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# POND WASTE MANAGEMENT DATA EVALUATION MEMORANDUM

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Oak Ridge, Tennessee 37831-7101
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SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

contributed to the preparation of this document and should not be considered an eligible contractor for its review.

PM551B13

# POND WASTE MANAGEMENT
# DATA EVALUATION MEMORANDUM

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# ACRONYMS

| | |
|---|---|
| ASTM | American Society of Testing and Materials |
| DL | detection limit |
| EPA | U.S. Environmental Protection Agency |
| EP-TOX | extraction procedure toxicity test |
| ICP | inductively coupled plasma |
| LCS | laboratory control sample |
| LDR | land disposal restrictions |
| PCB | polychlorinated biphenyl |
| PCE | tetrachloroethylene |
| %R | percent recovery |
| QC | quality control |
| RCRA | Resource Conservation and Recovery Act |
| RPD | relative percent difference |
| SRM | standard reference material |
| TCE | trichloroethylene |
| TCLP | toxicity characteristic leaching procedure |

# EXECUTIVE SUMMARY

Unprocessed sludge from the K-1407 B and C ponds was characterized in 1985 before removal from the ponds, and in 1991 by statistical sampling of the accessible drums stored on the K-1417 Drum Storage Yard. These characterizations of the sludge can be used as a starting point for evaluation of treatment and disposal of the pond waste. The existing information has been evaluated relative to U.S. Environmental Protection Agency (EPA) waste characterization criteria, EPA Land Disposal Restriction (LDR) criteria as an F006 waste, and Envirocare waste acceptance criteria. Data have been assessed relative to its precision, accuracy, representativeness, completeness, comparability, and sensitivity. Although many parameters of the sludge have been characterized, additional data would be required to satisfy potential treatment and disposal project requirements as identified in the Data Quality Objectives Technical Memorandum, December 1993.

The studies identify unique data populations for the B and C ponds, and unique data sets for 1985 and 1991. Both investigations can provide useful information concerning the potential sludge content. This evaluation suggests that the 1985 sludge analyses can be used to help characterize the unprocessed sludge in the stored drums. However, the 1991 study data are believed to be a better representation of what is currently remaining in the drummed waste. The results of both studies have been utilized here to evaluate whether the data needs of the Pond Waste Management Project have been achieved.

Based on the maximum total concentrations measured in the sludge, the nine regulated metals could exceed leachate criteria if they were 100% leachable. This confirms the need to evaluate toxicity characteristic leaching procedure (TCLP) extracts. Nickel, which exceeded LDR leachate criteria in many samples, is the primary metal of concern. Mercury levels also exceeded leachate criteria in some samples. Concerns over silver's analytical accuracy make it uncertain whether this metal would exceed leachate criteria.

Samples of the unprocessed sludge were measured for concentrations for the metals specified in the Data Quality Objective Technical Memorandum; mean detection limits achieved in the studies met the sensitivity goals established except for lead in the 1991 study. Failure to meet detection limit goals means that it cannot be predicted with confidence whether the regulatory criteria could be met. Although analytical precision varied between the studies, the goals for relative percent difference were met in at least one of the studies for all metals, with the exception of mercury. The accuracy of silver analyses, particularly in the TCLP analyses of the 1991 study, is questionable based on low matrix spike recoveries. These parameters should receive further characterization if levels of uncertainty or confidence are unacceptable.

Total and amenable cyanide were evaluated as part of the 1991 sampling because they are specifically listed as regulated species for F006 wastes. All results were reported as $<1.0$ mg/kg total cyanide and were therefore well below regulatory criteria.

Organic parameters represent another data deficiency in the current sludge characterization information. Volatile organic compounds and polychlorinated biphenyls were measured in the 1985 study only. At the maximum measured total concentrations, trichloroethylene and tetrachloroethylene indicated they could exceed TCLP criteria if they were 100% leachable. Pesticide and herbicide analyses were performed on extraction procedure-toxicity extracts in 1985 only. The extract concentrations did not exceed leachate limits, however, a full list of the currently regulated TCLP compounds was not analyzed.

Concentrations of regulated semivolatile, volatile, and pesticide organic compounds have not been characterized. Based on these findings, existing data do not confirm the sludge could meet TCLP criteria. Regulated organic compounds require further characterization in the sludge.

Radionuclides identified in the Data Quality Objective Technical Memorandum have been characterized with the exception of strontium-90. While some radionuclides exhibit highly variable concentrations, the absolute values are low relative to Envirocare waste disposal criteria. If a selected treatment process has the potential to concentrate radionuclides in the resulting stabilized sludge, this information must be re-evaluated for the resulting material.

Evaluation of the liquid fractions contained in the drums will need to be based on the waste acceptance criteria of the selected disposal facility. The existing data set may be an aid to this decision, however, supernatant liquids would probably be composited for disposal and a sample of that composite would be the determining factor for its disposal.

Additional parameters identified in the Data Quality Objective Technical Memorandum for process formulation, rather than regulatory compliance, are also identified as data deficiencies. These include particle size distribution, mineral composition, and carbonate content. The lack of this information may limit the evaluation of treatment options.

The results of the 1985 and 1991 characterization studies provide adequate data for many of the parameters required for the Pond Waste Management Project. The primary deficiencies are in relation to parameters not measured, specifically organic compounds and cyanides. Evaluation criteria were based on the assumption that grouting would be the most likely treatment. Evaluation of other technologies could require the measurement of other parameters or may require lower detection limit goals than those utilized here.

# 1. INTRODUCTION

The Pond Waste Management Project includes the off-site treatment and disposal of ~32,000 drums of raw sludge at the K-1417 Drum Storage Yard and the K-25 Building. Representative criteria have been assembled to support evaluation of potential treatment technologies, particularly stabilization of the untreated pond waste. This memorandum describes historical data that may be used to support the proposed treatment and evaluates whether these data fulfill anticipated criteria and data quality for the study.

## 1.1 PREVIOUS SAMPLING EFFORTS

Previously collected data that characterize the untreated pond waste stored in drums on the K-1417 Drum Storage Yard and in the K-25 Building include analyses of: (1) samples of the sludge taken directly from the K-1407-B and -C ponds in May 1985; and (2) samples of the untreated sludge and liquid from the drums on the K-1417 Drum Storage Yard in 1991.

Characterization of previously stabilized sludge is not examined in this technical memorandum because the primary concern of this study is the treatment and disposal of the untreated pond waste. An evaluation of the quality control (QC) data from the 1991 study is presented in Appendix A. The analytical results used in this summary are listed in Appendixes B through M.

## 1.2 COMPARISON CRITERIA AND QUALITY EVALUATION

Criteria for the pond waste treatment evaluation have been based on the regulatory and waste acceptance criteria that the untreated sludge or treated sludge must meet. These criteria have been derived from Land Disposal Restrictions (LDR) (40 *CFR* 261.24), F006 Waste Treatment Standards (40 *CFR* 268.40), Envirocare waste acceptance criteria, and general composition knowledge requirements for treatment. Criteria are identified in Tables 1.1, 1.2, and 1.3 along with anticipated levels of concern. The anticipated levels of concern represent the minimum measurable value of an analyte that will clearly demonstrate a regulatory or technical criteria can be met. Anticipated levels of concern with respect to this evaluation of the pond waste data have been defined as approximately one-tenth of the lowest regulatory criteria. For example, the level of concern defined for arsenic is 0.5 mg/L vs the toxicity characteristic leaching procedure (TCLP) regulatory level of 5.0 mg/L while the level of concern defined for lead is 0.04 mg/L vs the LDR regulatory level of 0.37 mg/L, and so on.

The existing data information was never formally validated or assessed for its quality. Therefore this memorandum has collected the available information and attempted to provide a data quality assessment with respect to the data's precision, accuracy, representativeness, comparability, completeness and sensitivity.

### 1.2.1 Representativeness

*Representativeness* is a qualitative assessment of whether the samples taken are characteristic of the target population, which, in this case, is the group of drums containing unprocessed sludge in the K-1417 Drum Storage Yard. Because of the large number of drums, it is not practical to characterize each drum. The data were evaluated as to whether the sampling strategy would provide a sample with characteristics similar to the target population in terms of the range and mean of the parameters.

**Table 1.1. Regulatory criteria for pond waste disposal**

| Analyte | Constituent concentrations in waste extract (TCLP) (mg/L) | | Anticipated level of concern | |
|---|---|---|---|---|
| | TCLP (40 *CFR* 261.24) | Treatment standards for F006 listed waste (40 *CFR* 268.40) | Leachate (mg/L)[a] | Total (mg/kg)[b] |
| | | ***Metals*** | | |
| Arsenic | 5.0 | -- | 0.5 | 10 |
| Barium | 100. | -- | 10 | 200 |
| Cadmium | 1.0 | 0.19 | 0.02 | 0.38 |
| Chromium (total) | 5.0 | 0.86 | 0.09 | 1.72 |
| Lead | 5.0 | 0.37 | 0.04 | 0.74 |
| Mercury | 0.2 | -- | 0.02 | 0.4 |
| Nickel | -- | 5.00 | 0.5 | 10 |
| Selenium | 1.0 | -- | 0.1 | 2 |
| Silver | 5.0 | 0.30 | 0.03 | 0.60 |
| | | ***Organics*** | | |
| Endrin | 0.02 | -- | 0.002 | 0.04 |
| Lindane | 0.4 | -- | 0.04 | 0.8 |
| Methoxychlor | 10 | -- | 1.0 | 20 |
| Toxaphene | 0.5 | -- | 0.05 | 1.0 |
| 2,4-D | 10 | -- | 1.0 | 2.0 |
| 2,4,5-TP (Silvex) | 1 | -- | 0.1 | 0.2 |
| Benzene | 0.5 | -- | 0.05 | 1.0 |
| Carbon tetrachloride | 0.5 | -- | 0.05 | 1.0 |
| Chlordane | 0.03 | -- | 0.003 | 0.06 |
| Chlorobenzene | 100 | -- | 10 | 200 |
| Chloroform | 6 | -- | 0.6 | 12 |
| o-Cresol (2-methylphenol) | 200 | -- | 20 | 400 |
| m-Cresol (3-methylphenol) | 200 | -- | 20 | 400 |
| p-Cresol (4-methylphenol) | 200 | -- | 20 | 400 |
| Cresols | 200 | -- | 20 | 400 |
| 1,4-Dichlorobenzene | 7.5 | -- | 0.75 | 15 |

**Table 1.1 (continued)**

| Analyte | Constituent concentrations in waste extract (TCLP) (mg/L) | | Anticipated level of concern | |
|---|---|---|---|---|
| | TCLP (40 *CFR* 261.24) | Treatment standards for F006 listed waste (40 *CFR* 268.40) | Leachate (mg/L)[a] | Total (mg/kg)[b] |
| 1,2-Dichloroethane | 0.5 | -- | 0.05 | 1.0 |
| 1,1-Dichloroethene | 0.7 | -- | 0.07 | 1.4 |
| 2,4-Dinitrotoluene | 0.13 | -- | 0.01 | 0.26 |
| Heptachlor | 0.008 | -- | 0.001 | 0.016 |
| Hexachlorobenzene | 0.13 | -- | 0.01 | 0.26 |
| Hexachlorobutadiene | 0.5 | -- | 0.05 | 1.0 |
| Hexachloroethane | 3 | -- | 0.3 | 6.0 |
| Methyl ethyl ketone (2-butanone) | 200 | -- | 20 | 400 |
| Nitrobenzene | 2 | -- | 0.2 | 4.0 |
| Pentachlorophenol | 100 | -- | 10 | 200 |
| Pyridine | 5 | -- | 0.5 | 10 |
| Tetrachloroethene | 0.7 | -- | 0.07 | 1.4 |
| Trichloroethene | 0.5 | -- | 0.05 | 1.0 |
| 2,4,5-Trichlorophenol | 400 | -- | 40 | 800 |
| 2,4,6-Trichlorophenol | 2 | -- | 0.2 | 40 |
| Vinyl chloride | 0.2 | -- | 0.02 | 4 |
| Cyanides (total) | -- | 590 mg/kg | -- | 59 |
| Cyanides (amenable) | -- | 30 mg/kg | -- | 3 |

[a]Identifies a value of one-tenth the most stringent regulatory level as the anticipated level of concern
[b]Identifies a value one-tenth of the total concentration which could potentially generate a failing leachate concentration Given the total concentration of an analyte in a sample, a theoretical worst case leachate concentration can be calculated The anticipated level of concern represents one-tenth of the total concentration which could potentially create a leachate in excess of the regulatory level. (i.e., arsenic, regulatory level = 5.0 mg/L leaching all arsenic from a sample containing 100 mg/kg would produce a leachate of 5.0 mg/L, therefore the anticipated level of concern is taken as 10 mg/kg)

**Table 1.2. Envirocare waste acceptance criteria**

| Analyte[a] | Envirocare waste acceptance criteria (pCi/g) | Anticipated level of concern (pCi/g) |
|---|---|---|
| | ***Radioisotopes*** | |
| Cesium-137 | 560 | 56 |
| Neptunium-237 | 2,000 | 200 |
| Plutonium-238 | 10,000 | 1,000 |
| Plutonium-239 | 9,900 | 990 |
| Strontium-90 | 20,000 | 2,000 |
| Technetium-99 | 100,000 | 10,000 |
| Thorium-230 | 15,000 | 1,500 |
| Thorium-232 | 680 | 68 |
| Uranium-234 | 37,000 | 3,700 |
| Uranium-235 | 770 | 77 |
| Uranium-238 | 28,000 | 2,800 |
| Gamma spectroscopy | Isotope-specific | — |
| Soil pH | 2.0-12.0 | — |
| Paint filter liquids test | Pass | — |
| Hydrogen cyanide | 20 mg/kg | 2 mg/kg |
| Hydrogen sulfide | — | — |
| Total organic halides | 1,000 mg/kg | 100 mg/kg |

[a]Radionuclides identified based on process knowledge.

Note Metals, cyanides, and organics must meet regulatory criteria (see Table 1.1).

**Table 1.3. Additional potential data needs for waste treatment**

| Analyte | General minimum criteria[a] |
|---|---|
| Metals | (mg/kg) |
| Aluminum | 1,000 |
| Boron | 1,000 |
| Calcium | 1,000 |
| Copper | 1,000 |
| Iron | 1,000 |
| Magnesium | 1,000 |
| Potassium | 1,000 |
| Silica | 1,000 |
| Sodium | 1,000 |
| Titanium | 1,000 |
| Zinc | 1,000 |
| Minerals | (mg/kg) |
| Aluminates | 1,000 |
| Silicates | 1,000 |
| | (mg/kg) |
| PCBs | 1 |
| General Chemistry | |
| Carbonate | 10 |
| Chloride | 10 |
| Fluoride | 10 |
| Phosphate | 1 |
| Sulfate | 200 |
| TOC | 0.2 |
| Moisture content | 1% |
| Particle size (0.002 mm, 0.063 mm, 0.2 mm, 2.0 mm, 50 mm) | 1% |

[a]Based on professional judgment or previous measurements.

### 1.2.2 Comparability

*Comparability* is an evaluation of the data with respect to other measurements of the same population. Whether equivalent measurements were taken and whether the results were similar are assessed.

### 1.2.3 Precision

*Precision* is the degree of mutual agreement between independent measurements made under identical, specified conditions. Relative percent difference (RPD) has been used to express precision. Analysis of laboratory duplicates and replicates provides an assessment of the precision associated with the analytical method. Analysis of field duplicates provides a total assessment of the overall precision of the sample data as this analysis includes both the field and laboratory variability. Evaluation of sampling precision may be determined from the difference between the overall precision and the analytical precision. The usefulness of the precision data is limited to samples that contain contaminants at concentrations above the detection limit (DL). RPD is calculated as follows:

$$RPD = \frac{[D_1 - D_2]}{(D_1 + D_2)/2} \times 100 ,$$

where

$D_1$ is the value of the first measurement,
$D_2$ is the value of the second measurement.

For parameters that may be compared to a regulatory level or waste acceptance criteria, a common level for precision is 20% RPD. This level of precision would provide a level of confidence that the criteria had not been exceeded. If the average RPD exceeded 20%, the absolute difference of the replicates was examined. If the average absolute difference was less than the anticipated level of concern, precision was considered acceptable. Anticipated levels of concern were set to approximately one-tenth the regulatory or waste acceptance criteria.

For parameters characterized for use in process design (additional potential data needs), 164% RPD was employed. This was based on the assumption that an order-of-magnitude uncertainty in the characteristic was acceptable.

### 1.2.4 Accuracy

*Accuracy* is the closeness of agreement between an observed value and an accepted reference value. When applied to a set of observations, accuracy is the combination of a random component and a common systematic error component (bias). Accuracy is evaluated by reviewing the percent recovery (%R) which is calculated as follows:

For matrix spike QC analyses,

$$\%R = \frac{SSR - SR}{SA} \times 100 ,$$

where

*SSR* is the spiked sample measurement,
*SR* is the unspiked sample measurement,
*SA* is the amount of spike added.

For QC analyses which use a standard reference material (SRM), the following formula is used:

$$\%R = \frac{C_m}{C_{arm}} \times 100 ,$$

where

$C_m$ is the measured concentration of the SRM,
$C_{arm}$ is the true measured concentration of the SRM.

Accuracy is evaluated using the %R from matrix spike additions and laboratory control standards (LCS) where available. Generally, %R values between 75 and 125 were considered acceptable. Accuracy was also assessed qualitatively by comparisons of the results for samples that had been analyzed for the same parameter using different analytical techniques.

### 1.2.5 Sensitivity

Sensitivity requirements have been identified as the anticipated level of concern for each analyte. These were set to one-tenth the regulatory or waste acceptance criteria that applied to each parameter. For parameters with analytical detection limits at or below the anticipated level of concern, results can be used with confidence to determine if regulatory criteria can be met. When the analytical detection limit for a parameter is greater than the anticipated level of concern, confidence is lowered in the ability of the analytical results to determine if regulatory criteria can be met. As the analytical detection limit approaches the actual regulatory criteria level, confidence in the analytical results to determine if the criteria can be met decreases. When the analytical detection limit exceeds the actual regulatory criteria level, there will be no confidence that the analytical results can determine when the regulatory criteria can be met.

### 1.2.6 Completeness

*Completeness* addresses whether sufficient measurements have been made to adequately characterize each parameter. The Data Quality Objectives Memorandum (SAIC 1993) recommends the collection of 29 samples of each parameter. With 29 samples, the maximum result represents the upper 95% confidence limit of the 90th percentile. Fewer than 10% of the samples are likely to be greater than the observed maximum. This goal should result in, at most, a 10% failure rate in a design based on the

maximum observation. This approach is useful when no information is available on the variability and shape of the distribution being sampled. If the shape and variability are known, as is the case with parameters that have already been measured, the uncertainty about the mean or other population characteristics can be estimated. Uncertainty in the mean of a parameter may be acceptable with fewer than 29 samples if the variability of that parameter is small. Likewise, when variability is high, more than 29 samples may be needed. Critical parameters and acceptable uncertainty may vary with the treatment process proposed. Therefore, parameter characterizations have been judged inadequate only if no samples were analyzed. Completeness also considers if the data set contains the necessary parameters of concern.

## 1.3 DATA EVALUATION

The previous sampling efforts will be discussed to evaluate whether the data collected meet the objectives established for the pond waste treatment evaluation. What data have been collected, how samples were collected and analyzed, and the results of the analyses are reported for each effort. Several different types of summary statistics will be used to evaluate these data.

A summary table is presented for each sampling event and type of sampling performed. Each table reports the number of results above the detection limit over the total number of samples. Radionuclides are counted as detected if the result was greater than the counting uncertainty. Note that the total number of analyses may vary from analyte to analyte because some analytes are not always measured. The minimum and maximum results above the detection limit are reported. These columns are blank if there were no results above the detection limit. The average is calculated using all results including those reported as less than the detection limit. Values less than the analytical detection limit are included at one-half the detection limit except for radionuclides that were reported as net results with counting uncertainties. Radionuclides with counting uncertainties are averaged at their reported value even if that value is less than the counting uncertainty.

The coefficient of variation (standard deviation divided by the mean) has been calculated as an index of the variability of the measurements. A confidence interval index was computed as an index of the uncertainty of the mean. The confidence interval index is the 95% confidence interval about the mean divided by the mean taken as a percent. For example, a parameter with a 10-fold uncertainty in the mean would have a confidence interval index of 164%. The index for a parameter with a confidence interval of 10 to 100 and a mean of 55 would be calculated as (100-10)/55 * 100 = 164%. A 20% variability would be equivalent to a 20% value for the confidence interval index.

A mean detection limit has been calculated, defined as the mean of those results that are reported as the detection limit. This mean detection limit can be compared to the anticipated level of concern. If no results were less than the detection limit, a mean detection limit has not been reported.

# 2. 1985 SAMPLING OF POND SLUDGE

## 2.1 SAMPLING DESCRIPTION

Pond sludge from the K-1407-B and -C ponds was characterized in May 1985 before removal of the sludge from the ponds and placement in the drums (Shoemaker and Bostick 1988). Twelve-foot long aluminum pipes were driven into the ponds to collect cores of the sludge and underlying clay. Twenty-seven core samples were taken from the ponds: 12 from B pond and 15 from C pond. The sludge from each core was composited as one sample for analysis. The clay layer was divided vertically into 6-in. increments, and each increment was analyzed individually. The pipes were driven as deeply into the clay as possible, usually 6 to 36 in. A total of 36 samples was collected from the B pond and 48 samples from the C pond.

## 2.2 ANALYSES PERFORMED

Samples were analyzed for total metals following U.S. Environmental Protection Agency (EPA) methods (SW-846, Test Methods for Evaluating Solid Waste). Total radionuclides, volatile organics, and polychlorinated biphenyls (PCBs) were analyzed in the samples using a combination of EPA, Martin Marietta Energy Systems, Inc., and American Society of Testing and Materials (ASTM) methods (Table 2.1). The extraction procedure toxicity test (EP-TOX) was used to generate a leachate which was subsequently analyzed for metals, herbicides, and pesticides following EPA methods.

## 2.3 DATA EVALUATION

Although 12 samples were taken from B pond and 15 from C pond, the number of samples per core varied depending on the depth of penetration. Sludge was composited as one sample while the clay layer samples were labeled A (0-0.5 ft), B (0.5-1.0 ft), C (1.0-1.5 ft), and E (2-2.5 ft). Results for 38 samples from B pond were received for evaluation: samples from the sludge layer and clay layers A and B from 12 cores, plus laboratory duplicates for 1 sludge sample and 1 A-layer clay.

Results for 52 samples from C pond were received. These samples represented the sludge layer and top clay layer from 14 cores, clay layer B from 11 cores, clay layer C from 5 cores, and layer E from 2 cores. There were three laboratory duplicates of clay layer A and one sludge duplicate.

For the data summaries, data were grouped by pond and sample type. All clay samples, regardless of which layer they were taken from, were summarized together. B and C pond results were summarized separately to allow comparison with published summaries. Results from laboratory duplicates were excluded from the summary statistics. Table 2.2 lists analytes that were not detected in either pond. These analytes were excluded from the subsequent summary tables. Tables 2.3 and 2.4 list the summary statistics for the total analyses of the sludge from the B and C ponds, respectively. Tables 2.5 and 2.6 summarize the total analyses for the clay layers. Results of EP-TOX analyses for sludge are in Tables 2.7 and 2.8, and for the clay layers are in Tables 2.9 and 2.10.

**Table 2.1. Analytical protocol for initial program to characterize sludge and clay layers in K-1407-B and K-1407-C ponds**

| Parameters analyzed | Preparation procedures | Analytical procedures |
|---|---|---|
| ICP[a] metals | EPA-3050[b] | EPA-6010 |
| Volatile organics | EPA-624 | EPA-624 |
| Uranium-235 | TP-1853[c] | TP-2116 |
| Uranium | TP-1807 | TP-1807 |
| Cesium | TP-1621 | TP-1621 |
| Technetium | TP-1620 | TP-1620 |
| Plutonium | TP-1607 | TP-1607 |
| Neptunium | TP-1606 | TP-1606 |
| Density | N/A[d] | TP-1852 |
| pH | N/A | ASTM-D2976[e] |
| PCBs[f] | EPA-3550 | EC-340[g] |
| EP-TOX[h] extraction | EPA-1310 | N/A |
| Arsenic | EPA-3020 | EPA-7060 |
| Barium | EPA-3020 | EPA-7080 |
| Cadmium | EPA-3020 | EPA-7130 |
| Chromium | EPA-3020 | EPA-7191 |
| Lead | EPA-3020 | EPA-7421 |
| Nickel | EPA-3020 | EPA-7190 |
| Selenium | EPA-3020 | EPA-7740 |
| Silver | EPA-3020 | EPA-7761 |
| 2,4-D | EPA-8150 | EPA-8150 |
| Silvex | EPA-8150 | EPA-8150 |
| Endrin | EPA-8080 | EPA-8080 |
| Lindane | EPA-8080 | EPA-8080 |
| Methoxychlor | EPA-8080 | EPA-8080 |
| Toxaphene | EPA-8080 | EPA-8080 |

[a]Inductively coupled plasma.
[b]Environmental Protection Agency procedure.
[c]Technical procedure (in house).
[d]Not applicable.
[e]American Society of Testing and Materials.
[f]Polychlorinated biphenyls.
[g]Environmental council (five-plant procedure).
[h]Extraction procedure toxicity test.

*Source:* Shoemaker and Bostick 1988.

**Table 2.2. Chemicals not detected during 1985 sampling of the K-1407-B and -C ponds**

| Analyte (units) | Number of measurements | Minimum | Average | Maximum |
|---|---|---|---|---|
| | *Results for Clay Layers* | | | |
| **Total Metals** | | | | |
| Niobium (μg/g) | 55 | 0.7 | 0.7 | 0.7 |
| **Pesticides and PCBs** | | | | |
| PCB (Aroclor-1016) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1221) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1232) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1242) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1248) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1260) (μg/g) | 14 | 0.1 | 0.1 | 0.1 |
| **Volatile Organics** | | | | |
| 1,1,2,2-tetrachloroethane (μg/g) | 55 | 0.07 | 0.0815 | 0.7 |
| 1,1,2-trichloroethane (μg/g) | 55 | 0.05 | 0.0582 | 0.5 |
| 1,1-dichloroethane (μg/g) | 55 | 0.05 | 0.0582 | 0.5 |
| 1,1-dichloroethylene (μg/g) | 55 | 0.03 | 0.0349 | 0.3 |
| 1,2-dichloroethane (μg/g) | 55 | 0.03 | 0.0349 | 0.3 |
| 1,2-dichloropropane (μg/g) | 55 | 0.06 | 0.0698 | 0.6 |
| benzene (μg/g) | 55 | 0.04 | 0.0465 | 0.4 |
| bromodichloromethane (μg/g) | 55 | 0.02 | 0.0233 | 0.2 |
| bromoform (μg/g) | 55 | 0.05 | 0.0582 | 0.5 |
| chlorobenzene (μg/g) | 55 | 0.06 | 0.0698 | 0.6 |
| cis-1,3-dichloropropene (μg/g) | 55 | 0.05 | 0.0582 | 0.5 |
| dibromochloromethane (μg/g) | 55 | 0.03 | 0.0349 | 0.3 |
| ethyl benzene (μg/g) | 55 | 0.07 | 0.0815 | 0.7 |
| freon-113 (μg/g) | 55 | 0.1 | 0.116 | 1 |
| freon-114 (μg/g) | 55 | 0.1 | 0.116 | 1 |
| freon-123 (μg/g) | 55 | 0.1 | 0.116 | 1 |
| methyl ethyl ketone (MEK) (μg/g) | 55 | 0.1 | 0.116 | 1 |
| other halomethanes (μg/g) | 55 | 0.1 | 0.116 | 1 |

**Table 2.2 (continued)**

| Analyte (units) | Number of measurements | Minimum | Average | Maximum |
|---|---|---|---|---|
| trans-1,3-dichloropropene (μg/g) | 55 | 0.05 | 0.0582 | 0.5 |
| trichlorofluoromethane (μg/g) | 55 | 0.1 | 0.116 | 1 |
| | ***Results for Sludge*** | | | |
| **Pesticides and PCBs** | | | | |
| PCB (Aroclor-1016) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1221) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1232) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1242) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1248) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1254) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| PCB (Aroclor-1260) (μg/g) | 5 | 0.1 | 0.1 | 0.1 |
| **Volatile Organics** | | | | |
| 1,1,1-trichloroethane (μg/g) | 25 | 0.004 | 0.0386 | 0.04 |
| 1,1,2,2-tetrachloroethane (μg/g) | 25 | 0.007 | 0.0675 | 0.07 |
| 1,1,2-trichloroethane (μg/g) | 25 | 0.005 | 0.0482 | 0.05 |
| 1,1-dichloroethane (μg/g) | 25 | 0.005 | 0.0482 | 0.05 |
| 1,1-dichloroethylene (μg/g) | 25 | 0.003 | 0.0289 | 0.03 |
| 1,2-dichloroethane (μg/g) | 25 | 0.003 | 0.0289 | 0.03 |
| 1,2-dichloropropane (μg/g) | 25 | 0.006 | 0.0578 | 0.06 |
| benzene (μg/g) | 25 | 0.004 | 0.0386 | 0.04 |
| bromodichloromethane (μg/g) | 25 | 0.002 | 0.0193 | 0.02 |
| bromoform (μg/g) | 25 | 0.005 | 0.0482 | 0.05 |
| carbon tetrachloride (μg/g) | 25 | 0.003 | 0.0289 | 0.03 |
| chlorobenzene (μg/g) | 25 | 0.006 | 0.0578 | 0.06 |
| chloroform (μg/g) | 25 | 0.002 | 0.0193 | 0.02 |
| cis-1,3-dichloropropene (μg/g) | 25 | 0.005 | 0.0482 | 0.05 |
| dibromochloromethane (μg/g) | 25 | 0.003 | 0.0289 | 0.03 |

Table 2.2 (continued)

| Analyte (units) | Number of measurements | Minimum | Average | Maximum |
|---|---|---|---|---|
| ethyl benzene (μg/g) | 25 | 0.007 | 0.0675 | 0.07 |
| freon-114 (μg/g) | 25 | 0.01 | 0.0964 | 0.1 |
| freon-123 (μg/g) | 25 | 0.01 | 0.0964 | 0.1 |
| methyl ethyl ketone (MEK) (μg/g) | 25 | 0.01 | 0.0964 | 0.1 |
| other halomethanes (μg/g) | 25 | 0.01 | 0.0964 | 0.1 |
| tetrachloroethylene (μg/g) | 25 | 0.004 | 0.0386 | 0.04 |
| trans-1,3-dichloropropene (μg/g) | 25 | 0.005 | 0.0482 | 0.05 |
| trichlorofluoromethane (μg/g) | 25 | 0.01 | 0.0964 | 0.1 |

Table 2.3. Analytical results for sludge samples taken in 1985 from the K-1407-B pond

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (μg/g) | 10/ 10 | 19000 | 49000 | 36600 | 28 | 33 | . |
| Arsenic (μg/g) | 9/ 10 | 85 | 290 | 174 | 49 | 57 | 5 |
| Barium (μg/g) | 10/ 10 | 120 | 290 | 237 | 21 | 25 | . |
| Beryllium (μg/g) | 10/ 10 | 1.4 | 3.1 | 2.21 | 26 | 30 | . |
| Boron (μg/g) | 10/ 10 | 75 | 190 | 114 | 31 | 36 | . |
| Cadmium (μg/g) | 6/ 10 | 0.59 | 5.8 | 1.66 | 124 | 144 | 0.3 |
| Calcium (μg/g) | 10/ 10 | 17000 | 120000 | 52100 | 58 | 67 | . |
| Chromium (μg/g) | 10/ 10 | 290 | 2400 | 804 | 81 | 94 | . |
| Cobalt (μg/g) | 10/ 10 | 22 | 61 | 43.5 | 24 | 27 | . |
| Copper (μg/g) | 10/ 10 | 420 | 1600 | 1070 | 35 | 41 | . |
| Iron (μg/g) | 9/ 9 | 35000 | 120000 | 73200 | 33 | 41 | . |
| Lead (μg/g) | 10/ 10 | 66 | 180 | 129 | 27 | 32 | . |
| Lithium (μg/g) | 10/ 10 | 14 | 37 | 24.5 | 27 | 31 | . |
| Magnesium (μg/g) | 10/ 10 | 3400 | 16000 | 6610 | 53 | 62 | . |
| Manganese (μg/g) | 10/ 10 | 300 | 830 | 594 | 28 | 33 | . |
| Molybdenum (μg/g) | 9/ 10 | 9.5 | 49 | 19.7 | 65 | 75 | 1 |
| Nickel (μg/g) | 10/ 10 | 34 | 7100 | 4140 | 54 | 63 | . |
| Niobium (μg/g) | 0/ 10 | . | . | 0.35 | 0 | 0 | 0.7 |

Table 2.3 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Phosphorus (μg/g) | 10/ 10 | 6200 | 21000 | 13000 | 34 | 40 | . |
| Potassium (μg/g) | 10/ 10 | 1800 | 7300 | 4240 | 37 | 43 | . |
| Selenium (μg/g) | 9/ 10 | 19 | 140 | 98.2 | 48 | 56 | 5 |
| Sodium (μg/g) | 10/ 10 | 400 | 3100 | 1210 | 65 | 75 | . |
| Strontium (μg/g) | 10/ 10 | 81 | 190 | 147 | 26 | 30 | . |
| Thorium (μg/g) | 1/ 10 | 30 | 30 | 12 | 53 | 61 | 20 |
| Titanium (μg/g) | 10/ 10 | 210 | 470 | 387 | 22 | 26 | . |
| Vanadium (μg/g) | 10/ 10 | 16 | 67 | 48.9 | 32 | 37 | . |
| Zinc (μg/g) | 10/ 10 | 480 | 810 | 611 | 18 | 21 | . |
| | | | *General Chemistry* | | | | |
| Density @25C (G/ML) | 8/ 8 | 1.1 | 1.2 | 1.16 | 4 | 6 | . |
| pH (STD UNITS) | 10/ 10 | 6.7 | 7.4 | 7.03 | 3 | 4 | . |
| | | | *Organic Compounds* | | | | |
| acetone (μg/g) | 3/ 11 | 0.47 | 0.81 | 0.209 | 135 | 148 | 0.1 |
| fluorocarbons (μg/g) | 2/ 2 | 0.9 | 1.3 | 1.1 | 26 | 230 | . |
| freon-113 (μg/g) | 0/ 11 | . | . | 0.05 | 0 | 0 | 0.1 |
| methylene chloride (μg/g) | 5/ 11 | 0.09 | 0.13 | 0.0555 | 86 | 94 | 0.03 |
| toluene (μg/g) | 0/ 11 | . | . | 0.03 | 0 | 0 | 0.06 |

Table 2.3 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| trans-1,2-dichloroethylene (μg/g) | 1/ 11 | 3.3 | 3.3 | 0.309 | 321 | 351 | 0.02 |
| trichloroethylene (μg/g) | 1/ 11 | 0.33 | 0.33 | 0.0391 | 247 | 270 | 0.02 |
| | | | ***Radionuclides*** | | | | |
| Cesium (pCi/g) | 1/ 9 | 7.2 | 7.2 | 3.8 | 34 | 42 | 6.76 |
| Neptunium (pCi/g) | 9/ 9 | 0.59 | 18.4 | 5.26 | 103 | 127 | . |
| Plutonium (pCi/g) | 9/ 9 | 0.45 | 10.7 | 4.25 | 83 | 102 | . |
| Technetium (pCi/g) | 9/ 9 | 1036. | 13513. | 4860 | 81 | 100 | . |
| U-235 (WT.%) | 10/ 10 | 1.12 | 1.39 | 1.21 | 7 | 8 | . |
| Uranium (μg/g) | 10/ 10 | 69 | 1044 | 559 | 56 | 65 | . |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.

Table 2.4. Analytical results for sludge samples taken in 1985 from the K-1407-C pond

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (μg/g) | 14/ 14 | 8500 | 40000 | 25900 | 39 | 37 | . |
| Arsenic (μg/g) | 3/ 14 | 65 | 97 | 18.4 | 176 | 166 | 5 |
| Barium (μg/g) | 14/ 14 | 13 | 160 | 91.1 | 54 | 51 | . |
| Beryllium (μg/g) | 2/ 14 | 0.18 | 0.29 | 0.0464 | 178 | 169 | 0.03 |
| Boron (μg/g) | 14/ 14 | 52 | 11000 | 3540 | 128 | 121 | . |
| Cadmium (μg/g) | 8/ 14 | 0.6 | 1.7 | 0.607 | 86 | 82 | 0.3 |
| Calcium (μg/g) | 14/ 14 | 130000 | 490000 | 316000 | 36 | 34 | . |
| Chromium (μg/g) | 14/ 14 | 30 | 2400 | 578 | 135 | 127 | . |
| Cobalt (μg/g) | 14/ 14 | 2 | 210 | 50.8 | 130 | 123 | . |
| Copper (μg/g) | 14/ 14 | 120 | 2000 | 546 | 114 | 108 | . |
| Iron (μg/g) | 14/ 14 | 2500 | 73000 | 25400 | 92 | 87 | . |
| Lead (μg/g) | 14/ 14 | 6 | 140 | 44.4 | 92 | 87 | . |
| Lithium (μg/g) | 14/ 14 | 2.9 | 31 | 17.7 | 52 | 49 | . |
| Magnesium (μg/g) | 14/ 14 | 4700 | 11000 | 7730 | 23 | 21 | . |
| Manganese (μg/g) | 14/ 14 | 73 | 1400 | 428 | 87 | 83 | . |
| Molybdenum (μg/g) | 0/ 14 | . | . | 0.5 | 0 | 0 | 1 |
| Nickel (μg/g) | 14/ 14 | 240 | 21000 | 5540 | 138 | 131 | . |
| Niobium (μg/g) | 7/ 14 | 3.1 | 5.3 | 2.23 | 90 | 86 | 0.7 |

Table 2.4 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Phosphorus (μg/g) | 14/ 14 | 320 | 18000 | 5010 | 123 | 116 | . |
| Potassium (μg/g) | 14/ 14 | 2600 | 15000 | 10100 | 31 | 29 | . |
| Selenium (μg/g) | 2/ 14 | 11 | 13 | 3.86 | 90 | 85 | 5 |
| Sodium (μg/g) | 14/ 14 | 740 | 15000 | 6030 | 83 | 79 | . |
| Strontium (μg/g) | 14/ 14 | 61 | 200 | 118 | 28 | 26 | . |
| Thorium (μg/g) | 9/ 14 | 27 | 53 | 33.6 | 58 | 55 | 20 |
| Titanium (μg/g) | 14/ 14 | 110 | 730 | 351 | 58 | 55 | . |
| Vanadium (μg/g) | 14/ 14 | 11 | 44 | 25.1 | 41 | 39 | . |
| Zinc (μg/g) | 14/ 14 | 68 | 660 | 219 | 88 | 84 | . |
| ***General Chemistry*** | | | | | | | |
| Density @25C (G/ML) | 11/ 11 | 1.1 | 1.7 | 1.35 | 14 | 16 | . |
| pH (STD UNITS) | 14/ 14 | 8.19 | 11.9 | 10.2 | 14 | 14 | . |
| ***Organics*** | | | | | | | |
| acetone (μg/g) | 9/ 14 | 0.14 | 1 | 0.252 | 103 | 97 | 0.1 |
| fluorocarbons (μg/g) | 2/ 2 | 2.5 | 3.5 | 3 | 24 | 210 | . |
| freon-113 (μg/g) | 2/ 14 | 0.18 | 0.27 | 0.0718 | 95 | 90 | 0.0925 |
| methylene chloride (μg/g) | 2/ 14 | 0.04 | 0.04 | 0.0176 | 58 | 55 | 0.0278 |
| toluene (μg/g) | 1/ 14 | 0.09 | 0.09 | 0.0324 | 56 | 53 | 0.0558 |

Table 2.4 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| trans-1,2-dichloroethylene (μg/g) | 1/ 14 | 0.14 | 0.14 | 0.0193 | 180 | 171 | 0.02 |
| trichloroethylene (μg/g) | 0/ 14 | . | . | 0.00936 | 26 | 24 | 0.0187 |
| | | | *Radionuclides* | | | | |
| Cesium (pCi/g) | 8/ 14 | 7.2 | 230. | 55.1 | 136 | 128 | 6.76 |
| Neptunium (pCi/g) | 14/ 14 | 0.68 | 81. | 20.9 | 137 | 130 | . |
| Plutonium (pCi/g) | 14/ 14 | 0.45 | 109. | 30.6 | 142 | 135 | . |
| Technetium (pCi/g) | 14/ 14 | 132. | 6126. | 1650 | 122 | 115 | . |
| U-235 (WT. %) | 14/ 14 | 1.31 | 2.61 | 1.6 | 25 | 23 | . |
| Uranium (μg/g) | 14/ 14 | 58 | 1841 | 506 | 107 | 102 | . |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.

Table 2.5. Analytical results for clay layer samples taken in 1985 from K-1407-B pond

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (μg/g) | 23/ 23 | 15000 | 62000 | 35900 | 32 | 23 | . |
| Arsenic (μg/g) | 2/ 23 | 19 | 66 | 5.98 | 226 | 162 | 5 |
| Barium (μg/g) | 23/ 23 | 48 | 630 | 125 | 93 | 67 | . |
| Beryllium (μg/g) | 23/ 23 | 0.19 | 1.5 | 0.882 | 40 | 29 | . |
| Boron (μg/g) | 23/ 23 | 19 | 140 | 69.8 | 44 | 31 | . |
| Cadmium (μg/g) | 1/ 23 | 1.2 | 1.2 | 0.196 | 112 | 80 | 0.3 |
| Calcium (μg/g) | 23/ 23 | 1400 | 68000 | 7680 | 181 | 129 | . |
| Chromium (μg/g) | 23/ 23 | 31 | 3200 | 317 | 209 | 149 | . |
| Cobalt (μg/g) | 23/ 23 | 6.9 | 48 | 18.8 | 50 | 36 | . |
| Copper (μg/g) | 14/ 14 | 4.2 | 1700 | 216 | 203 | 192 | . |
| Iron (μg/g) | 22/ 22 | 13000 | 93000 | 40500 | 41 | 30 | . |
| Lead (μg/g) | 20/ 23 | 11 | 220 | 32.3 | 137 | 98 | 5 |
| Lithium (μg/g) | 23/ 23 | 14 | 53 | 30.6 | 41 | 29 | . |
| Magnesium (μg/g) | 23/ 23 | 1300 | 8000 | 4380 | 44 | 32 | . |
| Manganese (μg/g) | 23/ 23 | 240 | 5400 | 911 | 126 | 90 | . |
| Molybdenum (μg/g) | 23/ 23 | 1 | 24 | 7.23 | 85 | 61 | . |
| Nickel (μg/g) | 23/ 23 | 33 | 9700 | 1030 | 199 | 142 | . |
| Phosphorus (μg/g) | 23/ 23 | 280 | 20000 | 1920 | 213 | 152 | . |

Table 2.5 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Potassium (μg/g) | 23/ 23 | 110 | 11000 | 5110 | 54 | 39 | . |
| Selenium (μg/g) | 23/ 23 | 21 | 140 | 73.3 | 35 | 25 | . |
| Sodium (μg/g) | 23/ 23 | 88 | 1200 | 423 | 56 | 40 | . |
| Strontium (μg/g) | 23/ 23 | 6.9 | 89 | 18.1 | 96 | 69 | . |
| Thorium (μg/g) | 2/ 23 | 24 | 58 | 12.7 | 81 | 58 | 20 |
| Titanium (μg/g) | 23/ 23 | 120 | 380 | 203 | 32 | 23 | . |
| Vanadium (μg/g) | 23/ 23 | 23 | 76 | 44.3 | 36 | 26 | . |
| Zinc (μg/g) | 23/ 23 | 29 | 1300 | 154 | 167 | 119 | . |
| | | | *Organics* | | | | |
| PCB (Aroclor-1254) (μg/g) | 2/ 4 | 0.57 | 3.62 | 1.07 | 160 | 377 | 0.1 |
| 1,1,1-trichloroethane (μg/g) | 4/ 23 | 0.26 | 25 | 1.18 | 441 | 316 | 0.04 |
| acetone (μg/g) | 7/ 23 | 0.11 | 1.4 | 0.253 | 148 | 106 | 0.156 |
| carbon tetrachloride (μg/g) | 2/ 23 | 0.14 | 3 | 0.15 | 414 | 296 | 0.03 |
| chloroform (μg/g) | 2/ 23 | 0.06 | 0.11 | 0.0204 | 140 | 101 | 0.0286 |
| methylene chloride (μg/g) | 17/ 23 | 0.04 | 0.24 | 0.0872 | 60 | 43 | 0.075 |
| tetrachloroethylene (μg/g) | 4/ 23 | 0.47 | 82 | 3.81 | 448 | 321 | 0.04 |
| toluene (μg/g) | 1/ 23 | 0.21 | 0.21 | 0.0496 | 134 | 96 | 0.0845 |
| trans-1,2-dichloroethylene (μg/g) | 3/ 23 | 0.13 | 2 | 0.162 | 298 | 214 | 0.029 |
| trichloroethylene (μg/g) | 8/ 23 | 0.04 | 69 | 3.09 | 465 | 333 | 0.02 |

Table 2.5 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Radionuclides* | | | | |
| Cesium (pCi/g) | 1/ 10 | 9.009 | 9.009 | 3.94 | 45 | 52 | 6.76 |
| Neptunium (pCi/g) | 10/ 10 | 0.045 | 4.054 | 1.02 | 123 | 142 | . |
| Plutonium (pCi/g) | 9/ 10 | 0.0450 | 4.054 | 1.19 | 108 | 125 | 0.0225 |
| Technetium (pCi/g) | 10/ 10 | 37.838 | 6756.757 | 1240 | 160 | 186 | . |
| U-235 (WT.%) | 22/ 22 | 0.76 | 2.82 | 1.78 | 32 | 24 | . |
| Uranium (μg/g) | 23/ 23 | 1.7 | 1416 | 172 | 194 | 139 | . |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.

Table 2.6. Analytical results for clay layer samples taken in 1985 from K-1407-C pond

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (μg/g) | 32/ 32 | 20000 | 65000 | 35900 | 28 | 17 | . |
| Arsenic (μg/g) | 4/ 32 | 7.4 | 36 | 4.64 | 148 | 89 | 5 |
| Barium (μg/g) | 32/ 32 | 53 | 230 | 106 | 44 | 26 | . |
| Beryllium (μg/g) | 17/ 32 | 0.05 | 1.1 | 0.254 | 124 | 74 | 0.03 |
| Boron (μg/g) | 32/ 32 | 23 | 73 | 40.2 | 32 | 19 | . |
| Cadmium (μg/g) | 15/ 32 | 0.43 | 0.97 | 0.378 | 71 | 43 | 0.3 |
| Calcium (μg/g) | 32/ 32 | 370 | 35000 | 3650 | 179 | 107 | . |
| Chromium (μg/g) | 32/ 32 | 19 | 99 | 47.7 | 44 | 26 | . |
| Cobalt (μg/g) | 32/ 32 | 5.1 | 77 | 18.3 | 66 | 40 | . |
| Copper (μg/g) | 29/ 32 | 1.2 | 47 | 9.63 | 98 | 59 | 0.4 |
| Iron (μg/g) | 32/ 32 | 19000 | 50000 | 31800 | 27 | 16 | . |
| Lead (μg/g) | 32/ 32 | 12 | 55 | 29.1 | 36 | 22 | . |
| Lithium (μg/g) | 32/ 32 | 14 | 35 | 22.5 | 28 | 17 | . |
| Magnesium (μg/g) | 32/ 32 | 2200 | 23000 | 4390 | 89 | 53 | . |
| Manganese (μg/g) | 32/ 32 | 320 | 6000 | 2180 | 66 | 40 | . |
| Molybdenum (μg/g) | 0/ 32 | . | . | 0.5 | 0 | 0 | 1 |
| Nickel (μg/g) | 32/ 32 | 12 | 700 | 52.1 | 229 | 137 | . |
| Phosphorus (μg/g) | 32/ 32 | 310 | 1000 | 549 | 27 | 16 | . |

Table 2.6 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Potassium (μg/g) | 32/ 32 | 1400 | 8600 | 3460 | 59 | 36 | . |
| Selenium (μg/g) | 0/ 32 | . | . | 2.5 | 0 | 0 | 5 |
| Sodium (μg/g) | 32/ 32 | 780 | 4400 | 2130 | 49 | 29 | . |
| Strontium (μg/g) | 32/ 32 | 5.2 | 18 | 10.1 | 37 | 22 | . |
| Thorium (μg/g) | 2/ 32 | 20 | 29 | 10.9 | 34 | 21 | 20 |
| Titanium (μg/g) | 32/ 32 | 160 | 330 | 245 | 21 | 13 | . |
| Vanadium (μg/g) | 32/ 32 | 30 | 78 | 47.9 | 24 | 14 | . |
| Zinc (μg/g) | 32/ 32 | 39 | 85 | 65 | 18 | 11 | . |
| | | | *Organics* | | | | |
| PCB (Aroclor-1254) (μg/g) | 0/ 10 | . | . | 0.05 | 0 | 0 | 0.1 |
| 1,1,1-trichloroethane (μg/g) | 0/ 32 | . | . | 0.02 | 0 | 0 | 0.04 |
| acetone (μg/g) | 5/ 32 | 0.19 | 0.68 | 0.105 | 147 | 88 | 0.1 |
| carbon tetrachloride (μg/g) | 0/ 32 | . | . | 0.015 | 0 | 0 | 0.03 |
| chloroform (μg/g) | 0/ 32 | . | . | 0.01 | 0 | 0 | 0.02 |
| methylene chloride (μg/g) | 1/ 32 | 0.09 | 0.09 | 0.0173 | 76 | 46 | 0.03 |
| tetrachloroethylene (μg/g) | 0/ 32 | . | . | 0.02 | 0 | 0 | 0.04 |
| toluene (μg/g) | 0/ 32 | . | . | 0.03 | 0 | 0 | 0.05 |
| trans-1,2-dichloroethylene (μg/g) | 0/ 32 | . | . | 0.01 | 0 | 0 | 0.02 |
| trichloroethylene (μg/g) | 0/ 32 | . | . | 0.01 | 0 | 0 | 0.02 |

Table 2.6 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Radionuclides* | | | | |
| Cesium (pCi/g) | 2/ 17 | 7.66 | 54.5 | 6.64 | 186 | 158 | 6.76 |
| Neptunium (pCi/g) | 17/ 17 | 0.05 | 1.04 | 0.286 | 87 | 74 | . |
| Plutonium (pCi/g) | 16/ 17 | 0.05 | 1.26 | 0.358 | 93 | 79 | 0.0225 |
| Technetium (pCi/g) | 9/ 17 | 26.1 | 82.9 | 32.4 | 73 | 62 | 24.8 |
| U-235 (WT.%) | 27/ 27 | 0.7 | 1.68 | 1.19 | 15 | 10 | . |
| Uranium (μg/g) | 30/ 32 | 3 | 57 | 14.6 | 81 | 49 | 1 |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.



