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BWX Technologies, Inc.
a McDermott company

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BWXT of Ohio, Inc.
1 Mound Road
P.O. Box 3030
Miamisburg, Ohio 45343-3030
(937) 865-4020

ESC-205/99
December 18, 1999

00-TC/12-18

Mr. Richard B. Provencher, Director
Miamisburg Environmental Management Project
U.S. Department of Energy
P.O. Box 66
Miamisburg, OH 45343-0066

ATTENTION: Rob Rothman (2)

SUBJECT: Contract No. DE-AC24-97OH20044
CERCLA Documents for Parcel 4

REFERENCE: Statement of Work Requirement C 7.1e -- Regulator Reports

Dear Mr. Provencher:

BWXT of Ohio has completed the following CERCLA products for public review in support of the transfer of Parcel 4: Residual Risk Evaluation, Screening Level Ecological Risk Assessment and the Proposed Plan for Parcel 4.

Pending approval from your office to release the documents to the public, copies will be placed in the CERCLA Public Reading Room for a thirty day public review period that starts December 18, 2000 through January 16, 2001. If you or members of your staff have any questions regarding the documents, or if additional support is needed, please contact Dave Rakel at extension 4203.

Sincerely,

JSStapleton

Jeffrey S. Stapleton
Manager, Environmental Safeguards & Compliance

JSS/nmg

Enclosures as stated

cc: Tim Fischer, USEPA, (2) w/attachments
Brian Nickel, OEPA, (2) w/attachments
Ruth Vandegrift, ODH, (1) w/attachments
Dewain Eckman, DOE/MEMP, (1) w/attachments
John Ebersole, DOE/OH, (1) w/attachments
Dave Rakel, BWXT of Ohio, (2) w/attachments
Dann Bird, MMCIC, (2) w/attachments
Public Reading Room, (5) w/attachments
DCC

SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT

Parcel 4

Final

February 2001

Department of Energy
BWXT of Ohio, Inc.
Mound Plant
Miamisburg, Ohio

The Mound Core Team
P.O. Box 66
Miamisburg, Ohio 45343-0066

Dr. Jeff Fisher
Ms. Cathianne Watkins
1550 Calls Creek Circle
Watkinsville, GA
30677

Dear Dr. Jeff Fisher and Ms. Cathianne Watkins:

The Core Team, consisting of the U.S. Department of Energy Miamisburg Environmental Management Project (DOE-MEMP), U.S. Environmental Protection Agency (USEPA), and the Ohio Environmental Protection Agency (OEPA), appreciates your comments on the Residual Risk Evaluation for Parcel 4. Attached are our responses.

Should the responses to comments require additional detail, please contact Rob Rothman at (937) 865-3823 and we will gladly arrange a meeting or telephone conference.

Sincerely,

DOE/MEMP: _____
Robert S. Rothman, Remedial Project Manager

USEPA: _____
Timothy J. Fischer, Remedial Project Manager

OEPA: _____
Brian K. Nickel, Project Manager

Comments Received on the
Parcel 4 Proposed Plan and Risk Evaluations
from
Dr. Jeff Fisher and Cathianne Watkins
January 2001

General Findings in Public Review Draft (Rev 0)

Comment 1:

The level of contamination of the soil and groundwater at this parcel require restrictions on the use of this property. For example, constructing basements, using unpaved access roads, driveways and patios are not recommended. The type of industry that locates on the property is an issue. Food service and child care facilities are not recommended. The recommended institutional controls were listed (with no detail) in the document. The authors of the human health risk assessment did not present a specific opinion concerning the site, other than suggesting the risk assessment is 'conservative' and institutional controls will provide adequate protection.

Response :

The Parcel 4 RRE was conducted to evaluate human health risks associated with residual levels of contamination remaining within the area to ensure that future users of the land will not be exposed to contaminant levels that would pose unacceptable risks. The RRE was not intended to be a risk management document. The *Risk Assessment Guidance for Superfund Volume 1 Human Health Evaluation Manual (Part A)*, Section 9.1.1, Page 9-2 recommends avoiding the drawing of "risk management" conclusions within a risk assessment. The risk managers do agree that this parcel requires restrictions therefore the Record of Decision will state : "In order to maintain protection of human health and the environment at Parcel 4 in the future, the institutional controls to be adopted will ensure:

- Maintenance of industrial/commercial land use;
- Prohibition against residential use;
- Prohibition against the use of groundwater;
- Site access for federal and state agencies for the purpose of sampling and monitoring; and
- Prohibition against removal of Parcel 4 soils from the DOE Mound property (as owned in 1998) boundary without approval form the Ohio Department of Health (ODH) and the Ohio Environmental Protection Agency (OEPA)."

Comment 2:

An area of concern is off-site migration of COPCs and other materials that were removed from the risk analysis, but are known human carcinogens.

Contamination of this parcel apparently occurred from soil runoff, resuspension of dust, and atmospheric disposition of stack emissions. This parcel represents, for the most part, the 'unused' portion of Mound, but the soil is contaminated to a degree that one can argue for clean up of soil. If no clean-up of soil occurs, the current and future theoretical health risks to the immediate off-site community need to be included in this document. Discussions (or map) are needed to delineate 1) the distribution pattern of radionuclides and chemicals in the soil, and 2) the modes of transport of these radionuclides from their source to this parcel and the adjacent community since this soil contamination in this parcel is apparently not the result of work activity in this parcel.

Response:

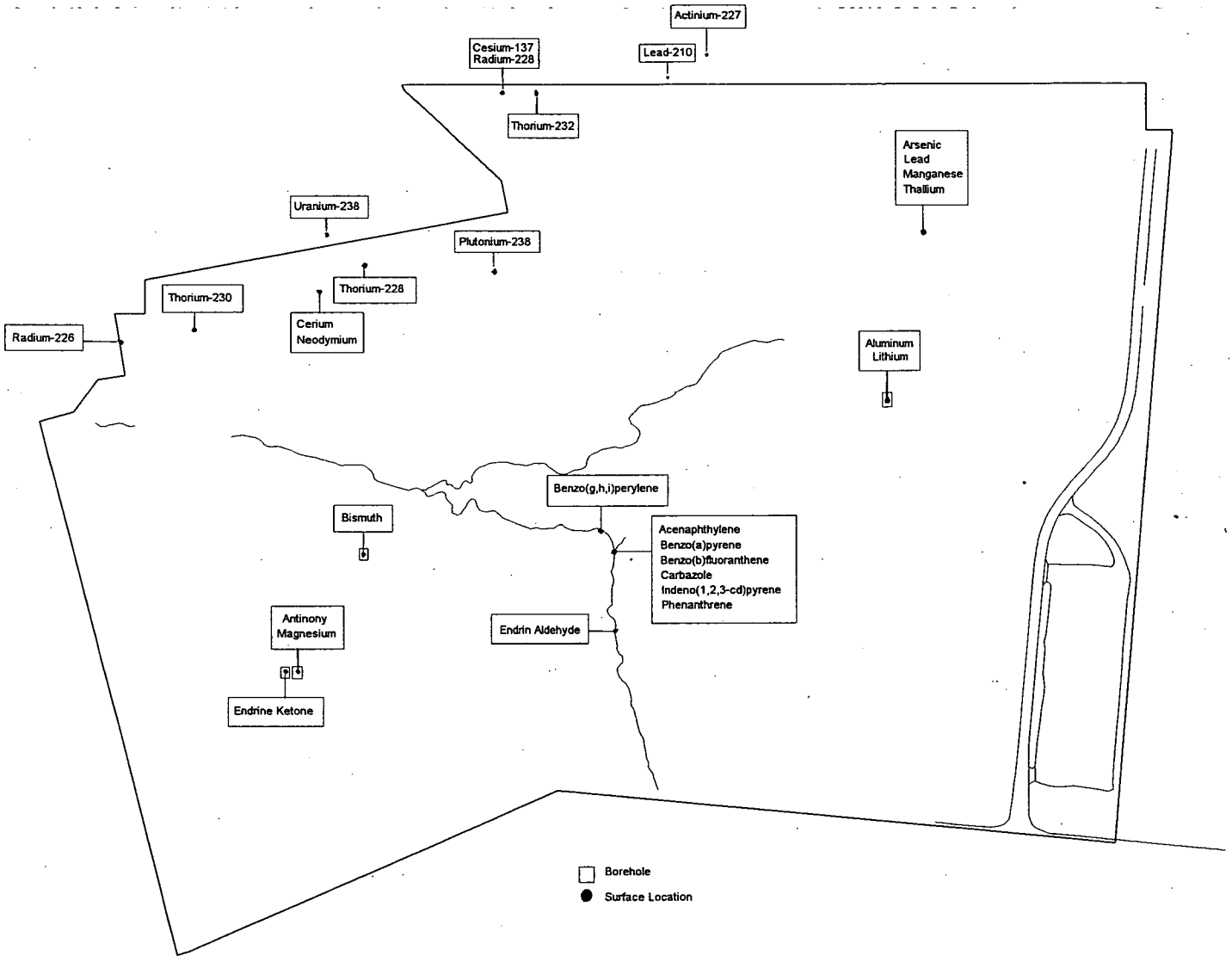
This Residual Risk Evaluation was prepared according to the Residual Risk Evaluation Methodology (RREM). This methodology focuses on the risks within the parcel . According to the Mound 2000 Work Plan, off-site risk will be addressed in the off-site or final Record of Decision and its supporting risk evaluation.

No plant operations, no spills, and no dumping activities are known to have occurred on Parcel 4. The property did receive surface runoff from the adjacent plant operations, which has potentially contaminated Parcel 4. In 1995, a drainage control system was installed along the road north (and uphill) of Parcel 4 to prevent additional surface runoff. Parcel 4 was evaluated using all available sampling data. All carcinogenic and non-carcinogenic constituents detected in Parcel 4 were evaluated in the RRE unless they screened out using the RREM screening techniques. Although the RRE does evaluate indirect exposure to contaminants that may migrate through air or groundwater, it does not evaluate off-site exposure. The purpose of the RRE is to ensure that future on-site users of the land will not be exposed to contaminant levels that pose unacceptable risks following a transfer of ownership. The evaluation of off-site risks is not covered by the RREM. Further speculation as to how contaminants came to be located in Parcel 4 media would not improve the accuracy of the RRE.

A map will be added to the Final version of the Parcel 4 RRE that shows the location of the soil COPCs maximum concentration.

Comment 3:

The community that surrounds this site deserves attention and should not be overlooked. What can Mound say to the public about health and safety for individuals that live adjacent to the site if no remedial action (clean-up) is taken? What can Mound say to the public about working on this parcel if institutional controls are instituted? Kids, pregnant women, and young adults will visit this site! What type of activity (historical or current) at the Mound is responsible for the hand-full chemicals and radionuclides that are driving this parcel risk assessment?



Locations Of Maximum Observed Value For COPCs That Did Not Screen Out of Parcel 4 RRE

Response:

The community that surrounds the Mound facility should be protected, however the evaluation of off-site risks is not covered by the RRE. The purpose of the RRE is to assess potential health risks associated with residual levels of contamination remaining within a parcel prior to its release for future use. The future use scenarios specified by the RRE (i.e. construction worker, site employee) assume that adult workers will be chronically exposed to residual contamination in soil, groundwater, and air. Since the RRE used reasonable maximum exposure (RME) assumptions, actual risk levels for site employees and construction workers are not likely to exceed the levels presented in the RRE. Furthermore, the use of institutional controls limiting exposures to soil and groundwater are planned to ensure that on-site conditions are protective of future receptors.

Given the projected industrial/commercial future use for the site, it is unlikely that children and pregnant visitors would be chronically exposed to on-site contaminants. If exposures to children and pregnant visitors were to occur, those exposures are expected to be brief in duration and below any incremental cancer or adverse effect levels as modeled by the construction worker and site employee scenarios within the Parcel 4 Residual Risk Evaluation . Much lower for instance than a construction worker who was assumed to be exposed through incidental ingestion of soil, dermal contact with soil external radiation exposure, inhalation of airborne dust and vapors, ground water ingestion, dermal contact with ground water and inhalation of vapors released by ground water while showering. If on-site conditions are protective of the highly exposed construction worker, it is anticipated that on-site conditions would be protective of occasional site visitors. Pregnant employees are restricted from access to radiological work areas, and currently there are no radiological work areas in Parcel 4. Radiation levels on Parcel 4 are well below levels that would require workplace restrictions for pregnant women. The restrictions on development and use of the property (some of which specifically prohibit "children under eighteen years of age") are listed in detail in the Quit Claim Deed which is Appendix A of this Record of Decision.

Current and future risk due to antimony in groundwater was estimated using the maximum concentration detected. For chromium, it was assumed that all chromium detected was present in the most toxic, hexavalent state. Hexavalent chromium is not naturally occurring and requires strong oxidizing conditions to persist. Assuming that contaminants are present at the maximum concentration detected and assuming that contaminants are present only in their most toxic form is likely to result in an overestimation of actual risk levels.

Although the focus of this evaluation is Parcel 4, the offsite population has not been forgotten. Mound's effluent monitoring and environmental surveillance continues, is reported to the public via the Annual Site Environmental Monitoring Report and other means, and will continue until the end of the Exit

Project. The effluent monitoring program focuses on releases from the site, i.e., stack and wastewater discharges. The environmental surveillance program involves sample collection and analysis of ambient air, regional water supplies, sediments, onsite and offsite groundwater, and foodstuffs.

Screening Level Ecological Risk Assessment Parcel 4

Comment 4:

The ecological risk assessment was easier to read, generally. Did Mound formally sample for the two species, the Indiana bat and the eastern massasauga rattlesnake? If not, why? Succinct statements needs to be included about the strength of the data concerning a census of what does live on this site. If historical data is available, are there any trends? How will future use of the site effect the current population of wildlife? Development of the site means removal of several species. What are the species that will be affected by development? Are wildlife contaminated with chemicals or radionuclides, from this site, that is, is there any data on the measurement of these materials in carcasses?

Response:

No formal sampling for the Indiana bat and the eastern massasauga was conducted. The habitat required by the Indiana bat was not found to be present and no eastern massasauga specimens were collected during the comprehensive 1992-1993 OU9 Ecological Characterization study. Careful examination of all habitats on Parcel 4 in March 2000 revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9, Ecological Characterization study. For this reason, it is assumed that the Indiana bat and the eastern massasauga do not occur on or in the vicinity of Parcel 4.

Evaluating trends in species populations, impacts of development on wildlife, and tissue analysis are beyond the scope of a Screening Level Ecological Risk Assessment (SLERA) for a variety of reasons. First, a SLERA focuses on the potential for adverse effects on wildlife from chemical stressors, not physical or biological stressors. Second, impacts of future developmental actions have been addressed in the Environmental Assessment: Disposition of Mound Plant's South Property (DOE/EA-1239 June 1999). Third, community analysis and tissue bioassays are typically performed in a baseline Ecological Risk Assessment, using the results of the SLERA to focus quantitative field studies on those contaminants that pose a potential for adverse effects on specific wildlife species.

Comment 6:

Screening potential constituents of potential concern for surface soil samples less than 2 inches in depth only invalidates this pathway. This surface soil exposure issues for wildlife that do not live in soil is the same issue with humans. Granted, the expected disturbance of soil and potential exposure is expected to be with the surface layer of soil, but for this site, with industrial development and a construction worker scenario, removal or relocation of soil is expected. When this occurs, deep soil is brought to the surface and is a potential source for surface soil exposure. Re-accomplish the ecological analysis using 'deep' surface soil.

Response:

Samples collected within the 0 – to 2 **-feet** depth below ground surface were evaluated in the SLERA.

Specific Findings

Comment 1:

The ecological and human health documents are incorrect when referring to hazard index values as 'risk' projections. Only the cancer calculations are risk projections based on a slope or dose-response. There are no dose-response analyses for non-cancer human health effects or the ecological effects using a LOAEL or NOAEL approach with uncertainty factors. Please correct this technical deficiency in the documents. Nothing can be inferred in terms of risk from a HI value greater than 1.0 (other than segregating chemicals or radionuclides in terms of mode of action). So, a HI value of 1.1, 10 or 100 is very deceptive to interpret, unless the toxicology data and uncertainty factors used to derive a toxicity factor are evaluated. Bench mark dose response values are needed for noncancer 'risk' projections.

Response:

We agree that hazard index values are not "risk" projections. However, the text improvements requested will not impact the remedy selected for this parcel. These improvements will be applied to the next parcel. We also agree that the interpretation of HI values greater than 1 is complex and deceptive to interpret (see RAGS Part A, Section 8.2.2, page 8-14). Segregation of hazard indices requires identification of the major effects of each chemical, including those seen at higher doses than the critical effect (e.g. the chemical may cause liver damage at a dose of 100 mg/kg-day and neurotoxicity at a dose of 250 mg/kg-day). Major effect catagories include neurotoxicity, developmental toxicity, reproductive toxicity, immmunotoxicity, and adverse effects by target organ. Although higher exposure levels may be required to produce adverse health effects other than the critical effect, the reference dose can be used as the toxicity value for each effect category as a conservative and simplifying step. If

the segregation is not carefully done, an underestimation of true hazard could result.

Comment 2:

Add an appendix to the Residual Risk Evaluation Parcel 4 document with the statistically derived background concentrations (mean, range, n, and standard deviation) for chemicals and radionuclides.

Response:

The background values used in the Parcel 4 RRE were taken from the Mound 2000 RREM Appendix A. The soil background values were established in the *Operable Unit 9 Background Soils Investigation Soil Chemistry Report* (September 1994). The groundwater background values were established in the *Operable Unit 9 Hydrogeologic Investigation Groundwater Sweeps Report* (April 1995). Since the background values were not recalculated and were published along with the RREM, these values will not be repeated in this RRE. Mound stakeholders were provided with an opportunity to critically evaluate the background values when the public review draft of the RREM was issued. A citation referring the reader to Appendix A of the RREM will be added to the Parcel 4 RRE.

Comment 3:

The updated RBGV calculations were very helpful. This presents a systemic problem for future risk assessments because citation of prior outdated risk guidance documents is not appropriate. Please create a RBGV document for the public that is current for the two worker scenarios and can be cited in future risk assessments.

Response:

Thank you for the positive feed back. We are aware of the challenge of maintaining up-to-date values for the site. There are a few options in discussion – one is the approach you have suggested.

Comment 4:

SOIL: Table 5.19, total residual risk for parcel 4, summary table, (no page number) of the Residual Risk Evaluation Parcel 4 document. This sums it up! Technically, combining the cancer calculations for chemicals and radionuclides makes no sense. Combining rads and chemicals make sense only if the mechanism of action of the chemical is thought to be genotoxic by production of hydroxy radicals or direct alkylation of DNA. However, given the lumping of these data, the theoretical excess cancer risks are 1.0 in 10,000 from exposure to contaminated soil for the site employee and 3.3 in 100,000 for construction worker for parcel 4. Future use of water as a drinking source presents

unacceptable risks. However, there are drinking water standards in place (ARARs) to set acceptable standards, both on site and off site. This is not true for soil. The calculations in this document will be used to determine the acceptability of the soil in parcel 4.

Is the USEPA and OEPA using total residual risk or incremental risk (total residual risk- background risk)? The reality is that parcel 4 imposes excess theoretical cancer risks above background and is borderline in terms of acceptability as it stands. If only total residual risk is required, then remove the incremental risk calculations. These calculations do not add information to the document. If incremental risk is used to establish soil safety criteria, then a public review of the adequacy of the background levels is needed. I do not believe that the public critically evaluated these data. The set point of 1e-4 to 1e-6 for excess cancer risks is misinterpreted or ill defined in the document. The site is the entire Mound faculty (and the off-site locations which is another issue).

If the theoretical cancer risks for soil at parcel 4 are at 6.5e-5 for incremental risk or 1.1e-4 for total residual risk, then what is the probability that the entire Mound facility will meet the criterion of 1e-4 to 1e-6, given that this is the 'cleanest' portion of the site? A near zero probability is probably the answer. Antimony in water and low level radionuclides in soil are driving the health concerns. Can 'hot spot' removal of soil help in reducing the calculated health risks for soil at parcel 4 and can treatment of water for the site be considered? Is the current thinking to write-off the water supply and not deal with it as eluded to in the institutional controls?

Response:

The commentor makes a good point, technically the summation of cancer calculations for chemical and radionuclides is conservative. Cancer slope factors are defined differently for radionuclide and non-radionuclides. The document *Radiation Risk Assessment at CERCLA Sites: Q&A* (EPA540/R199/006, December, 1999) states:

"Excess cancer risk from both radionuclides and chemical carcinogens should be summed to provide an estimate of the combined risk presented by all carcinogenic contaminants as specified in OSWER directive 9200.4-18 (1997). An exception would be cases in which a person reasonably can not be exposed to both chemical and radiological carcinogens...

In the absence of additional information, it is reasonable to assume that excess cancer risks are additive for purposes of evaluating the total incremental cancer risk associated with a contaminated site."

These risks were summed to allow risk management decisions to be made on cumulative effects that might be missed if the risks were evaluated individually. The presentation of total, background, and incremental risk follows the RREM.

Risk management decisions focus on site related risks which are represented in the incremental sections. Carcinogenic risk results were compared to the acceptable risk range of 10^{-4} to 10^{-6} (increase in cancer risk of one human in ten thousand to one human in one million) as specified by the National Contingency Plan.

Comment 5:

Provide a list of authors and their affiliations on the 1st page of the documents.

Response:

The number of contributors to these reports is large; the number of organizations participating in the development of these documents is large. Because of this and the fact that the documents represent the positions of US EPA, DOE, and OEPA concerning the site, we have chosen not to provide a list of authors and affiliations.

The Mound Core Team
P.O. Box 66
Miamisburg, Ohio 45343-0066

Mr. Peter Townsend
Hydro-Log
PO Box 555
Yellow Springs, Ohio 45387

Dear Mr. Townsend:

The Core Team, consisting of the U.S. Department of Energy Miamisburg Environmental Management Project (DOE-MEMP), U.S. Environmental Protection Agency (USEPA), and the Ohio Environmental Protection Agency (OEPA), appreciates your comments on the Proposed Plan for Parcel 4. Attached are our responses.

Should the responses to comments require additional detail, please contact Rob Rothman at (937) 865-3823 and we will gladly arrange a meeting or telephone conference.

Sincerely,

DOE/MEMP: _____
Robert S. Rothman, Remedial Project Manager

USEPA _____
Timothy J. Fischer, Remedial Project Manager

OEPA _____
Brian K. Nickel, Project Manager

Comments Received on the
Parcel 4 Proposed Plan and Risk Evaluations
from
Peter Townsend
January 2001

The Proposed Plan for Parcel 4 contains three areas of concern. These are: 1) groundwater protection and groundwater monitoring in the Buried Valley Aquifer (BVA) downflow from Parcel 4 is not considered, 2) the source of groundwater contaminants is not considered, and 3) the source of groundwater contaminants is most likely airborne fallout from Mound Lab emissions. This study implies that other off-site areas, particularly to the east, west, and north of Mound Labs would have considerable heavy metal and radionuclide fallout, and should receive similar groundwater investigations.

Concerns:

1) The Proposed Plan for Parcel 4 protects future groundwater use within Parcel 4 through deed restrictions, which will prevent future Parcel 4 landowners from installing wells. The groundwater flow regime for Parcel 4 is shown on a map on page 8 in Appendix B of the *Residual Risk Evaluation, Parcel 4*. The groundwater flow map is presented on page 2 of these comments. This map shows that the groundwater flow from Parcel 4 descends from the east and northern boundaries, and enters the Buried Valley Aquifer (BVA). In the BVA are the groundwater supply wells for the Mound Laboratory, also downflow from Parcel 4. The Hazard Index (HI) for groundwater within Parcel 4 is above 1, and has resulted in the decision to impose deed restrictions, eliminating future land owners from installing wells on their property. There should be a discussion in the Proposed Plan for Parcel 4 about the impact of the groundwater flow from parcel 4 into the BVA, and the possible impact on the Mound Water Supply Wells. Also, there should be provisions for monitoring groundwater descending from Parcel 4 into the BVA, to look for possible migration of contaminated groundwater from Parcel 4 into the BVA and the Mound Water Supply Wells.

Response:

There may be some misinterpretation of the Parcel 4 RRE results. The groundwater data are not solely from Parcel 4. Groundwater quality data from wells across the site; i.e, located on and near (including the Mound Plant process areas) Parcel 4 were used to calculate the current and future potential impact of measured chemicals of concern (COCs) at the closest existing groundwater receptor, the Mound water supply wells (see

Appendix B of the RRE). As discussed in the Parcel 4 RRE, the calculated unacceptable HI for the current groundwater scenario is driven largely by the result of a few suspect antimony concentrations measured nearly a decade ago in the production wells. The future groundwater scenario is driven largely by total chromium, assumed to be hexavalent chromium. There is no indication that groundwater COC concentrations beneath Parcel 4 have significantly contributed to the elevated HI.

There is an additional source of uncertainty surrounding the groundwater measurements used in the RRE. The sampling method itself is believed to produce turbid samples which would yield results for measurements of metals that are not representative of the groundwater. Such results would be biased high. (*1999 Comparative Well Study*, unpublished) The new micro purge, low flow sampling is being implemented for the groundwater sampling network. The micro purge, low flow sampling will provide more consistency and reduce the uncertainty. We will share the results of this effort as they become available.

Also, Mound's environmental surveillance program will continue after Parcel 4 is transferred. The on-site groundwater monitoring program will continue. The Operable Unit One groundwater treatment and its monitoring will continue. The production wells will be monitored for Safe Drinking Water Act compliance until the site transitions to city water. In addition, monitoring as a part of Post Closure Stewardship will be developed in detail prior to the final parcel transfer.

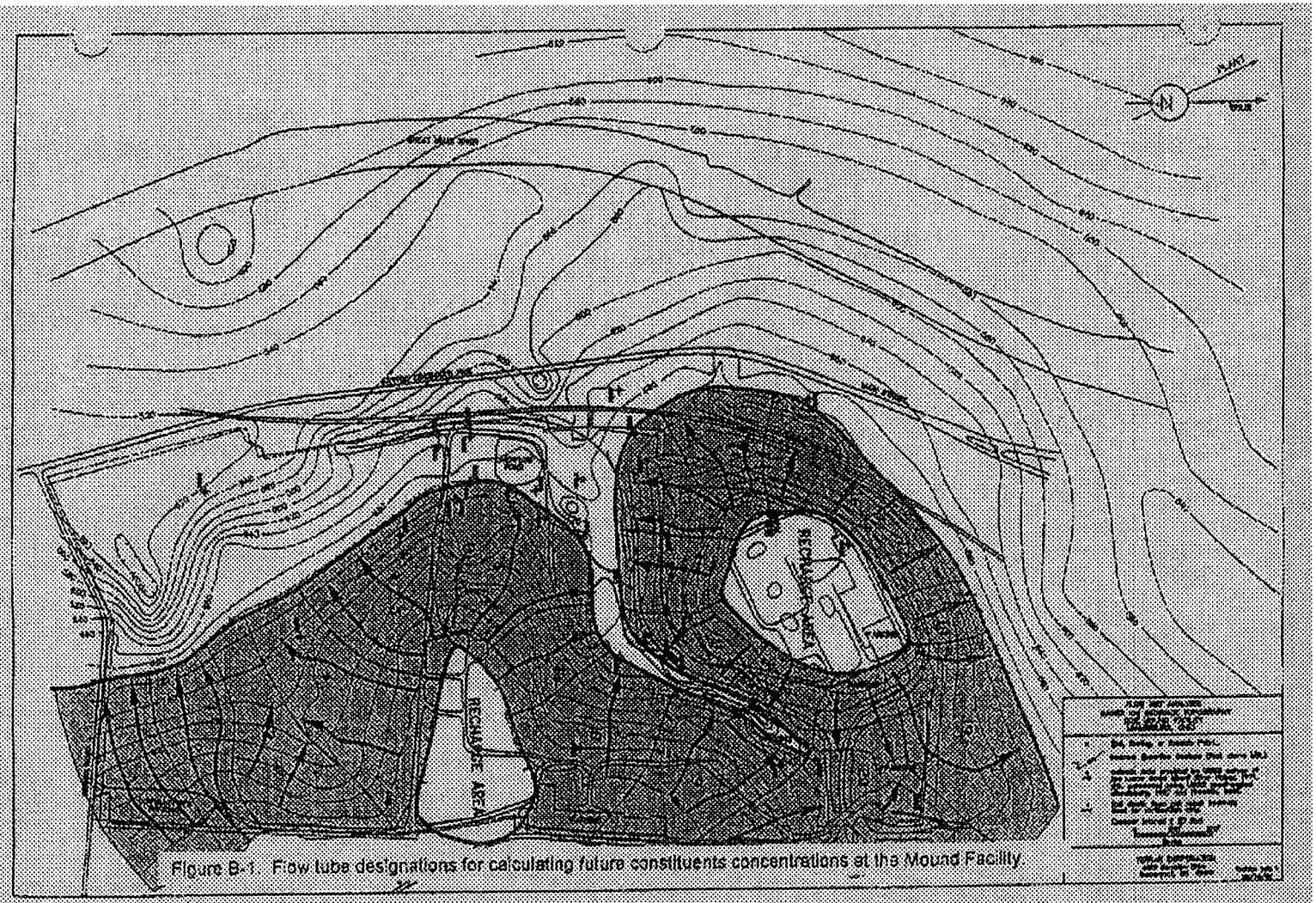


Figure B-1. Flow tube designations for calculating future constituents concentrations at the Mound Facility

2) Parcel 4 was a farm purchased by Mound Laboratories in 1981. The public has been informed that Parcel 4 was never used by Mound Labs to store or handle any chemicals, wastes, or metals. However, groundwater tests reported in the *Residual Risk Evaluation, Parcel 4* document show that a large number of heavy metals and radionuclides occur in the groundwater at Parcel 4. Metals found in groundwater at Parcel 4 are shown on the attached page. This page is Table 2.9 from the *Residual Risk Evaluation, Parcel 4.*

Table 2.9 shows a number of metals present, in many samples, that would not normally occur in such high amounts. For example, chromium was detected in 78 of 120 tests at concentrations up to 7,400 times higher than expected background concentration; copper was detected in 81 of 117 tests at concentrations up to 430 times higher than expected background concentration; and nickel was detected in 82 of 120 tests at concentrations up to 330 times higher than expected background concentration. Table 2.8 in the *Residual Risk Evaluation, Parcel 4* document, page 5, shows radionuclides present in a number of samples at levels several times higher than expected background values.

An interesting and important question is where did these metals and radionuclides come from? How did they get in the groundwater at this site? These are not materials that would come from farming or other land use from before Mound purchased the property. If Mound never used this property, then how did these contaminants arrive? Most of this property is not downhill from Mound, so these materials could not have washed off the Mound. The only reasonable mode of arrival is from airborne fallout.

Figure 1 of these comments, shown on page 6, is a contour map of average annual air concentration of Pu^{238} for 1997. Figure 1 is contoured in increments of 1×10^{-18} uCi/mL from 1 to 10, and above 10, contours are omitted and raw data values are presented because air concentrations at Mound are so high that contours near the lab would be too close together.

Figure 1 shows that Pu^{238} air concentrations drop off rapidly away from the Mound Laboratory, but note on Figure 1 that Parcel 4, located in the southern 1/3 of the Mound Property, receives considerable Pu^{238} fallout as indicated by this contour map. Note also that the Pu^{238} contaminant plume extends beyond the Mound Plant in all directions, but most notably to the north and west, into areas of Miamisburg that adjoin Mound facility. Figure 1 strongly shows off-site airborne emissions of Pu^{238}.

Figure 2 shows the number of air monitoring stations in place from 1992 to 1998. Table 1 lists air monitoring station numbers and gives data values for 1996 and 1997 Pu^{238} levels at each station.

Table 3.9 Initial Identification of Future Groundwater Constituents of Potential Concern for the Construction Worker Scenario
(Maximum Detected Concentration Compared to Background and Mound Guidance Values)

Chemical	Minimum Concentration in Bedrock Wells	Maximum Concentration in Bedrock Wells	Units	Detection Frequency in Bedrock Wells	95 Percent UCL	Concentration Used for Screening	Background Value	Construction Worker Risk-Based SV	Reference	COPC?
Inorganics										
Aluminum	26.3	31500.00	ug/L	107/113	6843.80	31500.00	37.532	15000.00	a, d	YES
Ammonia**	110	37500.00	ug/L	54/ 61	4103.00	37500.00	182			NO-5
Antimony	0.33	41.60	ug/L	39/122	3.83	41.60	0.578	6.00	a	YES
Arsenic**	0.3	933.00	ug/L	36/114	11.80	933.00	32.997	3.00	a	YES
Barium	17.5	329.00	ug/L	112/114	130.00	329.00	350.309	700.00	a	NO-5
Beryllium**	0.83	2.30	ug/L	49/113	0.61	2.30		0.03	c	YES
Bismuth**	0.5	360.00	ug/L	35/103	25.28	360.00				YES
Boron**	110	110.00	ug/L	1/ 3	ND	110.00		900.00	a, d	NO-5
Cadmium	0.14	13.30	ug/L	33/128	0.75	13.30		5.00	a	YES
Calcium	116	1510000.00	ug/L	168/168	199000.00	1510000.00	111100.664			NO-4
Calcium	8.00	17700000.00	ug/L	56/ 56	9038000.00	17700000.00	101822			NO-5
Chloride**	0.27	44800.00	ug/L	98/109	5618.00	44800.00	6.076	30.00	a, d	YES
Chromium*	0.31	291.00	ug/L	46/113	18.50	291.00	1.032	600.00	a, d	NO-5
Cobalt**	0.38	314.00	ug/L	83/117	36.80	314.00	1.187	600.00	a, d	YES
Copper	5.8	14.20	ug/L	2/ 43	4780.00	14.20		200.00	a	NO-5
Cyanide**	491000	32500000.00	ug/L	47/ 47	2480.00	32500000.00				NO-4
Dissolved Solids	150	2400.00	ug/L	57/ 58	678.00	2400.00	419			NO-5
Fluoride**	0.154	1910000.00	ug/L	138/163	45400.00	1910000.00	4064.888			NO-4
Iron	0.4	32.80	ug/L	53/125	6.96	32.80	20.03			YES
Lead**	0.8	4280.00	ug/L	89/102	373.00	4280.00	35.9			YES
Lithium	26.9	7190000.00	ug/L	169/169	77800.00	7190000.00	40428.111			NO-4
Magnesium	0.037	3835.00	ug/L	129/169	737.00	3835.00	229.368	51.00	a	YES
Manganese	0.1	1.40	ug/L	2/113	0.06	1.40		3.00	a	NO-5
Mercury**	0.09	474.00	ug/L	31/ 98	32.50	474.00	5.397	30.00	a, d	YES
Molybdenum	1.3	11600.00	ug/L	85/139	740.00	11600.00	34.853	200.00	a	YES
Nickel	60	19100.00	ug/L	31/ 41	782.00	19100.00	231			NO-5
Phosphate**	2.15	214000.00	ug/L	158/164	23200.00	214000.00	4461.583			NO-4
Potassium	1.3	7.00	ug/L	16/113	3.78	7.00		50.00	a, d	NO-5
Selenium	2230	12300.00	ug/L	6/ 6	NC	12300.00				NO-4
Silicon**	0.75	29.60	ug/L	79/115	5.26	29.60		51.00	a	NO-5
Silver	88.2	7270000.00	ug/L	168/182	346000.00	7270000.00	62403.363			NO-4
Sodium	3000	4960000.00	ug/L	73/ 78	885.00	4960000.00				NO-4
Sulfate	5.1	6.90	ug/L	6/107	1.44	6.90		0.80	a, d	YES
Thallium	1.4	337.30	ug/L	27/100	14.98	337.30	34.382	6000.00	a, d	NO-5
Tin	0.15	377.00	ug/L	69/113	33.08	377.00	41.1	91.00	a	YES
Vanadium	3.4	398.00	ug/L	76/117	47.55	398.00	118.6	3100.00	a	NO-5
Zinc										

Page 4

Table 2.8 Final Identification of Current Groundwater Constituents of Potential Concern for the Site Employee Scenario (Exposure Point Concentration Compared to Background Values)

Chemical	Minimum Concentration	Maximum Concentration	Units	Detection Frequency	95 Percent UCL	Concentration Used for Screening and EPC	Background Value	COPC for RBS
Inorganics								
Antimony	2.6	40.20	ug/L	5-20	85.30	40.20	0.578	YES
Cadmium	4.6	7.20	ug/L	6-12	6.81	6.81		YES
Copper	7.8	1670.00	ug/L	23-30	13.70	13.70	11.69	YES
Lead	3.4	40.00	ug/L	9-32	7.38	7.38	10.05	NO
Radionuclides								
Actinium-227	0.30	0.53	pCi/L	3-10	NC	0.53		YES
Actinium-228/Th-232	0.05	2.04	pCi/L	5-20	0.87	2.04	0.705	YES
Thorium-228	0.0	2.1	pCi/L	31-35	1.01	1.01	0.709	YES
Thorium-230	0.01	1.69	pCi/L	31-32	1.34	1.34		YES
Radium	110.00	7200.00	pCi/L	118-128	861.00	861.00	1483.47	NO
Thorium-234	0.21	4.43	pCi/L	34-36	NC	4.43	0.994	YES
Uranium-238	0.13	8.25	pCi/L	41-48	0.67	0.67	0.828	NO

UCL = Upper Confidence Limit
EPC = minimum of 95% UCL or maximum detected concentration
NO = Background Value
NC = 95% UCL not calculated, less than 20 samples in the data set.

Figure 1. 1997 average Plutonium 238 concentration in the air around the Mound Plant (10E-18uCi/mL)

Background subtracted from the data

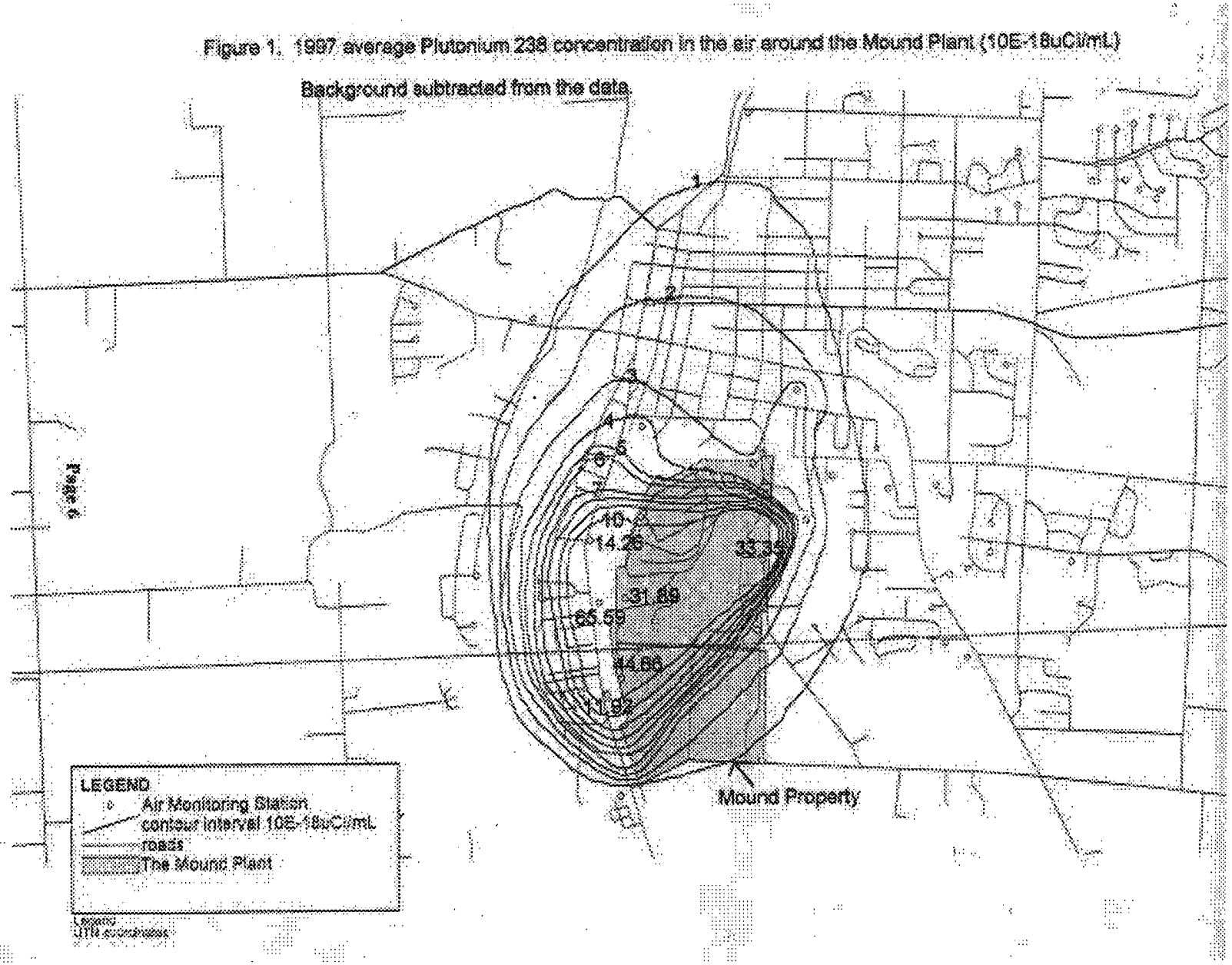


Figure 3 of these comments is a contour map of average annual air concentration of Pu^{238} for 1996. Figure 3 is contoured in increments of 1×10^{-18} uCi/mL from 1 to 10, and above 10 contours are omitted and raw data values are presented, because air concentrations at Mound are so high that contours near the lab are too close together. Figure 3 shows that air dispersion of the heavy metal and radionuclide Pu^{238} extends into Miamisburg, as was also shown in Figure 1.

Figures 1 and 3 both show that the heavy metal Pu^{238} was dispersed through the air, off-site from Mound Lab into the surrounding area. Miamisburg, especially north, east, and to a lesser extent west of Mound, received airborne fallout of heavy metals and radionuclides from Mound.

Mound Lab emitted relatively little Pu^{238} in 1997 compared to earlier years. The year 1997 was chosen for this illustration not because of the high Pu^{238} airborne emissions, but because by 1997 Mound Lab had a relatively thorough air monitoring system in place. Figure 4 shows a graph of annual Pu^{238} air emissions from Mound Lab for 1960 - 1998. Table 2 gives data that were graphed to construct Figure 4. Note that Pu^{238} emissions for most years are not even seen on this plot because most years emissions of Pu^{238} from Mound were relatively small compared to the huge emissions in 1960, and relatively large emissions from 1965 to 1970. If we were to scale Figures 1 and 3 up to the higher emissions during the 1960's and assume that non-radioactive heavy metals were also emitted from Mound Labs, then we can easily account for the presence of both radionuclides and heavy metals in elevate concentrations in the groundwater of Parcel 4.

Response:

The assertion that the potential source of elevated metals in the groundwater associated with Parcel 4 is the result of air deposition is interesting. The concentrations of metals and radionuclides listed in Table 2.9 are from groundwater monitoring across the Mound Plant (See Appendix B of the RRE). Most of the highest values are from the bedrock monitoring wells located north of Parcel 4, in the main process areas. If air deposition was the main source of elevated groundwater metals, a very significant overall increase in soil metals concentrations throughout the entire Mound site would have been detected. It has not. Also, an increasing trend in groundwater metals concentrations in all shallow monitoring wells should have emerged if the contamination was distributed by air and has migrated to the deeper monitoring wells. No such trends have been observed.

Figure 2. Location of air monitoring stations July 1992 to May 1998

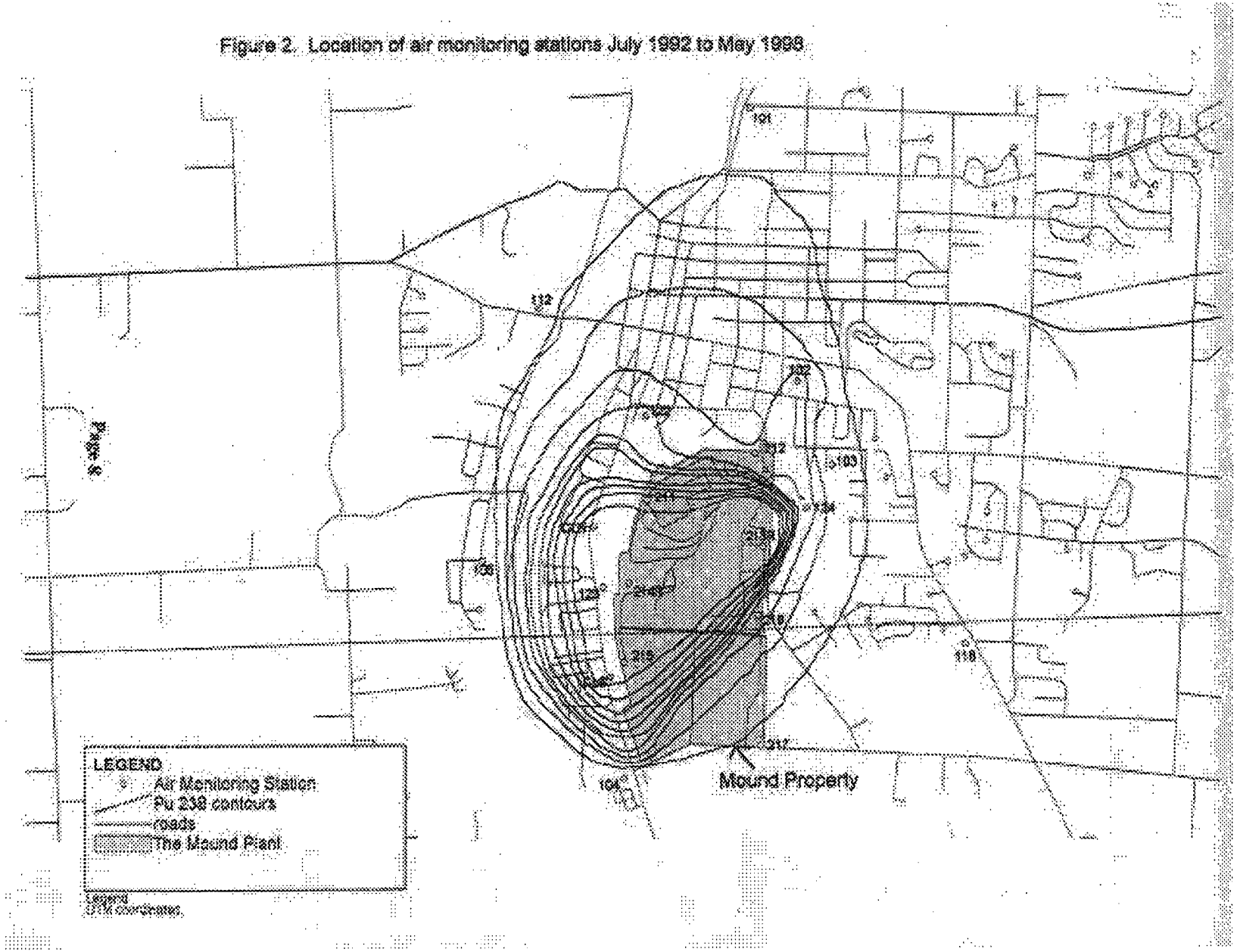


Figure 3. 1996 average Plutonium 238 concentration in the air around the Mound Plant (10E-18uCi/mL).

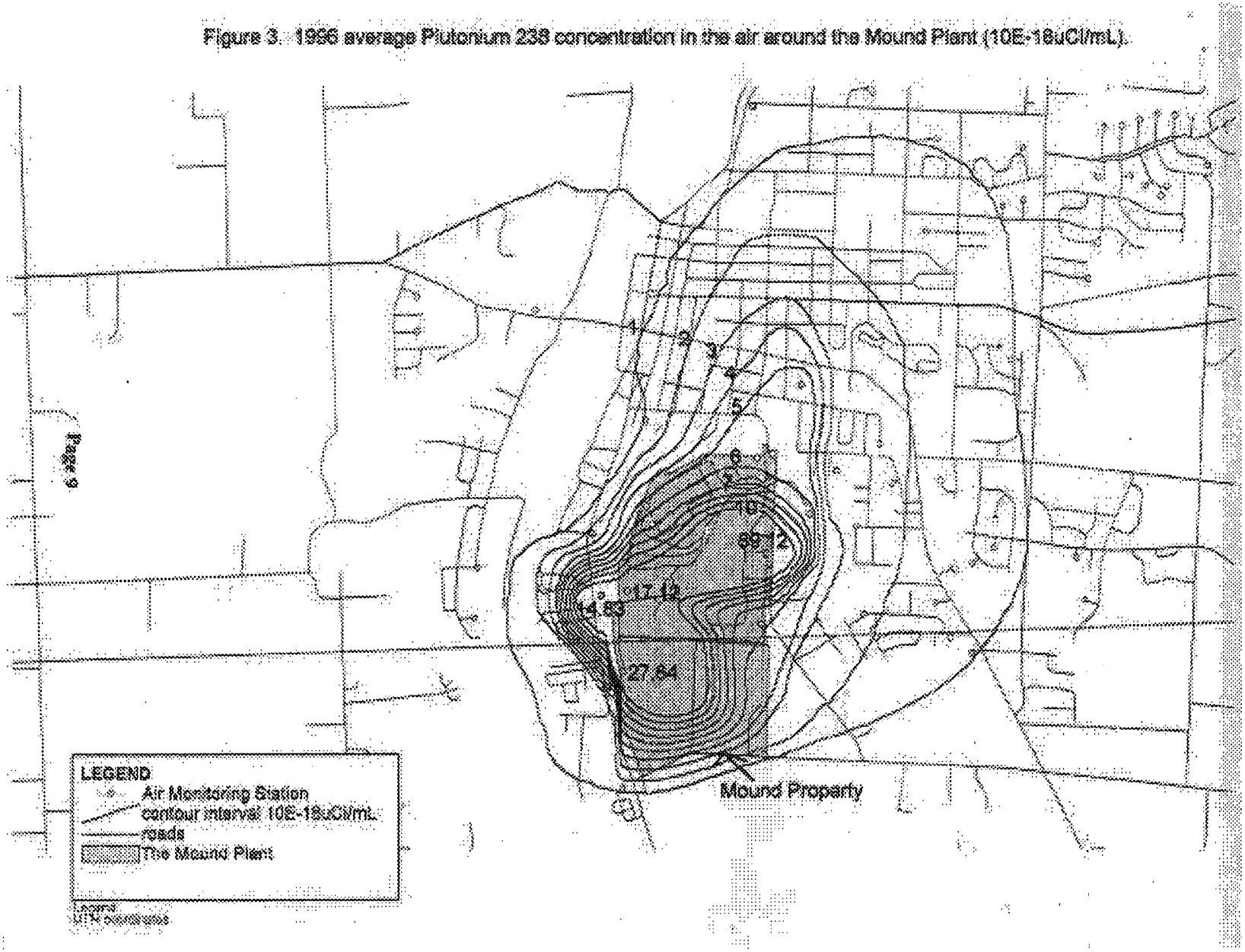


TABLE 1.

AVERAGE PLUTONIUM 238 CONCENTRATIONS (10^{-15} uCi/mL) IN THE AIR AT INDIVIDUAL AIR MONITORING STATIONS.
1996 AND 1997

Offsite air monitoring Stations	1996 Pu^{238} concentrations in air.	1997 Pu^{238} concentrations in air.
101	0.25	0.44
102	5.88	3.26
103	2.32	1.38
104	1.22	0.76
105	0.19	0.45
112	0.13	0.37
118	1.18	0.27
122	1.07	4.33
123	14.83	65.59
124	6.45	3.98
CLN	2.26	14.26
CLS	3.91	11.92
Onsite air monitoring stations		
211	5.42	8.31
212	5.76	3.02
213R	89.12	33.35
214R	17.12	31.89
215	27.64	44.86
216	5.03	3.54
217	1.43	0.8

1996 and 1997 background levels subtracted from the data.

Data taken from 1996 and 1997 Annual Site Environmental Reports pages 4-18 and 5-4 respectively.

1117d1

Figure 4 - Graph of Pu 238 air emissions from Mound Lab, 1960-1998.

TABLE 2

year	Pu 238 Air (uCi)
1960	250,125
1961	160
1962	140
1963	108
1964	252
1965	5,803
1966	30,442
1967	54,347
1968	6,720
1969	10,544
1970	4,342
1971	401
1972	74
1973	64
1974	26
1975	23
1976	16
1977	13
1978	14
1979	12
1980	15
1981	8
1982	21
1983	4
1984	7
1985	5
1986	6
1987	5
1988	5
1989	4
1990	18
1991	15
1992	6
1993	12
1994	15
1995	9
1996	7
1997	45
1998	15

Annual Plutonium 238 releases to the air from the Mound Plant

Plutonium emission figures for 1960 to 1989 were found in the Remedial Investigation /Feasibility study, Operable Unit 2, site wide work Plan, Mound May'91 DOE, Section 2, page 6. Plutonium emission figures for 1990 through 1998 were found in the yearly Annual Site Environmental Reports 1990 through 1998.

3) It appears that the source of the elevated radionuclides and heavy metals in the groundwater at Parcel 4 is air emission from Mound Lab. Therefore, levels of heavy metals and radionuclides in the groundwater in Miamisburg adjacent to Mound Labs are probably elevated and of environmental concern. Groundwater studies similar to Parcel 4 should occur in Miamisburg.

Response:

As discussed above, the results listed in Table 2.9 are from bedrock monitoring wells from across the entire Mound Plant. Many wells with the elevated levels of heavy metals are located in or just down gradient of the process areas north of Parcel 4 (see Appendix B of the RRE). Additional investigation is underway as discussed earlier.

There is an offsite groundwater monitoring program at Mound. It's objectives are to assure local residents and communities that their drinking water has not been adversely impacted by plant activities and to provide an early warning of impacts due to continuing environmental restoration activities. This program consists of the collection and analysis of samples from production wells, private wells, regional drinking water supplies, and BVA monitoring wells. Samples are analyzed for radionuclides, inorganic substances, and VOCs. The details of the program and its results are available in the Annual Environmental Monitoring Report. In 1999, the average tritium concentrations ranged from 0.05nCi/L to 0.53 nCi/L (with the MCL = 20nCi/L). Many results for other radionuclides were comparable to background levels; average concentrations were less than 2.9% of the respective dose standard.

The Mound Core Team
P.O. Box 66
Miamisburg, Ohio 45343-0066

Rev. Dr. Velma M. Shearer
124 Chestnut Street
#210
Englewood, Ohio
45322

Dear Rev. Dr. Shearer:

The Core Team, consisting of the U.S. Department of Energy Miamisburg Environmental Management Project (DOE-MEMP), U.S. Environmental Protection Agency (USEPA), and the Ohio Environmental Protection Agency (OEPA), appreciates your comments on the Proposed Plan for Parcel 4. Attached are our responses.

Should the responses to comments require additional detail, please contact Rob Rothman at (937) 865-3823 and we will gladly arrange a meeting or telephone conference.

Sincerely,

DOE/MEMP: _____
Robert S. Rothman, Remedial Project Manager

USEPA: _____
Timothy J. Fischer, Remedial Project Manager

OEPA: _____
Brian K. Nickel, Project Manager

Comments Received on the
Parcel 4 Proposed Plan and Risk Evaluations
from
Rev. Dr. Velma M. Shearer
January 2001

Concerns:

1. The drainage from PRS 419, the drainage pipe along the western boundary of the Mound Site and which ends within Parcel 4, before draining by open concrete ditch across City Park property to the Great Miami River.

   It has been stated that the effluent which drains through the pipeline is run-off from the overflow ponds to the north, and this is monitored at Outfall 002 daily for gross alpha (and tritium) and biweekly from 24 hour composite samples for Pu 238, Pu 239/240, U 233/234, U 238, Th 228, Th 230, and Th 232. Will this effluent become the source of water for the future pond as shown within the drawings for future development of parcel 4? Or, if the effluent is routed permanently through the open concrete ditch to the Great Miami River, it should be monitored and released only to meet recreational standards rather than industrial standards. Add to the recreational standard a factor of 10 for children under 15 years of age, since children are much more susceptible to carcinogens than adults. This is not considered in the Proposed Plan, but is, in reality, located on the edge of Parcel 4.

Response:

The effluent from PRS 419 (Drainage Outflow Reroute) does come from the site's drainage system. This system includes the Retention Basins, the Overflow Pond, Outfall 002, the drainage ditch that separates the two hills that comprise the site, and the Asphalt-lined Pond. The effluent at Outfall 002 is regulated by the site's National Pollutant Discharge Elimination System (NPDES) permit. Sampling for radionuclides is not required by the NPDES permit; however flow-proportional samples are collected from Outfall 002 and are analyzed for tritium and isotopes of plutonium, uranium, and thorium. Samples are collected daily during the work week. Three 24-hour samples are collected on Tuesdays, Wednesdays, and Thursdays. One 96-hour sample is collected each Monday. Samples are analyzed four times a week for tritium. Two-week composite samples are analyzed for isotopes of plutonium and uranium. The two-week composite samples are also analyzed for isotopes of thorium. The results of these measurements are reported in the Annual Site Environmental Monitoring Report. According to MMCIC's current

plans, this effluent will not be the source of water for the future pond planned for Parcel 4.

The second part of your concern addresses the standards employed in monitoring this effluent (industrial vs. recreational). These are scenarios for calculating risk. Standards with different bases are applied to this effluent. The nonradioactive constituents in this effluent are monitored and regulated by the NPDES permit limits. The radioactive constituents are compared to Derived Concentration Guides (DCGs). These are the concentrations that would result in a 50-year committed effective dose equivalent of 100 mrem. DCGs are listed in DOE Order 5400.5 and are based on recommendations in Publications 26 and 30 of the International Commission on Radiological Protection. The DCGs for water are based on the conservative assumption that the water is used as drinking water; clearly not the case for this effluent. The average radionuclide concentrations at Outfall 002 during 1999 were:

Radionuclide	Average Concentration MicroCurie/mL	Average as a percent Of DOE DCG
H-3	2.14E-6	0.11
Pu-238	4.82E-10	1.21
Pu-239	4.45E-12	0.015
U-233,234	5.15E-10	0.1
Th-228	5.3E-11	0.01
Th-230	2.6E-11	0.009
Th-232	3.67E-12	0.007

2. The total and incremental carcinogenic and non-carcinogenic risks exceed the acceptable risk range for the future construction worker and the future site employee due to potential exposure groundwater.

Though the estimates for future exposures are biased high, yet considerable PRS cleanup is yet to take place across the site, and must be included in the calculations. For example, a number of PRSs exist which can contribute potential exposure through the movement of the groundwater to the Buried Valley Aquifer: the Pu 238 and Th contaminated soils disposed at the disposal area known as Rader's Hill, the sampling locations I8, I9, J8 and J9 in the region of Building 21 and upgradient areas east of this site, and the Thorium 230 samples taken very near to the Parcel 4 north boundary and which exceeded the 3.0 pCi/g industrial site limit. Though a barrier may delay some of the transport, we must keep in mind that Pu 238 can attach to colloids and move with the colloids in water, and that the Th 230 could be in a water soluble form and thus move with the groundwater flow. (See the following

published papers which give examples of radionuclide transport by natural organic matter from its original deposition to other areas.)

a) A. B. Kersting, D.W. Efurd, D. L. Finnegan, D. J. Rokop, D. K. Smith and J. L. Thompson, "Migration of Plutonium in Ground Water at the Nevada Test Site", *Nature*, Vol. 397, 7 January 1999, 58-59.

b) John F. McCarthy, William E. Sanford, and Paige L. Stafford, "Lanthanide Field Tracers Demonstrate Enhanced Transport of Transuranic Radionuclides by Natural Organic Matter", *Environmental Science & Technology*, Vol. 32, No. 24, December 15, 1998, A-F.

c) Richard C. Marty, Deborah Bennett, and Philip Thullen, "Mechanisms of Plutonium Transport in a Shallow Aquifer in Mortandad Canyon, Los Alamos National Laboratory, New Mexico", *Environmental Science and Technology*, Vol. 31, No. 7, 1997, 2020-2027.

Since the existent potable water source wells on the Mound site are not to be used as a water resource for the newly established industries in Parcel 4, and since the most likely source of potable water for Parcel 4 industrial use will be the Miamisburg City water wells which also draw from the same Buried Valley Aquifer, and since the Miamisburg wells are sufficiently close to the Parcel 4 perimeter, the question remains as to how long before these wells also will be of concern. The Miamisburg City water wells are already known to contain 300 pCi/L of tritium.

Response:

The references listed point out that movement of radionuclides in the subsurface is possible by colloidal transport or through complexation with naturally occurring organic matter. Although this is a possible avenue of migration for elements with normally high affinities to soil (i.e. thorium & plutonium), it does not appear to be a predominant transport mechanism at Mound. For example, if thorium or plutonium were present in the groundwater and migrating in significant concentrations as colloids or organic complexes, samples from monitoring wells directly down-gradient of disposal sites containing these contaminants should consistently show measurable concentrations above background. Such trends have not appeared in over a decade of extensive groundwater monitoring. Although details of the groundwater monitoring program to be implemented as part of the Stewardship efforts at the Mound are yet to be established, correctly placed "sentinel" wells near disposal areas containing radionuclides will help confirm that these contaminants remain immobile. Parcel 4 contains

no disposal areas, providing further assurance that colloidal transport or organic complexation of radionuclides is not a potential long-term liability at this site.

The last paragraph of the comment expresses concern for the potential migration of contaminants from Parcel 4 to the current Miamisburg wellfield. In 1995, the DOE completed a detailed numeric groundwater model of the Great Miami River Buried Valley Aquifer (*Operable Unit 9, Determination of Potential Pathways from Source Areas Adjacent and Within the Buried Valley Aquifer via Ground Water Flow Modeling and Particle Tracking. Technical Memorandum,* Final, September 1995). This model substantiated that the Miamisburg wellfield zone of capture is strongly influenced and limited by recharge from the Great Miami River. Due to this recharge, the position of the Miamisburg wellfield nearly a mile up-gradient of Parcel 4 and the groundwater capture zone created by the Mound production wells, the potential for adverse contaminant impact is remote.

3. The cumulative Cancer Risks for all carcinogenic contaminants do not appear to include Cr(VI) (Hexavalent Chromium) and Sb (Antimony). Cr(VI) is a confirmed human carcinogen; Sb is a questionable carcinogen with experimental carcinogenic data. Both of these chemicals should be included the Cancer Risk calculations. The Cancer Risk totals, hopefully, includes both radiological and hazardous contaminants in the total calculations.

Response:

In general, we total risk for both radioactive and non-radioactive carcinogens.

The *Mound 2000 Residual Risk Evaluation Methodology* (RREM) indicates that the process of evaluating residual risk starts with a list of constituents that includes every compound detected in a given media. These constituents are then screened using criteria established by the RREM to determine which constituents are carried through the RRE. Using the constituent screening methods put forth in the RREM, antimony was retained as a constituent of potential concern (COPC) for groundwater and soil greater than 2 feet below land surface (bls), but not for soil 0-2 feet bls. The level of antimony detected in soil 0-2 feet bls was lower than the screening guideline value. Therefore, antimony was not carried through the RRE calculations for this media. The non-carcinogenic effects of antimony in soil greater than 2 feet bls and groundwater were evaluated in the RRE.

Antimony has not undergone a complete evaluation under US EPA's Integrated Risk Information System (IRIS) program for evidence of human carcinogenic potential. Therefore, the carcinogenic potential of antimony could not be evaluated. However, according to U.S. EPA , multimedia antimony exposures (exposures that occur outside the workplace) are essentially negligible by comparison to occupational exposures where discrete clinical health effects have been observed (*Ambient Water Quality Criteria Document for Antimony*. Prepared by the Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, Cincinnati, OH for the Office of Air Quality Planning and Standards, Washington, DC. EPA 440/5-80-020).Therefore, incidental exposures to antimony are not likely to cause unacceptable levels of risk.

Total chromium was evaluated in site media and was conservatively assumed to be present in the hexavalent state. Using the constituent screening methods specified by the RREM, Chromium VI was not retained as a COPC in current groundwater, soil 0-2 feet bls or soil greater than 2 feet bls. In all three instances, chromium was detected at levels below the Chromium VI guideline values. Chromium VI was carried through the screening process for Future Groundwater in both the Construction Worker and Site Employee scenarios. For the ingestion pathway, IRIS does not provide a cancer slope factor for Chromium VI due to lack of evidence. IRIS does provide an inhalation cancer slope factor for Chromium VI. Metals in general were removed from the inhalation pathway since they do not readily volatilize from water while showering. Hence, Chromium VI was removed from consideration as a carcinogen because the pathway (inhalation) to the receptors (Construction Worker, Site Employee) did not exist. A copy of the ATSDR factsheet for chromium is enclosed.

4. Are emergency plans in place for an unforeseen overflow of the holding ponds in case of a heavy rainfall, especially if, for example, during a time when serious remediations are taking place, e.g., of PRS 66? How would such an overflow effect the 419 pipeline and its exit at the Parcel 4 border?

Response :

Contingency plans exist for managing the Overflow Pond in the case of a release and for stormwater management/erosion control during remediation activities. In the event of a (suspected) release, a gate just upstream of the Retention Basins is closed; this diverts the drainage to the Overflow Pond. This pond has approximately four million gallon capacity

and can hold approximately two weeks of the site's water effluent if there is no rain. If the Overflow Pond should exceed its capacity, the overflow travels to the west from the southern corner of the pond, crosses the road, and pools on the DOE property. The overflow from the pond would not enter the drainage reroute (PRS 419).

Stormwater management/erosion control measures for remediation projects are designed specifically for each project. Heavy rainfall on site during remediation activities has always been a prime concern. Note that during remediation of the canal, OEPA recommended additional controls for potential run on flows. These were constructed upgradient of the project. Additionally, the project was constructed and managed in a manner that considered rainfall and as a result there were no unplanned releases during the extensive remediation process. Recall that the reason for the cleanup of the canal was a storm event washing contamination off site, and the site was reminded of this to emphasize the importance of stormwater controls during remediation of the canal. OEPA was very pleased with the result. It is our intent to see that the proper controls are placed during all remediation activities, and in particular PRS 66. The site has already been talking about controls such as those to prevent run on into the disturbed soil areas, and using the excavation itself to contain any storm flows that come in contact with disturbed earth. Then the water can be removed under controlled conditions (tested, pumped for appropriate disposal, etc). This method has been used in some of the removals on this and other sites and works well.

5. A cost of approximately $5000 annually is proposed for the maintenance of deed restrictions, Institutional Controls and maintenance for the total former Mound site. Who will be funding any needed monitoring of water, soils, and air on Parcel 4? Certainly an additional amount should be provided annually for a basic environmental monitoring program.

Response:

The $5,000 per year as referenced is the annual estimated cost for maintaining the Institutional Controls for Parcel 4 (i.e. deed restrictions) and performing the effectiveness reviews for US EPA and OEPA as described in the Proposed Plan. The selected remedy for Parcel 4 does not include monitoring of water, soils, or air on Parcel 4. However, as the Exit Project continues, DOE will continue its environmental surveillance program. This program and its results are described in the Annual Site Environmental Monitoring Report. Any monitoring of the site after DOE completes its mission would be part of Post Closure Stewardship and may be included in the site-wide Proposed Plan and Record of Decision. As a

member of the Post Closure Stewardship Committee, you know these discussions are just beginning.

6. Where will a Data Base be established, and who will maintain all records? This could become part of the Stewardship Program, however, an additional dimension specific to Parcel 4 would need to be added.

Response:

If the contents of the Data Base are the results of monitoring discussed in Comment 5, the Stewardship Program is the appropriate vehicle to address the question. DOE will retain responsibility for and ownership of the information in the current data base (Mound Environmental Information Management System or MEIMS) and the Geographic Information System.

SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT

Parcel 4

Final

February 2001

Department of Energy
BWXT of Ohio, Inc.
Mound Plant
Miamisburg, Ohio

Table of Contents

SECTION

FIGURES

TABLES

APPENDICES

EXECUTIVE SUMMARY

The Mound Plant in Miamisburg, Ohio is operated for the U.S. Department of Energy (DOE) by BWXT of Ohio, Inc. (BWXTO). The plant started in operation in 1949 as an integrated research, development, and production facility operating in support of the DOE weapons and energy program (DOE, 1994). DOE purchased the area immediately south of the Mound Plant in 1981. This area, known as the South Property, consists of 124-acres of former farmland. Parcel 4 consists of approximately 95 acres of the South Property. Since its purchase, access to the South Property and Parcel 4 has been restricted, and the only notable disturbances have been periodic mowing of grassy areas and occasional field training exercises by the Mound Plant security force. No plant operations occurred on the property, though the property did receive surface runoff from the adjacent operations that has potentially contaminated Parcel 4. The boundary of Parcel 4 was defined in 1999 to exclude an area of known contamination.

This screening level ecological risk assessment (SLERA) has been prepared for Parcel 4 as part of RI/FS activities at the plant. The overall objective of the SLERA is to determine whether Mound Plant-related contamination poses a current or potential threat of adverse ecological effects to ecological receptors inhabiting Parcel 4. In support of the SLERA, a site walkthrough survey was conducted on 20 and 21 March 2000. This qualitative survey was primarily designed to gather information on changes in general habitat cover since the 1992/1993 OU-9 Ecological Investigation, and to assess the potential for occurrence of several receptor species for evaluation in the SLERA.

This SLERA consists of the following two steps:

- Screening-Level Problem Formulation and Screening-Level Ecological Effects Evaluation.

- Screening-Level Preliminary Exposure Estimate and Risk Calculation.

PROBLEM FORMULATION

The screening-level problem formulation step focuses on identifying categories of potential ecological receptors that may exist in the site area; identifying contaminants which may pose unacceptable risk to those receptors; and determining contaminant fate/transport and toxicity mechanisms (EPA, 1996).

Careful examination of all habitats on Parcel 4 during the March 2000 walkthrough survey revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9, Ecological Characterization study. The habitats present on Parcel 4 include:

- Mesic grassland.
- Subxeric grassland.
- Low gradient upland forest dominated by south and west aspects.
- Low gradient upland forest with level or nearly level topography.
- Early successional scrub/shrub.
- Late successional scrub/shrub.

There are no permanent streams on the site, although during prolonged wet periods, there is flow in the unnamed, intermittent stream channel that enters Parcel 4 from the property south of Benner Road. Seasonal groundwater seeps are also present on the property. While the site lies within the range of several federal/state threatened and endangered species, no listed species is expected to be a permanent, year-round resident of Parcel 4.

There were no known direct releases of site contaminants to Parcel 4, though there is the potential for past on-site releases to migrate onto the property primarily through surface water runoff. Several characterization investigations have been conducted on Parcel 4 to determine the extent of contaminant migration to this adjacent property. PRS 306 is a groundwater seep; PRS314 is an area that contained farm trash and potentially oil from previous farm operations; and PRS 406 is at the northern end of Parcel 4 near Mound Plant and may contain radiological contamination.

Several target terrestrial receptors from several trophic levels (i.e., herbivores and insectivores) were selected to represent animal populations that inhabit the site and the surrounding areas. The selected target species have been observed on Parcel 4 during all sampling seasons, represent several guilds, and are commonly used as receptors of concern in ecological risk assessments. Direct contact with soil by plants, earthworms, and soil-dwelling organisms was evaluated, as well as eposure to surface water and sediment in Benner Branch by aquatic organisms.

Plutonium-238 and other radionuclides in soil, surface water, and sediment above site-specific background levels are considered to be radiological constituents of potential concern (COPCs). To determine chemical COPCs in soil, surface water, and sediment, the maximum detected concentration of a contaminant was compared to ecological screening levels and site-specific background levels. Chemical COPCs included several organics, numerous inorganics, and one anion.

ECOLOGICAL EFFECTS EVALUATION

For each COPC with a potentially complete exposure pathway, a screening-level toxicity reference value (TRV) was developed from a review of literature. TRVs based on dose are used for bird and mammal receptors and TRVs based on media concentrations are used for plants, earthworms, soil-dwelling organisms, aquatic organisms, and benthic organisms. For chemical COPCs, the TRV is based on the chronic NOAEL for a constituent obtained from literature

source. For radionuclides, the International Atomic Energy Agency (IAEA) recommends limiting the dose for terrestrial organisms to 100 mrad/day (IAEA, 1992; Sample et al., 1997). This dose limit is based on studies evaluating reproductive success and survival. A dose rate of 1 rad/day is generally considered protective of plant and invertebrate populations (IAEA, 1992; Barnthouse, 1995; Sample et al., 1997).). The recommended acceptable dose rate to natural populations of aquatic biota is 1 rad/day based on results of the reviews summarized in NCRP Report No. 109 (NCRP 1991; BJC, 1998). This limit was intended to apply to the most radiosensitive populations of aquatic organisms (BJC, 1998).

EXPOSURE ESTIMATE

Birds, such as the American robin and northern cardinal, and mammals, such as the meadow vole, short-tailed shrew, and white-tailed deer, which represent several trophic levels, were selected as target receptors. Direct ingestion of COPCs in soil and surface water, and indirect ingestion through the food chain via ingestion of plants and insects were considered in this assessment. External exposure through direct radiation from soil and inhalation of radionulide-contaminated dust were also considered for radiological COPCs. Direct impacts on plants, earthworms, soil-dwelling organisms, aquatic organisms, and benthic organisms were evaluated for both chemicals and radionuclides.

To estimate radionuclide exposure by ecological receptors (i.e., plants, earthworms, and terrestrial wildlife), a radiation dose rate in millirads per day (mrad/d) was calculated for each receptor group following the methodology described in *Methods and Tools for Estimation of the Exposure of Terrestrial Wildlife to Contaminants (*Sample et al., 1997). Exposure routes evaluated for radionuclides include external exposure through direct radiation from soil (both aboveground and below ground) and internal exposure through ingestion of soil, prey, and water and through inhalation of contaminated dust.

To estimate chemical exposure by avian and mammalian ecological receptors, exposure doses were estimated for the selected target species from soil concentrations using species-specific food and soil ingestion rates, literature-based bioconcentration factors to estimate chemical concentrations in food, and species-specific body weights. To ensure that sites which may pose an ecological risk are properly identified, exposure values were biased in the direction of overestimating risk. To estimate chemical exposure by plants and soil-dwelling organisms, soil concentrations were compared to literature benchmarks for these organisms.

Using methods developed by Blaylock et al. (1993), Bechtel Jacobs Company (1998) has developed benchmarks for radionculides in sediment and surface water that result in a total dose rate of 1 rad/day for fish. These benchmarks were used to estimate radionculide exposure by aquatic life in Benner Branch and from groundwater discharge to surface water.

RISK CALCULATION

The hazard quotient (HQ) approach was used as an indicator of the risks posed to surrogate ecological receptors from exposure to site-related contaminants. The hazard quotient compares exposure values to dose-based or media-based TRVs, and can be expressed as the ratio of a potential exposure level to the TRV. A hazard quotient exceeding 1.0 indicates the species of

interest (or the species for which the toxicity data was based on) may be at risk of an adverse effect from the particular COPC, exposure route, or medium on which the HQ was based. Further evaluation may be needed in terms of site-specific toxicity data for a given target receptor.

While there is potential risk to plants, earthworms, and soil-dwelling organisms exposed to chemical COPCs in soil and to aquatic receptors exposed to chemical contaminants in the intermittent natural drainage channel on Parcel 4, this risk is minimal. Many of the chemical COPCs may be present due to naturally occurring or anthropogenic sources.

The conservative screening level ERA found that there is a potential for adverse effects on terrestrial organisms from residual chemical contamination (i.e., metals). However, refinement of the preliminary COPCs found that the potential for adverse ecological effects due to site-related waste disposal activities is low. The refinement included a background evaluation, re-calculation of HQs using an average exposure point concentration (i.e., 95% UCL), evaluation of bioavailability of COPCs, adjustment of the area use factor, and a re-evaluation of ecological screening levels.

1.0 INTRODUCTION

The Mound Plant in Miamisburg, Ohio is operated for the U.S. Department of Energy (DOE) by BWXT of Ohio, Inc. (BWXTO). Figure 1-1 shows the location of the Mound Plant in relation to surrounding cities. The plant started in operation in 1949 as an integrated research, development, and production facility operating in support of the DOE weapons and energy programs (DOE, 1994). DOE purchased the area immediately south of the Mound Plant on August 26, 1981. This area, known as the South Property, consists of 124-acres of former farmland. Parcel 4 consists of approximately 95 acres of the South Property. The northern border of Parcel 4 is about 400 feet south of the on-site road that forms the boundary of the South Property. Since its purchase, access to the South Property and Parcel 4 has been restricted, and the only notable disturbances have been periodic mowing of grassy areas and occasional field training exercises by the Mound Plant security force. No plant operations occurred on the property, though the property did receive surface runoff from the adjacent operations that has potentially contaminated Parcel 4.

