN		2.20		2	2.20	2.20	2.20	1.0
Delta-BHC	PPB		.10		2	.10	.10	.10	4.0
Endrin	PPB		.10		2	.10	.10	.10	.2
Fluoride	PPB		500.00		4	500.00	500.00	500.00	4000.0
Gamma-BHC	PPB		.10		2	.10	.10	.10	4.0
Gross alpha	PCI/L		4.00		3	1.24	1.73	.36	15.0
Gross beta	PCI/L		8.00	YES	13	5.58	8.18	3.05	50.0
Lead (graphite furnace)	PPB		5.00	YES	2	14.00	19.00	9.00	50.0
Mercury	PPB		.10		2	.10	.10	.10	2.0
Methoxychlor	PPB		3.00		2	3.00	3.00	3.00	100.0
Nitrate	PPB		500.00	YES	4	1525.00	1700.00	1400.00	45000.0
Nitrate, High Detection Level	PPB		2500.00	YES	4	2750.00	3500.00	2500.00	45000.0
Radium	PCI/L		1.00	YES	2	1.01	1.52	.49	100.0
Selenium	PPB		5.00		2	5.00	5.00	5.00	10.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
Silver		PPB	10.00		2	10.00	10.00	10.00	50.0	
Toxaphene		PPB	1.00		2	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
Chloride		PPB	500.00	YES	4	3475.00	4000.00	3000.00	250000.0	
Iron		PPB	30.00	YES	2	259500.00	312000.00	207000.00	300.0	YES
Manganese		PPB	5.00	YES	2	2010.00	2090.00	1930.00	50.0	YES
Phenol		PPB	10.00		2	10.00	10.00	10.00		
Sodium		PPB	200.00	YES	2	14500.00	14600.00	14400.00		
Sulfate		PPB	500.00	YES	4	17775.00	23400.00	14100.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
0,0-Diethyl-0,2-pyrazinyl phosphorothion		PPB	10.00		2	10.00	10.00	10.00		
1,1,1,2-tetrachloroethane		PPB	10.00		2	10.00	10.00	10.00		
1,1,1-trichloroethane		PPB	5.00		4	5.00	5.00	5.00	200.0	
1,1,2,2-tetrachloroethane		PPB	5.00		2	5.00	5.00	5.00		
1,1,2-trichloroethane		PPB	5.00		4	5.00	5.00	5.00		
1,1-dichloroethane		PPB	5.00		4	5.00	5.00	5.00		
1,1-dichloroethylene		PPB	10.00		2	10.00	10.00	10.00	7.0	
1,1-dimethylhydrazine		PPB	10.00		2	10.00	10.00	10.00		
1,2,3,4-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3,5-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3-trichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3-trichloropropane		PPB	10.00		2	10.00	10.00	10.00		
1,2,4,5-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,4-trichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2-dibromo-3-chloropropane		PPB	10.00		2	10.00	10.00	10.00	.2	
1,2-dibromoethane		PPB	10.00		2	10.00	10.00	10.00		
1,2-dichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2-dichloroethane		PPB	5.00		4	5.00	5.00	5.00	5.0	
1,2-dichloropropane		PPB	5.00		2	5.00	5.00	5.00	5.0	
1,2-dimethylhydrazine		PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		2	.01	.01	.01		
	2,4,5-T	PPB	2.00		2	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2-picoline	PPB	10.00		2	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		2	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		2	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		2	10.00	10.00	19.00		
	Acenaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		2	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		2	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00		4	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		2	10.00	10.00	10.00		
	Acrolein	PPB	10.00		2	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Aldrin	PPB	.10		2	.10	.10	.10		
	Allyl Chloride	PPB	100.00		2	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Alpha,alpha-dimethylphenethylamine	PPB	10.00	2	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	4630.00	4730.00	4530.00	50.0	YES
	Amitrole	PPB	10.00		10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	YES	73.50	97.00	50.00		
	Aniline	PPB	10.00		10.00	10.00	10.00		
	Anthracene	PPB	10.00		10.00	10.00	10.00		
	Antimony	PPB	100.00		100.00	100.00	100.00		
	Arsenite	PPB	10.00		10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		10.00	10.00	10.00		
	Benz[a]anthracene	PPB	10.00		10.00	10.00	10.00		
	Benz[cl]acridine	PPB	10.00		10.00	10.00	10.00		
	Benzene	PPB	5.00		5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		10.00	10.00	10.00		
	Benzenethiol	PPB	10.00		10.00	10.00	10.00		
	Benzidine	PPB	10.00		10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		10.00	10.00	10.00		
	Benzo(k)Fluoranthene	PPB	10.00		10.00	10.00	10.00		
	Benzo[a]pyrene	PPB	10.00		10.00	10.00	10.00		
	Benzo[b]fluoranthene	PPB	10.00		10.00	10.00	10.00		
Benzo[j]fluoranthene	PPB	10.00		10.00	10.00	10.00			
Benzyl Alcohol	PPB	10.00		10.00	10.00	10.00			
Benzyl chloride	PPB	10.00		10.00	10.00	10.00			
Beryllium	PPB	5.00		5.00	5.00	5.00	5.00		
Bis(2-chloro-1-methylethyl)ether	PPB	10.00		10.00	10.00	10.00	10.00		
Bis(2-chloroethoxy) methane	PPB	10.00		10.00	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroisopropyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	2	35.00	46.00	24.00		
	Bromide	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	2	35450.00	35900.00	35000.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00		6	-31	1.71	-2.12	120.0	
	Chlordane	PPB	1.00		2	1.00	1.00	1.00	2.0	
	Chloronaphazine	PPB	10.00		2	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		2	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		2	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		2	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		2	10.00	10.00	10.00	100.0	
	Chloroform	PPB	5.00		4	5.00	5.00	5.00		
	Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00		
	Chrysene	PPB	10.00		2	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00	YES	2	22.00	24.00	20.00		
	Cobalt-60	PCI/L	22.50		6	.55	2.46	-2.97	200.0	
	Copper	PPB	10.00	YES	2	70.00	75.00	65.00	1000.0	
	Cresols	PPB	10.00		2	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00		
	Cyanide	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	DDD	PPB	.10	2	.10	.10	.10		
	DDE	PPB	.10	2	.10	.10	.10		
	DDT	PPB	.10	2	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Di-n-propylinitrosamine	PPB	10.00	2	10.00	10.00	10.00		
	Diallate	PPB	10.00	2	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00	2	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00	2	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00	2	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00	2	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00	2	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00	2	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00	2	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00	2	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	2	10.00	10.00	10.00		
	Dieldrin	PPB	.10	2	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Diethylstilbestrol	PPB	200.00	2	200.00	200.00	200.00		
	Dihydrosafrole	PPB	10.00	2	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	2	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	2	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	2	10.00	10.00	10.00		
	Dioxane	PPB	500.00	2	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	2	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	2	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	2	.10	.10	.10		
	Endosulfan II	PPB	.10	2	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	2	.50	.50	.50		
	Ethanol	PPB	10000.00	2	10000.00	10000.00	10000.00		

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

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EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
								Max Limit
								Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Magnesium	PPB	50.00	YES	2	8315.00	8590.00	8040.00
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00
	Malonitrile	PPB	10.00		2	10.00	10.00	10.00
	Melphalan	PPB	10.00		2	10.00	10.00	10.00
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00
	Methyl ethyl ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00
	Methylene Chloride	PPB	5.00		4	5.00	5.00	5.00
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00
	Monobutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
N-propylamine		PPB	10000.00		2	10000.00	10000.00	10000.00	
Naphthalene		PPB	10.00		2	10.00	10.00	10.00	
Natural uranium		UG/L	.73	YES	2	3.02	3.76	2.27	59.0
Nickel		PPB	10.00	YES	2	84.00	89.00	79.00	
Nicotinic acid		PPB	100.00		2	100.00	100.00	100.00	
Nitrite		PPB	1000.00		4	1000.00	1000.00	1000.00	3300.0
Nitrobenzene		PPB	10.00		2	10.00	10.00	10.00	
Nitroscyrrolidine		PPB	10.00		2	10.00	10.00	10.00	
O,O,O-triethyl phosphorothioate		PPB	10.00		2	10.00	10.00	10.00	
O-toluidine hydrochloride		PPB	10.00		2	10.00	10.00	10.00	
P benzoquinone		PPB	10.00		2	10.00	10.00	10.00	
P-chloro-m-cresol		PPB	10.00		2	10.00	10.00	10.00	
P-chloroaniline		PPB	10.00		2	10.00	10.00	10.00	
P-dimethylaminoazobenzene		PPB	10.00		2	10.00	10.00	10.00	
P-nitroaniline		PPB	10.00		2	10.00	10.00	10.00	
PHORATE		PPB	2.00		2	2.00	2.00	2.00	
Paraldehyde		PPB	10000.00		2	10000.00	10000.00	10000.00	
Parathion		PPB	2.00		2	2.00	2.00	2.00	
Pcdd's		PPB	.01		2	.01	.01	.01	
Pcdf's		PPB	.01		2	.01	.01	.01	
Pentachlorobenzene		PPB	10.00		2	10.00	10.00	10.00	
Pentachloroethane		PPB	10.00		2	10.00	10.00	10.00	
Pentachloronitrobenzene		PPB	10.00		2	10.00	10.00	10.00	
Pentachlorophenol		PPB	50.00		2	50.00	50.00	50.00	200.0
Perchlorate		PPB	500.00		2	500.00	500.00	500.00	
Phenacetin		PPB	10.00		2	10.00	10.00	10.00	
Phenanthrene		PPB	10.00		2	10.00	10.00	10.00	
Phenylenediamine		PPB	10.00		2	10.00	10.00	10.00	
Phosphate		PPB	1000.00		4	1000.00	1000.00	1000.00	
Phthalic acid esters		PPB	10.00		2	10.00	10.00	10.00	
Plutonium-238		PCI/L	.10		2	.00	.00	.00	1.6
Plutonium-239/40		PCI/L	.10		2	.03	.04	.01	1.2

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Potassium		PPB	150.00	YES	2	5185.00	5190.00	5180.00		
Pronamide		PPB	10.00		2	10.00	10.00	10.00		
Propionitrile		PPB	5.00		2	5.00	5.00	5.00		
Pyrene		PPB	10.00		2	10.00	10.00	10.00		
Pyridine		PPB	500.00		2	500.00	500.00	500.00		
Reserpine		PPB	10.00		2	10.00	10.00	10.00		
Benocinol		PPB	10.00		2	10.00	10.00	10.00		
Ruthenium-106		PCI/L	172.50		6	11.31	48.00	-20.40	240.0	
Safrol		PPB	10.00		2	10.00	10.00	10.00		
Silicon		PPB	50.00	YES	2	39950.00	44800.00	35100.00		
Strontium		PPB	10.00	YES	2	167.00	173.00	161.00		
Strontium-90		PCI/L	5.00		6	-.02	.28	-.36	40.0	
Strychnine		PPB	50.00		2	50.00	50.00	50.00		
Styrene		PPB	5.00		2	5.00	5.00	5.00	5.0	
Sulfide		PPB	1000.00		2	1000.00	1000.00	1000.00		
Sym-trinitrobenzene		PPB	10.00		2	10.00	10.00	10.00		
Technetium-99		PCI/L	15.00		2	3.22	3.35	3.08	4000.0	
Tetrachloroethylene		PPB	5.00		4	5.00	5.00	5.00	5.0	
Tetraethylpyrophosphate		PPB	2.00		2	2.00	2.00	2.00		
Tetrahydrofuran		PPB	10.00		4	10.00	10.00	10.00		
Thallium		PPB	5.00		2	5.00	5.00	5.00		
Thiofanox		PPB	10.00		2	10.00	10.00	10.00		
Thiourea		PPB	200.00		2	200.00	200.00	200.00		
Thiuram		PPB	10.00		2	10.00	10.00	10.00		
Tin		PPB	30.00		2	30.00	30.00	30.00		
Tin 113 Daughter		PPB			2	-.54	.34	-1.42	2000.0	
Titanium		PPB	60.00	YES	2	442.00	461.00	423.00		
Toluene		PPB	5.00		4	5.00	5.00	5.00	2000.0	
Toluenediamine		PPB	10.00		2	10.00	10.00	10.00		
Total carbon		PPB	1000.00	YES	2	20800.00	21300.00	20300.00		
Trans-1,2-dichloroethene		PPB	5.00		4	5.00	5.00	5.00	70.0	
Tributylphosphoric Acid		PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-8 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Trichloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		2	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		2	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	10	4517.00	8620.00	2600.00	80000.0	
	Turbidity	NTU	.10	YES	2	155.50	200.00	111.00	5.0	YES
	Uranium	PCI/L	.50	YES	2	1.73	1.94	1.52	40.0	
	Vanadium	PPB	5.00	YES	2	335.50	336.00	335.00		
	Vinyl Acetate	PPB	5.00		2	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		4	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		2	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	2	30.00	36.00	24.00	5000.0	
	Zirconium	PPB	50.00		2	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		6	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00

Well Location and Site Map for 216-A-29 Ditch

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory	Specific conductance	UMHO	1.00	YES	51	372.22	794.00	160.00	700.0	YES
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	126	19.10	329.00	.01	700.0	YES
	Total organic carbon	PPB	2000.00		118	616.31	1500.00	200.00		
	pH, Field Measurement		.10	YES	118	8.01	8.80	6.90	8.5	YES
	pH, Laboratory Measurement		.01	YES	51	7.98	8.23	7.30	8.5	
DRINKING WATER PARAMETERS										
2,4,5-TP silvex	2,4-D	PPB	2.00		30	2.00	2.00	2.00	10.0	
	Alpha, High Detection Level	PPB	2.00		30	2.00	2.00	2.00	100.0	
	Alpha-BHC	PPB	4.00	YES	30	1.81	5.53	.10	15.0	
	Arsenic	PPB	.10		33	.10	.10	.10	4.0	
	Arsenic, filtered	PPB	5.00	YES	43	6.40	11.00	5.00	50.0	
	Barium	PPB	5.00	YES	43	6.53	11.00	5.00	50.0	
	Barium, filtered	PPB	6.00	YES	43	17.12	36.00	9.00	1000.0	
	Beta-BHC	PPB	6.00	YES	43	16.95	34.00	11.00	1000.0	
	Cadmium	PPB	.10		33	.10	.10	.10	4.0	
	Cadmium, filtered	PPB	2.00		43	2.00	2.00	2.00	10.0	
	Chromium	PPB	2.00		43	2.00	2.00	2.00	10.0	
	Chromium, filtered	PPB	10.00	YES	43	43.67	140.00	10.00	50.0	YES
	Coliform (Membrane Filter)	PPB	10.00	YES	43	10.00	10.00	10.00	50.0	
	Coliform bacteria	PPB	1.00		12	1.00	1.00	1.00	1.0	
	Delta-BHC	MPN	2.20		17	2.20	2.20	2.20	1.0	
	Endrin	PPB	.10		33	.10	.10	.10	4.0	
	Fluoride	PPB	.10		33	.10	.10	.10	.2	
	Gamma-BHC	PPB	500.00	YES	31	535.61	1000.00	500.00	4000.0	
Gross alpha	Gross beta	PPB	.10		33	.10	.10	.10	4.0	
	Lead (graphite furnace)	PPB	4.00		1	1.41	1.41	1.41	15.0	
	Lead, filtered	PPB	8.00	YES	31	6.19	23.00	.63	50.0	
		PPB	5.00	YES	32	5.03	6.00	5.00	50.0	
		PPB	5.00		32	5.00	5.00	5.00	50.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury	PPB	.10		30	.10	.10	.10	2.0	
	Mercury, filtered	PPB	.10		30	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		33	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	31	3424.71	12500.00	700.00	45000.0	
	Radium	PCI/L	1.00		31	.15	.55	.06	100.0	
	Selenium	PPB	5.00	YES	43	5.14	7.00	5.00	10.0	
	Selenium, filtered	PPB	5.00	YES	43	5.16	7.00	5.00	10.0	
	Silver	PPB	10.00		43	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		43	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		33	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	31	4231.61	8000.00	2800.00	250000.0	YES
	Iron	PPB	30.00	YES	43	278.40	804.00	30.00	300.0	
	Iron, filtered	PPB	30.00	YES	43	32.37	61.00	30.00	300.0	
	Manganese	PPB	5.00	YES	43	8.23	27.00	5.00	50.0	
	Manganese, filtered	PPB	5.00	YES	43	5.05	6.00	5.00	50.0	
	Phenol	PPB	10.00		11	10.00	10.00	10.00		
	Phenol, low DL	PPB	10.00		23	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	43	13371.40	45000.00	5260.00		
	Sodium, filtered	PPB	200.00	YES	43	13598.37	45900.00	5400.00		
	Sulfate	PPB	500.00	YES	31	53177.42	221000.00	11700.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		7	10.00	10.00	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		6	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		29	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		6	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		29	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		29	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		6	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		6	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,2,3,4-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00	6	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00	6	10.00	10.00	10.00	.2	
	1,2-dibromoethane	PPB	10.00	6	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00	29	5.00	5.00	5.00	5.00	
	1,2-dichloropropane	PPB	5.00	6	5.00	5.00	5.00	5.00	
	1,2-dimethylhydrazine	PPB	10.00	6	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00	7	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00	11	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00	6	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00	6	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00	7	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00	9	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00	9	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00	7	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00	9	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00	7	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00	7	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01	9	.01	.01	.01		
	2,4,5-T	PPB	2.00	30	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00	7	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00	7	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00	7	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2,4-dinitrophenol	PPB	10.00		7	10.00	10.00	10.00	
	2,4-dinitrotoluene	PPB	10.00		7	10.00	10.00	10.00	
	2,6-dichlorophenol	PPB	10.00		7	10.00	10.00	10.00	
	2,6-dinitrotoluene	PPB	10.00		7	10.00	10.00	10.00	
	2-Hexanone	PPB	50.00		6	50.00	50.00	50.00	
	2-Methylnaphthalene	PPB	10.00		7	10.00	10.00	10.00	
	2-acetylaminofluorene	PPB	10.00		7	10.00	10.00	10.00	
	2-chloroethyl vinyl ether	PPB	5.00		6	5.00	5.00	5.00	
	2-chloronaphthalene	PPB	10.00		7	10.00	10.00	10.00	
	2-chlorophenol	PPB	10.00		7	10.00	10.00	10.00	
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		7	10.00	10.00	10.00	
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		7	10.00	10.00	10.00	
	2-methylaziridine	PPB	10.00		7	10.00	10.00	10.00	
	2-methylactonitrile	PPB	10.00		7	10.00	10.00	10.00	
	2-naphthylamine	PPB	10.00		7	10.00	10.00	10.00	
	2-picoline	PPB	10.00		7	10.00	10.00	10.00	
	2-propyn-1-ol	PPB	10000.00		10	10000.00	10000.00	10000.00	
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		7	10.00	10.00	10.00	
	3,3'-Dichlorobenzidine	PPB	10.00		7	10.00	10.00	10.00	
	3,3'-dimethoxybenzidine	PPB	10.00		7	10.00	10.00	10.00	
	3,3'-dimethylbenzidine	PPB	10.00		7	10.00	10.00	10.00	
	3-chloropropionitrile	PPB	10000.00		10	10000.00	10000.00	10000.00	
	3-methylcholanthrene	PPB	10.00		7	10.00	10.00	10.00	
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		7	10.00	10.00	10.00	
	4,6-dinitro-o-cresol and salts	PPB	10.00		7	10.00	10.00	10.00	
	4-Nitroquinoline 1-oxide	PPB	10.00		7	10.00	10.00	10.00	
	4-aminobiphenyl	PPB	10.00		7	10.00	10.00	10.00	
	4-bromophenyl phenyl ether	PPB	10.00		7	10.00	10.00	10.00	
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		7	10.00	10.00	10.00	
	5-nitro-o-toluidine	PPB	10.00		7	10.00	10.00	10.00	
	7,12-dimethylbenz[a]anthracene	PPB	10.00		7	10.00	10.00	10.00	
	7H-dibenzol[c,g]carbazole	PPB	10.00		7	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Acenaphthalene	PPB	10.00		7	10.00	10.00	10.00	
	Acenaphthene	PPB	10.00		7	10.00	10.00	10.00	
	Acetone - by ABN	PPB	10.00		7	10.00	10.00	10.00	
	Acetone by VOA	PPB	10.00		29	9.69	10.00	5.00	
	Acetonitrile	PPB	10.00		6	10.00	10.00	10.00	
	Acetophenone	PPB	10.00		7	10.00	10.00	10.00	
	Acrolein	PPB	10.00		6	10.00	10.00	10.00	
	Acrylamide	PPB	10000.00		10	10000.00	10000.00	10000.00	
	Acrylonitrile	PPB	10.00		6	10.00	10.00	10.00	
	Aldrin	PPB	.10		10	.10	.10	.10	
	Alkalinity		20000.00	YES	3	104000.00	108000.00	102000.00	
	Allyl Chloride	PPB	100.00		6	100.00	100.00	100.00	
	Allyl alcohol	PPB	10000.00		10	10000.00	10000.00	10000.00	
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		7	10.00	10.00	10.00	
	Aluminum	PPB	150.00	YES	43	152.19	244.00	150.00	50.0
	Aluminum, filtered	PPB	150.00		43	150.00	150.00	150.00	50.0
	Americium-241	PCI/L	.10		6	.01	.03	0.00	
	Amitrole	PPB	10.00		7	10.00	10.00	10.00	
	Ammonium ion	PPB	50.00		26	50.00	50.00	50.00	
	Aniline	PPB	10.00		7	10.00	10.00	10.00	
	Anthracene	PPB	10.00		7	10.00	10.00	10.00	
	Antimony	PPB	100.00		43	100.00	100.00	100.00	
	Antimony, filtered	PPB	100.00		43	100.00	100.00	100.00	
	Aramite	PPB	10.00		7	10.00	10.00	10.00	
	Arochlor 1016	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1221	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1232	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1242	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1248	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1254	PPB	1.00		10	1.00	1.00	1.00	.5
	Arochlor 1260	PPB	1.00		10	1.00	1.00	1.00	.5
	Auramine	PPB	10.00		7	10.00	10.00	10.00	

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benz[a]anthracene	PPB	10.00		7	10.00	10.00	10.00		
	Benz[c]acridine	PPB	10.00		7	10.00	10.00	10.00		
	Benzene	PPB	5.00		29	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		7	10.00	10.00	10.00		
	Benzenethiol	PPB	10.00		7	10.00	10.00	10.00		
	Benidine	PPB	10.00		7	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		7	10.00	10.00	10.00		
	Benzo(k)fluoranthene	PPB	10.00		7	10.00	10.00	10.00		
	Benzo(a)pyrene	PPB	10.00		7	10.00	10.00	10.00		
	Benzo(b)fluoranthene	PPB	10.00		7	10.00	10.00	10.00		
	Benzo[j]fluoranthene	PPB	10.00		7	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		7	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		7	10.00	10.00	10.00		
	Beryllium	PPB	5.00	YES	43	5.02	6.00	5.00		
	Beryllium, filtered	PPB	5.00	YES	43	5.02	6.00	5.00		
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		7	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		7	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		7	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		7	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	8	10.50	14.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		6	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	43	16.35	38.00	10.00		
	Boron, filtered	PPB	10.00	YES	43	17.35	54.00	10.00		
	Bromide	PPB	1000.00		31	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		6	5.00	5.00	5.00		100.0
	Bromodichloromethane	PPB	5.00		6	5.00	5.00	5.00		100.0
	Bromoform	PPB	5.00		6	5.00	5.00	5.00		
	Butyl benzyl phthalate	PPB	10.00		7	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	43	27693.02	75100.00	16800.00		
	Calcium, filtered	PPB	50.00	YES	43	28016.28	72800.00	17600.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		29	5.00	5.00	5.00		5.0
	Carbon disulfide	PPB	10.00		6	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Detection Limit	Units	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Carbophenothion	2.00	PPB	10	2.00	2.00	2.00		
	Cesium-137	20.00	PCI/L	8	-.61	3.51	-4.52	120.0	
	Chlordane	1.00	PPB	10	1.00	1.00	1.00	2.0	
	Chloronaphazine	10.00	PPB	7	10.00	10.00	10.00		
	Chloroalkyl ethers	10.00	PPB	7	10.00	10.00	10.00		
	Chlorobenzene	5.00	PPB	6	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	10.00	PPB	11	10.00	10.00	10.00	60.0	
	Chlorobenzilate	300.00	PPB	10	300.00	300.00	300.00		
	Chloroethane	10.00	PPB	6	10.00	10.00	10.00	100.0	
	Chloroform	5.00	PPB	29	5.00	5.00	5.00		
	Chloromethyl methyl ether	10.00	PPB	6	10.00	10.00	10.00		
	Chrysene	10.00	PPB	7	10.00	10.00	10.00		
	Citrus red	1000.00	PPB	9	1000.00	1000.00	1000.00		
	Cobalt	20.00	PPB	43	20.00	20.00	20.00		
	Cobalt, filtered	20.00	PPB	43	20.00	20.00	20.00		
	Cobalt-60	22.50	PCI/L	8	-1.41	1.53	-7.05	200.0	
	Copper	10.00	PPB	43	11.21	52.00	10.00	1000.0	
	Copper, filtered	10.00	PPB	43	10.12	13.00	10.00	1000.0	
	Cresols	10.00	PPB	10	10.00	10.00	10.00		
	Crotonaldehyde	10.00	PPB	6	10.00	10.00	10.00		
	Cyanide	10.00	PPB	11	10.00	10.00	10.00		
	DDD	10	PPB	10	10	10	10		
	DDE	10	PPB	10	10	10	10		
	DDT	10	PPB	10	10	10	10		
	Di-n-butyl phthalate	10.00	PPB	7	10.00	10.00	10.00		
	Di-n-octyl phthalate	10.00	PPB	7	10.00	10.00	10.00		
	Di-n-propylnitrosamine	10.00	PPB	7	10.00	10.00	10.00		
	Diallate	10.00	PPB	7	10.00	10.00	10.00		
	Dibenz[a,h]acridine	10.00	PPB	7	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	10.00	PPB	7	10.00	10.00	10.00		
	Dibenz[a,j]acridine	10.00	PPB	7	10.00	10.00	10.00		
	Dibenzof[a,e]pyrene	10.00	PPB	7	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzo[a,h]pyrene	PPB	10.00	7	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00	7	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00	7	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00	6	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	6	10.00	10.00	10.00		
	Dieldrin	PPB	.10	10	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	7	10.00	10.00	10.00		
	Diethylstilbestrol	PPB	200.00	9	200.00	200.00	200.00		
	Dihydrosoafrole	PPB	10.00	7	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	10	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	7	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	7	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	7	10.00	10.00	10.00		
	Dioxane	PPB	500.00	6	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	7	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	10	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	10	.10	.10	.10		
	Endosulfan II	PPB	.10	10	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	10	.50	.50	.50		
	Ethanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	6	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	6	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	7	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	6	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	7	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	9	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00	7	10.00	10.00	10.00		
	Fluorene	PPB	10.00	7	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Formalin	PPB	500.00		6	500.00	500.00	500.00	
	Heptachlor	PPB	.10		10	.10	.10	.10	.4
	Heptachlor epoxide	PPB	.10		10	.10	.10	.10	
	Hexachlorobenzene	PPB	10.00		11	10.00	10.00	10.00	
	Hexachlorobutadiene	PPB	10.00		7	10.00	10.00	10.00	
	Hexachlorocyclopentadiene	PPB	10.00		7	10.00	10.00	10.00	
	Hexachloroethane	PPB	10.00		7	10.00	10.00	10.00	
	Hexachlorophene	PPB	10.00		11	10.00	10.00	10.00	
	Hexachloropropene	PPB	10.00		7	10.00	10.00	10.00	
	Hydrazine, Low Detection Level	PPB	30.00		26	30.00	30.00	30.00	
	Indeno(1,2,3-cd)pyrene	PPB	10.00		7	10.00	10.00	10.00	
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	3	1.68	2.79	.68	20.0
	Iodomethane	PPB	10.00		6	10.00	10.00	10.00	
	Isobutyl alcohol	PPB	10000.00		10	10000.00	10000.00	10000.00	
	Isodrin	PPB	10.00		7	10.00	10.00	10.00	
	Isophorone	PPB	10.00		7	10.00	10.00	10.00	
	Isosafrole	PPB	10.00		7	10.00	10.00	10.00	
	Kepone	PPB	1.00		10	1.00	1.00	1.00	
	Kerosene	PPB	10000.00		11	10000.00	10000.00	10000.00	
	Lithium	PPB	10.00		43	10.00	10.00	10.00	
	Lithium, filtered	PPB	10.00		43	10.00	10.00	10.00	
	Magnesium	PPB	50.00	YES	43	8259.30	27300.00	4850.00	
	Magnesium, filtered	PPB	50.00	YES	43	8235.35	25100.00	4890.00	
	Maleic hydrazide	PPB	500.00		10	500.00	500.00	500.00	
	Malononitrile	PPB	10.00		7	10.00	10.00	10.00	
	Melphalan	PPB	10.00		7	19.00	10.00	10.00	
	Methacrylonitrile	PPB	10.00		6	10.00	10.00	10.00	
	Methanethiol	PPB	10.00		6	10.00	10.00	10.00	
	Methapyrilene	PPB	10.00		7	10.00	10.00	10.00	
	Methionyl	PPB	10.00		7	10.00	10.00	10.00	
	Methyl isobutyl Ketone	PPB	10.00		29	10.00	10.00	10.00	
	Methyl bromide	PPB	10.00		6	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl chloride	PPB	10.00		6	10.00	10.00	10.00	
	Methyl ethyl ketone	PPB	10.00		29	10.00	10.00	10.00	
	Methyl methacrylate	PPB	10.00		7	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		7	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		10	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00		29	5.00	5.00	5.00	
	Methylthiouracil	PPB	10.00		7	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		43	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		43	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		10	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		6	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		7	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		7	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		9	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		10	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00		11	10.00	10.00	10.00	
	Nickel	PPB	10.00	YES	43	24.00	72.00	10.00	
	Nickel, filtered	PPB	10.00		43	10.00	10.00	10.00	
	Nicotinic acid	PPB	100.00		10	100.00	100.00	100.00	
	Nitrite	PPB	1000.00		31	1000.00	1000.00	1000.00	3300.0
	Nitrobenzene	PPB	10.00		7	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		7	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		7	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	O-toluidine hydrochloride	PPB	10.00		7	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		7	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		7	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		7	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		7	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		7	10.00	10.00	10.00		
	PHORATE	PPB	2.00		10	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		10	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		10	2.00	2.00	2.00		
	Pcdd's	PPB	.01		9	.01	.01	.01		
	Pcdf's	PPB	.01		9	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		11	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		6	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		7	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		10	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		9	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		7	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		7	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		7	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		31	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		7	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		9	.00	.00	.01	1.6	
	Plutonium-239/40	PCI/L	.10		9	.00	.01	.00	1.2	
	Potassium	PPB	100.00	YES	43	4371.86	6040.00	3530.00		
	Potassium, filtered	PPB	100.00	YES	43	4456.05	6460.00	3610.00		
	Pronamide	PPB	10.00		7	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		6	5.00	5.00	5.00		
	Pyrene	PPB	10.00		7	10.00	10.00	10.00		
	Pyridine	PPB	500.00		6	500.00	500.00	500.00		
	Reserpine	PPB	10.00		7	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		7	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		8	-8.64	-6.97	-29.70	240.0	

Groundwater Analysis Results for 216-A-29 Ditch (1989-1990)

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EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-29 Ditch (1967-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00	7	10.00	10.00	10.00	
	Tritium	PCI/L	500.00	18	17817.81	69900.00	-55.70	80000.0
	Turbidity	NTU	.10	31	2.57	19.50	.10	5.0
	Unknown Halogenated Hydrocarbon	PPB		1	14.00	14.00	14.00	YES
	Uranium	PCI/L	.50	10	1.54	4.56	.68	40.0
	Vanadium	PPB	5.00	43	20.09	41.00	5.00	
	Vanadium, filtered	PPB	5.00	43	20.42	42.00	6.00	
	Vinyl Acetate	PPB	5.00	6	5.00	5.00	5.00	
	Vinyl chloride	PPB	10.00	29	10.00	10.00	10.00	2.0
	Warfarin	PPB	10.00	7	10.00	10.00	10.00	
	Xylene-m	PPB	5.00	29	5.00	5.00	5.00	10000.0
	Xylene-o,p	PPB	5.00	29	5.00	5.00	5.00	10000.0
	Zinc	PPB	5.00	43	11.07	30.00	5.00	5000.0
	Zinc, filtered	PPB	5.00	43	7.33	30.00	5.00	5000.0
	Zirconium	PPB	50.00	43	50.00	50.00	50.00	
	Zirconium, filtered	PPB	50.00	43	50.00	50.00	50.00	
	dibromochloromethane	PPB	5.00	6	5.00	5.00	5.00	100.0
	m-Nitroaniline	PPB	10.00	7	10.00	10.00	10.00	
	o-Nitroaniline	PPB	10.00	7	10.00	10.00	10.00	
	o-Nitrophenol	PPB	10.00	7	10.00	10.00	10.00	
	p-Dichlorobenzene	PPB	5.00	40	6.38	10.00	5.00	750.0
	p-Nitrophenol	PPB	10.00	7	10.00	10.00	10.00

Well Location and Site Map for 216-A-30 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	4	274.00	308.00	238.00	700.0	
	Specific conductance	UMHO	1.00	YES	4	276.75	309.00	244.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	4	5.75	12.00	2.00		
	Total organic carbon	PPB	2000.00		2	600.00	600.00	600.00		
	pH, Field Measurement		.10	YES	4	8.05	8.63	7.09		YES
	pH, Laboratory Measurement		.01	YES	4	7.78	7.90	7.50		8.5
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		2	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		2	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	11	2.57	7.28	.02	15.0	
	Alpha-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	2	26.00	38.00	14.00	50.0	
	Barium	PPB	6.00	YES	2	184.50	269.00	100.00	1000.0	
	Beta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Cadmium	PPB	2.00	YES	2	31.50	42.00	21.00	10.0	YES
	Chromium	PPB	10.00	YES	2	52.00	55.00	49.00	50.0	YES
	Coliform bacteria	MPN	2.20		2	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Endrin	PPB	.10		2	.10	.10	.10	.2	
	Fluoride	PPB	500.00	YES	4	550.00	600.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Gross alpha	PCI/L	4.00	YES	2	4.80	6.41	3.19	15.0	
	Gross beta	PCI/L	8.00	YES	13	12.79	20.80	7.54	50.0	
	Lead (graphite furnace)	PPB	5.00	YES	2	32.50	50.00	15.00	50.0	YES
	Mercury	PPB	.10		2	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		2	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	4	13900.00	43300.00	1100.00	45000.0	
Nitrate, High Detection Level	PPB	2500.00	YES	8	26037.50	47300.00	2500.00	45000.0	YES	
Radium	PCI/L	1.00	YES	2	.74	1.19	.29	100.0		
Selenium	PPB	5.00		2	5.00	5.00	5.00	10.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
Silver		PPB	10.00		2	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		2	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
Chloride		PPB	500.00	YES	4	1650.00	2700.00	1200.00	250000.0	
Iron		PPB	30.00	YES	2	80100.00	116000.00	44200.00	300.0	YES
Manganese		PPB	5.00	YES	2	2605.00	3330.00	1880.00	50.0	YES
Phenol		PPB	10.00		2	10.00	10.00	10.00		
Sodium		PPB	200.00	YES	2	19200.00	21000.00	17400.00		
Sulfate		PPB	500.00	YES	4	19350.00	24300.00	15800.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
0,0-Diethyl-0,2-pyrazinyl phosphorothion		PPB	10.00		2	10.00	10.00	10.00		
1,1,1,2-tetrachlorethane		PPB	10.00		2	10.00	10.00	10.00		
1,1,1-trichloroethane		PPB	5.00		4	5.00	5.00	5.00	200.0	
1,1,2,2-tetrachlorethane		PPB	5.00		2	5.00	5.00	5.00		
1,1,2-trichloroethane		PPB	5.00		4	5.00	5.00	5.00		
1,1-dichloroethane		PPB	5.00		4	5.00	5.00	5.00		
1,1-dichloroethylene		PPB	10.00		2	10.00	10.00	10.00	7.0	
1,1-dimethylhydrazine		PPB	10.00		2	10.00	10.00	10.00		
1,2,3,4-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3,5-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3-trichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,3-trichloropropane		PPB	10.00		2	10.00	10.00	10.00		
1,2,4,5-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2,4-trichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2-dibromo-3-chloropropane		PPB	10.00		2	10.00	10.00	10.00	.2	
1,2-dibromoethane		PPB	10.00		2	10.00	10.00	10.00		
1,2-dichlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
1,2-dichloroethane		PPB	5.00		4	5.00	5.00	5.00	5.0	
1,2-dichloropropane		PPB	5.00		2	5.00	5.00	5.00	5.0	
1,2-dimethylhydrazine		PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		2	.01	.01	.01		
	2,4,5-T	PPB	2.00		2	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2-picoline	PPB	10.00		2	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		2	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		2	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	7H-dibenzofc,g]carbazole	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		2	10.00	10.00	10.00		
	Acetone - by A6N	PPB	10.00		2	10.00	10.00	10.00		
	Acetone by VGA	PPB	10.00		4	10.00	13.00	10.00		
	Acetonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		2	10.00	10.00	10.00		
	Acrolein	PPB	10.00		2	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Aldrin	PPB	.10		2	.10	.10	.10		
	Allyl Chloride	PPB	100.00		2	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		2	10.00	10.00	10.00
	Aluminum	PPB	150.00	YES	2	8015.00	14000.00	2030.00
	Amitrole	PPB	10.00		2	10.00	10.00	10.00
	Ammonium ion	PPB	50.00	YES	2	71.50	93.00	50.00
	Aniline	PPB	10.00		2	10.00	10.00	10.00
	Anthraccene	PPB	10.00		2	10.00	10.00	10.00
	Antimony	PPB	100.00		2	100.00	100.00	100.00
	Aramite	PPB	10.00		2	10.00	10.00	10.00
	Arochlor 1016	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1221	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1232	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1242	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1248	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1254	PPB	1.00		2	1.00	1.00	1.00
	Arochlor 1260	PPB	1.00		2	1.00	1.00	1.00
	Auramine	PPB	10.00		2	10.00	10.00	10.00
	Benz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00
	Benz[c]acridine	PPB	10.00		2	10.00	10.00	10.00
	Benzene	PPB	5.00		4	5.00	5.00	5.00
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00
	Benzenethiol	PPB	10.00		2	10.00	10.00	10.00
	Benzidine	PPB	10.00		2	10.00	10.00	10.00
	Benzo(ghi)perylene	PPB	10.00		2	10.00	10.00	10.00
	Benzo(k)fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzo[a]pyrene	PPB	10.00		2	10.00	10.00	10.00
	Benzo[b]fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzo[j]fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzyl Alcohol	PPB	10.00		2	10.00	10.00	10.00
	Benzyl chloride	PPB	10.00		2	10.00	10.00	10.00
	Beryllium	PPB	5.00		2	5.00	5.00	5.00
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		2	10.00	10.00	10.00
	Bis(2-chloroethoxy) methane	PPB	10.00		2	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00	
	Bis(2-chloroisopropyl) ether	PPB	10.00		2	10.00	10.00	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	2	13.00	16.00	10.00	
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00	
	Boron	PPB	10.00	YES	2	18.00	24.00	12.00	
	Bromide	PPB	1000.00		4	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00	
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00		2	5.00	5.00	5.00	100.0
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
	Calcium	PPB	50.00	YES	2	29600.00	30000.00	29200.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00		4	5.00	5.00	5.00	5.0
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00	
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00	
	Cesium-137	PCI/L	20.00		11	.06	6.76	-9.19	120.0
	Chlordane	PPB	1.00		2	1.00	1.00	1.00	2.0
	Chloronaphazene	PPB	10.00		2	10.00	10.00	10.00	
	Chloroalkyl ethers	PPB	10.00		2	10.00	10.00	10.00	
	Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0
	Chlorobenzene (by ABN)	PPB	10.00		2	10.00	10.00	10.00	60.0
	Chlorobenzilate	PPB	300.00		2	300.00	300.00	300.00	
	Chloroethane	PPB	10.00		2	10.00	10.00	10.00	
	Chloroform	PPB	5.00		4	5.00	5.00	5.00	100.0
	Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00	
	Chrysene	PPB	10.00		2	10.00	10.00	10.00	
	Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00	
	Cobalt	PPB	20.00	YES	2	20.50	21.00	20.00	
	Cobalt-60	PCI/L	22.50		11	-1.71	3.46	-6.73	200.0
	Copper	PPB	10.00	YES	2	62.50	78.00	47.00	1000.0
	Cresols	PPB	10.00		2	10.00	10.00	10.00	
	Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00	
	Cyanide	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
DDD		PPB	.10		2	.10	.10	.10	
DDE		PPB	.10		2	.10	.10	.10	
DDT		PPB	.10		2	.10	.10	.10	
Di-n-butyl phthalate		PPB	10.00		2	10.00	10.00	10.00	
Di-n-octyl phthalate		PPB	10.00		2	10.00	10.00	10.00	
Di-n-propylnitrosamine		PPB	10.00		2	10.00	10.00	10.00	
Diallate		PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,h]acridine		PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,h]anthracene		PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,j]acridine		PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,e]pyrene		PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,h]pyrene		PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,i]pyrene		PPB	10.00		2	10.00	10.00	10.00	
Dibenzofuran		PPB	10.00		2	10.00	10.00	10.00	
Dibromomethane		PPB	10.00		2	10.00	10.00	10.00	
Dibutyl Phosphate		PPB	10000.00		2	10000.00	10000.00	10000.00	
Dichlorodifluoromethane		PPB	10.00		2	10.00	10.00	10.00	
Dieldrin		PPB	.10		2	.10	.10	.10	
Diethyl phthalate		PPB	10.00		2	10.00	10.00	10.00	
Diethylstilbesterol		PPB	200.00		2	200.00	200.00	200.00	
Dihydrocarrole		PPB	10.00		2	10.00	10.00	10.00	
Dimethoate		PPB	2.00		2	2.00	2.00	2.00	
Dimethyl phthalate		PPB	10.00		2	10.00	10.00	10.00	
Dinitrobenzene		PPB	10.00		2	10.00	10.00	10.00	
Dinoseb		PPB	10.00		2	10.00	10.00	10.00	
Dioxane		PPB	500.00		2	500.00	500.00	500.00	
Diphenylamine		PPB	10.00		2	10.00	10.00	10.00	
Disulfoton		PPB	2.00		2	2.00	2.00	2.00	
Endosulfan I		PPB	.10		2	.10	.10	.10	
Endosulfan II		PPB	.10		2	.10	.10	.10	
Endosulfan Sulfate		PPB	.50		2	.50	.50	.50	
Ethanol		PPB	10000.00		2	10000.00	10000.00	10000.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Ethyl benzene	PPB	5.00		2	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00		2	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00		2	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00		2	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00		2	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Fluorene	PPB	10.00		2	10.00	10.00	10.00		
	Formalin	PPB	500.00		2	500.00	500.00	500.00		
	Heptachlor	PPB	.10		2	.10	.10	.10	.4	
	Heptchlor epoxide	PPB	.10		2	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		2	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	.34	.54	.14	20.0	
	Iodomethane	PPB	10.00		2	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		2	10.00	10.00	10.00		
	Isophorone	PPB	10.00		2	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00		
	Kepone	PPB	1.00		2	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00	YES	2	14.50	19.00	10.00		
	Magnesium	PPB	50.00	YES	2	9955.00	12400.00	7510.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00
	Melphalan	PPB	10.00		2	10.00	10.00	10.00
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00
	Methyl ethyl ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00
	Methylene Chloride	PPB	5.00		4	5.00	5.00	5.00
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00
	Monobutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00
	N-propylamine	PPB	10000.00		2	10000.00	10000.00	10000.00

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Nickel	PPB	10.00	YES	2	38.00	44.00	32.00		
	Nicotinic acid	PPB	100.00		2	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		4	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		2	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		2	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		2	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	PHORATE	PPB	2.00		2	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		2	2.00	2.00	2.00		
	Pcdd's	PPB	.01		2	.01	.01	.01		
	Pcdf's	PPB	.01		2	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		2	.00	.00	.00	1.6	
	Plutonium-239/40	PCI/L	.10		2	.00	.00	.00	1.2	
	Potassium	PPB	100.00	YES	2	8780.00	9850.00	7710.00		
	Promamide	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00		
	Pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Pyridine	PPB	500.00		2	500.00	500.00	500.00		
	R-serpine	PPB	10.00		2	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		11	11.46	56.40	-23.60	240.0	
	Safrol	PPB	10.00		2	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	2	41500.00	54300.00	28700.00		
	Strontium	PPB	10.00	YES	2	176.50	189.00	164.00		
	Strontium-90	PCI/L	5.00		7	-0.07	.13	-.34	40.0	
	Strychnine	PPB	50.00		2	50.00	50.00	50.00		
	Styrene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		2	1000.00	1090.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		2	6.11	7.62	4.60	4000.0	
	Tetrachloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		2	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		4	10.00	10.00	10.00		
	Thallium	PPB	5.00		2	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		2	10.00	10.00	10.00		
	Thiourea	PPB	200.00		2	200.00	200.00	200.00		
	Thiuram	PPB	10.00		2	10.00	10.00	10.00		
	Tin	PPB	30.00		2	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	2	674.00	1120.00	228.00		
	Toluene	PPB	5.00	YES	4	13.00	37.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	2	23750.00	24500.00	23000.00		
	Trans-1,2-dichloroethene	PPB	5.00		4	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		2	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-30 Crib (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Tris(2,3-dibromopropyl) phosphate									
	Tritium	PPB	10.00		2	10.00	10.00	10.00		
		PCI/L	500.00	YES	13	238449.62	657000.00	155.00	80000.0	YES
	Turbidity	NTU	.10	YES	2	122.00	200.00	44.00	5.0	YES
	Uranium	PCI/L	.50	YES	2	1.00	1.05	.95	40.0	
	Vanadium	PPB	5.00	YES	2	166.50	249.00	84.00		
	Vinyl Acetate	PPB	5.00		2	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		4	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		2	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	2	74.50	79.00	70.00	5000.0	
	Zirconium	PPB	50.00		2	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		6	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00

N39200

N39000

N38800

N38600

N38400

Water Table too Flat to Generalize
Ground Water Flow Direction

- Ground Water Monitoring Wells
- Vadose Zone Monitoring Wells
- (Numbers in Parentheses are
Tank Farm ID Numbers for Wells)