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Table 2.7. EP-TOX results for sludge samples taken in 1985 from the K-1407-B pond

| Analyte | Proportion detected | Proportion > leachate criteria | Leachate criteria | Minimum detect | Maximum detect | Average | Coefficient of variation | Confidence interval index (%) | Mean detection limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic (mg/L) | 12/ 12 | 0/ 12 | 5.000[a] | 0.005 | 0.022 | 0.0113 | 46 | 48 | . |
| Barium (mg/L) | 12/ 12 | 0/ 12 | 100.000[a] | 0.18 | 0.92 | 0.429 | 55 | 57 | . |
| Cadmium (mg/L) | 12/ 12 | 0/ 12 | 0.190[b] | 0.025 | 0.085 | 0.056 | 29 | 30 | . |
| Chromium (mg/L) | 9/ 12 | 0/ 12 | 0.860[b] | 0.01 | 0.31 | 0.0438 | 195 | 202 | 0.01 |
| Lead (mg/L) | 11/ 12 | 0/ 12 | 0.370[b] | 0.004 | 0.025 | 0.00908 | 68 | 70 | 0.004 |
| Mercury (mg/L) | 4/ 12 | 0/ 12 | 0.200[a] | 0.001 | 0.012 | 0.00183 | 183 | 190 | 0.001 |
| Nickel* (mg/L) | 12/ 12 | 11/ 12 | 5.000[b] | 3.74 | 33.5 | 21.2 | 42 | 43 | . |
| Selenium (mg/L) | 1/ 12 | 0/ 12 | 1.000[a] | 0.005 | 0.005 | 0.00271 | 27 | 28 | 0.005 |
| Silver (mg/L) | 0/ 12 | 0/ 12 | 0.300[b] | . | . | 0.005 | 0 | 0 | 0.01 |
| endrin (mg/L) | 0/ 2 | 0/ 2 | 0.02[a] | . | . | 0.00005 | 42 | 379 | 0.0001 |
| lindane (mg/L) | 0/ 2 | 0/ 2 | 0.4[a] | . | . | 0.0118 | 75 | 672 | 0.0235 |
| methoxychlor (mg/L) | 0/ 2 | 0/ 2 | 10.0[a] | . | . | 0.00004 | 35 | 316 | 0.00008 |
| toxaphene (mg/L) | 0/ 2 | 0/ 2 | 0.5[a] | . | . | 0.001 | 71 | 631 | 0.002 |
| 2,4-D (mg/L) | 2/ 2 | 0/ 2 | 10.000[a] | 0.03 | 0.128 | 0.079 | 88 | 783 | . |
| silvex (mg/L) | 1/ 2 | 0/ 2 | 1.000[a] | 0.074 | 0.074 | 0.0378 | 136 | 1210 | 0.003 |

* Exceeds leachate criteria in at least one sample

[a]TCLP leachate criteria
[b]LDR leachate criteria

Table 2.8. EP-TOX results for pond sludge samples taken in 1985 from the K-1407-C pond

| Analyte | Proportion detected | Proportion > leachate criteria | Leachate criteria | Minimum detect | Maximum detect | Average | Coefficient of variation | Confidence interval index (%) | Mean detection limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic (mg/L) | 4/ 13 | 0/ 13 | 5.000[a] | 0.005 | 0.016 | 0.00465 | 91 | 89 | 0.005 |
| Barium (mg/L) | 13/ 13 | 0/ 13 | 100.000[a] | 0.24 | 1.02 | 0.515 | 40 | 40 | . |
| Cadmium (mg/L) | 8/ 13 | 0/ 13 | 0.19[b] | 0.002 | 0.03 | 0.00692 | 136 | 134 | 0.002 |
| Chromium (mg/L) | 4/ 13 | 0/ 13 | 0.860[b] | 0.06 | 0.25 | 0.0488 | 165 | 163 | 0.01 |
| Lead (mg/L) | 5/ 13 | 0/ 13 | 0.370[b] | 0.004 | 0.015 | 0.00423 | 97 | 96 | 0.004 |
| Mercury (mg/L) | 7/ 12 | 0/ 12 | 0.200[a] | 0.001 | 0.042 | 0.00954 | 153 | 159 | 0.001 |
| Nickel* (mg/L) | 13/ 13 | 12/ 13 | 5.000[b] | 0.15 | 18.9 | 4.7 | 118 | 117 | . |
| Selenium (mg/L) | 1/ 13 | 0/ 13 | 1.000[a] | 0.015 | 0.015 | 0.00346 | 100 | 99 | 0.005 |
| Silver (mg/L) | 0/ 13 | 0/ 13 | 0.300[b] | . | . | 0.005 | 0 | 0 | 0.01 |
| endrin (mg/L) | 0/ 3 | 0/ 3 | 0.02[a] | . | . | 0.0000267 | 11 | 37 | 0.0000533 |
| lindane (mg/L) | 1/ 3 | 0/ 3 | 0.400[a] | 0.034 | 0.034 | 0.0113 | 173 | 584 | 0.00001 |
| methoxychlor (mg/L) | 0/ 3 | 0/ 3 | 10.0[a] | . | . | 0.0000217 | 13 | 45 | 0.0000433 |
| toxaphene (mg/L) | 0/ 2 | 0/ 2 | 0.5[a] | . | . | 0.0005 | 0 | 0 | 0.001 |
| 2,4-D (mg/L) | 0/ 3 | 0/ 3 | 10.0[a] | . | . | 0.0147 | 4 | 13 | 0.0293 |
| silvex (mg/L) | 0/ 3 | 0/ 3 | 1.0[a] | . | . | 0.00417 | 35 | 117 | 0.00833 |

* Exceeds leachate criteria in at least one sample

[a]TCLP leachate criteria
[b]LDR leachate criteria

Table 2.9. EP-TOX results for clay layer samples taken in 1985 from the K-1407-B pond

| Analyte | Proportion detected | Proportion > leachate criteria | Leachate criteria | Minimum detect | Maximum detect | Average | Coefficient of variation | Confidence interval index (%) | Mean detection limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic (mg/L) | 3/ 23 | 0/ 23 | 5.000[a] | 0.006 | 0.011 | 0.00322 | 64 | 46 | 0.005 |
| Barium (mg/L) | 11/ 23 | 0/ 23 | 100.000[a] | 0.1 | 0.65 | 0.163 | 105 | 75 | 0.1 |
| Cadmium (mg/L) | 9/ 23 | 0/ 23 | 0.190[b] | 0.002 | 0.05 | 0.0104 | 153 | 109 | 0.002 |
| Chromium (mg/L) | 4/ 23 | 0/ 23 | 0.860[b] | 0.01 | 0.07 | 0.00848 | 159 | 114 | 0.01 |
| Lead (mg/L) | 17/ 23 | 0/ 23 | 0.370[b] | 0.004 | 0.018 | 0.00648 | 75 | 54 | 0.004 |
| Mercury (mg/L) | 2/ 23 | 0/ 23 | 0.200[a] | 0.002 | 0.003 | 0.000674 | 88 | 63 | 0.001 |
| *Nickel (mg/L) | 22/ 23 | 4/ 23 | 5.000[b] | 0.02 | 38 | 3.08 | 267 | 191 | 0.01 |
| Selenium (mg/L) | 1/ 23 | 0/ 23 | 1.000[a] | 0.011 | 0.011 | 0.00287 | 62 | 44 | 0.005 |
| Silver (mg/L) | 0/ 23 | 0/ 23 | 0.072[b] | . | . | 0.005 | 0 | 0 | 0.01 |
| endrin (mg/L) | 0/ 4 | 0/ 4 | 0.02[a] | . | . | 0.0000[illegible] | 6 | 15 | 0.0000775 |
| lindane (mg/L) | 1/ 4 | 0/ 1 | 0.400[a] | 0.008 | 0.008 | 0.00201 | 199 | 468 | 0.00002 |
| methoxychlor (mg/L) | 0/ 4 | 0/ 4 | 10.0[a] | . | . | 0.0000313 | 8 | 19 | 0.0000625 |
| toxaphene (mg/L) | 0/ 4 | 0/ 4 | 0.5[a] | . | . | 0.000875 | 29 | 67 | 0.00175 |
| 2 4 D (mg/L) | 1/ 4 | 0/ 4 | 10.0[a] | 0.084 | 0.084 | 0.0218 | 191 | 449 | 0.002 |
| silvex (mg/L) | 1/ 4 | 0/ 4 | 1.0[a] | 0.002 | 0.002 | 0.000613 | 151 | 355 | 0.0003 |

* Exceeds TCLP criteria in at least one sample

[a]TCLP leachate criteria
[b]LDR leachate criteria

Table 2.10. EP-TOX results for clay layer samples taken in 1985 from the K-1407-C pond

| Analyte | Proportion detected | Proportion > leachate criteria | Leachate criteria | Minimum detect | Maximum detect | Average | Coefficient of variation | Confidence interval index (%) | Mean detection limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic (mg/L) | 2/ 32 | 0/ 32 | 5.000[a] | 0.005 | 0.007 | 0.00272 | 33 | 20 | 0.005 |
| Barium (mg/L) | 29/ 32 | 0/ 32 | 100.000[a] | 0.11 | 1.99 | 0.587 | 94 | 56 | 0.1 |
| Cadmium (mg/L) | 7/ 32 | 0/ 32 | 0.190[b] | 0.002 | 0.04 | 0.00256 | 268 | 161 | 0.002 |
| Chromium (mg/L) | 3/ 32 | 0/ 32 | 0.860[b] | 0.01 | 0.01 | 0.00547 | 27 | 16 | 0.01 |
| Lead (mg/L) | 18/ 32 | 0/ 32 | 0.370[b] | 0.004 | 0.071 | 0.0105 | 144 | 86 | 0.004 |
| Mercury (mg/L) | 5/ 32 | 0/ 32 | 0.200[a] | 0.002 | 0.005 | 0.000891 | 118 | 71 | 0.001 |
| Nickel (mg/L) | 28/ 32 | 0/ 32 | 5.000[b] | 0.01 | 1.68 | 0.117 | 257 | 154 | 0.01 |
| Selenium (mg/L) | 15/ 32 | 0/ 32 | 1.000[a] | 0.005 | 0.023 | 0.00636 | 97 | 58 | 0.005 |
| Silver (mg/L) | 0/ 32 | 0/ 32 | 0.072[b] | . | . | 0.005 | 0 | 0 | 0.01 |
| endrin (mg/L) | 0/ 10 | 0/ 10 | 0.02[a] | . | . | 0.0000335 | 17 | 20 | 0.000067 |
| lindane (mg/L) | 1/ 10 | 0/ 10 | 0.400[a] | 0.0148 | 0.0148 | 0.00149 | 315 | 365 | 0.0000111 |
| methoxychlor (mg/L) | 0/ 10 | 0/ 10 | 10.0[a] | . | . | 0.000025 | 16 | 19 | 0.00005 |
| toxaphene (mg/L) | 0/ 10 | 0/ 10 | 0.5[a] | . | . | 0.00055 | 29 | 33 | 0.0011 |
| 2,4-D (mg/L) | 1/ 10 | 0/ 10 | 10.0[a] | 0.05 | 0.05 | 0.0191 | 58 | 67 | 0.0313 |
| silvex (mg/L) | 1/ 10 | 0/ 10 | 1.0[a] | 0.004 | 0.004 | 0.0048 | 9 | 10 | 0.00978 |

[a]TCLP leachate criteria
[b]LDR leachate criteria

The data were never formally validated. There were no laboratory qualifier flags on the results except to indicate results less than the detection limit. The procedures used call for QC measures including method blanks, duplicates, and matrix spikes. The data received for evaluation included results from: surrogate recoveries of volatile organics from 81 samples, matrix spikes of EP-TOX metals from 7 samples, matrix spikes of total metals from 1 sample, matrix spikes of radionuclides from 2 samples, and 6 pairs of laboratory duplicates. The duplicates were used to estimate the analytical uncertainty. The data were evaluated based on the following criteria: (1) representativeness, (2) comparability, (3) precision, (4) accuracy, (5) sensitivity, and (6) completeness.

### 2.3.1 Representativeness

The number and locations of samples from the pond were chosen to produce a statistically representative sample of the sludge and underlying clay in the ponds. While these data are representative of concentrations in the ponds, the mean results may not be representative of the material in the drums because the relative amounts of sludge and clay that were excavated from each pond and placed in the drums are unknown and because the relative volumes of sludge from each pond that previously have been grouted are unknown. However, the ranges of concentrations found in the ponds in 1985 may be representative of the ranges that could be expected in raw sludge currently in the drums.

### 2.3.2 Comparability

EP-TOX analyses and analyses for total metals followed EPA SW-846 methods. These methods are required for demonstrating compliance with Resource Conservation and Recovery Act (RCRA) regulations, although the TCLP test has replaced the EP-TOX test as a leachate evaluation. Although the leachate methods have changed, TCLP and EP-TOX analyses would be expected to give comparable results for those parameters determined. The data were compared to summary tables in a previously published report that used the same data evaluated here (Shoemaker and Bostick 1988).

The previously published summary tables of these data (Shoemaker and Bostick 1988) do not indicate the number of samples included in the summaries nor the number of analyses that were greater than the detection limit. This limited comparisons to the minimum and maximum results reported for a given media and pond. Reported means may be different depending upon how the results from duplicate samples and results less than the detection limit were treated in the previously published tables. In general, the minimum and maximum values agreed with the previous summaries. A notable exception, however, were the results for the total analyses of organic compounds. The organic compounds in the previous summary are determined to be reported low by a factor of 1000. Organics in the previous summary (Shoemaker and Bostick 1988) were reported as milligrams per gram rather than micrograms per gram as reported in this summary. Considering the normal reporting limits for organic compounds, the organic results in Tables 2.2 - 2.6 are believed to be reported correctly. Results for the EP-TOX tests are reported in the same units as in the Shoemaker and Bostick report (1988).

### 2.3.3 Precision

The average RPD for laboratory duplicates was calculated to assess analytical uncertainty (Tables 2.11 and 2.12). Results for both ponds were combined because sampling, analytical procedures, and sample matrix are assumed to be relatively the same for both ponds. Sludge and clay were summarized separately so that the effect of matrix differences could be seen. RPD values do not provide an estimate of precision for results that are less than the detection limit. Replicate analyses for nearly

Table 2.11. Results of laboratory duplicates analyses in sludge layer during 1985 sampling of the K-1407-B and -C ponds

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| | | | *Total Metals* | | | | |
| Aluminum (μg/g) | 2 | 1000 | 14000 | 7500 | 3.9 | 50.0 | 27.0 |
| Arsenic (μg/g) | 2 | 0 | 10 | 5 | 0.0 | 6.5 | 3.2 |
| Barium (μg/g) | 2 | 0 | 42 | 21 | 0.0 | 47.2 | 23.6 |
| Beryllium (μg/g) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Boron (μg/g) | 2 | 2 | 3230 | 1620 | 2.6 | 141.0 | 72.0 |
| Cadmium (μg/g) | 2 | 0 | 0.2 | 0.1 | 0.0 | 3.5 | 1.8 |
| Calcium (μg/g) | 2 | 1000 | 230000 | 116000 | 1.3 | 73.0 | 37.2 |
| Chromium (μg/g) | 2 | 10 | 120 | 65 | 2.0 | 66.7 | 34.3 |
| Cobalt (μg/g) | 2 | 0 | 4 | 2 | 0.0 | 22.2 | 11.1 |
| Copper (μg/g) | 2 | 40 | 140 | 90 | 5.9 | 73.7 | 39.8 |
| Iron (μg/g) | 1 | 5000 | 5000 | 5000 | 28.6 | 28.6 | 28.6 |
| Lead (μg/g) | 2 | 3 | 3 | 3 | 3.8 | 14.6 | 9.2 |
| Lithium (μg/g) | 2 | 2 | 8 | 5 | 13.3 | 50.0 | 31.7 |
| Magnesium (μg/g) | 2 | 200 | 700 | 450 | 4.1 | 11.8 | 7.9 |
| Manganese (μg/g) | 2 | 10 | 850 | 430 | 1.3 | 87.2 | 44.2 |
| Molybdenum (μg/g) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Nickel (μg/g) | 2 | 300 | 950 | 625 | 7.6 | 77.6 | 42.6 |
| Niobium (μg/g) | 2 | 0 | 0.1 | 0.05 | 0.0 | 3.2 | 1.6 |

Table 2.11 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| Phosphorus (μg/g) | 2 | 600 | 1200 | 900 | 11.5 | 46.2 | 28.8 |
| Potassium (μg/g) | 2 | 200 | 2000 | 1100 | 10.5 | 37.0 | 23.8 |
| Selenium (μg/g) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Sodium (μg/g) | 2 | 10 | 3100 | 1560 | 2.5 | 87.3 | 44.9 |
| Strontium (μg/g) | 2 | 0 | 34 | 17 | 0.0 | 43.6 | 21.8 |
| Thorium (μg/g) | 2 | 0 | 2 | 1 | 0.0 | 5.0 | 2.5 |
| Titanium (μg/g) | 2 | 10 | 170 | 90 | 4.7 | 35.1 | 19.9 |
| Vanadium (μg/g) | 2 | 1 | 16 | 8.5 | 6.1 | 51.6 | 28.8 |
| Zinc (μg/g) | 2 | 20 | 34 | 27 | 3.9 | 30.1 | 17.0 |
| ***General Chemistry*** | | | | | | | |
| Density @25C (G/ML) | 2 | 0 | 0.2 | 0.1 | 0.0 | 13.3 | 6.7 |
| pH (STD UNITS) | 2 | 0.1 | 0.3 | 0.2 | 1.4 | 2.7 | 2.1 |
| ***Radionuclides*** | | | | | | | |
| Cesium (DPM/G) | 2 | 0 | 4 | 2 | 0.0 | 10.3 | 5.1 |
| Neptunium (DPM/G) | 2 | 0 | 11.7 | 5.85 | 0.0 | 40.1 | 20.1 |
| Plutonium (DPM/G) | 2 | 0.9 | 6.8 | 3.85 | 59.6 | 62.1 | 60.9 |
| Technetium (DPM/G) | 2 | 360 | 1700 | 1030 | 20.7 | 54.0 | 37.3 |
| U-235 (WT.%) | 2 | 0.01 | 0.05 | 0.03 | 0.8 | 3.4 | 2.1 |

Table 2.11 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| Uranium (μg/g) | 2 | 73.4 | 74 | 73.7 | 19.4 | 23.8 | 21.6 |
| | | *EP-TOX Metals* | | | | | |
| Arsenic (mg/L) | 2 | 0.001 | 0.004 | 0.0025 | 10.5 | 57.1 | 33.8 |
| Barium (mg/L) | 2 | 0.02 | 0.04 | 0.03 | 6.3 | 10.5 | 8.4 |
| Cadmium (mg/L) | 2 | 0.001 | 0.002 | 0.0015 | 2.1 | 13.3 | 7.7 |
| Chromium (mg/L) | 2 | 0 | 0.22 | 0.11 | 0.0 | 129.0 | 64.7 |
| Lead (mg/L) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Mercury (mg/L) | 2 | 0 | 0.04 | 0.02 | 0.0 | 182.0 | 90.9 |
| Nickel (mg/L) | 2 | 0.1 | 2.86 | 1.48 | 0.5 | 41.0 | 20.8 |
| Selenium (mg/L) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Silver (mg/L) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |

Table 2.12. Results of laboratory duplicates analyses in clay layers during 1985 sampling of the K-1407-B and -C ponds

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| | | | *Total Metals* | | | | |
| Aluminum (μg/g) | 4 | 1000 | 7000 | 3000 | 2.1 | 17.3 | 7.2 |
| Arsenic (μg/g) | 4 | 0 | 16 | 4.7 | 0.0 | 57.1 | 25.2 |
| Barium (μg/g) | 4 | 1 | 10 | 5.5 | 1.7 | 13.8 | 5.9 |
| Beryllium (μg/g) | 4 | 0 | 0.26 | 0.09 | 0.0 | 37.8 | 17.6 |
| Boron (μg/g) | 4 | 4 | 18 | 9.25 | 11.4 | 54.5 | 25.5 |
| Cadmium (μg/g) | 4 | 0 | 0.2 | 0.065 | 0.0 | 50.0 | 14.8 |
| Calcium (μg/g) | 4 | 0 | 7100 | 3400 | 0.0 | 95.3 | 42.3 |
| Chromium (μg/g) | 4 | 1 | 90 | 25.5 | 4.4 | 54.5 | 21.1 |
| Cobalt (μg/g) | 4 | 0 | 4 | 1 | 0.0 | 33.3 | 8.3 |
| Copper (μg/g) | 4 | 2.6 | 41 | 13.6 | 36.0 | 153.0 | 69.7 |
| Iron (μg/g) | 4 | 0 | 7000 | 3250 | 0.0 | 18.2 | 8.5 |
| Lead (μg/g) | 4 | 1 | 8 | 4.75 | 3.3 | 26.7 | 16.2 |
| Lithium (μg/g) | 4 | 1 | 2 | 1.5 | 2.0 | 12.5 | 6.1 |
| Magnesium (μg/g) | 4 | 100 | 900 | 475 | 2.9 | 21.2 | 13.8 |
| Manganese (μg/g) | 4 | 20 | 500 | 203 | 7.4 | 15.9 | 10.3 |
| Molybdenum (μg/g) | 4 | 0 | 0.1 | 0.025 | 0.0 | 1.9 | 0.5 |
| Nickel (μg/g) | 4 | 1 | 1400 | 359 | 3.4 | 51.9 | 33.7 |
| Niobium (μg/g) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |

Table 2.12 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| Phosphorus (μg/g) | 4 | 30 | 400 | 160 | 6.7 | 33.3 | 20.4 |
| Potassium (μg/g) | 4 | 200 | 600 | 400 | 4.4 | 21.3 | 13.3 |
| Selenium (μg/g) | 4 | 0 | 7 | 1.75 | 0.0 | 8.2 | 2.1 |
| Sodium (μg/g) | 4 | 40 | 300 | 160 | 7.1 | 16.7 | 12.5 |
| Strontium (μg/g) | 4 | 0.2 | 13 | 5.05 | 2.6 | 63.4 | 28.9 |
| Thorium (μg/g) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Titanium (μg/g) | 4 | 10 | 30 | 15 | 3.1 | 9.8 | 5.6 |
| Vanadium (μg/g) | 4 | 1 | 16 | 7.5 | 1.7 | 22.9 | 11.4 |
| Zinc (μg/g) | 4 | 1 | 30 | 10.5 | 1.5 | 19.4 | 9.2 |
| | | | *Radionuclides* | | | | |
| Cesium (DPM/G) | 4 | 0 | 106 | 28.3 | 0.0 | 156.0 | 48.4 |
| Neptunium (DPM/G) | 4 | 0.1 | 0.8 | 0.4 | 16.0 | 50.0 | 32.5 |
| Plutonium (DPM/G) | 4 | 0.3 | 1.4 | 0.9 | 17.2 | 85.7 | 62.0 |
| Technetium (DPM/G) | 4 | 20 | 1600 | 451 | 15.4 | 76.7 | 53.5 |
| U-235 (WT.%) | 4 | 0.03 | 0.22 | 0.11 | 1.6 | 15.2 | 8.0 |
| Uranium (μg/g) | 4 | 0 | 43 | 11.5 | 0.0 | 55.5 | 15.9 |

Table 2.12 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| | | | *EP-TOX Metals* | | | | |
| Arsenic (mg/L) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Barium (mg/L) | 4 | 0.03 | 1.13 | 0.375 | 19.4 | 79.3 | 45.1 |
| Cadmium (mg/L) | 4 | 0 | 0.02 | 0.005 | 0.0 | 33.3 | 8.3 |
| Chromium (mg/L) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Lead (mg/L) | 4 | 0.004 | 0.019 | 0.0103 | 25.0 | 141.0 | 93.7 |
| Mercury (mg/L) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Nickel (mg/L) | 4 | 0.06 | 3.01 | 0.833 | 44.0 | 153.0 | 89.2 |
| Selenium (mg/L) | 4 | 0 | 0.002 | 0.0005 | 0.0 | 33.3 | 8.3 |
| Silver (mg/L) | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |

all organic compounds were less than the detection limit: therefore, organic compounds were not included in the tables.

To meet the objectives for the pond waste treatment evaluation, the calculated average RPD should be <20% or 164% depending on the parameter. If the RPD was above the criteria, the objective would still be met if the average absolute difference for the duplicates was less than the anticipated level of concern. If neither of these criteria is met, the precision of the data may not be adequate for the project.

The analytical precision of the total metals analyses in sludge met the objectives based on the average RPD or absolute difference except for chromium and nickel (Table 2.11). Objectives for metals that must meet leachate criteria were chosen such that analysis of the total raw sludge could be used to estimate whether the leachate criteria would likely be met after treatment. This determination cannot be made for chromium and nickel with certainty because of the large variability in duplicate results (34 and 43% respectively). Although some other metals exceed the 20% RPD criteria, the absolute differences are less than the anticipated level of concern. For example, barium has an average RPD of 24% but the average absolute difference is 21 $\mu$g/g which is less than the 200 $\mu$g/g anticipated level of concern. Radionuclides met the objectives based on the size of the absolute differences. The specific activity of total uranium at 2.8% uranium-235 (the highest observed enrichment in this data) would be $\sim$2 $\mu$Ci/g. The 74 $\mu$g/g difference between replicates would be the equivalent of 148 pCi/g total uranium activity with roughly half the activity from uranium-234 and half from uranium-238. These activities are below the anticipated level of concern for uranium-234 and uranium-238 in Table 1.2. The general chemistry and other parameters measured also met the respective criteria (phosphorus, density, and pH). Of the leachate metals measured, only nickel had results outside the objectives. It must be recognized that these estimates of precision are crude because so few pairs of replicates were available for analysis.

The RPDs based on the laboratory duplicates for analyses of the clay layer followed the same pattern as for the sludge layer with respect to meeting the objectives. Metals met the criteria with the exception of chromium and nickel (Table 2.12). Radionuclides met the objectives. Phosphorous, the only general chemistry parameter measured in the clay duplicates, also met the criteria. Of the TCLP metals measured, only nickel had results outside objectives. Precision for arsenic, mercury, and silver could not be determined because all of the results were less than the detection limit.

### 2.3.4 Accuracy

Surrogate recoveries of volatile organic compounds for 81 samples were all within the acceptable range for the method. The volatile results should, therefore, be reasonably accurate. The %R for matrix spikes on total metals and radionuclides were acceptable (between 75 and 125%), but analyses were performed only for cadmium, lead, molybdenum, neptunium, and plutonium. The accuracy of the other metals and radionuclides analyzed cannot be assessed with the available data.

Matrix spike results for metals analyses on 4 EP-TOX extracts were all between 90 and 110%R. Results were not available for mercury, so the accuracy of mercury cannot be assessed. QC data for herbicide and pesticide analyses of EP-TOX extracts also were not available for evaluation.

### 2.3.5 Sensitivity

Sensitivity was assessed in terms of the concentration of analyte that could be detected in the matrix. The mean detection limit from the data summaries (Tables 2.2 - 2.10) was compared to the anticipated level of concern identified in Tables 1.1 - 1.3. Except for total analyses of lead and selenium, the mean detection limit for all parameters was less than or equal to the anticipated level of concern or the parameter was never below the detection limit. The mean detection limit for lead was 5 $\mu$g/g while the anticipated level of concern was 0.74 $\mu$g/g. For selenium the mean detection limit was 5 $\mu$g/g and the level of concern was 2 $\mu$g/g. Anticipated levels of concern for total analyses included a safety factor of 10. Therefore these mean detection levels still allow a 3- to 4-fold confidence factor that the element does not exceed a total concentration where it could potentially create a TCLP leachate in excess of the regulatory level. The mean detection limits for all EP-TOX results, including cadmium and selenium, were less than or equal to the anticipated levels of concern identified for leachate analyses.

### 2.3.6 Completeness

Completeness was assessed by checking whether all analytes specified in the Data Quality Objectives Memorandum (SAIC 1993) were measured. Liquids were not separated from the sludge for analysis so no information on the liquid fraction was generated. Total metals analyses were performed on both the sludge and clay fractions with the exception of mercury and silver, which were not analyzed in either sludge or clay. Total and amenable cyanides and silica, under the metals category, were not measured. Of the parameters listed under general chemistry in Table 1.3, only phosphorous was measured. Radionuclides measured did not include strontium or thorium isotopes. pH was reported only for sludge samples. Moisture content, mineral content, and particle size distribution were not determined for any samples. Only PCBs and some of the volatile organic compounds listed in Table 1.1 were measured for total concentrations in the sludge and clay. Herbicides and pesticides were not measured for total concentrations but were measured in the EP-TOX extracts. All current TCLP and LDR metals were measured in the EP-TOX extracts. In summary, the 1985 pond sampling data do not satisfy current data needs for a number of analytes, especially organics.

The number of samples analyzed also affects the uncertainty in characterizing the mean parameter value. The uncertainty in characterizing the material was assessed by calculating a confidence interval index. This index is the 95% confidence interval of the mean expressed as a percent. If the mean need only be characterized within a factor of 10, this index must be $<164\%$. For example, if the 95% confidence interval ranged from 100 to 1000 and the mean was 550, the index would be calculated as (1000-100)/550. Taken as a percent, this ratio is 164. Most parameters may be characterized with less than a factor of 10 uncertainty about the mean (Tables 2.3 - 2.10).

## 2.4 DATA SUMMARY

### 2.4.1 Total Analyses of the Sludge Layer

In the B pond sludge, few organic compounds were detected other than acetone and methylene chloride, which were always $<1$ $\mu$g/g and could be the result of laboratory contamination during analysis (Table 2.3). Trichloroethylene (TCE) and trans-1,2-dichloroethylene were each detected once out of 11 analyses at concentrations of 0.33 and 3.3 $\mu$g/g, respectively. The concentration of TCE is below the anticipated level of concern and, therefore, is not of concern. There are no TCLP limits for trans-1,2-

dichloroethylene. The results from two samples indicated that fluorocarbons were present. but no specific compounds were identified. The pH of the B pond sludge samples were close to neutral (6.7 to 7.4). Technetium-99 and uranium isotopes were the most abundant radionuclides.

Total analyses from the C pond sludge (Table 2.4) generally had lower mean concentrations of metals than the B pond (Table 2.3). Based on a t-test, concentrations of aluminum, arsenic, barium, beryllium, copper, iron, lead, molybdenum, vanadium, and zinc were significantly lower in the C pond than in the B pond (at a 0.05 probability level). Concentrations of boron, calcium, potassium, selenium, sodium, and thorium were significantly higher, however. As in the B pond, few organic compounds were detected. The mean technetium-99 concentration was significantly lower in the C pond sludge than the B pond sludge, but cesium, plutonium, and the percent uranium-235 enrichment were higher.

### 2.4.2 Total Analyses of the Clay Layer

More organic compounds were detected in the B pond clay layer than in the C pond clay layer or in the sludge from either pond (Table 2.5). PCB-1254 was detected in 2 out of 4 samples analyzed with a maximum concentration of 3.6 $\mu$g/g. Six other organic compounds were measured at concentrations $> 1$ $\mu$g/g: 1,1,1-trichloroethane (25 $\mu$g/g), acetone (1.4), carbon tetrachloride (3.0), tetrachloroethylene (82.), trans-1,2-dichloroethylene (2.0), and trichloroethylene (69.). The maximum measured concentrations of tetrachloroethylene (PCE) and TCE are both more than 20 times the TCLP waste extraction criteria. This would allow these compounds to exceed the TCLP leachate limit if they were fully leachable. Therefore, to be confident that these clay samples would not exceed TCLP limits, additional PCE and TCE TCLP analyses may be warranted.

Organics were difficult to characterize because they were heterogeneously distributed. PCE and TCE are both more dense than water and could therefore settle in localized depressions in the pond. Both could also adsorb to clay particles. This could explain why TCE was detected in only 1 out of 11 sludge samples from the B pond but in 8 out of 23 clay layer samples.

### 2.4.3 EP-TOX Analyses

If EP-TOX results are taken as equivalent to TCLP analyses, the results suggest that the untreated sludge from the B and C ponds would not pass LDR disposal criteria for nickel (Tables 2.7 and 2.8). Nickel results for EP-TOX analyses of the clay samples for the B pond also exceeded the LDR disposal criteria, but not as frequently as the sludge samples (Tables 2.9). The maximum concentrations of cadmium measured in the C pond and B pond clay did not exceed the disposal criteria, but were close to it. TCLP criteria were not exceeded for any of the herbicides or pesticides measured. Based on these results, analysis of nickel is warranted on treated material to verify that LDR disposal criteria have been met.

# 3. 1991 SAMPLING OF DRUMS ON THE K-1417 DRUM STORAGE YARD

## 3.1 SAMPLING DESCRIPTION

A sampling effort was started in July 1991 to characterize the ~32,000 drums of unprocessed sludge stored in drums on the K-1417 Drum Storage Yard and process vaults of the K-25 Building (Kirkpatrick et al. 1992). About 19,000 drums contain sludge from the B pond and 13,000 drums from the C pond. The sampling design called for sampling of 22 drums from each pond. This would result in the maximum value of each group representing the 90% upper confidence bound on the 90th percentile of the sampled population. The complete 22 samples were obtained from C pond drums, but only 16 B pond drums were sampled because of safety concerns. For the B pond drums, the maximum value represents the 90% upper confidence bound on the 87th percentile of the sampled population.

Five gallons of sludge were sampled from each drum. When possible, samples were taken by inserting a tube to the bottom of the drum and withdrawing the filled tube. This sampled all levels of the drum and included the overlaying water in same proportion as was originally in the drum. When sludge consistency or inclusions prevented a sampler from reaching the bottom of the drum, a scoop was used to obtain the sample. Subsequent subsampling of these drum composites in February and March of 1992 yielded samples for cyanide analysis.

## 3.2 ANALYSES PERFORMED

Liquid decanted off the sludge was analyzed for anions, radionuclides, metals, total organic carbon, pH, density, and total dissolved solids by EPA SW-846 methods (Table 3.1). The sludge was analyzed for anions, radionuclides, metals, total organic carbon, pH, total cyanide, and density. Analyses for TCLP metals were performed on wet sludge and sludge after drying.

## 3.3 DATA EVALUATION

Three types of samples were analyzed in this study: (1) the sludge solids (Table 3.2), (2) the liquid fraction decanted off the sludge (Table 3.3), and (3) the TCLP extracts of the sludge (Table 3.4). For the summary tables, only primary samples were included in the statistics; field and laboratory duplicates and blanks/spikes were excluded. The data have been summarized across samples taken from drums from both ponds. Summarizing across all drums represents the characteristics of the waste that will require treatment during the next phase of treatment and disposal.

The data were never formally validated, so an examination of the laboratory QC data was performed (Appendix A). This examination focused on the available duplicate, matrix spike, and LCS results as measures of precision and accuracy. The conclusions of the analytical data quality evaluation are presented where applicable in the following subsections. The data were evaluated based on the following criteria: (1) representativeness, (2) comparability, (3) precision, (4) accuracy, (5) sensitivity, and (6) completeness.

**Table 3.1. Summary of the analytical procedures for 1991 sampling of drums on the K-1417 drum storage yard**

| Media | Analyses | Analytical method | Reference method |
|---|---|---|---|
| Liquid | Chloride | Chloride, waste | EPA-300.0 |
| | Sulfate | Sulfate, waste | EPA-300.0 |
| | Nitrate | Nitrate, waste | EPA-300.0 |
| | Phosphate | Phosphate, waste | EPA-365.2 |
| | Fluoride | Fluoride, waste | EPA-340.2 |
| | Uranium | Uranium, fluorometric | TP-1837 |
| | U-235 | Thermal ionization | TP-2101 |
| | Metals (ICP) | Metal quantitation | EPA-3010/6010 |
| | As | Arsenic, waste, AA | EPA-7060 |
| | Se | Selenium, waste, AA | EPA-7740 |
| | Tl | Thallium, waste, AA | EPA-3020/7841 |
| | Pb | Lead, waste, AA | EPA-3020/7421 |
| | Hg | Mercury, waste, AA | EPA-7470 |
| | Alpha activity | Alpha activity, waste | ACD-160068 |
| | Beta activity | Beta activity, waste | ACD-160068 |
| | Gamma activity | Gamma activity, waste | ACD-160067 |
| | pH | pH, waste | EPA-9040 |
| | Total dissolved solids | TDS, waste | EPA-160.2 |
| | TOC | Total organic carbon | EPA-415.1 |
| | Density | Density, water | TP-182407 |
| Sludges | Chloride | Chloride, sludge | ACD-1948/EPA-300.0 |
| | Sulfate | Sulfate, sludge | ACD-1948/EPA-300.0 |
| | Nitrate | Nitrate, sludge | ACD-1948/EPA-300.0 |
| | Phosphate | Phosphate, sludge | ACD-1948/EPA-365.2 |
| | Fluoride | Fluoride, sludge | ACD-1948/EPA-340.2 |
| | Uranium | Uranium, fluorometric | TP-1837 |
| | U-235 | Thermal ionization | TP-2101 |
| | TOC | Total organic carbon | TP-185203 |
| | Density | Density | TP-182403 |

| Media | Analyses | Analytical method | Reference method |
|---|---|---|---|
| | Metals (ICP) | Metal Quantitation | EPA-3050/6010 |
| | As | Arsenic, sludge, AA | EPA-3050/7060 |
| | Se | Selenium, sludge, AA | EPA-3050/7740 |
| | Tl | Thallium, sludge, AA | EPA-3050/7841 |
| | Pb | Lead, sludge, AA | EPA-3050/7421 |
| | Hg | Mercury, sludge, AA | EPA-7471 |
| | Tc-99 | Technetium-99, waste | ACD-160069 |
| | Th-228 | Thorium-228, waste | ACD-160065 |
| | Th-230 | Thorium-230, waste | ACD-160065 |
| | Th-232 | Thorium-232, waste | ACD-160065 |
| | Np-237 | Neptunium-237 | ACD-160065 |
| | Pu-238 | Plutonium-238 | ACD-160065 |
| | Pu-239/240 | Plutonium-239/240 | ACD-160065 |
| | Alpha activity | Alpha activity, sludge | ACD-160068 |
| | Beta activity | Beta activity, sludge | ACD-160068 |
| | Gamma activity | Gamma activity, sludge | ACD-160067 |
| | pH | pH, sludge | EPA-9045 |
| | TCLP | TCLP, sludge | EPA-1311 |
| | Total solids | TS, waste | EPA-160.1 |
| | Total cyanide | Total cyanide, sludge | EPA 9010, ACD-184403 |
| TCLP Leachate | Metals (ICP) | Metal Quantitation | EPA-3010/6010 |
| | As | Arsenic, waste, AA | EPA-3010/6010 |
| | Se | Selenium, waste, AA | EPA-3010/6010 |
| | Tl | Thallium, waste, AA | EPA-3010/7841 |
| | Pb | Lead, waste, AA | EPA-3010/6010 |
| | Hg | Mercury, waste, AA | EPA-7470 |
| | pH | pH, waste | EPA-9040 |

Table 3.2. Analytical results for sludge samples taken in 1991 from B and C pond drums at the K-1417 drum storage yard

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficent of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (mg/kg) | 32/ 32 | 4900 | 26000 | 14800 | 40 | 24 | . |
| Antimony (mg/kg) | 2/ 32 | 4.8 | 42 | 12.2 | 113 | 23 | 22.9 |
| Arsenic-AA (mg/kg) | 33/ 33 | 17.8 | 379 | 91.5 | 104 | 62 | . |
| Arsenic-ICP (mg/kg) | 19/ 32 | 4.4 | 110 | 31.8 | 78 | 47 | 42.9 |
| Barium (mg/kg) | 32/ 32 | 36 | 110 | 59.9 | 27 | 16 | . |
| Beryllium (mg/kg) | 27/ 32 | 0.25 | 0.96 | 0.483 | 47 | 28 | 0.344 |
| Boron (mg/kg) | 5/ 5 | 9 | 71 | 33 | 90 | 171 | . |
| Cadmium (mg/kg) | 22/ 32 | 0.92 | 3.1 | 1.75 | 33 | 20 | 3.[illegible] |
| Calcium (mg/kg) | 32/ 32 | 3500 | 180000 | 60900 | 73 | 44 | . |
| Chromium (mg/kg) | 32/ 32 | 48 | 510 | 167 | 58 | 35 | . |
| Cobalt (mg/kg) | 32/ 32 | 6.8 | 26 | 15 | 35 | 21 | . |
| Copper (mg/kg) | 32/ 32 | 71 | 270 | 159 | 42 | 25 | . |
| Lead-AA (mg/kg) | 33/ 33 | 32.8 | 187 | 69.1 | 60 | 35 | . |
| Lead-ICP (mg/kg) | 23/ 32 | 20 | 75 | 32.4 | 38 | 23 | 58.6 |
| Magnesium (mg/kg) | 32/ 32 | 1000 | 4100 | 2350 | 35 | 21 | . |
| Manganese (mg/kg) | 32/ 32 | 120 | 2100 | 514 | 75 | 45 | . |
| Mercury (mg/kg) | 33/ 33 | 4.7 | 81 | 23.6 | 80 | 47 | . |
| Molybdenum (mg/kg) | 13/ 32 | 0.96 | 8.4 | 3.37 | 74 | 44 | 6.67 |
| Nickel (mg/kg) | 32/ 32 | 270 | 2200 | 1020 | 55 | 33 | . |
| Potassium (mg/kg) | 32/ 32 | 370 | 5200 | 2640 | 50 | 30 | . |

Table 3.2 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficent of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Selenium-AA (mg/kg) | 33/ 33 | 0.74 | 13.6 | 2.86 | 102 | 60 | . |
| Selenium-ICP (mg/kg) | 3/ 32 | 4.8 | 42 | 12.3 | 112 | 67 | 23.6 |
| Silicon (mg/kg) | 5/ 5 | 230 | 530 | 356 | 31 | 60 | . |
| Silver (mg/kg) | 12/ 32 | 0.55 | 6 | 1.74 | 92 | 55 | 3.8 |
| Sodium (mg/kg) | 32/ 32 | 230 | 2000 | 770 | 55 | 33 | . |
| Thallium (mg/kg) | 33/ 33 | 0.3 | 4.52 | 1.27 | 90 | 53 | . |
| Vanadium (mg/kg) | 32/ 32 | 9.5 | 34 | 21.1 | 29 | 17 | . |
| Zinc (mg/kg) | 32/ 32 | 44 | 180 | 93.3 | 42 | 25 | . |
| | | | *General Chemistry* | | | | |
| Chloride (mg/kg) | 23/ 34 | 28 | 305 | 116 | 64 | 37 | 95.5 |
| Fluoride (mg/kg) | 34/ 34 | 15 | 320 | 99.8 | 88 | 51 | . |
| Nitrate (mg/kg) | 0/ 34 | . | . | 23.2 | 70 | 41 | 46.5 |
| Sulfate (mg/kg) | 34/ 34 | 477 | 6649 | 2140 | 72 | 42 | . |
| Density (g/mL) | 34/ 34 | 0.92 | 1.84 | 1.42 | 14 | 8 | . |
| pH (std units) | 27/ 27 | 7 | 11.6 | 9.52 | 19 | 12 | . |
| Total organic carbon (%) | 33/ 33 | 0.27 | 7 | 1.82 | 102 | 60 | . |
| Total phosphate (mg/kg) | 34/ 34 | 1.5 | 130 | 23.5 | 124 | 72 | . |
| Total solids (%) | 33/ 33 | 14.42 | 83.77 | 48.5 | 36 | 21 | . |
| Water weight loss (%) | 24/ 24 | 16.23 | 85.58 | 46.7 | 35 | 25 | . |
| Total cyanide (mg/kg)[e] | 0/38 | . | . | 1.0 | . | . | 1.0 |

Table 3.2 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficent of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Radionuclides* | | | | |
| Alpha activity (pCi/g) | 33/ 33 | 88.2 | 868 | 420 | 51 | 30 | 22 |
| Beta activity (pCi/g) | 33/ 33 | 242 | 4570 | 1180 | 81 | 48 | 33 |
| Cesium-137 (pCi/g) | 33/ 33 | 0.622 | 50 | 15.6 | 85 | 50 | 1.7 |
| Neptunium-237 (pCi/g) | 33/ 33 | 1.42 | 62.7 | 19.3 | 81 | 48 | 3.1 |
| Plutonium-238 (pCi/g) | 17/ 33 | 0.18 | 0.885 | 0.296 | 71 | 42 | 0 .3 |
| Plutonium-239 (pCi/g) | 32/ 33 | 0.551 | 62.2 | 19 | 82 | 49 | 2.8 |
| Protactinium-234 (pCi/g) | 32/ 33 | 116 | 865 | 406 | 55 | 33 | 112 |
| Technetium-99 (pCi/g) | 33/ 33 | 14 | 5310 | 1590 | 82 | 48 | 95 |
| Thorium-228 (pCi/g) | 34/ 34 | 0.413 | 24.13 | 1.95 | 205 | 119 | 2.1 |
| Thorium-230 (pCi/g) | 33/ 33 | 14 | 294 | 80.7 | 67 | 39 | 6.4 |
| Thorium-232 (pCi/g) | 33/ 33 | 0.23 | 20.2 | 3.78 | 135 | 79 | 1.3 |
| Thorium-234 (pCi/g) | 33/ 33 | 32.4 | 360 | 162 | 59 | 35 | 10.4 |
| Uranium-235 (pCi/g) | 31/ 31 | 3.77 | 34.55 | 17.4 | 55 | 33 | 1.9 |
| Uranium-235 (wt %) | 34/ 34 | 1.2 | 2.7 | 1.37 | 18 | 10 | . |
| Uranium Y-12 (mg/kg) | 34/ 34 | 134 | 1050 | 544 | 56 | 32 | . |
| Uranium K-25 (mg/kg) | 34/ 34 | 200 | 2800 | 1160 | 67 | 39 | . |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.
[e] Regulatory criterion for F006 wastes is 590 mg/kg total cyanide.

**Table 3.3. Analytical results for liquid samples taken in 1991 from B and C pond drums at the K-1417 drum storage yard**

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Metals* | | | | |
| Aluminum (mg/L) | 21/ 27 | 0.096 | 180 | 22.2 | 213 | 140 | 0.2 |
| Antimony (mg/L) | 0/ 27 | . | . | 0.308 | 144 | 95 | 0.617 |
| Arsenic-AA (mg/L) | 15/ 15 | 0.0106 | 0.756 | 0.135 | 165 | 150 | . |
| Arsenic-ICP (mg/L) | 0/ 27 | . | . | 0.308 | 144 | 95 | 0.617 |
| Barium (mg/L) | 26/ 27 | 0.01 | 0.41 | 0.0699 | 140 | 92 | 0.01 |
| Beryllium (mg/L) | 5/ 27 | 0.0003 | 0.0034 | 0.002 | 134 | 88 | 0.00423 |
| Boron (mg/L) | 27/ 27 | 0.2 | 5.9 | 1.55 | 93 | 61 | . |
| Cadmium (mg/L) | 0/ 27 | . | . | 0.0185 | 144 | 95 | 0.037 |
| Calcium (mg/L) | 27/ 27 | 9.9 | 770 | 383 | 80 | 53 | . |
| Chromium (mg/L) | 5/ 27 | 0.021 | 0.97 | 0.125 | 171 | 112 | 0.133 |
| Cobalt (mg/L) | 2/ 27 | 0.076 | 0.077 | 0.0346 | 133 | 87 | 0.0626 |
| Copper (mg/L) | 12/ 27 | 0.0083 | 1.2 | 0.153 | 181 | 119 | 0.0376 |
| Lead-AA (mg/L) | 14/ 14 | 0.0014 | 0.294 | 0.0602 | 160 | 151 | . |
| Lead-ICP (mg/L) | 0/ 27 | . | . | 0.3 | 149 | 98 | 0.6 |
| Magnesium (mg/L) | 26/ 27 | 0.078 | 160 | 63.8 | 93 | 61 | 0.03 |
| Manganese (mg/L) | 25/ 27 | 0.027 | 9.4 | 1.89 | 123 | 81 | 0.01 |
| Mercury (mg/L) | 25/ 28 | 0.002 | 0.95 | 0.149 | 171 | 110 | 0.02 |
| Nickel (mg/L) | 27/ 27 | 0.066 | 4.5 | 0.967 | 120 | 79 | . |

Table 3.3 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| Selenium-AA (mg/L) | 15/ 15 | 0.002 | 0.0168 | 0.008 | 61 | 56 | . |
| Selenium-ICP (mg/L) | 0/ 27 | . | . | 0.308 | 144 | 95 | 0.617 |
| Silver (mg/L) | 1/ 27 | 0.063 | 0.063 | 0.0382 | 140 | 92 | 0.0745 |
| Sodium (mg/L) | 27/ 27 | 140 | 650 | 334 | 44 | 29 | . |
| Thallium (mg/L) | 15/ 15 | 0.001 | 0.0065 | 0.0020 | 83 | 76 | . |
| Vanadium (mg/L) | 4/ 27 | 0.052 | 0.27 | 0.0494 | 146 | 96 | 0.0637 |
| Zinc (mg/L) | 24/ 25 | 0.0095 | 1.7 | 0.184 | 215 | 147 | 0.02 |
| | | | *General Chemistry* | | | | |
| Chloride (mg/L) | 19/ 19 | 90 | 431 | 237 | 48 | 39 | . |
| Fluoride (mg/L) | 19/ 19 | 2.3 | 28 | 7.35 | 95 | 76 | . |
| Nitrate (mg/L) | 0/ 19 | . | . | 19.5 | 49 | 39 | 39 |
| Sulfate (mg/L) | 19/ 19 | 355 | 1930 | 1480 | 31 | 24 | . |
| Density (g/mL) | 19/ 19 | 0.9806 | 1.023 | 0.99 | 1 | 1 | . |
| pH (std units) | 19/ 19 | 7.2 | 12.1 | 8.8 | 21 | 16 | . |
| Dissolved solids (mg/L) | 18/ 18 | 2058 | 4426 | 3080 | 19 | 16 | . |
| Total organic carbon (mg/L) | 17/ 17 | 11 | 84 | 35.2 | 64 | 54 | . |
| Total phosphate (mg/L) | 19/ 19 | 0.3 | 2 | 0.626 | 63 | 50 | . |

Table 3.3 (continued)

| Analyte | Proportion detected | Minimum detect | Maximum detect | Average[a] | Coefficient of variation[b] | Confidence interval index (%)[c] | Mean detection limit[d] |
|---|---|---|---|---|---|---|---|
| | | | *Radionuclides* | | | | |
| Alpha activity (pCi/L) | 11/ 11 | 331 | 6090 | 3220 | 59 | 65 | 1070 |
| Beta activity (pCi/L) | 11/ 11 | 2320 | 17400 | 7670 | 63 | 69 | 1800 |
| Cesium-137 (pCi/L) | 2/ 11 | 104 | 109 | 39.1 | 99 | 108 | 128 |
| Protactinium-234 (pCi/L) | 1/ 11 | 16100 | 16100 | 6740 | 67 | 74 | 23900 |
| Thorium-228 (pCi/L) | 1/ 1 | 2690 | 2690 | 2690 | . | . | 2800 |
| Thorium-234 (pCi/L) | 6/ 11 | 725 | 2730 | 1120 | 96 | 105 | 1450 |
| Uranium-235 (pCi/L) | 6/ 6 | 135 | 273 | 179 | 31 | 50 | 216 |
| Uranium-235 (weight) | 20/ 20 | 1.1 | 1.9 | 1.34 | 15 | 12 | . |
| Uranium (mg/L) | 20/ 20 | 0.018 | 8.29 | 2.75 | 92 | 71 | . |
| Uranium fluorometric (mg/L) | 17/ 19 | 0.16 | 8.2 | 3 | 94 | 75 | 0.1 |

[a] Average includes nondetects at $Y_2$ the detection limit. Radionuclides are included as the reported result.
[b] Coefficient of variation is the standard deviation divided by the mean taken as a percent.
[c] Confidence interval index is the 95% confidence interval of the mean divided by the mean taken as a percent.
[d] The mean detection limit is the mean of all values reported as less than detects. For radionuclides reported with counting uncertainties, the value reported is the average 2 sigma counting uncertainty.



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Table 3.4. TCLP results for sludge samples taken in 1991 from B and C pond drums at the K-1417 drum storage yard

| Analyte | Proportion detected | Proportion > leachate criteria | leachate criteria | Minimum detect | Maximum detect | Average | Coefficient of variation | Confidence interval index | Mean detection limit |
|---|---|---|---|---|---|---|---|---|---|
| | | | | *Dried sludge* | | | | | |
| Arsenic (mg/L) | 0/ 32 | 0/ 32 | 5.000[a] | . | . | 0.25 | 0 | 0 | 0.5 |
| Barium (mg/L) | 0/ 35 | 0/ 35 | 100.000[a] | . | . | 0.5 | 0 | 0 | 1 |
| Cadmium (mg/L) | 4/ 35 | 0/ 35 | 0.190[b] | 0.031 | 0.038 | 0.0172 | 37 | 21 | 0.03 |
| Chromium (mg/L) | 3/ 35 | 0/ 35 | 0.860[b] | 0.13 | 0.35 | 0.0666 | 92 | 52 | 0.1 |
| Lead (mg/L) | 0/ 35 | 0/ 35 | 0.370[b] | . | . | 0.25 | 0 | 0 | 0.5 |
| Mercury* (mg/L) | 26/ 35 | 3/ 35 | 0.200[a] | 0.0046 | 0.4 | 0.0613 | 147 | 84 | 0.016 |
| Nickel* (mg/L) | 35/ 35 | 20/ 35 | 5.000[b] | 0.71 | 16 | 6.76 | 60 | 34 | . |
| Selenium (mg/L) | 0/ 35 | 0/ 35 | 1.000[a] | . | . | 0.25 | 0 | 0 | 0.5 |
| Silver (mg/L) | 0/ 34 | 0/ 34 | 0.300[b] | . | . | 0.05 | 0 | 0 | 0.1 |
| | | | | *Wet sludge* | | | | | |
| Arsenic (mg/L) | 0/ 32 | 0/ 32 | 5.000[a] | . | . | 0.243 | 16 | 10 | 0.486 |
| Barium (mg/L) | 7/ 35 | 0/ 35 | 100.000[a] | 1.1 | 1.3 | 0.624 | 48 | 27 | 0.968 |
| Cadmium (mg/L) | 4/ 35 | 0/ 35 | 0.190[b] | 0.03 | 0.04 | 0.0169 | 42 | 24 | 0.0291 |
| Chromium (mg/L) | 1/ 35 | 0/ 35 | 0.860[b] | 0.24 | 0.24 | 0.0541 | 61 | 35 | 0.0974 |
| Lead (mg/L) | 0/ 35 | 0/ 35 | 0.370[b] | . | . | 0.244 | 16 | 9 | 0.487 |
| Mercury (mg/L) | 28/ 35 | 0/ 35 | 0.200[a] | 0.004 | 0.067 | 0.0207 | 63 | 36 | 0.0149 |
| Nickel* (mg/L) | 35/ 35 | 8/ 35 | 5.000[b] | 0.27 | 12 | 4.16 | 67 | 39 | . |
| Selenium (mg/L) | 0/ 35 | 0/ 35 | 1.000[a] | . | . | 0.244 | 16 | 9 | 0.487 |
| Silver (mg/L) | 0/ 28 | 0/ 28 | 0.300[b] | . | . | 0.0484 | 18 | 78 | 0.0968 |

* At least one result above the leachate criteria.

[a]TCLP leachate criteria
[b]LDR leachate criteria

### 3.3.1 Representativeness

A characterization of the raw sludge on the K-1417 drum storage yard would ideally be accomplished by a random sampling of all drums in the yard. The 1991 sampling, however, was limited by accessibility of the drums. Only drums on the top and outside rows could be reached safely. Considering that the drums were systematically rather than randomly filled and placed, the population sampled can only be said to represent the accessible drums. In addition, the number of B and C pond samples available from the drums was not proportional to the number of B and C pond drums in the drum storage yard. For example, B pond is represented by 59% of the drums but only 42% of the samples. The 1991 data best represent only that portion of the drums which were accessible. Summary results presented in Tables 3.2 and 3.4 are expected to be biased relative to the 1985 B and C pond average concentrations. However, it is believed they are the best available representation of the current drummed sludge.

### 3.3.2 Comparability

One way to assess the representativeness of the 1991 data is to compare it with the 1985 sampling that characterized the sludge in place in the K-1407-B and -C ponds. In addition to the caveats stated in Sect. 3.3.1, it should be noted that: (1) the 1991 drummed samples may also contain some clay removal from the bottom of the ponds, (2) some of the sludge included in the 1985 data set was grouted and would not contribute to the 1991 data set, and (3) all process activities contributing to the ponds stopped shortly after the 1985 sampling, resulting in a 3 to 4 year hiatus with no activity except possible dilution before sludge removal activities started.

With these caveats in mind, some relative comparisons can be made. For uranium and metals with a leachate criteria, the mean result from the sludge in the B pond was higher than the mean from the C pond in both the 1985 and 1991 studies (Table 3.5), except for nickel, selenium, and uranium-235 enrichment. The B and C pond means for the 1991 data are more similar to each other than the B and C pond means measured in 1985. The concentration of nickel, the chemical which most frequently exceeded the LDR leachate criteria, was 4 to 5 times higher in the 1985 sampling than in the 1991 sampling. This may be due to weathering which occurred between the cessation of process activities and the containerization of the sludge. Nickel did have the highest leached concentrations in both data sets. Differences in uranium concentrations between years may be the result of analytical differences. The 1991 fluorometric uranium concentrations were 2 to 3 times the 1985 results. But uranium, however, was measured by two methods in 1991. Results for the fluorometric method were about twice the results obtained using a thermal ionization method (Table 3.2).