This screening level ecological risk assessment (SLERA) has been prepared for Parcel 4. The overall objective of the SLERA is to determine whether Mound Plant-related contamination poses a current or potential threat of adverse ecological effects to ecological receptors inhabiting Parcel 4. In support of the SLERA, a site walkthrough survey was conducted on 20 and 21 March 2000. This qualitative survey was primarily designed to gather information on changes in general habitat cover since the 1992/1993 OU-9 Ecological Investigation, and to assess the potential for occurrence of several receptor species for evaluation in the SLERA.

A preliminary or screening-level risk evaluation is the initial ecological risk assessment screening at a hazardous waste site (EPA, 1996). EPA (1997) defines a SLERA as "a preliminary risk assessment that can be conducted with limited site-specific data by defining assumptions for parameters that lack site-specific data." To ensure that sites that may pose an ecological risk are properly identified, EPA (1997) suggests that "values should be consistently biased in the direction of overestimating risk. Without this bias, a screening evaluation could not provide a defensible conclusion for an absence of ecological risk." In conjunction with the human health risk assessment, the ecological risk assessment forms the basis for determining the need for remedial activities at a site and serves as the justification for the selected remedial action.

Technical risk assessment guidance for the performance of the screening-level ecological risk assessment came primarily from:

- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments* (EPA, 1997).

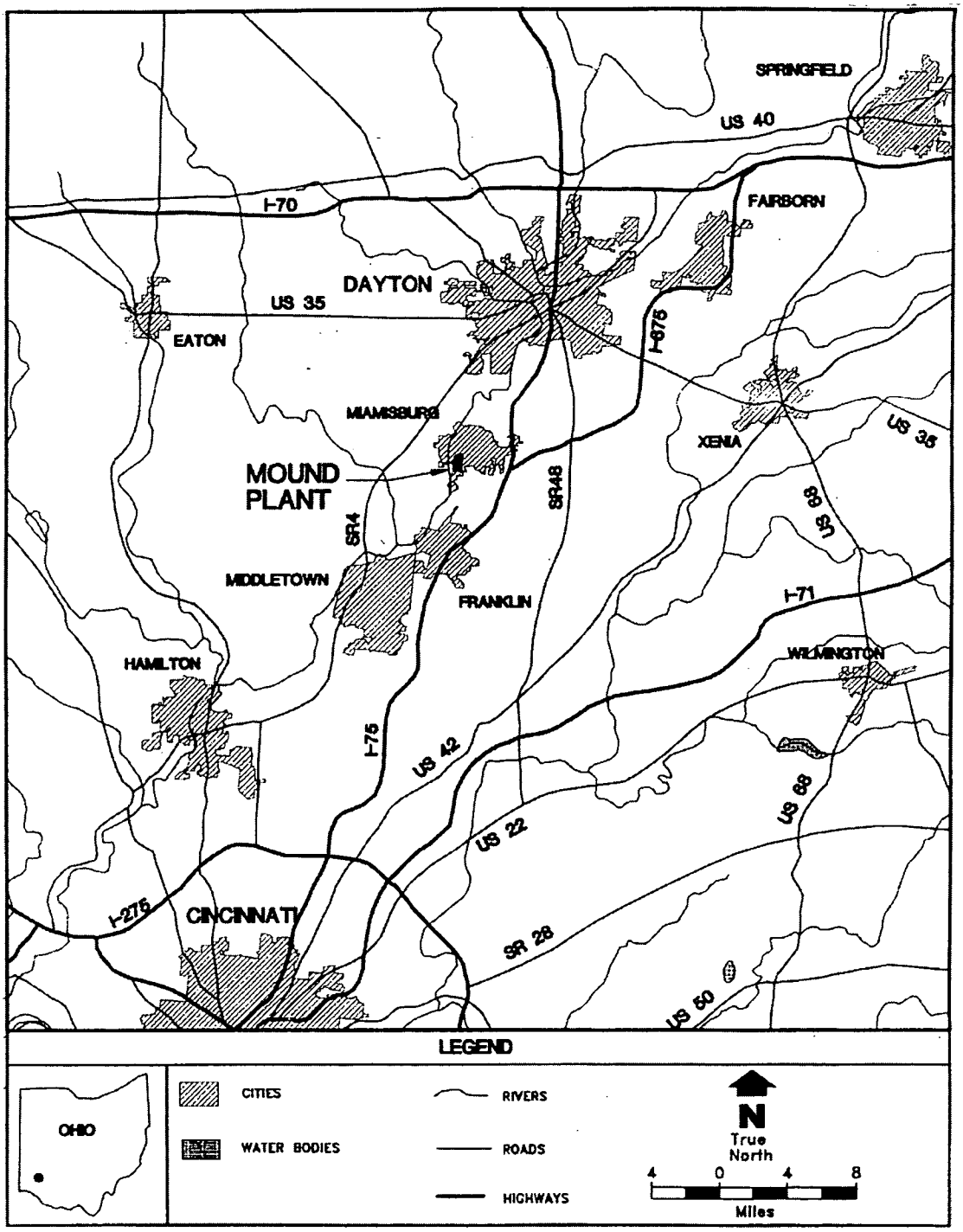
- *Guidelines for Ecological Risk Assessment* (EPA, 1998).

This screening-level ecological risk assessment consists of the following two steps:

- Screening-Level Problem Formulation and Screening-Level Ecological Effects Evaluation.
- Screening-Level Preliminary Exposure Estimate and Risk Calculation.

Each step of the screening-level ecological risk assessment for Parcel 4 is presented in the following sections.

Figure 1-1
Mound Plant Location



2.0 SCREENING LEVEL PROBLEM FORMULATION

The screening-level problem formulation step focuses on identifying categories of potential ecological receptors that may exist in the site area; identifying contaminants which may pose unacceptable risk to those receptors; and determining contaminant fate/transport and toxicity mechanisms (EPA, 1996). A planning step then identifies the major factors (i.e., environmental setting, extent of contamination, contaminant fate and transport, potential receptors, and complete exposure pathways) to be considered in the screening-level ecological risk assessment.

2.1 Environmental Setting

The following subsection on the environmental setting is summarized from information presented in the *Operable Unit 9, Ecological Characterization Report* (DOE 1994). In addition, observations made during a site visit on 21 and 22 March 2000 are also discussed.

2.1.1 Site History

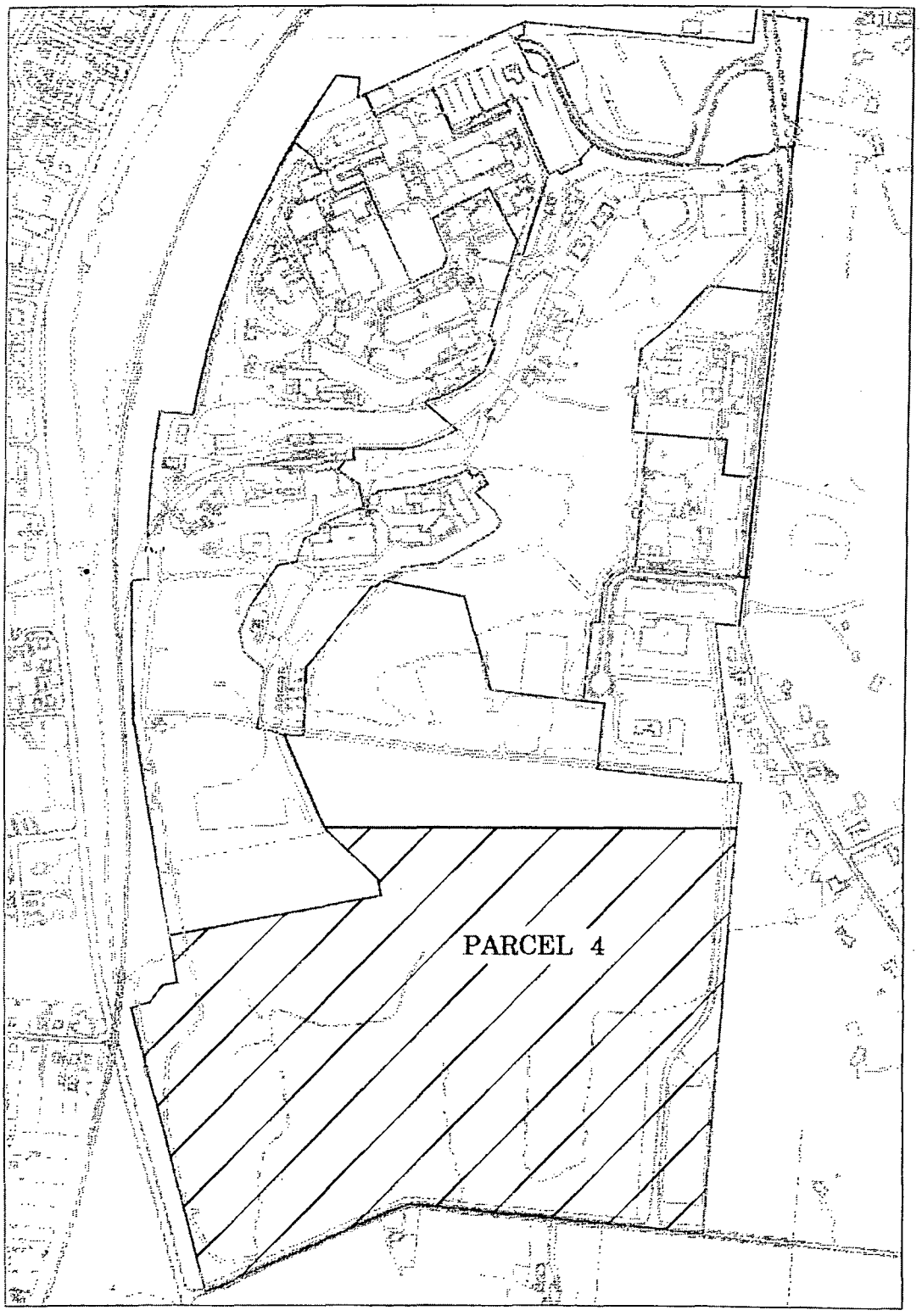
The Mound Plant (Figure 2-1) was established in 1946 on a 728,000 square-meter (m^2) (182-acre) untillable portion of a farm consisting of two large hills with a northeast-southwest trending valley separating them. The Mound Plant is located in the Eastern Deciduous Forest Province in the transition zone between the beech-maple forest and oak-hickory forest plant associations (Bailey, 1978).

Land use in the areas to the north, east, and west of the Mound Plant is largely residential with relatively low population density.

DOE purchased the area immediately south of the Mound Plant in 1981 (i.e,, the South Property). The 124-acre South Property is bounded by Mound Plant to the north, private property to the east, Benner Road to the south, and the Miami-Erie Canal to the west. The land, which is gently rolling until the Mound Plant property line where it is steeply sloped, was used for agricultural purposes. DOE razed a two-story brick house, a barn, a frame tool shed, and an outhouse, disposed of some old implements, and discarded appliances that were left by the former owner. A farm fence was put up around the perimeter. Since its purchase, access to the property has been restricted, and the only notable disturbances have been periodic mowing of grassy areas and occasional field training exercises by the Mound Plant security force.

The 124 acres were originally in Operable Unit 5, though subsequently the land was divided into release block A and release block B. In 1999, the north property line was shifted slightly and the property is now called Parcel 4. The current boundary of Parcel 4 is shown in Figure 2-1. Parcel 4 consists of approximately 95 acres of the original 124 acres. No plant operations, no spills or

Figure 2-1
Site Location Map



releases to the environment from the Mound Plant, and no dumping activities occurred on the property. The property did receive surface runoff from the adjacent plant operations, which has potentially contaminated Parcel 4. PRS 306, PRS 314, and PRS 406 are located in Parcel 4. PRS 306 is a groundwater seep; PRS 314 is an area that contained farm trash and potentially oil from previous farm operations; and PRS 406 is at the northern end of Parcel 4. The new property risk assessment concluded that no further assessment was needed for PRS 306, PRS 314, and PRS 406 (DOE, 1996a).

2.1.2 Site Description

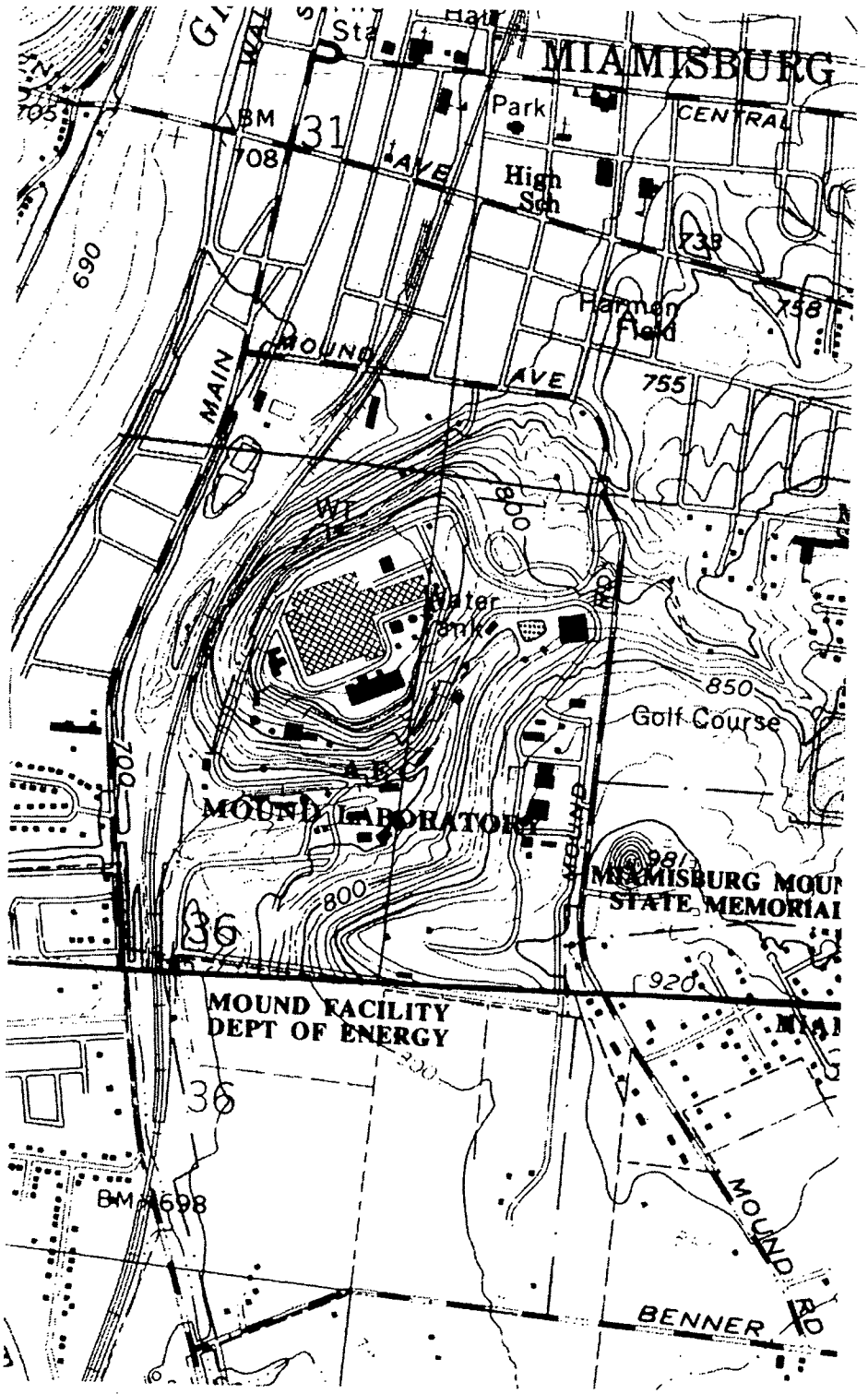
Parcel 4 is bounded by Benner Road to the south, and the Contractor's Entrance Road to the east and to the west by the Miami-Erie Canal. The north boundary is approximately 400 feet south of the Mound Service Road. In general, Parcel 4 slopes from east to west. Elevations range from 890 ft (above sea level) in the northwest corner to approximately 700 ft. along most of the western boundary. Figure 2-2 is a US Geological Survey map for the entire Mound Plant.

There are no permanent streams on the site, although during prolonged wet periods, there is flow in the unnamed, intermittent stream channel that enters Parcel 4 from the property south of Benner Road. For ease of reference, this channel was called the Benner Branch in *Operable Unit 9, Ecological Characterization Report* (DOE 1994. When water is present, Benner Branch flows north onto the site, receives input from numerous swales draining the west and north-facing slopes of Parcel 4, turns west near the center of Parcel 4, then flows westward to the western site boundary. Ultimately, this channel flows into the southern section of the Miami-Erie Canal in the vicinity of the Norfolk Southern Railroad trestle over Dayton-Cincinnati Pike. Throughout Parcel 4, the natural drainage channel is intermittent, and does not sustain surface flow except during heavy precipitation events. During prolonged wet periods, Benner Branch can carry a substantial amount of flow, as evidenced by observations of high water after heavy rains during the Operable Unit 9 Ecological Characterization (DOE 1994). This was supported by observations made during fieldwork for this report, of water-borne debris lodged in overhanging tree limbs several feet above the channel. On 21 March 2000, Benner Branch carried strong flow, estimated at several cubic feet per second. Most of the swales and channels draining the north-and west-facing slope of Parcel 4 carried water on that day. However, the following day, the main channel draining the north-facing slope had flow only in the upper reaches. The lower reaches were dry, indicating water was leaving the surface and entering the water table through porous media The USGS Franklin quadrangle topographical map does not show the channel on Parcel 4, but shows the larger, unnamed, intermittent stream that it drains into (Figure 2-2). Eight groundwater seeps have been identified within Parcel 4. These seeps are primarily located in the north – northeastern half of Parcel 4. These seeps or springs can generally be described as surface expressions of groundwater flow and their presence is seasonal.

2.1.3 Site Ecology

The Mound Plant, including Parcel 4, is located in the Eastern Deciduous Forest Province in the transition zone between the beech-maple forest and oak-hickory forest plant associations (Bailey 1978). An ecological characterization study was conducted during 1992-1993 for Operable Unit

Figure 2-2
USGS Map



9, which consisted of site-wide studies of the Mound Plant and off-site areas. The objectives of this study were to: 1) identify flora and fauna in and around the site; 2) identify sensitive environments in and around the site; and 3) identify endangered species and their habitats in and around this site. Field surveys included floristic sampling, bird, mammal, herptile trappings and surveys, and fish and macroinvertebrate sampling and surveys. The results of this study are presented in the Operable *Unit 9, Ecological Characterization Report* (DOE, 1994). The reader is referred to this document for the detailed results of this study.

In support of this ecological risk assessment, habitats on Parcel 4 were delineated and re-examined on 21 and 22 March 2000 with the aid of recent aerial photographs and maps from the *Operable Unit 9, Ecological Characterization Report* (DOE 1994). The March walkover was primarily designed to gather information on changes in general habitat cover since the OU-9 Ecological Investigation, and to assess the potential for occurrence of several receptor species for evaluation in the SLERA. The WESTON ecologist who directed the original OU-9 Ecological Assessment performed this walkover. Since the ecologist was very familiar with the site, the focus of the March 2000 field effort was to re-examine the habitats which had been mapped and characterized during the OU-9 Ecological Assessment, and determine what, if any, changes had occurred in the intervening time period. Another goal of the March 2000 examination was to determine if the site now possessed habitat suitable for protected species and, secondarily, if target species to be evaluated in the SLERA were present based on direct or indirect indications. During the OU-9 Ecological Assessment, no state or federally protected species were found to be permanent residents of the site and the walkover survey confirmed that this was still true.

Given that the March 2000 site visit occurred prior to the onset of the growing season, it was not possible to conduct a thorough plant inventory, nor was this the focus of the investigation. It was possible to collect only general plant community information and map habitat boundaries to determine the percent coverage of each habitat type.

On Parcel 4, a variety of habitat types occur as illustrated in Figure 2-3. These habitats and area(s) where they were found were:

1. Mesic grassland.
2. Subxeric grassland.
3. Low gradient upland forest dominated by south and west aspects.
4. Low gradient upland forest with level or nearly level topography.
5. Early successional scrub/shrub.
6. Late successional scrub/shrub.

Mesic grassland occurs only along the western site boundary, in the large field occupying the lowest elevations (i.e., 700 to 710 ft) near the Miami-Erie Canal. Mesic grasslands and subxeric grasslands superficially resemble each other, but differing moisture regimes give rise to

markedly different herbaceous communities. Whereas subxeric grasslands are located on topographic uplands, mesic grasslands are positioned on the more moist and fertile Ross soils of the Great Miami River's historic floodplain (Davis et al., 1976). In 1992, a total of 49 plant species were documented in mesic grasslands on Parcel 4 during fixed-area plot sampling (DOE 1994). Early season dominants included common brome grass, Japanese brome grass, meadow fescue, and Kentucky blue grass. During the March 2000 walkover, mesic grassland was found to occupy approximately 6.92 acres of Parcel 4.

On Parcel 4, subxeric grassland is found in more elevated positions than mesic grassland, in areas between 720 and 850-ft elevation (formerly upland pastures). Because of their upland topographic position they are well drained and seasonally droughty. On the west-facing slope near the eastern site boundary, a series of tile drains (presumably emplaced by the former landowner) enhance drainage. In some areas routine mowing is still conducted by Mound Plant personnel. In these areas, the vegetative community is largely herbaceous. However, since 1992, much of the subxeric grassland on Parcel 4 has not been maintained and is rapidly converting to an early successional scrub/shrub community. Shrub and tree seedlings are common in the unmaintained areas, and most will likely convert to an early successional scrub/shrub community within a few years. In 1992, the dominant herbaceous species in the subxeric grassland were meadow fescue, Kentucky blue grass, Canada blue grass, and rough dropseed. Canada goldenrod, spotted knapweed, Queen Anne's lace, and English plantain were also common. In the present investigation, teasel was one of the more common herbaceous elements in unmaintained areas. Subxeric grassland presently occupies approximately 40.12 acres of Parcel 4.

Low gradient upland forest dominated by south and west aspects occurs on the northern and eastern areas of Parcel 4. The boundaries of this community have changed little since 1992, except that some of the bordering scrub/shrub communities have grown to become upland forest. Areas vegetated by upland forest have gently to moderately sloping topography; elevations range from about 750 to 860 ft. The vegetative composition is comprised primarily of relatively young, mixed deciduous species underlain with dense stands of Amur honeysuckle. Apart from several widely scattered super-dominant trees, the overstory has an even-aged appearance. This suggests that these areas were once pasture containing scattered shade trees. Many of these former shade trees are still present, but are now surrounded by developing forest. Low gradient upland forest dominated by south and west aspect covers approximately 30.25 acres of Parcel 4.

Low gradient upland forest with level or nearly level topography occurs in the southern and western areas of Parcel 4, and along Benner Branch and its various drainage pathways. The largest tracts of this habitat type occur west of the center of Parcel 4. Low gradient upland forest with level or nearly level topography is associated with the seasonal drainage pathways, and shares many vegetational characteristics with the forest community situated upgradient. This habitat type occupies approximately 11.43 acres of Parcel 4.

Early successional scrub/shrub are defined as grasslands, pastures, and other previously disturbed areas that have been abandoned for long enough periods of time to allow encroachment by shrubs and small trees (DOE 1994). There is no overstory, the middlestory is mostly open to somewhat dense, and the ground layer is covered with a moderately dense herbaceous layer. Both early and

late successional scrub/shrub communities occupy a variety of topographic positions on Parcel 4. The vegetation community consists of a mixture of herbaceous and woody species, with the herbaceous species being dominated by meadow fescue and Kentucky blue grass, and the woody species being dominated by black locust and Amur honeysuckle. All areas currently described as early successional scrub/shrub were, in 1992, characterized as subxeric grassland. In the intervening time period, routine mowing has been discontinued by Mound Plant facilities maintenance, and woody species have become established and allowed to flourish. For the purpose of this study, early successional scrub/shrub differs from late successional scrub/shrub in that the former is dominated by herbaceous species and the latter by woody species. Early successional scrub/shrub occupies approximately 5.41 acres of Parcel 4.

In general, late successional scrub/shrub communities on Parcel 4 were, in 1992, described as early successional scrub/shrub. It is expected that without further disturbance, these areas will, within a few years, succeed into upland forest habitat. Late successional shrub/scrub communities on Parcel 4 contain both herbaceous and woody plant components. However, their small trees are now beginning to form an overstory, and consequently, the herbaceous ground layer is becoming more sparse. The species composition of late successional scrub/shrub is similar to early successional scrub/shrub, but the woody species component is more advanced and thus more dominant. On Parcel 4, late successional scrub/shrub occupies approximately 5.87 acres, and is contiguous with, or nearly surrounded by upland forest communities.

2.1.4 Rare, Threatened, and Endangered Species

As part of the CERCLA Section 120 Federal Facility Agreement with the U.S. Environmental Protection Agency and the Ohio EPA, DOE conducted an ecological characterization of the Mound Plant (DOE, 1994). This work involved the identification of sensitive environments (e.g., wetlands), and seasonal studies of the following biota groups: vegetation, mammals, reptiles, amphibians, aquatic macroinvertebrates, fish, and birds. Seasonal ecological studies were initiated in June 1992 and were completed in 1994. These studies included the Miami-Erie Canal and Overflow Creek, as well as Parcel 4.

In preparation for the OU9 ecological characterization, the Ohio Department of Natural Resources-Division of Natural Areas and Preserves (ODNR-DNAP) and the U.S. Fish and Wildlife Service (USFWS) were contacted regarding rare, threatened, and endangered (RTE) species occurrences. Although information from these sources suggested a very low probability of RTE occurrence, onsite reconnaissance revealed the presence of limited specialized habitat that were believed capable of harboring protected species. During general systematic surveys of the site as part of OU9 ecological characterization study field surveys, two state-protected species were found – the dark-eyed junco (*Junco hyemalis*), a state-endangered bird; and the inland rush (*Juncus interior*), a state-endangered grass. The dark-eyed junco is a common winter visitor throughout most of the eastern U.S. and is not a permanent resident of the site. At the Mound Plant, numerous individuals were found in the fall and the winter in several areas on the North and South Properties. The inland rush was found in a seasonal grassland seepage on the South Property and is apparently a casual waif. As such, it is not expected to be a permanent part of the Mound Plant flora (DOE, 1994).

The ODNR-DNAP was also contacted in May 2000 for updated information. Within the project area, the inland rush, a state threatened plant, has been recorded in the Natural Heritage database (Appendix E). This record appears to be at the same location as found during the OU9 ecological characterization. No listed animal species were noted by the ODNR-DNAP to occur in the project area. The information provided by the ODNR-DNAP is based on information supplied by many individuals and organizations, and does not necessarily indicate that a listed species is absent from an area. There are no existing or proposed state nature preserves or scenic rivers at the project site. There are no known unique ecological sites, geologic features, breeding or non-breeding animal concentrations, champion trees, state parks, forest, or wildlife area within a one-mile radius of the project area.

The current status of the rush and the junco was not determined during the March 2000 survey since this survey was qualitative. Careful examination of all habitats on Parcel 4 revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9 ecological characterization study. For this reason, it is assumed that permanent residents/communities of these species do not occur on or in the vicinity of Parcel 4.

The USFWS was contacted in May 2000 for updated information regarding the occurrence or possible occurrence of Federally-listed threatened or endangered species in the vicinity of the Mound Plant (Appendix E). The site lies within the range of the Indiana bat, a Federally-listed endangered species, and the eastern massasauga, a docile rattlesnake that is declining throughout its national range and may soon receive status as a Federal candidate species. The snake is currently listed as endangered by the State of Ohio. The Indiana bat and the eastern massasauga are not expected to occur on the property for the following reasons:

- During the OU9 ecological characterization, the USFWS provided a letter to the Department of Energy indicating that although the Mound Plant lies within the range of the Indiana bat, no habitat for this species was present. Consequently, bat surveys were not conducted for the Indiana bat as part of the ecological characterization. The current status of the Indiana bat was not determined during the March 2000 survey since this survey was qualitative. Careful examination of all habitats on Parcel 4 revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9 ecological characterization study. For this reason, it is assumed that this species does not occur on or in the vicinity of Parcel 4.

- Surveys for reptiles and amphibians during the ecological characterization revealed the occurrence of several species of snakes in and along the Miami-Erie Canal and Overflow Creek and on Parcel 4 (DOE, 1994). However, the eastern massasauga was not found. In general, habitats within the 1992/1993 study area ranged from moderately impacted (e.g., recently fallow farmland on Parcel 4) to significantly impacted (e.g., Miami-Erie Canal, Overflow Creek and riparian area). Consequently, potential habitat for the massasauga was very limited and the species is not considered to occur on or in the vicinity of Parcel 4 or along the Miami Erie Canal and Overflow Creek. The current status of the eastern massasauga was not determined during the March 2000 survey since this survey was

qualitative. Careful examination of all habitats on Parcel 4 revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9 ecological characterization study. For this reason, it is assumed that this species does not occur on or in the vicinity of Parcel 4.

2.2 Extent of Contamination

Historical operations and accidental releases from the Mound Plant have resulted in the discharge of radiological (primarily plutonium and tritium) and non-radiological contamination onto the Mound Plant site, the Plant Drainage Ditch, and the off-site Miami-Erie Canal. There were no known direct releases of site contaminants to Parcel 4, though there is the potential for past on-site releases to migrate onto the property primarily through surface water runoff. Several characterization investigations have been conducted on Parcel 4 to determine the extent of contaminant migration to this adjacent property. PRS 306, PRS 314, and PRS 406 are located in Parcel 4. PRS 306 is a groundwater seep; PRS 314 is an area that contained farm trash and potentially oil from previous farm operations; and PRS 406 is at the northern end of Parcel 4 and may contain radiological contamination. The New Property Risk Assessment concluded that no further assessment was needed for PRS 306, PRS 314, and PRS 406 (DOE, 1996a).

All Parcel 4 data used in this evaluation were obtained from the reports listed in Table 2-1 and all data were collected and analyzed according to the Data Quality Objectives specific to each individual project. Samples were collected throughout the site as shown in Figure 2-4. The data used in support of this evaluation are provided in Appendix A. Media investigated during these studies included surface and subsurface soil, surface water and sediment from Benner Branch, and groundwater. Samples were analyzed for radionuclides, VOCs, SVOCs, pesticides/PCBs, inorganics, and anions. No remediation has occurred on Parcel 4.

2.3 Contamination and Transport

The primary source of contamination at Parcel 4 consists of residual soil contaminants as a result of runoff from the adjacent plant. Radionuclide and chemical contaminants at this site can be transported to other media through atmospheric deposition, via surface water movement, erosion, and through leaching to groundwater. In the atmosphere, radon (and daughters) released from impacted soils, along with other radioactively and chemically contaminated dusts, can be suspended in the air by wind movement and be transported off-site. The contaminated particles can be deposited on surfaces at considerable distances from the site.

Movement of surface water over contaminated soils or sediments can provide a means for transport of contaminated materials. Infiltration of surface water can transport contaminated material in the soil into groundwater. Movement of contamination by surface water runoff during storms and/or erosion processes is suspected in Parcel 4 because site-related contaminants have been measured at some locations in the soil in Parcel 4.

Figure 2-4
Sampling Location Map

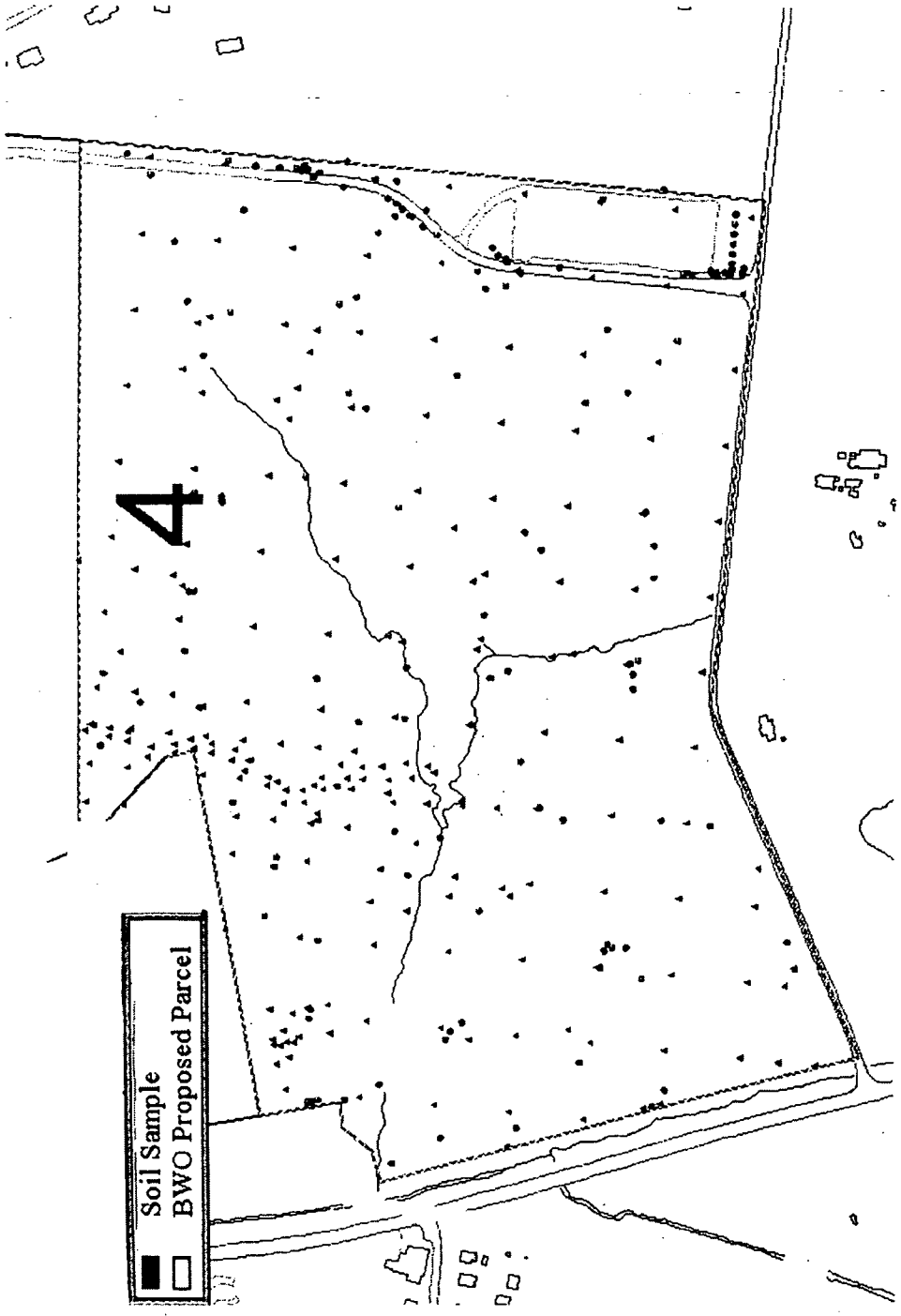


Table 2-1

Parcel 4 Data Set Components
Parcel 4, Mound Plant
Miamisburg, Ohio

Description	Reference
New Property	Operable Unit 5 Remedial Investigation Report, Final, Rev 0, February 1996
Surface Water and Sediment	Operable Unit 9 Surface Water and Sediment Investigation Report, Technical Memo, Rev 2, September 1996
Radiological Site Survey - OU9 Site Scoping Report	Operable Unit 9 Site Scoping report Vol 3; Radiological Site Survey, Final, June 1993
Mound Plant Screening Data	Mound Environmental Information Management System
WD Building Soil Characterization	ECOTEK
Parcel 4/5 Boundary Investigation	Data Report, Parcel 4/5 Boundary Sampling, Draft Rev. 0, November 2000
Soil Gas Confirmation Sampling	Operable Unit 9 Further Assessment Soil Gas Confirmation Sampling, Final, Rev 0, May 1996
Regional Soils Investigation	Operable Unit 9 Regional Soils Investigation Report, Final, Rev 2, August 1995
New Property Extended Phase	Operable Unit 5 Remedial Investigation Report, Final, Rev 0, February 1996 or Operable Unit 5 New Property Extended Phase I Field Report, Final, Rev 0, July 1995
Operable Unit 3 LFI	Operable Unit 3 Miscellaneous Sites Limited Field Investigation Report, Final, Rev 0 July 1993

Contaminants may also be transferred through the food chain. Plants and soil-dwelling organisms can take up contaminants from surface and subsurface soil, and certain contaminants may biomagnify up the food chain. Aquatic organisms can bioconcentrate contaminants from surrounding surface water and/or sediment environments.

2.4 Potential Receptors

A field investigation (site walkthrough) in support of the ecological risk assessment of Parcel 4 was performed 21 and 22 March 2000. The primary goal of the field investigation was to gather information on changes in general habitat cover since the 1992/1993 OU 9 Ecological

Investigation, and to assess the potential for occurrence of several receptor species for evaluation in the SLERA. To that end, the field investigators examined Parcel 4 for plants, fish, and/or wildlife that may be potentially exposed to contaminants of concern. Target species were selected for an effect assessment based on several criteria including, but not limited to, recreational importance, sensitivity to ecological change, sensitivity to contaminants, and importance to the well being of protected and recreationally important species.

At the time the field investigation was conducted, the Mound Plant and vicinity were experiencing typical early spring weather. Daytime temperatures ranged from 40 to 60° F. There had been recent rainfall and nearly all intermittent stream channels carried surface flow. Leaves were starting to appear on woody vegetation, and some early spring flowers were in bloom. Results from the on-site examination were supplemented with sampling data presented in Operable Unit 9, Ecological Characterization Report (DOE 1994). This report, summarizing multi-seasonal studies conducted between spring 1992 and fall 1993, provides detailed, quantitative and qualitative data on several biota groups, including plants, birds, small and large mammals, herptiles (reptiles and amphibians), fish, and aquatic macroinvertebrates. Careful examination of all habitats on Parcel 4 by the WESTON ecologist who directed the OU9 ecological characterization study revealed minor changes in certain habitat categories related to succession of the plant communities. However, no significant physical changes have occurred since completion of the Operable Unit 9 ecological characterization study. For this reason, it is assumed that most animal species inventoried in 1992 and 1993 are still present at roughly the same abundance. The reader is referred to Operable Unit 9, Ecological Characterization Report (DOE 1994) for a listing of the species found to inhabit Parcel 4.

2.4.1 Target Terrestrial Receptors

Exposure of terrestrial wildlife (i.e., mammals, birds, amphibians, and reptiles) to constituents of potential concern (COPCs) occurs primarily when animals feed in areas impacted by site contamination. Plants are the major biotic component of the terrestrial environment and serve as the major source of food and shelter for other living forms within the terrestrial ecosystem. Earthworms and other soil-dwelling organisms also serve as a major food source for other living organisms. These organisms are directly exposed to contaminants in their soil environment, and earthworms directly ingest soil. In this screening-level evaluation, several target terrestrial receptors from several trophic levels (i.e., herbivores and insectivores) were selected to represent animal populations that inhabit the site and the surrounding areas (Table 2-2). The selected target species have been observed on Parcel 4 during all sampling seasons, represent several feeding guilds, and are commonly used as receptors of concern in ecological risk assessments. Exposure to surface water and sediment in Benner Branch by aquatic wildlife species (e.g., muskrats, mallards, great blue heron, and mink) was not evaluated due to the intermittent nature of this surface water feature and because no fish were found during the ecological characterization study (DOE, 1994). A lack of intake and toxicological data for reptiles and amphibians is the reason impacts of chemical contamination cannot be quantified for these organisms. State/federally listed species were not selected as target endpoint species because they are not permanent residents, the habitat to support these species is not present at the site, and the lack of intake and toxicological data to quantify risks to these species.

Table 2-2 Receptors of Concern
Parcel 4, Mound Plant
Montgomery County, Ohio

Terrestrial Habitat
Plants
Soil-dwelling organisms
Birds
Herbivore (i.e., northern cardinal)
Insectivores (i.e., American robin)
Mammals
Herbivore (i.e., meadow vole; white-tailed deer)
Insectivore (i.e., short-tailed shrew)
Reptiles/Amphibians
Aquatic Habitat
Fish and other aquatic organisms
Benthic invertebrates

Plants

Plants are the major biotic component of the terrestrial environment and serve as the major source of food and shelter for other living forms within the terrestrial ecosystem. Because abundance and composition of plants in a terrestrial ecosystem are integral to the overall health of the system, it is essential that the assessment of ecological risks to terrestrial communities include an evaluation of the effects that environmental stressors may have on the growth and survival of vascular plants within the ecosystem (Fletcher et al., 1990).

Soil-dwelling Organisms

Earthworms and other soil-dwelling organism serve as a major food source for other living organisms. An earthworm's feeding and burrowing activities break down organic matter and release nutrients, and improve aeration, drainage, and aggregation of soil (Efroymson et al., 1997a). These organisms are directly exposed to contaminants in their soil environment, and earthworms directly ingest soil.

Meadow vole

Meadow voles (*Microtus pennsylvanicus*) are small rodents (172 to 259 mm in length) that usually have long, soft fur that is dull chestnut-brown above, and silvery-gray below. The ears are small, as are the eyes, and the tail is short (32 to 63 mm). Meadow voles inhabit low moist areas or high grasslands with rank growths of vegetation and also occur near streams, lakes, and open swamps. They forage both during the day and at night, and feed on a variety of green plants, including both monocots and dicots. They also eat some insects, though not to the extent that *Peromyscus* (mice) do. The meadow vole occurs throughout most of northern North

America, including all of Ohio. It is a prolific species, capable of rapid population increase under favorable conditions. With their high reproductive potential and their colonizing ability, they can adapt well to frequent changes in agricultural land use. At the Mound Plant, a single meadow vole was captured in 1992 in a live trap set on the lower slope of the Main Hill. Since 1992/1993, much of Parcel 4 has not been maintained, and grassy areas formerly mown on a routine basis by the Mound Plant maintenance staff now are covered with rank growths of herbaceous vegetation or have progressed into an early successional scrub/shrub community. The meadow vole was selected as a receptor species to represent mammalian herbivores because there presently exists on Parcel 4 much suitable habitat and the species is expected to be one of the more common herbaceous mammals in the study area.

Short-tailed shrew

The short-tailed shrew (*Blarina brevicauda*) is a small insectivore, 93 to 134 mm in length. It is dark gray to black with a pointed nose, tiny eyes, and concealed ears. As the name suggests, the tail is very short (19 to 30 mm). The only other species of shrew in the vicinity of the Mound Plant that has a short tail is *Cryptotus parva*, the least shrew. The short-tailed shrew is primarily nocturnal, but occasionally is active during the day. It prefers moist forests, but is found in brushy areas, along fencerows, and in pastures throughout the eastern United States. Like other shrews, *Blarina* is primarily a meat eater. Its diet includes other small mammals such as meadow voles and deer mice as well as invertebrates, such as grasshoppers and crickets. In 1992, short-tailed shrews were collected at the Mound Plant from a seepage area at the base of the southern slope of the Main Hill, and in the scrub/shrub vegetation community near the crest of the SM/PP Hill. Greater areas covered by scrub/shrub and tall grass now exist on Parcel 4 because no routine mowing of the large open areas is performed by Mound Plant maintenance. Thus, the short tailed shrew was selected as a receptor species to represent mammalian insectivores because there presumably is abundant food source and habitat for short-tailed shrews, and thus greater numbers of this small predator on Parcel 4 are expected.

White-tailed deer

The white-tailed deer (*Odocoileus virginianus*) is the most common large deer in eastern North America and is characterized by its teeth, which lack upper incisors, and its hooves. The antlers of males consist of a main beam with prongs. White-tailed deer measure 1600 to 2150 mm in length and are reddish-tan in summer and bluish-gray in winter. The tail is long (255 to 360 mm) and is white on the underside. White-tailed deer are found throughout most of North America and may occupy forested, brushy, and open areas. Their diet consists mostly of browse in winter, but grasses, forbs, fruits, and foliage of shrubs and small trees are eaten in summer.

During the ecological assessment for Operable Unit 9 (DOE 1994), conducted in 1992 and 1993, one or more white-tailed deer were observed on Parcel 4 on 17 separate occasions. The precise size of the deer herd occurring on Parcel 4 was not determined, but appeared to vary. On two separate occasions, seven (7) deer were seen in a single herd. Both male and female deer were seen during the Operable Unit 9 ecological characterization. On 21 and 22 March 2000,

numerous scat, bedding areas, and other indications of white-tailed deer occurrence were found on Parcel 4. Thus the white-tailed deer was selected as a large mammal herbivorous receptor of concern because it appears that they are still relatively common at Mound Plant.

American Robin

The American robin (*Turdus migratorius*) is one of North America's most recognizable birds. Standing from 9 to 10 ½ inches tall, the top and sides of the head are black, and the underparts are mouse gray or deep mouse gray. The tail is dark, and tipped with white, and the throat is white, and streaked with black. The chest, breast, upper abdomen, sides, flanks, and under wing-coverts are plain, deep cinnamon-rufous in color. The robin is considered a habitat generalist, being found in woodlands, gardens, and parks. The northern robin's distribution includes all of eastern and northern North America, and it is a year-round resident in Ohio. It nests on buildings, and any structures offering sufficient support, including trees and shrubs. The diet includes earthworms, snails, and other invertebrates, and much fruit. The young are fed insects.

In the Ornithological Committee of Dayton Audubon Society's publication on Birds of Dayton, robins are described as being a common migrant and summer resident, and an uncommon to rare species in winter. In 1992, it was found at the Mound Plant site during all sampling periods of the Operable Unit 9 ecological characterization study, and it was confirmed nesting in several areas of the Main Hill and South Property. The Amur honeysuckle thickets on the SM/PP Hill were found to provide refuge during the winter for large numbers (several hundred) of robins. On 21 and 22 March 2000, numerous robins were found on Parcel 4 in a variety of habitats, including early and late successional scrub/shrub, mesic and subxeric grassland, and low gradient upland forest. A robin was selected as an avian receptor species to represent insectivorous birds because of its feeding habits and its year-round residency.

Northern Cardinal

The northern cardinal (*Cardinalis cardinalis*) is 7.5 to 9 inches long, and has a wingspread of 10 to 12 inches. The head has a prominent crest, and in the male, the head and underparts are deep vermilion red. The chin and a mask around the base of the bill are black, and the back is washed with olive-gray. The tail is brick red. The female's upperparts are pale olive-brown, and her underparts are tawny-olive, shading to pinkish buff on the lower belly. The cardinal's range includes eastern North America from southeastern South Dakota, southern Iowa, northern Indiana, southern Ontario, and southern New York south to southern Georgia and western Florida. The cardinal is an abundant species within its range, and is a generalist in its habitat preference, inhabiting thickets, dense shrubs, undergrowth, residential areas, and riparian thickets. Adults feed primarily on vegetable matter (i.e., seeds and wild fruit). Insects comprise a minor portion of their diet. In Parcel 4, during the Operable Unit 9 ecological characterization, the cardinal was found in all seasons wherever there was dense cover. A cardinal was selected as an avian receptor species to represent herbivorous birds because of its feeding habits and its year-round residency.

2.4.2 Target Aquatic Receptors

Aquatic invertebrates were selected as receptors because of their close association with a benthic (i.e., sediment) environment. Aquatic organisms (e.g., fish, aquatic plants,and aquatic insects) were selected as receptors inhabiting a surface water environment. In this screening-level evaluation, the target aquatic receptors are those plant and animal populations inhabiting Benner Branch. It should be noted that no fish were found in Benner Branch during the OU9 ecological characterization study (DOE, 1994). However, fish are considered as a receptor species because vertebrates are more radiosensitive than invertebrates (BJC, 1998).

2.5 Complete Exposure Pathways

For an exposure pathway to be complete, a contaminant must be able to travel from the source to ecological receptors and to be taken up by the receptors via one or more exposure routes (EPA, 1998). For terrestrial animals, there are three basic chemical exposure routes: ingestion, inhalation, and dermal absorption. Little information is available for quantifying the inhalation or dermal absorption exposure pathways for terrestrial animals. Although these exposure pathways may be complete, the risk is considered minimal when compared to ingestion. For terrestrial plants, root absorption of contaminants in soil or leaf absorption of contaminants evaporating from the soil are potential exposure routes. For soil-dwelling organisms, direct contact with the dermis and ingestion of contaminated soil are the primary exposure routes. For aquatic organisms, direct contact with water or sediment with the gills or dermis and ingestion of water, food, and sediments are the primary exposure routes. For all ecological receptors, there is also the potential for direct gamma radiation resulting from the radioactive decay of plutonium-238 and the other radionuclide COPCs. For radionuclides, internal exposure (via ingestion and inhalation) and external exposures are the primary exposure routes for ecological receptors.

2.6 General Assessment Endpoints

Assessment endpoints are "explicit expressions of the environmental value that is to be protected" (EPA, 1998). The ecological resources selected to represent management goals for environmental protection are reflected in the assessment endpoint. Assessment endpoints link the risk assessment to management concerns and they are central to conceptual model development (EPA, 1998). The following principal criteria are used when selecting assessment endpoints (EPA, 1998):

- The contaminants present and their concentrations.
- Mechanisms of toxicity of the contaminants to different groups of organisms.
- Ecologically relevant receptor groups that are potentially sensitive or highly exposed to the contaminant and attributes of their natural history.
- Potentially complete exposure pathways.

The preliminary assessment endpoints for Parcel 4 are presented in Table 2-3. Protection of individual threatened and endangered species was not considered as an assessment endpoint because no listed species are expected to permanently occur on or in the vicinity of Parcel 4.

Table 2-3

Preliminary Assessment Endpoints
Parcel 4, Mound Plant, Montgomery County, Ohio

Preliminary Assessment Endpoint
Parcel 4
Changes in plant and soil-dwelling organism communities attributable to COPCs measured in soil.
Potential reduction of mammal and avian populations resulting from chronic exposure to COPCs in soil.
COPC bioacccumulation and biomagnification in flora and fauna associated with potential adverse effects.
Benner Branch
Changes in aquatic community (i.e., fish and benthic invertebrates) structure and function attributable to COPCs measured in surface water and sediment in Brenner Branch, and groundwater discharging to surface water.

Locations where the wildlife preliminary remediation goal (PRG) is exceeded are included in Appendix F.

2.7 *Conceptual Model*

The conceptual model establishes the complete exposure pathways that are evaluated in the ecological risk assessment and the relationship of the measurement endpoints to the assessment endpoints (EPA, 1997). The conceptual model for Parcel 4 is presented in Table 2-4. The ecological conceptual model presents the feeding guilds supported by the existing habitat at the site. However, not all feeding guilds will be equally evaluated in the risk assessment. In most cases, a lack of intake and toxicological data for many wildlife species (e.g., reptiles and amphibians) is the reason impacts of chemical contamination cannot be quantified for these organisms. While bird and mammal species at the top of the food chain have the potential to be exposed to contaminants that have biomagnified, these carnivores tend to have large home ranges. Thus, an evaluation of potential impacts to herbivorous and insectivorous birds and mammals is expected to more conservative since these groups would consume larger amounts of contaminated prey. Herbivores and insectivores who feed exclusively on plants or insects are expected to have a greater degree of exposure to contaminants than an omnivore who consumes a variety of prey. Thus, if risk to herbivores and insectivores is acceptable, risk to an omnivore is expected to be acceptable. Terrestrial wildlife exposure to seep water was not evaluated due to the limited potential for exposure to this medium. The seeps are seasonal features. While wildlife may ingest seep water, this water is not expected to be their sole water source as many small animals obtain water from various sources including their food, dew, etc. All feeding guilds and exposure routes that are not quantified in the risk assessment will be discussed in the uncertainty analysis.

Based on the conceptual site model, the following exposure scenarios, which are based on the presence of adequate habitat for the selected receptor species, were included in the environmental evaluation of the site:

Table 2-4

Preliminary Ecological Conceptual Site Model
Parcel 4, Mound Plant, Montgomery County, Ohio

Exposure Medium	Exposure Route	Plants	Soil-dwelling Organisms	Birds	Mammals	Reptiles / Amphibians	Fish	Macrobenthos
Soil *Parcel 4*	Ingestion	O	X	X	X	Δ	--	--
	Dermal contact	O	X	O	O	Δ	--	--
	Inhalation	O	X	O	O	Δ	--	--
	External	X	X	X	X	Δ	--	--
	Food/Prey	O		X	X	Δ	--	--
Sediment *Benner Branch*	Growth medium	X	--	--	--	--	--	--
	Ingestion	O	O	O	O	Δ	X	X
	Dermal contact	O	O	O	O	Δ	X	X
	External	O	O	O	O	Δ	X	X
	Food/Prey	O	O	O	O	Δ	X	X
Surface water *Benner Branch*	Ingestion	O	O	X	X	Δ	X	X
	Dermal contact	O	O	O	O	Δ	X	X
	External	O	O	O	O	Δ	X	X
	Inhalation	O	O	O	O	Δ	X	X
	Food/Prey	O	O	O	O	Δ	X	X
Groundwater/ Seeps *Discharge to surface water*	Ingestion	O	O	0	0	Δ	X	X
	Dermal contact	O	O	O	O	Δ	X	X
	External	O	O	O	O	Δ	X	X
	Inhalation	O	O	O	O	Δ	X	X
	Food/Prey	O	O	O	O	Δ	X	X

X = Potential exposure route determined to be significant for this receptor.
O = Potential exposure route determined to be insignificant for this receptor.
Δ = Potential exposure route cannot be quantified due to lack of exposure and toxicity data.
-- = Potential exposure route not of concern for this receptor.

2.7.1 Terrestrial Habitat

- Plant and soil-dwelling organism hazard quotient (HQ) evaluation of direct exposure to chemical and radiological COPCs in soil where media concentrations are compared with plant and soil-dwelling organism benchmarks.

- A primary consumer (herbivore) hazard quotient evaluation for avian and mammalian species, where cumulative internal (i.e., consumption of vegetation, incidental ingestion of soil and surface water, inhalation of dust (radiological only)) and external exposure is compared with published or derived toxicity reference values.

- A secondary consumer (insectivore) hazard quotient evaluation for an avian and mammalian species, where cumulative internal (i.e., consumption of insects/earthworms, incidental ingestion of soil and surface water, inhalation of dust (radiological only)) and external exposure is compared with published or derived toxicity reference values.

2.7.2 Aquatic Habitat

- Aquatic community hazard quotient evaluation for aquatic insects, aquatic plants, and benthic organisms that are directly exposed to chemical and radiological COPCs in Benner Branch surface water and sediment, and groundwater discharging to surface water where media concentrations are compared with surface water and sediment quality benchmarks.

3.0 SCREENING-LEVEL ECOLOGICAL EFFECTS EVALUATION

The screening-level ecological effects evaluation focuses on developing toxicity reference values (TRVs), listed in Appendix C for COPCs, as well as determining the complete exposure pathways that exist at the site (EPA 1996).

3.1 Constituents of Potential Concern

Radionuclides in soil, surface water, and sediment above site-specific background levels are considered to be radiological COPCs. To determine chemical COPCs in soil and sediment, the maximum detected concentration of a contaminant was compared to U.S. EPA Region V Ecological Data Quality Levels (EDQLs) (EPA 1999a) and site-specific background levels. To determine chemical COPCs in surface water, the maximum detected concentration of a contaminant was compared to OEPA outside mixing zone average water quality standards. If a state surface water standard was not available, the lower of Region V surface water EDQLs and federal water quality criteria were used for screening. The results of the screening are provided in Appendix B. Ecological receptors are not expected to be exposed to soil deeper than about 2 feet below ground surface (bgs); thus, soils collected below this depth were not evaluated in the SLERA.

3.1.1 Toxicological Profiles

Radionuclides

Ionizing radiation exists as background radiation from terrestrial sources, building materials, food, and cosmic sources. Acute doses of ionizing radiation at high levels are known to produce biological effects ranging from chromosomal changes to cell death. Radionuclides naturally decay causing a decrease in their activities or concentrations. Each radionuclide has a half-life that is a measure of how long it will take for half of the radioactive isotope to decay. The decay series of concern are summarized below and all decay products are listed in Table D-1.

Thorium-228 (Th-228)

Thorium-228 is a naturally occurring isotope, with a half-life of 1.93 years, as a member of the Thorium-232 series. Th-228 emits an alpha particle and decays into Radium-224. Th-228 also emits gamma rays following 2% of all disintegrations. Th-228 will have the same metabolic properties as Th-230 including biological half-life and target organs.

Thorium-230 (Th-230)

Thorium-230 is a naturally occurring isotope, with a half-life of 7.54×10^4 years, as a member of the Uranium-238 series. The average amount of Th-230 in the body is 3 pCi from natural sources. Th-230 emits an alpha particle and decays into Radium-226. Radium-226 has a half-life of 8×10^4 years with a biological half-life of 8×10^3 days in bone and 700 days for all other

organs. Seventy percent of thorium when taken in the body will deposit in the bone, while 4% deposits in the liver and 16% in all remaining organs.

Thorium-232 (Th-232)

Thorium-232 is also naturally occurring, with a half-life of 1.40×10^{10} years, and is the start of the Thorium series. The average amount of Th-232 intake from natural sources is 5×10^{-7} g/day with a total amount in the body of 1.4 pCi. Th-232 emits an alpha particle and decays into Radium-228, which has a half-life of 1.41×10^{10} years. Th-232 will have the same metabolic properties as Th-230 including biological half-life and target organs.

Uranium-234 (U-234)

Uranium-234 is naturally occurring, with a half-life of 2.46×10^{5} years, as a member of the Uranium series. U-234 emits an alpha particle and is the precursor of Th-230. U-234 will have the same metabolic properties as Uranium-235 including biological half-life and target organs.

Uranium-235 (U-235)

Uranium-235 is naturally occurring, with a half-life of 7.04×10^{8} years, and is the start of the Actinium series. The average amount of U-235 intake from natural sources is 1.9×10^{-6} g/day with a total amount in the body of 9×10^{-6} g natural uranium. U-235 emits an alpha particle and decays into Thorium-231. U-235 has a biological half-life of 8×10^{3} days in the kidney and two components of biological half-life in the skeleton of 20 and 5000 days. Chemical effects to the kidney are likely to be more important than radiation effects to the body. Radiation effects to the kidneys and lungs must be considered if the uranium is enriched (higher percentage of U-235).

Uranium-238 (U-238)

Uranium-238 is naturally occurring, with a half-life of 4.51×10^{9} years, and is the start of the Uranium series. U-238 emits an alpha particle and decays into Th-234. U-238 will have the same metabolic properties as U-235 including biological half-life and target organs.

Plutonium-238 (Pu-238)

Plutonium-238, with a half-life of 87.7 years, emits an alpha particle and decays into Uranium-234. Pu-238 has a 100 year biological half-life in bone and 40 years in the liver. When plutonium is taken into the body, 45% will deposit in bone, mostly on endosteal surfaces, and 45% will deposit in the liver.

Metals

Aluminum occurs naturally and makes up approximately 8% of the surface of the earth. Aluminum enters environmental media naturally through the weathering of rocks and minerals. Anthropogenic releases are primarily associated with industrial process, such as smelting. In general, decrease in pH results in an increase in mobility for monomeric forms of aluminum. In groundwater or surface water systems, equilibrium with a solid phase of form is established that

largely controls the extent of aluminum dissolution that can occur. Aluminum is not bioconcentrated in plants and it is not expected to biomagnify in the terrestrial food chain. Bioconcentration in fish is a function of the water quality, with slightly more accumulation noted at lower pH (ATSDR, 1990).

Antimony is naturally present in the earth's crust. Anthropogenic sources include metal smelting, coal-fired power plants, and refuse incineration. Antimony does not appear to appreciably bioconcentrate in fish and aquatic organisms. Uptake from soil is minor, and is correlated with the amount of available antimony. Antimony bioconcentration has been measured in small mammals, though biomagnification from lower to higher trophic levels in the food chain has not been suggested (ATSDR, 1990).

Arsenic is a relatively common element. In general, inorganic arsenic is more toxic than organic compounds, and trivalent species are more toxic than pentavalent species (Eisler, 1988). Episodes of arsenic poisoning are either acute or subacute; cases of chronic arsenosis are rarely encountered (Eisler, 1988). Arsenic is a teratogen and carcinogen that can traverse placental barriers and produce fetal death and malformations in many species of mammals (Eisler, 1988). Arsenic is bioconcentrated by organisms, but it is not biomagnified in the food chain (Eisler, 1988).

Aquatic and terrestrial organisms bioaccumulate **cadmium** at all levels of the food chain (Eisler, 1985). Mammals are less susceptible to the acute toxic effects of cadmium than aquatic insects and fish. Sublethal effects in birds and other species include growth retardation, anemia, and testicular damage (Eisler, 1985). Teratogenic effects on animals appears to be greater for cadmium than for other metals (Eisler, 1985). Cadmium does not biomagnify.

Toxic effects of **chromium** are primarily expressed at lower trophic levels (Eilser, 1986). Under laboratory conditions, chromium is mutagenic, carcinogenic, and teratogenic (Eisler, 1986). Potential endpoints include growth reductions and impaired survival (Eisler, 1986). Trivalent chromium is generally less toxic than hexavalent chromium (Eisler, 1986). In animals, hexavalent chromium is readily converted to trivalent chromium (Eisler, 1986). For aquatic life, younger life stages are more sensitive than older organisms. Chromium does not biomagnify.

Lithium is widely distributed throughout the earth's crust, though the lithium content in soil is controlled more by conditions of soil formation than by its initial content in parent rocks. Soluble lithium in soils is readily available to plants. While lithium is not known to be an essential plant nutrient, it can affect plant growth and development (Kabata-Pendias and Pendias, 1992).

Elemental **mercury** has no known normal metabolic function (Eisler, 1987). Mercury is a mutagen, teratogen, and carcinogen, and causes embryocidal, cytochemical, and histopathological effects (Eisler, 1987). Methylmercury can be bioconcentrated and biomagnfied through food chains (Eisler, 1987). For all organisms, early developmental stages are the most sensitive, and organomercury compounds are more toxic than inorganic forms (Eisler, 1987).

Silver is one of the basic elements that make up the earth. Because silver is an element, it does not break down, but it can change form by combining with other substances. Silver and its compounds are not known to be mutagenic, teratogenic, or carcinogenic. Silver, as ionic Ag^+ is one of the most toxic metals known to aquatic organisms. Sorption is the dominant process that controls silver partitioning in water and its movement in soils and sediment (Eisler, 1996).

Vanadium enters the environment from both natural and anthropogenic sources. Some marine organisms bioconcentrate very efficiently. In general marine plants and invertebrates contain higher levels of vanadium than terrestrial plants and animals. Vanadium does not appear to concentrate in the aboveground portion of plants. While no data are available regarding biomagnification of vanadium, studies suggest that this is unlikely (ATSDR, 1990).

3.2 Development of Toxicity Reference Values

For each COPC with a potentially complete exposure pathway, a screening-level toxicity reference value (TRV) was developed from a review of literature. TRVs based on dose are used for bird and mammal receptors and TRVs based on media concentrations are used for fish and benthic organisms.

3.2.1 Dose-based TRVs

Chemicals

For chemicals, toxicity reference values based on no-observed-adverse-effect-levels (NOAELs) were developed for each receptor class (i.e., birds and mammals). NOAEL-based TRVs represent values believed to be nonhazardous for the listed wildlife species, and is the lowest exposure level shown not to produce adverse effects in a potential receptor. Most dose-based toxicity data were obtained from EPA (1999) and Sample et al. (1996). If a TRV was not directly available from toxicity studies, a TRV was extrapolated from available studies following methods recommended by EPA (1999). TRVs could not be developed for all chemicals; those with no available toxicity data are discussed in the Uncertainty Analysis (Subsection 5.3).

If a chronic NOAEL was not available for a constituent, uncertainty factors were used to adjust the available toxicity data to a chronic NOAEL. A factor of 10 was used to adjust from a lowest observable adverse effect level (LOAEL) to a NOAEL, and to adjust from an acute to chronic value (EPA, 1999). Studies have found that the ratio of an LD_{50} to a chronic NOAEL typically ranges from 10 to 10,000 (Sample et al., 1996). An uncertainty factor of 100 was used to adjust an LD_{50} to a chronic NOAEL (EPA, 1999b). To account for differences between test species and the receptor species, a body-weight scaling factor was used, following methodology developed in Sample et al. (1996). A scaling factor of 1 is assumed for avian species and species-specific scaling factors for mammals are presented in Appendix B. The dose-based TRVs for the receptors of concern are also presented in Appendix B.

Radionuclides

For radionuclides, the International Atomic Energy Agency (IAEA) recommends limiting the dose for terrestrial organisms to 100 mrad/day (IAEA, 1992; Sample et al., 1997). This dose limit is based on studies evaluating reproductive success and survival. A dose rate of 1 rad/day is generally considered protective of plant and invertebrate populations (IAEA, 1992; Barnthouse, 1995; Sample et al., 1997). This dose limit is based on studies of productivity and community characteristics. Invertebrates tend to be less radiosensitive than plants or vertebrates, and indirect responses to radiation-induced vegetation changes (e.g., habitat alteration) appear to be more critical than direct effects (e.g., mortality) from radiation (IAEA, 1992; Sample et al., 1997). The recommended acceptable dose rate to natural populations of aquatic biota is 1 rad/day based on results of the reviews summarized in NCRP Report No. 109 (NCRP 1991; BJC, 1998). This limit was intended to apply to the most radiosensitive populations of aquatic organisms (BJC, 1998).

3.2.2 Media-based TRVs

Chemicals

Soil

Toxicity data for plants and soil-dwelling organisms have been developed for a limited number of organic and inorganic chemicals. EPA recently released draft Ecological Soil Screening Levels (EPA, 2000) for plants, invertebrates, birds, and mammals. Screening benchmarks for evaluating chemical effects on terrestrial plants and soil- and litter-dwelling invertebrates have been developed by ORNL (Efroymson et al., 1997a&b).

Surface Water

As a means of characterizing aquatic toxicity, ambient water quality criteria (AWQC) have been developed for the protection of 95 percent of all aquatic life where sufficient data are available (EPA, 1992). Not only fish, but also aquatic invertebrates and plants are protected (EPA, 1986). The Ohio EPA has established water quality standards to protect aquatic life habitat (Ohio Administrative Code, Chapter 3745-1). For metals, most water quality criteria are hardness-dependent. Surface water data were used to calculate hardness values and hardness-dependent criteria for each water body (Appendix B, Table B-5). A hardness value of 400 mg/L was used for groundwater.

Sediment

Various agencies (CCME, 1999; Long et al., 1995; Jones et al., 1996) have developed sediment quality criteria and benchmarks for the assessment of toxicological effects on sediment-associated biota. Note that these benchmarks are not remediation goals; remediation goals must consider the adverse effects on habitat and remobilization of contaminants caused by removal or remediation of sediments (Jones et al., 1996). The sediment benchmarks should not be considered as the sole measure of sediment toxicity; rather, field studies and toxicity tests are

primary indicators of sediment toxicity (Jones et al., 1996). The sediment benchmarks provide a means to determine which chemicals are most likely causing toxicity as presented in Jones et al. (1996). "The use of multiple benchmarks also provides an indication of the likelihood and nature of effects. For example, exceedance of only one conservatively estimated benchmark may provide weak evidence of real effects, whereas exceedance of mulitple benchmarks of varying conservatism may provide strong evidence of real effects."(Jones et al., 1996).

The Canadian Council of Ministers of the Environment (Smith et al., 1996; CCME, 1999) has developed environmental quality guidelines that include sediment quality guidelines for the protection of aquatic life. The guidelines include a threshold effect level (TEL), which represents the concentration below which adverse effects were expected to rarely occur, and the probable effect level (PEL), which is defined as the level above which adverse effects were expected to occur frequently. The TEL is also generally recommended as the interim freshwater sediment quality guideline (ISQG). Concentrations that fall between the range of TEL and PEL are occasionally expected to be associated with adverse biological effects.

The National Oceanic and Atmospheric Administration (NOAA) has developed sediment effect ranges to determine concentrations of chemicals which are likely to result in effects based upon available sediment data collected primarily in marine and estuarine environments throughout the United States (Long et al., 1995). The Effects Range-Low (ER-L) values represent the lower tenth percentile of the range of concentrations in which effects were observed or predicted. The Effects Range-Median (ER-M) values represent median concentrations.

Radionuclides

Using methods presented in Blaylock et al. (1993), the Bechtel Jacobs Company (BJC) (1998) has developed benchmarks for radionuclides in sediment and surface water that result in a total dose rate of 1 rad/day for fish. Two types of benchmarks were derived: single-media benchmarks and multimedia benchmarks. The benchmarks include exposures from parent isotopes and all short-lived daughter products. They also include exposures from all major alpha, beta, and gamma emissions for each isotope. The single-media benchmarks are based on exposures to radionuclides in one medium but not the other. The water benchmarks include internal and external exposures from water only. The sediment benchmarks include only external exposures from sediment. These benchmarks are intended for use when both water and sediment data are available. That is, measured sediment concentrations should be compared to the sediment values and collocated water measurements should be compared to the water values (BJC, 1998).

The multimedia benchmarks are for use when only one medium was sampled at a site. The water benchmarks account for internal exposures, external exposures to water, and external exposures to sediment. The sediment concentrations are estimated from the water concentrations using the radionuclide-specific soil-water partition coefficients (Kd). The sediment benchmarks account for external exposures to sediment plus internal exposures, which were estimated based on the radionuclide-specific transfer factors (i.e., the Kd and BCF).). Both the single-media and multi-media benchmarks were also developed for two size categories of fish (BJC, 1998). Due to the

uncertainty associated with use of generic transfer factors, the single-media benchmarks are considered to be more reliable than the multimedia benchmarks (BJC, 1998). Both benchmarks are used in the SLERA to provide an indication of the likelihood and nature of effects.

4.0 SCREENING-LEVEL EXPOSURE ESTIMATE

The screening-level total effective dose equivalent (TEDE) involves the selection of exposure parameters for use in calculating a daily exposure dose or exposure concentration. Measured environmental medium concentrations (e.g., surface water, sediment, and soil) are used for estimating TEDE of terrestrial and aquatic wildlife to site contaminants.

4.1 Dose-Based Exposure

4.1.1 Radionuclide Exposure

To estimate radionuclide exposure by ecological receptors (i.e., plants, insects, small mammals/birds, small-medium mammals/birds, medium mammals/birds, and large mammals a radiation dose rate in millirads per day (mrad/d) was calculated for each receptor group following the methodology described in *Methods and Tools for Estimation of the Exposure of Terrestrial Wildlife to Contaminants (*Sample et al., 1997). This methodology uses radionuclide exposure point concentrations in environmental media such as surface water, soil, and sediment, and radionuclide-, media-, receptor- and pathway-specific factors to calculate doses from alpha, beta, and gamma emissions and includes dose rates from all short-lived daughter products. Dose rates from each radionculide (plus appropriate daughters) are then summed over all exposure routes and all radionuclides to calculate an estimate of the TEDE received for each receptor (Sample et al., 1997).

Exposure routes evaluated for radionuclides include external exposure through direct radiation from soil (both aboveground and below ground) and internal exposure through ingestion of soil, prey, and water and through inhalation of contaminated dust. Radionuclide exposure concentrations and doses are presented in Appendix D.

External Exposure: Direct Radiation from Soil

The equation for aboveground dose from external exposures for a plant or wildlife receptor is (Sample et al., 1997):

$$D\,abovegrd = F\,above \times F\,ruf \sum C\,soil,i \times DF\,grd,i \times CFb \times ECF$$

Where:

D *abovegrd*	=	external dose rate to receptor from aboveground exposures to contaminated soil aboveground (mrad/day).
F *above*	=	dose rate reduction factor accounting for the fraction of time the receptor spends aboveground (unitless).

F *ruf* = dose rate reduction factor accounting for ground roughness (unitless) [Representative average of 0.7 (Eckerman and Ryman 1993) is reasonable default].

C *soil,i* = activity of radionuclide *i* in surface soil (pCi/g).

DF *grd,i* = dose coefficient for radionuclide *i* in soil contaminated to given depth (Eckerman and Ryman 1993) (Sv/sec per Bq/min).

CFb = conversion factor to change Sv/sec per Bq/min to mrad g/pCi day. (Equals 5.12×10^{14}).

ECF = elevation correction factor to adjust dose coefficients to value representative of effective height of animal aboveground.

The equation for below ground external exposures of earthworms and wildlife receptors is (Sample et al., 1997):

$$D\ belowgrd = 1.05\ F\ below \sum C\ soil,i \times \varepsilon i \times CFa\ ,$$

Where:

D *belowgrd* = external dose rate to earthworm or wildlife receptor in burrow from contaminated soil (mrad/day).

F*below* = dose rate reduction factor accounting for the fraction of time the receptor spends below ground (unitless).

C *soil, i* = activity of radionuclide *i* in surface soil (pCi/g).

εi = energy for gamma emissions by nuclide *i* (MeV/nuclear disintegrations (MeV/nt),

1.05 = conversion factor to account for immersion in soil vs. water (estimated value; Keith Eckerman, Health Sciences Research Division, Oak Ridge National Laboratory, personal communication, June 1996).

C*Fa* = conversion factor to go from MeV/nt to g mrad/pCi day. (5.12×10^{-2}).

Alpha particles have low penetration ability and are not considered for external exposure. The effective dose coefficients used incorporate both high energy beta and gamma emissions (Sample et al., 1997). Below ground exposure assumes immersion in a continuous soil medium. The exposure fractions reflect the fraction of time the receptor spends above and below ground. For this analysis, values of 1 were conservatively applied for both above- and below ground exposure. In addition, all default exposure parameters presented in Sample et al. (1997) were used to estimate external exposure.

Internal Exposure: Ingestion

Wildlife receptors may receive internal radiation doses after ingesting contaminated prey, soil, or water. Internal exposure for wildlife that consume a variety of prey types, ingesting soil, and drinking water, as well as plants and invertebrates taking up contaminants directly from the soil can be estimated as (Sample et al., 1997):

$$D\ ing = \sum QF \times C\ tissue \times \varepsilon i \times CFa \times AF$$

Where:

D *ing*	=	internal dose rate received after ingestion of contaminated prey and soil (mrad/day).
QF	=	quality factor to account for the greater biological effectiveness of α particles (20 for α; 1 for β and γ emissions; unitless).
C *tissue*	=	activity (pCi/g) of radionuclide *i* in tissue of organism.
εi	=	energy for α, β, or γ emissions by nuclide *i* (MeV/nt).
CFa	=	conversion factor to go from MeV/nt to g mrad/pCi day (5.12×10^{-2}).
AF	=	absorption factor (unitless).

Radionuclide activity in tissue was estimated from soil activity using uptake factors and bioaccumulation factors presented in Sample et al. (1997). Absorbed energy fractions for alpha and beta radiation were conservatively assumed to be 1 for all receptors. Beta absorption fractions may be less than one for plants and earthworms, since some fraction may have sufficient energy to pass through smaller organisms. For gamma radiation, absorption fractions presented in Sample et al. (1997) were used. In addition, all default exposure parameters presented in Sample et al. (1997) were used to estimate ingestion exposure.

Internal Exposure: Inhalation

Wildlife species that use burrows may receive an additional internal dose from inhalation of dust originating from contaminated soil, especially since they may spend a large portion of their time in below ground burrows. Intake of radionuclides by inhalation is estimated as (DOE 1995b, as cited in Sample et al., 1997):

$$D\ inh = QF \times F\ below \sum C\ soil,i \times A \times AD \times \varepsilon i \times CFa \times AF$$

Where:

D inh	=	internal dose rate from inhalation of contaminated soil (mrad/day).

F below	=	dose reduction factor for fraction of time receptor spends below ground (unitless).
C soil, i	=	activity of radionuclide i in surface soil (pCi/g).
A	=	mass of respirable dust per volume of air breathed (0.1 g/m^3; DOE 1995b).
AD	=	air density (1200 g/m^3; Eckerman and Ryman 1993).
εi	=	energy for α, β, or γ emissions by nuclide *i* (MeV/nt).
CFa	=	conversion factor to go from MeV/nt to mrad g/pCi/day (5.12 x 10^{-2}).
AF	=	absorption factor (unitless).

The exposure fraction reflects the fraction of time the receptor spends above- and below ground. For this analysis, a value of 1 was conservatively applied for inhalation exposure. In addition, all default exposure parameters presented in Sample et al. (1997) were used to estimate inhalation exposure.

Chemical Exposure

To estimate chemical exposure by avian and mammalian ecological receptors, exposure doses were estimated for the selected target species using the following general equation:

$$Dose = (C_{medium} \times IR \times FI) / BW$$

Where:

Dose	=	Daily dose through exposure route, e.g., soil, surface water, prey (mg/kg-day).
IR	=	Ingestion rate of the medium (kg/day or L/day).
C_{medium}	=	Chemical concentration in soil, surface water, or prey (mg/kg or mg/L).
FI	=	Fraction ingested from contaminated source (unitless).
BW	=	Body weight (kg).

Total exposure to a receptor organism can be determined by summing the dose received by soil, food, and water. Intake of contaminants via surface water was considered only for chemical COPCs. To ensure that sites which may pose an ecological risk are properly identified, the EPA

suggests that exposure values should be consistently biased in the direction of overestimating risk. "Without this bias, a screening evaluation could not provide a defensible conclusion for an absence of ecological risk" (EPA, 1996). Conservative assumptions were used to estimate exposure levels in this assessment, including:

- Maximum COPC concentrations at exposure point.
- 100% bioavailability of contaminants.
- 100% of diet consisting of most contaminated food item.
- Minimum body weights and maximum ingestion rates.
- Most sensitive life stage.
- Home range lies entirely within site.