W48800

W48600

W48400

W48200

AGL\216-A36B.DWG

Well Location and Site Map for 216-B-36B Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	32	482.19	834.00	240.00	700.0	YES
	Specific conductance	UMHO	1.00	YES	111	418.37	675.00	224.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	114	4.36	15.00	-2.00		
	Total organic carbon	PPB	2000.00		114	629.82	1400.00	200.00		
	pH, Field Measurement		.10	YES	107	7.74	8.30	7.08	8.5	
	pH, Laboratory Measurement		.01	YES	32	7.89	8.10	7.70	8.5	
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		34	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		34	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	40	3.86	16.50	1.17	15.0	YES
	Alpha-BHC	PPB	.10		34	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	34	9.15	15.00	6.00	50.0	
	Arsenic, filtered	PPB	5.00	YES	34	8.29	14.00	5.00	50.0	
	Barium	PPB	6.00	YES	34	46.79	73.00	29.00	1000.0	
	Barium, filtered	PPB	6.00	YES	34	47.74	74.00	29.00	1000.0	
	Beta-BHC	PPB	.10		34	.10	.10	.10	4.0	
	Cadmium	PPB	2.00		34	2.00	2.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00	YES	34	2.32	7.00	2.00	10.0	
	Chromium	PPB	10.00	YES	34	27.74	96.00	10.00	50.0	YES
	Chromium, filtered	PPB	10.00		34	10.00	10.00	10.00	50.0	
	Coliform (Membrane Filter)	PPB	1.00		16	1.00	1.00	1.00	1.0	
	Coliform bacteria	MPN	2.20		15	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		34	.10	.10	.10	4.0	
	Endrin	PPB	.10		34	.10	.10	.10	.2	
	Fluoride	PPB	500.00	YES	34	573.53	1000.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		34	.10	.10	.10	4.0	
	Gross alpha	PCI/L	4.00		3	2.42	3.22	1.23	15.0	
	Gross beta	PCI/L	8.00	YES	43	149.77	845.00	4.95	50.0	YES
	Lead (graphite furnace)	PPB	5.00	YES	34	5.03	6.00	5.00	50.0	
	Lead, filtered	PPB	5.00		34	5.00	5.00	5.00	50.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit	
DRINKING WATER PARAMETERS											
	Mercury	PPB	.10		33	.10	.10	.10	2.0		
	Mercury, filtered	PPB	.10		33	.10	.10	.10	2.0		
	Methoxychlor	PPB	3.00		34	3.00	3.00	3.00	100.0		
	Nitrate	PPB	500.00	YES	34	120420.59	354000.00	4900.00	45000.0	YES	
	Nitrate, High Detection Level	PPB	2500.00	YES	9	114066.67	137000.00	74000.00	45000.0	YES	
	Radium	PCI/L	1.00	YES	33	.24	1.08	-.04	100.0		
	Selenium	PPB	5.00	YES	34	5.03	6.00	5.00	10.0		
	Selenium, filtered	PPB	5.00	YES	34	5.12	9.00	5.00	10.0		
	Silver	PPB	10.00		34	10.00	10.00	10.00	50.0		
	Silver, filtered	PPB	10.00		34	10.00	10.00	10.00	50.0		
	Toxaphene	PPB	1.00		34	1.00	1.00	1.00	5.0		
	GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	34	5058.82	24000.00	2900.00	250000.0		
	Iron	PPB	30.00	YES	34	132.65	492.00	30.00	300.0	YES	
	Iron, filtered	PPB	30.00	YES	34	32.38	53.00	30.00	300.0		
	Manganese	PPB	5.00	YES	34	6.29	11.00	5.00	50.0		
	Manganese, filtered	PPB	5.00	YES	34	5.15	6.00	5.00	50.0		
	Phenol	PPB	10.00		10	10.00	10.00	10.00			
	Phenol, low DL	PPB	10.00		24	10.00	10.00	10.00			
	Sodium	PPB	200.00	YES	34	24120.59	39100.00	16600.00			
	Sodium, filtered	PPB	200.00	YES	34	24397.06	36200.00	16300.00			
	Sulfate	PPB	500.00	YES	34	36585.29	102000.00	23200.00	250000.0		
	SITE SPECIFIC AND OTHER PARAMETERS										
		0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		10	10.00	10.00	10.00		
1,1,1,2-tetrachlorethane		PPB	10.00		10	10.00	10.00	10.00			
1,1,1-trichloroethane		PPB	5.00		17	5.00	5.00	5.00	200.0		
1,1,2,2-tetrachlorethane		PPB	5.00		10	5.00	5.00	5.00			
1,1,2-trichloroethane		PPB	5.00		17	5.00	5.00	5.00			
1,1-dichloroethane		PPB	5.00		17	5.00	5.00	5.00			
	1,1-dichloroethylene	PPB	10.00		10	10.00	10.00	10.00	7.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,1-dimethylhydrazine	PPB	10.00	10	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00	10	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00	10	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00	10	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00	17	5.00	5.00	5.00	5.00	
	1,2-dichloropropane	PPB	5.00	10	5.00	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	10	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00	10	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00	10	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00	10	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00	10	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00	10	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00	10	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00	10	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00	10	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00	10	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00	10	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01	10	.01	.01	.01		
	2,4,5-T	PPB	2.00	34	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00	10	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00	10	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2,4-dichlorophenol	PPB	10.00		10	10.00	10.00	10.00	
	2,4-dinitrophenol	PPB	10.00		10	10.00	10.00	10.00	
	2,4-dinitrotoluene	PPB	10.00		10	10.00	10.00	10.00	
	2,6-dichlorophenol	PPB	10.00		10	10.00	10.00	10.00	
	2,6-dinitrotoluene	PPB	10.00		10	10.00	10.00	10.00	
	2-Hexanone	PPB	50.00		10	50.00	50.00	50.00	
	2-Methylnaphthalene	PPB	10.00		10	10.00	10.00	10.00	
	2-acetylaminofluorene	PPB	10.00		10	10.00	10.00	10.00	
	2-chloroethyl vinyl ether	PPB	5.00		10	5.00	5.00	5.00	
	2-chloronaphthalene	PPB	10.00		10	10.00	10.00	10.00	
	2-chlorophenol	PPB	10.00		10	10.00	10.00	10.00	
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		10	10.00	10.00	10.00	
	2-methyl-2-(methylthio) propionaldehyde	PPB	10.00		10	10.00	10.00	10.00	
	2-methylaziridine	PPB	10.00		10	10.00	10.00	10.00	
	2-methylactonitrile	PPB	10.00		10	10.00	10.00	10.00	
	2-naphthylamine	PPB	10.00		10	10.00	10.00	10.00	
	2-picoline	PPB	10.00		10	10.00	10.00	10.00	
	2-propyn-1-ol	PPB	10000.00		10	10000.00	10000.00	10000.00	
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		10	10.00	10.00	10.00	
	3,3'-Dichlorobenzidine	PPB	10.00		10	10.00	10.00	10.00	
	3,3'-dimethoxybenzidine	PPB	10.00		10	10.00	10.00	10.00	
	3,3'-dimethylbenzidine	PPB	10.00		10	10.00	10.00	10.00	
	3-chloropropionitrile	PPB	10000.00		10	10000.00	10000.00	10000.00	
	3-methylcholanthrene	PPB	10.00		10	10.00	10.00	10.00	
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		10	10.00	10.00	10.00	
	4,6-dinitro-o-cresol and salts	PPB	10.00		10	10.00	10.00	10.00	
	4-Nitroquinoline 1-oxide	PPB	10.00		10	10.00	10.00	10.00	
	4-aminobiphenyl	PPB	10.00		10	10.00	10.00	10.00	
	4-bromophenyl phenyl ether	PPB	10.00		10	10.00	10.00	10.00	
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		10	10.00	10.00	10.00	
	5-nitro-o-toluidine	PPB	10.00		10	10.00	10.00	10.00	
	7,12-dimethylbenz[a]anthracene	PPB	10.00		10	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	7H-dibenzofc,glcarbazole	PPB	10.00	10	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00	10	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00	10	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00	10	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	17	9.88	10.00	8.00		
	Acetonitrile	PPB	10.00	10	10.00	10.00	10.00		
	Acetophenone	PPB	10.00	10	10.00	10.00	10.00		
	Acrolein	PPB	10.00	10	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00	10	10.00	10.00	10.00		
	Aldrin	PPB	.10	10	.10	.10	.10		
	Allyl Chloride	PPB	100.00	10	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00	10	10.00	10.00	10.00		
	Aluminum	PPB	150.00	34	150.00	150.00	150.00	50.0	
	Aluminum, filtered	PPB	150.00	34	150.00	150.00	150.00	50.0	
	Americium-241	PCI/L	.10	2	.01	.01	.01		
	Amitroie	PPB	10.00	10	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	34	50.00	50.00	50.00		
	Aniline	PPB	10.00	10	10.00	10.00	10.00		
	Anthracene	PPB	10.00	10	10.00	10.00	10.00		
	Antimony	PPB	100.00	34	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00	34	100.00	100.00	100.00		
	Aramite	PPB	10.00	10	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00	10	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00	10	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00	10	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Benz[a]anthracene	PPB	10.00		10	10.00	10.00	10.00	
	Benz[c]acridine	PPB	10.00		10	10.00	10.00	10.00	
	Benzene	PPB	5.00		17	5.00	5.00	5.00	5.0
	Benzene, dichloromethyl	PPB	10.00		10	10.00	10.00	10.00	
	Benzenethiol	PPB	10.00		10	10.00	10.00	10.00	
	Benzenidine	PPB	10.00		10	10.00	10.00	10.00	
	Benzo(ghi)perylene	PPB	10.00		10	10.00	10.00	10.00	
	Benzo(k)fluoranthene	PPB	10.00		10	10.00	10.00	10.00	
	Benzo[a]pyrene	PPB	10.00		10	10.00	10.00	10.00	
	Benzo[b]fluoranthene	PPB	10.00		10	10.00	10.00	10.00	
	Benzo[j]fluoranthene	PPB	10.00		10	10.00	10.00	10.00	
	Benzyl Alcohol	PPB	10.00		10	10.00	10.00	10.00	
	Benzyl chloride	PPB	10.00		10	10.00	10.00	10.00	
	Beryllium	PPB	5.00		34	5.00	5.00	5.00	
	Beryllium, filtered	PPB	5.00	YES	34	5.03	6.00	5.00	
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		10	10.00	10.00	10.00	
	Bis(2-chloroethoxy) methane	PPB	10.00		10	10.00	10.00	10.00	
	Bis(2-chloroethyl) ether	PPB	10.00		10	10.00	10.00	10.00	
	Bis(2-chloroisopropyl)ether	PPB	10.00		10	10.00	10.00	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	10	10.20	12.00	10.00	
	Bis(chloromethyl) ether	PPB	5.00		10	5.00	5.00	5.00	
	Boron	PPB	10.00	YES	34	19.94	32.00	14.00	
	Boron, filtered	PPB	10.00	YES	34	20.15	28.00	11.00	
	Bromide	PPB	1000.00		34	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00		10	5.00	5.00	5.00	
	Bromodichloromethane	PPB	5.00		10	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00		10	5.00	5.00	5.00	100.0
	Butyl benzyl phthalate	PPB	10.00		10	10.00	10.00	10.00	
	Calcium	PPB	50.00	YES	34	47067.65	97000.00	21900.00	
	Calcium, filtered	PPB	50.00	YES	34	47297.06	90400.00	21200.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00		17	5.00	5.00	5.00	5.0
	Carbon disulfide	PPB	10.00		10	10.00	10.00	10.00	

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

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EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzo[a,e]pyrene	PPB	10.00	10	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00	10	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00	10	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00	10	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00	10	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	10	10.00	10.00	10.00		
	Dieldrin	PPB	.10	10	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	10	10.00	10.00	10.00		
	Diethylstilbestrol	PPB	200.00	10	200.00	200.00	200.00		
	Dihydrosofrole	PPB	10.00	10	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	10	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	10	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	10	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	10	10.00	10.00	10.00		
	Dioxane	PPB	500.00	10	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	10	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	10	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	10	.10	.10	.10		
	Endosulfan II	PPB	.10	10	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	10	.50	.50	.50		
	Ethanol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	10	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	10	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	10	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	10	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	10	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	10	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00	10	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Fluorene	PPB	10.00		10	10.00	10.00	10.00		
	Formalin	PPB	500.00		10	500.00	500.00	500.00		
	Heptachlor	PPB	.10		10	.10	.10	.10		.4
	Heptchlor epoxide	PPB	.10		10	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		10	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		10	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		10	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		10	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		10	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		10	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		10	10.00	10.00	10.00		
	Iodine-129	PCI/L	15.00	YES	6	9.51	16.00	2.03		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	2	2.12	2.24	1.99	20.0	
	Iodomethane	PPB	10.00		10	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		10	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		10	10.00	10.00	10.00		
	Isophorone	PPB	10.00		10	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		10	10.00	10.00	10.00		
	Kepone	PPB	1.00		10	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		10	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		34	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		34	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	34	13386.76	25900.00	6400.00		
	Magnesium, filtered	PPB	50.00	YES	34	13601.47	24300.00	6350.00		
	Maleic hydrazide	PPB	500.00		10	500.00	500.00	500.00		
	Malonitrile	PPB	10.00		10	10.00	10.00	10.00		
	Manganese-54	PPB			2	-1.72	-1.63	-1.81		
	Melphalan	PPB	10.00		10	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		10	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		10	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		10	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Metholonyl	PPB	10.00		10	10.00	10.00	10.00		
	Methyl Isobutyl ketone	PPB	10.00		17	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		10	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		10	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		17	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		10	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		10	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		10	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		17	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		10	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		34	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		34	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		10	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		10	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		10	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		10	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		10	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		10	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		10	10.00	10.00	10.00		
	Natural uranium	UG/L	.73	YES	9	-29.63	8.47	-313.00	59.0	
	Nickel	PPB	10.00	YES	34	17.74	52.00	10.00		
	Nickel, filtered	PPB	10.00	YES	34	10.47	14.00	10.00		
	Nicotinic acid	PPB	100.00		10	100.00	100.00	100.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-A-368 Jrb (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Nitrite	PPB	1000.00	34	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00	10	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00	10	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00	10	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00	10	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00	10	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00	10	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00	10	10.00	10.00	10.00		
	P-dimethylaminobenzene	PPB	10.00	10	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00	10	10.00	10.00	10.00		
	PHORATE	PPB	2.00	10	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00	10	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00	10	2.00	2.00	2.00		
	Pcdd's	PPB	.01	10	.01	.01	.01		
	Pcdf's	PPB	.01	10	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00	10	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00	10	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00	10	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00	10	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00	10	500.00	500.00	500.00		
	Phenacetin	PPB	10.00	10	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00	10	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00	10	10.00	10.00	10.00		
	Phosphate	PPB	1000.00	34	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00	10	10.00	10.00	10.00		
	Potassium	PPB	100.00	34	6084.71	7430.00	4500.00		
	Potassium, filtered	PPB	100.00	34	6139.12	8030.00	4500.00		
	Pronamide	PPB	10.00	10	10.00	10.00	10.00		
	Propionitrile	PPB	5.00	10	5.00	5.00	5.00		
	Pyrene	PPB	10.00	10	10.00	10.00	10.00		
	Pyridine	PPB	500.00	10	500.00	500.00	500.00		
	Reserpine	PPB	10.00	10	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Resorcinol	PPB	10.00		10	10.00	10.00	10.00	
	Ruthenium-106	PCI/L	172.50	YES	40	56.02	547.00	-66.00	240.0 YES
	Safrol	PPB	10.00		10	10.00	10.00	10.00	
	Silicon	PPB	50.00	YES	34	18644.12	20700.00	17300.00	
	Silicon, filtered	PPB	50.00	YES	34	18914.71	21600.00	17300.00	
	Strontium	PPB	10.00	YES	34	254.21	488.00	117.00	
	Strontium, filtered	PPB	10.00	YES	34	257.12	505.00	114.00	
	Strontium-90	PCI/L	5.00	YES	12	4.82	28.10	-16	40.0
	Strychnine	PPB	50.00		10	50.00	50.00	50.00	
	Styrene	PPB	5.00		10	5.00	5.00	5.00	5.0
	Sulfide	PPB	1000.00		10	1000.00	1000.00	1000.00	
	Sym-trinitrobenzene	PPB	10.00		10	10.00	10.00	10.00	
	Technetium-99	PCI/L	15.00	YES	8	157.24	599.00	2.25	4000.0
	Tetrachloroethylene	PPB	5.00		17	5.00	5.00	5.00	5.0
	Tetraethylpyrophosphate	PPB	2.00		10	2.00	2.00	2.00	
	Tetrahydrofuran	PPB	10.00		17	10.00	10.00	10.00	
	Thallium	PPB	5.00		10	5.00	5.07	5.00	
	Thallium, filtered	PPB	5.00		10	5.00	5.00	5.00	
	Thiofanox	PPB	10.00		10	10.00	10.00	10.00	
	Thiourea	PPB	200.00		10	200.00	200.00	200.00	
	Thiuram	PPB	10.00		10	10.00	10.00	10.00	
	Tin	PPB	30.00		34	30.00	30.00	30.00	
	Tin, filtered	PPB	30.00		34	30.00	30.00	30.00	
	Titanium	PPB	60.00		34	60.00	60.00	60.00	
	Titanium, filtered	PPB	60.00		34	60.00	60.00	60.00	
	Toluene	PPB	5.00		17	5.00	5.00	5.00	2000.0
	Toluenediamine	PPB	10.00		10	10.00	10.00	10.00	
	Total carbon	PPB	1000.00	YES	33	21784.85	24500.00	17900.00	
	Trans-1,2-dichloroethene	PPB	5.00		17	5.00	5.00	5.00	70.0
	Tributylphosphoric Acid	PPB	10.00		10	10.00	10.00	10.00	
	Trichloroethylene	PPB	5.00		17	5.00	5.00	5.00	5.0
	Trichloromethanethiol	PPB	10.00		10	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-368 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Trichloromonofluoromethane	PPB	10.00	YES	10	10.30	13.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		10	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	40	1527095.00	5200000.00	27400.00	80000.0	YES
	Turbidity	NTU	.10	YES	32	.68	1.40	.10	5.0	
	Uranium	PCI/L	.50	YES	2	3.32	4.52	2.11	40.0	
	Vanadium	PPB	5.00	YES	34	24.74	36.00	16.00		
	Vanadium, filtered	PPB	5.00	YES	34	24.88	37.00	20.00		
	Vinyl Acetate	PPB	5.00		10	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		17	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		10	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		17	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		17	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	34	21.03	177.00	5.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	34	6.12	14.00	5.00	5000.0	
	Zirconium	PPB	50.00		34	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		34	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		10	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		10	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		10	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		10	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		27	6.85	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		10	10.00	10.00	10.00

- Ground Water Monitoring Wells
 - ③ Vadose Zone Monitoring Wells and Ground Water Monitoring Wells (Bailed Samples)
- (Numbers in Parentheses are Tank Farm ID Numbers for Wells)

N40400

N40200

299-E25-17
(01-37-10)

N40000

216-A-37-1

Water Table too Flat to Generalize
Ground Water Flow Direction

N39800

AGL\216-A371.DWG

W46400

W46200

W46000

W45800

W45600

Well Location and Site Map for 216-A-37-1 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
CONTAMINATION INDICATOR PARAMETERS									
Conductivity, Laboratory	UMHO		1.00	YES	8	484.50	721.00	272.00	700.0 YES
Specific conductance	UMHO		1.00	YES	32	508.16	741.00	257.00	700.0 YES
Total Organic Halogen, Low Det. Level	PPB		10.00		32	2.22	6.00	-1.00	
Total organic carbon	PPB		2000.00		28	553.57	900.00	400.00	
pH, Field Measurement			.10	YES	32	7.87	8.25	7.48	8.5
pH, Laboratory Measurement			.01	YES	8	7.88	8.40	7.70	8.5
DRINKING WATER PARAMETERS									
2,4,5-TP silvex	PPB		2.00		11	2.00	2.00	2.00	10.0
2,4-D	PPB		2.00		11	2.00	2.00	2.00	100.0
Alpha, High Detection Level	PCI/L		4.00	YES	18	2.43	9.00	.15	15.0
Alpha-BHC	PPB		.10		11	.10	.10	.10	4.0
Arsenic	PPB		5.00	YES	11	11.91	56.00	5.00	50.0 YES
Arsenic, filtered	PPB		5.00	YES	10	7.50	11.00	5.00	50.0
Barium	PPB		6.00	YES	11	70.73	343.00	13.00	1000.0
Barium, filtered	PPB		6.00	YES	13	45.85	85.00	13.00	1000.0
Beta-BHC	PPB		.10		11	.10	.10	.10	4.0
Cadmium	PPB		2.00	YES	11	21.00	211.00	2.00	10.0 YES
Cadmium, filtered	PPB		2.00		13	2.00	2.00	2.00	10.0
Chromium	PPB		10.00	YES	11	38.27	321.00	10.00	50.0 YES
Chromium, filtered	PPB		10.00		13	10.00	10.00	10.00	50.0
Coliform (Membrane Filter)	PPB		1.00		4	1.00	1.00	1.00	1.0
Coliform bacteria	MPN		2.20		6	2.20	2.20	2.20	1.0
Delta-BHC	PPB		.10		11	.10	.10	.10	4.0
Endrin	PPB		.10		11	.10	.10	.10	.2
Fluoride	PPB		500.00	YES	15	600.00	1000.00	500.00	4000.0
Gamma-BHC	PPB		.10		11	.10	.10	.10	4.0
Gross alpha	PCI/L		4.00		4	.98	2.18	-.40	15.0
Gross beta	PCI/L		8.00	YES	22	13.23	32.30	6.11	50.0
Lead (graphite furnace)	PPB		5.00	YES	11	9.27	52.00	5.00	50.0 YES
Lead, filtered	PPB		5.00		10	5.00	5.00	5.00	50.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury	PPB	.10		10	.10	.10	.10	2.0	
	Mercury, filtered	PPB	.10		9	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		11	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	15	132546.67	235000.00	16200.00	45000.0	YES
	Nitrate, High Detection Level	PPB	2500.00	YES	7	60314.29	186000.00	24300.00	45000.0	YES
	Radium	PCI/L	1.00	YES	11	.21	1.65	.05	100.0	
	Selenium	PPB	5.00		11	5.00	5.00	5.00	10.0	
	Selenium, filtered	PPB	5.00		10	5.00	5.00	5.00	10.0	
	Silver	PPB	10.00		11	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		13	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		11	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	15	3753.33	5100.00	2600.00	250000.0	
	Iron	PPB	30.00	YES	11	54022.64	592000.00	36.00	300.0	YES
	Iron, filtered	PPB	30.00	YES	13	30.15	32.00	30.00	300.0	
	Manganese	PPB	5.00	YES	11	574.00	6240.00	5.00	50.0	YES
	Manganese, filtered	PPB	5.00	YES	13	5.08	6.00	5.00	50.0	
	Phenol	PPB	10.00		5	10.00	10.00	10.00		
	Phenol, low DL	PPB	10.00		6	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	11	34100.00	53500.00	17400.00		
	Sodium, filtered	PPB	200.00	YES	13	36100.00	56700.00	18000.00		
	Sulfate	PPB	500.00	YES	15	42573.33	78400.00	23300.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		5	10.00	10.00	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		5	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		9	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		5	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		9	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		9	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		5	10.00	10.00	10.00	7.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,1-dimethylhydrazine	PPB	10.00		5	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		5	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		5	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00		5	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		9	5.00	5.00	5.00		5.0
	1,2-dichloropropane	PPB	5.00		5	5.00	5.00	5.00		5.0
	1,2-dimethylhydrazine	PPB	10.00		5	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		5	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00		5	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		5	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		5	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		4	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		4	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		5	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		4	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		5	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		5	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		4	.01	.01	.01		
	2,4,5-T	PPB	2.00		11	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		5	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
								Max Limit
								Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	2,4-dichlorophenol	PPB	10.00		5	10.00	10.00	10.00
	2,4-dinitrophenol	PPB	10.00		5	10.00	10.00	10.00
	2,4-dinitrotoluene	PPB	10.00		5	10.00	10.00	10.00
	2,6-dichlorophenol	PPB	10.00		5	10.00	10.00	10.00
	2,6-dinitrotoluene	PPB	10.00		5	10.00	10.00	10.00
	2-Hexanone	PPB	50.00		5	50.00	50.00	50.00
	2-Methylnaphthalene	PPB	10.00		5	10.00	10.00	10.00
	2-acetylaminofluorene	PPB	10.00		5	10.00	10.00	10.00
	2-chloroethyl vinyl ether	PPB	5.00		5	5.00	5.00	5.00
	2-chloronaphthalene	PPB	10.00		5	10.00	10.00	10.00
	2-chlorophenol	PPB	10.00		5	10.00	10.00	10.00
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		5	10.00	10.00	10.00
	2-methyl-2-(methylthio) propionaldehyde	PPB	10.00		5	10.00	10.00	10.00
	2-methylaziridine	PPB	10.00		5	10.00	10.00	10.00
	2-methylactonitrile	PPB	10.00		5	10.00	10.00	10.00
	2-naphthylamine	PPB	10.00		5	10.00	10.00	10.00
	2-picoline	PPB	10.00		5	10.00	10.00	10.00
	2-propyn-1-ol	PPB	10000.00		5	10000.00	10000.00	10000.00
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		5	10.00	10.00	10.00
	3,3'-Dichlorobenzidine	PPB	10.00		5	10.00	10.00	10.00
	3,3'-dimethoxybenzidine	PPB	10.00		5	10.00	10.00	10.00
	3,3'-dimethylbenzidine	PPB	10.00		5	10.00	10.00	10.00
	3-chloropropionitrile	PPB	10000.00		5	10000.00	10000.00	10000.00
	3-methylcholanthrene	PPB	10.00		5	10.00	10.00	10.00
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		5	10.00	10.00	10.00
	4,6-dinitro-o-cresol and salts	PPB	10.00		5	10.00	10.00	10.00
	4-Nitroquinoline 1-oxide	PPB	10.00		5	10.00	10.00	10.00
	4-aminobiphenyl	PPB	10.00		5	10.00	10.00	10.00
	4-bromophenyl phenyl ether	PPB	10.00		5	10.00	10.00	10.00
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		5	10.00	10.00	10.00
	5-nitro-o-toluidine	PPB	10.00		5	10.00	10.00	10.00
	7,12-dimethylbenz[a]anthracene	PPB	10.00		5	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
SITE SPECIFIC AND OTHER PARAMETERS									
	7H-dibenzofc,glcarbazole	PPB	10.00		5	10.00	10.00	10.00	
	Acenaphthalene	PPB	10.00		5	10.00	10.00	10.00	
	Acenaphthene	PPB	10.00		5	10.00	10.00	10.00	
	Acetone - by ABN	PPB	10.00		5	10.00	10.00	10.00	
	Acetone by VOA	PPB	10.00		9	10.00	10.00	10.00	
	Acetonitrile	PPB	10.00		5	10.00	10.00	10.00	
	Acetophenone	PPB	10.00		5	10.00	10.00	10.00	
	Acrolein	PPB	10.00		5	10.00	10.00	10.00	
	Acrylamide	PPB	10000.00		5	10000.00	10000.00	10000.00	
	Acrylonitrile	PPB	10.00		5	10.00	10.00	10.00	
	Aldrin	PPB	.10		5	.10	.10	.10	
	Allyl Chloride	PPB	100.00		5	100.00	100.00	100.00	
	Allyl alcohol	PPB	10000.00		5	10000.00	10000.00	10000.00	
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		5	10.00	10.00	10.00	
	Aluminum	PPB	150.00	YES	11	243.64	1180.00	150.00	50.0 YES
	Aluminum, filtered	PPB	150.00		13	150.00	150.00	150.00	50.0
	Amitrole	PPB	10.00		5	10.00	10.00	10.00	
	Ammonium ion	PPB	50.00	YES	5	99.60	257.00	50.00	
	Aniline	PPB	10.00		5	10.00	10.00	10.00	
	Anthraccene	PPB	10.00		5	10.00	10.00	10.00	
	Antimony	PPB	100.00		11	100.00	100.00	100.00	
	Antimony, filtered	PPB	100.00		13	100.00	100.00	100.00	
	Aramite	PPB	10.00		5	10.00	10.00	10.00	
	Arochlor 1016	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1221	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1232	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1242	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1248	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1254	PPB	1.00		5	1.00	1.00	1.00	.5
	Arochlor 1260	PPB	1.00		5	1.00	1.00	1.00	.5
	Auramine	PPB	10.00		5	10.00	10.00	10.00	
	Benz[a]anthracene	PPB	10.00		5	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
								Max Limit
								Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Benz[c]acridine	PPB	10.00		5	10.00	10.00	10.00
	Benzene	PPB	5.00		9	5.00	5.00	5.00
	Benzene, dichloromethyl	PPB	10.00		5	10.00	10.00	10.00
	Benzenethiol	PPB	10.00		5	10.00	10.00	10.00
	Benzidine	PPB	10.00		5	10.00	10.00	10.00
	Benzo(ghi)perylene	PPB	10.00		5	10.00	10.00	10.00
	Benzo(k)fluoranthene	PPB	10.00		5	10.00	10.00	10.00
	Benzo[a]pyrene	PPB	10.00		5	10.00	10.00	10.00
	Benzo[b]fluoranthene	PPB	10.00		5	10.00	10.00	10.00
	Benzo[j]fluoranthene	PPB	10.00		5	10.00	10.00	10.00
	Benzyl Alcohol	PPB	10.00		5	10.00	10.00	10.00
	Benzyl chloride	PPB	10.00		5	10.00	10.00	10.00
	Beryllium	PPB	5.00		11	5.00	5.00	5.00
	Beryllium, filtered	PPB	5.00		13	5.00	5.00	5.00
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		5	10.00	10.00	10.00
	Bis(2-chloroethoxy) methane	PPB	10.00		5	10.00	10.00	10.00
	Bis(2-chloroethyl) ether	PPB	10.00		5	10.00	10.00	10.00
	Bis(2-chloroisopropyl)ether	PPB	10.00		5	10.00	10.00	10.00
	Bis(2-ethylhexyl) phthalate	PPB	10.00		5	10.00	10.00	10.00
	Bis(chloromethyl) ether	PPB	5.00		5	5.00	5.00	5.00
	Boron	PPB	10.00	YES	11	41.27	115.00	13.00
	Boron, filtered	PPB	10.00	YES	13	30.31	47.00	13.00
	Bromide	PPB	1000.00		15	1000.00	1000.00	1000.00
	Bromoacetone	PPB	5.00		5	5.00	5.00	5.00
	Bromodichloromethane	PPB	5.00		5	5.00	5.00	5.00
	Bromoform	PPB	5.00		5	5.00	5.00	5.00
	Butyl benzyl phthalate	PPB	10.00		5	10.00	10.00	10.00
	Calcium	PPB	50.00	YES	11	46881.82	68500.00	25200.00
	Calcium, filtered	PPB	50.00	YES	13	48238.46	66800.00	24800.00
	Carbon Tetrachloride by GC/MS	PPB	5.00		9	5.00	5.00	5.00
	Carbon disulfide	PPB	10.00		5	10.00	10.00	10.00
	Carbophenothion	PPB	2.00		5	2.00	2.00	2.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Cesium-137	PCI/L	20.00		14	-.13	7.64	-6.72	120.0	
	Chlordane	PPB	1.00		5	1.00	1.00	1.00	2.0	
	Chloromaphazine	PPB	10.00		5	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		5	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		5	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		5	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		5	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		5	10.00	10.00	10.00		
	Chloroform	PPB	5.00		9	5.00	5.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		5	10.00	10.00	10.00		
	Chrysene	PPB	10.00		5	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00	YES	11	20.91	30.00	20.00		
	Cobalt, filtered	PPB	20.00		13	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		14	.46	6.87	-3.99	200.0	
	Copper	PPB	10.00	YES	11	15.73	73.00	10.00	1000.0	
	Copper, filtered	PPB	10.00		13	10.00	10.00	10.00	1000.0	
	Cresols	PPB	10.00		5	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		5	10.00	10.00	10.00		
	Cyanide	PPB	10.00		5	10.00	10.00	10.00		
	DDD	PPB	.10		5	.10	.10	.10		
	DDE	PPB	.10		5	.10	.10	.10		
	DDT	PPB	.10		5	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		5	10.00	10.00	10.00		
	Diallate	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		5	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzofa,ilpyrene	PPB	10.00	5	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00	5	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00	5	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	5	10.00	10.00	10.00		
	Dieldrin	PPB	.10	5	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	5	10.00	10.00	10.00		
	Diethylstilbesterol	PPB	200.00	4	200.00	200.00	200.00		
	Dihydrosofrole	PPB	10.00	5	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	5	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	5	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	5	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	5	10.00	10.00	10.00		
	Dioxane	PPB	500.00	5	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	5	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	5	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	5	.10	.10	.10		
	Endosulfan II	PPB	.10	5	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	5	.50	.50	.50		
	Ethanol	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	5	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	5	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	5	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	5	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	5	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	4	200.00	200.00	200.00		
	Europium-155	PPB		4	3.15	5.24	.91	4000.0	
	Fluoranthene	PPB	10.00	5	10.00	10.00	10.00		
	Fluorene	PPB	10.00	5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Formalin	PPB	500.00		5	500.00	500.00	500.00		
	Heptachlor	PPB	.10		5	.10	.10	.10		.4
	Heptachlor epoxide	PPB	.10		5	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		5	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00	YES	4	32.00	38.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	4	2.08	2.52	1.08		20.0
	Iodomethane	PPB	10.00		5	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		5	10.00	10.00	10.00		
	Isophorone	PPB	10.00		5	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		5	10.00	10.00	10.00		
	Kepone	PPB	1.00		5	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00	YES	11	10.27	12.00	10.00		
	Lithium, filtered	PPB	10.00	YES	13	10.15	11.00	10.00		
	Magnesium	PPB	50.00	YES	11	12385.45	17600.00	7280.00		
	Magnesium, filtered	PPB	50.00	YES	13	12746.92	17900.00	7320.00		
	Maleic hydrazide	PPB	500.00		5	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		5	10.00	10.00	10.00		
	Melphalan	PPB	10.00		5	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		5	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		5	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		5	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		5	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		9	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl chloride	PPB	10.00	5	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00	9	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00	5	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00	5	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00	5	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00	9	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00	5	10.00	10.00	10.00		
	Molybdenum	PPB	40.00	11	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00	13	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00	5	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00	5	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00	5	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00	5	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00	4	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00	5	10.00	10.00	10.00		
	Nickel	PPB	10.00	YES	25.73	10.00	10.00		
	Nickel, filtered	PPB	10.00	13	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00	5	100.00	100.00	100.00		
	Nitrite	PPB	1000.00	15	1000.00	1000.00	1000.00		3300.0
	Nitrobenzene	PPB	10.00	5	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00	5	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00	5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	O-toluidine hydrochloride	PPB	10.00		5	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		5	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		5	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		5	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		5	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		5	10.00	10.00	10.00		
	PHORATE	PPB	2.00		5	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		5	2.00	2.00	2.00		
	Pcdd's	PPB	.01		4	.01	.01	.01		
	Pcdf's	PPB	.01		4	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		5	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		5	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		4	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		5	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		5	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		5	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		15	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		5	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		4	.00	.01	.00	1.6	
	Plutonium-239/40	PCI/L	.10	YES	4	.11	.44	.00	1.2	
	Potassium	PPB	100.00	YES	11	8668.18	13100.00	5190.00		
	Potassium, filtered	PPB	100.00	YES	13	9068.46	12600.00	5340.00		
	Pronamide	PPB	10.00		5	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		5	5.00	5.00	5.00		
	Pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Pyridine	PPB	500.00		5	500.00	500.00	500.00		
	Reserpine	PPB	10.00		5	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		5	10.00	10.00	10.00		
	Ruthenium-103	PPB	20.00		1	2.23	2.23	2.23	2000.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Ruthenium-106	PCI/L	172.50		13	-5.55	28.20	-57.00	240.0	
	Safrol	PPB	10.00		5	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	11	26290.91	73600.00	17100.00		
	Silicon, filtered	PPB	50.00	YES	13	22315.38	28300.00	17700.00		
	Strontium	PPB	10.00	YES	11	252.45	352.00	131.00		
	Strontium, filtered	PPB	10.00	YES	13	252.15	336.00	132.00		
	Strontium-90	PCI/L	5.00		10	-27	26	-60	40.0	
	Strychnine	PPB	50.00		5	50.00	50.00	50.00		
	Styrene	PPB	5.00		5	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		3	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		4	3.52	4.13	2.36	4000.0	
	Tetrachloroethylene	PPB	5.00		9	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		5	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		9	10.00	10.00	10.00		
	Thallium	PPB	5.00		5	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		4	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		5	10.00	10.00	10.00		
	Thiourea	PPB	200.00		4	200.00	200.00	200.00		
	Thiuram	PPB	10.00		5	10.00	10.00	10.00		
	Tin	PPB	30.00		11	30.00	30.00	30.00		
	Tin 113 Daughter	PPB			4	1.12	3.40	-2.70	2000.0	
	Tin, filtered	PPB	30.00		13	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	11	66.18	128.00	60.00		
	Titanium, filtered	PPB	60.00		13	60.00	60.00	60.00		
	Toluene	PPB	5.00	YES	9	6.56	19.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		5	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	4	20300.00	23900.00	18500.00		
	Trans-1,2-dichloroethene	PPB	5.00		9	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		5	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		9	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		5	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-1 Crib (1980-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Trichloromonofluoromethane	PPB	10.00		5	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		5	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	16	1197187.50	4170000.00	254000.00	80000.0	YES
	Turbidity	NTU	.10	YES	4	51.60	200.00	.50	5.0	YES
	Uranium	PCI/L	.50	YES	5	2.87	8.73	1.03	40.0	
	Vanadium	PPB	5.00	YES	11	91.36	656.00	32.00		
	Vanadium, filtered	PPB	5.00	YES	13	34.23	41.00	30.00		
	Vinyl Acetate	PPB	5.00		5	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		9	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		5	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		9	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		9	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	11	23.45	68.00	9.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	13	9.85	20.00	5.00	5000.0	
	Zirconium	PPB	50.00		11	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		13	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		5	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		5	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		5	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		5	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		14	6.79	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		5	10.00	10.00	10.00

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W45800	W45600	W45400	W45200	W45000	W44800	W44600	W44400	W44200
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Well Location and Site Map for 216-A-37-2 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit	
CONTAMINATION INDICATOR PARAMETERS											
Conductivity, Laboratory Specific conductance	UMHO		1.00	YES	8	278.63	350.00	225.00	700.0		
	UMHO		1.00	YES	32	251.63	338.00	180.00	700.0		
	PPB		10.00	YES	32	3.19	15.00	-1.00			
	PPB		2000.00		28	596.43	1300.00	400.00			
	pH, Field Measurement		.10	YES	32	7.96	8.75	7.29		YES	
	pH, Laboratory Measurement		.01	YES	8	7.91	8.10	7.60		8.5	
DRINKING WATER PARAMETERS											
2,4,5-TP silvex	PPB		2.00		10	2.00	2.00	2.00	10.0		
	PPB		2.00		10	2.00	2.00	2.00	100.0		
	PCI/L		4.00		14	.98	1.72	-.19	15.0		
	PPB		.10		10	.10	.10	.10	4.0		
	PPB		5.00	YES	10	13.80	24.00	8.00	50.0		
	PPB		5.00	YES	10	13.60	20.00	8.00	50.0		
	PPB		6.00	YES	10	21.10	33.00	12.00	1000.0		
	PPB		6.00	YES	14	21.50	32.00	13.00	1000.0		
	PPB		.10		10	.10	.10	.10	4.0		
	PPB		2.00		10	2.00	2.00	2.00	10.0		
	PPB		2.00		14	2.00	2.00	2.00	10.0		
	PPB		10.00		10	10.00	10.00	10.00	50.0		
	PPB		10.00		14	10.00	10.00	10.00	50.0		
	PPB		1.00		6	1.00	1.00	1.00	1.0		
	MPN		2.20		4	2.20	2.20	2.20	1.0		
	PPB		.10		10	.10	.10	.10	4.0		
	PPB		.10		10	.10	.10	.10	.2		
	Fluoride	PPB		500.00	YES	14	579.79	800.00	500.00	4000.0	
PPB			.10		10	.10	.10	.10	4.0		
PCI/L			4.00		4	1.17	2.21	.30	15.0		
PCI/L			8.00	YES	18	7.40	10.00	4.22	50.0		
PPB			5.00		10	5.00	5.00	5.00	50.0		
PPB			5.00		10	5.00	5.00	5.00	50.0		
Lead (graphite furnace)											
Lead, filtered											

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
DRINKING WATER PARAMETERS									
Mercury		PPB	.10		10	.10	.10	.10	2.0
Mercury, filtered		PPB	.10		10	.10	.10	.10	2.0
Methoxychlor		PPB	3.00		10	3.00	3.00	3.00	100.0
Nitrate		PPB	500.00	YES	14	2464.29	4000.00	1100.00	45000.0
Nitrate, High Detection Level		PPB	2500.00	YES	4	4017.50	6270.00	2500.00	45000.0
Radium		PCI/L	1.00		10	.05	.18	-.02	100.0
Selenium		PPB	5.00		10	5.00	5.00	5.00	10.0
Selenium, filtered		PPB	5.00		10	5.00	5.00	5.00	10.0
Silver		PPB	10.00		10	10.00	10.00	10.00	50.0
Silver, filtered		PPB	10.00		14	10.00	10.00	10.00	50.0
Toxaphene		PPB	1.00		10	1.00	1.00	1.00	5.0
GROUNDWATER QUALITY PARAMETERS									
Chloride		PPB	500.00	YES	14	2192.86	3500.00	1000.00	250000.0
Iron		PPB	30.00	YES	10	122.10	296.00	30.00	300.0
Iron, filtered		PPB	30.00	YES	14	31.00	41.00	30.00	300.0
Manganese		PPB	5.00	YES	10	8.80	20.00	5.00	50.0
Manganese, filtered		PPB	5.00	YES	14	5.50	10.00	5.00	50.0
Phenol		PPB	10.00		4	10.00	10.00	10.00	
Phenol, low DL		PPB	10.00		6	10.00	10.00	10.00	
Sodium		PPB	200.00	YES	10	18570.00	31609.00	14900.00	
Sodium, filtered		PPB	200.00	YES	14	19864.29	36900.00	13900.00	
Sulfate		PPB	500.00	YES	14	23892.86	34400.00	15400.00	250000.0
SITE SPECIFIC AND OTHER PARAMETERS									
0,0-Diethyl-0,2-pyrazinyl phosphorothion		PPB	10.00		4	10.00	10.00	10.00	
1,1,1,2-tetrachlorethane		PPB	10.00		4	10.00	10.00	10.00	
1,1,1-trichloroethane		PPB	5.00		8	5.00	5.00	5.00	200.0
1,1,2,2-tetrachlorethane		PPB	5.00		4	5.00	5.00	5.00	
1,1,2-trichloroethane		PPB	5.00		8	5.00	5.00	5.00	
1,1-dichloroethane		PPB	5.00		8	5.00	5.00	5.00	
1,1-dichloroethylene		PPB	10.00		4	10.00	10.00	10.00	7.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
				Detected				Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	1,1-dimethylhydrazine	PPB	10.00	4	10.00	10.00	10.00	
	1,2,3,4-tetrachlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2,3,5-tetrachlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2,3-trichlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2,3-trichloropropane	PPB	10.00	4	10.00	10.00	10.00	
	1,2,4,5-tetrachlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2,4-trichlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2-dibromo-3-chloropropane	PPB	10.00	4	10.00	10.00	10.00	.2
	1,2-dibromoethane	PPB	10.00	4	10.00	10.00	10.00	
	1,2-dichlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,2-dichloroethane	PPB	5.00	8	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00	4	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	4	10.00	10.00	10.00	
	1,2-diphenylhydrazine	PPB	10.00	4	10.00	10.00	10.00	
	1,3,5-trichlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,3-dichlorobenzene	PPB	10.00	4	10.00	10.00	10.00	
	1,3-dichloropropene	PPB	5.00	4	5.00	5.00	5.00	
	1,4-dichloro-2-butene	PPB	10.00	4	10.00	10.00	10.00	
	1,4-naphthoquinone	PPB	10.00	4	10.00	10.00	10.00	
	1-(o-chlorophenyl) thiourea	PPB	200.00	4	200.00	200.00	200.00	
	1-Butanol	PPB	10000.00	3	10000.00	10000.00	10000.00	
	1-Butynol	PPB	10000.00	3	10000.00	10000.00	10000.00	
	1-Propanol	PPB	10000.00	3	10000.00	10000.00	10000.00	
	1-acetyl-2-thiourea	PPB	200.00	4	200.00	200.00	200.00	
	1-chloro-2,3-epoxypropane	PPB	10.00	4	10.00	10.00	10.00	
	1-naphthyl-2-thiourea	PPB	200.00	4	200.00	200.00	200.00	
	1-naphthylamine	PPB	10.00	4	10.00	10.00	10.00	
	2,3,4,6-tetrachlorophenol	PPB	10.00	4	10.00	10.00	10.00	
	2,3,7,8 TCDD	PPB	.01	3	.01	.01	.01	
	2,4,5-T	PPB	2.00	10	2.00	2.00	2.00	
	2,4,5-Trichlorophenol	PPB	10.00	4	10.00	10.00	10.00	
	2,4,6-trichlorophenol	PPB	10.00	4	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dichlorophenol	PPB	10.00		4	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		4	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		4	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		4	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		4	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		4	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		4	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		4	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		4	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		4	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		4	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		4	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		4	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		4	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		4	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		4	10.00	10.00	10.00		
	2-picoline	PPB	10.00		4	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		4	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		4	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		4	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		4	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		3	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		4	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		4	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		4	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		4	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		4	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		4	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		4	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		4	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		4	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	7H-dibenzo[c,g]carbazole	PPB	10.00		4	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		4	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		4	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		4	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00		8	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00		4	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		4	10.00	10.00	10.00		
	Acrolein	PPB	10.00		4	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		4	10.00	10.00	10.00		
	Aldrin	PPB	.10		4	.10	.10	.10		
	Alkalinity		20000.00	YES	1	124000.00	124000.00	124000.00		
	Allyl Chloride	PPB	100.00		4	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		4	10.00	10.00	10.00		
	Aluminum	PPB	150.00		10	150.00	150.00	150.00	50.0	
	Aluminum, filtered	PPB	150.00		14	150.00	150.00	150.00	50.0	
	Amitrole	PPB	10.00		4	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00		4	50.00	50.00	50.00		
	Aniline	PPB	10.00		4	10.00	10.00	10.00		
	Anthracene	PPB	10.00		4	10.00	10.00	10.00		
	Antimony	PPB	100.00		10	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		14	100.00	100.00	100.00		
	Aramite	PPB	10.00		4	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		4	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		4	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		4	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benz[a]anthracene	PPB	10.00		4	10.00	10.00	10.00		
	Benz[c]acridine	PPB	10.00		4	10.00	10.00	10.00		
	Benzene	PPB	5.00		8	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		4	10.00	10.00	10.00		
	Benzenethoil	PPB	10.00		4	10.00	10.00	10.00		
	Benzidine	PPB	10.00		4	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		4	10.00	10.00	10.00		
	Benzo(k)Fluoranthene	PPB	10.00		4	10.00	10.00	10.00		
	Benzo[a]pyrene	PPB	10.00		4	10.00	10.00	10.00		
	Benzo[b]fluoranthene	PPB	10.00		4	10.00	10.00	10.00		
	Benzo[f]jfluoranthene	PPB	10.00		4	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		4	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		4	10.00	10.00	10.00		
	Beryllium	PPB	5.00		10	5.00	5.00	5.00		
	Beryllium, filtered	PPB	5.00		14	5.00	5.00	5.00		
	Bis(2-chloro-1-methyl(ethyl)ether	PPB	10.00		4	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		4	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		4	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		4	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	4	10.75	13.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		4	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	10	19.90	33.00	12.00		
	Boron, filtered	PPB	10.00	YES	14	23.79	51.00	10.00		
	Bromide	PPB	1000.00		14	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		4	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		4	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		4	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		4	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	10	22270.00	28500.00	18700.00		
	Calcium, filtered	PPB	50.00	YES	14	22114.29	27900.00	17900.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		8	5.00	5.00	5.00		5.0
	Carbon disulfide	PPB	10.00		4	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Carbophenothion	PPB	2.00	4	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00	8	-.55	2.83	-6.18	120.0	
	Chlordane	PPB	1.00	4	1.00	1.00	1.00	2.0	
	Chloronaphazine	PPB	10.00	4	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00	4	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00	4	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00	4	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00	4	300.00	300.00	300.00		
	Chloroethane	PPB	10.00	4	10.00	10.00	10.00		
	Chloroform	PPB	5.00	8	5.00	5.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00	4	10.00	10.00	10.00		
	Chrysene	PPB	10.00	4	10.00	10.00	10.00		
	Citrus red	PPB	1000.00	4	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00	10	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00	14	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50	8	.44	3.30	-1.63	200.0	
	Copper	PPB	10.00	10	10.00	10.00	10.00	1000.0	
	Copper, filtered	PPB	10.00	14	10.00	10.00	10.00	1000.0	
	Cresols	PPB	10.00	4	10.00	10.00	10.00	1000.0	
	Crotonaldehyde	PPB	10.00	4	10.00	10.00	10.00		
	Cyanide	PPB	10.00	4	10.00	10.00	10.00		
	DDD	PPB	.10	4	.10	.10	.10		
	DDE	PPB	.10	4	.10	.10	.10		
	DDT	PPB	.10	4	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00	4	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00	4	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00	4	10.00	10.00	10.00		
	Diallate	PPB	10.00	4	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00	4	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00	4	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00	4	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00	4	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzof[a,h]pyrene	PPB	10.00		4	10.00	10.00	10.00	
	Dibenzof[a,i]pyrene	PPB	10.00		4	10.00	10.00	10.00	
	Dibenzofuran	PPB	10.00		4	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00		4	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		4	10.00	10.00	10.00	
	Dieldrin	PPB	.10		4	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		4	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00		4	200.00	200.00	200.00	
	Dihydrosafrole	PPB	10.00		4	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		4	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		4	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		4	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		4	10.00	10.00	10.00	
	Dioxane	PPB	500.00		4	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		4	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		4	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		4	.10	.10	.10	
	Endosulfan II	PPB	.10		4	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		4	.50	.50	.50	
	Ethanol	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		4	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		4	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		4	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		4	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		4	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		4	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		4	10.00	10.00	10.00	
	Fluorene	PPB	10.00		4	10.00	10.00	10.00	

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Formalin	PPB	500.00		4	500.00	500.00	500.00
	Heptachlor	PPB	.10		4	.10	.10	.10
	Heptachlor epoxide	PPB	.10		4	.10	.10	.10
	Hexachlorobenzene	PPB	10.00		4	10.00	10.00	10.00
	Hexachlorobutadiene	PPB	10.00		4	10.00	10.00	10.00
	Hexachlorocyclopentadiene	PPB	10.00		4	10.00	10.00	10.00
	Hexachloroethane	PPB	10.00		4	10.00	10.00	10.00
	Hexachlorophene	PPB	10.00		4	10.00	10.00	10.00
	Hexachloropropene	PPB	10.00		4	10.00	10.00	10.00
	Hydrazine, Low Detection Level	PPB	30.00		4	30.00	30.00	30.00
	Indeno(1,2,3-cd)pyrene	PPB	10.00		4	10.00	10.00	10.00
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	5	.59	1.41	-.09
	Iodomethane	PPB	10.00		4	10.00	10.00	10.00
	Isobutyl alcohol	PPB	10000.00		3	10000.00	10000.00	10000.00
	Isodrin	PPB	10.00		4	10.00	10.00	10.00
	Isophorone	PPB	10.00		4	10.00	10.00	10.00
	Isosafrole	PPB	10.00		4	10.00	10.00	10.00
	Kepone	PPB	1.00		4	1.00	1.00	1.00
	Kerosene	PPB	10000.00		4	10000.00	10000.00	10000.00
	Lithium	PPB	10.00		10	10.00	10.00	10.00
	Lithium, filtered	PPB	10.00		14	10.00	10.00	10.00
	Magnesium	PPB	50.00	YES	10	5422.00	6460.00	3880.00
	Magnesium, filtered	PPB	50.00	YES	14	5410.00	6690.00	3800.00
	Maleic hydrazide	PPB	500.00		4	500.00	500.00	500.00
	Malononitrile	PPB	10.00		4	10.00	10.00	10.00
	Melphalan	PPB	10.00		4	10.00	10.00	10.00
	Methacrylonitrile	PPB	10.00		4	10.00	10.00	10.00
	Methanethiol	PPB	10.00		4	10.00	10.00	10.00
	Methapyrilene	PPB	10.00		4	10.00	10.00	10.00
	Metholonyl	PPB	10.00		4	10.00	10.00	10.00
	Methyl Isobutyl Ketone	PPB	10.00		8	10.00	10.00	10.00
	Methyl bromide	PPB	10.00		4	10.00	10.00	10.00

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl chloride	PPB	10.00		4	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		8	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		4	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		4	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		4	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		8	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		4	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		10	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		14	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		3	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		4	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		4	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		4	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		4	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		4	10.00	10.00	10.00		
	Nickel	PPB	10.00		10	10.00	10.00	10.00		
	Nickel, filtered	PPB	10.00		14	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		4	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		14	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		4	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		4	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		4	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	0-toluidine hydrochloride	PPB	10.00		4	10.00	10.00	10.00
	P benzoquinone	PPB	10.00		4	10.00	10.00	10.00
	P-chloro-m-cresol	PPB	10.00		4	10.00	10.00	10.00
	P-chloroaniline	PPB	10.00		4	10.00	10.00	10.00
	P-dimethylaminobenzene	PPB	10.00		4	10.00	10.00	10.00
	P-nitroaniline	PPB	10.00		4	10.00	10.00	10.00
	PHORATE	PPB	2.00		4	2.00	2.00	2.00
	Paraldehyde	PPB	10000.00		3	10000.00	10000.00	10000.00
	Parathion	PPB	2.00		4	2.00	2.00	2.00
	Pcdd's	PPB	.01		3	.01	.01	.01
	Pcdf's	PPB	.01		3	.01	.01	.01
	Pentachlorobenzene	PPB	10.00		4	10.00	10.00	10.00
	Pentachloroethane	PPB	10.00		4	10.00	10.00	10.00
	Pentachloronitrobenzene	PPB	10.00		4	10.00	10.00	10.00
	Pentachlorophenol	PPB	50.00		4	50.00	50.00	50.00
	Perchlorate	PPB	500.00		4	500.00	500.00	500.00
	Phenacetin	PPB	10.00		4	10.00	10.00	10.00
	Phenanthrene	PPB	10.00		4	10.00	10.00	10.00
	Phenylenediamine	PPB	10.00		4	10.00	10.00	10.00
	Phosphate	PPB	1000.00		14	1000.00	1000.00	1000.00
	Phthalic acid esters	PPB	10.00		4	10.00	10.00	10.00
	Plutonium-238	PCI/L	.10		4	.00	.00	.00
	Plutonium-239/40	PCI/L	.10		4	.00	.00	.00
	Potassium	PPB	100.00	YES	10	6714.00	8540.00	4920.00
	Potassium, filtered	PPB	100.00	YES	14	6739.29	8630.00	4780.00
	Pronamide	PPB	10.00		4	10.00	10.00	10.00
	Propionitrile	PPB	5.00		4	5.00	5.00	5.00
	Pyrene	PPB	10.00		4	10.00	10.00	10.00
	Pyridine	PPB	500.00		4	500.00	500.00	500.00
	Reserpine	PPB	10.00		4	10.00	10.00	10.00
	Resorcinol	PPB	10.00		4	10.00	10.00	10.00
	Ruthenium-106	PCI/L	172.50		8	3.40	30.50	-56.30
								240.0

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CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Safrol	PPB	10.00		4	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	10	26150.00	32600.00	18300.00		
	Silicon, filtered	PPB	50.00	YES	14	26107.14	32400.00	17800.00		
	Strontium	PPB	10.00	YES	10	121.30	163.00	103.00		
	Strontium, filtered	PPB	10.00	YES	14	123.36	161.00	96.00		
	Strontium-90	PCI/L	5.00		7	-01	.45	-44	40.0	
	Strychnine	PPB	50.00		4	50.00	50.00	50.00		
	Styrene	PPB	5.00	YES	4	5.00	5.00	5.00	5.0	YES
	Sulfide	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		4	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		2	6.35	7.82	4.88	4000.0	
	Tetrachloroethylene	PPB	5.00		8	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		4	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		8	10.00	10.00	10.00		
	Thallium	PPB	5.00		4	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		4	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		4	10.00	10.00	10.00		
	Thiourea	PPB	200.00		4	200.00	200.00	200.00		
	Thiuram	PPB	10.00		4	10.00	10.00	10.00		
	Tin	PPB	30.00		10	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		14	30.00	30.00	30.00		
	Titanium	PPB	60.00		10	60.00	60.00	60.00		
	Titanium, filtered	PPB	60.00		14	60.00	60.00	60.00		
	Toluene	PPB	5.00		8	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		4	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	3	23166.67	28000.00	19800.00		
	Total dissolved solids	PPB	5000.00	YES	1	208000.00	208000.00	208000.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00		8	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		4	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		8	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		4	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		4	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-A-37-2 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		4	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	11	2918.50	10100.00	11.50	80000.0	
	Turbidity	NTU	.10	YES	4	.65	1.20	.40	5.0	
	Uranium	PCI/L	.50	YES	4	.75	.95	.50	40.0	
	Vanadium	PPB	5.00	YES	10	90.50	139.00	42.00		
	Vanadium, filtered	PPB	5.00	YES	14	90.43	140.00	39.00		
	Vinyl Acetate	PPB	5.00		4	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		8	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		4	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		8	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		8	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	10	8.20	15.00	5.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	14	6.00	10.00	5.00	5000.0	
	Zirconium	PPB	50.00		10	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		14	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		4	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		4	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		4	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		4	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		12	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		4	10.00	10.00	10.00