### 3.3.3 Precision

The average RPD between laboratory duplicates was less than the required 20% for metals targeted in the objectives except for mercury which was 26% (Appendix A). The RPD was also <20% for TCLP duplicate analyses except for one pair of mercury results. An uncertainty <20% would be acceptable precision for the treatment evaluation. Laboratory records also indicate problems with the preservation of mercury samples, so mercury results should be considered questionable. Laboratory duplicate results were not available for evaluation of the wet chemistry analytes (anions, fluorometric uranium, total organic carbon, pH, density, and total solids). Thorium and plutonium were the only radionuclides that had RPDs >20%. The maximum RPD was 54% for thorium-232 in batch W/P-1267 and 34% for plutonium-238 in batch W/P-1266. The maximum thorium and plutonium are less than one-tenth of the Envirocare waste acceptance criteria so these data were acceptable.

Table 3.5. Comparison of 1985 and 1991 sampling of K-1407-B and -C pond sludges

| Analyte | Mean result (mg/kg) | | | |
|---|---|---|---|---|
| | 1985 B | 1991 B | 1985 C | 1991 C |
| Arsenic | 174 | 159 | 18 | 58 |
| Barium | 237 | 67 | 91 | 57 |
| Cadmium | 1.7 | 2.2 | 0.6 | 1.5 |
| Chromium | 804 | 192 | 578 | 156 |
| Lead | 129 | 44 | 44 | 27 |
| Nickel | 4140 | 996 | 5546 | 1030 |
| Selenium | 98 | 5.8 | 3.9 | 15.3 |
| Uranium (flurometric) | 559 | 1610 | 506 | 910 |
| Uranium-235 (Wt. %) | 1.2 | 1.3 | 1.6 | 1.4 |

Laboratory duplicates provide an estimate of uncertainty resulting from the analytical process. Field duplicates provide an estimate of the uncertainty of the combined effects of sampling and analysis. Two pairs of field duplicates were analyzed (Table 3.6). The RPD was calculated as an index of variability.

As expected, the average RPD for the field duplicates was larger than the RPD for the laboratory duplicates. The metals that had a 20% RPD specified in the objectives exceeded the criteria (Table 3.6). The average absolute differences for these metals were larger than the anticipated levels of concern. The sampling uncertainty for these metals was greater than the acceptable level specified in the objectives for the treatment evaluation. Many of the radionuclides measured also had average RPDs >20%. For the radionuclides, however, the average absolute differences were less than the anticipated levels of concern. The level of uncertainty for radionuclides is acceptable because it is below the needed level of resolution expressed as the anticipated level of concern.

The variability observed in the field duplicates indicates that one sample may not be sufficient to characterize the metal concentrations in a drum with confidence. Sampling variability may be reduced by analyzing a composited sample or homogenizing drum contents before sampling.

### 3.3.4 Accuracy

Accuracy is assessed by examining the %R from matrix spike additions. Recoveries between 75% and 125% are considered acceptable. Recoveries of silver were very low in three of the TCLP batches affecting about one-third of the samples. The silver analyses of nine samples in batch 10903A were excluded from the summary in Table 3.4 because the average of eight spike recoveries was only 11%. The other two batches were retained for the summary but had silver recoveries of only 35% and 51%. Although silver was not detected in any of the TCLP samples (Table 3.4), silver could be present but not detected because of analytical interferences.

Methodological differences appear to have an effect on the uranium concentrations. Total uranium was measured at both the K-25 Site and Y-12 Plant laboratories. The K-25 Site results were about twice the Y-12 Plant results (Table 3.2). The K-25 Site laboratory used a method which dissolved the sample while the Y-12 Plant laboratory used a leaching procedure. The difference could be explained by a higher extraction efficiency (Rucker 1992). But the 1985 samples were also analyzed by the K-25 Site laboratory using a dissolution process and are lower than the 1991 K-25 Site results by about a factor of 2. Although the accuracy of the uranium measurements may be uncertain by a factor of 2, the maximum concentration measured in the sludge (2800 mg/kg) was below the anticipated level of concern and therefore below the level of the disposal criteria. This comparison was made by converting the uranium concentration to activity assuming the highest observed enrichment (2.7% uranium-235). Under these assumptions, the total uranium activity would be about 5600 pCi/g with approximately half the activity from uranium-238 and half from uranium-234.

### 3.3.5 Sensitivity

Sensitivity was assessed in terms of the concentration of analyte that could be detected in the matrix. The mean detection limits for the total sludge from the data summary (Table 3.2) were compared to the anticipated level of concern identified in Tables 1.1 - 1.3. Except for total analyses of cadmium, selenium, silver, and chloride the mean detection limit for all parameters was less than or equal to the anticipated level of concern or the parameter was never below the detection limit. The mean detection limit for cadmium was 3.53 $\mu$g/g while the anticipated level of concern was 0.38 $\mu$g/g. For selenium

Table 3.6. Results of field duplicate analyses on sludge during 1991 sampling of the K-1417 drum storage yard

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| | | | *Total Metals* | | | | |
| Aluminum (μg/g) | 2 | 1000 | 4700 | 2850 | 5.4 | 64.8 | 35.1 |
| Antimony (μg/g) | 2 | 1.7 | 35.2 | 18.5 | 30.1 | 157.0 | 93.6 |
| Arsenic-AA (μg/g) | 2 | 19 | 22 | 20.5 | 8.9 | 33.3 | 21.1 |
| Arsenic-ICP (μg/g) | 2 | 21 | 35 | 28 | 35.9 | 108.0 | 71.8 |
| Barium (μg/g) | 2 | 5 | 28 | 16.5 | 10.1 | 47.5 | 28.8 |
| Beryllium (μg/g) | 2 | 0.02 | 0.27 | 0.145 | 4.4 | 43.9 | 24.2 |
| Cadmium (μg/g) | 2 | 0.9 | 1.2 | 1.05 | 44.4 | 46.2 | 45.3 |
| Calcium (μg/g) | 2 | 6000 | 8000 | 7000 | 7.0 | 50.0 | 28.5 |
| Chromium (μg/g) | 2 | 30 | 90 | 60 | 24.0 | 41.9 | 32.9 |
| Cobalt (μg/g) | 2 | 2 | 7 | 4.5 | 15.4 | 48.3 | 31.8 |
| Copper (μg/g) | 2 | 20 | 100 | 60 | 14.3 | 41.7 | 28.0 |
| Lead-AA (μg/g) | 2 | 5.8 | 7 | 6.4 | 5.1 | 12.1 | 8.6 |
| Lead-ICP (μg/g) | 2 | 17 | 18 | 17.5 | 41.0 | 58.1 | 49.5 |
| Magnesium (μg/g) | 2 | 400 | 800 | 600 | 14.8 | 50.0 | 32.4 |
| Manganese (μg/g) | 2 | 40 | 80 | 60 | 10.0 | 42.1 | 26.1 |
| Mercury (μg/g) | 2 | 5.3 | 22.3 | 13.8 | 51.2 | 161.0 | 106.0 |
| Molybdenum (μg/g) | 2 | 1.8 | 7.05 | 4.43 | 52.9 | 158.0 | 105.0 |
| Nickel (μg/g) | 2 | 410 | 460 | 435 | 37.4 | 39.3 | 38.4 |

Table 3.6 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| Potassium (μg/g) | 2 | 500 | 830 | 665 | 12.3 | 106.0 | 59.0 |
| Selenium-AA (μg/g) | 2 | 0.04 | 0.77 | 0.405 | 2.2 | 13.4 | 7.8 |
| Selenium-ICP (μg/g) | 2 | 1.7 | 35.2 | 18.5 | 30.1 | 157.0 | 93.6 |
| Silver (μg/g) | 2 | 0.47 | 4.23 | 2.35 | 48.7 | 158.0 | 103.0 |
| Sodium (μg/g) | 2 | 160 | 260 | 210 | 15.7 | 68.4 | 42.1 |
| Thallium (μg/g) | 2 | 0.04 | 0.77 | 0.405 | 6.3 | 22.4 | 14.3 |
| Vanadium (μg/g) | 2 | 0 | 6.4 | 3.2 | 0.0 | 50.0 | 25.0 |
| Zinc (μg/g) | 2 | 5 | 60 | 32.5 | 7.3 | 40.0 | 23.6 |
| | | *General Chemistry* | | | | | |
| Chloride (μg/g) | 2 | 5 | 27 | 16 | 4.9 | 9.3 | 7.1 |
| Fluoride (μg/g) | 2 | 1 | 3 | 2 | 6.1 | 12.2 | 9.2 |
| Nitrate (μg/g) | 2 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Sulfate (μg/g) | 2 | 34 | 261 | 148 | 0.7 | 17.7 | 9.2 |
| Density (g/mL) | 2 | 0.02 | 0.11 | 0.065 | 1.6 | 7.4 | 4.5 |
| pH (STD UNITS) | 2 | 0.1 | 0.2 | 0.15 | 1.4 | 1.8 | 1.6 |
| Total Organic Carbon (TOC) (%) | 2 | 0 | 1.1 | 0.55 | 0.0 | 18.8 | 9.4 |
| Total Phosphate (μg/g) | 2 | 1.5 | 3 | 2.25 | 35.3 | 66.7 | 51.0 |
| Total Solids (%) | 2 | 2.14 | 3.81 | 2.98 | 3.9 | 12.5 | 8.2 |
| Water Weight Loss (%) | 1 | 3.81 | 3.81 | 3.81 | 5.5 | 5.5 | 5.5 |

Table 3.6 (continued)

| Analyte (units) | N | Absolute difference (concentration) | | | Relative percent difference | | |
|---|---|---|---|---|---|---|---|
| | | Minimum | Maximum | Average | Minimum | Maximum | Average |
| | | | *Radionuclides* | | | | |
| Alpha Activity (pCi/g) | 2 | 43 | 253 | 148 | 13.7 | 36.0 | 24.9 |
| Beta Activity (pCi/g) | 2 | 23 | 680 | 352 | 4.6 | 19.9 | 12.3 |
| Cesium-137 (pCi/g) | 2 | 1.36 | 3.1 | 2.23 | 13.5 | 43.2 | 28.4 |
| Neptunium-237 (pCi/g) | 2 | 0.6 | 22.8 | 11.7 | 3.7 | 65.5 | 34.6 |
| Plutonium-238 (pCi/g) | 2 | 0.04 | 0.385 | 0.213 | 11.8 | 200.0 | 106.0 |
| Plutonium-239 (pCi/g) | 2 | 0.8 | 8.78 | 4.79 | 3.5 | 73.7 | 38.6 |
| Protactinium-234m (pCi/g) | 2 | 10 | 12 | 11 | 1.9 | 2.8 | 2.4 |
| Technetium-99 (pCi/g) | 2 | 160 | 1910 | 1040 | 14.4 | 65.3 | 39.9 |
| Thorium-228 (pCi/g) | 3 | 0.13 | 22.4 | 8.52 | 12.9 | 173.0 | 93.1 |
| Thorium-230 (pCi/g) | 2 | 3.7 | 187 | 95.4 | 5.2 | 93.3 | 49.2 |
| Thorium-232 (pCi/g) | 2 | 0.73 | 6.94 | 3.84 | 74.9 | 86.4 | 80.6 |
| Thorium-234 (pCi/g) | 2 | 14 | 27 | 20.5 | 10.4 | 10.5 | 10.5 |
| Uranium-235 (pCi/g) | 2 | 0 | 5.61 | 2.81 | 0.0 | 20.2 | 10.1 |
| Uranium-235 (WGT %) | 2 | 0.1 | 0.1 | 0.1 | 8.0 | 8.0 | 8.0 |
| Uranium-Y-12 ($\mu$g/g) | 2 | 33 | 98 | 65.5 | 8.1 | 10.9 | 9.5 |
| Uranium-K-25 ($\mu$g/g) | 2 | 80 | 400 | 240 | 8.3 | 16.0 | 12.2 |

the mean detection limit was 23.6 μg/g and the level of concern was 2 μg/g. For silver the mean detection limit was 3.8 μg/g while the anticipated level of concern was 0.60 μg/g. Anticipated levels of concern for total metals analyses included a safety factor of 10, however, each of these metals exceeds this factor. The above comparisons indicate the mean detection limits for these elements will not allow us to say with confidence, that the element does not exceed a total concentration where it could potentially create a TCLP leachate in excess of the regulatory level. The mean detection limit for chloride was 96 mg/Kg while the level of concern based on professional judgment was 10 mg/Kg. Total cyanide determinations were performed and found to be at concentrations <1.0 mg/kg, well below the F006 waste criterion of 590 mg/kg.

Results for the liquid samples (Table 3.3) can also be compared to the anticipated levels of concern (Tables 1.1 - 1.3). Either the levels of concern were achieved or all the results were above the level of concern for the target analytes, except for cadmium, silver, and the radionuclides. The mean detection limit for cadmium was 0.037 mg/L while the anticipated level of concern was 0.02 mg/L. For silver the mean detection limit was 0.0745 mg/L while the level of concern was 0.03 mg/L. Anticipated levels of concern for these analyses included a safety factor of 10. Therefore these mean detection levels still allow some confidence that the element would not exceed a leachate regulatory level even when analyzed as an independent sample.

Mean detection limit values for TCLP leachate analyses on the wet and dried sludge did not meet anticipated levels of concern for two metals (compare Tables 1.1 and 3.4). For selenium, the mean detection limit of 0.5 mg/L was higher than the anticipated level of concern, however, it was one-half the regulatory limit of 1.0 mg/L. For lead, the mean detection limit (0.5 mg/L) is greater than the regulatory limit (0.37 mg/L). The lead mean detection limit was adequate for the TCLP leachate criteria but not for the more stringent LDR F006 listed waste criteria. These results will imply a higher probability of generating false negative results for these analytes from this database.

### 3.3.6 Completeness

Some objectives were not met because the analytes were not measured. There were no measurements of semivolatile or volatile organic compounds, carbonates, particle size distribution, or mineralogy. The activity of uranium-234 and uranium-238 was not measured although it could be calculated using the total uranium and uranium-235 data.

In designing a process to treat the sludge, characterization of the mean as well as the range of concentrations in the sludge is desired. The 1991 project specified a sample size of 29, required to assure maximum result in the sample, is the upper 95% confidence bound on the 90th percentile of the sampled population. Pooling the samples from the B and C pond drums produces a sample size of 29 or more for most analytes of the sludge solids (Tables 3.2 and 3.4). Only 5 samples were analyzed for boron and silicon, and 28 samples for TCLP silver.

For the liquid samples, <29 results were available for each analyte (Table 3.3). Metals analyses came closest to meeting the criteria with 27 samples. The smaller sample size results in more uncertainty in the true range of concentrations in the population.

Radionuclides identified in the Data Quality Objective Memorandum have been characterized with the exception of strontium-90. While some radionuclides exhibit highly variable concentrations, the absolute values are low relative to Envirocare waste disposal criteria. If a selected treatment process has the potential to concentrate radionuclides in the resulting stabilized sludge, this information must be re-evaluated for the resulting material.

Evaluation of the liquid fractions contained in the drums will need to be based on the waste acceptance criteria of the selected disposal facility. The existing data set may be an aid to this decision, however, supernatant liquids would probably be composited for disposal and a sample of that composite would be the determining factor for its disposal.

Additional parameters identified in the Data Quality Objective Memorandum for process formulation, rather than regulatory compliance, are also identified as data deficiencies. These include particle size distribution, mineral composition, and carbonate content. The lack of this information may limit the evaluation of treatment options.

The results of the 1985 and 1991 characterization studies provide adequate data for many of the parameters required for the Pond Waste Management Project. The primary deficiencies are in relation to parameters not measured, specifically organic compounds. Evaluation criteria were based on the assumption that grouting would be the most likely treatment. Evaluation of other technologies could require the measurement of other parameters or may require lower detection limit goals than those utilized here.

# 4. SUMMARY

Unprocessed sludge from the K-1407 B and C ponds was characterized in 1985 before removal from the ponds, and in 1991 by statistical sampling of the accessible drums stored on the K-1417 Drum Storage Yard. These characterizations of the sludge can be used as a starting point for evaluation of treatment and disposal of the pond waste. Although many parameters of the sludge have been characterized, additional data would be required to satisfy potential treatment and disposal project requirements as identified in the Data Quality Objectives Technical Memorandum, December 1993.

Results of the two studies have been compared. Although the studies identify unique data populations for the B and C ponds, and unique data sets for 1985 and 1991, it is concluded both investigations can provide useful information concerning the potential sludge content. This suggests that the 1985 sludge analyses can be used to help characterize the unprocessed sludge in the stored drums. However, the 1991 study data are believed to be a better representation of what is currently remaining in the drummed waste. The results of both studies have been utilized here to evaluate whether the data needs of the Pond Waste Management Project have been achieved.

Based on the maximum total concentrations measured in the sludge, the nine regulated metals could exceed the leachate criteria if they were 100% leachable. This confirms the need to evaluate TCLP extracts. Nickel, which exceeded LDR leachate criteria in nearly all samples, is the primary metal of concern. Cadmium and mercury levels also exceeded leachate criteria in some samples. Concerns over silver's analytical accuracy make it uncertain whether this metal would exceed leachate criteria.

Samples of the unprocessed sludge were measured for the concentrations for the metals specified in the Data Quality Objective Memorandum; mean detection limits achieved in the studies met the sensitivity goals established except for cadmium. Failure to meet detection limit goals means that it cannot be predicted with confidence whether the regulatory criteria could be met. Although analytical precision varied between the studies, the goals for relative percent difference were met in at least one of the studies for all metals, with the exception of mercury. The accuracy of silver analyses, particularly in the TCLP analyses of the 1991 study, is questionable based on low matrix spike recoveries. These parameters should receive further characterization if levels of uncertainty or confidence are unacceptable.

Total and amenable cyanide were evaluated as part of the 1991 sampling because they are specifically listed as regulated species for F006 wastes. All results were reported as $< 1.0$ mg/kg total cyanide and were therefore well below regulatory criteria.

Organic parameters represent another data deficiency in the current sludge characterization information. Volatile organic compounds and PCBs were measured in the 1985 study only. At the maximum measured total concentrations, TCE and PCE indicated they could exceed TCLP criteria if they were 100% leachable. Pesticide and herbicide analyses were performed on EP-TOX extracts in 1985 only. The extract concentrations did not exceed leachate limits, however, a full list of the currently regulated TCLP compounds was not analyzed. Concentrations of regulated semivolatile, volatile, and pesticide organic compounds have not been characterized. Based on these findings, existing data do not confirm the sludge could meet TCLP criteria. Regulated organic compounds require further characterization in the sludge.

Radionuclides identified in the Data Quality Objective Memorandum have been characterized with the exception of strontium-90. While some radionuclides exhibit highly variable concentrations, the absolute values are low relative to Envirocare waste disposal criteria. If a selected treatment process has the potential to concentrate radionuclides in the resulting stabilized sludge, this information must be re-evaluated for the resulting material.

Evaluation of the liquid fractions contained in the drums will need to be based on the waste acceptance criteria of the selected disposal facility. The existing data set may be an aid to this decision, however, supernatant liquids would probably be composited for disposal and a sample of that composite would be the determining factor for its disposal.

Additional parameters identified in the Data Quality Objective Memorandum for process formulation, rather than regulatory compliance, are also identified as data deficiencies. These include particle size distribution, mineral composition, and carbonate content. The lack of this information may limit the evaluation of treatment options.

The results of the 1985 and 1991 characterization studies provide adequate data for many of the parameters required for the Pond Waste Management Project. The primary deficiencies are in relation to parameters not measured, specifically organic compounds and cyanides. Evaluation criteria were based on the assumption that grouting would be the most likely treatment. Evaluation of other technologies could require the measurement of other parameters or may require lower detection limit goals than those utilized here.

# 5. REFERENCES

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Shoemaker, J.L. and W.D. Bostick. 1988. *Support for Characterization, Grout Formulations, and Stabilization of K-1407-B and K-1407-C Pond Sludges.* K/QT-199, Martin Marietta Energy Systems, Inc., Oak Ridge Gaseous Diffusion Plant, Oak Ridge, TN, September.

# APPENDIX A

# ANALYTICAL DATA EVALUATION OF 1991 SAMPLING OF DRUMS ON THE K-1417 DRUM STORAGE YARD

# A. ANALYTICAL DATA EVALUATION OF 1991 SAMPLING OF DRUMS ON THE K-1417 DRUM STORAGE YARD

A total of 55 analytical batches containing ~ 167 samples were analyzed for metals, wet chemistry, and radiological parameters by the K-25 Site Analytical Chemistry Division (ACD) Laboratory, Y-12 Plant Laboratory, and International Technology (IT) Laboratories in support of this study. These data have not been independently validated. These assessments represent a presentation of the analytical quality assurance/quality control (QA/QC) data that were analyzed in support of the samples collected for this study. Table A.1 provides an analytical batch/sample identification cross reference to assist in the evaluation of these data.

## A.1 INDUCTIVELY COUPLED PLASMA ANALYSES

Inductively Coupled Plasma (ICP) analyses were conducted by the K-25 ACD laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge for aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, lead, magnesium, manganese, molybdenum, nickel, potassium, selenium, silver, sodium, vanadium, and zinc. The SW-846 method 3050 was used to prepare samples and SW-846 method 6010 was used as the analytical protocol for these analyses. Samples were analyzed in eight batches identified as QA files: 10809Y, 10905X, 10906X, 10910A, 10927A, 11008X, 11022A, and 11115A.

*Calibration.* No calibration data was available for review; however, examination of the actual QA files may provide this data.

*Blanks.* The analysis of blanks provides a means of assessing the existence and magnitude of contamination introduced via the analytical methodology. The following method blanks were identified in the laboratory reports: 910828-027, 910829-046, 910925-019, 910926-148, 911013-008, and 911031-057; however, laboratory data reports were not available for review.

*Matrix spikes.* Spiked sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology. All criteria were met with the following exceptions:

QA File: 10910A

For this batch both a matrix spike and a matrix spike duplicate were run. The following results were above or below the 75% to 125% control limits for one or both QC runs.

Table A.1 QA batches for samples taken in 1991 from the K-1417 storage pad

| Sample ID | Lab ID |
|---|---|
| **ICP Metals Analyses** | |
| Batch: No QA data available | |
| C2138-SL | 910819-092 |
| C3038-SL | 910819-093 |
| C4538-SL | 910819-089 |
| C5438-SL | 910819-091 |
| C5538-SL | 910819-094 |
| Batch: 10809Y | |
| B3238-LQ | 910807-251 |
| B3538-LQ | 910807-252 |
| B6238-LQ | 910807-249 |
| B7938-LQ | 910807-250 |
| B9838-LQ | 910807-253 |
| B9838-LQ | 910807-254 |
| Batch: 10905X | |
| B1238-LQ | 910819-160 |
| B1338-LQ | 910819-158 |
| B2238-LQ | 910819-159 |
| B3738-LQ | 910819-169 |
| B5838-LQ | 910819-152 |
| B6038-LQ | 910819-155 |
| B6638-LQ | 910819-154 |
| B7038-LQ | 910819-153 |
| B7438-LQ | 910819-156 |
| B7738-LQ | 910819-157 |
| C2738-LQ | 910819-162 |
| C2838-LQ | 910819-166 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| C2938-LQ | 910819-164 |
| C3338-LQ | 910819-167 |
| C4538-LQ | 910819-170 |
| C4738-LQ | 910819-168 |
| C4838-LQ | 910819-165 |
| C5238-LQ | 910819-150 |
| C5638-LQ | 910819-151 |
| C5738-LQ | 910819-149 |
| Batch: 10906X | |
| B3838-LQ | 910819-171 |
| B9738-LQ | 910819-174 |
| C3038-LQ | 910819-172 |
| C5538-LQ | 910819-173 |
| Batch: 10910A | |
| B1338-SL | 910819-072 |
| B2238-SL | 910819-073 |
| B7938-SL | 910815-134 |
| B9838-SL | 910815-136 |
| C1038-SL | 910815-140 |
| C1538-SL | 910819-075 |
| C1638-SL | 910819-078 |
| C2338-SL | 910819-076 |
| C2538-SL | 910819-079 |
| C2838-SL | 910819-084 |
| C3138-SL | 910819-080 |
| C3338-SL | 910819-085 |
| C3938-SL | 910819-082 |
| C4838-SL | 910819-083 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| C5238-SL | 910815-139 |
| C9938-SL | 910815-137 |
| Batch: 10927A | |
| B3738-SL | 910819-087 |
| B5838-SL | 910815-144 |
| B6638-SL | 910815-146 |
| B7038-SL | 910815-145 |
| B7438-SL | 910819-070 |
| B9738-SL | 910819-074 |
| Batch: 11008X | |
| B3838-SL | 910819-090 |
| C2938-SL | 910819-081 |
| C4638-SL | 910819-088 |
| C4738-SL | 910819-086 |
| C5638-SL | 910815-143 |
| C5738-SL | 910815-138 |
| Batch: 11022A | |
| C2738-SL | 910819-077 |
| Batch: 11115A | |
| B7738-SL | 910819-071 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| **Mercury Analyses** | |
| Batch: | |
| C2138-SL | 910819-092 |
| C3038-SL | 910819-093 |
| C4538-SL | 910819-089 |
| C5438-SL | 910819-091 |
| C5538-SL | 910819-094 |
| Batch: 10809A | |
| B3238-LQ | 910807-251 |
| B3538-LQ | 910807-252 |
| B6238-LQ | 910807-249 |
| B7938-LQ | 910807-250 |
| B938-LQ | 910807-248 |
| B9838-LQ | 910807-253 |
| B9838-LQ | 910807-254 |
| Batch: 10820A | |
| B1338-SL | 910819-072 |
| B2238-SL | 910819-073 |
| B5838-SL | 910815-144 |
| B6238-SL | 910815-133 |
| B6638-SL | 910815-146 |
| B7038-SL | 910815-145 |
| B7438-SL | 910819-070 |
| B7738-SL | 910819-071 |
| B7938-SL | 910815-134 |
| B9738-SL | 910819-074 |
| B9838-SL | 910815-136 |
| C1038-SL | 910815-140 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| C1538-SL | 910819-075 |
| C2338-SL | 910819-076 |
| C5238-SL | 910815-139 |
| C5638-SL | 910815-143 |
| C5738-SL | 910815-138 |
| C9938-SL | 910815-137 |
| Batch: 10820B | |
| B3738-SL | 910819-087 |
| B3838-SL | 910819-090 |
| C1638-SL | 910819-078 |
| C2538-SL | 910819-079 |
| C2738-SL | 910819-077 |
| C2838-SL | 910819-084 |
| C2938-SL | 910819-081 |
| C3138-SL | 910819-080 |
| C3338-SL | 910819-085 |
| C3938-SL | 910819-082 |
| C4638-SL | 910819-088 |
| C4738-SL | 910819-086 |
| C4838-SL | 910819-083 |
| Batch: 10820C | |
| B1238-LQ | 910819-160 |
| B1338-LQ | 910819-158 |
| B2238-LQ | 910819-159 |
| B3738-LQ | 910819-169 |
| B5838-LQ | 910819-152 |
| B6038-LQ | 910819-155 |
| B6638-LQ | 910819-154 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| B7038-LQ | 910819-153 |
| B7438-LQ | 910819-156 |
| B7738-LQ | 910819-157 |
| C2738-LQ | 910819-162 |
| C2838-LQ | 910819-166 |
| C2938-LQ | 910819-164 |
| C3338-LQ | 910819-167 |
| C4538-LQ | 910819-170 |
| C4738-LQ | 910819-168 |
| C4838-LQ | 910819-165 |
| C5238-LQ | 910819-150 |
| C5638-LQ | 910819-151 |
| C5738-LQ | 910819-149 |
| Batch: 10820D | |
| B3838-LQ | 910819-171 |
| B9738-LQ | 910819-174 |
| C3038-LQ | 910819-172 |
| C5538-LQ | 910819-173 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| **TCLP metals analyses** | |
| Batch: | |
| B1238-SL (DRY) | 910815-272 |
| B6038-SL (DRY) | 910815-271 |
| B6638-SL | 910815-274 |
| C1538-SL | 910815-275 |
| C3338-SL (DRY) | 910815-273 |
| C5438-SL | 910815-276 |
| C9938-SL | 910803-017 |
| SPIKE | 910804-038 |
| Batch: 10805A | |
| B3238-SL | 910803-013 |
| B3238-SL (DRY) | 910803-012 |
| B3538-SL | 910803-009 |
| B3538-SL (DRY) | 910803-008 |
| B9838-SL | 910803-015 |
| B9838-SL (DRY) | 910803-014 |
| BLANK #1 | 910804-036 |
| BLANK #2 | 910804-037 |
| C1038-SL | 910803-011 |
| C1038-SL (DRY) | 910803-010 |
| C9938-SL (DRY) | 910803-016 |
| Batch: 10826X | |
| B1238-SL | 910815-166 |
| B1338-SL | 910815-164 |
| B2238-SL | 910815-165 |
| B3838-SL | 910815-239 |
| B5838-SL | 910815-153 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| B6038-SL | 910815-156 |
| B6638-SL | 910815-155 |
| B7038-SL | 910815-154 |
| B7438-SL | 910815-162 |
| B7738-SL | 910815-163 |
| C1538-SL | 910815-167 |
| C2138-SL | 910815-241 |
| C2338-SL | 910815-168 |
| C2838-SL (DRY) | 910815-259 |
| C3038-SL | 910815-242 |
| C3338-SL (DRY) | 910815-260 |
| C4538-SL | 910815-238 |
| C4838-SL (DRY) | 910815-258 |
| C5238-SL | 910815-150 |
| C5438-SL | 910815-240 |
| C5638-SL | 910815-042 |
| C5738-SL | 910815-148 |
| REAG. BLANK #1 | 910821-080 |
| REAG. BLANK #2 | 910821-081 |
| REAGENT BLK#1 | 910819-053 |
| REAGENT BLK#2 | 910819-054 |
| Batch: 10828A | |
| B1238-SL (DRY) | 910815-249 |
| B1338-SL (DRY) | 910815-247 |
| B2238-SL (DRY) | 910815-248 |
| BLANK #2 | 910824-003 |
| C1538-SL (DRY) | 910815-250 |
| C1638-SL (DRY) | 910815-253 |
| C2338-SL (DRY) | 910815-251 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| C2538-SL (DRY) | 910815-254 |
| C3138-SL (DRY) | 910815-255 |
| C4738-SL (DRY) | 910815-261 |
| C5238-SL (DRY) | 910815-151 |
| C5738-SL (DRY) | 910815-149 |
| REAG. BLANK #1 | 910821-088 |
| REAG. BLANK #1 | 910823-182 |
| REAG. BLANK #2 | 910821-089 |
| REAG. BLANK #2 | 910823-183 |
| Batch: 10903A | |
| B3738-SL | 910815-236 |
| B7438-SL (DRY) | 910815-245 |
| B9738-SL | 910815-244 |
| C2838-SL | 910815-233 |
| C3338-SL | 910815-234 |
| C4638-SL | 910815-237 |
| C4738-SL | 910815-235 |
| C4838-SL | 910815-232 |
| C5538-SL | 910815-243 |
| Batch: 10904A | |
| B3738-SL (DRY) | 910815-262 |
| B3838-SL (DRY) | 910815-265 |
| B5838-SL (DRY) | 910815-158 |
| B6038-SL (DRY) | 910815-161 |
| B6638-SL (DRY) | 910815-160 |
| B7038-SL (DRY) | 910815-159 |
| B7738-SL (DRY) | 910815-246 |
| B9738-SL (DRY) | 910815-270 |

Table A.1. (continued)

| Sample ID | Lab ID |
|---|---|
| C1638-SL | 910815-227 |
| C2138-SL (DRY) | 910815-267 |
| C2538-SL | 910815-228 |
| C2738-SL | 910815-226 |
| C2738-SL (DRY) | 910815-252 |
| C2938-SL (DRY) | 910815-256 |
| C3038-SL (DRY) | 910815-268 |
| C3138-SL | 910815-229 |
| C4538-SL (DRY) | 910815-264 |
| C4638-SL (DRY) | 910815-263 |
| C5438-SL (DRY) | 910815-266 |
| C5538-SL (DRY) | 910815-269 |
| C5638-SL (DRY) | 910815-157 |
| REAG. BLANK #1 | 910826-068 |
| REAG. BLANK #1 | 910827-163 |
| REAG. BLANK #2 | 910826-069 |
| REAG. BLANK #2 | 910827-164 |
| Batch: 10920X | |
| C2938-SL | 910815-230 |
| Batch: 10925X | |
| C3938-SL | 910815-231 |
| Batch: 10927A | |
| B6238-SL | 910815-133 |
| C3938-SL (DRY) | 910815-257 |
| REAGENT BLANK#1 | 910822-133 |

| Analyte | Matrix spike | Matrix spike duplicate | RPD |
|---|---|---|---|
| Antimony | 26.4% | 28.0% | 6.0% |
| Beryllium | 75.3% | 69.4% | 8.1% |
| Cadmium[a] | 75.6% | 68.1% | 9.6% |
| Chromium[a] | 76.2% | 53.5% | 6.4% |
| Cobalt | 77.2% | 68.3% | 9.1% |
| Lead[a] | 74.6% | 65.3% | 6.4% |
| Manganese | 74.1% | 46.4% | 7.7% |
| Molybdenum | 77.2% | 69.2% | 10.0% |
| Selenium | 77.2% | 69.7% | 10.0% |
| Silver[a] | 79.4% | 72.5% | 8.8% |
| Sodium | 153.5% | 67.0% | 17.9% |
| Vanadium | 81.1% | 73.5% | 7.7% |
| Zinc | 82.4% | 57.0% | 6.9% |

[a]DQO target analyte

QA File: 10828A

For this batch both a matrix spike and a matrix spike duplicate were run. The following results were above or below the 75% to 125% control limits for one or both QC runs.

| Analyte | Matrix spike | Matrix spike duplicate | RPD |
|---|---|---|---|
| Antimony | 47.8% | 50.7% | 6.0% |
| Manganese | 24.7% | 29.4% | 0.6% |
| Silicon | 8.8% | 41.2% | 18.6% |

Note: Antimony and manganese are not part of the target analyte list for this project.

QA File: 11115A

For this batch both a matrix spike and a matrix spike duplicate were run. The following results were above or below the 75% to 125% control limits for one or both QC runs.

| Analyte | Matrix spike | Matrix spike duplicate | RPD |
|---|---|---|---|
| Arsenic | 24.8% | 113.3% | 128.3% |
| Chromium | 46.5% | 89.2% | 60.2% |
| Cobalt | 12.0% | 89.2% | 152.0% |
| Lithium | 12.9% | 90.9% | 150.3% |

Note: Arsenic is a target analyte for this project. The laboratory has noted that the original spiked sample was incorrectly spiked; RPD results support this observation.

QA File: 11022A

For this batch both a matrix spike and a matrix spike duplicate were run. The following results were above or below the 75% to 125% control limits for one or both QC runs.

| Analyte | Matrix spike | Matrix spike duplicate | RPD |
|---|---|---|---|
| Molybdenum | 72.7% | 79.9% | 9.2% |
| Sodium | 143.1% | 89.1% | 13.0% |

No spike data was available for QA files 11008X, 10809Y, 10905X, and 10906X.

*Duplicates.* Results of duplicate analyses serve as an indicator of the precision of the methods and the sample measurements. For QA Files: 10910A, 10927A, 11115A, and 11022A relative percent differences (RPDs) of the matrix spike and matrix spike duplicate were evaluated with all less than 20% with the exception of QA File 11115A which, as was noted by the laboratory, appears to have been incorrectly spiked. A laboratory duplicate was performed on sample 9838-WATER (QA File 10809Y) with all results <20% with the exception of aluminum (28.6%), iron (71.1%), and zinc (77.8%). The analytes outside the limits are not target analytes. A replicate analysis was performed with sample 5838 with all RPDs in control.

No duplicate data was found associated with QA Files 11008X, 10809Y, and 10906X.

*Laboratory control samples (LCS).* The LCS analysis is designed to serve as a monitor of the efficiency of the digestion procedure. All criteria were met with the following exceptions:

QA File: 10910A

LCS recovery was above the 120% recovery upper control limit for aluminum (143.2%) and antimony (149.0%).

No LCS data was found associated with QA Files 10927A, 11022A, 10809Y, and 10906X.

*Other*. Any other analytical indicators which may have an effect on data quality. No other deficiencies noted.

*Summary*. For all samples associated with QA File 10910A, antimony showed very poor recovery based on matrix spike/matrix spike duplicate analysis. Antimony also exceeded the upper control limit on the LCS sample run. Results for antimony reported above the instrument detection level (IDL) should be considered estimated and results reported at the IDL should not be used. Matrix spike recoveries were below the 75% lower control limit for lead (74.6%) and manganese (74.1%), and above the 125% upper control limit for sodium (153.5%). For lead and manganese, all results should be considered as estimated; and for sodium, results reported above the detection limit should be considered estimated. Aluminum also exceeded the upper control limit on the LCS sample run. Results reported above the detection limit for aluminum should be considered as estimated.

For samples associated with QA File 10828A, antimony showed low recovery (47.8%) and manganese poor recovery (24.7%) based on matrix spike/matrix spike duplicate analyses. All results for antimony should be considered estimated. For manganese, positive results above the detection limit should be considered estimated and results reported at the detection limit should be considered not usable.

For samples associated with QA File 11115A, chromium showed low recovery (46.5%), and arsenic (24.8%) and cobalt (12.0%) showed poor recovery based on matrix spike analysis. As noted by the laboratory it appears that the original spiked sample was incorrectly spiked. RPD results support this observation. No qualification of data occurred.

For samples associated with QA File 11022A, molybdenum (72.7%) and sodium (143.1%) were outside the 75% to 125% control limits for matrix spike analysis but were inside on the subsequent matrix spike duplicate analysis. No qualification of data occurred.

Provided below are summary tables of precision and accuracy measures for the ICP analyses (Tables A.2 and A.3).

## A.2 MERCURY ANALYSES

Mercury analyses were conducted by the K-25 ACD Laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge. The EPA-7470 and EPA-7471 methods were used as the analytical protocol for these analyses. Samples were analyzed in five batches identified as QA files: 10809A, 10820A, 10820B, 10820C, and 10820D.

*Calibration*. No calibration data was available for review; however, examination of the actual QA files may provide this data.

*Blanks*. The analysis of blanks provides a means of assessing the existence and magnitude of contamination introduced via the analytical methodology. No blank data were available for review.

*Matrix spikes*. Spiked sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology. All criteria were met with the following exceptions:

**Table A.2. Percent recovery of metals from matrix spike additions for ICP analyses**

| Parameter | Number | Average | Mininum | Maximum |
|---|---|---|---|---|
| Aluminum | 2 | 86.9 | 83.7 | 90.1 |
| Antimony | 6 | 38.6 | 26.4 | 50.8 |
| Arsenic | 8 | 85.5 | 75.9 | 100.2 |
| Barium | 8 | 91.0 | 77.2 | 98.1 |
| Beryllium | 8 | 82.7 | 69.4 | 92.7 |
| Boron | 5 | 94.5 | 87.5 | 107.2 |
| Cadmium | 8 | 83.0 | 68.1 | 96.5 |
| Chromium | 8 | 85.2 | 53.5 | 106.0 |
| Cobalt | 8 | 84.0 | 68.3 | 96.8 |
| Copper | 8 | 101.8 | 84.0 | 122.0 |
| Lead | 8 | 77.7 | 65.3 | 86.7 |
| Lithium | 2 | 100.2 | 95.5 | 104.9 |
| Magnesium | 2 | 99.4 | 98.5 | 100.2 |
| Manganese | 6 | 42.9 | 24.7 | 74.1 |
| Molybdenum | 8 | 78.9 | 69.2 | 88.3 |
| Nickel | 2 | 88.4 | 81.9 | 94.8 |
| Potassium | 8 | 99.5 | 85.9 | 122.0 |
| Selenium | 8 | 86.6 | 69.7 | 107.1 |
| Silver | 6 | 83.3 | 72.5 | 92.6 |
| Sodium | 8 | 101.5 | 67.0 | 153.6 |
| Titanium | 2 | 92.0 | 90.4 | 93.6 |
| Vanadium | 8 | 85.6 | 73.5 | 97.4 |
| Zinc | 8 | 84.3 | 57.0 | 103.0 |
| Zirconium | 2 | 87.1 | 82.2 | 91.9 |

**Table A.3. Relative percent difference between matrix spike and matrix spike duplicates for ICP metal analyses**

| Parameter | Number | Average | Mininum | Maximum |
|---|---|---|---|---|
| Aluminum | 1 | 7.4 | 7.4 | 7.4 |
| Antimony | 2 | 5.9 | 5.9 | 5.9 |
| Arsenic | 3 | 6.0 | 2.5 | 10.8 |
| Barium | 3 | 4.7 | 1.1 | 11.4 |
| Beryllium | 3 | 4.6 | 2.5 | 8.2 |
| Boron | 2 | 8.4 | 4.6 | 12.3 |
| Cadmium | 3 | 5.4 | 2.0 | 10.4 |
| Chromium | 3 | 16.9 | 4.4 | 35.0 |
| Cobalt | 3 | 5.6 | 1.1 | 12.3 |
| Copper | 3 | 9.5 | 0.7 | 20.7 |
| Lead | 3 | 10.4 | 7.3 | 13.3 |
| Lithium | 1 | 9.4 | 9.4 | 9.4 |
| Magnesium | 1 | 1.7 | 1.7 | 1.7 |
| Manganese | 2 | 31.7 | 17.4 | 46.0 |
| Molybdenum | 3 | 7.5 | 2.2 | 10.9 |
| Nickel | 1 | 14.6 | 14.6 | 14.6 |
| Potassium | 3 | 18.0 | 3.7 | 28.7 |
| Selenium | 3 | 9.5 | 2.1 | 16.1 |
| Silver | 2 | 5.9 | 2.7 | 9.1 |
| Sodium | 3 | 45.5 | 11.4 | 78.5 |
| Titanium | 1 | 3.5 | 3.5 | 3.5 |
| Vanadium | 3 | 5.4 | 2.4 | 9.8 |
| Zinc | 3 | 13.6 | 1.3 | 36.4 |
| Zirconium | 1 | 11.1 | 11.1 | 11.1 |

QA Files: 10820A and 10820B

For both batches the sample concentration was greater than four times the amount of spike added; in these cases the percent recovery is neither calculated or reviewed. The matrix spike results for the remaining batches are summarized in Table A.4.

*Duplicates.* Results of duplicate analyses serve as an indicator of the precision of the methods and the sample measurements. Replicates were run with QA Files: 10820A (15.4 RPD), 10820C (11.5 RPD), and 10820D (50.0 RPD). It was noted that all samples associated with 10820D contained up to an inch of mud and/or sediment which could account for the high RPD.

No duplicate or replicate data were found associated with QA File 10820B.

*Laboratory control samples.* The LCS analysis is designed to serve as a monitor of the efficiency of the digestion procedure. No LCS data were available for review.

*Other.* Any other analytical indicators which may have an effect on data quality.

QA File: 10809A

It was noted that all samples had a pH of 7 when delivered to the laboratory. Procedure 7471 requires samples to be acidified to a pH <2. Sample 6238 was identified as having a total activity of 113,000 dpm/mL, higher than the laboratory can handle; however, the laboratory did analyze using only 1 mL of sample.

QA File: 10820C

Samples 1138, 2938, and 4838 were identified as having the following pHs: 3, 10.7, and 3-4, respectively. Procedure 7470 requires samples to be acidified to a pH <2. Samples 1138 and 4838 were also identified as having up to one-quarter inch of mud/sediment.

QA File: 10820D

All samples contained up to one inch of mud/sediment.

*Summary.* For all samples associated with QA File 10809A, samples 1138, 2938, and 4838 have been identified by the laboratory as provisional due to the higher than required pH. This may be indicative of a sample preservation problem.

## A.3 TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Toxicity Characteristic Leaching Procedure (TCLP) analyses were conducted by the K-25 ACD Laboratory on the wet solid phase, dry solid phase, and stabilized cubes of the K-1407-B and -C ponds sludge. The EPA-1311 method followed by SW-846 method 6010 for arsenic, barium, cadmium, lead, nickel, selenium, and silver, and EPA-7470 for mercury was used as the analytical protocol for these analyses. These 99 samples were analyzed for TCLP. Samples were prepared in six batches identified as QA files: 91-1R, 91-16, 91-18, 91-19, 91-17, and 91-2R. Samples were analyzed by the 6010 method

Table A.4. Percent recovery of mercury from matrix spike additions

| Parameter | Number | Average | Mininum | Maximum |
|---|---|---|---|---|
| Mercury | 3 | 110.2 | 97.5 | 117 |

in nine batches identified as QA files: 10802X, 10805A, 10904A, 10903A, 10828A, 10927A, 10826X, 10920X, and 10925X. Samples were analyzed by the 7470 method in three batches identified as QA files: 10801Z, 10805A, and 10805A1.

*Calibration.* No calibration data was available for review; however, examination of the actual QA files may provide this data.

*Blanks.* The analysis of blanks provides a means of assessing the existence and magnitude of contamination introduced via the analytical methodology. The following method blanks were identified in the laboratory reports: 910903-031, 910830-176, 910831-004, 910827-148, 910903-084, 910828-026, 910925-019, 910823-014, 910824-002, and 910831-004; however, laboratory data reports were not available for review.

*Matrix spikes.* Spiked sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology. All criteria were met with the following exceptions (Table A.5):

QA File: 10826X

Spike recovery results were below the 75% recovery lower control limit for arsenic (74.4%) and selenium (73.3%).

QA File: 10828A

A total of nine spikes were run with this batch; recoveries for silver for all nine runs ranged from a low of 18.8% to a high of 62.6% with an average recovery of 38.5%. For two of the nine, arsenic ranged from 60.8% to 127.0% but outside the 75% to 125% limits. Selenium and chromium were outside the 75% to 125% control limits for one run at 48% and 131.2%, respectively.

QA File: 10903A

A total of eight spikes were run with this batch; recoveries for silver for all eight runs ranged from a low of 0.9% to a high of 25.0% with an average recovery of 11.3%. For four of the eight, arsenic ranged from 66.5% to 73.6% all below the 75% lower control limit. Selenium was also below the 75% lower control limit for one run at 42.4%.

QA File: 10904A

A total of sixteen spikes were run with this batch; recoveries for silver for all sixteen runs ranged from a low of 2.7% to a high of 58.9% with an average recovery of 35.3%. For four of the sixteen, arsenic ranged from 55.4% to 139.9% but outside the 75% to 125% limits. For three of the sixteen, selenium ranged from 59.8% to 73.8%, all below the 75% lower limit.

QA File: 10920X

Spike recovery results were below the 75% recovery lower control limit for arsenic (68.5%), selenium (66.6%), and silver (50.7%).

**Table A.5. Percent recovery of metals from matrix spike additions for TCLP analyses**

| Parameter | Number | Average | Mininum | Maximum |
|---|---|---|---|---|
| Arsenic | 46 | 88.9 | 48.6 | 139.9 |
| Barium | 49 | 91.2 | 80.5 | 100.6 |
| Cadmium | 49 | 90.6 | 82.3 | 97.7 |
| Chromium | 48 | 87.6 | 78.2 | 131.2 |
| Lead | 49 | 91.5 | 79.6 | 102.9 |
| Mercury | 14 | 17.7 | -50.0 | 75.0 |
| Nickel | 3 | 95.7 | 92.4 | 97.6 |
| Selenium | 49 | 86.8 | 42.4 | 115.8 |
| Silver | 49 | 33.8 | -47.5 | 96.9 |

Spike data for mercury were provided electronically by the K-25 ACD; however, these data lack the ability to tie specific spike data to the associated batch of samples. Recoveries ranged from -50.0% to 75.0%.

*Duplicates*. Results of duplicate analyses serve as an indicator of the precision of the methods and the sample measurements. All duplicate RPDs were well within the 20% control limits with the exception of mercury (200%) samples 938-S and 938-S-D.

*Laboratory control samples*. The LCS analysis is designed to serve as a monitor of the efficiency of the digestion procedure. All criteria were met with the following exceptions:

QA File: 10828A

Two LCS samples were run with this batch; recoveries for silver for both runs were 63.3% and 74.0%, both below the 80% lower limit.

QA File: 10904A

Two LCS samples were run with this batch; recoveries for silver for both runs were below the 80% lower limit at 74.7% and 62.7%.

QA File: 10927A

LCS recovery was below the 80% recovery lower control limit for silver (69.0%).

No LCS samples could be associated with QA Files: 10802X, 10805A, 10826X, and 10920X.

*Other*. Any other analytical indicators which may have an effect on data quality. No other deficiencies noted.

*Summary*. For all samples associated with QA Files: 10828A, 10904A, and 10920X, silver showed poor recovery based on spike analyses. There was also low recoveries on the LCSs associated with these batches. Silver data should be viewed as estimated. For samples associated with QA File 10903A, silver results should not be used. Chromium data associated with QA File 10828A and selenium data associated with QA File 10903A should also be viewed as estimated. Because of the low average matrix spike recovery associated with mercury as presented below, and the inability to specifically relate the matrix spike data to specific batches of samples, mercury data should at best be considered provisional.

## 5.4 WET/GENERAL CHEMISTRY

Wet/general chemistry analyses were conducted by the K-25 ACD Laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge for total solids, sulfate, chloride, nitrate, phosphate, fluoride, pH, total dissolved solids, fluorometric uranium, total organic carbon, and density. Samples were analyzed in 33 batches identified as QA files: 91-1, 91-12B, 91-42, 91-19, 91-17, 91-W79, 91-H141, 91-2, 91-H156, 91-3, 91-18, 91-H142, 91-5, 91-43, 91-6, 91-13B, 91-70T, 91-20, 91-W81, 91-4, 91-44, 91-W80, 91-71T, 91-96, 91-72, 91-W78, 91-21, 91-29B, 91-H150, 91-97, 91-73, 91-30B, 91-79IA.

*Calibration*. No calibration data were available for review; however, examination of the actual QA files may provide this data.

*Blanks*. The analysis of blanks provides a means of assessing the existence and magnitude of contamination introduced via the analytical methodology. No blank data were available for review.

*Matrix spikes*. Spiked sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology. All control limit criteria were met (Table A.6).

*Duplicates*. Results of duplicate analyses serve as an indicator of the precision of the methods and the sample measurements. No duplicate data were available for review.

*Laboratory control samples*. The LCS analysis is designed to serve as a monitor of the efficiency of the digestion procedure. No LCS data available for review. Note that methods may not require LCS sample analyses.

*Other*. The following samples associated with QA Files: 91-12B, 91-13B, 91-70T, 91-71T and 91-79IA have been identified as exceeding holding time for nitrate: 6238-SLUDGE, 7938-SLUDGE, 938-SLUDGE, 5838, 7038, 6638, 7438, 7738, 1338, 2238, 3838, 9738, 9938, 5738, 5238, 1038, 5638, 1538, 2338, 2738, 1638, 2538, 3138, 2938, 3938, 4838, 2838, 4738, 4638, 6038, 1238, 3738, and 4538.

The following samples associated with QA Files: 91-42, 91-43, 91-96, 91-97 have been identified as exceeding holding time for pH: 6238, 938, 5838, 7038, 6638, 7738, 2238, 4738, 5238, 7438, 6038, 1338, 1238, 3738, 3838, 9738, 5738, 5638, 2738, 2938, 2838, 4538, and 3038.

*Summary*. All data that were available for review indicate laboratory QC data within control limits. Samples as identified under "other" should be considered provisional.

## A.5 RADIOLOGICAL

Radiological analyses were conducted by the K-25 ACD laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge for alpha/beta activity, gamma activity, technetium-99, thorium-228, thorium-230, thorium-232, neptunium-237, plutonium-238, and plutonium-239. Liquid phase samples were limited to total, alpha, beta, and gamma activity. Samples were analyzed in six batches identified as QA files: W/P-1266, W/P-1267, W/P-1268, W/P-1277, W/P-1391, and WP1622.

*Calibration*. No calibration data were available for review; however, examination of the actual QA files may provide this data.

*Blanks*. The analysis of blanks provides a means of assessing the existence and magnitude of contamination introduced via the analytical methodology. No blank data were available for review.

*Matrix spikes*. Spiked sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology. All criteria were met with the following exceptions (Table A.7):

**Table A.6. Percent recovery from matrix spike additions for wet/chemistry analysis**

| Parameter | Number | Average | Minimum | Maximum |
|---|---|---|---|---|
| | | **Liquid samples** | | |
| Fluoride SIE | 1 | 98.0 | 98.0 | 98.0 |
| Nitrate | 1 | 109.7 | 109.7 | 109.7 |
| Total organic carbon | 2 | 95.0 | 90.0 | 100.0 |
| Total phosphate | 1 | 92.0 | 92.0 | 92.0 |
| Uranium fluorometric | 1 | 100.0 | 100.0 | 100.0 |
| | | **Sludge samples** | | |
| Chloride IC | 1 | 86.1000 | 86.1 | 86.1 |
| Fluoride SIE | 3 | 90.3333 | 80.0 | 101.0 |
| Nitrate | 1 | 94.6000 | 94.6 | 94.6 |
| Sulfate | 1 | 98.9000 | 98.9 | 98.9 |
| Total organic carbon | 2 | 89.2500 | 82.4 | 96.1 |
| Total phosphate | 2 | 95.5000 | 95.0 | 96.0 |
| Uranium fluorometric | 3 | 98.1000 | 86.1 | 111.1 |

**Table A.7. Percent recovery from matrix spike additions for radionuclides**

| Parameter | Number | Average | Minimum | Maximum |
|---|---|---|---|---|
| | | **Sludge samples** | | |
| Alpha activity | 1 | 46.9 | 46.9 | 46.9 |
| Beta activity | 1 | 117.4 | 117.4 | 117.4 |
| Neptunium-237 | 4 | 200.9 | 90.7 | 498.2 |
| Plutonium-238 | 1 | 66.1 | 66.1 | 66.1 |
| Plutonium-239 | 3 | 101.3 | 75.5 | 116.3 |
| Technetium-99 | 2 | 92.3 | 80.3 | 104.2 |
| Thorium-230 | 3 | 107.4 | 91.7 | 124.4 |
| | | **Liquid samples** | | |
| Alpha activity | 1 | 91.9 | 91.9 | 91.9 |
| Beta activity | 1 | 82.0 | 82.0 | 82.0 |

QA File: W/P-1267

Spike recovery results were below the 75% recovery lower control limit for alpha activity (46.9%).