Birds and mammals representing several trophic levels were proposed as the target receptors for this evaluation. Exposure of terrestrial wildlife to COPCs occurs primarily when animals feed in areas impacted by site contamination. The species selected as receptors of concern represent a range of feeding relationships within Parcel 4. Receptors evaluated include herbivores and insectivores. Exposure of a piscivore was not considered because no fish have been found in Benner Branch, Exposure of a carnivore was not evaluated because none of the contaminants of concern are expected to biomagnify in the terrestrial food chain, there is a lack of bioaccumulation factors for small mammals, and the large home range of most carnivores will limit their site exposure.

The chemical concentration in food (i.e., plants and earthworms) were estimated using chemical-specific bioconcentration factors (BCFs). Chemical concentrations in plants were estimated by multiplying chemical-specific plant uptake factors (PUFs) by measured soil or sediment concentrations. Bioaccumulation factors (BAFs) were used to estimate earthworm concentrations from soil exposure.

4.2 Media-Based Exposure

4.2.1 Radionuclide Exposure

Using methods presented in Blaylock et al. (1993), Bechtel Jacobs Company (1998) has developed benchmarks for radionculides in sediment and surface water that result in a total dose rate of 1 rad/day for fish. Two types of benchmarks were derived: single-media benchmarks and multimedia benchmarks. These benchmarks were used to estimate radionculide exposure by aquatic life in Benner Branch and from groundwater discharge to surface water. It should be noted that no fish were found in Benner Branch during the OU9 ecological characterization study (DOE, 1994). However, fish are considered as a receptor species in development of radiological benchmarks because vertebrates are more radiosensitive than invertebrates (BJC, 1998).

4.2.2 Chemical Exposure

Chemical exposure by plants, soil-dwelling organisms, sediment-dwelling organisms, and aquatic life such as fish are evaluated in this assessment through direct comparison to ecological benchmarks rather than dose calculations. To estimate chemical exposure by plants and soil-dwelling organisms, soil concentrations are compared directly to toxicity benchmarks. To estimate chemical exposure by sediment-dwelling organisms and aquatic life, sediment and surface water concentrations are compared directly to toxicity benchmarks (e.g., sediment effects range concentrations and ambient water quality criteria).

5.0 SCREENING-LEVEL RISK CHARACTERIZATION

The screening-level risk characterization integrates information from the screening-level problem formulation, screening-level ecological effects evaluation, and the screening-level exposure estimate to predict the nature and extent of ecological risk or threat, as well as the environmental impact of previous site activities. The hazard quotient (HQ) approach is used as an indicator of the risks posed to surrogate ecological receptors from exposure to site-related contaminants (EPA, 1996). The hazard quotient compares exposure values to TRVs, and can be expressed as the ratio of a potential exposure level to the TRV:

$$HQ = \text{Exposure} / \text{TRV}$$

where:

HQ	=	Hazard quotient (unitless).
Exposure	=	Exposure concentration at the exposure point (e.g., mg-contaminant/kg-sediment or pCi/g) or estimated contaminant exposure dose at the exposure point (mg contaminant/kg body weight/day or mrad/day).
TRV	=	Toxicity reference value, i.e. effect dose or effect criteria (in units that match the exposure concentration). Listed in Appendix C

Exposure to the same chemical or radionuclide (plus daughters) through multiple exposure routes (e.g., soil ingestion, prey ingestion) is assumed to be cumulative. Consequently, a total hazard index (HI) for a specific COPC examines the potential risk posed by the COPC through more than one exposure route:

$$HI = \sum HQi$$

Where:

HI	=	Hazard index (unitless)
HQi	=	Hazard quotient for exposure route i (unitless)

A HQ or HI exceeding 1.0 indicates the species of interest (or the species for which the toxicity data was based on) may be at risk of an adverse effect from the particular COPC, exposure route, or medium on which the HQ (or HI) was based. Further evaluation may be needed in terms of site-specific toxicity data for a given target receptor.

For aquatic life exposure to radionuclides, the concentrations of radionuclides in water or sediment were screened against single-media and multi-media benchmarks by calculating a HQ.

The radiological benchmarks are normalized in an attempt to account for the biological effectiveness of the different types of radiation, which allows for the calculation of an HI. The HI is the measure of the total dose rate to the organism and accounts for all three exposure pathways: total internal dose, total external dose from water, and total external dose from sediment (BJC, 1998).

5.1 Risk to Terrestrial Receptors

5.1.1 Radionuclides

Terrestrial organisms may be exposed to radionuclide concentrations in soil via external exposure through direct radiation, via internal exposure through ingestion of soil and food, and via internal exposure through inhalation of contaminated dust. Maximum detected radionuclide concentrations were applied in exposure models to estimate total radionuclide exposure doses. These doses were compared to IAEA-recommended dose limits for terrestrial organisms (e.g., mammals and birds) and plant and invertebrate populations. The total hazard indices for these receptor groups are presented in Table 5-1. The HI is the sum of all exposure routes and all radioncuclides (plus daughters). Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

For all receptors, total HIs do not exceed unity, suggesting that the radionuclides measured in Parcel 4 soil pose a negligible risk to terrestrial biota.

5.1.2 Chemicals

Plants

Plants may be directly exposed to chemical COPCs in soil. There is a potential for adverse effects to plants from exposure to aluminum, antimony, chromium, lithium, silver, and vanadium (Table 5-2).

No plant benchmarks were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, and bismuth, measured in surface soil, which may contribute to the ecological risk. The uncertainty associated with the lack of benchmark values is discussed in the Uncertainty Analysis.

Soil-dwelling Organisms

Soil-dwelling organisms, including earthworms, may be directly exposed to chemical COPCs in their soil environment. There is a potential for adverse effects to earthworms from exposure to chromium and mercury. There is potential for adverse effects to other soil-dwelling organisms from exposure to aluminum, chromium, lithium, and vanadium (Table 5-2).

No earthworm benchmarks were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, aluminum, antimony, lithium, silver, vanadium, and bismuth, which may contribute to the ecological risk. No other soil-dwelling organism benchmarks were available for 2,4,6-

trinitrotoluene, benzoic acid, endrin ketone, antimony and bismuth, which may contribute to the ecological risk. The uncertainty associated with the lack of benchmark values is discussed in the Uncertainty Analysis.

Meadow vole

The meadow vole may be exposed to chemical COPCs through ingestion of plants and soil. The estimated daily dose and the potential risk to a vole are presented in Table 5-3. There is a potential for adverse effects to a vole from exposure to chemical COPCs in Parcel 4 soil. Numerous metals were found to be of potential concern. For cadmium, a hazard quotient greater than unity is due to plant ingestion only. For aluminum, antimony, silver, and vanadium, hazard quotients greater than unity are due to both soil and plant ingestion. Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

Of these constituents, aluminum, antimony, and silver had a hazard quotient greater than 10. An uncertainty factor of 10 is typically used to extrapolate from a no observable adverse effect level (NOAEL) to a lowest observable effect level (LOAEL) (EPA, 1997; EPA, 1999). The more conservative NOAEL is the preferred screening exposure level to determine a level that is unlikely to adversely impact populations and to ensure that risk is not underestimated. If a LOAEL value is exceeded, there is more certainty that the contaminants may be adversely impacting ecological receptors.

Table 5-1
Summary of Radionuclide Exposure and Risk
Parcel 4, Mound Plant

Receptor Group Pathways for Below Ground Receptors	A Plants	A Insects	B Small mammals	C Small-medium mammals	D Medium mammals	E Large mammals	B Small birds	C Small-medium birds	D Medium birds
External (mrad/day)									
Below Ground	8.13E-01	8.13E-01	8.13E-01	8.13E-01	8.13E-01	8.13E-01	8.13E-01	8.13E-01	8.13E-01
Ingestion (mrad/day)									
Soil	3.03E+00	3.14E+00	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03
Food			3.38E-01	3.46E-01	3.50E-01	3.79E-01	3.77E-01	3.85E-01	3.89E-01
Inhalation (mrad/day)	4.39E-02	4.39E-02	4.39E-02	4.39E-02	4.39E-02	4.39E-02	4.39E-02	4.39E-02	4.39E-02
Total Effective Dose Equivalent (*mrad/day*)	3.89E+00	4.00E+00	1.20E+00	1.21E+00	1.21E+00	1.24E+00	1.24E+00	1.25E+00	1.25E+00
Benchmark (mrad/day)	1.00E+03	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02
Hazard Index	3.89E-03	4.00E-02	1.20E-02	1.21E-02	1.21E-02	1.24E-02	1.24E-02	1.25E-02	1.25E-02

Receptor Group Pathways for Aboveground Receptors	A Plants	A Insects	B Small mammals	C Small-medium mammals	D Medium mammals	E Large mammals	B Small birds	C Small-medium birds	D Medium birds
External (mrad/day)									
Aboveground	3.07E-01	3.07E-01	3.07E-01	3.07E-01	3.07E-01	3.07E-01	3.07E-01	3.07E-01	3.07E-01
Ingestion (mrad/day)									
Soil	3.03E+00	3.14E+00	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03	6.37E-03
Food			3.38E-01	3.46E-01	3.50E-01	3.79E-01	3.77E-01	3.85E-01	3.89E-01
Total Effective Dose Equivalent (mrad/day)	3.34E+00	3.45E+00	6.51E-01	6.59E-01	6.63E-01	6.92E-01	6.90E-01	6.98E-01	7.02E-01
Benchmark (mrad/day)	1.00E+03	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02	1.00E+02
Hazard Index	3.34E-03	3.45E-02	6.51E-03	6.59E-03	6.63E-03	6.92E-03	6.90E-03	6.98E-03	7.02E-03

Methods used to calculate exposure dose based on Sample et al. (1997) .

Table 5-2
Comparison of Parcel 4 Soil Concentrations to Plant and Soil-Dwelling Organism Benchmarks
Parcel 4, Mound Plant

Chemical	Soil Concentration	Benchmark Value[a]			Hazard Quotient		
		Plant	Earthworms	Soil Microorganisms	Plant	Earthworms	Soil-Dwelling Organism
Organic Compounds (ug/kg)							
2,4,6-Trinitrotoluene	0.0002	NTV	NTV	NTV	--	--	--
Benzoic acid	0.012	NTV	NTV	NTV	--	--	--
Endrin ketone	0.00025	NTV	NTV	NTV	--	--	--
Inorganics (mg/kg)							
Aluminum	21400	50	NTV	600	428	--	35.7
Antimony	42.2	5	NTV	NTV	8.44	--	--
Arsenic	11.8	37 *	60	100	0.3189	0.19667	0.118
Cadmium	7.7	29 *	110 *	20	0.2655	0.07	0.385
Chromium	30.5	5 *	0.40	10	6.1	76.25	3.05
Lithium	27.3	2	NTV	10	13.65	--	2.73
Mercury	0.14	0.30	0.10	30	0.466[7]	1.40	0.0047
Silver	0.17	2	NTV	50	8.5	--	0.34
Vanadium	37	2	NTV	20	18.5	--	1.85
Anions (mg/kg)							
Bismuth	28.5	NTV	NTV	NTV	--	--	--

Notes:
Only chemicals detected above screening levels are presented.
NTV = No toxicity value.
-- = Not applicable; not available.
a = Efroymson et al., 1997A & b, unless indicated.
* = EPA EcoSSL (EPA, 2000)

Table 5-3 Risk to Meadow Vole
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration mg/kg	Surface Water Concentration mg/L	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil kg dw/day	Plant kg dw/day	Surface Water L/day	Total	mg/kg/day	Soil	Plant	Surface Water	Total
Organics														
2,4,6-Trinitrotoluene	0.0002	ND	2	2.7040 A,d	0.001	1.033E-05	0.0011809	0	0.00119123	NTV	--	--	--	--
Benzoic acid	0.012	ND	1.9	3.0889 A,d	0.037	0.0006201	0.08094	0	0.08156028	NTV	--	--	--	--
Endrin ketone	0.00025	ND	--	0	0	1.292E-05	0	0	1.2918E-05	NTV	--	--	--	--
Inorganics														
Aluminum	21400	0.95	NA	0.0040 A	85.6	1105.8	186.92	0.147264438	1292.84283	1.89	585.1	98.90	0.08	684
Antimony	42.2	ND	NA	0.2000 A	8.4	2.181	18.43	0	20.6105583	0.122	17.87	151.07	0	169
Arsenic	11.8	ND	NA	0.0360 A	0.4248	0.6097	0.9276	0	1.53734123	5.54	0.1101	0.1674	0	0.28
Cadmium	7.7	ND	NA	0.364 A	2.80	0.3979	6.120	0	6.51820829	0.977	0.4072	6.2644	0	6.67
Chromium	30.5	ND	NA	0.008 b	0.2	1.576	0.4995	0	2.07549792	6.3	0.2502	0.0793	0	0.329
Lithium	27.3	0.0052	NA	0.025 b	0.7	1.411	1.490	0.000806079	2.90178592	9.18	0.1537	0.1623	0.00009	0.316
Mercury	0.14	ND	NA	0.038 a	0.0	0.007234	0.0114642	0	0.01869821	2.37	0.0031	0.0048	0	0.008
Silver	17	ND	NA	0.400 a	6.8	0.87842	14.85	0	15.7272436	0.366	2.4001	40.5706	0	43.0
Vanadium	37	ND	NA	0.0049 c	0.2	1.9119	0.3959	0	2.30774996	0.378	5.0578	1.0473	0	6.11
Anions														
Bismuth	28.5	ND	NA	0.0350 b	1.0	1.4726444	2.1781915	0	3.65083587	NTV	--	--	--	--
Chloride	ND	206	NA	0.0000	0	0	0	31.9331307	31.9331307	NTV	--	--	--	--
Fluoride	ND	0.215	NA	0.0000	0	0	0	0.033328267	0.03332827	73.72	0.0000	0.0000	0.00045	0.00045

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	0.0017	EPA, 1993
IRp	Plant intake rate (kg dw/ day)	0.0718	EPA, 1993
IRsw	Surface water intake rate (L/day)	0.0051	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	0.03725	EPA, 1993
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B
log K_{ow}	Octanol-water partition coefficient	Chemical-specific	--

a = EPA, 1999
b = Baes et al., 1984 (based on Bv).
c = Efroymson et al., 1997
d = TNRCC, 1996.
NA = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.

No mammal TRVs were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, bismuth, and chloride, measured in surface soil, which may contribute to the ecological risk. The uncertainty associated with the lack of TRVs is discussed in the Uncertainty Analysis (Section 5.3).

Short-tailed Shrew

The short-tailed shrew may be exposed to chemical COPCs through ingestion of earthworms and soil. The estimated daily dose and the potential risk to a shrew are presented in Table 5-4. There is a potential for adverse effects to a shrew from exposure to chemical COPCs in Parcel 4 soil. Numerous metals were found to be of potential concern. For antimony, cadmium, chromium, lithium, silver, and vanadium, a hazard quotient greater than unity is due to soil ingestion only. For aluminum, hazard quotients greater than unity are due to both soil and earthworm ingestion. Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

Of these constituents, aluminum, antimony, silver, and vanadium had a hazard quotient greater than 10. An uncertainty factor of 10 is typically used to extrapolate from a no observable adverse effect level (NOAEL) to a lowest observable effect level (LOAEL) (EPA, 1997; EPA, 1999). The more conservative NOAEL is the preferred screening exposure level to determine a level that is unlikely to adversely impact populations and to ensure that risk is not underestimated. If a LOAEL value is exceeded, there is more certainty that the contaminants may be adversely impacting ecological receptors.

No mammal TRVs were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, bismuth, and chloride, measured in surface soil, which may contribute to the ecological risk. The uncertainty associated with the lack of TRVs is discussed in the Uncertainty Analysis (Section 5.3).

White-tailed Deer

The white-tailed deer may be exposed to chemical COPCs through ingestion of plants and soil. The estimated daily dose and the potential risk to a deer are presented in Table 5-5. There is a potential for adverse effects to a deer from exposure to chemical COPCs in Parcel 4 soil. Three metals were found to be of potential concern. For silver, a hazard quotient greater than unity is due to plant ingestion only. For aluminum and antimony, a hazard quotient greater than unity is due to soil and plant ingestion. Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

Aluminum and antimony had a hazard quotient greater than 10. An uncertainty factor of 10 is typically used to extrapolate from a no observable adverse effect level (NOAEL) to a lowest observable effect level (LOAEL) (EPA, 1997; EPA, 1999). The more conservative NOAEL is the preferred screening exposure level to determine a level that is unlikely to adversely impact populations and to ensure that risk is not underestimated. If a LOAEL value is exceeded, there is more certainty that the contaminants may be adversely impacting ecological receptors.

Table 5-4 Risk to Short-tailed Shrew
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * BAF) * IRew) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration mg/kg	Surface Water Concentration mg/L	log Kow	Earthworm BAF	Earthworm Concentration	Intake				TRV	Hazard Quotient			
						Soil kg dw/day	Earthworm kg wet/day	Surface Water L/day	Total	mg/kg/day	Soil	Earthworm	Surface Water	Total
Organics														
2,4,6-Trinitrotoluene	0.0002	ND	2	3.10 a	0.00062	0.000106	0.00001		0.000113	NTV	--	--	--	--
Benzoic acid	0.012	ND	1.9	2.57 a	0.03085	0.00635	0.000		0.007	NTV	--	--	--	--
Endrin ketone	0.00025	ND	--	0	0	0.0001324	0.000		0.000	NTV	--	--	--	--
Inorganics														
Aluminum	21400	0.95	NA	0.22 a	4708	11329	57.33	0.	11386.9	2.22	5103.3	25.8	0.058	5129.2
Antimony	42.2	ND	NA	0.22 a	9.284	22.34	0.11		22.454	0.144	155.1	0.8	0	155.9
Arsenic	11.8	ND	NA	0.11 a	1.298	6.25	0.02		6.263	6.54	0.96	0.00	0	0.96
Cadmium	7.7	ND	NA	0.96 a	7.392	4.08	0.0900		4.166	1.15	3.54	0.08	0	3.62
Chromium	30.5	ND	NA	0.01 a	0.305	16.15	0.0037		16.151	7.455	2.17	0.00	0	2.17
Lithium	27.3	0.0052	NA	0.22 a	6.006	14.45	0.073	0.0007	14.527	10.81	1.337	0.007	0.0001	1.344
Mercury	0.14	ND	NA	0.04 a	0.0056	0.0741	0.0001		0.074	2.798	0.02649	0.00002	0	0.0265
Silver	17	ND	NA	0.22 a	3.74	9.000	0.046		9.046	0.431	20.882	0.106	0	20.987
Vanadium	37	ND	NA	0.22 a	8.14	19.59	0.0991		19.687	0.4473	43.79	0.22	0	44.01
Anions														
Bismuth	28.5	ND	NA	--		15.088	0		15.088	NTV	--	--	--	--
Chloride	ND	206	NA	--	0	0.00000	0	27.8705882	27.87059	NTV	--	--	--	--
Fluoride	ND	0.215	NA	--	0	0	0	0.02908823	0.02909	86.89	0	0	0.000335	0.000335

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	9.00E-03	EPA, 1999
IRsw	Surface water intake rate (L/day)	2.30E-03	EPA, 1999
IRew	Earthworm intake rate (kg wet/ day)	2.07E-04	EPA, 1999
BAF	Bioaccumulation factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	0.015	EPA, 1999
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B

ND = Not detected above method detection limit or screening level for this medium.
NA or -- = Not applicable.
NTV = No toxicity value available.
a = EPA, 1999

Table 5-5 Risk to White-tailed Deer
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration mg/kg	Surface Water Concentration mg/L	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil kg dw/day	Plant kg dw/day	Surface Water L/day	Total	mg/kg/day	Soil	Plant	Surface Water	Total
Organics														
2,4,6-Trinitrotoluene	0.0002	ND	2	2.7040 a,d	0.001	1.593E-0	2.15E-05	0	2.17E-05	NTV	--	--	--	--
Benzoic acid	0.012	ND	1.9	3.0889 a,d	0.037	9.558E-0	0.001476	0	0.0014857	NTV	--	--	--	--
Endrin ketone	0.00025	ND	--	0	0	1.991E-0	0	0	1.991E-07	NTV	--	--	--	--
Inorganics														
Aluminum	21400	0.95	NA	0.0040 a	85.6	17.044	3.4088	0.092814159	20.5459	0.293	58.1715	11.6343	0.32	70.1
Antimony	42.2	ND	NA	0.2000 a	8.44	0.033	0.33611	0	0.3697	0.019	1.7690	17.6898	0	19.5
Arsenic	11.8	ND	NA	0.0360 a	0.4248	0.009	0.01692	0	0.0263	0.861	0.0109	0.0196	0	0.031
Cadmium	7.7	ND	NA	0.364 a	2.8028	0.006	0.11162	0	0.1177	0.152	0.0403	0.7343	0	0.775
Chromium	30.5	ND	NA	0.008 b	0.22875	0.024	0.00911	0	0.0334	0.9835	0.0247	0.0093	0	0.0340
Lithium	27.3	0.0052	NA	0.025 b	0.6825	0.021	0.02718	0.000508035	0.0494	2.64	0.0082	0.0103	0.00019	0.019
Mercury	0.14	ND	NA	0.038 a	0.00525	0.000	0.000209	0	0.00032	0.369	0.00030	0.00057	0	0.00087
Silver	17	ND	NA	0.400 a	6.8	0.013	0.270796	0	0.2843	0.057	0.2375	4.7508	0	4.988
Vanadium	37	ND	NA	0.0049 c	0.1813	0.029	0.007220	0	0.0367	0.059	0.4995	0.1224	0	0.62
Anions														
Bismuth	28.5	ND	NA	0.0350 b	1	0.0227	0.03972	0	0.06242	NTV	--	--	--	--
Chloride	ND	206	NA	--	0	0.0000	0	20.1260177	20.12602	NTV	--	--	--	--
Fluoride	ND	0.215	NA	--	0	0	0	0.02100531	0.02101	11.45	0	0	0.001835	0.001835

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	0.045	EPA, 1993
IRp	Plant intake rate (kg dw/ day)	2.25	EPA, 1993
IRsw	Surface water intake rate (L/day)	5.52	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	87.175	Burt & Grossenheider, 1980
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B
log K_{ow}	Octanol-water partition coefficient	Chemical-specific	--

a = EPA, 1999
b = Baes et al., 1984 (based on Bv).
c = Efroymson et al., 1997
d = TNRCC, 1996.
NA = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.

No mammalian TRVs were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, lithium, bismuth, and chloride, measured in surface soil, which may contribute to the ecological risk. The uncertainty associated with the lack of TRVs is discussed in the Uncertainty Analysis (Section 5.3).

American Robin

A robin may be exposed to chemical COPCs through ingestion of earthworms and soil. The estimated daily dose and the potential risk to a robin are presented in Table 5-6. There is a potential for adverse effects to a robin from exposure to chemical COPCs in Parcel 4 soil. Aluminum and cadmium were found to be of potential concern. For cadmium, a hazard quotient greater than unity is due to earthworm ingestion only. For aluminum, a hazard quotient greater than unity is due to soil and earthworm ingestion. Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

Of these constituents, aluminum had a hazard quotient greater than 10. An uncertainty factor of 10 is typically used to extrapolate from a no observable adverse effect level (NOAEL) to a lowest observable adverse effect level (LOAEL) (EPA, 1997; EPA, 1999). The more conservative NOAEL is the preferred screening exposure level to determine a level that is unlikely to adversely impact populations and to ensure that risk is not underestimated. If a LOAEL value is exceeded, there is more certainty that the contaminants may be adversely impacting ecological receptors.

No avian TRVs were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, lithium, bismuth, and chloride, measured in surface soil, which may contribute to the ecological risk. The uncertainty associated with the lack of TRVs is discussed in the Uncertainty Analysis.

Northern Cardinal

A cardinal may be exposed to chemical COPCs through ingestion of plants and soil. The estimated daily dose and the potential risk to a cardinal are presented in Table 5-7. There is a potential for adverse effects to a cardinal from exposure to chemical COPCs in Parcel 4 soil. Aluminum was the only contaminant found to be of potential concern. For aluminum, a hazard quotient greater than unity is due to soil ingestion. Due to the conservative method for estimating exposure doses, these risks may be overestimated as discussed further in the Uncertainty Analysis (Section 5.3).

No constituents had a hazard quotient greater than 10. An uncertainty factor of 10 is typically used to extrapolate from a no observable adverse effect level (NOAEL) to a lowest observable adverse effect level (LOAEL) (EPA, 1997; EPA, 1999). The more conservative NOAEL is the preferred screening exposure level to determine a level that is unlikely to adversely impact populations and to ensure that risk is not underestimated. If a LOAEL value is exceeded, there is more certainty that the contaminants may be adversely impacting ecological receptors.

Table 5-6
Risk to American Robin
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * BAF) * IRew) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Earthworm BAF	Earthworm Concentration	Intake				TRV	Hazard Quotient			
						Soil	Earthworm	Surface Water	Total		Soil	Earthworm	Surface Water	Total
Organics														
2,4,6-Trinitrotoluene	0.0002	ND	2	3.10 a	0.00062	0.0000029	0.00027	0	0.000276	NTV	--	--	--	--
Benzoic acid	0.012	ND	1.9	2.57 a	0.03085	0.00017	0.014	0	0.014	NTV	--	--	--	--
Endrin ketone	0.00025	ND	--	0	0	0.0000036	0.000	0	0.000	NTV	--	--	--	--
Inorganics														
Aluminum	21400	0.95	NA	0.22 a	4708	305.0	2072	0.13063	2377	110	2.8	18.8	0.0012	21.6
Antimony	42.2	ND	NA	0.22 a	9.284	0.60	4.08	0	4.686	NTV	--	--	--	--
Arsenic	11.8	ND	NA	0.11 a	1.298	0.17	0.57	0	0.739	2.46	0.07	0.23	0	0.30
Cadmium	7.7	ND	NA	0.96 a	7.392	0.1097	3.2525	0	3.362	1.45	0.08	2.24	0	2.32
Chromium	30.5	ND	NA	0.01 a	0.305	0.4346	0.1342	0	0.569	1	0.43	0.13	0	0.57
Lithium	27.3	0.0052	NA	0.22 a	6.01	0.38903	2.643	0.00072	3.032	NTV	--	--	--	--
Mercury	0.14	ND	NA	0.04 a	0.0056	0.0020	0.0025	0	0.004	3.25	0.00061	0.00076	0	0.0014
Silver	17	ND	NA	0.22 a	3.74	0.242	1.646	0	1.888	178	0.001	0.009	0	0.011
Vanadium	37	ND	NA	0.22 a	8.14	0.5273	3.5816	0	4.109	11.4	0.05	0.31	0	0.36
Anions														
Bismuth	28.5	ND	NA	--		0.406	0		0.406	NTV	--	--	--	--
Chloride	ND	206	NA	--		0.000	0	28.33	28.33	NTV	--	--	--	--
Fluoride	ND	0.215	NA	--		0	0	0.02956	0.030	7.8	0	0	0.003790	0.004

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	1.14E-03	EPA, 1999
IRsw	Surface water intake rate (L/day)	1.10E-02	EPA, 1999
IRew	Earthworm intake rate (kg wet/ day)	0.0352	EPA, 1999
BAF	Bioaccumulation factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	0.08	EPA, 1999
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B

NA or -- = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.
a = EPA, 1999

Table 5-7
Risk to Northern Cardinal
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil	Plant	Surface Water	Total		Soil	Plant	Surface Water	Total
Organics														
2,4,6-Trinitrotoluene	0.0002	ND	2	2.7040 a,d	0.001	1.126E-06	0.0001525	0	0.0001536	NTV	--	--	--	--
Benzoic acid	0.012	ND	1.9	3.0889 a,d	0.037	0.00006756	0.0104527	0	0.0105203	NTV	--	--	--	--
Endrin ketone	0.00025	ND	--	0	0	1.4075E-06	0	0	1.408E-06	NTV	--	--	--	--
Inorganics														
Aluminum	21400	0.95	NA	0.0040 a	85.6	120.4820	24.1392	0.2565	144.8777	110	1.09529	0.21945	0.00233	1.3
Antimony	42.2	ND	NA	0.2000 a	8.4	0.2375860	2.3800800	0	2.617666	NTV	--	--	--	--
Arsenic	11.8	ND	NA	0.0360 a	0.4248	0.0664340	0.1197936	0	0.1862276	2.46	0.02701	0.04870	0	0.076
Cadmium	7.7	ND	NA	0.364 a	2.80	0.0433510	0.7903896	0	0.8337406	1.45	0.02990	0.54510	0	0.575
Chromium	30.5	ND	NA	0.008 b	0.2	0.17171500	0.06450750	0	0.2362225	1	0.17172	0.06451	0	0.2362
Lithium	27.3	0.0052	NA	0.025 b	0.7	0.15369900	0.19246500	0.001404	0.347568	NTV	--	--	--	--
Mercury	0.14	ND	NA	0.038 a	0.0	0.00078820	0.00148050	0	0.0022687	3.25	0.00024	0.00046	0	0.0007
Silver	17	ND	NA	0.400 a	6.8	0.09571000	1.91760000	0	2.01331	178	0.00054	0.01077	0	0.011
Vanadium	37	ND	NA	0.0049 c	0.2	0.20831000	0.0511266	0	0.2594366	11.4	0.01827	0.00448	0	0.0228
Anions														
Bismuth	28.5	ND	NA	0.0350 b	1	0.1604550	0.281295	0	0.44175	NTV	--	--	--	--
Chloride	ND	206	NA	--	0	0.0000000	0	55.62	55.62	NTV	--	--	--	--
Fluoride	ND	0.215	NA	--	0	0	0	0.05805	0.05805	7.8	0	0	0.007442	0.007442

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
Irs	Soil intake rate (kg dw/day)	0.0000563	EPA, 1993
Irp	Plant intake rate (kg dw/ day)	0.0028	EPA, 1993
Irsw	Surface water intake rate (L/day)	0.0027	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	0.01	EPA, 1993, based on wren
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B
log Kow	Octanol-water partition coefficient	Chemical-specific	--

a = EPA, 1999
b = Baes et al., 1984 (based on Bv).
c = Efroymson et al., 1997
d = TNRCC, 1996.
NA = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.

No avian TRVs were available for 2,4,6-trinitrotoluene, benzoic acid, endrin ketone, lithium, bismuth, and chloride, which may contribute to the ecological risk. The uncertainty associated with the lack of TRVs is discussed in the Uncertainty Analysis.

5.2 Risk to Aquatic Receptors

5.2.1 Radionuclides

Aquatic organisms may be exposed to radionuclide concentrations in sediment and surface water through internal exposure to water and external exposures to water and sediment. Single-media and multimedia benchmarks were used to calculate hazard quotients and hazard indices (Table 5-8 for Benner Branch surface water and Table 5-9 for Benner Branch sediment.). Single media benchmarks were used to calculate hazard quotients and hazard indices for groundwater that could potentially discharge to surface water (Table 5-10). The screening HQs and HI do not exceed unity, suggesting that the radionuclides measured in the Benner Branch and groundwater pose a negligible risk to aquatic biota.

5.2.2 Chemicals

The maximum detected concentration of aluminum in Benner Branch surface water exceeded the acute ambient water quality criteria (Table 5-11). The maximum detected concentration of chloride and fluoride exceeded background levels. No water quality benchmarks were available for these anions. No sediment contaminants exceeded the applicable probable effect levels or ER-M values, while aluminum, beryllium, lithium, molybdenum, tin, and bismuth exceeded background levels (Table 5-12). No background levels or benchmarks were available for endosulfan II and endrin ketone in sediments and no sediment benchmarks were available for aluminum, beryllium, lithium, molybdenum, tin, vanadium, and bismuth. In groundwater, the maximum detected concentrations of aluminum, arsenic, chromium, copper, iron, lithium, manganese, and zinc exceeded the acute water quality criteria (Table 5-13). No water quality criteria were available for bismuth, chloride, fluoride, nitrogen, phosphorous, and sulfate. Constituents lacking benchmarks and measured above background levels may also contribute to the ecological risk. The uncertainty associated with the lack of benchmarks is discussed in the Uncertainty Analysis.

Table 5-8
Use of Single-Media and Multi-Media Benchmarks for the Calculation of Hazard Quotients (HQ) and Hazard Indices (HI), South Benner Branch Surface Water
Parcel 4, Mound Plant

COPC	Surface Water Concentration pCi/L	Water single media benchmark (pCi/L)		Water multimedia benchmark (pCi/L)		HQ based on single-media benchmarks		HQ based on multi-media benchmarks	
		small fish	large fish	small fish	large fish	small fish	large fish	small fish	large fish
Plutonium-238	0.000002	1.17E+03	1.17E+03	1.17E+03	1.17E+03	1.71E-09	1.71E-09	1.71E-09	1.71E-09
Potassium-40	352	7.61E+02	7.27E+02	7.61E+02	7.27E+02	4.63E-01	4.84E-01	4.63E-01	4.84E-01
Radium-226+D	0.288	1.60E+02	2.60E+02	1.60E+02	1.60E+02	1.80E-03	1.11E-03	1.80E-03	1.80E-03
Strontium-90+D	0.429	6.29E+04	5.77E+04	5.80E+04	5.77E+04	6.82E-06	7.44E-06	7.40E-06	7.44E-06
Uranium-234	0.458	4.04E+03	4.04E+03	4.04E+03	4.04E+03	1.13E-04	1.13E-04	1.13E-04	1.13E-04
Total Hazard Index						0.464	0.485	0.464	0.486

Note:
Based on methods presented in BJC, 1998.

Table 5-9
Use of Single-Media and Multi-Media Benchmarks for the Calculation of Hazard Quotients (HQ) and Hazard Indices (HI), Benner Branch Sediment
Parcel 4, Mound Plant

COPC	Sediment Concentration	Sediment single media benchmark (pCi/g)		Sediment multimedia benchmark (pCi/g)		HQ based on single-media benchmarks		HQ based on multi-media benchmarks	
	pCi/g	small fish	large fish	small fish	large fish	small fish	large fish	small fish	large fish
Cesium-137+D	0.384	3.39E+04	3.65E+04	7.13E+03	5.84E+03	1.13E-05	1.05E-05	5.39E-05	6.58E-05
Plutonium-238	1.29	9.59E+07	4.80E+08	1.17E+05	1.17E+05	1.35E-08	2.69E-09	1.10E-05	1.10E-05
Potassium-40	27.4	3.16E+05	3.71E+05	4.19E+02	4.00E+02	8.67E-05	7.39E-05	6.54E-02	6.85E-02
Radium-226+D	1.44	2.82E+04	3.32E+04	7.99E+01	7.99E+01	5.11E-05	4.34E-05	1.80E-02	1.80E-02
Strontium-90+D	0.63	6.29E+04	5.77E+04	5.65E+04	5.77E+04	1.00E-05	1.09E-05	1.12E-05	1.09E-05
Thorium-228+D	1.13	3.31E+04	3.69E+04	5.90E+02	5.91E+02	3.41E-05	3.06E-05	1.92E-03	1.91E-03
Thorium-230	1.42	1.12E+08	5.60E+08	4.13E+03	4.13E+03	1.27E-08	2.54E-09	3.44E-04	3.44E-04
Thorium-232+D	1.12	5.47E+04	6.29E+04	4.40E+03	4.44E+03	2.05E-05	1.78E-05	2.55E-04	2.52E-04
Uranium-234	0.936	1.00E+08	5.02E+08	2.02E+02	2.02E+02	9.36E-09	1.86E-09	4.63E-03	4.63E-03
Uranium-235+D	0.0769	2.96E+05	3.41E+05	2.18E+02	2.18E+02	2.60E-07	2.26E-07	3.53E-04	3.53E-04
Uranium-238+D	1.15	1.75E+06	9.99E+06	2.27E+02	2.27E+02	6.57E-07	1.15E-07	5.07E-03	5.07E-03
Total Hazard Index						0.000215	0.000187	0.096058	0.099171

Notes:
Based on methods presented in BJC, 1998.

Table 5-10
Use of Single-Media and Multi-Media Benchmarks for the Calculation of Hazard Quotients (HQ) and Hazard Indices (HI)
Benner Branch Groundwater
Parcel 4, Mound Plant

COPC	Groundwater Concentration pCi/L	Water single media benchmark (pCi/L)		HQ based on single-media benchmarks	
		small fish	large fish	small fish	large fish
Americium-241	0.47	1.17E+03	1.17E+03	4.02E-04	4.02E-04
Radium-226+D	1.22	1.60E+02	2.60E+02	7.63E-03	4.69E-03
Thorium-230	0.43	4.13E+02	4.13E+02	1.04E-03	1.04E-03
Thorium-232 + D	0.35	4.78E+02	4.77E+02	7.32E-04	7.34E-04
Uranium-234	0.94	4.04E+03	4.04E+03	2.33E-04	2.33E-04
Uranium-235 + D	0.07	4.37E+03	4.37E+03	1.60E-05	1.60E-05
Uranium-238 + D	1.12	4.55E+03	4.55E+03	2.46E-04	2.46E-04
Total Hazard Index				0.0103	0.0074

Note:
Based on methods presented in BJC, 1998.

Table 5-11
Comparison of Benner Branch Surface Water Concentrations to Surface Water Benchmarks
Parcel 4, Mound Plant

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Background [a]	Ohio Water Quality Standard [b]		NAWQ Criteria [c]	
		Minimum	Maximum			OMZA	OMZM	chronic	acute
Inorganics (ug/L)									
Aluminum	2/4	213	950	MND22-4102	360	--	--	87	750
Lithium	3/4	4.7	5.2	MND22-4102	NBL	--	--	14+	260+
Anions (mg/L)									
Chloride	2/2	129	206	MND22-4101	150	--	--	--	--
Fluoride	2/2	0.146	0.215	MND22-4102	0.1	--	--	--	--

Notes:
Only chemicals detected above screening levels are presented.
-- = Not applicable; not available.
Shading indicates maximum detected concentration exceeds highest benchmark or background.
OMZM = Outside mixing zone maximum.
OMZA = Outside mixing zone average.
+ = Tier II Values (Suter and Tsao, 1996).
a = Site-specific background pond surface water; from OU-9 Surface Water and Sediment Investigation Report, September 1996.
b =OEPA, 1999. Ohio Water Quality Standards. Chapter 3745-1 of the Administrative Code.
c =Suter and Tsao, 1996.
NBL = No background value listed.

Table 5-12
Comparison of Benner Branch Sediment Concentrations to Sediment Benchmarks
Parcel 4, Mound Plant

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Background [a]	CCME[b]		Long et al.[c]	
		Minimum	Maximum			ISQG	PEL	ER-L	ER-M
Organic Compounds (ug/kg)									
Endosulfan II	4/7	0.053	7.10	MND22-4001	NBL	--	--	--	--
Endrin ketone	1/7	--	0.24	MND22-4001	NBL	--	--	--	--
Inorganics (mg/kg)									
Aluminum	7/7	6330	15300	MND22-4001	10000	--	--	--	--
Beryllium	7/7	0.42	0.850	MND22-4001	0.48	--	--	--	--
Lithium	7/7	8.4	22.4	MND22-4003	12	--	--	--	--
Molybdenum	7/7	0.56	1.6	MND22-4003	1.4	--	--	--	--
Nickel	7/7	12.4	23.7	MND22-4003	19	--	--	20.9	51.6
Tin	3/7	2.6	4.8	MND22-4002	1.3	--	--	--	--
Vanadium	7/7	16.6	30.2	MND22-4001	28	--	--	--	--
Anions (mg/kg)									
Bismuth	5/7	0.76	1.5	MND22-4102	0.49	--	--	--	--

Notes:
Shading indicates maximum detected concentration exceeds highest benchmark or background.
Only chemicals detected above screening levels are presented.
-- = Not applicable; not available.
a Site-specific background stream sediment; from OU-9 Surface Water and Sediment Investigation Report, September 1996.
b CCME, 1999
c Long et al., 1995.
NBL = No background value listed.

Table 5-13
Comparison of Benner Branch Groundwater Concentrations to Groundwater Benchmarks
Parcel 4, Mound Plant

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Ohio Water Quality Standard a		NAWQ Criteria b	
		Minimum	Maximum		OMZA	OMZM	chronic	acute
Organic Compounds (ug/L)								
Hexane	1/2	--	1.00	B401	--	--	0.58+	10+
Inorganics (ug/L)								
Aluminum	2/2	40200	58800	B408	--	--	87	750
Arsenic	2/2	9.9	472.0	B408	150	340	3.1+	66+
Chromium	2/2	111	164.0	B408	11.00	16.00	11.00	16
Cobalt	1/2	--	126.00	B408	--	--	23+	1500+
Copper	2/2	160	485.0	B408	29h	50h	12h	18h
Iron	2/2	136000	470000	B408	--	--	1000	
Lead	2/2	80.7	148.0	B408	30h	570h	3.2h	82h
Lithium	1/1	--	701.0	B401	--	--	14+	260+
Manganese	2/2	2190	7000	B408	--	--	120+	2300+
Molybdenum	1/1	--	168.0	B401	--	--	370+	16000+
Nickel	2/2	122	322.0	B408	170h	1500h	160h	1400h
Vanadium	2/2	84.4	138.0	B408	--	--	20+	280+
Zinc	2/2	413	1140.0	B408	380h	380h	110h	120h
Anions (ug/L)								
Bismuth	2/2	688	1460.00	B408	--	--	--	--
Chloride	2/2	42700	113000.0	B401	--	--	--	--
Fluoride	2/2	201	310.000	B401	--	--	--	--
Nitrogen	2/2	368	369.000	B408	--	--	--	--
Phosphorous	1/2	--	666.00	B401	--	--	--	--
Sulfate	2/2	42600	43700.00	B401	--	--	--	--

Notes:
Only chemicals detected above screening levels are presented.
-- = Not applicable; not available.
Shading indicates maximum detected concentration exceeds highest benchmark or background.
OMZM = Outside mixing zone maximum.
OMZA = Outside mixing zone average.
+ = Tier II Values (Suter and Tsao, 1996).
h = hardness-dependent criteria, based on a hardness of 400 mg/L. See Table A-5.
a = Site-specific background pond surface water; from OU-9 Surface Water and Sediment Investigation Report, September 1996.
b =OEPA, 1999. Ohio Water Quality Standards. Chapter 3745-1 of the Administrative Code.
c =Suter and Tsao, 1996.

5.3 Summary of Uncertainty

The ecological risk assessment process is subject to a variety of uncertainties. Almost every step involves assumptions based on professional judgment. Due to the conservative nature of a SLERA, most of the uncertainty results are an overestimation of risk. However, the risk may also be underestimated or unknown. Uncertainties specific to this risk assessment can be attributed to:

- Environmental chemistry and sampling analysis.
- Fate and transport parameters.
- Exposure assumptions.
- Toxicological data.

Uncertainties specific to this risk assessment include the following:

Environmental Chemistry and Sampling Analysis

- Soils collected to a two-foot depth were used in this evaluation. Except for burrowing animals, most ecological receptors will not be exposed to soil at greater than a two-foot depth. Thus, contaminant concentrations may be underestimated for burrowing animals if highest concentrations are found in samples collected below a two-foot depth.
- Chemical contaminants on the property are presumed to be present due to runoff from the Mound Plant. Off-site sources may also contribute non-radiological contamination, since the flow in the unnamed, intermittent stream channel (named Benner Branch in this document) enters Parcel 4 from the property south of Benner Road.
- The highest levels of metals contamination were measured in samples collected from the Farm Trash Area. The Farm Trash Area is located near the southwest corner of Parcel 4. It is the location of a former residence that was razed when DOE purchased the property in 1981. This area covers less than ¼ acre and was used to receive trash, tires, and household debris when the farm was in use. Mound Plant has never used this area for waste or trash disposal, and no RCRA-regulated materials have been stored or handled in the area (DOE, 1993). Thus, risks posed by contaminants found in this area may be overestimated since this area did not receive wastes associated with Mound Plant activities.

Fate and Transport Parameters

- Total (i.e., non-filtered or undissolved) surface water concentrations were used to evaluate risk for this site, though dissolved (i.e., filtered) metal concentrations more closely approximate the bioavailable fraction of metal in the water column than does the total recoverable metal (EPA, 1995). Thus, risks associated with surface water exposure may be overestimated.
- Aluminum is a major constituent in the earth's crust and is typically found at high concentrations. The soluble fraction that is easily mobile and exchangeable plays a major

role in the availability, and thus the toxicity, of this element. Generally, the soluble fraction of this element is very low in comparison to the total concentration. Thus, evaluating total concentrations of this element may overestimate risk.

- The bioavailability of COPCs in the environmental media and diet of the receptors (e.g., soil, earthworms, and plants) was estimated at 100 percent. This is likely to overestimate risk since constituents in the environment are quite frequently bound as complexes that reduce their bioavailability.

- Groundwater was assumed to discharge to surface water without dilution or attenuation of contaminants. Thus, contaminant concentrations released to surface water would be overestimated.

Exposure Assumptions

- Maximum values were used as exposure point concentrations for all media. This is likely to result in an overestimation of risk, especially for terrestrial ecological receptors who may inhabit a greater area than the area represented by just one or a few samples.

- Exposure parameters for all receptors were selected based on literature information. The amount of food, soils, sediment, and water consumed on a daily basis; the variety of food consumed; and the percentage of the whole diet that each food item represents was estimated based on information from scientific literature. In addition, the amount of time spent exposed to site-related media is assumed to be the highest possible value. Because conservative assumptions were used throughout the exposure assessment process, these assumptions are likely to overestimate dietary intake.

- Several food and water ingestion rates for bird and mammal receptors were estimated based on allometric models from the scientific literature. Allometric models that estimate dietary and water ingestion rates are based on the relationship that exists between relative body weights and ingestion rates of birds and mammals. The allometric models were developed by incorporating information on many different species that have varying weights and food preferences. These models generally result in an overestimation of the actual intake rates for ecological receptors.

- Risk to the shrew and robin was primarily associated with ingestion of earthworms. There are a number of difficulties associated with applying literature-based earthworm BAFs. Environmental conditions such as soil characteristics obscure the underlying relationship between concentrations in soil and in earthworms. Earthworms selectively feed on plant debris and soil organic matter, and consequently, soil concentrations may not represent true exposure concentrations. Also, different earthworm species bioaccumulate chemicals at different rates (Beyer, 1990). In addition, it is not known how available metals in earthworm tissues are to predators. The presence of high metal concentrations in earthworm tissues is not adequate proof that they will be absorbed by the predator (Lee, 1985). Thus, risks to the shrew and robin may be over- or under-estimated, depending on the metal evaluated and its bioavailability.

- An exposure pathway was eliminated from the quantitative evaluation in the SLERA if the pathway is incomplete (e.g., receptors cannot be exposed to the chemical); the pathway is complete but insignificant; or the pathway would be very difficult to quantify (e.g., ingestion of sediments by fish because of lack of toxicological and intake data). Several complete exposure pathways could not be quantified in this SLERA primarily because exposure assumptions and toxicity data were not available to estimate exposure and risk. There is very little information on the dermal absorption and inhalation exposure pathways for chemical COPCs. Although these exposure pathways are complete, the relative contribution to risk from these pathways when compared to that of ingestion is likely less, though the actual risk is unknown.

- While bird and mammal species at the top of the food chain have the potential to be exposed to contaminants that have biomagnified, these carnivores tend to have large home ranges that will reduce their exposure. Thus, an evaluation of potential impacts to herbivorous and insectivorous birds and mammals is expected to more conservative since these groups would consume larger amounts of contaminated prey. Herbivores and insectivores who feed exclusively on plants or insects are expected to have a greater degree of exposure to contaminants than an omnivore who consumes a variety of prey. Thus, if risk to herbivores and insectivores is acceptable, risk to an omnivore is expected to be acceptable. Although these other receptors will be exposed to contamination, this risk is expected to be less than for herbivores and insectivores, though the actual risk is unknown.

- An exposure pathway was eliminated from the quantitative evaluation in the SLERA if the pathway is incomplete (e.g., receptors cannot be exposed to the chemical); the pathway is complete but insignificant; or the pathway would be very difficult to quantify (e.g., ingestion of contaminated prey by carnivores because of lack of toxicological and intake data). Several complete exposure pathways could not be quantified in this SLERA primarily because exposure assumptions and toxicity data were not available to estimate exposure and risk. There is very little information on the dermal absorption and inhalation exposure pathways for chemical COPCs. Although these exposure pathways are complete, the relative contribution to risk from these pathways when compared to that of ingestion is likely less, though the actual risk is unknown.

- Wildlife ingestion of seep water was not quantified in the SLERA. Several organics (PETN), 1,3-dinitrobenzene, 1,3.5-trinitrobenzene, PETN, trichloroethene, and inorganics (copper, aluminum, vanadium, cobalt, and silver) were identified as COPCs in seeps in the OU5 Remedial Investigation Report, Final (Revision 0), January 1996. Only aluminum and vanadium were found in all seeps. While wildlife may ingest water from these seeps, it would not be their sole water supply because the seeps are seasonal and because small animals obtain water from a variety of sources. None of these constituents are known to biomagnify in the food chain. Thus, exposure may be slightly underestimated.

Toxicological Data

- Mammalian TRVs were not available for three organics and two anions in soil. Bird TRVs were not available for three organics, two inorganics, and two anions in soil. Surface water benchmarks were not available for six anions. Sediment benchmarks were not available for two organics, six inorganics, and one anion. Plant benchmarks were not available for three organics and one anion. Earthworm benchmarks were not available for three organics, three inorganics, and one anion. Soil organism benchmarks were not available for three organics, one inorganic, and one anion. Thus, the potential for adverse effects on terrestrial wildlife, aquatic organisms, , and benthic organisms may be underestimated.
- The plant, earthworm, and soil organism benchmarks for aluminum, chromium, lithium, and vanadium are less than the site-related background concentrations for these metals. Within Parcel 4, only one sample location slightly exceeded background levels of aluminum, vanadium, and lithium. Mercury was detected at only one sample location. Antimony and chromium were measured at elevated concentrations in the Farm Trash area.
- TRVs were obtained from literature sources that were not specific to the ecological receptors at the site; therefore, in the absence of site-specific data, the extrapolation of the effect data to the receptors was necessary. Since most toxicity data were unavailable for wild bird and mammalian receptors, effects doses were obtained from laboratory studies (e.g., rat, mouse, quail, chicken, and turkey). The lowest reported chronic NOAEL for potential effects on reproduction, development, and reduced survival were used to derive TRVs when available. However, limitations in the available data necessitated the use of other endpoints such as organ-specific effects for several chemicals. This results in conservative TRVs whose relationship to potential population effects is uncertain (Sample et al., 1996). The NOAEL-based TRVs are designed not to underestimate risk, so that the risks at the site may actually be overestimated.
- The majority of available effect data was determined using laboratory animals studied under laboratory conditions. These data as well as toxicological interpretations based on blood biochemistry or body weight changes may not represent adverse health effects or cannot be precisely extrapolated to free-ranging wildlife population.
- Since toxic effects on benthic organisms, plants, earthworms, and soil organims are species-specific and directly related to ambient conditions (e.g., pH, organic carbon content, grain size), comparison of literature-based toxic concentrations in sediment and soil is extremely simplistic and may not accurately illustrate potential hazards.

5.4 Refinement of Preliminary COPCs

To ensure that sites which may pose an ecological risk are property identified, EPA (1996b) suggests that values used in a screening level ecological risk assessment (SLERA) should be consistently biased in the direction of overestimating risk. "Without this bias, a screening evaluation could not provide a defensible conclusion for an absence of ecological risk." The SLERA found that there is a potential for adverse effects on terrestrial organisms from residual chemical contamination (primarily select heavy metals) in Parcel 4 soils. No potential for adverse

effects from radiological contamination was found. Based on the results of this SLERA, further investigation is needed to determine if site-related chemical concentrations pose an adverse ecological threat or if the concentrations detected on-site are consistent with expected concentrations not related to site activity.

Although the SLERA probably overestimates the risk from non-radiological contaminants, further evaluation of the available site data, the terrestrial habitat on the site, the toxicity of these contaminants and the results of the Human Health Risk Assessment would have to be done to reduce that conservatism. Because of the conservative assumptions used during the SLERA, some of the retained contaminants (i.e., contaminants with an HQ>1) may also pose a potential for adverse ecological effects. The constituents that pose a potential for adverse effects are summarized in Table 5-14 by area and receptor organism. The following is a description of site conditions that will reduce the conservatism of the HQs presented in the SLERA.

The area use factor is defined as the ratio of the home range (or feeding/foraging range) of the receptor to the area of contamination. Parcel 4 covers approximately 95.2 acres (38.5 hectares). For a meadow vole and short-tailed shrew, the area use factor defaults to 1 because their home range [0.027 ha – vole; 0.39 ha- shrew (EPA, 1993)] is less than the area of Parcel 4. The robin and cardinal were observed on the site during all sampling seasons; thus, no adjustment of the area use factor based on migratory habits is appropriate. Thus, the risk estimates will not change due to area use.

Maximum values were used as exposure point concentrations for all media. In order to account for uncertainties in the ability of the measured data to reflect actual site conditions, the EPA (1992) has recommended the calculation of the 95% upper confidence limit (UCL) of the arithmetic mean using log-transformed data. In most cases, it is reasonable to assume that Superfund soil sampling data are lognormally distributed (EPA, 1992). The 95% UCL concentration reasonably represents the concentration to which mobile ecological receptors will be exposed. The 95% UCL concentrations for the COPCs in Parcel 4 soil with a HQ>1 (based on the maximum concentration) are presented in Tables 5-14 through 5-20. Hazard quotients were re-calculated using the 95% UCL concentration of log-normally transformed data. For the meadow vole, the re-calculated HQ exceeded unity for aluminum, antimony, cadmium, silver, and vanadium. For the shrew, the re-calculated HQ exceeded unity for aluminum, antimony, cadmium, chromium, selenium, silver, and vanadium. For the white-tailed deer, the re-calculated HQ exceeded one for aluminum, antimony, and silver. For the robin, the re-calculated HQ exceeded unity for aluminum, and cadmium. For the cardinal, the re-calculated HQ did not exceed unity for any COPC.

However, the 95% UCL concentration of aluminum (5,755 mg/kg does not exceed site-specific background concentration (19,000 mg/kg). In addition, within Parcel 4, only one sample location slightly exceeded background levels of aluminum, vanadium, and lithium. Thus, these metals can be considered to be at background levels throughout Parcel 4.

Table 5-14
Refinement of COPCs: Receptors and COPCs with HQ>1
Parcel 4, Mound Plant

Receptor	Contaminant	Soil	Plant	Worm
Vole	Aluminum	X	X	
	Antimony	X	X	
	Cadmium		X	
	Silver	X	X	
	Vanadium	X	X	
Shrew	Aluminum	X		X
	Antimony	X		
	Cadmium	X		
	Chromium	X		
	Lithium	X		
	Silver	X		
	Vanadium	X		
Deer	Aluminum	X	X	
	Antimony	X	X	
	Silver		X	
Robin	Aluminum	X		X
	Cadmium			X
Cardinal	Aluminum	X	X	

Table 5-15
Comparison of 95% UCL soil Concentrations to Plant and Soil-Dwelling Organism Benchmarks
Parcel 4, Mound Plant

Chemical	Soil Concentration	Benchmark Value[a]					Hazard Quotient		
		Plant		Earthworms		Soil Microorganisms	Plant	Earthworms	Soil-Dwelling Organism
Inorganics (mg/kg)									
Aluminum	5754	50		NTV		600	115.08	--	9.6
Antimony	42.2	5		NTV		NTV	8.44	--	--
Arsenic	11.8	37	*	60		100	0.3189	0.19667	0.118
Cadmium	7.7	29	*	110	*	20	0.2655	0.07	0.385
Chromium	30.5	5	*	0.40		10	6.1	76.25	3.05
Lithium	27.3	2		NTV		10	13.65	--	2.73
Mercury	0.07	0.30		0.10		30	0.2333	0.70	0.0023
Silver	17	2		NTV		50	8.5	--	0.34
Vanadium	37	2		NTV		20	18.5	--	1.85

Notes:
Only chemicals with an HQ>1 are presented.
NTV = No toxicity value.
-- = Not applicable; not available.
a = Efroymson et al., 1997A & b, unless indicated.
* = EPA EcoSSL (EPA, 2000)

Table 5-16
Risk to Meadow Vole: 95% UCL Exposure Point Concentration
Parcel 4, Mound Plant

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw * IRsw)] / BW

HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil	Plant	Surface Water	Total		Soil	Plant	Surface Water	Total
Inorganics														
Aluminum	5754	0.95	NA	0.0040 a	23.016	297.3	50.26	0.147264438	347.72532	1.89	157.3	26.59	0.08	184
Antimony	42.2	ND	NA	0.2000 a	8.4	2.181	18.43	0	20.610558	0.122	17.87	151.07	0	169
Cadmium	7.7	ND	NA	0.364 a	2.80	0.3979	6.120	0	6.5182083	0.977	0.4072	6.2644	0	6.67
Silver	17	ND	NA	0.400 a	6.8	0.87842	14.85	0	15.727244	0.366	2.4001	40.5706	0	43.0
Vanadium	37	ND	NA	0.0049 c	0.2	1.9119	0.3959	0	2.30775	0.378	5.0578	1.0473	0	6.11

Symbol	Parameter	Valu	Source
Cs	Soil concentration (mg/kg)	-	--
Csw	Surface water concentration (mg/L)	-	--
IRs	Soil intake rate (kg dw/day)	0.001	EPA, 1993
IRp	Plant intake rate (kg dw/ day)	0.071	EPA, 1993
Irsw	Surface water intake rate (L/day)	0.005	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specifi	--
BW	Body weight (kg)	0.032	EPA, 1993
TRV	Toxicity reference value (mg/kg/day)	Chemical-specifi	Appendix B
log Kow	Octanol-water partition coefficient	Chemical-specifi	--

a = EPA, 1999

b = Baes et al., 1984 (based on Bv).

c = Efroymson et al., 1997

d = TNRCC, 1996.

NA = Not applicable.

NTV = No toxicity value available.

ND = Not detected above method detection limit or screening level for this medium.

Table 5-17
Risk to Short-tailed Shrew: 95% UCL Exposure Point Concentration

Intake = [(Cs * IRs) + ((Cs * BAF) * IRew) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Earthworm BAF		Earthworm Concentration	Intake				TRV	Hazard Quotient			
							Soil	Earthworm	Surface Water	Total		Soil	Earthworm	Surface Water	Total
Inorganics															
Aluminum	5754	0.95	NA	0.22	a	1266	3046	15.4	0.1	3061.8	2.22	1372.2	6.9	0	1379.2
Antimony	42.2	ND	NA	0.22	a	9.284	22.34	0.1	0	22.454	0.144	155.1	0.8	0	155.9
Cadmium	7.7	ND	NA	0.96	a	7.392	4.08	0.090	0	4.166	1.15	3.54	0.08	0	3.62
Chromium	30.5	ND	NA	0.01	a	0.305	16.15	0.003	0	16.151	7.455	2.17	0.00	0	2.17
Lithium	27.3	0.0052	NA	0.22	a	6.006	14.45	0.07	0.00070	14.527	10.81	1.337	0.007	0.0001	1.344
Silver	17	ND	NA	0.22	a	3.74	9.000	0.04	0	9.046	0.431	20.882	0.106	0	20.987
Vanadium	37	ND	NA	0.22	a	8.14	19.59	0.099	0	19.687	0.4473	43.79	0.22	0	44.01

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	9.00E-03	EPA, 1999
Irsw	Surface water intake rate (L/day)	2.30E-03	EPA, 1999
IRew	Earthworm intake rate (kg wet/ day)	2.07E-04	EPA, 1999
BAF	Bioaccumulation factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	0.017	EPA, 1999
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B

ND = Not detected above method detection limit or screening level for this medium.
NA or -- = Not applicable.
NTV = No toxicity value available.
a = EPA, 1999

Table 5-18
Risk to Whitetail Deer: 95% UCL Exposure Point Concentration

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil	Plant	Surface Water	Total		Soil	Plant	Surface Water	Total
Inorganics														
Aluminum	5754	0.95	NA	0.0040 a	23.016	4.5828	0.9166	0.092814159	5.5922	0.293	15.6411	3.1282	0.32	19.1
Antimony	42.2	ND	NA	0.2000 a	8.4	0.03361	0.33611	0	0.3697	0.019	1.7690	17.6898	0	19.5
Silver	17	ND	NA	0.400 a	6.8	0.013540	0.270796	0	0.2843	0.057	0.2375	4.7508	0	4.988

Symbol	Parameter	Value	Source
Cs	Soil concentration (mg/kg)	--	--
Csw	Surface water concentration (mg/L)	--	--
IRs	Soil intake rate (kg dw/day)	0.045	EPA, 1993
IRp	Plant intake rate (kg dw/ day)	2.25	EPA, 1993
Irsw	Surface water intake rate (L/day)	5.52	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specific	--
BW	Body weight (kg)	56.5	Sample and Suter, 1994
TRV	Toxicity reference value (mg/kg/day)	Chemical-specific	Appendix B
log Kow	Octanol-water partition coefficient	Chemical-specific	--

a = EPA, 1999
b = Baes et al., 1984 (based on Bv).
c = Efroymson et al., 1997
d = TNRCC, 1996.
NA = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.

Table 5-19
Risk to American Robin: 95% UCL Exposure Point Concentration

Intake = [(Cs * IRs) + ((Cs * BAF) * IRew) + (Csw * IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Earthworm BAF		Earthworm Concentration	Intake				TRV	Hazard Quotient			
							Soil	Earthworm	Surface Water	Total		Soil	Earthworm	Surface Water	Total
Inorganics															
Aluminum	5754	0.95	NA	0.22	a	1266	82.0	557	0.13063	639	110	0.7	5.1	0.0	5.8
Cadmium	7.7	ND	NA	0.96	a	7.392	0.1097	3.2525	0	3.362	1.45	0.08	2.24	0	2.32

Symbol	Parameter	Valu	Source
Cs	Soil concentration (mg/kg)	-	--
Csw	Surface water concentration (mg/L)	-	--
IRs	Soil intake rate (kg dw/day)	1.14E-0	EPA, 1999
Irsw	Surface water intake rate (L/day)	1.10E-0	EPA, 1999
IRew	Earthworm intake rate (kg wet/ day)	0.035	EPA, 1999
BAF	Bioaccumulation factor (unitless)	Chemical-specifi	--
BW	Body weight (kg)	0.0	EPA, 1999
TRV	Toxicity reference value (mg/kg/day)	Chemical-specifi	Appendix B

NA or -- = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.
a = EPA, 1999

Table 5-20
Risk to Northern Cardinal: 95% UCL Exposure Point Concentration

Intake = [(Cs * IRs) + ((Cs * PUF) * IRp) + (Csw • IRsw)] / BW
HQ = Intake / TRV

Constituent	Soil Concentration	Surface Water Concentration	log Kow	Plant Uptake Factor	Plant Concentration	Intake				TRV	Hazard Quotient			
						Soil	Plant	Surface Water	Total		Soil	Plant	Surface Water	Total
Inorganics														
Aluminum	5754	0.95	NA	0.0040 a	23.016	32.3950	6.4905	0.2565	39.14203	110	0.29450	0.05900	0.00233	0.4

Symbol	Parameter	Valu	Source
Cs	Soil concentration (mg/kg)	-	--
Csw	Surface water concentration (mg/L)	-	--
IRs	Soil intake rate (kg dw/day)	5.63E-0	EPA, 1993
IRp	Plant intake rate (kg dw/ day)	0.002	EPA, 1993
Irsw	Surface water intake rate (L/day)	0.002	EPA, 1993
PUF	Plant uptake factor (unitless)	Chemical-specifi	--
BW	Body weight (kg)	0.0	EPA, 1993, based on wren
TRV	Toxicity reference value (mg/kg/day)	Chemical-specifi	Appendix B
log Kow	Octanol-water partition coefficient	Chemical-specifi	--

a = EPA, 1999
b = Baes et al., 1984 (based on Bv).
c = Efroymson et al., 1997
d = TNRCC, 1996.
NA = Not applicable.
NTV = No toxicity value available.
ND = Not detected above method detection limit or screening level for this medium.

The highest levels of metals contamination (i.e., antimony, cadmium, chromium, and silver) were measured in samples collected from the Farm Trash Area (MND33-0102; MND-33-0103; MND33-0104). The Farm Trash Area is located near the southwest corner of Parcel 4. It is the location of a former residence that was razed when DOE purchased the property in 1981. This area covers less than ¼ acre and was used to receive trash, tires, and household debris when the farm was in use. Mound Plant has never used this area for waste or trash disposal, and no RCRA-regulated materials have been stored or handled in the area (DOE, 1993). Removing these data points, the maximum concentrations of antimony, cadmium, and silver do not exceed background levels and chromium slightly exceeds background at one sample location.

5.5 RISK DESCRIPTION

A screening-level ecological risk assessment was conducted at this site to evaluate which contaminants pose a potential to adversely impact ecological receptors inhabiting Parcel 4 and adjacent areas. Birds, such as the American robin and northern cardinal, and mammals, such as the meadow vole, short-tailed shrew, and white-tailed deer, which represent several trophic levels, were selected as target receptors. Direct ingestion of COPCs in soil and surface water, and indirect ingestion through the food chain via ingestion of plants and insects were considered in this assessment. External exposure through direct radiation from soil and inhalation of radionulide-contaminated dust were also considered for radiological COPCs. Direct impacts on plants, earthworms, aquatic insects and benthic organisms were evaluated for both chemicals and radionuclides. The hazard quotient (HQ) approach was used as an indicator of the risks posed to surrogate ecological receptors from exposure to site-related contaminants. The hazard quotient compares exposure values to dose-based or media-based TRVs, and can be expressed as the ratio of a potential exposure level to the TRV: A hazard quotient exceeding 1.0 indicates the species of interest (or the species for which the toxicity data was based on) may be at risk of an adverse effect from the particular COPC, exposure route, or medium on which the HQ was based. Further evaluation may be needed in terms of site-specific toxicity data for a given target receptor. While there is potential risk to aquatic receptors exposed to chemical contaminants in Benner Branch and to plants and earthworms exposed to chemical contaminants in soil, this risk is minimal, and many of the contaminants of concern may be present due to naturally occurring or anthropogenic sources.

The conservative screening level ERA found that there is a potential for adverse effects on terrestrial organisms from residual chemical contamination (i.e., metals). However, refinement of the preliminary COPCs found that the potential for adverse ecological effects due to site-related waste disposal activities is low. The refinement included a background evaluation, re-calculation of HQs using an average exposure point concentration (i.e., 95% UCL), evaluation of bioavailability of COPCs, adjustment of the area use factor, and a re-evaluation of ecological screening levels. Table 5-21 shows the ecological risk results exceeding an HQ>1. The table then compares the HQ against its refined HQ.

Table 5-21
Summary of Ecological Risk Estimates
Parcel 4, Mound Plant

Receptor	Contaminant	Hazard Quotient >1					Refined Hazard Quotient				
		Direct Contact	Soil	Plant	Worm	Total	Direct Contact	Soil	Plant	Worm	Total
Plants	Aluminum	428	--	--	--	428	115	--	--	--	115
	Antimony	8.4	--	--	--	8.4	8.4	--	--	--	8.4
	Chromium	6.1	--	--	--	6.1	6.1	--	--	--	6.1
	Lithium	14	--	--	--	14	14	--	--	--	14
	Silver	8.5	--	--	--	8.5	8.5	--	--	--	8.5
	Vanadium	19	--	--	--	19	19	--	--	--	19
Earthworms	Chromium	76	--	--	--	76	76	--	--	--	76
	Mercury	1.4	--	--	--	1.4	0.7	--	--	--	0.7
Soil-dwelling Organisms	Aluminum	36	--	--	--	36	9.6	--	--	--	9.6
	Chromium	3.1	--	--	--	3.1	3.1	--	--	--	3.1
	Lithium	2.7	--	--	--	2.7	2.7	--	--	--	2.7
	Vanadium	1.9	--	--	--	1.9	1.9	--	--	--	1.9
Vole	Aluminum	--	585	99	--	684	--	157	27	--	184
	Antimony	--	18	151	--	169	--	18	151	--	169
	Cadmium	--	--	6.3	--	6.67	--	--	6.3	--	6.67
	Silver	--	2.4	41	--	43	--	2.4	41	--	43
	Vanadium	--	5.1	1.0	--	6.11	--	5.1	1.0	--	6.11
Shrew	Aluminum	--	5103	--	26	5129	--	1372	--	6.9	1379
	Antimony	--	155	--	--	156	--	155	--	--	156
	Cadmium	--	3.5	--	--	3.62	--	3.5	--	--	3.62

Table 5-21 (cont.)

Receptor	Contaminant	Hazard Quotient >1					Refined Hazard Quotient				
		Direct Contact	Soil	Plant	Worm	Total	Direct Contact	Soil	Plant	Worm	Total
	Chromium	--	2.2	--	--	2.17	--	2.2	--	--	2.17
	Lithium	--	1.3	--	--	1.34	--	1.3	--	--	1.34
	Silver	--	21	--	--	21	--	21	--	--	21
	Vanadium	--	44	--	--	44	--	44	--	--	44
Deer	Aluminum	--	58	12	--	70.1		16	3.1	--	19.1
	Antimony	--	1.8	18	--	19.5		1.8	18	--	19.5
	Silver	--	--	4.8	--	4.99		--	4.8	--	4.99
Robin	Aluminum	--	2.8	--	19	21.6	--	0.7	--	5.1	5.8
	Cadmium	--	--	--	2.2	2.32	--	--	--	2.2	2.32
Cardinal	Aluminum	--	1.1	--	--	1.3	--	0.29	--	--	0.4

Note:
Total HQ may not equal sum of individual HQ because only HQ> 1 values are presented and values are rounded to three significant figures.

Although the SLERA probably overestimates the risk from non-radiological contaminants, further evaluation of the available site data, the terrestrial habitat on the site, the toxicity of these contaminants and the results of the Human Health Risk Assessment would have to be done to reduce that conservatism. Because of the conservative assumptions used during the SLERA, some of the retained contaminants (i.e., contaminants with an HQ>1) may appear to pose a potential for adverse ecological effects. The following is a description of site conditions that will reduce the conservatism of the HQs presented in the SLERA.

Exposure Point Concentration (EPC)

Maximum values were used as exposure point concentrations for all media. In order to account for uncertainties in the ability of the measured data to reflect actual site conditions, the EPA (1992) has recommended the calculation of the 95% upper confidence limit (UCL) of the arithmetic mean using log-transformed data. In most cases, it is reasonable to assume that Superfund soil sampling data are lognormally distributed (EPA, 1992). The 95% UCL concentration reasonably represents the concentration that mobile ecological receptors will be exposed to. Re-calculating the hazard quotient with the 95% UCL concentration, the re-calculated HQ for the meadow vole exceeded one for aluminum, antimony, cadmium, silver, and vanadium; the re-calculated HQ for the shrew exceeded one for aluminum, antimony, cadmium, chromium, lithium, silver, and vanadium; the re-calculated HQ for the white-tailed deer exceeded one for aluminum, antimony, and silver; the re-calculated HQ for the robin exceeded one for aluminum, and cadmium; and the re-calculated HQ for the cardinal did not exceed one for any COPC.

Background (BKG)

The 95% UCL concentration of aluminum (10,590 mg/kg) does not exceed site-specific background concentration (19,000 mg/kg). In addition, within Parcel 4, only one sample location slightly exceeded background levels of aluminum, vanadium, and lithium.

Not Site Related (NSR)

The highest levels of metals contamination (i.e., antimony, cadmium, chromium, and silver) were measured in samples collected from the Farm Trash Area (MND33-0102; MND-33-0103; MND33-0104). The Farm Trash Area is located near the southwest corner of Parcel 4. It is the location of a former residence that was razed when DOE purchased the property in 1981. This area covers less than ¼ acre and was used to receive trash, tires, and household debris when the farm was in use. Mound Plant has never used this area for waste or trash disposal, and no RCRA-regulated materials have been stored or handled in the area (DOE, 1993). Removing these data points, the maximum concentrations of antimony, cadmium, and silver do not exceed background levels and chromium slightly exceeds background at one sample location. Also, antimony, cadmium, and silver were only measured above detection limits in samples collected from the Farm Trash Area of Parcel 4.

6.0 REFERENCES

ATSDR. 1990. *Toxicological Profile for Aluminum.* Draft.

ATSDR. 1990. *Toxicological Profile for Antimony.* Draft.

ATSDR. 1990. *Toxicological Profile for Thallium.* Draft.

ATSDR. 1990. *Toxicological Profile for Vanadium.* Draft.

ATSDR. 1991. *Toxicological Profile for Di(2-ethylhexyl)phthalate.* Draft.

ATSDR. 1994. *Toxicological Profile for Selenium.* Draft.

Baes, C.F., R.D. Sharp, A.L. Sjoreen, and R.W. Shor. 1984. *A review and analysis of parameters assessing transport of environmentally released radionuclides through agriculture.* ORNL-5786. Oak Ridge National Laboratory.

Bailey, R.G. 1978. *Description of the Ecoregions of the United States.* U.S. Department of Agriculture Forest Service. May 1978.

Barnthouse, L.W. 1995. *Effects of Ionizing Radiation on Terrestrial Plants and Animals: A Workshop Report.* ORNL/TM-13141. Oak Ridge National Laboratory.

Bechtel Jacobs Company, LLC. (BJC). 1998. *Radiological Benchmarks for Screening Contaminants of Potential Concern for Effects on Aquatic Biota at Oak Ridge National Laboratory, Oak Ridge, Tennessee.* BJC/OR-80. Oak Ridge National Laboratory.

Blaylock, B.G., M.L. Frank, and B.R. O'Neal. *Methodology for Estimating Radiation Dose Rates to Freshwater Biota Exposed to Radionuclides in the Environment.* ES/ER-TM-78. Oak Ridge National Laboratory.

Canadian Council of Ministers of the Environment. 1999. *Canadian sediment quality guidelines for the protection of aquatic life: Summary Tables.* In: Canadian environmental quality guidelines, 1999, Canadian Council of Ministers of the Environment, Winnepeg.

Efroymson, R.A., G.W. Suter II, B.E. Sample, and D.S. Jones. 1997. *Preliminary Remediation Goals for Ecological Endpoints.* ES/ER/TM-162/R2. Oak Ridge National Laboratory.

Eisenbud, Merril. 1987. *Environmental Radioactivity.*

Eisler, Ronald. 1985. *Cadmium Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.2).

Eisler, Ronald. 1985. *Selenium Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.5).

Eisler, Ronald. 1986. *Chromium Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.6).

Eisler, Ronald. 1986. *Lead Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.14).

Eisler, Ronald. 1987. *Mercury Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.10).

Eisler, Ronald. 1988. *Arsenic Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 85(1.12).

Eisler, Ronald. 1993. *Zinc Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 10.

Eisler, Ronald. 1994. *Radiation Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 26. Contaminant Hazard Reviews Rep. 29.

Eisler, Ronald. 1996. Silver *Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review.* U.S. Fish Wildl. Serv. Biol. Rep. 32. Contaminant Hazard Reviews Rep. 32.

Ehrlich, Paul R., David S. Dobkin, and Darry Wheye. 1988. The birder's handbook: a field guide to the natural history of North American birds. Simon and Schuster, Inc.

Integrated Risk Information System (IRIS). 1999. EPA Toxicological Database. Washington, D.C.

International Atomic Energy Agency (IAEA). 1992. *Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards.* Technical Report Series No. 332. ISBN 92-0-100992-5.

Hazard, Evan B. 1982. *The Mammals of Minnesota.* University of Minnesota Press, Minneapolis.

Howell, Arthur H. 1932. *Florida bird life.* Florida Dept. of Game and Fresh Water Fish. Coward-McCann, Inc. New York.

Jones, J. Knox, Jr., and Elmer C. Birney. 1982. Handbook of mammals of the north-central states. University of Minnesota Press, Minneapolis.

Jones, D.S., R.N. Hull, and G.W. Suter II. 1996. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1996 Revision.* ES/ER/M-95/R2. Oak Ridge National Laboratory.

Kabata-Pendias, Alina, and Henryk Pendias. 1992. *Trace Elements in Soils and Plants.* 2nd ed. CRC Press. Boca Raton, FL.

Lee, K,E, 1985. *Earthworms, Their Ecology and Relationships with Soil and Land Use.* Academic Press. New York.

Long, Edward R., Donald D. Macdonald, Sherri L. Smith, and Fred D. Calder. 1995. *Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments.* Environmental Management 19:1. Pp. 81-97.

Martin, Alexander C., Herbert S. Zim, and Arnold L. Nelson. 1951. *American Wildlife and Plants: A Guide to Wildlife Food Habits.* Dover Publications. New York.

Montgomery, John. H. 1991. *Groundwater Chemicals Desk Reference.* Lewis Publishers, Inc. Chelsea, MI.