Water Table too Flat to Generalize
Ground Water Flow Direction

- Ground Water Monitoring Wells
(Pumped Samples)
- Vadose Zone Monitoring Wells
(Numbers in Parentheses are
Tank Farm ID Numbers for Wells)

N38600

N38400

N38200

216-A-45 Crib

299-E17-54
(01-45-10)

299-E17-13

299-E17-12

299-E17-53
(01-45-04)

Inlet Line

W49600

W49400

W49200

W49000

W48800

AGL\216-A-45

Well Location and Site Map for 216-A-45 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	3	326.33	363.00	282.00	700.0	
	Specific conductance	UMHO	1.00	YES	7	357.57	388.00	291.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	4	7.00	15.00	1.00		
	Total organic carbon	PPB	2000.00		2	550.00	600.00	500.00		
	pH, Field Measurement		.10	YES	7	8.10	8.42	7.52	8.5	
	pH, Laboratory Measurement		.01	YES	3	7.87	7.90	7.80	8.5	
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		2	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		2	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	9	3.33	6.42	1.07	15.0	
	Alpha-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	2	9.50	10.00	9.00	50.0	
	Arsenic, filtered	PPB	5.00	YES	3	9.00	9.00	9.00	50.0	
	Barium	PPB	6.00	YES	2	34.50	35.00	34.00	1000.0	
	Barium, filtered	PPB	6.00	YES	5	35.80	38.00	34.00	1000.0	
	Beta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Cadmium	PPB	2.00		2	2.00	2.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00		5	2.00	2.00	2.00	10.0	
	Chromium	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Chromium, filtered	PPB	10.00		5	10.00	10.00	10.00	50.0	
	Coliform (Membrane Filter)	PPB	1.00		2	1.00	1.00	1.00	1.0	
	Delta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Endrin	PPB	.10		2	.10	.10	.10	.2	
	Fluoride	PPB	500.00		4	500.00	500.00	500.00	4000.0	
	Gamma-BHC	PPB	.10	YES	2	.10	.10	.10	4.0	
	Gross alpha	PCI/L	4.00		2	2.78	2.98	2.57	15.0	
	Gross beta	PCI/L	8.00	YES	11	39.96	71.70	12.80	50.0	YES
Lead (graphite furnace)	PPB	5.00		2	5.00	5.00	5.00	5.00	50.0	
Lead, filtered	PPB	5.00		3	5.00	5.00	5.00	5.00	50.0	
Mercury	PPB	.10		2	.10	.10	.10	.10	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
DRINKING WATER PARAMETERS									
	Mercury, filtered	PPB	.10		3	.10	.10	.10	2.0
	Methoxychlor	PPB	3.00		2	3.00	3.00	3.00	100.0
	Nitrate	PPB	500.00	YES	4	27800.00	29300.00	24000.00	45000.0
	Nitrate, High Detection Level	PPB	2500.00	YES	7	34714.29	42800.00	28000.00	45000.0
	Radium	PCI/L	1.00		2	.04	.07	.01	100.0
	Selenium	PPB	5.00		2	5.00	5.00	5.00	10.0
	Selenium, filtered	PPB	5.00		3	5.00	5.00	5.00	10.0
	Silver	PPB	10.00		2	10.00	10.00	10.00	50.0
	Silver, filtered	PPB	10.00		5	10.00	10.00	10.00	50.0
	Toxaphene	PPB	1.00		2	1.00	1.00	1.00	5.0
GROUNDWATER QUALITY PARAMETERS									
	Chloride	PPB	500.00	YES	4	3950.00	4300.00	3700.00	250000.0
	Iron	PPB	30.00	YES	2	207.50	373.00	42.00	300.0
	Iron, filtered	PPB	30.00		5	30.00	30.00	30.00	300.0
	Manganese	PPB	5.00	YES	2	5.50	6.00	5.00	50.0
	Manganese, filtered	PPB	5.00		5	5.00	5.00	5.00	50.0
	Phenol	PPB	10.00		2	10.00	10.00	10.00	
	Sodium	PPB	200.00	YES	2	19750.00	20900.00	18600.00	
	Sodium, filtered	PPB	200.00	YES	5	19860.00	22900.00	18100.00	
	Sulfate	PPB	500.00	YES	4	38025.00	46100.00	30000.00	250000.0
SITE SPECIFIC AND OTHER PARAMETERS									
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		2	10.00	10.00	10.00	
	1,1,1,2-tetrachlorethane	PPB	10.00		2	10.00	10.00	10.00	
	1,1,1-trichloroethane	PPB	5.00		4	5.00	5.00	5.00	200.0
	1,1,2,2-tetrachlorethane	PPB	5.00		2	5.00	5.00	5.00	
	1,1,2-trichloroethane	PPB	5.00		4	5.00	5.00	5.00	
	1,1-dichloroethane	PPB	5.00		4	5.00	5.00	5.00	
	1,1-dichloroethylene	PPB	10.00		2	10.00	10.00	10.00	7.0
	1,1-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00	
	1,2,3,4-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2,3,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		2	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		2	10.00	10.00	10.00	.2	
	1,2-dibromoethane	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		4	5.00	5.00	5.00	5.0	
	1,2-dichloropropane	PPB	5.00		2	5.00	5.00	5.00	5.0	
	1,2-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00		2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		1	.01	.01	.01		
	2,4,5-T	PPB	2.00		2	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00	
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00	
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00	
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00	
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00	
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00	
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00	
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00	
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00	
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00	
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		2	10.00	10.00	10.00	
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00	
	2-methylactonitrile	PPB	10.00		2	10.00	10.00	10.00	
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00	
	2-picoline	PPB	10.00		2	10.00	10.00	10.00	
	2-propyn-1-ol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00	
	3,3'-Dichlorobenzidine	PPB	10.00		2	10.00	10.00	10.00	
	3,3'-dimethoxybenzidine	PPB	10.00		2	10.00	10.00	10.00	
	3,3'-dimethylbenzidine	PPB	10.00		2	10.00	10.00	10.00	
	3-chloropropionitrile	PPB	10000.00		1	10000.00	10000.00	10000.00	
	3-methylcholanthrene	PPB	10.00		2	10.00	10.00	10.00	
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		2	10.00	10.00	10.00	
	4,6-dinitro-o-cresol and salts	PPB	10.00		2	10.00	10.00	10.00	
	4-Nitroquinoline 1-oxide	PPB	10.00		2	10.00	10.00	10.00	
	4-aminobiphenyl	PPB	10.00		2	10.00	10.00	10.00	
	4-bromophenyl phenyl ether	PPB	10.00		2	10.00	10.00	10.00	
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		2	10.00	10.00	10.00	
	5-nitro-o-toluidine	PPB	10.00		2	10.00	10.00	10.00	
	7,12-dimethylbenz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00	
	7H-dibenzo[c,g]carbazole	PPB	10.00		2	10.00	10.00	10.00	
	Acenaphthalene	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Acenaphthene	PPB	10.00		2	10.00	10.00	10.00
	Acetone - by ABN	PPB	10.00		2	10.00	10.00	10.00
	Acetone by VOA	PPB	10.00		4	10.00	10.00	10.00
	Acetonitrile	PPB	10.00		2	10.00	10.00	10.00
	Acetophenone	PPB	10.00		2	10.00	10.00	10.00
	Acrolein	PPB	10.00		2	10.00	10.00	10.00
	Acrylamide	PPB	10000.00		1	10000.00	10000.00	10000.00
	Acrylonitrile	PPB	10.00		2	10.00	10.00	10.00
	Aldrin	PPB	.10		2	.10	.10	.10
	Alkalinity		20000.00	YES	1	88000.00	88000.00	88000.00
	Allyl Chloride	PPB	100.00		2	100.00	100.00	100.00
	Allyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		2	10.00	10.00	10.00
	Aluminum	PPB	150.00		2	150.00	150.00	150.00
	Aluminum, filtered	PPB	150.00		5	150.00	150.00	150.00
	Americium-241	PCI/L	.10		1	.01	.01	.01
	Amitrole	PPB	10.00		2	10.00	10.00	10.00
	Ammonium ion	PPB	50.00		2	50.00	50.00	50.00
	Aniline	PPB	10.00		2	10.00	10.00	10.00
	Anthracene	PPB	10.00		2	10.00	10.00	10.00
	Antimony	PPB	100.00		2	100.00	100.00	100.00
	Antimony, filtered	PPB	100.00		5	100.00	100.00	100.00
	Aramite	PPB	10.00		2	10.00	10.00	10.00
	Arochlor 1016	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1221	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1232	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1242	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1248	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1254	PPB	1.00		1	1.00	1.00	1.00
	Arochlor 1260	PPB	1.00		1	1.00	1.00	1.00
	Auramine	PPB	10.00		2	10.00	10.00	10.00
	Benz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Benz[c]acridine	PPB	10.00		2	10.00	10.00	10.00
	Benzene	PPB	5.00		4	5.00	5.00	5.00
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00
	Benzenethiol	PPB	10.00		2	10.00	10.00	10.00
	Benidine	PPB	10.00		2	10.00	10.00	10.00
	Benzo(ghi)perylene	PPB	10.00		2	10.00	10.00	10.00
	Benzo(k)fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzo(a)pyrene	PPB	10.00		2	10.00	10.00	10.00
	Benzo(b)fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzo(j)fluoranthene	PPB	10.00		2	10.00	10.00	10.00
	Benzyl Alcohol	PPB	10.00		2	10.00	10.00	10.00
	Benzyl chloride	PPB	10.00		2	10.00	10.00	10.00
	Beryllium	PPB	5.00		2	5.00	5.00	5.00
	Beryllium, filtered	PPB	5.00		5	5.00	5.00	5.00
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		2	10.00	10.00	10.00
	Bis(2-chloroethoxy) methane	PPB	10.00		2	10.00	10.00	10.00
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00
	Bis(2-chloroisopropyl)ether	PPB	10.00		2	10.00	10.00	10.00
	Bis(2-ethylhexyl) phthalate	PPB	10.00		2	10.00	10.00	10.00
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00
	Boron	PPB	10.00	YES	2	15.50	18.00	13.00
	Boron, filtered	PPB	10.00	YES	5	20.20	27.00	15.00
	Bromide	PPB	1000.00		4	1000.00	1000.00	1000.00
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00
	Bromoform	PPB	5.00		2	5.00	5.00	5.00
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00
	Calcium	PPB	50.00	YES	2	27800.00	29100.00	26500.00
	Calcium, filtered	PPB	50.00	YES	5	28000.00	29600.00	24800.00
	Carbon Tetrachloride by GC/MS	PPB	5.00		4	5.00	5.00	5.00
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Cesium-137	PCI/L	20.00		11	1.07	4.95	-2.87	120.0	
	Chlordane	PPB	1.00		2	1.00	1.00	1.00	2.0	
	Chloronaphazine	PPB	10.00		2	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		2	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		2	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		2	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Chloroform	PPB	5.00		4	5.00	5.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00		
	Chrysene	PPB	10.00		2	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		2	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		5	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		11	4.16	10.60	-1.57	200.0	
	Copper	PPB	10.00		2	10.00	10.00	10.00	1000.0	
	Copper, filtered	PPB	10.00		5	10.00	10.00	10.00	1000.0	
	Cresols	PPB	10.00		2	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00		
	Cyanide	PPB	10.00		2	10.00	10.00	10.00		
DDD	PPB	.10		2	.10	.10	.10			
DDE	PPB	.10		2	.10	.10	.10			
DDT	PPB	.10		2	.10	.10	.10			
Di-n-butyl phthalate	PPB	10.00		2	10.00	10.00	10.00			
Di-n-octyl phthalate	PPB	10.00		2	10.00	10.00	10.00			
Di-n-propylnitrosamine	PPB	10.00		2	10.00	10.00	10.00			
Diallate	PPB	10.00		2	10.00	10.00	10.00			
Dibenz[a,h]acridine	PPB	10.00		2	10.00	10.00	10.00			
Dibenz[a,h]anthracene	PPB	10.00		2	10.00	10.00	10.00			
Dibenz[a,j]acridine	PPB	10.00		2	10.00	10.00	10.00			
Dibenzo[a,e]pyrene	PPB	10.00		2	10.00	10.00	10.00			
Dibenzo[a,h]pyrene	PPB	10.00		2	10.00	10.00	10.00			

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzofa, i)pyrene	PPB	10.00		2	10.00	.00	10.00	
	Dibenzofuran	PPB	10.00		2	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00		2	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		2	10.00	10.00	10.00	
	Dieldrin	PPB	.10		2	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00		2	200.00	200.00	200.00	
	Dihydrosofrole	PPB	10.00		2	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		2	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		2	10.00	10.00	10.00	
	Dioxane	PPB	500.00		2	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		2	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		2	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		2	.10	.10	.10	
	Endosulfan II	PPB	.10		2	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		2	.50	.50	.50	
	Ethanol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		2	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		2	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		2	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		2	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		2	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		2	10.00	10.00	10.00	
	Fluorene	PPB	10.00		2	10.00	10.00	10.00	
	Fluoride, Low Detection Level	PPB	20.00	YES	1	531.00	531.00	531.00	4000.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Formalin	PPB	500.00		2	500.00	500.00	500.00		
	Heptachlor	PPB	.10		2	.10	.10	.10		.4
	Heptchlor epoxide	PPB	.10		2	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		2	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	7	3.83	7.49	1.33	20.0	
	Iodomethane	PPB	10.00		2	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		2	10.00	10.00	10.00		
	Isophorone	PPB	10.00		2	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00		
	Kepone	PPB	1.00		2	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		2	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		5	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	2	8390.00	8650.00	8130.00		
	Magnesium, filtered	PPB	50.00	YES	5	8494.00	9350.00	7870.00		
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00		
	Melphalan	PPB	10.00		2	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00	
	Methyl ethyl ketone	PPB	10.00		4	8.75	10.00	5.00	
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00		4	5.00	5.00	5.00	
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		5	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00	
	Natural uranium	UG/L	.73	YES	7	5.05	6.22	4.49	59.0
	Nickel	PPB	10.00		2	10.00	10.00	10.00	
	Nickel, filtered	PPB	10.00		5	10.00	10.00	10.00	
	Nicotinic acid	PPB	100.00		2	100.00	100.00	100.00	
	Nitrite	PPB	1000.00		4	1000.00	1000.00	1000.00	3300.0
	Nitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00	
	P benzoquinone	PPB	10.00		2	10.00	10.00	10.00	
	P-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00	
	P-chloroaniline	PPB	10.00		2	10.00	10.00	10.00	
	P-dimethylaminazobenzene	PPB	10.00		2	10.00	10.00	10.00	
	P-nitroaniline	PPB	10.00		2	10.00	10.00	10.00	
	PHORATE	PPB	2.00		2	2.00	2.00	2.00	
	Paraldehyde	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Parathion	PPB	2.00		2	2.00	2.00	2.00	
	Pcdd's	PPB	.01		1	.01	.01	.01	
	Pcdf's	PPB	.01		1	.01	.01	.01	
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Pentachloroethane	PPB	10.00		2	10.00	10.00	10.00	
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00	
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00	
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00	
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00	
	Phosphate	PPB	1000.00		4	1000.00	1000.00	1000.00	
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00	
	Plutonium-238	PCI/L	.10		9	.00	.00	.01	1.6
	Plutonium-239/40	PCI/L	.10		9	.00	.01	.00	1.2
	Potassium	PPB	100.00	YES	2	4985.00	4990.00	4980.00	
	Potassium, filtered	PPB	100.00	YES	5	5076.00	5570.00	4830.00	
	Pronamide	PPB	10.00		2	10.00	10.00	10.00	
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00	
	Pyrene	PPB	10.00		2	10.00	10.00	10.00	
	Pyridine	PPB	500.00		2	500.00	500.00	500.00	
	Reserpine	PPB	10.00		2	10.00	10.00	10.00	
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Ruthenium-106	PCI/L	172.50		11	35.61	80.10	-21.40	240.0	
	Safrol	PPB	10.00		2	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	2	17200.00	17300.00	17100.00		
	Silicon, filtered	PPB	50.00	YES	5	18360.00	18800.00	18000.00		
	Strontium	PPB	10.00	YES	2	139.00	141.00	137.00		
	Strontium, filtered	PPB	10.00	YES	5	142.80	149.00	132.00		
	Strontium-90	PCI/L	5.00		8	.25	.70	-.33	40.0	
	Strychnine	PPB	50.00		2	50.00	50.00	50.00		
	Styrene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Tetrachloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		2	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		4	10.00	10.00	10.00		
	Thallium	PPB	5.00		2	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		3	5.00	5.00	5.00		
	thiofanox	PPB	10.00		2	10.00	10.00	10.00		
	Thiourea	PPB	200.00		2	200.00	200.00	200.00		
	Thiuram	PPB	10.00		2	10.00	10.00	10.00		
	Tin	PPB	30.00		2	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		5	30.00	30.00	30.00		
	Titanium	PPB	60.00		2	60.00	60.00	60.00		
	Titanium, filtered	PPB	60.00		5	60.00	60.00	60.00		
	Toluene	PPB	5.00		4	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	1	22000.00	22000.00	22000.00		
	Total dissolved solids		5000.00	YES	2	214500.00	228000.00	201000.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00		4	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		2	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-A-45 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Iris(2,3-dibromopropyl) phosphate									
	Iritium	PPB	10.00		2	10.00	10.00	10.00		
	Turbidity	PCI/L	500.00	YES	11	1761000.00	3460000.00	751000.00	80000.0	YES
	Uranium	NTU	.10	YES	2	.40	.70	.10	5.0	
	Uranium-234	PCI/L	.50	YES	2	2.80	2.90	2.70	40.0	
	Uranium-235	PCI/L	.10	YES	7	1.64	1.79	1.44	20.0	
	Uranium-238	PCI/L	.10	YES	7	.13	.58	.04	24.0	
	Vanadium	PCI/L	.10	YES	7	1.58	2.08	1.21	24.0	
	Vanadium, filtered	PPB	5.00	YES	2	26.00	28.00	24.00		
	Vinyl Acetate	PPB	5.00	YES	5	27.40	30.00	25.00		
	Vinyl chloride	PPB	5.00		2	5.00	5.00	5.00		
	Warfarin	PPB	10.00		4	10.00	10.00	10.00	2.0	
	Xylene-m	PPB	10.00		2	10.00	10.00	10.00		
	Xylene-o,p	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc, filtered	PPB	5.00	YES	2	17.00	21.00	13.00	5000.0	
	Zirconium	PPB	5.00	YES	5	7.20	11.00	5.00	5000.0	
	Zirconium, filtered	PPB	50.00		2	50.00	50.00	50.00		
	dibromochloromethane	PPB	50.00		5	50.00	50.00	50.00		
	m-Nitroaniline	PPB	5.00		2	5.00	5.00	5.00	100.0	
	o-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		6	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00

Well Location and Site Map for 216-B-3 Pond System

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory Specific conductance Total Organic Halogen, Low Det. Level Total organic carbon pH, Field Measurement pH, Laboratory Measurement	UMHO		1.00	YES	54	328.15	489.00	142.00	700.0	
	UMHO		1.00	YES	175	275.69	447.00	137.00	700.0	
	PPB		10.00	YES	163	40.37	1310.00	.01		
	PPB		2000.00		155	563.23	1900.00	200.00		
			.10	YES	174	8.00	8.53	6.95	8.5	YES
			.01	YES	54	7.94	8.40	7.40	8.5	
DRINKING WATER PARAMETERS										
2,4,5-TP silvex 2,4-D Alpha, High Detection Level Alpha-BHC Arsenic Arsenic, filtered Barium Barium, filtered Beta-BHC Cadmium Cadmium, filtered Chromium Chromium, filtered Coliform (Membrane Filter) Coliform bacteria Delta-BHC Endrin Fluoride Gamma-BHC Gross alpha Gross beta Lead (graphite furnace) Lead, filtered	PPB		2.00		47	2.38	20.00	2.00	10.0	
	PPB		2.00		47	2.38	20.00	2.00	100.0	
	PCI/L		4.00	YES	50	2.37	7.93	-.38	15.0	
	PPB		.10		46	.10	.10	.10	4.0	
	PPB		5.00	YES	49	7.18	16.00	5.00	50.0	
	PPB		5.00	YES	48	7.04	15.00	5.00	50.0	
	PPB		6.00	YES	42	41.26	117.00	6.00	1000.0	
	PPB		6.00	YES	41	39.27	110.00	6.00	1000.0	
	PPB		.10		46	.10	.10	.10	4.0	
	PPB		2.00	YES	42	2.95	41.00	2.00	10.0	YES
	PPB		2.00	YES	41	2.02	3.00	2.00	10.0	
	PPB		10.00	YES	42	44.93	206.00	10.00	50.0	YES
	PPB		10.00	YES	41	10.12	15.00	10.00	50.0	
	PPB		1.00		11	1.00	1.00	1.00	1.0	
	MPN		2.20		35	2.20	2.20	2.20	1.0	
	PPB		.10		46	.10	.10	.10	4.0	
	PPB		.10		46	.10	.10	.10	.2	
	PPB		500.00	YES	49	530.20	700.00	500.00	4000.0	
	PPB		.10		46	.10	.10	.10	4.0	
	PCI/L		4.00		1	1.07	1.07	1.07	15.0	
PCI/L		8.00	YES	57	5.83	12.70	1.32	50.0		
PPB		5.00	YES	47	5.62	25.00	5.00	50.0		
PPB		5.00		46	5.00	5.00	5.00	50.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-8-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury	PPB	.10		46	.10	.10	.10	2.0	
	Mercury, filtered	PPB	.10		45	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		46	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	49	8161.22	29600.00	500.00	45000.0	
	Nitrate, High Detection Level	PPB	2500.00		6	2500.00	2500.00	2500.00	45000.0	
	Radium	PCI/L	1.00		48	.18	.58	-.09	100.0	
	Selenium	PPB	5.00		49	5.00	5.00	5.00	10.0	
	Selenium, filtered	PPB	5.00		48	5.00	5.00	5.00	10.0	
	Silver	PPB	10.00		42	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		41	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		46	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	49	4808.57	9800.00	2500.00	250000.0	YES
	Iron	PPB	30.00	YES	42	3143.40	116000.00	44.00	300.0	YES
	Iron, filtered	PPB	30.00	YES	41	48.32	318.00	30.00	300.0	YES
	Manganese	PPB	5.00	YES	42	72.79	1790.00	5.00	50.0	YES
	Manganese, filtered	PPB	5.00	YES	41	27.39	231.00	5.00	50.0	YES
	Phenol	PPB	10.00		11	10.00	10.00	10.00		
	Phenol, low DL	PPB	10.00		38	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	42	17831.19	34100.00	3540.00		
	Sodium, filtered	PPB	200.00	YES	41	18281.95	34500.00	4040.00		
	Sulfate	PPB	500.00	YES	49	25387.76	70300.00	3700.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		11	10.00	10.00	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		17	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		48	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		17	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		48	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		48	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		17	10.00	10.00	10.00	7.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
								Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	1,1-dimethylhydrazine	PPB	10.00	17	10.00	10.00	10.00	
	1,2,3,4-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2,3,5-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2,3-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2,3-trichloropropane	PPB	10.00	17	10.00	10.00	10.00	
	1,2,4,5-tetrachlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2,4-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2-dibromo-3-chloropropane	PPB	10.00	17	10.00	10.00	10.00	.2
	1,2-dibromoethane	PPB	10.00	17	10.00	10.00	10.00	
	1,2-dichlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,2-dichloroethane	PPB	5.00	48	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00	17	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	17	10.00	10.00	10.00	
	1,2-diphenylhydrazine	PPB	10.00	11	10.00	10.00	10.00	
	1,3,5-trichlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,3-dichlorobenzene	PPB	10.00	11	10.00	10.00	10.00	
	1,3-dichloropropane	PPB	5.00	17	5.00	5.00	5.00	
	1,4-dichloro-2-butene	PPB	10.00	17	10.00	10.00	10.00	
	1,4-naphthoquinone	PPB	10.00	11	10.00	10.00	10.00	
	1-(o-chlorophenyl) thiourea	PPB	200.00	10	200.00	200.00	200.00	
	1-Butanol	PPB	10000.00	11	10000.00	10000.00	10000.00	
	1-Butynol	PPB	10000.00	11	10000.00	10000.00	10000.00	
	1-Propanol	PPB	10000.00	11	10000.00	10000.00	10000.00	
	1-acetyl-2-thiourea	PPB	200.00	10	200.00	200.00	200.00	
	1-chloro-2,3-epoxypropane	PPB	10.00	11	10.00	10.00	10.00	
	1-naphthyl-2-thiourea	PPB	200.00	10	200.00	200.00	200.00	
	1-naphthylamine	PPB	10.00	11	10.00	10.00	10.00	
	2,3,4,6-tetrachlorophenol	PPB	10.00	11	10.00	10.00	10.00	
	2,3,7,8 TCDD	PPB	.01	10	.01	.01	.01	
	2,4,5-T	PPB	2.00	47	2.38	20.00	2.00	
	2,4,5-Trichlorophenol	PPB	10.00	11	10.00	10.00	10.00	
	2,4,6-trichlorophenol	PPB	10.00	11	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

Group	Constituent	ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
		Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
								Max Limit
								Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	2,4-dichlorophenol	PPB	10.00		11	10.00	10.00	10.00
	2,4-dinitrophenol	PPB	10.00		11	10.00	10.00	10.00
	2,4-dinitrotoluene	PPB	10.00		11	10.00	10.00	10.00
	2,6-dichlorophenol	PPB	10.00		11	10.00	10.00	10.00
	2,6-dinitrotoluene	PPB	10.00		11	10.00	10.00	10.00
	2-Hexanone	PPB	50.00		17	50.00	50.00	50.00
	2-Methylnaphthalene	PPB	10.00		11	10.00	10.00	10.00
	2-acetylaminofluorene	PPB	10.00		11	10.00	10.00	10.00
	2-chloroethyl vinyl ether	PPB	5.00		17	5.00	5.00	5.00
	2-chloronaphthalene	PPB	10.00		11	10.00	10.00	10.00
	2-chlorophenol	PPB	10.00		11	10.00	10.00	10.00
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		11	10.00	10.00	10.00
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		11	10.00	10.00	10.00
	2-methylaziridine	PPB	10.00		11	10.00	10.00	10.00
	2-methylactonitrile	PPB	10.00		11	10.00	10.00	10.00
	2-naphthylamine	PPB	10.00		11	10.00	10.00	10.00
	2-picoline	PPB	10.00		11	10.00	10.00	10.00
	2-propyn-1-ol	PPB	10000.00		11	10000.00	10000.00	10000.00
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		11	10.00	10.00	10.00
	3,3'-Dichlorobenzidine	PPB	10.00		11	10.00	10.00	10.00
	3,3'-dimethoxybenzidine	PPB	10.00		11	10.00	10.00	10.00
	3,3'-dimethylbenzidine	PPB	10.00		11	10.00	10.00	10.00
	3-chloropropionitrile	PPB	10000.00		11	10000.00	10000.00	10000.00
	3-methylcholanthrene	PPB	10.00		11	10.00	10.00	10.00
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		11	10.00	10.00	10.00
	4,6-dinitro-o-cresol and salts	PPB	10.00		11	10.00	10.00	10.00
	4-Nitroquinoline 1-oxide	PPB	10.00		11	10.00	10.00	10.00
	4-aminobiphenyl	PPB	10.00		11	10.00	10.00	10.00
	4-bromophenyl phenyl ether	PPB	10.00		11	10.00	10.00	10.00
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		11	10.00	10.00	10.00
	5-nitro-o-toluidine	PPB	10.00		11	10.00	10.00	10.00
	7,12-dimethylbenz[a]anthracene	PPB	10.00		11	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	7H-dibenzo[c,g]carbazole	PPB	10.00		11	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		11	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		11	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		11	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	YES	48	9.88	13.30	6.00		
	Acetonitrile	PPB	10.00		17	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		11	10.00	10.00	10.00		
	Acrolein	PPB	10.00		17	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		11	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		17	10.00	10.00	10.00		
	Aldrin	PPB	.10		11	.10	.10	.10		
	Alkalinity		20000.00	YES	1	53000.00	53000.00	53000.00		
	Allyl Chloride	PPB	100.00		17	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		11	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		11	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	42	340.98	7110.00	150.00	50.0	YES
	Aluminum, filtered	PPB	150.00		41	150.00	150.00	150.00	50.0	
	Americium-241	PCI/L	.10		7	.01	.01	.00		
	Amitrole	PPB	10.00		11	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	YES	49	54.63	149.00	50.00		
	Aniline	PPB	10.00		11	10.00	10.00	10.00		
	Anthracene	PPB	10.00		11	10.00	10.00	10.00		
	Antimony	PPB	100.00		42	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		41	100.00	100.00	100.00		
	Aramite	PPB	10.00		11	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		17	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		17	1.00	1.00	1.00	.5	

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Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Auramine		PPB	10.00		11	10.00	10.00	10.00		
Benz[a]anthracene		PPB	10.00		11	10.00	10.00	10.00		
Benz[c]acridine		PPB	10.00		11	10.00	10.00	10.00		
Benzene		PPB	5.00		48	5.00	5.00	5.00	5.0	
Benzene, dichloromethyl		PPB	10.00		11	10.00	10.00	10.00		
Benzenethiol		PPB	10.00		11	10.00	10.00	10.00		
Benzidine		PPB	10.00		11	10.00	10.00	10.00		
Benzo(ghi)perylene		PPB	10.00		11	10.00	10.00	10.00		
Benzo(k)Fluoranthene		PPB	10.00		11	10.00	10.00	10.00		
Benzo[a]pyrene		PPB	10.00		11	10.00	10.00	10.00		
Benzo[b]fluoranthene		PPB	10.00		11	10.00	10.00	10.00		
Benzo[j]fluoranthene		PPB	10.00		11	10.00	10.00	10.00		
Benzyl Alcohol		PPB	10.00		11	10.00	10.00	10.00		
Benzyl chloride		PPB	10.00		11	10.00	10.00	10.00		
Beryllium		PPB	5.00	YES	42	5.12	10.00	5.00		
Beryllium, filtered		PPB	5.00		41	5.00	5.00	5.00		
Bis(2-chloro-1-methylethyl)ether		PPB	10.00		11	10.00	10.00	10.00		
Bis(2-chloroethoxy) methane		PPB	10.00		11	10.00	10.00	10.00		
Bis(2-chloroethyl) ether		PPB	10.00		11	10.00	10.00	10.00		
Bis(2-chloroisopropyl)ether		PPB	10.00		11	10.00	10.00	10.00		
Bis(2-ethylhexyl) phthalate		PPB	10.00		11	10.00	10.00	10.00		
Bis(chloromethyl) ether		PPB	5.00		17	5.00	5.00	5.00		
Boron		PPB	10.00	YES	42	21.36	61.00	10.00		
Boron, filtered		PPB	10.00	YES	41	21.41	62.00	10.00		
Bromide		PPB	1000.00		49	1000.00	1000.00	1000.00		
Bromoacetone		PPB	5.00		17	5.00	5.00	5.00		
Bromodichloromethane		PPB	5.00		17	5.00	5.00	5.00	100.0	
Bromoform		PPB	5.00		17	5.00	5.00	5.00	100.0	
Butyl benzyl phthalate		PPB	10.00		11	10.00	10.00	10.00		
Calcium		PPB	50.00	YES	42	26104.76	44200.00	16900.00		
Calcium, filtered		PPB	50.00	YES	41	26148.78	44000.00	19100.00		
Carbon Tetrachloride by GC/MS		PPB	5.00		48	5.00	5.00	5.00	5.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Carbon disulfide	PPB	10.00	17	10.00	10.00	10.00	
	Carbophenothion	PPB	2.00	11	2.00	2.00	2.00	
	Cesium-137	PCI/L	20.00	20	-.26	4.52	-9.51	120.0
	Chlordane	PPB	1.00	11	1.00	1.00	1.00	2.0
	Chlornaphazine	PPB	10.00	11	10.00	10.00	10.00	
	Chloroalkyl ethers	PPB	10.00	11	10.00	10.00	10.00	
	Chlorobenzene	PPB	5.00	17	5.00	5.00	5.00	100.0
	Chlorobenzene (by ABM)	PPB	10.00	11	10.00	10.00	10.00	60.0
	Chlorobenzilate	PPB	300.00	11	300.00	300.00	300.00	
	Chloroethane	PPB	10.00	17	10.00	10.00	10.00	
	Chloroform	PPB	5.00	48	5.00	5.00	5.00	100.0
	Chloromethyl methyl ether	PPB	10.00	17	10.00	10.00	10.00	
	Chrysene	PPB	10.00	11	10.00	10.00	10.00	
	Citrus red	PPB	1000.00	10	1000.00	1000.00	1000.00	
	Cobalt	PPB	20.00	42	20.00	20.00	20.00	
	Cobalt, filtered	PPB	20.00	41	20.00	20.00	20.00	
	Cobalt-60	PCI/L	22.50	20	1.62	9.09	-6.75	200.0
	Copper	PPB	10.00	42	10.88	39.00	10.00	1000.0
	Copper, filtered	PPB	10.00	41	10.15	16.00	10.00	1000.0
	Cresols	PPB	10.00	11	10.00	10.00	10.00	
	Crotonaldehyde	PPB	10.00	17	10.00	10.00	10.00	
	Cyanide	PPB	10.00	15	10.00	10.00	10.00	
	DDD	PPB	.10	11	.10	.10	.10	
	DDE	PPB	.10	11	.10	.10	.10	
	DDT	PPB	.10	11	.10	.10	.10	
	Di-n-butyl phthalate	PPB	10.00	11	10.00	10.00	10.00	
	Di-n-octyl phthalate	PPB	10.00	11	10.00	10.00	10.00	
	Di-n-propylnitrosamine	PPB	10.00	11	10.00	10.00	10.00	
	Diallate	PPB	10.00	11	10.00	10.00	10.00	
	Dibenz[a,h]acridine	PPB	10.00	11	10.00	10.00	10.00	
	Dibenz[a,h]anthracene	PPB	10.00	11	10.00	10.00	10.00	
	Dibenz[a,h]acridine	PPB	10.00	11	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzofa,elpyrene	PPB	10.00	11	10.00	10.00	10.00		
	Dibenzofa,hjpyrene	PPB	10.00	11	10.00	10.00	10.00		
	Dibenzofa,ilpyrene	PPB	10.00	11	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00	11	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00	17	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	11	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	17	10.00	10.00	10.00		
	Dieldrin	PPB	.10	11	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	11	10.00	10.00	10.00		
	Diethylstilbesterol	PPB	200.00	10	200.00	200.00	200.00		
	Dihydroafore	PPB	10.00	11	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	11	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	11	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	11	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	11	10.00	10.00	10.00		
	Dioxane	PPB	500.00	17	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	11	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	11	3.64	20.00	2.00		
	Endosulfan I	PPB	.10	11	.10	.10	.10		
	Endosulfan II	PPB	.10	11	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	11	.50	.50	.50		
	Ethanol	PPB	10000.00	11	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	17	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00	11	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	11	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	17	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	11	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	11	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	17	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	11	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	10	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00	11	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Fluorene	PPB	10.00		11	10.00	10.00	10.00		
	Formalin	PPB	500.00		17	500.00	500.00	500.00		
	Heptachlor	PPB	.10		11	.10	.10	.10		.4
	Heptchlor epoxide	PPB	.10		11	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		11	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		11	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		11	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		11	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		11	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		11	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00	YES	47	30.13	36.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		11	10.00	10.00	10.00		
	Iodomethane	PPB	10.00		17	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		11	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		11	10.00	10.00	10.00		
	Isophorone	PPB	10.00		11	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		11	10.00	10.00	10.00		
	Kepone	PPB	1.00		11	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		11	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00	YES	42	10.29	15.00	10.00		
	Lithium, filtered	PPB	10.00	YES	41	10.22	15.00	10.00		
	Magnesium	PPB	50.00	YES	42	8022.14	13600.00	4010.00		
	Magnesium, filtered	PPB	50.00	YES	41	8017.07	13500.00	4950.00		
	Maleic hydrazide	PPB	500.00		11	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		11	10.00	10.00	10.00		
	Melphalan	PPB	10.00		11	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		17	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		17	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		11	10.00	10.00	10.00		
	Methotonyl	PPB	10.00		11	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		48	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		17	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl chloride	PPB	10.00		17	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		48	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		11	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		11	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		11	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00	YES	48	5.02	6.00	5.00		
	Methylthiouracil	PPB	10.00		11	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		42	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		41	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		11	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		17	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		11	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		11	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		10	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		11	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		11	10.00	10.00	10.00		
	Natural uranium	UG/L	.75	YES	2	1.00	1.02	.97	59.0	
	Nickel	PPB	10.00	YES	42	24.88	100.00	10.00		
	Nickel, filtered	PPB	10.00	YES	41	10.44	24.00	10.00		
	Nicotinic acid	PPB	100.00		11	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		49	1600.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		11	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		11	10.00	10.00	10.00		

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EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-3 Pond (1988-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Ruthenium-106	PCI/L	172.50		20	-14	65.80	-74.60	240.0	
	Safrol	PPB	10.00		11	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	42	15375.00	21700.00	3830.00		
	Silicon, filtered	PPB	50.00	YES	41	15387.32	20000.00	3950.00		
	Strontium	PPB	10.00	YES	42	156.60	238.00	78.00		
	Strontium, filtered	PPB	10.00	YES	41	157.34	231.00	96.00		
	Strontium-90	PCI/L	5.00		17	-01	1.13	-49	40.0	
	Strychnine	PPB	50.00		11	50.00	50.00	50.00		
	Styrene	PPB	5.00		17	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		10	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		11	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		7	5.16	13.80	1.82	4000.0	
	Tetrachloroethylene	PPB	5.00		48	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		11	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		48	10.00	10.00	10.00		
	Thallium	PPB	5.00		8	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		7	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		11	10.00	10.00	10.00		
	Thiourea	PPB	200.00		10	200.00	200.00	200.00		
	Thiuram	PPB	10.00		11	10.00	10.00	10.00		
	Tin	PPB	30.00		42	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		41	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	42	70.19	488.00	60.00		
	Titanium, filtered	PPB	60.00		41	60.00	60.00	60.00		
	Toluene	PPB	5.00		48	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		11	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	44	24965.91	36500.00	15300.00		
	Total dissolved solids	PPB	5000.00	YES	7	167714.29	216000.00	68000.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00		48	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		11	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		48	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		17	10.00	10.00	10.00		

Groundwater Analysis Results for 216-B-3 Pond (1989-1990)

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Well Location and Site Map for 216-B-55 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory	UMHO		1.00	YES	4	648.00	829.00	486.00	700.0	YES
	UMHO		1.00	YES	4	621.25	767.00	480.00	700.0	YES
	PPB		10.00		4	3.50	6.00	1.00		
	PPB		2000.00		2	350.00	500.00	200.00		
	pH, Field Measurement		.10	YES	4	7.80	7.85	7.76	8.5	
	pH, Laboratory Measurement		.01	YES	4	7.55	7.60	7.50	8.5	
DRINKING WATER PARAMETERS										
2,4,5-TP silvex	PPB		2.00		2	2.00	2.00	2.00	10.0	
	PPB		2.00		2	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	4	4.58	6.63	2.17	15.0	
	Alpha-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Arsenic	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Arsenic, filtered	PPB	5.00		1	5.00	5.00	5.00	50.0	
	Barium	PPB	6.00	YES	2	96.00	110.00	82.00	1000.0	
	Barium, filtered	PPB	6.00	YES	2	82.00	88.00	76.00	1000.0	
	Beta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Cadmium	PPB	2.00	YES	2	5.00	8.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00		2	2.00	2.00	2.00	10.0	
	Chromium	PPB	10.00	YES	2	13.50	17.00	10.00	50.0	
	Chromium, filtered	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Coliform (Membrane Filter)	PPB	1.00		1	1.00	1.00	1.00	1.0	
	Coliform bacteria	MPN	2.20		1	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Endrin	PPB	.10		2	.10	.10	.10	.2	
	Fluoride	PPB		500.00	YES	4	500.00	500.00	500.00	4000.0
Gamma-BHC		PPB	.10		2	.10	.10	.10	4.0	
Gross beta		PCI/L	8.00	YES	10	16.73	45.40	6.22	50.0	
Lead (graphite furnace)		PPB	5.00	YES	2	7.00	9.00	5.00	50.0	
Lead, filtered		PPB	5.00		1	5.00	5.00	5.00	50.0	
Mercury		PPB	.10		2	.10	.10	.10	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury, filtered	PPB	.10		1	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		2	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	4	112500.00	241000.00	35400.00	45000.0	YES
	Radium	PCI/L	1.00		2	.33	.50	.16	100.0	
	Selenium	PPB	5.00		2	5.00	5.00	5.00	10.0	
	Selenium, filtered	PPB	5.00		1	5.00	5.00	5.00	10.0	
	Silver	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		2	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	4	8825.00	9600.00	8300.00	250000.0	
	Iron	PPB	30.00	YES	2	11644.00	23200.00	88.00	300.0	YES
	Iron, filtered	PPB	30.00		2	30.00	30.00	30.00	300.0	
	Manganese	PPB	5.00	YES	2	717.50	1430.00	5.00	50.0	YES
	Manganese, filtered	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Phenol	PPB	10.00		2	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	2	29600.00	32700.00	26500.00		
	Sodium, filtered	PPB	200.00	YES	2	27250.00	28800.00	25700.00		
	Sulfate	PPB	500.00	YES	4	60400.00	62700.00	57900.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		4	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		4	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		4	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		2	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,2,3-trichlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00	2	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00	2	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00	2	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00	4	5.00	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00	2	5.00	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	2	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00	2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00	2	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00	2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00	2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00	2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00	2	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00	2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00	2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00	2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00	2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00	2	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01	2	.01	.01	.01		
	2,4,5-T	PPB	2.00	2	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00	2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00	2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00	2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00	2	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00	2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		2	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2-picoline	PPB	10.00		2	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dichlorobenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		2	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		2	10.00	10.00	10.00		
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Acetone - by ABN	PPB	10.00		2	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00		4	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		2	10.00	10.00	10.00		
	Acrolein	PPB	10.00		2	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Aldrin	PPB	.10		2	.10	.10	.10		
	Allyl Chloride	PPB	100.00		2	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Alpha, alpha-dimethylphenethylamine	PPB	10.00		2	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	2	225.50	301.00	150.00	50.0	YES
	Aluminum, filtered	PPB	150.00		2	150.00	150.00	150.00	50.0	
	Amitrole	PPB	10.00		2	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00		2	50.00	50.00	50.00		
	Aniline	PPB	10.00		2	10.00	10.00	10.00		
	Anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Antimony	PPB	100.00		2	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		2	100.00	100.00	100.00		
	Aramite	PPB	10.00		2	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		2	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		2	10.00	10.00	10.00		
	Benz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Benz[c]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Benzene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Benzenethiol	PPB	10.00	2	10.00	10.00	10.00		
	Benzidine	PPB	10.00	2	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00	2	10.00	10.00	10.00		
	Benzo(k)fluoranthene	PPB	10.00	2	10.00	10.00	10.00		
	Benzo(a)pyrene	PPB	10.00	2	10.00	10.00	10.00		
	Benzo(b)fluoranthene	PPB	10.00	2	10.00	10.00	10.00		
	Benzo[j]fluoranthene	PPB	10.00	2	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00	2	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00	2	10.00	10.00	10.00		
	Beryllium	PPB	5.00	2	5.00	5.00	5.00		
	Beryllium, filtered	PPB	5.00	2	5.00	5.00	5.00		
	Bis(2-chloro-1-methylethyl) ether	PPB	10.00	2	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00	2	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00	2	10.00	10.00	10.00		
	Bis(2-chloroisopropyl) ether	PPB	10.00	2	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00	2	5.00	5.00	5.00		
	Boron	PPB	10.00	2	26.00	27.00	25.00		
	Boron, filtered	PPB	10.00	2	25.50	28.00	23.00		
	Bromide	PPB	1000.00	4	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00	2	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00	2	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00	2	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Calcium	PPB	50.00	2	63000.00	80700.00	45300.00		
	Calcium, filtered	PPB	50.00	2	46950.00	49100.00	44800.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00	4	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00	2	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00	2	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00	8	2.75	8.28	-3.60	120.0	
	Chlordane	PPB	1.00	2	1.00	1.00	1.00	2.0	
	Chlornaphazine	PPB	10.00	2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Chloroalkyl ethers										
Chlorobenzene		PPB	10.00		2	10.00	10.00	10.00		
Chlorobenzene (by ABW)		PPB	5.00		2	5.00	5.00	5.00	100.0	
Chlorobenzilate		PPB	10.00		2	10.00	10.00	10.00	60.0	
Chloroethane		PPB	300.00		2	300.00	300.00	300.00		
Chloroform		PPB	10.00		2	10.00	10.00	10.00		
Chloromethyl methyl ether		PPB	5.00		4	5.00	5.00	5.00	100.0	
Chrysene		PPB	10.00		2	10.00	10.00	10.00		
Citrus red		PPB	1000.00		2	1000.00	1000.00	1000.00		
Cobalt		PPB	20.00		2	20.00	20.00	20.00		
Cobalt, filtered		PPB	20.00		2	20.00	20.00	20.00		
Cobalt-60		PCl/L	22.50		8	-1.11	4.13	-6.05	200.0	
Copper		PPB	10.00	YES	2	12.00	14.00	10.00	1000.0	
Copper, filtered		PPB	10.00		2	10.00	10.00	10.00	1000.0	
Cresols		PPB	10.00		2	10.00	10.00	10.00		
Crotonaldehyde		PPB	10.00		2	10.00	10.00	10.00		
Cyanide		PPB	10.00		2	10.00	10.00	10.00		
DDD		PPB	.10		2	.10	.10	.10		
DDE		PPB	.10		2	.10	.10	.10		
DDT		PPB	.10		2	.10	.10	.10		
Di-n-butyl phthalate		PPB	10.00		2	10.00	10.00	10.00		
Di-n-octyl phthalate		PPB	10.00		2	10.00	10.00	10.00		
Di-n-propylnitrosamine		PPB	10.00		2	10.00	10.00	10.00		
Diallate		PPB	10.00		2	10.00	10.00	10.00		
Dibenz[a,h]acridine		PPB	10.00		2	10.00	10.00	10.00		
Dibenz[a,h]anthracene		PPB	10.00		2	10.00	10.00	10.00		
Dibenz[a,j]acridine		PPB	10.00		2	10.00	10.00	10.00		
Dibenzo[a,e]pyrene		PPB	10.00		2	10.00	10.00	10.00		
Dibenzo[a,h]pyrene		PPB	10.00		2	10.00	10.00	10.00		
Dibenzo[a,i]pyrene		PPB	10.00		2	10.00	10.00	10.00		
Dibenzofuran		PPB	10.00		2	10.00	10.00	10.00		
Dibromomethane		PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		2	10.00	10.00	10.00	
	Dieldrin	PPB	.10		2	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00		2	200.00	200.00	200.00	
	Dihydrosoafrole	PPB	10.00		2	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		2	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		2	10.00	10.00	10.00	
	Dioxane	PPB	500.00		2	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		2	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		2	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		2	.10	.10	.10	
	Endosulfan II	PPB	.10		2	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		2	.50	.50	.50	
	Ethanol	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		2	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		2	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		2	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		2	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		2	200.00	200.00	200.00	
	Europium-155	PPB			2	-4.31	-2.95	-5.67	4000.0
	Fluoranthene	PPB	10.00		2	10.00	10.00	10.00	
	Fluorene	PPB	10.00		2	10.00	10.00	10.00	
	Formalin	PPB	500.00		2	500.00	500.00	500.00	
	Heptachlor	PPB	.10		2	.10	.10	.10	.4
	Heptachlor epoxide	PPB	.10		2	.10	.10	.10	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	Hexachlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	Hexachlorobutadiene	PPB	10.00		2	10.00	10.00	10.00
	Hexachlorocyclopentadiene	PPB	10.00		2	10.00	10.00	10.00
	Hexachloroethane	PPB	10.00		2	10.00	10.00	10.00
	Hexachlorophene	PPB	10.00		2	10.00	10.00	10.00
	Hexachloropropene	PPB	10.00		2	10.00	10.00	10.00
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00
	Indeno(1,2,3-cd)pyrene	PPB	10.00		2	10.00	10.00	10.00
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	.25	.38	.11
	Iodomethane	PPB	10.00		2	10.00	10.00	10.00
	Isobutyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00
	Isodrin	PPB	10.00		2	10.00	10.00	10.00
	Isophorone	PPB	10.00		2	10.00	10.00	10.00
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00
	Kepone	PPB	1.00		2	1.00	1.00	1.00
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00
	Lithium	PPB	10.00		2	10.00	10.00	10.00
	Lithium, filtered	PPB	10.00		2	10.00	10.00	10.00
	Magnesium	PPB	50.00	YES	2	18300.00	22500.00	14100.00
	Magnesium, filtered	PPB	50.00	YES	2	14550.00	15500.00	13600.00
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00
	Melphalan	PPB	10.00		2	10.00	10.00	10.00
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00
	Methyl ethyl ketone	PPB	10.00		4	10.00	10.00	10.00
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		4	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		2	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Nickel	PPB	10.00	YES	2	11.00	12.00	10.00		
	Nickel, filtered	PPB	10.00		2	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		2	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		4	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		2	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-8-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	P-chloroaniline	PPB	10.00		2	10.00	10.00	10.00		
	P-methylaminobenzene	PPB	10.00		2	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	PHORATE	PPB	2.00		2	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		2	2.00	2.00	2.00		
	Pcdd's	PPB	.01		2	.01	.01	.01		
	Pcdf's	PPB	.01		2	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		2	10.00	16.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		2	.00	.00	.00	1.6	
	Plutonium-239/40	PCI/L	.10		2	.00	.00	.00	1.2	
	Potassium	PPB	100.00	YES	2	6765.00	7280.00	6250.00		
	Potassium, filtered	PPB	100.00	YES	2	6355.00	6570.00	6140.00		
	Pronamide	PPB	10.00		2	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00		
	Pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Pyridine	PPB	500.00		2	500.00	500.00	500.00		
	Reserpine	PPB	10.00		2	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00		
	Ruthenium-103	PPB	10.00		1	-1.43	-1.43	-1.43	2000.0	
	Ruthenium-106	PCI/L	172.50		7	-11.66	16.80	-62.50	240.0	
	Safrol	PPB	10.00		2	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	2	17400.00	17900.00	16900.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Silicon, filtered	PPB	50.00	YES	2	17600.00	18500.00	16700.00	
	Strontium	PPB	10.00	YES	2	277.50	321.00	234.00	
	Strontium, filtered	PPB	10.00	YES	2	248.00	268.00	228.00	
	Strontium-90	PCI/L	5.00		2	-39	-28	-49	40.0
	Strychnine	PPB	50.00		2	50.00	50.00	50.00	
	Styrene	PPB	5.00		2	5.00	5.00	5.00	5.0
	Sulfide	PPB	1000.00		2	1000.00	1000.00	1000.00	
	Sym-trinitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Technetium-99	PCI/L	15.00	YES	2	29.36	54.80	3.91	4000.0
	Tetrachloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0
	Tetraethylpyrophosphate	PPB	2.00		2	2.00	2.00	2.00	
	Tetrahydrofuran	PPB	10.00		4	10.00	10.00	10.00	
	Thallium	PPB	5.00		2	5.00	5.00	5.00	
	Thallium, filtered	PPB	5.00		1	5.00	5.00	5.00	
	Thiofanox	PPB	10.00		2	10.00	10.00	10.00	
	Thiourea	PPB	200.00		2	200.00	200.00	200.00	
	Thiuram	PPB	10.00		2	10.00	10.00	10.00	
	Tin	PPB	30.00		2	30.00	30.00	30.00	
	Tin 113 Daughter	PPB			2	.35	2.20	-1.51	2000.0
	Tin, filtered	PPB	30.00		2	30.00	30.00	30.00	
	Titanium	PPB	60.00		2	60.00	60.00	60.00	
	Titanium, filtered	PPB	60.00		2	60.00	60.00	60.00	
	Toluene	PPB	5.00		4	5.00	5.00	5.00	2000.0
	Toluenediamine	PPB	10.00		2	10.00	10.00	10.00	
	Total carbon	PPB	1000.00	YES	2	30350.00	32700.00	28000.00	
	Trans-1,2-dichloroethene	PPB	5.00		4	5.00	5.00	5.00	70.0
	Tributylphosphoric Acid	PPB	10.00		2	10.00	10.00	10.00	
	Trichloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0
	Trichloromethanethiol	PPB	10.00		2	10.00	10.00	10.00	
	Trichloromono-fluoromethane	PPB	10.00		2	10.00	10.00	10.00	
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		2	10.00	10.00	10.00	
	Tritium	PCI/L	500.00	YES	10	75038.00	134000.00	5880.00	80000.0 YES