QA File: W/P1622

Spike recovery results were below the 75% recovery lower control limit for plutonium-238 (66.1%).

*Duplicates*. Results of duplicate analyses serve as an indicator of the precision of the methods and the sample measurements. Replicate analyses were run by the laboratory. All criteria were met with the following exceptions:

QA File: W/P-1266

RPDs were greater than 20% for plutonium-238 (33.2%), plutonium-239 (26.3%), and thorium-228 (47.3%).

QA File: W/P-1267

RPDs were greater than 20% for alpha activity (26.8%), thorium-228 (50.0%), and thorium-232 (54.1%).

QA File: W/P-1266

RPDs were greater than 20% for plutonium-238 (34.4%), plutonium-239 (32.0%), and thorium-232 (44.8%).

*Laboratory control samples*. The LCS analysis is designed to serve as a monitor of the efficiency of the digestion procedure. No LCS data available were for review. Note that methods may not require LCS sample analyses.

*Other*. Any other analytical indicators which may have an effect on data quality. No other deficiencies noted.

*Summary*. For all samples associated with QA File W/P-1266, RPDs were greater than 20% for plutonium-238 (33.2%), plutonium-239 (26.3%), and thorium-228 (47.3%) sample data for these radionuclides should be considered estimated. For all samples associated with QA File: W/P-1267, RPDs were greater than 20% for alpha activity (26.8%), thorium-228 (50.0%), and thorium-232 (54.1%) sample data for these radionuclides should be considered estimated. For all samples associated with QA File: W/P-1266, RPDs were greater than 20% for plutonium-238 (34.4%), plutonium-239 (32.0%), and thorium-232 (44.8%). Sample data for these radionuclides should be considered estimated.

## A.6 IT LABORATORY GRAPHITE FURNACE ATOMIC ABSORPTION METALS

Graphite Furnace Atomic Absorption (GFAA) analyses were conducted by the IT Laboratories for the K-25 ACD Laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge for

arsenic, selenium, thallium, and lead. No laboratory QC data associated with these analyses were available for review.

## A.7 Y-12 PLANT LABORATORY (Radiological)

Uranium analyses were conducted by the Y-12 Plant Laboratory for the K-25 ACD Laboratory on the liquid and solid phases of the K-1407-B and -C ponds sludge for total uranium and uranium-235. No laboratory QC data associated with these analyses were available for review.

# APPENDIX B

# TOTAL ANALYSES FOR 1985 SLUDGE SAMPLES FROM THE K-1407-B POND

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-S LABSMPID=850506-056 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 19000 | UG/G | | . |
| Arsenic (ICP) | 85 | UG/G | | . |
| Barium | 216 | UG/G | | . |
| Beryllium | 1.7 | UG/G | | . |
| Boron | 93 | UG/G | | . |
| Cadmium | 0.59 | UG/G | | . |
| Calcium | 120000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 290 | UG/G | | . |
| Cobalt | 22 | UG/G | | . |
| Copper | 420 | UG/G | | . |
| Density @25C | 1.1 | G/ML | | . |
| Iron | 35000 | UG/G | | . |
| Lead (ICP) | 66 | UG/G | | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 16000 | UG/G | | . |
| Manganese | 560 | UG/G | | . |
| Molybdenum | 9.5 | UG/G | | . |
| Neptunium | 1.8 | DPM/G | | . |
| Nickel | 1100 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 6200 | UG/G | | . |
| Plutonium | 2 | DPM/G | | . |
| Potassium | 2500 | UG/G | | . |
| Selenium (ICP) | 19 | UG/G | | . |
| Sodium | 730 | UG/G | | . |
| Strontium | 190 | UG/G | | . |
| Technetium | 2500 | DPM/G | | . |
| Thorium | 30 | UG/G | | . |
| Titanium | 330 | UG/G | | . |
| U-235 | 1.26 | WT.% | | . |
| Uranium | 308 | UG/G | | . |
| Vanadium | 36 | UG/G | | . |
| Zinc | 480 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7.4 | STD UNITS | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-S LABSMPID=850506-056 LOCATION=K1407B STATION=1 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-10-S LABSMPID=850506-064 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 49000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 210 | UG/G | | . |
| Beryllium | 1.6 | UG/G | | . |
| Boron | 81 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 33000 | UG/G | | . |
| Cesium | 16 | DPM/G | | . |
| Chromium | 2400 | UG/G | | . |
| Cobalt | 42 | UG/G | | . |
| Copper | 1200 | UG/G | | . |
| Iron | 64000 | UG/G | | . |
| Lead (ICP) | 150 | UG/G | | . |
| Lithium | 27 | UG/G | | . |
| Magnesium | 5200 | UG/G | | . |
| Manganese | 660 | UG/G | | . |
| Molybdenum | 18 | UG/G | | . |
| Neptunium | 9.4 | DPM/G | | . |
| Nickel | 4800 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 21000 | UG/G | | . |
| Plutonium | 11.5 | DPM/G | | . |
| Potassium | 4300 | UG/G | | . |
| Selenium (ICP) | 120 | UG/G | | . |
| Sodium | 2000 | UG/G | | . |
| Strontium | 100 | UG/G | | . |
| Technetium | 11000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 280 | UG/G | | . |
| U-235 | 1.39 | WT.% | | . |
| Uranium | 1044 | UG/G | | . |
| Vanadium | 49 | UG/G | | . |
| Zinc | 810 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-10-S LABSMPID=850506-064 LOCATION=K1407B STATION=10 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.13 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 6.7 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-11-S LABSMPID=850506-133 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 220 | UG/G | | . |
| Barium | 230 | UG/G | | . |
| Beryllium | 3.1 | UG/G | | . |
| Boron | 130 | UG/G | | . |
| Cadmium | 0.83 | UG/G | | . |
| Calcium | 55000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 480 | UG/G | | . |
| Cobalt | 61 | UG/G | | . |
| Copper | 1400 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 95000 | UG/G | | . |
| Lead (ICP) | 130 | UG/G | | . |
| Lithium | 26 | UG/G | | . |
| Magnesium | 7700 | UG/G | | . |
| Manganese | 830 | UG/G | | . |
| Molybdenum | 49 | UG/G | | . |
| Neptunium | 11.7 | DPM/G | | . |
| Nickel | 7100 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-11-S LABSMPID=850506-133 LOCATION=K1407B STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 18000 | UG/G | | . |
| Plutonium | 3.7 | DPM/G | | . |
| Potassium | 4100 | UG/G | | . |
| Selenium (ICP) | 120 | UG/G | | . |
| Sodium | 3100 | UG/G | | . |
| Strontium | 170 | UG/G | | . |
| Technetium | 12000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 450 | UG/G | | . |
| U-235 | 1.12 | WT.% | | . |
| Uranium | 660 | UG/G | | . |
| Vanadium | 51 | UG/G | | . |
| Zinc | 720 | UG/G | | . |
| acetone | 0.81 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| fluorocarbons | 1.3 | UG/G | | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7.3 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-S LABSMPID=850506-057 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 140 | UG/G | | . |
| Barium | 220 | UG/G | | . |
| Beryllium | 1.8 | UG/G | | . |
| Boron | 110 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 73000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 330 | UG/G | | . |
| Cobalt | 49 | UG/G | | . |
| Copper | 1500 | UG/G | | . |
| Iron | 120000 | UG/G | | . |
| Lead (ICP) | 150 | UG/G | | . |
| Lithium | 20 | UG/G | | . |
| Magnesium | 7000 | UG/G | | . |
| Manganese | 740 | UG/G | | . |
| Molybdenum | 20 | UG/G | | . |
| Neptunium | 7.3 | DPM/G | | . |
| Nickel | 5500 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 15000 | UG/G | | . |
| Plutonium | 4.8 | DPM/G | | . |
| Potassium | 3500 | UG/G | | . |
| Selenium (ICP) | 140 | UG/G | | . |
| Sodium | 870 | UG/G | | . |
| Strontium | 130 | UG/G | | . |
| Technetium | 4500 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 430 | UG/G | | . |
| U-235 | 1.14 | WT.% | | . |
| Uranium | 466 | UG/G | | . |
| Vanadium | 34 | UG/G | | . |
| Zinc | 590 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7.1 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-S LABSMPID=850506-057 LOCATION=K1407B STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-3-S LABSMPID=850506-058 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 31000 | UG/G | | . |
| Arsenic (ICP) | 290 | UG/G | | . |
| Barium | 270 | UG/G | | . |
| Beryllium | 2.6 | UG/G | | . |
| Boron | 110 | UG/G | | . |
| Cadmium | 2.1 | UG/G | | . |
| Calcium | 17000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 410 | UG/G | | . |
| Cobalt | 45 | UG/G | | . |
| Copper | 1000 | UG/G | | . |
| Density @25C | 1.1 | G/ML | | . |
| Iron | 55000 | UG/G | | . |
| Lead (ICP) | 150 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 3400 | UG/G | | . |
| Manganese | 300 | UG/G | | . |
| Molybdenum | 23 | UG/G | | . |
| Neptunium | 40.9 | DPM/G | | . |
| Nickel | 3600 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 11000 | UG/G | | . |
| Plutonium | 23.8 | DPM/G | | . |
| Potassium | 3600 | UG/G | | . |
| Selenium (ICP) | 100 | UG/G | | . |
| Sodium | 930 | UG/G | | . |
| Strontium | 190 | UG/G | | . |
| Technetium | 30000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 470 | UG/G | | . |
| U-235 | 1.15 | WT.% | | . |
| Uranium | 847 | UG/G | | . |
| Vanadium | 67 | UG/G | | . |
| Zinc | 530 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-3-S LABSMPID=850506-058 LOCATION=K1407B STATION=3 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 6.9 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-4-S LABSMPID=850506-059 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 44000 | UG/G | | . |
| Arsenic (ICP) | 210 | UG/G | | . |
| Barium | 270 | UG/G | | . |
| Beryllium | 2.2 | UG/G | | . |
| Boron | 96 | UG/G | | . |
| Cadmium | 1.9 | UG/G | | . |
| Calcium | 29000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 1100 | UG/G | | . |
| Cobalt | 52 | UG/G | | . |
| Copper | 1200 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 67000 | UG/G | | . |
| Lead (ICP) | 150 | UG/G | | . |
| Lithium | 28 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 460 | UG/G | | . |
| Molybdenum | 17 | UG/G | | . |
| Neptunium | 17.2 | DPM/G | | . |
| Nickel | 4500 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 14000 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-4-S LABSMPID=850506-059 LOCATION=K1407B STATION=4 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Plutonium | 19.1 | DPM/G | | . |
| Potassium | 4500 | UG/G | | . |
| Selenium (ICP) | 110 | UG/G | | . |
| Sodium | 980 | UG/G | | . |
| Strontium | 150 | UG/G | | . |
| Technetium | 15000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 410 | UG/G | | . |
| U-235 | 1.22 | WT.% | | . |
| Uranium | 345 | UG/G | | . |
| Vanadium | 61 | UG/G | | . |
| Zinc | 630 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7.1 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-S LABSMPID=850506-131 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 43000 | UG/G | | . |
| Arsenic (ICP) | 230 | UG/G | | . |
| Barium | 280 | UG/G | | . |
| Beryllium | 2.6 | UG/G | | . |
| Boron | 150 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 47000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 670 | UG/G | | . |
| Cobalt | 39 | UG/G | | . |
| Copper | 820 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 75000 | UG/G | | . |
| Lead (ICP) | 110 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 6200 | UG/G | | . |
| Manganese | 500 | UG/G | | . |
| Molybdenum | 16 | UG/G | | . |
| Neptunium | 6.2 | DPM/G | | . |
| Nickel | 34 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 11000 | UG/G | | . |
| Plutonium | 8.7 | DPM/G | | . |
| Potassium | 5500 | UG/G | | . |
| Selenium (ICP) | 120 | UG/G | | . |
| Sodium | 980 | UG/G | | . |
| Strontium | 160 | UG/G | | . |
| Technetium | 5800 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 400 | UG/G | | . |
| U-235 | 1.2 | WT.% | | . |
| Uranium | 69 | UG/G | | . |
| Vanadium | 54 | UG/G | | . |
| Zinc | 560 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-S LABSMPID=850506-131 LOCATION=K1407B STATION=5 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-6-S LABSMPID=850506-143 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 41000 | UG/G | | . |
| Arsenic (ICP) | 250 | UG/G | | . |
| Barium | 290 | UG/G | | . |
| Beryllium | 2.9 | UG/G | | . |
| Boron | 190 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 43000 | UG/G | | . |
| Chromium | 560 | UG/G | | . |
| Cobalt | 41 | UG/G | | . |
| Copper | 840 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 75000 | UG/G | | . |
| Lead (ICP) | 120 | UG/G | | . |
| Lithium | 27 | UG/G | | . |
| Magnesium | 5600 | UG/G | | . |
| Manganese | 480 | UG/G | | . |
| Molybdenum | 29 | UG/G | | . |
| Nickel | 3800 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 8100 | UG/G | | . |
| Potassium | 5300 | UG/G | | . |
| Selenium (ICP) | 130 | UG/G | | . |
| Sodium | 970 | UG/G | | . |
| Strontium | 180 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 430 | UG/G | | . |
| U-235 | 1.16 | WT.% | | . |
| Uranium | 838 | UG/G | | . |
| Vanadium | 61 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-6-S LABSMPID=850506-143 LOCATION=K1407B STATION=6 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Zinc | 520 | UG/G | | . |
| acetone | 0.62 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| fluorocarbons | 0.9 | UG/G | | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.11 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-S LABSMPID=850506-060 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 25000 | UG/G | | . |
| Arsenic (ICP) | 150 | UG/G | | . |
| Barium | 120 | UG/G | | . |
| Beryllium | 1.4 | UG/G | | . |
| Boron | 75 | UG/G | | . |
| Cadmium | 5.8 | UG/G | | . |
| Calcium | 74000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 500 | UG/G | | . |
| Cobalt | 38 | UG/G | | . |
| Copper | 700 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Lead (ICP) | 80 | UG/G | | . |
| Lithium | 14 | UG/G | | . |
| Magnesium | 4800 | UG/G | | . |
| Manganese | 800 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1.3 | DPM/G | | . |
| Nickel | 4100 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 11000 | UG/G | | . |
| Plutonium | 1 | DPM/G | | . |
| Potassium | 1800 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 400 | UG/G | | . |
| Strontium | 81 | UG/G | | . |
| Technetium | 2300 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.31 | WT.% | | . |
| Uranium | 274 | UG/G | | . |
| Vanadium | 16 | UG/G | | . |
| Zinc | 530 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7.1 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-S LABSMPID=850506-060 LOCATION=K1407B STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 3.3 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.33 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-7-S LABSMPID=850506-061 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 26000 | UG/G | | . |
| Arsenic (ICP) | 160 | UG/G | | . |
| Barium | 120 | UG/G | | . |
| Beryllium | 1.4 | UG/G | | . |
| Boron | 77 | UG/G | | . |
| Cadmium | 5.6 | UG/G | | . |
| Calcium | 75000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 510 | UG/G | | . |
| Cobalt | 38 | UG/G | | . |
| Copper | 660 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Lead (ICP) | 77 | UG/G | | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 5000 | UG/G | | . |
| Manganese | 790 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1.3 | DPM/G | | . |
| Nickel | 3800 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 9800 | UG/G | | . |
| Plutonium | 1.9 | DPM/G | | . |
| Potassium | 2000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 390 | UG/G | | . |
| Strontium | 81 | UG/G | | . |
| Technetium | 4000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.3 | WT.% | | . |
| Uranium | 348 | UG/G | | . |
| Vanadium | 17 | UG/G | | . |
| Zinc | 510 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-S LABSMPID=850506-061 LOCATION=K1407B STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 7 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 3.2 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.33 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-8-S LABSMPID=850506-062 LOCATION=K1407B STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| acetone | 0.47 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-9-S LABSMPID=850506-063 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 49000 | UG/G | | . |
| Arsenic (ICP) | 160 | UG/G | | . |
| Barium | 260 | UG/G | | . |
| Beryllium | 2.2 | UG/G | | . |
| Boron | 100 | UG/G | | . |
| Cadmium | 4.8 | UG/G | | . |
| Calcium | 30000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 1300 | UG/G | | . |
| Cobalt | 46 | UG/G | | . |
| Copper | 1600 | UG/G | | . |
| Density @25C | 1.1 | G/ML | | . |
| Iron | 73000 | UG/G | | . |
| Lead (ICP) | 180 | UG/G | | . |
| Lithium | 37 | UG/G | | . |
| Magnesium | 5500 | UG/G | | . |
| Manganese | 610 | UG/G | | . |
| Molybdenum | 15 | UG/G | | . |
| Neptunium | 9.2 | DPM/G | | . |
| Nickel | 6900 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 15000 | UG/G | | . |
| Plutonium | 10.4 | DPM/G | | . |
| Potassium | 7300 | UG/G | | . |
| Selenium (ICP) | 120 | UG/G | | . |
| Sodium | 1100 | UG/G | | . |
| Strontium | 120 | UG/G | | . |
| Technetium | 14000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 460 | UG/G | | . |
| U-235 | 1.19 | WT.% | | . |
| Uranium | 737 | UG/G | | . |
| Vanadium | 60 | UG/G | | . |
| Zinc | 740 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 6.7 | STD UNITS | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-9-S LABSMPID=850506-063 LOCATION=K1407B STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX C

# EP-TOX ANALYSES FOR 1985 SLUDGE SAMPLES FROM THE K-1407-B POND

EP-TOX analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-S LABSMPID=850506-056 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.016 | MG/L | | . |
| Barium | 0.33 | MG/L | | . |
| Cadmium | 0.048 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 3.74 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-10-S LABSMPID=850506-064 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.013 | MG/L | | . |
| Barium | 0.26 | MG/L | | . |
| Cadmium | 0.049 | MG/L | | . |
| Chromium | 0.02 | MG/L | | . |
| Lead (AA) | 0.01 | MG/L | | . |
| Mercury | 0.004 | MG/L | | . |
| Nickel | 23.9 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-11-S LABSMPID=850506-133 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.008 | MG/L | | . |
| Barium | 0.75 | MG/L | | . |
| Cadmium | 0.075 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.012 | MG/L | | . |
| Nickel | 33.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-12-S LABSMPID=850506-146 LOCATION=K1407B STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.128 | MG/L | | . |
| Arsenic (AA) | 0.009 | MG/L | | . |
| Barium | 0.92 | MG/L | | . |
| Cadmium | 0.04 | MG/L | | . |
| Chromium | 0.31 | MG/L | | . |
| Lead (AA) | 0.009 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 27.8 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00013 | MG/L | < | . |
| lindane | 0.036 | MG/L | < | . |
| methoxychlor | 0.0001 | MG/L | < | . |
| silvex | 0.003 | MG/L | < | . |
| toxaphene | 0.003 | MG/L | < | . |

---------- SMP_ID=K1407B-2-S LABSMPID=850506-057 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.006 | MG/L | | . |
| Barium | 0.23 | MG/L | | . |
| Cadmium | 0.058 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.007 | MG/L | | . |
| Mercury | 0.001 | MG/L | | . |
| Nickel | 29.2 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-3-S LABSMPID=850506-058 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.019 | MG/L | | . |
| Barium | 0.3 | MG/L | | . |
| Cadmium | 0.052 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.015 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 19.9 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-4-S LABSMPID=850506-059 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.01 | MG/L | | . |
| Barium | 0.46 | MG/L | | . |
| Cadmium | 0.068 | MG/L | | . |
| Chromium | 0.05 | MG/L | | . |
| Lead (AA) | 0.025 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 17 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-5-S LABSMPID=850506-131 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.022 | MG/L | | . |
| Barium | 0.67 | MG/L | | . |
| Cadmium | 0.063 | MG/L | | . |
| Chromium | 0.02 | MG/L | | . |
| Lead (AA) | 0.01 | MG/L | | . |
| Mercury | 0.001 | MG/L | | . |
| Nickel | 14.45 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-6-S LABSMPID=850506-143 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | | . |
| Arsenic (AA) | 0.009 | MG/L | | . |
| Barium | 0.41 | MG/L | | . |
| Cadmium | 0.06 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 20 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.011 | MG/L | < | . |
| methoxychlor | 0.00006 | MG/L | < | . |
| silvex | 0.074 | MG/L | | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-S LABSMPID=850506-060 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.009 | MG/L | | . |
| Barium | 0.18 | MG/L | | . |
| Cadmium | 0.049 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 19.8 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-7-S LABSMPID=850506-061 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.01 | MG/L | | . |
| Barium | 0.2 | MG/L | | . |
| Cadmium | 0.048 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 19.7 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-8-S LABSMPID=850506-062 LOCATION=K1407B STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | | . |
| Barium | 0.21 | MG/L | | . |
| Cadmium | 0.025 | MG/L | | . |
| Chromium | 0.04 | MG/L | | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 12.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-B pond.

---------- SMP_ID=K1407B-9-S LABSMPID=850506-063 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.01 | MG/L | | . |
| Barium | 0.43 | MG/L | | . |
| Cadmium | 0.085 | MG/L | | . |
| Chromium | 0.04 | MG/L | | . |
| Lead (AA) | 0.011 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 33.5 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX D

# TOTAL ANALYSES FOR 1985 CLAY SAMPLES FROM THE K-1407-B POND

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-A LABSMPID=850506-065 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 51000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 54 | UG/G | | . |
| Beryllium | 0.49 | UG/G | | . |
| Boron | 33 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 6600 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 120 | UG/G | | . |
| Cobalt | 10 | UG/G | | . |
| Copper | 59 | UG/G | | . |
| Iron | 43000 | UG/G | | . |
| Lead (ICP) | 26 | UG/G | | . |
| Lithium | 49 | UG/G | | . |
| Magnesium | 2800 | UG/G | | . |
| Manganese | 280 | UG/G | | . |
| Molybdenum | 5.2 | UG/G | | . |
| Neptunium | 4.6 | DPM/G | | . |
| Nickel | 2000 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1000 | UG/G | | . |
| Plutonium | 5.3 | DPM/G | | . |
| Potassium | 2600 | UG/G | | . |
| Selenium (ICP) | 89 | UG/G | | . |
| Sodium | 260 | UG/G | | . |
| Strontium | 14 | UG/G | | . |
| Technetium | 2100 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.86 | WT.% | | . |
| Uranium | 56 | UG/G | | . |
| Vanadium | 76 | UG/G | | . |
| Zinc | 140 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.24 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-A LABSMPID=850506-065 LOCATION=K1407B STATION=1 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-1-A LABSMPID=850506-066 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 49000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 62 | UG/G | | . |
| Beryllium | 0.52 | UG/G | | . |
| Boron | 37 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 13000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 210 | UG/G | | . |
| Cobalt | 14 | UG/G | | . |
| Copper | 100 | UG/G | | . |
| Iron | 39000 | UG/G | | . |
| Lead (ICP) | 34 | UG/G | | . |
| Lithium | 50 | UG/G | | . |
| Magnesium | 3300 | UG/G | | . |
| Manganese | 260 | UG/G | | . |
| Molybdenum | 5.3 | UG/G | | . |
| Neptunium | 5.4 | DPM/G | | . |
| Nickel | 3400 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1400 | UG/G | | . |
| Plutonium | 6.3 | DPM/G | | . |
| Potassium | 2800 | UG/G | | . |
| Selenium (ICP) | 82 | UG/G | | . |
| Sodium | 300 | UG/G | | . |
| Strontium | 27 | UG/G | | . |
| Technetium | 3700 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 200 | UG/G | | . |
| U-235 | 1.83 | WT.% | | . |
| Uranium | 99 | UG/G | | . |
| Vanadium | 65 | UG/G | | . |
| Zinc | 170 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-A LABSMPID=850506-066 LOCATION=K1407B STATION=1 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.07 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.16 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.21 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-B LABSMPID=850506-149 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 42000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 48 | UG/G | | . |
| Beryllium | 0.57 | UG/G | | . |
| Boron | 62 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3200 | UG/G | | . |
| Chromium | 65 | UG/G | | . |
| Cobalt | 6.9 | UG/G | | . |
| Iron | 41000 | UG/G | | . |
| Lead (ICP) | 17 | UG/G | | . |
| Lithium | 37 | UG/G | | . |
| Magnesium | 2600 | UG/G | | . |
| Manganese | 360 | UG/G | | . |
| Molybdenum | 10 | UG/G | | . |
| Nickel | 310 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 660 | UG/G | | . |
| Potassium | 2900 | UG/G | | . |
| Selenium (ICP) | 70 | UG/G | | . |
| Sodium | 330 | UG/G | | . |
| Strontium | 8.7 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 160 | UG/G | | . |
| U-235 | 1.57 | WT.% | | . |
| Uranium | 12 | UG/G | | . |
| Vanadium | 72 | UG/G | | . |
| Zinc | 100 | UG/G | | . |
| acetone | 0.11 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.09 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-10-A LABSMPID=850506-073 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 33000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 0.86 | UG/G | | . |
| Boron | 55 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 2300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 87 | UG/G | | . |
| Cobalt | 23 | UG/G | | . |
| Copper | 27 | UG/G | | . |
| Iron | 34000 | UG/G | | . |
| Lead (ICP) | 15 | UG/G | | . |
| Lithium | 21 | UG/G | | . |
| Magnesium | 3800 | UG/G | | . |
| Manganese | 600 | UG/G | | . |
| Molybdenum | 1.7 | UG/G | | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 180 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 490 | UG/G | | . |
| Plutonium | 0.1 | DPM/G | | . |
| Potassium | 5800 | UG/G | | . |
| Selenium (ICP) | 68 | UG/G | | . |
| Sodium | 460 | UG/G | | . |
| Strontium | 8.9 | UG/G | | . |
| Technetium | 464 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 2.6 | WT.% | | . |
| Uranium | 42 | UG/G | | . |
| Vanadium | 38 | UG/G | | . |
| Zinc | 63 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-10-A LABSMPID=850506-073 LOCATION=K1407B STATION=10 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-10-B LABSMPID=850506-156 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 25000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 130 | UG/G | | . |
| Beryllium | 1.5 | UG/G | | . |
| Boron | 84 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 2100 | UG/G | | . |
| Chromium | 50 | UG/G | | . |
| Cobalt | 28 | UG/G | | . |
| Iron | 40000 | UG/G | | . |
| Lead (ICP) | 16 | UG/G | | . |
| Lithium | 19 | UG/G | | . |
| Magnesium | 3100 | UG/G | | . |
| Manganese | 1900 | UG/G | | . |
| Molybdenum | 13 | UG/G | | . |
| Nickel | 44 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 610 | UG/G | | . |
| Potassium | 4000 | UG/G | | . |
| Selenium (ICP) | 66 | UG/G | | . |
| Sodium | 530 | UG/G | | . |
| Strontium | 8.8 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 160 | UG/G | | . |
| U-235 | 1.49 | WT.% | | . |
| Uranium | 9 | UG/G | | . |
| Vanadium | 42 | UG/G | | . |
| Zinc | 40 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-11-A LABSMPID=850506-134 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 35000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 86 | UG/G | | . |
| Beryllium | 0.78 | UG/G | | . |
| Boron | 88 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 8500 | UG/G | | . |
| Cesium | 20 | DPM/G | | . |
| Chromium | 430 | UG/G | | . |
| Cobalt | 21 | UG/G | | . |
| Copper | 150 | UG/G | | . |
| Iron | 51000 | UG/G | | . |
| Lead (ICP) | 28 | UG/G | | . |
| Lithium | 22 | UG/G | | . |
| Magnesium | 5800 | UG/G | | . |
| Manganese | 450 | UG/G | | . |
| Molybdenum | 5.6 | UG/G | | . |
| Neptunium | 2.9 | DPM/G | | . |
| Nickel | 990 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 3.62 | UG/G | | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 3700 | UG/G | | . |
| Plutonium | 4.3 | DPM/G | | . |
| Potassium | 9300 | UG/G | | . |
| Selenium (ICP) | 100 | UG/G | | . |
| Sodium | 850 | UG/G | | . |
| Strontium | 20 | UG/G | | . |
| Technetium | 850 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 1.31 | WT.% | | . |
| Uranium | 619 | UG/G | | . |
| Vanadium | 40 | UG/G | | . |
| Zinc | 180 | UG/G | | . |
| acetone | 1.4 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-11-A LABSMPID=850506-134 LOCATION=K1407B STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.11 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-11-B LABSMPID=850506-136 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 31000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 85 | UG/G | | . |
| Beryllium | 1.5 | UG/G | | . |
| Boron | 57 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3400 | UG/G | | . |
| Chromium | 60 | UG/G | | . |
| Cobalt | 30 | UG/G | | . |
| Iron | 27000 | UG/G | | . |
| Lead (ICP) | 5 | UG/G | < | . |
| Lithium | 20 | UG/G | | . |
| Magnesium | 6800 | UG/G | | . |
| Manganese | 420 | UG/G | | . |
| Molybdenum | 1 | UG/G | | . |
| Nickel | 130 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 340 | UG/G | | . |
| Potassium | 9700 | UG/G | | . |
| Selenium (ICP) | 52 | UG/G | | . |
| Sodium | 590 | UG/G | | . |
| Strontium | 15 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 130 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-11-B LABSMPID=850506-136 LOCATION=K1407B STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| U-235 | 1.35 | WT.% | | . |
| Uranium | 10 | UG/G | | . |
| Vanadium | 30 | UG/G | | . |
| Zinc | 63 | UG/G | | . |
| acetone | 0.52 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-12-A LABSMPID=850506-147 LOCATION=K1407B STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 27000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 140 | UG/G | | . |
| Beryllium | 0.96 | UG/G | | . |
| Boron | 43 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 2100 | UG/G | | . |
| Chromium | 48 | UG/G | | . |
| Cobalt | 21 | UG/G | | . |
| Copper | 26 | UG/G | | . |
| Iron | 37000 | UG/G | | . |
| Lead (ICP) | 17 | UG/G | | . |
| Lithium | 23 | UG/G | | . |
| Magnesium | 3900 | UG/G | | . |
| Manganese | 860 | UG/G | | . |
| Molybdenum | 3.3 | UG/G | | . |
| Nickel | 240 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 630 | UG/G | | . |
| Potassium | 5100 | UG/G | | . |
| Selenium (ICP) | 67 | UG/G | | . |
| Sodium | 370 | UG/G | | . |
| Strontium | 9.2 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 2.82 | WT.% | | . |
| Uranium | 12.6 | UG/G | | . |
| Vanadium | 31 | UG/G | | . |
| Zinc | 57 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-12-B LABSMPID=850506-148 LOCATION=K1407B STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 17000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 630 | UG/G | | . |
| Beryllium | 0.97 | UG/G | | . |
| Boron | 90 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 2200 | UG/G | | . |
| Chromium | 39 | UG/G | | . |
| Cobalt | 24 | UG/G | | . |
| Copper | 4.2 | UG/G | | . |
| Iron | 61000 | UG/G | | . |
| Lead (ICP) | 11 | UG/G | | . |
| Lithium | 15 | UG/G | | . |
| Magnesium | 2900 | UG/G | | . |
| Manganese | 5400 | UG/G | | . |
| Molybdenum | 13 | UG/G | | . |
| Nickel | 51 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 810 | UG/G | | . |
| Potassium | 3600 | UG/G | | . |
| Selenium (ICP) | 110 | UG/G | | . |
| Sodium | 380 | UG/G | | . |
| Strontium | 13 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 140 | UG/G | | . |
| U-235 | 1.06 | WT.% | | . |
| Uranium | 9.9 | UG/G | | . |
| Vanadium | 25 | UG/G | | . |
| Zinc | 39 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-A LABSMPID=850506-067 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.26 | UG/G | | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 40000 | UG/G | | . |
| Arsenic (ICP) | 66 | UG/G | | . |
| Barium | 190 | UG/G | | . |
| Beryllium | 1.5 | UG/G | | . |
| Boron | 74 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 68000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 3200 | UG/G | | . |
| Cobalt | 48 | UG/G | | . |
| Copper | 1700 | UG/G | | . |
| Iron | 93000 | UG/G | | . |
| Lead (ICP) | 220 | UG/G | | . |
| Lithium | 22 | UG/G | | . |
| Magnesium | 8000 | UG/G | | . |
| Manganese | 790 | UG/G | | . |
| Molybdenum | 24 | UG/G | | . |
| Neptunium | 9 | DPM/G | | . |
| Nickel | 9700 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 20000 | UG/G | | . |
| Plutonium | 9 | DPM/G | | . |
| Potassium | 3300 | UG/G | | . |
| Selenium (ICP) | 140 | UG/G | | . |
| Sodium | 1200 | UG/G | | . |
| Strontium | 89 | UG/G | | . |
| Technetium | 15000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 290 | UG/G | | . |
| U-235 | 1.28 | WT.% | | . |
| Uranium | 1416 | UG/G | | . |
| Vanadium | 29 | UG/G | | . |
| Zinc | 1300 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.11 | UG/G | | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-A LABSMPID=850506-067 LOCATION=K1407B STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 2 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.09 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-B LABSMPID=850506-150 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 1.1 | UG/G | | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 45000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 200 | UG/G | | . |
| Beryllium | 0.77 | UG/G | | . |
| Boron | 140 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 10000 | UG/G | | . |
| Chromium | 760 | UG/G | | . |
| Cobalt | 26 | UG/G | | . |
| Iron | 43000 | UG/G | | . |
| Lead (ICP) | 79 | UG/G | | . |
| Lithium | 35 | UG/G | | . |
| Magnesium | 6100 | UG/G | | . |
| Manganese | 420 | UG/G | | . |
| Molybdenum | 8.2 | UG/G | | . |
| Nickel | 2700 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 2500 | UG/G | | . |
| Potassium | 11000 | UG/G | | . |
| Selenium (ICP) | 83 | UG/G | | . |
| Sodium | 590 | UG/G | | . |
| Strontium | 33 | UG/G | | . |
| Thorium | 24 | UG/G | | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 2.25 | WT.% | | . |
| Uranium | 71.1 | UG/G | | . |
| Vanadium | 47 | UG/G | | . |
| Zinc | 250 | UG/G | | . |
| acetone | 1.1 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.14 | UG/G | | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.06 | UG/G | | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.21 | UG/G | | . |
| trans-1,2-dichloroethylene | 1.3 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.18 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-3-A LABSMPID=850506-068 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.37 | UG/G | | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 62000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 52 | UG/G | | . |
| Beryllium | 0.49 | UG/G | | . |
| Boron | 42 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1700 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 66 | UG/G | | . |
| Cobalt | 8 | UG/G | | . |
| Copper | 38 | UG/G | | . |
| Iron | 41000 | UG/G | | . |
| Lead (ICP) | 29 | UG/G | | . |
| Lithium | 53 | UG/G | | . |
| Magnesium | 2300 | UG/G | | . |
| Manganese | 250 | UG/G | | . |
| Molybdenum | 3.6 | UG/G | | . |
| Neptunium | 2.7 | DPM/G | | . |
| Nickel | 630 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 680 | UG/G | | . |
| Plutonium | 3 | DPM/G | | . |
| Potassium | 3100 | UG/G | | . |
| Selenium (ICP) | 86 | UG/G | | . |
| Sodium | 220 | UG/G | | . |
| Strontium | 7.4 | UG/G | | . |
| Technetium | 2800 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.59 | WT.% | | . |
| Uranium | 148 | UG/G | | . |
| Vanadium | 76 | UG/G | | . |
| Zinc | 120 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.04 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 3.3 | UG/G | | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-3-A LABSMPID=850506-068 LOCATION=K1407B STATION=3 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.13 | UG/G | | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 1 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-3-B LABSMPID=850506-151 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 25 | UG/G | | . |
| 1,1,2,2-tetrachloroethane | 0.7 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.5 | UG/G | < | . |
| 1,1-dichloroethane | 0.5 | UG/G | < | . |
| 1,1-dichloroethylene | 0.3 | UG/G | < | . |
| 1,2-dichloroethane | 0.3 | UG/G | < | . |
| 1,2-dichloropropane | 0.6 | UG/G | < | . |
| Aluminum | 42000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 91 | UG/G | | . |
| Beryllium | 0.59 | UG/G | | . |
| Boron | 74 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1900 | UG/G | | . |
| Chromium | 50 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Iron | 38000 | UG/G | | . |
| Lead (ICP) | 19 | UG/G | | . |
| Lithium | 36 | UG/G | | . |
| Magnesium | 2500 | UG/G | | . |
| Manganese | 630 | UG/G | | . |
| Molybdenum | 1.8 | UG/G | | . |
| Nickel | 260 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 580 | UG/G | | . |
| Potassium | 3300 | UG/G | | . |
| Selenium (ICP) | 73 | UG/G | | . |
| Sodium | 260 | UG/G | | . |
| Strontium | 8 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 0.76 | WT.% | | . |
| Uranium | 8.8 | UG/G | | . |
| Vanadium | 62 | UG/G | | . |
| Zinc | 74 | UG/G | | . |
| acetone | 1 | UG/G | < | . |
| benzene | 0.4 | UG/G | < | . |
| bromodichloromethane | 0.2 | UG/G | < | . |
| bromoform | 0.5 | UG/G | < | . |
| carbon tetrachloride | 3 | UG/G | | . |
| chlorobenzene | 0.6 | UG/G | < | . |
| chloroform | 0.2 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.5 | UG/G | < | . |
| dibromochloromethane | 0.3 | UG/G | < | . |
| ethyl benzene | 0.7 | UG/G | < | . |
| freon-113 | 1 | UG/G | < | . |
| freon-114 | 1 | UG/G | < | . |
| freon-123 | 1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 1 | UG/G | < | . |
| methylene chloride | 0.3 | UG/G | < | . |
| other halomethanes | 1 | UG/G | < | . |
| tetrachloroethylene | 82 | UG/G | | . |
| toluene | 0.6 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.2 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.5 | UG/G | < | . |
| trichloroethylene | 69 | UG/G | | . |
| trichlorofluoromethane | 1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-4-A LABSMPID=850506-069 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 96 | UG/G | | . |
| Beryllium | 0.84 | UG/G | | . |
| Boron | 39 | UG/G | | . |
| Cadmium | 1.2 | UG/G | | . |
| Calcium | 7300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 370 | UG/G | | . |
| Cobalt | 14 | UG/G | | . |
| Copper | 130 | UG/G | | . |
| Iron | 26000 | UG/G | | . |
| Lead (ICP) | 45 | UG/G | | . |
| Lithium | 24 | UG/G | | . |
| Magnesium | 3200 | UG/G | | . |
| Manganese | 470 | UG/G | | . |
| Molybdenum | 2 | UG/G | | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 1100 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 590 | UG/G | | . |
| Plutonium | 1.4 | DPM/G | | . |
| Potassium | 4400 | UG/G | | . |
| Selenium (ICP) | 43 | UG/G | | . |
| Sodium | 250 | UG/G | | . |
| Strontium | 21 | UG/G | | . |
| Technetium | 715 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 190 | UG/G | | . |
| U-235 | 1.64 | WT.% | | . |
| Uranium | 66 | UG/G | | . |
| Vanadium | 31 | UG/G | | . |
| Zinc | 110 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.47 | UG/G | | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-4-A LABSMPID=850506-069 LOCATION=K1407B STATION=4 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.04 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-4-B LABSMPID=850506-152 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 15000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 55 | UG/G | | . |
| Beryllium | 0.83 | UG/G | | . |
| Boron | 72 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1900 | UG/G | | . |
| Chromium | 31 | UG/G | | . |
| Cobalt | 9 | UG/G | | . |
| Iron | 13000 | UG/G | | . |
| Lead (ICP) | 18 | UG/G | | . |
| Lithium | 14 | UG/G | | . |
| Magnesium | 2100 | UG/G | | . |
| Manganese | 240 | UG/G | | . |
| Molybdenum | 3.9 | UG/G | | . |
| Nickel | 33 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 280 | UG/G | | . |
| Potassium | 2800 | UG/G | | . |
| Selenium (ICP) | 21 | UG/G | | . |
| Sodium | 250 | UG/G | | . |
| Strontium | 6.9 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 120 | UG/G | | . |
| U-235 | 1.69 | WT.% | | . |
| Uranium | 13.6 | UG/G | | . |
| Vanadium | 23 | UG/G | | . |
| Zinc | 29 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 1.5 | UG/G | | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.4 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-A LABSMPID=850506-132 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 51000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 88 | UG/G | | . |
| Beryllium | 0.48 | UG/G | | . |
| Boron | 67 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 5600 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 490 | UG/G | | . |
| Cobalt | 15 | UG/G | | . |
| Copper | 240 | UG/G | | . |
| Iron | 36000 | UG/G | | . |
| Lead (ICP) | 42 | UG/G | | . |
| Lithium | 43 | UG/G | | . |
| Magnesium | 3800 | UG/G | | . |
| Manganese | 300 | UG/G | | . |
| Molybdenum | 3.2 | UG/G | | . |
| Neptunium | 0.7 | DPM/G | | . |
| Nickel | 1600 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.57 | UG/G | | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 1400 | UG/G | | . |
| Plutonium | 1 | DPM/G | | . |
| Potassium | 6600 | UG/G | | . |
| Selenium (ICP) | 68 | UG/G | | . |
| Sodium | 330 | UG/G | | . |
| Strontium | 26 | UG/G | | . |
| Technetium | 3000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 310 | UG/G | | . |
| U-235 | 1.72 | WT.% | | . |
| Uranium | 646 | UG/G | | . |
| Vanadium | 57 | UG/G | | . |
| Zinc | 150 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-A LABSMPID=850506-132 LOCATION=K1407B STATION=5 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.1 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-5-B LABSMPID=850506-135 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 84 | UG/G | | . |
| Beryllium | 0.9 | UG/G | | . |
| Boron | 41 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3300 | UG/G | | . |
| Chromium | 70 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Iron | 31000 | UG/G | | . |
| Lead (ICP) | 14 | UG/G | | . |
| Lithium | 37 | UG/G | | . |
| Magnesium | 3300 | UG/G | | . |
| Manganese | 480 | UG/G | | . |
| Molybdenum | 1.1 | UG/G | | . |
| Nickel | 210 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 630 | UG/G | | . |
| Potassium | 4600 | UG/G | | . |
| Selenium (ICP) | 59 | UG/G | | . |
| Sodium | 370 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 150 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-B LABSMPID=850506-135 LOCATION=K1407B STATION=5 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| U-235 | 1.09 | WT.% | | . |
| Uranium | 15 | UG/G | | . |
| Vanadium | 45 | UG/G | | . |
| Zinc | 73 | UG/G | | . |
| acetone | 0.74 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.12 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-6-A LABSMPID=850506-144 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 43000 | UG/G | | . |
| Arsenic (ICP) | 19 | UG/G | | . |
| Barium | 120 | UG/G | | . |
| Beryllium | 0.66 | UG/G | | . |
| Boron | 57 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 22000 | UG/G | | . |
| Chromium | 590 | UG/G | | . |
| Cobalt | 26 | UG/G | | . |
| Copper | 340 | UG/G | | . |
| Iron | 45000 | UG/G | | . |
| Lead (ICP) | 40 | UG/G | | . |
| Lithium | 43 | UG/G | | . |
| Magnesium | 4900 | UG/G | | . |
| Manganese | 400 | UG/G | | . |
| Molybdenum | 8.5 | UG/G | | . |
| Nickel | 2200 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 4400 | UG/G | | . |
| Potassium | 4600 | UG/G | | . |
| Selenium (ICP) | 91 | UG/G | | . |
| Sodium | 530 | UG/G | | . |
| Strontium | 35 | UG/G | | . |
| Thorium | 58 | UG/G | | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.85 | WT.% | | . |
| Uranium | 514 | UG/G | | . |
| Vanadium | 48 | UG/G | | . |
| Zinc | 180 | UG/G | | . |
| acetone | 0.43 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.12 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-6-B LABSMPID=850506-145 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 48000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 1.2 | UG/G | | . |
| Boron | 120 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3800 | UG/G | | . |
| Chromium | 100 | UG/G | | . |
| Cobalt | 13 | UG/G | | . |
| Copper | 44 | UG/G | | . |
| Iron | 36000 | UG/G | | . |
| Lead (ICP) | 17 | UG/G | | . |
| Lithium | 50 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 410 | UG/G | | . |
| Molybdenum | 12 | UG/G | | . |
| Nickel | 330 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 660 | UG/G | | . |
| Potassium | 7700 | UG/G | | . |
| Selenium (ICP) | 58 | UG/G | | . |
| Sodium | 520 | UG/G | | . |
| Strontium | 19 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 2.65 | WT.% | | . |
| Uranium | 69.5 | UG/G | | . |
| Vanadium | 48 | UG/G | | . |
| Zinc | 68 | UG/G | | . |
| acetone | 0.26 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.13 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-A LABSMPID=850506-070 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 26000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 58 | UG/G | | . |
| Beryllium | 0.19 | UG/G | | . |
| Boron | 19 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1400 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 110 | UG/G | | . |
| Cobalt | 12 | UG/G | | . |
| Copper | 32 | UG/G | | . |
| Iron | 26000 | UG/G | | . |
| Lead (ICP) | 23 | UG/G | | . |
| Lithium | 18 | UG/G | | . |
| Magnesium | 1300 | UG/G | | . |
| Manganese | 550 | UG/G | | . |
| Molybdenum | 2.4 | UG/G | | . |
| Neptunium | 0.1 | DPM/G | | . |
| Nickel | 260 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 490 | UG/G | | . |
| Plutonium | 0.05 | DPM/G | < | . |
| Potassium | 1700 | UG/G | | . |
| Selenium (ICP) | 48 | UG/G | | . |
| Sodium | 88 | UG/G | | . |
| Strontium | 7.2 | UG/G | | . |
| Technetium | 84 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 190 | UG/G | | . |
| U-235 | 2.34 | WT.% | | . |
| Uranium | 86 | UG/G | | . |
| Vanadium | 51 | UG/G | | . |
| Zinc | 71 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.08 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-A LABSMPID=850506-070 LOCATION=K1407B STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.06 | UG/G | | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-7-B LABSMPID=850506-153 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 26000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 130 | UG/G | | . |
| Beryllium | 0.7 | UG/G | | . |
| Boron | 130 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3100 | UG/G | | . |
| Chromium | 65 | UG/G | | . |
| Cobalt | 22 | UG/G | | . |
| Iron | 67000 | UG/G | | . |
| Lead (ICP) | 5 | UG/G | < | . |
| Lithium | 24 | UG/G | | . |
| Magnesium | 7000 | UG/G | | . |
| Manganese | 2600 | UG/G | | . |
| Molybdenum | 19 | UG/G | | . |
| Nickel | 59 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1000 | UG/G | | . |
| Potassium | 9100 | UG/G | | . |
| Selenium (ICP) | 110 | UG/G | | . |
| Sodium | 260 | UG/G | | . |
| Strontium | 15 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 380 | UG/G | | . |
| Uranium | 1.7 | UG/G | | . |
| Vanadium | 32 | UG/G | | . |
| Zinc | 64 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-8-A LABSMPID=850506-071 LOCATION=K1407B STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 27000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 1.1 | UG/G | | . |
| Boron | 73 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 67 | UG/G | | . |
| Cobalt | 19 | UG/G | | . |
| Copper | 26 | UG/G | | . |
| Iron | 25000 | UG/G | | . |
| Lead (ICP) | 5 | UG/G | < | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 6600 | UG/G | | . |
| Manganese | 1800 | UG/G | | . |
| Molybdenum | 1.7 | UG/G | | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 71 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 350 | UG/G | | . |
| Plutonium | 0.4 | DPM/G | | . |
| Potassium | 110 | UG/G | | . |
| Selenium (ICP) | 47 | UG/G | | . |
| Sodium | 530 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Technetium | 585 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 2.46 | WT.% | | . |
| Uranium | 58 | UG/G | | . |
| Vanadium | 23 | UG/G | | . |
| Zinc | 50 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.08 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-8-A LABSMPID=850506-071 LOCATION=K1407B STATION=8 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407B-9-A LABSMPID=850506-072 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 39000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 95 | UG/G | | . |
| Beryllium | 1.2 | UG/G | | . |
| Boron | 55 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 8800 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 380 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 210 | UG/G | | . |
| Lead (ICP) | 43 | UG/G | | . |
| Lithium | 44 | UG/G | | . |
| Magnesium | 7200 | UG/G | | . |
| Manganese | 660 | UG/G | | . |
| Molybdenum | 10 | UG/G | | . |
| Neptunium | 1.3 | DPM/G | | . |
| Nickel | 400 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1400 | UG/G | | . |
| Plutonium | 2 | DPM/G | | . |
| Potassium | 6200 | UG/G | | . |
| Selenium (ICP) | 73 | UG/G | | . |
| Sodium | 260 | UG/G | | . |
| Strontium | 14 | UG/G | | . |
| Technetium | 2000 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 230 | UG/G | | . |
| U-235 | 2.43 | WT.% | | . |
| Uranium | 67 | UG/G | | . |
| Vanadium | 47 | UG/G | | . |
| Zinc | 240 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-9-A LABSMPID=850506-072 LOCATION=K1407B STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-9-B LABSMPID=850506-155 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 35000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 120 | UG/G | | . |
| Beryllium | 1.2 | UG/G | | . |
| Boron | 90 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 4200 | UG/G | | . |
| Chromium | 47 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Iron | 38000 | UG/G | | . |
| Lead (ICP) | 17 | UG/G | | . |
| Lithium | 38 | UG/G | | . |
| Magnesium | 6000 | UG/G | | . |
| Manganese | 680 | UG/G | | . |
| Molybdenum | 12 | UG/G | | . |
| Nickel | 120 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 890 | UG/G | | . |
| Potassium | 6000 | UG/G | | . |
| Selenium (ICP) | 63 | UG/G | | . |
| Sodium | 300 | UG/G | | . |
| Strontium | 13 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.38 | WT.% | | . |
| Uranium | 6.7 | UG/G | | . |
| Vanadium | 45 | UG/G | | . |
| Zinc | 89 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX E

# EP-TOX ANALYSES FOR 1985 CLAY SAMPLES FROM THE K-1407-B POND

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-1-A LABSMPID=850506-065 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.14 | MG/L | | . |
| Cadmium | 0.05 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.018 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 5.33 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-1-A LABSMPID=850506-066 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.17 | MG/L | | . |
| Cadmium | 0.07 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.014 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 8.34 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-1-B LABSMPID=850506-149 LOCATION=K1407B STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | | . |
| Cadmium | 0.003 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.009 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 1.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93
EP-TOX analyses for 1985 clay samples from the

K-1407-B pond.

---------- SMP_ID=K1407B-10-A LABSMPID=850506-073 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.08 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-10-B LABSMPID=850506-156 LOCATION=K1407B STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-11-A LABSMPID=850506-134 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.54 | MG/L | | . |
| Cadmium | 0.025 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.016 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 5.39 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-11-B LABSMPID=850506-136 LOCATION=K1407B STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-12-A LABSMPID=850506-147 LOCATION=K1407B STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.002 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.26 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.18 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00008 | MG/L | < | . |
| lindane | 0.00002 | MG/L | < | . |
| methoxychlor | 0.00007 | MG/L | < | . |
| silvex | 0.0003 | MG/L | < | . |
| toxaphene | 0.002 | MG/L | < | . |

---------- SMP_ID=K1407B-12-B LABSMPID=850506-148 LOCATION=K1407B STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.002 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | < | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00008 | MG/L | < | . |
| lindane | 0.00002 | MG/L | < | . |
| methoxychlor | 0.00006 | MG/L | < | . |
| silvex | 0.0003 | MG/L | < | . |
| toxaphene | 0.002 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-2-A LABSMPID=850506-067 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.007 | MG/L | | . |
| Barium | 0.38 | MG/L | | . |
| Cadmium | 0.049 | MG/L | | . |
| Chromium | 0.07 | MG/L | | . |
| Lead (AA) | 0.015 | MG/L | | . |
| Mercury | 0.003 | MG/L | | . |
| Nickel | 38 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-2-B LABSMPID=850506-150 LOCATION=K1407B STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.006 | MG/L | | . |
| Barium | 0.31 | MG/L | | . |
| Cadmium | 0.03 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.012 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 3.8 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-3-A LABSMPID=850506-068 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.33 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-3-B LABSMPID=850506-151 LOCATION=K1407B STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.11 | MG/L | | . |
| Cadmium | 0.016 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.57 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-4-A LABSMPID=850506-069 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-4-B LABSMPID=850506-152 LOCATION=K1407B STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-5-A LABSMPID=850506-132 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.007 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.45 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-5-B LABSMPID=850506-135 LOCATION=K1407B STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.12 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.005 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.09 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-6-A LABSMPID=850506-144 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.084 | MG/L | | . |
| Arsenic (AA) | 0.011 | MG/L | | . |
| Barium | 0.65 | MG/L | | . |
| Cadmium | 0.03 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.012 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 13.7 | MG/L | | . |
| Selenium (AA) | 0.011 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.008 | MG/L | | . |
| methoxychlor | 0.00006 | MG/L | < | . |
| silvex | 0.002 | MG/L | | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-6-B LABSMPID=850506-145 LOCATION=K1407B STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.002 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.22 | MG/L | | . |
| Cadmium | 0.02 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.81 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00008 | MG/L | < | . |
| lindane | 0.00002 | MG/L | < | . |
| methoxychlor | 0.00006 | MG/L | < | . |
| silvex | 0.0003 | MG/L | < | . |
| toxaphene | 0.002 | MG/L | < | . |

---------- SMP_ID=K1407B-7-A LABSMPID=850506-070 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 0.32 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-7-B LABSMPID=850506-153 LOCATION=K1407B STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.07 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-B pond.