National Geographic Society. 1983. Field guide to the birds of North America. Second edition.

National Council on Radiation Protection and Measurements (NCRP). 1991. *Effects of Ionizing Radiation on Aquatic Organisms*. NCRP Report No. 109. National Council on Radiation Protection and Measurements. Bethesda, Maryland.

Nuclear Energy Agency of the Organization for Economic Co-Operation and Development (NEA/OECD). 1986. *Derivation of Reference Levels for the Acceptance of Long-Lived Radioactive Waste (Draft)*. RWM/DOC(86)2. NEA/OECD, Paris.

NOAA.1999. NOAA's National Status and Trends Program. "Sediment Quality Guidelines". http://seaserver.nos.noaa.gov/projects/sedimentquality.html.

Ohio EPA. Ohio Water Quality Standards. Chapter 3745-1 of the Administrative Code.

Ornithology Committee of the Dayton Audubon Society. 1984. Birds of Dayton: an update of Benedict J. Blincoe's The Birds of Dayton and The Central Miami Valley, Ohio. Landfall Press, Dayton, Ohio.

Sample, B.E. and G.W. Suter II. 1994. *Estimating Exposure of Terrestrial Wildlife to Contaminants*. Oak Ridge National Laboratory. Oak Ridge, TN. ES/ER/TM-125.

Sample, B.E., D.M. Opresko, and G.W. Suter II. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*. ES/ER/TM-125. Oak Ridge National Laboratory.

Sample, B.E., M.S. Aplin, R.A. Efroymson, G.W. Suter II, and C.J.E. Welsh. 1997. *Methods and Tools for Estimation of the Exposure of Terrestrial Wildlife to Contaminants*. ORNL/TM-13391. Oak Ridge National Laboratory.

Smith, S.L, D.D. MacDonald, K.A. Keenleyside, and C.L. Gaudet. 1996. *The development and implementation of Canadian Sediment Quality Guidelines*. Development and Progress in Sediment Quality Assessment: Rationale, Challenges, Techniques, and Strategies. Edited by M. Munawar and G. Dave. Ecovsion World Monograph Series. Pp. 233-249.

Suter, G.W. II and C.L. Tsao. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Edition*. ES/ER/TM-96/R2. Oak Ridge National Laboratory.

Talmage, Sylvia S. and Barbara T.Walton. 1991. "Small Mammals as Monitors of Environmental Contaminants." In: *Reviews of Environmental Contamination and Toxicology*. Volume 119. Springer –Verlag, New York.

Texas Natural Resource Conservation Commission (TNRCC). 1996. *Guidance for Conducting Ecological Risk Assessment Under the Texas Risk Reduction Program*. Draft. RG-263. 15 November 1996.

DOE 1992b. *Operable Unit 9, Field Sampling Plan*. U.S. Department of Energy, Albuquerque Field Office, Albuquerque, New Mexico. May 1992.

U.S. Department of Energy. 1994. Operable Unit 9, Ecological Characterization Report, Mound Plant, Montgomery County, Ohio. Environmental Restoration Program, EG&G Mound Applied Technologies.

United States Department of Energy (DOE). 1996a. OU5 New Property Remedial Investigation Report, Final Revision 0. ER Program, Mound Plant. February 1996.

United States Department of Energy (DOE). 1996b. OU9 Surface Water and Sediment Investigation Report, Revision 2. ER Program, Mound Plant. September 1996.

United States Environmental Protection Agency (EPA). Region V. 1999a. RCRA Corrective Action Ecological Data Quality Levels. http://www.epa.gov/reg5oopa/rcraca/edql.htm.

EPA. 1999b. *Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities.* EPA530-D-99-001A. Office of Solid Waste and Emergency Response.

EPA. 1998. Guidelines for Ecological Risk Assessment. EPA/630/R-95/002F. January 1998.

EPA. 1997. *Ecological Risk Assessment Guidance of Superfund: Process for Designing and Conducting Ecological Risk Assessments.* Interim Final. Emergency Response Team. Edison, NJ. 5 June 1997.

EPA. 1996. *Proposed Guidelines for Ecological Risk Assessment.* EPA/630/R-95/002B. August 1996.

EPA. 1995. *Final Water Quality Guidance for the Great Lakes System.* 40 CFR Parts 9, 122, 131, and 132.

EPA. 1993. *Wildlife Exposure Factors Handbook, Volume I.* EPA/600/R-93/187a. Office of Research and Development.

EPA. 1992. *Framework for Ecological Risk Assessment.* Risk Assessment Forum. EPA/603/R-92/001.

EPA. 1986. Quality Criteria for Water, 1986. EPA/440/5-86-001. Office of Water Regulations and Standards.

EPA. 1986. *Ecological Risk Assessment.* Office of Pesticide Programs, Washington, DC. EPA/540/9-85/001.

The University Society, Inc. 1936. *Birds of America.* Doubleday and Company.

Whicker, F.W. and T.B. Kirchner. 1987. "PATHWAY: A Dynamic Food-Chain Model to Predict Radionculide Ingestion After Fall Deposition. *Health Phys.* 52(6):717.

Young, H. 1951. "Territorial Behavior of the Eastern Robin". Proceedings of the Linnean Society of New York. 58-62:1-37.

APPENDIX A

PARCEL 4 DATA

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	2.0100	PCI/G	0.5500		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	1.9900	PCI/G	0.7050		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.9080	PCI/G	0.5500		
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.8880	PCI/G	0.4000		
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.7870	PCI/G	0.3940		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.6950	PCI/G	0.4230		
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.6900	PCI/G	0.6900	U	
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.6000	PCI/G	0.6000	U	
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.5800	PCI/G	0.5800	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Actinium-227	0.5700	PCI/G	0.5700	U	U
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5600	PCI/G	0.5600	U	
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5400	PCI/G	0.5400	U	
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5200	PCI/G	0.5200	U	
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5100	PCI/G	0.5100	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5100	PCI/G	0.5100	U	
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.5000	PCI/G	0.5000	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4900	PCI/G	0.4900	U	
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4800	PCI/G	0.4500		
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4800	PCI/G	0.4800	U	
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4800	PCI/G	0.4800	U	
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.4800	PCI/G	0.4800	U	
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4600	PCI/G	0.4600	U	
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4600	PCI/G	0.4600	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.4600	PCI/G	0.4600	U	
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4500	PCI/G	0.4500	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4500	PCI/G	0.4500	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4500	PCI/G	0.4500	U	
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4500	PCI/G	0.4500	U	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Actinium-227	0.4500	PCI/G	0.4500	U	U
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4400	PCI/G	0.4400	U	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Actinium-227	0.4400	PCI/G	0.4400	U	U
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4300	PCI/G	0.4300	U	
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4230	PCI/G	0.4230	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4200	PCI/G	0.4200	U	
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4100	PCI/G	0.4100	U	
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4100	PCI/G	0.4100	U	
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4010	PCI/G	0.401	U	
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4000	PCI/G	0.4000	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.4000	PCI/G	0.4000	U	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Actinium-227	0.4000	PCI/G	0.4000	U	U
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3900	PCI/G	0.3900	U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Actinium-227	0.3900	PCI/G	0.3900	U	U
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3800	PCI/G	0.3800	U	
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3700	PCI/G	0.3700	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3700	PCI/G	0.3700	U	
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3700	PCI/G	0.3700	U	
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3700	PCI/G	0.3700	U	
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3700	PCI/G	0.3700	U	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Actinium-227	0.3700	PCI/G	0.3700	U	U
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3600	PCI/G	0.3600	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3600	PCI/G	0.3600	U	
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3600	PCI/G	0.3600	U	
B408	19940616	B40811	34897	Borehole	0.00	0.50	Actinium-227	0.3600	PCI/G	0.3600	U	U
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.3600	PCI/G	0.3600	U	
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3530	PCI/G	0.3530	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3500	PCI/G	0.3500	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3500	PCI/G	0.3500	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3500	PCI/G	0.3500	U	
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3400	PCI/G	0.3400	U	
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3400	PCI/G	0.3400	U	
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3400	PCI/G	0.3400	U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3400	PCI/G	0.3400	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3400	PCI/G	0.3400	U	
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3300	PCI/G	0.3300	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3300	PCI/G	0.3300	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3300	PCI/G	0.3300	U	
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3200	PCI/G	0.3200	U	
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.3200	PCI/G	0.3200	U	
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3100	PCI/G	0.3100	U	
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3100	PCI/G	0.3100	U	
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3100	PCI/G	0.3100	U	
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3100	PCI/G	0.3100	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.3000	PCI/G	0.3000	U	
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2900	PCI/G	0.2900	U	
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2900	PCI/G	0.2900	U	
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2900	PCI/G	0.2900	U	
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.2900	PCI/G	0.2100		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2800	PCI/G	0.2800	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2600	PCI/G	0.2600	U	
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2600	PCI/G	0.2600	U	
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.2600	PCI/G	0.2200		
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.2500	PCI/G	0.2500	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2430	PCI/G	0.2430	U	
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.2400	PCI/G	0.2400	U	
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.2300	PCI/G	0.1400		
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2100	PCI/G	0.2100	U	
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2100	PCI/G	0.2100	U	
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.2000	PCI/G	0.1400		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1800	PCI/G	0.1800	U	
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.1600	PCI/G	0.1500		
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1500	PCI/G	0.1500	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1500	PCI/G	0.1500	U	
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1400	PCI/G	0.1300		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1300	PCI/G	0.1300	U	
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1300	PCI/G	0.0800		
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1200	PCI/G	0.1200	U	
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1200	PCI/G	0.1200	U	
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1200	PCI/G	0.1200	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1100	PCI/G	0.1100	U	
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1100	PCI/G	0.1100	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.1100	PCI/G	0.1100	U	
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1000	PCI/G	0.1000	U	
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.1000	PCI/G	0.1000	U	
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.1000	PCI/G	0.1000	U	
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.0900	PCI/G	0.0900	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.0900	PCI/G	0.0900	U	
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.0900	PCI/G	0.0900	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.0900	PCI/G	0.0900	U	
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.0900	PCI/G	0.0900	U	
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.0900	PCI/G	0.0900	U	
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Actinium-227	0.0900	PCI/G	0.0900	U	
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Actinium-227	0.0800	PCI/G	0.0800	U	
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Actinium-227	0.0600	PCI/G	0.0600	U	
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.8330	PCI/G	0.8330	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Americium-241	0.5800	PCI/G	0.5800	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Americium-241	0.5800	PCI/G	0.5800	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Americium-241	0.4800	PCI/G	0.4800	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Americium-241	0.4600	PCI/G	0.4600	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Americium-241	0.4200	PCI/G	0.4200	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Americium-241	0.4100	PCI/G	0.4100	U	U
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.4000	PCI/G		U	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Americium-241	0.3800	PCI/G	0.3800	U	U
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.3380	PCI/G	0.338	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.2490	PCI/G	0.2490	U	
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.2100	PCI/G	0.2100	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.2100	PCI/G	0.1100		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1950	PCI/G	0.1950	U	
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Americium-241	0.1900	PCI/G	0.1900	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1810	PCI/G	0.1810	U	
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1800	PCI/G	0.1800	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1710	PCI/G	0.1430		
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1700	PCI/G	0.1700	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Americium-241	0.1700	PCI/G	0.1700	U	
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1690	PCI/G	0.1690	U	
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1600	PCI/G	0.1400		
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1600	PCI/G	0.1600	U	
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1600	PCI/G	0.1600	U	
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1600	PCI/G	0.1600	U	
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1600	PCI/G	0.1600	U	
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Americium-241	0.1600	PCI/G	0.1600	U	
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1500	PCI/G	0.1500	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1400	PCI/G	0.1400	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1400	PCI/G	0.1400	U	
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1400	PCI/G	0.1400	U	
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.1400	PCI/G		U	
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1300	PCI/G	0.1300	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1300	PCI/G	0.1300	U	
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1300	PCI/G	0.1300	U	
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1300	PCI/G	0.1300	U	
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1200	PCI/G	0.1200	U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.1200	PCI/G		U	
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.1200	PCI/G		U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1100	PCI/G	0.1100	U	
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1020	PCI/G	0.1020	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1000	PCI/G	0.1000	U	
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1000	PCI/G	0.1000	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1000	PCI/G	0.1000	U	
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.1000	PCI/G	0.1000	U	
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Americium-241	0.1000	PCI/G	0.1000	U	
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0990	PCI/G	0.0990	U	
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0900	PCI/G	0.0900	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0900	PCI/G	0.0900	U	
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0900	PCI/G	0.0900	U	
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0900	PCI/G	0.0900	U	
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0900	PCI/G	0.0900	U	
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Americium-241	0.0900	PCI/G	0.0900	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0800	PCI/G	0.0800	U	
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0800	PCI/G	0.0800	U	
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0800	PCI/G	0.0700		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0700	PCI/G	0.0700	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0700	PCI/G	0.0700	U	
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0700	PCI/G	0.0700	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0700	PCI/G	0.0700	U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.0650	PCI/G		U	
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0600	PCI/G	0.0600	U	
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0500	PCI/G	0.0500	U	
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0500	PCI/G	0.0400		
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0500	PCI/G	0.0500	U	
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0500	PCI/G	0.0500	U	
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0500	PCI/G	0.0500	U	
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0500	PCI/G	0.0500	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0500	PCI/G	0.0500	U	
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Americium-241	0.0500	PCI/G	0.0500	U	
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0400	PCI/G	0.0400	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0400	PCI/G	0.0400	U	
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0400	PCI/G	0.0400	U	
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0400	PCI/G	0.0400	U	
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0400	PCI/G	0.0400	U	
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0400	PCI/G	0.0400	U	
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0400	PCI/G	0.0400	U	
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0400	PCI/G	0.0400	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Americium-241	0.0400	PCI/G	0.0400	U	
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Americium-241	0.0330	PCI/G		U	
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0300	PCI/G	0.0300	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0300	PCI/G	0.0300	U	
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0300	PCI/G	0.0300	U	
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0300	PCI/G	0.0300	U	
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0300	PCI/G	0.0300	U	
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0300	PCI/G	0.0300	U	
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0300	PCI/G	0.0300	U	
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Americium-241	0.0300	PCI/G	0.0300	U	
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Americium-241	0.0200	PCI/G	0.0200	U	
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0200	PCI/G	0.0200	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Americium-241	0.0200	PCI/G	0.0200	U	
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0513	PCI/G	0.0513	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bismuth-207	0.0800	PCI/G	0.0800	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bismuth-207	0.0700	PCI/G	0.0700	U	U
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0663	PCI/G	0.0663	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0618	PCI/G	0.0618	U	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bismuth-207	0.0600	PCI/G	0.0600	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bismuth-207	0.0600	PCI/G	0.0600	U	U
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0580	PCI/G	0.0580	U	
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0530	PCI/G	0.0530	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0503	PCI/G	0.0503	U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bismuth-207	0.0500	PCI/G	0.0500	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bismuth-207	0.0500	PCI/G	0.0500	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bismuth-207	0.0500	PCI/G	0.0500	U	U
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0450	PCI/G	0.0450	U	
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0439	PCI/G	0.0439	U	
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0420	PCI/G	0.0420	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-207	0.0316	PCI/G	0.0316	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bismuth-210	0.1300	PCI/G	0.1300	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bismuth-210	0.1100	PCI/G	0.1100	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bismuth-210	0.1000	PCI/G	0.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bismuth-210	0.0900	PCI/G	0.0900	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bismuth-210	0.0900	PCI/G	0.0900	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bismuth-210	0.0900	PCI/G	0.0900	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bismuth-210	0.0800	PCI/G	0.0800	U	U
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0796	PCI/G	0.0796	U	
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.1020	PCI/G	0.1020	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0991	PCI/G	0.0991	U	
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0843	PCI/G	0.0843	U	
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0805	PCI/G	0.0805	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0770	PCI/G	0.0770	U	
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0652	PCI/G	0.0652	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0640	PCI/G	0.0640	U	
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0623	PCI/G	0.0623	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Bismuth-210	0.0454	PCI/G	0.0454	U	
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0660	PCI/G	0.0660	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.8950	PCI/G	0.0772		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6930	PCI/G	0.0613		
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6600	PCI/G	0.0300		
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6480	PCI/G	0.0432		
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6300	PCI/G	0.0600		
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6300	PCI/G	0.0600		
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.6200	PCI/G	0.0300		
B401	19940614	B40101	34897	Borehole	0.00	0.50	Cesium-137	0.6100	PCI/G	0.6100		U
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.6000	PCI/G	0.0501		
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.6000	PCI/G	0.0200		
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5900	PCI/G	0.0800		
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5900	PCI/G	0.0800		
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5600	PCI/G	0.0600		
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5500	PCI/G	0.0600		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5500	PCI/G	0.0600		
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.5500	PCI/G			
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5300	PCI/G	0.0600		
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5300	PCI/G	0.0600		
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5300	PCI/G	0.0800		
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5300	PCI/G	0.0600		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5180	PCI/G	0.0724		
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5100	PCI/G	0.0600		
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5000	PCI/G	0.0600		
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.5000	PCI/G	0.0600		
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4700	PCI/G	0.0800		
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.4700	PCI/G	0.0900		
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.1000		
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.0200		
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.0600		
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.0600		
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.0600		
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4600	PCI/G	0.0900		
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.4600	PCI/G	0.0300		
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4500	PCI/G	0.0200		
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4300	PCI/G	0.0600		
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4200	PCI/G	0.0500		
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4100	PCI/G	0.0200		
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4100	PCI/G	0.0700		
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.4100	PCI/G	0.0600		
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3900	PCI/G	0.0700		
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3800	PCI/G	0.0800		
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3800	PCI/G	0.0600		
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3800	PCI/G	0.0400		
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3800	PCI/G	0.0600		
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.3800	PCI/G	0.0300		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Cesium-137	0.3800	PCI/G	0.3800		U
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3700	PCI/G	0.0500		
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3700	PCI/G	0.0600		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Cesium-137	0.3700	PCI/G	0.3700		U
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3600	PCI/G	0.0900		
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3600	PCI/G	0.0700		
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3500	PCI/G	0.0700		
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3500	PCI/G	0.0700		
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3500	PCI/G	0.0600		
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3500	PCI/G	0.0700		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.3500	PCI/G	0.0800		
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3400	PCI/G	0.0600		
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3400	PCI/G	0.0800		
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3300	PCI/G	0.0800		
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3300	PCI/G	0.0200		
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3300	PCI/G	0.0900		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Cesium-137	0.3300	PCI/G	0.3300		U
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3200	PCI/G	0.0600		
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3200	PCI/G	0.0700		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.3200	PCI/G	0.0700		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.3200	PCI/G	0.0200		
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3150	PCI/G	0.0637		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3100	PCI/G	0.0600		
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.3000	PCI/G	0.0800		
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2900	PCI/G	0.0800		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.2900	PCI/G			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Cesium-137	0.2900	PCI/G	0.2900		U
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2800	PCI/G	0.0200		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.2800	PCI/G	0.0200		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.2800	PCI/G	0.0800		
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2700	PCI/G	0.0600		
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2700	PCI/G	0.0700		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Cesium-137	0.2700	PCI/G	0.2700		U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Cesium-137	0.2600	PCI/G	0.2600		U
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.2600	PCI/G			
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.2600	PCI/G			
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.2600	PCI/G	0.0200		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.2500	PCI/G			
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2400	PCI/G	0.0600		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Cesium-137	0.2400	PCI/G			
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2300	PCI/G	0.0400		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Cesium-137	0.2300	PCI/G	0.0600		
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2200	PCI/G	0.0800		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2200	PCI/G	0.0600		
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.2100	PCI/G	0.0200		
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.2000	PCI/G	0.0800		
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1900	PCI/G	0.0700		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1900	PCI/G	0.0200		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1800	PCI/G	0.0918		
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1800	PCI/G	0.0200		
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1800	PCI/G	0.0200		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1700	PCI/G	0.0200		
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1700	PCI/G	0.0200		
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1700	PCI/G	0.0200		
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1600	PCI/G	0.0200		
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1600	PCI/G	0.0200		
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1500	PCI/G	0.0600		
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1500	PCI/G	0.0100		
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0500		
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0400		
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0600		
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0800		
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0400		
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1400	PCI/G	0.0200		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1300	PCI/G	0.0819		
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1300	PCI/G	0.0500		
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1300	PCI/G	0.0200		
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1200	PCI/G	0.0700		
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1200	PCI/G	0.0400		
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1200	PCI/G	0.0200		
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.1100	PCI/G	0.0600		
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.1000	PCI/G	0.0200		
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0900	PCI/G	0.0700		
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0800	PCI/G	0.0500		
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0700	PCI/G	0.0700	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0700	PCI/G	0.0500		
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0700	PCI/G	0.0400		
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0600	PCI/G	0.0500		
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0600	PCI/G	0.0600	U	
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0600	PCI/G	0.0300		
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0600	PCI/G	0.0100		
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0546	PCI/G	0.0375		
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Cesium-137	0.0400	PCI/G	0.0200	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Cesium-137	0.0200	PCI/G	0.0200	U	
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0582	PCI/G	0.0582	U	
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1200	PCI/G	0.1200	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1100	PCI/G	0.1100	U	
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1100	PCI/G	0.1100	U	
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.1100	PCI/G		U	
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1000	PCI/G	0.1000	U	
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1000	PCI/G	0.1000	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.1000	PCI/G	0.1000	U	
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0924	PCI/G	0.0924	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0800		
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0900	PCI/G	0.0900	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Cobalt-60	0.0900	PCI/G	0.0900	U	U
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0900	PCI/G	0.0900	U	
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0900	PCI/G	0.0900	U	
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0900	PCI/G	0.0800		
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0800	PCI/G	0.0800	U	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Cobalt-60	0.0800	PCI/G	0.0800	U	U
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0800	PCI/G	8.0000	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0800	PCI/G	0.0800	U	
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0786	PCI/G	0.0786	U	
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0735	PCI/G	0.0735	U	
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0700	PCI/G	0.0700	U	
B408	19940616	B40811	34897	Borehole	0.00	0.50	Cobalt-60	0.0700	PCI/G	0.0700	U	U
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0682	PCI/G	0.0682	U	
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0677	PCI/G	0.0677	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0650	PCI/G	0.0650	U	
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0600	PCI/G	0.0600	U	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Cobalt-60	0.0600	PCI/G	0.0600	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Cobalt-60	0.0600	PCI/G	0.0600	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Cobalt-60	0.0600	PCI/G	0.0600	U	U
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0531	PCI/G	0.0531	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0500	PCI/G	0.0500	U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Cobalt-60	0.0500	PCI/G	0.0500	U	U
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0497	PCI/G	0.0497	U	
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0400	PCI/G	0.0400	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0400	PCI/G	0.0400	U	
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0400	PCI/G	0.0400	U	
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0400	PCI/G	0.0300		
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0400	PCI/G	0.0400	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0372	PCI/G	0.0372	U	
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0300	PCI/G	0.0300	U	
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0300	PCI/G	0.0300	U	
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.0280	PCI/G		U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.0280	PCI/G		U	
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.0250	PCI/G		U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.0250	PCI/G		U	
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Cobalt-60	0.0230	PCI/G		U	
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Cobalt-60	0.0200	PCI/G	0.0200	U	
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Cobalt-60	0.0200	PCI/G	0.0200	U	
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.3500	PCI/G	1.1900		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.3200	PCI/G	1.3600		
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.2800	PCI/G	0.8900		
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Lead-210	3.2100	PCI/G	0.4000		
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.0900	PCI/G	1.0500		
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.0500	PCI/G	1.1700		
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	3.0200	PCI/G	1.2700		
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.8700	PCI/G	1.2200		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.8000	PCI/G	0.8300		
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.7000	PCI/G	0.6400		
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.5600	PCI/G	1.0700		
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.5600	PCI/G	1.2800		
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.5000	PCI/G	1.1900		
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.4500	PCI/G	1.2800		
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.4500	PCI/G	0.3700		
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.4500	PCI/G	0.8900		
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Lead-210	2.3800	PCI/G	0.7800		
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.3700	PCI/G	1.0100		
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.3300	PCI/G	1.4200		
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.3100	PCI/G	0.6600		
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.2700	PCI/G	0.6400		
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Lead-210	2.2600	PCI/G	0.7400		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.2200	PCI/G	1.3000		
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.1700	PCI/G	1.4100		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.1500	PCI/G	0.7200		
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Lead-210	2.1400	PCI/G	0.7500		
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0800	PCI/G	0.7500		
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0700	PCI/G	1.1100		
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0700	PCI/G	0.4800		
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0700	PCI/G	0.3200		
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0100	PCI/G	1.2200		
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0000	PCI/G	0.7500		
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	2.0000	PCI/G	1.4200		
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.9800	PCI/G	1.2300		
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.9800	PCI/G	0.8900		
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.9400	PCI/G	0.9100		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8700	PCI/G	0.8900		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Lead-210	1.8700	PCI/G	0.4000		
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Lead-210	1.8700	PCI/G	1.7500		
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8600	PCI/G	0.2900		
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8600	PCI/G	0.6500		
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8500	PCI/G	0.6500		
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8400	PCI/G	1.2800		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Lead-210	1.8400	PCI/G	0.2700		
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.8300	PCI/G	0.7400		
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.7200	PCI/G	0.7600		
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.7100	PCI/G	1.7100	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Lead-210	1.7100	PCI/G	1.7100	U	
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.7000	PCI/G	0.6900		
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6900	PCI/G	0.7600		
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6800	PCI/G	0.3500		
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Lead-210	1.6600	PCI/G	0.4500		
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6300	PCI/G	1.2100		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Lead-210	1.6300	PCI/G	0.4300		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6200	PCI/G	0.5400		
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6000	PCI/G	0.3100		
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6000	PCI/G	0.6800		
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.6000	PCI/G	1.2300		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Lead-210	1.5800	PCI/G	1.5800	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.5100	PCI/G	1.2500		
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.5100	PCI/G	1.3500		
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.5000	PCI/G	1.5000	U	
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.5000	PCI/G	0.7300		
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4900	PCI/G	0.6300		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Lead-210	1.4800	PCI/G	0.8600		
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Lead-210	1.4700	PCI/G	0.2200		
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4600	PCI/G	1.4600	U	
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4600	PCI/G	1.4600	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4500	PCI/G	1.2300		
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4200	PCI/G	1.4200	U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4100	PCI/G	1.4100	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4100	PCI/G	1.3300		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Lead-210	1.4100	PCI/G	0.8700		
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.4000	PCI/G	1.4000	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.3700	PCI/G	1.0900		
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Lead-210	1.3700	PCI/G	0.4400		
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.3500	PCI/G	1.3500	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.3500	PCI/G	1.0300	U	
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.3300	PCI/G	0.4400		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Lead-210	1.3000	PCI/G	0.2300		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2800	PCI/G	0.8000		
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2800	PCI/G	0.7400		
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2700	PCI/G	0.3300		
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2400	PCI/G	0.5700		
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2400	PCI/G	1.2400	U	
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2400	PCI/G	1.0900		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2300	PCI/G	0.6800		
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Lead-210	1.2200	PCI/G	0.2100		
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2100	PCI/G	1.2100	U	
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Lead-210	1.2100	PCI/G	0.2300		
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.2000	PCI/G	0.8100		
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.1900	PCI/G	1.1900	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.1800	PCI/G	1.1800	U	
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Lead-210	1.1800	PCI/G	0.2200		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.1700	PCI/G	1.1700	U	
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.1200	PCI/G	0.3600		
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.0900	PCI/G	1.0900	U	
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Lead-210	1.0600	PCI/G	0.3900		
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.0500	PCI/G	0.7100		
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.0500	PCI/G	1.0500	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.0400	PCI/G	1.0400	U	
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Lead-210	1.0400	PCI/G	0.3000		
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	1.0200	PCI/G	0.2800		
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.9500	PCI/G	0.7100		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Lead-210	0.9300	PCI/G	0.3600		
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Lead-210	0.9200	PCI/G	0.7300		
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.8900	PCI/G	0.8900	U	
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.8900	PCI/G	0.7700		
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.8500	PCI/G	0.8500	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.8000	PCI/G	0.8000	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.7600	PCI/G	0.7500		
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Lead-210	0.7600	PCI/G	0.3000		
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.7100	PCI/G	0.1400		
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.5800	PCI/G	0.4800		
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Lead-210	0.5300	PCI/G	0.4400		
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Lead-210	0.3800	PCI/G	0.2900		
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Lead-210	0.2600	PCI/G	0.2600	U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0670	PCI/G			
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0510	PCI/G			
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0500	PCI/G			
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0430	PCI/G		U	
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0250	PCI/G		U	
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Neptunium-237	0.0230	PCI/G			
S1066	19850801	10568	RSS	Surface location	0.00	0.00	Plutonium-238	55.4000	PCI/G	0.0100		
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	45.3100	PCI/G	45.3100	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	43.9300	PCI/G	43.9300	U	
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	43.9000	PCI/G	43.9000	U	
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	42.2200	PCI/G	42.2200	U	
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	42.1800	PCI/G	42.1800	U	
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	41.2100	PCI/G	41.2100	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	41.0300	PCI/G	41.0300	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	39.2700	PCI/G	39.2700	U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	39.0200	PCI/G	39.0200	U	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Plutonium-238	38.0000	PCI/G			
S1072	19850801	10546	RSS	Surface location	0.00	0.00	Plutonium-238	36.9000	PCI/G	0.0100		
S1049	19850801	10560	RSS	Surface location	0.00	0.00	Plutonium-238	36.9000	PCI/G	0.0100		
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	36.4000	PCI/G	36.4000	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	34.8300	PCI/G	34.8300	U	
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	34.3000	PCI/G	34.3000	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	34.2200	PCI/G	34.2200	U	
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	34.1400	PCI/G	34.1400	U	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Plutonium-238	34.0000	PCI/G			
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	33.9600	PCI/G	33.9600	U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	33.9100	PCI/G	33.9100	U	
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	33.8700	PCI/G	33.8700	U	
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	33.8300	PCI/G	33.8300	U	
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	33.1400	PCI/G	33.1400	U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	32.0600	PCI/G	32.0600	U	
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	31.6400	PCI/G	31.6400	U	
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	31.6200	PCI/G	31.6200	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	31.5900	PCI/G	31.5900	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	30.0400	PCI/G	30.0400	U	
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Plutonium-238	30.0400	PCI/G	30.0400	U	
SCR873	19931124	9311241-B	SCRDATA	Borehole	0.00	0.00	Plutonium-238	30.0000	PCI/G			
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	29.8300	PCI/G	29.8300	U	
S1057	19850801	10539	RSS	Surface location	0.00	0.00	Plutonium-238	28.7000	PCI/G	0.0100		
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	28.4000	PCI/G	28.4000	U	
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	28.0000	PCI/G	28.0000	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Plutonium-238	28.0000	PCI/G			
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	27.9100	PCI/G	27.9100	U	
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	27.6300	PCI/G	27.6300	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	27.2500	PCI/G	27.2500	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	27.2300	PCI/G	27.2300	U	
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Plutonium-238	25.8800	PCI/G	25.8800	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	24.5200	PCI/G	24.5200	U	
S1053	19850801	10537	RSS	Surface location	0.00	0.00	Plutonium-238	24.5000	PCI/G	0.0100		
S1056	19850801	10563	RSS	Surface location	0.00	0.00	Plutonium-238	24.4000	PCI/G	0.0100		
S1063	19850801	10542	RSS	Surface location	0.00	0.00	Plutonium-238	24.0000	PCI/G	0.0100		
5S17	19940228	05S17	34896	Surface location	0.00	0.50	Plutonium-238	24.0000	PCI/G	24.0000	U	
18S6	19940222	018S6	34896	Surface location	0.00	1.50	Plutonium-238	24.0000	PCI/G	24.0000	U	
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Plutonium-238	23.9500	PCI/G	23.9500	U	
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	23.8500	PCI/G	23.8500	U	
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	23.7500	PCI/G	23.7500	U	
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	23.5900	PCI/G	23.5900	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	23.4000	PCI/G	0.00447		
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Plutonium-238	23.3300	PCI/G	23.3300	U	
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	23.3000	PCI/G	23.3000	U	
SCR808	19931201	93120112	SCRDATA	Borehole	0.00	0.00	Plutonium-238	23.0000	PCI/G		U	
18S4	19940222	018S4	34896	Surface location	0.00	1.50	Plutonium-238	23.0000	PCI/G	23.0000	U	
18S22	19940222	18S22	34896	Surface location	0.00	1.50	Plutonium-238	23.0000	PCI/G	23.0000	U	
20S22	19940221	20S22	34896	Surface location	0.00	1.50	Plutonium-238	23.0000	PCI/G	23.0000	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	22.7900	PCI/G	22.7900	U	
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	22.6300	PCI/G	22.6300	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	22.6300	PCI/G	22.6300	U	
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Plutonium-238	22.6100	PCI/G	22.6100	U	
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	22.5500	PCI/G	22.5500	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	22.2900	PCI/G	22.2900	U	
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	21.9800	PCI/G	21.9800	U	
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	21.8300	PCI/G	21.8300	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	21.6600	PCI/G	21.6600	U	
SCR926	19921222	9212224	SCRDATA	Borehole	0.00	0.00	Plutonium-238	21.0000	PCI/G		U	
8S15	19940303	08S15	34896	Surface location	0.00	0.50	Plutonium-238	21.0000	PCI/G	21.0000	U	
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	20.5000	PCI/G	20.5000	U	
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	20.3300	PCI/G	20.3300	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	20.1200	PCI/G	20.1200	U	
SCR761	19921224	9212244	SCRDATA	Borehole	0.00	0.00	Plutonium-238	20.0000	PCI/G		U	
5S14	19940228	05S14	34896	Surface location	0.00	0.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
6S15	19940228	06S15	34896	Surface location	0.00	0.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
8S2	19940224	008S2	34896	Surface location	0.00	1.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
14S4	19940222	014S4	34896	Surface location	0.00	1.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
16S4	19940221	016S4	34896	Surface location	0.00	1.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
20S4	19940221	020S4	34896	Surface location	0.00	1.50	Plutonium-238	20.0000	PCI/G	20.0000	U	
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	19.9300	PCI/G	19.9300	U	
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	19.8400	PCI/G	19.8400	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	19.1200	PCI/G	19.1200	U	
SCR752	19921223	92122318	SCRDATA	Borehole	0.00	0.00	Plutonium-238	19.0000	PCI/G		U	
SCR745	19921223	92122320	SCRDATA	Borehole	0.00	0.00	Plutonium-238	19.0000	PCI/G		U	
SCR764	19921223	92122325	SCRDATA	Borehole	0.00	0.00	Plutonium-238	19.0000	PCI/G		U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Plutonium-238	19.0000	PCI/G		U	
4S6	19940224	004S6	34896	Surface location	0.00	1.50	Plutonium-238	19.0000	PCI/G	19.0000	U	
14S8	19940222	014S8	34896	Surface location	0.00	1.50	Plutonium-238	19.0000	PCI/G	19.0000	U	
12S10	19940223	12S10	34896	Surface location	0.00	1.50	Plutonium-238	19.0000	PCI/G	19.0000	U	
16S10	19940222	16S10	34896	Surface location	0.00	1.50	Plutonium-238	19.0000	PCI/G	19.0000	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	18.6800	PCI/G	18.6800	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	18.5100	PCI/G	18.5100	U	
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	18.1300	PCI/G	18.1300	U	
4S17	19940228	04S17	34896	Surface location	0.00	0.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
20S8	19940221	020S8	34896	Surface location	0.00	1.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
16S18	19940222	16S18	34896	Surface location	0.00	1.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
16S20	19940222	16S20	34896	Surface location	0.00	1.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
20S18	19940221	20S18	34896	Surface location	0.00	1.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
24S22	19940221	24S22	34896	Surface location	0.00	1.50	Plutonium-238	18.0000	PCI/G	18.0000	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	17.7100	PCI/G	17.7100	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	17.6000	PCI/G	17.6000	U	
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	17.4900	PCI/G	17.4900	U	
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	17.2600	PCI/G	17.2600	U	
SCR735	19921223	92122323	SCRDATA	Borehole	0.00	0.00	Plutonium-238	17.0000	PCI/G		U	
SCR864	19930429	93042913	SCRDATA	Borehole	0.00	0.00	Plutonium-238	17.0000	PCI/G		U	
SCR797	19930429	93042917	SCRDATA	Borehole	0.00	0.00	Plutonium-238	17.0000	PCI/G		U	
12S4	19940223	012S4	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
18S2	19940222	018S2	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
4S14	19940224	04S14	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
4S16	19940224	04S16	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
10S22	19940221	10S22	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
20S10	19940221	20S10	34896	Surface location	0.00	1.50	Plutonium-238	17.0000	PCI/G	17.0000	U	
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.9500	PCI/G	16.9500	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.9200	PCI/G	16.9200	U	
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.8300	PCI/G	16.8300	U	
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.4900	PCI/G	16.4900	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.3900	PCI/G	16.3900	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.2300	PCI/G	16.2300	U	
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	16.1400	PCI/G	16.1400	U	
SCR773	19921223	92122313	SCRDATA	Borehole	0.00	0.00	Plutonium-238	16.0000	PCI/G		U	
SCR773	19921223	92122314	SCRDATA	Borehole	0.00	0.00	Plutonium-238	16.0000	PCI/G		U	
SCR861	19921228	92122810	SCRDATA	Borehole	0.00	0.00	Plutonium-238	16.0000	PCI/G		U	
SCR872	19921228	92122811	SCRDATA	Borehole	0.00	0.00	Plutonium-238	16.0000	PCI/G		U	
9S15	19940303	09S15	34896	Surface location	0.00	0.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
5S16	19940228	05S16	34896	Surface location	0.00	0.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
8S0	19940222	008S0	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
16S6	19940222	016S6	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
20S0	19940221	020S0	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
8S12	19940224	08S12	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
16S12	19940222	16S12	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
18S24	19940222	18S24	34896	Surface location	0.00	1.50	Plutonium-238	16.0000	PCI/G	16.0000	U	
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	15.8400	PCI/G	15.8400	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	15.4900	PCI/G	15.4900	U	
S1047	19850801	10535	RSS	Surface location	0.00	0.00	Plutonium-238	15.4000	PCI/G	0.0100		
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	15.1700	PCI/G	15.1700	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	15.1600	PCI/G	15.1600	U	
SCR751	19921228	9212283	SCRDATA	Borehole	0.00	0.00	Plutonium-238	15.0000	PCI/G		U	
12S14	19940223	12S14	34896	Surface location	0.00	1.50	Plutonium-238	15.0000	PCI/G	15.0000	U	
16S24	19940222	16S24	34896	Surface location	0.00	1.50	Plutonium-238	15.0000	PCI/G	15.0000	U	
18S12	19940222	18S12	34896	Surface location	0.00	1.50	Plutonium-238	15.0000	PCI/G	15.0000	U	
S1067	19850801	10544	RSS	Surface location	0.00	0.00	Plutonium-238	14.3000	PCI/G	0.0100		
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	14.1200	PCI/G	14.1200	U	
SCR926	19921222	9212225	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR748	19921223	92122315	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR749	19921223	92122319	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR738	19921228	9212281	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR780	19921228	9212287	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR937	19930430	93043024	SCRDATA	Borehole	0.00	0.00	Plutonium-238	14.0000	PCI/G		U	
SCR955	19911008	9110081	SCRDATA	Borehole	0.50	0.50	Plutonium-238	14.0000	PCI/G		U	
SCR955	19911008	9110085	SCRDATA	Borehole	0.50	0.50	Plutonium-238	14.0000	PCI/G		U	
10S2	19940222	010S2	34896	Surface location	0.00	1.50	Plutonium-238	14.0000	PCI/G	14.0000	U	
10S8	19940223	010S8	34896	Surface location	0.00	1.50	Plutonium-238	14.0000	PCI/G	14.0000	U	
14S10	19940222	14S10	34896	Surface location	0.00	1.50	Plutonium-238	14.0000	PCI/G	14.0000	U	
18S20	19940222	18S20	34896	Surface location	0.00	1.50	Plutonium-238	14.0000	PCI/G	14.0000	U	
22S20	19940221	22S20	34896	Surface location	0.00	1.50	Plutonium-238	14.0000	PCI/G	14.0000	U	
SCR751	19921228	9212284	SCRDATA	Borehole	2.00	2.00	Plutonium-238	14.0000	PCI/G		U	
S1079	19850801	10549	RSS	Surface location	0.00	0.00	Plutonium-238	13.8000	PCI/G	0.0100		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	13.6700	PCI/G	13.6700	U	
SCR748	19921223	92122316	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR741	19921223	92122324	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR743	19921228	9212285	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR962	19930429	9304296	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR916	19930429	9304297	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR786	19930430	93043023	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
SCR939	19930430	93043027	SCRDATA	Borehole	0.00	0.00	Plutonium-238	13.0000	PCI/G		U	
10S15	19940303	10S15	34896	Surface location	0.00	0.50	Plutonium-238	13.0000	PCI/G	13.0000	U	
SCR955	19911008	9110082	SCRDATA	Borehole	0.50	0.50	Plutonium-238	13.0000	PCI/G		U	
18S8	19940222	018S8	34896	Surface location	0.00	1.50	Plutonium-238	13.0000	PCI/G	13.0000	U	
6S10	19940224	06S10	34896	Surface location	0.00	1.50	Plutonium-238	13.0000	PCI/G	13.0000	U	
12S24	19940223	12S24	34896	Surface location	0.00	1.50	Plutonium-238	13.0000	PCI/G	13.0000	U	
18S16	19940222	18S16	34896	Surface location	0.00	1.50	Plutonium-238	13.0000	PCI/G	13.0000	U	
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	12.9300	PCI/G	12.9300	U	
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	12.8000	PCI/G	12.8000	U	
SCR955	19911009	9110094	SCRDATA	Borehole	0.00	0.00	Plutonium-238	12.0000	PCI/G		U	
SCR759	19921228	9212286	SCRDATA	Borehole	0.00	0.00	Plutonium-238	12.0000	PCI/G		U	
20S24	19940221	20S24	34896	Surface location	0.00	0.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
4S0	19940221	004S0	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
6S2	19940224	006S2	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
8S6	19940224	008S6	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
16S0	19940222	016S0	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
8S16	19940224	08S16	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
12S18	19940223	12S18	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
14S12	19940223	14S12	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
18S10	19940222	18S10	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	
20S12	19940221	20S12	34896	Surface location	0.00	1.50	Plutonium-238	12.0000	PCI/G	12.0000	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	11.5300	PCI/G	11.5300	U	
S1071	19850801	10570	RSS	Surface location	0.00	0.00	Plutonium-238	11.3000	PCI/G	0.0100		
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	11.2500	PCI/G	11.2500	U	
SCR955	19911009	9110096	SCRDATA	Borehole	0.00	0.00	Plutonium-238	11.0000	PCI/G		U	
SCR895	19930429	9304298	SCRDATA	Borehole	0.00	0.00	Plutonium-238	11.0000	PCI/G		U	
SCR941	19930430	93043028	SCRDATA	Borehole	0.00	0.00	Plutonium-238	11.0000	PCI/G		U	
8S17	19940303	08S17	34896	Surface location	0.00	0.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
4S15	19940228	04S15	34896	Surface location	0.00	0.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
5S15	19940228	05S15	34896	Surface location	0.00	0.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Plutonium-238	11.0000	PCI/G		U	
6S0	19940222	006S0	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
8S8	19940224	008S8	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
10S0	19940222	010S0	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
10S4	19940223	010S4	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
12S8	19940223	012S8	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
14S6	19940222	014S6	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
10S14	19940223	10S14	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
16S22	19940222	16S22	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
22S22	19940221	22S22	34896	Surface location	0.00	1.50	Plutonium-238	11.0000	PCI/G	11.0000	U	
S1052	19850801	10561	RSS	Surface location	0.00	0.00	Plutonium-238	10.6000	PCI/G	0.0100		
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	10.3500	PCI/G	10.3500	U	
SCR711	19921228	9212289	SCRDATA	Borehole	0.00	0.00	Plutonium-238	10.0000	PCI/G		U	
SCR843	19930429	93042914	SCRDATA	Borehole	0.00	0.00	Plutonium-238	10.0000	PCI/G		U	
9S16	19940303	09S16	34896	Surface location	0.00	0.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
11S17	19940303	11S17	34896	Surface location	0.00	0.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Plutonium-238	10.0000	PCI/G		U	
SCR955	19911008	9110083	SCRDATA	Borehole	0.50	0.50	Plutonium-238	10.0000	PCI/G		U	
SCR955	19911008	9110087	SCRDATA	Borehole	0.50	0.50	Plutonium-238	10.0000	PCI/G		U	
4S8	19940224	004S8	34896	Surface location	0.00	1.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
14S2	19940222	014S2	34896	Surface location	0.00	1.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
16S2	19940222	016S2	34896	Surface location	0.00	1.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
10S10	19940223	10S10	34896	Surface location	0.00	1.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
20S20	19940221	20S20	34896	Surface location	0.00	1.50	Plutonium-238	10.0000	PCI/G	10.0000	U	
SCR755	19921228	9212288	SCRDATA	Borehole	2.00	2.00	Plutonium-238	10.0000	PCI/G		U	
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	9.8800	PCI/G	9.8800	U	
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	9.3900	PCI/G	9.3900	U	
SCR955	19911009	9110095	SCRDATA	Borehole	0.00	0.00	Plutonium-238	9.0000	PCI/G		U	
9S17	19940303	09S17	34896	Surface location	0.00	0.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
6S4	19940224	006S4	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
6S8	19940224	006S8	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
8S20	19940224	08S20	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
12S20	19940223	12S20	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
12S22	19940223	12S22	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
14S16	19940223	14S16	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
14S24	19940223	14S24	34896	Surface location	0.00	1.50	Plutonium-238	9.0000	PCI/G	9.0000	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	8.8400	PCI/G	8.8400	U	
SCR753	19921223	92122317	SCRDATA	Borehole	0.00	0.00	Plutonium-238	8.0000	PCI/G		U	
7S15	19940303	07S15	34896	Surface location	0.00	0.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
8S4	19940224	008S4	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
10S6	19940223	010S6	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
16S8	19940222	016S8	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
20S6	19940221	020S6	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
12S12	19940223	12S12	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
12S16	19940223	12S16	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
18S14	19940222	18S14	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
18S18	19940222	18S18	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
20S16	19940221	20S16	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
22S18	19940224	22S18	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
23S20	19940221	23S20	34896	Surface location	0.00	1.50	Plutonium-238	8.0000	PCI/G	8.0000	U	
SCR944	19930430	93043030	SCRDATA	Borehole	0.00	0.00	Plutonium-238	7.0000	PCI/G		U	
10S17	19940303	10S17	34896	Surface location	0.00	0.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
4S2	19940224	004S2	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
12S6	19940223	012S6	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
6S14	19940224	06S14	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
8S14	19940224	08S14	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
10S12	19940221	10S12	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
10S16	19940223	10S16	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
10S18	19940223	10S18	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
14S18	19940223	14S18	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
14S20	19940223	14S20	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
16S14	19940222	16S14	34896	Surface location	0.00	1.50	Plutonium-238	7.0000	PCI/G	7.0000	U	
S1068	19850801	10569	RSS	Surface location	0.00	0.00	Plutonium-238	6.1900	PCI/G	0.0100		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
SCR885	19930429	9304299	SCRDATA	Borehole	0.00	0.00	Plutonium-238	6.0000	PCI/G		U	
7S16	19940303	07S16	34896	Surface location	0.00	0.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
11S15	19940303	11S15	34896	Surface location	0.00	0.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
11S16	19940303	11S16	34896	Surface location	0.00	0.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
12S0	19940222	012S0	34896	Surface location	0.00	1.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
12S2	19940222	012S2	34896	Surface location	0.00	1.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
4S10	19940224	04S10	34896	Surface location	0.00	1.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
4S18	19940224	04S18	34896	Surface location	0.00	1.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
8S18	19940224	08S18	34896	Surface location	0.00	1.50	Plutonium-238	6.0000	PCI/G	6.0000	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	5.4200	PCI/G	5.4200	U	
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	5.1300	PCI/G	5.1300	U	
SCR885	19930429	93042910	SCRDATA	Borehole	0.00	0.00	Plutonium-238	5.0000	PCI/G		U	
SCR864	19930429	93042912	SCRDATA	Borehole	0.00	0.00	Plutonium-238	5.0000	PCI/G		U	
14S22	19940223	14S22	34896	Surface location	0.00	1.50	Plutonium-238	5.0000	PCI/G	5.0000	U	
S1065	19850801	10544	RSS	Surface location	0.00	0.00	Plutonium-238	4.7200	PCI/G	0.0100		
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Plutonium-238	4.0510	PCI/G	0.0060		
SCR938	19930430	93043026	SCRDATA	Borehole	0.00	0.00	Plutonium-238	4.0000	PCI/G		U	
4S4	19940224	004S4	34896	Surface location	0.00	1.50	Plutonium-238	4.0000	PCI/G	4.0000	U	
6S6	19940224	006S6	34896	Surface location	0.00	1.50	Plutonium-238	4.0000	PCI/G	4.0000	U	
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	3.2200	PCI/G	3.2200	U	
S1054	19850801	10562	RSS	Surface location	0.00	0.00	Plutonium-238	3.0200	PCI/G	0.0100		
4S12	19940224	04S12	34896	Surface location	0.00	1.50	Plutonium-238	3.0000	PCI/G	3.0000	U	
10S20	19940223	10S20	34896	Surface location	0.00	1.50	Plutonium-238	3.0000	PCI/G	3.0000	U	
S1073	19850801	10571	RSS	Surface location	0.00	0.00	Plutonium-238	2.5000	PCI/G	0.0100		
S1059	19850801	10540	RSS	Surface location	0.00	0.00	Plutonium-238	2.2000	PCI/G	0.0100		
S1058	19850801	10564	RSS	Surface location	0.00	0.00	Plutonium-238	2.2400	PCI/G	0.0100		
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Plutonium-238	2.1970	PCI/G	0.0170		
S1060	19850801	10565	RSS	Surface location	0.00	0.00	Plutonium-238	2.1000	PCI/G	0.0100		
SCR823	19930429	93042915	SCRDATA	Borehole	0.00	0.00	Plutonium-238	2.0000	PCI/G		U	
8S10	19940224	08S10	34896	Surface location	0.00	1.50	Plutonium-238	2.0000	PCI/G	2.0000	U	
10S24	19940223	10S24	34896	Surface location	0.00	1.50	Plutonium-238	2.0000	PCI/G	2.0000	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	1.7000	PCI/G	0.00495		
S1078	19850801	10548	RSS	Surface location	0.00	0.00	Plutonium-238	1.5800	PCI/G	0.0100		
S1055	19850801	10538	RSS	Surface location	0.00	0.00	Plutonium-238	1.3700	PCI/G	0.0100		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Plutonium-238	1.2380	PCI/G	0.0160		
S1077	19850801	10573	RSS	Surface location	0.00	0.00	Plutonium-238	1.1600	PCI/G	0.0100		
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	1.0800	PCI/G	0.00432		
S1051	19850801	10536	RSS	Surface location	0.00	0.00	Plutonium-238	1.0800	PCI/G	0.0100		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Plutonium-238	1.0260	PCI/G	0.0060		
SCR878	19930429	93042911	SCRDATA	Borehole	0.00	0.00	Plutonium-238	1.0000	PCI/G		U	
14S0	19940222	014S0	34896	Surface location	0.00	1.50	Plutonium-238	1.0000	PCI/G	1.0000	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.9260	PCI/G	0.0070		
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.8220	PCI/G	0.0060		
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.7160	PCI/G	0.0200		
S1076	19850801	10572	RSS	Surface location	0.00	0.00	Plutonium-238	0.6700	PCI/G	0.0100		
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.6020	PCI/G	0.0170		
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.5340	PCI/G	0.0060		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.4860	PCI/G	0.0180		
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.4730	PCI/G	0.0190		
GJ	19940414	RGJ303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.4680	PCI/G			
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Plutonium-238	0.4460	PCI/G	0.0070		
S1074	19850801	10547	RSS	Surface location	0.00	0.00	Plutonium-238	0.4400	PCI/G	0.0100		
S1062	19850801	10566	RSS	Surface location	0.00	0.00	Plutonium-238	0.3700	PCI/G	0.0100		
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.3370	PCI/G	0.0160		
S1064	19850801	10567	RSS	Surface location	0.00	0.00	Plutonium-238	0.3300	PCI/G	0.0100		
S1070	19850801	10545	RSS	Surface location	0.00	0.00	Plutonium-238	0.2800	PCI/G	0.0100		
S1083	19850801	10576	RSS	Surface location	0.00	0.00	Plutonium-238	0.2800	PCI/G	0.0100		
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.2790	PCI/G	0.0060		
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.2720	PCI/G			
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.2430	PCI/G	0.00506		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.2370	PCI/G	0.00310		
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.2240	PCI/G			J
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.2040	PCI/G	0.00608		
S1082	19850801	10550	RSS	Surface location	0.00	0.00	Plutonium-238	0.2000	PCI/G	0.0100		
S1081	19850801	10575	RSS	Surface location	0.00	0.00	Plutonium-238	0.2000	PCI/G	0.0100		
HJ	19940414	RHJ303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.2000	PCI/G			
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Plutonium-238	0.1970	PCI/G	0.0190		
S1086	19850801	10552	RSS	Surface location	0.00	0.00	Plutonium-238	0.1800	PCI/G	0.0100		
S1061	19850801	10541	RSS	Surface location	0.00	0.00	Plutonium-238	0.1700	PCI/G	0.0100		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.1560	PCI/G	0.00168		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Plutonium-238	0.1500	PCI/G			J
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.1330	PCI/G	0.00308		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
S1085	19850801	10577	RSS	Surface location	0.00	0.00	Plutonium-238	0.1300	PCI/G	0.0100		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Plutonium-238	0.1300	PCI/G	0.0050		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.1230	PCI/G	0.00229		
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Plutonium-238	0.1100	PCI/G	0.0060		
S1084	19850801	10551	RSS	Surface location	0.00	0.00	Plutonium-238	0.1000	PCI/G	0.0100		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.1000	PCI/G			
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Plutonium-238	0.1000	PCI/G	0.0060		
EK	19940517	REK303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.0825	PCI/G			J
S1080	19850801	10574	RSS	Surface location	0.00	0.00	Plutonium-238	0.0800	PCI/G	0.0100		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.0800	PCI/G			
HK	19940517	RHK303	04-2768	Borehole	0.00	2.00	Plutonium-238	0.0772	PCI/G			J
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.0640	PCI/G			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Plutonium-238	0.0600	PCI/G	0.0600	U	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.0510	PCI/G			
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-238	0.0445	PCI/G	0.00236		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.0400	PCI/G			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Plutonium-238	0.0300	PCI/G	0.0300	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Plutonium-238	0.0300	PCI/G			J
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Plutonium-238	0.0300	PCI/G		U	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Plutonium-238	0.0200	PCI/G	0.0200	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Plutonium-238	0.0200	PCI/G	0.0200	U	UJ
C0240	19830901	2501	RSS	Borehole	1.50	1.50	Plutonium-238	0.0200	PCI/G	0.0100		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Plutonium-239	0.0180	PCI/G	0.0180	U	
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Plutonium-239	0.0160	PCI/G	0.0160	U	
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Plutonium-239	0.0150	PCI/G	0.0200		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Plutonium-239	0.0110	PCI/G	0.0050		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Plutonium-239	0.0100	PCI/G	0.0060		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.1920	PCI/G	0.00367		
GJ	19940414	RGJ303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0909	PCI/G	0.0909	ND/M	U
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0832	PCI/G			
HK	19940517	RHK303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0386	PCI/G			J
B408	19940616	B40811	34897	Borehole	0.00	0.50	Plutonium-239/240	0.0300	PCI/G	0.0300	U	UJ
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0300	PCI/G		U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0270	PCI/G		U	
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0229	PCI/G	0.00506		
HJ	19940414	RHJ303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0217	PCI/G			
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0200	PCI/G		U	
EK	19940517	REK303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0191	PCI/G			J
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0182	PCI/G	0.00298		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0150	PCI/G		U	
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0134	PCI/G	0.0134	ND	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0130	PCI/G		U	
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0120	PCI/G	0.00229		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0118	PCI/G	0.00310		
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0115	PCI/G	0.00195		
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Plutonium-239/240	0.0110	PCI/G		U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Plutonium-239/240	0.0100	PCI/G	0.0100	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Plutonium-239/240	0.0100	PCI/G	0.0100	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Plutonium-239/240	0.0100	PCI/G	0.0100	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Plutonium-239/240	0.0100	PCI/G	0.0100	U	UJ
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0071	PCI/G			
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0070	PCI/G	0.00313		
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0068	PCI/G			
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0039	PCI/G	0.00374		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0035	PCI/G	0.00350	U	
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Plutonium-239/240	0.0031	PCI/G	0.0031	ND	UJ
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Plutonium-239/240	0.0024	PCI/G	0.00236	U	
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	35.0000	PCI/G		U	
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	12.0000	PCI/G		U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	12.0000	PCI/G		U	
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	11.0000	PCI/G		U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	9.9000	PCI/G		U	
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Plutonium-241	8.8000	PCI/G		U	
HJ	19940414	RHJ303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0399	PCI/G	0.0399	ND/M	U
GJ	19940414	RGJ303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0334	PCI/G	0.0334	ND/M	U
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0300	PCI/G		U	
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0270	PCI/G		U	
EK	19940517	REK303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0234	PCI/G	0.0234	NDM	UJ

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0216	PCI/G	0.0216	ND	U
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0205	PCI/G	0.0205	ND/M	U
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0200	PCI/G		U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0150	PCI/G		U	
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0140	PCI/G	0.0140	ND	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0130	PCI/G		U	
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Plutonium-242	0.0110	PCI/G		U	
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0084	PCI/G	0.0084	ND	U
HK	19940517	RHK303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0080	PCI/G	0.0080	ND	UJ
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Plutonium-242	0.0031	PCI/G	0.0031	ND	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Potassium-40	34.4600	PCI/G			
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	31.9000	PCI/G	3.0000		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	29.9000	PCI/G	0.7860		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	27.2000	PCI/G	0.5300		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	26.9000	PCI/G	0.5190		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	26.5000	PCI/G	0.6730		
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	25.1000	PCI/G	0.3400		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	23.8000	PCI/G	0.4960		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Potassium-40	22.4700	PCI/G			
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	18.3000	PCI/G	0.4570		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Potassium-40	17.8200	PCI/G			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Potassium-40	16.6100	PCI/G			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Potassium-40	16.4500	PCI/G			
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	16.0000	PCI/G	0.3950		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Potassium-40	15.5800	PCI/G			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Potassium-40	14.6900	PCI/G			
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Potassium-40	12.5000	PCI/G	0.3400		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Radium-226	3.2600	PCI/G	1.3300		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Radium-226	3.0300	PCI/G	0.9200		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Radium-226	2.9300	PCI/G	0.9300		
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Radium-226	2.9200	PCI/G	0.3500		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Radium-226	2.7800	PCI/G	0.3900		
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Radium-226	2.7600	PCI/G	0.7100		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Radium-226	2.7400	PCI/G	0.4300		
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Radium-226	2.7200	PCI/G	0.3200		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Radium-226	2.7100	PCI/G	0.2700		
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Radium-226	2.5400	PCI/G	0.8000		
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Radium-226	2.5000	PCI/G	0.7100		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Radium-226	2.4800	PCI/G	0.4700		
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Radium-226	2.4400	PCI/G	0.4600		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Radium-226	2.3000	PCI/G	0.3100		
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Radium-226	2.2400	PCI/G	0.4000		
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Radium-226	2.1400	PCI/G	0.2900		
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Radium-226	2.1100	PCI/G	0.3200		
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Radium-226	2.1000	PCI/G	1.6900		
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Radium-226	2.0900	PCI/G	0.3700		
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Radium-226	2.0700	PCI/G	0.3000		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Radium-226	1.9600	PCI/G	1.4300		
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.8100	PCI/G	1.2400		
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.8000	PCI/G	0.7100		
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.8000	PCI/G	0.7500		
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Radium-226	1.7800	PCI/G	0.4900		
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Radium-226	1.7600	PCI/G	0.7900		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.7500	PCI/G	0.6000		
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.7400	PCI/G	1.3500		
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.7400	PCI/G	1.4300		
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.7300	PCI/G	0.2900		
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.6900	PCI/G	0.8900		
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.6800	PCI/G	0.9400		
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.6800	PCI/G	1.5500		
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.6600	PCI/G	1.0700		
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Radium-226	1.6500	PCI/G	0.4300		
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.6200	PCI/G	1.6200	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5900	PCI/G	1.3700		
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5800	PCI/G	1.5800	U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5700	PCI/G	1.5700	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5700	PCI/G	1.3200		
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5700	PCI/G	1.5700	U	
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5400	PCI/G	1.0500		
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5400	PCI/G	1.5400	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5300	PCI/G	0.7100		
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5200	PCI/G	1.5200	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5100	PCI/G	1.5100	U	
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5100	PCI/G	1.5100	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.5000	PCI/G	0.9800		
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4900	PCI/G	1.4900	U	
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4900	PCI/G	1.1900		
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4700	PCI/G	1.3000		
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4700	PCI/G	1.4700	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4300	PCI/G	0.5700		
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4200	PCI/G	1.3000		
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4200	PCI/G	0.9000		
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4200	PCI/G	1.1500		
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Radium-226	1.4200	PCI/G	0.3300		
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4100	PCI/G	1.4100	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4100	PCI/G	0.9900		
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.4100	PCI/G	1.4100	U	
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3800	PCI/G	1.3800	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3600	PCI/G	1.3600	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3500	PCI/G	0.8900		
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3500	PCI/G	1.3500	U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3500	PCI/G	1.3500	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3400	PCI/G	0.9900		
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3200	PCI/G	1.3200	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3200	PCI/G	0.9000		
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3100	PCI/G	0.9300		
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3100	PCI/G	1.3100	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.3000	PCI/G	0.3900		
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2900	PCI/G	1.2200		
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2800	PCI/G	1.1900		
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2800	PCI/G	1.1700		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2700	PCI/G	0.1160		
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2600	PCI/G	0.4400		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2600	PCI/G	0.1450		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2400	PCI/G	0.1010		
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2400	PCI/G	1.2400	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2200	PCI/G	1.2200	U	
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2200	PCI/G	1.2200	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2200	PCI/G	1.2200	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2200	PCI/G	1.2200	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2000	PCI/G	1.2000	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.2000	PCI/G	1.0000		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1900	PCI/G	0.1100		
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1900	PCI/G	1.1900	U	
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1800	PCI/G	0.0910		
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1600	PCI/G	1.1600	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1600	PCI/G	1.1600	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1500	PCI/G	0.9800		
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1500	PCI/G	0.9700		
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1200	PCI/G	1.1200	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1100	PCI/G	0.1030		
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1000	PCI/G	0.9000		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.1000	PCI/G	0.1890		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Radium-226	1.1000	PCI/G			
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.0800	PCI/G	1.0800	U	
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.0700	PCI/G	0.0885		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.0700	PCI/G	0.1310		
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.0500	PCI/G	1.0500	U	
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	1.0300	PCI/G	0.0668		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Radium-226	1.0100	PCI/G			
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9900	PCI/G	0.6000		
B408	19940616	B40801	34897	Borehole	0.00	0.50	Radium-226	0.9700	PCI/G			
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9600	PCI/G	0.9600	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9500	PCI/G	0.2900		
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9500	PCI/G	0.9500	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Radium-226	0.9500	PCI/G			
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9200	PCI/G	0.9200	U	
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9100	PCI/G	0.9100	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9000	PCI/G	0.8700		
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.9000	PCI/G	0.8300		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Radium-226	0.8900	PCI/G			
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.8700	PCI/G	0.8700	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.8400	PCI/G	0.4200		
B401	19940614	B40101	34897	Borehole	0.00	0.50	Radium-226	0.8400	PCI/G			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Radium-226	0.8200	PCI/G			
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.8000	PCI/G	0.5100		
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.7900	PCI/G	0.3600		
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.7600	PCI/G	0.4500		
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.6600	PCI/G	0.2000		
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Radium-226	0.6400	PCI/G	0.2400		
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Radium-226	0.3700	PCI/G	0.3700	U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	2.5700	PCI/G	0.2440		
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.9900	PCI/G	0.3400		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.7200	PCI/G	0.2960		
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.4300	PCI/G	0.1760		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.3600	PCI/G	0.2560		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.2300	PCI/G	0.2150		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.1600	PCI/G	0.2810		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	1.0500	PCI/G	0.2000		
004650	20000725	004650DUP	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	0.9480	PCI/G	0.1730		
004641	20000725	004641	P4P5BOUND	Surface Location	0.0	0.0	Radium-228	0.6360	PCI/G	0.2560		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	3.4000	PCI/G		U	
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	2.5000	PCI/G		U	
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	2.4000	PCI/G		U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	2.4000	PCI/G		U	
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	2.1000	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Strontium-90	1.1000	PCI/G		U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Strontium-90	0.1500	PCI/G	0.1500	U	U
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	1.6600	PCI/G	0.0611		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Thorium-228	1.6400	PCI/G			J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Thorium-228	1.3600	PCI/G			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Thorium-228	1.3600	PCI/G			J
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	1.3000	PCI/G	0.0275		
B408	19940616	B40801	34897	Borehole	0.00	0.50	Thorium-228	1.2900	PCI/G	1.2900		UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Thorium-228	1.2100	PCI/G			
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Thorium-228	1.2100	PCI/G			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Thorium-228	1.2000	PCI/G			J
B408	19940616	B40811	34897	Borehole	0.00	0.50	Thorium-228	1.0700	PCI/G	1.0700		UJ
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Thorium-228	1.0700	PCI/G			
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Thorium-228	1.0200	PCI/G			
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	1.0000	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	1.0000	PCI/G			
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Thorium-228	0.9780	PCI/G			
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.9440	PCI/G	0.0418		
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Thorium-228	0.9190	PCI/G	0.0260		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.9120	PCI/G	0.0526		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.8940	PCI/G	0.0855		
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Thorium-228	0.8670	PCI/G	0.0330		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	0.8600	PCI/G			
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Thorium-228	0.8390	PCI/G	0.0250		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Thorium-228	0.7890	PCI/G	0.0110		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.7450	PCI/G	0.0648		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	0.7300	PCI/G			
004641	20000725	004641DUP	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.7000	PCI/G	0.0210		
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	0.6900	PCI/G			
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.6890	PCI/G	0.0612		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.6890	PCI/G	0.0507		
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Thorium-228	0.6690	PCI/G	0.0710		
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Thorium-228	0.6380	PCI/G		CJ	J
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Thorium-228	0.6380	PCI/G	0.0340		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Thorium-228	0.6200	PCI/G			
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	16.7900	PCI/G	16.7900	U	
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	16.1200	PCI/G	16.1200	U	
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	15.4500	PCI/G	15.4500	U	
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	15.3300	PCI/G	15.3300	U	
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	15.2500	PCI/G	15.2500	U	
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	14.8900	PCI/G	14.8900	U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	14.7600	PCI/G	14.7600	U	
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	14.5700	PCI/G	14.5700	U	
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	14.1600	PCI/G	14.1600	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.8900	PCI/G	13.8900	U	
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.8200	PCI/G	13.8200	U	
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.6800	PCI/G	13.6800	U	
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.5600	PCI/G	13.5600	U	
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.5200	PCI/G	13.5200	U	
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.3400	PCI/G	13.3400	U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	13.3100	PCI/G	13.3100	U	
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.8100	PCI/G	12.8100	U	
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.7900	PCI/G	12.7900	U	
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.7300	PCI/G	12.7300	U	
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.6700	PCI/G	12.6700	U	
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.6000	PCI/G	12.6000	U	
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.4800	PCI/G	12.4800	U	
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.4400	PCI/G	12.4400	U	
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.2100	PCI/G	12.2100	U	
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.1600	PCI/G	12.1600	U	
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.1500	PCI/G	12.1500	U	
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.0600	PCI/G	12.0600	U	
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	12.0100	PCI/G	12.0100	U	
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	11.6900	PCI/G	11.6900	U	
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	11.6700	PCI/G	11.6700	U	
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	11.4500	PCI/G	11.4500	U	
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	11.2100	PCI/G	11.2100	U	
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	11.0600	PCI/G	11.0600	U	
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.9900	PCI/G	10.9900	U	
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.9900	PCI/G	10.9900	U	
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.9800	PCI/G	10.9800	U	
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.8200	PCI/G	10.8200	U	
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.6900	PCI/G	10.6900	U	
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.5800	PCI/G	10.5800	U	
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.5500	PCI/G	10.5500	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.3900	PCI/G	10.3900	U	
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.1600	PCI/G	10.1600	U	
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	10.0400	PCI/G	10.0400	U	
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	9.6900	PCI/G	9.6900	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	9.5600	PCI/G	9.5600	U	
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	9.4100	PCI/G	9.4100	U	
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	9.2400	PCI/G	9.2400	U	
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	8.8500	PCI/G	8.8500	U	
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	8.6600	PCI/G	8.6600	U	
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Thorium-230	8.0900	PCI/G	8.0900	U	
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	8.0800	PCI/G	8.0800	U	
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.9400	PCI/G	7.9400	U	
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.8300	PCI/G	7.8300	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.8200	PCI/G	7.8200	U	
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.7600	PCI/G	7.7600	U	
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.6600	PCI/G	7.6600	U	
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Thorium-230	7.6600	PCI/G	7.6600	U	
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.4600	PCI/G	7.4600	U	
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Thorium-230	7.4600	PCI/G	7.4600	U	
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.3500	PCI/G	7.3500	U	
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.3500	PCI/G	7.3500	U	
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.3100	PCI/G	7.3100	U	
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.3000	PCI/G	7.3000	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.2600	PCI/G	7.2600	U	
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.2300	PCI/G	7.2300	U	
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.2200	PCI/G	7.2200	U	
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.1900	PCI/G	7.1900	U	
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	7.1800	PCI/G	7.1800	U	
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Thorium-230	7.1600	PCI/G	7.1600	U	
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	6.8200	PCI/G	6.8200	U	
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	6.7200	PCI/G	6.7200	U	
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	6.5100	PCI/G	6.5100	U	
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	6.4500	PCI/G	6.4500	U	
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	5.9500	PCI/G	5.9500	U	
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	4.9400	PCI/G	4.9400	U	
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	4.7200	PCI/G	4.7200	U	
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	4.7100	PCI/G	4.7100	U	
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Thorium-230	4.5900	PCI/G	4.5900	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Thorium-230	4.5000	PCI/G	4.5000	U	
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Thorium-230	4.3000	PCI/G	4.3000	U	
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	4.2400	PCI/G	4.2400	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Thorium-230	4.1100	PCI/G	4.1100	U	
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Thorium-230	3.8900	PCI/G	3.8900	U	
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Thorium-230	3.7000	PCI/G	3.7000	U	
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	3.6400	PCI/G	3.6400	U	
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Thorium-230	3.6100	PCI/G	3.6100	U	
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	3.5800	PCI/G	3.5800	U	
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	3.4900	PCI/G	3.4900	U	
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	3.2900	PCI/G	3.2900	U	
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.9200	PCI/G	2.9200	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.6900	PCI/G	2.2400		
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.6800	PCI/G	2.4100		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.5500	PCI/G	2.5500	U	
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.4900	PCI/G	2.4900	U	
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.4200	PCI/G	2.4200	U	
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	2.3800	PCI/G	2.3800	U	
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	2.3600	PCI/G	2.3600	U	
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Thorium-230	2.3200	PCI/G	2.3200	U	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Thorium-230	1.9100	PCI/G			J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Thorium-230	1.5800	PCI/G			
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Thorium-230	1.5700	PCI/G		CJ	J
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Thorium-230	1.4700	PCI/G			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Thorium-230	1.4600	PCI/G			J
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	1.3700	PCI/G	1.3700	U	
004641	20000725	004641DUP	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	1.3300	PCI/G	0.0139		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Thorium-230	1.3300	PCI/G			J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Thorium-230	1.3200	PCI/G			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Thorium-230	1.2300	PCI/G			J
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	1.2000	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	1.2000	PCI/G			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Thorium-230	1.1800	PCI/G			J
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Thorium-230	1.1380	PCI/G	0.0260		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Thorium-230	1.1310	PCI/G	0.0110		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	1.1000	PCI/G			
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Thorium-230	1.0470	PCI/G	0.0090		
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	1.0200	PCI/G	0.0367		
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Thorium-230	1.0200	PCI/G			
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Thorium-230	1.0020	PCI/G	0.0090		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Thorium-230	0.9690	PCI/G	0.0340		
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.8590	PCI/G	0.0208		
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Thorium-230	0.8510	PCI/G		CJ	J
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	0.8000	PCI/G			
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	0.7700	PCI/G			
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.7310	PCI/G	0.0324		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.6600	PCI/G	0.0386		
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.6560	PCI/G	0.0362		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Thorium-230	0.6500	PCI/G			
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.6370	PCI/G	0.0302		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.5050	PCI/G	0.0452		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.4850	PCI/G	0.0321		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Thorium-230	0.4680	PCI/G	0.0181		
S1049	19850801	10560	RSS	Surface location	0.00	0.00	Thorium-232	5.6000	PCI/G	2.0000		
SCR955	19911008	9110086	SCRDATA	Borehole	0.50	0.50	Thorium-232	3.6000	PCI/G			
12S14	19940223	12S14	34896	Surface location	0.00	1.50	Thorium-232	2.1000	PCI/G			
S1047	19850801	10535	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1051	19850801	10536	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1053	19850801	10537	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1055	19850801	10538	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1057	19850801	10539	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1059	19850801	10540	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1061	19850801	10541	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1063	19850801	10542	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1065	19850801	10544	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1067	19850801	10544	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1070	19850801	10545	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1072	19850801	10546	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1074	19850801	10547	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1078	19850801	10548	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1079	19850801	10549	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1082	19850801	10550	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1084	19850801	10551	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1086	19850801	10552	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
S1052	19850801	10561	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1054	19850801	10562	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1056	19850801	10563	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1058	19850801	10564	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1060	19850801	10565	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1062	19850801	10566	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1064	19850801	10567	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1066	19850801	10568	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1068	19850801	10569	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1071	19850801	10570	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1073	19850801	10571	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1076	19850801	10572	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1077	19850801	10573	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1080	19850801	10574	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1081	19850801	10575	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1083	19850801	10576	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
S1085	19850801	10577	RSS	Surface location	0.00	0.00	Thorium-232	2.0000	PCI/G	2.0000	U	
C0240	19830901	2501	RSS	Borehole	1.50	1.50	Thorium-232	2.0000	PCI/G	2.0000	U	
SCR773	19921223	92122314	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.9000	PCI/G		U	
16S4	19940221	016S4	34896	Surface location	0.00	1.50	Thorium-232	1.8000	PCI/G	1.8000	U	
7S15	19940303	07S15	34896	Surface location	0.00	0.50	Thorium-232	1.7000	PCI/G	1.7000	U	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Thorium-232	1.7000	PCI/G		U	
10S6	19940223	010S6	34896	Surface location	0.00	1.50	Thorium-232	1.7000	PCI/G	1.7000	U	
10S8	19940223	010S8	34896	Surface location	0.00	1.50	Thorium-232	1.7000	PCI/G	1.7000	U	
20S16	19940221	20S16	34896	Surface location	0.00	1.50	Thorium-232	1.7000	PCI/G	1.7000	U	
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.6300	PCI/G	0.0244		
SCR955	19911009	9110094	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.6000	PCI/G		U	
SCR745	19921223	92122320	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.6000	PCI/G		U	
8S15	19940303	08S15	34896	Surface location	0.00	0.50	Thorium-232	1.6000	PCI/G	1.6000	U	
11S16	19940303	11S16	34896	Surface location	0.00	0.50	Thorium-232	1.6000	PCI/G	1.6000	U	
11S17	19940303	11S17	34896	Surface location	0.00	0.50	Thorium-232	1.6000	PCI/G	1.6000	U	
24S22	19940221	24S22	34896	Surface location	0.00	1.50	Thorium-232	1.6000	PCI/G	1.6000	U	
SCR749	19921223	92122319	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.5000	PCI/G		U	
9S15	19940303	09S15	34896	Surface location	0.00	0.50	Thorium-232	1.5000	PCI/G	1.5000	U	
10S17	19940303	10S17	34896	Surface location	0.00	0.50	Thorium-232	1.5000	PCI/G	1.5000	U	
20S4	19940221	020S4	34896	Surface location	0.00	1.50	Thorium-232	1.5000	PCI/G	1.5000	U	
10S14	19940223	10S14	34896	Surface location	0.00	1.50	Thorium-232	1.5000	PCI/G	1.5000	U	
SCR741	19921223	92122324	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.4000	PCI/G		U	
SCR829	19930803	93080314	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.4000	PCI/G		U	
7S16	19940303	07S16	34896	Surface location	0.00	0.50	Thorium-232	1.4000	PCI/G	1.4000	U	
9S16	19940303	09S16	34896	Surface location	0.00	0.50	Thorium-232	1.4000	PCI/G	1.4000	U	
5S14	19940228	05S14	34896	Surface location	0.00	0.50	Thorium-232	1.4000	PCI/G	1.4000	U	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Thorium-232	1.4000	PCI/G		U	
12S6	19940223	012S6	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
12S8	19940223	012S8	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
18S4	19940222	018S4	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
14S22	19940223	14S22	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
20S14	19940221	20S14	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
20S20	19940221	20S20	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
20S22	19940221	20S22	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
22S22	19940221	22S22	34896	Surface location	0.00	1.50	Thorium-232	1.4000	PCI/G	1.4000	U	
SCR955	19911009	9110096	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.3000	PCI/G		U	
SCR926	19921222	9212225	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.3000	PCI/G		U	
SCR748	19921223	92122315	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.3000	PCI/G		U	
SCR751	19921228	9212283	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.3000	PCI/G		U	
SCR885	19930429	93042910	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.3000	PCI/G		U	
8S17	19940303	08S17	34896	Surface location	0.00	0.50	Thorium-232	1.3000	PCI/G	1.3000	U	
10S15	19940303	10S15	34896	Surface location	0.00	0.50	Thorium-232	1.3000	PCI/G	1.3000	U	
4S17	19940228	04S17	34896	Surface location	0.00	0.50	Thorium-232	1.3000	PCI/G	1.3000	U	
5S16	19940228	05S16	34896	Surface location	0.00	0.50	Thorium-232	1.3000	PCI/G	1.3000	U	
20S24	19940221	20S24	34896	Surface location	0.00	0.50	Thorium-232	1.3000	PCI/G	1.3000	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Thorium-232	1.3000	PCI/G		U	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Thorium-232	1.3000	PCI/G		U	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Thorium-232	1.3000	PCI/G			
SCR955	19911008	9110081	SCRDATA	Borehole	0.50	0.50	Thorium-232	1.3000	PCI/G		U	
SCR955	19911008	9110082	SCRDATA	Borehole	0.50	0.50	Thorium-232	1.3000	PCI/G		U	
SCR955	19911008	9110085	SCRDATA	Borehole	0.50	0.50	Thorium-232	1.3000	PCI/G		U	
8S2	19940224	008S2	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
10S0	19940222	010S0	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
16S8	19940222	016S8	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
18S8	19940222	018S8	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
20S8	19940221	020S8	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
4S14	19940224	04S14	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
6S14	19940224	06S14	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
8S10	19940224	08S10	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
10S12	19940221	10S12	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
14S10	19940222	14S10	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
18S16	19940222	18S16	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
18S18	19940222	18S18	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
20S10	19940221	20S10	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
20S12	19940221	20S12	34896	Surface location	0.00	1.50	Thorium-232	1.3000	PCI/G	1.3000	U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Thorium-232	1.2800	PCI/G			J
004719	20000713	004719	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.2100	PCI/G	0.2400		
SCR955	19911009	9110095	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.2000	PCI/G		U	
SCR748	19921223	92122316	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.2000	PCI/G		U	
SCR735	19921223	92122323	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.2000	PCI/G		U	
SCR761	19921224	9212244	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.2000	PCI/G		U	
SCR759	19921228	9212286	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.2000	PCI/G		U	
9S17	19940303	09S17	34896	Surface location	0.00	0.50	Thorium-232	1.2000	PCI/G	1.2000	U	
5S17	19940228	05S17	34896	Surface location	0.00	0.50	Thorium-232	1.2000	PCI/G	1.2000	U	
6S15	19940228	06S15	34896	Surface location	0.00	0.50	Thorium-232	1.2000	PCI/G	1.2000	U	
SCR955	19911008	9110083	SCRDATA	Borehole	0.50	0.50	Thorium-232	1.2000	PCI/G		U	
SCR955	19911008	9110087	SCRDATA	Borehole	0.50	0.50	Thorium-232	1.2000	PCI/G		U	
6S8	19940224	006S8	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
8S6	19940224	008S6	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
10S2	19940222	010S2	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
12S0	19940222	012S0	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
14S6	19940222	014S6	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
18S2	19940222	018S2	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
4S18	19940224	04S18	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
6S10	19940224	06S10	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
10S20	19940223	10S20	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
10S24	19940223	10S24	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
12S12	19940223	12S12	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
16S18	19940222	16S18	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
18S14	19940222	18S14	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
18S20	19940222	18S20	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
22S17	19940224	22S17	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
23S20	19940221	23S20	34896	Surface location	0.00	1.50	Thorium-232	1.2000	PCI/G	1.2000	U	
SCR751	19921228	9212284	SCRDATA	Borehole	2.00	2.00	Thorium-232	1.2000	PCI/G		U	
004718	20000719	004718	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.1400	PCI/G	0.2700		
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Thorium-232	1.1200	PCI/G		CJ	J
SCR773	19921223	92122313	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.1000	PCI/G		U	
SCR764	19921223	92122325	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.1000	PCI/G		U	
4S15	19940228	04S15	34896	Surface location	0.00	0.50	Thorium-232	1.1000	PCI/G	1.1000	U	
5S15	19940228	05S15	34896	Surface location	0.00	0.50	Thorium-232	1.1000	PCI/G	1.1000	U	
6S2	19940224	006S2	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
6S4	19940224	006S4	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
14S8	19940222	014S8	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
18S6	19940222	018S6	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
20S0	19940221	020S0	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
4S10	19940224	04S10	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
8S12	19940224	08S12	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
8S14	19940224	08S14	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
8S16	19940224	08S16	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
8S18	19940224	08S18	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
10S16	19940223	10S16	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
10S18	19940223	10S18	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
10S22	19940221	10S22	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
14S12	19940223	14S12	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
14S14	19940223	14S14	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
16S14	19940222	16S14	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
16S16	19940222	16S16	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
16S24	19940222	16S24	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
18S10	19940222	18S10	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
18S24	19940222	18S24	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
20S18	19940221	20S18	34896	Surface location	0.00	1.50	Thorium-232	1.1000	PCI/G	1.1000	U	
SCR755	19921228	9212288	SCRDATA	Borehole	2.00	2.00	Thorium-232	1.1000	PCI/G		U	
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.0900	PCI/G	0.0181		
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.0500	PCI/G	0.2900		
004724	20000714	004724	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.0400	PCI/G	0.2200		
CANAL SW	19990920	005003	SCRDATA	Surface location	0.00	0.00	Thorium-232	1.0400	PCI/G	0.0900		
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.0300	PCI/G	0.2300		
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Thorium-232	1.0200	PCI/G			