Groundwater Analysis Results for 216-B-55 Crib (1989-1990)

A12-14

- Ground Water Monitoring Wells
- Vadose Zone Monitoring Wells (Numbers in Parentheses are Tank Farm I.D. Numbers for Wells)
- △ Shallow Investigation Wells

N44000

N43800

N43600

N43400

Water Table Too Flat to Generalize Ground Water Flow Direction

AGL\216-B-62

Well Location and Site Map for 216-B-62 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1939-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	4	514.75	521.00	510.00	700.0	
	Specific conductance	UMHO	1.00	YES	4	495.25	505.00	475.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00		4	1.00	2.00	.01		
	Total organic carbon	PPB	2000.00		2	350.00	400.00	300.00		
	pH, Field Measurement		.10	YES	4	7.79	7.84	7.74	8.5	
	pH, Laboratory Measurement		.01	YES	4	7.63	7.70	7.50	8.5	
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		2	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		2	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	8	19.64	32.30	12.20	15.0	YES
	Alpha-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Arsenic	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Arsenic, filtered	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Barium	PPB	6.00	YES	2	34.00	40.00	28.00	1000.0	
	Barium, filtered	PPB	6.00	YES	4	33.00	41.00	24.00	1000.0	
	Beta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Cadmium	PPB	2.00		2	2.00	2.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00		4	2.00	2.00	2.00	10.0	
	Chromium	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Chromium, filtered	PPB	10.00		4	10.00	10.00	10.00	50.0	
	Coliform (Membrane Filter)	PPB	1.00		2	1.00	1.00	1.00	1.0	
	Delta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Endrin	PPB	.10		2	.10	.10	.10	.2	
	Fluoride	PPB	500.00		4	500.00	500.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Gross alpha	PCI/L	4.00	YES	1	26.50	26.50	26.50	15.0	YES
	Gross beta	PCI/L	8.00	YES	9	11.36	18.10	7.34	50.0	
	Lead (graphite furnace)	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Lead, filtered	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Mercury	PPB	.10		2	.10	.10	.10	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury, filtered	PPB	.10		2	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		2	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	4	38050.00	40000.00	36100.00	45000.0	
	Nitrate, High Detection Level	PPB	2500.00	YES	5	42320.00	43600.00	41000.00	45000.0	
	Radium	PCI/L	1.00		2	-.03	.01	-.07	100.0	
	Selenium	PPB	5.00	YES	2	5.00	5.00	5.00	10.0	
	Selenium, filtered	PPB	5.00	YES	2	5.00	5.00	5.00	10.0	
	Silver	PPB	10.00		2	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		4	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		2	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	4	9875.00	10300.00	9300.00	250000.0	YES
	Iron	PPB	30.00	YES	2	265.50	308.00	223.00	300.0	
	Iron, filtered	PPB	30.00		4	30.00	30.00	30.00	300.0	
	Manganese	PPB	5.00	YES	2	5.50	6.00	5.00	50.0	
	Manganese, filtered	PPB	5.00		4	5.00	5.00	5.00	50.0	
	Phenol	PPB	10.00		2	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	2	23800.00	24000.00	23600.00		
	Sodium, filtered	PPB	200.00	YES	4	24250.00	25300.00	22300.00		
	Sulfate	PPB	500.00	YES	4	89650.00	93500.00	86800.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1,2-tetrachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		4	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		4	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		4	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		2	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-8-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	1,2,3,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,2,3-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,2,3-trichloropropane	PPB	10.00		2	10.00	10.00	10.00
	1,2,4,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,2,4-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,2-dibromo-3-chloropropane	PPB	10.00		2	10.00	10.00	10.00
	1,2-dibromoethane	PPB	10.00		2	10.00	10.00	10.00
	1,2-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,2-dichloroethane	PPB	5.00		4	5.00	5.00	5.00
	1,2-dichloropropane	PPB	5.00		2	5.00	5.00	5.00
	1,2-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00
	1,3-dichloropropene	PPB	5.00		2	5.00	5.00	5.00
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00
	1-Butanol	PPB	10000.00		2	10000.00	10000.00	10000.00
	1-Butynol	PPB	10000.00		2	10000.00	10000.00	10000.00
	1-Propanol	PPB	10000.00		2	10000.00	10000.00	10000.00
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00
	2,3,7,8 TCDD	PPB	.01		2	.01	.01	.01
	2,4,5-T	PPB	2.00		2	2.00	2.00	2.00
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde	PPB	10.00		2	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2-picoline	PPB	10.00		2	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		2	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		2	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		2	10.00	10.00	10.00		
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		2	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Acenaphthene	PPB	10.00	2	10.00	10.00	10.00	
	Acetone - by ABN	PPB	10.00	2	10.00	10.00	10.00	
	Acetone by VOA	PPB	10.00	4	10.00	10.00	10.00	
	Acetonitrile	PPB	10.00	2	10.00	10.00	10.00	
	Acetophenone	PPB	10.00	2	10.00	10.00	10.00	
	Acrolein	PPB	10.00	2	10.00	10.00	10.00	
	Acrylamide	PPB	10000.00	2	10000.00	10000.00	10000.00	
	Acrylonitrile	PPB	10.00	2	10.00	10.00	10.00	
	Aldrin	PPB	.10	2	.10	.10	.10	
	Allyl Chloride	PPB	100.00	2	100.00	100.00	100.00	
	Allyl alcohol	PPB	10000.00	2	10000.00	10000.00	10000.00	
	Alpha,alpha-dimethylphenethylamine	PPB	10.00	2	10.00	10.00	10.00	
	Aluminum	PPB	150.00	2	150.00	150.00	150.00	50.0
	Aluminum, filtered	PPB	150.00	4	150.00	150.00	150.00	50.0
	Amitrole	PPB	10.00	2	10.00	10.00	10.00	
	Ammonium ion	PPB	50.00	2	50.00	50.00	50.00	
	Aniline	PPB	10.00	2	10.00	10.00	10.00	
	Anthracene	PPB	10.00	2	10.00	10.00	10.00	
	Antimony	PPB	100.00	2	100.00	100.00	100.00	
	Antimony, filtered	PPB	100.00	4	100.00	100.00	100.00	
	Aramite	PPB	10.00	2	10.00	10.00	10.00	
	Arochlor 1016	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1221	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1232	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1242	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1248	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1254	PPB	1.00	2	1.00	1.00	1.00	.5
	Arochlor 1260	PPB	1.00	2	1.00	1.00	1.00	.5
	Auramine	PPB	10.00	2	10.00	10.00	10.00	
	Benz[a]anthracene	PPB	10.00	2	10.00	10.00	10.00	
	Benz[c]acridine	PPB	10.00	2	10.00	10.00	10.00	
	Benzene	PPB	5.00	4	5.00	5.00	5.00	5.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00		
	Benzenethiol	PPB	10.00		2	10.00	10.00	10.00		
	Benzidine	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(k)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(a)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(b)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(a)anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Beryllium	PPB	5.00		2	5.00	5.00	5.00		
	Beryllium, filtered	PPB	5.00		4	5.00	5.00	5.00		
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00		
	Boron	PPB	10.00	YFS	2	118.50	136.00	101.00		
	Boron, filtered	PPB	10.00	YES	4	122.50	137.00	101.00		
	Bromide	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	2	53800.00	54500.00	53100.00		
	Calcium, filtered	PPB	50.00	YES	4	52850.00	53200.00	52200.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00		7	.76	5.29	-2.44	120.0	
	Chlordane	PPB	1.00		2	1.00	1.00	1.00	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

Group	Constituent	ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
		Detection Limit	Units	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
				Detected				Above Limit
SITE SPECIFIC AND OTHER PARAMETERS								
Chloromethazine	PPB	10.00		2	10.00	10.00	10.00	
Chloroalkyl ethers	PPB	10.00		2	10.00	10.00	10.00	
Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0
Chlorobenzene (by AIN)	PPB	10.00		2	10.00	10.00	10.00	60.0
Chlorobenzilate	PPB	300.00		2	300.00	300.00	300.00	
Chloroethane	PPB	10.00		2	10.00	10.00	10.00	
Chloroform	PPB	5.00		4	5.00	5.00	5.00	100.0
Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00	
Chrysene	PPB	10.00		2	10.00	10.00	10.00	
Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00	
Cobalt	PPB	20.00		2	20.00	20.00	20.00	
Cobalt, filtered	PPB	20.00		4	20.00	20.00	20.00	
Cobalt-60	PCI/L	22.50		7	-16	7.34	-6.05	200.0
Copper	PPB	10.00		2	10.00	10.00	10.00	1000.0
Copper, filtered	PPB	10.00		4	10.00	10.00	10.00	1000.0
Cresols	PPB	10.00		2	10.00	10.00	10.00	1000.0
Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00	
Cyanide	PPB	10.00		2	10.00	10.00	10.00	
DDD	PPB	.10		2	.10	.10	.10	
DDE	PPB	.10		2	.10	.10	.10	
DDT	PPB	.10		2	.10	.10	.10	
Di-n-butyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
Di-n-octyl phthalate	PPB	10.00		2	10.00	10.00	10.00	
Di-n-propylnitrosemine	PPB	10.00		2	10.00	10.00	10.00	
Diallate	PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,h]acridine	PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,h]anthracene	PPB	10.00		2	10.00	10.00	10.00	
Dibenz[a,j]acridine	PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,e]pyrene	PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,h]pyrene	PPB	10.00		2	10.00	10.00	10.00	
Dibenzof[a,i]pyrene	PPB	10.00		2	10.00	10.00	10.00	
Dibenzofuran	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max. Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibromomethane	PPB	10.00	2	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	2	10.00	10.00	10.00		
	Dieldrin	PPB	.10	2	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Diethylstilbesterol	PPB	200.00	2	200.00	200.00	200.00		
	Dihydrosafrole	PPB	10.00	2	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	2	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	2	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	2	10.00	10.00	10.00		
	Dioxane	PPB	500.00	2	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	2	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	2	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	2	.10	.10	.10		
	Endosulfan II	PPB	.10	2	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	2	.50	.50	.50		
	Ethanol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	2	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	2	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	2	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	2	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	2	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	2	200.00	200.00	200.00		
	Europium-155	PPB		2	1.36	6.37	-3.65	4000.0	
	Fluoranthene	PPB	10.00	2	10.00	10.00	10.00		
	Fluorene	PPB	10.00	2	10.00	10.00	10.00		
	Formalin	PPB	500.00	2	500.00	500.00	500.00		
	Heptachlor	PPB	.10	2	.10	.10	.10	.4	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Heptachlor epoxide	PPB	.10		2	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		2	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	.62	.75	.50	20.0	
	Iodomethane	PPB	10.00		2	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		2	10.00	10.00	10.00		
	Isophorone	PPB	10.00		2	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00		
	Kepone	PPB	1.00		2	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		2	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		4	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	2	14000.00	14400.00	13600.00		
	Magnesium, filtered	PPB	50.00	YES	4	13950.00	14100.00	13500.00		
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00		
	Melphalan	PPB	10.00		2	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		4	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		4	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		4	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Natural uranium	UG/L	.73	YES	5	35.18	46.40	22.10	59.0	
	Nickel	PPB	10.00		2	10.00	10.00	10.00		
	Nickel, filtered	PPB	10.00		4	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		2	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		4	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
 Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	P benzoquinone	PPB	10.00		2	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		2	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		2	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	PHORATE	PPB	2.00		2	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		2	2.00	2.00	2.00		
	Pcdd's	PPB	.01		2	.01	.01	.01		
	Pcdf's	PPB	.01		2	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		4	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		2	-.00	-.00	-.00	1.6	
	Plutonium-239/40	PCI/L	.10		2	-.00	-.00	-.00	1.2	
	Potassium	PPB	100.00	YES	2	5620.00	5870.00	5370.00		
	Potassium, filtered	PPB	100.00	YES	4	5575.00	5630.00	5460.00		
	Pronamide	PPB	10.00		2	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00		
	Pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Pyridine	PPB	500.00		2	500.00	500.00	500.00		
	Reserpine	PPB	10.00		2	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		7	-7.65	26.30	-28.20	240.0	
	Safrol	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Silicon		PPB	50.00		2	16250.00	16600.00	15900.00		
Silicon, filtered		PPB	50.00	YES	4	13350.00	17000.00	15800.00		
Strontium		PPB	10.00	YES	2	231.00	236.00	226.00		
Strontium, filtered		PPB	10.00	YES	4	232.25	239.00	222.00		
Strontium-90		PCI/L	5.00		3	.09	.02	.16	40.0	
Strychnine		PPB	50.00		2	50.00	50.00	50.00		
Styrene		PPB	5.00		2	4.50	5.00	4.00	5.0	
Sulfide		PPB	1000.00		2	1000.00	1000.00	1000.00		
Sym-trinitrobenzene		PPB	10.00		2	10.00	10.00	10.00		
Technetium-99		PCI/L	15.00		2	9.07	10.30	7.84	4000.0	
Tetrachloroethylene		PPB	5.00		4	5.00	5.00	5.00	5.0	
Tetraethylpyrophosphate		PPB	2.00		2	2.00	2.00	2.00		
Tetrahydrofuran		PPB	10.00		4	10.00	10.00	10.00		
Thallium		PPB	5.00		2	5.00	5.00	5.00		
Thallium, filtered		PPB	5.00		2	5.00	5.00	5.00		
Thiofanox		PPB	10.00		2	10.00	10.00	10.00		
Thiourea		PPB	200.00		2	200.00	200.00	200.00		
Thiuram		PPB	10.00		2	10.00	10.00	10.00		
Tin		PPB	30.00		2	30.00	30.00	30.00	2000.0	
Tin 113 Daughter		PPB			2	.62	1.39	.16		
Tin, filtered		PPB	30.00		4	30.00	30.00	30.00		
Titanium		PPB	60.00		2	60.00	60.00	60.00		
Titanium, filtered		PPB	60.00		4	60.00	60.00	60.00		
Toluene		PPB	5.00		4	5.00	5.00	5.00	2000.0	
Toluenediamine		PPB	10.00		2	10.00	10.00	10.00		
Total carbon		PPB	1000.00	YES	2	27450.00	27700.00	27200.00		
Trans-1,2-dichloroethene		PPB	5.00		4	5.00	5.00	5.00	70.0	
Tributylphosphoric Acid		PPB	10.00		2	10.00	10.00	10.00		
Trichloroethylene		PPB	5.00		4	5.00	5.00	5.00	5.0	
Trichloromethanethiol		PPB	10.00		2	10.00	10.00	10.00		
Trichloromonofluoromethane		PPB	10.00		2	10.00	10.00	10.00		
Tris(2,3-dibromopropyl) phosphate		PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-B-62 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Tritium	PCI/L	500.00	YES	9	182888.89	300000.00	103000.00	80000.0	YES
	Turbidity	NTU	.10	YES	2	.65	1.00	.30	5.0	
	Uranium	PCI/L	.50	YES	2	18.10	19.10	17.10	40.0	
	Uranium-234	PCI/L	.10	YES	2	12.05	12.10	12.00	20.0	
	Uranium-235	PCI/L	.10	YES	2	.58	.61	.55	24.0	
	Uranium-238	PCI/L	.10	YES	2	11.70	11.70	11.70	24.0	
	Vanadium	PPB	5.00	YES	2	17.00	18.00	16.00		
	Vanadium, filtered	PPB	5.00	YES	4	14.25	18.00	11.00		
	Vinyl Acetate	PPB	5.00		2	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		4	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		2	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	2	19.50	33.00	6.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	4	17.25	30.00	5.00	5000.0	
	Zirconium	PPB	50.00		2	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		4	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		6	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00

Well Location and Site Map for 216-C-63 Ditch

Water Table too Flat to Generalize
Ground Water Flow Direction

216-C-7

AGL\216-C-7

Well Location and Site Map for 216-C-7 Crib

Generalized Direction
of Ground Water Flow

Well Location and Site Map for 216-S-10 Ditch

Well Location and Site Map for 216-S-26 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory	Specific conductance	UMHO	1.00	YES	2	493.00	544.00	442.00	700.0	
	Total Organic Halogen, Low Det. Level	UMHO	1.00	YES	1	501.00	501.00	501.00	700.0	
	Total organic carbon	PPB	10.00	YES	2	11.00	12.00	10.00		
	pH, Field Measurement	PPB	2000.00		1	400.00	400.00	400.00		
	pH, Laboratory Measurement		.10	YES	1	7.90	7.90	7.90	8.5	
			.01	YES	2	7.85	7.90	7.80	8.5	
DRINKING WATER PARAMETERS										
2,4,5-TP silvex	2,4-D	PPB	2.00		1	2.00	2.00	2.00	10.0	
	Alpha, High Detection Level	PPB	2.00		1	2.00	2.00	2.00	100.0	
	Alpha-BHC	PCI/L	4.00	YES	3	5.97	7.21	4.40	15.0	
	Arsenic	PPB	.10		1	.10	.10	.10	4.0	
	Arsenic, filtered	PPB	5.00		1	5.00	5.00	5.00	50.0	
	Barium	PPB	5.00		1	5.00	5.00	5.00	50.0	
	Barium, filtered	PPB	6.00	YES	1	40.00	40.00	40.00	1000.0	
	Beta-BHC	PPB	6.00	YES	3	32.00	40.00	27.00	1000.0	
	Cadmium	PPB	.10		1	.10	.10	.10	4.0	
	Cadmium, filtered	PPB	2.00		1	2.00	2.00	2.00	10.0	
	Chromium	PPB	2.00		3	2.00	2.00	2.00	10.0	
	Chromium, filtered	PPB	10.00	YES	1	13.00	13.00	13.00	50.0	
	Coliform (Membrane Filter)	PPB	10.00	YES	3	11.00	12.00	10.00	50.0	
	Delta-BHC	PPB	1.00		1	1.00	1.00	1.00	1.0	
	Endrin	PPB	.10		1	.10	.10	.10	4.0	
	Fluoride	PPB	.10		1	.10	.10	.10	.2	
	Gamma-BHC	PPB	500.00		3	500.00	500.00	500.00	4000.0	
	Gross alpha	Gross beta	PPB	.10		1	.10	.10	.10	4.0
Lead (graphite furnace)		PCI/L	4.00	YES	1	5.90	5.90	5.90	15.0	
Lead, filtered		PCI/L	8.00		4	5.97	7.44	4.96	50.0	
Mercury		PPB	5.00		1	5.00	5.00	5.00	50.0	
		PPB	5.00		1	5.00	5.00	5.00	50.0	
		PPB	.10		1	.10	.10	.10	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
	Mercury, filtered	PPB	.10		1	.10	.10	.10	2.0	
	Methoxychlor	PPB	3.00		1	3.00	3.00	3.00	100.0	
	Nitrate	PPB	500.00	YES	3	44333.33	70500.00	31100.00	45000.0	YES
	Nitrate, High Detection level	PPB	2500.00	YES	1	96900.00	96900.00	96900.00	45000.0	YES
	Radium	PCI/L	1.00		1	.10	.10	.10	100.0	
	Selenium	PPB	5.00	YES	1	35.00	35.00	35.00	10.0	YES
	Selenium, filtered	PPB	5.00	YES	1	33.00	33.00	33.00	10.0	YES
	Silver	PPB	10.00		1	10.00	10.00	10.00	50.0	
	Silver, filtered	PPB	10.00		3	10.00	10.00	10.00	50.0	
	Toxaphene	PPB	1.00		1	1.00	1.00	1.00	5.0	
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	3	7166.67	9700.00	5900.00	250000.0	
	Iron	PPB	30.00	YES	1	177.00	177.00	177.00	300.0	
	Iron, filtered	PPB	30.00	YES	3	102.67	248.00	30.00	300.0	
	Manganese	PPB	5.00		1	5.00	5.00	5.00	50.0	
	Manganese, filtered	PPB	5.00	YES	3	5.33	6.00	5.00	50.0	
	Phenol	PPB	10.00		1	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	1	34800.00	34800.00	34800.00		
	Sodium, filtered	PPB	200.00	YES	3	32433.33	35100.00	30500.00		
	Sulfate	PPB	500.00	YES	3	43800.00	58700.00	36100.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		1	10.00	10.00	10.00		
	1,1,1,2-tetrachlorethane	PPB	10.00		1	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		2	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachlorethane	PPB	5.00		1	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		1	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		1	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,2,3,5-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,2,3-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,2,3-trichloropropane	PPB	10.00		1	10.00	10.00	10.00	
	1,2,4,5-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,2,4-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,2-dibromo-3-chloropropane	PPB	10.00		1	10.00	10.00	10.00	.2
	1,2-dibromoethane	PPB	10.00		1	10.00	10.00	10.00	
	1,2-dichlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,2-dichloroethane	PPB	10.00		1	10.00	10.00	10.00	
	1,2-dichloropropane	PPB	5.00		2	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	5.00		1	5.00	5.00	5.00	5.0
	1,2-diphenylhydrazine	PPB	10.00		1	10.00	10.00	10.00	
	1,3,5-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,3-dichlorobenzene	PPB	10.00		1	10.00	10.00	10.00	
	1,3-dichloropropane	PPB	5.00		1	5.00	5.00	5.00	
	1,4-dichloro-2-butene	PPB	10.00		1	10.00	10.00	10.00	
	1,4-naphthoquinone	PPB	10.00		1	10.00	10.00	10.00	
	1-(o-chlorophenyl) thiourea	PPB	200.00		1	200.00	200.00	200.00	
	1-Butanol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	1-Butynol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	1-Propanol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	1-acetyl-2-thiourea	PPE	200.00		1	200.00	200.00	200.00	
	1-chloro-2,3-epoxypropane	PPB	10.00		1	10.00	10.00	10.00	
	1-naphthyl-2-thiourea	PPB	200.00		1	200.00	200.00	200.00	
	1-naphthylamine	PPB	10.00		1	10.00	10.00	10.00	
	2,3,4,6-tetrachlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2,3,7,8 TCDD	PPB	.01		1	.01	.01	.01	
	2,4,5-T	PPB	2.00		1	2.00	2.00	2.00	
	2,4,5-Trichlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2,4,6-trichlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2,4-dichlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2,4-dinitrophenol	PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2,4-dinitrotoluene	PPB	10.00		1	10.00	10.00	10.00	
	2,6-dichlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2,6-dinitrotoluene	PPB	10.00		1	10.00	10.00	10.00	
	2-Hexanone	PPB	50.00		1	50.00	50.00	50.00	
	2-Methylnaphthalene	PPB	10.00		1	10.00	10.00	10.00	
	2-acetylaminofluorene	PPB	10.00		1	10.00	10.00	10.00	
	2-chloroethyl vinyl ether	PPB	5.00		1	5.00	5.00	5.00	
	2-chloronaphthalene	PPB	10.00		1	10.00	10.00	10.00	
	2-chlorophenol	PPB	10.00		1	10.00	10.00	10.00	
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		1	10.00	10.00	10.00	
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		1	10.00	10.00	10.00	
	2-methylaziridine	PPB	10.00		1	10.00	10.00	10.00	
	2-methyl lactonitrile	PPB	10.00		1	10.00	10.00	10.00	
	2-naphthylamine	PPB	10.00		1	10.00	10.00	10.00	
	2-picoline	PPB	10.00		1	10.00	10.00	10.00	
	2-propyn-1-ol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		1	10.00	10.00	10.00	
	3,3'-Dichlorobenzidine	PPB	10.00		1	10.00	10.00	10.00	
	3,3'-dimethoxybenzidine	PPB	10.00		1	10.00	10.00	10.00	
	3,3'-dimethylbenzidine	PPB	10.00		1	10.00	10.00	10.00	
	3-chloropropionitrile	PPB	10000.00		1	10000.00	10000.00	10000.00	
	3-methylcholanthrene	PPB	10.00		1	10.00	10.00	10.00	
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		1	10.00	10.00	10.00	
	4,6-dinitro-o-cresol and salts	PPB	10.00		1	10.00	10.00	10.00	
	4-Nitroquinoline 1-oxide	PPB	10.00		1	10.00	10.00	10.00	
	4-aminobiphenyl	PPB	10.00		1	10.00	10.00	10.00	
	4-bromophenyl phenyl ether	PPB	10.00		1	10.00	10.00	10.00	
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		1	10.00	10.00	10.00	
	5-nitro-o-toluidine	PPB	10.00		1	10.00	10.00	10.00	
	7,12-dimethylbenz[a]anthracene	PPB	10.00		1	10.00	10.00	10.00	
	7H-dibenzo[c,g]carbazole	PPB	10.00		1	10.00	10.00	10.00	
	Acenaphthalene	PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
SITE SPECIFIC AND OTHER PARAMETERS									
	Acenaphthene	PPB	10.00		1	10.00	10.00	10.00	
	Acetone - by ABN	PPB	10.00		1	10.00	10.00	10.00	
	Acetone by VOA	PPB	10.00		2	10.00	10.00	10.00	
	Acetonitrile	PPB	10.00		1	10.00	10.00	10.00	
	Acetophenone	PPB	10.00		1	10.00	10.00	10.00	
	Acrolein	PPB	10.00		1	10.00	10.00	10.00	
	Acrylamide	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Acrylonitrile	PPB	10.00		1	10.00	10.00	10.00	
	Aldrin	PPB	.10		1	.10	.10	.10	
	Allyl Chloride	PPB	100.00		1	100.00	100.00	100.00	
	Allyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Alpha,alpha-dimethyl(phenethyl)amine	PPB	10.00		1	10.00	10.00	10.00	
	Aluminum	PPB	150.00		1	150.00	150.00	150.00	50.0
	Aluminum, filtered	PPB	150.00		3	150.00	150.00	150.00	50.0
	Americium-241	PCI/L	.10		1	.01	.01	.01	
	Amitrole	PPB	10.00		1	10.00	10.00	10.00	
	Ammonium ion	PPB	50.00		1	50.00	50.00	50.00	
	Aniline	PPB	10.00		1	10.00	10.00	10.00	
	Anthracene	PPB	10.00		1	10.00	10.00	10.00	
	Antimony	PPB	100.00		1	100.00	100.00	100.00	
	Antimony, filtered	PPB	100.00		3	100.00	100.00	100.00	
	Aramite	PPB	10.00		1	10.00	10.00	10.00	
	Arochlor 1016	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1221	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1232	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1242	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1248	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1254	PPB	1.00		1	1.00	1.00	1.00	.5
	Arochlor 1260	PPB	1.00		1	1.00	1.00	1.00	.5
	Auramine	PPB	10.00		1	10.00	10.00	10.00	
	Benz[a]anthracene	PPB	10.00		1	10.00	10.00	10.00	
	Benz[c]acridine	PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
Benzene		PPB	5.00		2	5.00	5.00	5.00	5.0
Benzene, dichloromethyl		PPB	10.00		1	10.00	10.00	10.00	
Benzenethiol		PPB	10.00		1	10.00	10.00	10.00	
Benzidine		PPB	10.00		1	10.00	10.00	10.00	
Benzo(ghi)perylene		PPB	10.00		1	10.00	10.00	10.00	
Benzo(k)fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzo(a)pyrene		PPB	10.00		1	10.00	10.00	10.00	
Benzo(b)fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzo(j)fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzyl Alcohol		PPB	10.00		1	10.00	10.00	10.00	
Benzyl chloride		PPB	10.00		1	10.00	10.00	10.00	
Beryllium		PPB	5.00		1	5.00	5.00	5.00	
Beryllium, filtered		PPB	5.00		3	5.00	5.00	5.00	
Bis(2-chloro-1-methylethyl) ether		PPB	10.00		1	10.00	10.00	10.00	
Bis(2-chloroethoxy) methane		PPB	10.00		1	10.00	11.00	10.00	
Bis(2-chloroethyl) ether		PPB	10.00		1	10.00	10.00	10.00	
Bis(2-chloroisopropyl) ether		PPB	10.00		1	10.00	10.00	10.00	
Bis(2-ethylhexyl) phthalate		PPB	10.00		1	10.00	10.00	10.00	
Bis(chloromethyl) ether		PPB	5.00		1	5.00	5.00	5.00	
Boron		PPB	10.00	YES	1	30.00	30.00	30.00	
Boron, filtered		PPB	10.00	YES	3	34.33	37.00	32.00	
Bromide		PPB	1000.00		3	1000.00	1000.00	1000.00	
Bromoacetone		PPB	5.00		1	5.00	5.00	5.00	
Bromodichloromethane		PPB	5.00		1	5.00	5.00	5.00	100.0
Bromoform		PPB	5.00		1	5.00	5.00	5.00	100.0
Butyl benzyl phthalate		PPB	10.00		1	10.00	10.00	10.00	
Calcium		PPB	50.00	YES	1	49800.00	49800.00	49800.00	
Calcium, filtered		PPB	50.00	YES	3	42300.00	50600.00	37100.00	
Carbon Tetrachloride by GC/MS		PPB	5.00		2	5.00	5.00	5.00	5.0
Carbon disulfide		PPB	10.00		1	10.00	10.00	10.00	
Carbophenothion		PPB	2.00		1	2.00	2.00	2.00	
Cesium-137		PCI/L	20.00		2	-1.75	-1.38	-1.88	120.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit	
SITE SPECIFIC AND OTHER PARAMETERS										
	Chlordane	PPB	1.00	1	1.00	1.00	1.00	2.0		
	Chlorophazine	PPB	10.00	1	10.00	10.00	10.00			
	Chloroalkyl ethers	PPB	10.00	1	10.00	10.00	10.00			
	Chlorobenzene	PPB	5.00	1	5.00	5.00	5.00	100.0		
	Chlorobenzene (by ABN)	PPB	10.00	1	10.00	10.00	10.00	60.0		
	Chlorobenzilate	PPB	300.00	1	300.00	300.00	300.00			
	Chloroethane	PPB	10.00	1	10.00	10.00	10.00			
	Chloroform	PPB	5.00	2	10.00	14.00	6.00	100.0		
	Chloromethyl methyl ether	PPB	10.00	1	10.00	10.00	10.00			
	Chrysene	PPB	10.00	1	10.00	10.00	10.00			
	Citrus red	PPB	1000.00	1	1000.00	1000.00	1000.00			
	Cobalt	PPB	20.00	1	20.00	20.00	20.00			
	Cocalt, filtered	PPB	20.00	3	20.00	20.00	20.00			
	Cobalt-60	PCI/L	22.50	2	-3.56	0.00	-7.11	200.0		
	Copper	PPB	10.00	1	10.00	10.00	10.00	1000.0		
	Copper, filtered	PPB	10.00	3	10.00	10.00	10.00	1000.0		
	Cresols	PPB	10.00	1	10.00	10.00	10.00			
	Crotonaldehyde	PPB	10.00	1	10.00	10.00	10.00			
	Cyanide	PPB	10.00	1	10.00	10.00	10.00			
	DDD	PPB	.10	1	.10	.10	.10			
	DDE	PPB	.10	1	.10	.10	.10			
	DDT	PPB	.10	1	.10	.10	.10			
	Di-n-butyl phthalate	PPB	10.00	1	10.00	10.00	10.00			
	Di-n-octyl phthalate	PPB	10.00	1	10.00	10.00	10.00			
	Di-n-propylnitrosamine	PPB	10.00	1	10.00	10.00	10.00			
	Diallate	PPB	10.00	1	10.00	10.00	10.00			
	Dibenz[a,h]acridine	PPB	10.00	1	10.00	10.00	10.00			
	Dibenz[a,h]anthracene	PPB	10.00	1	10.00	10.00	10.00			
	Dibenz[a,j]acridine	PPB	10.00	1	10.00	10.00	10.00			
	Dibenzo[a,e]pyrene	PPB	10.00	1	10.00	10.00	10.00			
	Dibenzo[a,h]pyrene	PPB	10.00	1	10.00	10.00	10.00			
	Dibenzo[a,i]pyrene	PPB	10.00	1	10.00	10.00	10.00			

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Wrib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzofuran	PPB	10.00		1	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00		1	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		1	10.00	10.00	10.00	
	Dieldrin	PPB	.10		1	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		1	10.00	10.00	10.00	
	Diethylstilbestrol	PPB	200.00		1	200.00	200.00	200.00	
	Dihydroxafrole	PPB	10.00		1	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		1	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		1	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		1	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		1	10.00	10.00	10.00	
	Dioxane	PPB	500.00		1	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		1	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		1	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		1	.10	.10	.10	
	Endosulfan II	PPB	.10		1	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		1	.50	.50	.50	
	Ethanol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		1	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		1	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		1	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		1	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		1	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		1	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		1	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		1	10.00	10.00	10.00	
	Fluorene	PPB	10.00		1	10.00	10.00	10.00	
	Formalin	PPB	500.00		1	500.00	500.00	500.00	
	Heptachlor	PPB	.10		1	.10	.10	.10	.4

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Heptachlor epoxide	PPB	.10		1	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		1	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		1	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		1	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	.17	.34	-.00	20.0	
	Iodomethane	PPB	10.00		1	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		1	10.00	10.00	10.00		
	Isophorone	PPB	10.00		1	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		1	10.00	10.00	10.00		
	Kepone	PPB	1.00		1	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		1	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		3	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	1	13100.00	13100.00	13100.00		
	Magnesium, filtered	PPB	50.00	YES	3	10963.33	13400.00	9390.00		
	Maleic hydrazide	PPB	500.00		1	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		1	10.00	10.00	10.00		
	Manganese-54	PPB			1	2.68	2.68	2.68		
	Melphalan	PPB	10.00		1	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		1	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		1	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		1	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		1	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		2	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		1	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl ethyl ketone	PPB	10.00		2	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		1	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		1	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		1	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		2	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		1	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		1	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		3	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		1	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		1	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		1	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		1	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		1	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		1	10.00	10.00	10.00		
	Natural uranium	UG/L	.73	YES	1	11.40	11.40	11.40	59.0	
	Nickel	PPB	10.00		1	10.00	10.00	10.00		
	Nickel, filtered	PPB	10.00		3	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		1	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		3	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		1	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	O-toluidine hydrochloride	PPB	10.00		1	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		1	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		1	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		1	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		1	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	PHORATE	PPB	2.00		1	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		1	2.00	2.00	2.00		
	Pcdd's	PPB	.01		1	.01	.01	.01		
	Pcdf's	PPB	.01		1	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		1	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		1	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		1	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		1	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		1	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		1	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		3	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		1	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		1	.00	.00	.00	1.6	
	Plutonium-239/40	PCI/L	.10		1	.00	.00	.00	1.2	
	Potassium	PPB	100.00	YES	1	6010.00	6010.00	6010.00		
	Potassium, filtered	PPB	100.00	YES	3	5556.67	6140.00	5170.00		
	Pronamide	PPB	10.00		1	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		1	5.00	5.00	5.00		
	Pyrene	PPB	10.00		1	10.00	10.00	10.00		
	Pyridine	PPB	500.00		1	500.00	500.00	500.00		
	Reserpine	PPB	10.00		1	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		1	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		2	24.56	40.70	8.41	240.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above
SITE SPECIFIC AND OTHER PARAMETERS									
Safrol		PPB	10.00		1	10.00	10.00	10.00	
Silicon		PPB	50.00	YES	1	14300.00	14300.00	14300.00	
Silicon, filtered		PPB	50.00	YES	3	14066.67	14400.00	13800.00	
Strontium		PPB	10.00	YES	1	264.00	264.00	264.00	
Strontium, filtered		PPB	10.00	YES	3	217.67	263.00	188.00	
Strontium-90		PCI/L	5.00		2	-22	.35	-79	40.0
Strychnine		PPB	50.00		1	50.00	50.00	50.00	
Styrene		PPB	5.00		1	5.00	5.00	5.00	5.0
Sulfide		PPB	1000.00		1	1000.00	1000.00	1000.00	
Sym-trinitrobenzene		PPB	10.00		1	10.00	10.00	10.00	
Technetium-99		PCI/L	15.00		1	3.42	3.42	3.42	4000.0
Tetrachloroethylene		PPB	5.00		2	5.00	5.00	5.00	5.0
Tetraethylpyrophosphate		PPB	2.00		1	2.00	2.00	2.00	
Tetrahydrofuran		PPB	10.00		2	10.00	10.00	10.00	
Thallium		PPB	5.00		1	5.00	5.00	5.00	
Thallium, filtered		PPB	5.00		1	5.00	5.00	5.00	
Thiofanox		PPB	10.00		1	10.00	10.00	10.00	
Thiourea		PPB	200.00		1	200.00	200.00	200.00	
Thiuram		PPB	10.00		1	10.00	10.00	10.00	
Tin		PPB	30.00		1	30.00	30.00	30.00	
Tin, filtered		PPB	30.00		3	30.00	30.00	30.00	
Titanium		PPB	60.00		1	60.00	60.00	60.00	
Titanium, filtered		PPB	60.00		3	60.00	60.00	60.00	
Toluene		PPB	5.00		2	5.00	5.00	5.00	2000.0
Toluenediamine		PPB	10.00		1	10.00	10.00	10.00	
Total carbon		PPB	1000.00	YES	1	32200.00	32200.00	32200.00	
Trans-1,2-dichloroethene		PPB	5.00		2	5.00	5.00	5.00	70.0
Tributylphosphoric Acid		PPB	10.00		1	10.00	10.00	10.00	
Trichloroethylene		PPB	5.00		2	5.00	5.00	5.00	5.0
Trichloromethanethiol		PPB	10.00		1	10.00	10.00	10.00	
Trichloromonofluoromethane		PPB	10.00		1	10.00	10.00	10.00	
Tris(2,3-dibromopropyl) phosphate		PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-S-26 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Tritium	PCI/L	500.00	YES	2	4280.00	5050.00	3510.00	80000.0	
	Turbidity	NTU	.10	YES	1	.80	.80	.80	5.0	
	Uranium	PCI/L	.50	YES	1	5.55	5.55	5.55	40.0	
	Uranium-234	PCI/L	.10	YES	1	3.75	3.75	3.75	20.0	
	Uranium-235	PCI/L	.10	YES	1	.13	.13	.13	24.0	
	Uranium-238	PCI/L	.10	YES	1	3.13	3.13	3.13	24.0	
	Vanadium	PPB	5.00	YES	1	19.00	19.00	19.00		
	Vanadium, filtered	PPB	5.00	YES	3	18.00	20.00	16.00		
	Vinyl Acetate	PPB	5.00		1	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		2	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		1	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		2	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		2	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	1	31.00	31.00	31.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	3	29.00	30.00	27.00	5000.0	
	Zirconium	PPB	50.00		1	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		3	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		1	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		1	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		3	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		1	10.00	10.00	10.00

Well Location and Site Map for 216-T-1 Ditch

Well Location and Site Map for 216-T-4-2 Ditch

Well Location and Site Map for 216-U-14 Ditch

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory	UMHO		1.00	YES	3	226.33	251.00	197.00	700.0	
	UMHO		1.00	YES	5	223.40	270.00	189.00	700.0	
	PPB		10.00	YES	5	9.60	13.00	6.00		
	PPB		2000.00		3	533.33	600.00	500.00		
	pH, Field Measurement		.10	YES	5	8.27	9.14	7.42	8.5	YES
	pH, Laboratory Measurement		.01	YES	3	8.33	8.60	8.00	8.5	YES
DRINKING WATER PARAMETERS										
2,4,5-TP silvex	PPB		2.00		3	2.00	2.00	2.00	10.0	
	PPB		2.00		3	2.00	2.00	2.00	100.0	
	PCI/L		4.00	YES	5	9.27	14.40	4.25	15.0	
	PPB		.10		3	.10	.10	.10	4.0	
	PPB		5.00	YES	3	10.33	14.00	5.00	50.0	
	PPB		5.00	YES	2	12.50	13.00	12.00	50.0	
	PPB		6.00	YES	3	88.67	222.00	21.00	1000.0	
	PPB		6.00	YES	4	18.25	20.00	16.00	1000.0	
	PPB		.10		3	.10	.10	.10	4.0	
	PPB		2.00	YES	3	32.67	94.00	2.00	10.0	YES
	PPB		2.00		4	2.00	2.00	2.00	10.0	
	PPB		10.00	YES	3	56.33	149.00	10.00	50.0	YES
	PPB		10.00		4	10.00	10.00	10.00	50.0	
	PPB		1.00		2	1.00	1.00	1.00	1.0	
	MPN		2.20		1	2.20	2.20	2.20	1.0	
	PPB		.10		3	.10	.10	.10	4.0	
	PPB		.10		3	.10	.10	.10	.2	
	Fluoride	PPB		500.00	YES	5	500.00	500.00	500.00	4000.0
Gamma-BHC	PPB		.10		3	.10	.10	.10	4.0	
Gross alpha	PCI/L		4.00	YES	2	10.49	11.80	9.18	15.0	
Gross beta	PCI/L		8.00	YES	7	6.72	11.60	3.32	50.0	
Lead (graphite furnace)	PPB		5.00	YES	3	11.67	25.00	5.00	50.0	
Lead, filtered	PPB		5.00		2	5.00	5.00	5.00	50.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
DRINKING WATER PARAMETERS									
Mercury		PPB	.10		3	.10	.10	.10	2.0
Mercury, filtered		PPB	.10		2	.10	.10	.10	2.0
Methoxychlor		PPB	3.00		3	3.00	3.00	3.00	100.0
Nitrate		PPB	500.00	YES	5	860.00	1300.00	500.00	45000.0
Nitrate, High Detection Level		PPB	2500.00		2	2500.00	2500.00	2500.00	45000.0
Radium		PCI/L	1.00	YES	3	.32	1.01	.03	100.0
Selenium		PPB	5.00		3	5.00	5.00	5.00	10.0
Selenium, filtered		PPB	5.00		2	5.00	5.00	5.00	10.0
Silver		PPB	10.00		3	10.00	10.00	10.00	50.0
Silver, filtered		PPB	10.00		4	10.00	10.00	10.00	50.0
Toxaphene		PPB	1.00		3	1.00	1.00	1.00	5.0
GROUNDWATER QUALITY PARAMETERS									
Chloride		PPB	500.00	YES	5	1980.00	4800.00	1200.00	250000.0
Iron		PPB	30.00	YES	3	92042.33	276000.00	36.00	300.0
Iron, filtered		PPB	30.00		4	30.00	30.00	30.00	300.0
Manganese		PPB	5.00	YES	3	1006.67	3010.00	5.00	50.0
Manganese, filtered		PPB	5.00		4	5.00	5.00	5.00	50.0
Phenol		PPB	10.00		3	10.00	10.00	10.00	
Sodium		PPB	200.00	YES	3	24937.33	39900.00	12600.00	
Sodium, filtered		PPB	200.00	YES	4	16825.00	21700.00	12100.00	
Sulfate		PPB	500.00	YES	5	16980.00	39200.00	9600.00	250000.0
SITE SPECIFIC AND OTHER PARAMETERS									
0,0-Diethyl-0,2-pyrazinyl phosphorothion		PPB	10.00		3	10.00	10.00	10.00	
1,1,1,2-tetrachlorethane		PPB	10.00		3	10.00	10.00	10.00	
1,1,1-trichloroethane		PPB	5.00		5	5.00	5.00	5.00	200.0
1,1,2,2-tetrachlorethane		PPB	5.00		3	5.00	5.00	5.00	
1,1,2-trichloroethane		PPB	5.00		5	5.00	5.00	5.00	
1,1-dichloroethane		PPB	5.00		5	5.00	5.00	5.00	
1,1-dichloroethylene		PPB	10.00		3	10.00	10.00	10.00	7.0
1,1-dimethylhydrazine		PPB	10.00		3	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2,3,4-tetrachlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		3	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		3	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00		3	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		5	5.00	5.00	5.00		5.0
	1,2-dichloropropane	PPB	5.00		3	5.00	5.00	5.00		5.0
	1,2-dimethylhydrazine	PPB	10.00		3	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		3	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		3	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		3	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		3	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		3	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		3	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		3	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		3	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		3	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		3	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		3	.01	.01	.01		
	2,4,5-T	PPB	2.00		3	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		3	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		3	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		3	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result
SITE SPECIFIC AND OTHER PARAMETERS								
	2,4-dinitrophenol	PPB	10.00		3	10.00	10.00	10.00
	2,4-dinitrotoluene	PPB	10.00		3	10.00	10.00	10.00
	2,6-Bis(1,1-Dimethylethyl)-4-Methyl Phen	PPB		YES	1	20.00	20.00	20.00
	2,6-dichlorophenol	PPB	10.00		3	10.00	10.00	10.00
	2,6-dinitrotoluene	PPB	10.00		3	10.00	10.00	10.00
	2-Hexanone	PPB	50.00		3	50.00	50.00	50.00
	2-Methylnaphthalene	PPB	10.00		3	10.00	10.00	10.00
	2-acetylaminofluorene	PPB	10.00		3	10.00	10.00	10.00
	2-chloroethyl vinyl ether	PPB	5.00		3	5.00	5.00	5.00
	2-chloronaphthalene	PPB	10.00		3	10.00	10.00	10.00
	2-chlorophenol	PPB	10.00		3	10.00	10.00	10.00
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		3	10.00	10.00	10.00
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		3	10.00	10.00	10.00
	2-methylaziridine	PPB	10.00		3	10.00	10.00	10.00
	2-methylactonitrile	PPB	10.00		3	10.00	10.00	10.00
	2-naphthylamine	PPB	10.00		3	10.00	10.00	10.00
	2-picoline	PPB	10.00		3	10.00	10.00	10.00
	2-propyn-1-ol	PPB	10000.00		3	10000.00	10000.00	10000.00
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		3	10.00	10.00	10.00
	3,3'-Dichlorobenzidine	PPB	10.00		3	10.00	10.00	10.00
	3,3'-dimethoxybenzidine	PPB	10.00		3	10.00	10.00	10.00
	3,3'-dimethylbenzidine	PPB	10.00		3	10.00	10.00	10.00
	3-chloropropionitrile	PPB	10000.00		3	10000.00	10000.00	10000.00
	3-methylcholanthrene	PPB	10.00		3	10.00	10.00	10.00
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00		3	10.00	10.00	10.00
	4,6-dinitro-o-cresol and salts	PPB	10.00		3	10.00	10.00	10.00
	4-Nitroquinoline 1-oxide	PPB	10.00		3	10.00	10.00	10.00
	4-aminobiphenyl	PPB	10.00		3	10.00	10.00	10.00
	4-bromophenyl phenyl ether	PPB	10.00		3	10.00	10.00	10.00
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		3	10.00	10.00	10.00
	5-nitro-o-toluidine	PPB	10.00		3	10.00	10.00	10.00
	7,12-dimethylbenz[a]anthracene	PPB	10.00		3	10.00	10.00	10.00

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	7H-dibenzo[c,g]carbazole	PPB	10.00	3	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00	3	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00	3	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00	3	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	5	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00	3	10.00	10.00	10.00		
	Acetophenone	PPB	10.00	3	10.00	10.00	10.00		
	Acrolein	PPB	10.00	3	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00	3	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00	3	10.00	10.00	10.00		
	Aldrin	PPB	.10	3	.10	.10	.10		
	Allyl Chloride	PPB	100.00	3	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00	3	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00	3	10.00	10.00	10.00		
	Aluminum	PPB	150.00	3	5000.00	14700.00	150.00	50.0	YES
	Aluminum, filtered	PPB	150.00	4	150.00	150.00	150.00	50.0	
	Americium-241	PCI/L	.10	2	.01	.01	.01		
	Amitrole	PPB	10.00	3	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	3	59.67	79.00	50.00		
	Aniline	PPB	10.00	3	10.00	10.00	10.00		
	Anthracene	PPB	10.00	3	10.00	10.00	10.00		
	Antimony	PPB	100.00	3	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00	4	100.00	100.00	100.00		
	Aramite	PPB	10.00	3	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00	3	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00	3	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00	3	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Benz[a]anthracene	PPB	10.00	3	10.00	10.00	10.00	
	Benz[c]acridine	PPB	10.00	3	10.00	10.00	10.00	
	Benzene	PPB	5.00	5	5.00	5.00	5.00	5.0
	Benzene, dichloromethyl	PPB	10.00	3	10.00	10.00	10.00	
	Benzenethiol	PPB	10.00	3	10.00	10.00	10.00	
	Benzidine	PPB	10.00	3	10.00	10.00	10.00	
	Benzo(ghi)perylene	PPB	10.00	3	10.00	10.00	10.00	
	Benzo(k)fluoranthene	PPB	10.00	3	10.00	10.00	10.00	
	Benzo(a)pyrene	PPB	10.00	3	10.00	10.00	10.00	
	Benzo(b)fluoranthene	PPB	10.00	3	10.00	10.00	10.00	
	Benzo(j)fluoranthene	PPB	10.00	3	10.00	10.00	10.00	
	Benzyl Alcohol	PPB	10.00	3	10.00	10.00	10.00	
	Benzyl chloride	PPB	10.00	3	10.00	10.00	10.00	
	Beryllium	PPB	5.00	3	5.00	5.00	5.00	
	Beryllium, filtered	PPB	5.00	4	5.00	5.00	5.00	
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00	3	10.00	10.00	10.00	
	Bis(2-chloroethoxy) methane	PPB	10.00	3	10.00	10.00	10.00	
	Bis(2-chloroethyl) ether	PPB	10.00	3	10.00	10.00	10.00	
	Bis(2-chloroisopropyl)ether	PPB	10.00	3	10.00	10.00	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00	3	10.00	10.00	10.00	
	Bis(chloromethyl) ether	PPB	5.00	3	5.00	5.00	5.00	
	Boron	PPB	10.00	3	32.00	40.00	20.00	
	Boron, filtered	PPB	10.00	4	29.75	43.00	20.00	
	Bromide	PPB	1000.00	5	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00	3	5.00	5.00	5.00	100.0
	Bromodichloromethane	PPB	5.00	3	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00	3	5.00	5.00	5.00	
	Butyl benzyl phthalate	PPB	10.00	3	10.00	10.00	10.00	
	Calcium	PPB	50.00	3	19066.67	22690.00	16700.00	
	Calcium, filtered	PPB	50.00	4	16875.00	18100.00	15600.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00	5	7.20	13.00	4.00	5.0
	Carbon disulfide	PPB	10.00	3	10.00	10.00	10.00	YES