---------- SMP_ID=K1407B-8-A LABSMPID=850506-071 LOCATION=K1407B STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.005 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.06 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-9-A LABSMPID=850506-072 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.08 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407B-9-B LABSMPID=850506-155 LOCATION=K1407B STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.31 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.2 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX F

# TOTAL ANALYSES FOR 1985 SLUDGE SAMPLES FROM THE K-1407-C POND

Total analyses for 1985 sludge samples from the K-1407-C Pond

---------- SMP_ID=K1407C-1-S LABSMPID=850524-092 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 160 | UG/G | | . |
| Beryllium | 0.29 | UG/G | | . |
| Boron | 370 | UG/G | | . |
| Cadmium | 1.7 | UG/G | | . |
| Calcium | 410000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 83 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 220 | UG/G | | . |
| Iron | 8900 | UG/G | | . |
| Lead (ICP) | 57 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 110 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 3.2 | DPM/G | | . |
| Nickel | 700 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1500 | UG/G | | . |
| Plutonium | 7.5 | DPM/G | | . |
| Potassium | 11000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1900 | UG/G | | . |
| Strontium | 200 | UG/G | | . |
| Technetium | 361 | DPM/G | | . |
| Thorium | 53 | UG/G | | . |
| Titanium | 730 | UG/G | | . |
| U-235 | 1.34 | WT.% | | . |
| Uranium | 155.6 | UG/G | | . |
| Vanadium | 44 | UG/G | | . |
| Zinc | 120 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.9 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-S LABSMPID=850524-092 LOCATION=K1407C STATION=1 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-10-S LABSMPID=850524-099 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 8500 | UG/G | | . |
| Arsenic (ICP) | 65 | UG/G | | . |
| Barium | 25 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 10000 | UG/G | | . |
| Cadmium | 0.83 | UG/G | | . |
| Calcium | 490000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 30 | UG/G | | . |
| Cobalt | 2.9 | UG/G | | . |
| Copper | 160 | UG/G | | . |
| Density @25C | 1.4 | G/ML | | . |
| Iron | 3000 | UG/G | | . |
| Lead (ICP) | 6 | UG/G | | . |
| Lithium | 5.5 | UG/G | | . |
| Magnesium | 10000 | UG/G | | . |
| Manganese | 73 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 3.4 | DPM/G | | . |
| Nickel | 430 | UG/G | | . |
| Niobium | 4.4 | UG/G | | . |
| Phosphorus | 320 | UG/G | | . |
| Plutonium | 1 | DPM/G | | . |
| Potassium | 2600 | UG/G | | . |
| Selenium (ICP) | 11 | UG/G | | . |
| Sodium | 9900 | UG/G | | . |
| Strontium | 100 | UG/G | | . |
| Technetium | 314 | DPM/G | | . |
| Thorium | 52 | UG/G | | . |
| Titanium | 160 | UG/G | | . |
| U-235 | 1.41 | WT.% | | . |
| Uranium | 437.7 | UG/G | | . |
| Vanadium | 14 | UG/G | | . |
| Zinc | 87 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-10-S LABSMPID=850524-099 LOCATION=K1407C STATION=10 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.2 | STD UNITS | | . |
| permethylated cyclosiloxane | 2.4 | UG/G | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-S LABSMPID=850528-114 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 80 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 52 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 230000 | UG/G | | . |
| Cesium | 255 | DPM/G | | . |
| Chromium | 930 | UG/G | | . |
| Cobalt | 80 | UG/G | | . |
| Copper | 710 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 40000 | UG/G | | . |
| Lead (ICP) | 63 | UG/G | | . |
| Lithium | 23 | UG/G | | . |
| Magnesium | 6100 | UG/G | | . |
| Manganese | 420 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 145.3 | DPM/G | | . |
| Nickel | 8200 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 9100 | UG/G | | . |
| Plutonium | 222.1 | DPM/G | | . |
| Potassium | 10000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1600 | UG/G | | . |
| Strontium | 120 | UG/G | | . |
| Technetium | 9530 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 230 | UG/G | | . |
| U-235 | 1.31 | WT.% | | . |
| Uranium | 1032 | UG/G | | . |
| Vanadium | 22 | UG/G | | . |
| Zinc | 300 | UG/G | | . |
| acetone | 0.14 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.18 | UG/G | | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 9.5 | STD UNITS | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-S LABSMPID=850528-114 LOCATION=K1407C STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-12-S LABSMPID=850524-100 LOCATION=K1407C STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 27000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 74 | UG/G | | . |
| Beryllium | 0.18 | UG/G | | . |
| Boron | 66 | UG/G | | . |
| Cadmium | 0.62 | UG/G | | . |
| Calcium | 280000 | UG/G | | . |
| Cesium | 40 | DPM/G | | . |
| Chromium | 310 | UG/G | | . |
| Cobalt | 27 | UG/G | | . |
| Copper | 300 | UG/G | | . |
| Iron | 24000 | UG/G | | . |
| Lead (ICP) | 27 | UG/G | | . |
| Lithium | 21 | UG/G | | . |
| Magnesium | 6500 | UG/G | | . |
| Manganese | 550 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 14.9 | DPM/G | | . |
| Nickel | 2600 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 3500 | UG/G | | . |
| Plutonium | 25.6 | DPM/G | | . |
| Potassium | 8700 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1100 | UG/G | | . |
| Strontium | 130 | UG/G | | . |
| Technetium | 3150 | DPM/G | | . |
| Thorium | 27 | UG/G | | . |
| Titanium | 190 | UG/G | | . |
| U-235 | 1.46 | WT.% | | . |
| Uranium | 82.6 | UG/G | | . |
| Vanadium | 22 | UG/G | | . |
| Zinc | 140 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-12-S LABSMPID=850524-100 LOCATION=K1407C STATION=12 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 9 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-14-S LABSMPID=850528-115 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 690 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 230000 | UG/G | | . |
| Cesium | 182 | DPM/G | | . |
| Chromium | 860 | UG/G | | . |
| Cobalt | 73 | UG/G | | . |
| Copper | 700 | UG/G | | . |
| Density @25C | 1.1 | G/ML | | . |
| Iron | 38000 | UG/G | | . |
| Lead (ICP) | 63 | UG/G | | . |
| Lithium | 23 | UG/G | | . |
| Magnesium | 8500 | UG/G | | . |
| Manganese | 1000 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 77.1 | DPM/G | | . |
| Nickel | 9300 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 7000 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-S LABSMPID=850528-115 LOCATION=K1407C STATION=14 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Plutonium | 115.7 | DPM/G | | . |
| Potassium | 9000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2900 | UG/G | | . |
| Strontium | 98 | UG/G | | . |
| Technetium | 5730 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 430 | UG/G | | . |
| U-235 | 1.35 | WT.% | | . |
| Uranium | 755 | UG/G | | . |
| Vanadium | 30 | UG/G | | . |
| Zinc | 290 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 8.5 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-15-S LABSMPID=850528-051 LOCATION=K1407C STATION=15 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 33000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 93 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 250000 | UG/G | | . |
| Cesium | 240 | DPM/G | | . |
| Chromium | 1900 | UG/G | | . |
| Cobalt | 160 | UG/G | | . |
| Copper | 1600 | UG/G | | . |
| Density @25C | 1.3 | G/ML | | . |
| Iron | 62000 | UG/G | | . |
| Lead (ICP) | 100 | UG/G | | . |
| Lithium | 24 | UG/G | | . |
| Magnesium | 11000 | UG/G | | . |
| Manganese | 380 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 138 | DPM/G | | . |
| Nickel | 21000 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 15000 | UG/G | | . |
| Plutonium | 241.7 | DPM/G | | . |
| Potassium | 15000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2900 | UG/G | | . |
| Strontium | 150 | UG/G | | . |
| Technetium | 10300 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 250 | UG/G | | . |
| U-235 | 1.33 | WT.% | | . |
| Uranium | 866 | UG/G | | . |
| Vanadium | 20 | UG/G | | . |
| Zinc | 540 | UG/G | | . |
| acetone | 0.23 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-15-S LABSMPID=850528-051 LOCATION=K1407C STATION=15 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 9.05 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-2-S LABSMPID=850528-049 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 14000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 62 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 9000 | UG/G | | . |
| Cadmium | 0.77 | UG/G | | . |
| Calcium | 430000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 31 | UG/G | | . |
| Cobalt | 4.1 | UG/G | | . |
| Copper | 130 | UG/G | | . |
| Density @25C | 1.1 | G/ML | | . |
| Iron | 5400 | UG/G | | . |
| Lead (ICP) | 11 | UG/G | | . |
| Lithium | 7.8 | UG/G | | . |
| Magnesium | 8800 | UG/G | | . |
| Manganese | 310 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1.6 | DPM/G | | . |
| Nickel | 280 | UG/G | | . |
| Niobium | 3.4 | UG/G | | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 440 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-S LABSMPID=850528-049 LOCATION=K1407C STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Plutonium | 2.2 | DPM/G | | . |
| Potassium | 12000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 11000 | UG/G | | . |
| Strontium | 110 | UG/G | | . |
| Technetium | 293 | DPM/G | | . |
| Thorium | 46 | UG/G | | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 2.2 | WT.% | | . |
| Uranium | 63 | UG/G | | . |
| Vanadium | 20 | UG/G | | . |
| Zinc | 76 | UG/G | | . |
| acetone | 0.42 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 9.28 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-20-S LABSMPID=850528-116 LOCATION=K1407C STATION=20 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 42000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 380 | UG/G | | . |
| Cadmium | 1.8 | UG/G | | . |
| Calcium | 200000 | UG/G | | . |
| Cesium | 19 | DPM/G | | . |
| Chromium | 89 | UG/G | | . |
| Cobalt | 16 | UG/G | | . |
| Copper | 350 | UG/G | | . |
| Density @25C | 1.6 | G/ML | | . |
| Iron | 22000 | UG/G | | . |
| Lead (ICP) | 24 | UG/G | | . |
| Lithium | 27 | UG/G | | . |
| Magnesium | 5500 | UG/G | | . |
| Manganese | 320 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 11.3 | DPM/G | | . |
| Nickel | 1200 | UG/G | | . |
| Niobium | 2.8 | UG/G | | . |
| Phosphorus | 1000 | UG/G | | . |
| Plutonium | 5.9 | DPM/G | | . |
| Potassium | 11000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 10000 | UG/G | | . |
| Strontium | 110 | UG/G | | . |
| Technetium | 997 | DPM/G | | . |
| Thorium | 51 | UG/G | | . |
| Titanium | 770 | UG/G | | . |
| U-235 | 1.6 | WT.% | | . |
| Uranium | 107 | UG/G | | . |
| Vanadium | 45 | UG/G | | . |
| Zinc | 90 | UG/G | | . |
| acetone | 0.52 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.5 | STD UNITS | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-20-S LABSMPID=850528-116 LOCATION=K1407C STATION=20 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-3-S LABSMPID=850524-093 LOCATION=K1407C STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 33000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 140 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 1300 | UG/G | | . |
| Cadmium | 1.6 | UG/G | | . |
| Calcium | 280000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 94 | UG/G | | . |
| Cobalt | 9.5 | UG/G | | . |
| Copper | 130 | UG/G | | . |
| Density @25C | 1.6 | G/ML | | . |
| Iron | 16000 | UG/G | | . |
| Lead (ICP) | 29 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 6300 | UG/G | | . |
| Manganese | 250 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 2 | DPM/G | | . |
| Nickel | 270 | UG/G | | . |
| Niobium | 4 | UG/G | | . |
| Phosphorus | 880 | UG/G | | . |
| Plutonium | 3.4 | DPM/G | | . |
| Potassium | 14000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 15000 | UG/G | | . |
| Strontium | 130 | UG/G | | . |
| Technetium | 640 | DPM/G | | . |
| Thorium | 48 | UG/G | | . |
| Titanium | 690 | UG/G | | . |
| U-235 | 1.51 | WT.% | | . |
| Uranium | 100.4 | UG/G | | . |
| Vanadium | 39 | UG/G | | . |
| Zinc | 110 | UG/G | | . |
| acetone | 0.33 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-3-S LABSMPID=850524-093 LOCATION=K1407C STATION=3 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.04 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.9 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-S LABSMPID=850528-113 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 21000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 78 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 6200 | UG/G | | . |
| Cadmium | 0.84 | UG/G | | . |
| Calcium | 360000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 42 | UG/G | | . |
| Cobalt | 5.9 | UG/G | | . |
| Copper | 120 | UG/G | | . |
| Density @25C | 1.7 | G/ML | | . |
| Iron | 9500 | UG/G | | . |
| Lead (ICP) | 14 | UG/G | | . |
| Lithium | 12 | UG/G | | . |
| Magnesium | 8100 | UG/G | | . |
| Manganese | 380 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 2.1 | DPM/G | | . |
| Nickel | 240 | UG/G | | . |
| Niobium | 4 | UG/G | | . |
| Phosphorus | 500 | UG/G | | . |
| Plutonium | 1.7 | DPM/G | | . |
| Potassium | 9100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 8200 | UG/G | | . |
| Strontium | 100 | UG/G | | . |
| Technetium | 426 | DPM/G | | . |
| Thorium | 51 | UG/G | | . |
| Titanium | 530 | UG/G | | . |
| U-235 | 2 | WT.% | | . |
| Uranium | 58 | UG/G | | . |
| Vanadium | 28 | UG/G | | . |
| Zinc | 83 | UG/G | | . |
| acetone | 1 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.27 | UG/G | | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.7 | STD UNITS | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-S LABSMPID=850528-113 LOCATION=K1407C STATION=4 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-5-S LABSMPID=850524-094 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 17000 | UG/G | | . |
| Arsenic (ICP) | 68 | UG/G | | . |
| Barium | 23 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 11000 | UG/G | | . |
| Cadmium | 0.64 | UG/G | | . |
| Calcium | 450000 | UG/G | | . |
| Cesium | 16 | DPM/G | | . |
| Chromium | 54 | UG/G | | . |
| Cobalt | 4.1 | UG/G | | . |
| Copper | 140 | UG/G | | . |
| Density @25C | 1.4 | G/ML | | . |
| Iron | 4200 | UG/G | | . |
| Lead (ICP) | 6.4 | UG/G | | . |
| Lithium | 4.4 | UG/G | | . |
| Magnesium | 8900 | UG/G | | . |
| Manganese | 92 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 5.6 | DPM/G | | . |
| Nickel | 460 | UG/G | | . |
| Niobium | 5.3 | UG/G | | . |
| Phosphorus | 450 | UG/G | | . |
| Plutonium | 1.5 | DPM/G | | . |
| Potassium | 11000 | UG/G | | . |
| Selenium (ICP) | 13 | UG/G | | . |
| Sodium | 12000 | UG/G | | . |
| Strontium | 100 | UG/G | | . |
| Technetium | 586 | DPM/G | | . |
| Thorium | 51 | UG/G | | . |
| Titanium | 180 | UG/G | | . |
| U-235 | 1.64 | WT.% | | . |
| Uranium | 109.9 | UG/G | | . |
| Vanadium | 13 | UG/G | | . |
| Zinc | 85 | UG/G | | . |
| acetone | 0.18 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-5-S LABSMPID=850524-094 LOCATION=K1407C STATION=5 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.7 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.09 | UG/G | | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-6-S LABSMPID=850528-048 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 11000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 13 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 10000 | UG/G | | . |
| Cadmium | 0.6 | UG/G | | . |
| Calcium | 450000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 38 | UG/G | | . |
| Cobalt | 2 | UG/G | | . |
| Copper | 120 | UG/G | | . |
| Density @25C | 1.4 | G/ML | | . |
| Iron | 2500 | UG/G | | . |
| Lead (ICP) | 7.8 | UG/G | | . |
| Lithium | 2.9 | UG/G | | . |
| Magnesium | 8100 | UG/G | | . |
| Manganese | 80 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1.5 | DPM/G | | . |
| Nickel | 270 | UG/G | | . |
| Niobium | 4.6 | UG/G | | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 440 | UG/G | | . |
| Plutonium | 1.9 | DPM/G | | . |
| Potassium | 9500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 12000 | UG/G | | . |
| Strontium | 100 | UG/G | | . |
| Technetium | 616 | DPM/G | | . |
| Thorium | 52 | UG/G | | . |
| Titanium | 110 | UG/G | | . |
| U-235 | 2.61 | WT.% | | . |
| Uranium | 67 | UG/G | | . |
| Vanadium | 11 | UG/G | | . |
| Zinc | 68 | UG/G | | . |
| acetone | 0.17 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-6-S LABSMPID=850528-048 LOCATION=K1407C STATION=6 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.2 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| toxaphene | 0.001 | MG/L | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-7-S LABSMPID=850524-095 LOCATION=K1407C STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 35000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 670 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 200000 | UG/G | | . |
| Cesium | 41 | DPM/G | | . |
| Chromium | 120 | UG/G | | . |
| Cobalt | 16 | UG/G | | . |
| Copper | 120 | UG/G | | . |
| Density @25C | 1.4 | G/ML | | . |
| Iron | 20000 | UG/G | | . |
| Lead (ICP) | 19 | UG/G | | . |
| Lithium | 20 | UG/G | | . |
| Magnesium | 5600 | UG/G | | . |
| Manganese | 1400 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 23.3 | DPM/G | | . |
| Nickel | 750 | UG/G | | . |
| Niobium | 3.1 | UG/G | | . |
| Phosphorus | 1000 | UG/G | | . |
| Plutonium | 8 | DPM/G | | . |
| Potassium | 6400 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2000 | UG/G | | . |
| Strontium | 61 | UG/G | | . |
| Technetium | 1560 | DPM/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-S LABSMPID=850524-095 LOCATION=K1407C STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Thorium | 41 | UG/G | | . |
| Titanium | 570 | UG/G | | . |
| U-235 | 1.44 | WT.% | | . |
| Uranium | 414.8 | UG/G | | . |
| Vanadium | 39 | UG/G | | . |
| Zinc | 96 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.04 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| pH | 11.2 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-S LABSMPID=850524-098 LOCATION=K1407C STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| pH | 8.44 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-S LABSMPID=850524-096 LOCATION=K1407C STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-8-S LABSMPID=850524-097 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.004 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.007 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.005 | UG/G | < | . |
| 1,1-dichloroethane | 0.005 | UG/G | < | . |
| 1,1-dichloroethylene | 0.003 | UG/G | < | . |
| 1,2-dichloroethane | 0.003 | UG/G | < | . |
| 1,2-dichloropropane | 0.006 | UG/G | < | . |
| Aluminum | 40000 | UG/G | | . |
| Arsenic (ICP) | 97 | UG/G | | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 91 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 130000 | UG/G | | . |
| Cesium | 384 | DPM/G | | . |
| Chromium | 2400 | UG/G | | . |
| Cobalt | 210 | UG/G | | . |
| Copper | 2000 | UG/G | | . |
| Iron | 73000 | UG/G | | . |
| Lead (ICP) | 140 | UG/G | | . |
| Lithium | 31 | UG/G | | . |
| Magnesium | 7400 | UG/G | | . |
| Manganese | 540 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 183.6 | DPM/G | | . |
| Nickel | 21000 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 18000 | UG/G | | . |
| Plutonium | 239.6 | DPM/G | | . |
| Potassium | 13000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3200 | UG/G | | . |
| Strontium | 140 | UG/G | | . |
| Technetium | 13600 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 1.35 | WT.% | | . |
| Uranium | 1841 | UG/G | | . |
| Vanadium | 29 | UG/G | | . |
| Zinc | 660 | UG/G | | . |
| acetone | 0.42 | UG/G | | . |
| benzene | 0.004 | UG/G | < | . |
| bromodichloromethane | 0.002 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-8-S LABSMPID=850524-097 LOCATION=K1407C STATION=8 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| bromoform | 0.005 | UG/G | < | . |
| carbon tetrachloride | 0.003 | UG/G | < | . |
| chlorobenzene | 0.006 | UG/G | < | . |
| chloroform | 0.002 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.005 | UG/G | < | . |
| dibromochloromethane | 0.003 | UG/G | < | . |
| ethyl benzene | 0.007 | UG/G | < | . |
| fluorocarbons | 2.5 | UG/G | | . |
| freon-113 | 0.01 | UG/G | < | . |
| freon-114 | 0.01 | UG/G | < | . |
| freon-123 | 0.01 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.01 | UG/G | < | . |
| methylene chloride | 0.003 | UG/G | < | . |
| other halomethanes | 0.01 | UG/G | < | . |
| pH | 8.19 | STD UNITS | | . |
| tetrachloroethylene | 0.004 | UG/G | < | . |
| toluene | 0.006 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.14 | UG/G | | . |
| trans-1,3-dichloropropene | 0.005 | UG/G | < | . |
| trichloroethylene | 0.002 | UG/G | < | . |
| trichlorofluoromethane | 0.01 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-S LABSMPID=850524-098 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 30000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 100 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 85 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 240000 | UG/G | | . |
| Cesium | 511 | DPM/G | | . |
| Chromium | 1200 | UG/G | | . |
| Cobalt | 100 | UG/G | | . |
| Copper | 1200 | UG/G | | . |
| Density @25C | 1.2 | G/ML | | . |
| Iron | 49000 | UG/G | | . |
| Lead (ICP) | 78 | UG/G | | . |
| Lithium | 23 | UG/G | | . |
| Magnesium | 8200 | UG/G | | . |
| Manganese | 410 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 47.3 | DPM/G | | . |
| Nickel | 12000 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 12000 | UG/G | | . |
| Plutonium | 77.8 | DPM/G | | . |
| Potassium | 10000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 740 | UG/G | | . |
| Strontium | 110 | UG/G | | . |
| Technetium | 4150 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.41 | WT.% | | . |
| Uranium | 1100.2 | UG/G | | . |
| Vanadium | 20 | UG/G | | . |
| Zinc | 410 | UG/G | | . |
| acetone | 0.39 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| fluorocarbons | 3.5 | UG/G | | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-S LABSMPID=850524-098 LOCATION=K1407C STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| pH | 8.44 | STD UNITS | | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX G

# EP-TOX ANALYSES FOR 1985 SLUDGE SAMPLES FROM THE K-1407-C POND

EP-TOX analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-S LABSMPID=850524-092 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.79 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.015 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.15 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-10-S LABSMPID=850524-099 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | | . |
| Barium | 0.43 | MG/L | | . |
| Cadmium | 0.021 | MG/L | | . |
| Chromium | 0.18 | MG/L | | . |
| Lead (AA) | 0.011 | MG/L | | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 6.24 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-11-S LABSMPID=850528-114 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.38 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.032 | MG/L | | . |
| Nickel | 6.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset pond8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-12-S LABSMPID=850524-100 LOCATION=K1407C STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.36 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.024 | MG/L | | . |
| Nickel | 2.51 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-14-S LABSMPID=850528-115 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.006 | MG/L | | . |
| Barium | 0.47 | MG/L | | . |
| Cadmium | 0.03 | MG/L | | . |
| Chromium | 0.1 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.004 | MG/L | | . |
| Nickel | 12.9 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-15-S LABSMPID=850528-051 LOCATION=K1407C STATION=15 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.028 | MG/L | < | . |
| Arsenic (AA) | 0.016 | MG/L | | . |
| Barium | 1.02 | MG/L | | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.005 | MG/L | | . |
| Nickel | 3.27 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00005 | MG/L | < | . |
| lindane | 0.034 | MG/L | | . |
| methoxychlor | 0.00004 | MG/L | < | . |
| silvex | 0.005 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset pond8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-S LABSMPID=850528-049 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.5 | MG/L | | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 1.86 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00005 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00004 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-20-S LABSMPID=850528-116 LOCATION=K1407C STATION=20 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.22 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.025 | MG/L | | . |
| Nickel | 0.58 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-3-S LABSMPID=850524-093 LOCATION=K1407C STATION=3 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.51 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | | . |
| Nickel | 0.33 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset pond8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-S LABSMPID=850528-113 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.54 | MG/L | | . |
| Cadmium | 0.003 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.92 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-5-S LABSMPID=850524-094 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.3 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 1.23 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-6-S LABSMPID=850528-048 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.53 | MG/L | | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 1.09 | MG/L | | . |
| Selenium (AA) | 0.015 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00006 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |

Source: dataset pond8502 on 08DEC93

EP-TOX analyses for 1985 sludge samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-S LABSMPID=850524-095 LOCATION=K1407C STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.62 | MG/L | | . |
| Cadmium | 0.014 | MG/L | | . |
| Chromium | 0.06 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.042 | MG/L | | . |
| Nickel | 5.54 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-7-S LABSMPID=850524-096 LOCATION=K1407C STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.009 | MG/L | | . |
| Barium | 0.66 | MG/L | | . |
| Cadmium | 0.016 | MG/L | | . |
| Chromium | 0.28 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 8.4 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-8-S LABSMPID=850524-097 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.011 | MG/L | | . |
| Barium | 0.24 | MG/L | | . |
| Cadmium | 0.011 | MG/L | | . |
| Chromium | 0.25 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.007 | MG/L | | . |
| Nickel | 18.9 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset pond8502 on 08DEC93

# APPENDIX H

# TOTAL ANALYSES FOR 1985 CLAY SAMPLES FROM THE K-1407-C POND

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-A LABSMPID=850528-021 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 49000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 130 | UG/G | | . |
| Beryllium | 0.4 | UG/G | | . |
| Boron | 73 | UG/G | | . |
| Cadmium | 0.84 | UG/G | | . |
| Calcium | 8000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 50 | UG/G | | . |
| Cobalt | 16 | UG/G | | . |
| Copper | 17 | UG/G | | . |
| Iron | 36000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 28 | UG/G | | . |
| Magnesium | 7000 | UG/G | | . |
| Manganese | 1300 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 88 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 560 | UG/G | | . |
| Plutonium | 1.6 | DPM/G | | . |
| Potassium | 8600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1600 | UG/G | | . |
| Strontium | 15 | UG/G | | . |
| Technetium | 82 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 250 | UG/G | | . |
| U-235 | 1.3 | WT.% | | . |
| Uranium | 27 | UG/G | | . |
| Vanadium | 52 | UG/G | | . |
| Zinc | 73 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-A LABSMPID=850528-021 LOCATION=K1407C STATION=1 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-B LABSMPID=850528-034 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 26000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 0.45 | UG/G | | . |
| Boron | 47 | UG/G | | . |
| Cadmium | 0.61 | UG/G | | . |
| Calcium | 35000 | UG/G | | . |
| Chromium | 94 | UG/G | | . |
| Cobalt | 15 | UG/G | | . |
| Copper | 23 | UG/G | | . |
| Iron | 34000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 21 | UG/G | | . |
| Magnesium | 23000 | UG/G | | . |
| Manganese | 990 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 33 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 470 | UG/G | | . |
| Potassium | 4400 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1700 | UG/G | | . |
| Strontium | 18 | UG/G | | . |
| Thorium | 29 | UG/G | | . |
| Titanium | 180 | UG/G | | . |
| U-235 | 1.36 | WT.% | | . |
| Uranium | 24 | UG/G | | . |
| Vanadium | 36 | UG/G | | . |
| Zinc | 65 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-10-A LABSMPID=850528-027 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 29000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 160 | UG/G | | . |
| Beryllium | 0.63 | UG/G | | . |
| Boron | 36 | UG/G | | . |
| Cadmium | 0.47 | UG/G | | . |
| Calcium | 8300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 41 | UG/G | | . |
| Cobalt | 19 | UG/G | | . |
| Copper | 5.2 | UG/G | | . |
| Iron | 27000 | UG/G | | . |
| Lead (ICP) | 37 | UG/G | | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 3900 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 28 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 450 | UG/G | | . |
| Plutonium | 0.1 | DPM/G | | . |
| Potassium | 3900 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3600 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 230 | UG/G | | . |
| U-235 | 0.7 | WT.% | | . |
| Uranium | 7 | UG/G | | . |
| Vanadium | 44 | UG/G | | . |
| Zinc | 56 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-10-A LABSMPID=850528-027 LOCATION=K1407C STATION=10 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-10-B LABSMPID=850528-038 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 30000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 170 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 36 | UG/G | | . |
| Cadmium | 0.61 | UG/G | | . |
| Calcium | 800 | UG/G | | . |
| Chromium | 50 | UG/G | | . |
| Cobalt | 33 | UG/G | | . |
| Copper | 1.2 | UG/G | | . |
| Iron | 33000 | UG/G | | . |
| Lead (ICP) | 50 | UG/G | | . |
| Lithium | 20 | UG/G | | . |
| Magnesium | 2900 | UG/G | | . |
| Manganese | 3700 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 20 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 530 | UG/G | | . |
| Potassium | 2100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 870 | UG/G | | . |
| Strontium | 7.7 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.68 | WT.% | | . |
| Uranium | 11 | UG/G | | . |
| Vanadium | 49 | UG/G | | . |
| Zinc | 47 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-A LABSMPID=850528-119 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 49000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 88 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 41 | UG/G | | . |
| Cadmium | 0.63 | UG/G | | . |
| Calcium | 1300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 39 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 6.6 | UG/G | | . |
| Iron | 35000 | UG/G | | . |
| Lead (ICP) | 23 | UG/G | | . |
| Lithium | 35 | UG/G | | . |
| Magnesium | 3500 | UG/G | | . |
| Manganese | 1900 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 30 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 540 | UG/G | | . |
| Plutonium | 1.6 | DPM/G | | . |
| Potassium | 6900 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 780 | UG/G | | . |
| Strontium | 7.7 | UG/G | | . |
| Technetium | 160 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 330 | UG/G | | . |
| U-235 | 1.28 | WT.% | | . |
| Uranium | 12 | UG/G | | . |
| Vanadium | 60 | UG/G | | . |
| Zinc | 85 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-A LABSMPID=850528-119 LOCATION=K1407C STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-11-A LABSMPID=850528-120 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 48000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 85 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 49 | UG/G | | . |
| Cadmium | 0.69 | UG/G | | . |
| Calcium | 1300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 34 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 9.5 | UG/G | | . |
| Iron | 33000 | UG/G | | . |
| Lead (ICP) | 29 | UG/G | | . |
| Lithium | 33 | UG/G | | . |
| Magnesium | 3400 | UG/G | | . |
| Manganese | 2100 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.6 | DPM/G | | . |
| Nickel | 44 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 420 | UG/G | | . |
| Plutonium | 0.7 | DPM/G | | . |
| Potassium | 6600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 880 | UG/G | | . |
| Strontium | 7.5 | UG/G | | . |
| Technetium | 80 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 1.18 | WT.% | | . |
| Uranium | 12 | UG/G | | . |
| Vanadium | 59 | UG/G | | . |
| Zinc | 81 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-A LABSMPID=850528-120 LOCATION=K1407C STATION=11 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-B LABSMPID=850528-124 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 43000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 78 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 49 | UG/G | | . |
| Cadmium | 0.57 | UG/G | | . |
| Calcium | 1700 | UG/G | | . |
| Chromium | 37 | UG/G | | . |
| Cobalt | 18 | UG/G | | . |
| Copper | 7.2 | UG/G | | . |
| Iron | 34000 | UG/G | | . |
| Lead (ICP) | 28 | UG/G | | . |
| Lithium | 32 | UG/G | | . |
| Magnesium | 3200 | UG/G | | . |
| Manganese | 2600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 47 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 510 | UG/G | | . |
| Potassium | 6200 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 870 | UG/G | | . |
| Strontium | 7.3 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 300 | UG/G | | . |
| Uranium | 15 | UG/G | | . |
| Vanadium | 58 | UG/G | | . |
| Zinc | 80 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-C LABSMPID=850528-127 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 39000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 64 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 38 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1000 | UG/G | | . |
| Chromium | 63 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 3.5 | UG/G | | . |
| Iron | 31000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 3300 | UG/G | | . |
| Manganese | 1600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 55 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 490 | UG/G | | . |
| Potassium | 5100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 810 | UG/G | | . |
| Strontium | 7.3 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 250 | UG/G | | . |
| U-235 | 1.18 | WT.% | | . |
| Uranium | 9 | UG/G | | . |
| Vanadium | 50 | UG/G | | . |
| Zinc | 60 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-12-A LABSMPID=850528-028 LOCATION=K1407C STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 27000 | UG/G | | . |
| Arsenic (ICP) | 15 | UG/G | | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 1.1 | UG/G | | . |
| Boron | 46 | UG/G | | . |
| Cadmium | 0.43 | UG/G | | . |
| Calcium | 5900 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 43 | UG/G | | . |
| Cobalt | 19 | UG/G | | . |
| Copper | 21 | UG/G | | . |
| Iron | 37000 | UG/G | | . |
| Lead (ICP) | 12 | UG/G | | . |
| Lithium | 32 | UG/G | | . |
| Magnesium | 7700 | UG/G | | . |
| Manganese | 520 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.6 | DPM/G | | . |
| Nickel | 45 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 620 | UG/G | | . |
| Plutonium | 0.8 | DPM/G | | . |
| Potassium | 7900 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2600 | UG/G | | . |
| Strontium | 15 | UG/G | | . |
| Technetium | 91 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 300 | UG/G | | . |
| U-235 | 1.15 | WT.% | | . |
| Uranium | 10 | UG/G | | . |
| Vanadium | 30 | UG/G | | . |
| Zinc | 83 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-12-A LABSMPID=850528-028 LOCATION=K1407C STATION=12 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-13-A LABSMPID=850528-099 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 44000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 210 | UG/G | | . |
| Beryllium | 0.84 | UG/G | | . |
| Boron | 24 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1100 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 23 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 0.4 | UG/G | < | . |
| Iron | 20000 | UG/G | | . |
| Lead (ICP) | 31 | UG/G | | . |
| Lithium | 17 | UG/G | | . |
| Magnesium | 2900 | UG/G | | . |
| Manganese | 6000 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.4 | DPM/G | | . |
| Nickel | 29 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 500 | UG/G | | . |
| Plutonium | 0.5 | DPM/G | | . |
| Potassium | 3300 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 4400 | UG/G | | . |
| Strontium | 15 | UG/G | | . |
| Technetium | 120 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 1.34 | WT.% | | . |
| Uranium | 22 | UG/G | | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-A LABSMPID=850528-099 LOCATION=K1407C STATION=13 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Vanadium | 39 | UG/G | | . |
| Zinc | 59 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-A LABSMPID=850528-100 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 7.8 | UG/G | | . |
| Barium | 220 | UG/G | | . |
| Beryllium | 1.1 | UG/G | | . |
| Boron | 42 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1200 | UG/G | | . |
| Cesium | 22 | DPM/G | | . |
| Chromium | 22 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 3 | UG/G | | . |
| Iron | 20000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 15 | UG/G | | . |
| Magnesium | 2500 | UG/G | | . |
| Manganese | 6500 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.3 | DPM/G | | . |
| Nickel | 30 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 590 | UG/G | | . |
| Plutonium | 0.2 | DPM/G | | . |
| Potassium | 2700 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 4100 | UG/G | | . |
| Strontium | 14 | UG/G | | . |
| Technetium | 140 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 290 | UG/G | | . |
| U-235 | 1.56 | WT.% | | . |
| Uranium | 23 | UG/G | | . |
| Vanadium | 37 | UG/G | | . |
| Zinc | 66 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-A LABSMPID=850528-100 LOCATION=K1407C STATION=13 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-13-B LABSMPID=850528-102 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 30000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 140 | UG/G | | . |
| Beryllium | 0.37 | UG/G | | . |
| Boron | 24 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1200 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 27 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 3.8 | UG/G | | . |
| Iron | 21000 | UG/G | | . |
| Lead (ICP) | 28 | UG/G | | . |
| Lithium | 14 | UG/G | | . |
| Magnesium | 2300 | UG/G | | . |
| Manganese | 4200 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 20 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 420 | UG/G | | . |
| Plutonium | 0.2 | DPM/G | | . |
| Potassium | 1500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-B LABSMPID=850528-102 LOCATION=K1407C STATION=13 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Sodium | 3300 | UG/G | | . |
| Strontium | 11 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 260 | UG/G | | . |
| Uranium | 3 | UG/G | | . |
| Vanadium | 37 | UG/G | | . |
| Zinc | 69 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-C LABSMPID=850528-106 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 30000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 110 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 24 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 950 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 20 | UG/G | | . |
| Cobalt | 14 | UG/G | | . |
| Copper | 0.4 | UG/G | < | . |
| Iron | 19000 | UG/G | | . |
| Lead (ICP) | 22 | UG/G | | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 2600 | UG/G | | . |
| Manganese | 3200 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 12 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 540 | UG/G | | . |
| Plutonium | 0.1 | DPM/G | | . |
| Potassium | 1600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2900 | UG/G | | . |
| Strontium | 11 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 270 | UG/G | | . |
| U-235 | 1.01 | WT.% | | . |
| Uranium | 11 | UG/G | | . |
| Vanadium | 38 | UG/G | | . |
| Zinc | 52 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-C LABSMPID=850528-106 LOCATION=K1407C STATION=13 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-13-E LABSMPID=850528-107 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 29000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 100 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 40 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 23 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Copper, | 2.5 | UG/G | | . |
| Iron | 22000 | UG/G | | . |
| Lead (ICP) | 18 | UG/G | | . |
| Lithium | 18 | UG/G | | . |
| Magnesium | 2800 | UG/G | | . |
| Manganese | 2200 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 2.3 | DPM/G | | . |
| Nickel | 31 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 500 | UG/G | | . |
| Plutonium | 1.4 | DPM/G | | . |
| Potassium | 1900 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-E LABSMPID=850528-107 LOCATION=K1407C STATION=13 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Sodium | 2300 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 300 | UG/G | | . |
| U-235 | 1.15 | WT.% | | . |
| Uranium | 9 | UG/G | | . |
| Vanadium | 40 | UG/G | | . |
| Zinc | 63 | UG/G | | . |
| acetone | 0.19 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.09 | UG/G | | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-A LABSMPID=850528-121 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 230 | UG/G | | . |
| Beryllium | 0.86 | UG/G | | . |
| Boron | 33 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1100 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 35 | UG/G | | . |
| Cobalt | 19 | UG/G | | . |
| Copper | 3.8 | UG/G | | . |
| Iron | 23000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 15 | UG/G | | . |
| Magnesium | 2700 | UG/G | | . |
| Manganese | 5700 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 46 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 470 | UG/G | | . |
| Plutonium | 1 | DPM/G | | . |
| Potassium | 2500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 4100 | UG/G | | . |
| Strontium | 13 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 280 | UG/G | | . |
| U-235 | 1.28 | WT.% | | . |
| Uranium | 32 | UG/G | | . |
| Vanadium | 41 | UG/G | | . |
| Zinc | 69 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-A LABSMPID=850528-121 LOCATION=K1407C STATION=14 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-B LABSMPID=850528-125 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 38000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 150 | UG/G | | . |
| Beryllium | 0.18 | UG/G | | . |
| Boron | 38 | UG/G | | . |
| Cadmium | 0.49 | UG/G | | . |
| Calcium | 11000 | UG/G | | . |
| Chromium | 83 | UG/G | | . |
| Cobalt | 20 | UG/G | | . |
| Copper | 47 | UG/G | | . |
| Iron | 23000 | UG/G | | . |
| Lead (ICP) | 30 | UG/G | | . |
| Lithium | 20 | UG/G | | . |
| Magnesium | 3100 | UG/G | | . |
| Manganese | 3400 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 700 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 1000 | UG/G | | . |
| Potassium | 2600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3200 | UG/G | | . |
| Strontium | 18 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 320 | UG/G | | . |
| U-235 | 0.92 | WT.% | | . |
| Uranium | 11 | UG/G | | . |
| Vanadium | 42 | UG/G | | . |
| Zinc | 76 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-C LABSMPID=850528-128 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 29000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 98 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 23 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1600 | UG/G | | . |
| Chromium | 19 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Copper | 2.7 | UG/G | | . |
| Iron | 21000 | UG/G | | . |
| Lead (ICP) | 15 | UG/G | | . |
| Lithium | 19 | UG/G | | . |
| Magnesium | 2800 | UG/G | | . |
| Manganese | 2600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 14 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 450 | UG/G | | . |
| Potassium | 2100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2300 | UG/G | | . |
| Strontium | 11 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 310 | UG/G | | . |
| Uranium | 4 | UG/G | | . |
| Vanadium | 40 | UG/G | | . |
| Zinc | 59 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-E LABSMPID=850528-129 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 25000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 66 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 23 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1100 | UG/G | | . |
| Chromium | 24 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Copper | 3.9 | UG/G | | . |
| Iron | 23000 | UG/G | | . |
| Lead (ICP) | 14 | UG/G | | . |
| Lithium | 15 | UG/G | | . |
| Magnesium | 2600 | UG/G | | . |
| Manganese | 1100 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 12 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 350 | UG/G | | . |
| Potassium | 1500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1700 | UG/G | | . |
| Strontium | 8 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.05 | WT.% | | . |
| Uranium | 11 | UG/G | | . |
| Vanadium | 37 | UG/G | | . |
| Zinc | 58 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-15-A LABSMPID=850528-101 LOCATION=K1407C STATION=15 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 130 | UG/G | | . |
| Beryllium | 0.32 | UG/G | | . |
| Boron | 31 | UG/G | | . |
| Cadmium | 0.78 | UG/G | | . |
| Calcium | 1900 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 58 | UG/G | | . |
| Cobalt | 18 | UG/G | | . |
| Copper | 0.4 | UG/G | < | . |
| Iron | 31000 | UG/G | | . |
| Lead (ICP) | 34 | UG/G | | . |
| Lithium | 16 | UG/G | | . |
| Magnesium | 3000 | UG/G | | . |
| Manganese | 2600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 14 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 630 | UG/G | | . |
| Plutonium | 0.8 | DPM/G | | . |
| Potassium | 2200 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2500 | UG/G | | . |
| Strontium | 8.2 | UG/G | | . |
| Technetium | 110 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 240 | UG/G | | . |
| U-235 | 1.16 | WT.% | | . |
| Uranium | 39 | UG/G | | . |
| Vanadium | 51 | UG/G | | . |
| Zinc | 47 | UG/G | | . |
| acetone | 0.23 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-15-A LABSMPID=850528-101 LOCATION=K1407C STATION=15 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-2-A LABSMPID=850528-098 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 38000 | UG/G | | . |
| Arsenic (ICP) | 20 | UG/G | | . |
| Barium | 120 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 41 | UG/G | | . |
| Cadmium | 0.48 | UG/G | | . |
| Calcium | 2300 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 48 | UG/G | | . |
| Cobalt | 26 | UG/G | | . |
| Copper | 8.5 | UG/G | | . |
| Iron | 33000 | UG/G | | . |
| Lead (ICP) | 43 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 3300 | UG/G | | . |
| Manganese | 2400 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 28 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 760 | UG/G | | . |
| Plutonium | 0.05 | DPM/G | < | . |
| Potassium | 2200 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-A LABSMPID=850528-098 LOCATION=K1407C STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Sodium | 1900 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 300 | UG/G | | . |
| U-235 | 1.18 | WT.% | | . |
| Uranium | 19 | UG/G | | . |
| Vanadium | 55 | UG/G | | . |
| Zinc | 77 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-B LABSMPID=850528-104 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 70 | UG/G | | . |
| Beryllium | 0.05 | UG/G | | . |
| Boron | 33 | UG/G | | . |
| Cadmium | 0.57 | UG/G | | . |
| Calcium | 1100 | UG/G | | . |
| Chromium | 81 | UG/G | | . |
| Cobalt | 22 | UG/G | | . |
| Copper | 4.6 | UG/G | | . |
| Iron | 33000 | UG/G | | . |
| Lead (ICP) | 41 | UG/G | | . |
| Lithium | 19 | UG/G | | . |
| Magnesium | 2700 | UG/G | | . |
| Manganese | 2400 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 16 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 380 | UG/G | | . |
| Potassium | 1400 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1100 | UG/G | | . |
| Strontium | 6.6 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 190 | UG/G | | . |
| U-235 | 1.06 | WT.% | | . |
| Uranium | 7 | UG/G | | . |
| Vanadium | 46 | UG/G | | . |
| Zinc | 56 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-B LABSMPID=850528-104 LOCATION=K1407C STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-2-C LABSMPID=850528-105 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 34000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 78 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 35 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1100 | UG/G | | . |
| Chromium | 65 | UG/G | | . |
| Cobalt | 21 | UG/G | | . |
| Copper | 4.5 | UG/G | | . |
| Iron | 34000 | UG/G | | . |
| Lead (ICP) | 34 | UG/G | | . |
| Lithium | 22 | UG/G | | . |
| Magnesium | 3100 | UG/G | | . |
| Manganese | 2000 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 27 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | | |
| PCB (Aroclor-1242) | 0.1 | UG/G | | |
| PCB (Aroclor-1248) | 0.1 | UG/G | | |
| PCB (Aroclor-1254) | 0.1 | UG/G | | |
| PCB (Aroclor-1260) | 0.1 | UG/G | | |
| Phosphorus | 400 | UG/G | | |
| Potassium | 1800 | UG/G | | |
| Selenium (ICP) | 5 | UG/G | | |
| Sodium | 1100 | UG/G | | |
| Strontium | 8.1 | UG/G | | |
| Thorium | 20 | UG/G | | |
| Titanium | 200 | UG/G | | |
| Uranium | 1 | UG/G | | |
| Vanadium | 48 | UG/G | | |
| Zinc | 60 | UG/G | | |

Source: dataset POND8502 on _____

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-C LABSMPID=850528-105 LOCATION=K1407C STATION=2 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| acetone | 0.68 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-20-A LABSMPID=850528-122 LOCATION=K1407C STATION=20 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 73000 | UG/G | | . |
| Arsenic (ICP) | 14 | UG/G | | . |
| Barium | 63 | UG/G | | . |
| Beryllium | 0.77 | UG/G | | . |
| Boron | 89 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 8700 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 65 | UG/G | | . |
| Cobalt | 6 | UG/G | | . |
| Copper | 32 | UG/G | | . |
| Iron | 53000 | UG/G | | . |
| Lead (ICP) | 23 | UG/G | | . |
| Lithium | 29 | UG/G | | . |
| Magnesium | 5400 | UG/G | | . |
| Manganese | 290 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 5.8 | DPM/G | | . |
| Nickel | 130 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 920 | UG/G | | . |
| Plutonium | 3.6 | DPM/G | | . |
| Potassium | 11000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 20000 | UG/G | | . |
| Strontium | 12 | UG/G | | . |
| Technetium | 206 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 230 | UG/G | | . |
| U-235 | 1.25 | WT.% | | . |
| Uranium | 77 | UG/G | | . |
| Vanadium | 67 | UG/G | | . |
| Zinc | 84 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-20-A LABSMPID=850528-122 LOCATION=K1407C STATION=20 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-4-A LABSMPID=850528-118 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 26000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 86 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 30 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1500 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 26 | UG/G | | . |
| Cobalt | 18 | UG/G | | . |
| Copper | 8.6 | UG/G | | . |
| Iron | 23000 | UG/G | | . |
| Lead (ICP) | 35 | UG/G | | . |
| Lithium | 17 | UG/G | | . |
| Magnesium | 2400 | UG/G | | . |
| Manganese | 1600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.1 | DPM/G | | . |
| Nickel | 16 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 430 | UG/G | | . |
| Plutonium | 0.1 | DPM/G | | . |
| Potassium | 2000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2200 | UG/G | | . |
| Strontium | 7 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.23 | WT.% | | . |
| Uranium | 7 | UG/G | | . |
| Vanadium | 39 | UG/G | | . |
| Zinc | 59 | UG/G | | . |
| acetone | 0.29 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-A LABSMPID=850528-118 LOCATION=K1407C STATION=4 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-B LABSMPID=850528-123 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 24000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 86 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 31 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 2000 | UG/G | | . |
| Chromium | 48 | UG/G | | . |
| Cobalt | 77 | UG/G | | . |
| Copper | 8.1 | UG/G | | . |
| Iron | 27000 | UG/G | | . |
| Lead (ICP) | 55 | UG/G | | . |
| Lithium | 19 | UG/G | | . |
| Magnesium | 3000 | UG/G | | . |
| Manganese | 2900 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 24 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 440 | UG/G | | . |
| Potassium | 1500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1800 | UG/G | | . |
| Strontium | 6 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 190 | UG/G | | . |
| U-235 | 1.17 | WT.% | | . |
| Uranium | 13 | UG/G | | . |
| Vanadium | 42 | UG/G | | . |
| Zinc | 46 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-C LABSMPID=850528-126 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 20000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 71 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 31 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 820 | UG/G | | . |
| Chromium | 38 | UG/G | | . |
| Cobalt | 13 | UG/G | | . |
| Copper | 6.5 | UG/G | | . |
| Iron | 25000 | UG/G | | . |
| Lead (ICP) | 32 | UG/G | | . |
| Lithium | 14 | UG/G | | . |
| Magnesium | 2200 | UG/G | | . |
| Manganese | 970 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 12 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 310 | UG/G | | . |
| Potassium | 1500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2000 | UG/G | | . |
| Strontium | 5.2 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 200 | UG/G | | . |
| U-235 | 1.18 | WT.% | | . |
| Uranium | 15 | UG/G | | . |
| Vanadium | 39 | UG/G | | . |
| Zinc | 39 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-5-A LABSMPID=850528-022 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 65000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 64 | UG/G | | . |
| Beryllium | 0.63 | UG/G | | . |
| Boron | 60 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1400 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 64 | UG/G | | . |
| Cobalt | 6 | UG/G | | . |
| Copper | 15 | UG/G | | . |
| Iron | 50000 | UG/G | | . |
| Lead (ICP) | 26 | UG/G | | . |
| Lithium | 31 | UG/G | | . |
| Magnesium | 4600 | UG/G | | . |
| Manganese | 330 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.3 | DPM/G | | . |
| Nickel | 44 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 760 | UG/G | | . |
| Plutonium | 0.7 | DPM/G | | . |
| Potassium | 6800 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 2800 | UG/G | | . |
| Strontium | 9.1 | UG/G | | . |
| Technetium | 69 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 180 | UG/G | | . |
| U-235 | 1.14 | WT.% | | . |
| Uranium | 8 | UG/G | | . |
| Vanadium | 72 | UG/G | | . |
| Zinc | 83 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-5-A LABSMPID=850528-022 LOCATION=K1407C STATION=5 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-5-B LABSMPID=850528-035 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 43000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 53 | UG/G | | . |
| Beryllium | 0.37 | UG/G | | . |
| Boron | 42 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 740 | UG/G | | . |
| Chromium | 55 | UG/G | | . |
| Cobalt | 14 | UG/G | | . |
| Copper | 16 | UG/G | | . |
| Iron | 47000 | UG/G | | . |
| Lead (ICP) | 40 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 3800 | UG/G | | . |
| Manganese | 700 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 23 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 680 | UG/G | | . |
| Potassium | 3300 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3100 | UG/G | | . |
| Strontium | 6.8 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 170 | UG/G | | . |
| U-235 | 0.98 | WT.% | | . |
| Uranium | 5 | UG/G | | . |
| Vanadium | 58 | UG/G | | . |
| Zinc | 76 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-6-A LABSMPID=850528-097 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 42000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 61 | UG/G | | . |
| Beryllium | 0.13 | UG/G | | . |
| Boron | 47 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 1200 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 47 | UG/G | | . |
| Cobalt | 7 | UG/G | | . |
| Copper | 14 | UG/G | | . |
| Iron | 38000 | UG/G | | . |
| Lead (ICP) | 18 | UG/G | | . |
| Lithium | 23 | UG/G | | . |
| Magnesium | 3400 | UG/G | | . |
| Manganese | 500 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.2 | DPM/G | | . |
| Nickel | 25 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 520 | UG/G | | . |
| Plutonium | 0.1 | DPM/G | | . |
| Potassium | 3500 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3000 | UG/G | | . |
| Strontium | 6.7 | UG/G | | . |
| Technetium | 58 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.21 | WT.% | | . |
| Uranium | 10 | UG/G | | . |
| Vanadium | 54 | UG/G | | . |
| Zinc | 74 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-6-A LABSMPID=850528-097 LOCATION=K1407C STATION=6 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-6-B LABSMPID=850528-103 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 54000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 53 | UG/G | | . |
| Beryllium | 0.43 | UG/G | | . |
| Boron | 59 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 370 | UG/G | | . |
| Chromium | 59 | UG/G | | . |
| Cobalt | 5.1 | UG/G | | . |
| Copper | 11 | UG/G | | . |
| Iron | 46000 | UG/G | | . |
| Lead (ICP) | 18 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 320 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 22 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| PCB (Aroclor-1016) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1221) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1232) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1242) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1248) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1254) | 0.1 | UG/G | < | . |
| PCB (Aroclor-1260) | 0.1 | UG/G | < | . |
| Phosphorus | 670 | UG/G | | . |
| Potassium | 4700 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 3500 | UG/G | | . |
| Strontium | 6.5 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-6-B LABSMPID=850528-103 LOCATION=K1407C STATION=6 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Titanium | 160 | UG/G | | . |
| Uranium | 1 | UG/G | < | . |
| Vanadium | 62 | UG/G | | . |
| Zinc | 66 | UG/G | | . |
| acetone | 0.63 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-A LABSMPID=850528-023 LOCATION=K1407C STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 50000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 94 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 68 | UG/G | | . |
| Cadmium | 0.59 | UG/G | | . |
| Calcium | 1100 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 43 | UG/G | | . |
| Cobalt | 22 | UG/G | | . |
| Copper | 5.7 | UG/G | | . |
| Iron | 37000 | UG/G | | . |
| Lead (ICP) | 35 | UG/G | | . |
| Lithium | 28 | UG/G | | . |
| Magnesium | 3900 | UG/G | | . |
| Manganese | 2600 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.5 | DPM/G | | . |
| Nickel | 57 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 670 | UG/G | | . |
| Plutonium | 0.9 | DPM/G | | . |
| Potassium | 4100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1500 | UG/G | | . |
| Strontium | 10 | UG/G | | . |
| Technetium | 55 | DPM/G | < | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 330 | UG/G | | . |
| U-235 | 1.28 | WT.% | | . |
| Uranium | 24 | UG/G | | . |
| Vanadium | 56 | UG/G | | . |
| Zinc | 80 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-A LABSMPID=850528-023 LOCATION=K1407C STATION=7 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-8-A LABSMPID=850528-024 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 43000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 65 | UG/G | | . |
| Beryllium | 0.03 | UG/G | < | . |
| Boron | 45 | UG/G | | . |
| Cadmium | 0.79 | UG/G | | . |
| Calcium | 1400 | UG/G | | . |
| Cesium | 17 | DPM/G | | . |
| Chromium | 32 | UG/G | | . |
| Cobalt | 13 | UG/G | | . |
| Copper | 8.8 | UG/G | | . |
| Iron | 32000 | UG/G | | . |
| Lead (ICP) | 20 | UG/G | | . |
| Lithium | 30 | UG/G | | . |
| Magnesium | 3500 | UG/G | | . |
| Manganese | 1700 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.6 | DPM/G | | . |
| Nickel | 33 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 590 | UG/G | | . |
| Plutonium | 0.8 | DPM/G | | . |
| Potassium | 4000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 910 | UG/G | | . |
| Strontium | 7.5 | UG/G | | . |
| Technetium | 128 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 250 | UG/G | | . |
| U-235 | 1.17 | WT.% | | . |
| Uranium | 13 | UG/G | | . |
| Vanadium | 52 | UG/G | | . |
| Zinc | 65 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-8-A LABSMPID=850528-024 LOCATION=K1407C STATION=8 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-8-B LABSMPID=850528-036 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 36000 | UG/G | | . |
| Arsenic (ICP) | 7.4 | UG/G | | . |
| Barium | 60 | UG/G | | . |
| Beryllium | 0.18 | UG/G | | . |
| Boron | 51 | UG/G | | . |
| Cadmium | 0.97 | UG/G | | . |
| Calcium | 1500 | UG/G | | . |
| Chromium | 99 | UG/G | | . |
| Cobalt | 17 | UG/G | | . |
| Copper | 8.9 | UG/G | | . |
| Iron | 47000 | UG/G | | . |
| Lead (ICP) | 22 | UG/G | | . |
| Lithium | 24 | UG/G | | . |
| Magnesium | 3900 | UG/G | | . |
| Manganese | 2200 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 32 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 850 | UG/G | | . |
| Potassium | 2000 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 870 | UG/G | | . |
| Strontium | 6.6 | UG/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 180 | UG/G | | . |
| U-235 | 1.26 | WT.% | | . |
| Uranium | 8 | UG/G | | . |
| Vanadium | 57 | UG/G | | . |
| Zinc | 60 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-A LABSMPID=850528-025 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 37000 | UG/G | | . |
| Arsenic (ICP) | 36 | UG/G | | . |
| Barium | 60 | UG/G | | . |
| Beryllium | 0.15 | UG/G | | . |
| Boron | 35 | UG/G | | . |
| Cadmium | 0.3 | UG/G | < | . |
| Calcium | 3900 | UG/G | | . |
| Cesium | 121 | DPM/G | | . |
| Chromium | 54 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Copper | 17 | UG/G | | . |
| Iron | 42000 | UG/G | | . |
| Lead (ICP) | 36 | UG/G | | . |
| Lithium | 26 | UG/G | | . |
| Magnesium | 3800 | UG/G | | . |
| Manganese | 520 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 1 | DPM/G | | . |
| Nickel | 40 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 460 | UG/G | | . |
| Plutonium | 2.8 | DPM/G | | . |
| Potassium | 2100 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1100 | UG/G | | . |
| Strontium | 11 | UG/G | | . |
| Technetium | 184 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 220 | UG/G | | . |
| U-235 | 1.34 | WT.% | | . |
| Uranium | 57 | UG/G | | . |
| Vanadium | 78 | UG/G | | . |
| Zinc | 68 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-A LABSMPID=850528-025 LOCATION=K1407C STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