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	1.0100	PCI/G	0.2400		
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Thorium-232	1.0100	PCI/G			
SCR926	19921222	9212224	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR753	19921223	92122317	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR752	19921223	92122318	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR861	19921228	92122810	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR872	19921228	92122811	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR843	19930429	93042914	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR895	19930429	9304298	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR937	19930430	93043024	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
SCR808	19931201	93120112	SCRDATA	Borehole	0.00	0.00	Thorium-232	1.0000	PCI/G		U	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Thorium-232	1.0000	PCI/G		U	
4S0	19940221	004S0	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
8S0	19940222	008S0	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
12S2	19940222	012S2	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
14S4	19940222	014S4	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
12S16	19940223	12S16	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
12S22	19940223	12S22	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
14S16	19940223	14S16	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
16S20	19940222	16S20	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
18S12	19940222	18S12	34896	Surface location	0.00	1.50	Thorium-232	1.0000	PCI/G	1.0000	U	
CANAL NW	19990920	005004	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.9900	PCI/G	0.0600		
004672	20000725	004672	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9700	PCI/G	0.2500		
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.9700	PCI/G			
004677	20000714	004677	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9600	PCI/G	0.1900		
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Thorium-232	0.9580	PCI/G			
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9400	PCI/G	0.0700		
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9300	PCI/G	0.0500		
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9300	PCI/G	0.0600		
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.9300	PCI/G			
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9200	PCI/G	0.1900		
B408	19940616	B40801	34897	Borehole	0.00	0.50	Thorium-232	0.9200	PCI/G			J
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9100	PCI/G	0.3000		
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9100	PCI/G	0.2100		
004713	20000719	004713	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9100	PCI/G	0.2600		
B401	19940614	B40101	34897	Borehole	0.00	0.50	Thorium-232	0.9100	PCI/G			
004679	20000714	004679	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.9000	PCI/G	0.1900		
SCR711	19921228	9212289	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.9000	PCI/G		U	
SCR797	19930429	93042917	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.9000	PCI/G		U	
SCR941	19930430	93043028	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.9000	PCI/G		U	
SCR873	19931124	9311241-B	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.9000	PCI/G		U	
4S6	19940224	004S6	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
4S8	19940224	004S8	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
10S4	19940223	010S4	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
12S4	19940223	012S4	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
4S12	19940224	04S12	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
10S10	19940223	10S10	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
12S10	19940223	12S10	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
12S18	19940223	12S18	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
12S20	19940223	12S20	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
14S18	19940223	14S18	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
14S20	19940223	14S20	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
18S22	19940222	18S22	34896	Surface location	0.00	1.50	Thorium-232	0.9000	PCI/G	0.9000	U	
CANAL NW	19990928	005009	SCRDATA	Surface location	1.00	2.00	Thorium-232	0.8940	PCI/G	0.0090		
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8900	PCI/G	0.1500		
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8900	PCI/G	0.2100		
CANAL CTR	19990920	005000	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.8900	PCI/G	0.0800		
CANAL SE	19990920	005001	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.8900	PCI/G	0.0700		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Thorium-232	0.8900	PCI/G			J
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8800	PCI/G	0.1500		
CANAL NE	19990920	005002	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.8800	PCI/G	0.0700		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Thorium-232	0.8800	PCI/G			J
CANAL SE	19990928	005006	SCRDATA	Surface location	1.00	2.00	Thorium-232	0.8730	PCI/G	0.0260		
CANAL CTR	19990928	005005	SCRDATA	Surface location	1.00	2.00	Thorium-232	0.8610	PCI/G	0.0110		
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8600	PCI/G	0.0800		
004716	20000725	004716	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8590	PCI/G	0.0208		
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.2300		
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.0700		
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.2900		
004692	20000714	004692	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.1700		
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.1400		
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.2000		

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Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8500	PCI/G	0.2600		
004725	20000725	004725	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8490	PCI/G	0.0386		
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.8400	PCI/G			
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8300	PCI/G	0.2200		
004689	20000714	004689	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8300	PCI/G	0.1700		
004722	20000714	004722	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8300	PCI/G	0.1800		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Thorium-232	0.8300	PCI/G			J
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8200	PCI/G	0.2500		
004664	20000712	004664	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8200	PCI/G	0.2200		
004680	20000719	004680	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.8200	PCI/G	0.2800		
SCR743	19921228	9212285	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.8000	PCI/G		U	
SCR864	19930429	93042913	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.8000	PCI/G		U	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Thorium-232	0.8000	PCI/G		U	
6S0	19940222	006S0	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
8S4	19940224	008S4	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
16S2	19940222	016S2	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
20S6	19940221	020S6	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
6S12	19940224	06S12	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
12S24	19940223	12S24	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
16S10	19940222	16S10	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
16S12	19940222	16S12	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
16S22	19940222	16S22	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
22S18	19940224	22S18	34896	Surface location	0.00	1.50	Thorium-232	0.8000	PCI/G	0.8000	U	
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7900	PCI/G	0.0500		
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7900	PCI/G	0.1900		
004691	20000725	004691	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7880	PCI/G	0.0321		
CANAL SW	19990928	005008	SCRDATA	Surface location	1.00	2.00	Thorium-232	0.7860	PCI/G	0.0250		
CANAL NE	19990928	005007	SCRDATA	Surface location	1.00	2.00	Thorium-232	0.7810	PCI/G	0.0120		
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7800	PCI/G	0.1300		
004699	20000715	004699	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7800	PCI/G	0.2000		
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Thorium-232	0.7740	PCI/G		CJ	J
004676	20000714	004676	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7700	PCI/G	0.2600		
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7700	PCI/G	0.2800		
004688	20000724	004688	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7700	PCI/G	0.2500		
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7600	PCI/G	0.3300		
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7600	PCI/G	0.1900		
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7500	PCI/G	0.2400		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.7500	PCI/G			
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7400	PCI/G	0.2200		
004661	20000712	004661	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7300	PCI/G	0.2600		
004663	20000712	004663	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7300	PCI/G	0.1900		
004729	20000725	004729	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7300	PCI/G	0.0305		
004641	20000725	004641DUP	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7270	PCI/G	0.0139		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7200	PCI/G	0.2400		
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7200	PCI/G	0.0800		
004730	20000714	004730	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7200	PCI/G	0.2400		
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7100	PCI/G	0.2200		
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7000	PCI/G	0.2100		
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.7000	PCI/G	0.3700		
SCR738	19921228	9212281	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.7000	PCI/G		U	
SCR864	19930429	93042912	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.7000	PCI/G		U	
SCR916	19930429	9304297	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.7000	PCI/G		U	
SCR786	19930430	93043023	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.7000	PCI/G		U	
SCR939	19930430	93043027	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.7000	PCI/G		U	
4S2	19940224	004S2	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
4S4	19940224	004S4	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
6S6	19940224	006S6	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
8S8	19940224	008S8	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
16S6	19940222	016S6	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
4S16	19940224	04S16	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
8S20	19940224	08S20	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
14S24	19940223	14S24	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
22S20	19940221	22S20	34896	Surface location	0.00	1.50	Thorium-232	0.7000	PCI/G	0.7000	U	
004678	20000714	004678	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6900	PCI/G	0.3300		
004709	20000715	004709	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6900	PCI/G	0.2500		
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6800	PCI/G	0.1400		
004695	20000712	004695	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6800	PCI/G	0.2800		
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6700	PCI/G	0.1900		
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6700	PCI/G	0.0500		
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6700	PCI/G	0.2400		
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6600	PCI/G	0.1800		
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.6600	PCI/G			

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6510	PCI/G	0.0218		
004654	20000725	004654	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6500	PCI/G	0.2400		
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6400	PCI/G	0.3000		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Thorium-232	0.6400	PCI/G			
004683	20000719	004683	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6300	PCI/G	0.2300		
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6300	PCI/G	0.2200		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6150	PCI/G	0.0203		
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6000	PCI/G	0.2900		
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.6000	PCI/G	0.2100		
SCR780	19921228	9212287	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.6000	PCI/G		U	
SCR878	19930429	93042911	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.6000	PCI/G		U	
SCR944	19930430	93043031	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.6000	PCI/G		U	
14S2	19940222	014S2	34896	Surface location	0.00	1.50	Thorium-232	0.6000	PCI/G	0.6000	U	
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5920	PCI/G	0.0367		
004697	20000719	004697	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5900	PCI/G	0.2500		
004728	20000714	004728	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5800	PCI/G	0.2500		
004658	20000711	004658	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5700	PCI/G	0.2800		
004705	20000715	004705	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5300	PCI/G	0.1000		
004712	20000713	004712	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.5200	PCI/G	0.1200		
SCR823	19930429	93042915	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.5000	PCI/G		U	
SCR885	19930429	9304299	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.5000	PCI/G		U	
SCR943	19930430	93043029	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.5000	PCI/G		U	
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.4600	PCI/G	0.3100		
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.4600	PCI/G	0.0400		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.4500	PCI/G	0.1500		
004657	20000711	004657	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.4400	PCI/G	0.1900		
004690	20000714	004690	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.4200	PCI/G	0.2100		
SCR962	19930429	9304296	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.4000	PCI/G		U	
SCR938	19930430	93043026	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.4000	PCI/G		U	
11S15	19940303	11S15	34896	Surface location	0.00	0.50	Thorium-232	0.4000	PCI/G	0.4000	U	
004704	20000715	004704	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.3900	PCI/G	0.1900		
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.3800	PCI/G	0.1600		
004706	20000715	004706	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.3800	PCI/G	0.1500		
004708	20000724	004708	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.3200	PCI/G	0.3100		
16S0	19940222	016S0	34896	Surface location	0.00	1.50	Thorium-232	0.3000	PCI/G	0.3000	U	
20S2	19940221	020S2	34896	Surface location	0.00	1.50	Thorium-232	0.3000	PCI/G	0.3000	U	
004696	20000712	004696	P4P5BOUND	Surface Location	0.0	0.0	Thorium-232	0.2600	PCI/G	0.2600	U	
4560	19991109	004560	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.2090	PCI/G	0.0430		
4563	19991110	004563	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.2090	PCI/G	0.0070		
4557	19991109	004557	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.2080	PCI/G	0.0100		
SCR944	19930430	93043030	SCRDATA	Borehole	0.00	0.00	Thorium-232	0.2000	PCI/G		U	
14S0	19940222	014S0	34896	Surface location	0.00	1.50	Thorium-232	0.2000	PCI/G	0.2000	U	
4555	19991110	004555	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1910	PCI/G	0.0120		
4562	19991110	004562	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1880	PCI/G	0.0250		
4551	19991110	004551	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1830	PCI/G	0.0090		
4561	19991110	004561	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1830	PCI/G	0.0090		
4552	19991110	004552	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1820	PCI/G	0.0330		
4556	19991110	004556	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1800	PCI/G	0.0090		
4554	19991110	004554	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1770	PCI/G	0.0100		
4553	19991109	004553	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1540	PCI/G	0.0120		
4559	19991110	004559	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.1340	PCI/G	0.0100		
18S0	19940222	018S0	34896	Surface location	0.00	1.50	Thorium-232	0.1000	PCI/G	0.1000	U	
4558	19991110	004558	SCRDATA	Surface location	0.00	0.00	Thorium-232	0.0370	PCI/G	0.0080		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Tritium	2.5000	PCI/G	2.5000		U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Tritium	2.1000	PCI/G	2.1000		U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Tritium	1.6000	PCI/G	1.6000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Tritium	1.2000	PCI/G	1.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Tritium	0.8000	PCI/G	0.8000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Tritium	0.3000	PCI/G	0.3000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Uranium-234	1.1700	PCI/G			J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Uranium-234	0.9600	PCI/G	0.9600		UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Uranium-234	0.9600	PCI/G			J
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.9600	PCI/G			
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.9100	PCI/G			
B409	19940628	B40901	34897	Borehole	0.00	0.50	Uranium-234	0.9000	PCI/G	0.9000		UJ
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.9000	PCI/G			
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Uranium-234	0.8620	PCI/G			
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Uranium-234	0.8570	PCI/G			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Uranium-234	0.8500	PCI/G	0.8500		UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Uranium-234	0.8300	PCI/G	0.8300		UJ

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Uranium-234	0.8260	PCI/G			
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.8000	PCI/G			
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Uranium-234	0.7990	PCI/G			
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.7800	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Uranium-234	0.7800	PCI/G			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Uranium-234	0.7700	PCI/G	0.7700		UJ
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Uranium-234	0.6420	PCI/G			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Uranium-235	0.2000	PCI/G			J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Uranium-235	0.1600	PCI/G			J
004702	20000715	004702	P4P5BOUND	Surface Location	0.0	0.0	Uranium-235	0.1200	PCI/G	0.0600		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Uranium-235	0.1200	PCI/G			J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Uranium-235	0.1100	PCI/G			J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Uranium-235	0.1100	PCI/G			J
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Uranium-235	0.0781	PCI/G			
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Uranium-235	0.0761	PCI/G			
004710	20000715	004710	P4P5BOUND	Surface Location	0.0	0.0	Uranium-235	0.0700	PCI/G	0.0700		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Uranium-235	0.0700	PCI/G			J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Uranium-235	0.0700	PCI/G			J
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Uranium-235	0.0634	PCI/G			
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Uranium-235	0.0600	PCI/G			
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0530	PCI/G			
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0500	PCI/G			
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Uranium-235	0.0465	PCI/G			
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0360	PCI/G			
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0340	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0290	PCI/G			
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Uranium-235	0.0250	PCI/G			
004643	20000710	004643	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.9500	PCI/G	1.4500		
004651	20000711	004651	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.9500	PCI/G	1.4000		
004645	20000711	004645	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.9300	PCI/G	1.1800		
004720	20000725	004720	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.8400	PCI/G	1.1300		
004684	20000714	004684	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.7700	PCI/G	0.8300		
004660	20000712	004660	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.7600	PCI/G	1.0400		
004674	20000717	004674	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.7200	PCI/G	0.4000		
004717	20000713	004717	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.7100	PCI/G	1.0700		
004673	20000714	004673	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.6500	PCI/G	1.2000		
004670	20000712	004670	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.6300	PCI/G	1.4000		
004687	20000724	004687	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.5600	PCI/G	1.1900		
004698	20000718	004698	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.5500	PCI/G	0.3200		
004644	20000725	004644	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.5300	PCI/G	0.7800		
004675	20000714	004675	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4900	PCI/G	1.1000		
004653	20000711	004653	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4600	PCI/G	1.1600		
004700	20000715	004700	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4600	PCI/G	0.4100		
004666	20000712	004666	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4500	PCI/G	0.3400		
004715	20000719	004715	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4300	PCI/G	1.0100		
004685	20000719	004685	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4200	PCI/G	1.1800		
004693	20000712	004693	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4200	PCI/G	1.1300		
004714	20000713	004714	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4200	PCI/G	1.2100		
004648	20000726	004648	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4000	PCI/G	1.4000	U	
004686	20000714	004686	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4000	PCI/G	1.0500		
004694	20000712	004694	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.4000	PCI/G	1.1600		
004681	20000714	004681	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.3900	PCI/G	1.2300		
004726	20000724	004726	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.3900	PCI/G	1.2900		
004701	20000715	004701	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.3600	PCI/G	1.0900		
004682	20000719	004682	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.3200	PCI/G	1.1600		
004646	20000711	004646	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.2400	PCI/G	1.3200	U	
004647	20000711	004647	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.2400	PCI/G	0.7500		
004711	20000713	004711	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.2300	PCI/G	0.6900		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Uranium-238	1.2000	PCI/G			J
004723	20000719	004723	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.1400	PCI/G	1.1000		
004671	20000712	004671	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.1100	PCI/G	0.7000		
004656	20000711	004656	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.0900	PCI/G	0.7300		
CJ	19940609	RCJ303	04-2768	Borehole	0.00	2.00	Uranium-238	1.0500	PCI/G			
004642	20000710	004642	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.0400	PCI/G	0.2300		
004727	20000725	004727	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.0300	PCI/G	0.9400		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Uranium-238	1.0200	PCI/G			J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Uranium-238	1.0200	PCI/G			J
004650	20000725	004650	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	1.0100	PCI/G	0.3000		
#1B	19910624	#1BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	1.0000	PCI/G			
004659	20000711	004659	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.9700	PCI/G	0.7300		

Table A-1
Surface Soil Data: Radionuclides
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40811	34897	Borehole	0.00	0.50	Uranium-238	0.9700	PCI/G			J
004662	20000712	004662	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.9600	PCI/G	0.5400		
#6B	19910624	#6BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	0.9500	PCI/G			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Uranium-238	0.9400	PCI/G			J
CH	19940609	RCH303	04-2768	Borehole	0.00	2.00	Uranium-238	0.9310	PCI/G			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Uranium-238	0.9300	PCI/G			J
CJ	19940609	RCJ313	04-2768	Borehole	0.00	2.00	Uranium-238	0.9290	PCI/G			
004703	20000719	004703	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8800	PCI/G	0.7800		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Uranium-238	0.8800	PCI/G			J
004721	20000714	004721	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8600	PCI/G	0.7300		
#2B	19910624	#2BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	0.8600	PCI/G			
004652	20000711	004652	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8400	PCI/G	0.8000		
004655	20000711	004655	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8400	PCI/G	0.8400	U	
#3B	19910624	#3BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	0.8400	PCI/G			
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	0.8400	PCI/G			
BJ	19940414	RBJ303	04-2768	Borehole	0.00	2.00	Uranium-238	0.8300	PCI/G			
004668	20000712	004668	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8100	PCI/G	0.6400		
004669	20000725	004669	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.8000	PCI/G	0.3800		
004731	20000719	004731	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.7700	PCI/G	0.4400		
#4B	19910624	#4BS	WDSOIL	Borehole	0.00	0.50	Uranium-238	0.7600	PCI/G			
004665	20000712	004665	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.6800	PCI/G	0.2400		
004667	20000712	004667	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.6700	PCI/G	0.4400		
004649	20000711	004649	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.6300	PCI/G	0.5600		
BH	19940413	RBH303	04-2768	Borehole	0.00	2.00	Uranium-238	0.5140	PCI/G			
004707	20000715	004707	P4P5BOUND	Surface Location	0.0	0.0	Uranium-238	0.3200	PCI/G	0.1400		

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,1,1-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1,1-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,1,1-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,1,1-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,1,1-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,1,1-Trichloroethane	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,1,2,2-Tetrachloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,1,2,2-Tetrachloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,1,2,2-Tetrachloroethane	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1,2-Trichloro-1,2,2-trifluoroethane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1,2-Trichloro-1,2,2-trifluoroethane	11.0000	UG/KG	11.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,1,2-Trichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1,2-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,1,2-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,1,2-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,1,2-Trichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,1,2-Trichloroethane	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,1-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,1-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethane	5.0000	UG/KG	5.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,1-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,1-Dichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,1-Dichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,1-Dichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,1-Dichloroethene	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2-Dichloroethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethane	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2-Dichloroethene	6.0000	UG/KG	6.0000	U	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Dichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethene	5.0000	UG/KG	5.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2-Dichloroethene	5.0000	UG/KG	5.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2-Dichloroethene	5.0000	UG/KG	5.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2-Dichloroethene	5.0000	UG/KG	5.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2-Dichloropropane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Dichloropropane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2-Dichloropropane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2-Dichloropropane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2-Dichloropropane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2-Dichloropropane	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	26.0000	UG/KG	26.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	26.0000	UG/KG	26.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	25.0000	UG/KG	25.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Diethylbenzene	24.0000	UG/KG	24.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	23.0000	UG/KG	23.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	23.0000	UG/KG	23.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Diethylbenzene	22.0000	UG/KG	22.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,3-cis-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3-cis-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,3-cis-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,3-cis-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,3-cis-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,3-cis-Dichloropropene	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,3-trans-Dichloropropene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3-trans-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,3-trans-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,3-trans-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,3-trans-Dichloropropene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,3-trans-Dichloropropene	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Butanone	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Butanone	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Butanone	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Butanone	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Butanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Butanone	11.0000	UG/KG	11.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Hexanone	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Hexanone	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Hexanone	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Hexanone	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Hexanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Hexanone	11.0000	UG/KG	11.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Methyl-2-pentanone	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Methyl-2-pentanone	11.0000	UG/KG	11.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acetone	13.0000	UG/KG	13.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acetone	13.0000	UG/KG	13.0000	U	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acetone	12.0000	UG/KG	12.0000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acetone	12.0000	UG/KG	12.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acetone	11.0000	UG/KG	11.0000	U	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acetone	11.0000	UG/KG	11.0000	U	UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acetone	11.0000	UG/KG	11.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Acetone	9.0000	UG/KG	11.0000	JB	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Acetone	8.0000	UG/KG	11.0000	JB	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Acetone	6.0000	UG/KG	11.0000	JB	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Acetone	6.0000	UG/KG	11.0000	JB	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Acetone	6.0000	UG/KG	11.0000	JB	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Acetone	6.0000	UG/KG	11.0000	JB	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Acetone	5.0000	UG/KG	11.0000	JB	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Acetone	5.0000	UG/KG	11.0000	JB	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acetonitrile	130.0000	UG/KG	130.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acetonitrile	130.0000	UG/KG	130.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acetonitrile	120.0000	UG/KG	120.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acetonitrile	120.0000	UG/KG	120.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acetonitrile	110.0000	UG/KG	110.0000	JB	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acetonitrile	110.0000	UG/KG	110.0000	JB	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acetonitrile	110.0000	UG/KG	110.0000	JB	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acrylonitrile	130.0000	UG/KG	130.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acrylonitrile	130.0000	UG/KG	130.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acrylonitrile	120.0000	UG/KG	120.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acrylonitrile	120.0000	UG/KG	120.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acrylonitrile	110.0000	UG/KG	110.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acrylonitrile	110.0000	UG/KG	110.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acrylonitrile	110.0000	UG/KG	110.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzene	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bromodichloromethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bromodichloromethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bromodichloromethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bromodichloromethane	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bromodichloromethane	5.0000	UG/KG	5.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bromoform	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bromoform	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bromoform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bromoform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bromoform	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bromoform	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bromoform	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bromoform	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bromoform	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bromoform	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bromomethane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bromomethane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bromomethane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bromomethane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bromomethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bromomethane	11.0000	UG/KG	11.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Carbon Disulfide	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Carbon Disulfide	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Carbon Disulfide	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Carbon Disulfide	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Carbon Disulfide	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Carbon Tetrachloride	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Carbon Tetrachloride	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Carbon Tetrachloride	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Carbon Tetrachloride	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Carbon Tetrachloride	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chlorobenzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chlorobenzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chlorobenzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chlorobenzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chlorobenzene	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chloroethane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chloroethane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chloroethane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chloroethane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chloroethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chloroethane	11.0000	UG/KG	11.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chloroform	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chloroform	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chloroform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chloroform	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chloroform	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chloroform	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chloroform	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chloroform	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chloroform	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chloroform	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chloromethane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chloromethane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chloromethane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chloromethane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chloromethane	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chloromethane	11.0000	UG/KG	11.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dibromochloromethane	6.0000	UG/KG	6.0000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dibromochloromethane	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dibromochloromethane	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dibromochloromethane	5.0000	UG/KG	5.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dibromochloromethane	5.0000	UG/KG	5.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dibromochloromethane	5.0000	UG/KG	5.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dibromochloromethane	5.0000	UG/KG	5.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Ethylbenzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Ethylbenzene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Ethylbenzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Ethylbenzene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Ethylbenzene	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexane	11.0000	UG/KG	11.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Iodomethane	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Iodomethane	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Iodomethane	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Iodomethane	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Iodomethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Iodomethane	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Iodomethane	11.0000	UG/KG	11.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Methylene Chloride	24.0000	UG/KG	24.0000	B	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Methylene Chloride	16.0000	UG/KG	5.0000	B	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Methylene Chloride	15.0000	UG/KG	5.0000	B	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Methylene Chloride	15.0000	UG/KG	6.0000	B	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Methylene Chloride	13.0000	UG/KG	5.0000	B	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Methylene Chloride	13.0000	UG/KG	6.0000	B	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Methylene Chloride	13.0000	UG/KG	6.0000	B	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Methylene Chloride	12.0000	UG/KG	12.0000	B	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Methylene Chloride	11.0000	UG/KG	5.0000	B	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Methylene Chloride	11.0000	UG/KG	6.0000	B	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Methylene Chloride	7.0000	UG/KG	7.0000	B	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Methylene Chloride	6.0000	UG/KG	6.0000	JB	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Methylene Chloride	6.0000	UG/KG	6.0000	JB	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Methylene Chloride	6.0000	UG/KG	6.0000	JB	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Methylene Chloride	6.0000	UG/KG	6.0000	JB	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Styrene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Styrene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Styrene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Styrene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Styrene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Styrene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Styrene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Styrene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Styrene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Styrene	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Tetrachloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Tetrachloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Tetrachloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Tetrachloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Tetrachloroethene	5.0000	UG/KG	5.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Toluene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Toluene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Toluene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Toluene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Toluene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Toluene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Toluene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Toluene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Toluene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Toluene	2.0000	UG/KG	5.0000	J	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Trichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Trichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Trichloroethene	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Trichloroethene	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Trichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Trichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Trichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Trichloroethene	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Trichloroethene	5.0000	UG/KG	5.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Vinyl Acetate	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Vinyl Acetate	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Vinyl Acetate	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Vinyl Acetate	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Vinyl Acetate	11.0000	UG/KG	11.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Vinyl Chloride	13.0000	UG/KG	13.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Vinyl Chloride	13.0000	UG/KG	13.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Vinyl Chloride	12.0000	UG/KG	12.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Vinyl Chloride	12.0000	UG/KG	12.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Vinyl Chloride	11.0000	UG/KG	11.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Xylenes, Total	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Xylenes, Total	5.0000	UG/KG	5.0000	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Xylenes, Total	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Xylenes, Total	5.0000	UG/KG	5.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Xylenes, Total	5.0000	UG/KG	5.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	33.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4,5-Trichlorophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dichlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	360.0000	UG/KG	360.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dimethylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dinitrophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	360.0000	UG/KG	360.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	360.0000	UG/KG	360.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Chloronaphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Chloronaphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Chloronaphthalene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Chloronaphthalene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Chloronaphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Chloronaphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Chloronaphthalene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Chlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Chlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Chlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Chlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	38.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Methylnaphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Methylnaphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Methylnaphthalene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Methylnaphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Methylnaphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Methylnaphthalene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Methylnaphthalene	63.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Methylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Nitrophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Nitrophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Nitrophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Nitrophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Nitrophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Nitrophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Nitrophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Nitrophenol	360.0000	UG/KG	360.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	850.0000	UG/KG	850.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	840.0000	UG/KG	840.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	810.0000	UG/KG	810.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	3,3'-Dichlorobenzidine	770.0000	UG/KG	770.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	760.0000	UG/KG	760.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	740.0000	UG/KG	740.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	720.0000	UG/KG	720.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	3-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	3-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	3-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	3-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	3-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	3-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	3-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4,6-Dinitro-o-Cresol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	7.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chloroaniline	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chloroaniline	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chloroaniline	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chloroaniline	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chloroaniline	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chloroaniline	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chloroaniline	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chloroaniline	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Methylphenol	380.0000	UG/KG	380.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Nitrophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Nitrophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Nitrophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Nitrophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Nitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Nitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Nitrophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Acenaphthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Acenaphthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Acenaphthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Acenaphthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acenaphthene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acenaphthene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acenaphthene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acenaphthene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acenaphthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acenaphthene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acenaphthene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Acenaphthene	25.0000	UG/KG	740.0000	J	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Acenaphthylene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acenaphthylene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acenaphthylene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acenaphthylene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acenaphthylene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acenaphthylene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acenaphthylene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acenaphthylene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Anthracene	740.0000	UG/KG	740.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Anthracene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Anthracene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Anthracene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(a)anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(a)anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(a)anthracene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(a)anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(a)anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(a)anthracene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(a)anthracene	58.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(a)pyrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(a)pyrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(a)pyrene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(a)pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(a)pyrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(a)pyrene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(a)pyrene	51.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(b)fluoranthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	98.0000	UG/KG		XJ	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	59.0000	UG/KG		XJ	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	49.0000	UG/KG		XJ	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	37.0000	UG/KG		XJ	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(k)fluoranthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	170.0000	UG/KG		XJ	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	100.0000	UG/KG		XJ	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	100.0000	UG/KG		XJ	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	65.0000	UG/KG		XJ	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzoic Acid	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzoic Acid	2100.0000	UG/KG	2100.0000	JB	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzoic Acid	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzoic Acid	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzoic Acid	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzoic Acid	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzoic Acid	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzoic Acid	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	12.0000	UG/KG	3600.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzyl Alcohol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzyl Alcohol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzyl Alcohol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzyl Alcohol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzyl Alcohol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzyl Alcohol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzyl Alcohol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000	JB	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000	U	UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	74.0000	UG/KG	740.0000	J	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	360.0000	UG/KG	360.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Carbazole	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Carbazole	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Carbazole	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Carbazole	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Carbazole	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Carbazole	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Carbazole	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chrysene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chrysene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chrysene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chrysene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chrysene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chrysene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chrysene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chrysene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chrysene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chrysene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chrysene	78.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dibenzofuran	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dibenzofuran	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dibenzofuran	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dibenzofuran	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dibenzofuran	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dibenzofuran	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dibenzofuran	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dibenzofuran	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Diethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Diethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Diethyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Diethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Diethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Diethyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Diethyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dimethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dimethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dimethyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dimethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dimethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dimethyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dimethyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	120.0000	UG/KG	120.0000	JB	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	96.0000	UG/KG	96.0000	JB	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	95.0000	UG/KG	95.0000	JB	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	85.0000	UG/KG	85.0000	JB	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Di-n-butyl Phthalate	68.0000	UG/KG		J	J

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B405	19940622	B40501	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	67.0000	UG/KG		J	J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	25.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Fluoranthene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Fluoranthene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Fluoranthene	380.0000	UG/KG	380.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Fluoranthene	110.0000	UG/KG		J	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Fluoranthene	65.0000	UG/KG		J	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Fluoranthene	41.0000	UG/KG		J	J
B408	19940616	B40811	34897	Borehole	0.00	0.50	Fluoranthene	39.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Fluorene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Fluorene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Fluorene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Fluorene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Fluorene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Fluorene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Fluorene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Fluorene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Fluorene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Fluorene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Fluorene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorobutadiene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorobutadiene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorobutadiene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorobutadiene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorobutadiene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorobutadiene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorobutadiene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachloroethane	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachloroethane	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachloroethane	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachloroethane	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachloroethane	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachloroethane	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachloroethane	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachloroethane	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Isophorone	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Isophorone	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Isophorone	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Isophorone	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Isophorone	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Isophorone	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Isophorone	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Isophorone	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Isophorone	380.0000	UG/KG	380.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40811	34897	Borehole	0.00	0.50	Isophorone	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Isophorone	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Naphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Naphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Naphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Naphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Naphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Naphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Naphthalene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Naphthalene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Naphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Naphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Naphthalene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Nitrobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Nitrobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Nitrobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Nitrobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Nitrobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Nitrobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Nitrobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Nitrobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Pentachlorophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Pentachlorophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Pentachlorophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Pentachlorophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Pentachlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Pentachlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Pentachlorophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Phenanthrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Phenanthrene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Phenanthrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Phenanthrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Phenanthrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Phenanthrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Phenanthrene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Phenanthrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Phenanthrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Phenanthrene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Phenanthrene	78.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Phenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Phenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Phenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Phenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Phenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Phenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Phenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Phenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Phenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Phenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Phenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Phenol	23.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Pyrene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Pyrene	370.0000	UG/KG	370.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Pyrene	120.0000	UG/KG	730.0000	J	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Pyrene	98.0000	UG/KG		J	J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Pyrene	77.0000	UG/KG	750.0000	J	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Pyrene	56.0000	UG/KG		J	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Pyrene	47.0000	UG/KG		J	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Pyrene	36.0000	UG/KG		J	J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Pyrene	25.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2,4-Trichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2,4-Trichlorobenzene	33.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,2-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,4-Dichlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,2'-oxybis(1-chloropropane)	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4,5-Trichlorophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4,5-Trichlorophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4,6-Trichlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dichlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dichlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dichlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dichlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dimethylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dimethylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dimethylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dimethylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dinitrophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dinitrophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	360.0000	UG/KG	360.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Benzyl-4-Chlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Chloronaphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Chloronaphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Chloronaphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Chloronaphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Chloronaphthalene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Chloronaphthalene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Chloronaphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Chloronaphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Chloronaphthalene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Chlorophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Chlorophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Chlorophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Chlorophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Chlorophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Chlorophenol	370.0000	UG/KG	370.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Chlorophenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Chlorophenol	38.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Methylnaphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Methylnaphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Methylnaphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Methylnaphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Methylnaphthalene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Methylnaphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Methylnaphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Methylnaphthalene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Methylnaphthalene	63.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Methylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	2-Nitrophenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	2-Nitrophenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	2-Nitrophenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Nitrophenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Nitrophenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Nitrophenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Nitrophenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Nitrophenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Nitrophenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Nitrophenol	360.0000	UG/KG	360.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	850.0000	UG/KG	850.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	840.0000	UG/KG	840.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	810.0000	UG/KG	810.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	3,3'-Dichlorobenzidine	770.0000	UG/KG	770.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	760.0000	UG/KG	760.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	740.0000	UG/KG	740.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	3,3'-Dichlorobenzidine	720.0000	UG/KG	720.0000	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	3-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	3-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	3-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	3-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	3-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	3-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	3-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	3-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4,6-Dinitro-o-Cresol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4,6-Dinitro-o-Cresol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Bromophenyl-phenyl Ether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chloro-3-methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chloro-3-methylphenol	7.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chloroaniline	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chloroaniline	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chloroaniline	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chloroaniline	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chloroaniline	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chloroaniline	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chloroaniline	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chloroaniline	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chloroaniline	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chloroaniline	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Chlorophenyl-phenylether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Methylphenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Methylphenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Methylphenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Methylphenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Methylphenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Methylphenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Methylphenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Methylphenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Methylphenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Nitroaniline	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Nitroaniline	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Nitroaniline	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Nitroaniline	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Nitroaniline	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Nitroaniline	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4-Nitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4-Nitrophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4-Nitrophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4-Nitrophenol	2000.0000	UG/KG	2000.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B407	19940620	B40701	34897	Borehole	0.00	0.50	4-Nitrophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4-Nitrophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4-Nitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4-Nitrophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4-Nitrophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Acenaphthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Acenaphthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Acenaphthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Acenaphthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Acenaphthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acenaphthene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acenaphthene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acenaphthene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acenaphthene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acenaphthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acenaphthene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acenaphthene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Acenaphthene	25.0000	UG/KG	740.0000	J	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Acenaphthylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Acenaphthylene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Acenaphthylene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Acenaphthylene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Acenaphthylene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Acenaphthylene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Acenaphthylene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Acenaphthylene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Acenaphthylene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Acenaphthylene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Anthracene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Anthracene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Anthracene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(a)anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(a)anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(a)anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(a)anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(a)anthracene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(a)anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(a)anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(a)anthracene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(a)anthracene	58.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(a)pyrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(a)pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(a)pyrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(a)pyrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(a)pyrene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(a)pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(a)pyrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(a)pyrene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(a)pyrene	51.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(b)fluoranthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	98.0000	UG/KG		XJ	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	59.0000	UG/KG		XJ	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	49.0000	UG/KG		XJ	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(b)fluoranthene	37.0000	UG/KG		XJ	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(g,h,i)perylene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzo(k)fluoranthene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	170.0000	UG/KG		XJ	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	100.0000	UG/KG		XJ	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	100.0000	UG/KG		XJ	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzo(k)fluoranthene	65.0000	UG/KG		XJ	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzoic Acid	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzoic Acid	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzoic Acid	2100.0000	UG/KG	2100.0000	JB	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzoic Acid	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzoic Acid	2000.0000	UG/KG	2000.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzoic Acid	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzoic Acid	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzoic Acid	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzoic Acid	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzoic Acid	12.0000	UG/KG	3600.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Benzyl Alcohol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Benzyl Alcohol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Benzyl Alcohol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Benzyl Alcohol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Benzyl Alcohol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Benzyl Alcohol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Benzyl Alcohol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Benzyl Alcohol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Benzyl Alcohol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-chloroethoxy)methane	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-chloroethyl)ether	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000	JB	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000	U	UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bis(2-ethylhexyl)phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Bis(2-ethylhexyl)phthalate	74.0000	UG/KG	740.0000	J	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Butyl Benzyl Phthalate	360.0000	UG/KG	360.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Carbazole	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Carbazole	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Carbazole	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Carbazole	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Carbazole	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Carbazole	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Carbazole	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chrysene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chrysene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chrysene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chrysene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chrysene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chrysene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chrysene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chrysene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chrysene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chrysene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chrysene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chrysene	78.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dibenz(a,h)anthracene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dibenzofuran	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dibenzofuran	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dibenzofuran	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dibenzofuran	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dibenzofuran	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dibenzofuran	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dibenzofuran	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dibenzofuran	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dibenzofuran	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dibenzofuran	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Diethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Diethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Diethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Diethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Diethyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Diethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Diethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Diethyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Diethyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dimethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dimethyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dimethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dimethyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dimethyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dimethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dimethyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dimethyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dimethyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	120.0000	UG/KG	120.0000	JB	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	96.0000	UG/KG	96.0000	JB	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	95.0000	UG/KG	95.0000	JB	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	85.0000	UG/KG	85.0000	JB	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Di-n-butyl Phthalate	68.0000	UG/KG		J	J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Di-n-butyl Phthalate	67.0000	UG/KG		J	J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Di-n-butyl Phthalate	25.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Di-n-octyl Phthalate	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Fluoranthene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Fluoranthene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Fluoranthene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Fluoranthene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Fluoranthene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Fluoranthene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Fluoranthene	420.0000	UG/KG	420.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B406	19940622	B40601	34897	Borehole	0.20	0.70	Fluoranthene	380.0000	UG/KG	380.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Fluoranthene	110.0000	UG/KG		J	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Fluoranthene	65.0000	UG/KG		J	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Fluoranthene	41.0000	UG/KG		J	J
B408	19940616	B40811	34897	Borehole	0.00	0.50	Fluoranthene	39.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Fluorene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Fluorene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Fluorene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Fluorene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Fluorene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Fluorene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Fluorene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Fluorene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Fluorene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Fluorene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Fluorene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Fluorene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorobenzene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorobutadiene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorobutadiene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorobutadiene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorobutadiene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorobutadiene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorobutadiene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorobutadiene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorobutadiene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorobutadiene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachlorocyclopentadiene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Hexachloroethane	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Hexachloroethane	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Hexachloroethane	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Hexachloroethane	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Hexachloroethane	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Hexachloroethane	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Hexachloroethane	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Hexachloroethane	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Hexachloroethane	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Hexachloroethane	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Indeno(1,2,3-cd)pyrene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Isophorone	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Isophorone	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Isophorone	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Isophorone	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Isophorone	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Isophorone	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Isophorone	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Isophorone	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Isophorone	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Isophorone	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Isophorone	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Isophorone	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Naphthalene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Naphthalene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Naphthalene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Naphthalene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Naphthalene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Naphthalene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Naphthalene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Naphthalene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Naphthalene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Naphthalene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Naphthalene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Naphthalene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Nitrobenzene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Nitrobenzene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Nitrobenzene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Nitrobenzene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Nitrobenzene	420.0000	UG/KG	420.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B407	19940620	B40701	34897	Borehole	0.00	0.50	Nitrobenzene	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Nitrobenzene	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Nitrobenzene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Nitrobenzene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Nitrobenzene	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	N-Nitroso-di-n-propylamine	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	N-Nitrosodiphenylamine	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3700.0000	UG/KG	3700.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3600.0000	UG/KG	3600.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Pentachlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Pentachlorophenol	3500.0000	UG/KG	3500.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Pentachlorophenol	2100.0000	UG/KG	2100.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Pentachlorophenol	2000.0000	UG/KG	2000.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Pentachlorophenol	2000.0000	UG/KG	2000.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Pentachlorophenol	1900.0000	UG/KG	1900.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Pentachlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Pentachlorophenol	1800.0000	UG/KG	1800.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Pentachlorophenol	1700.0000	UG/KG	1700.0000	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Phenanthrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Phenanthrene	750.0000	UG/KG	750.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Phenanthrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Phenanthrene	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Phenanthrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Phenanthrene	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Phenanthrene	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Phenanthrene	400.0000	UG/KG	400.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Phenanthrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Phenanthrene	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Phenanthrene	360.0000	UG/KG	360.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Phenanthrene	78.0000	UG/KG		J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Phenol	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Phenol	750.0000	UG/KG	750.0000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Phenol	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Phenol	730.0000	UG/KG	730.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Phenol	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Phenol	420.0000	UG/KG	420.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Phenol	420.0000	UG/KG	420.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Phenol	400.0000	UG/KG	400.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Phenol	380.0000	UG/KG	380.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Phenol	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Phenol	370.0000	UG/KG	370.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Phenol	360.0000	UG/KG	360.0000	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Phenol	23.0000	UG/KG	740.0000	J	J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Pyrene	760.0000	UG/KG	760.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Pyrene	740.0000	UG/KG	740.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Pyrene	730.0000	UG/KG	730.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Pyrene	420.0000	UG/KG	420.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Pyrene	380.0000	UG/KG	380.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Pyrene	370.0000	UG/KG	370.0000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Pyrene	120.0000	UG/KG	730.0000	J	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Pyrene	98.0000	UG/KG		J	J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Pyrene	77.0000	UG/KG	750.0000	J	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Pyrene	56.0000	UG/KG		J	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Pyrene	47.0000	UG/KG		J	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Pyrene	36.0000	UG/KG		J	J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Pyrene	25.0000	UG/KG	740.0000	J	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4,4'-DDD	8.3000	UG/KG	8.3000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4,4'-DDD	8.3000	UG/KG	8.3000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4,4'-DDD	8.3000	UG/KG	8.3000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4,4'-DDD	8.3000	UG/KG	8.3000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4,4'-DDD	8.2000	UG/KG	8.2000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4,4'-DDD	8.2000	UG/KG	8.2000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4,4'-DDD	8.1000	UG/KG	8.1000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4,4'-DDD	8.0000	UG/KG	8.0000	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	4,4'-DDD	6.6000	UG/KG		P	J
B405	19940622	B40501	34897	Borehole	0.00	0.50	4,4'-DDD	4.2000	UG/KG	4.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4,4'-DDD	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4,4'-DDD	3.8000	UG/KG	3.8000	JP	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4,4'-DDD	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4,4'-DDD	3.6000	UG/KG	3.6000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	4,4'-DDE	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4,4'-DDE	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4,4'-DDE	4.0000	UG/KG	4.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4,4'-DDE	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	4,4'-DDE	3.8000	UG/KG	3.8000	JP	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4,4'-DDE	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4,4'-DDE	3.6000	UG/KG	3.6000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4,4'-DDE	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4,4'-DDE	3.1000	UG/KG	3.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4,4'-DDE	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4,4'-DDE	3.1000	UG/KG	3.1000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4,4'-DDE	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4,4'-DDE	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4,4'-DDE	3.0000	UG/KG	3.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4,4'-DDE	3.0000	UG/KG	3.0000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	4,4'-DDT	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	4,4'-DDT	9.1000	UG/KG	9.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	4,4'-DDT	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	4,4'-DDT	9.0000	UG/KG	9.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	4,4'-DDT	9.0000	UG/KG	9.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	4,4'-DDT	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	4,4'-DDT	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	4,4'-DDT	8.8000	UG/KG	8.8000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	4,4'-DDT	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	4,4'-DDT	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	4,4'-DDT	4.0000	UG/KG	4.0000	JP	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B401	19940614	B40101	34897	Borehole	0.00	0.50	4,4'-DDT	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	4,4'-DDT	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	4,4'-DDT	3.6000	UG/KG	3.6000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	4,4'-DDT	0.2500	UG/KG		JP	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aldrin	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aldrin	3.1000	UG/KG	3.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aldrin	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aldrin	3.1000	UG/KG	3.1000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aldrin	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aldrin	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aldrin	3.0000	UG/KG	3.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aldrin	3.0000	UG/KG	3.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aldrin	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aldrin	2.2000	UG/KG	2.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aldrin	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aldrin	1.9000	UG/KG	1.9000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aldrin	1.9000	UG/KG	1.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aldrin	0.3500	UG/KG		J	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aldrin	0.0740	UG/KG		J	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Alpha Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Alpha Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Alpha Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Alpha Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Alpha Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Alpha Chlordane	10.4000	UG/KG	10.4000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Alpha Chlordane	10.4000	UG/KG	10.4000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Alpha Chlordane	10.2000	UG/KG	10.2000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Alpha Chlordane	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Alpha Chlordane	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Alpha Chlordane	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Alpha Chlordane	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Alpha Chlordane	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Alpha Chlordane	1.9000	UG/KG	1.9000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Alpha Chlordane	1.9000	UG/KG	1.9000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Alpha-BHC	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Alpha-BHC	2.3000	UG/KG	2.3000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Alpha-BHC	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Alpha-BHC	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Alpha-BHC	2.3000	UG/KG	2.3000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Alpha-BHC	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Alpha-BHC	2.2000	UG/KG	2.2000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Alpha-BHC	2.2000	UG/KG	2.2000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Alpha-BHC	2.2000	UG/KG	2.2000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Alpha-BHC	2.2000	UG/KG	2.2000	U	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Alpha-BHC	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Alpha-BHC	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Alpha-BHC	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Alpha-BHC	1.9000	UG/KG	1.9000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Alpha-BHC	1.9000	UG/KG	1.9000	U	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1016	102.0000	UG/KG		U	
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1016	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1016	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1016	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1016	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1016	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1016	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1016	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1016	88.0000	UG/KG	88.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1016	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1016	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1016	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1016	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1016	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1016	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1016	36.0000	UG/KG	36.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1221	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1221	90.7000	UG/KG	90.7000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1221	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1221	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1221	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1221	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1221	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1221	88.0000	UG/KG	88.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1221	86.0000	UG/KG	86.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1221	86.0000	UG/KG	86.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1221	82.0000	UG/KG	82.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1221	78.0000	UG/KG	78.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1221	77.0000	UG/KG	77.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1221	76.0000	UG/KG	76.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1221	73.0000	UG/KG	73.0000	U	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1221	50.0000	UG/KG		U	
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1232	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1232	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1232	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1232	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1232	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1232	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1232	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1232	88.0000	UG/KG	88.0000	U	UJ
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1232	50.0000	UG/KG		U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1232	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1232	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1232	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1232	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1232	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1232	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1232	36.0000	UG/KG	36.0000	U	U
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1242	102.0000	UG/KG		U	
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1242	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1242	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1242	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1242	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1242	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1242	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1242	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1242	88.0000	UG/KG	88.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1242	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1242	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1242	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1242	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1242	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1242	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1242	36.0000	UG/KG	36.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1248	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1248	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1248	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1248	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1248	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1248	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1248	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1248	88.0000	UG/KG	88.0000	U	UJ
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1248	50.0000	UG/KG		U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1248	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1248	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1248	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1248	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1248	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1248	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1248	36.0000	UG/KG	36.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1254	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1254	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1254	181.3000	UG/KG	181.3000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1254	180.9000	UG/KG	180.9000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1254	180.4000	UG/KG	180.4000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1254	178.9000	UG/KG	178.9000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1254	178.1000	UG/KG	178.1000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1254	175.9000	UG/KG	175.9000	U	UJ
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1254	50.0000	UG/KG		U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1254	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1254	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1254	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1254	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1254	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1254	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1254	36.0000	UG/KG	36.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aroclor-1260	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aroclor-1260	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aroclor-1260	181.3000	UG/KG	181.3000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aroclor-1260	180.9000	UG/KG	180.9000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aroclor-1260	180.4000	UG/KG	180.4000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aroclor-1260	178.9000	UG/KG	178.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aroclor-1260	178.1000	UG/KG	178.1000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aroclor-1260	175.9000	UG/KG	175.9000	U	UJ
#5B	19910624	#5BS	WDSOIL	Borehole	0.00	0.50	Aroclor-1260	50.0000	UG/KG		U	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aroclor-1260	42.0000	UG/KG	42.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aroclor-1260	42.0000	UG/KG	42.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aroclor-1260	40.0000	UG/KG	40.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aroclor-1260	39.0000	UG/KG	39.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aroclor-1260	38.0000	UG/KG	38.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aroclor-1260	37.0000	UG/KG	37.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aroclor-1260	36.0000	UG/KG	36.0000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Beta-BHC	4.5000	UG/KG	4.5000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Beta-BHC	4.4000	UG/KG	4.4000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Beta-BHC	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Beta-BHC	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Beta-BHC	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Beta-BHC	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Beta-BHC	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Beta-BHC	1.9000	UG/KG	1.9000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Beta-BHC	1.9000	UG/KG	1.9000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Delta-BHC	6.8000	UG/KG	6.8000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Delta-BHC	6.8000	UG/KG	6.8000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Delta-BHC	6.8000	UG/KG	6.8000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Delta-BHC	6.8000	UG/KG	6.8000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Delta-BHC	6.8000	UG/KG	6.8000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Delta-BHC	6.7000	UG/KG	6.7000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Delta-BHC	6.7000	UG/KG	6.7000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Delta-BHC	6.6000	UG/KG	6.6000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Delta-BHC	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Delta-BHC	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Delta-BHC	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Delta-BHC	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Delta-BHC	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Delta-BHC	1.9000	UG/KG	1.9000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Delta-BHC	1.9000	UG/KG	1.9000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Dieldrin	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Dieldrin	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Dieldrin	4.0000	UG/KG	4.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Dieldrin	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Dieldrin	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Dieldrin	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Dieldrin	3.6000	UG/KG	3.6000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Dieldrin	1.5000	UG/KG	1.5000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Dieldrin	1.5000	UG/KG	1.5000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Dieldrin	1.5000	UG/KG	1.5000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Dieldrin	1.5000	UG/KG	1.5000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Dieldrin	1.5000	UG/KG	1.5000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Dieldrin	1.5000	UG/KG	1.5000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Dieldrin	1.4000	UG/KG	1.4000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Dieldrin	1.4000	UG/KG	1.4000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endosulfan I	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endosulfan I	9.1000	UG/KG	9.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endosulfan I	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endosulfan I	9.0000	UG/KG	9.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endosulfan I	9.0000	UG/KG	9.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endosulfan I	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endosulfan I	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endosulfan I	8.8000	UG/KG	8.8000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endosulfan I	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endosulfan I	2.2000	UG/KG	2.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endosulfan I	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endosulfan I	1.9000	UG/KG	1.9000	U	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endosulfan I	0.2700	UG/KG		JP	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endosulfan I	0.1300	UG/KG		JP	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endosulfan I	0.0510	UG/KG		J	J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endosulfan II	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endosulfan II	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endosulfan II	4.0000	UG/KG	4.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endosulfan II	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endosulfan II	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endosulfan II	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endosulfan II	3.6000	UG/KG	3.6000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endosulfan II	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endosulfan II	3.1000	UG/KG	3.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endosulfan II	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endosulfan II	3.1000	UG/KG	3.1000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endosulfan II	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endosulfan II	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endosulfan II	3.0000	UG/KG	3.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endosulfan II	3.0000	UG/KG	3.0000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endosulfan Sulfate	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endosulfan Sulfate	18.1000	UG/KG	18.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endosulfan Sulfate	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endosulfan Sulfate	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endosulfan Sulfate	18.0000	UG/KG	18.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endosulfan Sulfate	17.9000	UG/KG	17.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endosulfan Sulfate	17.8000	UG/KG	17.8000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endosulfan Sulfate	17.6000	UG/KG	17.6000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endosulfan Sulfate	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endosulfan Sulfate	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endosulfan Sulfate	4.0000	UG/KG	4.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endosulfan Sulfate	3.9000	UG/KG	3.9000	JP	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endosulfan Sulfate	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endosulfan Sulfate	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endosulfan Sulfate	3.6000	UG/KG	3.6000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endrin	4.5000	UG/KG	4.5000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endrin	4.4000	UG/KG	4.4000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endrin	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endrin	4.2000	UG/KG	4.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endrin	4.0000	UG/KG	4.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endrin	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endrin	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endrin	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endrin	3.6000	UG/KG	3.6000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endrin Aldehyde	17.3000	UG/KG	17.3000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endrin Aldehyde	17.3000	UG/KG	17.3000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endrin Aldehyde	17.3000	UG/KG	17.3000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endrin Aldehyde	17.3000	UG/KG	17.3000	U	UJ

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endrin Aldehyde	17.2000	UG/KG	17.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endrin Aldehyde	17.1000	UG/KG	17.1000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endrin Aldehyde	17.0000	UG/KG	17.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endrin Aldehyde	16.8000	UG/KG	16.8000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endrin Aldehyde	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endrin Aldehyde	4.2000	UG/KG	4.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endrin Aldehyde	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endrin Aldehyde	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endrin Aldehyde	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endrin Aldehyde	3.6000	UG/KG	3.6000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endrin Aldehyde	0.3000	UG/KG		JP	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Endrin Ketone	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Endrin Ketone	18.1000	UG/KG	18.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Endrin Ketone	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Endrin Ketone	18.1000	UG/KG	18.1000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Endrin Ketone	18.0000	UG/KG	18.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Endrin Ketone	17.9000	UG/KG	17.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Endrin Ketone	17.8000	UG/KG	17.8000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Endrin Ketone	17.6000	UG/KG	17.6000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Endrin Ketone	4.2000	UG/KG	4.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Endrin Ketone	4.2000	UG/KG	4.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Endrin Ketone	3.9000	UG/KG	3.9000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Endrin Ketone	3.8000	UG/KG	3.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Endrin Ketone	3.7000	UG/KG	3.7000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Endrin Ketone	3.6000	UG/KG	3.6000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Endrin Ketone	0.2500	UG/KG		J	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Gamma Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Gamma Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Gamma Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Gamma Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Gamma Chlordane	10.5000	UG/KG	10.5000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Gamma Chlordane	10.4000	UG/KG	10.4000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Gamma Chlordane	10.4000	UG/KG	10.4000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Gamma Chlordane	10.2000	UG/KG	10.2000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Gamma Chlordane	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Gamma Chlordane	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Gamma Chlordane	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Gamma Chlordane	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Gamma Chlordane	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Gamma Chlordane	1.9000	UG/KG	1.9000	U	UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Gamma Chlordane	0.0580	UG/KG		J	J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Gamma-BHC (Lindane)	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Gamma-BHC (Lindane)	3.1000	UG/KG	3.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Gamma-BHC (Lindane)	3.1000	UG/KG	3.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Gamma-BHC (Lindane)	3.1000	UG/KG	3.1000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Gamma-BHC (Lindane)	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Gamma-BHC (Lindane)	3.0000	UG/KG	3.0000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Gamma-BHC (Lindane)	3.0000	UG/KG	3.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Gamma-BHC (Lindane)	3.0000	UG/KG	3.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	2.0000	UG/KG	2.0000	JP	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Gamma-BHC (Lindane)	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	1.9000	UG/KG	1.9000	JP	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Gamma-BHC (Lindane)	1.9000	UG/KG	1.9000	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Heptachlor	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Heptachlor	2.3000	UG/KG	2.3000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Heptachlor	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Heptachlor	2.3000	UG/KG	2.3000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Heptachlor	2.3000	UG/KG	2.3000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Heptachlor	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Heptachlor	2.2000	UG/KG	2.2000	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Heptachlor	2.2000	UG/KG	2.2000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Heptachlor	2.2000	UG/KG	2.2000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Heptachlor	2.2000	UG/KG	2.2000	U	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Heptachlor	2.1000	UG/KG	2.1000	JP	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Heptachlor	2.0000	UG/KG	2.0000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B406	19940622	B40601	34897	Borehole	0.20	0.70	Heptachlor	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Heptachlor	1.9000	UG/KG	1.9000	JP	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Heptachlor	1.9000	UG/KG	1.9000	JP	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Heptachlor Epoxide	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Heptachlor Epoxide	9.1000	UG/KG	9.1000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Heptachlor Epoxide	9.1000	UG/KG	9.1000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Heptachlor Epoxide	9.0000	UG/KG	9.0000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Heptachlor Epoxide	9.0000	UG/KG	9.0000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Heptachlor Epoxide	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Heptachlor Epoxide	8.9000	UG/KG	8.9000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Heptachlor Epoxide	8.8000	UG/KG	8.8000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Heptachlor Epoxide	2.2000	UG/KG	2.2000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Heptachlor Epoxide	2.2000	UG/KG	2.2000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Heptachlor Epoxide	2.1000	UG/KG	2.1000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Heptachlor Epoxide	2.0000	UG/KG	2.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Heptachlor Epoxide	2.0000	UG/KG	2.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Heptachlor Epoxide	1.9000	UG/KG	1.9000	U	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	Heptachlor Epoxide	0.1000	UG/KG		J	J
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Methoxychlor	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Methoxychlor	90.7000	UG/KG	90.7000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Methoxychlor	90.6000	UG/KG	90.6000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Methoxychlor	90.5000	UG/KG	90.5000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Methoxychlor	90.2000	UG/KG	90.2000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Methoxychlor	89.5000	UG/KG	89.5000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Methoxychlor	89.0000	UG/KG	89.0000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Methoxychlor	88.0000	UG/KG	88.0000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	Methoxychlor	22.0000	UG/KG	22.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Methoxychlor	22.0000	UG/KG	22.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Methoxychlor	21.0000	UG/KG	21.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Methoxychlor	20.0000	UG/KG	20.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Methoxychlor	20.0000	UG/KG	20.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Methoxychlor	1.9000	UG/KG	1.9000	JPB	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Methoxychlor	1.9000	UG/KG	1.9000	JPB	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Toxaphene	220.0000	UG/KG	220.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Toxaphene	220.0000	UG/KG	220.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Toxaphene	210.0000	UG/KG	210.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Toxaphene	200.0000	UG/KG	200.0000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Toxaphene	200.0000	UG/KG	200.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Toxaphene	190.0000	UG/KG	190.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Toxaphene	190.0000	UG/KG	190.0000	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Toxaphene	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Toxaphene	181.4000	UG/KG	181.4000	U	UJ
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Toxaphene	181.3000	UG/KG	181.3000	U	UJ
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Toxaphene	180.9000	UG/KG	180.9000	U	UJ
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Toxaphene	180.4000	UG/KG	180.4000	U	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Toxaphene	178.9000	UG/KG	178.9000	U	UJ
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Toxaphene	178.1000	UG/KG	178.1000	U	UJ
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Toxaphene	175.9000	UG/KG	175.9000	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3,5-Trinitrobenzene	1.5000	MG/KG	1.5000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	1,3-Dinitrobenzene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	1,3-Dinitrobenzene	0.0980	MG/KG		J	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	U

Table A-2
Surface Soil Data: Organics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4,6-Trinitrotoluene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4,6-Trinitrotoluene	0.2000	MG/KG		J	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,4-Dinitrotoluene	0.5000	MG/KG	0.5000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	2,6-Dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	2-Amino-4,6-dinitrotoluene	1.5000	MG/KG	1.5000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	HMX	3.0000	MG/KG	3.0000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	HMX	3.0000	MG/KG	3.0000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Nitrobenzene	1.5000	MG/KG	1.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Nitrobenzene	1.5000	MG/KG	1.5000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	RDX	2.5000	MG/KG	2.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	RDX	2.5000	MG/KG	2.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	RDX	2.5000	MG/KG	2.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	RDX	2.5000	MG/KG	2.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	RDX	2.5000	MG/KG	2.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	RDX	2.5000	MG/KG	2.5000	U	UJ
B405	19940622	B40501	34897	Borehole	0.00	0.50	RDX	0.2000	MG/KG	0.2000	J	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Tetryl	2.5000	MG/KG	2.5000	U	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Tetryl	2.5000	MG/KG	2.5000	U	U

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B409	19940628	B40901	34897	Borehole	0.00	0.50	Aluminum	21400.0000	MG/KG			
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Aluminum	4820.0000	MG/KG	6.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Aluminum	3890.0000	MG/KG	6.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Aluminum	3830.0000	MG/KG			
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Aluminum	3780.0000	MG/KG	6.0000		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Aluminum	3610.0000	MG/KG			
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Aluminum	3590.0000	MG/KG	6.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Aluminum	3330.0000	MG/KG	6.0000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Aluminum	3210.0000	MG/KG			
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Aluminum	3180.0000	MG/KG	6.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Aluminum	2680.0000	MG/KG	6.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Aluminum	2030.0000	MG/KG	6.0000		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Aluminum	1900.0000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Aluminum	1800.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Aluminum	1680.0000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Antimony	42.2000	MG/KG	3.0000		J
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Antimony	35.0000	MG/KG	3.0000		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Antimony	34.0000	MG/KG	3.0000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Antimony	30.8000	MG/KG	3.0000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Antimony	30.3000	MG/KG	3.0000		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Antimony	28.2000	MG/KG	3.0000		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Antimony	27.1000	MG/KG	3.0000		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Antimony	26.1000	MG/KG	3.0000		J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Antimony	1.9000	MG/KG	1.9000	UN	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Antimony	1.9000	MG/KG	1.9000	UN	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Antimony	1.8000	MG/KG	1.8000	UN	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Antimony	1.7000	MG/KG	1.7000	UN	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	Antimony	1.7000	MG/KG	1.7000	UN	UJ
B408	19940616	B40811	34897	Borehole	0.00	0.50	Antimony	1.7000	MG/KG	1.7000	UN	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Arsenic	11.8000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Arsenic	7.7000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Arsenic	7.4000	MG/KG			
B409	19940628	B40901	34897	Borehole	0.00	0.50	Arsenic	7.4000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Arsenic	6.8000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Arsenic	6.7000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Arsenic	6.3000	MG/KG			
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Arsenic	5.9000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Arsenic	4.9000	MG/KG	0.2000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Arsenic	4.8000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Arsenic	4.3000	MG/KG	0.2000		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Arsenic	4.2000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Arsenic	4.0000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Arsenic	3.9000	MG/KG	0.2000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Arsenic	3.9000	MG/KG	0.2000		J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Barium	103.0000	MG/KG			
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Barium	32.4000	MG/KG	0.2000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Barium	31.4000	MG/KG	0.2000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Barium	26.9000	MG/KG	0.2000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Barium	23.4000	MG/KG	0.2000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Barium	23.0000	MG/KG	0.2000		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Barium	22.4000	MG/KG			
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Barium	22.4000	MG/KG	0.2000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Barium	20.9000	MG/KG	0.2000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Barium	20.4000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Barium	18.0000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Barium	16.6000	MG/KG	0.2000		
B408	19940616	B40811	34897	Borehole	0.00	0.50	Barium	16.3000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Barium	16.1000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Barium	12.4000	MG/KG			
B409	19940628	B40901	34897	Borehole	0.00	0.50	Beryllium	1.0000	MG/KG	1.0000		U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Beryllium	0.7100	MG/KG	0.2000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Beryllium	0.7000	MG/KG	0.2000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Beryllium	0.6900	MG/KG	0.2000		

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Beryllium	0.6900	MG/KG	0.2000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Beryllium	0.6800	MG/KG	0.2000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Beryllium	0.6700	MG/KG	0.2000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Beryllium	0.5900	MG/KG	0.2000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Beryllium	0.5900	MG/KG	0.2000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Beryllium	0.2300	MG/KG		B	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Beryllium	0.2100	MG/KG		B	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Beryllium	0.1800	MG/KG		B	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Beryllium	0.1300	MG/KG		B	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Beryllium	0.1300	MG/KG		B	
B408	19940616	B40811	34897	Borehole	0.00	0.50	Beryllium	0.1200	MG/KG		B	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Bismuth	28.5000	MG/KG		B	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Bismuth	19.6000	MG/KG		B	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Bismuth	19.6000	MG/KG		B	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Bismuth	17.5000	MG/KG		B	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Bismuth	14.5000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Bismuth	14.0000	MG/KG		B	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Bismuth	12.3000	MG/KG		B	
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Cadmium	7.7000	MG/KG	0.2000		J
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Cadmium	6.0000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Cadmium	6.0000	MG/KG	0.2000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Cadmium	5.5000	MG/KG	0.2000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Cadmium	5.4000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Cadmium	5.2000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Cadmium	5.0000	MG/KG	0.2000		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Cadmium	4.8000	MG/KG	0.2000		J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Cadmium	0.2200	MG/KG	0.2200	U	UJ
B409	19940628	B40901	34897	Borehole	0.00	0.50	Cadmium	0.2200	MG/KG	0.2200	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Cadmium	0.2100	MG/KG	0.2100	U	UJ
B401	19940614	B40101	34897	Borehole	0.00	0.50	Cadmium	0.2000	MG/KG	0.2000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Cadmium	0.2000	MG/KG	0.2000	U	UJ
B408	19940616	B40801	34897	Borehole	0.00	0.50	Cadmium	0.1900	MG/KG	0.1900	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Cadmium	0.1900	MG/KG	0.1900	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Calcium	150000.0000	MG/KG	2.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Calcium	116000.0000	MG/KG	2.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Calcium	113000.0000	MG/KG	2.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Calcium	112000.0000	MG/KG	2.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Calcium	109000.0000	MG/KG	2.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Calcium	105000.0000	MG/KG	2.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Calcium	104000.0000	MG/KG	2.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Calcium	97900.0000	MG/KG	2.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Calcium	4980.0000	MG/KG			J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Calcium	2060.0000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Calcium	1680.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Calcium	1670.0000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Calcium	1080.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Calcium	899.0000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Calcium	812.0000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Chromium	30.5000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Chromium	25.1000	MG/KG	1.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Chromium	25.0000	MG/KG	1.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Chromium	25.0000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Chromium	25.0000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Chromium	23.9000	MG/KG	1.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Chromium	22.9000	MG/KG	1.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Chromium	22.5000	MG/KG			
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Chromium	21.0000	MG/KG	1.0000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Chromium	5.7000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Chromium	5.0000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Chromium	4.6000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Chromium	2.9000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Chromium	2.7000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Chromium	1.7000	MG/KG			

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B409	19940628	B40901	34897	Borehole	0.00	0.50	Cobalt	14.4000	MG/KG			
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Cobalt	8.5000	MG/KG	1.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Cobalt	8.4000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Cobalt	8.4000	MG/KG	1.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Cobalt	8.1000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Cobalt	8.1000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Cobalt	7.8000	MG/KG	1.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Cobalt	6.4000	MG/KG	1.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Cobalt	6.4000	MG/KG	1.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Cobalt	4.8000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Cobalt	3.7000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Cobalt	2.7000	MG/KG		B	
B408	19940616	B40811	34897	Borehole	0.00	0.50	Cobalt	2.4000	MG/KG		B	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Cobalt	2.3000	MG/KG		B	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Cobalt	1.4000	MG/KG		B	
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Copper	18.0000	MG/KG	1.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Copper	17.1000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Copper	17.0000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Copper	16.8000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Copper	16.3000	MG/KG	1.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Copper	16.2000	MG/KG			
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Copper	16.2000	MG/KG	1.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Copper	14.5000	MG/KG	1.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Copper	13.7000	MG/KG	1.0000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Copper	8.1000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Copper	5.5000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Copper	4.0000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Copper	3.9000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Copper	3.8000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Copper	3.4000	MG/KG			
B409	19940628	B40901	34897	Borehole	0.00	0.50	Cyanide	0.6500	MG/KG	0.6500	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Cyanide	0.6400	MG/KG	0.6400	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Cyanide	0.6200	MG/KG	0.6200	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Cyanide	0.5900	MG/KG	0.5900	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Cyanide	0.5800	MG/KG	0.5800	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Cyanide	0.5700	MG/KG	0.5700	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Cyanide	0.5500	MG/KG	0.5500	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Cyanide	0.3800	MG/KG	0.2000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Cyanide	0.3600	MG/KG	0.2000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Cyanide	0.3500	MG/KG	0.2000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Cyanide	0.3500	MG/KG	0.2000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Cyanide	0.3400	MG/KG	0.2000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Cyanide	0.3100	MG/KG	0.2000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Cyanide	0.3000	MG/KG	0.2000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Cyanide	0.1200	MG/KG	0.1000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Iron	28800.0000	MG/KG			
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Iron	12500.0000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Iron	11400.0000	MG/KG	1.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Iron	11100.0000	MG/KG	1.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Iron	10700.0000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Iron	10600.0000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Iron	9100.0000	MG/KG	1.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Iron	8430.0000	MG/KG			
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Iron	7870.0000	MG/KG	1.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Iron	6470.0000	MG/KG	1.0000		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Iron	6100.0000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Iron	6020.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Iron	4760.0000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Iron	4040.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Iron	2790.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Lead	32.0000	MG/KG		N	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Lead	24.2000	MG/KG		N	J

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B406	19940622	B40601	34897	Borehole	0.20	0.70	Lead	20.2000	MG/KG		N	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Lead	19.9000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Lead	18.0000	MG/KG		N	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Lead	16.6000	MG/KG		N	J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Lead	15.6000	MG/KG		N	J
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Lead	10.1000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Lead	7.5000	MG/KG	0.2000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Lead	7.4000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Lead	7.0000	MG/KG	0.2000		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Lead	6.8000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Lead	5.7000	MG/KG	0.2000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Lead	5.7000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Lead	5.4000	MG/KG	0.2000		J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Lithium	27.3000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Lithium	6.4000	MG/KG		B	
B406	19940622	B40601	34897	Borehole	0.20	0.70	Lithium	4.4000	MG/KG		B	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Lithium	4.0000	MG/KG		B	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Lithium	2.7000	MG/KG		B	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Lithium	1.8000	MG/KG	1.8000	B	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Magnesium	68800.0000	MG/KG	5.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Magnesium	49500.0000	MG/KG	5.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Magnesium	48000.0000	MG/KG	5.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Magnesium	45000.0000	MG/KG	5.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Magnesium	41900.0000	MG/KG	5.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Magnesium	38200.0000	MG/KG	5.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Magnesium	37800.0000	MG/KG	5.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Magnesium	37100.0000	MG/KG	5.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Magnesium	4520.0000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Magnesium	1310.0000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Magnesium	1310.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Magnesium	1180.0000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Magnesium	915.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Magnesium	656.0000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Magnesium	583.0000	MG/KG			
B409	19940628	B40901	34897	Borehole	0.00	0.50	Manganese	969.0000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Manganese	350.0000	MG/KG			
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Manganese	306.0000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Manganese	283.0000	MG/KG	0.2000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Manganese	279.0000	MG/KG	0.2000		J
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Manganese	276.0000	MG/KG	0.2000		J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Manganese	267.0000	MG/KG			
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Manganese	256.0000	MG/KG	0.2000		J
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Manganese	254.0000	MG/KG	0.2000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Manganese	245.0000	MG/KG	0.2000		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Manganese	232.0000	MG/KG	0.2000		J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Manganese	182.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Manganese	181.0000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Manganese	157.0000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Manganese	116.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Mercury	0.1400	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Mercury	0.1300	MG/KG	0.1300	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Mercury	0.1300	MG/KG	0.1300	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Mercury	0.1200	MG/KG	0.1200	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Mercury	0.1200	MG/KG	0.1200	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Mercury	0.1200	MG/KG	0.1200	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Mercury	0.1100	MG/KG	0.1100	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Mercury	0.1000	MG/KG	0.1000	U	U