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Carbophenothion	PPB	2.00		3	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00		5	.03	2.47	-3.54	120.0	
	Chlordane	PPB	1.00		3	1.00	1.00	1.00	2.0	
	Chloronaphazine	PPB	10.00		3	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		3	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		3	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		3	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		3	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		3	10.00	10.00	10.00		
	Chloroform	PPB	5.00		5	5.00	5.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		3	10.00	10.00	10.00		
	Chrysene	PPB	10.00		3	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		3	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		3	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		4	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50	YES	5	.46	3.33	-1.52	200.0	
	Copper	PPB	10.00		3	19.33	38.00	10.00	1000.0	
	Copper, filtered	PPB	10.00		4	10.00	10.00	10.00	1000.0	
	Cresols	PPB	10.00		3	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		3	10.00	10.00	10.00		
	Cyanide	PPB	10.00		3	10.00	10.00	10.00		
	DDD	PPB	.10		3	.10	.10	.10		
	DDE	PPB	.10		3	.10	.10	.10		
	DDT	PPB	.10		3	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		3	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		3	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		3	10.00	10.00	10.00		
	Diallate	PPB	10.00		3	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		3	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		3	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		3	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		3	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Dibenzo[a,h]pyrene	PPB	10.00		3	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00		3	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00		3	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00		3	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00		3	10.00	10.00	10.00		
	Dieldrin	PPB	.10		3	.10	.10	.10		
	Diethyl phthalate	PPB	10.00		3	10.00	10.00	10.00		
	Diethylstilbesterol	PPB	200.00		3	200.00	200.00	200.00		
	Dihydrosafrole	PPB	10.00		3	10.00	10.00	10.00		
	Dimethoate	PPB	2.00		3	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00		3	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00		3	10.00	10.00	10.00		
	Dinoseb	PPB	10.00		3	10.00	10.00	10.00		
	Dioxane	PPB	500.00		3	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00		3	10.00	10.00	10.00		
	Disulfoton	PPB	2.00		3	2.00	2.00	2.00		
	Endosulfan I	PPB	.10		3	.10	.10	.10		
	Endosulfan II	PPB	.10		3	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50		3	.50	.50	.50		
	Ethanol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00		3	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00		3	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00		3	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00		3	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00		3	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00		3	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00		3	10.00	10.00	10.00		
	Fluorene	PPB	10.00		3	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Fluoride, Low Detection Level		20.00	YES	1	205.00	205.00	205.00	4000.0	
	Formalin	PPB	500.00		3	500.00	500.00	500.00		
	Heptachlor	PPB	.10		3	.10	.10	.10	.4	
	Heptachlor epoxide	PPB	.10		3	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		3	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		3	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		3	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		3	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		3	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		3	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		3	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		3	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	.01	.05	-.02	20.0	
	Iodomethane	PPB	10.00		3	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		3	10.00	10.00	10.00		
	Isophorone	PPB	10.00		3	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		3	10.00	10.00	10.00		
	Kepone	PPB	1.00		3	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00	YES	3	12.33	17.00	10.00		
	Lithium, filtered	PPB	10.00		4	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	3	7300.00	10200.00	5440.00		
	Magnesium, filtered	PPB	50.00	YES	4	5632.50	6250.00	4950.00		
	Maleic hydrazide	PPB	500.00		3	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		3	10.00	10.00	10.00		
	Melphalan	PPB	10.00		3	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		3	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		3	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		3	10.00	10.00	10.00		
	Methoxyonyl	PPB	10.00		3	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		5	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl bromide	PPB	10.00		3	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		3	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		5	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		3	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		3	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		3	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		5	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		3	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		3	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		4	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		3	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		3	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		3	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		3	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		3	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		3	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		3	10.00	10.00	10.00		
	Natural uranium	UG/L	.73	YES	2	17.50	21.90	13.10	59.0	
	Nickel	PPB	10.00	YES	3	32.67	78.00	10.00		
	Nickel, filtered	PPB	10.00		4	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		3	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		5	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		3	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Nitrosopyrrolidine	PPB	10.00		3	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		3	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		3	10.00	10.00	10.00	
	P benzoquinone	PPB	10.00		3	10.00	10.00	10.00	
	P-chloro-m-cresol	PPB	10.00		3	10.00	10.00	10.00	
	P-chloroaniline	PPB	10.00		3	10.00	10.00	10.00	
	P-dimethylaminoazobenzene	PPB	10.00		3	10.00	10.00	10.00	
	P-nitroaniline	PPB	10.00		3	10.00	10.00	10.00	
	PHORATE	PPB	2.00		3	2.00	2.00	2.00	
	Paraldehyde	PPB	10000.00		3	10000.00	10000.00	10000.00	
	Parathion	PPB	2.00		3	2.00	2.00	2.00	
	Pcdd's	PPB	.01		3	.01	.01	.01	
	Pcdf's	PPB	.01		3	.01	.01	.01	
	Pentachlorobenzene	PPB	10.00		3	10.00	10.00	10.00	
	Pentachloroethane	PPB	10.00		3	10.00	10.00	10.00	
	Pentachloronitrobenzene	PPB	10.00		3	10.00	10.00	10.00	
	Pentachlorophenol	PPB	50.00		3	50.00	50.00	50.00	200.0
	Perchlorate	PPB	500.00		3	500.00	500.00	500.00	
	Phenacetin	PPB	10.00		3	10.00	10.00	10.00	
	Phenanthrene	PPB	10.00		3	10.00	10.00	10.00	
	Phenylenediamine	PPB	10.00		3	10.00	10.00	10.00	
	Phosphate	PPB	1000.00		5	1000.00	1000.00	1000.00	
	Phthalic acid esters	PPB	10.00		3	10.00	10.00	10.00	
	Plutonium-238	PCI/L	.10		4	.00	.00	.00	1.6
	Plutonium-239/40	PCI/L	.10		4	.00	.01	.01	1.2
	Potassium	PPB	100.00	YES	3	4266.67	6670.00	2870.00	
	Potassium, filtered	PPB	100.00	YES	4	2882.50	3150.00	2620.00	
	Pronamide	PPB	10.00		3	10.00	10.00	10.00	
	Propionitrile	PPB	5.00		3	5.00	5.00	5.00	
	Pyrene	PPB	10.00		3	10.00	10.00	10.00	
	Pyridine	PPB	500.00		3	500.00	500.00	500.00	
	Reserpine	PPB	10.00		3	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Resorcinol	PPB	10.00		3	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		5	-5.82	34.70	-51.20	240.0	
	Safrol	PPB	10.00		3	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	3	23233.33	35900.00	14700.00		
	Silicon, filtered	PPB	50.00	YES	4	16525.00	18700.00	14600.00		
	Strontium	PPB	10.00	YES	3	86.67	101.00	73.00		
	Strontium, filtered	PPB	10.00	YES	4	76.25	84.00	68.00		
	Strontium-90	PCI/L	5.00		5	-0.7	.11	-47	40.0	
	Strychnine	PPB	50.00		3	50.00	50.00	50.00		
	Styrene	PPB	5.00		3	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		3	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		3	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00	YES	1	29.90	29.90	29.90	4000.0	
	Tetrachloroethylene	PPB	5.00		5	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		3	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		5	10.00	10.00	10.00		
	Thallium	PPB	5.00		3	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		2	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		3	10.00	10.00	10.00		
	Thiourea	PPB	200.00		3	200.00	200.00	200.00		
	Thiuram	PPB	10.00		3	10.00	10.00	10.00		
	Tin	PPB	30.00		3	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		4	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	3	496.67	1370.00	60.00		
	Titanium, filtered	PPB	60.00		4	60.00	60.00	60.00		
	Toluene	PPB	5.00	YES	5	6.60	13.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		3	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	3	19933.33	23900.00	15800.00		
	Total dissolved solids	PPB	5000.00	YES	2	116500.00	123000.00	110000.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00		5	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		3	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00		5	5.00	5.00	5.00	5.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-14 Ditch (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Trichloromethanethiol	PPB	10.00		3	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		3	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		3	10.00	10.00	10.00		
	Tritium	PCI/L	500.00		7	96.74	165.00	-103.00	80000.0	
	Turbidity	NTU	.10	YES	3	66.93	200.00	.20	5.0	YES
	Uranium	PCI/L	.50	YES	5	11.46	20.90	4.39	40.0	
	Uranium-234	PCI/L	.10	YES	2	6.02	7.85	4.18	20.0	
	Uranium-235	PCI/L	.10	YES	2	.29	.31	.27	24.0	
	Uranium-238	PCI/L	.10	YES	2	5.81	7.82	3.79	24.0	
	Vanadium	PPB	5.00	YES	3	68.00	145.00	20.00		
	Vanadium, filtered	PPB	5.00	YES	4	28.00	36.00	20.00		
	Vinyl Acetate	PPB	5.00		3	5.00	5.00	5.00	2.0	
	Vinyl chloride	PPB	10.00		5	10.00	10.00	10.00		
	Warfarin	PPB	10.00		3	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		5	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		5	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	3	50.67	127.00	11.00	5000.0	
	Zinc, filtered	PPB	5.00	YES	4	7.25	9.00	5.00	5000.0	
	Zirconium	PPB	50.00		3	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		4	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		3	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		3	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		3	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		3	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		8	6.88	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		3	10.00	10.00	10.00

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Well Location and Site Map for 216-U-17 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory Specific conductance Total Organic Halogen, Low Det. Level Total organic carbon pH, Field Measurement pH, Laboratory Measurement		UMHO	1.00	YES	7	1721.29	2310.00	955.00	700.0	YES
		UMHO	1.00	YES	12	1802.83	2640.00	283.00	700.0	YES
		PPB	10.00	YES	13	27.69	52.00	20.00		
		PPB	2000.00		7	785.71	1200.00	500.00		
			.10	YES	12	7.47	7.69	7.18	8.5	
			.01	YES	7	7.44	7.60	7.30	8.5	
DRINKING WATER PARAMETERS										
2,4,5-TP silvex 2,4-D Alpha, High Detection Level Alpha-BHC Arsenic Arsenic, filtered Barium Barium, filtered Beta-BHC Cadmium Cadmium, filtered Chromium Chromium, filtered Coliform bacteria Delta-BHC Endrin Fluoride Gamma-BHC Gross alpha Gross beta Lead (graphite furnace) Lead, filtered Mercury		PPB	2.00		7	2.00	2.00	2.00	10.0	
		PPB	2.00		7	2.00	2.00	2.00	100.0	
		PCI/L	4.00	YES	28	209.85	363.00	35.80	15.0	YES
		PPB	.10		7	.10	.10	.10	4.0	
		PPB	5.00		7	5.00	5.00	5.00	50.0	
		PPB	5.00		7	5.00	5.00	5.00	50.0	
		PPB	6.00	YES	7	196.57	290.00	84.00	1000.0	
		PPB	6.00	YES	12	196.92	279.00	66.00	1000.0	
		PPB	.10		7	.10	.10	.10	4.0	
		PPB	2.00	YES	7	2.00	2.00	2.00	10.0	
		PPB	2.00		12	2.00	2.00	2.00	10.0	
		PPB	10.00	YES	7	15.43	47.00	10.00	50.0	
		PPB	10.00		12	10.00	10.00	10.00	50.0	
		MPN	2.20	YES	7	2.46	4.00	2.20	1.0	YES
		PPB	.10		7	.10	.10	.10	4.0	
		PPB	.10		7	.10	.10	.10	.2	
		PPB	500.00	YES	13	915.38	1700.00	500.00	4030.0	
		PPB	.10		7	.10	.10	.10	4.0	
		PCI/L	4.00	YES	5	209.72	285.00	94.60	15.0	YES
		PCI/L	8.00	YES	33	1317.61	2770.00	134.00	50.0	YES
	PPB	5.00	YES	7	6.57	16.00	5.00	50.0		
	PPB	5.00		7	5.00	5.00	5.00	50.0		
	PPB	.10		7	.10	.10	.10	2.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

WHC-EP-0366

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES					
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit		
DRINKING WATER PARAMETERS												
Mercury, filtered	Methoxychlor	PPB	.10		7	.10	.10	.10	2.0			
		PPB	3.00		7	3.00	3.00	3.00	100.0			
		PPB	500.00	YES	13	834846.15	1300000.00	266000.00	45000.0	YES		
		PPB	2500.00	YES	21	946190.48	1360000.00	330000.00	45000.0	YES		
		PCI/L	1.00		7	.44	.88	.03	100.0			
		PPB	5.00	YES	7	6.29	10.00	5.00	10.0	YES		
		PPB	5.00	YES	7	6.00	9.00	5.00	10.0			
		PPB	10.00		7	10.00	10.00	10.00	50.0			
		PPB	10.00		12	10.00	10.00	10.00	50.0			
PPB	1.00		7	1.00	1.00	1.00	1.00	5.0				
GROUNDWATER QUALITY PARAMETERS												
Chloride	Iron	PPB	500.00	YES	13	23907.69	36500.00	19000.00	250000.0			
		PPB	30.00	YES	7	2225.14	7770.00	362.00	300.0	YES		
		PPB	30.00	YES	12	84.58	256.00	30.00	300.0			
		PPB	5.00	YES	7	7.29	13.00	5.00	50.0			
		PPB	5.00	YES	12	5.33	7.00	5.00	50.0			
		PPB	10.00		7	10.00	10.00	10.00				
		PPB	200.00	YES	7	40171.43	52100.00	28000.00				
		PPB	200.00	YES	12	41658.33	55100.00	26700.00				
		PPB	500.00	YES	13	72715.38	121000.00	62000.00	250000.0			
		SITE SPECIFIC AND OTHER PARAMETERS										
		0,0-Diethyl-0,2-pyrazinyl phosphorothion	1,1,1,2-tetrachlorethane	PPB	10.00		7	10.00	10.00	10.00		
				PPB	10.00		7	10.00	10.00	10.00		
PPB	5.00				12	5.00	5.00	5.00	200.0			
PPB	5.00				7	5.00	5.00	5.00				
PPB	5.00				12	5.00	5.00	5.00				
PPB	5.00				12	5.00	5.00	5.00				
PPB	5.00				12	5.00	5.00	5.00				
PPB	10.00				7	10.00	10.00	10.00	7.0			
PPB	10.00				7	10.00	10.00	10.00				
PPB	10.00		7	10.00	10.00	10.00						

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	1,2,3,5-tetrachlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,2,3-trichlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,2,3-trichloropropane	PPB	10.00	7	10.00	10.00	10.00	
	1,2,4,5-tetrachlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,2,4-trichlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,2-dibromo-3-chloropropane	PPB	10.00	7	10.00	10.00	10.00	.2
	1,2-dibromoethane	PPB	10.00	7	10.00	10.00	10.00	
	1,2-dichlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,2-dichloroethane	PPB	5.00	12	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00	7	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	7	10.00	10.00	10.00	
	1,2-diphenylhydrazine	PPB	10.00	7	10.00	10.00	10.00	
	1,3,5-trichlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,3-dichlorobenzene	PPB	10.00	7	10.00	10.00	10.00	
	1,3-dichloropropane	PPB	5.00	7	5.00	5.00	5.00	
	1,4-dichloro-2-butene	PPB	10.00	7	10.00	10.00	10.00	
	1,4-naphthoquinone	PPB	10.00	7	10.00	10.00	10.00	
	1-(o-chlorophenyl) thiourea	PPB	200.00	7	200.00	200.00	200.00	
	1-Butanol	PPB	10000.00	6	10000.00	10000.00	10000.00	
	1-Butynol	PPB	10000.00	6	10000.00	10000.00	10000.00	
	1-Propanol	PPB	10000.00	6	10000.00	10000.00	10000.00	
	1-acetyl-2-thiourea	PPB	200.00	7	200.00	200.00	200.00	
	1-chloro-2,3-epoxypropane	PPB	10.00	7	10.00	10.00	10.00	
	1-naphthyl-2-thiourea	PPB	200.00	7	200.00	200.00	200.00	
	1-naphthylamine	PPB	10.00	7	10.00	10.00	10.00	
	2,3,4,6-tetrachlorophenol	PPB	10.00	7	10.00	10.00	10.00	
	2,3,7,8 TCDD	PPB	.01	6	.01	.01	.01	
	2,4,5-T	PPB	2.00	7	2.00	2.00	2.00	
	2,4,5-Trichlorophenol	PPB	10.00	7	10.00	10.00	10.00	
	2,4,6-trichlorophenol	PPB	10.00	7	10.00	10.00	10.00	
	2,4-dichlorophenol	PPB	10.00	7	10.00	10.00	10.00	
	2,4-dinitrophenol	PPB	10.00	7	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dinitrotoluene	PPB	10.00		7	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		7	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		7	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		7	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		7	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		7	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		7	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		7	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		7	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		7	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		7	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		7	10.00	10.00	10.00		
	2-methyl lactonitrile	PPB	10.00		7	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		7	10.00	10.00	10.00		
	2-picoline	PPB	10.00		7	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		6	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		7	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		7	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		7	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		7	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		6	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		7	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		7	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		7	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		7	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		7	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		7	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		7	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		7	10.00	10.00	10.00		
	7,12-dimethyl(benz[a])anthracene	PPB	10.00		7	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		7	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		7	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Acenaphthene	PPB	10.00		7	10.00	10.00	10.00		
	Acetone - by ABH	PPB	10.00		7	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00		12	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00		7	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		7	10.00	10.00	10.00		
	Acrolein	PPB	10.00		7	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		7	10.00	10.00	10.00		
	Aldrin	PPB	.10		7	.10	.10	.10		
	Alkalinity		20000.00	YES	1	121000.00	121000.00	121000.00		
	Allyl Chloride	PPB	100.00		7	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		7	10.00	10.00	10.00		
	Aluminum	PPB	150.00		7	150.00	150.00	150.00	50.0	
	Aluminum, filtered	PPB	150.00		12	150.00	150.00	150.00	50.0	
	Americium-241	PCI/L	.10		6	.00	.01	-.00		
	Amitrole	PPB	10.00		7	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00		7	50.00	50.00	50.00		
	Aniline	PPB	10.00		7	10.00	10.00	10.00		
	Anthracene	PPB	10.00		7	10.00	10.00	10.00		
	Antimony	PPB	100.00		7	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		12	100.00	100.00	100.00		
	Aramite	PPB	10.00		7	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		7	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		7	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		7	10.00	10.00	10.00		
	Benz[a]anthracene	PPB	10.00		7	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Benz[c]acridine	PPB	10.00		7	10.00	10.00	10.00	
	Benzene	PPB	5.00		12	5.00	5.00	5.00	5.0
	Benzene, dichloromethyl	PPB	10.00		7	10.00	10.00	10.00	
	Benzenethiol	PPB	10.00		7	10.00	10.00	10.00	
	Benzidine	PPB	10.00		7	10.00	10.00	10.00	
	Benzo(ghi)perylene	PPB	10.00		7	10.00	10.00	10.00	
	Benzo(k)fluoranthene	PPB	10.00		7	10.00	10.00	10.00	
	Benzo[a]pyrene	PPB	10.00		7	10.00	10.00	10.00	
	Benzo[b]fluoranthene	PPB	10.00		7	10.00	10.00	10.00	
	Benzo[j]fluoranthene	PPB	10.00		7	10.00	10.00	10.00	
	Benzyl Alcohol	PPB	10.00		7	10.00	10.00	10.00	
	Benzyl chloride	PPB	10.00		7	10.00	10.00	10.00	
	Beryllium	PPB	5.00		7	5.00	5.00	5.00	
	Beryllium, filtered	PPB	5.00		12	5.00	5.00	5.00	
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		7	10.00	10.00	10.00	
	Bis(2-chloroethoxy) methane	PPB	10.00		7	10.00	10.00	10.00	
	Bis(2-chloroethyl) ether	PPB	10.00		7	10.00	10.00	10.00	
	Bis(2-chloroisopropyl)ether	PPB	10.00		7	10.00	10.00	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00		7	10.00	10.00	10.00	
	Bis(chloromethyl) ether	PPB	5.00		7	5.00	5.00	5.00	
	Boron	PPB	10.00	YES	7	34.57	43.00	29.00	
	Boron, filtered	PPB	10.00	YES	12	37.83	58.00	32.00	
	Bromide	PPB	1000.00		13	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00		7	5.00	5.00	5.00	
	Bromodichloromethane	PPB	5.00		7	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00		7	5.00	5.00	5.00	100.0
	Butyl benzyl phthalate	PPB	10.00		7	10.00	10.00	10.00	
	Calcium	PPB	50.00	YES	7	226714.29	308000.00	108000.00	
	Calcium, filtered	PPB	50.00	YES	12	234491.67	325000.00	90900.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00	YES	12	26.92	51.00	10.00	5.0 YES
	Carbon disulfide	PPB	10.00		7	10.00	10.00	10.00	
	Carbophenothion	PPB	2.00		7	2.00	2.00	2.00	

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Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Cesium-137	PCI/L	20.00		19	.52	8.93	-4.51	120.0	
	Chlordane	PPB	1.00		7	1.00	1.00	1.00	2.0	
	Chloronaphazine	PPB	10.00		7	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		7	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		7	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		7	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		7	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		7	10.00	10.00	10.00		
	Chloroform	PPB	5.00	YES	12	4.83	9.00	3.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		7	10.00	10.00	10.00		
	Chrysene	PPB	10.00		7	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		7	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		7	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		12	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		20	-.74	6.24	-5.59	200.0	
	Copper	PPB	10.00	YES	7	41.71	232.00	10.00	1000.0	
	Copper, filtered	PPB	10.00	YES	12	10.33	14.00	10.00	1000.0	
	Cresols	PPB	10.00		7	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		7	10.00	10.00	10.00		
	Cyanide	PPB	10.00	YES	8	10.53	12.40	10.00		
	DDD	PPB	.10		7	.10	.10	.10		
	DDE	PPB	.10		7	.10	.10	.10		
	DDT	PPB	.10		7	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		7	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		7	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		7	10.00	10.00	10.00		
	Diallate	PPB	10.00		7	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		7	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		7	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		7	10.00	10.00	10.00		
	Dibenzofa,e]pyrene	PPB	10.00		7	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		7	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Dibenzo[a,i]pyrene	PPB	10.00		7	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00		7	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00		7	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00		7	10.00	10.00	10.00		
	Dieldrin	PPB	.10		7	.10	.10	.10		
	Diethyl phthalate	PPB	10.00		7	10.00	10.00	10.00		
	Diethylstilbestrol	PPB	200.00		7	200.00	200.00	200.00		
	Dihydrosofrole	PPB	10.00		7	10.00	10.00	10.00		
	Dimethoate	PPE	2.00		7	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00		7	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00		7	10.00	10.00	10.00		
	Dinoseb	PPB	10.00		7	10.00	10.00	10.00		
	Dioxane	PPB	500.00		7	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00		7	10.00	10.00	10.00		
	Disulfoton	PPB	2.00		7	2.00	2.00	2.00		
	Endosulfan I	PPB	.10		7	.10	.10	.10		
	Endosulfan II	PPB	.10		7	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50		7	.50	.50	.50		
	Ethanol	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00		7	5.00	5.00	5.00	700.0	
	Ethyl carbanate	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00		7	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00		7	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Ethylene oxide	PPE	10.00		7	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00		7	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00		7	200.00	200.00	200.00		
	Europium-155	PCI/L			1	3.20	3.20	3.20	4000.0	
	Fluoranthene	PPB	10.00		7	10.00	10.00	10.00		
	Fluorene	PPB	10.00		7	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Fluoride, Low Detection Level	PPB	20.00	YES	6	368.50	418.00	339.00	4000.0	
	Formalin	PPB	500.00		7	500.00	500.00	500.00		
	Heptachlor	PPB	.10		7	.10	.10	.10	.4	
	Heptachlor epoxide	PPB	.10		7	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		7	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		7	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		7	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		7	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		7	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		7	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		7	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		7	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00	YES	5	1.74	2.33	.89	20.0	
	Iodomethane	PPB	10.00		7	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		7	10.00	10.00	10.00		
	Isophorone	PPB	10.00		7	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		7	10.00	10.00	10.00		
	Kepone	PPB	1.00		7	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		7	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00	YES	7	10.14	11.00	10.00		
	Lithium, filtered	PPB	10.00	YES	12	10.42	12.00	10.00		
	Magnesium	PPB	50.00	YES	7	77657.14	108000.00	32100.00		
	Magnesium, filtered	PPB	50.00	YES	12	80141.67	114000.00	26700.00		
	Maleic hydrazide	PPB	500.00		7	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		7	10.00	10.00	10.00		
	Melphalan	PPB	10.00		7	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		7	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		7	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		7	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		7	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		12	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Methyl bromide	PPB	10.00		7	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		7	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		12	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		7	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		7	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		7	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		12	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		7	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		7	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		12	40.00	40.00	40.00		
	Monobutyl Phosphate	PPB	10000.00		6	10000.00	10000.00	10000.00		
	N,N-diethylhydrazine	PPB	10.00		7	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosomethylethylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		7	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		7	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		7	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		6	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		7	10.00	10.00	10.00		
	Natural uranium	UG/L	.75	YES	21	530.95	2900.00	165.00	59.0	YES
	Nickel	PPB	10.00	YES	7	12.43	27.00	10.00		
	Nickel, filtered	PPB	10.00	YES	12	10.17	12.00	10.00		
	Nicotinic acid	PPB	100.00		7	100.00	100.00	100.00		
	Nitrite	PPB	1000.00		13	1000.00	1000.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		7	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Nitrosopyrrolidine	PPB	10.00		7	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		7	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		7	10.00	10.00	10.00	
	P benzoquinone	PPB	10.00		7	10.00	10.00	10.00	
	P-chloro-m-cresol	PPB	10.00		7	10.00	10.00	10.00	
	P-chloroaniline	PPB	10.00		7	10.00	10.00	10.00	
	P-dimethylaminoazobenzene	PPB	10.00		7	10.00	10.00	10.00	
	P-nitroaniline	PPB	10.00		7	10.00	10.00	10.00	
	PHORATE	PPB	2.00		7	2.00	2.00	2.00	
	Paraldehyde	PPB	10000.00		6	10000.00	10000.00	10000.00	
	Parathion	PPB	2.00		7	2.00	2.00	2.00	
	Pcd's	PPB	.01		6	.01	.01	.01	
	Pcdf's	PPB	.01		6	.01	.01	.01	
	Pentachlorobenzene	PPB	10.00		7	10.00	10.00	10.00	
	Pentachloroethane	PPB	10.00		7	10.00	10.00	10.00	
	Pentachloronitrobenzene	PPB	10.00		7	10.00	10.00	10.00	
	Pentachlorophenol	PPB	50.00		7	50.00	50.00	50.00	
	Perchlorate	PPB	500.00		7	500.00	500.00	500.00	200.0
	Phenacetin	PPB	10.00		7	10.00	10.00	10.00	
	Phenanthrene	PPB	10.00		7	10.00	10.00	10.00	
	Phenylenediamine	PPB	10.00		7	10.00	10.00	10.00	
	Phosphate	PPB	1000.00		13	1000.00	1000.00	1000.00	
	Phthalic acid esters	PPB	10.00		7	10.00	10.00	10.00	
	Plutonium-238	PC/L	.10	YES	14	.02	.17	-.00	1.6
	Plutonium-239/40	PC/L	.10	YES	14	.02	.12	-.00	1.2
	Potassium	PPB	100.00	YES	7	9437.14	11100.00	6470.00	
	Potassium, filter-adj	PPB	100.00	YES	12	9518.33	11500.00	5680.00	
	Pronamide	PPB	10.00		7	10.00	10.00	10.00	
	Propionitrile	PPB	5.00		7	5.00	5.00	5.00	
	Pyrene	PPB	10.00		7	10.00	10.00	10.00	
	Pyridine	PPB	500.00		7	500.00	500.00	500.00	
	Reserpine	PPB	10.00		7	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Resorcinol	PPB	10.00		7	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		19	1.34	41.40	-25.40	240.0	
	Safrol	PPB	10.00		7	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	7	23785.71	25400.00	21500.00		
	Silicon, filtered	PPB	50.00	YES	12	23058.33	28500.00	20000.00		
	Silver-110 Metastable	PCI/L			1	-1.77	-1.77	-1.77	400.0	
	Strontium	PPB	10.00	YES	7	1158.29	1630.00	483.00		
	Strontium, filtered	PPB	10.00	YES	12	1206.83	1690.00	391.00		
	Strontium-90	PCI/L	5.00		15	.85	4.31	-.07	40.0	
	Strychnine	PPB	50.00		7	50.00	50.00	50.00		
	Styrene	PPB	5.00		7	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		7	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		7	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00	YES	21	17363.06	41000.00	27.20	4000.0	YES
	Tetrachloroethylene	PPB	5.00		12	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		7	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		12	10.00	10.00	10.00		
	Thallium	PPB	5.00		7	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		7	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		7	10.00	10.00	10.00		
	Thiourea	PPB	200.00		7	200.00	200.00	200.00		
	Thiuram	PPB	10.00		7	10.00	10.00	10.00		
	Tin	PPB	30.00		7	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		12	30.00	30.00	30.00		
	Titanium	PPB	60.00		7	60.00	60.00	60.00		
	Titanium, filtered	PPB	60.00		12	60.00	60.00	60.00		
	Toluene	PPB	5.00		12	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		7	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	6	32400.00	34600.00	29800.00		
	Total dissolved solids	PPB	5000.00	YES	7	1376142.86	1880000.00	609000.00	500000.0	YES
	Trans-1,2-dichloroethene	PPB	5.00		12	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		7	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-U-17 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Trichloroethylene	PPB	5.00	12	4.25	5.00	3.00	5.0	
	Trichloromethanethiol	PPB	10.00	7	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00	7	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00	7	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	29	1906.72	3760.00	411.00	80000.0	
	Turbidity	NTU	.10	7	36.21	185.00	2.30	5.0	YES
	Uranium	PCI/L	.50	7	250.21	547.00	2.04	40.0	YES
	Uranium-234	PCI/L	.10	17	161.84	465.00	67.90	20.0	YES
	Uranium-235	PCI/L	.10	17	8.92	29.30	3.10	24.0	YES
	Uranium-238	PCI/L	.10	17	165.64	484.00	70.50	24.0	YES
	Vanadium	PPB	5.00	7	16.86	30.00	10.00		
	Vanadium, filtered	PPB	5.00	12	11.58	16.00	9.00		
	Vinyl Acetate	PPB	5.00	7	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00	12	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00	7	10.00	10.00	10.00		
	Xylene-m	PPB	5.00	12	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00	12	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	7	139.14	542.00	8.00	5000.0	
	Zinc, filtered	PPB	5.00	12	77.92	429.00	6.00	5000.0	
	Zirconium	PPB	50.00	7	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00	12	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00	7	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00	7	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00	7	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00	7	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00	19	6.84	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00	7	10.00	10.00	10.00

Well Location and Site Map for 216-W-LC Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
Conductivity, Laboratory	Specific conductance	UMHO	1.00	YES	2	384.50	409.00	360.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	2	23.00	26.00	20.00	700.0	
	Total organic carbon	PPB	2000.00	YES	1	2800.00	2800.00	2800.00		
	pH, Field Measurement		.10	YES	2	8.64	9.00	8.28	8.5	YES
	pH, Laboratory Measurement		.01	YES	2	8.60	8.70	8.50	8.5	YES
DRINKING WATER PARAMETERS										
2,4,5-TP silvex	2,4-D	PPB	2.00		1	2.00	2.00	2.00	10.0	
	Alpha, High Detection Level	PPB	2.00		1	2.00	2.00	2.00	100.0	
	Alpha-BHC	PPB	4.00		2	1.83	2.77	.88	15.0	
	Arsenic	PPB	.10		1	.10	.10	.10	4.0	
	Barium	PPB	5.00		1	5.00	5.00	5.00	50.0	
	Beta-BHC	PPB	6.00	YES	1	49.00	49.00	49.00	1000.0	
	Cadmium	PPB	.10		1	.10	.10	.10	4.0	
	Chromium	PPB	2.00	YES	1	13.00	13.00	13.00	10.0	YES
	Coliform bacteria	PPB	10.00	YES	1	16.00	16.00	16.00	50.0	
	Delta-BHC	MPN	2.20		1	2.20	2.20	2.20	1.0	
	Endrin	PPB	.10		1	.10	.10	.10	4.0	
	Fluoride	PPB	.10		1	.10	.10	.10	.2	
	Gamma-BHC	PPB	500.00		2	500.00	500.00	500.00	4000.0	
	Gross beta	PPB	.10		1	.10	.10	.10	4.0	
	Lead (graphite furnace)	PPB	8.00	YES	2	16.85	20.30	13.40	50.0	
	Mercury	PPB	5.00	YES	1	33.00	33.00	33.00	50.0	
	Methoxychlor	PPB	.10		1	.10	.10	.10	2.0	
	Nitrate	PPB	3.00		1	3.00	3.00	3.00	100.0	
Radium	PPB	500.00	YES	2	7400.00	14300.00	500.00	45000.0		
Selenium	PPB	1.00		1	.44	.44	.44	100.0		
Silver	PPB	5.00		1	5.00	5.00	5.00	10.0		
Toxaphene	PPB	10.00		1	10.00	10.00	10.00	50.0		
		1.00		1	1.00	1.00	1.00	5.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	2	22450.00	22500.00	22400.00	250000.0	
	Iron	PPB	30.00	YES	1	37700.00	37700.00	37700.00	300.0	YES
	Manganese	PPB	5.00	YES	1	432.00	432.00	432.00	50.0	YES
	Phenol	PPB	10.00		1	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	1	32500.00	32500.00	32500.00		
	Sulfate	PPB	500.00	YES	2	62400.00	63900.00	60900.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		1	10.00	10.00	10.00		
	1,1,1,2-tetrachloroethane	PPB	10.00		1	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		2	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachloroethane	PPB	5.00		1	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		1	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		1	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		1	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		1	10.00	10.00	10.00	.2	
	1,2-dibromoethane	PPB	10.00		1	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		2	5.00	5.00	5.00	5.0	
	1,2-dichloropropane	PPB	5.00		1	5.00	5.00	5.00	5.0	
	1,2-dimethylhydrazine	PPB	10.00		1	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		1	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,3-dichlorobenzene	PPB	10.00	1	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00	1	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00	1	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00	1	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00	1	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00	1	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00	1	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00	1	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00	1	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00	1	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00	1	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00	1	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01	1	.01	.01	.01		
	2,4,5-T	PPB	2.00	1	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00	1	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00	1	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00	1	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00	1	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00	1	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00	1	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00	1	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00	1	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00	1	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde	PPB	10.00	1	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00	1	10.00	10.00	10.00		
	2-methylacetonitrile	PPB	10.00	1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2-naphthylamine	PPB	10.00		1	10.00	10.00	10.00		
	2-picoline	PPB	10.00		1	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		1	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		1	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		1	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		1	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		1	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		1	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		1	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		1	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		1	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		1	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		1	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		1	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		1	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		1	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		1	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		1	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		1	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		1	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00		2	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00		1	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		1	10.00	10.00	10.00		
	Acrolein	PPB	10.00		1	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		1	10.00	10.00	10.00		
	Aldrin	PPB	.10		1	.10	.10	.10		
	Allyl Chloride	PPB	100.00		1	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		1	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	1	2030.00	2030.00	2030.00	50.0	YES

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
Americium-241		PC1/L	.10		1	.01	.01	.01	
Amitroie		PPB	10.00		1	10.00	10.00	10.00	
Ammonium ion		PPB	50.00	YES	1	94.00	94.00	94.00	
Aniline		PPB	10.00		1	10.00	10.00	10.00	
Anthracene		PPB	10.00		1	10.00	10.00	10.00	
Antimony		PPB	100.00		1	100.00	100.00	100.00	
Aramite		PPB	10.00		1	10.00	10.00	10.00	
Arochlor 1016		PPB	1.00		1	1.00	1.00	1.00	.5
Arochlor 1221		PPB	1.00		1	5.00	5.00	5.00	.5
Arochlor 1232		PPB	1.00		1	1.00	1.00	1.00	.5
Arochlor 1242		PPB	1.00		1	1.00	1.00	1.00	.5
Arochlor 1248		PPB	1.00		1	1.00	1.00	1.00	.5
Arochlor 1254		PPB	1.00		1	1.00	1.00	1.00	.5
Arochlor 1260		PPB	1.00		1	1.00	1.00	1.00	.5
Auramine		PPB	10.00		1	10.00	10.00	10.00	
Benzo[a]anthracene		PPB	10.00		1	10.00	10.00	10.00	
Benz[c]acridine		PPB	10.00		1	10.00	10.00	10.00	
Benzene		PPB	5.00		2	5.00	5.00	5.00	5.0
Benzene, dichloromethyl		PPB	10.00		1	10.00	10.00	10.00	
Benzenethiol		PPB	10.00		1	10.00	10.00	10.00	
Benzidine		PPB	10.00		1	10.00	10.00	10.00	
Benzo(ghi)perylene		PPB	10.00		1	10.00	10.00	10.00	
Benzo(k)fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzo[a]pyrene		PPB	10.00		1	10.00	10.00	10.00	
Benzo[b]fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzo[j]fluoranthene		PPB	10.00		1	10.00	10.00	10.00	
Benzyl Alcohol		PPB	10.00		1	10.00	10.00	10.00	
Benzyl chloride		PPB	10.00		1	10.00	10.00	10.00	
Beryllium		PPB	5.00		1	5.00	5.00	5.00	
Bis(2-chloro-1-methylethyl)ether		PPB	10.00		1	10.00	10.00	10.00	
Bis(2-chloroethoxy) methane		PPB	10.00		1	10.00	10.00	10.00	
Bis(2-chloroethyl) ether		PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Bis(2-chloroisopropyl) ether	PPB	10.00		1	10.00	10.00	10.00	
	Bis(2-ethylhexyl) phthalate	PPB	10.00	YES	1	15.00	15.00	15.00	
	Bis(chloromethyl) ether	PPB	5.00		1	5.00	5.00	5.00	
	Bisphenol A	PPB		YES	1	42.00	42.00	42.00	
	Boron	PPB	10.00	YES	1	587.00	587.00	587.00	
	Bromide	PPB	1000.00		2	1000.00	1000.00	1000.00	
	Bromoacetone	PPB	5.00		1	5.00	5.00	5.00	
	Bromodichloromethane	PPB	5.00		1	5.00	5.00	5.00	100.0
	Bromoform	PPB	5.00		1	5.00	5.00	5.00	100.0
	Butyl benzyl phthalate	PPB	10.00		1	10.00	10.00	10.00	
	Calcium	PPB	50.00	YES	1	21500.00	21500.00	21500.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00		2	5.00	5.00	5.00	5.0
	Carbon disulfide	PPB	10.00		1	10.00	10.00	10.00	
	Carbophenothion	PPB	2.00		1	2.00	2.00	2.00	
	Cesium-137	PCI/L	20.00		1	.95	.95	.95	120.0
	Chlordane	PPB	1.00		1	1.00	1.00	1.00	2.0
	Chlornaphazine	PPB	10.00		1	10.00	10.00	10.00	
	Chloroalkyl ethers	PPB	10.00		1	10.00	10.00	10.00	
	Chlorobenzene	PPB	5.00		1	5.00	5.00	5.00	100.0
	Chlorobenzene (by ABN)	PPB	10.00		1	10.00	10.00	10.00	60.0
	Chlorobenzilate	PPB	300.00		1	300.00	300.00	300.00	
	Chloroethane	PPB	10.00		1	10.00	10.00	10.00	
	Chloroform	PPB	5.00		2	5.00	5.00	5.00	100.0
	Chloromethyl methyl ether	PPB	10.00		1	10.00	10.00	10.00	
	Chrysene	PPB	10.00		1	10.00	10.00	10.00	
	Citrus red	PPB	1000.00		1	1000.00	1000.00	1000.00	
	Cobalt	PPB	20.00		1	20.00	20.00	20.00	
	Cobalt-60	PCI/L	22.50		1	-2.15	-2.15	-2.15	200.0
	Copper	PPB	10.00	YES	1	78.00	78.00	78.00	1000.0
	Cresols	PPB	10.00		1	10.00	10.00	10.00	
	Crotonaldehyde	PPB	10.00		1	10.00	10.00	10.00	
	Cyanide	PPB	10.00		1	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
DDO		PPB	.10		1	.10	.10	.10		
DDE		PPB	.10		1	.10	.10	.10		
DDT		PPB	.10	YES	1	.10	.10	.10		
Di-n-butyl phthalate		PPB	10.00		1	10.00	10.00	10.00		
Di-n-octyl phthalate		PPB	10.00		1	10.00	10.00	10.00		
Di-n-propylnitrosamine		PPB	10.00		1	10.00	10.00	10.00		
Diallate		PPB	10.00		1	10.00	10.00	10.00		
Dibenz[a,h]acridine		PPB	10.00		1	10.00	10.00	10.00		
Dibenz[a,h]anthracene		PPB	10.00		1	10.00	10.00	10.00		
Dibenz[a,j]acridine		PPB	10.00		1	10.00	10.00	10.00		
Dibenzo[a,e]pyrene		PPB	10.00		1	10.00	10.00	10.00		
Dibenzo[a,h]pyrene		PPB	10.00		1	10.00	10.00	10.00		
Dibenzo[a,i]pyrene		PPB	10.00		1	10.00	10.00	10.00		
Dibenzofuran		PPB	10.00		1	10.00	10.00	10.00		
Dibromomethane		PPB	10000.00		1	10000.00	10000.00	10000.00		
Dibutyl Phosphate		PPB	10.00		1	10.00	10.00	10.00		
Dichlorodifluoromethane		PPB	.10		1	.10	.10	.10		
Dieldrin		PPB	10.00		1	10.00	10.00	10.00		
Diethyl phthalate		PPB	200.00		1	200.00	200.00	200.00		
Diethylstilbesterol		PPB	10.00		1	10.00	10.00	10.00		
Dihydrosafrole		PPB	2.00		1	2.00	2.00	2.00		
Dimethoate		PPB	10.00		1	10.00	10.00	10.00		
Dimethyl phthalate		PPB	10.00		1	10.00	10.00	10.00		
Dinitrobenzene		PPB	10.00		1	10.00	10.00	10.00		
Dinoseb		PPB	500.00		1	500.00	500.00	500.00		
Dioxane		PPB	10.00		1	10.00	10.00	10.00		
Diphenylamine		PPB	2.00		1	2.00	2.00	2.00		
Disulfoton		PPB	.10		1	.10	.10	.10		
Endosulfan I		PPB	.10		1	.10	.10	.10		
Endosulfan II		PPB	.50		1	.50	.50	.50		
Endosulfan Sulfate		PPB	10000.00		1	10000.00	10000.00	10000.00		
Ethanol		PPB								

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Ethyl benzene	PPB	5.00		1	5.00	5.00	5.00	700.0	
	Ethyl carbanate	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00		1	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00		1	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00		1	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00		1	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00		1	200.00	200.00	200.00		
	Europium-154	PPB			1	-.83	-.83	-.83	800.0	
	Europium-155	PPB			1	1.18	1.18	1.18	4000.0	
	Fluoranthene	PPB	10.00		1	10.00	10.00	10.00		
	Fluorene	PPB	10.00		1	10.00	10.00	10.00		
	Formalin	PPB	500.00		1	500.00	500.00	500.00		
	Heptachlor	PPB	.10		1	.10	.10	.10	.4	
	Heptachlor epoxide	PPB	.10		1	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		1	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		1	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		1	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		1	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		1	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		1	-.13	-.13	-.13	20.0	
	Iodomethane	PPB	10.00		1	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		1	10.00	10.00	10.00		
	Isophorone	PPB	10.00		1	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		1	10.00	10.00	10.00		
	Kepone	PPB	1.00		1	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		1	10000.00	10000.00	10000.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Lithium	PPB	10.00		1	10.00	10.00	10.00	
	Magnesium	PPB	50.00	YES	1	17300.00	17300.00	17300.00	
	Maleic hydrazide	PPB	500.00		1	500.00	500.00	500.00	
	Malononitrile	PPB	10.00		1	10.00	10.00	10.00	
	Melphalan	PPB	10.00		1	10.00	10.00	10.00	
	Methacrylonitrile	PPB	10.00		1	10.00	10.00	10.00	
	Methanethiol	PPB	10.00		1	10.00	10.00	10.00	
	Methapyrilene	PPB	10.00		1	10.00	10.00	10.00	
	Metholonyl	PPB	10.00		1	10.00	10.00	10.00	
	Methyl Isobutyl ketone	PPB	10.00		2	10.00	10.00	10.00	
	Methyl bromide	PPB	10.00		1	10.00	10.00	10.00	
	Methyl chloride	PPB	10.00		1	10.00	10.00	10.00	
	Methyl ethyl ketone	PPB	10.00		2	10.00	10.00	10.00	
	Methyl methacrylate	PPB	10.00		1	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		1	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		1	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00		2	5.00	5.00	5.00	
	Methylthiouracil	PPB	10.00		1	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		1	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		1	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		1	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosomethylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		1	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		1	10.00	10.00	10.00	

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	N-phenylthiourea	PPB	500.00		1	500.00	500.00	500.00		
	N-propylamine	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Naphthalene	PPB	10.00		1	10.00	10.00	10.00		
	Nickel	PPB	10.00	YES	1	19.00	19.00	19.00		
	Nicotinic acid	PPB	100.00		1	100.00	100.00	100.00		
	Nitrite	PPB	1000.00	YES	2	1100.00	1200.00	1000.00	3300.0	
	Nitrobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Nitrosopyrrolidine	PPB	10.00		1	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		1	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00		1	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		1	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		1	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		1	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		1	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	PHORATE	PPB	2.00		1	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		1	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		1	2.00	2.00	2.00		
	Pcdd's	PPB	.01		1	.01	.01	.01		
	Pcdf's	PPB	.01		1	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		1	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		1	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		1	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		1	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		1	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		1	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		1	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		1	.00	.00	.00	1.6	
	Plutonium-239/40	PCI/L	.10		1	-.00	-.00	-.00	1.2	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Potassium	PPB	100.00	YES	1	9290.00	9290.00	9290.00		
	Pronamide	PPB	10.00		1	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		1	5.00	5.00	5.00		
	Pyrene	PPB	10.00		1	10.00	10.00	10.00		
	Pyridine	PPB	500.00		1	500.00	500.00	500.00		
	Reserpine	PPB	10.00		1	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		1	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		1	-28.90	-28.90	-28.90	240.0	
	Safrol	PPB	10.00		1	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	1	11300.00	11300.00	11300.00		
	Silver-110 Metastable	PPB		YES	1	5.38	5.38	5.38	400.0	
	Strontium	PPB	10.00	YES	1	93.00	93.00	93.00		
	Strontium-90	PCI/L	5.00		1	-0.00	-0.00	-0.00	40.0	
	Strychnine	PPB	50.00		1	50.00	50.00	50.00		
	Styrene	PPB	5.00		1	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		1	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		1	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		1	3.50	3.50	3.50	4000.0	
	Tetrachloroethylene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		1	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		2	10.00	10.00	10.00		
	Thallium	PPB	5.00		1	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		1	10.00	10.00	10.00		
	Thiourea	PPB	200.00		1	200.00	200.00	200.00		
	Thiuram	PPB	10.00		1	10.00	10.00	10.00		
	Tin	PPB	30.00		1	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	1	193.00	193.00	193.00	2000.0	
	Toluene	PPB	5.00		2	5.00	5.00	5.00		
	Toluenediamine	PPB	10.00		1	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	1	20400.00	20400.00	20400.00		
	Trans-1,2-dichloroethene	PPB	5.00		2	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		1	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-W-LWC Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Trichloroethylene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Trichloromethanethiol	PPB	10.00		1	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		1	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		1	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	2	1310.00	1400.00	1220.00	80000.0	
	Turbidity	NTU	.10	YES	1	33.00	33.00	33.00	5.0	YES
	Uranium	PCI/L	.50	YES	1	1.10	1.10	1.10	40.0	
	Vanadium	PPB	5.00	YES	1	9.00	9.00	9.00		
	Vinyl Acetate	PPB	5.00		1	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		2	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		1	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		2	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		2	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	1	404.00	404.00	404.00	5000.0	
	Zirconium	PPB	50.00		1	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		1	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		1	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		1	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		3	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		1	10.00	10.00	10.00

Well Location and Site Map for 216-Z-20 Crib

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	4	177.00	241.00	138.00	700.0	
	Specific conductance	UMHO	1.00	YES	5	182.40	222.00	115.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	4	361.50	1170.00	38.00		
	Total organic carbon	PPB	2000.00		3	766.67	1200.00	500.00		
	pH, Field Measurement		.10	YES	5	8.00	8.57	7.48	8.5	YES
	pH, Laboratory Measurement		.01	YES	5	7.76	8.30	7.00	8.5	
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		2	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		2	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	12	2.58	12.40	-.07	15.0	
	Alpha-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Arsenic	PPB	5.00		2	5.00	5.00	5.00	50.0	
	Barium	PPB	6.00	YES	7	30.57	36.00	25.00	1000.0	
	Barium, filtered	PPB	6.00	YES	1	22.00	22.00	22.00	1000.0	
	Beta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Cadmium	PPB	2.00	YES	7	7.00	22.00	2.00	10.0	YES
	Cadmium, filtered	PPB	2.00		1	2.00	2.00	2.00	10.0	
	Chromium	PPB	10.00	YES	7	29.14	85.00	10.00	50.0	YES
	Chromium, filtered	PPB	10.00		1	10.00	10.00	10.00	50.0	
	Coliform bacteria	MPN	2.20		2	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Endrin	PPB	.10		2	.10	.10	.10	.2	
	Fluoride	PPB	500.00		6	500.00	500.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		2	.10	.10	.10	4.0	
	Gross alpha	PCI/L	4.00		4	1.44	1.99	.90	15.0	
	Gross beta	PCI/L	8.00	YES	16	5.12	24.60	-1.28	50.0	
	Lead (graphite furnace)	PPB	5.00	YES	2	9.50	12.00	7.00	50.0	
Mercury	PPB	.10		2	.10	.10	.10	2.0		
Methoxychlor	PPB	3.00		2	3.00	3.00	3.00	100.0		
Nitrate	PPB	500.00	YES	6	933.33	2400.00	500.00	45000.0		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit	
DRINKING WATER PARAMETERS											
	Nitrate, High Detection Level	PPB	2500.00	YES	5	2600.00	3000.00	2500.00	45000.0		
	Radium	PCI/L	1.00		2	-.03	-.00	-.06	100.0		
	Selenium	PPB	5.00		2	5.00	5.00	5.00	10.0		
	Silver	PPB	10.00		7	10.00	10.00	10.00	50.0		
	Silver, filtered	PPB	10.00		1	10.00	10.00	10.00	50.0		
	Toxaphene	PPB	1.00		2	1.00	1.00	1.00	5.0		
GROUNDWATER QUALITY PARAMETERS											
	Chloride	PPB	500.00	YES	6	3833.33	4200.00	3500.00	250000.0		
	Iron	PPB	30.00	YES	7	15998.57	49900.00	810.00	300.0	YES	
	Iron, filtered	PPB	30.00		1	30.00	30.00	30.00	300.0		
	Manganese	PPB	5.00	YES	7	283.43	604.00	29.00	50.0	YES	
	Manganese, filtered	PPB	5.00		1	5.00	5.00	5.00	50.0		
	Phenol	PPB	10.00		2	10.00	10.00	10.00			
	Sodium	PPB	200.00	YES	7	6802.86	8490.00	5890.00			
	Sodium, filtered	PPB	200.00	YES	1	5970.00	5970.00	5970.00			
	Sulfate	PPB	500.00	YES	6	6583.33	16300.00	2200.00	250000.0		
	SITE SPECIFIC AND OTHER PARAMETERS										
		0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		2	10.00	10.00	10.00		
		1,1,1,2-tetrachlorethane	PPB	10.00		2	10.00	10.00	10.00		
1,1,1-trichloroethane		PPB	5.00		4	5.00	5.00	5.00	200.0		
1,1,2,2-tetrachlorethane		PPB	5.00		2	5.00	5.00	5.00			
1,1,2-trichloroethane		PPB	5.00		4	5.00	5.00	5.00			
1,1-dichloroethane		PPB	5.00		4	5.00	5.00	5.00			
1,1-dichloroethylene		PPB	10.00		2	10.00	10.00	10.00	7.0		
1,1-dimethylhydrazine		PPB	10.00		2	10.00	10.00	10.00			
1,2,3,4-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00			
1,2,3,5-tetrachlorobenzene		PPB	10.00		2	10.00	10.00	10.00			
1,2,3-trichlorobenzene		PPB	10.00		2	10.00	10.00	10.00			
1,2,3-trichloropropane		PPB	10.00		2	10.00	10.00	10.00			
1,2,4,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00				

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Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT				ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2,4-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		2	10.00	10.00	10.00	.2	
	1,2-dibromobethane	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		4	5.00	5.00	5.00	5.0	
	1,2-dichloropropane	PPB	5.00		2	5.00	5.00	5.00	5.0	
	1,2-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		2	.01	.01	.01		
	2,4,5-T	PPB	2.00		2	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		