---------- SMP_ID=K1407C-9-A LABSMPID=850528-026 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 35000 | UG/G | | . |
| Arsenic (ICP) | 20 | UG/G | | . |
| Barium | 61 | UG/G | | . |
| Beryllium | 0.22 | UG/G | | . |
| Boron | 42 | UG/G | | . |
| Cadmium | 0.5 | UG/G | | . |
| Calcium | 11000 | UG/G | | . |
| Cesium | 15 | DPM/G | < | . |
| Chromium | 48 | UG/G | | . |
| Cobalt | 11 | UG/G | | . |
| Copper | 25 | UG/G | | . |
| Iron | 35000 | UG/G | | . |
| Lead (ICP) | 32 | UG/G | | . |
| Lithium | 25 | UG/G | | . |
| Magnesium | 4700 | UG/G | | . |
| Manganese | 610 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Neptunium | 0.7 | DPM/G | | . |
| Nickel | 61 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 430 | UG/G | | . |
| Plutonium | 1.4 | DPM/G | | . |
| Potassium | 2600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1300 | UG/G | | . |
| Strontium | 17 | UG/G | | . |
| Technetium | 82 | DPM/G | | . |
| Thorium | 20 | UG/G | < | . |
| Titanium | 210 | UG/G | | . |
| U-235 | 1.25 | WT.% | | . |
| Uranium | 55 | UG/G | | . |
| Vanadium | 62 | UG/G | | . |
| Zinc | 67 | UG/G | | . |
| acetone | 0.12 | UG/G | | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-A LABSMPID=850528-026 LOCATION=K1407C STATION=9 ----------
(continued)

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

Total analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-B LABSMPID=850528-037 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 1,1,1-trichloroethane | 0.04 | UG/G | < | . |
| 1,1,2,2-tetrachloroethane | 0.07 | UG/G | < | . |
| 1,1,2-trichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethane | 0.05 | UG/G | < | . |
| 1,1-dichloroethylene | 0.03 | UG/G | < | . |
| 1,2-dichloroethane | 0.03 | UG/G | < | . |
| 1,2-dichloropropane | 0.06 | UG/G | < | . |
| Aluminum | 28000 | UG/G | | . |
| Arsenic (ICP) | 5 | UG/G | < | . |
| Barium | 140 | UG/G | | . |
| Beryllium | 0.81 | UG/G | | . |
| Boron | 51 | UG/G | | . |
| Cadmium | 0.73 | UG/G | | . |
| Calcium | 13000 | UG/G | | . |
| Chromium | 38 | UG/G | | . |
| Cobalt | 22 | UG/G | | . |
| Copper | 22 | UG/G | | . |
| Iron | 35000 | UG/G | | . |
| Lead (ICP) | 13 | UG/G | | . |
| Lithium | 33 | UG/G | | . |
| Magnesium | 12000 | UG/G | | . |
| Manganese | 1200 | UG/G | | . |
| Molybdenum | 1 | UG/G | < | . |
| Nickel | 43 | UG/G | | . |
| Niobium | 0.7 | UG/G | < | . |
| Phosphorus | 630 | UG/G | | . |
| Potassium | 5600 | UG/G | | . |
| Selenium (ICP) | 5 | UG/G | < | . |
| Sodium | 1800 | UG/G | | . |
| Strontium | 17 | UG/G | | . |
| Thorium | 20 | UG/G | | . |
| Titanium | 250 | UG/G | | . |
| U-235 | 1.29 | WT.% | | . |
| Uranium | 23 | UG/G | | . |
| Vanadium | 30 | UG/G | | . |
| Zinc | 71 | UG/G | | . |
| acetone | 0.1 | UG/G | < | . |
| benzene | 0.04 | UG/G | < | . |
| bromodichloromethane | 0.02 | UG/G | < | . |
| bromoform | 0.05 | UG/G | < | . |
| carbon tetrachloride | 0.03 | UG/G | < | . |
| chlorobenzene | 0.06 | UG/G | < | . |
| chloroform | 0.02 | UG/G | < | . |
| cis-1,3-dichloropropene | 0.05 | UG/G | < | . |
| dibromochloromethane | 0.03 | UG/G | < | . |
| ethyl benzene | 0.07 | UG/G | < | . |
| freon-113 | 0.1 | UG/G | < | . |
| freon-114 | 0.1 | UG/G | < | . |
| freon-123 | 0.1 | UG/G | < | . |
| methyl ethyl ketone (MEK) | 0.1 | UG/G | < | . |
| methylene chloride | 0.03 | UG/G | < | . |
| other halomethanes | 0.1 | UG/G | < | . |
| tetrachloroethylene | 0.04 | UG/G | < | . |
| toluene | 0.06 | UG/G | < | . |
| trans-1,2-dichloroethylene | 0.02 | UG/G | < | . |
| trans-1,3-dichloropropene | 0.05 | UG/G | < | . |
| trichloroethylene | 0.02 | UG/G | < | . |
| trichlorofluoromethane | 0.1 | UG/G | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX I

# EP-TOX ANALYSES FOR 1985 CLAY SAMPLES FROM THE K-1407-C POND

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-1-A LABSMPID=850528-021 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 1.94 | MG/L | | . |
| Cadmium | 0.004 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.071 | MG/L | | . |
| Mercury | 0.004 | MG/L | | . |
| Nickel | 0.56 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-1-B LABSMPID=850528-034 LOCATION=K1407C STATION=1 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.71 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.01 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.06 | MG/L | | . |
| Selenium (AA) | 0.006 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-10-A LABSMPID=850528-027 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 1.94 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.021 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.007 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-10-B LABSMPID=850528-038 LOCATION=K1407C STATION=10 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.2 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.03 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-11-A LABSMPID=850528-119 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.52 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-11-A LABSMPID=850528-120 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.64 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.015 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.04 | MG/L | | . |
| Selenium (AA) | 0.007 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-11-B LABSMPID=850528-124 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.54 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.015 | MG/L | | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.017 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-11-C LABSMPID=850528-127 LOCATION=K1407C STATION=11 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.49 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.053 | MG/L | | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 0.08 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-12-A LABSMPID=850528-028 LOCATION=K1407C STATION=12 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.51 | MG/L | | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.009 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.09 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-A LABSMPID=850528-099 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 1.99 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.011 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00005 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00004 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-13-A LABSMPID=850528-100 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.86 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.15 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00005 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00004 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-B LABSMPID=850528-102 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.9 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-13-C LABSMPID=850528-106 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.2 | MG/L | | . |
| Cadmium | 0.04 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | | . |
| Selenium (AA) | 0.013 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-13-E LABSMPID=850528-107 LOCATION=K1407C STATION=13 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.18 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.002 | MG/L | | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00006 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-14-A LABSMPID=850528-121 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 1.32 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.07 | MG/L | | . |
| Selenium (AA) | 0.021 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-14-B LABSMPID=850528-125 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.61 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.007 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.023 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-14-C LABSMPID=850528-128 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.11 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.026 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.01 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-14-E LABSMPID=850528-129 LOCATION=K1407C STATION=14 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | | . |
| Selenium (AA) | 0.008 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-15-A LABSMPID=850528-101 LOCATION=K1407C STATION=15 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.05 | MG/L | | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 1.18 | MG/L | | . |
| Cadmium | 0.003 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.006 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.06 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.0148 | MG/L | | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.004 | MG/L | | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-A LABSMPID=850528-098 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | | . |
| Barium | 0.84 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.01 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-2-B LABSMPID=850528-104 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-2-C LABSMPID=850528-105 LOCATION=K1407C STATION=2 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.13 | MG/L | | . |
| Cadmium | 0.002 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | < | . |
| Selenium (AA) | 0.005 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00007 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00005 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

---------- SMP_ID=K1407C-20-A LABSMPID=850528-122 LOCATION=K1407C STATION=20 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.007 | MG/L | | . |
| Barium | 0.17 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 1.15 | MG/L | | . |
| Selenium (AA) | 0.034 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-4-A LABSMPID=850528-118 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.32 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.02 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-4-B LABSMPID=850528-123 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.13 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | < | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-4-C LABSMPID=850528-126 LOCATION=K1407C STATION=4 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.007 | MG/L | | . |
| Barium | 0.57 | MG/L | | . |
| Cadmium | 0.003 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.011 | MG/L | | . |
| Mercury | 0.005 | MG/L | | . |
| Nickel | 1.68 | MG/L | | . |
| Selenium (AA) | 0.022 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-5-A LABSMPID=850528-022 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.68 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.1 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-5-B LABSMPID=850528-035 LOCATION=K1407C STATION=5 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.21 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | < | . |
| Selenium (AA) | 0.007 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-6-A LABSMPID=850528-097 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.042 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.1 | MG/L | < | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.005 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00009 | MG/L | < | . |
| lindane | 0.00002 | MG/L | < | . |
| methoxychlor | 0.00007 | MG/L | < | . |
| silvex | 0.008 | MG/L | < | . |
| toxaphene | 0.002 | MG/L | < | . |

---------- SMP_ID=K1407C-6-B LABSMPID=850528-103 LOCATION=K1407C STATION=6 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| 2,4-D | 0.03 | MG/L | < | . |
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.11 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |
| endrin | 0.00005 | MG/L | < | . |
| lindane | 0.00001 | MG/L | < | . |
| methoxychlor | 0.00004 | MG/L | < | . |
| silvex | 0.01 | MG/L | < | . |
| toxaphene | 0.001 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-7-A LABSMPID=850528-023 LOCATION=K1407C STATION=7 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.45 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.01 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.05 | MG/L | | . |
| Selenium (AA) | 0.007 | MG/L | | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-8-A LABSMPID=850528-024 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.32 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.011 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.12 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-8-B LABSMPID=850528-036 LOCATION=K1407C STATION=8 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.49 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.01 | MG/L | < | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

EP-TOX analyses for 1985 clay samples from the K-1407-C pond.

---------- SMP_ID=K1407C-9-A LABSMPID=850528-025 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.25 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.023 | MG/L | | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.11 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-9-A LABSMPID=850528-026 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.47 | MG/L | | . |
| Cadmium | 0.002 | MG/L | < | . |
| Chromium | 0.01 | MG/L | < | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.24 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

---------- SMP_ID=K1407C-9-B LABSMPID=850528-037 LOCATION=K1407C STATION=9 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (AA) | 0.005 | MG/L | < | . |
| Barium | 0.78 | MG/L | | . |
| Cadmium | 0.003 | MG/L | | . |
| Chromium | 0.01 | MG/L | | . |
| Lead (AA) | 0.004 | MG/L | < | . |
| Mercury | 0.001 | MG/L | < | . |
| Nickel | 0.14 | MG/L | | . |
| Selenium (AA) | 0.005 | MG/L | < | . |
| Silver | 0.01 | MG/L | < | . |

Source: dataset POND8502 on 08DEC93

# APPENDIX J

# RESULTS FOR 1991 SLUDGE SOLIDS SAMPLES FROM THE K-1417 DRUMS

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B1338-SL LABSMPID=910819-072 LOCATION=K-1417 STATION=B1338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 277 | PCI/G | | 10.00 |
| Aluminum | 8800 | MG/KG | | . |
| Antimony | 4.8 | MG/KG | < | . |
| Arsenic (ICP) | 18 | MG/KG | | . |
| Arsenic (AA) | 44.2 | MG/KG | | . |
| Barium | 64 | MG/KG | | . |
| Beryllium | 0.59 | MG/KG | | . |
| Beta Activity | 1350 | PCI/G | | 21.00 |
| Cadmium | 2.1 | MG/KG | | . |
| Calcium | 6700 | MG/KG | | . |
| Cesium-137 | 1.46 | PCI/G | | 0.38 |
| Chloride IC | 155 | MG/KG | | . |
| Chromium | 200 | MG/KG | | . |
| Cobalt | 14 | MG/KG | | . |
| Copper | 140 | MG/KG | | . |
| Density | 1.11 | G/ML | | . |
| Fluoride SIE | 35 | MG/KG | | . |
| Lead (ICP) | 35 | MG/KG | | . |
| Lead (AA) | 56.2 | MG/KG | | . |
| Magnesium | 1600 | MG/KG | | . |
| Manganese | 520 | MG/KG | | . |
| Mercury | 11 | MG/KG | | . |
| Molybdenum | 1.7 | MG/KG | | . |
| Neptunium-237 | 5 | PCI/G | | 0.93 |
| Nickel | 590 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0 | PCI/G | | 0.19 |
| Plutonium-239 | 3.16 | PCI/G | | 0.74 |
| Potassium | 1400 | MG/KG | | . |
| Protactinium-234m | 157 | PCI/G | | 50.00 |
| Selenium (ICP) | 4.8 | MG/KG | < | . |
| Selenium (AA) | 1.42 | MG/KG | | . |
| Silver | 0.57 | MG/KG | < | . |
| Sodium | 290 | MG/KG | | . |
| Sulfate | 1297 | MG/KG | | . |
| Technetium-99 | 975 | PCI/G | | 34.00 |
| Thallium (AA) | 0.8 | MG/KG | | . |
| Thorium-228 | 0.897 | PCI/G | | 0.39 |
| Thorium-230 | 33.7 | PCI/G | | 2.40 |
| Thorium-232 | 5.77 | PCI/G | | 1.00 |
| Thorium-234 | 81.1 | PCI/G | | 4.30 |
| Total Organic Carbon (TOC) | 2 | % | | . |
| Total Phosphate | 8.5 | MG/KG | | . |
| Total Solids | 14.42 | % | | . |
| Uranium (K-25) | 322 | MG/KG | | . |
| Uranium (Y-12) | 520 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 9.96 | PCI/G | | 0.57 |
| Vanadium | 19 | MG/KG | | . |
| Water Weight Loss | 85.58 | % | | . |
| Zinc | 94 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B2238-SL LABSMPID=910819-073 LOCATION=K-1417 STATION=B2238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 88.2 | PCI/G | | 6.00 |
| Aluminum | 18000 | MG/KG | | . |
| Antimony | 4.3 | MG/KG | < | . |
| Arsenic (ICP) | 4.3 | MG/KG | < | . |
| Arsenic (AA) | 20 | MG/KG | | . |
| Barium | 41 | MG/KG | | . |
| Beryllium | 0.36 | MG/KG | | . |
| Beta Activity | 446 | PCI/G | | 12.00 |
| Cadmium | 1 | MG/KG | | . |
| Calcium | 68000 | MG/KG | | . |
| Cesium-137 | 0.622 | PCI/G | | 0.32 |
| Chloride IC | 107 | MG/KG | | . |
| Chromium | 86 | MG/KG | | . |
| Cobalt | 12 | MG/KG | | . |
| Copper | 120 | MG/KG | | . |
| Density | 1.42 | G/ML | | . |
| Fluoride SIE | 45 | MG/KG | | . |
| Lead (ICP) | 23 | MG/KG | | . |
| Lead (AA) | 57 | MG/KG | | . |
| Magnesium | 2800 | MG/KG | | . |
| Manganese | 1100 | MG/KG | | . |
| Mercury | 5.3 | MG/KG | | . |
| Molybdenum | 0.86 | MG/KG | < | . |
| Neptunium-237 | 1.42 | PCI/G | | 0.53 |
| Nickel | 650 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.0459 | PCI/G | | 0.16 |
| Plutonium-239 | 0.551 | PCI/G | | 0.32 |
| Potassium | 3200 | MG/KG | | . |
| Protactinium-234m | 34 | PCI/G | | 50.00 |
| Selenium (ICP) | 4.3 | MG/KG | < | . |
| Selenium (AA) | 0.79 | MG/KG | | . |
| Silver | 0.84 | MG/KG | | . |
| Sodium | 810 | MG/KG | | . |
| Sulfate | 964 | MG/KG | | . |
| Technetium-99 | 14 | PCI/G | | 1.60 |
| Thallium (AA) | 0.3 | MG/KG | | . |
| Thorium-228 | 0.688 | PCI/G | | 0.36 |
| Thorium-230 | 14 | PCI/G | | 1.60 |
| Thorium-232 | 0.872 | PCI/G | | 0.42 |
| Thorium-234 | 32.4 | PCI/G | | 2.70 |
| Total Organic Carbon (TOC) | 1.1 | % | | . |
| Total Phosphate | 12 | MG/KG | | . |
| Total Solids | 47.01 | % | | . |
| Uranium (K-25) | 134 | MG/KG | | . |
| Uranium (Y-12) | 200 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 3.77 | PCI/G | | 0.48 |
| Vanadium | 19 | MG/KG | | . |
| Water Weight Loss | 52.99 | % | | . |
| Zinc | 50 | MG/KG | | . |
| pH | 7.5 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B3738-SL LABSMPID=910819-087 LOCATION=K-1417 STATION=B3738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 485 | PCI/G | | 11.0 |
| Aluminum | 11000 | MG/KG | | . |
| Antimony | 6.3 | MG/KG | < | . |
| Arsenic (ICP) | 57 | MG/KG | | . |
| Arsenic (AA) | 183 | MG/KG | | . |
| Barium | 69 | MG/KG | | . |
| Beryllium | 0.71 | MG/KG | | . |
| Beta Activity | 1220 | PCI/G | | 15.0 |
| Cadmium | 3.1 | MG/KG | | . |
| Calcium | 14000 | MG/KG | | . |
| Cesium-137 | 3.89 | PCI/G | | 0.5 |
| Chloride IC | 168 | MG/KG | | . |
| Chromium | 330 | MG/KG | | . |
| Cobalt | 16 | MG/KG | | . |
| Copper | 260 | MG/KG | | . |
| Density | 1.27 | G/ML | | . |
| Fluoride SIE | 34 | MG/KG | | . |
| Lead (ICP) | 52 | MG/KG | | . |
| Lead (AA) | 139 | MG/KG | | . |
| Magnesium | 1700 | MG/KG | | . |
| Manganese | 260 | MG/KG | | . |
| Mercury | 18 | MG/KG | | . |
| Molybdenum | 3.1 | MG/KG | | . |
| Neptunium-237 | 5 | PCI/G | | 1.0 |
| Nickel | 1300 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.36 | PCI/G | | 0.2 |
| Plutonium-239 | 8.1 | PCI/G | | 1.0 |
| Potassium | 1600 | MG/KG | | . |
| Protactinium-234m | 358 | PCI/G | | 49.0 |
| Selenium (ICP) | 6.3 | MG/KG | < | . |
| Selenium (AA) | 5.42 | MG/KG | | . |
| Silver | 1.2 | MG/KG | | . |
| Sodium | 380 | MG/KG | | . |
| Sulfate | 3272 | MG/KG | | . |
| Technetium-99 | 3050 | PCI/G | | 43.0 |
| Thallium (AA) | 2.17 | MG/KG | | . |
| Thorium-228 | 1.04 | PCI/G | | 0.3 |
| Thorium-230 | 84.5 | PCI/G | | 3.0 |
| Thorium-232 | 0.84 | PCI/G | | 0.3 |
| Thorium-234 | 275 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 2.1 | % | | . |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 34.77 | % | | . |
| Uranium (K-25) | 780 | MG/KG | | . |
| Uranium (Y-12) | 2300 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 27.1 | PCI/G | | 0.9 |
| Vanadium | 17 | MG/KG | | . |
| Water Weight Loss | 65.23 | % | | . |
| Zinc | 180 | MG/KG | | . |
| pH | 7 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B3838-SL LABSMPID=910819-090 LOCATION=K-1417 STATION=B3838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 283 | PCI/G | | 8.0 |
| Aluminum | 21000 | MG/KG | | . |
| Antimony | 63 | MG/KG | < | . |
| Arsenic (ICP) | 63 | MG/KG | < | . |
| Arsenic (AA) | 23.3 | MG/KG | | . |
| Barium | 110 | MG/KG | | . |
| Beryllium | 0.94 | MG/KG | | . |
| Beta Activity | 328 | PCI/G | | 8.0 |
| Cadmium | 3.8 | MG/KG | < | . |
| Calcium | 92000 | MG/KG | | . |
| Cesium-137 | 11.5 | PCI/G | | 0.8 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 110 | MG/KG | | . |
| Cobalt | 25 | MG/KG | | . |
| Copper | 100 | MG/KG | | . |
| Density | 1.74 | G/ML | | . |
| Fluoride SIE | 300 | MG/KG | | . |
| Lead (ICP) | 75 | MG/KG | | . |
| Lead (AA) | 49.8 | MG/KG | | . |
| Magnesium | 3000 | MG/KG | | . |
| Manganese | 2100 | MG/KG | | . |
| Mercury | 15 | MG/KG | | . |
| Molybdenum | 13 | MG/KG | < | . |
| Neptunium-237 | 9 | PCI/G | | 1.0 |
| Nickel | 780 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.05 | PCI/G | | 0.1 |
| Plutonium-239 | 13.8 | PCI/G | | 1.0 |
| Potassium | 3700 | MG/KG | | . |
| Protactinium-234m | 158.5 | PCI/G | | 59.0 |
| Selenium (ICP) | 63 | MG/KG | < | . |
| Selenium (AA) | 1.5 | MG/KG | | . |
| Silver | 7.5 | MG/KG | < | . |
| Sodium | 950 | MG/KG | | . |
| Sulfate | 612 | MG/KG | | . |
| Technetium-99 | 624 | PCI/G | | 21.0 |
| Thallium (AA) | 0.74 | MG/KG | | . |
| Thorium-228 | 0.71 | PCI/G | | 0.3 |
| Thorium-230 | 40.1 | PCI/G | | 2.0 |
| Thorium-232 | 0.23 | PCI/G | | 0.2 |
| Thorium-234 | 56 | PCI/G | | 4.0 |
| Total Organic Carbon (TOC) | 0.32 | % | | . |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 64.68 | % | | . |
| Uranium (K-25) | 866 | MG/KG | | . |
| Uranium (Y-12) | 420 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 7.6 | PCI/G | | 0.6 |
| Vanadium | 34 | MG/KG | | . |
| Water Weight Loss | 35.32 | % | | . |
| Zinc | 78 | MG/KG | | . |
| pH | 9.4 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B5838-SL LABSMPID=910815-144 LOCATION=K-1417 STATION=B5838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 654 | PCI/G | | 12.0 |
| Aluminum | 12000 | MG/KG | | . |
| Antimony | 6.3 | MG/KG | < | . |
| Arsenic (ICP) | 73 | MG/KG | | . |
| Arsenic (AA) | 186 | MG/KG | | . |
| Barium | 73 | MG/KG | | . |
| Beryllium | 0.88 | MG/KG | | . |
| Beta Activity | 1330 | PCI/G | | 16.0 |
| Boron | 16 | MG/KG | | . |
| Cadmium | 2.5 | MG/KG | | . |
| Calcium | 22000 | MG/KG | | . |
| Cesium-137 | 8.95 | PCI/G | | 0.7 |
| Chloride IC | 231 | MG/KG | | . |
| Chromium | 230 | MG/KG | | . |
| Cobalt | 18 | MG/KG | | . |
| Copper | 230 | MG/KG | | . |
| Density | 1.37 | G/ML | | . |
| Fluoride SIE | 29 | MG/KG | | . |
| Lead (ICP) | 58 | MG/KG | | . |
| Lead (AA) | 135 | MG/KG | | . |
| Magnesium | 2900 | MG/KG | | . |
| Manganese | 360 | MG/KG | | . |
| Mercury | 20 | MG/KG | | . |
| Molybdenum | 4.5 | MG/KG | | . |
| Neptunium-237 | 13.4 | PCI/G | | 1.0 |
| Nickel | 1300 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.24 | PCI/G | | 0.1 |
| Plutonium-239 | 12.9 | PCI/G | | 1.0 |
| Potassium | 1400 | MG/KG | | . |
| Protactinium-234m | 505 | PCI/G | | 52.0 |
| Selenium (ICP) | 6.3 | MG/KG | < | . |
| Selenium (AA) | 5.95 | MG/KG | | . |
| Silicon | 300 | MG/KG | | . |
| Silver | 1.5 | MG/KG | | . |
| Sodium | 410 | MG/KG | | . |
| Sulfate | 4530 | MG/KG | | . |
| Technetium-99 | 3700 | PCI/G | | 47.0 |
| Thallium (AA) | 2.87 | MG/KG | | . |
| Thorium-228 | 1.23 | PCI/G | | 0.4 |
| Thorium-230 | 120 | PCI/G | | 3.0 |
| Thorium-232 | 1.92 | PCI/G | | 0.4 |
| Thorium-234 | 279 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 3.8 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 39.83 | % | | . |
| Uranium (K-25) | 940 | MG/KG | | . |
| Uranium (Y-12) | 2500 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 26.7 | PCI/G | | 0.8 |
| Vanadium | 25 | MG/KG | | . |
| Zinc | 160 | MG/KG | | . |
| pH | 7.1 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B6238-SL LABSMPID=910815-133 LOCATION=K-1417 STATION=B6238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 541 | PCI/G | | 15.00 |
| Arsenic (AA) | 113 | MG/KG | | . |
| Barium (TCLP) | 0.53 | MG/L | | . |
| Beta Activity | 2600 | PCI/G | | 29.00 |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Cesium-137 | 2 | PCI/G | | 0.41 |
| Chloride IC | 28 | MG/KG | | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Density | 1.38 | G/ML | | . |
| Fluoride SIE | 33 | MG/KG | | . |
| Lead (AA) | 91.8 | MG/KG | | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury | 5.5 | MG/KG | | . |
| Neptunium-237 | 8.02 | PCI/G | | 1.20 |
| Nickel (TCLP) | 0.05 | MG/L | < | . |
| Nitrate | 2 | MG/KG | <P | . |
| Plutonium-238 | 0 | PCI/G | | 0.18 |
| Plutonium-239 | 3.36 | PCI/G | | 0.80 |
| Protactinium-234m | 328 | PCI/G | | 49.00 |
| Selenium (AA) | 3.84 | MG/KG | | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |
| Sulfate | 4173 | MG/KG | | . |
| Technetium-99 | 1200 | PCI/G | | 38.00 |
| Thallium (AA) | 1.72 | MG/KG | | . |
| Thorium-228 | 0.413 | PCI/G | | 0.28 |
| Thorium-230 | 33.6 | PCI/G | | 2.50 |
| Thorium-232 | 1.51 | PCI/G | | 0.53 |
| Thorium-234 | 194 | PCI/G | | 5.00 |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 42.07 | % | | . |
| Uranium (K-25) | 711 | MG/KG | | . |
| Uranium (Y-12) | 1800 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 22.8 | PCI/G | | 0.74 |
| pH | 7.2 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B6638-SL LABSMPID=910815-146 LOCATION=K-1417 STATION=B6638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 509 | PCI/G | | 11.0 |
| Aluminum | 9400 | MG/KG | | . |
| Antimony | 5.7 | MG/KG | < | . |
| Arsenic (ICP) | 47 | MG/KG | | . |
| Arsenic (AA) | 149 | MG/KG | | . |
| Barium | 66 | MG/KG | | . |
| Beryllium | 0.59 | MG/KG | | . |
| Beta Activity | 1320 | PCI/G | | 16.0 |
| Boron | 9 | MG/KG | | . |
| Cadmium | 1.8 | MG/KG | | . |
| Calcium | 13000 | MG/KG | | . |
| Cesium-137 | 4.43 | PCI/G | | 0.5 |
| Chloride IC | 244 | MG/KG | | . |
| Chromium | 230 | MG/KG | | . |
| Cobalt | 14 | MG/KG | | . |
| Copper | 200 | MG/KG | | . |
| Density | 1.19 | G/ML | | . |
| Fluoride SIE | 33 | MG/KG | | . |
| Lead (ICP) | 39 | MG/KG | | . |
| Lead (AA) | 115 | MG/KG | | . |
| Magnesium | 1600 | MG/KG | | . |
| Manganese | 290 | MG/KG | | . |
| Mercury | 49 | MG/KG | | . |
| Molybdenum | 3.3 | MG/KG | | . |
| Neptunium-237 | 6.2 | PCI/G | | 1.0 |
| Nickel | 1100 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.29 | PCI/G | | 0.2 |
| Plutonium-239 | 8.2 | PCI/G | | 1.0 |
| Potassium | 1300 | MG/KG | | . |
| Protactinium-234m | 177.5 | PCI/G | | 52.0 |
| Selenium (ICP) | 5.7 | MG/KG | < | . |
| Selenium (AA) | 4.23 | MG/KG | | . |
| Silicon | 230 | MG/KG | | . |
| Silver | 1.2 | MG/KG | | . |
| Sodium | 380 | MG/KG | | . |
| Sulfate | 3086 | MG/KG | | . |
| Technetium-99 | 2940 | PCI/G | | 42.0 |
| Thallium (AA) | 2.24 | MG/KG | | . |
| Thorium-228 | 1.19 | PCI/G | | 0.4 |
| Thorium-230 | 74.7 | PCI/G | | 3.0 |
| Thorium-232 | 0.96 | PCI/G | | 0.3 |
| Thorium-234 | 222 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 3.5 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 22.18 | % | | . |
| Uranium (K-25) | 859 | MG/KG | | . |
| Uranium (Y-12) | 1800 | MG/KG | | . |
| Uranium-235 | 1.5 | WGT % | | . |
| Uranium-235 | 23.9 | PCI/G | | 0.8 |
| Vanadium | 16 | MG/KG | | . |
| Zinc | 140 | MG/KG | | . |
| pH | 7 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B7038-SL LABSMPID=910815-145 LOCATION=K-1417 STATION=B7038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 683 | PCI/G | | 13.0 |
| Aluminum | 9900 | MG/KG | | . |
| Antimony | 6.1 | MG/KG | < | . |
| Arsenic (ICP) | 59 | MG/KG | | . |
| Arsenic (AA) | 180 | MG/KG | | . |
| Barium | 66 | MG/KG | | . |
| Beryllium | 0.7 | MG/KG | | . |
| Beta Activity | 1580 | PCI/G | | 18.0 |
| Boron | 10 | MG/KG | | . |
| Cadmium | 2.4 | MG/KG | | . |
| Calcium | 17000 | MG/KG | | . |
| Cesium-137 | 5.25 | PCI/G | | 0.7 |
| Chloride IC | 185 | MG/KG | | . |
| Chromium | 280 | MG/KG | | . |
| Cobalt | 16 | MG/KG | | . |
| Copper | 240 | MG/KG | | . |
| Density | 1.32 | G/ML | | . |
| Fluoride SIE | 29 | MG/KG | | . |
| Lead (ICP) | 46 | MG/KG | | . |
| Lead (AA) | 124 | MG/KG | | . |
| Magnesium | 1900 | MG/KG | | . |
| Manganese | 260 | MG/KG | | . |
| Mercury | 9.3 | MG/KG | | . |
| Molybdenum | 3.4 | MG/KG | | . |
| Neptunium-237 | 9.7 | PCI/G | | 1.0 |
| Nickel | 1300 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.2 | PCI/G | | 0.1 |
| Plutonium-239 | 10.4 | PCI/G | | 1.0 |
| Potassium | 1300 | MG/KG | | . |
| Protactinium-234m | 493.5 | PCI/G | | 57.0 |
| Selenium (ICP) | 6.1 | MG/KG | < | . |
| Selenium (AA) | 5.42 | MG/KG | | . |
| Silicon | 530 | MG/KG | | . |
| Silver | 1.4 | MG/KG | | . |
| Sodium | 310 | MG/KG | | . |
| Sulfate | 4570 | MG/KG | | . |
| Technetium-99 | 3310 | PCI/G | | 45.0 |
| Thallium (AA) | 2.61 | MG/KG | | . |
| Thorium-228 | 1.2 | PCI/G | | 0.3 |
| Thorium-230 | 84.3 | PCI/G | | 3.0 |
| Thorium-232 | 1.53 | PCI/G | | 0.4 |
| Thorium-234 | 282.5 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 3.4 | % | | . |
| Total Phosphate | 5 | MG/KG | | . |
| Total Solids | 34.52 | % | | . |
| Uranium (K-25) | 784 | MG/KG | | . |
| Uranium (Y-12) | 2300 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 29.5 | PCI/G | | 1.0 |
| Vanadium | 16 | MG/KG | | . |
| Zinc | 160 | MG/KG | | . |
| pH | 7.1 | STD UNITS | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B7438-SL LABSMPID=910819-070 LOCATION=K-1417 STATION=B7438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 861 | PCI/G | | 20.00 |
| Aluminum | 8300 | MG/KG | | . |
| Antimony | 6 | MG/KG | < | . |
| Arsenic (ICP) | 110 | MG/KG | | . |
| Arsenic (AA) | 311 | MG/KG | | . |
| Barium | 82 | MG/KG | | . |
| Beryllium | 0.96 | MG/KG | | . |
| Beta Activity | 4570 | PCI/G | | 41.00 |
| Cadmium | 2.4 | MG/KG | | . |
| Calcium | 18000 | MG/KG | | . |
| Cesium-137 | 6.06 | PCI/G | | 0.62 |
| Chloride IC | 236 | MG/KG | | . |
| Chromium | 140 | MG/KG | | . |
| Cobalt | 16 | MG/KG | | . |
| Copper | 240 | MG/KG | | . |
| Density | 1.3 | G/ML | | . |
| Fluoride SIE | 26 | MG/KG | | . |
| Lead (ICP) | 45 | MG/KG | | . |
| Lead (AA) | 130 | MG/KG | | . |
| Magnesium | 1800 | MG/KG | | . |
| Manganese | 170 | MG/KG | | . |
| Mercury | 13 | MG/KG | | . |
| Molybdenum | 5.5 | MG/KG | | . |
| Neptunium-237 | 27.4 | PCI/G | | 2.40 |
| Nickel | 1000 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.314 | PCI/G | | 0.33 |
| Plutonium-239 | 11.5 | PCI/G | | 1.60 |
| Potassium | 1100 | MG/KG | | . |
| Protactinium-234m | 456 | PCI/G | | 51.00 |
| Selenium (ICP) | 6 | MG/KG | < | . |
| Selenium (AA) | 7.95 | MG/KG | | . |
| Silver | 1.4 | MG/KG | | . |
| Sodium | 410 | MG/KG | | . |
| Sulfate | 4620 | MG/KG | | . |
| Technetium-99 | 2990 | PCI/G | | 61.00 |
| Thallium (AA) | 4.52 | MG/KG | | . |
| Thorium-228 | 2.04 | PCI/G | | 0.65 |
| Thorium-230 | 61.8 | PCI/G | | 3.60 |
| Thorium-232 | 11.5 | PCI/G | | 1.60 |
| Thorium-234 | 264 | PCI/G | | 6.00 |
| Total Organic Carbon (TOC) | 7 | % | | . |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 37.39 | % | | . |
| Uranium (K-25) | 1010 | MG/KG | | . |
| Uranium (Y-12) | 2400 | MG/KG | | . |
| Uranium-235 | 1.2 | WGT % | | . |
| Uranium-235 | 25.6 | PCI/G | | 0.81 |
| Vanadium | 17 | MG/KG | | . |
| Water Weight Loss | 62.61 | % | | . |
| Zinc | 150 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B7738-SL LABSMPID=910819-071 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 576 | PCI/G | | 11.0 |
| Aluminum | 4900 | MG/KG | | . |
| Antimony | 4.8 | MG/KG | | . |
| Arsenic (ICP) | 48 | MG/KG | | . |
| Arsenic (AA) | 235 | MG/KG | | . |
| Barium | 45 | MG/KG | | . |
| Beryllium | 0.48 | MG/KG | | . |
| Beta Activity | 3070 | PCI/G | | 22.0 |
| Cadmium | 2.1 | MG/KG | | . |
| Calcium | 12000 | MG/KG | | . |
| Cesium-137 | 2.47 | PCI/G | | 0.4 |
| Chloride IC | 305 | MG/KG | | . |
| Chromium | 170 | MG/KG | | . |
| Cobalt | 11 | MG/KG | | . |
| Copper | 190 | MG/KG | | . |
| Density | 1.23 | G/ML | | . |
| Fluoride SIE | 26 | MG/KG | | . |
| Lead (ICP) | 33 | MG/KG | | . |
| Lead (AA) | 135 | MG/KG | | . |
| Magnesium | 1200 | MG/KG | | . |
| Manganese | 150 | MG/KG | | . |
| Mercury | 25 | MG/KG | | . |
| Molybdenum | 2.5 | MG/KG | | . |
| Neptunium-237 | 46.2 | PCI/G | | 3.3 |
| Nickel | 940 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.385 | PCI/G | | 0.3 |
| Plutonium-239 | 16.3 | PCI/G | | 2.2 |
| Potassium | 370 | MG/KG | | . |
| Protactinium-234m | 428 | PCI/G | | 47.9 |
| Selenium (ICP) | 4.8 | MG/KG | | . |
| Selenium (AA) | 5.35 | MG/KG | | . |
| Silver | 0.73 | MG/KG | | . |
| Sodium | 250 | MG/KG | | . |
| Sulfate | 4873 | MG/KG | | . |
| Technetium-99 | 3880 | PCI/G | | 130.0 |
| Thallium (AA) | 3.05 | MG/KG | | . |
| Thorium-228 | 24.13 | PCI/G | | 22.3 |
| Thorium-228 | 4.81 | PCI/G | | 1.1 |
| Thorium-230 | 294 | PCI/G | | 8.4 |
| Thorium-232 | 4.56 | PCI/G | | 1.0 |
| Thorium-234 | 270 | PCI/G | | 5.2 |
| Total Organic Carbon (TOC) | 6.4 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 32.46 | % | | . |
| Uranium (K-25) | 949 | MG/KG | | . |
| Uranium (Y-12) | 2300 | MG/KG | | . |
| Uranium-235 | 1.2 | WGT % | | . |
| Uranium-235 | 30.51 | PCI/G | | 0.7 |
| Vanadium | 9.6 | MG/KG | | . |
| Water Weight Loss | 67.54 | % | | . |
| Zinc | 120 | MG/KG | | . |
| pH | 7.2 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B7938-SL LABSMPID=910815-134 LOCATION=K-1417 STATION=B7938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 868 | PCI/G | | 14.0 |
| Aluminum | 5900 | MG/KG | | . |
| Antimony | 4.1 | MG/KG | < | . |
| Arsenic (ICP) | 67 | MG/KG | | . |
| Arsenic (AA) | 304 | MG/KG | | . |
| Barium | 54 | MG/KG | | . |
| Beryllium | 0.61 | MG/KG | | . |
| Beta Activity | 2520 | PCI/G | | 22.0 |
| Cadmium | 3 | MG/KG | | . |
| Calcium | 15000 | MG/KG | | . |
| Cesium-137 | 7.95 | PCI/G | | 0.7 |
| Chloride IC | 192 | MG/KG | | . |
| Chromium | 140 | MG/KG | | . |
| Cobalt | 14 | MG/KG | | . |
| Copper | 210 | MG/KG | | . |
| Density | 1.28 | G/ML | | . |
| Fluoride SIE | 19 | MG/KG | | . |
| Lead (ICP) | 37 | MG/KG | | . |
| Lead (AA) | 130 | MG/KG | | . |
| Magnesium | 1100 | MG/KG | | . |
| Manganese | 160 | MG/KG | | . |
| Mercury | 37 | MG/KG | | . |
| Molybdenum | 3.4 | MG/KG | | . |
| Neptunium-237 | 10.9 | PCI/G | | 1.0 |
| Nickel | 1000 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.51 | PCI/G | | 0.2 |
| Plutonium-239 | 17.3 | PCI/G | | 1.0 |
| Potassium | 370 | MG/KG | | . |
| Protactinium-234m | 720 | PCI/G | | 59.0 |
| Selenium (ICP) | 4.1 | MG/KG | < | . |
| Selenium (AA) | 9.54 | MG/KG | | . |
| Silver | 1.5 | MG/KG | | . |
| Sodium | 250 | MG/KG | | . |
| Sulfate | 6649 | MG/KG | | . |
| Technetium-99 | 5310 | PCI/G | | 57.0 |
| Thallium (AA) | 3.59 | MG/KG | | . |
| Thorium-228 | 1.11 | PCI/G | | 0.3 |
| Thorium-230 | 78.6 | PCI/G | | 3.0 |
| Thorium-232 | 0.96 | PCI/G | | 0.3 |
| Thorium-234 | 360 | PCI/G | | 7.0 |
| Total Organic Carbon (TOC) | 6.2 | % | | . |
| Total Phosphate | 8.5 | MG/KG | | . |
| Total Solids | 32.81 | % | | . |
| Uranium (K-25) | 1040 | MG/KG | | . |
| Uranium (Y-12) | 2200 | MG/KG | | . |
| Uranium-235 | 1.2 | WGT % | | . |
| Uranium-235 | 34.55 | PCI/G | | 0.9 |
| Vanadium | 11 | MG/KG | | . |
| Zinc | 150 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B938-SL LABSMPID=910815-135 LOCATION=K-1417 STATION=B938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Chloride IC | 181 | MG/KG | | . |
| Density | 1.58 | G/ML | | . |
| Fluoride SIE | 23 | MG/KG | | . |
| Nitrate | 23 | MG/KG | < | . |
| Sulfate | 2744 | MG/KG | | . |
| Total Organic Carbon (TOC) | 2.3 | % | | . |
| Total Phosphate | 3 | MG/KG | | . |
| Total Solids | 16.7 | % | | . |
| Uranium (K-25) | 294 | MG/KG | | . |
| Uranium (Y-12) | 540 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| pH | 7.8 | STD UNITS | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B9738-SL LABSMPID=910819-074 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 829 | PCI/G | | 21.00 |
| Aluminum | 9600 | MG/KG | | . |
| Antimony | 6.5 | MG/KG | < | . |
| Arsenic (ICP) | 69 | MG/KG | | . |
| Arsenic (AA) | 257 | MG/KG | | . |
| Barium | 73 | MG/KG | | . |
| Beryllium | 0.75 | MG/KG | | . |
| Beta Activity | 3750 | PCI/G | | 39.00 |
| Boron | 11 | MG/KG | | . |
| Cadmium | 3.3 | MG/KG | | . |
| Calcium | 20000 | MG/KG | | . |
| Cesium-137 | 3.83 | PCI/G | | 0.55 |
| Chloride IC | 278 | MG/KG | | . |
| Chromium | 260 | MG/KG | | . |
| Cobalt | 18 | MG/KG | | . |
| Copper | 290 | MG/KG | | . |
| Density | 1.21 | G/ML | | . |
| Fluoride SIE | 23 | MG/KG | | . |
| Lead (ICP) | 50 | MG/KG | | . |
| Lead (AA) | 142 | MG/KG | | . |
| Magnesium | 2000 | MG/KG | | . |
| Manganese | 230 | MG/KG | | . |
| Mercury | 2.7 | MG/KG | | . |
| Molybdenum | 4.3 | MG/KG | | . |
| Neptunium-237 | 23.4 | PCI/G | | 2.20 |
| Nickel | 1400 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0 | PCI/G | | 0.24 |
| Plutonium-239 | 7.52 | PCI/G | | 1.30 |
| Potassium | 1200 | MG/KG | | . |
| Protactinium-234m | 416 | PCI/G | | 64.00 |
| Selenium (ICP) | 6.5 | MG/KG | < | . |
| Selenium (AA) | 6.12 | MG/KG | | . |
| Silicon | 630 | MG/KG | | . |
| Silver | 1.2 | MG/KG | | . |
| Sodium | 510 | MG/KG | | . |
| Sulfate | 4907 | MG/KG | | . |
| Technetium-99 | 1970 | PCI/G | | 53.00 |
| Thallium (AA) | 3.82 | MG/KG | | . |
| Thorium-228 | 1.75 | PCI/G | | 0.61 |
| Thorium-230 | 107 | PCI/G | | 4.80 |
| Thorium-232 | 11.5 | PCI/G | | 1.60 |
| Thorium-234 | 243 | PCI/G | | 6.30 |
| Total Organic Carbon (TOC) | 5.3 | % | | . |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 28.65 | % | | . |
| Uranium (K-25) | 851 | MG/KG | | . |
| Uranium (Y-12) | 2700 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 24.9 | PCI/G | | 0.83 |
| Vanadium | 16 | MG/KG | | . |
| Water Weight Loss | 71.35 | % | | . |
| Zinc | 180 | MG/KG | | . |
| pH | 7.1 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=B9838-SL LABSMPID=910815-136 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 258 | PCI/G | | 8.0 |
| Aluminum | 13000 | MG/KG | | . |
| Antimony | 5 | MG/KG | < | . |
| Arsenic (ICP) | 12 | MG/KG | | . |
| Arsenic (AA) | 58.1 | MG/KG | | . |
| Barium | 34 | MG/KG | | . |
| Beryllium | 0.36 | MG/KG | | . |
| Beta Activity | 512 | PCI/G | | 10.0 |
| Cadmium | 1.1 | MG/KG | | . |
| Calcium | 96000 | MG/KG | | . |
| Cesium-137 | 21.8 | PCI/G | | 1.1 |
| Chloride IC | 107 | MG/KG | | . |
| Chromium | 99 | MG/KG | | . |
| Cobalt | 11 | MG/KG | | . |
| Copper | 120 | MG/KG | | . |
| Density | 1.53 | G/ML | | . |
| Fluoride SIE | 26 | MG/KG | | . |
| Lead (ICP) | 17 | MG/KG | | . |
| Lead (AA) | 49 | MG/KG | | . |
| Magnesium | 2900 | MG/KG | | . |
| Manganese | 250 | MG/KG | | . |
| Mercury | 31 | MG/KG | | . |
| Molybdenum | 0.99 | MG/KG | < | . |
| Neptunium-237 | 11 | PCI/G | | 1.0 |
| Nickel | 810 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.33 | PCI/G | | 0.2 |
| Plutonium-239 | 21.9 | PCI/G | | 1.0 |
| Potassium | 2200 | MG/KG | | . |
| Protactinium-234m | 436.5 | PCI/G | | 56.0 |
| Selenium (ICP) | 6.2 | MG/KG | | . |
| Selenium (AA) | 2.81 | MG/KG | | . |
| Silver | 0.8 | MG/KG | | . |
| Sodium | 680 | MG/KG | | . |
| Sulfate | 1600 | MG/KG | | . |
| Technetium-99 | 1200 | PCI/G | | 28.0 |
| Thallium (AA) | 0.61 | MG/KG | | . |
| Thorium-228 | 0.69 | PCI/G | | 0.3 |
| Thorium-230 | 68.8 | PCI/G | | 2.0 |
| Thorium-232 | 1.21 | PCI/G | | 0.3 |
| Thorium-234 | 120.5 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 0.88 | % | | . |
| Total Phosphate | 1.5 | MG/KG | | . |
| Total Solids | 51.66 | % | | . |
| Uranium (K-25) | 340 | MG/KG | | . |
| Uranium (Y-12) | 820 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 13.55 | PCI/G | | 0.7 |
| Vanadium | 15 | MG/KG | | . |
| Zinc | 52 | MG/KG | | . |
| pH | 11.6 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C1038-SL LABSMPID=910815-140 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 335 | PCI/G | | 9.0 |
| Aluminum | 18000 | MG/KG | | . |
| Antimony | 4.8 | MG/KG | < | . |
| Arsenic (ICP) | 15 | MG/KG | | . |
| Arsenic (AA) | 47.6 | MG/KG | | . |
| Barium | 52 | MG/KG | | . |
| Beryllium | 0.46 | MG/KG | | . |
| Beta Activity | 492 | PCI/G | | 10.0 |
| Cadmium | 1.5 | MG/KG | | . |
| Calcium | 89000 | MG/KG | | . |
| Cesium-137 | 21.35 | PCI/G | | 1.1 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 110 | MG/KG | | . |
| Cobalt | 12 | MG/KG | | . |
| Copper | 150 | MG/KG | | . |
| Density | 1.43 | G/ML | | . |
| Fluoride SIE | 17 | MG/KG | | . |
| Lead (ICP) | 22 | MG/KG | | . |
| Lead (AA) | 44.9 | MG/KG | | . |
| Magnesium | 2900 | MG/KG | | . |
| Manganese | 420 | MG/KG | | . |
| Mercury | 7.7 | MG/KG | | . |
| Molybdenum | 0.95 | MG/KG | < | . |
| Neptunium-237 | 15.9 | PCI/G | | 1.0 |
| Nickel | 890 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.32 | PCI/G | | 0.2 |
| Plutonium-239 | 22.4 | PCI/G | | 1.0 |
| Potassium | 3800 | MG/KG | | . |
| Protactinium-234m | 535 | PCI/G | | 69.0 |
| Selenium (ICP) | 4.8 | MG/KG | < | . |
| Selenium (AA) | 1.78 | MG/KG | | . |
| Silver | 0.57 | MG/KG | < | . |
| Sodium | 940 | MG/KG | | . |
| Sulfate | 1341 | MG/KG | | . |
| Technetium-99 | 1030 | PCI/G | | 26.0 |
| Thallium (AA) | 0.62 | MG/KG | | . |
| Thorium-228 | 1.07 | PCI/G | | 0.3 |
| Thorium-230 | 73.4 | PCI/G | | 3.0 |
| Thorium-232 | 1.34 | PCI/G | | 0.4 |
| Thorium-234 | 141.5 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 1 | % | | . |
| Total Phosphate | 1.5 | MG/KG | | . |
| Total Solids | 54.02 | % | | . |
| Uranium (K-25) | 391 | MG/KG | | . |
| Uranium (Y-12) | 1000 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 14.6 | PCI/G | | 0.9 |
| Vanadium | 20 | MG/KG | | . |
| Zinc | 66 | MG/KG | | . |
| pH | 11.4 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C1538-SL LABSMPID=910819-075 LOCATION=K-1417 STATION=C1538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 411 | PCI/G | | 13.00 |
| Aluminum | 21000 | MG/KG | | . |
| Antimony | 5 | MG/KG | < | . |
| Arsenic (ICP) | 13 | MG/KG | | . |
| Arsenic (AA) | 43.7 | MG/KG | | . |
| Barium | 50 | MG/KG | | . |
| Beryllium | 0.43 | MG/KG | | . |
| Beta Activity | 1220 | PCI/G | | 21.00 |
| Cadmium | 1.2 | MG/KG | | . |
| Calcium | 81000 | MG/KG | | . |
| Cesium-137 | 16 | PCI/G | | 0.90 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 100 | MG/KG | | . |
| Cobalt | 12 | MG/KG | | . |
| Copper | 140 | MG/KG | | . |
| Density | 0.92 | G/ML | | . |
| Fluoride SIE | 24 | MG/KG | | . |
| Lead (ICP) | 22 | MG/KG | | . |
| Lead (AA) | 41 | MG/KG | | . |
| Magnesium | 2800 | MG/KG | | . |
| Manganese | 310 | MG/KG | | . |
| Mercury | 13 | MG/KG | | . |
| Molybdenum | 0.99 | MG/KG | < | . |
| Neptunium-237 | 14.7 | PCI/G | | 1.70 |
| Nickel | 890 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.239 | PCI/G | | 0.29 |
| Plutonium-239 | 14.3 | PCI/G | | 1.70 |
| Potassium | 3300 | MG/KG | | . |
| Protactinium-234m | 413 | PCI/G | | 53.00 |
| Selenium (ICP) | 5 | MG/KG | < | . |
| Selenium (AA) | 0.93 | MG/KG | | . |
| Silver | 0.77 | MG/KG | | . |
| Sodium | 730 | MG/KG | | . |
| Sulfate | 1716 | MG/KG | | . |
| Technetium-99 | 797 | PCI/G | | 34.00 |
| Thallium (AA) | 0.92 | MG/KG | | . |
| Thorium-228 | 1.58 | PCI/G | | 0.55 |
| Thorium-230 | 88 | PCI/G | | 4.10 |
| Thorium-232 | 1.53 | PCI/G | | 0.56 |
| Thorium-234 | 128 | PCI/G | | 4.90 |
| Total Organic Carbon (TOC) | 1.1 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 65.76 | % | | . |
| Uranium (K-25) | 355 | MG/KG | | . |
| Uranium (Y-12) | 810 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 12.8 | PCI/G | | 0.63 |
| Vanadium | 23 | MG/KG | | . |
| Water Weight Loss | 34.24 | % | | . |
| Zinc | 61 | MG/KG | | . |
| pH | 11.2 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C1638-SL LABSMPID=910819-078 LOCATION=K-1417 STATION=C1638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 286 | PCI/G | | 11.00 |
| Aluminum | 20000 | MG/KG | | . |
| Antimony | 4.9 | MG/KG | < | . |
| Arsenic (ICP) | 28 | MG/KG | | . |
| Arsenic (AA) | 38.4 | MG/KG | | . |
| Barium | 62 | MG/KG | | . |
| Beryllium | 0.46 | MG/KG | | . |
| Beta Activity | 913 | PCI/G | | 18.00 |
| Cadmium | 1.3 | MG/KG | | . |
| Calcium | 72000 | MG/KG | | . |
| Cesium-137 | 13.3 | PCI/G | | 0.77 |
| Chloride IC | 156 | MG/KG | | . |
| Chromium | 100 | MG/KG | | . |
| Cobalt | 13 | MG/KG | | . |
| Copper | 120 | MG/KG | | . |
| Density | 1.71 | G/ML | | . |
| Fluoride SIE | 140 | MG/KG | | . |
| Lead (ICP) | 26 | MG/KG | | . |
| Lead (AA) | 43.5 | MG/KG | | . |
| Magnesium | 2000 | MG/KG | | . |
| Manganese | 740 | MG/KG | | . |
| Mercury | 48 | MG/KG | | . |
| Molybdenum | 1.5 | MG/KG | | . |
| Neptunium-237 | 14.1 | PCI/G | | 1.60 |
| Nickel | 770 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <P | . |
| Plutonium-238 | 0.259 | PCI/G | | 0.27 |
| Plutonium-239 | 14.1 | PCI/G | | 1.60 |
| Potassium | 2600 | MG/KG | | . |
| Protactinium-234m | 123 | PCI/G | | 57.00 |
| Selenium (ICP) | 5.3 | MG/KG | | . |
| Selenium (AA) | 0.94 | MG/KG | | . |
| Silver | 0.59 | MG/KG | < | . |
| Sodium | 670 | MG/KG | | . |
| Sulfate | 1220 | MG/KG | | . |
| Technetium-99 | 494 | PCI/G | | 28.00 |
| Thallium (AA) | 0.71 | MG/KG | | . |
| Thorium-228 | 0.991 | PCI/G | | 0.41 |
| Thorium-230 | 39.1 | PCI/G | | 2.60 |
| Thorium-232 | 11.4 | PCI/G | | 1.40 |
| Thorium-234 | 66.7 | PCI/G | | 3.90 |
| Total Organic Carbon (TOC) | 0.79 | % | | . |
| Total Phosphate | 130 | MG/KG | | . |
| Total Solids | 67.05 | % | | . |
| Uranium (K-25) | 387 | MG/KG | | . |
| Uranium (Y-12) | 700 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Vanadium | 25 | MG/KG | | . |
| Water Weight Loss | 32.95 | % | | . |
| Zinc | 68 | MG/KG | | . |
| pH | 10.7 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2138-SL LABSMPID=910819-092 LOCATION=K-1417 STATION=C2138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 160 | PCI/G | | 6.0 |
| Aluminum | 17000 | MG/KG | | . |
| Antimony | 4.7 | MG/KG | < | . |
| Arsenic (ICP) | 4.7 | MG/KG | < | . |
| Arsenic (AA) | 31.8 | MG/KG | | . |
| Barium | 53 | MG/KG | | . |
| Beryllium | 0.33 | MG/KG | | . |
| Beta Activity | 260 | PCI/G | | 7.0 |
| Cadmium | 0.92 | MG/KG | | . |
| Calcium | 50000 | MG/KG | | . |
| Cesium-137 | 10.2 | PCI/G | | 0.8 |
| Chloride IC | 96 | MG/KG | | . |
| Chromium | 120 | MG/KG | | . |
| Cobalt | 10 | MG/KG | | . |
| Copper | 71 | MG/KG | | . |
| Density | 1.84 | G/ML | | . |
| Fluoride SIE | 320 | MG/KG | | . |
| Lead (ICP) | 20 | MG/KG | | . |
| Lead (AA) | 32.8 | MG/KG | | . |
| Magnesium | 1700 | MG/KG | | . |
| Manganese | 730 | MG/KG | | . |
| Mercury | 9.8 | MG/KG | | . |
| Molybdenum | 0.96 | MG/KG | | . |
| Neptunium-237 | 8.4 | PCI/G | | 1.0 |
| Nickel | 450 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.09 | PCI/G | | 0.1 |
| Plutonium-239 | 11.1 | PCI/G | | 1.0 |
| Potassium | 3200 | MG/KG | | . |
| Protactinium-234m | 200 | PCI/G | | 53.0 |
| Selenium (ICP) | 4.7 | MG/KG | < | . |
| Selenium (AA) | 1.68 | MG/KG | | . |
| Silver | 0.56 | MG/KG | < | . |
| Sodium | 810 | MG/KG | | . |
| Sulfate | 848 | MG/KG | | . |
| Technetium-99 | 474 | PCI/G | | 19.0 |
| Thallium (AA) | 0.67 | MG/KG | | . |
| Thorium-228 | 0.74 | PCI/G | | 0.3 |
| Thorium-230 | 37.8 | PCI/G | | 2.0 |
| Thorium-232 | 1.14 | PCI/G | | 0.4 |
| Thorium-234 | 72 | PCI/G | | 4.0 |
| Total Organic Carbon (TOC) | 0.46 | % | | . |
| Total Phosphate | 76 | MG/KG | | . |
| Total Solids | 71.44 | % | | . |
| Uranium (K-25) | 157 | MG/KG | | . |
| Uranium (Y-12) | 350 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 6.65 | PCI/G | | 0.7 |
| Vanadium | 21 | MG/KG | | . |
| Water Weight Loss | 28.56 | % | | . |
| Zinc | 46 | MG/KG | | . |
| pH | 11.1 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2338-SL LABSMPID=910819-076 LOCATION=K-1417 STATION=C2338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 221 | PCI/G | | 9.20 |
| Aluminum | 7600 | MG/KG | | . |
| Antimony | 4.4 | MG/KG | < | . |
| Arsenic (ICP) | 4.4 | MG/KG | < | . |
| Arsenic (AA) | 37 | MG/KG | | . |
| Barium | 59 | MG/KG | | . |
| Beryllium | 0.53 | MG/KG | | . |
| Beta Activity | 857 | PCI/G | | 17.00 |
| Cadmium | 1.3 | MG/KG | | . |
| Calcium | 3500 | MG/KG | | . |
| Cesium-137 | 8.6 | PCI/G | | 0.66 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 510 | MG/KG | | . |
| Cobalt | 12 | MG/KG | | . |
| Copper | 81 | MG/KG | | . |
| Density | 1.68 | G/ML | | . |
| Fluoride SIE | 230 | MG/KG | | . |
| Lead (ICP) | 23 | MG/KG | | . |
| Lead (AA) | 42.3 | MG/KG | | . |
| Magnesium | 1500 | MG/KG | | . |
| Manganese | 470 | MG/KG | | . |
| Mercury | 5.8 | MG/KG | | . |
| Molybdenum | 3.4 | MG/KG | | . |
| Neptunium-237 | 18.8 | PCI/G | | 1.90 |
| Nickel | 590 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.227 | PCI/G | | 0.24 |
| Plutonium-239 | 15.9 | PCI/G | | 1.70 |
| Potassium | 1400 | MG/KG | | . |
| Protactinium-234m | 385 | PCI/G | | 48.00 |
| Selenium (ICP) | 4.4 | MG/KG | < | . |
| Selenium (AA) | 1.01 | MG/KG | | . |
| Silver | 0.53 | MG/KG | < | . |
| Sodium | 230 | MG/KG | | . |
| Sulfate | 929 | MG/KG | | . |
| Technetium-99 | 414 | PCI/G | | 27.00 |
| Thallium (AA) | 0.55 | MG/KG | | . |
| Thorium-228 | 0.577 | PCI/G | | 0.33 |
| Thorium-230 | 48.2 | PCI/G | | 3.00 |
| Thorium-232 | 4.81 | PCI/G | | 0.96 |
| Thorium-234 | 80.3 | PCI/G | | 4.00 |
| Total Organic Carbon (TOC) | 0.69 | % | | . |
| Total Phosphate | 16 | MG/KG | | . |
| Total Solids | 59.73 | % | | . |
| Uranium (K-25) | 224 | MG/KG | | . |
| Uranium (Y-12) | 720 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 10.6 | PCI/G | | 0.63 |
| Vanadium | 17 | MG/KG | | . |
| Water Weight Loss | 40.27 | % | | . |
| Zinc | 62 | MG/KG | | . |
| pH | 10.1 | STD UNITS | P | . |