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Mercury	0.1000	MG/KG	0.1000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Molybdenum	6.2000	MG/KG		N	J
B409	19940628	B40901	34897	Borehole	0.00	0.50	Molybdenum	6.2000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Molybdenum	5.4000	MG/KG		N	J
B407	19940620	B40701	34897	Borehole	0.00	0.50	Molybdenum	4.2000	MG/KG		N	J
B401	19940614	B40101	34897	Borehole	0.00	0.50	Molybdenum	4.1000	MG/KG		N	J
B408	19940616	B40801	34897	Borehole	0.00	0.50	Molybdenum	3.6000	MG/KG		N	J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Nickel	25.8000	MG/KG	2.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Nickel	24.9000	MG/KG	2.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Nickel	24.5000	MG/KG	2.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Nickel	24.5000	MG/KG	2.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Nickel	24.3000	MG/KG	2.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Nickel	24.1000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Nickel	22.1000	MG/KG	2.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Nickel	21.8000	MG/KG	2.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Nickel	21.1000	MG/KG	2.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Nickel	8.6000	MG/KG			
B406	19940622	B40601	34897	Borehole	0.20	0.70	Nickel	5.7000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Nickel	4.9000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Nickel	3.4000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Nickel	2.8000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Nickel	2.3000	MG/KG	2.3000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Potassium	3550.0000	MG/KG			
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Potassium	671.0000	MG/KG	10.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Potassium	601.0000	MG/KG			
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Potassium	584.0000	MG/KG	10.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Potassium	527.0000	MG/KG	10.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Potassium	512.0000	MG/KG	10.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Potassium	508.0000	MG/KG	10.0000		
B407	19940620	B40701	34897	Borehole	0.00	0.50	Potassium	488.0000	MG/KG			
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Potassium	461.0000	MG/KG	10.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Potassium	454.0000	MG/KG	10.0000		
B401	19940614	B40101	34897	Borehole	0.00	0.50	Potassium	421.0000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Potassium	389.0000	MG/KG	10.0000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Potassium	343.0000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Potassium	341.0000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Potassium	270.0000	MG/KG		B	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Selenium	1.0000	MG/KG	1.0000	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Selenium	0.8700	MG/KG	0.8700	UW	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Selenium	0.8400	MG/KG	0.8400	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Selenium	0.8000	MG/KG	0.8000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Selenium	0.7900	MG/KG	0.7900	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Selenium	0.7700	MG/KG	0.7700	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Selenium	0.7400	MG/KG	0.7400	U	U
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Selenium	0.6700	MG/KG	0.6700	U	U
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Selenium	0.6700	MG/KG	0.6700	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Selenium	0.6700	MG/KG	0.6700	U	U
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Selenium	0.6600	MG/KG	0.6600	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Selenium	0.6600	MG/KG	0.6600	U	U
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Selenium	0.6600	MG/KG	0.6600	U	U
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Selenium	0.6500	MG/KG	0.6500	U	U
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Selenium	0.6500	MG/KG	0.6500	U	U
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Silver	17.0000	MG/KG	1.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Silver	15.7000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Silver	15.3000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Silver	15.2000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Silver	14.8000	MG/KG	1.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Silver	14.7000	MG/KG	1.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Silver	14.1000	MG/KG	1.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Silver	12.0000	MG/KG	1.0000		
B405	19940622	B40501	34897	Borehole	0.00	0.50	Silver	0.2600	MG/KG	0.2600	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Silver	0.2600	MG/KG	0.2600	U	U

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
B407	19940620	B40701	34897	Borehole	0.00	0.50	Silver	0.2500	MG/KG	0.2500	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Silver	0.2400	MG/KG	0.2400	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Silver	0.2300	MG/KG	0.2300	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Silver	0.2300	MG/KG	0.2300	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Silver	0.2200	MG/KG	0.2200	U	U
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Sodium	221.0000	MG/KG	10.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Sodium	170.0000	MG/KG	10.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Sodium	149.0000	MG/KG	10.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Sodium	143.0000	MG/KG	10.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Sodium	136.0000	MG/KG	10.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Sodium	123.0000	MG/KG	10.0000		
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Sodium	121.0000	MG/KG	10.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Sodium	116.0000	MG/KG	10.0000		
B409	19940628	B40901	34897	Borehole	0.00	0.50	Sodium	99.5000	MG/KG	99.5000	B	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Sodium	39.3000	MG/KG		B	
B407	19940620	B40701	34897	Borehole	0.00	0.50	Sodium	37.8000	MG/KG		B	
B401	19940614	B40101	34897	Borehole	0.00	0.50	Sodium	32.6000	MG/KG		B	
B405	19940622	B40501	34897	Borehole	0.00	0.50	Sodium	32.0000	MG/KG		B	
B408	19940616	B40811	34897	Borehole	0.00	0.50	Sodium	27.9000	MG/KG		B	
B408	19940616	B40801	34897	Borehole	0.00	0.50	Sodium	26.7000	MG/KG		B	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Thallium	0.9300	MG/KG	0.9300	UN	UJ
B407	19940620	B40701	34897	Borehole	0.00	0.50	Thallium	0.8900	MG/KG	0.8900	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Thallium	0.8300	MG/KG	0.8300	U	U
B405	19940622	B40501	34897	Borehole	0.00	0.50	Thallium	0.6600	MG/KG	0.6600	UW	UJ
B406	19940622	B40601	34897	Borehole	0.20	0.70	Thallium	0.6100	MG/KG	0.6100	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Thallium	0.5900	MG/KG	0.5900	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Thallium	0.5700	MG/KG	0.5700	UW	UJ
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Thallium	0.4400	MG/KG	0.4400		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Thallium	0.4400	MG/KG	0.4400		J
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Thallium	0.4400	MG/KG	0.4400		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Thallium	0.4400	MG/KG	0.4400		J
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Thallium	0.4400	MG/KG	0.4400		J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Thallium	0.4400	MG/KG	0.4400		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Thallium	0.4400	MG/KG	0.4400		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Thallium	0.4300	MG/KG	0.4300		J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Tin	12.0000	MG/KG	12.0000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Tin	12.0000	MG/KG	12.0000	U	U
B407	19940620	B40701	34897	Borehole	0.00	0.50	Tin	11.6000	MG/KG	11.6000	U	U
B401	19940614	B40101	34897	Borehole	0.00	0.50	Tin	10.9000	MG/KG	10.9000	U	U
B406	19940622	B40601	34897	Borehole	0.20	0.70	Tin	10.8000	MG/KG	10.8000	U	U
B408	19940616	B40811	34897	Borehole	0.00	0.50	Tin	10.6000	MG/KG	10.6000	U	U
B408	19940616	B40801	34897	Borehole	0.00	0.50	Tin	10.3000	MG/KG	10.3000	U	U
B409	19940628	B40901	34897	Borehole	0.00	0.50	Vanadium	37.0000	MG/KG			
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Vanadium	24.2000	MG/KG	1.0000		
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Vanadium	23.6000	MG/KG	1.0000		
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Vanadium	22.8000	MG/KG	1.0000		
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Vanadium	22.7000	MG/KG	1.0000		
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Vanadium	22.6000	MG/KG	1.0000		
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Vanadium	21.3000	MG/KG	1.0000		
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Vanadium	20.2000	MG/KG	1.0000		
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Vanadium	18.9000	MG/KG	1.0000		
B406	19940622	B40601	34897	Borehole	0.20	0.70	Vanadium	7.3000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Vanadium	7.0000	MG/KG			
B405	19940622	B40501	34897	Borehole	0.00	0.50	Vanadium	6.1000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Vanadium	4.8000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Vanadium	4.6000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Vanadium	0.7500	MG/KG		B	
B409	19940628	B40901	34897	Borehole	0.00	0.50	Zinc	62.2000	MG/KG			J
MND33-0104	19920116	0104-0002	MND33	Borehole	1.50	2.00	Zinc	40.4000	MG/KG	0.5000		J
MND33-0103	19920116	0103-0001	MND33	Borehole	0.00	0.50	Zinc	38.3000	MG/KG	0.5000		J
MND33-0104	19920116	0104-1002	MND33	Borehole	1.50	2.00	Zinc	34.7000	MG/KG	0.5000		J
MND33-0102	19920116	0102-0001	MND33	Borehole	0.00	0.50	Zinc	33.9000	MG/KG	0.5000		J

Table A-3
Surface Soil Data: Inorganics
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND33-0104	19920116	0104-0001	MND33	Borehole	0.00	0.50	Zinc	30.2000	MG/KG	0.5000		J
MND33-0102	19920116	0102-1001	MND33	Borehole	0.00	0.50	Zinc	30.0000	MG/KG	0.5000		J
MND33-0102	19920116	0102-0002	MND33	Borehole	1.50	2.00	Zinc	25.6000	MG/KG	0.5000		J
B406	19940622	B40601	34897	Borehole	0.20	0.70	Zinc	23.2000	MG/KG			
MND33-0103	19920116	0103-0002	MND33	Borehole	1.50	2.00	Zinc	22.7000	MG/KG	0.5000		J
B405	19940622	B40501	34897	Borehole	0.00	0.50	Zinc	15.8000	MG/KG			
B407	19940620	B40701	34897	Borehole	0.00	0.50	Zinc	15.6000	MG/KG			
B408	19940616	B40811	34897	Borehole	0.00	0.50	Zinc	13.4000	MG/KG			
B408	19940616	B40801	34897	Borehole	0.00	0.50	Zinc	13.3000	MG/KG			
B401	19940614	B40101	34897	Borehole	0.00	0.50	Zinc	6.7000	MG/KG			

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0001	Borehole	19920116	1,2,4-Trichlorobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	1,2,4-Trichlorobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	1,2,4-Trichlorobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	1,2,4-Trichlorobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	1,2,4-Trichlorobenzene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	1,2,4-Trichlorobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	1,2,4-Trichlorobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	1,2,4-Trichlorobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	1,2,4-Trichlorobenzene	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	1,2,4-Trichlorobenzene	33.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	1,2-Dichlorobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	1,2-Dichlorobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	1,2-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	1,2-Dichlorobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	1,2-Dichlorobenzene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	1,2-Dichlorobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	1,2-Dichlorobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	1,2-Dichlorobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	1,2-Dichlorobenzene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	1,3-Dichlorobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	1,3-Dichlorobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	1,3-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	1,3-Dichlorobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	1,3-Dichlorobenzene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	1,3-Dichlorobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	1,3-Dichlorobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	1,3-Dichlorobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	1,3-Dichlorobenzene	360.0000	UG/KG	360.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0001	Borehole	19920116	1,4-Dichlorobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	1,4-Dichlorobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	1,4-Dichlorobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	1,4-Dichlorobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	1,4-Dichlorobenzene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	1,4-Dichlorobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	1,4-Dichlorobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	1,4-Dichlorobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	1,4-Dichlorobenzene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2,2'-oxybis(1-chloropropane)	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,2'-oxybis(1-chloropropane)	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,2'-oxybis(1-chloropropane)	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,2'-oxybis(1-chloropropane)	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,2'-oxybis(1-chloropropane)	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,2'-oxybis(1-chloropropane)	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,2'-oxybis(1-chloropropane)	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,2'-oxybis(1-chloropropane)	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,2'-oxybis(1-chloropropane)	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2,4,5-Trichlorophenol	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	2,4,5-Trichlorophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	2,4,5-Trichlorophenol	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	2,4,5-Trichlorophenol	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	2,4,5-Trichlorophenol	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	2,4,5-Trichlorophenol	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	2,4,5-Trichlorophenol	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	2,4,5-Trichlorophenol	1700.0000	UG/KG	1700.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0001	Borehole	19920116	2,4,6-Trichlorophenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,4,6-Trichlorophenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,4,6-Trichlorophenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,4,6-Trichlorophenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,4,6-Trichlorophenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,4,6-Trichlorophenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,4,6-Trichlorophenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,4,6-Trichlorophenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,4,6-Trichlorophenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2,4-Dichlorophenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,4-Dichlorophenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,4-Dichlorophenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,4-Dichlorophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,4-Dichlorophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,4-Dichlorophenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,4-Dichlorophenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,4-Dichlorophenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,4-Dichlorophenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,4-Dichlorophenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,4-Dichlorophenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,4-Dichlorophenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,4-Dichlorophenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,4-Dichlorophenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,4-Dichlorophenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2,4-Dimethylphenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,4-Dimethylphenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,4-Dimethylphenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,4-Dimethylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,4-Dimethylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,4-Dimethylphenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,4-Dimethylphenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,4-Dimethylphenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,4-Dimethylphenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,4-Dimethylphenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,4-Dimethylphenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,4-Dimethylphenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,4-Dimethylphenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,4-Dimethylphenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,4-Dimethylphenol	360.0000	UG/KG	360.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0001	Borehole	19920116	2,4-Dinitrophenol	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	2,4-Dinitrophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	2,4-Dinitrophenol	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	2,4-Dinitrophenol	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	2,4-Dinitrophenol	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	2,4-Dinitrophenol	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	2,4-Dinitrophenol	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	2,4-Dinitrophenol	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	2,4-Dinitrotoluene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,4-Dinitrotoluene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,4-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,4-Dinitrotoluene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,4-Dinitrotoluene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,4-Dinitrotoluene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,4-Dinitrotoluene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,4-Dinitrotoluene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,4-Dinitrotoluene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2,6-Dinitrotoluene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2,6-Dinitrotoluene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2,6-Dinitrotoluene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2,6-Dinitrotoluene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2,6-Dinitrotoluene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2,6-Dinitrotoluene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2,6-Dinitrotoluene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2,6-Dinitrotoluene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2,6-Dinitrotoluene	360.0000	UG/KG	360.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B405	B40501	Borehole	19940622	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Benzyl-4-Chlorophenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Benzyl-4-Chlorophenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2-Benzyl-4-Chlorophenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Benzyl-4-Chlorophenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Benzyl-4-Chlorophenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2-Chloronaphthalene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2-Chloronaphthalene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2-Chloronaphthalene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2-Chloronaphthalene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2-Chloronaphthalene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2-Chloronaphthalene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2-Chloronaphthalene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2-Chloronaphthalene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2-Chloronaphthalene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Chloronaphthalene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Chloronaphthalene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2-Chloronaphthalene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2-Chloronaphthalene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Chloronaphthalene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Chloronaphthalene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2-Chlorophenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2-Chlorophenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2-Chlorophenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2-Chlorophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2-Chlorophenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2-Chlorophenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2-Chlorophenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2-Chlorophenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Chlorophenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Chlorophenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2-Chlorophenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2-Chlorophenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Chlorophenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Chlorophenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	2-Chlorophenol	38.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	2-Methylnaphthalene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2-Methylnaphthalene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2-Methylnaphthalene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2-Methylnaphthalene	740.0000	UG/KG	740.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0002	Borehole	19920116	2-Methylnaphthalene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2-Methylnaphthalene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2-Methylnaphthalene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2-Methylnaphthalene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2-Methylnaphthalene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Methylnaphthalene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Methylnaphthalene	400.0000	UG/KG	400.0000
B406	B40601	Borehole	19940622	2-Methylnaphthalene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Methylnaphthalene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Methylnaphthalene	360.0000	UG/KG	360.0000
B401	B40101	Borehole	19940614	2-Methylnaphthalene	63.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	2-Methylphenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2-Methylphenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2-Methylphenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2-Methylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	2-Methylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2-Methylphenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2-Methylphenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2-Methylphenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2-Methylphenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Methylphenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Methylphenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2-Methylphenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2-Methylphenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Methylphenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Methylphenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	2-Nitroaniline	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	2-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	2-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	2-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	2-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	2-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	2-Nitroaniline	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	2-Nitroaniline	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	2-Nitroaniline	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	2-Nitroaniline	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	2-Nitroaniline	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	2-Nitroaniline	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	2-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	2-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	2-Nitroaniline	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	2-Nitrophenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	2-Nitrophenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	2-Nitrophenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	2-Nitrophenol	740.0000	UG/KG	740.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-0002	Borehole	19920116	2-Nitrophenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	2-Nitrophenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	2-Nitrophenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	2-Nitrophenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	2-Nitrophenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	2-Nitrophenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	2-Nitrophenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	2-Nitrophenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	2-Nitrophenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	2-Nitrophenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	2-Nitrophenol	360.0000	UG/KG	360.0000
MND33-0102	0102-0001	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0102	0102-1001	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0103	0103-0001	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0104	0104-0001	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0102	0102-0002	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0103	0103-0002	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0104	0104-0002	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
MND33-0104	0104-1002	Borehole	19920116	3,3'-Dichlorobenzidine	1500.0000	UG/KG	1500.0000
B409	B40901	Borehole	19940628	3,3'-Dichlorobenzidine	850.0000	UG/KG	850.0000
B405	B40501	Borehole	19940622	3,3'-Dichlorobenzidine	840.0000	UG/KG	840.0000
B407	B40701	Borehole	19940620	3,3'-Dichlorobenzidine	810.0000	UG/KG	810.0000
B406	B40601	Borehole	19940622	3,3'-Dichlorobenzidine	770.0000	UG/KG	770.0000
B401	B40101	Borehole	19940614	3,3'-Dichlorobenzidine	760.0000	UG/KG	760.0000
B408	B40811	Borehole	19940616	3,3'-Dichlorobenzidine	740.0000	UG/KG	740.0000
B408	B40801	Borehole	19940616	3,3'-Dichlorobenzidine	720.0000	UG/KG	720.0000
MND33-0102	0102-0002	Borehole	19920116	3-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	3-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0002	Borehole	19920116	3-Nitroaniline	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	3-Nitroaniline	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	3-Nitroaniline	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	3-Nitroaniline	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	3-Nitroaniline	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	3-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	3-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	3-Nitroaniline	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	4,6-Dinitro-o-Cresol	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	4,6-Dinitro-o-Cresol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	4,6-Dinitro-o-Cresol	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	4,6-Dinitro-o-Cresol	2100.0000	UG/KG	2100.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B405	B40501	Borehole	19940622	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	4,6-Dinitro-o-Cresol	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	4,6-Dinitro-o-Cresol	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	4,6-Dinitro-o-Cresol	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	4,6-Dinitro-o-Cresol	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	4-Bromophenyl-phenyl Ether	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	4-Bromophenyl-phenyl Ether	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	4-Bromophenyl-phenyl Ether	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	4-Bromophenyl-phenyl Ether	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	4-Bromophenyl-phenyl Ether	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	4-Bromophenyl-phenyl Ether	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	4-Bromophenyl-phenyl Ether	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	4-Bromophenyl-phenyl Ether	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	4-Bromophenyl-phenyl Ether	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	4-Chloro-3-methylphenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	4-Chloro-3-methylphenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	4-Chloro-3-methylphenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	4-Chloro-3-methylphenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	4-Chloro-3-methylphenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	4-Chloro-3-methylphenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	4-Chloro-3-methylphenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	4-Chloro-3-methylphenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	4-Chloro-3-methylphenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	4-Chloro-3-methylphenol	7.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	4-Chloroaniline	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	4-Chloroaniline	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	4-Chloroaniline	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	4-Chloroaniline	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	4-Chloroaniline	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	4-Chloroaniline	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	4-Chloroaniline	730.0000	UG/KG	730.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0103	0103-0002	Borehole	19920116	4-Chloroaniline	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	4-Chloroaniline	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	4-Chloroaniline	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	4-Chloroaniline	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	4-Chloroaniline	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	4-Chloroaniline	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	4-Chloroaniline	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	4-Chloroaniline	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	4-Chlorophenyl-phenylether	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	4-Chlorophenyl-phenylether	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	4-Chlorophenyl-phenylether	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	4-Chlorophenyl-phenylether	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	4-Chlorophenyl-phenylether	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	4-Chlorophenyl-phenylether	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	4-Chlorophenyl-phenylether	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	4-Chlorophenyl-phenylether	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	4-Chlorophenyl-phenylether	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	4-Methylphenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	4-Methylphenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	4-Methylphenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	4-Methylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	4-Methylphenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	4-Methylphenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	4-Methylphenol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	4-Methylphenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	4-Methylphenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	4-Methylphenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	4-Methylphenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	4-Methylphenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	4-Methylphenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	4-Methylphenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	4-Methylphenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	4-Nitroaniline	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	4-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	4-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	4-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	4-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	4-Nitroaniline	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	4-Nitroaniline	3500.0000	UG/KG	3500.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0103	0103-0002	Borehole	19920116	4-Nitroaniline	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	4-Nitroaniline	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	4-Nitroaniline	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	4-Nitroaniline	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	4-Nitroaniline	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	4-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	4-Nitroaniline	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	4-Nitroaniline	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	4-Nitrophenol	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	4-Nitrophenol	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	4-Nitrophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	4-Nitrophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	4-Nitrophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	4-Nitrophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	4-Nitrophenol	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	4-Nitrophenol	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	4-Nitrophenol	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	4-Nitrophenol	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	4-Nitrophenol	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	4-Nitrophenol	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	4-Nitrophenol	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	4-Nitrophenol	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	4-Nitrophenol	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	Acenaphthene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Acenaphthene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Acenaphthene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Acenaphthene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Acenaphthene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Acenaphthene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Acenaphthene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Acenaphthene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Acenaphthene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Acenaphthene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Acenaphthene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Acenaphthene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Acenaphthene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Acenaphthene	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	Acenaphthene	25.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	Acenaphthylene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Acenaphthylene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Acenaphthylene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Acenaphthylene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Acenaphthylene	740.0000	UG/KG	740.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0104	0104-1002	Borehole	19920116	Acenaphthylene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Acenaphthylene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Acenaphthylene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Acenaphthylene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Acenaphthylene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Acenaphthylene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Acenaphthylene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Acenaphthylene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Acenaphthylene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Acenaphthylene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Anthracene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Anthracene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Anthracene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Anthracene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Anthracene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Anthracene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Anthracene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Anthracene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Anthracene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Anthracene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Anthracene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Anthracene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Anthracene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Benzo(a)anthracene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Benzo(a)anthracene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzo(a)anthracene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzo(a)anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzo(a)anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzo(a)anthracene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzo(a)anthracene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzo(a)anthracene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzo(a)anthracene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Benzo(a)anthracene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Benzo(a)anthracene	400.0000	UG/KG	400.0000
B406	B40601	Borehole	19940622	Benzo(a)anthracene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzo(a)anthracene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Benzo(a)anthracene	360.0000	UG/KG	360.0000
B401	B40101	Borehole	19940614	Benzo(a)anthracene	58.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Benzo(a)pyrene	760.0000	UG/KG	760.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0102	0102-0002	Borehole	19920116	Benzo(a)pyrene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzo(a)pyrene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzo(a)pyrene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzo(a)pyrene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzo(a)pyrene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzo(a)pyrene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzo(a)pyrene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzo(a)pyrene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Benzo(a)pyrene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Benzo(a)pyrene	400.0000	UG/KG	400.0000
B406	B40601	Borehole	19940622	Benzo(a)pyrene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzo(a)pyrene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Benzo(a)pyrene	360.0000	UG/KG	360.0000
B401	B40101	Borehole	19940614	Benzo(a)pyrene	51.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Benzo(b)fluoranthene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Benzo(b)fluoranthene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzo(b)fluoranthene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzo(b)fluoranthene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzo(b)fluoranthene	420.0000	UG/KG	420.0000
B406	B40601	Borehole	19940622	Benzo(b)fluoranthene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzo(b)fluoranthene	370.0000	UG/KG	370.0000
B401	B40101	Borehole	19940614	Benzo(b)fluoranthene	98.0000	UG/KG	
B407	B40701	Borehole	19940620	Benzo(b)fluoranthene	59.0000	UG/KG	
B409	B40901	Borehole	19940628	Benzo(b)fluoranthene	49.0000	UG/KG	
B408	B40801	Borehole	19940616	Benzo(b)fluoranthene	37.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Benzo(g,h,i)perylene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Benzo(g,h,i)perylene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzo(g,h,i)perylene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzo(g,h,i)perylene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Benzo(g,h,i)perylene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Benzo(g,h,i)perylene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Benzo(g,h,i)perylene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzo(g,h,i)perylene	370.0000	UG/KG	370.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B408	B40801	Borehole	19940616	Benzo(g,h,i)perylene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Benzo(k)fluoranthene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Benzo(k)fluoranthene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzo(k)fluoranthene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzo(k)fluoranthene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzo(k)fluoranthene	420.0000	UG/KG	420.0000
B406	B40601	Borehole	19940622	Benzo(k)fluoranthene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzo(k)fluoranthene	370.0000	UG/KG	370.0000
B401	B40101	Borehole	19940614	Benzo(k)fluoranthene	170.0000	UG/KG	
B407	B40701	Borehole	19940620	Benzo(k)fluoranthene	100.0000	UG/KG	
B409	B40901	Borehole	19940628	Benzo(k)fluoranthene	100.0000	UG/KG	
B408	B40801	Borehole	19940616	Benzo(k)fluoranthene	65.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Benzoic Acid	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	Benzoic Acid	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	Benzoic Acid	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	Benzoic Acid	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	Benzoic Acid	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	Benzoic Acid	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	Benzoic Acid	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	Benzoic Acid	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	Benzoic Acid	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	Benzoic Acid	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	Benzoic Acid	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	Benzoic Acid	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	Benzoic Acid	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	Benzoic Acid	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0002	Borehole	19920116	Benzoic Acid	12.0000	UG/KG	3600.0000
MND33-0104	0104-0001	Borehole	19920116	Benzyl Alcohol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Benzyl Alcohol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Benzyl Alcohol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Benzyl Alcohol	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Benzyl Alcohol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Benzyl Alcohol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Benzyl Alcohol	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Benzyl Alcohol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Benzyl Alcohol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Benzyl Alcohol	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B407	B40701	Borehole	19940620	Benzyl Alcohol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Benzyl Alcohol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Benzyl Alcohol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Benzyl Alcohol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Benzyl Alcohol	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Bis(2-chloroethoxy)methane	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Bis(2-chloroethoxy)methane	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Bis(2-chloroethoxy)methane	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Bis(2-chloroethoxy)methane	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Bis(2-chloroethoxy)methane	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Bis(2-chloroethoxy)methane	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Bis(2-chloroethoxy)methane	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Bis(2-chloroethoxy)methane	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Bis(2-chloroethoxy)methane	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Bis(2-chloroethyl)ether	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Bis(2-chloroethyl)ether	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Bis(2-chloroethyl)ether	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Bis(2-chloroethyl)ether	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Bis(2-chloroethyl)ether	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Bis(2-chloroethyl)ether	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Bis(2-chloroethyl)ether	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Bis(2-chloroethyl)ether	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Bis(2-chloroethyl)ether	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Bis(2-ethylhexyl)phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Bis(2-ethylhexyl)phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Bis(2-ethylhexyl)phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Bis(2-ethylhexyl)phthalate	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B409	B40901	Borehole	19940628	Bis(2-ethylhexyl)phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Bis(2-ethylhexyl)phthalate	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Bis(2-ethylhexyl)phthalate	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Bis(2-ethylhexyl)phthalate	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Bis(2-ethylhexyl)phthalate	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	Bis(2-ethylhexyl)phthalate	74.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	Butyl Benzyl Phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Butyl Benzyl Phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Butyl Benzyl Phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Butyl Benzyl Phthalate	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Butyl Benzyl Phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Butyl Benzyl Phthalate	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Butyl Benzyl Phthalate	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Butyl Benzyl Phthalate	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Butyl Benzyl Phthalate	360.0000	UG/KG	360.0000
B405	B40501	Borehole	19940622	Carbazole	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Carbazole	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Carbazole	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Carbazole	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Carbazole	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Carbazole	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Carbazole	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Chrysene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Chrysene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Chrysene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Chrysene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Chrysene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Chrysene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Chrysene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Chrysene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Chrysene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Chrysene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Chrysene	400.0000	UG/KG	400.0000
B406	B40601	Borehole	19940622	Chrysene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Chrysene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Chrysene	360.0000	UG/KG	360.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B401	B40101	Borehole	19940614	Chrysene	78.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Dibenz(a,h)anthracene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Dibenz(a,h)anthracene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Dibenz(a,h)anthracene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Dibenz(a,h)anthracene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Dibenz(a,h)anthracene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Dibenz(a,h)anthracene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Dibenz(a,h)anthracene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Dibenz(a,h)anthracene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Dibenz(a,h)anthracene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Dibenzofuran	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Dibenzofuran	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Dibenzofuran	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Dibenzofuran	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Dibenzofuran	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Dibenzofuran	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Dibenzofuran	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Dibenzofuran	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Dibenzofuran	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Dibenzofuran	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Dibenzofuran	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Dibenzofuran	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Dibenzofuran	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Dibenzofuran	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Dibenzofuran	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Diethyl Phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Diethyl Phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Diethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Diethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Diethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Diethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Diethyl Phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Diethyl Phthalate	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Diethyl Phthalate	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Diethyl Phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Diethyl Phthalate	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Diethyl Phthalate	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Diethyl Phthalate	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Diethyl Phthalate	370.0000	UG/KG	370.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B408	B40801	Borehole	19940616	Diethyl Phthalate	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Dimethyl Phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Dimethyl Phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Dimethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Dimethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Dimethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Dimethyl Phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Dimethyl Phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Dimethyl Phthalate	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Dimethyl Phthalate	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Dimethyl Phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Dimethyl Phthalate	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Dimethyl Phthalate	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Dimethyl Phthalate	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Dimethyl Phthalate	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Dimethyl Phthalate	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Di-n-butyl Phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Di-n-butyl Phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Di-n-butyl Phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Di-n-butyl Phthalate	730.0000	UG/KG	730.0000
B409	B40901	Borehole	19940628	Di-n-butyl Phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Di-n-butyl Phthalate	120.0000	UG/KG	120.0000
B408	B40811	Borehole	19940616	Di-n-butyl Phthalate	96.0000	UG/KG	96.0000
B408	B40801	Borehole	19940616	Di-n-butyl Phthalate	95.0000	UG/KG	95.0000
B401	B40101	Borehole	19940614	Di-n-butyl Phthalate	85.0000	UG/KG	85.0000
B406	B40601	Borehole	19940622	Di-n-butyl Phthalate	68.0000	UG/KG	
B405	B40501	Borehole	19940622	Di-n-butyl Phthalate	67.0000	UG/KG	
MND33-0104	0104-0002	Borehole	19920116	Di-n-butyl Phthalate	25.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	Di-n-octyl Phthalate	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Di-n-octyl Phthalate	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Di-n-octyl Phthalate	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Di-n-octyl Phthalate	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Di-n-octyl Phthalate	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Di-n-octyl Phthalate	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B406	B40601	Borehole	19940622	Di-n-octyl Phthalate	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Di-n-octyl Phthalate	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Di-n-octyl Phthalate	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Fluoranthene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Fluoranthene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Fluoranthene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Fluoranthene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Fluoranthene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Fluoranthene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Fluoranthene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Fluoranthene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Fluoranthene	420.0000	UG/KG	420.0000
B406	B40601	Borehole	19940622	Fluoranthene	380.0000	UG/KG	380.0000
B401	B40101	Borehole	19940614	Fluoranthene	110.0000	UG/KG	
B407	B40701	Borehole	19940620	Fluoranthene	65.0000	UG/KG	
B408	B40801	Borehole	19940616	Fluoranthene	41.0000	UG/KG	
B408	B40811	Borehole	19940616	Fluoranthene	39.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Fluorene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Fluorene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Fluorene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Fluorene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Fluorene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Fluorene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Fluorene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Fluorene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Fluorene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Fluorene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Fluorene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Fluorene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Fluorene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Fluorene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Fluorene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Hexachlorobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Hexachlorobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Hexachlorobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Hexachlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Hexachlorobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Hexachlorobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Hexachlorobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Hexachlorobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Hexachlorobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Hexachlorobenzene	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B407	B40701	Borehole	19940620	Hexachlorobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Hexachlorobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Hexachlorobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Hexachlorobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Hexachlorobenzene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Hexachlorobutadiene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Hexachlorobutadiene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Hexachlorobutadiene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Hexachlorobutadiene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Hexachlorobutadiene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Hexachlorobutadiene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Hexachlorobutadiene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Hexachlorobutadiene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Hexachlorobutadiene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Hexachlorobutadiene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Hexachlorobutadiene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Hexachlorobutadiene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Hexachlorobutadiene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Hexachlorobutadiene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Hexachlorobutadiene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Hexachlorocyclopentadiene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Hexachlorocyclopentadiene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Hexachlorocyclopentadiene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Hexachlorocyclopentadiene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Hexachlorocyclopentadiene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Hexachlorocyclopentadiene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Hexachlorocyclopentadiene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Hexachlorocyclopentadiene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Hexachlorocyclopentadiene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Hexachloroethane	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Hexachloroethane	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Hexachloroethane	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Hexachloroethane	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Hexachloroethane	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Hexachloroethane	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Hexachloroethane	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Hexachloroethane	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Hexachloroethane	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Hexachloroethane	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B407	B40701	Borehole	19940620	Hexachloroethane	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Hexachloroethane	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Hexachloroethane	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Hexachloroethane	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Hexachloroethane	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Indeno(1,2,3-cd)pyrene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Indeno(1,2,3-cd)pyrene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Indeno(1,2,3-cd)pyrene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Indeno(1,2,3-cd)pyrene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Indeno(1,2,3-cd)pyrene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Indeno(1,2,3-cd)pyrene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Indeno(1,2,3-cd)pyrene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Indeno(1,2,3-cd)pyrene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Indeno(1,2,3-cd)pyrene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Isophorone	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Isophorone	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Isophorone	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Isophorone	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Isophorone	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Isophorone	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Isophorone	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Isophorone	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Isophorone	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Isophorone	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Isophorone	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Isophorone	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Isophorone	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Isophorone	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Isophorone	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Naphthalene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Naphthalene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Naphthalene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Naphthalene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Naphthalene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Naphthalene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Naphthalene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Naphthalene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Naphthalene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Naphthalene	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B407	B40701	Borehole	19940620	Naphthalene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Naphthalene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Naphthalene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Naphthalene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Naphthalene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Nitrobenzene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Nitrobenzene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Nitrobenzene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Nitrobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Nitrobenzene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Nitrobenzene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Nitrobenzene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Nitrobenzene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Nitrobenzene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Nitrobenzene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Nitrobenzene	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Nitrobenzene	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Nitrobenzene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Nitrobenzene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Nitrobenzene	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	N-Nitroso-di-n-propylamine	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	N-Nitroso-di-n-propylamine	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	N-Nitroso-di-n-propylamine	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	N-Nitroso-di-n-propylamine	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	N-Nitroso-di-n-propylamine	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	N-Nitroso-di-n-propylamine	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	N-Nitroso-di-n-propylamine	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	N-Nitroso-di-n-propylamine	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	N-Nitroso-di-n-propylamine	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	N-Nitrosodiphenylamine	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	N-Nitrosodiphenylamine	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	N-Nitrosodiphenylamine	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	N-Nitrosodiphenylamine	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	N-Nitrosodiphenylamine	420.0000	UG/KG	420.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
B407	B40701	Borehole	19940620	N-Nitrosodiphenylamine	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	N-Nitrosodiphenylamine	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	N-Nitrosodiphenylamine	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	N-Nitrosodiphenylamine	360.0000	UG/KG	360.0000
MND33-0104	0104-0001	Borehole	19920116	Pentachlorophenol	3700.0000	UG/KG	3700.0000
MND33-0102	0102-0001	Borehole	19920116	Pentachlorophenol	3600.0000	UG/KG	3600.0000
MND33-0103	0103-0001	Borehole	19920116	Pentachlorophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-0002	Borehole	19920116	Pentachlorophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-0002	Borehole	19920116	Pentachlorophenol	3600.0000	UG/KG	3600.0000
MND33-0104	0104-1002	Borehole	19920116	Pentachlorophenol	3600.0000	UG/KG	3600.0000
MND33-0102	0102-1001	Borehole	19920116	Pentachlorophenol	3500.0000	UG/KG	3500.0000
MND33-0103	0103-0002	Borehole	19920116	Pentachlorophenol	3500.0000	UG/KG	3500.0000
B409	B40901	Borehole	19940628	Pentachlorophenol	2100.0000	UG/KG	2100.0000
B405	B40501	Borehole	19940622	Pentachlorophenol	2000.0000	UG/KG	2000.0000
B407	B40701	Borehole	19940620	Pentachlorophenol	2000.0000	UG/KG	2000.0000
B406	B40601	Borehole	19940622	Pentachlorophenol	1900.0000	UG/KG	1900.0000
B401	B40101	Borehole	19940614	Pentachlorophenol	1800.0000	UG/KG	1800.0000
B408	B40811	Borehole	19940616	Pentachlorophenol	1800.0000	UG/KG	1800.0000
B408	B40801	Borehole	19940616	Pentachlorophenol	1700.0000	UG/KG	1700.0000
MND33-0104	0104-0001	Borehole	19920116	Phenanthrene	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Phenanthrene	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Phenanthrene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Phenanthrene	740.0000	UG/KG	740.0000
MND33-0104	0104-0002	Borehole	19920116	Phenanthrene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Phenanthrene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Phenanthrene	730.0000	UG/KG	730.0000
MND33-0103	0103-0002	Borehole	19920116	Phenanthrene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Phenanthrene	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Phenanthrene	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Phenanthrene	400.0000	UG/KG	400.0000
B406	B40601	Borehole	19940622	Phenanthrene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Phenanthrene	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Phenanthrene	360.0000	UG/KG	360.0000
B401	B40101	Borehole	19940614	Phenanthrene	78.0000	UG/KG	
MND33-0104	0104-0001	Borehole	19920116	Phenol	760.0000	UG/KG	760.0000
MND33-0102	0102-0002	Borehole	19920116	Phenol	750.0000	UG/KG	750.0000
MND33-0102	0102-0001	Borehole	19920116	Phenol	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Phenol	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Phenol	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Phenol	730.0000	UG/KG	730.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Location name	Sample identification	Location type	Collection date	Value name	Measured value	Value unit	Detection Limit
MND33-0103	0103-0002	Borehole	19920116	Phenol	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Phenol	420.0000	UG/KG	420.0000
B409	B40901	Borehole	19940628	Phenol	420.0000	UG/KG	420.0000
B407	B40701	Borehole	19940620	Phenol	400.0000	UG/KG	400.0000
B401	B40101	Borehole	19940614	Phenol	380.0000	UG/KG	380.0000
B406	B40601	Borehole	19940622	Phenol	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Phenol	370.0000	UG/KG	370.0000
B408	B40801	Borehole	19940616	Phenol	360.0000	UG/KG	360.0000
MND33-0104	0104-0002	Borehole	19920116	Phenol	23.0000	UG/KG	740.0000
MND33-0104	0104-0001	Borehole	19920116	Pyrene	760.0000	UG/KG	760.0000
MND33-0102	0102-0001	Borehole	19920116	Pyrene	740.0000	UG/KG	740.0000
MND33-0103	0103-0001	Borehole	19920116	Pyrene	740.0000	UG/KG	740.0000
MND33-0104	0104-1002	Borehole	19920116	Pyrene	740.0000	UG/KG	740.0000
MND33-0102	0102-1001	Borehole	19920116	Pyrene	730.0000	UG/KG	730.0000
B405	B40501	Borehole	19940622	Pyrene	420.0000	UG/KG	420.0000
B406	B40601	Borehole	19940622	Pyrene	380.0000	UG/KG	380.0000
B408	B40811	Borehole	19940616	Pyrene	370.0000	UG/KG	370.0000
MND33-0103	0103-0002	Borehole	19920116	Pyrene	120.0000	UG/KG	730.0000
B401	B40101	Borehole	19940614	Pyrene	98.0000	UG/KG	
MND33-0102	0102-0002	Borehole	19920116	Pyrene	77.0000	UG/KG	750.0000
B407	B40701	Borehole	19940620	Pyrene	56.0000	UG/KG	
B409	B40901	Borehole	19940628	Pyrene	47.0000	UG/KG	
B408	B40801	Borehole	19940616	Pyrene	36.0000	UG/KG	
MND33-0104	0104-0002	Borehole	19920116	Pyrene	25.0000	UG/KG	740.0000

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	120-82-1	U	UJ	MND33
1.50	2.00	120-82-1	U	UJ	MND33
0.00	0.50	120-82-1	U	UJ	MND33
0.00	0.50	120-82-1	U	UJ	MND33
1.50	2.00	120-82-1	U	UJ	MND33
0.00	0.50	120-82-1	U	UJ	MND33
1.50	2.00	120-82-1	U	UJ	MND33
0.00	0.50	120-82-1	U	U	34897
0.00	0.50	120-82-1	U	U	34897
0.00	0.50	120-82-1	U	U	34897
0.00	0.50	120-82-1	U	U	34897
0.20	0.70	120-82-1	U	U	34897
0.00	0.50	120-82-1	U	U	34897
0.00	0.50	120-82-1	U	U	34897
1.50	2.00	120-82-1	J	J	MND33
0.00	0.50	95-50-1	U	UJ	MND33
1.50	2.00	95-50-1	U	UJ	MND33
0.00	0.50	95-50-1	U	UJ	MND33
0.00	0.50	95-50-1	U	UJ	MND33
1.50	2.00	95-50-1	U	UJ	MND33
1.50	2.00	95-50-1	U	UJ	MND33
0.00	0.50	95-50-1	U	UJ	MND33
1.50	2.00	95-50-1	U	UJ	MND33
0.00	0.50	95-50-1	U	U	34897
0.00	0.50	95-50-1	U	U	34897
0.00	0.50	95-50-1	U	U	34897
0.00	0.50	95-50-1	U	U	34897
0.20	0.70	95-50-1	U	U	34897
0.00	0.50	95-50-1	U	U	34897
0.00	0.50	95-50-1	U	U	34897
0.00	0.50	541-73-1	U	UJ	MND33
1.50	2.00	541-73-1	U	UJ	MND33
0.00	0.50	541-73-1	U	UJ	MND33
0.00	0.50	541-73-1	U	UJ	MND33
1.50	2.00	541-73-1	U	UJ	MND33
1.50	2.00	541-73-1	U	UJ	MND33
0.00	0.50	541-73-1	U	UJ	MND33
1.50	2.00	541-73-1	U	UJ	MND33
0.00	0.50	541-73-1	U	U	34897
0.00	0.50	541-73-1	U	U	34897
0.00	0.50	541-73-1	U	U	34897
0.00	0.50	541-73-1	U	U	34897
0.20	0.70	541-73-1	U	U	34897
0.00	0.50	541-73-1	U	U	34897
0.00	0.50	541-73-1	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.20	0.70	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.20	0.70	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.20	0.70	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	UJ	MND33
1.50	2.00	106-46-7	U	UJ	MND33
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.20	0.70	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	106-46-7	U	U	34897
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	UJ	MND33
1.50	2.00	108-60-1	U	UJ	MND33
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.20	0.70	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	108-60-1	U	U	34897
0.00	0.50	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	UJ	MND33
1.50	2.00	95-95-4	U	UJ	MND33
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.20	0.70	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897
0.00	0.50	95-95-4	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	88-06-2	U	UJ	MND33
1.50	2.00	88-06-2	U	UJ	MND33
0.00	0.50	88-06-2	U	UJ	MND33
0.00	0.50	88-06-2	U	UJ	MND33
1.50	2.00	88-06-2	U	UJ	MND33
1.50	2.00	88-06-2	U	UJ	MND33
0.00	0.50	88-06-2	U	UJ	MND33
1.50	2.00	88-06-2	U	UJ	MND33
0.00	0.50	88-06-2	U	U	34897
0.00	0.50	88-06-2	U	U	34897
0.00	0.50	88-06-2	U	U	34897
0.00	0.50	88-06-2	U	U	34897
0.20	0.70	88-06-2	U	U	34897
0.00	0.50	88-06-2	U	U	34897
0.00	0.50	88-06-2	U	U	34897
0.00	0.50	120-83-2	U	UJ	MND33
1.50	2.00	120-83-2	U	UJ	MND33
0.00	0.50	120-83-2	U	UJ	MND33
0.00	0.50	120-83-2	U	UJ	MND33
1.50	2.00	120-83-2	U	UJ	MND33
1.50	2.00	120-83-2	U	UJ	MND33
0.00	0.50	120-83-2	U	UJ	MND33
1.50	2.00	120-83-2	U	UJ	MND33
0.00	0.50	120-83-2	U	U	34897
0.00	0.50	120-83-2	U	U	34897
0.00	0.50	120-83-2	U	U	34897
0.00	0.50	120-83-2	U	U	34897
0.20	0.70	120-83-2	U	U	34897
0.00	0.50	120-83-2	U	U	34897
0.00	0.50	120-83-2	U	U	34897
0.00	0.50	105-67-9	U	UJ	MND33
1.50	2.00	105-67-9	U	UJ	MND33
0.00	0.50	105-67-9	U	UJ	MND33
0.00	0.50	105-67-9	U	UJ	MND33
1.50	2.00	105-67-9	U	UJ	MND33
1.50	2.00	105-67-9	U	UJ	MND33
0.00	0.50	105-67-9	U	UJ	MND33
1.50	2.00	105-67-9	U	UJ	MND33
0.00	0.50	105-67-9	U	U	34897
0.00	0.50	105-67-9	U	U	34897
0.00	0.50	105-67-9	U	U	34897
0.00	0.50	105-67-9	U	U	34897
0.20	0.70	105-67-9	U	U	34897
0.00	0.50	105-67-9	U	U	34897
0.00	0.50	105-67-9	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	51-28-5	U	UJ	MND33
0.00	0.50	51-28-5	U	UJ	MND33
0.00	0.50	51-28-5	U	UJ	MND33
1.50	2.00	51-28-5	U	UJ	MND33
1.50	2.00	51-28-5	U	UJ	MND33
1.50	2.00	51-28-5	U	UJ	MND33
0.00	0.50	51-28-5	U	UJ	MND33
1.50	2.00	51-28-5	U	UJ	MND33
0.00	0.50	51-28-5	U	U	34897
0.00	0.50	51-28-5	U	U	34897
0.00	0.50	51-28-5	U	U	34897
0.20	0.70	51-28-5	U	U	34897
0.00	0.50	51-28-5	U	U	34897
0.00	0.50	51-28-5	U	U	34897
0.00	0.50	51-28-5	U	U	34897
0.00	0.50	121-14-2	U	UJ	MND33
1.50	2.00	121-14-2	U	UJ	MND33
0.00	0.50	121-14-2	U	UJ	MND33
0.00	0.50	121-14-2	U	UJ	MND33
1.50	2.00	121-14-2	U	UJ	MND33
1.50	2.00	121-14-2	U	UJ	MND33
0.00	0.50	121-14-2	U	UJ	MND33
1.50	2.00	121-14-2	U	UJ	MND33
0.00	0.50	121-14-2	U	U	34897
0.00	0.50	121-14-2	U	U	34897
0.00	0.50	121-14-2	U	U	34897
0.00	0.50	121-14-2	U	U	34897
0.20	0.70	121-14-2	U	U	34897
0.00	0.50	121-14-2	U	U	34897
0.00	0.50	121-14-2	U	U	34897
0.00	0.50	606-20-2	U	UJ	MND33
1.50	2.00	606-20-2	U	UJ	MND33
0.00	0.50	606-20-2	U	UJ	MND33
0.00	0.50	606-20-2	U	UJ	MND33
1.50	2.00	606-20-2	U	UJ	MND33
1.50	2.00	606-20-2	U	UJ	MND33
0.00	0.50	606-20-2	U	UJ	MND33
1.50	2.00	606-20-2	U	UJ	MND33
0.00	0.50	606-20-2	U	U	34897
0.00	0.50	606-20-2	U	U	34897
0.00	0.50	606-20-2	U	U	34897
0.00	0.50	606-20-2	U	U	34897
0.20	0.70	606-20-2	U	U	34897
0.00	0.50	606-20-2	U	U	34897
0.00	0.50	606-20-2	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	120-32-1	U	U	34897
0.00	0.50	120-32-1	U	U	34897
0.00	0.50	120-32-1	U	U	34897
0.00	0.50	120-32-1	U	U	34897
0.20	0.70	120-32-1	U	U	34897
0.00	0.50	120-32-1	U	U	34897
0.00	0.50	120-32-1	U	U	34897
0.00	0.50	91-58-7	U	UJ	MND33
1.50	2.00	91-58-7	U	UJ	MND33
0.00	0.50	91-58-7	U	UJ	MND33
0.00	0.50	91-58-7	U	UJ	MND33
1.50	2.00	91-58-7	U	UJ	MND33
1.50	2.00	91-58-7	U	UJ	MND33
0.00	0.50	91-58-7	U	UJ	MND33
1.50	2.00	91-58-7	U	UJ	MND33
0.00	0.50	91-58-7	U	U	34897
0.00	0.50	91-58-7	U	U	34897
0.00	0.50	91-58-7	U	U	34897
0.00	0.50	91-58-7	U	U	34897
0.20	0.70	91-58-7	U	U	34897
0.00	0.50	91-58-7	U	U	34897
0.00	0.50	91-58-7	U	U	34897
0.00	0.50	95-57-8	U	UJ	MND33
1.50	2.00	95-57-8	U	UJ	MND33
0.00	0.50	95-57-8	U	UJ	MND33
0.00	0.50	95-57-8	U	UJ	MND33
1.50	2.00	95-57-8	U	UJ	MND33
0.00	0.50	95-57-8	U	UJ	MND33
1.50	2.00	95-57-8	U	UJ	MND33
0.00	0.50	95-57-8	U	U	34897
0.00	0.50	95-57-8	U	U	34897
0.00	0.50	95-57-8	U	U	34897
0.00	0.50	95-57-8	U	U	34897
0.20	0.70	95-57-8	U	U	34897
0.00	0.50	95-57-8	U	U	34897
0.00	0.50	95-57-8	U	U	34897
1.50	2.00	95-57-8	J	J	MND33
0.00	0.50	91-57-6	U	UJ	MND33
1.50	2.00	91-57-6	U	UJ	MND33
0.00	0.50	91-57-6	U	UJ	MND33
0.00	0.50	91-57-6	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	91-57-6	U	UJ	MND33
1.50	2.00	91-57-6	U	UJ	MND33
0.00	0.50	91-57-6	U	UJ	MND33
1.50	2.00	91-57-6	U	UJ	MND33
0.00	0.50	91-57-6	U	U	34897
0.00	0.50	91-57-6	U	U	34897
0.00	0.50	91-57-6	U	U	34897
0.20	0.70	91-57-6	U	U	34897
0.00	0.50	91-57-6	U	U	34897
0.00	0.50	91-57-6	U	U	34897
0.00	0.50	91-57-6	J	J	34897
0.00	0.50	95-48-7	U	UJ	MND33
1.50	2.00	95-48-7	U	UJ	MND33
0.00	0.50	95-48-7	U	UJ	MND33
0.00	0.50	95-48-7	U	UJ	MND33
1.50	2.00	95-48-7	U	UJ	MND33
1.50	2.00	95-48-7	U	UJ	MND33
0.00	0.50	95-48-7	U	UJ	MND33
1.50	2.00	95-48-7	U	UJ	MND33
0.00	0.50	95-48-7	U	U	34897
0.00	0.50	95-48-7	U	U	34897
0.00	0.50	95-48-7	U	U	34897
0.00	0.50	95-48-7	U	U	34897
0.20	0.70	95-48-7	U	U	34897
0.00	0.50	95-48-7	U	U	34897
0.00	0.50	95-48-7	U	U	34897
0.00	0.50	88-74-4	U	UJ	MND33
0.00	0.50	88-74-4	U	UJ	MND33
0.00	0.50	88-74-4	U	UJ	MND33
1.50	2.00	88-74-4	U	UJ	MND33
1.50	2.00	88-74-4	U	UJ	MND33
1.50	2.00	88-74-4	U	UJ	MND33
0.00	0.50	88-74-4	U	UJ	MND33
1.50	2.00	88-74-4	U	UJ	MND33
0.00	0.50	88-74-4	U	U	34897
0.00	0.50	88-74-4	U	U	34897
0.00	0.50	88-74-4	U	U	34897
0.20	0.70	88-74-4	U	U	34897
0.00	0.50	88-74-4	U	U	34897
0.00	0.50	88-74-4	U	U	34897
0.00	0.50	88-74-4	U	U	34897
0.00	0.50	88-75-5	U	UJ	MND33
1.50	2.00	88-75-5	U	UJ	MND33
0.00	0.50	88-75-5	U	UJ	MND33
0.00	0.50	88-75-5	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	88-75-5	U	UJ	MND33
1.50	2.00	88-75-5	U	UJ	MND33
0.00	0.50	88-75-5	U	UJ	MND33
1.50	2.00	88-75-5	U	UJ	MND33
0.00	0.50	88-75-5	U	U	34897
0.00	0.50	88-75-5	U	U	34897
0.00	0.50	88-75-5	U	U	34897
0.00	0.50	88-75-5	U	U	34897
0.20	0.70	88-75-5	U	U	34897
0.00	0.50	88-75-5	U	U	34897
0.00	0.50	88-75-5	U	U	34897
0.00	0.50	91-94-1	U	UJ	MND33
0.00	0.50	91-94-1	U	UJ	MND33
0.00	0.50	91-94-1	U	UJ	MND33
0.00	0.50	91-94-1	U	UJ	MND33
1.50	2.00	91-94-1	U	UJ	MND33
1.50	2.00	91-94-1	U	UJ	MND33
1.50	2.00	91-94-1	U	UJ	MND33
1.50	2.00	91-94-1	U	UJ	MND33
0.00	0.50	91-94-1	U	U	34897
0.00	0.50	91-94-1	U	U	34897
0.00	0.50	91-94-1	U	U	34897
0.20	0.70	91-94-1	U	U	34897
0.00	0.50	91-94-1	U	U	34897
0.00	0.50	91-94-1	U	U	34897
0.00	0.50	91-94-1	U	U	34897
1.50	2.00	99-09-2	U	UJ	MND33
1.50	2.00	99-09-2	U	UJ	MND33
1.50	2.00	99-09-2	U	UJ	MND33
0.00	0.50	99-09-2	U	U	34897
0.00	0.50	99-09-2	U	U	34897
0.00	0.50	99-09-2	U	U	34897
0.20	0.70	99-09-2	U	U	34897
0.00	0.50	99-09-2	U	U	34897
0.00	0.50	99-09-2	U	U	34897
0.00	0.50	99-09-2	U	U	34897
0.00	0.50	534-52-1	U	UJ	MND33
0.00	0.50	534-52-1	U	UJ	MND33
0.00	0.50	534-52-1	U	UJ	MND33
1.50	2.00	534-52-1	U	UJ	MND33
1.50	2.00	534-52-1	U	UJ	MND33
1.50	2.00	534-52-1	U	UJ	MND33
0.00	0.50	534-52-1	U	UJ	MND33
1.50	2.00	534-52-1	U	UJ	MND33
0.00	0.50	534-52-1	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	534-52-1	U	U	34897
0.00	0.50	534-52-1	U	U	34897
0.20	0.70	534-52-1	U	U	34897
0.00	0.50	534-52-1	U	U	34897
0.00	0.50	534-52-1	U	U	34897
0.00	0.50	534-52-1	U	U	34897
0.00	0.50	101-55-3	U	UJ	MND33
1.50	2.00	101-55-3	U	UJ	MND33
0.00	0.50	101-55-3	U	UJ	MND33
0.00	0.50	101-55-3	U	UJ	MND33
1.50	2.00	101-55-3	U	UJ	MND33
1.50	2.00	101-55-3	U	UJ	MND33
0.00	0.50	101-55-3	U	UJ	MND33
1.50	2.00	101-55-3	U	UJ	MND33
0.00	0.50	101-55-3	U	U	34897
0.00	0.50	101-55-3	U	U	34897
0.00	0.50	101-55-3	U	U	34897
0.00	0.50	101-55-3	U	U	34897
0.20	0.70	101-55-3	U	U	34897
0.00	0.50	101-55-3	U	U	34897
0.00	0.50	101-55-3	U	U	34897
0.00	0.50	59-50-7	U	UJ	MND33
1.50	2.00	59-50-7	U	UJ	MND33
0.00	0.50	59-50-7	U	UJ	MND33
0.00	0.50	59-50-7	U	UJ	MND33
1.50	2.00	59-50-7	U	UJ	MND33
0.00	0.50	59-50-7	U	UJ	MND33
1.50	2.00	59-50-7	U	UJ	MND33
0.00	0.50	59-50-7	U	U	34897
0.00	0.50	59-50-7	U	U	34897
0.00	0.50	59-50-7	U	U	34897
0.00	0.50	59-50-7	U	U	34897
0.20	0.70	59-50-7	U	U	34897
0.00	0.50	59-50-7	U	U	34897
0.00	0.50	59-50-7	U	U	34897
1.50	2.00	59-50-7	J	J	MND33
0.00	0.50	106-47-8	U	UJ	MND33
1.50	2.00	106-47-8	U	UJ	MND33
0.00	0.50	106-47-8	U	UJ	MND33
0.00	0.50	106-47-8	U	UJ	MND33
1.50	2.00	106-47-8	U	UJ	MND33
1.50	2.00	106-47-8	U	UJ	MND33
0.00	0.50	106-47-8	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	106-47-8	U	UJ	MND33
0.00	0.50	106-47-8	U	U	34897
0.00	0.50	106-47-8	U	U	34897
0.00	0.50	106-47-8	U	U	34897
0.00	0.50	106-47-8	U	U	34897
0.20	0.70	106-47-8	U	U	34897
0.00	0.50	106-47-8	U	U	34897
0.00	0.50	106-47-8	U	U	34897
0.00	0.50	7005-72-3	U	UJ	MND33
1.50	2.00	7005-72-3	U	UJ	MND33
0.00	0.50	7005-72-3	U	UJ	MND33
0.00	0.50	7005-72-3	U	UJ	MND33
1.50	2.00	7005-72-3	U	UJ	MND33
1.50	2.00	7005-72-3	U	UJ	MND33
0.00	0.50	7005-72-3	U	UJ	MND33
1.50	2.00	7005-72-3	U	UJ	MND33
0.00	0.50	7005-72-3	U	U	34897
0.00	0.50	7005-72-3	U	U	34897
0.00	0.50	7005-72-3	U	U	34897
0.00	0.50	7005-72-3	U	U	34897
0.20	0.70	7005-72-3	U	U	34897
0.00	0.50	7005-72-3	U	U	34897
0.00	0.50	7005-72-3	U	U	34897
0.00	0.50	106-44-5	U	UJ	MND33
1.50	2.00	106-44-5	U	UJ	MND33
0.00	0.50	106-44-5	U	UJ	MND33
0.00	0.50	106-44-5	U	UJ	MND33
1.50	2.00	106-44-5	U	UJ	MND33
1.50	2.00	106-44-5	U	UJ	MND33
0.00	0.50	106-44-5	U	UJ	MND33
1.50	2.00	106-44-5	U	UJ	MND33
0.00	0.50	106-44-5	U	U	34897
0.00	0.50	106-44-5	U	U	34897
0.00	0.50	106-44-5	U	U	34897
0.00	0.50	106-44-5	U	U	34897
0.20	0.70	106-44-5	U	U	34897
0.00	0.50	106-44-5	U	U	34897
0.00	0.50	106-44-5	U	U	34897
0.00	0.50	100-01-6	U	UJ	MND33
0.00	0.50	100-01-6	U	UJ	MND33
0.00	0.50	100-01-6	U	UJ	MND33
1.50	2.00	100-01-6	U	UJ	MND33
1.50	2.00	100-01-6	U	UJ	MND33
1.50	2.00	100-01-6	U	UJ	MND33
0.00	0.50	100-01-6	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	100-01-6	U	UJ	MND33
0.00	0.50	100-01-6	U	U	34897
0.00	0.50	100-01-6	U	U	34897
0.00	0.50	100-01-6	U	U	34897
0.20	0.70	100-01-6	U	U	34897
0.00	0.50	100-01-6	U	U	34897
0.00	0.50	100-01-6	U	U	34897
0.00	0.50	100-01-6	U	U	34897
0.00	0.50	100-02-7	U	UJ	MND33
0.00	0.50	100-02-7	U	UJ	MND33
0.00	0.50	100-02-7	U	UJ	MND33
1.50	2.00	100-02-7	U	UJ	MND33
1.50	2.00	100-02-7	U	UJ	MND33
1.50	2.00	100-02-7	U	UJ	MND33
0.00	0.50	100-02-7	U	UJ	MND33
1.50	2.00	100-02-7	U	UJ	MND33
0.00	0.50	100-02-7	U	U	34897
0.00	0.50	100-02-7	U	U	34897
0.00	0.50	100-02-7	U	U	34897
0.20	0.70	100-02-7	U	U	34897
0.00	0.50	100-02-7	U	U	34897
0.00	0.50	100-02-7	U	U	34897
0.00	0.50	100-02-7	U	U	34897
0.00	0.50	83-32-9	U	UJ	MND33
1.50	2.00	83-32-9	U	UJ	MND33
0.00	0.50	83-32-9	U	UJ	MND33
0.00	0.50	83-32-9	U	UJ	MND33
1.50	2.00	83-32-9	U	UJ	MND33
0.00	0.50	83-32-9	U	UJ	MND33
1.50	2.00	83-32-9	U	UJ	MND33
0.00	0.50	83-32-9	U	U	34897
0.00	0.50	83-32-9	U	U	34897
0.00	0.50	83-32-9	U	U	34897
0.00	0.50	83-32-9	U	U	34897
0.20	0.70	83-32-9	U	U	34897
0.00	0.50	83-32-9	U	U	34897
0.00	0.50	83-32-9	U	U	34897
1.50	2.00	83-32-9	J	UJ	MND33
0.00	0.50	208-96-8	U	UJ	MND33
1.50	2.00	208-96-8	U	UJ	MND33
0.00	0.50	208-96-8	U	UJ	MND33
0.00	0.50	208-96-8	U	UJ	MND33
1.50	2.00	208-96-8	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	208-96-8	U	UJ	MND33
0.00	0.50	208-96-8	U	UJ	MND33
1.50	2.00	208-96-8	U	UJ	MND33
0.00	0.50	208-96-8	U	U	34897
0.00	0.50	208-96-8	U	U	34897
0.00	0.50	208-96-8	U	U	34897
0.00	0.50	208-96-8	U	U	34897
0.20	0.70	208-96-8	U	U	34897
0.00	0.50	208-96-8	U	U	34897
0.00	0.50	208-96-8	U	U	34897
0.00	0.50	120-12-7	U	UJ	MND33
1.50	2.00	120-12-7	U	UJ	MND33
0.00	0.50	120-12-7	U	UJ	MND33
0.00	0.50	120-12-7	U	UJ	MND33
1.50	2.00	120-12-7	U	UJ	MND33
1.50	2.00	120-12-7	U	UJ	MND33
0.00	0.50	120-12-7	U	UJ	MND33
1.50	2.00	120-12-7	U	UJ	MND33
0.00	0.50	120-12-7	U	U	34897
0.00	0.50	120-12-7	U	U	34897
0.00	0.50	120-12-7	U	U	34897
0.00	0.50	120-12-7	U	U	34897
0.20	0.70	120-12-7	U	U	34897
0.00	0.50	120-12-7	U	U	34897
0.00	0.50	120-12-7	U	U	34897
0.00	0.50	56-55-3	U	UJ	MND33
1.50	2.00	56-55-3	U	UJ	MND33
0.00	0.50	56-55-3	U	UJ	MND33
0.00	0.50	56-55-3	U	UJ	MND33
1.50	2.00	56-55-3	U	UJ	MND33
1.50	2.00	56-55-3	U	UJ	MND33
0.00	0.50	56-55-3	U	UJ	MND33
1.50	2.00	56-55-3	U	UJ	MND33
0.00	0.50	56-55-3	U	U	34897
0.00	0.50	56-55-3	U	U	34897
0.00	0.50	56-55-3	U	U	34897
0.20	0.70	56-55-3	U	U	34897
0.00	0.50	56-55-3	U	U	34897
0.00	0.50	56-55-3	U	U	34897
0.00	0.50	56-55-3	J	J	34897
0.00	0.50	50-32-8	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	50-32-8	U	UJ	MND33
0.00	0.50	50-32-8	U	UJ	MND33
0.00	0.50	50-32-8	U	UJ	MND33
1.50	2.00	50-32-8	U	UJ	MND33
1.50	2.00	50-32-8	U	UJ	MND33
0.00	0.50	50-32-8	U	UJ	MND33
1.50	2.00	50-32-8	U	UJ	MND33
0.00	0.50	50-32-8	U	U	34897
0.00	0.50	50-32-8	U	U	34897
0.00	0.50	50-32-8	U	U	34897
0.20	0.70	50-32-8	U	U	34897
0.00	0.50	50-32-8	U	U	34897
0.00	0.50	50-32-8	U	U	34897
0.00	0.50	50-32-8	J	J	34897
0.00	0.50	205-99-2	U	UJ	MND33
1.50	2.00	205-99-2	U	UJ	MND33
0.00	0.50	205-99-2	U	UJ	MND33
0.00	0.50	205-99-2	U	UJ	MND33
1.50	2.00	205-99-2	U	UJ	MND33
1.50	2.00	205-99-2	U	UJ	MND33
0.00	0.50	205-99-2	U	UJ	MND33
1.50	2.00	205-99-2	U	UJ	MND33
0.00	0.50	205-99-2	U	U	34897
0.20	0.70	205-99-2	U	U	34897
0.00	0.50	205-99-2	U	UJ	34897
0.00	0.50	205-99-2	XJ	J	34897
0.00	0.50	205-99-2	XJ	J	34897
0.00	0.50	205-99-2	XJ	J	34897
0.00	0.50	205-99-2	XJ	J	34897
0.00	0.50	191-24-2	U	UJ	MND33
1.50	2.00	191-24-2	U	UJ	MND33
0.00	0.50	191-24-2	U	UJ	MND33
0.00	0.50	191-24-2	U	UJ	MND33
1.50	2.00	191-24-2	U	UJ	MND33
1.50	2.00	191-24-2	U	UJ	MND33
0.00	0.50	191-24-2	U	UJ	MND33
1.50	2.00	191-24-2	U	UJ	MND33
0.00	0.50	191-24-2	U	U	34897
0.00	0.50	191-24-2	U	U	34897
0.00	0.50	191-24-2	U	U	34897
0.00	0.50	191-24-2	U	U	34897
0.20	0.70	191-24-2	U	U	34897
0.00	0.50	191-24-2	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	191-24-2	U	U	34897
0.00	0.50	207-08-9	U	UJ	MND33
1.50	2.00	207-08-9	U	UJ	MND33
0.00	0.50	207-08-9	U	UJ	MND33
0.00	0.50	207-08-9	U	UJ	MND33
1.50	2.00	207-08-9	U	UJ	MND33
1.50	2.00	207-08-9	U	UJ	MND33
0.00	0.50	207-08-9	U	UJ	MND33
1.50	2.00	207-08-9	U	UJ	MND33
0.00	0.50	207-08-9	U	U	34897
0.20	0.70	207-08-9	U	U	34897
0.00	0.50	207-08-9	U	UJ	34897
0.00	0.50	207-08-9	XJ	J	34897
0.00	0.50	207-08-9	XJ	J	34897
0.00	0.50	207-08-9	XJ	J	34897
0.00	0.50	207-08-9	XJ	J	34897
0.00	0.50	65-85-0	U	UJ	MND33
0.00	0.50	65-85-0	U	UJ	MND33
0.00	0.50	65-85-0	U	UJ	MND33
1.50	2.00	65-85-0	U	UJ	MND33
1.50	2.00	65-85-0	U	UJ	MND33
0.00	0.50	65-85-0	U	UJ	MND33
1.50	2.00	65-85-0	U	UJ	MND33
0.00	0.50	65-85-0	JB	U	34897
0.00	0.50	65-85-0	U	U	34897
0.00	0.50	65-85-0	U	U	34897
0.20	0.70	65-85-0	U	U	34897
0.00	0.50	65-85-0	U	U	34897
0.00	0.50	65-85-0	U	U	34897
0.00	0.50	65-85-0	U	U	34897
1.50	2.00	65-85-0	J	J	MND33
0.00	0.50	100-51-6	U	UJ	MND33
1.50	2.00	100-51-6	U	UJ	MND33
0.00	0.50	100-51-6	U	UJ	MND33
0.00	0.50	100-51-6	U	UJ	MND33
1.50	2.00	100-51-6	U	UJ	MND33
1.50	2.00	100-51-6	U	UJ	MND33
0.00	0.50	100-51-6	U	UJ	MND33
1.50	2.00	100-51-6	U	UJ	MND33
0.00	0.50	100-51-6	U	U	34897
0.00	0.50	100-51-6	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	100-51-6	U	U	34897
0.00	0.50	100-51-6	U	U	34897
0.20	0.70	100-51-6	U	U	34897
0.00	0.50	100-51-6	U	U	34897
0.00	0.50	100-51-6	U	U	34897
0.00	0.50	111-91-1	U	UJ	MND33
1.50	2.00	111-91-1	U	UJ	MND33
0.00	0.50	111-91-1	U	UJ	MND33
0.00	0.50	111-91-1	U	UJ	MND33
1.50	2.00	111-91-1	U	UJ	MND33
1.50	2.00	111-91-1	U	UJ	MND33
0.00	0.50	111-91-1	U	UJ	MND33
1.50	2.00	111-91-1	U	UJ	MND33
0.00	0.50	111-91-1	U	U	34897
0.00	0.50	111-91-1	U	U	34897
0.00	0.50	111-91-1	U	U	34897
0.00	0.50	111-91-1	U	U	34897
0.20	0.70	111-91-1	U	U	34897
0.00	0.50	111-91-1	U	U	34897
0.00	0.50	111-91-1	U	U	34897
0.00	0.50	111-44-4	U	UJ	MND33
1.50	2.00	111-44-4	U	UJ	MND33
0.00	0.50	111-44-4	U	UJ	MND33
0.00	0.50	111-44-4	U	UJ	MND33
1.50	2.00	111-44-4	U	UJ	MND33
1.50	2.00	111-44-4	U	UJ	MND33
0.00	0.50	111-44-4	U	UJ	MND33
1.50	2.00	111-44-4	U	UJ	MND33
0.00	0.50	111-44-4	U	U	34897
0.00	0.50	111-44-4	U	U	34897
0.00	0.50	111-44-4	U	U	34897
0.00	0.50	111-44-4	U	U	34897
0.20	0.70	111-44-4	U	U	34897
0.00	0.50	111-44-4	U	U	34897
0.00	0.50	111-44-4	U	U	34897
0.00	0.50	117-81-7	U	UJ	MND33
1.50	2.00	117-81-7	U	UJ	MND33
0.00	0.50	117-81-7	U	UJ	MND33
0.00	0.50	117-81-7	U	UJ	MND33
1.50	2.00	117-81-7	U	UJ	MND33
0.00	0.50	117-81-7	U	UJ	MND33
1.50	2.00	117-81-7	U	UJ	MND33
0.00	0.50	117-81-7	U	UJ	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	117-81-7	JB	U	34897
0.00	0.50	117-81-7	U	U	34897
0.00	0.50	117-81-7	U	U	34897
0.20	0.70	117-81-7	U	UJ	34897
0.00	0.50	117-81-7	U	U	34897
0.00	0.50	117-81-7	U	U	34897
1.50	2.00	117-81-7	J	UJ	MND33
0.00	0.50	85-68-7	U	UJ	MND33
1.50	2.00	85-68-7	U	UJ	MND33
0.00	0.50	85-68-7	U	UJ	MND33
0.00	0.50	85-68-7	U	UJ	MND33
1.50	2.00	85-68-7	U	UJ	MND33
1.50	2.00	85-68-7	U	UJ	MND33
0.00	0.50	85-68-7	U	UJ	MND33
1.50	2.00	85-68-7	U	UJ	MND33
0.00	0.50	85-68-7	U	U	34897
0.00	0.50	85-68-7	U	U	34897
0.00	0.50	85-68-7	U	U	34897
0.00	0.50	85-68-7	U	U	34897
0.20	0.70	85-68-7	U	U	34897
0.00	0.50	85-68-7	U	U	34897
0.00	0.50	85-68-7	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.20	0.70	86-74-8	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.00	0.50	86-74-8	U	U	34897
0.00	0.50	218-01-9	U	UJ	MND33
1.50	2.00	218-01-9	U	UJ	MND33
0.00	0.50	218-01-9	U	UJ	MND33
0.00	0.50	218-01-9	U	UJ	MND33
1.50	2.00	218-01-9	U	UJ	MND33
1.50	2.00	218-01-9	U	UJ	MND33
0.00	0.50	218-01-9	U	UJ	MND33
1.50	2.00	218-01-9	U	UJ	MND33
0.00	0.50	218-01-9	U	U	34897
0.00	0.50	218-01-9	U	U	34897
0.00	0.50	218-01-9	U	U	34897
0.20	0.70	218-01-9	U	U	34897
0.00	0.50	218-01-9	U	U	34897
0.00	0.50	218-01-9	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	218-01-9	J	J	34897
0.00	0.50	53-70-3	U	UJ	MND33
1.50	2.00	53-70-3	U	UJ	MND33
0.00	0.50	53-70-3	U	UJ	MND33
0.00	0.50	53-70-3	U	UJ	MND33
1.50	2.00	53-70-3	U	UJ	MND33
1.50	2.00	53-70-3	U	UJ	MND33
0.00	0.50	53-70-3	U	UJ	MND33
1.50	2.00	53-70-3	U	UJ	MND33
0.00	0.50	53-70-3	U	U	34897
0.00	0.50	53-70-3	U	U	34897
0.00	0.50	53-70-3	U	U	34897
0.00	0.50	53-70-3	U	U	34897
0.20	0.70	53-70-3	U	U	34897
0.00	0.50	53-70-3	U	U	34897
0.00	0.50	53-70-3	U	U	34897
0.00	0.50	132-64-9	U	UJ	MND33
1.50	2.00	132-64-9	U	UJ	MND33
0.00	0.50	132-64-9	U	UJ	MND33
0.00	0.50	132-64-9	U	UJ	MND33
1.50	2.00	132-64-9	U	UJ	MND33
1.50	2.00	132-64-9	U	UJ	MND33
0.00	0.50	132-64-9	U	UJ	MND33
1.50	2.00	132-64-9	U	UJ	MND33
0.00	0.50	132-64-9	U	U	34897
0.00	0.50	132-64-9	U	U	34897
0.00	0.50	132-64-9	U	U	34897
0.00	0.50	132-64-9	U	U	34897
0.20	0.70	132-64-9	U	U	34897
0.00	0.50	132-64-9	U	U	34897
0.00	0.50	132-64-9	U	U	34897
0.00	0.50	84-66-2	U	UJ	MND33
1.50	2.00	84-66-2	U	UJ	MND33
0.00	0.50	84-66-2	U	UJ	MND33
0.00	0.50	84-66-2	U	UJ	MND33
1.50	2.00	84-66-2	U	UJ	MND33
1.50	2.00	84-66-2	U	UJ	MND33
0.00	0.50	84-66-2	U	UJ	MND33
1.50	2.00	84-66-2	U	UJ	MND33
0.00	0.50	84-66-2	U	U	34897
0.00	0.50	84-66-2	U	U	34897
0.00	0.50	84-66-2	U	U	34897
0.00	0.50	84-66-2	U	U	34897
0.20	0.70	84-66-2	U	U	34897
0.00	0.50	84-66-2	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	84-66-2	U	U	34897
0.00	0.50	131-11-3	U	UJ	MND33
1.50	2.00	131-11-3	U	UJ	MND33
0.00	0.50	131-11-3	U	UJ	MND33
0.00	0.50	131-11-3	U	UJ	MND33
1.50	2.00	131-11-3	U	UJ	MND33
1.50	2.00	131-11-3	U	UJ	MND33
0.00	0.50	131-11-3	U	UJ	MND33
1.50	2.00	131-11-3	U	UJ	MND33
0.00	0.50	131-11-3	U	U	34897
0.00	0.50	131-11-3	U	U	34897
0.00	0.50	131-11-3	U	U	34897
0.00	0.50	131-11-3	U	U	34897
0.20	0.70	131-11-3	U	U	34897
0.00	0.50	131-11-3	U	U	34897
0.00	0.50	131-11-3	U	U	34897
0.00	0.50	84-74-2	U	UJ	MND33
1.50	2.00	84-74-2	U	UJ	MND33
0.00	0.50	84-74-2	U	UJ	MND33
0.00	0.50	84-74-2	U	UJ	MND33
1.50	2.00	84-74-2	U	UJ	MND33
0.00	0.50	84-74-2	U	UJ	MND33
1.50	2.00	84-74-2	U	UJ	MND33
0.00	0.50	84-74-2	U	U	34897
0.00	0.50	84-74-2	JB	U	34897
0.00	0.50	84-74-2	JB	U	34897
0.00	0.50	84-74-2	JB	U	34897
0.00	0.50	84-74-2	JB	U	34897
0.20	0.70	84-74-2	J	J	34897
0.00	0.50	84-74-2	J	J	34897
1.50	2.00	84-74-2	J	J	MND33
0.00	0.50	117-84-0	U	UJ	MND33
1.50	2.00	117-84-0	U	UJ	MND33
0.00	0.50	117-84-0	U	UJ	MND33
0.00	0.50	117-84-0	U	UJ	MND33
1.50	2.00	117-84-0	U	UJ	MND33
1.50	2.00	117-84-0	U	UJ	MND33
0.00	0.50	117-84-0	U	UJ	MND33
1.50	2.00	117-84-0	U	UJ	MND33
0.00	0.50	117-84-0	U	U	34897
0.00	0.50	117-84-0	U	U	34897
0.00	0.50	117-84-0	U	U	34897
0.00	0.50	117-84-0	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.20	0.70	117-84-0	U	U	34897
0.00	0.50	117-84-0	U	U	34897
0.00	0.50	117-84-0	U	U	34897
0.00	0.50	206-44-0	U	UJ	MND33
1.50	2.00	206-44-0	U	UJ	MND33
0.00	0.50	206-44-0	U	UJ	MND33
0.00	0.50	206-44-0	U	UJ	MND33
1.50	2.00	206-44-0	U	UJ	MND33
1.50	2.00	206-44-0	U	UJ	MND33
0.00	0.50	206-44-0	U	UJ	MND33
1.50	2.00	206-44-0	U	UJ	MND33
0.00	0.50	206-44-0	U	U	34897
0.00	0.50	206-44-0	U	U	34897
0.20	0.70	206-44-0	U	U	34897
0.00	0.50	206-44-0	J	J	34897
0.00	0.50	206-44-0	J	J	34897
0.00	0.50	206-44-0	J	J	34897
0.00	0.50	206-44-0	J	J	34897
0.00	0.50	86-73-7	U	UJ	MND33
1.50	2.00	86-73-7	U	UJ	MND33
0.00	0.50	86-73-7	U	UJ	MND33
0.00	0.50	86-73-7	U	UJ	MND33
1.50	2.00	86-73-7	U	UJ	MND33
1.50	2.00	86-73-7	U	UJ	MND33
0.00	0.50	86-73-7	U	UJ	MND33
1.50	2.00	86-73-7	U	UJ	MND33
0.00	0.50	86-73-7	U	U	34897
0.00	0.50	86-73-7	U	U	34897
0.00	0.50	86-73-7	U	U	34897
0.00	0.50	86-73-7	U	U	34897
0.20	0.70	86-73-7	U	U	34897
0.00	0.50	86-73-7	U	U	34897
0.00	0.50	86-73-7	U	U	34897
0.00	0.50	118-74-1	U	UJ	MND33
1.50	2.00	118-74-1	U	UJ	MND33
0.00	0.50	118-74-1	U	UJ	MND33
0.00	0.50	118-74-1	U	UJ	MND33
1.50	2.00	118-74-1	U	UJ	MND33
1.50	2.00	118-74-1	U	UJ	MND33
0.00	0.50	118-74-1	U	UJ	MND33
1.50	2.00	118-74-1	U	UJ	MND33
0.00	0.50	118-74-1	U	U	34897
0.00	0.50	118-74-1	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	118-74-1	U	U	34897
0.00	0.50	118-74-1	U	U	34897
0.20	0.70	118-74-1	U	U	34897
0.00	0.50	118-74-1	U	U	34897
0.00	0.50	118-74-1	U	U	34897
0.00	0.50	87-68-3	U	UJ	MND33
1.50	2.00	87-68-3	U	UJ	MND33
0.00	0.50	87-68-3	U	UJ	MND33
0.00	0.50	87-68-3	U	UJ	MND33
1.50	2.00	87-68-3	U	UJ	MND33
1.50	2.00	87-68-3	U	UJ	MND33
0.00	0.50	87-68-3	U	UJ	MND33
1.50	2.00	87-68-3	U	UJ	MND33
0.00	0.50	87-68-3	U	U	34897
0.00	0.50	87-68-3	U	U	34897
0.00	0.50	87-68-3	U	U	34897
0.00	0.50	87-68-3	U	U	34897
0.20	0.70	87-68-3	U	U	34897
0.00	0.50	87-68-3	U	U	34897
0.00	0.50	87-68-3	U	U	34897
0.00	0.50	77-47-4	U	UJ	MND33
1.50	2.00	77-47-4	U	UJ	MND33
0.00	0.50	77-47-4	U	UJ	MND33
0.00	0.50	77-47-4	U	UJ	MND33
1.50	2.00	77-47-4	U	UJ	MND33
1.50	2.00	77-47-4	U	UJ	MND33
0.00	0.50	77-47-4	U	UJ	MND33
1.50	2.00	77-47-4	U	UJ	MND33
0.00	0.50	77-47-4	U	U	34897
0.00	0.50	77-47-4	U	U	34897
0.00	0.50	77-47-4	U	U	34897
0.00	0.50	77-47-4	U	U	34897
0.20	0.70	77-47-4	U	U	34897
0.00	0.50	77-47-4	U	U	34897
0.00	0.50	77-47-4	U	U	34897
0.00	0.50	67-72-1	U	UJ	MND33
1.50	2.00	67-72-1	U	UJ	MND33
0.00	0.50	67-72-1	U	UJ	MND33
0.00	0.50	67-72-1	U	UJ	MND33
1.50	2.00	67-72-1	U	UJ	MND33
1.50	2.00	67-72-1	U	UJ	MND33
0.00	0.50	67-72-1	U	UJ	MND33
1.50	2.00	67-72-1	U	UJ	MND33
0.00	0.50	67-72-1	U	U	34897
0.00	0.50	67-72-1	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	67-72-1	U	U	34897
0.00	0.50	67-72-1	U	U	34897
0.20	0.70	67-72-1	U	U	34897
0.00	0.50	67-72-1	U	U	34897
0.00	0.50	67-72-1	U	U	34897
0.00	0.50	193-39-5	U	UJ	MND33
1.50	2.00	193-39-5	U	UJ	MND33
0.00	0.50	193-39-5	U	UJ	MND33
0.00	0.50	193-39-5	U	UJ	MND33
1.50	2.00	193-39-5	U	UJ	MND33
1.50	2.00	193-39-5	U	UJ	MND33
0.00	0.50	193-39-5	U	UJ	MND33
1.50	2.00	193-39-5	U	UJ	MND33
0.00	0.50	193-39-5	U	U	34897
0.00	0.50	193-39-5	U	U	34897
0.00	0.50	193-39-5	U	U	34897
0.00	0.50	193-39-5	U	U	34897
0.20	0.70	193-39-5	U	U	34897
0.00	0.50	193-39-5	U	U	34897
0.00	0.50	193-39-5	U	U	34897
0.00	0.50	78-59-1	U	UJ	MND33
1.50	2.00	78-59-1	U	UJ	MND33
0.00	0.50	78-59-1	U	UJ	MND33
0.00	0.50	78-59-1	U	UJ	MND33
1.50	2.00	78-59-1	U	UJ	MND33
1.50	2.00	78-59-1	U	UJ	MND33
0.00	0.50	78-59-1	U	UJ	MND33
1.50	2.00	78-59-1	U	UJ	MND33
0.00	0.50	78-59-1	U	U	34897
0.00	0.50	78-59-1	U	U	34897
0.00	0.50	78-59-1	U	U	34897
0.00	0.50	78-59-1	U	U	34897
0.20	0.70	78-59-1	U	U	34897
0.00	0.50	78-59-1	U	U	34897
0.00	0.50	78-59-1	U	U	34897
0.00	0.50	91-20-3	U	UJ	MND33
1.50	2.00	91-20-3	U	UJ	MND33
0.00	0.50	91-20-3	U	UJ	MND33
0.00	0.50	91-20-3	U	UJ	MND33
1.50	2.00	91-20-3	U	UJ	MND33
1.50	2.00	91-20-3	U	UJ	MND33
0.00	0.50	91-20-3	U	UJ	MND33
1.50	2.00	91-20-3	U	UJ	MND33
0.00	0.50	91-20-3	U	U	34897
0.00	0.50	91-20-3	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	91-20-3	U	U	34897
0.00	0.50	91-20-3	U	U	34897
0.20	0.70	91-20-3	U	U	34897
0.00	0.50	91-20-3	U	U	34897
0.00	0.50	91-20-3	U	U	34897
0.00	0.50	98-95-3	U	UJ	MND33
1.50	2.00	98-95-3	U	UJ	MND33
0.00	0.50	98-95-3	U	UJ	MND33
0.00	0.50	98-95-3	U	UJ	MND33
1.50	2.00	98-95-3	U	UJ	MND33
1.50	2.00	98-95-3	U	UJ	MND33
0.00	0.50	98-95-3	U	UJ	MND33
1.50	2.00	98-95-3	U	UJ	MND33
0.00	0.50	98-95-3	U	U	34897
0.00	0.50	98-95-3	U	U	34897
0.00	0.50	98-95-3	U	U	34897
0.00	0.50	98-95-3	U	U	34897
0.20	0.70	98-95-3	U	U	34897
0.00	0.50	98-95-3	U	U	34897
0.00	0.50	98-95-3	U	U	34897
0.00	0.50	621-64-7	U	UJ	MND33
1.50	2.00	621-64-7	U	UJ	MND33
0.00	0.50	621-64-7	U	UJ	MND33
0.00	0.50	621-64-7	U	UJ	MND33
1.50	2.00	621-64-7	U	UJ	MND33
1.50	2.00	621-64-7	U	UJ	MND33
0.00	0.50	621-64-7	U	UJ	MND33
1.50	2.00	621-64-7	U	UJ	MND33
0.00	0.50	621-64-7	U	U	34897
0.00	0.50	621-64-7	U	U	34897
0.00	0.50	621-64-7	U	U	34897
0.00	0.50	621-64-7	U	U	34897
0.20	0.70	621-64-7	U	U	34897
0.00	0.50	621-64-7	U	U	34897
0.00	0.50	621-64-7	U	U	34897
0.00	0.50	86-30-6	U	UJ	MND33
1.50	2.00	86-30-6	U	UJ	MND33
0.00	0.50	86-30-6	U	UJ	MND33
0.00	0.50	86-30-6	U	UJ	MND33
1.50	2.00	86-30-6	U	UJ	MND33
1.50	2.00	86-30-6	U	UJ	MND33
0.00	0.50	86-30-6	U	UJ	MND33
1.50	2.00	86-30-6	U	UJ	MND33
0.00	0.50	86-30-6	U	U	34897
0.00	0.50	86-30-6	U	U	34897