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Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2-Methylnaphthalene	PPB	10.00	2	10.00	10.00	10.00		
	2-acetylamino fluorene	PPB	10.00	2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00	2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00	2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00	2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00	2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00	2	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00	2	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00	2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00	2	10.00	10.00	10.00		
	2-picoline	PPB	10.00	2	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00	2	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00	2	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00	2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00	2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00	2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00	2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00	2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00	2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00	2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00	2	10.00	10.00	10.00		
	7H-dibenzo[c,glcarbazole	PPB	10.00	2	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00	2	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00	2	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00	2	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	4	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00	2	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Acetophenone	PPB	10.00		2	10.00	10.00	10.00		
	Acrolein	PPB	10.00		2	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Aldrin	PPB	.10		2	.10	.10	.10		
	Alkalinity		200mg/l	YES	1	72400.00	72400.00	72400.00		
	Allyl Chloride	PPB	100.00		2	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		2	10.00	10.00	10.00		
	Aluminum	PPB	150.00	YES	7	377.86	676.00	150.00	50.0	YES
	Aluminum, filtered	PPB	150.00		1	150.00	150.00	150.00	50.0	
	Americium-241	PCI/L	.10	YES	2	.07	.12	.01		
	Amitrole	PPB	10.00		2	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	YES	3	145.67	194.00	50.00		
	Aniline	PPB	10.00		2	10.00	10.00	10.00		
	Anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Antimony	PPB	100.00		7	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		1	100.00	100.00	100.00		
	Aramite	PPB	10.00		2	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		2	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		2	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		2	10.00	10.00	10.00		
	Benz[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Benz[c]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Benzene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00		
	Benzenethiol	PPB	10.00		2	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-2-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benzidine	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(k)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(a)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(b)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(j)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(i)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Beryllium	PPB	5.00		7	5.00	5.00	5.00		
	Beryllium, filtered	PPB	5.00		1	5.00	5.00	5.00		
	Bis(2-chloro-1-methylethyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroisopropyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	7	21.86	28.00	17.00		
	Boron, filtered	PPB	10.00	YES	1	18.00	18.00	18.00		
	Bromide	PPB	1000.00		6	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	7	22500.00	25000.00	16000.00		
	Calcium, filtered	PPB	50.00	YES	1	24200.00	24200.00	24200.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00	YES	4	507.75	2000.00	5.00	5.0	YES
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00		
	Cesium-134	PPB			2	-1.00	-23	-1.77		
	Cesium-137	PC/L	20.00		7	.81	3.18	-1.76	120.0	
	Chlordane	PPB	1.00		2	1.00	1.00	1.00	2.0	
	Chlornaphazine	PPB	10.00		2	10.00	10.00	10.00		

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 Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PAF ETERS										
Chloroalkyl ethers	Chlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABM)	PPB	10.00		2	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		2	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Chloroform	PPB	5.00	YES	4	72.25	204.00	25.00	100.0	YES
	Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00		
	Chrysene	PPB	10.00		2	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		7	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		1	20.00	20.00	20.00		
	Cobalt-60	µCi/L	22.50		7	1.91	16.80	-5.22	200.0	
	Copper	PPB	10.00		7	11.71	21.00	10.00	10.00	1000.0
	Copper, filtered	PPB	10.00		1	10.00	10.00	10.00	10.00	1000.0
	Cresols	PPB	10.00		2	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00		
	Cyanide	PPB	10.00		3	10.00	10.00	10.00		
	DDD	PPB	.10		2	.10	.10	.10		
	DDE	PPB	.10		2	.10	.10	.10		
	DDT	PPB	.10		2	.10	.10	.10		
Di-n-butyl phthalate	Di-n-butyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		2	10.00	10.00	10.00		
	Diallate	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00		2	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00		2	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibutyl Phosphate	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00	2	10.00	10.00	10.00		
	Dieldrin	PPB	.10	2	.10	.10	.10		
	Diethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Diethylstilbesterol	PPB	200.00	2	200.00	200.00	200.00		
	Dihydroafrrole	PPB	10.00	2	10.00	10.00	10.00		
	Dimethoate	PPB	2.00	2	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00	2	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00	2	10.00	10.00	10.00		
	Dinoseb	PPB	10.00	2	10.00	10.00	10.00		
	Dioxane	PPB	500.00	2	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00	2	10.00	10.00	10.00		
	Disulfoton	PPB	2.00	2	2.00	2.00	2.00		
	Endosulfan I	PPB	.10	2	.10	.10	.10		
	Endosulfan II	PPB	.10	2	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50	2	.50	.50	.50		
	Ethanol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00	2	5.00	5.00	5.00		700.0
	Ethyl carbamate	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00	2	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00	2	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00	2	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00	2	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00	2	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00	2	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00	2	10.00	10.00	10.00		
	Fluorene	PPB	10.00	2	10.00	10.00	10.00		
	Formalin	PPB	500.00	2	500.00	500.00	500.00		
	Heptachlor	PPB	.10	2	.10	.10	.10		.4
	Heptachlor epoxide	PPB	.10	2	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00	2	10.00	10.00	10.00		

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Groundwater Analysis Results for 216-2-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Hexachlorobutadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		2	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		2	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		2	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Iodine-129 (Drinking Water Standard)	PCI/L	1.00		2	-08	-.03	-.13	20.0	
	Iodomethane	PPB	10.00		2	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		2	10.00	10.00	10.00		
	Isophorone	PPB	10.00		2	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00		
	Kepone	PPB	1.00		2	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		7	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		1	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	7	7525.71	8420.00	5730.00		
	Magnesium, filtered	PPB	50.00	YES	1	7560.00	7560.00	7560.00		
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00		
	Melphalan	PPB	10.00		2	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		4	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		4	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00	YES	4	5.50	7.00	5.00	
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		7	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		1	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		2	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00	
	Nickel	PPB	10.00	YES	7	23.43	47.00	10.00	
	Nickel, filtered	PPB	10.00		1	10.00	10.00	10.00	
	Nicotinic acid	PPB	100.00		2	100.00	100.00	100.00	
	Nitrite	PPB	1000.00		6	1000.00	1000.00	1000.00	3300.0
	Nitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00	
	p benzoquinone	PPB	10.00		2	10.00	10.00	10.00	
	p-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00	
	p-chloroaniline	PPB	10.00		2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	p-dimethylaminobenzene	PPB	10.00		2	10.00	10.00	10.00	
	p-nitroaniline	PPB	10.00		2	10.00	10.00	10.00	
	PHORATE	PPB	2.00		2	2.00	2.00	2.00	
	Paraldehyde	PPB	10000.00		2	10000.00	10000.00	10000.00	
	Parathion	PPB	2.00		2	2.00	2.00	2.00	
	Pcdd's	PPB	.01		2	.01	.01	.01	
	Pcdf's	PPB	.01		2	.01	.01	.01	
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Pentachloroethane	PPB	10.00		2	10.00	10.00	10.00	
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00	
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00	
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00	
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00	
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00	
	Phosphate	PPB	1000.00		6	1000.00	1000.00	1000.00	
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00	
	Plutonium-238	PCI/L	.10		7	.00	.00	.00	1.6
	Plutonium-239/40	PCI/L	.10	YES	7	.07	.43	.00	1.2
	Potassium	PPB	100.00	YES	7	3008.57	3330.00	2830.00	
	Potassium, filtered	PPB	100.00	YES	1	2770.00	2770.00	2770.00	
	Pronamide	PPB	10.00		2	10.00	10.00	10.00	
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00	
	Pyrene	PPB	10.00		2	10.00	10.00	10.00	
	Pyridine	PPB	500.00		2	500.00	500.00	500.00	
	Reserpine	PPB	10.00		2	10.00	10.00	10.00	
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00	
	Ruthenium-106	PCI/L	172.50		7	-8.19	40.60	-58.30	240.0
	Safrol	PPB	10.00		2	10.00	10.00	10.00	
	Silicon	PPB	50.00	YES	7	21271.43	24800.00	12900.00	
	Silicon, filtered	PPB	50.00	YES	1	22600.00	22600.00	22600.00	
	Silver-110 Metastable	PCI/L			2	-1.06	4.69	-6.81	400.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Strontium	PPB	10.00	YES	7	97.86	114.00	59.00		
	Strontium, filtered	PPB	10.00	YES	1	104.00	104.00	104.00		
	Strontium-90	PCI/L	5.00		2	-0.17	-0.06	-0.28	40.0	
	Strychnine	PPB	50.00		2	50.00	50.00	50.00		
	Styrene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00		2	.45	.49	.41	4000.0	
	Tetrachloroethylene	PPB	5.00		4	5.00	5.00	5.00	5.0	
	Tetraethylpyrophosphate	PPB	2.00		2	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		4	10.00	10.00	10.00		
	Thallium	PPB	5.00		2	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		2	10.00	10.00	10.00		
	Thiourea	PPB	200.00		2	200.00	200.00	200.00		
	Thiuram	PPB	10.00		2	10.00	10.00	10.00		
	Tin	PPB	30.00		7	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		1	30.00	30.00	30.00		
	Titanium	PPB	60.00	YES	7	61.43	70.00	60.00		
	Titanium, filtered	PPB	60.00		1	60.00	60.00	60.00		
	Toluene	PPB	5.00		4	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	3	15233.33	15600.00	14500.00		
	Trans-1,2-dichloroethene	PPB	5.00		4	5.00	5.00	5.00	70.0	
	Tributylphosphoric Acid	PPB	10.00		2	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00	YES	4	7.50	15.00	5.00	5.0	YES
	Trichloromethanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		2	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		2	10.00	10.00	10.00		
	Tritium	PCI/L	500.00	YES	10	588.30	3300.00	102.00	80000.0	
	Turbidity	NTU	.10	YES	2	101.00	108.00	94.00	5.0	YES
	Uranium	PCI/L	.50	YES	2	.77	1.11	.43	40.0	
	Vanadium	PPB	5.00	YES	7	42.86	48.00	39.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 216-Z-20 Crib (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Vanadium, filtered	PPB	5.00	YES	1	38.00	38.00	38.00		
	Vinyl Acetate	PPB	5.00		2	5.00	5.00	5.00		
	Vinyl chloride	PPB	10.00		4	10.00	10.00	10.00	2.0	
	Warfarin	PPB	10.00		2	10.00	10.00	10.00		
	Xylene-m	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Xylene-o,p	PPB	5.00		4	5.00	5.00	5.00	10000.0	
	Zinc	PPB	5.00	YES	7	16.86	42.00	6.00	5000.0	
	Zinc, filtered	PPB	5.00		1	5.00	5.00	5.00	5000.0	
	Zirconium	PPB	50.00		7	50.00	50.00	50.00		
	Zirconium, filtered	PPB	50.00		1	50.00	50.00	50.00		
	dibromochloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	m-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	o-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	p-Dichlorobenzene	PPB	5.00		6	6.67	10.00	5.00	750.0	
	p-Nitrophenol	PPB	10.00		2	10.00	10.00	10.00

Well Location and Site Map for 200-W Powerhouse Pond

Well Location and Site Map for 2101-M Pond

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
CONTAMINATION INDICATOR PARAMETERS										
	Conductivity, Laboratory	UMHO	1.00	YES	60	322.40	552.00	178.00	700.0	
	Specific conductance	UMHO	1.00	YES	72	307.24	568.00	156.00	700.0	
	Total Organic Halogen, Low Det. Level	PPB	10.00	YES	65	7.46	21.00	.01		
	Total organic carbon	PPB	2000.00		65	524.62	1000.00	200.00		
	pH, Field Measurement		.10	YES	73	7.87	8.26	6.90	8.5	
	pH, Laboratory Measurement		.01	YES	60	8.02	8.20	7.30	8.5	
DRINKING WATER PARAMETERS										
	2,4,5-TP silvex	PPB	2.00		18	2.00	2.00	2.00	10.0	
	2,4-D	PPB	2.00		18	2.00	2.00	2.00	100.0	
	Alpha, High Detection Level	PCI/L	4.00	YES	20	2.63	5.53	.85	15.0	
	Alpha-BHC	PPB	.10		18	.10	.10	.10	4.0	
	Arsenic	PPB	5.00	YES	20	9.10	14.00	5.00	50.0	
	Arsenic, filtered	PPB	5.00	YES	20	8.55	14.00	5.00	50.0	
	Barium	PPB	6.00	YES	20	51.10	62.00	25.00	1000.0	
	Barium, filtered	PPB	6.00	YES	20	53.50	73.00	25.00	1000.0	
	Beta-BHC	PPB	.10		18	.10	.10	.10	4.0	
	Cadmium	PPB	2.00		20	2.00	2.00	2.00	10.0	
	Cadmium, filtered	PPB	2.00	YES	20	2.00	2.00	2.00	10.0	
	Chromium	PPB	10.00	YES	20	50.15	104.00	16.00	50.0	YES
	Chromium, filtered	PPB	10.00	YES	20	10.10	12.00	10.00	50.0	
	Coliform (Membrane Filter)	PPB	1.00	YES	3	1.00	1.00	1.00	1.0	YES
	Coliform bacteria	MPN	2.20		12	2.20	2.20	2.20	1.0	
	Delta-BHC	PPB	.10		18	.10	.10	.10	4.0	
	Endrin	PPB	.10		18	.10	.10	.10	.2	
	Fluoride	PPB	500.00	YES	19	542.11	700.00	500.00	4000.0	
	Gamma-BHC	PPB	.10		18	.10	.10	.10	4.0	
	Gross beta	PCI/L	8.00	YES	20	6.04	10.60	1.78	50.0	
	Lead (graphite furnace)	PPB	5.00		20	5.00	5.00	5.00	50.0	
	Lead, filtered	PPB	5.00		20	5.00	5.00	5.00	50.0	
	Mercury	PPB	.10		20	.10	.10	.10	2.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
DRINKING WATER PARAMETERS									
	Mercury, filtered	PPB	.10		20	.10	.10	.10	2.0
	Methoxychlor	PPB	3.00		18	3.00	3.00	3.00	100.0
	Nitrate	PPB	500.00	YES	19	2987.89	12500.00	500.00	45000.0
	Radium	PCI/L	1.00		20	.26	.76	.04	100.0
	Selenium	PPB	5.00	YES	20	5.30	7.00	5.00	10.0
	Selenium, filtered	PPB	5.00	YES	20	5.35	7.00	5.00	10.0
	Silver	PPB	10.00		20	10.00	10.00	10.00	50.0
	Silver, filtered	PPB	10.00		20	10.00	10.00	10.00	50.0
	Toxaphene	PPB	1.00		18	1.00	1.00	1.00	5.0
GROUNDWATER QUALITY PARAMETERS									
	Chloride	PPB	500.00	YES	19	7289.47	14600.00	4900.00	250000.0
	Iron	PPB	30.00	YES	20	368.60	858.00	77.00	300.0
	Iron, filtered	PPB	30.00	YES	20	32.50	41.00	30.00	300.0
	Manganese	PPB	5.00	YES	20	9.45	18.00	5.00	50.0
	Manganese, filtered	PPB	5.00	YES	20	5.05	6.00	5.00	50.0
	Phenol	PPB	10.00		5	10.00	10.00	10.00	
	Phenol, low DL	PPB	10.00		13	10.00	10.00	10.00	
	Sodium	PPB	200.00	YES	20	13636.00	27800.00	5410.00	
	Sodium, filtered	PPB	200.00	YES	20	14408.50	30500.00	5700.00	
	Sulfate	PPB	500.00	YES	19	50505.26	153000.00	12500.00	250000.0
SITE SPECIFIC AND OTHER PARAMETERS									
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		5	10.00	10.00	10.00	
	1,1,1,2-tetrachloroethane	PPB	10.00		7	10.00	10.00	10.00	
	1,1,1-trichloroethane	PPB	5.00		10	5.00	5.00	5.00	200.0
	1,1,2,2-tetrachloroethane	PPB	5.00		7	5.00	5.00	5.00	
	1,1,2-trichloroethane	PPB	5.00		10	5.00	5.00	5.00	
	1,1-dichloroethane	PPB	5.00		10	5.00	5.00	5.00	
	1,1-dichloroethylene	PPB	10.00		7	10.00	10.00	10.00	7.0
	1,1-dimethylhydrazine	PPB	10.00		7	10.00	10.00	10.00	
	1,2,3,4-tetrachlorobenzene	PPB	10.00		5	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	1,2,3,5-tetrachlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00	7	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00	7	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00	7	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00	10	5.00	5.00	5.00	5.00	5.0
	1,2-dichloropropane	PPB	5.00	7	5.00	5.00	5.00	5.00	5.0
	1,2-dimethylhydrazine	PPB	10.00	7	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00	5	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	1,3-dichloropropane	PPB	5.00	7	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00	7	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00	5	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00	5	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00	5	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00	5	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00	5	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00	5	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00	5	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00	5	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00	5	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00	5	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01	5	.01	.01	.01		
	2,4,5-T	PPB	2.00	18	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00	5	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00	5	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00	5	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00	5	10.00	10.00	10.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dinitrotoluene	PPB	10.00		5	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		5	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		5	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		7	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		5	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		5	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		7	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		5	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		5	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		5	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		5	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		5	10.00	10.00	10.00		
	2-methylacetone	PPB	10.00		5	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		5	10.00	10.00	10.00		
	2-picoline	PPB	10.00		5	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		5	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		5	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		5	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		5	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		5	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		5	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		5	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		5	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		5	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		5	10.00	10.00	10.00		
	4-b-omophenyl phenyl ether	PPB	10.00		5	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		5	10.00	10.00	10.00		
	5-tro-o-toluidine	PPB	10.00		5	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		5	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		5	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00		5	10.00	10.00	10.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
Acephthene	PPB	10.00		5	10.00	10.00	10.00		
Acetone - by ABM	PPB	10.00		5	10.00	10.00	10.00		
Acetone by VOA	PPB	10.00		10	10.00	10.00	10.00		
Acetonitrile	PPB	10.00		7	10.00	10.00	10.00		
Acetophenone	PPB	10.00		5	10.00	10.00	10.00		
Acrolein	PPB	10.00		7	10.00	10.00	10.00		
Acrylamide	PPB	10000.00		5	10000.00	10000.00	10000.00		
Acrylonitrile	PPB	10.00		7	10.00	10.00	10.00		
Aldrin	PPB	.10		5	.10	.10	.10		
Alkalinity		20000.00	YES	13	99623.08	108000.00	90000.00		
Allyl Chloride	PPB	100.00		7	100.00	100.00	100.00		
Allyl alcohol	PPB	10000.00		5	10000.00	10000.00	10000.00		
Alpha,alpha-dimethylphenethylamine	PPB	10.00		5	10.00	10.00	10.00		
Aluminum	PPB	150.00	YES	20	154.70	244.00	150.00		YES
Aluminum, filtered	PPB	150.00		20	150.00	150.00	150.00	50.0	50.0
Americium-241	PCI/L	.10		1	.03	.03	.03		
Anitrole	PPB	10.00		5	10.00	10.00	10.00		
Ammonium ion	PPB	50.00		7	50.00	50.00	50.00		
Aniline	PPB	10.00		5	10.00	10.00	10.00		
Anthracene	PPB	10.00		5	10.00	10.00	10.00		
Artimony	PPB	100.00		20	100.00	100.00	100.00		
Artimony, filtered	PPB	100.00		20	100.00	100.00	100.00		
Aramite	PPB	10.00		5	10.00	10.00	10.00		
Arochlor 1016	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1221	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1232	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1242	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1248	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1254	PPB	1.00		5	1.00	1.00	1.00	.5	
Arochlor 1260	PPB	1.00		5	1.00	1.00	1.00	.5	
Auramine	PPB	10.00		5	10.00	10.00	10.00		
Benz(a)anthracene	PPB	10.00		5	10.00	10.00	10.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	benz[c]acridine	PPB	10.00		5	10.00	10.00	10.00	
	benzene	PPB	5.00		10	5.00	5.00	5.00	5.0
	benzene, dichloromethyl	PPB	10.00		5	10.00	10.00	10.00	
	benzenethiol	PPB	10.00		5	10.00	10.00	10.00	
	benzidine	PPB	10.00		5	10.00	10.00	10.00	
	benzo(ghi)perylene	PPB	10.00		5	10.00	10.00	10.00	
	benzo(k)fluoranthene	PPB	10.00		5	10.00	10.00	10.00	
	benzo(a)pyrene	PPB	10.00		5	10.00	10.00	10.00	
	benzo(b)fluoranthene	PPB	10.00		5	10.00	10.00	10.00	
	benzo[j]fluoranthene	PPB	10.00		5	10.00	10.00	10.00	
	benzyl Alcohol	PPB	10.00		5	10.00	10.00	10.00	
	benzyl chloride	PPB	10.00		5	10.00	10.00	10.00	
	beryllium	PPB	5.00		20	5.00	5.00	5.00	
	beryllium, filtered	PPB	5.00	YES	20	5.00	5.00	5.00	
	bis(2-chloro-1-methylethyl)ether	PPB	10.00		5	10.00	10.00	10.00	
	bis(2-chloroethoxy) methane	PPB	10.00		5	10.00	10.00	10.00	
	bis(2-chloroethyl) ether	PPB	10.00		5	10.00	10.00	10.00	
	bis(2-chloroisopropyl)ether	PPB	10.00		5	10.00	10.00	10.00	
	bis(2-ethylhexyl) phthalate	PPB	10.00		5	10.00	10.00	10.00	
	bis(chloromethyl) ether	PPB	5.00		7	5.00	5.00	5.00	
	boron	PPB	10.00	YES	20	19.30	38.00	10.00	
	boron, filtered	PPB	10.00	YES	20	20.95	42.00	10.00	
	bromide	PPB	1000.00		19	1000.00	1000.00	1000.00	
	bromoacetone	PPB	5.00		7	5.00	5.00	5.00	
	bromodichloromethane	PPB	5.00		7	4.71	5.00	3.00	100.0
	bromoform	PPB	5.00		7	5.00	5.00	5.00	100.0
	butyl benzyl phthalate	PPB	10.00		5	10.00	10.00	10.00	
	calcium	PPB	50.00	YES	20	34215.00	58000.00	25400.00	
	calcium, filtered	PPB	50.00	YES	20	36100.00	69500.00	25300.00	
	Carbon Tetrachloride by GC/MS	PPB	5.00		10	5.00	5.00	5.00	5.0
	Carbon disulfide	PPB	10.00		7	10.00	10.00	10.00	
	Carbophenothion	PPB	2.00		5	2.00	2.00	2.00	

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Cesium-137	PCI/L	20.00		1	1.18	1.18	1.18	120.0	
	Chlordane	PPB	1.00		5	1.00	1.00	1.00	2.0	
	Chloronaphazene	PPB	10.00		5	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		5	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		7	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		5	10.00	10.00	10.00	60.0	
	Chlorobenzilate	PPB	300.00		5	300.00	300.00	300.00		
	Chloroethane	PPB	10.00		7	10.00	10.00	10.00		
	Chloroform	PPB	5.00	YES	10	7.00	25.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		7	10.00	10.00	10.00		
	Chrysene	PPB	10.00		5	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		5	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		20	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		20	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		1	.76	.76	.76	200.0	
	Copper	PPB	10.00	YES	20	10.90	18.00	10.00	1000.0	
	Copper, filtered	PPB	10.00	YES	20	10.15	11.00	10.00	1000.0	
	Cresols	PPB	10.00		5	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		7	10.00	10.00	10.00		
	Cyanide	PPB	10.00		5	10.00	10.00	10.00		
	DDD	PPB	.10		5	.10	.10	.10		
	DDE	PPB	.10		5	.10	.10	.10		
	DDT	PPB	.10		5	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		5	10.00	10.00	10.00		
	Diallate	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		5	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		5	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		5	10.00	10.00	10.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Dibenzo[a, b]pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Dibenzofuran	PPB	10.00		5	10.00	10.00	10.00		
	Dibromomethane	PPB	10.00		7	10.00	10.00	10.00		
	Dibutyl Phosphate	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Dichlorodifluoromethane	PPB	10.00		7	10.00	10.00	10.00		
	Dieldrin	PPB	.10		5	.10	.10	.10		
	Diethyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Diethylstilbestrol	PPB	200.00		5	200.00	200.00	200.00		
	Dihydrosafrole	PPB	10.00		5	10.00	10.00	10.00		
	Dimethoate	PPB	2.00		5	2.00	2.00	2.00		
	Dimethyl phthalate	PPB	10.00		5	10.00	10.00	10.00		
	Dinitrobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Dinoseb	PPB	10.00		5	10.00	10.00	10.00		
	Dioxane	PPB	500.00		7	500.00	500.00	500.00		
	Diphenylamine	PPB	10.00		5	10.00	10.00	10.00		
	Disulfoton	PPB	2.00		5	2.00	2.00	2.00		
	Endosulfan I	PPB	.10		5	.10	.10	.10		
	Endosulfan II	PPB	.10		5	.10	.10	.10		
	Endosulfan Sulfate	PPB	.50		5	.50	.50	.50		
	Ethanol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Ethyl benzene	PPB	5.00		7	5.00	5.00	5.00	700.0	
	Ethyl carbamate	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Ethyl cyanide	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Ethyl methacrylate	PPB	10.00		7	10.00	10.00	10.00		
	Ethyl methanesulfonate	PPB	10.00		5	10.00	10.00	10.00		
	Ethylene Glycol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Ethylene oxide	PPB	10.00		7	10.00	10.00	10.00		
	Ethyleneimine	PPB	10.00		5	10.00	10.00	10.00		
	Ethylenethiourea	PPB	200.00		5	200.00	200.00	200.00		
	Fluoranthene	PPB	10.00		5	10.00	10.00	10.00		
	Fluorene	PPB	10.00		5	10.00	10.00	10.00		
	Formalin	PPB	500.00		7	500.00	500.00	500.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Heptachlor	PPB	.10		5	.10	.10	.10		.4
	Heptchlor epoxide	PPB	.10		5	.10	.10	.10		
	Hexachlorobenzene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorobutadiene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorocyclopentadiene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachloroethane	PPB	10.00		5	10.00	10.00	10.00		
	Hexachlorophene	PPB	10.00		5	10.00	10.00	10.00		
	Hexachloropropene	PPB	10.00		5	10.00	10.00	10.00		
	Hydrazine, Low Detection Level	PPB	30.00		7	30.00	30.00	30.00		
	Indeno(1,2,3-cd)pyrene	PPB	10.00		5	10.00	10.00	10.00		
	Iodomethane	PPB	10.00		7	10.00	10.00	10.00		
	Isobutyl alcohol	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Isodrin	PPB	10.00		5	10.00	10.00	10.00		
	Isophorone	PPB	10.00		5	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		5	10.00	10.00	10.00		
	Kepone	PPB	1.00		5	1.00	1.00	1.00		
	Kerosene	PPB	10000.00		5	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		20	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		20	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	20	9127.00	14700.00	7190.00		
	Magnesium, filtered	PPB	50.00	YES	20	9473.50	16200.00	7140.00		
	Maleic hydrazide	PPB	500.00		5	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		5	10.00	10.00	10.00		
	Melphalan	PPB	10.00		5	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		7	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		7	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		5	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		5	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		10	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		7	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		7	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		10	10.00	10.00	10.00		

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Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl methacrylate	PPB	10.00		5	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		5	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		5	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00	YES	10	11.80	75.00	3.00	
	Methylthiouracil	PPB	10.00		5	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		20	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		20	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		5	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		7	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		5	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		5	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		5	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		5	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00		5	10.00	10.00	10.00	
	Nickel	PPB	10.00	YES	20	26.65	54.00	10.00	
	Nickel, filtered	PPB	10.00	YES	20	10.65	17.00	10.00	
	Nicotinic acid	PPB	100.00		5	100.00	100.00	100.00	
	Nitrite	PPB	1000.00		19	1000.00	1000.00	1000.00	3300.0
	Nitrobenzene	PPB	10.00		5	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		5	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		5	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		5	10.00	10.00	10.00	
	P benzoquinone	PPB	10.00		5	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	P-chloro-m-cresol	PPB	10.00	5	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00	5	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00	5	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00	5	10.00	10.00	10.00		
	PHORATE	PPB	2.00	5	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00	5	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00	5	2.00	2.00	2.00		
	Pcdd's	PPB	.01	5	.01	.01	.01		
	Pcdf's	PPB	.01	5	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00	5	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00	7	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00	5	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00	5	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00	5	500.00	500.00	500.00		
	Phenacetin	PPB	10.00	5	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00	5	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00	5	10.00	10.00	10.00		
	Phosphate	PPB	1000.00	19	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00	5	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10	1	-.00	-.00	-.00	1.6	
	Plutonium-239/40	PCI/L	.10	1	.00	.00	.00	1.2	
	Potassium	PPB	100.00	20	5265.00	5780.00	4660.00		
	Potassium, filtered	PPB	100.00	20	5381.00	6210.00	4780.00		
	Pronamide	PPB	10.00	5	10.00	10.00	10.00		
	Propionitrile	PPB	5.00	7	5.00	5.00	5.00		
	Pyrene	PPB	10.00	5	10.00	10.00	10.00		
	Pyridine	PPB	500.00	7	500.00	500.00	500.00		
	Reserpine	PPB	10.00	5	10.00	10.00	10.00		
	Resorcinol	PPB	10.00	5	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50	1	-26.20	-26.20	-26.20	240.0	
	Safrol	PPB	10.00	5	10.00	10.00	10.00		
	Silicon	PPB	50.00	20	17690.00	19800.00	13600.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

WHC-EP-0366

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Silicon, filtered	PPB	50.00	YES	20	18230.00	22600.00	14000.00	
	Strontium	PPB	10.00	YES	20	172.10	257.00	141.00	
	Strontium, filtered	PPB	10.00	YES	20	177.90	283.00	143.00	
	Strontium-90	PCI/L	5.00		1	.43	.43	.43	40.0
	Strychnine	PPB	50.00		5	50.00	50.00	50.00	
	Styrene	PPB	5.00		7	5.00	5.00	5.00	5.0
	Sulfide	PPB	1000.00		5	1000.00	1000.00	1000.00	
	Sym-trinitrobenzene	PPB	10.00		5	10.00	10.00	10.00	
	Tetrachloroethylene	PPB	5.00		10	5.00	5.00	5.00	5.0
	Tetraethylpyrophosphate	PPB	2.00		5	2.00	2.00	2.00	
	Tetrahydrofuran	PPB	10.00		10	10.00	10.00	10.00	
	Thallium	PPB	5.00		5	5.00	5.00	5.00	
	Thallium, filtered	PPB	5.00		5	5.00	5.00	5.00	
	Thiofanox	PPB	10.00		5	10.00	10.00	10.00	
	Thiourea	PPB	200.00		5	200.00	200.00	200.00	
	Thiuram	PPB	10.00		5	10.00	10.00	10.00	
	Tin	PPB	30.00		20	30.00	30.00	30.00	
	Tin, filtered	PPB	30.00		20	30.00	30.00	30.00	
	Titanium	PPB	60.00		20	60.00	60.00	60.00	
	Titanium, filtered	PPB	60.00		20	60.00	60.00	60.00	
	Toluene	PPB	5.00		10	5.00	5.00	5.00	2000.0
	Toluenediamine	PPB	10.00		5	10.00	10.00	10.00	
	Total carbon	PPB	1000.00	YES	7	23957.14	25000.00	21500.00	
	Total dissolved solids	PPB	5000.00	YES	1	347000.00	347000.00	347000.00	500000.0
	Trans-1,2-dichloroethene	PPB	5.00		10	5.00	5.00	5.00	70.0
	Tributylphosphoric Acid	PPB	10.00		5	10.00	10.00	10.00	
	Trichloroethylene	PPB	5.00		10	5.00	5.00	5.00	5.0
	Trichloromethanethiol	PPB	10.00		7	10.00	10.00	10.00	
	Trichloromonofluoromethane	PPB	10.00		7	10.00	10.00	10.00	
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		5	10.00	10.00	10.00	
	Tritium	PCI/L	500.00		6	-6.59	86.30	-56.60	80000.0
	Turbidity	NTU	.10	YES	14	5.02	19.50	.70	5.0 YES

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 2101-M Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
Uranium		PCI/L	.50	YES	1	4.56	4.56	4.56	40.0
Vanadium		PPB	5.00	YES	20	23.15	32.00	5.00	
Vanadium, filtered		PPB	5.00	YES	20	24.70	35.00	6.00	
Vinyl Acetate		PPB	5.00		7	5.00	5.00	5.00	
Vinyl chloride		PPB	10.00		10	10.00	10.00	10.00	2.0
Warfarin		PPB	10.00		5	10.00	10.00	10.00	
Xylene-m		PPB	5.00		10	5.00	5.00	5.00	10000.0
Xylene-o,p		PPB	5.00		10	5.00	5.00	5.00	10000.0
Zinc		PPB	5.00	YES	20	16.25	30.00	5.00	5000.0
Zinc, filtered		PPB	5.00	YES	20	9.85	30.00	5.00	5000.0
Zirconium		PPB	50.00		20	50.00	50.00	50.00	
Zirconium, filtered		PPB	50.00		20	50.00	50.00	50.00	
dibromochloromethane		PPB	5.00		7	5.00	5.00	5.00	100.0
m-Nitroaniline		PPB	10.00		5	10.00	10.00	10.00	
o-Nitroaniline		PPB	10.00		5	10.00	10.00	10.00	
o-Nitrophenol		PPB	10.00		5	10.00	10.00	10.00	
p-Dichlorobenzene		PPB	5.00		15	6.67	10.00	5.00	750.0
p-Nitrophenol		PPB	10.00		5	10.00	10.00	10.00

Well Location and Site Map for 300 Area Process Trenches

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
CONTAMINATION INDICATOR PARAMETERS									
Conductivity, Laboratory	UMHO		1.00	YES	5	377.60	469.00	230.00	700.0
Specific conductance	UMHO		1.00	YES	129	268.58	523.00	139.00	700.0
Total Organic Halogen, Low Det. Level	PPB		10.00	YES	134	30.46	82.00	-1.00	
Total organic carbon	PPB		2000.00		134	613.43	2000.00	200.00	
pH, Field Measurement			.10	YES	129	7.45	8.97	5.83	8.5
pH, Laboratory Measurement			.01	YES	12	7.70	8.10	7.20	8.5
DRINKING WATER PARAMETERS									
2,4,5-TP silvex	PPB		2.00		56	2.00	2.00	2.00	10.0
2,4-D	PPB		2.00		56	2.00	2.00	2.00	100.0
Alpha, High Detection Level	PCI/L		4.00	YES	61	22.48	162.00	-80	15.0
Alpha-BHC	PPB		.10		56	.10	.10	.10	4.0
Arsenic	PPB		5.00	YES	56	5.07	6.00	5.00	50.0
Arsenic, filtered	PPB		5.00	YES	56	5.05	6.00	5.00	50.0
Barium	PPB		6.00	YES	62	34.55	77.00	11.00	1000.0
Barium, filtered	PPB		6.00	YES	63	34.95	79.00	12.00	1000.0
Beta-BHC	PPB		.10		56	.10	.10	.10	4.0
Cadmium	PPB		2.00	YES	62	2.03	3.00	2.00	10.0
Cadmium, filtered	PPB		2.00	YES	63	2.03	3.00	2.00	10.0
Chromium	PPB		10.00	YES	62	10.35	30.00	10.00	50.0
Chromium, filtered	PPB		10.00		63	10.00	10.00	10.00	50.0
Coliform (Membrane Filter)	PPB		1.00	YES	27	186.07	2400.00	1.00	1.0
Coliform bacteria	MPN		2.20	YES	28	7.11	79.00	2.20	1.0
Delta-BHC	PPB		.10		56	.10	.10	.10	4.0
Endrin	PPB		.10		56	.10	.10	.10	.2
Fluoride	PPB		500.00	YES	134	739.55	25000.00	500.00	4000.0
Gamma-BHC	PPB		.10		56	.10	.10	.10	4.0
Gross beta	PCI/L		3.00	YES	65	10.35	46.70	1.20	50.0
Lead (graphite furnace)	PPB		5.00		56	5.00	5.00	5.00	50.0
Lead, filtered	PPB		5.00		56	5.00	5.00	5.00	50.0
Mercury	PPB		.10		55	.10	.10	.10	2.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
DRINKING WATER PARAMETERS									
Mercury, filtered		PPB	.10		55	.10	.10	.10	2.0
Methoxychlor		PPB	3.00		56	3.00	3.00	3.00	100.0
Nitrate		PPB	500.00	YES	134	6279.85	23700.00	500.00	45000.0
Nitrate, High Detection Level		PPB	2500.00	YES	11	11809.09	28300.00	2500.00	45000.0
Radium		PCl/L	1.00		56	.07	.50	-.06	100.0
Selenium		PPB	5.00		56	5.00	5.00	5.00	10.0
Selenium, filtered		PPB	5.00		56	5.00	5.00	5.00	10.0
Silver		PPB	10.00		62	10.00	10.00	10.00	50.0
Silver, filtered		PPB	10.00		63	10.00	10.00	10.00	50.0
Toxaphene		PPB	1.00		56	1.00	1.00	1.00	5.0
Groundwater Quality Parameters									
Chloride		PPB	500.00	YES	134	17591.04	75100.00	500.00	250000.0
Iron		PPB	30.00	YES	62	190.19	2230.00	30.00	300.0
Iron, filtered		PPB	30.00	YES	63	49.38	327.00	30.00	300.0
Manganese		PPB	5.00	YES	62	16.73	106.00	5.00	50.0
Manganese, filtered		PPB	5.00	YES	63	14.33	85.00	5.00	50.0
Phenol		PPB	10.00		34	10.00	10.00	10.00	
Phenol, low DL		PPB	10.00		22	10.00	10.00	10.00	
Sodium		PPB	200.00	YES	62	20210.16	68500.00	5400.00	
Sodium, filtered		PPB	200.00	YES	63	19797.46	68900.00	5130.00	
Sulfate		PPB	300.00	YES	134	22923.88	52100.00	500.00	250000.0
SITE SPECIFIC AND OTHER PARAMETERS									
0,0-Diethyl-0,2-pyrazinyl phosphorothion		PPB	10.00		34	10.00	10.00	10.00	
1,1,1,2-tetrachloroethane		PPB	10.00		34	10.00	10.00	10.00	
1,1,1-trichloroethane		PPB	5.00	YES	121	5.00	9.00	3.00	200.0
1,1,2,2-tetrachloroethane		PPB	5.00		34	5.00	5.00	5.00	
1,1,2-trichloroethane		PPB	5.00		121	5.00	5.00	5.00	
1,1-dichloroethane		PPB	5.00		121	5.00	5.00	5.00	
1,1-dichloroethylene		PPB	10.00		34	10.00	10.00	10.00	7.0
1,1-dimethylhydrazine		PPB	10.00		34	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

WHC-EP-0366

CONSTITUENT		ANALYSIS SUMMARY						GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2,3,4-tetrachlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		34	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		34	10.00	10.00	10.00		.2
	1,2-dibromoethane	PPB	10.00		34	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00	YES	121	5.02	8.00	5.00	5.0	YES
	1,2-dichloropropane	PPB	5.00		34	5.00	5.00	5.00	5.0	
	1,2-dimethylhydrazine	PPB	10.00		34	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		34	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		34	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		34	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		34	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		34	200.00	200.00	200.00		
	1-Butanol	PPB	10000.00		28	10000.00	10000.00	10000.00		
	1-Butynol	PPB	10000.00		28	10000.00	10000.00	10000.00		
	1-Propanol	PPB	10000.00		28	10000.00	10000.00	10000.00		
	1-acetyl-2-thiourea	PPB	200.00		34	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		34	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		34	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		34	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		34	10.00	10.00	10.00		
	2,3,7,8 TCDD	PPB	.01		28	.01	.01	.01		
	2,4,5-T	PPB	2.00		56	2.00	2.00	2.00		
	2,4,5-Trichlorophenol	PPB	10.00		34	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		34	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	2,4-dinitrophenol	PPB	10.00		34	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		34	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		34	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		34	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		34	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		34	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		34	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		34	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		34	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		34	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		34	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		34	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		34	10.00	10.00	10.00		
	2-methylactonitrile	PPB	10.00		34	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		34	10.00	10.00	10.00		
	2-picoline	PPB	10.00		34	10.00	10.00	10.00		
	2-propyn-1-ol	PPB	10000.00		28	10000.00	10000.00	10000.00		
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00		34	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00		34	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00		34	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00		34	10.00	10.00	10.00		
	3-chloropropionitrile	PPB	10000.00		28	10000.00	10000.00	10000.00		
	3-methylcholanthrene	PPB	10.00		34	10.00	10.00	10.00		
	4,4'-methylenebis(2-chloroaniline)	PPB	10.00		34	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00		34	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00		34	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00		34	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00		34	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00		34	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00		34	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00		34	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Acenaphthalene	PPB	10.00		34	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00		34	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00		34	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	YES	121	9.73	13.00	3.00		
	Acetonitrile	PPB	10.00		34	10.00	10.00	10.00		
	Acetophenone	PPB	10.00		34	10.00	10.00	10.00		
	Acrolein	PPB	10.00		34	10.00	10.00	10.00		
	Acrylamide	PPB	10000.00		28	10000.00	10000.00	10000.00		
	Acrylonitrile	PPB	10.00		34	10.00	10.00	10.00		
	Aldrin	PPB	.10		34	.10	.10	.10		
	Alkalinity		20000.00	YES	55	95645.45	185000.00	5400.00		
	Allyl Chloride	PPB	100.00		34	100.00	100.00	100.00		
	Allyl alcohol	PPB	10000.00		28	10000.00	10000.00	10000.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00		34	10.00	10.00	10.00		
	Aluminum	PPB	150.00		62	150.00	150.00	150.00	50.0	
	Aluminum, filtered	PPB	150.00	YES	63	152.78	325.00	150.00	50.0	YES
	Amitrole	PPB	10.00		34	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	YES	34	59.29	129.00	50.00		
	Aniline	PPB	10.00		34	10.00	10.00	10.00		
	Anthracene	PPB	10.00		34	10.00	10.00	10.00		
	Antimony	PPB	100.00		62	100.00	100.00	100.00		
	Antimony, filtered	PPB	100.00		63	100.00	100.00	100.00		
	Aramite	PPB	10.00		34	10.00	10.00	10.00		
	Arochlor 1016	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1221	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1232	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1242	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1248	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1254	PPB	1.00		30	1.00	1.00	1.00	.5	
	Arochlor 1260	PPB	1.00		30	1.00	1.00	1.00	.5	
	Auramine	PPB	10.00		34	10.00	10.00	10.00		
	Benz [a] anthracene	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Benz[c]acridine	PPB	10.00		34	10.00	10.00	10.00		
	Benzene	PPB	5.00		121	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		34	10.00	10.00	10.00		
	Benzenethoil	PPB	10.00		34	10.00	10.00	10.00		
	Benidine	PPB	10.00		34	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		34	10.00	10.00	10.00		
	Benzo(k)Fluoranthene	PPB	10.00		34	10.00	10.00	10.00		
	Benzo[a]pyrene	PPB	10.00		34	10.00	10.00	10.00		
	Benzo[b]fluoranthene	PPB	10.00		34	10.00	10.00	10.00		
	Benzo[j]fluoranthene	PPB	10.00		34	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		34	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		34	10.00	10.00	10.00		
	Beryllium	PPB	5.00	YES	62	5.06	9.00	5.00		
	Beryllium, filtered	PPB	5.00	YES	63	5.05	8.00	5.00		
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		34	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		34	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		34	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		34	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00		34	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		34	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	62	34.79	273.00	10.00		
	Boron, filtered	PPB	10.00	YES	63	37.11	265.00	10.00		
	Bromide	PPB	1000.00		134	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		34	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		34	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		34	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		34	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	62	27983.87	50200.00	10300.00		
	Calcium, filtered	PPB	50.00	YES	63	28280.95	63200.00	10200.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		121	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00		34	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		34	2.00	2.00	2.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1993)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Cesium-137	Chlordane	PCl/L	20.00		15	.87	6.21	-4.71	120.0	
	Chloronaphazene	PPB	1.00		34	1.00	1.00	1.00	2.0	
	Chloroalkyl ethers	PPB	10.00		34	10.00	10.00	10.00		
	Chlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	Chlorobenzene (by ABN)	PPB	5.00		34	5.00	5.00	5.00	100.0	
	Chlorobenzilate	PPB	10.00		34	10.00	10.00	10.00	60.0	
	Chloroethane	PPB	300.00		34	300.00	300.00	300.00		
	Chloroform	PPB	10.00		34	10.00	10.00	10.00		
	Chloromethyl methyl ether	PPB	5.00	YES	121	14.35	36.00	5.00	100.0	
	Chrysene	PPB	10.00		34	10.00	10.00	10.00		
	Citrus red	PPB	10.00		34	10.00	10.00	10.00		
	Cobalt	PPB	1000.00		34	1000.00	1000.00	1000.00		
	Cobalt, filtered	PPB	20.00		62	20.00	20.00	20.00		
	Cobalt-60	PPB	20.00		63	20.00	20.00	20.00		
	Copper	PCl/L	22.50		15	1.63	7.03	-8.28	200.0	
	Copper, filtered	PPB	10.00	YES	62	11.60	50.00	10.00	1000.0	
	Cresols	PPB	10.00	YES	63	11.14	26.00	10.00	1000.0	
	Crotonaldehyde	PPB	10.00		34	10.00	10.00	10.00		
	Cyanide	PPB	10.00		35	10.00	10.00	10.00		
Cesium-137	DDD	PPB	10.00		34	.10	.10	.10		
	DDE	PPB	.10		34	.10	.10	.10		
	DDT	PPB	.10		34	.10	.10	.10		
	Di-n-butyl phthalate	PPB	10.00		34	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		34	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		34	10.00	10.00	10.00		
	Diallate	PPB	10.00		34	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		34	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		34	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		34	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		34	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Dibenzof[a,i]pyrene	PPB	10.00		34	10.00	10.00	10.00	
	Dibenzofuran	PPB	10.00		34	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00		34	10.00	10.00	10.00	
	Dibutyl Phosphate	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Dichlorodifluoromethane	PPB	10.00		34	10.00	10.00	10.00	
	Dieldrin	PPB	.10		34	.10	.10	.10	
	Diethyl phthalate	PPB	10.00		34	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00		34	200.00	200.00	200.00	
	Dihydrosafrole	PPB	10.00		34	10.00	10.00	10.00	
	Dimethoate	PPB	2.00		34	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00		34	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00		34	10.00	10.00	10.00	
	Dinoseb	PPB	10.00		34	10.00	10.00	10.00	
	Dioxane	PPB	500.00		34	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00		34	10.00	10.00	10.00	
	Disulfoton	PPB	2.00		34	2.00	2.00	2.00	
	Endosulfan I	PPB	.10		34	.10	.10	.10	
	Endosulfan II	PPB	.10		34	.10	.10	.10	
	Endosulfan Sulfate	PPB	.50		34	.50	.50	.50	
	Ethanol	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Ethyl benzene	PPB	5.00		34	5.00	5.00	5.00	700.0
	Ethyl carbamate	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Ethyl cyanide	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Ethyl methacrylate	PPB	10.00		34	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00		34	10.00	10.00	10.00	
	Ethylene Glycol	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Ethylene oxide	PPB	10.00		34	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00		34	10.00	10.00	10.00	
	Ethylenethiourea	PPB	200.00		34	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00		34	10.00	10.00	10.00	
	Fluorene	PPB	10.00		34	10.00	10.00	10.00	
	Formalin	PPB	500.00		34	500.00	500.00	500.00	

Groundwater Analysis Results for 500 Area Process Trenches (1989-1990)

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EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	Methyl ethyl ketone	PPB	10.00	YES	121	9.99	11.00	9.00	
	Methyl methacrylate	PPB	10.00		34	10.00	10.00	10.00	
	Methyl methanesulfonate	PPB	10.00		34	10.00	10.00	10.00	
	Methyl parathion	PPB	2.00		34	2.00	2.00	2.00	
	Methylene Chloride	PPB	5.00	YES	121	4.97	15.00	2.00	
	Methylthiouracil	PPB	10.00		34	10.00	10.00	10.00	
	Molybdenum	PPB	40.00		62	40.00	40.00	40.00	
	Molybdenum, filtered	PPB	40.00		63	40.00	40.00	40.00	
	Monobutyl Phosphate	PPB	10000.00		28	10000.00	10000.00	10000.00	
	N,N-diethylhydrazine	PPB	10.00		34	10.00	10.00	10.00	
	N-Nitrosodiphenylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitroso-N-methylurethane	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosodi-n-butylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosodiethanolamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosodiethylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosodimethylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosomethylethylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosomethylvinylamine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosomorpholine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosornicotine	PPB	10.00		34	10.00	10.00	10.00	
	N-nitrosopiperidine	PPB	10.00		34	10.00	10.00	10.00	
	N-phenylthiourea	PPB	500.00		34	500.00	500.00	500.00	
	N-propylamine	PPB	10000.00		28	10000.00	10000.00	10000.00	
	Naphthalene	PPB	10.00		34	10.00	10.00	10.00	
	Nickel	PPB	10.00	YES	62	12.34	80.00	10.00	
	Nickel, filtered	PPB	10.00	YES	63	12.08	75.00	10.00	
	Nicotinic acid	PPB	100.00		34	100.00	100.00	100.00	
	Nitrite	PPB	1000.00		134	1000.00	1000.00	1000.00	3300.0
	Nitrobenzene	PPB	10.00		34	10.00	10.00	10.00	
	Nitrosopyrrolidine	PPB	10.00		34	10.00	10.00	10.00	
	O,O,O-triethyl phosphorothioate	PPB	10.00		34	10.00	10.00	10.00	
	O-toluidine hydrochloride	PPB	10.00		34	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	P benzoquinone	PPB	10.00		34	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		34	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		34	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		34	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		34	10.00	10.00	10.00		
	PHORATE	PPB	2.00		34	2.00	2.00	2.00		
	Paraldehyde	PPB	10000.00		28	10000.00	10000.00	10000.00		
	Parathion	PPB	2.00		34	2.00	2.00	2.00		
	Pcdd's	PPB	.01		28	.01	.01	.01		
	Pcdf's	PPB	.01		28	.01	.01	.01		
	Pentachlorobenzene	PPB	10.00		34	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		34	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		34	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		34	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		5	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		34	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		34	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		34	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		134	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		34	10.00	10.00	10.00		
	Plutonium-238	PCI/L	.10		1	-.00	-.00	-.00	1.6	
	Plutonium-239/40	PCI/L	.10		1	.00	.00	.00	1.2	
	Potassium	PPB	100.00	YES	62	4033.68	9930.00	978.00		
	Potassium, filtered	PPB	100.00	YES	63	4016.63	10100.00	908.00		
	Pronamide	PPB	10.00		34	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		34	5.00	5.00	5.00		
	Pyrene	PPB	10.00		34	10.00	10.00	10.00		
	Pyridine	PPB	500.00		34	500.00	500.00	500.00		
	Reserpine	PPB	10.00		34	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		34	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		15	15.68	63.90	-24.90	240.0	
	Safrol	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Silicon	PPB	50.00	YES	62	12174.84	28100.00	2600.00		
	Silicon, filtered	PPB	50.00	YES	63	12054.76	27700.00	2580.00		
	Strontium	PPB	10.00	YES	62	130.31	232.00	76.00		
	Strontium, filtered	PPB	10.00	YES	63	131.14	287.00	74.00		
	Strontium-90	PCI/L	5.00		7	.06	.53	-.28	40.0	
	Strychnine	PPB	50.00		34	50.00	50.00	50.00		
	Styrene	PPB	5.00		34	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		34	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		34	10.00	10.00	10.00		
	Technetium-99	PCI/L	15.00	YES	14	12.30	71.80	-2.21	4000.0	
	Tetrachloroethylene	PPB	5.00	YES	121	4.93	5.00	1.00	5.0	YES
	Tetraethylpyrophosphate	PPB	2.00		18	2.00	2.00	2.00		
	Tetrahydrofuran	PPB	10.00		121	10.00	10.00	10.00		
	Thallium	PPB	5.00		34	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		34	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		34	10.00	10.00	10.00		
	Thiourea	PPB	200.00		34	200.00	200.00	200.00		
	Thiuram	PPB	10.00		34	10.00	10.00	10.00		
	Tin	PPB	30.00		62	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		63	30.00	30.00	30.00		
	Titanium	PPB	60.00		62	60.00	60.00	60.00		
	Titanium, filtered	PPB	60.00		63	60.00	60.00	60.00		
	Toluene	PPB	5.00		121	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		34	10.00	10.00	10.00		
	Total carbon	PPB	1000.00	YES	35	24831.43	43500.00	12600.00		
	Total dissolved solids		5000.00	YES	32	179046.88	278000.00	82500.00	500000.0	
	Trans-1,2-dichloroethene	PPB	5.00	YES	121	6.74	135.00	5.00	70.0	YES
	Tributylphosphoric Acid	PPB	10.00		34	10.00	10.00	10.00		
	Trichloroethylene	PPB	5.00	YES	121	5.09	23.00	1.00	5.0	YES
	Trichloromethanethiol	PPB	10.00		34	10.00	10.00	10.00		
	Trichloromonofluoromethane	PPB	10.00		34	10.00	10.00	10.00		
	Tris(2,3-dibromopropyl) phosphate	PPB	10.00		34	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for 300 Area Process Trenches (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
Tritium		PCI/L	500.00	YES	39	1660.42	8480.00	-93.30	80000.0	
Turbidity		NTU	.10	YES	32	.50	9.00	.10	5.0	YES
Unknown		PPB	0.00	YES	2	45.00	61.00	29.00		
Unknown Aliphatic Hydrocarbon		PPB		YES	1	90.00	90.00	90.00		
Uranium		PCI/L	.50	YES	134	67.36	370.00	-.03	40.0	YES
Vanadium		PPB	5.00	YES	62	6.40	14.00	5.00		
Vanadium, filtered		PPB	5.00	YES	63	6.92	15.00	5.00		
Vinyl Acetate		PPB	5.00		34	5.00	5.00	5.00		
Vinyl chloride		PPB	10.00		121	10.00	10.00	10.00	2.0	
Warfarin		PPB	10.00		34	10.00	10.00	10.00		
Xylene-m		PPB	5.00		121	5.00	5.00	5.00	10000.0	
Xylene-o,p		PPB	5.00		121	5.00	5.00	5.00	10000.0	
Zinc		PPB	5.00	YES	62	7.69	35.00	5.00	5000.0	
Zinc, filtered		PPB	5.00	YES	63	7.92	80.00	5.00	5000.0	
Zirconium		PPB	50.00		62	50.00	50.00	50.00		
Zirconium, filtered		PPB	50.00		63	50.00	50.00	50.00		
dibromochloromethane		PPB	5.00		34	5.00	5.00	5.00	100.0	
m-Nitroaniline		PPB	10.00		34	10.00	10.00	10.00		
o-Nitroaniline		PPB	10.00		34	10.00	10.00	10.00		
o-Nitrophenol		PPB	10.00		34	10.00	10.00	10.00		
p-Dichlorobenzene		PPB	5.00		155	6.10	10.00	5.00	750.0	
p-Nitrophenol		PPB	10.00		34	10.00	10.00	10.00