Source: dataset ponds103 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2538-SL LABSMPID=910819-079 LOCATION=K-1417 STATION=C2538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 282 | PCI/G | | 12.00 |
| Aluminum | 19000 | MG/KG | | . |
| Antimony | 4 | MG/KG | < | . |
| Arsenic (ICP) | 10 | MG/KG | | . |
| Arsenic (AA) | 28.1 | MG/KG | | . |
| Barium | 54 | MG/KG | | . |
| Beryllium | 0.38 | MG/KG | | . |
| Beta Activity | 945 | PCI/G | | 20.00 |
| Cadmium | 1 | MG/KG | | . |
| Calcium | 70000 | MG/KG | | . |
| Cesium-137 | 16.6 | PCI/G | | 0.95 |
| Chloride IC | 110 | MG/KG | | . |
| Chromium | 87 | MG/KG | | . |
| Cobalt | 13 | MG/KG | | . |
| Copper | 99 | MG/KG | | . |
| Density | 1.41 | G/ML | | . |
| Fluoride SIE | 150 | MG/KG | | . |
| Lead (ICP) | 24 | MG/KG | | . |
| Lead (AA) | 33.8 | MG/KG | | . |
| Magnesium | 2600 | MG/KG | | . |
| Manganese | 720 | MG/KG | | . |
| Mercury | 23 | MG/KG | | . |
| Molybdenum | 0.81 | MG/KG | < | . |
| Neptunium-237 | 24.1 | PCI/G | | 2.40 |
| Nickel | 660 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <P | . |
| Plutonium-238 | 0.361 | PCI/G | | 0.38 |
| Plutonium-239 | 18.9 | PCI/G | | 2.10 |
| Potassium | 3200 | MG/KG | | . |
| Protactinium-234m | 445 | PCI/G | | 59.00 |
| Selenium (ICP) | 4 | MG/KG | < | . |
| Selenium (AA) | 1.57 | MG/KG | | . |
| Silver | 0.48 | MG/KG | < | . |
| Sodium | 910 | MG/KG | | . |
| Sulfate | 1080 | MG/KG | | . |
| Technetium-99 | 721 | PCI/G | | 35.00 |
| Thallium (AA) | 0.56 | MG/KG | | . |
| Thorium-228 | 2.16 | PCI/G | | 0.72 |
| Thorium-230 | 67.1 | PCI/G | | 4.00 |
| Thorium-232 | 11.5 | PCI/G | | 1.70 |
| Thorium-234 | 78.4 | PCI/G | | 5.20 |
| Total Organic Carbon (TOC) | 1.1 | % | | . |
| Total Phosphate | 60 | MG/KG | | . |
| Uranium (K-25) | 314 | MG/KG | | . |
| Uranium (Y-12) | 1700 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 11.7 | PCI/G | | 7.00 |
| Vanadium | 24 | MG/KG | | . |
| Water Weight Loss | 54.19 | % | | . |
| Zinc | 54 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2738-SL LABSMPID=910819-077 LOCATION=K-1417 STATION=C2738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 596 | PCI/G | | 15.00 |
| Aluminum | 13000 | MG/KG | | . |
| Antimony | 42 | MG/KG | | . |
| Arsenic (ICP) | 46 | MG/KG | | . |
| Arsenic (AA) | 65.5 | MG/KG | | . |
| Barium | 55 | MG/KG | | . |
| Beryllium | 0.25 | MG/KG | | . |
| Beta Activity | 2450 | PCI/G | | 28.00 |
| Cadmium | 2.5 | MG/KG | | . |
| Calcium | 110000 | MG/KG | | . |
| Cesium-137 | 41.1 | PCI/G | | 1.40 |
| Chloride IC | 103 | MG/KG | | . |
| Chromium | 250 | MG/KG | | . |
| Cobalt | 22 | MG/KG | | . |
| Copper | 230 | MG/KG | | . |
| Density | 1.46 | G/ML | | . |
| Fluoride SIE | 160 | MG/KG | | . |
| Lead (ICP) | 42 | MG/KG | | . |
| Lead (AA) | 55.3 | MG/KG | | . |
| Magnesium | 2800 | MG/KG | | . |
| Manganese | 330 | MG/KG | | . |
| Mercury | 44 | MG/KG | | . |
| Molybdenum | 8.4 | MG/KG | | . |
| Neptunium-237 | 54.4 | PCI/G | | 3.00 |
| Nickel | 2200 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.885 | PCI/G | | 0.42 |
| Plutonium-239 | 57.4 | PCI/G | | 3.10 |
| Potassium | 3200 | MG/KG | | . |
| Protactinium-234m | 732 | PCI/G | | 65.00 |
| Selenium (ICP) | 42 | MG/KG | | . |
| Selenium (AA) | 1.2 | MG/KG | | . |
| Silver | 6 | MG/KG | | . |
| Sodium | 1100 | MG/KG | | . |
| Sulfate | 1034 | MG/KG | | . |
| Technetium-99 | 1540 | PCI/G | | 420.00 |
| Thallium (AA) | 0.48 | MG/KG | | . |
| Thorium-228 | 2.28 | PCI/G | | 0.62 |
| Thorium-230 | 141 | PCI/G | | 4.90 |
| Thorium-232 | 18.3 | PCI/G | | 1.80 |
| Thorium-234 | 243 | PCI/G | | 6.20 |
| Total Organic Carbon (TOC) | 1.1 | % | | . |
| Total Phosphate | 65 | MG/KG | | . |
| Total Solids | 48.71 | % | | . |
| Uranium (K-25) | 827 | MG/KG | | . |
| Uranium (Y-12) | 1400 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Vanadium | 16 | MG/KG | | . |
| Water Weight Loss | 51.29 | % | | . |
| Zinc | 100 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2838-SL LABSMPID=910819-084 LOCATION=K-1417 STATION=C2838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 201 | PCI/G | | 9.10 |
| Aluminum | 24000 | MG/KG | | . |
| Antimony | 50 | MG/KG | < | . |
| Arsenic (ICP) | 63 | MG/KG | | . |
| Arsenic (AA) | 22.1 | MG/KG | | . |
| Barium | 69 | MG/KG | | . |
| Beryllium | 0.45 | MG/KG | | . |
| Beta Activity | 700 | PCI/G | | 16.00 |
| Cadmium | 3 | MG/KG | < | . |
| Calcium | 100000 | MG/KG | | . |
| Cesium-137 | 10.2 | PCI/G | | 0.68 |
| Chloride IC | 110 | MG/KG | | . |
| Chromium | 86 | MG/KG | | . |
| Cobalt | 14 | MG/KG | | . |
| Copper | 84 | MG/KG | | . |
| Density | 1.66 | G/ML | | . |
| Fluoride SIE | 200 | MG/KG | | . |
| Lead (ICP) | 50 | MG/KG | < | . |
| Lead (AA) | 43.4 | MG/KG | | . |
| Magnesium | 2700 | MG/KG | | . |
| Manganese | 810 | MG/KG | | . |
| Mercury | 25 | MG/KG | | . |
| Molybdenum | 10 | MG/KG | < | . |
| Neptunium-237 | 15 | PCI/G | | 1.70 |
| Nickel | 650 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.181 | PCI/G | | 0.26 |
| Plutonium-239 | 10.3 | PCI/G | | 1.40 |
| Potassium | 4600 | MG/KG | | . |
| Protactinium-234m | 275 | PCI/G | | 44.00 |
| Selenium (ICP) | 50 | MG/KG | < | . |
| Selenium (AA) | 0.93 | MG/KG | | . |
| Silver | 6 | MG/KG | < | . |
| Sodium | 1500 | MG/KG | | . |
| Sulfate | 882 | MG/KG | | . |
| Technetium-99 | 449 | PCI/G | | 26.00 |
| Thallium (AA) | 0.64 | MG/KG | | . |
| Thorium-228 | 0.949 | PCI/G | | 0.41 |
| Thorium-230 | 45.2 | PCI/G | | 2.90 |
| Thorium-232 | 2.21 | PCI/G | | 0.65 |
| Thorium-234 | 64.7 | PCI/G | | 3.60 |
| Total Organic Carbon (TOC) | 0.51 | % | | . |
| Total Phosphate | 24 | MG/KG | | . |
| Total Solids | 61.73 | % | | . |
| Uranium (K-25) | 200 | MG/KG | | . |
| Uranium (Y-12) | 290 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 7.17 | PCI/G | | 0.58 |
| Vanadium | 31 | MG/KG | | . |
| Water Weight Loss | 38.27 | % | | . |
| Zinc | 75 | MG/KG | | . |
| pH | 10.9 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C2938-SL LABSMPID=910819-081 LOCATION=K-1417 STATION=C2938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 487 | PCI/G | | 15.00 |
| Aluminum | 16000 | MG/KG | | . |
| Antimony | 63 | MG/KG | < | . |
| Arsenic (ICP) | 63 | MG/KG | < | . |
| Arsenic (AA) | 58.6 | MG/KG | | . |
| Barium | 66 | MG/KG | | . |
| Beryllium | 0.38 | MG/KG | < | . |
| Beta Activity | 2010 | PCI/G | | 28.00 |
| Cadmium | 3.8 | MG/KG | < | . |
| Calcium | 120000 | MG/KG | | . |
| Cesium-137 | 37.6 | PCI/G | | 1.40 |
| Chloride IC | 92 | MG/KG | | . |
| Chromium | 250 | MG/KG | | . |
| Cobalt | 23 | MG/KG | | . |
| Copper | 230 | MG/KG | | . |
| Density | 1.55 | G/ML | | . |
| Fluoride SIE | 160 | MG/KG | | . |
| Lead (ICP) | 63 | MG/KG | < | . |
| Lead (AA) | 56.1 | MG/KG | | . |
| Magnesium | 3400 | MG/KG | | . |
| Manganese | 480 | MG/KG | | . |
| Mercury | 49 | MG/KG | | . |
| Molybdenum | 13 | MG/KG | < | . |
| Neptunium-237 | 62.7 | PCI/G | | 3.60 |
| Nickel | 2100 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.318 | PCI/G | | 0.34 |
| Plutonium-239 | 38.5 | PCI/G | | 2.90 |
| Potassium | 3500 | MG/KG | | . |
| Protactinium-234m | 681 | PCI/G | | 67.00 |
| Selenium (ICP) | 63 | MG/KG | < | . |
| Selenium (AA) | 1.9 | MG/KG | | . |
| Silver | 7.5 | MG/KG | < | . |
| Sodium | 1100 | MG/KG | | . |
| Sulfate | 1360 | MG/KG | | . |
| Technetium-99 | 1360 | PCI/G | | 44.00 |
| Thallium (AA) | 0.54 | MG/KG | | . |
| Thorium-228 | 2.12 | PCI/G | | 0.67 |
| Thorium-230 | 157 | PCI/G | | 5.80 |
| Thorium-232 | 20.2 | PCI/G | | 2.10 |
| Thorium-234 | 235 | PCI/G | | 7.20 |
| Total Organic Carbon (TOC) | 0.96 | % | | . |
| Total Phosphate | 34 | MG/KG | | . |
| Total Solids | 55.63 | % | | . |
| Uranium (K-25) | 777 | MG/KG | | . |
| Uranium (Y-12) | 930 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 24.6 | PCI/G | | 0.86 |
| Vanadium | 22 | MG/KG | | . |
| Water Weight Loss | 44.37 | % | | . |
| Zinc | 120 | MG/KG | | . |
| pH | 10.8 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C3038-SL LABSMPID=910819-093 LOCATION=K-1417 STATION=C3038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 260 | PCI/G | | 8.0 |
| Aluminum | 13000 | MG/KG | | . |
| Antimony | 44 | MG/KG | < | . |
| Arsenic (ICP) | 44 | MG/KG | < | . |
| Arsenic (AA) | 34.7 | MG/KG | | . |
| Barium | 38 | MG/KG | | . |
| Beryllium | 0.26 | MG/KG | < | . |
| Beta Activity | 346 | PCI/G | | 8.0 |
| Cadmium | 2.6 | MG/KG | < | . |
| Calcium | 180000 | MG/KG | | . |
| Cesium-137 | 14.75 | PCI/G | | 0.9 |
| Chloride IC | 88 | MG/KG | | . |
| Chromium | 48 | MG/KG | | . |
| Cobalt | 6.8 | MG/KG | | . |
| Copper | 77 | MG/KG | | . |
| Density | 1.56 | G/ML | | . |
| Fluoride SIE | 210 | MG/KG | | . |
| Lead (ICP) | 44 | MG/KG | < | . |
| Lead (AA) | 36.2 | MG/KG | | . |
| Magnesium | 4100 | MG/KG | | . |
| Manganese | 230 | MG/KG | | . |
| Mercury | 6.8 | MG/KG | | . |
| Molybdenum | 8.7 | MG/KG | < | . |
| Neptunium-237 | 11.1 | PCI/G | | 1.0 |
| Nickel | 360 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.18 | PCI/G | | 0.1 |
| Plutonium-239 | 15.9 | PCI/G | | 1.0 |
| Potassium | 2800 | MG/KG | | . |
| Protactinium-234m | 308.5 | PCI/G | | 48.0 |
| Selenium (ICP) | 44 | MG/KG | < | . |
| Selenium (AA) | 2.03 | MG/KG | | . |
| Silver | 5.2 | MG/KG | < | . |
| Sodium | 2000 | MG/KG | | . |
| Sulfate | 1050 | MG/KG | | . |
| Technetium-99 | 758 | PCI/G | | 23.0 |
| Thallium (AA) | 0.52 | MG/KG | | . |
| Thorium-228 | 0.78 | PCI/G | | 0.3 |
| Thorium-230 | 53.4 | PCI/G | | 2.0 |
| Thorium-232 | 0.44 | PCI/G | | 0.2 |
| Thorium-234 | 74.5 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 0.63 | % | | . |
| Total Phosphate | 10 | MG/KG | | . |
| Total Solids | 59.52 | % | | . |
| Uranium (K-25) | 273 | MG/KG | | . |
| Uranium (Y-12) | 610 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 9.8 | PCI/G | | 0.7 |
| Vanadium | 21 | MG/KG | | . |
| Water Weight Loss | 40.48 | % | | . |
| Zinc | 68 | MG/KG | | . |
| pH | 10.8 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C3138-SL LABSMPID=910819-080 LOCATION=K-1417 STATION=C3138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 151 | PCI/G | | 7.50 |
| Aluminum | 18000 | MG/KG | | . |
| Antimony | 4.3 | MG/KG | < | . |
| Arsenic (ICP) | 23 | MG/KG | | . |
| Arsenic (AA) | 42.2 | MG/KG | | . |
| Barium | 56 | MG/KG | | . |
| Beryllium | 0.61 | MG/KG | | . |
| Beta Activity | 476 | PCI/G | | 12.00 |
| Cadmium | 1.2 | MG/KG | | . |
| Calcium | 58000 | MG/KG | | . |
| Cesium-137 | 9.58 | PCI/G | | 0.69 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 63 | MG/KG | | . |
| Cobalt | 12 | MG/KG | | . |
| Copper | 120 | MG/KG | | . |
| Density | 1.29 | G/ML | | . |
| Fluoride SIE | 210 | MG/KG | | . |
| Lead (ICP) | 35 | MG/KG | | . |
| Lead (AA) | 48.5 | MG/KG | | . |
| Magnesium | 3000 | MG/KG | | . |
| Manganese | 490 | MG/KG | | . |
| Mercury | 26 | MG/KG | | . |
| Molybdenum | 0.86 | MG/KG | < | . |
| Neptunium-237 | 7.42 | PCI/G | | 1.10 |
| Nickel | 410 | MG/KG | | . |
| Nitrate | 10 | MG/KG | <P | . |
| Plutonium-238 | 0.0863 | PCI/G | | 0.12 |
| Plutonium-239 | 7.46 | PCI/G | | 1.10 |
| Potassium | 2400 | MG/KG | | . |
| Protactinium-234m | 116 | PCI/G | | 38.00 |
| Selenium (ICP) | 4.3 | MG/KG | < | . |
| Selenium (AA) | 2.03 | MG/KG | | . |
| Silver | 0.52 | MG/KG | < | . |
| Sodium | 770 | MG/KG | | . |
| Sulfate | 1420 | MG/KG | | . |
| Technetium-99 | 332 | PCI/G | | 24.00 |
| Thallium (AA) | 1.17 | MG/KG | | . |
| Thorium-228 | 0.906 | PCI/G | | 0.40 |
| Thorium-230 | 31.6 | PCI/G | | 2.40 |
| Thorium-232 | 5.39 | PCI/G | | 0.97 |
| Thorium-234 | 59 | PCI/G | | 3.10 |
| Total Organic Carbon (TOC) | 1.4 | % | | . |
| Total Phosphate | 18 | MG/KG | | . |
| Total Solids | 75.63 | % | | . |
| Uranium (K-25) | 200 | MG/KG | | . |
| Uranium (Y-12) | 400 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 5.03 | PCI/G | | 0.52 |
| Vanadium | 24 | MG/KG | | . |
| Water Weight Loss | 24.37 | % | | . |
| Zinc | 68 | MG/KG | | . |
| pH | 9 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C3338-SL LABSMPID=910819-085 LOCATION=K-1417 STATION=C3338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 561 | PCI/G | | 11.0 |
| Aluminum | 5800 | MG/KG | | . |
| Antimony | 4.4 | MG/KG | < | . |
| Arsenic (ICP) | 41 | MG/KG | | . |
| Arsenic (AA) | 379 | MG/KG | | . |
| Barium | 42 | MG/KG | | . |
| Beryllium | 0.43 | MG/KG | | . |
| Beta Activity | 1350 | PCI/G | | 16.0 |
| Cadmium | 1.9 | MG/KG | | . |
| Calcium | 10000 | MG/KG | | . |
| Cesium-137 | 4.64 | PCI/G | | 0.6 |
| Chloride IC | 245 | MG/KG | | . |
| Chromium | 140 | MG/KG | | . |
| Cobalt | 10 | MG/KG | | . |
| Copper | 170 | MG/KG | | . |
| Density | 1.2 | G/ML | | . |
| Fluoride SIE | 30 | MG/KG | | . |
| Lead (ICP) | 27 | MG/KG | | . |
| Lead (AA) | 187 | MG/KG | | . |
| Magnesium | 1000 | MG/KG | | . |
| Manganese | 120 | MG/KG | | . |
| Mercury | 4.7 | MG/KG | | . |
| Molybdenum | 2.7 | MG/KG | | . |
| Neptunium-237 | 6.6 | PCI/G | | 1.0 |
| Nickel | 830 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.35 | PCI/G | | 0.2 |
| Plutonium-239 | 10.3 | PCI/G | | 1.0 |
| Potassium | 490 | MG/KG | | . |
| Protactinium-234m | 474 | PCI/G | | 55.0 |
| Selenium (ICP) | 4.4 | MG/KG | < | . |
| Selenium (AA) | 13.6 | MG/KG | | . |
| Silver | 0.65 | MG/KG | | . |
| Sodium | 290 | MG/KG | | . |
| Sulfate | 4003 | MG/KG | | . |
| Technetium-99 | 3230 | PCI/G | | 44.0 |
| Thallium (AA) | 3.73 | MG/KG | | . |
| Thorium-228 | 0.43 | PCI/G | | 0.2 |
| Thorium-230 | 59.4 | PCI/G | | 2.0 |
| Thorium-232 | 1.04 | PCI/G | | 0.3 |
| Thorium-234 | 250 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 4.5 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 26.3 | % | | . |
| Uranium (K-25) | 223 | MG/KG | | . |
| Uranium (Y-12) | 2800 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 25.4 | PCI/G | | 0.8 |
| Vanadium | 9.5 | MG/KG | | . |
| Water Weight Loss | 73.7 | % | | . |
| Zinc | 120 | MG/KG | | . |
| pH | 7.2 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C3938-SL LABSMPID=910819-082 LOCATION=K-1417 STATION=C3938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 318 | PCI/G | | 12.00 |
| Aluminum | 26000 | MG/KG | | . |
| Antimony | 4.4 | MG/KG | < | . |
| Arsenic (ICP) | 4.4 | MG/KG | < | . |
| Arsenic (AA) | 37 | MG/KG | | . |
| Barium | 47 | MG/KG | | . |
| Beryllium | 0.46 | MG/KG | | . |
| Beta Activity | 828 | PCI/G | | 18.00 |
| Cadmium | 1.6 | MG/KG | | . |
| Calcium | 77000 | MG/KG | | . |
| Cesium-137 | 13.8 | PCI/G | | 0.88 |
| Chloride IC | 50 | MG/KG | < | . |
| Chromium | 68 | MG/KG | | . |
| Cobalt | 10 | MG/KG | | . |
| Copper | 92 | MG/KG | | . |
| Density | 1.2 | G/ML | | . |
| Fluoride SIE | 81 | MG/KG | | . |
| Lead (ICP) | 26 | MG/KG | | . |
| Lead (AA) | 44.5 | MG/KG | | . |
| Magnesium | 2700 | MG/KG | | . |
| Manganese | 380 | MG/KG | | . |
| Mercury | 59 | MG/KG | | . |
| Molybdenum | 0.88 | MG/KG | < | . |
| Neptunium-237 | 17 | PCI/G | | 1.90 |
| Nickel | 490 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.268 | PCI/G | | 0.32 |
| Plutonium-239 | 17.6 | PCI/G | | 1.90 |
| Potassium | 4100 | MG/KG | | . |
| Protactinium-234m | 194 | PCI/G | | 52.00 |
| Selenium (ICP) | 4.4 | MG/KG | < | . |
| Selenium (AA) | 1.18 | MG/KG | | . |
| Silver | 0.55 | MG/KG | | . |
| Sodium | 940 | MG/KG | | . |
| Sulfate | 1660 | MG/KG | | . |
| Technetium-99 | 478 | PCI/G | | 31.00 |
| Thallium (AA) | 0.62 | MG/KG | | . |
| Thorium-228 | 1.55 | PCI/G | | 0.58 |
| Thorium-230 | 70.3 | PCI/G | | 3.90 |
| Thorium-232 | 1.98 | PCI/G | | 0.67 |
| Thorium-234 | 74.1 | PCI/G | | 4.30 |
| Total Organic Carbon (TOC) | 0.75 | % | | . |
| Total Phosphate | 26 | MG/KG | | . |
| Total Solids | 69.21 | % | | . |
| Uranium (K-25) | 1050 | MG/KG | | . |
| Uranium (Y-12) | 490 | MG/KG | | . |
| Uranium-235 | 2.7 | WGT % | | . |
| Uranium-235 | 8.45 | PCI/G | | 0.67 |
| Vanadium | 30 | MG/KG | | . |
| Water Weight Loss | 30.79 | % | | . |
| Zinc | 55 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C4538-SL LABSMPID=910819-089 LOCATION=K-1417 STATION=C4538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 822 | PCI/G | | 14.0 |
| Aluminum | 17000 | MG/KG | | . |
| Antimony | 59 | MG/KG | < | . |
| Arsenic (ICP) | 59 | MG/KG | < | . |
| Arsenic (AA) | 49.6 | MG/KG | | . |
| Barium | 62 | MG/KG | | . |
| Beryllium | 0.35 | MG/KG | < | . |
| Beta Activity | 1000 | PCI/G | | 14.0 |
| Cadmium | 3.5 | MG/KG | < | . |
| Calcium | 83000 | MG/KG | | . |
| Cesium-137 | 50 | PCI/G | | 1.6 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 230 | MG/KG | | . |
| Cobalt | 21 | MG/KG | | . |
| Copper | 230 | MG/KG | | . |
| Density | 1.43 | G/ML | | . |
| Fluoride SIE | 150 | MG/KG | | . |
| Lead (ICP) | 59 | MG/KG | < | . |
| Lead (AA) | 51.9 | MG/KG | | . |
| Magnesium | 2600 | MG/KG | | . |
| Manganese | 750 | MG/KG | | . |
| Mercury | 7.5 | MG/KG | | . |
| Molybdenum | 12 | MG/KG | < | . |
| Neptunium-237 | 46.2 | PCI/G | | 2.0 |
| Nickel | 1900 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.85 | PCI/G | | 0.3 |
| Plutonium-239 | 62.2 | PCI/G | | 2.0 |
| Potassium | 3300 | MG/KG | | . |
| Protactinium-234m | 835 | PCI/G | | 74.0 |
| Selenium (ICP) | 59 | MG/KG | < | . |
| Selenium (AA) | 1.03 | MG/KG | | . |
| Silver | 7.1 | MG/KG | < | . |
| Sodium | 1200 | MG/KG | | . |
| Sulfate | 1332 | MG/KG | | . |
| Technetium-99 | 2470 | PCI/G | | 39.0 |
| Thallium (AA) | 0.5 | MG/KG | | . |
| Thorium-228 | 2.15 | PCI/G | | 0.4 |
| Thorium-230 | 156 | PCI/G | | 4.0 |
| Thorium-232 | 2.28 | PCI/G | | 0.4 |
| Thorium-234 | 300.5 | PCI/G | | 7.0 |
| Total Organic Carbon (TOC) | 0.61 | % | | . |
| Total Phosphate | 53 | MG/KG | | . |
| Total Solids | 44.05 | % | | . |
| Uranium (K-25) | 830 | MG/KG | | . |
| Uranium (Y-12) | 1300 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 31.35 | PCI/G | | 0.9 |
| Vanadium | 25 | MG/KG | | . |
| Water Weight Loss | 55.95 | % | | . |
| Zinc | 94 | MG/KG | | . |
| pH | 9.3 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C4638-SL LABSMPID=910819-088 LOCATION=K-1417 STATION=C4638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 601 | PCI/G | | 12.0 |
| Aluminum | 16000 | MG/KG | | . |
| Antimony | 64 | MG/KG | < | . |
| Arsenic (ICP) | 64 | MG/KG | < | . |
| Arsenic (AA) | 56.4 | MG/KG | | . |
| Barium | 63 | MG/KG | | . |
| Beryllium | 0.43 | MG/KG | | . |
| Beta Activity | 764 | PCI/G | | 12.0 |
| Cadmium | 3.8 | MG/KG | < | . |
| Calcium | 130000 | MG/KG | | . |
| Cesium-137 | 36.05 | PCI/G | | 1.4 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 240 | MG/KG | | . |
| Cobalt | 23 | MG/KG | | . |
| Copper | 270 | MG/KG | | . |
| Density | 1.42 | G/ML | | . |
| Fluoride SIE | 25 | MG/KG | | . |
| Lead (ICP) | 64 | MG/KG | < | . |
| Lead (AA) | 45.3 | MG/KG | | . |
| Magnesium | 3600 | MG/KG | | . |
| Manganese | 310 | MG/KG | | . |
| Mercury | 81 | MG/KG | | . |
| Molybdenum | 13 | MG/KG | < | . |
| Neptunium-237 | 34.7 | PCI/G | | 2.0 |
| Nickel | 2000 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.59 | PCI/G | | 0.2 |
| Plutonium-239 | 40 | PCI/G | | 2.0 |
| Potassium | 4200 | MG/KG | | . |
| Protactinium-234m | 419.5 | PCI/G | | 78.0 |
| Selenium (ICP) | 64 | MG/KG | < | . |
| Selenium (AA) | 2.34 | MG/KG | | . |
| Silver | 7.6 | MG/KG | < | . |
| Sodium | 1200 | MG/KG | | . |
| Sulfate | 2259 | MG/KG | | . |
| Technetium-99 | 1860 | PCI/G | | 34.0 |
| Thallium (AA) | 0.76 | MG/KG | | . |
| Thorium-228 | 1.31 | PCI/G | | 0.4 |
| Thorium-230 | 108 | PCI/G | | 3.0 |
| Thorium-232 | 0.75 | PCI/G | | 0.3 |
| Thorium-234 | 179.5 | PCI/G | | 7.0 |
| Total Organic Carbon (TOC) | 0.66 | % | | . |
| Total Phosphate | 3 | MG/KG | | . |
| Total Solids | 51.14 | % | | . |
| Uranium (K-25) | 707 | MG/KG | | . |
| Uranium (Y-12) | 1200 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 23 | PCI/G | | 0.9 |
| Vanadium | 24 | MG/KG | | . |
| Water Weight Loss | 48.86 | % | | . |
| Zinc | 110 | MG/KG | | . |
| pH | 11.3 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C4738-SL LABSMPID=910819-086 LOCATION=K-1417 STATION=C4738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 548 | PCI/G | | 11.0 |
| Aluminum | 18000 | MG/KG | | . |
| Antimony | 61 | MG/KG | < | . |
| Arsenic (ICP) | 61 | MG/KG | < | . |
| Arsenic (AA) | 61.5 | MG/KG | | . |
| Barium | 69 | MG/KG | | . |
| Beryllium | 0.37 | MG/KG | < | . |
| Beta Activity | 835 | PCI/G | | 13.0 |
| Cadmium | 3.7 | MG/KG | < | . |
| Calcium | 100000 | MG/KG | | . |
| Cesium-137 | 41.9 | PCI/G | | 1.5 |
| Chloride IC | 81.6 | MG/KG | | . |
| Chromium | 250 | MG/KG | | . |
| Cobalt | 26 | MG/KG | | . |
| Copper | 240 | MG/KG | | . |
| Density | 1.44 | G/ML | | . |
| Fluoride SIE | 140 | MG/KG | | . |
| Lead (ICP) | 61 | MG/KG | < | . |
| Lead (AA) | 46.3 | MG/KG | | . |
| Magnesium | 3000 | MG/KG | | . |
| Manganese | 600 | MG/KG | | . |
| Mercury | 51 | MG/KG | | . |
| Molybdenum | 12 | MG/KG | < | . |
| Neptunium-237 | 46.4 | PCI/G | | 2.0 |
| Nickel | 2100 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <H | . |
| Plutonium-238 | 0.42 | PCI/G | | 0.2 |
| Plutonium-239 | 47.9 | PCI/G | | 2.0 |
| Potassium | 4000 | MG/KG | | . |
| Protactinium-234m | 765 | PCI/G | | 75.0 |
| Selenium (ICP) | 61 | MG/KG | < | . |
| Selenium (AA) | 1.6 | MG/KG | | . |
| Silver | 7.3 | MG/KG | < | . |
| Sodium | 1200 | MG/KG | | . |
| Sulfate | 1298 | MG/KG | | . |
| Technetium-99 | 2120 | PCI/G | | 36.0 |
| Thallium (AA) | 0.53 | MG/KG | | . |
| Thorium-228 | 1.74 | PCI/G | | 0.4 |
| Thorium-230 | 141 | PCI/G | | 4.0 |
| Thorium-232 | 1.52 | PCI/G | | 0.4 |
| Thorium-234 | 292.5 | PCI/G | | 8.0 |
| Total Organic Carbon (TOC) | 0.73 | % | | . |
| Total Phosphate | 49 | MG/KG | | . |
| Total Solids | 44.56 | % | | . |
| Uranium (K-25) | 720 | MG/KG | | . |
| Uranium (Y-12) | 1600 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 29.9 | PCI/G | | 1.0 |
| Vanadium | 22 | MG/KG | | . |
| Water Weight Loss | 55.44 | % | | . |
| Zinc | 130 | MG/KG | | . |
| pH | 9.7 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C4838-SL LABSMPID=910819-083 LOCATION=K-1417 STATION=C4838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 237 | PCI/G | | 10.00 |
| Aluminum | 5700 | MG/KG | | . |
| Antimony | 4.5 | MG/KG | < | . |
| Arsenic (ICP) | 4.6 | MG/KG | | . |
| Arsenic (AA) | 35.8 | MG/KG | | . |
| Barium | 54 | MG/KG | | . |
| Beryllium | 0.53 | MG/KG | | . |
| Beta Activity | 749 | PCI/G | | 17.00 |
| Cadmium | 1.2 | MG/KG | | . |
| Calcium | 3600 | MG/KG | | . |
| Cesium-137 | 11.5 | PCI/G | | 0.84 |
| Chloride IC | 132 | MG/KG | | . |
| Chromium | 120 | MG/KG | | . |
| Cobalt | 9.3 | MG/KG | | . |
| Copper | 71 | MG/KG | | . |
| Density | 1.59 | G/ML | | . |
| Fluoride SIE | 93 | MG/KG | | . |
| Lead (ICP) | 21 | MG/KG | | . |
| Lead (AA) | 45 | MG/KG | | . |
| Magnesium | 1400 | MG/KG | | . |
| Manganese | 460 | MG/KG | | . |
| Mercury | 28 | MG/KG | | . |
| Molybdenum | 0.9 | MG/KG | < | . |
| Neptunium-237 | 15 | PCI/G | | 1.70 |
| Nickel | 270 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <P | . |
| Plutonium-238 | 0.0985 | PCI/G | | 0.24 |
| Plutonium-239 | 0.181 | PCI/G | | 0.26 |
| Potassium | 1000 | MG/KG | | . |
| Protactinium-234m | 282 | PCI/G | | 49.00 |
| Selenium (ICP) | 4.5 | MG/KG | < | . |
| Selenium (AA) | 1.28 | MG/KG | | . |
| Silver | 0.54 | MG/KG | < | . |
| Sodium | 230 | MG/KG | | . |
| Sulfate | 1110 | MG/KG | | . |
| Technetium-99 | 536 | PCI/G | | 31.00 |
| Thallium (AA) | 0.72 | MG/KG | | . |
| Thorium-228 | 1.38 | PCI/G | | 0.52 |
| Thorium-230 | 58.2 | PCI/G | | 3.40 |
| Thorium-232 | 3.89 | PCI/G | | 0.89 |
| Thorium-234 | 86.3 | PCI/G | | 3.90 |
| Total Organic Carbon (TOC) | 0.75 | % | | . |
| Total Phosphate | 80 | MG/KG | | . |
| Total Solids | 59.89 | % | | . |
| Uranium (K-25) | 226 | MG/KG | | . |
| Uranium (Y-12) | 450 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 8.1 | PCI/G | | 0.71 |
| Vanadium | 15 | MG/KG | | . |
| Water Weight Loss | 40.11 | % | | . |
| Zinc | 54 | MG/KG | | . |
| pH | 11.3 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C5238-SL LABSMPID=910815-139 LOCATION=K-1417 STATION=C5238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 271 | PCI/G | | 8.0 |
| Aluminum | 16000 | MG/KG | | . |
| Antimony | 4.4 | MG/KG | < | . |
| Arsenic (ICP) | 4.4 | MG/KG | | . |
| Arsenic (AA) | 32.1 | MG/KG | | . |
| Barium | 36 | MG/KG | | . |
| Beryllium | 0.32 | MG/KG | | . |
| Beta Activity | 408 | PCI/G | | 9.0 |
| Cadmium | 1.1 | MG/KG | | . |
| Calcium | 34000 | MG/KG | | . |
| Cesium-137 | 15.35 | PCI/G | | 0.9 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 92 | MG/KG | | . |
| Cobalt | 8.5 | MG/KG | | . |
| Copper | 71 | MG/KG | | . |
| Density | 1.57 | G/ML | | . |
| Fluoride SIE | 84 | MG/KG | | . |
| Lead (ICP) | 20 | MG/KG | | . |
| Lead (AA) | 34 | MG/KG | | . |
| Magnesium | 1200 | MG/KG | | . |
| Manganese | 400 | MG/KG | | . |
| Mercury | 11 | MG/KG | | . |
| Molybdenum | 0.88 | MG/KG | < | . |
| Neptunium-237 | 11.2 | PCI/G | | 1.0 |
| Nickel | 400 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.31 | PCI/G | | 0.2 |
| Plutonium-239 | 15.3 | PCI/G | | 1.0 |
| Potassium | 2600 | MG/KG | | . |
| Protactinium-234m | 399.5 | PCI/G | | 55.0 |
| Selenium (ICP) | 4.4 | MG/KG | < | . |
| Selenium (AA) | 1.38 | MG/KG | | . |
| Silver | 0.53 | MG/KG | < | . |
| Sodium | 690 | MG/KG | | . |
| Sulfate | 1283 | MG/KG | | . |
| Technetium-99 | 756 | PCI/G | | 23.0 |
| Thallium (AA) | 0.55 | MG/KG | | . |
| Thorium-228 | 1.01 | PCI/G | | 0.3 |
| Thorium-230 | 50.3 | PCI/G | | 2.0 |
| Thorium-232 | 0.8 | PCI/G | | 0.3 |
| Thorium-234 | 85 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 0.44 | % | | . |
| Total Phosphate | 7 | MG/KG | | . |
| Total Solids | 54.33 | % | | . |
| Uranium (K-25) | 300 | MG/KG | | . |
| Uranium (Y-12) | 450 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 10.2 | PCI/G | | 0.7 |
| Vanadium | 20 | MG/KG | | . |
| Zinc | 44 | MG/KG | | . |
| pH | 11 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C5438-SL LABSMPID=910819-091 LOCATION=K-1417 STATION=C5438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 142 | PCI/G | | 6.0 |
| Aluminum | 20000 | MG/KG | | . |
| Antimony | 5 | MG/KG | < | . |
| Arsenic (ICP) | 11 | MG/KG | | . |
| Arsenic (AA) | 17.8 | MG/KG | | . |
| Barium | 61 | MG/KG | | . |
| Beryllium | 0.38 | MG/KG | | . |
| Beta Activity | 242 | PCI/G | | 7.0 |
| Cadmium | 1.1 | MG/KG | | . |
| Calcium | 36000 | MG/KG | | . |
| Cesium-137 | 8.65 | PCI/G | | 0.7 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 75 | MG/KG | | . |
| Cobalt | 10 | MG/KG | | . |
| Copper | 73 | MG/KG | | . |
| Density | 1.26 | G/ML | | . |
| Fluoride SIE | 190 | MG/KG | | . |
| Lead (ICP) | 22 | MG/KG | | . |
| Lead (AA) | 49.4 | MG/KG | | . |
| Magnesium | 1500 | MG/KG | | . |
| Manganese | 630 | MG/KG | | . |
| Mercury | 28 | MG/KG | | . |
| Molybdenum | 0.95 | MG/KG | < | . |
| Neptunium-237 | 6.7 | PCI/G | | 1.0 |
| Nickel | 510 | MG/KG | | . |
| Nitrate | 100 | MG/KG | <H | . |
| Plutonium-238 | 0.09 | PCI/G | | 0.1 |
| Plutonium-239 | 9 | PCI/G | | 1.0 |
| Potassium | 2900 | MG/KG | | . |
| Protactinium-234m | 201 | PCI/G | | 41.0 |
| Selenium (ICP) | 4.7 | MG/KG | < | . |
| Selenium (AA) | 0.92 | MG/KG | | . |
| Silver | 0.57 | MG/KG | < | . |
| Sodium | 690 | MG/KG | | . |
| Sulfate | 1847 | MG/KG | | . |
| Technetium-99 | 392 | PCI/G | | 18.0 |
| Thallium (AA) | 0.57 | MG/KG | | . |
| Thorium-228 | 0.49 | PCI/G | | 0.2 |
| Thorium-230 | 31.5 | PCI/G | | 2.0 |
| Thorium-232 | 0.69 | PCI/G | | 0.3 |
| Thorium-234 | 54 | PCI/G | | 4.0 |
| Total Organic Carbon (TOC) | 0.27 | % | | . |
| Total Phosphate | 3 | MG/KG | | . |
| Total Solids | 83.77 | % | | . |
| Uranium (K-25) | 191 | MG/KG | | . |
| Uranium (Y-12) | 350 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 5 | PCI/G | | 0.6 |
| Vanadium | 25 | MG/KG | | . |
| Water Weight Loss | 16.23 | % | | . |
| Zinc | 53 | MG/KG | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C5538-SL LABSMPID=910819-094 LOCATION=K-1417 STATION=C5538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 313 | PCI/G | | 9.0 |
| Aluminum | 25000 | MG/KG | | . |
| Antimony | 63 | MG/KG | < | . |
| Arsenic (ICP) | 63 | MG/KG | < | . |
| Arsenic (AA) | 35 | MG/KG | | . |
| Barium | 100 | MG/KG | | . |
| Beryllium | 0.93 | MG/KG | | . |
| Beta Activity | 414 | PCI/G | | 9.0 |
| Cadmium | 3.8 | MG/KG | < | . |
| Calcium | 70000 | MG/KG | | . |
| Cesium-137 | 20.45 | PCI/G | | 1.0 |
| Chloride IC | 75 | MG/KG | | . |
| Chromium | 150 | MG/KG | | . |
| Cobalt | 24 | MG/KG | | . |
| Copper | 140 | MG/KG | | . |
| Density | 1.66 | G/ML | | . |
| Fluoride SIE | 110 | MG/KG | | . |
| Lead (ICP) | 63 | MG/KG | < | . |
| Lead (AA) | 43.5 | MG/KG | | . |
| Magnesium | 3200 | MG/KG | | . |
| Manganese | 1100 | MG/KG | | . |
| Mercury | 13 | MG/KG | | . |
| Molybdenum | 13 | MG/KG | < | . |
| Neptunium-237 | 15.8 | PCI/G | | 1.0 |
| Nickel | 1200 | MG/KG | | . |
| Nitrate | 50 | MG/KG | <H | . |
| Plutonium-238 | 0.52 | PCI/G | | 0.2 |
| Plutonium-239 | 22.4 | PCI/G | | 1.0 |
| Potassium | 5200 | MG/KG | | . |
| Protactinium-234m | 230 | PCI/G | | 64.0 |
| Selenium (ICP) | 63 | MG/KG | < | . |
| Selenium (AA) | 1.61 | MG/KG | | . |
| Silver | 7.6 | MG/KG | < | . |
| Sodium | 1100 | MG/KG | | . |
| Sulfate | 477 | MG/KG | | . |
| Technetium-99 | 984 | PCI/G | | 26.0 |
| Thallium (AA) | 0.54 | MG/KG | | . |
| Thorium-228 | 0.82 | PCI/G | | 0.3 |
| Thorium-230 | 84.8 | PCI/G | | 3.0 |
| Thorium-232 | 0.87 | PCI/G | | 0.3 |
| Thorium-234 | 93.5 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 0.34 | % | | . |
| Total Phosphate | 30 | MG/KG | | . |
| Total Solids | 59.32 | % | | . |
| Uranium (K-25) | 462 | MG/KG | | . |
| Uranium (Y-12) | 790 | MG/KG | | . |
| Uranium-235 | 1.4 | WGT % | | . |
| Uranium-235 | 11.95 | PCI/G | | 0.7 |
| Vanadium | 34 | MG/KG | | . |
| Water Weight Loss | 40.68 | % | | . |
| Zinc | 96 | MG/KG | | . |
| pH | 10.8 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C5638-SL LABSMPID=910815-143 LOCATION=K-1417 STATION=C5638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 342 | PCI/G | | 9.0 |
| Aluminum | 14000 | MG/KG | | . |
| Antimony | 62 | MG/KG | < | . |
| Arsenic (ICP) | 62 | MG/KG | < | . |
| Arsenic (AA) | 60.2 | MG/KG | | . |
| Barium | 50 | MG/KG | | . |
| Beryllium | 0.4 | MG/KG | | . |
| Beta Activity | 556 | PCI/G | | 11.0 |
| Boron | 71 | MG/KG | | . |
| Cadmium | 3.7 | MG/KG | < | . |
| Calcium | 110000 | MG/KG | | . |
| Cesium-137 | 27 | PCI/G | | 1.1 |
| Chloride IC | 109 | MG/KG | | . |
| Chromium | 180 | MG/KG | | . |
| Cobalt | 16 | MG/KG | | . |
| Copper | 180 | MG/KG | | . |
| Density | 1.29 | G/ML | | . |
| Fluoride SIE | 15 | MG/KG | | . |
| Lead (ICP) | 62 | MG/KG | < | . |
| Lead (AA) | 45 | MG/KG | | . |
| Magnesium | 3100 | MG/KG | | . |
| Manganese | 250 | MG/KG | | . |
| Mercury | 15 | MG/KG | | . |
| Molybdenum | 12 | MG/KG | < | . |
| Neptunium-237 | 23.5 | PCI/G | | 1.0 |
| Nickel | 1500 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.24 | PCI/G | | 0.1 |
| Plutonium-239 | 27 | PCI/G | | 2.0 |
| Potassium | 3700 | MG/KG | | . |
| Protactinium-234m | 690 | PCI/G | | 59.0 |
| Selenium (ICP) | 62 | MG/KG | < | . |
| Selenium (AA) | 1.32 | MG/KG | | . |
| Silicon | 370 | MG/KG | | . |
| Silver | 7.5 | MG/KG | < | . |
| Sodium | 1000 | MG/KG | | . |
| Sulfate | 1174 | MG/KG | | . |
| Technetium-99 | 1400 | PCI/G | | 30.0 |
| Thallium (AA) | 0.67 | MG/KG | | . |
| Thorium-228 | 0.83 | PCI/G | | 0.3 |
| Thorium-230 | 79.9 | PCI/G | | 3.0 |
| Thorium-232 | 0.87 | PCI/G | | 0.3 |
| Thorium-234 | 158 | PCI/G | | 5.0 |
| Total Organic Carbon (TOC) | 2.2 | % | | . |
| Total Phosphate | 1.5 | MG/KG | | . |
| Total Solids | 36.27 | % | | . |
| Uranium (K-25) | 484 | MG/KG | | . |
| Uranium (Y-12) | 960 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 19.85 | PCI/G | | 0.7 |
| Vanadium | 23 | MG/KG | | . |
| Zinc | 84 | MG/KG | | . |
| pH | 11.6 | STD UNITS | P | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C5738-SL LABSMPID=910815-138 LOCATION=K-1417 STATION=C5738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 492 | PCI/G | | 11.0 |
| Aluminum | 13000 | MG/KG | | . |
| Antimony | 61 | MG/KG | < | . |
| Arsenic (ICP) | 61 | MG/KG | < | . |
| Arsenic (AA) | 55.9 | MG/KG | | . |
| Barium | 48 | MG/KG | | . |
| Beryllium | 0.36 | MG/KG | < | . |
| Beta Activity | 645 | PCI/G | | 11.0 |
| Boron | 59 | MG/KG | | . |
| Cadmium | 3.6 | MG/KG | < | . |
| Calcium | 84000 | MG/KG | | . |
| Cesium-137 | 30.25 | PCI/G | | 1.3 |
| Chloride IC | 100 | MG/KG | < | . |
| Chromium | 170 | MG/KG | | . |
| Cobalt | 17 | MG/KG | | . |
| Copper | 210 | MG/KG | | . |
| Density | 1.39 | G/ML | | . |
| Fluoride SIE | 21 | MG/KG | | . |
| Lead (ICP) | 61 | MG/KG | < | . |
| Lead (AA) | 48.4 | MG/KG | | . |
| Magnesium | 2700 | MG/KG | | . |
| Manganese | 350 | MG/KG | | . |
| Mercury | 14 | MG/KG | | . |
| Molybdenum | 12 | MG/KG | < | . |
| Neptunium-237 | 23.8 | PCI/G | | 2.0 |
| Nickel | 1500 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.48 | PCI/G | | 0.2 |
| Plutonium-239 | 42.9 | PCI/G | | 2.0 |
| Potassium | 3400 | MG/KG | | . |
| Protactinium-234m | 865 | PCI/G | | 68.0 |
| Selenium (ICP) | 61 | MG/KG | < | . |
| Selenium (AA) | 0.74 | MG/KG | | . |
| Silicon | 350 | MG/KG | | . |
| Silver | 7.3 | MG/KG | < | . |
| Sodium | 890 | MG/KG | | . |
| Sulfate | 1897 | MG/KG | | . |
| Technetium-99 | 1740 | PCI/G | | 33.0 |
| Thallium (AA) | 0.61 | MG/KG | | . |
| Thorium-228 | 1.14 | PCI/G | | 0.3 |
| Thorium-230 | 121 | PCI/G | | 3.0 |
| Thorium-232 | 1.1 | PCI/G | | 0.3 |
| Thorium-234 | 214.5 | PCI/G | | 6.0 |
| Total Organic Carbon (TOC) | 0.97 | % | | . |
| Total Phosphate | 1.5 | MG/KG | | . |
| Total Solids | 34.08 | % | | . |
| Uranium (K-25) | 520 | MG/KG | | . |
| Uranium (Y-12) | 720 | MG/KG | | . |
| Uranium-235 | 1.3 | WGT % | | . |
| Uranium-235 | 21.35 | PCI/G | | 0.9 |
| Vanadium | 19 | MG/KG | | . |
| Zinc | 77 | MG/KG | | . |
| pH | 11.5 | STD UNITS | | . |

Source: dataset pondsl03 on 08DEC93

Results for 1991 sludge soilds samples from K-1417 drums.