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
0.00	0.50	86-30-6	U	U	34897
0.00	0.50	86-30-6	U	U	34897
0.20	0.70	86-30-6	U	U	34897
0.00	0.50	86-30-6	U	U	34897
0.00	0.50	86-30-6	U	U	34897
0.00	0.50	87-86-5	U	UJ	MND33
0.00	0.50	87-86-5	U	UJ	MND33
0.00	0.50	87-86-5	U	UJ	MND33
1.50	2.00	87-86-5	U	UJ	MND33
1.50	2.00	87-86-5	U	UJ	MND33
1.50	2.00	87-86-5	U	UJ	MND33
0.00	0.50	87-86-5	U	UJ	MND33
1.50	2.00	87-86-5	U	UJ	MND33
0.00	0.50	87-86-5	U	U	34897
0.00	0.50	87-86-5	U	U	34897
0.00	0.50	87-86-5	U	U	34897
0.20	0.70	87-86-5	U	U	34897
0.00	0.50	87-86-5	U	U	34897
0.00	0.50	87-86-5	U	U	34897
0.00	0.50	87-86-5	U	U	34897
0.00	0.50	85-01-8	U	UJ	MND33
1.50	2.00	85-01-8	U	UJ	MND33
0.00	0.50	85-01-8	U	UJ	MND33
0.00	0.50	85-01-8	U	UJ	MND33
1.50	2.00	85-01-8	U	UJ	MND33
1.50	2.00	85-01-8	U	UJ	MND33
0.00	0.50	85-01-8	U	UJ	MND33
1.50	2.00	85-01-8	U	UJ	MND33
0.00	0.50	85-01-8	U	U	34897
0.00	0.50	85-01-8	U	U	34897
0.00	0.50	85-01-8	U	U	34897
0.20	0.70	85-01-8	U	U	34897
0.00	0.50	85-01-8	U	U	34897
0.00	0.50	85-01-8	U	U	34897
0.00	0.50	85-01-8	J	J	34897
0.00	0.50	108-95-2	U	UJ	MND33
1.50	2.00	108-95-2	U	UJ	MND33
0.00	0.50	108-95-2	U	UJ	MND33
0.00	0.50	108-95-2	U	UJ	MND33
1.50	2.00	108-95-2	U	UJ	MND33
0.00	0.50	108-95-2	U	UJ	MND33

Table A-4
Surface Water Data
Parcel 4, Mound Plant

Start depth	End depth	CAS Number	Lab qualifier	Data qualifier	Project code
1.50	2.00	108-95-2	U	UJ	MND33
0.00	0.50	108-95-2	U	U	34897
0.00	0.50	108-95-2	U	U	34897
0.00	0.50	108-95-2	U	U	34897
0.00	0.50	108-95-2	U	U	34897
0.20	0.70	108-95-2	U	U	34897
0.00	0.50	108-95-2	U	U	34897
0.00	0.50	108-95-2	U	U	34897
1.50	2.00	108-95-2	J	J	MND33
0.00	0.50	129-00-0	U	UJ	MND33
0.00	0.50	129-00-0	U	UJ	MND33
0.00	0.50	129-00-0	U	UJ	MND33
1.50	2.00	129-00-0	U	UJ	MND33
0.00	0.50	129-00-0	U	UJ	MND33
0.00	0.50	129-00-0	U	U	34897
0.20	0.70	129-00-0	U	U	34897
0.00	0.50	129-00-0	U	UJ	34897
1.50	2.00	129-00-0	J	J	MND33
0.00	0.50	129-00-0	J	J	34897
1.50	2.00	129-00-0	J	J	MND33
0.00	0.50	129-00-0	J	J	34897
0.00	0.50	129-00-0	J	J	34897
0.00	0.50	129-00-0	J	J	34897
1.50	2.00	129-00-0	J	J	MND33

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Americium-241	0.9500	PCI/G	0.9500	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Americium-241	0.8320	PCI/G	0.8320	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Americium-241	0.8230	PCI/G	0.8230	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Americium-241	0.8020	PCI/G	0.8020	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Americium-241	0.4630	PCI/G	0.4630	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Americium-241	0.4560	PCI/G	0.4560	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Americium-241	0.2540	PCI/G	0.2540	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bismuth-207	0.1446	PCI/G	0.1450	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bismuth-207	0.1435	PCI/G	0.1440	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bismuth-207	0.1280	PCI/G	0.1280	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bismuth-207	0.1097	PCI/G	0.1100	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bismuth-207	0.0874	PCI/G	0.0874	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bismuth-207	0.0833	PCI/G	0.0833	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bismuth-207	0.0726	PCI/G	0.0725	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bismuth-210	0.1850	PCI/G	0.1850	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bismuth-210	0.1630	PCI/G	0.1630	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bismuth-210	0.1604	PCI/G	0.1600	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bismuth-210	0.1530	PCI/G	0.1530	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bismuth-210	0.1279	PCI/G	0.1280	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bismuth-210	0.0998	PCI/G	0.0998	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bismuth-210	0.0885	PCI/G	0.0885	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Cesium-137	0.3840	PCI/G			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Cesium-137	0.2720	PCI/G	0.2720	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Cesium-137	0.1950	PCI/G	0.1950	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Cesium-137	0.1595	PCI/G	0.1600	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Cesium-137	0.1180	PCI/G	0.1180	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Cesium-137	0.1090	PCI/G	0.1090	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Cesium-137	0.1074	PCI/G	0.1070	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Cobalt-60	0.2210	PCI/G	0.2210	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Cobalt-60	0.1940	PCI/G	0.1940	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Cobalt-60	0.1700	PCI/G	0.1700	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Cobalt-60	0.1670	PCI/G	0.1670	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Cobalt-60	0.1209	PCI/G	0.1210	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Cobalt-60	0.0950	PCI/G	0.0950	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Cobalt-60	0.0865	PCI/G	0.0865	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Plutonium-238	1.2900	PCI/G	0.0033		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0255	PCI/G	0.0087		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0249	PCI/G	0.0034		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0185	PCI/G	0.0105		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0173	PCI/G	0.0090		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0130	PCI/G	0.0039		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Plutonium-238	0.0108	PCI/G	0.0108	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0139	PCI/G	0.0139	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0132	PCI/G	0.0132	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0087	PCI/G	0.0087	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0087	PCI/G	0.0087	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0085	PCI/G	0.0085	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0075	PCI/G	0.0075	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Plutonium-239/240	0.0073	PCI/G	0.0073	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Potassium-40	27.4000	PCI/G			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Potassium-40	22.7000	PCI/G			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Potassium-40	21.8000	PCI/G			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Potassium-40	17.1000	PCI/G			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Potassium-40	16.5000	PCI/G			
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Potassium-40	15.3000	PCI/G			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Potassium-40	14.3000	PCI/G			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Radium-226	1.4400	PCI/G	0.7640		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Radium-226	1.3300	PCI/G	0.7220		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Radium-226	1.2000	PCI/G			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Radium-226	1.0800	PCI/G	0.5920		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Radium-226	0.8700	PCI/G			

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Radium-226	0.7440	PCI/G	0.5190		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Radium-226	0.7430	PCI/G			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Strontium-90	0.6300	PCI/G	0.6300	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Strontium-90	0.1880	PCI/G	0.1880	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Strontium-90	0.1680	PCI/G	0.1680	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Strontium-90	0.1580	PCI/G	0.1570		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Strontium-90	0.1420	PCI/G	0.1420	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Strontium-90	0.1410	PCI/G	0.1410	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Strontium-90	0.0939	PCI/G	0.0939	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Thorium-228	1.1300	PCI/G	0.0148		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Thorium-228	1.1200	PCI/G	0.0108		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Thorium-228	0.9770	PCI/G	0.0261		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Thorium-228	0.8340	PCI/G	0.0069		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Thorium-228	0.7840	PCI/G	0.0128		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Thorium-228	0.7620	PCI/G	0.0229		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Thorium-228	0.2100	PCI/G	0.0194		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Thorium-230	1.4200	PCI/G	0.0070		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Thorium-230	1.2700	PCI/G	0.0082		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Thorium-230	1.0500	PCI/G	0.0068		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Thorium-230	0.8670	PCI/G	0.0195		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Thorium-230	0.8320	PCI/G	0.0275		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Thorium-230	0.8300	PCI/G	0.0108		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Thorium-230	0.3160	PCI/G	0.0172		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Thorium-232	1.1200	PCI/G	0.0113		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Thorium-232	1.1000	PCI/G	0.0051		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Thorium-232	0.8410	PCI/G	0.0068		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Thorium-232	0.7610	PCI/G	0.0222		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Thorium-232	0.7080	PCI/G	0.0108		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Thorium-232	0.7010	PCI/G	0.0242		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Thorium-232	0.2260	PCI/G	0.0102		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Tritium	0.2890	PCI/G	0.2890	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Tritium	0.2890	PCI/G	0.2890	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Tritium	0.2890	PCI/G	0.2890	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Tritium	0.0647	PCI/G	0.2550	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Tritium	0.0489	PCI/G	0.2550	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Tritium	0.0353	PCI/G	0.2550	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Tritium	0.0326	PCI/G	0.2550	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Uranium-234	0.9360	PCI/G	0.0468		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Uranium-234	0.8850	PCI/G	0.0409		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Uranium-234	0.8710	PCI/G	0.0627		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Uranium-234	0.7870	PCI/G	0.0774		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Uranium-234	0.7840	PCI/G	0.0271		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Uranium-234	0.7260	PCI/G	0.0142		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Uranium-234	0.5700	PCI/G	0.0381		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Uranium-235	0.0769	PCI/G	0.0520		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Uranium-235	0.0535	PCI/G	0.0161		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Uranium-235	0.0486	PCI/G	0.0486	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Uranium-235	0.0409	PCI/G	0.0409	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Uranium-235	0.0366	PCI/G	0.0366	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Uranium-235	0.0316	PCI/G	0.0214		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Uranium-235	0.0259	PCI/G	0.0212		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Uranium-238	1.1500	PCI/G	0.0649		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Uranium-238	0.9650	PCI/G	0.0409		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Uranium-238	0.9390	PCI/G	0.0317		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Uranium-238	0.9040	PCI/G	0.0520		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Uranium-238	0.8020	PCI/G	0.0239		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Uranium-238	0.6880	PCI/G	0.0329		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Uranium-238	0.5990	PCI/G	0.0240		
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Acrylonitrile	150.0000	UG/KG	150.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Acrylonitrile	150.0000	UG/KG	150.0000	U	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Acrylonitrile	140.0000	UG/KG	140.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Acrylonitrile	120.0000	UG/KG	120.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Acrylonitrile	120.0000	UG/KG	120.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Acrylonitrile	120.0000	UG/KG	120.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Acrylonitrile	110.0000	UG/KG	110.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Benzene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Benzene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Benzene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Benzene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Benzene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Benzene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Benzene	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bromodichloromethane	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bromodichloromethane	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bromodichloromethane	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bromodichloromethane	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bromoform	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bromoform	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bromoform	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bromoform	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bromoform	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bromoform	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bromoform	6.0000	UG/KG	6.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bromomethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bromomethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bromomethane	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bromomethane	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bromomethane	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bromomethane	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bromomethane	11.0000	UG/KG	11.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Carbon Disulfide	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Carbon Disulfide	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Carbon Disulfide	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Carbon Disulfide	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Carbon Tetrachloride	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Chlorobenzene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Chlorobenzene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Chlorobenzene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Chlorobenzene	6.0000	UG/KG	6.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Chloroethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Chloroethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Chloroethane	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Chloroethane	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Chloroethane	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Chloroethane	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Chloroethane	11.0000	UG/KG	11.0000	U	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Chloroform	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Chloroform	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Chloroform	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Chloroform	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Chloroform	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Chloroform	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Chloroform	6.0000	UG/KG	6.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Chloromethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Chloromethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Chloromethane	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Chloromethane	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Chloromethane	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Chloromethane	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Chloromethane	11.0000	UG/KG	11.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Dibromochloromethane	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Dibromochloromethane	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Dibromochloromethane	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Dibromochloromethane	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Ethylbenzene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Ethylbenzene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Ethylbenzene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Ethylbenzene	6.0000	UG/KG	6.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Hexane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Hexane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Hexane	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Hexane	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Hexane	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Hexane	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Hexane	11.0000	UG/KG	11.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Iodomethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Iodomethane	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Iodomethane	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Iodomethane	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Iodomethane	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Iodomethane	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Iodomethane	11.0000	UG/KG	11.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Methylene Chloride	14.0000	UG/KG	5.0000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Methylene Chloride	13.0000	UG/KG	5.0000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Methylene Chloride	13.0000	UG/KG	10.0000	B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Methylene Chloride	11.0000	UG/KG	5.0000	B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Methylene Chloride	10.0000	UG/KG	5.0000	B	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Methylene Chloride	10.0000	UG/KG	5.0000	B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Methylene Chloride	6.0000	UG/KG	5.0000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Styrene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Styrene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Styrene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Styrene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Styrene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Styrene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Styrene	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Tetrachloroethene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Tetrachloroethene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Tetrachloroethene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Tetrachloroethene	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Toluene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Toluene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Toluene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Toluene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Toluene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Toluene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Toluene	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Trichloroethene	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Trichloroethene	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Trichloroethene	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Trichloroethene	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Trichloroethene	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Trichloroethene	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Trichloroethene	6.0000	UG/KG	6.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Vinyl Acetate	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Vinyl Acetate	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Vinyl Acetate	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Vinyl Acetate	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Vinyl Acetate	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Vinyl Acetate	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Vinyl Acetate	11.0000	UG/KG	11.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Vinyl Chloride	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Vinyl Chloride	15.0000	UG/KG	15.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Vinyl Chloride	14.0000	UG/KG	14.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Vinyl Chloride	12.0000	UG/KG	12.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Vinyl Chloride	12.0000	UG/KG	12.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Vinyl Chloride	12.0000	UG/KG	12.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Vinyl Chloride	11.0000	UG/KG	11.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Xylenes, Total	8.0000	UG/KG	8.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Xylenes, Total	7.0000	UG/KG	7.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Xylenes, Total	7.0000	UG/KG	7.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Xylenes, Total	6.0000	UG/KG	6.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	4,4'-DDD	5.0000	UG/KG	5.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	4,4'-DDD	4.9000	UG/KG	4.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	4,4'-DDD	3.9000	UG/KG	3.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	4,4'-DDD	3.9000	UG/KG	3.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	4,4'-DDD	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	4,4'-DDD	3.6000	UG/KG	3.6000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	4,4'-DDD	0.4000	UG/KG	3.3000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	4,4'-DDE	4.9000	UG/KG	4.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	4,4'-DDE	4.6000	UG/KG	4.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	4,4'-DDE	3.9000	UG/KG	3.9000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	4,4'-DDE	3.6000	UG/KG	3.6000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	4,4'-DDE	3.5000	UG/KG	3.3000	JP	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	4,4'-DDE	0.4800	UG/KG		JP	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	4,4'-DDE	0.2500	UG/KG		J	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	4,4'-DDT	4.9000	UG/KG	4.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	4,4'-DDT	3.9000	UG/KG	3.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	4,4'-DDT	3.9000	UG/KG	3.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	4,4'-DDT	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	4,4'-DDT	3.6000	UG/KG	3.6000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	4,4'-DDT	0.2300	UG/KG	3.3000	JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	4,4'-DDT	0.1900	UG/KG	3.3000	JP	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aldrin	2.5000	UG/KG	2.5000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aldrin	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aldrin	1.9000	UG/KG	1.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aldrin	0.2200	UG/KG		J	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aldrin	0.1400	UG/KG		J	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aldrin	0.1100	UG/KG	1.7000	JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aldrin	0.0820	UG/KG	1.7000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Alpha Chlordane	2.5000	UG/KG	2.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Alpha Chlordane	2.4000	UG/KG	2.4000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Alpha Chlordane	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Alpha Chlordane	1.9000	UG/KG	1.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Alpha Chlordane	1.1000	UG/KG		JP	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Alpha Chlordane	0.1700	UG/KG		JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Alpha Chlordane	0.0440	UG/KG	1.7000	JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.6000	UG/KG	2.6000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.5000	UG/KG	2.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.4000	UG/KG	2.4000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Alpha-BHC	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Alpha-BHC	1.9000	UG/KG	1.9000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1016	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1016	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1016	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1016	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1016	39.0000	UG/KG	39.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1016	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1016	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1221	100.0000	UG/KG	100.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1221	99.0000	UG/KG	99.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1221	94.0000	UG/KG	94.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1221	79.0000	UG/KG	79.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1221	78.0000	UG/KG	78.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1221	78.0000	UG/KG	78.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1221	73.0000	UG/KG	73.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1232	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1232	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1232	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1232	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1232	39.0000	UG/KG	39.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1232	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1232	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1242	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1242	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1242	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1242	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1242	39.0000	UG/KG	39.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1242	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1242	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1248	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1248	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1248	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1248	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1248	39.0000	UG/KG	39.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1248	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1248	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1254	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1254	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1254	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1254	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1254	39.0000	UG/KG	39.0000	U	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1254	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1254	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aroclor-1260	50.0000	UG/KG	50.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aroclor-1260	49.0000	UG/KG	49.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aroclor-1260	46.0000	UG/KG	46.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aroclor-1260	39.0000	UG/KG	39.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aroclor-1260	39.0000	UG/KG	39.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aroclor-1260	38.0000	UG/KG	38.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aroclor-1260	36.0000	UG/KG	36.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Beta-BHC	2.6000	UG/KG	2.6000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Beta-BHC	2.5000	UG/KG	2.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Beta-BHC	2.4000	UG/KG	2.4000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Beta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Beta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Beta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Beta-BHC	1.9000	UG/KG	1.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Delta-BHC	5.3000	UG/KG	1.7000	P	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Delta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Delta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Delta-BHC	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Delta-BHC	1.9000	UG/KG	1.9000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Delta-BHC	0.1200	UG/KG	1.7000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Delta-BHC	0.0800	UG/KG	1.7000	J	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Dieldrin	5.0000	UG/KG	5.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Dieldrin	4.9000	UG/KG	4.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Dieldrin	4.6000	UG/KG	4.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Dieldrin	3.9000	UG/KG	3.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Dieldrin	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Dieldrin	3.6000	UG/KG	3.6000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Dieldrin	0.9600	UG/KG		JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endosulfan I	2.6000	UG/KG	2.6000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endosulfan I	2.5000	UG/KG	2.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endosulfan I	2.4000	UG/KG	2.4000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endosulfan I	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endosulfan I	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endosulfan I	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endosulfan I	1.9000	UG/KG	1.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endosulfan II	7.1000	UG/KG		P	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endosulfan II	4.9000	UG/KG	4.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endosulfan II	3.9000	UG/KG	3.9000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endosulfan II	3.6000	UG/KG	3.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endosulfan II	0.6800	UG/KG		J	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endosulfan II	0.0930	UG/KG	3.3000	JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endosulfan II	0.0530	UG/KG	3.3000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	4.9000	UG/KG	4.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	3.9000	UG/KG	3.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	3.9000	UG/KG	3.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	3.6000	UG/KG	3.6000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	0.5600	UG/KG	3.3000	JP	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endosulfan Sulfate	0.1300	UG/KG	3.3000	JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endrin	5.0000	UG/KG	5.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endrin	4.9000	UG/KG	4.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endrin	4.6000	UG/KG	4.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endrin	3.9000	UG/KG	3.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endrin	3.9000	UG/KG	3.9000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endrin	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endrin	3.6000	UG/KG	3.6000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	5.0000	UG/KG	5.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	4.9000	UG/KG	4.9000	U	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	4.6000	UG/KG	4.6000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	3.8000	UG/KG	3.8000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	3.6000	UG/KG	3.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	0.9300	UG/KG		JP	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endrin Aldehyde	0.2800	UG/KG		JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Endrin Ketone	5.0000	UG/KG	5.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Endrin Ketone	4.9000	UG/KG	4.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Endrin Ketone	4.6000	UG/KG	4.6000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Endrin Ketone	3.9000	UG/KG	3.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Endrin Ketone	3.9000	UG/KG	3.9000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Endrin Ketone	3.6000	UG/KG	3.6000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Endrin Ketone	0.2400	UG/KG		JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Gamma Chlordane	2.6000	UG/KG	2.6000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Gamma Chlordane	2.5000	UG/KG	2.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Gamma Chlordane	2.4000	UG/KG	2.4000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Gamma Chlordane	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Gamma Chlordane	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Gamma Chlordane	1.9000	UG/KG	1.9000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Gamma Chlordane	0.9300	UG/KG		JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	2.5000	UG/KG	2.5000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	2.0000	UG/KG	2.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	1.9000	UG/KG	1.9000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	0.0950	UG/KG	1.7000	JP	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Gamma-BHC (Lindane)	0.0650	UG/KG	1.7000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Heptachlor	2.5000	UG/KG	2.5000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Heptachlor	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Heptachlor	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Heptachlor	1.9000	UG/KG	1.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Heptachlor	0.3200	UG/KG		JBP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Heptachlor	0.1400	UG/KG	1.7000	JP	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Heptachlor	0.0560	UG/KG	1.7000	JP	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	2.5000	UG/KG	2.5000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	2.0000	UG/KG	2.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	2.0000	UG/KG	2.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	1.9000	UG/KG	1.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	0.9400	UG/KG		JP	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	0.1200	UG/KG	1.7000	JP	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Heptachlor Epoxide	0.0720	UG/KG	1.7000	JP	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Methoxychlor	20.0000	UG/KG	20.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Methoxychlor	20.0000	UG/KG	20.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Methoxychlor	19.0000	UG/KG	19.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Methoxychlor	0.9500	UG/KG	17.0000	JPB	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Methoxychlor	0.6600	UG/KG	17.0000	JPB	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Methoxychlor	0.6500	UG/KG		J	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Methoxychlor	0.1300	UG/KG	17.0000	JPB	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Toxaphene	260.0000	UG/KG	260.0000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Toxaphene	250.0000	UG/KG	250.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Toxaphene	240.0000	UG/KG	240.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Toxaphene	200.0000	UG/KG	200.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Toxaphene	200.0000	UG/KG	200.0000	U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Toxaphene	200.0000	UG/KG	200.0000	U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Toxaphene	190.0000	UG/KG	190.0000	U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Aluminum	15300.0000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Aluminum	12000.0000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Aluminum	9670.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Aluminum	8670.0000	MG/KG	19.2000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Aluminum	8570.0000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Aluminum	7330.0000	MG/KG	19.2000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Aluminum	6330.0000	MG/KG	19.2000		

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Antimony	0.6200	MG/KG	1.9000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Antimony	0.5700	MG/KG	1.9000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Antimony	0.5300	MG/KG	1.9000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Antimony	0.2800	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Antimony	0.2800	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Antimony	0.2800	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Antimony	0.2600	MG/KG		U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Arsenic	9.2000	MG/KG	1.6000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Arsenic	7.2000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Arsenic	6.6000	MG/KG	1.6000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Arsenic	6.3000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Arsenic	6.1000	MG/KG	1.6000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Arsenic	6.0000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Arsenic	5.8000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Barium	111.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Barium	82.9000	MG/KG	0.2000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Barium	79.2000	MG/KG			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Barium	68.8000	MG/KG	0.2000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Barium	63.4000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Barium	59.9000	MG/KG	0.2000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Barium	53.7000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Beryllium	0.8500	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Beryllium	0.6300	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Beryllium	0.6200	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Beryllium	0.6000	MG/KG	0.2000		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Beryllium	0.5000	MG/KG	0.2000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Beryllium	0.4300	MG/KG	0.2000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Beryllium	0.4200	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Bismuth	1.6000	MG/KG	2.6000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Bismuth	1.5000	MG/KG	2.6000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Bismuth	1.3000	MG/KG	2.6000	B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Bismuth	0.8500	MG/KG		B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Bismuth	0.7600	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Bismuth	0.7600	MG/KG		B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Bismuth	0.6900	MG/KG		U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Cadmium	0.4100	MG/KG	0.3000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Cadmium	0.3700	MG/KG	0.3000	B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Cadmium	0.3100	MG/KG	0.3000	B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Cadmium	0.0700	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Cadmium	0.0700	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Cadmium	0.0700	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Cadmium	0.0600	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Calcium	71900.0000	MG/KG			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Calcium	62000.0000	MG/KG	28.5000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Calcium	47900.0000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Calcium	30200.0000	MG/KG	28.5000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Calcium	22200.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Calcium	14000.0000	MG/KG	28.5000		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Calcium	4340.0000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Chromium	18.5000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Chromium	15.9000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Chromium	15.2000	MG/KG	0.9000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Chromium	12.9000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Chromium	11.4000	MG/KG	0.9000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Chromium	11.2000	MG/KG			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Chromium	9.2000	MG/KG	0.9000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Cobalt	12.0000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Cobalt	11.6000	MG/KG		B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Cobalt	11.1000	MG/KG	0.6000	B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Cobalt	10.7000	MG/KG		B	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Cobalt	10.5000	MG/KG	0.6000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Cobalt	10.2000	MG/KG	0.6000	B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Cobalt	8.5000	MG/KG		B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Copper	21.7000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Copper	21.5000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Copper	16.9000	MG/KG	0.7000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Copper	15.3000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Copper	12.8000	MG/KG	0.7000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Copper	11.3000	MG/KG	0.7000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Copper	11.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Cyanide	0.8200	MG/KG	10.0000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Cyanide	0.7500	MG/KG	10.0000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Cyanide	0.7000	MG/KG	10.0000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Cyanide	0.5900	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Cyanide	0.5900	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Cyanide	0.5900	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Cyanide	0.5600	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Iron	25300.0000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Iron	23700.0000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Iron	21100.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Iron	20500.0000	MG/KG	15.7000		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Iron	16900.0000	MG/KG	15.7000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Iron	16700.0000	MG/KG			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Iron	14700.0000	MG/KG	15.7000		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Lead	24.8000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Lead	19.0000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Lead	17.0000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Lead	16.3000	MG/KG	1.9000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Lead	16.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Lead	14.8000	MG/KG	1.9000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Lead	13.9000	MG/KG	1.9000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Lithium	22.4000	MG/KG		B	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Lithium	17.7000	MG/KG		B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Lithium	12.2000	MG/KG	3.8000	B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Lithium	12.0000	MG/KG		B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Lithium	11.6000	MG/KG		B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Lithium	9.8000	MG/KG	3.8000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Lithium	8.4000	MG/KG	3.8000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Magnesium	15600.0000	MG/KG	4.0000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Magnesium	13000.0000	MG/KG			
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Magnesium	10400.0000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Magnesium	8630.0000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Magnesium	7950.0000	MG/KG	4.0000		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Magnesium	3470.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Magnesium	3310.0000	MG/KG	4.0000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Manganese	1250.0000	MG/KG	0.3000		
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Manganese	1140.0000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Manganese	1120.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Manganese	979.0000	MG/KG	0.3000		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Manganese	820.0000	MG/KG	0.3000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Manganese	765.0000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Manganese	500.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Mercury	0.1600	MG/KG	0.2000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Mercury	0.1500	MG/KG	0.2000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Mercury	0.1400	MG/KG	0.2000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Mercury	0.1200	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Mercury	0.1100	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Mercury	0.1100	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Mercury	0.1000	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Molybdenum	1.6000	MG/KG		B	

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Molybdenum	1.0000	MG/KG		B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Molybdenum	0.9800	MG/KG		B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Molybdenum	0.8600	MG/KG	1.7000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Molybdenum	0.8200	MG/KG	1.7000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Molybdenum	0.7500	MG/KG	1.7000	B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Molybdenum	0.5600	MG/KG		B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Nickel	23.7000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Nickel	21.4000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Nickel	18.3000	MG/KG	1.4000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Nickel	18.3000	MG/KG			
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Nickel	15.3000	MG/KG	1.4000		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Nickel	14.9000	MG/KG	1.4000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Nickel	12.4000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Potassium	3430.0000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Potassium	2800.0000	MG/KG			
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Potassium	2530.0000	MG/KG			
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Potassium	1680.0000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Potassium	1320.0000	MG/KG	16.7000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Potassium	1180.0000	MG/KG	16.7000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Potassium	1130.0000	MG/KG	16.7000	B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Selenium	3.6000	MG/KG	1.1000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Selenium	0.6500	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Selenium	0.6500	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Selenium	0.6400	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Selenium	0.6200	MG/KG		U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Selenium	0.3300	MG/KG	1.1000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Selenium	0.3100	MG/KG	1.1000	U	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Silver	0.5700	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Silver	0.5600	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Silver	0.5500	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Silver	0.5200	MG/KG		U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Silver	0.1600	MG/KG	0.5000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Silver	0.1500	MG/KG	0.5000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Silver	0.1400	MG/KG	0.5000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Sodium	530.0000	MG/KG	202.0000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Sodium	527.0000	MG/KG	202.0000	B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Sodium	429.0000	MG/KG		B	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Sodium	389.0000	MG/KG	202.0000	B	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Sodium	386.0000	MG/KG		B	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Sodium	364.0000	MG/KG		B	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Sodium	208.0000	MG/KG		B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Thallium	8.4000	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Thallium	8.0000	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Thallium	0.8400	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Thallium	0.8200	MG/KG		U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Thallium	0.4600	MG/KG	1.4000	U	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Thallium	0.4200	MG/KG	1.4000	U	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Thallium	0.3900	MG/KG	1.4000	U	
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Tin	4.8000	MG/KG	5.9000	B	
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Tin	2.7000	MG/KG	5.9000	B	
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Tin	2.6000	MG/KG	5.9000	B	
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Tin	2.5000	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Tin	2.4000	MG/KG		U	
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Tin	2.4000	MG/KG		U	
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Tin	2.3000	MG/KG		U	
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Vanadium	30.2000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Vanadium	21.0000	MG/KG	0.4000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Vanadium	21.0000	MG/KG			
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Vanadium	21.0000	MG/KG			
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Vanadium	19.7000	MG/KG	0.4000		
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Vanadium	17.6000	MG/KG			

Table A-5
Sediment Data
Parcel 4, Mound Plant

Location name	Collection date	Sample identification	Project code	Location type	Start depth	End depth	Value name	Measured value	Value unit	Detection	Lab qualifier	Data qualifier
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Vanadium	16.6000	MG/KG	0.4000		
MND22-4003	19941018	900000168	SWSD	Surface location	0.00	0.00	Zinc	74.1000	MG/KG			
MND22-4001	19941017	900000162	SWSD	Surface location	0.00	0.00	Zinc	62.2000	MG/KG			
MND22-4102	19950526	000477	SWSD	Surface location	0.00	0.00	Zinc	49.0000	MG/KG	1.4000		
MND22-4101	19950526	000651	SWSD	Surface location	0.00	0.00	Zinc	42.8000	MG/KG	1.4000		
MND22-4101	19950526	000478	SWSD	Surface location	0.00	0.00	Zinc	40.5000	MG/KG	1.4000		
MND22-4102	19941017	900000159	SWSD	Surface location	0.00	0.00	Zinc	40.1000	MG/KG			
MND22-4101	19941017	900000160	SWSD	Surface location	0.00	0.00	Zinc	31.7000	MG/KG			

Table A-6
Groundwater Data
Parcel 4, Mound Plant

Location_name	Collection_date	Sample_id	Project_code	Start_depth	End_depth	Depth_unit	Value_name	Measured	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
B401	19940615	W40101	34897	0	28.9	NA	Acrylonitrile	25	UG/L		J	J
B408	19940620	W40801	34897	0	37.1	NA	Acrylonitrile	100	UG/L	100	U	U
B401	19940615	W40101	34897	0	28.9	NA	Aluminum	40200	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Aluminum	58800	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Americium-241	0.54	PCI/L	0.54	U	UJ
B408	19940620	W40801	34897	0	37.1	NA	Americium-241	0.47	PCI/L			J
B401	19940615	W40101	34897	0	28.9	NA	Arsenic	9.9	UG/L		BN	J
B408	19940620	W40801	34897	0	37.1	NA	Arsenic	472	UG/L			J
B401	19940615	W40101	34897	0	28.9	NA	Barium	240	UG/L		EN	J
B408	19940620	W40801	34897	0	37.1	NA	Barium	552	UG/L		EN	J
B401	19940615	W40101	34897	0	28.9	NA	Beryllium	2.6	UG/L	2.6	B	U
B408	19940620	W40801	34897	0	37.1	NA	Beryllium	3.9	UG/L	3.9	B	U
B401	19940615	W40101	34897	0	28.9	NA	Beta-BHC	0.05	UG/L	0.05	U	UJ
B408	19940620	W40801	34897	0	37.1	NA	Beta-BHC	0.05	UG/L	0.05	U	UJ
B401	19940615	W40101	34897	0	28.9	NA	Bis(2-ethythexyl)phthalate	10	UG/L	10	U	U
B408	19940620	W40801	34897	0	37.1	NA	Bis(2-ethylhexyl)phthalate	3	UG/L		J	J
B401	19940615	W40101	34897	0	28.9	NA	Bismuth	688	UG/L			J
B408	19940620	W40801	34897	0	37.1	NA	Bismuth	1460	UG/L			J
B401	19940615	W40101	34897	0	28.9	NA	Calcium	703000	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Calcium	1760000	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Chloride	113	MG/L			
B408	19940620	W40801	34897	0	37.1	NA	Chloride	42.7	MG/L			
B401	19940615	W40101	34897	0	28.9	NA	Chromium	111	UG/L		N	J
B408	19940620	W40801	34897	0	37.1	NA	Chromium	164	UG/L		N	J
B401	19940615	W40101	34897	0	28.9	NA	Cobalt	45.8	UG/L	45.8	BN	UJ
B408	19940620	W40801	34897	0	37.1	NA	Cobalt	126	UG/L		N	J
B401	19940615	W40101	34897	0	28.9	NA	Copper	160	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Copper	485	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Fluoride	0.31	MG/L			
B408	19940620	W40801	34897	0	37.1	NA	Fluoride	0.201	MG/L			J
B401	19940615	W40101	34897	0	28.9	NA	Hexane	1	UG/L		J	J
B408	19940620	W40801	34897	0	37.1	NA	Hexane	10	UG/L	10	U	U
B401	19940615	W40101	34897	0	28.9	NA	Iron	136000	UG/L		E	J
B408	19940620	W40801	34897	0	37.1	NA	Iron	470000	UG/L		E	J
B401	19940615	W40101	34897	0	28.9	NA	Lead	80.7	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Lead	148	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Lithium	70.1	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Magnesium	242000	UG/L		E*	J
B408	19940620	W40801	34897	0	37.1	NA	Magnesium	462000	UG/L		E*	J
B401	19940615	W40101	34897	0	28.9	NA	Manganese	2190	UG/L		E	J
B408	19940620	W40801	34897	0	37.1	NA	Manganese	7000	UG/L		E	J
B401	19940615	W40101	34897	0	28.9	NA	Mercury	0.2	UG/L	0.2	U	U
B408	19940620	W40801	34897	0	37.1	NA	Mercury	0.4	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Methylene Chloride	18	UG/L	18	B	U
B408	19940620	W40801	34897	0	37.1	NA	Methylene Chloride	5	UG/L	5	JB	U
B401	19940615	W40101	34897	0	28.9	NA	Molybdenum	168	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Nickel	122	UG/L		N	J
B408	19940620	W40801	34897	0	37.1	NA	Nickel	322	UG/L		N	J
B401	19940615	W40101	34897	0	28.9	NA	Nitrate/Nitrite	0.56	MG/L			J
B408	19940620	W40801	34897	0	37.1	NA	Nitrate/Nitrite	0.53	MG/L			J
B401	19940615	W40101	34897	0	28.9	NA	Nitrogen	0.368	MG/L			J
B408	19940620	W40801	34897	0	37.1	NA	Nitrogen	0.369	MG/L			J
B401	19940615	W40101	34897	0	28.9	NA	Phenol	10	UG/L	10	J	U
B408	19940620	W40801	34897	0	37.1	NA	Phenol	10	UG/L	10	U	U
B401	19940615	W40101	34897	0	28.9	NA	Phosphorous	0.666	MG/L			J
B408	19940620	W40801	34897	0	37.1	NA	Phosphorous	0.1	MG/L	0.1	U	U
B401	19940615	W40101	34897	0	28.9	NA	Potassium	10800	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Potassium	13300	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Radium-226	1.22	PCI/L			J
B408	19940620	W40801	34897	0	37.1	NA	Radium-226	1.22	PCI/L			J
B401	19940615	W40101	34897	0	28.9	NA	Sodium	42400	UG/L			
B408	19940620	W40801	34897	0	37.1	NA	Sodium	18900	UG/L			
B401	19940615	W40101	34897	0	28.9	NA	Sulfate	43.7	MG/L			
B408	19940620	W40801	34897	0	37.1	NA	Sulfate	42.6	MG/L			
B401	19940615	W40101	34897	0	28.9	NA	Thorium-230	0.21	PCI/L			J
B408	19940620	W40801	34897	0	37.1	NA	Thorium-230	0.43	PCI/L			J
B401	19940615	W40101	34897	0	28.9	NA	Thorium-232	0.15	PCI/L			J
B408	19940620	W40801	34897	0	37.1	NA	Thorium-232	0.35	PCI/L			
B401	19940615	W40101	34897	0	28.9	NA	Toluene	1	UG/L		J	J
B408	19940620	W40801	34897	0	37.1	NA	Toluene	5	UG/L	5	U	U
B401	19940615	W40101	34897	0	28.9	NA	Uranium-234	0.43	PCI/L			J
B408	19940620	W40801	34897	0	37.1	NA	Uranium-234	0.94	PCI/L			J
B401	19940615	W40101	34897	0	28.9	NA	Uranium-235	0.04	PCI/L	0.04	U	U
B408	19940620	W40801	34897	0	37.1	NA	Uranium-235	0.07	PCI/L			
B401	19940615	W40101	34897	0	28.9	NA	Uranium-238	0.19	PCI/L			
B408	19940620	W40801	34897	0	37.1	NA	Uranium-238	1.12	PCI/L			
B401	19940615	W40101	34897	0	28.9	NA	Vanadium	84.4	UG/L		EN	J
B408	19940620	W40801	34897	0	37.1	NA	Vanadium	138	UG/L		EN	J
B401	19940615	W40101	34897	0	28.9	NA	Zinc	413	UG/L		EN	J
B408	19940620	W40801	34897	0	37.1	NA	Zinc	1140	UG/L		EN	J

Table A-7
Site-Specific Background Concentrations
Parcel 4, Mound Plant
Miamisburg, Ohio

Constituent	Soil [a]	Stream Sediments [b]	Stream Surface Waters [b]
Pesticides/PCBs (ug/kg or ug/L)			
alpha-BHC	ND	---	---
beta-BHC	ND	---	---
delta-BHC	ND	---	---
gamma-BHC (Lindane)	ND	---	---
Heptachlor	ND	---	---
Aldrin	ND	2.2	---
Heptachlor epoxide	ND	3	---
Endosulfan I	ND	---	---
Dieldrin	ND	22	---
4,4-DDE	4.3	3.8	---
Endrin	ND	---	---
Endosulfan II	NA	---	---
4,4-DDD	4.2	4.6	---
Endosulfan sulfate	ND	---	---
4,4-DDT	13	---	---
Methoxychlor	30	---	---
Endrin ketone	ND	---	---
alpha-Chlordane	ND	2.3	---
gamma-Chlordane	ND	1	---
Toxaphene	ND	---	---
Arocolor-1016	ND	---	---
Arolcor-1221	ND	---	---
Arocolor-1232	ND	---	---
Arocolor-1242	ND	---	---
Arocolor-1248	ND	---	---
Aroclor-1254	58	---	---
Aroclor-1260	ND	---	---
Common Anions/TOC (mg/kg or mg/L)			
Nitrate-Nitrite	26	820	25
Chloride	107	41000	150
Sulfate	150	84000	280
Fluoride	6.7	130	0.1
TOC	28000	25000	14
Metals (mg/kg or ug/L - unfiltered)			
Aluminum	19000	10000	360
Antimony	NA	---	---
Arsenic	8.6	29	---
Barium	180	270	130
Beryllium	1.3	0.48	---
Cadmium	2.1	0.75	---
Calcium	310000	130000	120000
Chromium	20	15	1.1
Cobalt	19	12	---
Copper	26	34	8.1
Iron	35000	30000	1700
Lead	48	36	---
Magnesium	40000	54000	44000

Table A-7
Site-Specific Background Concentrations
Parcel 4, Mound Plant
Miamisburg, Ohio

Constituent	Soil [a]	Stream Sediments [b]	Stream Surface Waters [b]
Manganese	1400	2800	460
Mercury	NA	---	---
Nickel	32	19	96
Potassium	1900	1900	12000
Selenium	NA	---	---
Silver	1.7	---	---
Sodium	240	680	65000
Thallium	0.46	---	---
Vanadium	25	28	0.55
Zinc	140	93	40
Molybdenum	27	1.4	15
Tin	20	1.3	---
Bismuth	NA	0.49	---
Lithium	26	12	---
Cyanide	ND	---	---
Radionuclide (pCi/g or pCi/L)			
Americium-241	ND	---	---
Cobalt-60	NA	---	---
Cesium-137	0.42	1.5	---
Bismuth-207	NA	---	---
Bismuth-210, metastable	ND	---	---
Potassium-40	37	16	180
Radium-226	2	2.1	0.15
Tritium	1.6	---	---
Plutonium-238	0.13	---	---
Plutonium-239/240	0.18	---	---
Thorium-228	1.5	1.8	---
Thorium-230	1.9	---	---
Thorium-232	1.4	1.4	---
Uranium-234	1.1	1.2	1.3
Uranium-235/236	0.11	0.11	---
Uranium-238	1.2	1.4	0.95
Strontium-90	0.72	---	---

ND = Not detected above method detection limit.
NA = Not analyzed.
--- = Not calculated for less than 4 detections.

[a] = Mound Plant background soil concentrations
[b] = OU9 Surface Water and Sediment Investigation Report, Sept. 1996.

APPENDIX B

SCREENING OF CHEMICALS OF POTENTIAL CONCERN BY MEDIUM

Table B-1
Comparison of Parcel 4 Soil Concentrations to Soil Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Dectections	Range of Detections Minimum	Range of Detections Maximum	Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
Radionuclide (pCi/g)										
Actinium-227	14/124	0.13	2.01	004720	0.0600	0.7050	NBL	NSL	--	Yes
Americium-241	5/130	0.05	0.21	4661	0.0200	0.8330	NBL	NSL	--	Yes
Bismuth-207	0/17	--	--	--	0.0316	0.0800	--	--	--	No
Bismuth-210	0/17	--	--	--	0.0454	0.1300	--	--	--	No
Cesium-137	125/130	0.05	0.90	004727	0.0100	0.6100	0.42	NSL	--	Yes
Cobalt-60	3/130	0.04	0.09	4661	0.0200	8.0000	NBL	NSL	--	Yes
Lead-210	94/117	0.29	3.35	004672	0.1400	1.7500	NBL	NSL	--	Yes
Neptunium-237	4/6	0.02	0.07	#6B	--	--	NBL	NSL	--	Yes
Plutonium-238	82/351	0.02	55.40	S1066	0.0050	45.3100	0.13	NSL	--	Yes
Plutonium-239	3/5	0.01	0.02	CANAL NW	0.0050	0.0180	0.18	NSL	--	No; bkg
Plutonium-239/240	15/30	0.00	0.19	004727	0.0024	0.0909	0.18	NSL	--	Yes
Plutonium-241	0/6	--	--	--	8.8000	35.0000	--	--	--	No
Plutonium-242	0/15	--	--	--	0.0003	0.0399	--	--	--	No
Potassium-40	17/17	12.50	34.46	B405	0.3400	3.0000	37	NSL	--	No; bkg
Radium-226	88/124	0.64	3.26	CANAL SW	0.0885	1.6900	2	NSL	--	Yes
Radium-228	10/10	0.64	2.57	004727	0.1730	0.3400	NBL	NSL	--	Yes
Strontium-90	1/7	2.10	2.10	#4B	0.1500	0.1500	0.72	NSL	--	Yes
Thorium-228	33/33	0.62	1.66	004720	0.0110	1.2900	1.5	NSL	--	Yes
Thorium-230	34/131	0.47	2.69	4558	0.0090	16.7900	1.9	NSL	--	Yes
Thorium-232	134/362	0.04	5.60	S1049	0.0070	2.0000	1.4	NSL	--	Yes
Tritium	2/6	2.10	2.50	B408	0.3000	2.5000	1.6	NSL	--	Yes
Uranium-234	18/18	0.64	1.17	B406	0.7700	0.9600	1.1	NSL	--	Yes
Uranium-235	20/20	0.03	0.20	B406	0.0600	0.0700	0.11	NSL	--	Yes
Uranium-238	65/68	0.32	1.95	004643	0.1400	1.4500	1.2	NSL	--	Yes
Organic Compounds (ug/kg)										
1,1,1-Trichloroethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,1,2,2-Tetrachloroethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,1,2-Trichloro-1,2,2-trifluoroethane	0/7	--	--	--	11.0000	13.0000	--	--	--	No
1,1,2-Trichloroethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,1-Dichloroethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,1-Dichloroethene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,2-Dichloroethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,2-Dichloroethene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,2-Dichloropropane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
1,2-Diethylbenzene	0/7	--	--	--	22.0000	26.0000	--	--	--	No
1,3-cis-Dichloropropene	0/15	--	--	--	5.0000	6.0000	--	--	--	No

Table B-1
Comparison of Parcel 4 Soil Concentrations to Soil Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Dectections	Range of Detections Minimum	Range of Detections Maximum	Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
1,3-trans-Dichloropropene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
2-Butanone	0/15	--	--	--	11.0000	13.0000	--	--	--	No
2-Hexanone	0/15	--	--	--	11.0000	13.0000	--	--	--	No
4-Methyl-2-pentanone	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Acetone	2/15	5.00	9.00	MND33-0102	11.0000	13.0000	NBL	2500.00	0.00360	No
Acetonitrile	3/7	110.00	110.00	B401	110.0000	113.0000	NBL	NSL	--	Yes
Acrylonitrile	0/7	--	--	--	110.0000	113.0000	--	--	--	No
Benzene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Bromodichloromethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Bromoform	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Bromomethane	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Carbon Disulfide	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Carbon tetrachloride	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Chlorobenzene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Chloroethane	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Chloroform	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Chloromethane	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Dibromochloromethane	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Ethylbenzene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Hexane	0/7	--	--	--	11.0000	13.0000	--	--	--	No
Iodomethane	0/7	--	--	--	11.0000	13.0000	--	--	--	No
Methylene chloride	15/15	6.00	24.00	B409	6.0000	24.0000	NBL	4050.00	0.006	No
Styrene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Tetrachloroethene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Toluene	1/15	--	2.00	MND33-0102	5.0000	6.0000	NBL	5450.00	0.00037	No
Trichloroethene	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Vinyl Acetate	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Vinyl Chloride	0/15	--	--	--	11.0000	13.0000	--	--	--	No
Xylenes, total	0/15	--	--	--	5.0000	6.0000	--	--	--	No
Semivolatile Organic Compounds (ug/kg)										
1,2,4-Trichlorobenzene	1/15	--	33.00	MND33-0104	360.0000	760.0000	NBL	11100.00	0.00297	No
1,2-Dichlorobenzene	0/15	--	--	--	360.0000	760.0000	NBL			
1,3-Dichlorobenzene	0/15	--	--	--	360.0000	760.0000	NBL			
1,4-Dichlorobenzene	0/15	--	--	--	360.0000	760.0000	NBL			
2,2'-oxybis(1-chloropropane)	0/15	--	--	--	360.0000	760.0000	NBL			
2,4,5-Trichlorophenol	0/15	--	--	--	1700.0000	3700.0000	NBL			
2,4,6-Trichlorophenol	0/15	--	--	--	360.0000	760.0000	NBL			
2,4-Dichlorophenol	0/15	--	--	--	360.0000	760.0000	NBL			

Table B-1
Comparison of Parcel 4 Soil Concentrations to Soil Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Dectections	Range of Detections Minimum	Range of Detections Maximum	Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
2,4-Dimethylphenol	0/15	--	--	--	360.0000	760.0000	NBL			
2,4-Dinitrophenol	0/15	--	--	--	1700.0000	3700.0000	NBL			
2,4-Dinitrotoluene	0/15	--	--	--	360.0000	760.0000	NBL			
2,6-Dinitrotoluene	0/15	--	--	--	360.0000	760.0000	NBL			
2-Benzyl-4-Chlorophenol	0/7	--	--	--	360.0000	420.0000	NBL			
2-Chloronaphthalene	0/15	--	--	--	360.0000	760.0000	NBL			
2-Chlorophenol	1/15	--	38.00	MND33-0104	360.0000	760.0000	NBL	242.66	0.15660	No
2-Methylnaphthalene	1/15	--	63.00	B401	360.0000	760.0000	NBL	3240	0.019	No
2-Methylphenol	0/15	--	--	--	360.0000	760.0000	NBL			
2-Nitroaniline	0/15	--	--	--	1700.0000	3700.0000	NBL			
2-Nitrophenol	0/15	--	--	--	360.0000	760.0000	NBL			
3,3'-Dichlorobenzidine	0/15	--	--	--	720.0000	1500.0000	NBL			
3-Nitroaniline	0/10	--	--	--	1700.0000	3600.0000	NBL			
4,6-Dinitro-o-Cresol	0/15	--	--	--	1700.0000	3700.0000	NBL			
4-Bromophenyl-phenyl Ether	0/15	--	--	--	360.0000	760.0000	NBL			
4-Chloro-3-methylphenol	1/15	--	7.00	MND33-0104	360.0000	760.0000	NBL	238.89	0.029	No
4-Chloroaniline	0/15	--	--	--	360.0000	760.0000	NBL			
4-Chlorophenyl-phenylether	0/15	--	--	--	360.0000	760.0000	NBL			
4-Methylphenol	0/15	--	--	--	360.0000	760.0000	NBL			
4-Nitroaniline	0/15	--	--	--	1700.0000	3700.0000	NBL			
4-Nitrophenol	0/15	--	--	--	1700.0000	3700.0000	NBL			
Acenaphthene	1/15	--	25.00	MND33-0104	360.0000	760.0000	NBL	682000	0.00004	No
Acenaphthylene	0/15	--	--	--	360.0000	760.0000	NBL			
Anthracene	0/15	--	--	--	360.0000	760.0000	NBL			
Benzo(a)anthracene	1/15	--	58.00	B401	360.0000	760.0000	NBL	5210	0.011	No
Benzo(a)pyrene	1/15	--	51.00	B401	360.0000	760.0000	NBL	1520	0.034	No
Benzo(b)fluoranthene	4/15	37.00	98.00	B401	370.0000	760.0000	NBL	59800	0.00164	No
Benzo(gh,l)perylene	0/15	--	--	--	360.0000	760.0000	NBL	--	--	No
Benzo(k)fluoranthene	4/15	65.00	170.00	B401	370.0000	760.0000	NBL	148000	0.00115	No
Benzoic acid	1/15	--	12.00	MND33-0104	1700.0000	3700.0000	NBL	NSL	--	Yes
Benzyl Alcohol	0/15	--	--	--	360.0000	760.0000	NBL			
Bis(2-chloroethoxy)methane	0/15	--	--	--	360.0000	760.0000	NBL			
Bis(2-chloroethyl)ether	0/15	--	--	--	360.0000	760.0000	NBL			
Bis(2-ethylhexyl)phthalate	1/15	--	74.00	MND33-0104	360.0000	760.0000	NBL	925.94	0.080	No
Butyl Benzyl Phthalate	0/15	--	--	--	360.0000	760.0000	NBL			
Carbazole	0/7	--	--	--	360.0000	420.0000	NBL			
Chrysene	1/15	--	78.00	B401	360.0000	760.0000	NBL	4730	0.016	No
Dibenz(a,h)anthracene	0/15	--	--	--	360.0000	760.0000	NBL			

Table B-1
Comparison of Parcel 4 Soil Concentrations to Soil Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Dectections	Range of Detections Minimum	Range of Detections Maximum	Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
Dibenzofuran	0/15	--	--	--	360.0000	760.0000	NBL			
Diethyl Phthalate	0/15	--	--	--	360.0000	760.0000	NBL			
Dimethyl Phthalate	0/15	--	--	--	360.0000	760.0000	NBL			
Di-n-butylphthalate	3/15	25.00	68.00	B406	85.0000	760.0000	NBL	149.79	0.454	No
Di-n-octyl Phthalate	0/15	--	--	--	360.0000	760.0000	NBL			
Fluoranthene	4/15	39.00	110.00	B401	380.0000	760.0000	NBL	122000	0.00090	No
Fluorene	0/15	--	--	--	360.0000	760.0000	NBL			
Hexachlorobenzene	0/15	--	--	--	360.0000	760.0000	NBL			
Hexachlorobutadiene	0/15	--	--	--	360.0000	760.0000	NBL			
Hexachlorocyclopentadiene	0/15	--	--	--	360.0000	760.0000	NBL			
Hexachloroethane	0/15	--	--	--	360.0000	760.0000	NBL			
Indeno(1,2,3-cd)pyrene	0/15	--	--	--	360.0000	760.0000	NBL			
Isophorone	0/15	--	--	--	360.0000	760.0000	NBL			
Naphthalene	0/15	--	--	--	360.0000	760.0000	NBL			
Nitrobenzene	0/15	--	--	--	360.0000	760.0000	NBL			
N-Nitroso-di-n-propylamine	0/15	--	--	--	360.0000	760.0000	NBL			
N-Nitrosodiphenylamine	0/15	--	--	--	360.0000	760.0000	NBL			
Pentachlorophenol	0/15	--	--	--	360.0000	760.0000	NBL			
Phenanthrene	1/15	--	78.00	B401	360.0000	760.0000	NBL	45700	0.0017	No
Phenol	1/15	--	23.00	MND33-0104	360.0000	760.0000	NBL	120000	0.00019	No
Pyrene	7/15	25.00	120.00	MND33-0103	370.0000	760.0000	NBL	78500	0.0015	No
Pesticides/PCBs (ug/kg)										
4,4-DDD	2/14	3.80	6.60	B409	3.6000	8.3000	4.2	758	0.00871	No
4,4-DDE	1/15	3.80	3.80	B401	3.0000	4.2000	4.3	596	0.00638	No
4,4-DDT	2/15	0.25	4.00	B407	3.6000	9.1000	13	18	0.229	No
Aldrin	2/15	0.07	0.35	B401	1.9000	3.1000	NBL	3	0.105	No
Alpha Chlordane	0/15	--	--	--	1.9000	10.5000	--	--	--	No
Alpha-BHC	0/15	--	--	--	1.9000	2.3000	--	--	--	No
Aroclor-1016	0/16	--	--	--	36.0000	90.7000	--	--	--	No
Aroclor-1221	0/16	--	--	--	73.0000	90.7000	--	--	--	No
Aroclor-1232	0/16	--	--	--	36.0000	90.7000	--	--	--	No
Aroclor-1242	0/16	--	--	--	36.0000	90.7000	--	--	--	No
Aroclor-1248	0/16	--	--	--	36.0000	90.7000	--	--	--	No
Aroclor-1254	0/16	--	--	--	36.0000	181.4000	--	--	--	No
Aroclor-1260	0/16	--	--	--	36.0000	181.4000	--	--	--	No
Beta-BHC	0/15	--	--	--	1.9000	4.5000	--	--	--	No
Delta-BHC	0/15	--	--	--	1.9000	6.8000	--	--	--	No
Dieldrin	0/15	--	--	--	1.4000	4.2000	--	--	--	No

Table B-1
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Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Dectections	Range of Detections Minimum	Range of Detections Maximum	Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
Endosulfan I	2/15	0.05	0.27	B407	1.9000	9.1000	NBL	119.27	0.00226	No
Endosulfan II	0/15	--	--	--	3.0000	4.2000	--	--	--	No
Endosulfan Sulfate	1/15	--	3.90	B406	3.6000	18.1000	NBL	35.78	0.10900	No
Endrin	0/15	--	--	--	3.6000	4.5000	--	--	--	No
Endrin aldehyde	1/15	--	0.30	B407	3.6000	17.3000	NBL	10.5	0.029	No
Endrin ketone	1/15	--	0.25	B407	3.6000	18.1000	NBL	NSL	--	Yes
Gamma-Chlordane	1/15	--	0.06	B408	1.9000	10.5000	NBL	224	0.00026	No
Gamma-BHC (Lindane)	2/15	1.90	2.00	B401	1.9000	3.1000	NBL	5.00	0.40000	No
Heptachlor	3/15	1.90	2.10	B407	1.9000	2.3000	NBL	5.98	0.35117	No
Heptachlor epoxide	1/15	--	0.10	B408	1.9000	9.1000	NBL	152	0.00066	No
Methoxychlor	2/15	1.90	1.90	B408	1.9000	90.7000	30	19.88	0.09557	No
Toxaphene	0/15	--	--	--	175.9000	220.0000	--	--	--	No
Explosives (mg/kg)										
1,3,5-Trinitrobenzene	0/7	--	--	--	1.5000	1.5000	--	--	--	No
1,3-Dinitrobenzene	1/7	--	0.0980	B405	1.5000	1.5000	NBL	654.70	0.00015	No
2,4,6-Trinitrotoluene	1/7	--	0.20	B405	1.5000	1.5000	NBL	NSL	--	Yes
2,4-Dinitrotoluene	0/7	--	--	--	0.5000	0.5000	--	--	--	No
2,6-Dinitrotoluene	0/7	--	--	--	1.5000	1.5000	--	--	--	No
2-Amino-4,6-dinitrotoluene	0/7	--	--	--	1.5000	1.5000	--	--	--	No
HMX	0/7	--	--	--	3.0000	3.0000	--	--	--	No
Nitrobenzene	0/7	--	--	--	1.5000	1.5000	--	--	--	No
RDX	1/7	--	0.20	B405	0.2000	2.5000	NBL	NSL	--	Yes
Tetryl	0/7	--	--	--	2.5000	2.5000	--	--	--	No
Inorganics (mg/kg)										
Aluminum	15/15	1680.00	21400.00	B409	6.0000	6.0000	19000	NSL	--	Yes
Antimony	14/14	1.70	42.20	MND33-0103	1.7000	3.0000	NBL	0.14	297	Yes
Arsenic	15/15	3.90	11.80	B406	0.2000	0.2000	8.6	6	2.07	Yes
Barium	15/15	12.40	103.00	B409	0.2000	0.2000	180	1.04	99	No; bkg
Beryllium	15/15	0.12	1.00	B409	0.2000	1.0000	1.3	1.06	0.94	No
Bismuth	7/7	12.30	28.50	B405	--	--	NBL	NSL	--	Yes
Cadmium	7/15	4.80	7.70	MND33-0103	0.1990	0.2000	2.1	0.0022	3468	Yes
Calcium	15/15	812.00	150000.00	MND33-0103	2.0000	2.0000	310000	NSL	--	No; bkg;nut
Chromium	15/15	1.70	30.50	MND33-0103	1.0000	1.0000	20	0.40	76	Yes
Cobalt	15/15	1.40	14.40	B409	1.0000	1.0000	19	0.14	103	No; bkg
Copper	15/15	3.40	18.00	MND33-0103	1.0000	1.0000	26	0.31	57	No; bkg
Cyanide	7/15	0.12	0.38	B409	0.1000	0.6500	NBL	1.33	0.29	No
Iron	15/15	2790.00	28800.00	B409	1.0000	1.0000	35000	NSL	--	No; bkg
Lead	15/15	5.40	32.00	B401	0.2000	0.2000	48	0.05	596	No; bkg

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Chemical	Frequency of Dectections	Range of Detections		Maximum Location	Range of Quantitation Limits		Background [a]	creening Value	Hazard Quotient	COPC?
		Minimum	Maximum							
Lithium	6/6	1.80	27.30	B409	1.8000	--	26	NSL	--	Yes
Magnesium	15/15	583.00	68800.00	MND33-0103	5.0000	5.0000	40000	NSL	--	No; nut
Manganese	15/15	116.00	969.00	B409	0.2000	0.2000	1400	NSL	--	No; bkg
Mercury	1/15	--	0.14	B408	0.1000	0.1300	NBL	0.10	1.4	Yes
Molybdenum	6/6	3.60	6.20	B405	--	--	27	NSL	--	No; bkg
Nickel	14/15	2.80	25.80	MND33-104	2.0000	2.0000	32	13.60	1.9	No; bkg
Potassium	15/15	270.00	3550.00	B409	10.0000	10.0000	1900	NSL	--	No; nut
Silver	7/15	12.00	17.00	MND33-0103	0.2200	1.0000	1.7	4.04	4.21	Yes
Sodium	15/15	26.70	221.00	MND33-0104	10.0000	99.5000	240	NSL	--	No; bkg;nut
Thallium	11/15	0.43	0.44	MND33-0102	0.4300	0.9300	0.46	0.06	7.7	Yes
Tin	0/7	--	--	--	10.3000	12.0000	20	--	--	No
Vanadium	15/15	0.75	37.00	B409	1.0000	1.0000	25	1.59	23.3	Yes
Zinc	15/15	6.70	62.20	B409	0.5000	0.5000	140	6.62	9.4	No; bkg

Notes:
NBL = No background level.
NSL = No screening level.
-- = Not applicable; not available.
bkg = Below background.
nut = Essential nutrient.

a Site-specific background levels for Mound Plant.
b U.S EPA Region V,. Ecological Data Quality Levels, RCRA Corrective Action (EPA, 1999).

Table B-2
Comparison of Benner Branch Surface Water Concentrations to Surface Water Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Background * Stream Surface Water	Screening Value	Source	Screening Hazard Quotient	COPC?
		Minimum	Maximum							
Radionuclide (pCi/L)										
Plutonium-238	1/3	--	0.000002	EPA-16	0.22 - 0.4	NBL	NSL	--		Yes
Potassium-40	2/2	166	352	MND22-4101	165 - 199	180	NSL	--	--	Yes
Radium-226	2/2	0.131	0.288	MND22-4101	0.0861 - 0.11	0.15	NSL	--	--	Yes
Strontium-90	1/2	--	0.429	MND22-4102	0.347 - 0.386	NBL	NSL	--	--	Yes
Uranium-234	2/2	0.43	0.458	MND22-4101	0.186 - 0.283	1.3	NSL	--	--	No; bkg
Organic Compounds (ug/L)										
beta-BHC	1/2	--	0.0028	MND22-4101	0.05	NBL	0.10	a	0.028	No
delta-BHC	1/2	--	0.0017	MND22-4101	0.05	NBL	0.10	a	0.017	No
Methylene chloride	1/2	--	1.00	MND22-4101	5	NBL	4.00	a	0.25	No
Inorganics (ug/L)										
Aluminum	2/4	213	950	MND22-4102	19.2	360	87.00	c	10.91954023	Yes
Antimony	3/4	2	2.8	MND22-4101	1.9	NBL	190.00	a	0.014736842	No
Barium	4/4	39.6	48.9	MND22-4101	0.2	130	5000.00	b	0.00978	No
Calcium	4/4	92600	110000	MND22-4102	28.5	120000	NSL	--	--	No;bkg;nut
Chromium	1/4	--	1.70	MND22-4101	0.9	1.1	11.00	a	0.154545455	No
Cobalt	2/4	0.73	1.20	MND22-4101	0.6	NBL	5.00	b	0.24	No
Copper	4/4	1.2	5.1	MND22-4101	0.7	8.1	34.00	a,h	0.15	No
Iron	2/4	192	1050	MND22-4101	15.7	1700	1000.00	c	1.05	No; bkg
Lead	1/4	--	1.9	MND22-4101	1.9	NBL	10.00	a,h	0.19	No
Lithium	3/4	4.7	5.2	MND22-4102	3.8	NBL	NSL	--	--	Yes
Magnesium	4/4	19600	25900	MND22-4102	4	44000	NSL	--	--	No; bkg;nut
Manganese	4/4	1	28	MND22-4101	0.3	460	NSL	--	--	No; bkg
Nickel	1/4	--	44.1	MND22-4101	1.4	96	147.00	a,h	0.3	No
Potassium	4/4	1620	2300	MND22-4102	16.7	12000	NSL	--	--	No; bkg;nut
Selenium	1/4	--	2	MND22-4101	1.1	NBL	4.60	a	0.348	No
Sodium	4/4	47800	102000	MND22-4101	202	65000	NSL	--	--	No; nut
Vanadium	1/4	--	3.6	MND22-4101	0.4	0.55	19.00	b	0.1895	No
Zinc	4/4	2	56	MND22-4101	1.4	40	298.00	a,h	0.1872	No

Table B-2
Comparison of Benner Branch Surface Water Concentrations to Surface Water Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Background * Stream Surface Water	Screening Value	Source	Screening Hazard Quotient	COPC?
		Minimum	Maximum							
Anions (mg/L)										
Chloride	2/2	129	206	MND22-4101	--	150	NSL	--	--	Yes
Fluoride	2/2	0.146	0.215	MND22-4102	--	0.1	NSL	--	--	Yes
Sulfate	2/2	36	51.90	MND22-4102	--	280	NSL	--	--	No; bkg

Notes:
Only chemicals detected above method detection limit are presented.
NBL = No background level.
NSL = No screening level.
-- = Not applicable; not available.
bkg = Below background
nut = Essential nutrient.

a =OEPA, 1999. Ohio Water Quality Standards. Chapter 3745-1 of the Administrative Code.
b = EPA, 1999. Ecological Data Quality Level.
c = EPA, 1986. Quality Criteria for Water.
h = hardness-dependent criteria, based on a hardness of 263 mg/L; See Table A-5.
* OU 9 Surface Water and Sediment Investigation Report, September 1996.