AGL\PERCPONDS

Well Location and Site Map for 400 Area Ponds

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit Above Limit
CONTAMINATION INDICATOR PARAMETERS									
Conductivity, Laboratory		UMHO	1.00	YES	2	845.00	845.00	845.00	700.0 YES
Specific conductance		UMHO	1.00	YES	2	760.00	760.00	760.00	700.0 YES
Total Organic Halogen, Low Det. Level		PPB	10.00		2	3.00	3.00	3.00	
Total organic carbon		PPB	2000.00		2	500.00	500.00	500.00	
pH, Field Measurement			.10	YES	2	8.05	8.05	8.05	8.5
pH, Laboratory Measurement			.01	YES	2	7.60	7.60	7.60	8.5
DRINKING WATER PARAMETERS									
Alpha, High Detection Level		PCI/L	4.00	YES	2	9.11	9.11	9.11	15.0
Arsenic		PPB	5.00		2	5.00	5.00	5.00	50.0
Arsenic, filtered		PPB	5.00		2	5.00	5.00	5.00	50.0
Barium		PPB	6.00	YES	2	45.00	45.00	45.00	1000.0
Barium, filtered		PPB	6.00	YES	2	51.00	51.00	51.00	1000.0
Cadmium		PPB	2.00		2	2.00	2.00	2.00	10.0
Cadmium, filtered		PPB	2.00		2	2.00	2.00	2.00	10.0
Chromium		PPB	10.00		2	10.00	10.00	10.00	50.0
Chromium, filtered		PPB	10.00		2	10.00	10.00	10.00	50.0
Coliform bacteria		MPN	2.20		2	2.20	2.20	2.20	1.0
Fluoride		PPB	500.00		2	500.00	500.00	500.00	4000.0
Gross beta		PCI/L	8.00	YES	2	12.10	12.10	12.10	50.0
Lead (graphite furnace)		PPB	5.00		2	5.00	5.00	5.00	50.0
Lead, filtered		PPB	5.00		2	5.00	5.00	5.00	50.0
Mercury		PPB	.10		2	.10	.10	.10	2.0
Mercury, filtered		PPB	.10		2	.10	.10	.10	2.0
Nitrate		PPB	500.00	YES	2	73400.00	73400.00	73400.00	45000.0 YES
Nitrate, High Detection Level		PPB	2500.00	YES	2	55500.00	55500.00	55500.00	45000.0 YES
Radium		PCI/L	1.00		2	.18	.18	.18	100.0
Selenium		PPB	5.00		2	5.00	5.00	5.00	10.0
Selenium, filtered		PPB	5.00		2	5.00	5.00	5.00	10.0
Silver		PPB	10.00		2	10.00	10.00	10.00	50.0
Silver, filtered		PPB	10.00		2	10.00	10.00	10.00	50.0

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY				GROUP A STUDY GUIDELINES			
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
DRINKING WATER PARAMETERS										
GROUNDWATER QUALITY PARAMETERS										
	Chloride	PPB	500.00	YES	2	30000.00	30000.00	30000.00	250000.0	
	Iron	PPB	30.00	YES	2	461.00	461.00	461.00	300.0	YES
	Iron, filtered	PPB	30.00		2	30.00	30.00	30.00	300.0	
	Manganese	PPB	5.00	YES	2	10.00	10.00	10.00	50.0	
	Manganese, filtered	PPB	5.00	YES	2	2.00	8.00	8.00	50.0	
	Phenol	PPB	10.00		2	10.00	10.00	10.00		
	Sodium	PPB	200.00	YES	2	36200.00	36200.00	36200.00		
	Sodium, filtered	PPB	200.00	YES	2	43000.00	43000.00	43000.00		
	Sulfate	PPB	500.00	YES	2	121000.00	121000.00	121000.00	250000.0	
SITE SPECIFIC AND OTHER PARAMETERS										
	0,0-Diethyl-0,2-pyrazinyl phosphorothion	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1,2-tetrachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	1,1,1-trichloroethane	PPB	5.00		2	5.00	5.00	5.00	200.0	
	1,1,2,2-tetrachloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1,2-trichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethane	PPB	5.00		2	5.00	5.00	5.00		
	1,1-dichloroethylene	PPB	10.00		2	10.00	10.00	10.00	7.0	
	1,1-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3,4-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,3-trichloropropane	PPB	10.00		2	10.00	10.00	10.00		
	1,2,4,5-tetrachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2,4-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dibromo-3-chloropropane	PPB	10.00		2	10.00	10.00	10.00	.2	
	1,2-dibromoethane	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,2-dichloroethane	PPB	5.00		2	5.00	5.00	5.00	5.0	
	1,2-dichloropropane	PPB	5.00		2	5.00	5.00	5.00	5.0	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	1,2-dimethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,2-diphenylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	1,3,5-trichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	1,3-dichloropropene	PPB	5.00		2	5.00	5.00	5.00		
	1,4-dichloro-2-butene	PPB	10.00		2	10.00	10.00	10.00		
	1,4-naphthoquinone	PPB	10.00		2	10.00	10.00	10.00		
	1-(o-chlorophenyl) thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-acetyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-chloro-2,3-epoxypropane	PPB	10.00		2	10.00	10.00	10.00		
	1-naphthyl-2-thiourea	PPB	200.00		2	200.00	200.00	200.00		
	1-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2,3,4,6-tetrachlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,5-Trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4,6-trichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,4-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dichlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2,6-dinitrotoluene	PPB	10.00		2	10.00	10.00	10.00		
	2-Hexanone	PPB	50.00		2	50.00	50.00	50.00		
	2-Methylnaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-acetylaminofluorene	PPB	10.00		2	10.00	10.00	10.00		
	2-chloroethyl vinyl ether	PPB	5.00		2	5.00	5.00	5.00		
	2-chloronaphthalene	PPB	10.00		2	10.00	10.00	10.00		
	2-chlorophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-cyclohexyl-4,6-dinitrophenol	PPB	10.00		2	10.00	10.00	10.00		
	2-methyl-2-(methylthio) propionaldehyde-	PPB	10.00		2	10.00	10.00	10.00		
	2-methylaziridine	PPB	10.00		2	10.00	10.00	10.00		
	2-methylacetonitrile	PPB	10.00		2	10.00	10.00	10.00		
	2-naphthylamine	PPB	10.00		2	10.00	10.00	10.00		
	2-picoline	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS									
	2-sec-butyl-4,6-dinitrophenol	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-Dichlorobenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-dimethoxybenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3,3'-dimethylbenzidine	PPB	10.00	2	10.00	10.00	10.00		
	3-methylcholanthrene	PPB	10.00	2	10.00	10.00	10.00		
	4,4'-methylenbis(2-chloroaniline)	PPB	10.00	2	10.00	10.00	10.00		
	4,6-dinitro-o-cresol and salts	PPB	10.00	2	10.00	10.00	10.00		
	4-Nitroquinoline 1-oxide	PPB	10.00	2	10.00	10.00	10.00		
	4-aminobiphenyl	PPB	10.00	2	10.00	10.00	10.00		
	4-bromophenyl phenyl ether	PPB	10.00	2	10.00	10.00	10.00		
	5-(aminomethyl)-3-isoxazolol	PPB	10.00	2	10.00	10.00	10.00		
	5-nitro-o-toluidine	PPB	10.00	2	10.00	10.00	10.00		
	7,12-dimethylbenz[a]anthracene	PPB	10.00	2	10.00	10.00	10.00		
	7H-dibenzo[c,g]carbazole	PPB	10.00	2	10.00	10.00	10.00		
	Acenaphthalene	PPB	10.00	2	10.00	10.00	10.00		
	Acenaphthene	PPB	10.00	2	10.00	10.00	10.00		
	Acetone - by ABN	PPB	10.00	2	10.00	10.00	10.00		
	Acetone by VOA	PPB	10.00	2	10.00	10.00	10.00		
	Acetonitrile	PPB	10.00	2	10.00	10.00	10.00		
	Acetophenone	PPB	10.00	2	10.00	10.00	10.00		
	Acrolein	PPB	10.00	2	10.00	10.00	10.00		
	Acrylonitrile	PPB	10.00	2	10.00	10.00	10.00		
	Alkalinity		20000.00	2	189000.00	189000.00	189000.00		
	Allyl Chloride	PPB	100.00	2	100.00	100.00	100.00		
	Alpha,alpha-dimethylphenethylamine	PPB	10.00	2	10.00	10.00	10.00		
	Aluminum	PPB	150.00	2	150.00	150.00	150.00		50.0
	Aluminum, filtered	PPB	150.00	2	150.00	150.00	150.00		50.0
	Amitrole	PPB	10.00	2	10.00	10.00	10.00		
	Ammonium ion	PPB	50.00	2	50.00	50.00	50.00		
	Aniline	PPB	10.00	2	10.00	10.00	10.00		
	Anthracene	PPB	10.00	2	10.00	10.00	10.00		
	Antimony	PPB	100.00	2	100.00	100.00	100.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT
Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Antimony, filtered	PPB	100.00		2	100.00	100.00	100.00		
	Aramite	PPB	10.00		2	10.00	10.00	10.00		
	Auramine	PPB	10.00		2	10.00	10.00	10.00		
	Benzo[a]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo[c]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Benzene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Benzene, dichloromethyl	PPB	10.00		2	10.00	10.00	10.00		
	Benzenethiol	PPB	10.00		2	10.00	10.00	10.00		
	Benidine	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(ghi)perylene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo(k)fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo[a]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo[b]fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzo[j]fluoranthene	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl Alcohol	PPB	10.00		2	10.00	10.00	10.00		
	Benzyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Beryllium	PPB	5.00		2	5.00	5.00	5.00		
	Beryllium, filtered	PPB	5.00		2	5.00	5.00	5.00		
	Bis(2-chloro-1-methylethyl)ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethoxy) methane	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroethyl) ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-chloroisopropyl)ether	PPB	10.00		2	10.00	10.00	10.00		
	Bis(2-ethylhexyl) phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Bis(chloromethyl) ether	PPB	5.00		2	5.00	5.00	5.00		
	Boron	PPB	10.00	YES	2	41.00	41.00	41.00		
	Boron, filtered	PPB	10.00	YES	2	47.00	47.00	47.00		
	Bromide	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Bromoacetone	PPB	5.00		2	5.00	5.00	5.00		
	Bromodichloromethane	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Bromoform	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Butyl benzyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Calcium	PPB	50.00	YES	2	89700.00	89700.00	89700.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

WHC-EP-0366

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Calcium, filtered	PPB	50.00	YES	2	87700.00	87700.00	87700.00		
	Carbon Tetrachloride by GC/MS	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Carbon disulfide	PPB	10.00		2	10.00	10.00	10.00		
	Carbophenothion	PPB	2.00		2	2.00	2.00	2.00		
	Cesium-137	PCI/L	20.00		2	-.65	-.65	-.65	120.0	
	Chloromphazine	PPB	10.00		2	10.00	10.00	10.00		
	Chloroalkyl ethers	PPB	10.00		2	10.00	10.00	10.00		
	Chlorobenzene	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Chlorobenzene (by ABN)	PPB	10.00		2	10.00	10.00	10.00	60.0	
	Chloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Chloroform	PPB	5.00		2	5.00	5.00	5.00	100.0	
	Chloromethyl methyl ether	PPB	10.00		2	10.00	10.00	10.00		
	Chrysene	PPB	10.00		2	10.00	10.00	10.00		
	Citrus red	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Cobalt	PPB	20.00		2	20.00	20.00	20.00		
	Cobalt, filtered	PPB	20.00		2	20.00	20.00	20.00		
	Cobalt-60	PCI/L	22.50		2	.58	.58	.58	200.0	
	Copper	PPB	10.00		2	10.00	10.00	10.00	1000.0	
	Copper, filtered	PPB	10.00		2	10.00	10.00	10.00	1000.0	
	Cresols	PPB	10.00		2	10.00	10.00	10.00		
	Crotonaldehyde	PPB	10.00		2	10.00	10.00	10.00		
	Cyanide	PPB	10.00		2	10.00	10.00	10.00		
	Di-n-butyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Di-n-octyl phthalate	PPB	10.00		2	10.00	10.00	10.00		
	Di-n-propylnitrosamine	PPB	10.00		2	10.00	10.00	10.00		
	Diallate	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,h]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,h]anthracene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenz[a,j]acridine	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,e]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,h]pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Dibenzo[a,i]pyrene	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT		ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES	
Group	Name	Units	Detection Limit	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit
SITE SPECIFIC AND OTHER PARAMETERS								
	Dibenzofuran	PPB	10.00	2	10.00	10.00	10.00	
	Dibromomethane	PPB	10.00	2	10.00	10.00	10.00	
	Dichlorodifluoromethane	PPB	10.00	2	10.00	10.00	10.00	
	Diethyl phthalate	PPB	10.00	2	10.00	10.00	10.00	
	Diethylstilbesterol	PPB	200.00	2	200.00	200.00	200.00	
	Dihydroxafrole	PPB	10.00	2	10.00	10.00	10.00	
	Dimethoate	PPB	2.00	2	2.00	2.00	2.00	
	Dimethyl phthalate	PPB	10.00	2	10.00	10.00	10.00	
	Dinitrobenzene	PPB	10.00	2	10.00	10.00	10.00	
	Dinoseb	PPB	10.00	2	10.00	10.00	10.00	
	Dioxane	PPB	500.00	2	500.00	500.00	500.00	
	Diphenylamine	PPB	10.00	2	10.00	10.00	10.00	
	Disulfoton	PPB	2.00	2	2.00	2.00	2.00	
	Ethyl benzene	PPB	5.00	2	5.00	5.00	5.00	700.0
	Ethyl methacrylate	PPB	10.00	2	10.00	10.00	10.00	
	Ethyl methanesulfonate	PPB	10.00	2	10.00	10.00	10.00	
	Ethylene oxide	PPB	10.00	2	10.00	10.00	10.00	
	Ethyleneimine	PPB	10.00	2	10.00	10.00	10.00	
	Ethyleneurea	PPB	200.00	2	200.00	200.00	200.00	
	Fluoranthene	PPB	10.00	2	10.00	10.00	10.00	
	Fluorene	PPB	10.00	2	10.00	10.00	10.00	
	Formalin	PPB	500.00	2	500.00	500.00	500.00	
	Hexachlorobenzene	PPB	10.00	2	10.00	10.00	10.00	
	Hexachlorobutadiene	PPB	10.00	2	10.00	10.00	10.00	
	Hexachlorocyclopentadiene	PPB	10.00	2	10.00	10.00	10.00	
	Hexachloroethane	PPB	10.00	2	10.00	10.00	10.00	
	Hexachlorophene	PPB	10.00	2	10.00	10.00	10.00	
	Hexachloropropene	PPB	10.00	2	10.00	10.00	10.00	
	Hydrazine, Low Detection Level	PPB	30.00	2	30.00	30.00	30.00	
	Indeno(1,2,3-cd)pyrene	PPB	10.00	2	10.00	10.00	10.00	
	Iodomethane	PPB	10.00	2	10.00	10.00	10.00	
	Isodrin	PPB	10.00	2	10.00	10.00	10.00	

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Isophorone	PPB	10.00		2	10.00	10.00	10.00		
	Isosafrole	PPB	10.00		2	10.00	10.00	10.00		
	Kerosene	PPB	10000.00		2	10000.00	10000.00	10000.00		
	Lithium	PPB	10.00		2	10.00	10.00	10.00		
	Lithium, filtered	PPB	10.00		2	10.00	10.00	10.00		
	Magnesium	PPB	50.00	YES	2	23400.00	23400.00	23400.00		
	Magnesium, filtered	PPB	50.00	YES	2	24800.00	24800.00	24800.00		
	Maleic hydrazide	PPB	500.00		2	500.00	500.00	500.00		
	Malononitrile	PPB	10.00		2	10.00	10.00	10.00		
	Melphalan	PPB	10.00		2	10.00	10.00	10.00		
	Methacrylonitrile	PPB	10.00		2	10.00	10.00	10.00		
	Methanethiol	PPB	10.00		2	10.00	10.00	10.00		
	Methapyrilene	PPB	10.00		2	10.00	10.00	10.00		
	Metholonyl	PPB	10.00		2	10.00	10.00	10.00		
	Methyl Isobutyl Ketone	PPB	10.00		2	10.00	10.00	10.00		
	Methyl bromide	PPB	10.00		2	10.00	10.00	10.00		
	Methyl chloride	PPB	10.00		2	10.00	10.00	10.00		
	Methyl ethyl ketone	PPB	10.00		2	10.00	10.00	10.00		
	Methyl methacrylate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl methanesulfonate	PPB	10.00		2	10.00	10.00	10.00		
	Methyl parathion	PPB	2.00		2	2.00	2.00	2.00		
	Methylene Chloride	PPB	5.00		2	5.00	5.00	5.00		
	Methylthiouracil	PPB	10.00		2	10.00	10.00	10.00		
	Molybdenum	PPB	40.00		2	40.00	40.00	40.00		
	Molybdenum, filtered	PPB	40.00		2	40.00	40.00	40.00		
	N,N-diethylhydrazine	PPB	10.00		2	10.00	10.00	10.00		
	N-Nitrosodiphenylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitroso-N-methylurethane	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodi-n-butylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethanolamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodiethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosodimethylamine	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	N-nitrosomethylethylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomethylvinylamine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosomorpholine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosornicotine	PPB	10.00		2	10.00	10.00	10.00		
	N-nitrosopiperidine	PPB	10.00		2	10.00	10.00	10.00		
	N-phenylthiourea	PPB	500.00		2	500.00	500.00	500.00		
	Naphthalene	PPB	10.00		2	10.00	10.00	10.00		
	Nickel	PPB	10.00		2	10.00	10.00	10.00		
	Nickel, filtered	PPB	10.00		2	10.00	10.00	10.00		
	Nicotinic acid	PPB	100.00		2	10.00	10.00	10.00		
	Nitrite	PPB	1000.00		2	100.00	100.00	100.00		
	Nitrobenzene	PPB	10.00		2	1000.00	1000.00	1000.00	3300.0	
	Nitrosopyrrolidine	PPB	10.00		2	10.00	10.00	10.00		
	O,O,O-triethyl phosphorothioate	PPB	10.00		2	10.00	10.00	10.00		
	O-toluidine hydrochloride	PPB	10.00		2	10.00	10.00	10.00		
	P benzoquinone	PPB	10.00		2	10.00	10.00	10.00		
	P-chloro-m-cresol	PPB	10.00		2	10.00	10.00	10.00		
	P-chloroaniline	PPB	10.00		2	10.00	10.00	10.00		
	P-dimethylaminoazobenzene	PPB	10.00		2	10.00	10.00	10.00		
	P-nitroaniline	PPB	10.00		2	10.00	10.00	10.00		
	PHORATE	PPB	2.00		2	2.00	2.00	2.00		
	Parathion	PPB	2.00		2	2.00	2.00	2.00		
	Pentachlorobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloroethane	PPB	10.00		2	10.00	10.00	10.00		
	Pentachloronitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Pentachlorophenol	PPB	50.00		2	50.00	50.00	50.00	200.0	
	Perchlorate	PPB	500.00		2	500.00	500.00	500.00		
	Phenacetin	PPB	10.00		2	10.00	10.00	10.00		
	Phenanthrene	PPB	10.00		2	10.00	10.00	10.00		
	Phenylenediamine	PPB	10.00		2	10.00	10.00	10.00		
	Phosphate	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Phthalic acid esters	PPB	10.00		2	10.00	10.00	10.00		

EFFLUENT STUDY GROUNDWATER SUMMARY REPORT

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

CONSTITUENT			ANALYSIS SUMMARY					GROUP A STUDY GUIDELINES		
Group	Name	Units	Detection Limit	Detected	Number of Analyses	Average Result	Maximum Result	Minimum Result	Max Limit	Above Limit
SITE SPECIFIC AND OTHER PARAMETERS										
	Potassium	PPB	100.00	YES	2	7630.00	7630.00	7630.00		
	Potassium, filtered	PPB	100.00	YES	2	8620.00	8620.00	8620.00		
	Pronamide	PPB	10.00		2	10.00	10.00	10.00		
	Propionitrile	PPB	5.00		2	5.00	5.00	5.00		
	Pyrene	PPB	10.00		2	10.00	10.00	10.00		
	Pyridine	PPB	500.00		2	500.00	500.00	500.00		
	Reserpine	PPB	10.00		2	10.00	10.00	10.00		
	Resorcinol	PPB	10.00		2	10.00	10.00	10.00		
	Ruthenium-106	PCI/L	172.50		2	13.10	13.10	13.10	240.0	
	Safrol	PPB	10.00		2	10.00	10.00	10.00		
	Silicon	PPB	50.00	YES	2	15200.00	15200.00	15200.00		
	Silicon, filtered	PPB	50.00	YES	2	16000.00	16000.00	16000.00		
	Strontium	PPB	10.00	YES	2	374.00	374.00	374.00		
	Strontium, filtered	PPB	10.00	YES	2	423.00	423.00	423.00		
	Strychnine	PPB	50.00		2	50.00	50.00	50.00		
	Styrene	PPB	5.00		2	5.00	5.00	5.00	5.0	
	Sulfide	PPB	1000.00		2	1000.00	1000.00	1000.00		
	Sym-trinitrobenzene	PPB	10.00		2	10.00	10.00	10.00		
	Tetrachloroethylene	PPB	5.00		2	5.00	5.00	5.00		
	Tetraethylpyrophosphate	PPB	2.00		2	2.00	2.00	2.00		5.0
	Tetrahydrofuran	PPB	10.00		2	10.00	10.00	10.00		
	Thallium	PPB	5.00		2	5.00	5.00	5.00		
	Thallium, filtered	PPB	5.00		2	5.00	5.00	5.00		
	Thiofanox	PPB	10.00		2	10.00	10.00	10.00		
	Thiourea	PPB	200.00		2	200.00	200.00	200.00		
	Thiuram	PPB	10.00		2	10.00	10.00	10.00		
	Tin	PPB	30.00		2	30.00	30.00	30.00		
	Tin, filtered	PPB	30.00		2	30.00	30.00	30.00		
	Titanium	PPB	60.00		2	60.00	60.00	60.00		
	Titanium, filtered	PPB	60.00		2	60.00	60.00	60.00		
	Toluene	PPB	5.00		2	5.00	5.00	5.00	2000.0	
	Toluenediamine	PPB	10.00		2	10.00	10.00	10.00		

Groundwater Analysis Results for the 400 Area Pond (1989-1990)

A27-12

WHC-EP-0366

APPENDIX B

DATA VALIDATION SUMMARY SHEETS

APPENDIX B

RCRA DATA VALIDATION

Unlike the U.S. Environmental Protection Agency (EPA) contract laboratory program (CLP), RCRA data validation procedures are not defined or required by the EPA. Reporting formats are much more flexible and varied due to the broad scope of RCRA analyses available. This data validation process implements three levels of evaluation based on type and origin of the sample as well as final disposition of the analytical results. The requirements to be reviewed during the validation process are defined below for Levels A, B, and C.

Level A is the minimum requirement for all RCRA data. The primary application is for data used in waste designation/disposal.

- Review requirements:
 - requested versus reported analyses
 - analysis holding times

Level B provides a more in-depth review for programs whose data are compiled for use in later reports.

- Review requirements in addition to those listed for Level A:
 - matrix spike/matrix spike duplicate analysis
 - surrogate recoveries
 - duplicate analysis
 - analytical blank analysis

Level C requires data be reported in sample delivery group (SDG) data packages and is applicable to CERCLA analytical work conducted in non-CLP laboratories, as well as CLP special analytical services (SAS).

- Review requirements (where applicable) in addition to those above:
 - initial and continuing instrument calibrations
 - GC/MS tune criteria
 - internal standards
 - laboratory control samples (LCS)
 - interference check sample (ICS)
 - any other QC checks performed or required by the method of analysis

Review requirements through Level B validation are described below.

This RCRA validation is heavily based on SW-846 methodology and QC requirements. Because of the wide scope of analyses contained in SW-846 and the limited requirements and guidelines that exist regarding the evaluation of RCRA data, this process represents a conservative approach to qualification of the data. Using professional judgement, the reviewer may at any time qualify data as estimated (J or UJ) or unusable (R) provided that the action is clearly documented.

B.1 REQUESTED VERSUS REPORTED ANALYSES (A, B, or C)

The objective is to ensure that all analyses requested by the customer were reported by the laboratory.

Criteria - All requested analyses shall be reported or accounted for.

Evaluation - Review the Sample Analysis Request (SAR) or Chain of Custody (COC) and verify that all analyses requested were reported by the laboratory or accounted for in the case of any anomalies. A copy of the SAR or COC shall be attached to the validation documentation.

Action - Contact the laboratory and/or the field sampling team in the event of any unreported analyses and document the cause of the discrepancy. Make any necessary arrangements to resample or run the analyses on existing samples as required by the customer.

B.2 HOLDING TIMES (A,B)

The objective is to determine the validity of results based on the holding time of the sample from its date of collection to the date of analysis or sample preparation, as appropriate.

Criteria - Holding time requirements shall be applied to all sample matrices. Holding time requirements for analyses must be clearly documented.

Evaluation - Holding times for each analysis are established by comparing the sampling date on the chain-of-custody form with dates of analysis and/or extraction found in the analytical data.

Action - If holding time requirements are not met, qualify all positive results as estimated (J) and nondetects as estimated (UJ), and document that holding times were exceeded. Professional judgement must be used in the case of grossly exceeded holding times. The expected bias would be low and the reviewer may determine that non-detect data are unusable (R).

B.3 SURROGATE RECOVERY (B,C)

Laboratory performance on individual samples is established by spiking activity. Prior to purging or extraction, samples, blanks, MS/MSD's, and standards may be spiked with surrogate compounds not expected to be detected in environmental media. Surrogate analyses provide information on laboratory accuracy as well as sample matrix effects. This is applicable only to organic analyses.

Criteria - Sample and blank surrogate recoveries must be within the QC limits as required by the specific method in question. If no recovery limits are specified in the method, control limits of 80 to 120% shall be applied.

Evaluation - Review the surrogate recovery data and verify that all results are within the specified control limits.

Action - Document all surrogate compounds, recoveries, and control limits that do not meet QC specifications. If surrogate recoveries are out of the specified QC limits but >10%, qualify all positive results as estimated (J) and nondetects as estimated (UJ) and document any bias observed. If recoveries are <10%, nondetects shall be qualified as unusable (R).

B.4 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (B,C)

MS/MSD data are an indication of the precision and accuracy of the analytical method on various matrices. The data are generated for long term evaluation and cannot be used alone to determine the precision and accuracy of individual samples.

Criteria - A matrix spike or MS/MSD must be analyzed with every analytical batch or every 20 samples, whichever is more frequent. Recoveries (%R) and relative percent differences (RPD) between MS and MSD recoveries must be within the method specified control limits. Control limits of 75-125 %R, and ± 20 RPD shall be applied in the case where none are specified.

Evaluation - Review the MS or MS/MSD results and verify that QC criteria are met. Observe any trends in bias that may be present for recoveries or RPD's which are outside the QC limits.

Action - If recoveries or RPD's are out of the specified control limits, qualify all associated sample data as estimated (J for positive results, and UJ for nondetects). For Inorganics analyses with recoveries <30%, nondetects shall be qualified as unusable (R). Document the %R or RPD and the control limits applied for all compounds outside those limits, and indicate any bias observed in the results.

B.5 DUPLICATE ANALYSES (B,C)

Duplicate analyses provide an indication of laboratory precision based on each sample matrix.

Criteria - Duplicate analysis must be performed with every analytical batch or every 20 samples, whichever is more frequent. This requirement may be satisfied with the analysis of one MS/MSD sample. Method specified control limits shall be applied to sample results where they exist, otherwise the limit shall be $\pm 20\%$. If both sample and duplicate results are below the method detection limit (MDL) or sample quantitation limit (SQL), then no control limit applies.

Evaluation - Review the duplicate analysis results and verify that all data fall within the control limits where applicable.

Action - If duplicate analysis results are outside the specified control limits, qualify all associated positive sample results as estimated (J), and nondetects as estimated (UJ). Document the RPD and limits for those compounds out of control.

B.6 ANALYTICAL BLANKS (B,C)

Assessment of analytical blank analysis results provide information on the existence and magnitude of any laboratory contamination problems.

Criteria - A minimum of one analytical blank must be analyzed for every batch or every 20 samples. No contaminants should be detected in the blanks.

Evaluation - Review the analysis results for evidence of blank contamination.

Action - In the case of unsuitable blank results, no positive sample results should be reported unless the concentration of the compound in the sample exceeds 5x the amount in any blank. If contaminants are detected above the MDL or SQL in any blank associated with the sample, the following guidelines are used to qualify all associated data. No action is taken for compounds detected in an associated blank but not in the sample.

- Qualify other positive sample results <5x the amount detected in any blank as not detected (U).
- A special case exists for positive sample results reported <MDL or SQL. If the 5x criteria dictate qualification (U), then the result reported is raised to the MDL or SQL as in the example below.

5x Criteria

Blank result	7
MDL or SQL	5
Sample result	4
Qualified result	5U

This is the only case where a reported laboratory value is changed. Sample results must not be corrected by subtracting any blank value.

- The 5x criteria shall also be applied to tentatively identified compounds (TIC) and unknown compounds which are found in both the sample and associated blank(s) for GC/MS analyses.

B.7 VALIDATION COVERSHEETS

The following pages are examples of RCRA data validation coversheets. Data validation coversheets are used to summarize specific areas checked and to note deficiencies requiring attention, as well as overall laboratory per-

formance and any discernable trends in the quality of the data. Supplementary information is contained in attachment pages to the coversheets. Each coversheet summarizes the validation results for a single sampling trip to a single well.

The following qualifiers are applied to the data as a result of the RCRA validation process and override any previous flags reported by the laboratory. If any other qualifiers are necessary to describe the quality of the data, they must be clearly documented.

- U The material was analyzed for, but was not detected. The associated value is the MDL or SQL.
- UJ The material was analyzed for, but was not detected. The MDL or SQL is an estimated quantity.
- J The associated value is an estimated quantity.
- R The data are unusable.

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch *JA*

----- DATA ASSESSMENT SUMMARY -----

Sample # 2742

Matrix water

Sample Date 10/30/89

Laboratory US Testing

Chain of Custody attached

Analysis Completeness O

Holding Times X

Analytical Blanks O

MS or MS/MSD X

Duplicate Analysis NA

Surrogate Recovery X

O -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-E25-35

No major problems-all results acceptable with
attached qualification

- herbicides (732) estimated (UT) because of
low surrogate recovery, high MSD %R, missed HT
- hydrazine (H62) estimated (UT) due to
low MS, MSD %R
- DAI qualified as estimated (UT) due to missed HT

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch

----- DATA ASSESSMENT SUMMARY -----

Sample # 2670

Matrix water

Sample Date 10/30/89

Laboratory US Testing

Chain of Custody attached

Analysis Completeness 0

Holding Times X

Analytical Blanks 0

MS or MS/MSD X

Duplicate Analysis NA

Surrogate Recovery 0

0 -data had no problems; X -data qualified due to minor problems

M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-W19-20

No major problems - all results acceptable with attached qualification

- DAI⁽⁷⁰³⁾ qualified as estimated (UJ) due to missed HT

- Herbicides (737) estimated (UJ) due to high MS ?R

- hydrazine (HG2) estimated (UJ) due to low MS, MSD ?R

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OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA lerch *JA*

----- DATA ASSESSMENT SUMMARY -----

Sample # 2663

Matrix water

Sample Date 10/27/89

Laboratory US Testing

Chain of Custody attached

Analysis Completeness 0

Holding Times 0

Analytical Blanks 0

MS or MS/MSD X

Duplicate Analysis NA

Surrogate Recovery 0

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-W19-23

No major problems-all results acceptable with
attached qualification

- hydrazine (HGZ) estimated (US) due to low MS, MSD & R
- herbicides (732) estimated due to ^{high} MS, ~~MSD~~ & R

RCRA B - Cover

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch *JA*

----- DATA ASSESSMENT SUMMARY -----

Sample # 2405 well 2-E25-2B

Matrix water

Sample Date 10/27/90

Laboratory USTesting

Chain of Custody

attached

Analysis Completeness

0

Holding Times

X

Analytical Blanks

0

MS or MS/MSD

X

Duplicate Analysis

NA

Surrogate Recovery

0

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: No major problems-all results
acceptable w/attached qualification

- DMI (763) qualified due to exceeded HT

- Herbicides (737) qualified (UJ) due to high MS %R

- Hydrazine (HG2) qualified (UJ) due to low MS, MSD %R

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch *JL*

----- DATA ASSESSMENT SUMMARY -----

Sample # 2694

Matrix water

Sample Date 10/30/89

Laboratory US Testing

Chain of Custody attached

Analysis Completeness 0

Holding Times X

Analytical Blanks 0

MS or MS/MSD X

Duplicate Analysis NA

Surrogate Recovery 0

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-W19-24

No major problems. all results acceptable with
attached qualification

- DAI(763) estimated (UT) due to exceeded HT
- hydrazine (H₂) estimated (UT) due to low MS,MSD %R
- herbicides(737) estimated (UT) due to high MS %R

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch *JA*

----- DATA ASSESSMENT SUMMARY -----

Sample # <u>2730</u>	Chain of Custody <u>attached</u>
Matrix <u>water</u>	Analysis Completeness <u>0</u>
Sample Date <u>10/31/90</u>	Holding Times <u>X</u>
Laboratory <u>US Testing</u>	Analytical Blanks <u>0</u>
	MS or MS/MSD <u>X</u>
	Duplicate Analysis <u>NA</u>
	Surrogate Recovery <u>0</u>

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-E25-32

No major problems - all results acceptable with
attached qualification

- DAI(763) estimated due to exceeded HT

- Herbicides(737) estimated (US) due to high MS %R

RCRA B - Cover

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OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 08/11/90

Reviewed By

JA Lerch *JA*

----- DATA ASSESSMENT SUMMARY -----

Sample # <u>2731</u>	Chain of Custody	<u>attached</u>
Matrix <u>water</u>	Analysis Completeness	<u>0</u>
Sample Date <u>10/31/89</u>	Holding Times	<u>X</u>
Laboratory <u>U.S. Testing</u>	Analytical Blanks	<u>0</u>
	MS or MS/MSD	<u>X</u>
	Duplicate Analysis	<u>NA</u>
	Surrogate Recovery	<u>0</u>

0 - data had no problems; X - data qualified due to minor problems
M - data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-E1B-1

No major problems - all results acceptable with
attached qualification

- DAI(763) estimated (W) due to exceeded HT

- herbicides(237) estimated (W) due to high MS ZOR

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OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 08/12/90

Reviewed By JA Lerch *for*

----- DATA ASSESSMENT SUMMARY -----

Sample # <u>2666</u>	Chain of Custody <u>attached</u>
Matrix <u>water</u>	Analysis Completeness <u>0</u>
Sample Date <u>10/27/89</u>	Holding Times <u>0</u>
Laboratory <u>US Testing</u>	Analytical Blanks <u>0</u>
	MS or MS/MSD <u>X</u>
	Duplicate Analysis <u>NA</u>
	Surrogate Recovery <u>X</u>

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well # 2-W19-26

No major problems-all results acceptable
with attached qualification

- Dioxins (752) estimated (W) due to low surrogate 2R
- hydrazine (HGZ) estimated (W) due to low MS, MSD 7.0R
- Pest (729) MS, MSD 7.0R high; sample results all
<DL, acceptable w/out qualification

RCRA B - Cover

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/11/90

Reviewed By JA Lerch

----- DATA ASSESSMENT SUMMARY -----

Sample # <u>2807 Well 2-W19-19</u>	Chain of Custody	<u>attached</u>
Matrix <u>water</u>	Analysis Completeness	<u>0</u>
Sample Date <u>10-31-89</u>	Holding Times	<u>X</u>
Laboratory <u>US Testing</u>	Analytical Blanks	<u>0</u>
	MS or MS/MSD	<u>X</u>
	Duplicate Analysis	<u>NA</u>
	Surrogate Recovery	<u>0</u>

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: No major problems - all results
acceptable with qualification
- DAI (763) estimated due to exceeded HT
- herbicides (737) estimated (45) due to high MS 2.R

RCRA B - Cover

OFFICE OF SAMPLE MANAGEMENT RCRA DATA VALIDATION - LEVEL B

Date 8/12/90

Reviewed By JA Lerch *[Signature]*

----- DATA ASSESSMENT SUMMARY -----

Sample # 2741

Matrix water

Sample Date 10/31/90

Laboratory US Testing

Chain of Custody attached

Analysis Completeness 0

Holding Times X

Analytical Blanks 0

MS or MS/MSD X

Duplicate Analysis NA

Surrogate Recovery 0

0 -data had no problems; X -data qualified due to minor problems
M -data qualified due to major problems/some data may be unusable

Overall Assessment: Well-H 2-625-34

No major problems - all results acceptable with
attached qualification

- DAI(763) estimated (UJ) due to exceeded HT

- herbicides(737) estimated (UJ) due to high MS 2R

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APPENDIX C

WELL LISTING AND SAMPLING DATES

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-16	6/20/89	065500	42
			065501	2
			065502	2
			065503	2
			JM3207	6
		8/18/89	066106	72
			066107	2
			066108	2
			066109	2
		9/28/89	066495	72
			066496	2
			066497	2
			066498	2
		11/13/89	066673	381
			066674	2
			066675	2
			066676	2
		2/01/90	66673Z	9
			067216	71
			067217	2
			067218	2
			067219	2
	1-N-17	6/20/89	065504	42
			065505	2
			065506	2
			065507	2
		8/18/89	066110	72
			066111	2
			066112	2
			066113	2
		9/26/89	066462	72
			066463	2
			066464	2
			066465	2
		11/10/89	066669	378
			066670	2
			066671	2
			066672	1
		2/01/90	66669Z	9
			067220	71
			067221	2
			067222	2
			067223	2
	1-N-18	6/20/89	065508	42
			065509	2
			065510	2
			065511	2
			JM3208	8
	1-N-21	7/17/89	065668	72
			065669	2
			065670	2

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-21	7/17/89	065671	2
		8/21/89	066125	72
			066126	2
			066127	2
			066128	2
		9/28/89	066499	72
			066500	2
			066501	2
			066502	2
		11/13/89	066677	378
			066673	2
			066679	2
			066680	2
			666772	9
		2/01/90	067224	71
			067225	2
			067226	2
			067227	2
	1-N-23	8/22/89	066137	42
			066138	2
			066139	2
			066140	2
		9/20/89	066410	42
			066411	2
			066412	2
			066413	2
		10/19/89	JM3258	8
		12/11/89	066808	349
			66808Z	9
	1-N-24	8/21/89	066129	42
			066130	2
			066131	2
			066132	2
		9/20/89	066402	42
			066403	2
			066404	2
			066405	2
		10/09/89	JM3219	8
		12/06/89	066805	349
			66805Z	9
		2/12/90	067352	41
			067353	2
			067354	2
			067355	2
	1-N-25	8/21/89	066121	42
			066122	2
			066123	2
			066124	2
		9/20/89	066406	42
			066407	2
			066408	2

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-25	9/20/89	066409	2
		10/09/89	JM3220	8
		12/06/89	066806	349
			66806Z	9
	1-N-26	8/22/89	066141	42
			066142	2
			066143	2
			066144	2
	9/18/89		066361	42
			066362	2
			066363	2
			066364	2
	12/12/89		066810	349
			66810Z	9
			067356	41
			067357	2
	2/12/90		067358	2
			067359	2
	1-N-47	8/21/89	066133	42
			066134	2
			066135	2
			066136	2
		9/18/89	066365	42
			066366	2
			066367	2
			066368	2
		12/11/89	066809	349
			66809Z	9
		2/08/90	067332	71
			067333	2
			067334	2
			067335	2
	1-N-54	6/21/89	065524	72
			065525	2
			065526	2
			065527	2
		8/15/89	066063	72
			066064	2
			066065	2
			066066	2
		10/02/89	066530	72
			066531	2
			066532	2
			066533	2
	11/01/89		066630	378
			66630Z	9
			067232	71
			067233	2
			067234	2
			067235	2

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-55	6/21/89	065528	72
			065529	72
			065530	2
			065531	2
		8/15/89	066067	72
			066068	2
			066069	2
			066070	2
		10/02/89	066534	72
			066535	2
			066536	2
			066537	2
		11/01/89	066631	378
			66631Z	9
		2/01/90	067236	71
			067237	2
			067238	2
			067239	2
	1-N-56	6/21/89	065532	72
			065533	2
			065534	2
			065535	2
		8/15/89	066059	72
			066060	2
			066061	2
			066062	2
		10/02/89	066550	72
			066551	2
			066552	2
			066553	2
		11/01/89	066632	379
			66632Z	9
		2/01/90	067240	71
			067241	2
			067242	2
			067243	2
	1-N-57	6/20/89	065495	72
			065496	2
			065497	2
			065498	2
		8/16/89	066083	72
			066084	2
			066085	2
			066086	2
		10/02/89	066538	72
			066539	2
			066540	2
			066541	2
		11/02/89	066633	378
			66633Z	9
	1-N-58	3/02/89	064926	374

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-58	3/02/89	064927	4
			064928	4
			064929	4
			64926N	9
		7/25/89	065748	374
			065749	4
			065750	4
			065751	4
			65748N	9
		8/14/89	066014	72
			066015	2
			066016	2
			066017	2
		9/18/89	066373	84
			066374	4
			066375	4
			066376	4
			66373N	9
		11/15/89	066688	105
			066689	3
			066690	3
			066691	3
			66688N	9
		2/05/90	067290	105
			067291	4
			067292	4
			067293	4
			67290N	9
	1-N-59	3/01/89	064916	374
			064917	372
			064918	4
			064919	4
			64916N	9
		7/17/89	64917N	4
			065676	374
			065677	4
			065678	4
			065679	4
		8/14/89	65676N	9
			066018	72
			066019	2
			066020	2
			066021	2
		9/18/89	066353	84
			066354	4
			066355	4
			066356	4
			66353N	9
		11/16/89	066706	105
			066707	3
			066708	3
			066709	3
			66706N	9

Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-59	2/02/90	067244	106
			067245	82
			067246	4
			067247	4
			67244N	9
			67245N	9
	1-N-60	3/02/89	064930	374
			064931	4
			064932	4
			064933	4
			64930N	9
		8/01/89	065853	374
			065854	374
			065855	4
			065856	4
			65853N	9
		8/14/89	65854N	9
			066022	72
			066023	2
			066024	2
			066025	2
		9/18/89	066357	84
			066358	4
			066359	4
			066360	4
			66357N	9
		11/16/89	066710	105
			066711	89
			066712	3
			066713	3
			66710N	9
		2/05/90	067286	106
			067287	4
			067288	4
			067289	4
			67286N	9
	1-N-61	3/02/89	064934	374
			064935	4
			064936	4
			064937	4
			64934N	9
		7/28/89	065795	374
			065796	4
			065797	4
			065798	4
			65795N	9
		8/14/89	066028	72
			066029	2
			066030	2
			066031	2
		9/19/89	066381	84
			066382	82

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Site	Well	Sample Date	UST Number	Number of Analyses
1324-N/NA	1-N-61	9/19/89	066383	4
			066384	4
			66381N	9
			66382N	9
		11/16/89	066714	105
			066715	3
			066716	3
			066717	3
			66714N	9
		2/07/90	067320	106
			067321	4
			067322	4
			067323	4
			67320N	9
	6-78-62	1/19/89	064697	37
		1/26/89	JM2828	1
		4/16/90	067772	379
			67772Z	8
	6-81-58	1/16/89	064674	37
		3/03/89	064951	374
			064952	4
			064953	4
			064954	4
			64951N	9
		4/11/89	JM3043	1
		9/18/89	066369	84
			066370	4
			066371	4
			066372	4
			66369N	9
		11/28/89	066754	379
			066755	2
			066756	2
			066757	2
			66754Z	9
		1/08/90	JM3398	1
		2/07/90	067315	106
			067316	4
			067317	4
			067318	4
			67315N	9
1325-N	1-N-27	3/06/89	064955	375
			064956	4
			064957	4
			064958	4
			64955C	9
		6/27/89	065584	106
			065585	4
			065586	4
			065587	4

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Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-27	6/27/89	65584C	9
		12/12/89	066811	380
			066812	4
			066813	4
			066814	4
			66811Z	9
		2/08/90	067338	106
			067339	4
			067340	4
			067341	4
			67338C	9
	1-N-29	1/06/89	064598	2
		3/06/89	064959	375
			064960	4
			064961	4
			064962	4
			64959C	9
		5/05/89	065148	1
			065149	1
			065150	1
			065151	1
		6/27/89	065588	106
			065589	4
			065590	4
			065591	4
			65588C	9
			JM3211	5
		11/29/89	066770	380
			066771	4
			066772	4
			066773	4
			66770Z	9
		1/03/90	066918	106
			066919	4
			066920	4
			066921	4
			66918C	9
		2/07/90	067311	106
			067312	4
			067313	4
			067314	4
			67311C	9
	1-N-31	1/05/89	064578	2
		3/06/89	064963	375
			064964	4
			064965	4
			064966	4
			64963C	9
		8/01/89	065849	106
			065850	4
			065851	4
			065852	4

Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-31	8/01/89	65849C	9
			066507	106
		9/28/89	066508	105
			066509	4
			066510	4
			66507C	9
			66508C	9
		12/01/89	066786	380
			066787	2
			066788	2
			066789	2
			66786Z	9
		2/06/90	067294	106
			067295	4
			067296	4
			067297	4
			67294C	10
	1-N-32	1/05/89	064579	2
			064967	375
		3/06/89	064968	4
			064969	4
			064970	4
			64967C	10
		6/07/89	JM3177	2
			065672	106
		7/17/89	065673	4
			065674	4
			065675	3
			65672C	9
			066398	106
		9/20/89	066399	4
			066400	4
			066401	4
			66398C	9
			066780	380
		11/30/89	066781	2
			066782	2
			066783	2
			66780Z	9
			067298	106
		2/06/90	067299	4
			067300	4
			067301	4
			67298C	9
	1-N-33	1/05/89	064580	2
			064971	377
		3/06/89	064972	4
			064973	4
			064974	4
			10	1
			11	1
			12	1

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Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-33	3/06/89	13	1
			64971C	9
		5/05/89	065147	74
		6/07/89	JM3178	3
		7/14/89	065662	113
			065663	113
			065664	4
			065665	4
			65662C	9
			65663C	9
		7/21/89	065715	7
			065716	7
		12/21/89	066878	380
			066879	361
			066880	4
			066881	4
			66878Z	9
			66879Z	5
		2/05/90	067276	106
			067277	81
			067278	4
			067279	4
			67276C	9
			67277C	9
	1-N-36	1/05/89	064581	2
		3/07/89	064975	375
			064976	375
			064977	4
			064978	4
			64975C	9
			64976C	4
		6/07/89	JM3179	2
		6/27/89	065576	106
			065577	4
			065578	4
			065579	4
			65576C	9
		9/19/89	066385	106
			066386	4
			066387	4
			066388	4
			66385C	9
		12/01/89	066790	380
			066791	4
			066792	4
			066793	4
			66790Z	9
	1-N-39	11/13/89	JM3339	1
		12/21/89	066886	106
			066887	90
			066888	4
			066889	4

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Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-39	12/21/89	66886C	9
			66887C	3
	1-N-41	1/05/89	064582	2
		3/08/89	064992	375
			064993	4
			064994	4
			064995	4
			64992C	9
		5/08/89	065156	1
			065157	1
			065158	1
			065159	1
		6/27/89	065580	106
			065581	4
			065582	4
			065583	4
			65580C	9
		9/19/89	066377	106
			066378	4
			066379	4
			066380	4
			66377C	9
		11/29/89	066774	380
			066775	2
			066776	2
			066777	2
			66774Z	11
		2/05/90	067272	106
			067273	4
			067274	4
			067275	4
			67272C	9
	1-N-42	3/07/89	064979	376
			064980	4
			064981	4
			064982	4
			64979C	9
		7/19/89	065702	106
			065703	4
			065704	4
			065705	4
			65702C	9
		9/20/89	066394	106
			066395	4
			066396	4
			066397	4
			66394C	9
		11/29/89	066766	380
			066767	2
			066768	2
			066769	2
			66766Z	11

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Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-42	2/07/90	067324	106
			067325	4
			067326	4
			067327	4
			67324C	9
	1-N-52	3/08/89	064988	375
			064989	4
			064990	4
			064991	4
			64988C	9
		5/08/89	065152	1
			065153	1
			065154	1
			065155	1
		6/29/89	065592	106
			065593	4
			065594	4
			065595	4
			65592C	9
		9/20/89	JM3212	2
			066414	106
			066415	4
			066416	4
			066417	4
		12/01/89	66414C	9
			066794	380
			066795	4
			066796	4
			066797	4
		2/05/90	66794Z	9
			067268	106
			067269	4
			067270	4
			067271	4
			67268C	9
	1-N-70	1/05/89	064583	2
		3/08/89	064996	375
			064997	4
			064998	4
			064999	4
			64996C	9
		5/08/89	065160	1
			065161	1
			065162	1
			065163	1
		7/18/89	065694	106
			065695	4
			065696	4
			065697	4
			65694C	9
		9/29/89	JM3213	1
			066525	106