---------- SMP_ID=C9938-SL LABSMPID=910815-137 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 292 | PCI/G | | 8.0 |
| Aluminum | 19000 | MG/KG | | . |
| Antimony | 40 | MG/KG | < | . |
| Arsenic (ICP) | 50 | MG/KG | | . |
| Arsenic (AA) | 66.6 | MG/KG | | . |
| Barium | 47 | MG/KG | | . |
| Beryllium | 0.44 | MG/KG | | . |
| Beta Activity | 515 | PCI/G | | 10.0 |
| Cadmium | 2.4 | MG/KG | < | . |
| Calcium | 83000 | MG/KG | | . |
| Cesium-137 | 24.45 | PCI/G | | 1.1 |
| Chloride IC | 105 | MG/KG | | . |
| Chromium | 140 | MG/KG | | . |
| Cobalt | 14 | MG/KG | | . |
| Copper | 130 | MG/KG | | . |
| Density | 1.54 | G/ML | | . |
| Fluoride SIE | 16 | MG/KG | | . |
| Lead (ICP) | 40 | MG/KG | < | . |
| Lead (AA) | 50.7 | MG/KG | | . |
| Magnesium | 2500 | MG/KG | | . |
| Manganese | 380 | MG/KG | | . |
| Mercury | 13 | MG/KG | | . |
| Molybdenum | 8 | MG/KG | < | . |
| Neptunium-237 | 16.5 | PCI/G | | 1.0 |
| Nickel | 1300 | MG/KG | | . |
| Nitrate | 23 | MG/KG | <P | . |
| Plutonium-238 | 0.36 | PCI/G | | 0.2 |
| Plutonium-239 | 23.2 | PCI/G | | 1.0 |
| Potassium | 4300 | MG/KG | | . |
| Protactinium-234m | 525 | PCI/G | | 52.0 |
| Selenium (ICP) | 40 | MG/KG | < | . |
| Selenium (AA) | 1.82 | MG/KG | | . |
| Silver | 4.8 | MG/KG | < | . |
| Sodium | 1100 | MG/KG | | . |
| Sulfate | 1602 | MG/KG | | . |
| Technetium-99 | 1190 | PCI/G | | 28.0 |
| Thallium (AA) | 0.66 | MG/KG | | . |
| Thorium-228 | 0.94 | PCI/G | | 0.3 |
| Thorium-230 | 69.7 | PCI/G | | 2.0 |
| Thorium-232 | 0.61 | PCI/G | | 0.3 |
| Thorium-234 | 127.5 | PCI/G | | 4.0 |
| Total Organic Carbon (TOC) | 1 | % | | . |
| Total Phosphate | 3 | MG/KG | | . |
| Total Solids | 56.16 | % | | . |
| Uranium (K-25) | 424 | MG/KG | | . |
| Uranium (Y-12) | 920 | MG/KG | | . |
| Uranium-235 | 1.2 | WGT % | | . |
| Uranium-235 | 14.6 | PCI/G | | 0.8 |
| Vanadium | 20 | MG/KG | | . |
| Zinc | 71 | MG/KG | | . |
| pH | 11.2 | STD UNITS | | . |

Source: dataset pondsl03 on 08DEC93

# APPENDIX K

# RESULTS FOR 1991 SLUDGE LIQUID SAMPLES FROM THE K-1417 DRUMS

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B1238-LQ LABSMPID=910819-160 LOCATION=K-1417 STATION=B1238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.038 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 1.9 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 740 | MG/L | | . |
| Chloride IC | 399 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.986 | G/ML | | . |
| Dissolved Solids | 3386 | MG/L | H | . |
| Fluoride SIE | 2.3 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 89 | MG/L | | . |
| Manganese | 2.4 | MG/L | | . |
| Mercury | 0.07 | MG/L | | . |
| Nickel | 0.38 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 300 | MG/L | | . |
| Sulfate | 1900 | MG/L | | . |
| Total Organic Carbon (TOC) | 11 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (K-25) | 2.4 | MG/L | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 1.7 | MG/L | | . |
| pH | 7.6 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B1338-LQ LABSMPID=910819-158 LOCATION=K-1417 STATION=B1338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 3120 | PCI/L | | 560 |
| Aluminum | 0.28 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 43.3 | UG/L | | . |
| Barium | 0.042 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 5260 | PCI/L | | 850 |
| Boron | 1.3 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 750 | MG/L | | . |
| Cesium-137 | 10.9 | PCI/L | | 60 |
| Chloride IC | 300 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9843 | G/ML | | . |
| Dissolved Solids | 3398 | MG/L | H | . |
| Fluoride SIE | 5 | MG/L | | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Lead (AA) | 11.3 | UG/L | | . |
| Magnesium | 120 | MG/L | | . |
| Manganese | 6.9 | MG/L | | . |
| Mercury | 0.064 | MG/L | | . |
| Nickel | 1.1 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | -825 | PCI/L | | 10000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 2 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 250 | MG/L | | . |
| Sulfate | 1900 | MG/L | | . |
| Thallium (AA) | 1.1 | UG/L | | . |
| Thorium-234 | 462 | PCI/L | | 860 |
| Total Organic Carbon (TOC) | 17 | MG/L | | . |
| Total Phosphate | 0.7 | MG/L | | . |
| Uranium (Y-12) | 3.47 | MG/L | | . |
| Uranium (K-25) | 4.1 | MG/L | | . |
| Uranium-235 | 141 | PCI/L | | 110 |
| Uranium-235 | 1.3 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.023 | MG/L | | . |
| pH | 7.5 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B2238-LQ LABSMPID=910819-159 LOCATION=K-1417 STATION=B2238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 1620 | PCI/L | | 430 |
| Aluminum | 0.27 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 29.9 | UG/L | | . |
| Barium | 0.046 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 2320 | PCI/L | | 710 |
| Boron | 0.46 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 610 | MG/L | | . |
| Cesium-137 | 14.6 | PCI/L | | 57 |
| Chloride IC | 314 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9806 | G/ML | | . |
| Dissolved Solids | 2804 | MG/L | H | . |
| Fluoride SIE | 3.4 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 1.4 | UG/L | | . |
| Magnesium | 84 | MG/L | | . |
| Manganese | 9.4 | MG/L | | . |
| Mercury | 0.72 | MG/L | | . |
| Nickel | 0.59 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | 4860 | PCI/L | | 9400 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 10 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 270 | MG/L | | . |
| Sulfate | 1570 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Thorium-234 | -184 | PCI/L | | 620 |
| Total Phosphate | 0.7 | MG/L | | . |
| Uranium (Y-12) | 1.64 | MG/L | | . |
| Uranium (K-25) | 2 | MG/L | | . |
| Uranium-235 | 1.3 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.21 | MG/L | | . |
| pH | 7.5 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B3238-LQ LABSMPID=910807-251 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.096 | MG/L | | . |
| Antimony | 0.05 | MG/L | < | . |
| Arsenic (ICP) | 0.05 | MG/L | < | . |
| Barium | 0.036 | MG/L | | . |
| Beryllium | 0.0003 | MG/L | | . |
| Boron | 0.55 | MG/L | | . |
| Cadmium | 0.003 | MG/L | < | . |
| Calcium | 230 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Cobalt | 0.005 | MG/L | < | . |
| Copper | 0.004 | MG/L | < | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Magnesium | 52 | MG/L | | . |
| Manganese | 5.7 | MG/L | | . |
| Mercury | 0.002 | MG/L | P | . |
| Nickel | 0.066 | MG/L | | . |
| Selenium (ICP) | 0.05 | MG/L | < | . |
| Silver | 0.006 | MG/L | < | . |
| Sodium | 140 | MG/L | | . |
| Uranium (Y-12) | 0.095 | MG/L | | . |
| Uranium-235 | 1.3 | WEIGHT | | . |
| Vanadium | 0.005 | MG/L | < | . |
| Zinc | 0.015 | MG/L | | . |

---------- SMP_ID=B3538-LQ LABSMPID=910807-252 LOCATION=K-1417 STATION=B3538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.45 | MG/L | | . |
| Antimony | 0.05 | MG/L | < | . |
| Arsenic (ICP) | 0.05 | MG/L | < | . |
| Barium | 0.036 | MG/L | | . |
| Beryllium | 0.0003 | MG/L | | . |
| Boron | 0.76 | MG/L | | . |
| Cadmium | 0.003 | MG/L | < | . |
| Calcium | 320 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Cobalt | 0.005 | MG/L | < | . |
| Copper | 0.0083 | MG/L | | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Magnesium | 74 | MG/L | | . |
| Manganese | 3.1 | MG/L | | . |
| Mercury | 0.0047 | MG/L | P | . |
| Nickel | 0.18 | MG/L | | . |
| Selenium (ICP) | 0.05 | MG/L | < | . |
| Silver | 0.006 | MG/L | < | . |
| Sodium | 180 | MG/L | | . |
| Uranium (Y-12) | 0.493 | MG/L | | . |
| Uranium-235 | 1.6 | WEIGHT | | . |
| Vanadium | 0.005 | MG/L | < | . |
| Zinc | 0.0095 | MG/L | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B3738-LQ LABSMPID=910819-169 LOCATION=K-1417 STATION=B3738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 35.2 | UG/L | | . |
| Barium | 0.045 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 1.8 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 770 | MG/L | | . |
| Chloride IC | 283 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9826 | G/ML | | . |
| Dissolved Solids | 3358 | MG/L | H | . |
| Fluoride SIE | 3.7 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 21.5 | UG/L | | . |
| Magnesium | 110 | MG/L | | . |
| Manganese | 1.9 | MG/L | | . |
| Mercury | 0.054 | MG/L | | . |
| Nickel | 0.61 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 2 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 230 | MG/L | | . |
| Sulfate | 1880 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Total Organic Carbon (TOC) | 12 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (Y-12) | 6.27 | MG/L | | . |
| Uranium (K-25) | 8.2 | MG/L | | . |
| Uranium-235 | 1.2 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.031 | MG/L | | . |
| pH | 7.7 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B3838-LQ LABSMPID=910819-171 LOCATION=K-1417 STATION=B3838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 2840 | PCI/L | | 540 |
| Aluminum | 1.4 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 32.1 | UG/L | | . |
| Barium | 0.098 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 2910 | PCI/L | | 740 |
| Boron | 3.2 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 690 | MG/L | | . |
| Cesium-137 | 9.6 | PCI/L | | 68 |
| Chloride IC | 416 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.996 | G/ML | | . |
| Dissolved Solids | 3734 | MG/L | P | . |
| Fluoride SIE | 3.5 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 7.6 | UG/L | | . |
| Magnesium | 130 | MG/L | | . |
| Manganese | 1.2 | MG/L | | . |
| Mercury | 0.14 | MG/L | | . |
| Nickel | 0.68 | MG/L | | . |
| Nitrate | 50 | MG/L | <P | . |
| Protactinium-234m | 4900 | PCI/L | | 13000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 2 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 240 | MG/L | | . |
| Sulfate | 1920 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Thorium-234 | 1540 | PCI/L | | 510 |
| Total Organic Carbon (TOC) | 14 | MG/L | | . |
| Total Phosphate | 0.7 | MG/L | | . |
| Uranium (Y-12) | 0.756 | MG/L | | . |
| Uranium (K-25) | 4.8 | MG/L | | . |
| Uranium-235 | 150 | PCI/L | | 110 |
| Uranium-235 | 1.4 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.059 | MG/L | | . |
| pH | 7.7 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B5838-LQ LABSMPID=910819-152 LOCATION=K-1417 STATION=B5838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 4160 | PCI/L | | 630.0 |
| Aluminum | 0.93 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 25.5 | UG/L | | . |
| Barium | 0.053 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 11500 | PCI/L | | 1100.0 |
| Boron | 4 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 660 | MG/L | | . |
| Cesium-137 | -3.07 | PCI/L | | 6.2 |
| Chloride IC | 172 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9863 | G/ML | | . |
| Dissolved Solids | 4426 | MG/L | H | . |
| Fluoride SIE | 3 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 13.4 | UG/L | | . |
| Magnesium | 150 | MG/L | | . |
| Manganese | 1.9 | MG/L | | . |
| Mercury | 0.02 | MG/L | < | . |
| Nickel | 1 | MG/L | | . |
| Nitrate | 5 | MG/L | <H | . |
| Protactinium-234m | 3650 | PCI/L | | 11000.0 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 2 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 240 | MG/L | | . |
| Sulfate | 1304 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Thorium-234 | 1610 | PCI/L | | 580.0 |
| Total Organic Carbon (TOC) | 34 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (Y-12) | 4.85 | MG/L | | . |
| Uranium (K-25) | 5.7 | MG/L | | . |
| Uranium-235 | 158 | PCI/L | | 87.0 |
| Uranium-235 | 1.2 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.031 | MG/L | | . |
| pH | 7.3 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B6038-LQ LABSMPID=910819-155 LOCATION=K-1417 STATION=B6038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 6090 | PCI/L | | 750 |
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 11.2 | UG/L | | . |
| Barium | 0.041 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 17400 | PCI/L | | 1300 |
| Boron | 2 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 640 | MG/L | | . |
| Cesium-137 | 32.6 | PCI/L | | 61 |
| Chloride IC | 243 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9883 | G/ML | | . |
| Dissolved Solids | 2810 | MG/L | H | . |
| Fluoride SIE | 2.8 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 2.5 | UG/L | | . |
| Magnesium | 92 | MG/L | | . |
| Manganese | 0.98 | MG/L | | . |
| Mercury | 0.098 | MG/L | | . |
| Nickel | 0.32 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | 9910 | PCI/L | | 10000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 2 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 140 | MG/L | | . |
| Sulfate | 1540 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Thorium-234 | 2340 | PCI/L | | 610 |
| Total Organic Carbon (TOC) | 35 | MG/L | | . |
| Total Phosphate | 0.3 | MG/L | | . |
| Uranium (Y-12) | 4.3 | MG/L | | . |
| Uranium (K-25) | 4.4 | MG/L | | . |
| Uranium-235 | 1.1 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.03 | MG/L | | . |
| pH | 7.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B6238-LQ LABSMPID=910807-249 LOCATION=K-1417 STATION=B6238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 2.2 | MG/L | | . |
| Antimony | 5 | MG/L | < | . |
| Arsenic (ICP) | 5 | MG/L | < | . |
| Barium | 0.15 | MG/L | | . |
| Beryllium | 0.03 | MG/L | < | . |
| Boron | 5.9 | MG/L | | . |
| Cadmium | 0.3 | MG/L | < | . |
| Calcium | 670 | MG/L | | . |
| Chromium | 1 | MG/L | < | . |
| Cobalt | 0.5 | MG/L | < | . |
| Copper | 0.45 | MG/L | | . |
| Lead (ICP) | 5 | MG/L | < | . |
| Magnesium | 130 | MG/L | | . |
| Manganese | 4.6 | MG/L | | . |
| Mercury | 0.02 | MG/L | <P | . |
| Nickel | 1.1 | MG/L | | . |
| Selenium (ICP) | 5 | MG/L | < | . |
| Silver | 0.6 | MG/L | < | . |
| Sodium | 230 | MG/L | | . |
| Uranium (Y-12) | 4.99 | MG/L | | . |
| Uranium-235 | 1.4 | WEIGHT | | . |
| Vanadium | 0.5 | MG/L | < | . |
| Zinc | 1.1 | MG/L | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B6638-LQ LABSMPID=910819-154 LOCATION=K-1417 STATION=B6638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 3830 | PCI/L | | 610 |
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 34 | UG/L | | . |
| Barium | 0.044 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 9950 | PCI/L | | 1000 |
| Boron | 2.2 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 670 | MG/L | | . |
| Cesium-137 | 2.4 | PCI/L | | 68 |
| Chloride IC | 90 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9842 | G/ML | | . |
| Dissolved Solids | 3290 | MG/L | H | . |
| Fluoride SIE | 3.2 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 10 | UG/L | | . |
| Magnesium | 110 | MG/L | | . |
| Manganese | 3.1 | MG/L | | . |
| Mercury | 0.027 | MG/L | | . |
| Nickel | 1 | MG/L | | . |
| Nitrate | 10 | MG/L | <H | . |
| Protactinium-234m | 6170 | PCI/L | | 12000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 16.8 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 200 | MG/L | | . |
| Sulfate | 1770 | MG/L | | . |
| Thallium (AA) | 6.5 | UG/L | | . |
| Thorium-234 | 2730 | PCI/L | | 530 |
| Total Organic Carbon (TOC) | 30 | MG/L | | . |
| Total Phosphate | 0.3 | MG/L | | . |
| Uranium (Y-12) | 4.42 | MG/L | | . |
| Uranium (K-25) | 5.8 | MG/L | | . |
| Uranium-235 | 218 | PCI/L | | 120 |
| Uranium-235 | 1.2 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.02 | MG/L | | . |
| pH | 7.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B7038-LQ LABSMPID=910819-153 LOCATION=K-1417 STATION=B7038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 4030 | PCI/L | | 630 |
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 756 | UG/L | | . |
| Barium | 0.039 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 4910 | PCI/L | | 830 |
| Boron | 2.6 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 660 | MG/L | | . |
| Cesium-137 | 45.2 | PCI/L | | 63 |
| Chloride IC | 90 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9854 | G/ML | O | . |
| Dissolved Solids | 3422 | MG/L | H | . |
| Fluoride SIE | 2.8 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 294 | UG/L | | . |
| Magnesium | 130 | MG/L | | . |
| Manganese | 2 | MG/L | | . |
| Mercury | 0.06 | MG/L | | . |
| Nickel | 1.1 | MG/L | | . |
| Nitrate | 10 | MG/L | <H | . |
| Protactinium-234m | 4140 | PCI/L | | 11000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 14.3 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 180 | MG/L | | . |
| Sulfate | 1900 | MG/L | | . |
| Thallium (AA) | 4.2 | UG/L | | . |
| Thorium-234 | 505 | PCI/L | | 860 |
| Total Organic Carbon (TOC) | 42 | MG/L | | . |
| Total Phosphate | 0.3 | MG/L | | . |
| Uranium (Y-12) | 4.61 | MG/L | | . |
| Uranium (K-25) | 6.4 | MG/L | | . |
| Uranium-235 | 135 | PCI/L | | 100 |
| Uranium-235 | 1.5 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.032 | MG/L | | . |
| pH | 7.2 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B7438-LQ LABSMPID=910819-156 LOCATION=K-1417 STATION=B7438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 679 | PCI/L | | 320 |
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 489 | UG/L | | . |
| Barium | 0.057 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 3330 | PCI/L | | 760 |
| Boron | 3.7 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 650 | MG/L | | . |
| Cesium-137 | 109 | PCI/L | | 61 |
| Chloride IC | 412 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9827 | G/ML | | . |
| Dissolved Solids | 3390 | MG/L | H | . |
| Fluoride SIE | 2.5 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 216 | UG/L | | . |
| Magnesium | 160 | MG/L | | . |
| Manganese | 0.99 | MG/L | | . |
| Mercury | 0.044 | MG/L | | . |
| Nickel | 0.29 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | 5330 | PCI/L | | 10000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 12.9 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 270 | MG/L | | . |
| Sulfate | 1830 | MG/L | | . |
| Thallium (AA) | 4 | UG/L | | . |
| Thorium-228 | 2690 | PCI/L | | 1400 |
| Thorium-234 | 702 | PCI/L | | 790 |
| Total Organic Carbon (TOC) | 30 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (Y-12) | 1.02 | MG/L | | . |
| Uranium (K-25) | 3 | MG/L | | . |
| Uranium-235 | 1.1 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.02 | MG/L | < | . |
| pH | 7.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B7738-LQ LABSMPID=910819-157 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 6090 | PCI/L | | 750 |
| Aluminum | 0.44 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 387 | UG/L | | . |
| Barium | 0.038 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 12800 | PCI/L | | 1100 |
| Boron | 2.9 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 770 | MG/L | | . |
| Cesium-137 | 46.4 | PCI/L | | 70 |
| Chloride IC | 431 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9883 | G/ML | | . |
| Dissolved Solids | 3726 | MG/L | H | . |
| Fluoride SIE | 2.7 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 184 | UG/L | | . |
| Magnesium | 150 | MG/L | | . |
| Manganese | 1.7 | MG/L | | . |
| Mercury | 0.092 | MG/L | | . |
| Nickel | 1.2 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | 11600 | PCI/L | | 13000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 8.1 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 300 | MG/L | | . |
| Sulfate | 1930 | MG/L | | . |
| Thallium (AA) | 2.5 | UG/L | | . |
| Thorium-234 | 2370 | PCI/L | | 540 |
| Total Organic Carbon (TOC) | 44 | MG/L | | . |
| Total Phosphate | 0.3 | MG/L | | . |
| Uranium (Y-12) | 8.29 | MG/L | | . |
| Uranium (K-25) | 7.7 | MG/L | | . |
| Uranium-235 | 273 | PCI/L | | 120 |
| Uranium-235 | 1.1 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| pH | 7.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B7938-LQ LABSMPID=910807-250 LOCATION=K-1417 STATION=B7938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.89 | MG/L | | . |
| Antimony | 0.05 | MG/L | < | . |
| Arsenic (ICP) | 0.05 | MG/L | < | . |
| Barium | 0.059 | MG/L | | . |
| Beryllium | 0.0003 | MG/L | | . |
| Boron | 2.6 | MG/L | | . |
| Cadmium | 0.003 | MG/L | < | . |
| Calcium | 570 | MG/L | | . |
| Chromium | 0.021 | MG/L | | . |
| Cobalt | 0.005 | MG/L | < | . |
| Copper | 0.026 | MG/L | | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Magnesium | 99 | MG/L | | . |
| Manganese | 0.9 | MG/L | | . |
| Mercury | 0.0022 | MG/L | P | . |
| Nickel | 0.32 | MG/L | | . |
| Selenium (ICP) | 0.05 | MG/L | < | . |
| Silver | 0.006 | MG/L | < | . |
| Sodium | 180 | MG/L | | . |
| Uranium (Y-12) | 5.78 | MG/L | | . |
| Uranium-235 | 1.4 | WEIGHT | | . |
| Vanadium | 0.005 | MG/L | < | . |
| Zinc | 0.035 | MG/L | | . |

---------- SMP_ID=B938-LQ LABSMPID=910807-248 LOCATION=K-1417 STATION=B938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Mercury | 0.0026 | MG/L | P | . |
| Uranium (Y-12) | 0.564 | MG/L | | . |
| Uranium-235 | 1.5 | WEIGHT | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B9738-LQ LABSMPID=910819-174 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 15300 | PCI/L | | 1200 |
| Aluminum | 0.2 | MG/L | < | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 287 | UG/L | | . |
| Barium | 0.038 | MG/L | . | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 62300 | PCI/L | | 2200 |
| Boron | 2.8 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 700 | MG/L | | . |
| Cesium-137 | 84.6 | PCI/L | | 74 |
| Chloride IC | 432 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9862 | G/ML | | . |
| Dissolved Solids | 3758 | MG/L | P | . |
| Fluoride SIE | 2.5 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 148 | UG/L | | . |
| Magnesium | 140 | MG/L | | . |
| Manganese | 1.3 | MG/L | | . |
| Mercury | 0.02 | MG/L | < | . |
| Nickel | 1.1 | MG/L | | . |
| Nitrate | 50 | MG/L | <P | . |
| Protactinium-234m | 21800 | PCI/L | | 7600 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 5.88 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 250 | MG/L | | . |
| Sulfate | 2040 | MG/L | | . |
| Thallium (AA) | 2.2 | UG/L | | . |
| Thorium-234 | 9520 | PCI/L | | 770 |
| Total Organic Carbon (TOC) | 14 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (Y-12) | 7.17 | MG/L | | . |
| Uranium (K-25) | 8.7 | MG/L | | . |
| Uranium-235 | 734 | PCI/L | | 120 |
| Uranium-235 | 1.3 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.06 | MG/L | | . |
| pH | 7.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=B9838-LQ LABSMPID=910807-253 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.24 | MG/L | | . |
| Antimony | 0.05 | MG/L | < | . |
| Arsenic (ICP) | 0.05 | MG/L | < | . |
| Barium | 0.034 | MG/L | | . |
| Beryllium | 0.0003 | MG/L | | . |
| Boron | 0.51 | MG/L | | . |
| Cadmium | 0.003 | MG/L | < | . |
| Calcium | 230 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Cobalt | 0.005 | MG/L | < | . |
| Copper | 0.0055 | MG/L | | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Magnesium | 51 | MG/L | | . |
| Manganese | 5.8 | MG/L | | . |
| Mercury | 0.0027 | MG/L | P | . |
| Nickel | 0.089 | MG/L | | . |
| Selenium (ICP) | 0.05 | MG/L | < | . |
| Silver | 0.006 | MG/L | < | . |
| Sodium | 140 | MG/L | | . |
| Uranium (Y-12) | 0.123 | MG/L | | . |
| Uranium-235 | 1.4 | WEIGHT | | . |
| Vanadium | 0.005 | MG/L | < | . |
| Zinc | 0.011 | MG/L | | . |

---------- SMP_ID=B9838-LQ LABSMPID=910807-254 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 0.32 | MG/L | | . |
| Antimony | 0.05 | MG/L | < | . |
| Arsenic (ICP) | 0.05 | MG/L | < | . |
| Barium | 0.034 | MG/L | | . |
| Beryllium | 0.0003 | MG/L | | . |
| Boron | 0.5 | MG/L | | . |
| Cadmium | 0.003 | MG/L | < | . |
| Calcium | 230 | MG/L | | . |
| Chromium | 0.01 | MG/L | < | . |
| Cobalt | 0.005 | MG/L | < | . |
| Copper | 0.0051 | MG/L | | . |
| Lead (ICP) | 0.05 | MG/L | < | . |
| Magnesium | 51 | MG/L | | . |
| Manganese | 5.8 | MG/L | | . |
| Mercury | 0.0036 | MG/L | P | . |
| Nickel | 0.094 | MG/L | | . |
| Selenium (ICP) | 0.05 | MG/L | < | . |
| Silver | 0.006 | MG/L | < | . |
| Sodium | 140 | MG/L | | . |
| Vanadium | 0.005 | MG/L | < | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C2738-LQ LABSMPID=910819-162 LOCATION=K-1417 STATION=C2738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 9.3 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 28.2 | UG/L | | . |
| Barium | 0.015 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.73 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 24 | MG/L | | . |
| Chloride IC | 184 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.074 | MG/L | | . |
| Density | 0.9867 | G/ML | | . |
| Dissolved Solids | 2586 | MG/L | H | . |
| Fluoride SIE | 17 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 2.2 | UG/L | | . |
| Magnesium | 0.73 | MG/L | | . |
| Manganese | 0.062 | MG/L | | . |
| Mercury | 0.12 | MG/L | | . |
| Nickel | 0.64 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 10 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 420 | MG/L | | . |
| Sulfate | 1290 | MG/L | | . |
| Thallium (AA) | 1.4 | UG/L | | . |
| Total Organic Carbon (TOC) | 35 | MG/L | | . |
| Total Phosphate | 0.7 | MG/L | | . |
| Uranium (Y-12) | 0.131 | MG/L | | . |
| Uranium (K-25) | 0.17 | MG/L | | . |
| Uranium-235 | 1.9 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.045 | MG/L | | . |
| pH | 10.7 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C2838-LQ LABSMPID=910819-166 LOCATION=K-1417 STATION=C2838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 12 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 28.1 | UG/L | | . |
| Barium | 0.02 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.48 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 23 | MG/L | | . |
| Chloride IC | 270 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.12 | MG/L | | . |
| Density | 1.0046 | G/ML | | . |
| Dissolved Solids | 2811 | MG/L | H | . |
| Fluoride SIE | 8.9 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 3.8 | UG/L | | . |
| Magnesium | 0.03 | MG/L | < | . |
| Manganese | 0.01 | MG/L | < | . |
| Mercury | 0.025 | MG/L | | . |
| Nickel | 0.37 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 10 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 650 | MG/L | | . |
| Sulfate | 1450 | MG/L | | . |
| Thallium (AA) | 1.4 | UG/L | | . |
| Total Organic Carbon (TOC) | 15 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (K-25) | 0.1 | MG/L | < | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.031 | MG/L | | . |
| pH | 10.5 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C2938-LQ LABSMPID=910819-164 LOCATION=K-1417 STATION=C2938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 12 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.01 | MG/L | < | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.6 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 14 | MG/L | | . |
| Chloride IC | 155 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.987 | G/ML | | . |
| Dissolved Solids | 2762 | MG/L | H | . |
| Fluoride SIE | 10 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 0.078 | MG/L | | . |
| Manganese | 0.01 | MG/L | < | . |
| Mercury | 0.02 | MG/L | < | . |
| Nickel | 0.21 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 460 | MG/L | | . |
| Sulfate | 1420 | MG/L | | . |
| Total Organic Carbon (TOC) | 36 | MG/L | | . |
| Total Phosphate | 0.9 | MG/L | | . |
| Uranium (Y-12) | 0.018 | MG/L | | . |
| Uranium (K-25) | 0.1 | MG/L | < | . |
| Uranium-235 | 1.5 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.026 | MG/L | | . |
| pH | 10.7 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C3038-LQ LABSMPID=910819-172 LOCATION=K-1417 STATION=C3038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 331 | PCI/L | | 160 |
| Aluminum | 52 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.017 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 4630 | PCI/L | | 520 |
| Boron | 0.86 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 18 | MG/L | | . |
| Cesium-137 | 58.5 | PCI/L | | 120 |
| Chloride IC | 165 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.19 | MG/L | | . |
| Density | 1.023 | G/ML | | . |
| Fluoride SIE | 13 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 0.62 | MG/L | | . |
| Manganese | 0.074 | MG/L | | . |
| Mercury | 0.18 | MG/L | | . |
| Nickel | 0.43 | MG/L | | . |
| Nitrate | 50 | MG/L | <P | . |
| Protactinium-234m | 8260 | PCI/L | | 22000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 620 | MG/L | | . |
| Sulfate | 1260 | MG/L | | . |
| Thorium-234 | -518 | PCI/L | | 1400 |
| Total Organic Carbon (TOC) | 74 | MG/L | | . |
| Total Phosphate | 0.7 | MG/L | | . |
| Uranium (K-25) | 0.21 | MG/L | | . |
| Vanadium | 0.059 | MG/L | | . |
| Zinc | 0.029 | MG/L | | . |
| pH | 11.8 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C3338-LQ LABSMPID=910819-167 LOCATION=K-1417 STATION=C3338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 21 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.079 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.35 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 67 | MG/L | | . |
| Chromium | 0.11 | MG/L | | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.088 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 2.8 | MG/L | | . |
| Manganese | 0.42 | MG/L | | . |
| Mercury | 0.082 | MG/L | | . |
| Nickel | 0.56 | MG/L | | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.063 | MG/L | | . |
| Sodium | 450 | MG/L | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.075 | MG/L | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C4538-LQ LABSMPID=910819-170 LOCATION=K-1417 STATION=C4538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 1.2 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 33.1 | UG/L | | . |
| Barium | 0.01 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.46 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 9.9 | MG/L | | . |
| Chloride IC | 134 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9838 | G/ML | | . |
| Dissolved Solids | 2382 | MG/L | H | . |
| Fluoride SIE | 28 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 20.5 | UG/L | | . |
| Magnesium | 0.96 | MG/L | | . |
| Manganese | 0.027 | MG/L | | . |
| Mercury | 0.044 | MG/L | | . |
| Nickel | 0.15 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 10 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 460 | MG/L | | . |
| Sulfate | 1110 | MG/L | | . |
| Thallium (AA) | 1.4 | UG/L | | . |
| Total Organic Carbon (TOC) | 15 | MG/L | | . |
| Total Phosphate | 0.5 | MG/L | | . |
| Uranium (Y-12) | 1.28 | MG/L | | . |
| Uranium (K-25) | 1.1 | MG/L | | . |
| Uranium-235 | 1.2 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.035 | MG/L | | . |
| pH | 8.4 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C4738-LQ LABSMPID=910819-168 LOCATION=K-1417 STATION=C4738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Alpha Activity | 2600 | PCI/L | | 520 |
| Aluminum | 1.5 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 10.6 | UG/L | | . |
| Barium | 0.011 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Beta Activity | 9360 | PCI/L | | 1000 |
| Boron | 0.35 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 17 | MG/L | | . |
| Cesium-137 | 104 | PCI/L | | 70 |
| Chloride IC | 113 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.04 | MG/L | < | . |
| Density | 0.9838 | G/ML | | . |
| Dissolved Solids | 2058 | MG/L | H | . |
| Fluoride SIE | 18 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 0.51 | MG/L | | . |
| Manganese | 0.033 | MG/L | | . |
| Mercury | 0.082 | MG/L | | . |
| Nickel | 0.13 | MG/L | | . |
| Nitrate | 50 | MG/L | <H | . |
| Protactinium-234m | 16100 | PCI/L | | 10000 |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 10 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 360 | MG/L | | . |
| Sulfate | 1060 | MG/L | | . |
| Thallium (AA) | 1 | UG/L | | . |
| Thorium-234 | 725 | PCI/L | | 670 |
| Total Phosphate | 0.3 | MG/L | | . |
| Uranium (Y-12) | 1.93 | MG/L | | . |
| Uranium (K-25) | 0.53 | MG/L | | . |
| Uranium-235 | 1.2 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.033 | MG/L | | . |
| pH | 9.1 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C4838-LQ LABSMPID=910819-165 LOCATION=K-1417 STATION=C4838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 170 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.37 | MG/L | | . |
| Beryllium | 0.0034 | MG/L | | . |
| Boron | 0.48 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 320 | MG/L | | . |
| Chromium | 0.97 | MG/L | | . |
| Cobalt | 0.076 | MG/L | | . |
| Copper | 1.2 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 16 | MG/L | | . |
| Manganese | 1.4 | MG/L | | . |
| Mercury | 0.87 | MG/L | P | . |
| Nickel | 4.5 | MG/L | | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 590 | MG/L | | . |
| Vanadium | 0.27 | MG/L | | . |
| Zinc | 0.43 | MG/L | | . |

---------- SMP_ID=C5238-LQ LABSMPID=910819-150 LOCATION=K-1417 STATION=C5238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 180 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.41 | MG/L | | . |
| Beryllium | 0.0031 | MG/L | | . |
| Boron | 0.45 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 250 | MG/L | | . |
| Chromium | 0.51 | MG/L | | . |
| Cobalt | 0.077 | MG/L | | . |
| Copper | 0.57 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 14 | MG/L | | . |
| Manganese | 1.8 | MG/L | | . |
| Mercury | 0.14 | MG/L | | . |
| Nickel | 4.1 | MG/L | | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 500 | MG/L | | . |
| Vanadium | 0.22 | MG/L | | . |
| Zinc | 0.49 | MG/L | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C5538-LQ LABSMPID=910819-173 LOCATION=K-1417 STATION=C5538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 29 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.022 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.71 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 15 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.069 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 0.47 | MG/L | | . |
| Manganese | 0.11 | MG/L | | . |
| Mercury | 0.95 | MG/L | | . |
| Nickel | 0.27 | MG/L | | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 410 | MG/L | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.048 | MG/L | | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C5638-LQ LABSMPID=910819-151 LOCATION=K-1417 STATION=C5638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 39 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Arsenic (AA) | 88.3 | UG/L | | . |
| Barium | 0.013 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.2 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 24 | MG/L | | . |
| Chloride IC | 159 | MG/L | | . |
| Chromium | 0.1 | MG/L | < | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.43 | MG/L | | . |
| Density | 0.9993 | G/ML | | . |
| Dissolved Solids | 2545 | MG/L | H | . |
| Fluoride SIE | 5 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Lead (AA) | 54.3 | UG/L | | . |
| Magnesium | 0.46 | MG/L | | . |
| Manganese | 0.029 | MG/L | | . |
| Mercury | 0.078 | MG/L | | . |
| Nickel | 1.5 | MG/L | | . |
| Nitrate | 5 | MG/L | <H | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Selenium (AA) | 8.57 | UG/L | | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 340 | MG/L | | . |
| Sulfate | 355 | MG/L | | . |
| Thallium (AA) | 1.2 | UG/L | | . |
| Total Organic Carbon (TOC) | 71 | MG/L | | . |
| Total Phosphate | 1 | MG/L | | . |
| Uranium (Y-12) | 0.055 | MG/L | | . |
| Uranium (K-25) | 0.16 | MG/L | | . |
| Uranium-235 | 1.3 | WEIGHT | | . |
| Vanadium | 0.05 | MG/L | < | . |
| Zinc | 0.051 | MG/L | | . |
| pH | 12.1 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

Results for 1991 sludge liquid samples from K-1417 drums.

---------- SMP_ID=C5738-LQ LABSMPID=910819-149 LOCATION=K-1417 STATION=C5738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Aluminum | 66 | MG/L | | . |
| Antimony | 0.5 | MG/L | < | . |
| Arsenic (ICP) | 0.5 | MG/L | < | . |
| Barium | 0.092 | MG/L | | . |
| Beryllium | 0.003 | MG/L | < | . |
| Boron | 0.33 | MG/L | | . |
| Cadmium | 0.03 | MG/L | < | . |
| Calcium | 160 | MG/L | | . |
| Chloride IC | 177 | MG/L | | . |
| Chromium | 0.3 | MG/L | | . |
| Cobalt | 0.05 | MG/L | < | . |
| Copper | 0.63 | MG/L | | . |
| Density | 0.9917 | G/ML | | . |
| Dissolved Solids | 2538 | MG/L | H | . |
| Fluoride SIE | 4.8 | MG/L | | . |
| Lead (ICP) | 0.5 | MG/L | < | . |
| Magnesium | 4.7 | MG/L | | . |
| Manganese | 0.36 | MG/L | | . |
| Mercury | 0.18 | MG/L | | . |
| Nickel | 3.3 | MG/L | | . |
| Nitrate | 11 | MG/L | <P | . |
| Selenium (ICP) | 0.5 | MG/L | < | . |
| Silver | 0.06 | MG/L | < | . |
| Sodium | 400 | MG/L | | . |
| Sulfate | 678 | MG/L | | . |
| Total Organic Carbon (TOC) | 84 | MG/L | | . |
| Total Phosphate | 2 | MG/L | | . |
| Uranium (K-25) | 0.21 | MG/L | | . |
| Vanadium | 0.052 | MG/L | | . |
| pH | 11.8 | STD UNITS | H | . |

Source: dataset pondlq02 on 08DEC93

# APPENDIX L

# TCLP RESULTS FOR 1991 WET SLUDGE SAMPLES FROM THE K-1417 DRUMS

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=B1238-SL LABSMPID=910815-166 LOCATION=K-1417 STATION=B1238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.036 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 2.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B1338-SL LABSMPID=910815-164 LOCATION=K-1417 STATION=B1338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 4.8 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B2238-SL LABSMPID=910815-165 LOCATION=K-1417 STATION=B2238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.033 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=B3238-SL LABSMPID=910803-013 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 2.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3538-SL LABSMPID=910803-009 LOCATION=K-1417 STATION=B3538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1.1 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 3.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3738-SL LABSMPID=910815-236 LOCATION=K-1417 STATION=B3738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.04 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 8.7 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3838-SL LABSMPID=910815-239 LOCATION=K-1417 STATION=B3838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 11 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=B5838-SL LABSMPID=910815-153 LOCATION=K-1417 STATION=B5838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 4.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B6038-SL LABSMPID=910815-156 LOCATION=K-1417 STATION=B6038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 4.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B6638-SL LABSMPID=910815-155 LOCATION=K-1417 STATION=B6638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 4.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=B6638-SL LABSMPID=910815-274 LOCATION=K-1417 STATION=B6638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 3.8 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B7038-SL LABSMPID=910815-154 LOCATION=K-1417 STATION=B7038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.4 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B7438-SL LABSMPID=910815-162 LOCATION=K-1417 STATION=B7438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=B7738-SL LABSMPID=910815-163 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 12 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B9738-SL LABSMPID=910815-244 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 4.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B9838-SL LABSMPID=910803-015 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.038 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.0055 | MG/L | | . |
| Nickel (TCLP) | 2.7 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=BLANK #1 LABSMPID=910804-036 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 0.32 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=BLANK #2 LABSMPID=910804-037 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 0.35 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 0.05 | MG/L | < | . |
| Selenium (TCLP) | 0.01 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=BLANK #2 LABSMPID=910824-003 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.78 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=C1038-SL LABSMPID=910803-011 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.004 | MG/L | | . |
| Nickel (TCLP) | 5.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C1538-SL LABSMPID=910815-167 LOCATION=K-1417 STATION=C1538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.8 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C1538-SL LABSMPID=910815-275 LOCATION=K-1417 STATION=C1538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 2.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C1638-SL LABSMPID=910815-227 LOCATION=K-1417 STATION=C1638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.2 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.031 | MG/L | | . |
| Nickel (TCLP) | 3.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2138-SL LABSMPID=910815-241 LOCATION=K-1417 STATION=C2138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.2 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 4.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C2338-SL LABSMPID=910815-168 LOCATION=K-1417 STATION=C2338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 2.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2538-SL LABSMPID=910815-228 LOCATION=K-1417 STATION=C2538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.3 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.033 | MG/L | | . |
| Nickel (TCLP) | 3.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2738-SL LABSMPID=910815-226 LOCATION=K-1417 STATION=C2738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 6.4 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C2838-SL LABSMPID=910815-233 LOCATION=K-1417 STATION=C2838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2938-SL LABSMPID=910815-230 LOCATION=K-1417 STATION=C2938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.1 | MG/L | < | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.48 | MG/L | | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=C3038-SL LABSMPID=910815-242 LOCATION=K-1417 STATION=C3038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.059 | MG/L | | . |
| Nickel (TCLP) | 3.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C3138-SL LABSMPID=910815-229 LOCATION=K-1417 STATION=C3138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.66 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C3338-SL LABSMPID=910815-234 LOCATION=K-1417 STATION=C3338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.1 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 2.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C3938-SL LABSMPID=910815-231 LOCATION=K-1417 STATION=C3938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 2.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C4538-SL LABSMPID=910815-238 LOCATION=K-1417 STATION=C4538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 9.5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C4638-SL LABSMPID=910815-237 LOCATION=K-1417 STATION=C4638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.024 | MG/L | | . |
| Nickel (TCLP) | 3.7 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C4738-SL LABSMPID=910815-235 LOCATION=K-1417 STATION=C4738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.1 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 5.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.56 | MG/L | | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C4838-SL LABSMPID=910815-232 LOCATION=K-1417 STATION=C4838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.3 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5238-SL LABSMPID=910815-150 LOCATION=K-1417 STATION=C5238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.24 | MG/L | | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5438-SL LABSMPID=910815-240 LOCATION=K-1417 STATION=C5438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.27 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C5438-SL LABSMPID=910815-276 LOCATION=K-1417 STATION=C5438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 4.7 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.18 | MG/L | | . |

---------- SMP_ID=C5538-SL LABSMPID=910815-243 LOCATION=K-1417 STATION=C5538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.067 | MG/L | | . |
| Nickel (TCLP) | 1.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5638-SL LABSMPID=910815-042 LOCATION=K-1417 STATION=C5638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 7.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=C5738-SL LABSMPID=910815-148 LOCATION=K-1417 STATION=C5738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.036 | MG/L | | . |
| Nickel (TCLP) | 0.94 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C9938-SL LABSMPID=910803-017 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.0054 | MG/L | | . |
| Nickel (TCLP) | 4.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #1 LABSMPID=910821-080 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.6 | MG/L | | . |
| Cadmium (TCLP) | 0.12 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=REAG. BLANK #1 LABSMPID=910821-088 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.21 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #1 LABSMPID=910823-182 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.33 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #1 LABSMPID=910826-068 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 17 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=REAG. BLANK #1 LABSMPID=910827-163 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.5 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #2 LABSMPID=910821-081 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.7 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.036 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #2 LABSMPID=910821-089 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.34 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=REAG. BLANK #2 LABSMPID=910823-183 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.33 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.01 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #2 LABSMPID=910826-069 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 52 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=REAG. BLANK #2 LABSMPID=910827-164 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 5 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=REAGENT BLANK#1 LABSMPID=910822-133 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.05 | MG/L | < | . |
| Barium (TCLP) | 0.56 | MG/L | | . |
| Cadmium (TCLP) | 0.003 | MG/L | < | . |
| Chromium (TCLP) | 0.01 | MG/L | < | . |
| Lead (TCLP) | 0.05 | MG/L | < | . |
| Mercury (TCLP) | 0.025 | MG/L | | . |
| Nickel (TCLP) | 0.05 | MG/L | < | . |
| Selenium (TCLP) | 0.05 | MG/L | < | . |
| Silver (TCLP) | 0.01 | MG/L | < | . |

---------- SMP_ID=REAGENT BLK#1 LABSMPID=910819-053 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 6.8 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=REAGENT BLK#2 LABSMPID=910819-054 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 2.7 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 0.1 | MG/L | < | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 wet sludge samples from K-1417 drums.

---------- SMP_ID=SPIKE LABSMPID=910804-038 LOCATION=K-1417 STATION=LAB ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 2.4 | MG/L | | . |
| Cadmium (TCLP) | 2 | MG/L | | . |
| Chromium (TCLP) | 1.9 | MG/L | | . |
| Lead (TCLP) | 2 | MG/L | | . |
| Mercury (TCLP) | 0.23 | MG/L | | . |
| Nickel (TCLP) | 6.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 2 | MG/L | | . |

Source: dataset pondtc02 on 08DEC93

# APPENDIX M

# TCLP RESULTS FOR 1991 DRIED SLUDGE SAMPLES FROM THE K-1417 DRUMS

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B1238-SL LABSMPID=910815-249 LOCATION=K-1417 STATION=B1238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 2.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B1238-SL LABSMPID=910815-272 LOCATION=K-1417 STATION=B1238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1.2 | MG/L | | . |
| Cadmium (TCLP) | 0.045 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 9.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B1338-SL LABSMPID=910815-247 LOCATION=K-1417 STATION=B1338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.031 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 8.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B2238-SL LABSMPID=910815-248 LOCATION=K-1417 STATION=B2238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 3.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3238-SL LABSMPID=910803-012 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.032 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 8.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3538-SL LABSMPID=910803-008 LOCATION=K-1417 STATION=B3538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.038 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 9.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B3738-SL LABSMPID=910815-262 LOCATION=K-1417 STATION=B3738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.037 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 13 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B3838-SL LABSMPID=910815-265 LOCATION=K-1417 STATION=B3838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 13 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B5838-SL LABSMPID=910815-158 LOCATION=K-1417 STATION=B5838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 13 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B6038-SL LABSMPID=910815-161 LOCATION=K-1417 STATION=B6038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 11 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B6038-SL LABSMPID=910815-271 LOCATION=K-1417 STATION=B6038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 11 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B6638-SL LABSMPID=910815-160 LOCATION=K-1417 STATION=B6638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.4 | MG/L | | . |
| Nickel (TCLP) | 5.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B7038-SL LABSMPID=910815-159 LOCATION=K-1417 STATION=B7038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 14 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B7438-SL LABSMPID=910815-245 LOCATION=K-1417 STATION=B7438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 8.1 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B7738-SL LABSMPID=910815-246 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 10 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=B9738-SL LABSMPID=910815-270 LOCATION=K-1417 STATION=B7738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 15 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=B9838-SL LABSMPID=910803-014 LOCATION=K-1417 STATION=B3238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.051 | MG/L | | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.002 | MG/L | < | . |
| Nickel (TCLP) | 7.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C1038-SL LABSMPID=910803-010 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.0046 | MG/L | | . |
| Nickel (TCLP) | 6.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C1538-SL LABSMPID=910815-250 LOCATION=K-1417 STATION=C1538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.15 | MG/L | | . |
| Nickel (TCLP) | 3.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C1638-SL LABSMPID=910815-253 LOCATION=K-1417 STATION=C1638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.19 | MG/L | | . |
| Nickel (TCLP) | 3.7 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C2138-SL LABSMPID=910815-267 LOCATION=K-1417 STATION=C2138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.021 | MG/L | | . |
| Nickel (TCLP) | 3.4 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2338-SL LABSMPID=910815-251 LOCATION=K-1417 STATION=C2338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 5.5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2538-SL LABSMPID=910815-254 LOCATION=K-1417 STATION=C2538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.28 | MG/L | | . |
| Nickel (TCLP) | 4.5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C2738-SL LABSMPID=910815-252 LOCATION=K-1417 STATION=C2738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.11 | MG/L | | . |
| Nickel (TCLP) | 10 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2838-SL LABSMPID=910815-259 LOCATION=K-1417 STATION=C2838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C2938-SL LABSMPID=910815-256 LOCATION=K-1417 STATION=C2938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.077 | MG/L | | . |
| Nickel (TCLP) | 7.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C3038-SL LABSMPID=910815-268 LOCATION=K-1417 STATION=C3038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.35 | MG/L | | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.044 | MG/L | | . |
| Nickel (TCLP) | 8.6 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C3138-SL LABSMPID=910815-255 LOCATION=K-1417 STATION=C3138 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 1.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C3338-SL LABSMPID=910815-260 LOCATION=K-1417 STATION=C3338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 2.8 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C3338-SL LABSMPID=910815-273 LOCATION=K-1417 STATION=C3338 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 2.1 | MG/L | | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C3938-SL LABSMPID=910815-257 LOCATION=K-1417 STATION=C3938 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.13 | MG/L | | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | < | . |
| Nickel (TCLP) | 2.9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C4538-SL LABSMPID=910815-264 LOCATION=K-1417 STATION=C4538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.032 | MG/L | | . |
| Nickel (TCLP) | 3.2 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C4638-SL LABSMPID=910815-263 LOCATION=K-1417 STATION=C4638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.038 | MG/L | | . |
| Nickel (TCLP) | 5.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C4738-SL LABSMPID=910815-261 LOCATION=K-1417 STATION=C4738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.037 | MG/L | | . |
| Nickel (TCLP) | 9.5 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C4838-SL LABSMPID=910815-258 LOCATION=K-1417 STATION=C4838 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 2.3 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C5238-SL LABSMPID=910815-151 LOCATION=K-1417 STATION=C5238 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 3.8 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5438-SL LABSMPID=910815-266 LOCATION=K-1417 STATION=C5438 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.22 | MG/L | | . |
| Nickel (TCLP) | 4 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5538-SL LABSMPID=910815-269 LOCATION=K-1417 STATION=C5538 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.02 | MG/L | | . |
| Nickel (TCLP) | 16 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93

TCLP results for 1991 dried sludge samples from K-1417 drums.

---------- SMP_ID=C5638-SL LABSMPID=910815-157 LOCATION=K-1417 STATION=C5638 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.12 | MG/L | | . |
| Nickel (TCLP) | 9 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C5738-SL LABSMPID=910815-149 LOCATION=K-1417 STATION=C5738 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Arsenic (TCLP) | 0.5 | MG/L | < | . |
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.25 | MG/L | | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.13 | MG/L | | . |
| Nickel (TCLP) | 0.71 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

---------- SMP_ID=C9938-SL LABSMPID=910803-016 LOCATION=K-1417 STATION=C1038 ----------

| ANALYTE | RESULTS | UNITS | LABQUAL | RAD COUNTING ERROR |
|---|---|---|---|---|
| Barium (TCLP) | 1 | MG/L | < | . |
| Cadmium (TCLP) | 0.03 | MG/L | < | . |
| Chromium (TCLP) | 0.1 | MG/L | < | . |
| Lead (TCLP) | 0.5 | MG/L | < | . |
| Mercury (TCLP) | 0.19 | MG/L | | . |
| Nickel (TCLP) | 0.59 | MG/L | | . |
| Selenium (TCLP) | 0.5 | MG/L | < | . |
| Silver (TCLP) | 0.1 | MG/L | < | . |

Source: dataset pondtc02 on 08DEC93