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Site	Well	Sample Date	UST Number	Number of Analyses
1325-N	1-N-70	9/29/89	066526	4
			066527	4
			066528	4
			66525C	9
		11/29/89	066778	379
			66778Z	12
		2/07/90	067328	106
			067329	4
			067330	4
			067331	4
			67328C	9
	6-78-62	1/19/89	064697	37
		1/26/89	JM2828	1
		4/16/90	067772	379
			67772Z	8
	6-81-58	1/16/89	064674	37
		3/03/89	064951	374
			064952	4
			064953	4
			064954	4
			64951N	9
		4/11/89	JM3043	1
		9/18/89	066369	84
			066370	4
			066371	4
			066372	4
			66369N	9
		11/28/89	066754	379
			066755	2
			066756	2
			066757	2
			66754Z	9
		1/08/90	JM3398	1
		2/07/90	067315	106
			067316	4
			067317	4
			067318	4
			67315N	9
216-A-8	2-E25-6	1/10/89	J54160	7
		1/30/89	0J5461	1
		2/08/89	J55050	3
		3/02/89	J55650	3
		10/05/89	0J5719	1
			J57190	7
		1/10/90	066952	347
			66952Z	14
		3/21/90	067659	30
			67659K	4
	2-E25-9	1/05/89	J54010	2

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-8	2-E25-9	1/10/89	J54170	8
		1/30/89	0J5462	1
		2/08/89	J55060	2
		3/02/89	J55660	2
		10/05/89	0J5720	1
			J57200	8
		1/10/90	066953	347
			66953Z	14
		3/21/90	067656	30
			67656K	4
216-A-29	2-E18-1	2/15/89	064792	83
			064793	4
			064794	4
			064795	4
			064796	24
			64792M	3
			64796P	1
		5/26/89	065300	85
			065301	4
			065302	4
			065303	4
			065308	21
			65300M	3
		8/08/89	065956	85
			065957	4
			065958	4
			065959	4
			065960	23
			65956M	4
		10/31/89	066624	377
			66624Z	12
		11/29/89	066762	5
			066763	4
			066764	4
			066765	4
	2-E25-26	2/28/89	064907	81
			064908	2
			064909	2
			064910	2
			064911	26
			64907B	3
		7/12/89	065621	113
			065622	81
			065623	2
			065624	2
			065625	2
			65622B	3
		8/11/89	065996	138
			065997	2
			065998	2
			065999	2

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-29	2-E25-26	8/11/89	65996T	5
			066162	81
		8/29/89	066163	2
			066164	2
			066165	2
			066177	26
			66162B	3
			11/01/89 066629	377
		1/29/90	66629Z	12
			067201	4
			067202	4
			067203	4
		3/25/90	067204	4
			067685	1
			67685D	9
	2-E25-28	2/24/89	064834	81
			064835	2
			064836	2
			064837	2
			064856	26
			64834B	3
		7/20/89	065706	81
			065707	2
			065708	2
			065709	2
		7/24/89	65706B	3
			065735	112
		8/29/89	066170	81
			066171	67
			066172	2
			066173	2
			066174	27
			066175	24
			66170B	3
		10/27/89	066619	377
			66619Z	12
		1/29/90	067189	4
			067190	4
			067191	4
			067192	4
		3/25/90	067694	1
			67694D	9
	2-E25-32P	1/04/89	064565	80
			064566	2
			064567	2
			064568	2
			64565B	4
		2/24/89	064838	81
			064839	2
			064840	2
			064841	2
			064857	26

Site	Well	Sample Date	UST Number	Number of Analyses
216-A-29	2-E25-32P	2/24/89	648388	3
		7/13/89	065631	81
			065632	81
			065633	58
			065634	58
			065635	112
			656318	3
			656328	3
		8/29/89	066166	82
			066167	2
			066168	2
			066169	2
			066176	26
			661668	3
		8/30/89	066218	56
			066219	56
			066220	56
		10/31/89	066627	377
			666272	12
		12/12/89	066816	85
			066817	58
			066818	58
			066819	58
			668168	3
		1/29/90	067197	4
			067198	4
			067199	4
			067200	4
		2/20/90	067376	1
			067377	1
			067378	1
			067379	1
		3/25/90	067690	1
			067691	1
			067692	1
			067693	1
		3/26/90	676970	5
		4/04/90	067727	298
			067728	58
			067729	58
			067730	58
			677278	3
	2-E25-34	2/27/89	064858	107
			064859	83
			064860	2
			064861	2
			64858A	4
			64859A	4
		7/17/89	065680	107
			065681	2
			065682	2
			065683	2
			65680A	4

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-29	2-E25-34	8/30/89	066198	107
			066199	2
			066200	2
			066201	2
			66198A	4
		10/31/89	066626	377
			66626Z	12
		1/29/90	067181	4
			067182	4
			067183	4
			067184	4
	2-E25-35	2/27/89	064864	107
			064865	2
			064866	2
			064867	2
			64864A	4
		7/17/89	065684	107
			065685	105
			065686	2
			065687	2
			65684A	4
			65685A	4
		8/30/89	066202	107
			066203	2
			066204	2
			066205	2
			66202A	4
		10/30/89	066622	377
			66622Z	12
		1/29/90	067185	4
			067186	4
			067187	4
			067188	4
216-A-30	2-E16-2	1/10/89	0J5418	1
			J54180	7
		2/10/89	0J5516	1
			J55160	6
		3/02/89	0J5567	1
			J55670	6
		10/19/89	J57420	7
		12/14/89	066838	347
			66838Z	12
		3/22/90	067666	30
			67666K	4
	2-E25-11	1/09/89	0J5410	1
			J54100	7
		2/10/89	0J5515	1
			J55150	6
		3/06/89	0J5575	1
			J55750	6

Site	Well	Sample Date	UST Number	Number of Analyses
216-A-30	2-E25-11	8/23/89	0J5670	1
			J56700	7
		10/03/89	0J5712	1
			J57120	7
		12/14/89	066839	347
			66839Z	12
		3/19/90	067647	30
			67647K	4
216-A-36B	2-E17-14	5/15/89	065201	377
			065202	2
			065203	2
			065204	2
			65201S	10
		6/26/89	065570	86
			065571	86
			065572	2
			065573	2
			65570S	7
		9/27/89	65571S	7
			066478	86
			066479	2
			066480	2
			066481	2
		1/23/90	66478S	7
			067099	106
			067100	2
			067101	2
			067102	2
			67099S	7
	2-E17-15	5/17/89	065241	377
			065242	377
			065243	2
			065244	2
			65241S	3
		7/27/89	65242S	3
			065791	86
			065792	2
			065793	2
			065794	2
			65791S	7
		9/21/89	066422	86
			066423	2
			066424	2
			066425	2
			66422S	7
		2/06/90	067302	106
			067303	2
			067304	2
			067305	2
			67302S	7

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-36B	2-E17-16	5/15/89	065205	377
			065206	2
			065207	2
			065208	2
		6/26/89	65205S	10
			065566	86
			065567	2
			065568	2
			065569	2
			65566S	7
		9/25/89	066442	86
			066443	2
			066444	2
			066445	2
		2/06/90	66442S	7
			067306	106
			067307	2
			067308	2
			067309	2
			67306S	7
	2-E17-17	5/12/89	065196	377
			065197	2
			065198	2
			065199	2
		6/23/89	65196S	10
			065554	86
			065555	2
			065556	2
			065557	2
			65554S	7
		9/21/89	066418	86
			066419	2
			066420	2
			066421	2
		1/22/90	66418S	7
			067085	105
			067086	79
			067087	2
			067088	2
			67085S	7
			67086S	2
	2-E17-18	5/19/89	065261	377
			065262	2
			065263	2
			065264	2
			65261S	10
		6/23/89	065558	86
			065559	2
			065560	2
			065561	2
		9/27/89	65558S	7
			066482	86

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-36B	2-E17-18	9/27/89	066483	82
			066484	2
			066485	2
			66482S	7
			66483S	7
		1/23/90	067103	106
			067104	2
			067105	2
			067106	2
			67103S	7
	2-E17-5	1/09/89	0J5413	1
			J54130	8
		2/10/89	0J5518	1
			J55180	7
		3/06/89	0J5579	1
			J55790	7
		3/22/89	J56320	1
		5/16/89	065225	377
			065226	2
			065227	2
			065228	2
			65225S	10
			JM3140	1
		6/22/89	065540	86
			065541	2
			065542	2
			065543	2
			65540S	7
		9/21/89	066426	86
			066427	2
			066428	2
			066429	2
			66426S	7
		10/03/89	0J5714	1
			J57140	8
			JM3215	2
		1/05/90	066930	378
			66930Z	12
		1/19/90	067076	106
			067077	2
			067078	2
			067079	2
			67076S	7
	2-E17-9	1/06/89	0J5408	1
			J54080	7
		1/09/89	0J5414	1
			J54140	8
		2/10/89	0J5519	1
			J55190	7
		3/07/89	0J5584	1
			J55840	7
		5/16/89	065221	377

Site	Well	Sample Date	UST Number	Number of Analyses
216-A-36B	2-E17-9	5/16/89	065222	2
			065223	2
			065224	2
		6/22/89	65221S	10
			065544	86
			065545	2
			065546	2
			065547	2
			65544S	7
			066503	86
		9/28/89	066504	2
			066505	2
			066506	2
			66503S	7
			0J5715	1
		10/03/89	J57150	8
		1/05/90	066931	378
			66931Z	12
		1/22/90	067081	106
			067082	2
			067083	2
			067084	2
			67081S	7
216-A-37-1	2-E25-17	1/10/89	0J5420	1
			J54200	7
		2/10/89	0J5517	1
			J55170	3
		3/02/89	0J5568	1
			J55680	3
		10/06/89	0J5725	1
			J57250	7
		1/04/90	066929	346
			66929Z	14
		3/19/90	067648	30
			67648K	7
	2-E25-18	2/01/89	0J5483	1
			J54830	7
		2/28/89	064883	81
			064884	2
			064885	2
			064886	2
			64883B	3
		6/23/89	065550	81
			065551	2
			065552	2
			065553	2
			65550B	3
		8/30/89	066206	81
			066207	2
			066208	2
			066209	2

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-37-1	2-E25-18	8/30/89	66206B	3
		1/09/90	066937	378
			66937Z	14
		3/19/90	067646	56
			67646K	7
	2-E25-19	2/01/89	0J5484	1
			J54840	7
		1/02/90	066906	378
			66906Z	14
		3/16/90	067638	56
			67638K	7
	2-E25-20	2/01/89	0J5485	1
			J54850	7
		2/28/89	064887	81
			064888	2
			064889	2
			064890	2
			64887B	3
		6/21/89	065512	81
			065513	2
			065514	2
			065515	2
			65512B	3
		8/31/89	066230	81
			066231	2
			066232	2
			066233	2
			66230B	3
		1/03/90	066922	378
			066923	355
			66922Z	14
			66923Z	9
		3/16/90	067637	56
			67637K	7
216-A-37-2	2-E25-21	2/01/89	0J5486	1
			J54860	7
		3/21/90	067660	56
			67660K	4
		4/16/90	067773	379
			67773Z	12
	2-E25-22	2/01/89	0J5487	1
			J54870	7
		2/28/89	064891	81
			064892	2
			064893	2
			064894	2
			64891B	3
		8/18/89	066102	81
			066103	2

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-37-2	2-E25-22	8/18/89	066104	2
			066105	2
			66102B	3
		8/30/89	066190	81
			066191	2
			066192	2
			066193	2
			66190B	3
		12/14/89	066840	378
			66840Z	12
		3/21/90	067657	56
			67657K	4
	2-E25-23	2/01/89	0J5488	1
			J54880	7
		1/29/90	067193	378
			67193Z	11
		3/21/90	067661	56
			67661K	4
	2-E25-24	2/01/89	0J5489	1
			J54890	7
		2/28/89	064899	81
			064900	2
			064901	2
			064902	2
			64899B	3
		6/21/89	065516	81
			065517	2
			065518	2
			065519	2
			65516B	3
		8/30/89	066210	81
			066211	2
			066212	2
			066213	2
			66210B	3
		12/20/89	066865	378
			66865Z	12
		3/21/90	067658	56
			67658K	4
216-A-45	2-E17-12	1/09/89	0J5411	1
			J54110	13
		1/26/89	J54470	1
		2/09/89	0J5511	1
			J55110	13
		3/06/89	0J5577	1
			J55770	13
		3/16/90	067628	56
			67628K	7
		4/17/90	067780	379
			67780Z	12

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Site	Well	Sample Date	UST Number	Number of Analyses
216-A-45	2-E17-13	1/C., '89	0J5412	1
			J54120	13
		1/26/89	J54480	1
		2/09/89	0J5512	1
			J55120	13
		3/06/89	0J5578	1
			J55780	13
		10/03/89	0J5713	1
			J57130	14
		11/30/89	066784	378
			066785	31
			66784Z	13
		3/19/90	067645	56
			67645K	7
216-B-3	2-E32-4	3/01/89	064922	107
			064923	2
			064924	2
			064925	2
			64922P	5
		3/13/89	065032	105
			065033	4
			065034	4
			065035	4
			65032L	10
		5/26/89	65308P	1
		6/16/89	065471	87
			065472	2
			065473	2
			065474	2
			65471P	4
		7/19/89	065698	105
			065699	4
			065700	4
			065701	4
			65698L	10
		8/10/89	065983	1
		9/08/89	066307	107
			066308	4
			066309	4
			066310	4
			66307L	10
		1/17/90	067024	107
			067025	4
			067026	4
			067027	4
			67024L	10
		1/26/90	067180	1
		4/29/90	67980X	2
		5/09/90	068101	39
			068102	4
			068103	4

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Site	Well	Sample Date	UST Number	Number of Analyses
216-B-3	2-E32-4	5/09/90	068104	4
	6-40-39	12/05/89	066803	377
			66802Z	12
		1/25/90	067151	107
			067152	2
			067153	2
			067154	2
			67151P	4
		4/25/90	067923	100
			067924	2
			067925	2
			067926	2
			67923P	4
	6-41-40	12/05/89	066801	377
			66801Z	12
		1/25/90	067147	107
			067148	2
			067149	2
			067150	2
			67147P	4
		1/26/90	67161P	4
			67162P	4
		4/19/90	067804	107
			067805	2
			067806	2
			067807	2
			67804P	4
	6-42-40A	2/06/89	0J5496	1
			J54960	13
		2/15/89	064784	107
			064785	2
			064786	2
			064787	2
			64784P	5
		4/07/89	0J5638	1
			J56380	13
		5/31/89	065315	161
			065316	2
			065317	2
			065318	2
			65315P	4
		8/10/89	065979	107
			065980	2
			065981	2
			065982	2
			65979P	4
		1/26/90	067175	375
			067176	2
			067177	2
			067178	2
			67175P	4

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Site	Well	Sample Date	UST Number	Number of Analyses
216-B-3	6-42-40B	1/05/89	J54060	5
		1/13/89	J54400	6
		2/06/89	0J5497	1
		2/08/89	J55080	5
		3/02/89	J55700	5
		4/26/89	0J5652	1
		8/28/89	0J5687	1
			J56870	6
		10/06/89	0J5733	1
			J57330	6
		12/11/89	066807	348
			66807Z	10
	6-42-42B	2/24/89	064846	107
			064847	2
			064848	2
			064849	2
			64846P	5
		6/16/89	065465	161
			065466	158
			065467	2
			065468	2
			65465P	4
			65466P	4
		8/09/89	065975	107
			065976	2
			065977	2
			065978	2
			65975P	4
		1/26/90	067171	316
			067172	2
			067173	2
			067174	2
			67171P	3
	6-43-41E	12/05/89	066800	378
			66800Z	12
		1/25/90	067129	107
			067130	2
			067131	2
			067132	2
			67129P	4
		3/19/90	067639	1
			067640	1
			067641	1
			067642	1
	6-43-41F	12/05/89	066802	377
			66803Z	12
		1/25/90	067133	107
			067134	2
			067135	2
			067136	2

Site	Well	Sample Date	UST Number	Number of Analyses
216-B-3	6-43-45	1/26/90	067157	107
			067158	2
			067159	2
			067160	2
			67157P	4
		4/18/90	067792	107
			067793	2
			067794	2
			067795	2
			67792P	4
		2/17/89	064815	107
			064816	2
			064817	2
			064818	2
			64815P	4
		6/15/89	065443	161
			065444	2
			065445	2
			065446	2
			65443P	4
		8/08/89	065961	107
			065962	2
			065963	2
			065964	2
			65961P	4
		1/31/90	067208	107
			067209	2
			067210	2
			067211	2
			67208P	4
		4/26/90	67955X	2
	6-44-43B	12/20/89	066866	377
			066867	356
			66866Z	13
			66867Z	13
		1/26/90	067161	107
			067162	80
			067163	2
			067164	2
		4/18/90	067788	107
			067789	2
			067790	2
			067791	2
		4/26/90	67788P	4
			67956X	2
216-B-55	2-E28-12	1/10/89	J54190	5
		2/07/89	J55000	5
		3/06/89	J55760	5
		8/23/89	J56710	5
		10/05/89	J57180	5

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Site	Well	Sample Date	UST Number	Number of Analyses
216-B-55	2-E28-12	1/09/90	066938	347
			66938Z	14
		3/22/90	067667	30
			67667K	4
	2-E28-13	1/27/89	J54570	5
			066966	378
		1/11/90	66966Z	14
			067668	56
		3/23/90	67668K	4
216-B-62	2-E28-18	2/07/89	0J5502	1
			J55020	7
		3/07/89	0J5586	1
			J55860	7
		3/17/89	J56190	3
			066967	378
		1/11/90	66967Z	14
			067670	56
		3/23/90	67670K	4
	2-E28-21	1/10/89	0J5421	1
			J54210	8
		2/07/89	0J5503	1
			J55030	7
		3/06/89	0J5580	1
			J55800	7
		3/17/89	J56200	3
			066968	378
		1/11/90	66968Z	14
			067671	56
		3/23/90	67671K	4
216-B-63	2-E34-1	2/07/89	J54990	6
			066798	348
		12/04/89	66798Z	10
	2-E34-2	3/15/89	065066	105
			065067	4
			065068	4
			065069	4
			65066L	10
		8/01/89	065829	105
			065830	4
			065831	4
			065832	4
			65829L	10
		9/06/89	066251	107
			066252	4
			066253	4
			066254	4
			66251L	10

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Site	Well	Sample Date	UST Number	Number of Analyses
216-B-63	2-E34-2	11/27/89	066742	379
			66742Z	10
		3/07/90	067544	107
			067545	4
			067546	4
			067547	4
			67544L	10
		3/25/90	67684D	2
216-S-26	2-W27-1	2/01/89	0J5490	1
			J54900	13
		1/11/90	066958	378
			66958Z	12
		4/12/90	067764	56
			067765	33
			67764K	4
			67765K	4
216-U-14	2-W19-1	1/02/90	066908	347
			66908Z	10
	2-W19-21	1/04/89	0J5394	1
			J53940	13
		11/02/89	066634	378
			66634Z	12
		4/04/90	067739	56
			67739K	5
	2-W19-27	2/01/89	0J5491	1
			J54910	13
		11/02/89	066635	378
			66635Z	12
		4/06/90	067758	56
			67758K	5
216-U-17	2-W19-19	1/12/89	0J5430	1
			J54300	6
		1/31/89	J54740	6
			0J5549	1
		2/22/89	J55490	5
			0J5592	1
		3/08/89	J55920	5
			0J5727	1
		10/06/89	J57270	12
			066623	378
	2-W19-20	4/04/90	66623Z	12
			067736	56
			67736K	4
			0J5426	1
		1/11/89	J54260	6

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Site	Well	Sample Date	UST Number	Number of Analyses
216-U-17	2-W19-20	1/31/89	J54730	3
		2/13/89	J55270	3
		2/17/89	OJ5536	1
			J55360	5
		3/08/89	OJ5591	1
			J55910	5
		10/05/89	OJ5721	1
			J57210	12
		10/30/89	066621	378
			66621Z	11
		3/20/90	067652	56
			67652K	3
	2-W19-23	1/11/89	OJ5427	1
			J54270	8
		1/31/89	J54750	6
		2/17/89	OJ5537	1
			J55370	8
		3/08/89	OJ5593	1
			J55930	8
		10/05/89	OJ5722	1
			J57220	14
		10/27/89	066618	378
			66618Z	12
		3/20/90	067653	56
			67653K	3
	2-W19-24	1/12/89	OJ5431	1
			J54310	8
		1/31/89	J54760	6
		2/17/89	OJ5538	1
			J55380	8
		3/08/89	OJ5594	1
			J55940	8
		7/31/89	65813L	1
		10/06/89	OJ5728	1
			J57280	14
		10/30/89	066620	378
			66620Z	11
		3/20/90	067654	56
			67654K	3
	2-W19-25	1/12/89	OJ5432	1
			J54320	8
		1/31/89	J54770	6
		2/17/89	OJ5539	1
			J55390	8
		3/08/89	OJ5595	1
			J55950	8
		10/05/89	OJ5723	1
			J57230	14
		1/24/90	067124	378
			67124Z	14
		3/20/90	067655	56

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Site	Well	Sample Date	UST Number	Number of Analyses
216-U-17	2-W19-25	3/20/90	67655K	4
	2-W19-26	10/05/89	0J5724	1
			J57240	14
		10/27/89	066617	378
			66617Z	12
216-W-LWC	2-W14-10	1/30/90	067207	348
			67207Z	16
		4/12/90	067768	30
			67768K	4
216-Z-20	2-W18-17	1/04/89	J53990	2
		1/10/89	J54220	6
		2/22/89	J55530	2
		3/07/89	0J5589	1
			J55880	2
		6/06/89	065384	13
		8/23/89	0J5672	1
			J56720	6
		10/06/89	0J5732	1
			J57320	6
		1/02/90	066907	347
			66907Z	15
		4/20/90	067820	56
			67820K	3
			67821Z	2
			67822Z	2
			67823Z	2
			67824Z	2
			67825Z	2
	2-W18-20	1/04/89	J54000	2
		1/10/89	J54230	6
		2/22/89	J55540	2
		3/07/89	J55900	2
		3/15/89	0J5615	1
		10/10/89	0J5738	1
			J57380	6
		1/08/90	066936	347
			66936Z	15
		4/02/90	067717	30
			067718	7
			67717K	4
			67718K	4
2101-M	2-E18-1	2/15/89	064792	83
			064793	4
			064794	4
			064795	4
			064796	24

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Site	Well	Sample Date	UST Number	Number of Analyses
2101-M	2-E18-1	2/15/89	64792M	3
			64796P	1
		5/26/89	065300	85
			065301	4
			065302	4
			065303	4
			065308	21
			65300M	3
		8/08/89	065956	85
			065957	4
			065958	4
			065959	4
			065960	23
			65956M	4
		10/31/89	066624	377
			66624Z	12
		11/29/89	066762	5
			066763	4
			066764	4
			066765	4
	2-E18-2	2/16/89	064797	83
			064798	64
			064799	4
			064800	4
			64797M	3
			64798M	3
		5/01/89	065331	85
			065332	4
			065333	4
			065334	4
			65331M	3
		8/11/89	065988	85
			065989	4
			065990	4
			065991	4
			65988M	4
		11/27/89	066743	369
			066744	2
			066745	2
			066746	2
			66743M	3
		3/13/90	067598	74
	2-E18-3	2/16/89	064803	83
			064804	4
			064805	4
			064806	4
			64803M	3
		6/01/89	065335	85
			065336	82
			065337	4
			065338	4
			65335M	3

Site	Well	Sample Date	UST Number	Number of Analyses
2101-M	2-E18-3	6/01/89	65336M	3
			065946	85
		8/08/89	065947	4
			065948	4
			065949	4
			65946M	4
			066747	379
			066748	377
			066749	4
			066750	4
			66747M	3
			66748M	3
		3/13/90	067597	67
	2-E18-4	2/15/89	064788	83
			064789	4
		5/26/89	064790	4
			064791	4
			64788M	3
			065304	85
			065305	4
			065306	4
		8/08/89	065307	4
			65304M	3
			065950	85
			065951	71
			065952	4
			065953	4
		11/21/89	65950M	4
			65951M	3
			066738	379
			066739	4
			066740	4
			066741	4
			66738M	3
300 Area PT	3-1-1	3/16/89	JM2884	1
	3-1-10	6/07/89	065393	377
			065394	2
			065395	2
			065396	2
			65393V	4
		12/18/89	066845	102
			66845V	4
	3-1-11	1/05/89	064585	27
			64585V	1
		1/19/89	064698	27
			64698V	1
		2/01/89	064718	7
			64718V	1
		2/17/89	064811	27

Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-1-11	2/17/89	64811V	1
		3/01/89	064912	27
			64912V	1
		3/16/89	065070	27
			65070V	1
		6/14/89	065435	377
			065436	2
			065437	2
			065438	2
			65435V	4
		8/03/89	065888	27
			65888V	1
		8/17/89	066091	27
			66091V	1
		8/28/89	066159	27
			66159V	1
		9/13/89	066343	27
			66343V	1
		9/27/89	066490	27
			66490V	1
		12/19/89	066854	102
			66854V	4
	3-1-12	6/02/89	065345	376
			065346	2
			065347	2
			065348	2
			65345V	4
		6/12/89	JM3193	1
		12/18/89	066841	102
			66841V	4
	3-1-13	6/06/89	065379	376
			065380	2
			065381	2
			065382	2
			65379V	4
		12/18/89	066842	102
			66842V	4
	3-1-14	6/06/89	065374	377
			065375	2
			065376	2
			065377	2
			65374V	4
		12/18/89	066843	102
			66843V	4
	3-1-15	6/09/89	065409	377
			065410	356
			065411	2
			065412	2
			65409V	4
			65410V	4

Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-1-15	12/18/89	066846	102
			66846V	4
	3-1-16A	1/13/89	064662	63
			64662V	1
		1/27/89	064707	63
		6/07/89	065385	376
			065386	2
			065387	2
			065388	2
			65385V	4
		12/18/89	066847	02
			66847V	4
	3-1-16B	1/13/89	064663	63
			64663V	1
		1/27/89	064708	63
		6/07/89	065397	376
			065398	2
			065399	2
			065400	2
			65397V	4
		12/18/89	066848	102
			66848V	4
	3-1-16C	1/13/89	064664	63
			64664V	1
		1/27/89	064709	63
		6/07/89	065389	377
			065390	2
			065391	2
			065392	2
			65389V	4
	3-1-17A	1/05/89	064584	27
			64584V	1
		1/19/89	064699	27
			64699V	1
		2/01/89	064719	7
			64719V	1
		2/17/89	064812	27
			64812V	1
		3/01/89	064913	27
			64913V	1
		3/16/89	065071	27
			65071V	1
		5/10/89	065172	27
			65172V	1
			JM3138	7
		6/05/89	065357	376
			065358	2
			065359	2
			065360	2
			65357V	4

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Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-1-17A	8/03/89	065889	27
			65889V	1
		8/17/89	066092	27
			66092V	1
		8/28/89	066160	27
			66160V	1
			JM3214	7
		9/13/89	066344	27
			66344V	1
		9/27/89	066491	27
			66491V	1
		10/04/89	066582	27
			66582V	1
		10/10/89	066593	27
			66593V	1
		10/17/89	066605	27
			66605V	1
		10/24/89	066608	27
			66608V	1
		10/31/89	066625	27
			66625V	1
		11/07/89	066644	27
			66644V	1
		11/14/89	066685	27
			66685V	1
		11/21/89	066737	27
			66737V	1
		11/28/89	066760	27
			66760V	1
		12/05/89	066799	27
			66799V	1
		12/12/89	066815	27
			66815V	1
		12/19/89	066855	102
			66855V	4
			JM3371	7
		12/28/89	066897	27
			66897V	1
		1/02/90	066909	27
			66909V	1
		1/09/90	066947	27
			66947V	1
		1/16/90	067019	27
			67019V	1
		1/23/90	067107	27
			67107V	1
		1/30/90	067206	27
			67206V	1
		2/06/90	067310	27
		2/07/90	67310V	1
		2/13/90	067360	27
			67360V	1
		2/20/90	067386	27
			67386V	1

Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-1-17A	2/27/90	067460	27
			67460V	1
		3/07/90	067548	27
			67548V	1
		3/13/90	067596	27
			67596V	1
		3/22/90	067663	27
			67663V	1
		3/28/90	067702	27
			67702V	1
		4/04/90	067735	27
			67735V	1
		4/12/90	067762	27
			67762V	1
		4/17/90	067785	27
			67785V	1
		4/24/90	067863	27
		5/01/90	068000	27
		5/11/90	068170	27
	3-1-17B	6/05/89	065361	376
			065362	2
			065363	2
			065364	2
			65361V	4
			JM3174	2
		12/19/89	066856	102
	3-1-17C		66856V	4
			JM3372	2
		6/05/89	065365	376
			065366	2
			065367	2
			065368	2
	3-1-18A		65365V	4
			JM3175	1
		1/05/89	064586	27
			64586V	1
		1/19/89	064700	27
			64700V	1
		2/01/89	064720	7
			64720V	1
		2/17/89	064813	27
			64813V	1
		3/01/89	064914	27
			64914V	1
		3/16/89	065072	27
			65072V	1
		5/10/89	065173	27
			65173V	1
		6/08/89	065401	376
			065402	2
			065403	2

Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-1-18A	6/08/89	065404	2
			65401V	5
		8/03/89	065887	27
			65887V	1
		8/17/89	066093	27
			66093V	1
		8/28/89	066161	27
			66161V	1
		3/27/89	066492	27
			66492V	1
		12/18/89	066844	102
			66844V	4
	3-1-18B	6/08/89	065405	376
			065406	2
			065407	2
			065408	2
			65405V	4
	3-1-19	1/05/89	064587	27
			64587V	1
		1/19/89	064701	27
			64701V	1
		2/01/89	064721	7
			64721V	1
		2/17/89	064814	27
			64814V	1
		3/01/89	064915	27
			64915V	1
	3-1-7	3/16/89	065073	27
			65073V	1
		6/02/89	065349	376
			065350	2
			065351	2
			065352	2
			65349V	4
		6/13/89	JM3201	1
		11/21/89	066736	379
			66736Z	10
		12/19/89	066857	102
			066858	76
			66857V	5
	3-1-9		66858V	5
			JM3370	1
	3-1-9	1/25/90	67145E	1
			67146E	1
	3-2-1	3/03/89	JM2858	1
		6/09/89	065419	377
			065420	2
			065421	2
			065422	2

Site	Well	Sample Date	UST Number	Number of Analyses	
300 Area PT	3-2-1	6/09/89	65419V	4	
		12/19/89	066850	102	
			66850V	4	
			JM3366	2	
	3-2-2	6/09/89	065415	377	
			065416	2	
			065417	2	
			065418	2	
			65415V	4	
	3-3-10	6/02/89	065341	376	
			065342	2	
			065343	2	
			065344	2	
			65341V	4	
		6/12/89	JM3192	2	
		12/19/89	066852	102	
			66852V	4	
			JM3368	2	
		8/16/89	066071	377	
	3-3-7		066072	354	
			66071V	4	
			66072V	4	
			12/19/89 066853	102	
	3-3-9	6/12/89	66853V	4	
			JM3369	2	
			065423	377	
			065424	2	
			065425	2	
		12/19/89	065426	2	
			65423V	4	
			066851	102	
			66851V	4	
			JM3367	4	
	3-4-1	7/12/89	065630	377	
			65630V	4	
		12/20/89	066864	102	
			66864V	4	
			JM3374	1	
	3-4-11	6/06/89	065370	376	
			065371	2	
			065372	2	
			065373	2	
			65370V	4	
		12/20/89	066862	102	
			66862V	4	
			JM3376	1	
	3-4-7	6/13/89	065431	378	

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Site	Well	Sample Date	UST Number	Number of Analyses
300 Area PT	3-4-7	6/13/89	065432	2
			065433	2
			065434	2
			65431V	4
		12/20/89	066861	102
			66861V	4
			JM3375	2
	3-8-1	6/05/89	065353	376
			065354	2
			065355	2
			065356	2
			65353V	4
			JM3173	3
		12/20/89	066863	102
			66863V	4
			JM3373	3
		4/12/90	067763	379
			67763Z	8
	3-8-2	6/13/89	065427	377
			065428	2
			065429	2
			065430	2
			65427V	4
	3-8-3	6/14/89	065439	377
			065440	2
			065441	2
			065442	2
			65439V	4
			JM3205	3
	6-S19-E13	4/11/89	JM3046	6
		10/24/89	JM3311	6
		4/13/90	067771	379
			67771Z	8
	6-S30-E15A	1/20/89	JM2825	1
		4/11/89	JM3048	8
		10/23/89	JM3293	8
		2/21/90	067389	35
			67389D	10
400 Area Pond	6-2-7	1/30/89	JM2832	2
		4/13/90	067770	376
			67770Z	8

APPENDIX D
INORGANIC SAMPLE REANALYSIS DATA

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5/29/90

Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-E25-17	1/04/90	066929	Ag*	< 10.00	2.39	.07	.01
			Al*	1180.00	149.00	362.00	36.20
			As*	56.00	10.10	9.23	.92
			Ba*	343.00	35.30	350.00	35.00
			Cd*	211.00	21.70	51.00	5.10
			Co*	30.00	4.15	21.10	2.11
			Cr*	321.00	34.60	28.50	2.85
			Cs*			.81	.08
			Cu*	73.00	9.84	73.00	7.30
			Fe*	592000.00	60000.00		
			Mn*	6240.00			
			Mo*	< 40.00	4.83	7.67	.77
			Ni*	183.00	18.80	32.80	3.28
			Pb*			43.70	4.37
			Rb*			1.59	.16
			Sb*	< 30.00	5.80	.33	.03
			Sr*	292.00	35.70	287.00	28.70
			V*	656.00	73.80	111.00	11.10
			Zn*	42.00	8.02	84.80	8.48
		66929Z	U*	12.49	5.36	11.80	1.18
2-E25-20	1/03/90	066922	Ag	< 10.00	2.39	.02	.00
			Ag*	< 10.00	2.39	.01	.00
			Al	< 150.00	20.10	2.82	.28
			Al*	< 150.00	20.10	3.85	.39
			As	7.00	2.81	3.85	.39
			As*	7.00	2.81	3.41	.34
			Ba	59.00	6.68	63.60	6.36
			Ba*	56.00	6.39	63.60	6.36
			Cd	< 2.00	1.38	.20	.02
			Cd*	< 2.00	1.38	.44	.04
			Co	< 20.00	3.35	.06	.01
			Co*	< 20.00	3.35	.08	.01
			Cr	< 10.00	5.13	1.68	.17
			Cr*	< 10.00	5.13	1.83	.18
			Cs			.01	.00
			Cs*			.17	.02
			Cu	< 10.00	2.89	.40	.04
			Cu*	< 10.00	2.89	2.91	.29
			Fe	< 30.00	9.50	37.00	3.70
			Fe*	84.00	13.00	72.00	7.20
			Mn	< 5.00	1.67	2.15	.22
			Mn*	< 5.00	1.67	3.59	.36
			Mo	< 40.00	4.83	16.20	1.62
			Mo*	< 40.00	4.83	15.50	1.55

*indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL		
				Result	Error	Result	Error	
2-E25-20	1/03/90	066922	Ni	<	10.00	3.15	1.01	.10
			Ni*	<	10.00	3.15	.88	.09
			Pb	<	5.00	2.55	.10	.01
			Pb*				.56	.06
			Rb				1.65	.17
			Rb*				1.62	.16
			Sb	<	30.00	5.80	.29	.03
			Sb*	<	30.00	5.80	.26	.03
			Sr		321.00	39.20	341.00	34.10
			Sr*		301.00	36.80	322.00	32.20
			V		33.00	5.60	39.60	3.96
			V*		32.00	5.50	36.00	3.60
			Zn		6.00	2.69	5.40	.54
			Zn*		11.00	3.39	10.80	1.08
		066923	Ag	<	10.00	2.39		
			Ag*	<	10.00	2.39	.04	.00
			Al	<	150.00	20.10		
			Al*	<	150.00	20.10	6.00	.60
			As		6.00	2.67		
			As*		7.00	2.81	3.45	.35
			Ba		57.00	6.48		
			Ba*		56.00	6.39	61.80	6.18
			Cd	<	2.00	1.38		
			Cd*	<	2.00	1.38	.52	.05
			Co	<	20.00	3.35		
			Co*	<	20.00	3.35	.07	.01
			Cr	<	10.00	5.13		
			Cr*	<	10.00	5.13	1.54	.15
			Cs*				.23	.02
			Cu	<	10.00	2.89		
			Cu*	<	10.00	2.89	2.47	.25
			Fe	<	30.00	9.50		
			Fe*		86.00	13.10	41.50	4.15
			Mn	<	5.00	1.67		
			Mn*	<	5.00	1.67	2.19	.22
			Mo	<	40.00	4.83		
			Mo*	<	40.00	4.83	16.00	1.60
			Ni	<	10.00	3.15		
			Ni*	<	10.00	3.15	.67	.07
			Pb	<	5.00	2.55		
			Pb*				.56	.06
			Rb*				1.69	.17
			Sb	<	30.00	5.80		
			Sb*	<	30.00	5.80	.30	.03
			Sr		313.00	38.20		
			Sr*		302.00	36.90	323.00	32.30

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-E25-20	1/03/90	066923	V	34.00	5.70		
			V*	35.00	5.79	36.60	3.66
			Zn	10.00	3.25		
			Zn*	11.00	3.39	11.80	1.18
		66922Z	U			2.00	.20
			U*	2.76	.89	2.20	.22
		66923L	U*	2.03	.67	2.10	.21
2-E25-22	12/14/89	066840	Ag	< 10.00	2.39	.01	.00
			Ag*	< 10.00	2.39	.02	.00
			Al	< 150.00	20.10	5.33	.53
			Al*	< 150.00	20.10	8.10	.81
			As	8.00	2.95	4.21	.42
			As*	8.00	2.95	4.71	.47
			Ba	13.00	2.64	14.80	1.48
			Ba*	13.00	2.64	14.80	1.48
			Cd	< 2.00	1.38	.05	.00
			Cd*	< 2.00	1.38	.04	.00
			Co	< 20.00	3.35	.03	.00
			Co*	< 20.00	3.35	.07	.01
			Cr	< 10.00	5.13	1.74	.17
			Cr*	< 10.00	5.13	1.54	.15
			Cs			.19	.02
			Cs*			.23	.02
			Cu	< 10.00	2.89	.72	.07
			Cu*	< 10.00	2.99	1.20	.12
			Fe	< 30.00	9.50	18.00	1.80
			Fe*	59.00	11.20	41.50	4.15
			Mn	< 5.00	1.67	1.01	.10
			Mn*	< 5.00	1.67	2.19	.22
			Mo	< 40.00	4.83	4.21	.42
			Mo*	< 40.00	4.83	4.55	.46
			Ni	< 10.00	3.15	1.02	.10
			Ni*	< 10.00	3.15	.67	.07
			Pb	< 5.00	2.55	.08	.01
			Pb*			.23	.02
			Rb			.76	.08
			Rb*			.87	.09
			Sb	< 30.00	5.80	.25	.03
			Sb*	< 30.00	5.80	.22	.02
			Sr	106.00	13.20	110.00	11.00
			Sr*	106.00	13.20	116.00	11.60
			V	42.00	6.49	37.80	3.78
			V*	42.00	6.49	41.70	4.17
			Zn	< 5.00	2.55	3.73	.37
			Zn*	7.00	2.83	8.56	.86

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-E25-22	12/14/89	668402	U			1.36	.14
			U*	1.19	.44	1.31	.13
2-E28-13	1/11/90	066966	Ag	< 10.00	2.39	.02	.00
			Ag*	< 10.00	2.39		
			Al	< 150.00	20.10	2.92	.29
			Al*	< 150.00	20.10		
			As	< 5.00	2.53	1.47	.15
			As*	< 5.00	2.53		
			Ba	76.00	8.34	79.20	7.92
			Ba*	82.00	8.93		
			Cd	< 2.00	1.38	.04	.00
			Cd*	< 2.00	1.38		
			Co	< 20.00	3.35	.06	.01
			Co*	< 20.00	3.35		
			Cr	< 10.00	5.13	2.75	.28
			Cr*	< 10.00	5.13		
			Cs			.24	.02
			Cu	< 10.00	2.89	.38	.04
			Cu*	< 10.00	2.89		
			Fe	< 30.00	9.50	23.40	2.34
			Fe*	88.00	13.30		
			Mn	< 5.00	1.67	1.50	.15
			Mn*	< 5.00	1.67		
			Mo	< 40.00	4.93	5.63	.56
			Mo*	< 40.00	4.83		
			Ni	< 10.00	3.15	1.51	.15
			Ni*	< 10.00	3.15		
			Pb	< 5.00	2.55	.37	.04
			Rb			2.51	.25
			Sb	< 30.00	5.80	.12	.01
			Sb*	< 30.00	5.80		
			Sr	228.00	28.00	245.00	24.50
			Sr*	234.00	28.70		
			V	19.00	4.31	17.20	1.72
			V*	17.00	4.14		
			Zn	10.00	3.25	8.26	.83
			Zn*	11.00	3.39		
		66966Z	U			3.47	.35
			U*	3.00	.96		
2-E28-18	1/11/90	066967	Ag	< 10.00	2.39		
			Ag*	< 10.00	2.39	.06	.01
			Al	< 150.00	20.10		
			Al*	< 150.00	20.10	5.68	.57
			As	< 5.00	2.53		

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-E28-18	1/11/90	066967	As*	< 5.00	2.53	2.60	.26
			Ba	24.00	3.46		
			Ba*	28.00	3.80	26.30	2.63
			Cd	< 2.00	1.38		
			Cd*	< 2.00	1.38	.11	.01
			Co	< 20.00	3.35		
			Co*	< 20.00	3.35	.14	.01
			Cr	< 10.00	5.13		
			Cr*	< 10.00	5.13	4.80	.48
			Cs*			.05	.00
			Cu	< 10.00	2.89		
			Cu*	< 10.00	2.89	.50	.05
			Fe	< 30.00	9.50		
			Fe ^o	308.00	33.60	210.00	21.00
			Mn	< 5.00	1.67		
			Mn*	< 5.00	1.67	3.20	.32
			Mo	< 40.00	4.83		
			Mo*	< 40.00	4.83	10.00	1.00
			Ni	< 10.00	3.15		
			Ni*	< 10.00	3.15	1.05	.11
			Pb	< 5.00	2.55		
			Pb*			1.10	.11
			Rb*			1.35	.14
			Sb	< 30.00	5.80		
			Sb*	< 30.00	5.80	.24	.02
			Sr	222.00	27.20		
			Sr*	236.00	28.90	252.00	25.20
			V	18.00	4.22		
			V*	18.00	4.22	18.50	1.85
			Zn	30.00	6.20		
			Zn*	33.00	6.66	25.50	2.55
		66967Z	U*	24.46	6.80	41.00	4.10
2-E28-21	1/11/90	066968	Ag	< 10.00	2.39	.02	.00
			Ag*	< 10.00	2.39		
			Al	< 150.00	20.10	2.50	.25
			Al*	< 150.00	20.10		
			As	< 5.00	2.53	1.63	.16
			As*	< 5.00	2.53		
			Ba	40.00	4.87	40.80	4.08
			Ba*	40.00	4.87		
			Cd	< 2.00	1.38	.06	.01
			Cd*	< 2.00	1.38		
			Co	< 20.00	3.35	.06	.01
			Co*	< 20.00	3.35		
			Cr	< 10.00	5.13	4.20	.42

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-E28-21	1/11/90	066968	Cr*	< 10.00	5.13		
			Cs			.01	.00
			Cu	< 10.00	2.89	.36	.04
			Cu*	< 10.00	2.89		
			Fe	< 30.00	9.50	25.00	2.50
			Fe*	223.00	25.40		
			Mn	< 5.00	1.67	1.65	.17
			Mn*	6.00	1.72		
			Mo	< 40.00	4.83	11.70	1.17
			Mo*	< 40.00	4.83		
			Ni	< 10.00	3.15	.80	.08
			Ni*	< 10.00	3.15		
			Pb	< 5.00	2.55	.27	.03
			Rb			1.11	.11
			Sb	< 30.00	5.80	.12	.01
			Sb*	< 30.00	5.80		
			Sr	231.00	28.30	230.00	23.00
			Sr*	226.00	27.70		
			V	11.00	3.66	14.60	1.46
			V*	16.00	4.05		
			Zn	< 5.00	2.55	6.70	.67
			Zn*	6.00	2.69		
		669682	U			34.30	3.43
			U*	27.32	7.55		
2-W10-14	1/10/90	066954	Ag	< 10.00	2.39	.02	.00
			Ag*	< 10.00	2.39	.02	.00
			Al	< 150.00	20.10	2.75	.28
			Al*	< 150.00	20.10	6.10	.61
			As	< 5.00	2.53	.85	.08
			As*	< 5.00	2.53	.76	.08
			Ba	68.00	7.55	67.00	6.70
			Ba*	70.00	7.75	66.60	6.66
			Cd	< 2.00	1.38	.02	.00
			Cd*	< 2.00	1.38	.05	.00
			Co	< 20.00	3.35	.16	.02
			Co*	< 20.00	3.35	.31	.03
			Cr	< 10.00	5.13	5.46	.55
			Cr*	91.00	11.50	22.00	2.20
			Cs			.21	.02
			Cs*			.22	.02
			Cu	< 10.00	2.89	.59	.06
			Cu*	< 10.00	2.89	1.04	.10
			Fe	37.00	9.85	34.80	3.48
			Fe*	392.00	41.90	75.10	7.51
			Mn	< 5.00	1.67	2.94	.29

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-W10-14	1/10/90	066954	Mn*	9.00	1.88	4.33	.43
			Mo	< 40.00	4.83	2.07	.21
			Mo*	< 40.00	4.83	2.30	.23
			Ni	< 10.00	3.15	4.96	.50
			Ni*	44.00	5.48	12.60	1.26
			Pb	< 5.00	2.55	.05	.00
			Pb*			.12	.01
			Rb			3.29	.33
			Rb*			3.01	.30
			Sb	< 30.00	5.80	.10	.01
			Sb*	< 30.00	5.80	.10	.01
			Sr	179.00	22.00	185.00	18.50
			Sr*	185.00	22.80	185.00	18.50
			V	35.00	5.79	33.40	3.34
			V*	35.00	5.79	30.40	3.04
			Zn	7.00	2.83	8.42	.84
			Zn*	7.00	2.83	8.68	.87
		66954L	U			.84	.08
			U*	.51	.24	.86	.09
2-W18-17	1/02/90	066907	Ag*	< 10.00	2.39	.03	.00
			Al*	589.00	75.20	266.00	26.60
			As*	< 5.00	2.53	.99	.10
			Ba*	32.00	4.15	35.70	3.57
			Cd*	16.00	2.28	4.81	.48
			Co*	< 20.00	3.35	1.97	.20
			Cr*	85.00	11.00	64.20	6.42
			Cs*			.06	.01
			Cu*	11.00	2.98	11.20	1.12
			Fe*	49900.00	5060.00		
			Mn*	604.00	61.20	437.00	43.70
			Mo*	< 40.00	4.83	.29	.03
			Ni*	41.00	5.23	33.30	3.33
			Pb*			6.79	.68
			Rb*			2.99	.30
			Sb*	< 30.00	5.80	.07	.01
			Sr*	77.00	9.72	79.10	7.91
			V*	41.00	6.39	28.40	2.84
			Zn*	27.00	5.75	29.80	2.98
		66907Z	U*	.62	.26	.95	.10
2-W27-1	1/11/90	066958	Ag	< 10.00	2.39		
			Ag*	< 10.00	2.39	.03	.00
			Al	< 150.00	20.10		
			Al*	< 150.00	20.10	28.30	2.83
			As	< 5.00	2.53		

* indicates unfiltered analyses; results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
2-W27-1	1/11/90	066958	As*	< 5.00	2.53	1.30	.13
			Ba	40.00	4.87		
			Ba*	40.00	4.87	39.20	3.92
			Cd	< 2.00	1.38		
			Cd*	< 2.00	1.38	.13	.01
			Co	< 20.00	3.35		
			Co*	< 20.00	3.35	.10	.01
			Cr	12.00	5.23		
			Cr*	13.00	5.27	16.20	1.62
			Cs*			.04	.00
			Cu	< 10.00	2.89		
			Cu*	< 10.00	2.89	.54	.05
			Fe	< 30.00	9.50		
			Fe*	177.00	21.10	172.00	17.20
			Mn	< 5.00	1.67		
			Mn*	< 5.00	1.67	4.00	.40
			Mo	< 40.00	4.83		
			Mo*	< 40.00	4.83	5.60	.56
			Ni	< 10.00	3.15		
			Ni*	< 10.00	3.15	1.56	.16
			Pb	< 5.00	2.55		
			Pb*			.53	.05
			Rb*			1.16	.12
			Sb	< 30.00	5.80		
			Sb*	< 30.00	5.80	.08	.01
			Sr	263.00	32.20		
			Sr*	264.00	32.30	271.00	27.10
			V	18.00	4.22		
			V*	19.00	4.31	18.80	1.88
			Zn	27.00	5.75		
			Zn*	31.00	6.35	28.00	2.80
		66958Z	U*	7.94	2.33	13.80	1.38
6-44-43B	12/20/89	066867	Ag	< 10.00	2.39		
			Ag*	< 10.00	2.39	.03	.00
			Al	< 150.00	20.10		
			Al*	168.00	22.40	196.00	19.60
			As	6.00	2.67		
			As*	7.00	2.81	3.63	.36
			Ba	52.00	6.00		
			Ba*	47.00	5.53	53.70	5.37
			Cd	< 2.00	1.38		
			Cd*	< 2.00	1.38	.07	.01
			Co	< 20.00	3.35		
			Co*	< 20.00	3.35	.40	.04
			Cr	15.00	5.38		

* indicates unfiltered analyses, results in ppb.

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Analysis Comparison

Well	Date	UST #	Element	UST		PNL	
				Result	Error	Result	Error
6-44-43B	12/20/89	066867	Cr*	30.00	6.30	8.00	.80
			Cs*			.03	.00
			Cu	< 10.00	2.89		
			Cu*	< 10.00	2.89	1.09	.11
			Fe	318.00	34.60		
			Fe*	562.00	58.90	207.00	20.70
			Mn	7.00	1.77		
			Mn*	11.00	2.01	8.90	.89
			Mo	< 40.00	4.83		
			Mo*	< 40.00	4.83	8.69	.87
			Ni	< 10.00	3.15		
			Ni*	16.00	3.43	4.80	.48
			Pb	< 5.00	2.55		
			Pb*			.41	.04
			Rb*			7.23	.72
			Sb	< 30.00	5.80		
			Sb*	< 30.00	5.80	.15	.02
			Sr	182.00	22.40		
			Sr*	168.00	20.70	190.00	19.00
			V	36.00	5.69		
			V*	35.00	5.79	33.50	3.35
			Zn	25.00	5.45		
			Zn*	27.00	5.75	28.40	2.84
		668662	U*	2.16	.69		
		668672	U*	2.70	.85	3.08	.31

*indicates unfiltered analyses, results in ppb.

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Site	Well	Sample Date	UST Number	Number of Analyses
216-B-3	6-43-41F	1/25/90	67133P	4
		4/18/90	067796	107
			067797	2
			067798	2
			067799	2
			67796P	4
	6-43-42J	2/24/89	064842	107
			064843	2
			064844	2
			064845	2
			64842P	5
		6/15/89	065447	161
			065448	2
			065449	2
			065450	2
			65447P	4
		8/09/89	065965	107
			065966	103
			065967	2
			065968	2
			65965P	4
			65966P	4
		1/31/90	067212	55
			067213	2
			067214	2
			067215	2
			67212P	4
	6-43-43	2/24/89	064850	107
			064851	90
			064852	2
			064853	2
			64850P	4
			64851P	3
		6/15/89	065451	161
			065452	2
			065453	2
			065454	2
			65451P	4
		8/09/89	065971	107
			065972	2
			065973	2
			065974	2
			65971P	4
		1/26/90	067167	375
			067168	2
			067169	2
			067170	2
			67167P	4
		4/26/90	67954X	2
	6-43-45	12/06/89	066804	377
			66804Z	12

END

DATE FILMED

12 / 21 / 90