Table B-3
Comparison of Brenner Branch Sediment Concentrations to Sediment Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Background* Stream Sediments	Screening Value[a]	Screening Hazard Quotient	COPC?
		Minimum	Maximum						
Radionuclide (pCi/g)									
Americium-241	0/7	--	--	--	0.2540-0.9500	--			
Bismuth-207	0/7	--	--	--	0.0725-0.1450	--			
Bismuth-210	0/7	--	--	--	0.0885-0.1850	--			
Cesium-137	1/7	0.384	0.384	MND22-4001	0.1070-0.2720	1.5	NSL	--	No; bkg
Cobalt-60	0/7	--	--	--	0.0865-0.2210	--			
Plutonium-238	6/7	0.013	1.290	MND22-4003	0.0033-0.0108	NBL	NSL	--	Yes
Plutonium-239/240	0/7	--	--	--	0.0073-0.0139	--			
Potassium-40	7/7	14.300	27.400	MND22-4003	--	16	NSL	--	Yes
Radium-226	7/7	0.730	1.440	MND22-4001	0.5190-0.7640	2.1	NSL	--	No; bkg
Strontium-90	1/7	0.158	0.158	MND22-4001	0.0939-0.1880	NBL	NSL	--	Yes
Thorium-228	7/7	0.210	1.130	MND22-4001	0.0108-0.0261	1.8	NSL	--	No; bkg
Thorium-230	7/7	0.316	1.420	MND22-4001	0.0068-0.0275	NBL	NSL	--	Yes
Thorium-232	7/7	0.226	1.120	MND22-4001	0.0051-0.0242	1.4	NSL	--	No; bkg
Tritium	0/7	--	--	--	0.2550-0.2890	--			
Uranium-234	7/7	0.570	0.936	MND22-4001	0.0142-0.0774	1.2	NSL	--	No; bkg
Uranium-235	4/7	0.026	0.077	MND22-4101	0.0161-0.0520	0.11	NSL	--	No; bkg
Uranium-238	7/7	0.599	1.150	MND22-4102	0.0239-0.0649	1.4	NSL	--	No; bkg
Pesticides/PCBs (ug/kg)									
4,4-DDD	1/7	0.400	0.400	MND22-4101	3.30-5.00	4.6	5.53	0.072332731	No
4,4-DDE	3/7	0.250	3.500	MND22-4101	3.30-4.90	3.8	1.42	2.464788732	Yes
4,4-DDT	2/7	0.190	0.230	MND22-4101	3.30-4.90	NBL	1.19	0.193277311	No
Aldrin	4/7	0.082	0.220	MND22-4003	1.70-2.50	2.2	2.00	0.11	No
alpha-Chlordane	3/7	0.044	1.100	MND22-4003	1.70-2.50	2.3	4.50	0.24	No
Alpha-BHC	0/7	--	--	--	1.90-2.60	--			
Aroclor-1016	0/7	--	--	--	36.0-50.0	--			
Aroclor-1221	0/7	--	--	--	73.0-100.0	--			
Aroclor-1232	0/7	--	--	--	36.0-50.0	--			
Aroclor-1242	0/7	--	--	--	36.0-50.0	--			
Aroclor-1248	0/7	--	--	--	36.0-50.0	--			
Aroclor-1254	0/7	--	--	--	36.0-50.0	--			
Aroclor-1260	0/7	--	--	--	36.0-50.0	--			
Beta-BHC	0/7	--	--	--	1.90-2.60	--			
delta-BHC	3/7	0.080	5.300	MND22-4101	1.70-2.0	NBL	6.00	0.88	No
Dieldrin	1/7	0.960	0.960	MND22-4003	3.60-5.00	22	2	0.48	No
Endosulfan I	0/7	--	--	--	1.900-2.600	--			
Endosulfan II	4/7	0.053	7.100	MND22-4001	3.30-4.90	NBL	0.104	68.3	Yes
Endosulfan sulfate	2/7	0.130	0.560	MND22-4101	3.30-4.90	NBL	34.6	0.0162	No
Endrin	0/7	--	--	--	3.60-5.0	--			
Endrin aldehyde	0/7	0.380	0.930	MND22-4102	3.60-5.0	NBL	3.20E+03	0.00029	No

Table B-3
Comparison of Brenner Branch Sediment Concentrations to Sediment Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Background* Stream Sediments	Screening Value[a]	Screening Hazard Quotient	COPC?
		Minimum	Maximum						
Endrin ketone	1/7	0.240	0.240	MND22-4001	3.6-5.0	NBL	NSL	--	Yes
gamma-Chlordane	1/7	0.930	0.930	MND22-4003	1.90-2.60	1	4.5	0.207	No
gamma-BHC (lindane)	2/7	0.065	0.095	MND22-4101	1.70-2.50	NBL	0.94	0.101	No
Heptachlor	3/7	0.056	0.320	MND22-4102	1.70-2.50	NBL	0.6	0.533	No
Heptachlor epoxide	3/7	0.072	0.940	MND22-4102	1.70-2.50	3	0.6	1.57	No; bkg
Methoxychlor	4/7	0.130	0.950	MND22-4101	17.0-20.0	NBL	3.59	0.265	No
Toxaphene	0/7	--	--	--	190.-260.				
Organic Compounds (ug/kg)									
Acrylonitrile	0/7	--	--	--	110.-150.				
Benzene	0/7	--	--	--	6.0-8.0				
Bromodichloromethane	0/7	--	--	--	6.0-8.0				
Bromoform	0/7	--	--	--	6.0-8.0				
Bromomethane	0/7	--	--	--	11.0-15.0				
Carbon Disulfide	0/7	--	--	--	6.0-8.0				
Carbon Tetrachloride	0/7	--	--	--	6.0-8.0				
Chlorobenzene	0/7	--	--	--	6.0-8.0				
Chloroethane	0/7	--	--	--	11.0-15.0				
Chloroform	0/7	--	--	--	6.0-8.0				
Chloromethane	0/7	--	--	--	11.0-15.0				
Dibromochloromethane	0/7	--	--	--	6.0-8.0				
Ethylbenzene	0/7	--	--	--	6.0-8.0				
Hexane	0/7	--	--	--	11.0-15.0				
Iodomethane	0/7	--	--	--	11.0-15.0				
Methylene chloride	7/7	6.000	14.000	MND22-4102	5.0-10.0	NBL	1260	0.011	No
Styrene	0/7	--	--	--	6.0-8.0				
Tetrachloroethene	0/7	--	--	--	6.0-8.0				
Toluene	0/7	--	--	--	6.0-8.0				
Trichloroethene	0/7	--	--	--	6.0-8.0				
Vinyl Acetate	0/7	--	--	--	11.0-15.0				
Vinyl Chloride	0/7	--	--	--	11.0-15.0				
Xylenes, Total	0/7	--	--	--	6.0-8.0				
Inorganics (mg/kg)									
Aluminum	7/7	6330.000	15300	MND22-4001	19.20	10000	NSL	--	Yes
Antimony	0/7	--	--	--	1.90				
Arsenic	7/7	5.800	9.200	MND22-4101	1.60	29	5.9	1.6	No; bkg
Barium	7/7	53.700	111.000	MND22-4001	0.20	270	NSL	--	No; bkg
Beryllium	7/7	0.420	0.850	MND22-4001	0.20	0.48	NSL	--	Yes
Bismuth	5/7	0.760	1.600	MND22-4102	2.60	0.49	NSL	--	Yes
Cadmium	3/7	0.310	0.410	MND22-4101	0.30-0.41	0.75	0.5960	0.7	No
Calcium	7/7	4340.000	71900.000	MND22-4101	28.50	130000	NSL	--	No; bkg; nut

Table B-3
Comparison of Brenner Branch Sediment Concentrations to Sediment Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Background* Stream Sediments	Screening Value[a]	Screening Hazard Quotient	COPC?
		Minimum	Maximum						
Chromium	7/7	9.200	18.500	MND22-4001	0.90	15	26.00	0.71	No
Cobalt	7/7	8.500	12.000	MND22-4102	0.60	12	50.00	0.2	No
Copper	7/7	11.000	21.700	MND22-4003	0.70	34	16.00	1.4	Yes
Cyanide	0/7	--	--	--	10.00				
Iron	7/7	14700.000	25300.000	MND22-4003	15.70	30000	NSL	--	No; bkg
Lead	7/7	13.900	24.800	MND22-4001	1.90	36	31.00	0.8	No
Lithium	7/7	8.400	22.400	MND22-4003	3.80	12	NSL	--	Yes
Magnesium	7/7	3310.000	15600.000	MND22-4101	4.00	54000	NSL	--	No; bkg;nut
Manganese	7/7	500.000	1250.000	MND22-4101	0.30	2800	NSL	--	No; bkg
Mercury	0/7	--	--	--	0.20				
Molybdenum	7/7	0.560	1.600	MND22-4003	1.70	1.4	NSL	--	Yes
Nickel	7/7	12.400	23.700	MND22-4003	1.40	19	16.00	1.5	Yes
Potassium	7/7	1130.000	3430.000	MND22-4001	16.70	1900	NSL	--	No; nut
Selenium	0/7	--	--	--	1.10				
Silver	0/7	--	--	--	0.50				
Sodium	7/7	208.000	530.000	MND22-4101	202.00	680	NSL	--	No; bkg;nut
Thallium	0/7	--	--	--	1.40				
Tin	3/7	2.600	4.800	MND22-4102	5.90	1.3	NSL	--	Yes
Vanadium	7/7	16.600	30.200	MND22-4001	0.40	28	NSL	--	Yes
Zinc	7/7	31.700	74.100	MND22-4003	1.40	93	120.00	0.6	No

Notes:
Only chemicals detected above method detection limit are presented.
NBL = No background level.
NSL = No screening level.
-- = Not applicable; not available.

a U.S EPA Region V,. Ecological Data Quality Levels, RCRA Corrective Action
* OU 9 Surface Water and Sediment Investigation Report, September 1996.

Table B-4
Comparison of Groundwater Concentrations to Surface Water Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Screening Value[b]	Source	Screening Hazard Quotient	COPC?
		Minimum	Maximum						
Radionuclide (pCi/L)									
Americium-241	1/2	--	0.47	B408	0.54	NSL	--	--	Yes
Radium-226	2/2	1.22	1.22	B401/B408	--	NSL	--	--	Yes
Thorium-230	2/2	0.21	0.43	B408	--	NSL	--	--	Yes
Thorium-232	2/2	0.15	0.35	B408	--	NSL	--	--	Yes
Uranium-234	2/2	0.43	0.94	B408	--	NSL	--	--	Yes
Uranium-235	1/2	--	0.07	B408	0.04	NSL	--	--	Yes
Uranium-238	2/2	0.19	1.12	B408	--	NSL	--	--	Yes
Organic Compounds (ug/L)									
Acrylonitrile	1/2	--	25.00	B401	100	430.00	a	0.0581	No
Bis(2-ethylhexyl)phthalate	1/2	--	3.00	B408	10	8.40	a	0.3571	No
Hexane	1/2	--	1.00	B401	10	NSL	--	--	Yes
Toluene	1/2	--	1.00	B401	5	1700.00	a	0.000588	No
Phenol	1/2	--	10.00	B401	10	200.00	a	0.05	No
Inorganics (ug/L)									
Aluminum	2/2	40200	58800	B408	--	87.00	c	676	Yes
Arsenic	2/2	9.9	472.0	B408	--	150	a	3.147	Yes
Barium	2/2	240	552	B408	--	5000.00	b	0.1104	No
Calcium	2/2	703000	1760000	B408	--	NSL	--	--	No; nutrient
Chromium	2/2	111	164.0	B408	--	11.00	a	14.91	Yes
Cobalt	1/2	--	126.00	B408	--	5.00	b	25.2	Yes
Copper	2/2	160	485.0	B408	--	29.00	a,h	16.72	Yes
Iron	2/2	136000	470000	B408	--	1000.00	c	470	Yes
Lead	2/2	80.7	148.0	B408	--	30.00	a,h	4.93	Yes
Lithium	1/1	--	701.0	B401	--	NSL	--	--	Yes
Magnesium	2/2	242000	462000	B408	--	NSL	--	--	No; nutrient
Manganese	2/2	2190	7000	B408	--	NSL	--	--	Yes
Mercury	1/2	--	0.4	B408	0.2	0.91	a	0.440	No
Molybdenum	1/1	--	168.0	B401	--	NSL	--	--	Yes
Nickel	2/2	122	322.0	B408	--	170.00	a,h	1.8941	Yes

Table B-4
Comparison of Groundwater Concentrations to Surface Water Screening Values
Parcel 4, Mound Plant, Miamisburg, Ohio

Chemical	Frequency of Detection	Range of Detections		Maximum Location	Range of Quantitation Limits	Screening Value[b]	Source	Screening Hazard Quotient	COPC?
		Minimum	Maximum						
Potassium	2/2	10800	13300	B408	--	NSL	--	--	No; nutrient
Sodium	2/2	18900	42400	B401	--	NSL	--	--	No; nutrient
Vanadium	2/2	84.4	138.0	B408	--	19.00	b	7.263157895	Yes
Zinc	2/2	413	1140.0	B408	--	380.00	a,h	3	Yes
Anions (ug/L)									
Bismuth	2/2	688	1460.00	B408	--	NSL	--	--	Yes
Chloride	2/2	42700	113000.0	B401	--	NSL	--	--	Yes
Fluoride	2/2	201	310.000	B401	--	NSL	--	--	Yes
Nitrate/Nitrite	2/2	530	560.000	B401	--	5000.00	c	0.112	No
Nitrogen	2/2	368	369.000	B408	--	NSL	--	--	Yes
Phosphorous	1/2	--	666.00	B401	1000	10.00	c	66.6	Yes
Sulfate	2/2	42600	43700.00	B401	--	NSL	--	--	Yes

Notes:
Only chemicals detected above method detection limit are presented.
NSL = No screening level.
-- = Not applicable; not available.
Nutrient = Essential nutrient.

a =OEPA, 1999. Ohio Water Quality Standards. Chapter 3745-1 of the Administrative Code.

Table B-5
Calcluation of Hardness and Hardness-Dependent Criteria
Parcel 4, Mound Plant, Miamisburg, Ohio

Hardness calculations				
	Brenner Branch		Groundwater	
	Calcium	Magnesium	Calcium	Magnesium
	92600	19600	703000	242000
	99100	21400	1760000	462000
	101000	23200		
	110000	25900		
Average (ug/L)	100675	22525	1231500	352000
Average (mg/L)	100.675	22.525	1231.5	352
equivalents	5.023683	1.851555	61.45185	28.9344
Hardness (mg/L)	344.1056		4523.832	

Brenner Br (Total recoverable)	Chemical	imzm	omzm	omza
hdness =	Beryllium	5766.826735	1890.352	12.60498599
344.1056369	Cadmium	24.82396028	11.3588	11.64055259
	Chromium	4458.877272	2527.544	209.4716023
	Copper	95.06363026	49.48165	34.35445344
	Lead	1069.374297	442.532	10.37821282
	Nickel	1695.021316	943.1003	147.0612248
	Silver	0.206171229	0.062599	--
	Zinc	536.5865801	298.2849	298.2848876

GW (Total recoverable)	Chemical	imzm	omzm	omza
hdness =	Beryllium	7347.072814	2408.353	16.05904844
400	Cadmium	29.41754336	13.4607	13.10088732
	Chromium	5043.84902	2859.139	209.4716023
	Copper	109.5479657	57.0209	34.35445344
	Lead	1295.219773	535.9921	10.37821282
	Nickel	1925.203599	1071.172	147.0612248
	Silver	0.267092302	0.081096	--
	Zinc	609.5737917	338.858	298.2848876

APPENDIX C

TOXICITY REFERENCE VALUES

Bird Toxicity Reference Values
Parcel 4, Mound Plant
Miamisburg, Ohio

Analyte	Test Species	Dose	Duration and Endpoint	Uncertainty Factor	TRV	Reference
Organics (ug/kg-BW-day)						
2,4,6-Trinitrotoluene	NDA	--	--	--	--	--
Benzoic acid	NDA	--	--	--	--	--
Di-n-butylphthalate	Ringed dove	1100	Chronic LOAEL (reproduction)	0.1	110	Sample et al., 1996
Endrin ketone	NDA	--	--	--	--	--
Inorganics (mg/kg-BW-day)						
Aluminum	ringed turtle dove	110	Chronic NOAEL	1	110	EPA, 1999
Antimony	NDA	--	--	--	--	--
Arsenic	Brown-headed cowbird	2.46	Chronic NOAEL	1	2.46	EPA, 1999
Cadmium	Mallard drake	1.45	Chronic NOAEL	1.0	1.45	EPA, 1999
Chromium (trivalent)	Black duck	1.0	Chronic NOAEL	1	1.0	EPA, 1999
Copper	1-day old chicks	46.97	Chronic NOAEL (growth)	1.0	46.97	EPA, 1999
Lithium	NDA	--	--	--	--	--
Mercury	Coturniz quail	325	Acute LOAEL (mortality)	0.01	3.25	EPA, 1999
Selenium	Mallard	0.5	Chronic LOAEL (mortality)	1.0	0.5	EPA, 1999
Silver	Mallard	1780	Subchronic NOAEL	0.1	178	EPA, 1999
Thallium	Starling	35	Acute LD50	0.01	0.35	EPA, 1999
Vanadium	Mallard	11.4	Chronic NOAEL	1.0	11.4	Sample et al., 1996

Bird Toxicity Reference Values
Parcel 4, Mound Plant
Miamisburg, Ohio

Analyte	Test Species	Dose	Duration and Endpoint	Uncertainty Factor	TRV	Reference
Anions (mg/kg-BW day)						
Bismuth	NDA	--	--	--	--	--
Chloride	NDA	--	--	--	--	--
Fluoride	Screech owl	7.8	Chronic NOAEL	1	7.8	Sample et al., 1996
Sulfate	NDA	--	--	--	--	--

Notes:

NDA - No data available.
NOAEL - No observable adverse effect level.
LOAEL - Lowest observable adverse effect level.
NOAEL values were estimated from LOAEL values by multiplying by a factor of 0.1 (EPA, 1999).
Chronic values were estimated from subchronic values by multiplying by a factor of 0.1 (EPA, 1999).
No effect levels and effect levels are considered to be the same as a NOAEL and a LOAEL, respectively.
Acute NOAEL values were converted to chronic NOAEL values by multiplying acute values by a factor of 0.01 (EPA, 1999).
LD50 values were converted to chronic NOAEL values by multiplying the LD50 by 0.01 (EPA, 1999).

Mammal Toxicity Reference Values
Parcel 4, Mound Plant
Miamisburg, Ohio

Analyte	Test Species	Dose	Duration and Endpoint	Uncertainty Factor	TRV	Reference
Organics (ug/kg-BW-day)						
2,4,6-Trintitrotoluene	NDA	--	--	--	--	--
Benzoic acid	NDA	--	--	--	--	--
Endrin ketone	NDA	--	--	--	--	--
Di-n-butylphthalate	mouse	550,000	Chronic NOAEL	1	550,000	Sample et al., 1996
Inorganics (mg/kg-BW-day)						
Aluminum	mouse	19.3	Chronic LOAEL (reproduction)	0.1	1.93	EPA, 1999
Antimony	mouse	1.25	Chronic LOAEL (reproduction)	0.1	0.125	Sample et al., 1996
Arsenic	dog	1.25	Chronic NOAEL	1	1.25	EPA, 1999
Cadmium	mouse	10	Chronic LOAEL (reproduction)	0.1	1	Sample et al., 1996
Chromium (hexavalent)	rat	3.5	Chronic NOAEL	1	3.5	EPA, 1999
Copper	mink	12	Chronic NOAEL	1.0	12	EPA, 1999
Lithium	rat	9.4	Chronic NOAEL	1	9.4	Sample et al., 1996
Mercury	mink	1.01	Chronic NOAEL (reproduction)	1.0	1.01	EPA, 1999
Selenium	mouse	0.2	Chronic NOAEL	1	0.2	Sample et al., 1996
Silver	mouse	3.75	Chronic LOAEL (hypoactivity)	0.1	0.375	EPA, 1999
Thallium	rat	1.31	Subchronic LOAEL (testicular function)	0.01	0.0131	EPA, 1999

Mammal Toxicity Reference Values
Parcel 4, Mound Plant
Miamisburg, Ohio

Analyte	Test Species	Dose	Duration and Endpoint	Uncertainty Factor	TRV	Reference
Vanadium	rat	2.1	Chronic LOAEL (reproduction)	0.1	0.21	Sample et al., 1996
Anions (mg/kg-day BW)						
Bismuth	NDA	--	--	--	--	--
Chloride	NDA	--	--	--	--	--
Fluoride	mink	31.37	Chronic NOAEL	1	31.37	Sample et al., 1996
Sulfate	NDA	--	--	--	--	--

Notes:

NDA - No data available.
NOAEL - No observable adverse effect level.
LOAEL - Lowest observable adverse effect level.
NOAEL values were estimated from LOAEL values by multiplying by a factor of 0.1 (EPA, 1999).
Chronic values were estimated from subchronic values by multiplying by a factor of 0.1 (EPA, 1999).
No effect levels and effect levels are considered to be the same as a NOAEL and a LOAEL, respectively.
Acute NOAEL values were converted to chronic NOAEL values by multiplying acute values by a factor of 0.01 (EPA, 1999).
LD50 values were converted to chronic NOAEL values by multiplying the LD50 by 0.01 (EPA, 1999).

Mammal Toxicity Reference Values by Receptor Group
Parcel 4, Mound Plant
Miamisburg, Ohio

Analyte	Test Species	TRV	Meadow Vole	Short-tailed shrew	White-tailed deer
Organics (ug/kg-BW-day)					
2.4.6-Trinitrotoluene	NDA	--	--	--	--
Benzoic acid	NDA	--	--	--	--
Endrin ketone	NDA	--	--	--	--
Di-n-butylphthalate	mouse	550,000	537,350	632,500	154,550
Inorganics (mg/kg-BW-day)					
Aluminum	mouse	1.93	1.89	2.22	0.293
Antimony	mouse	0.125	0.122	0.144	0.019
Arsenic	dog	1.25	5.54	6.54	0.861
Cadmium	mouse	1	0.977	1.15	0.152
Chromium (hexavalent)	rat	3.5	6.3	7.455	0.9835
Copper	mink	12	28.2	33.24	4.38
Lithium	rat	9.4	9.18	10.81	2.64
Mercury	mink	1.01	2.37	2.798	0.369
Selenium	mouse	0.2	0.1954	0.23	0.0304
Silver	mouse	0.375	0.366	0.431	0.057
Thallium	rat	0.0.31	0.0236	0.0279	0.0087
Tin	mouse	23.4	22.86	26.91	3.56
Vanadium	rat	0.21	0.378	0.4473	0.059
Anions (mg/kg-day BW)					
Bismuth	NDA	--	--	--	--
Chloride	NDA	--	--	--	--
Fluoride	mink	31.37	73.72	86.89	11.45
Sulfate	NDA	--	--	--	--
Nitrogen	NDA	--	--	--	--
Sulfate	NDA	--	--	--	--

Notes:
See following table for Scaling Factors.
NDA - No data available.

APPENDIX D

RADIOLOGICAL EXPOSURE DOSES

Table D-1
External Exposure: Direct Radiation from Soil
Parcel 4, Mound Plant
Miamisburg, Ohio

Daboveground = Fabove * Fru Σ Csoil,I * DFgrd,I * CFb x ECF
Dbelowground = 1.05 Fbelow Σ Csoil,I * ξi * CFa
Source: Sample et al., 1997

COPC	Csoil, I pCi/g	DFgrd,I	ξi, γ	External Exposure (mrad/d)	
				Daboveground	Dbelowground
Plutonium-238	55.4	8.07E-22	0.002	4.57E-05	5.67E-03
Thorium-228	1.66	4.17E-20	0.003	7.08E-05	2.55E-04
Radium-224	1.66	2.62E-19	0.01	4.45E-04	8.50E-04
Radon-220	1.66	1.1E-20	0	1.87E-05	0.00E+00
Polonium-216	1.66	4.87E-22	0	8.27E-07	0.00E+00
Lead-212	1.66	3.62E-18	0.148	6.14E-03	1.26E-02
Bismuth-212	1.66	5.36E-18	0.186	9.10E-03	1.58E-02
Polonium-212	1.0624	3.62E-18	0	3.93E-03	0.00E+00
Thallium-208	0.5976	9.68E-17	3.375	5.91E-02	1.03E-01
Lead-208	1.66	0	0	0.00E+00	0.00E+00
Thorium-230	2.69	6.39E-21	0.002	1.76E-05	2.75E-04
Radium-226	3.26	1.65E-19	0.007	5.50E-04	1.17E-03
Radon-222	3.26	1.1E-20	0	3.67E-05	0.00E+00
Polonium-218	3.26	2.63E-22	0	8.77E-07	0.00E+00
Lead-214	3.26	6.7E-18	0.25	2.23E-02	4.17E-02
Astatine-218	0.0006520	3.13E-20	0.007	2.09E-08	2.34E-07
Bismuth-214	3.26	4.36E-17	1.508	1.45E-01	2.52E-01
Polonium-214	3.26	2.4E-21	0	8.00E-06	0.00E+00
Thallium-210	0.0006520	0	0	0.00E+00	0.00E+00
Thorium-232	5.60	2.78E-21	0.001	1.59E-05	2.87E-04
Radium-228	2.57	0	0	0.00E+00	0.00E+00
Actinium-228	5.60	2.76E-17	0.971	1.58E-01	2.78E-01
Uranium-234	1.17	2.14E-21	0.002	2.56E-06	1.20E-04
Uranium-235	0.20	3.75E-18	1.56E-01	7.67E-04	1.60E-03
Thorium-231	0.20	1.94E-19	0.026	3.97E-05	2.66E-04
Uranium-238	1.95	5.52E-22	0.001	1.10E-06	9.98E-05
Thorium-234	1.95	1.29E-19	0.009	2.57E-04	8.99E-04
Protactinium-234m	1.95	4.2E-19	0.012	0.000837346	0.00119808
Actinium-227	2.01			0.00E+00	0.00E+00
Thorium-227	1.98			0.00E+00	0.00E+00
Radium-223	2.01	3.10E-18	0.134	6.37E-03	1.38E-02
Radon-219	2.01			0.00E+00	0.00E+00
Polonium-215	2.01			0.00E+00	0.00E+00
Lead-211	2.01			0.00E+00	0.00E+00
Bismuth-211	2.01	1.28E-18	0.047	2.63E-03	4.84E-03
Thallium-207	2.01	9.48E-20	0.002	1.95E-04	2.06E-04
Americium-241	0.210	1.23E-18	0.033	2.64E-04	3.55E-04
Cesium-137	0.895	3.94E-21		3.61E-06	0.00E+00
Barium-137	0.90	1.71E-17	0.597	1.56E-02	2.74E-02
Strontium-90	2.10	3.72E-21		7.99E-06	0.00E+00
Yttrium-90	2.10	1.20E-19		2.58E-04	0.00E+00
Cobalt-60	0.09	7.25E-17	2.504	6.67E-03	1.15E-02
Lead-210	3.35			0.00E+00	0.00E+00
Bismuth-210	3.35	1.86E-20		6.37E-05	0.00E+00
Neptunium-237	0.067	4.16E-19	0.035	2.85E-05	1.20E-04
Total External Exposure				3.07E-01	8.13E-01

Parameter	Source	Definition	Value	Units
Dabovegrd	Sample et al., 199	External dose rate to receptor from aboveground exposure to contaminated soil	--	mrad/day
Dbelow grrd	Sample et al., 199	External dose rate to receptor from belowground exposure to contaminated soil	--	mrad/day
Fabove	Conservative estimate; Sample et al., 1997	Dose rate reduction factor acounting for the time the receptor spends aboveground	1	unitless
Fbelow	Conservative estimate; Sample et al., 1997	Dose rate reduction factor acounting for the time the receptor spends below ground	1	unitless
Fruf	Sample et al., 199	Dose rate reduction factor accounting for gound roughness	0.7	unitless
Csoil, I	Sample et al., 199	Activity of radionuclide in surface soil	--	pCi/.g
DFgrd,I	Sample et al., 199	Dose coefficient for radionuclide I in soil contaminated to given depth	--	Sv/s per Bq/m3
CFb	Sample et al., 199	Conversion factor to change Sv/s per Bq/m3 to mrad g/pCi d	5.11E+14	--
Cfa	Sample et al., 199	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
1.05	Sample et al., 199	Coversion factor to account for immersion in soil versus water	--	unitless
ξi	Sample et al., 199	Energy for γ emissions by nuclide I	--	Me V/nt
ECF	Sample et al., 199	Elevation correction factor to adjust dose coefficients to value representative of effective height of animal aboveground	2	unitless, small mammal

Table D-2
Internal Exposure: Inhalation
Parcel 4, Mound Plant
Miamisburg, Ohio

Source: Sample et al., 1997
Dinh (α, β) = QF * Fbelow Σ Csoil,I * A * 1/AD * ξi * Cfa * 1
Dinh (γ) = QF * Fbelow Σ Csoil,I * A * 1/AD * ξi * Cfa * AF

COPC	Csoil, I pCi/g	ξi, α	ξi, β	ξi, γ	AF - A	AF-B	AF-C	AF-D	AF-E	plants + insects			small mammals/birds			small-medium mammals/birds			medium mammals/birds			large mammals		
										alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	0.63	0.79	0.94	0.94	0.94	1.30E-03	2.60E-06	2.98E-07	1.30E-03	2.60E-06	3.73E-07	1.30E-03	2.60E-06	4.44E-07	1.30E-03	2.60E-06	4.44E-07	1.30E-03	2.60E-06	4.44E-07
Thorium-228	1.66	5.4	0.021	0.003	0.63	0.79	0.94	0.94	0.94	3.82E-05	1.49E-07	1.34E-08	3.82E-05	1.49E-07	1.68E-08	3.82E-05	1.49E-07	2.00E-08	3.82E-05	1.49E-07	2.00E-08	3.82E-05	1.49E-07	2.00E-08
Radium-224	1.66	5.674	0.002	0.01	0.63	0.79	0.29	0.35	0.52	4.02E-05	1.42E-08	4.46E-08	4.02E-05	1.42E-08	5.60E-08	4.02E-05	1.42E-08	2.05E-08	4.02E-05	1.42E-08	2.48E-08	4.02E-05	1.42E-08	3.68E-08
Radon-220	1.66	6.288								4.45E-05	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00	4.45E-05	0.00E+00	0.00E+00
Polonium-216	1.66	6.779								4.60E-05	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00	4.60E-05	0.00E+00	0.00E+00
Lead-212	1.66		0.178	0.148	0.01	0.011	0.04	0.06	0.15	0.00E+00	1.25E-06	1.05E-08	0.00E+00	1.25E-06	1.15E-08	0.00E+00	1.25E-06	4.19E-08	0.00E+00	1.25E-06	6.29E-08	0.00E+00	1.25E-06	1.57E-07
Bismuth-212	1.66	2.174	0.472	0.186	0.01	0.011	0.04	0.06	0.14	1.54E-05	3.34E-06	1.32E-08	1.54E-05	3.34E-06	1.45E-08	1.54E-05	3.34E-06	5.27E-08	1.54E-05	3.34E-06	7.90E-08	1.54E-05	3.34E-06	1.84E-07
Polonium-212	1.0624	8.785								3.98E-05	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00	3.98E-05	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	0.01	0.01	0.03	0.04	0.11	0.00E+00	1.52E-06	8.61E-08	0.00E+00	1.52E-06	8.61E-08	0.00E+00	1.52E-06	2.58E-07	0.00E+00	1.52E-06	3.44E-07	0.00E+00	1.52E-06	9.47E-07
Lead-208	1.66									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	0.63	0.79	0.94	0.94	0.94	5.36E-05	1.72E-07	1.45E-08	5.36E-05	1.72E-07	1.81E-08	5.36E-05	1.72E-07	2.16E-08	5.36E-05	1.72E-07	2.16E-08	5.36E-05	1.72E-07	2.16E-08
Radium-226	3.26	4.774	0.004	0.007	0.63	0.79	0.94	0.94	0.94	6.64E-05	5.56E-08	6.13E-08	6.64E-05	5.56E-08	7.69E-08	6.64E-05	5.56E-08	9.15E-08	6.64E-05	5.56E-08	9.15E-08	6.64E-05	5.56E-08	9.15E-08
Radon-222	3.26	6.288								8.75E-05	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00	8.75E-05	0.00E+00	0.00E+00
Polonium-218	3.26	6.001								8.35E-05	0.00E+00	0.00E+00	8.35E-05	0.00E+00	0.00E+00	8.35E-05	0.00E+00	0.00E+00	8.35E-05	0.00E+00	0.00E+00	8.35E-05	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25	0.01	0.01	0.04	0.06	0.14	0.00E+00	4.08E-06	3.48E-08	0.00E+00	4.08E-06	3.48E-08	0.00E+00	4.08E-06	1.39E-07	0.00E+00	4.08E-06	2.09E-07	0.00E+00	4.08E-06	4.87E-07
Astatine-218	0.0006520	6.697	0.04	0.007	0.63	0.79	0.94	0.94	0.94	1.86E-08	1.11E-10	1.23E-11	1.86E-08	1.11E-10	1.54E-11	1.86E-08	1.11E-10	1.83E-11	1.86E-08	1.11E-10	1.83E-11	1.86E-08	1.11E-10	1.83E-11
Bismuth-214	3.26		0.659	1.508	0.085	0.0123	0.03	0.05	0.12	0.00E+00	9.17E-06	1.78E-08	0.00E+00	9.17E-06	2.58E-07	0.00E+00	9.17E-06	6.29E-07	0.00E+00	9.17E-06	1.05E-06	0.00E+00	9.17E-06	2.52E-06
Polonium-214	3.26	7.687								1.07E-04	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00
Thallium-210	0.0006520									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.998	0.012	0.001	0.63	0.79	0.94	0.94	0.94	9.55E-05	2.87E-07	1.51E-08	9.55E-05	2.87E-07	1.89E-08	9.55E-05	2.87E-07	2.25E-08	9.55E-05	2.87E-07	2.25E-08	9.55E-05	2.87E-07	2.25E-08
Radium-228	2.57		0.017							0.00E+00	1.86E-07	0.00E+00	0.00E+00	1.86E-07	0.00E+00	0.00E+00	1.86E-07	0.00E+00	0.00E+00	1.86E-07	0.00E+00	0.00E+00	1.86E-07	0.00E+00
Actinium-228	5.60		0.475	0.971	0.01	0.0127	0.04	0.06	0.14	0.00E+00	1.13E-05	2.32E-07	0.00E+00	1.13E-05	2.95E-07	0.00E+00	1.13E-05	9.28E-07	0.00E+00	1.13E-05	1.39E-06	0.00E+00	1.13E-05	3.25E-06
Uranium-234	1.17	4.758	0.013	0.002	0.63	0.79	0.94	0.94	0.94	2.38E-05	6.49E-08	6.29E-09	2.38E-05	6.49E-08	7.89E-09	2.38E-05	6.49E-08	9.38E-09	2.38E-05	6.49E-08	9.38E-09	2.38E-05	6.49E-08	9.38E-09
Uranium-235	0.20	4.396	0.049	0.156	0.01	0.0115	0.04	0.06	0.14	3.75E-06	4.18E-08	1.33E-09	3.75E-06	4.18E-08	1.53E-09	3.75E-06	4.18E-08	5.32E-09	3.75E-06	4.18E-08	7.99E-09	3.75E-06	4.18E-08	1.86E-08
Thorium-231	0.20		0.165	0.026	0.09	0.126	0.18	0.21	0.36	0.00E+00	1.41E-07	2.00E-09	0.00E+00	1.41E-07	2.80E-09	0.00E+00	1.41E-07	3.55E-09	0.00E+00	1.41E-07	4.66E-09	0.00E+00	1.41E-07	7.99E-09
Uranium-238	1.95	4.187	0.01	0.001	0.63	0.79	0.94	0.94	0.94	3.48E-05	8.32E-08	5.24E-09	3.48E-05	8.32E-08	6.57E-09	3.48E-05	8.32E-08	7.82E-09	3.48E-05	8.32E-08	7.82E-09	3.48E-05	8.32E-08	7.82E-09
Thorium-234	1.95		0.06	0.009	0.63	0.79	0.94	0.94	0.94	0.00E+00	4.99E-07	4.72E-08	0.00E+00	4.99E-07	5.92E-08	0.00E+00	4.99E-07	7.04E-08	0.00E+00	4.99E-07	7.04E-08	0.00E+00	4.99E-07	7.04E-08
Protactinium-234m	1.95		0.822	0.012						0.00E+00	6.84E-06	0.00E+00	0.00E+00	6.84E-06	0.00E+00	0.00E+00	6.84E-06	0.00E+00	0.00E+00	6.84E-06	0.00E+00	0.00E+00	6.84E-06	0.00E+00
Actinium-227	2.01									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.078	0.134	0.01	0.0105	0.04	0.06	0.15	4.86E-05	6.52E-07	1.15E-08	4.86E-05	6.52E-07	1.21E-08	4.86E-05	6.52E-07	4.80E-08	4.86E-05	6.52E-07	6.90E-08	4.86E-05	6.52E-07	1.72E-07
Radon-219	2.01									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047	0.027	0.04	0.11	0.15	0.29	5.62E-05	8.58E-08	1.09E-08	5.62E-05	8.58E-08	1.81E-08	5.62E-05	8.58E-08	4.43E-08	5.62E-05	8.58E-08	6.05E-08	5.62E-05	8.58E-08	1.17E-07
Thallium-207	2.01		0.493	0.002	0.63	0.79	0.94	0.94	0.94	0.00E+00	4.23E-06	1.08E-08	0.00E+00	4.23E-06	1.36E-08	0.00E+00	4.23E-06	1.61E-08	0.00E+00	4.23E-06	1.61E-08	0.00E+00	4.23E-06	1.61E-08
Americium-241	0.210	5.479	0.052	0.033	0.04	0.05	0.12	0.16	0.3	4.91E-06	4.66E-08	1.18E-09	4.91E-06	4.66E-08	1.48E-09	4.91E-06	4.66E-08	3.55E-09	4.91E-06	4.66E-08	4.73E-09	4.91E-06	4.66E-08	8.87E-09
Cesium-137	0.895		0.187							0.00E+00	7.14E-07	0.00E+00	0.00E+00	7.14E-07	0.00E+00	0.00E+00	7.14E-07	0.00E+00	0.00E+00	7.14E-07	0.00E+00	0.00E+00	7.14E-07	0.00E+00
Barium-137	0.90		0.085	0.597	0.011	0.015	0.04	0.06	0.15	0.00E+00	2.48E-07	2.51E-08	0.00E+00	2.48E-07	3.42E-08	0.00E+00	2.48E-07	9.12E-08	0.00E+00	2.48E-07	1.37E-07	0.00E+00	2.48E-07	3.42E-07
Strontium-90	2.10		0.196							0.00E+00	1.76E-06	0.00E+00	0.00E+00	1.76E-06	0.00E+00	0.00E+00	1.76E-06	0.00E+00	0.00E+00	1.76E-06	0.00E+00	0.00E+00	1.76E-06	0.00E+00
Yttrium-90	2.10		0.935							0.00E+00	8.38E-06	0.00E+00	0.00E+00	8.38E-06	0.00E+00	0.00E+00	8.38E-06	0.00E+00	0.00E+00	8.38E-06	0.00E+00	0.00E+00	8.38E-06	0.00E+00
Cobalt-60	0.09		0.097	2.504	0.01	0.01	0.03	0.04	0.11	0.00E+00	3.72E-08	9.62E-09	0.00E+00	3.72E-08	9.62E-09	0.00E+00	3.72E-08	2.88E-08	0.00E+00	3.72E-08	3.85E-08	0.00E+00	3.72E-08	1.06E-07
Lead-210	3.35									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	0.027	0.04	0.11	0.15	0.29	1.36E-06	2.00E-08	2.70E-10	1.36E-06	2.00E-08	4.00E-10	1.36E-06	2.00E-08	1.10E-09	1.36E-06	2.00E-08	1.50E-09	1.36E-06	2.00E-08	2.90E-09
Total Inhalation										4.38E-02	5.80E-05	2.74E-06	4.38E-02	5.80E-05	1.43E-06	4.38E-02	5.80E-05	3.00E-06	4.38E-02	5.80E-05	4.19E-06	4.38E-02	5.80E-05	9.06E-06
Exposure (mrad/d)										4.39E-02			4.39E-02			4.39E-02			4.39E-02			4.39E-02		

Parameter		Value	Units
Dinh	Internal dose rate from inhalation of contaminated soil	--	mrad/day
Fbelow	Dose rate reduction factor accounting for the time the receptor spends below ground	1	unitless
Csoil, I	Activity of radionuclide in surface soil		pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α/β/γ	Energy for α,β,γ emissions by nuclide I	--	Me V/nt
A	Mass of respirable dust per volume of air breathed	0.1	g/m3
AD	Air density	1200	g/m3
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α particles	1	unitless, β,γ

Table D-3
Internal Exposure: Ingestion of Soil
Parcel 4, Mound Plant
Miamisburg, Ohio

Source: Sample et al., 1997
Ding (α, β) = Σ QF * Ctissue *ξi * CFa * 1
Ding (γ) = Σ QF * Ctissue *ξi * CFa * AF

COPC	Csoil, I pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	Tissue Concentration from Soil Uptake		AF - A	Dose based on soil uptake (mrad/d)					
							C-plant Cs * Ufplant	C-invert Cs * Ufinvert		plant			invertebrate		
										alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04		1.66E-02	0.00E+00	0.63	9.34E-02	9.36E-06	1.07E-06	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	1.49E-03	8.30E-03	0.63	8.26E-03	1.61E-06	1.45E-07	4.59E-02	8.92E-06	8.03E-07
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02	1.25E-01	1.25E-01	0.63	7.23E-01	1.27E-05	4.02E-05	7.23E-01	1.27E-05	4.02E-05
Radon-220	1.66	6.288					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148			0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02	1.45E-02	3.32E-02	0.01	3.23E-02	3.51E-04	1.38E-06	7.39E-02	8.02E-04	3.16E-06
Polonium-212	1.0624	8.785					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00	5.98E-04	1.20E+00	0.01	0.00E+00	1.83E-05	1.03E-06	0.00E+00	3.66E-02	2.07E-03
Lead-208	1.66						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	2.42E-03	1.35E-02	0.63	1.16E-02	1.86E-06	1.56E-07	6.43E-02	1.03E-05	8.68E-07
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02	2.45E-01	2.45E-01	0.63	1.20E+00	5.01E-05	5.52E-05	1.20E+00	5.01E-05	5.52E-05
Radon-222	3.26	6.288					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25			0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007			0.00E+00	0.00E+00	0.63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02	2.85E-02	6.52E-02	0.085	0.00E+00	9.62E-04	1.87E-04	0.00E+00	2.20E-03	4.28E-04
Polonium-214	3.26	7.687					0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	5.04E-03	2.80E-02	0.63	2.06E-02	3.10E-06	1.63E-07	1.15E-01	1.72E-05	9.03E-07
Radium-228	2.57		0.017		7.50E-02	7.50E-02	1.93E-01	1.93E-01		0.00E+00	1.68E-04	0.00E+00	0.00E+00	1.68E-04	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03	4.90E-03	7.00E-03	0.01	0.00E+00	1.19E-04	2.44E-06	0.00E+00	1.70E-04	3.48E-06
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		4.39E-03	0.00E+00	0.63	2.14E-02	2.92E-06	2.83E-07	0.00E+00	0.00E+00	0.00E+00
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		7.50E-04	0.00E+00	0.01	3.38E-03	1.88E-06	5.99E-08	0.00E+00	0.00E+00	0.00E+00
Thorium-231	0.20		0.165	0.026			0.00E+00	0.00E+00	0.09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		7.31E-03	0.00E+00	0.63	3.14E-02	3.74E-06	2.36E-07	0.00E+00	0.00E+00	0.00E+00
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03	1.76E-03	9.75E-03	0.63	0.00E+00	5.39E-06	5.09E-07	0.00E+00	3.00E-05	2.83E-06
Protactinium-234m	1.95		0.822	0.012	6.23E-04		1.21E-03	0.00E+00	0.55	0.00E+00	5.11E-05	4.11E-07	0.00E+00	0.00E+00	0.00E+00
Actinium-227 DA	2.01						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02	1.51E-01	1.51E-01	0.01	8.75E-01	5.87E-04	1.03E-05	8.75E-01	5.87E-04	1.03E-05
Radon-219	2.01						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047			0.00E+00	0.00E+00	0.027	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002			0.00E+00	0.00E+00	0.63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033			0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.14E-03	0.00E+00		0.00E+00	1.09E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Barium-137	0.90		0.065	0.597			0.00E+00	0.00E+00	0.011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01		1.04E+00	0.00E+00		0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935				0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504			0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35						0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389				0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03	6.03E-04	6.03E-04	0.027	2.94E-03	2.16E-06	2.92E-08	2.94E-03	2.16E-06	2.92E-08
Total Soil Ingestion	3.35									3.02E+00	1.28E-02	3.01E-04	3.10E+00	4.07E-02	2.61E-03
Exposure (mrad/d)	0.067									3.03E+00			3.14E+00		

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, I	Activity of radionuclide in surface soil	--	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α/β/γ	Energy for α,β,γ emissions by nuclide I	--	Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α particles	1	unitless, β,γ

Table D-4
Internal Exposure: Ingestion of Soil
Parcel 4, Mound Plant
Miamisburg, Ohio

Source: Sample et al., 1997
Ding (α, β) = Σ QF * Ctissue *ξi * CFa * 1
Ding (γ) = Σ QF * Ctissue *ξi * CFa * AF

COPC	Csoil, I pCi/g	ξi, α	ξi, β	ξi, γ	UF-mammal	Tissue Concentration from Soil Uptake Cmammal Cs * Ufmammal	AF-B	AF-C	Dose based on soil uptake (mrad/d) small mammal/bird (group B) alpha	beta	gamma	small-medium mammal/bird (group C) alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002		0.00E+00	0.79	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	3.20E-05	5.31E-05	0.79	0.94	2.94E-04	5.71E-08	6.45E-09	2.94E-04	5.71E-08	7.67E-09
Radium-224	1.66	5.674	0.002	0.01		0.00E+00	0.79	0.29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148		0.00E+00	0.011	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186		0.00E+00	0.011	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375		0.00E+00	0.01	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	3.20E-05	8.61E-05	0.79	0.94	4.12E-04	6.61E-08	6.96E-09	4.12E-04	6.61E-08	8.29E-09
Radium-226	3.26	4.774	0.004	0.007		0.00E+00	0.79	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25		0.00E+00	0.01	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007		0.00E+00	0.79	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508		0.00E+00	0.0123	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	3.20E-05	1.79E-04	0.79	0.94	7.33E-04	1.10E-07	7.25E-09	7.33E-04	1.10E-07	8.62E-09
Radium-228	2.57		0.017			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971		0.00E+00	0.0127	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.20E-04	3.74E-04	0.79	0.94	1.82E-03	2.49E-07	3.03E-08	1.82E-03	2.49E-07	3.60E-08
Uranium-235	0.20	4.396	0.049	0.156	3.20E-04	6.40E-05	0.0115	0.04	2.88E-04	1.61E-07	5.88E-09	2.88E-04	1.61E-07	2.04E-08
Thorium-231	0.20		0.165	0.026		0.00E+00	0.126	0.16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.20E-04	6.24E-04	0.79	0.94	2.68E-03	3.19E-07	2.52E-08	2.68E-03	3.19E-07	3.00E-08
Thorium-234	1.95		0.06	0.009		0.00E+00	0.79	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012		0.00E+00	0.63		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227 DA	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134		0.00E+00	0.0105	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047		0.00E+00	0.04	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002		0.00E+00	0.79	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033		0.00E+00	0.05	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.62E-02	1.45E-02			0.00E+00	1.39E-04	0.00E+00	0.00E+00	1.39E-04	0.00E+00
Barium-137	0.90		0.065	0.597		0.00E+00	0.015	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504		0.00E+00	0.01	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035		0.00E+00	0.04	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total Soil Ingestion Exposure (mrad/d)									6.23E-03	1.40E-04	8.21E-08	6.23E-03	1.40E-04	1.11E-07
									6.37E-03			6.37E-03		

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, I	Activity of radionuclide in surface soil	--	pCi/.g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α|β|γ	Energy for α,β,γ emissions by nuclide I	--	Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α particles	1	unitless, β,γ

Table D-5
Internal Exposure: Ingestion of Soil
Parcel 4, Mound Plant
Miamisburg, Ohio

Source: Sample et al., 1997
Ding (α, β) = Σ QF * Ctissue *ξi * CFa * 1
Ding (γ) = Σ QF * Ctissue *ξi * CFa * AF

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	Tissue Concentration from Soil Uptake				Dose based on soil uptake (mrad/d)					
					UF-mammal	Cmammal Cs * Ufmammal	AF-D	AF-E	medium mammal/bird (group D)			large mammal (group E)		
									alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002		0.00E+00	0.94	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	3.20E-05	5.31E-05	0.94	0.94	2.94E-04	5.71E-08	7.67E-09	2.94E-04	5.71E-08	7.67E-09
Radium-224	1.66	5.674	0.002	0.01		0.00E+00	0.35	0.52	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148		0.00E+00	0.06	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186		0.00E+00	0.06	0.14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375		0.00E+00	0.04	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	3.20E-05	8.61E-05	0.94	0.94	4.12E-04	6.61E-08	8.29E-09	4.12E-04	6.61E-08	8.29E-09
Radium-226	3.26	4.774	0.004	0.007		0.00E+00	0.94	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25		0.00E+00	0.06	0.14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007		0.00E+00	0.94	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508		0.00E+00	0.05	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687				0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	3.20E-05	1.79E-04	0.94	0.94	7.33E-04	1.10E-07	8.62E-09	7.33E-04	1.10E-07	8.62E-09
Radium-228	2.67		0.017			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971		0.00E+00	0.06	0.14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.20E-04	3.74E-04	0.94	0.94	1.82E-03	2.49E-07	3.60E-08	1.82E-03	2.49E-07	3.60E-08
Uranium-235	0.20	4.396	0.049	0.156	3.20E-04	6.40E-05	0.06	0.14	2.88E-04	1.61E-07	3.07E-08	2.88E-04	1.61E-07	7.16E-08
Thorium-231	0.20		0.165	0.026		0.00E+00	0.21	0.36	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.20E-04	6.24E-04	0.94	0.94	2.68E-03	3.19E-07	3.00E-08	2.68E-03	3.19E-07	3.00E-08
Thorium-234	1.95		0.06	0.009		0.00E+00	0.94	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012		0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227 DA	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134		0.00E+00	0.06	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047		0.00E+00	0.15	0.29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002		0.00E+00	0.94	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033		0.00E+00	0.16	0.3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.62E-02	1.45E-02			0.00E+00	1.39E-04	0.00E+00	0.00E+00	1.39E-04	0.00E+00
Barium-137	0.90		0.065	0.597		0.00E+00	0.06	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504		0.00E+00	0.04	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35					0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389			0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035		0.00E+00	0.15	0.29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total Soil Ingestion Exposure (mrad/d)									6.23E-03	1.40E-04	1.21E-07	6.23E-03	1.40E-04	1.62E-07
									6.37E-03			6.37E-03		

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil	--	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,$\alpha\beta\gamma$	Energy for α,β,γ emissions by nuclide i	--	Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-6
Internal Exposure: Ingestion of Prey - Mammal Receptor Group B
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake C-plant	C-invertebrate	Cmammal	BAFmammal	Tissue concentration from prey ingestion Cmammal plant	invertebrate	mammal	AF-B	Dose based on prey ingestion: Mammals - Group B (mrad/d) prey:plants alpha	beta	gamma	prey: invertebrates alpha	beta	gamma	prey: small mammals (group B) alpha	beta	gamma
Plutonium-238	55.4	5.48?	0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	5.00E-04	8.31E-06	0.00E+00	0.00E+00	0.79	4.67E-05	4.68E-09	6.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.79	4.13E-05	8.03E-09	9.06E-10	2.29E-04	4.46E-08	5.04E-09	1.47E-06	2.86E-10	3.22E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.79	3.26E-02	5.74E-07	2.27E-06	3.26E-02	5.74E-07	2.27E-06	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.011	6.47E-04	7.02E-08	3.04E-08	1.48E-03	1.60E-05	6.96E-08	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.01	0.00E+00	3.66E-05	2.07E-06	0.00E+00	7.32E-02	4.13E-03	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.79	5.79E-05	9.30E-09	9.79E-10	3.22E-04	5.16E-08	5.44E-09	2.06E-06	3.31E-10	3.48E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.79	5.38E-02	2.25E-06	3.12E-06	5.38E-02	2.25E-06	3.12E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.0123	0.00E+00	1.92E-05	5.42E-07	0.00E+00	4.40E-05	1.24E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.79	1.03E-04	1.55E-08	1.02E-09	5.73E-04	8.60E-08	5.66E-09	3.67E-06	5.51E-10	3.62E-11
Radium-228	2.67		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.0127	0.00E+00	1.49E-07	3.87E-09	0.00E+00	2.13E-07	5.52E-09	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	1.50E-02	6.58E-05	0.00E+00	5.62E-06	0.79	3.21E-04	4.38E-08	5.32E-09	0.00E+00	0.00E+00	0.00E+00	2.74E-05	3.74E-09	4.54E-10
Uranium-235	0.20	4.398	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	1.50E-02	1.13E-05	0.00E+00	9.60E-07	0.0115	5.06E-05	2.82E-08	1.03E-09	0.00E+00	0.00E+00	0.00E+00	4.32E-06	2.41E-09	8.82E-11
Thorium-231	0.20		0.185	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	1.50E-02	1.10E-04	0.00E+00	9.36E-06	0.79	4.70E-04	5.62E-08	4.44E-09	0.00E+00	0.00E+00	0.00E+00	4.01E-05	4.79E-09	3.79E-10
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	8.78E-06	4.88E-05	0.00E+00	0.79	0.00E+00	2.70E-08	3.19E-09	0.00E+00	1.50E-07	1.77E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012	8.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.63	0.00E+00	2.56E-06	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.078	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.0105	3.94E-02	2.64E-05	4.89E-07	3.94E-02	2.64E-05	4.89E-07	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	2.56E+00	2.91E-03	0.00E+00	3.71E-02	0.05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	2.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	4.00E-01	4.16E-01	0.00E+00	0.00E+00	0.015	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.04	1.13E-05	8.30E-09	1.66E-10	1.13E-05	8.30E-09	1.66E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.27E-01	4.30E-03	6.55E-06	1.28E-01	7.33E-02	4.14E-03	7.90E-05	3.55E-04	1.02E-09
																3.38E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	–	mrad/day
Csoil, i	Activity of radionuclide in surface soil		pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	–
ξi,αβγ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	–	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-7
Internal Exposure: Ingestion of Prey - Mammal Receptor Group C
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAFmammal	Tissue concentration from prey ingestion			AF-C	Dose based on prey ingestion: Mammals - Group C (mrad/d)								
								C-plant	C-invert	Cmammal		Cmammal				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invert	mammal		alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	5.00E-04	8.31E-06	0.00E+00	0.00E+00	0.94	4.67E-05	4.68E-09	8.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.94	4.13E-05	8.03E-09	1.06E-09	2.29E-04	4.46E-08	5.99E-09	1.47E-06	2.86E-10	3.83E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.29	3.26E-02	5.74E-07	8.32E-07	3.26E-02	5.74E-07	8.32E-07	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.04	6.47E-04	7.02E-06	1.11E-07	1.48E-03	1.60E-05	2.53E-07	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.03	0.00E+00	3.66E-05	6.20E-06	0.00E+00	7.32E-02	1.24E-02	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.94	5.79E-05	9.30E-09	1.17E-09	3.22E-04	5.16E-08	6.47E-09	2.06E-06	3.31E-10	4.14E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.94	5.38E-02	2.25E-06	3.71E-06	5.38E-02	2.25E-06	3.71E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.03	0.00E+00	1.92E-05	1.32E-06	0.00E+00	4.40E-05	3.02E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.94	1.03E-04	1.55E-08	1.21E-09	5.73E-04	8.60E-08	6.74E-09	3.67E-06	5.51E-10	4.31E-11
Radium-228	2.87		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.04	0.00E+00	1.49E-07	1.22E-08	0.00E+00	2.13E-07	1.74E-08	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	1.50E-02	6.58E-05	0.00E+00	5.62E-06	0.94	3.21E-04	4.38E-08	6.33E-09	0.00E+00	0.00E+00	0.00E+00	2.74E-05	3.74E-09	5.41E-10
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	1.50E-02	1.13E-05	0.00E+00	9.60E-07	0.04	5.06E-05	2.82E-08	3.59E-09	0.00E+00	0.00E+00	0.00E+00	4.32E-06	2.41E-09	3.07E-10
Thorium-231	0.20		0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	1.50E-02	1.10E-04	0.00E+00	9.36E-06	0.94	4.70E-04	5.62E-08	5.28E-09	0.00E+00	0.00E+00	0.00E+00	4.01E-05	4.79E-09	4.50E-10
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	6.78E-06	4.88E-05	0.00E+00	0.94	0.00E+00	2.70E-08	3.80E-09	0.00E+00	1.50E-07	2.11E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.03	0.00E+00	2.56E-06	1.12E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227 DA	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.04	3.94E-02	2.64E-05	1.86E-06	3.94E-02	2.64E-05	1.86E-06	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	2.56E+00	2.91E-03	0.00E+00	3.71E-02		0.00E+00	2.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	4.00E-01	4.16E-01	0.00E+00	0.00E+00		0.00E+00	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00	0.00E+00	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.11	1.13E-05	8.30E-09	4.56E-10	1.13E-05	8.30E-09	4.56E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.27E-01	4.30E-03	1.41E-05	1.28E-01	7.33E-02	1.24E-02	7.90E-05	3.55E-04	1.42E-09
																3.46E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil	--	pCi/.g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,αβγ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-8
Internal Exposure: Ingestion of Prey - Mammal Receptor Group D
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAF mammal	Tissue concentration from prey ingestion			AF-D	Dose based on prey ingestion: Mammals - Group D (mrad/d)								
								C-plant	C-invert	Cmammal		Cmammal				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invertebrate	mammal		alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	5.00E-04	6.31E-06	0.00E+00	0.00E+00	0.94	4.66913E-05	4.68602E-09	7.9989E-10	0	0	0	0	0	0
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.94	4.13E-05	8.03E-09	1.08E-09	2.29E-04	4.46E-08	5.99E-09	1.47E-06	2.86E-10	3.83E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.35	3.26E-02	5.74E-07	1.00E-06	3.26E-02	5.74E-07	1.00E-06	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.188	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	8.64E-04	0.00E+00	0.06	6.47E-04	7.02E-06	1.66E-07	1.48E-03	1.60E-05	3.79E-07	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.04	0.00E+00	3.66E-05	8.26E-06	0.00E+00	7.32E-02	1.65E-02	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.94	5.79E-05	9.30E-09	1.17E-09	3.22E-04	5.16E-08	6.47E-09	2.08E-06	3.31E-10	4.14E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.94	5.38E-02	2.25E-06	3.71E-06	5.38E-02	2.25E-06	3.71E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.05	0.00E+00	1.92E-05	2.20E-06	0.00E+00	4.40E-05	5.03E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.998	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.94	1.03E-04	1.55E-08	1.21E-09	5.73E-04	8.60E-08	6.74E-09	3.67E-06	5.51E-10	4.31E-11
Radium-228	2.87		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.06	0.00E+00	1.49E-07	1.83E-08	0.00E+00	2.13E-07	2.61E-08	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	1.50E-02	6.58E-05	0.00E+00	5.62E-06	0.94	3.21E-04	4.38E-08	6.33E-09	0.00E+00	0.00E+00	0.00E+00	2.74E-05	3.74E-09	5.41E-10
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	1.50E-02	1.13E-05	0.00E+00	9.80E-07	0.06	5.06E-05	2.62E-08	5.39E-09	0.00E+00	0.00E+00	0.00E+00	4.32E-06	2.41E-09	4.60E-10
Thorium-231	0.20		0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	1.50E-02	1.10E-04	0.00E+00	9.36E-06	0.94	4.70E-04	5.62E-08	5.28E-09	0.00E+00	0.00E+00	0.00E+00	4.01E-05	4.79E-09	4.50E-10
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.78E-03	9.75E-03	0.00E+00	5.00E-03	8.78E-06	4.88E-05	0.00E+00	0.94	0.00E+00	2.70E-08	3.80E-09	0.00E+00	1.50E-07	2.11E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.93	0.00E+00	2.56E-06	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227 DA	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.06	3.94E-02	2.64E-05	2.79E-06	3.94E-02	2.64E-05	2.79E-06	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	2.56E+00	2.91E-03	0.00E+00	3.71E-02		0.00E+00	2.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	4.00E-01	4.16E-01	0.00E+00	0.00E+00		0.00E+00	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.15	1.13E-05	8.30E-09	6.22E-10	1.13E-05	8.30E-09	6.22E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.27E-01	4.30E-03	1.62E-05	1.28E-01	7.33E-02	1.65E-02	7.90E-05	3.55E-04	1.57E-09
																3.50E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil		pCi/g
Cfa	Conversion factor to change MeV/mt to g mrad/pCi d	5.12E-02	--
ξi,αξiβ,γ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α particles	1	unitless, β,γ

Table D-9
Internal Exposure: Ingestion of Prey - Mammal Receptor Group E
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAFmammal	Tissue concentration from prey ingestion			AF-E	Dose based on prey ingestion: Mammals - Group E (mrad/d)								
								C-plant	C-invert	Cmammal		Cmammal				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invert	mammal		alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04			1.68E-02	0.00E+00	0.00E+00	5.00E-04	8.31E-06	0.00E+00	0.00E+00	0.94	4.67E-05	4.68E-09	8.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.94	4.13E-05	8.03E-09	1.08E-09	2.29E-04	4.46E-08	5.99E-09	1.47E-06	2.86E-10	3.83E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.52	3.26E-02	5.74E-07	1.49E-06	3.26E-02	5.74E-07	1.49E-06	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.14	6.47E-04	7.02E-06	3.87E-07	1.48E-03	1.60E-05	8.85E-07	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5978		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.11	0.00E+00	3.66E-05	2.27E-05	0.00E+00	7.32E-02	4.54E-02	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.94	5.79E-05	9.30E-09	1.17E-09	3.22E-04	5.16E-08	6.47E-09	2.06E-06	3.31E-10	4.14E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.94	5.38E-02	2.25E-06	3.71E-06	5.38E-02	2.25E-06	3.71E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.12	0.00E+00	1.92E-05	5.29E-06	0.00E+00	4.40E-05	1.21E-05	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.94	1.03E-04	1.55E-08	1.21E-09	5.73E-04	8.60E-08	6.74E-09	3.67E-06	5.51E-10	4.31E-11
Radium-228	2.57		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.14	0.00E+00	1.49E-07	4.26E-08	0.00E+00	2.13E-07	6.09E-08	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	1.50E-02	6.58E-05	0.00E+00	5.62E-06	0.94	3.21E-04	4.38E-08	8.33E-09	0.00E+00	0.00E+00	0.00E+00	2.74E-05	3.74E-09	5.41E-10
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	1.50E-02	1.13E-05	0.00E+00	9.60E-07	0.14	5.06E-05	2.82E-08	1.26E-08	0.00E+00	0.00E+00	0.00E+00	4.32E-06	2.41E-09	1.07E-09
Thorium-231	0.20		0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.36	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	1.50E-02	1.10E-04	0.00E+00	9.36E-06	0.94	4.70E-04	5.62E-08	5.26E-09	0.00E+00	0.00E+00	0.00E+00	4.01E-05	4.79E-09	4.50E-10
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	8.78E-06	4.88E-05	0.00E+00	0.94	0.00E+00	2.70E-08	3.80E-09	0.00E+00	1.50E-07	2.11E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234	1.95		0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.93	0.00E+00	2.56E-06	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.15	3.94E-02	2.64E-05	6.98E-06	3.94E-02	2.64E-05	6.98E-06	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	2.56E+00	2.91E-03	0.00E+00	3.71E-02		0.00E+00	2.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	4.00E-01	4.16E-01	0.00E+00	0.00E+00		0.00E+00	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.29	1.13E-05	8.30E-09	1.20E-09	1.13E-05	8.30E-09	1.20E-09	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.27E-01	4.30E-03	4.07E-05	1.28E-01	7.33E-02	4.55E-02	7.90E-05	3.55E-04	2.19E-09
																3.79E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil	--	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α,β,γ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-10
Internal Exposure: Ingestion of Prey - Bird Receptor Group B
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAFbird	Tissue concentration from prey ingestion			AF-B	Dose based on prey ingestion: Birds - Group B (mrad/d)								
								C-plant	C-invert	Cmammal		C-bird				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invert	mammal		a	b	g	a	b	g	a	b	g
Plutonium-238	55.4	5.487		0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	2.10E-03	3.49E-05	0.00E+00	0.00E+00	0.79	1.98E-04	1.97E-08	2.82E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4		0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.79	4.13E-05	8.03E-09	9.06E-10	2.29E-04	4.46E-08	5.04E-09	1.47E-06	2.86E-10	3.22E-11
Radium-224	1.66	5.674		0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.79	3.26E-02	5.74E-07	2.27E-06	3.26E-02	5.74E-07	2.27E-06	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66			0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174		0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.011	6.47E-04	7.02E-06	3.04E-08	1.48E-03	1.60E-05	6.96E-08	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976			0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.01	0.00E+00	3.66E-05	2.07E-06	0.00E+00	7.32E-02	4.13E-03	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.871		0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.79	5.79E-05	9.30E-09	9.79E-10	3.22E-04	5.16E-08	5.44E-09	2.06E-06	3.31E-10	3.48E-11
Radium-226	3.26	4.774		0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.79	5.38E-02	2.25E-06	3.12E-06	5.38E-02	2.25E-06	3.12E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26			0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697		0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26			0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.0123	0.00E+00	1.92E-05	5.42E-07	0.00E+00	4.40E-05	1.24E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.998		0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.79	1.03E-04	1.55E-08	1.02E-09	5.73E-04	8.60E-08	5.66E-09	3.67E-06	5.51E-10	3.62E-11
Radium-228	2.57			0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60			0.475	0.971	6.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.0127	0.00E+00	1.49E-07	3.87E-09	0.00E+00	2.13E-07	5.52E-09	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758		0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	7.00E-01	3.07E-03	0.00E+00	2.62E-04	0.79	1.50E-02	2.04E-06	2.48E-07	0.00E+00	0.00E+00	0.00E+00	1.28E-03	1.74E-07	2.12E-08
Uranium-235	0.20	4.396		0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	7.00E-01	5.25E-04	0.00E+00	4.48E-05	0.0115	2.36E-03	1.32E-06	4.82E-08	0.00E+00	0.00E+00	0.00E+00	2.02E-04	1.12E-07	4.12E-09
Thorium-231	0.20			0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187		0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	7.00E-01	5.12E-03	0.00E+00	4.37E-04	0.79	2.19E-02	2.62E-06	2.07E-07	0.00E+00	0.00E+00	0.00E+00	1.87E-03	2.24E-07	1.77E-08
Thorium-234	1.95			0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	8.78E-06	4.88E-05	0.00E+00	0.79	0.00E+00	2.70E-08	3.19E-09	0.00E+00	1.50E-07	1.77E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95			0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.63	0.00E+00	2.56E-06	2.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227	2.01								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667		0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.0105	3.94E-02	2.64E-05	4.89E-07	3.94E-02	2.64E-05	4.89E-07	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01								0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55		0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01			0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479		0.052	0.033				0.00E+00	0.00E+00	0.00E+00	4.20E-03	0.00E+00	0.00E+00	0.00E+00	0.05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895			0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	7.00E+00	7.96E-03	0.00E+00	1.01E-01		0.00E+00	7.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00
Barium-137	0.895			0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.015	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10			0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	5.60E-02	5.82E-02	0.00E+00	0.00E+00		0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10			0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09			0.097	2.504				0.00E+00	0.00E+00	0.00E+00	1.40E+00	0.00E+00	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35								0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35			0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769		0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.04	1.13E-05	8.30E-09	1.66E-10	1.13E-05	8.30E-09	1.66E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																	1.66E-01	7.69E-04	9.05E-06	1.28E-01	7.33E-02	4.14E-03	3.36E-03	9.72E-04	4.31E-06
																	3.77E-01								

Parameter	Definition	Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil	--	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α,β,γ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-11
Internal Exposure: Ingestion of Prey - Bird Receptor Group C
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, I pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAFbird	Tissue concentration from prey ingestion			AF-C	Dose based on prey ingestion: Birds - Group C (mrad/d)								
								C-plant	C-invert	Cmammal		C-bird				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invert	mammal		alpha	beta	gamma	alpha	beta	gamma	alpha	beta	gamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	2.10E-03	3.49E-05	0.00E+00	0.00E+00	0.94	1.96E-04	1.97E-08	3.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.94	4.13E-05	8.03E-09	1.08E-09	2.29E-04	4.46E-08	5.99E-09	1.47E-06	2.86E-10	3.83E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.29	3.26E-02	5.74E-07	8.32E-07	3.26E-02	5.74E-07	8.32E-07	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.04	6.47E-04	7.02E-06	1.11E-07	1.48E-03	1.60E-05	2.53E-07	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.03	0.00E+00	3.66E-05	6.20E-06	0.00E+00	7.32E-02	1.24E-02	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.94	5.79E-05	9.30E-09	1.17E-09	3.22E-04	5.16E-08	6.47E-09	2.06E-06	3.31E-10	4.14E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.94	5.38E-02	2.25E-06	3.71E-06	5.38E-02	2.25E-06	3.71E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.03	0.00E+00	1.92E-05	1.32E-06	0.00E+00	4.40E-05	3.02E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.94	1.03E-04	1.55E-08	1.21E-09	5.73E-04	8.60E-08	6.74E-09	3.67E-06	5.51E-10	4.31E-11
Radium-228	2.57		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.04	0.00E+00	1.49E-07	1.22E-08	0.00E+00	2.13E-07	1.74E-08	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	7.00E-01	3.07E-03	0.00E+00	2.62E-04	0.94	1.50E-02	2.04E-06	2.96E-07	0.00E+00	0.00E+00	0.00E+00	1.28E-03	1.74E-07	2.52E-08
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	7.00E-01	5.25E-04	0.00E+00	4.48E-05	0.04	2.36E-03	1.32E-06	1.68E-07	0.00E+00	0.00E+00	0.00E+00	2.02E-04	1.12E-07	1.43E-08
Thorium-231	0.20		0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	7.00E-01	5.12E-03	0.00E+00	4.37E-04	0.94	2.19E-02	2.62E-06	2.46E-07	0.00E+00	0.00E+00	0.00E+00	1.87E-03	2.24E-07	2.10E-08
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	8.78E-06	4.88E-05	0.00E+00	0.94	0.00E+00	2.70E-08	3.80E-09	0.00E+00	1.50E-07	2.11E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.03	0.00E+00	2.56E-06	1.12E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.04	3.94E-02	2.64E-05	1.86E-06	3.94E-02	2.64E-05	1.86E-06	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	4.20E-03	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187		1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	7.00E+00	7.96E-03	0.00E+00	1.01E-01		0.00E+00	7.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	5.60E-02	5.82E-02	0.00E+00	0.00E+00		0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	1.40E+00	0.00E+00	0.00E+00	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.11	1.13E-05	8.30E-09	4.56E-10	1.13E-05	8.30E-09	4.56E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.66E-01	7.69E-04	1.48E-05	1.28E-01	7.33E-02	1.24E-02	3.36E-03	9.72E-04	6.07E-08
																3.85E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	–	mrad/day
Csoil, I	Activity of radionuclide in surface soil	–	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	–
ξi,α|β,γ	Energy for α,β,γ emissions by nuclide I		Me V/nt
AF	Absorption factor	–	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

Table D-12
Internal Exposure: Ingestion of Prey - Bird Receptor Group D
Parcel 4, Mound Plant
Miamisburg, Ohio

Ding = Σ QF * Ctissue *ξi * CFa * AF
Source: Sample et al., 1997

COPC	Csoil, i pCi/g	ξi, α	ξi, β	ξi, γ	UF-herb plants	UF-invert	UF-mammal	Tissue Concentration from Soil Uptake			BAFbird	Tissue concentration from prey ingestion			AF-D	Dose based on prey ingestion: Birds - Group D (mrad/d)								
								C-plant	C-invert	Cmammal		C-bird				prey:plants			prey: invertebrates			prey: small mammals (group B)		
												plant	invert	mammal		alpha	beta	gamma	alpha	beta	gamma	alpha	beta	bamma
Plutonium-238	55.4	5.487	0.011	0.002	3.00E-04			1.66E-02	0.00E+00	0.00E+00	2.10E-03	3.49E-05	0.00E+00	0.00E+00	0.94	1.96E-04	1.97E-08	3.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-228	1.66	5.4	0.021	0.003	9.00E-04	5.00E-03	3.20E-05	1.49E-03	8.30E-03	5.31E-05	5.00E-03	7.47E-06	4.15E-05	2.66E-07	0.94	4.13E-05	8.03E-09	1.08E-09	2.29E-04	4.46E-08	5.99E-09	1.47E-06	2.86E-10	3.83E-11
Radium-224	1.66	5.674	0.002	0.01	7.50E-02	7.50E-02		1.25E-01	1.25E-01	0.00E+00	4.50E-02	5.60E-03	5.60E-03	0.00E+00	0.35	3.26E-02	5.74E-07	1.00E-06	3.26E-02	5.74E-07	1.00E-06	0.00E+00	0.00E+00	0.00E+00
Radon-220	1.66	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-216	1.66	6.779						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-212	1.66		0.176	0.148				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-212	1.66	2.174	0.472	0.186	8.75E-03	2.00E-02		1.45E-02	3.32E-02	0.00E+00	2.00E-02	2.91E-04	6.64E-04	0.00E+00	0.06	6.47E-04	7.02E-06	1.66E-07	1.48E-03	1.60E-05	3.79E-07	0.00E+00	0.00E+00	0.00E+00
Polonium-212	1.0624	8.785						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-208	0.5976		0.598	3.375	1.00E-03	2.00E+00		5.98E-04	1.20E+00	0.00E+00	2.00E+00	1.20E-03	2.39E+00	0.00E+00	0.04	0.00E+00	3.66E-05	8.26E-06	0.00E+00	7.32E-02	1.65E-02	0.00E+00	0.00E+00	0.00E+00
Lead-208	1.66							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-230	2.69	4.671	0.015	0.002	9.00E-04	5.00E-03	3.20E-05	2.42E-03	1.35E-02	8.61E-05	5.00E-03	1.21E-05	6.73E-05	4.30E-07	0.94	5.79E-05	9.30E-09	1.17E-09	3.22E-04	5.16E-08	6.47E-09	2.06E-06	3.31E-10	4.14E-11
Radium-226	3.26	4.774	0.004	0.007	7.50E-02	7.50E-02		2.45E-01	2.45E-01	0.00E+00	4.50E-02	1.10E-02	1.10E-02	0.00E+00	0.94	5.38E-02	2.25E-06	3.71E-06	5.38E-02	2.25E-06	3.71E-06	0.00E+00	0.00E+00	0.00E+00
Radon-222	3.26	6.288						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-218	3.26	6.001						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-214	3.26		0.293	0.25				0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Astatine-218	0.0006520	6.697	0.04	0.007				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-214	3.26		0.659	1.508	8.75E-03	2.00E-02		2.85E-02	6.52E-02	0.00E+00	2.00E-02	5.71E-04	1.30E-03	0.00E+00	0.05	0.00E+00	1.92E-05	2.20E-06	0.00E+00	4.40E-05	5.03E-06	0.00E+00	0.00E+00	0.00E+00
Polonium-214	3.26	7.687						0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-210	0.0006520							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-232	5.60	3.996	0.012	0.001	9.00E-04	5.00E-03	3.20E-05	5.04E-03	2.80E-02	1.79E-04	5.00E-03	2.52E-05	1.40E-04	8.96E-07	0.94	1.03E-04	1.55E-08	1.21E-09	5.73E-04	8.60E-08	6.74E-09	3.67E-06	5.51E-10	4.31E-11
Radium-228	2.57		0.017		7.50E-02	7.50E-02		1.93E-01	1.93E-01	0.00E+00	4.50E-02	8.67E-03	8.67E-03	0.00E+00		0.00E+00	7.55E-06	0.00E+00	0.00E+00	7.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-228	5.60		0.475	0.971	8.75E-04	1.25E-03		4.90E-03	7.00E-03	0.00E+00	1.25E-03	6.13E-06	8.75E-06	0.00E+00	0.06	0.00E+00	1.49E-07	1.83E-08	0.00E+00	2.13E-07	2.61E-08	0.00E+00	0.00E+00	0.00E+00
Uranium-234	1.17	4.758	0.013	0.002	3.75E-03		3.20E-04	4.39E-03	0.00E+00	3.74E-04	7.00E-01	3.07E-03	0.00E+00	2.62E-04	0.94	1.50E-02	2.04E-06	2.96E-07	0.00E+00	0.00E+00	0.00E+00	1.28E-03	1.74E-07	2.52E-08
Uranium-235	0.20	4.396	0.049	0.156	3.75E-03		3.20E-04	7.50E-04	0.00E+00	6.40E-05	7.00E-01	5.25E-04	0.00E+00	4.48E-05	0.06	2.36E-03	1.32E-06	2.52E-07	0.00E+00	0.00E+00	0.00E+00	2.02E-04	1.12E-07	2.15E-08
Thorium-231	0.20		0.165	0.026				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium-238	1.95	4.187	0.01	0.001	3.75E-03		3.20E-04	7.31E-03	0.00E+00	6.24E-04	7.00E-01	5.12E-03	0.00E+00	4.37E-04	0.94	2.19E-02	2.62E-06	2.46E-07	0.00E+00	0.00E+00	0.00E+00	1.87E-03	2.24E-07	2.10E-08
Thorium-234	1.95		0.06	0.009	9.00E-04	5.00E-03		1.76E-03	9.75E-03	0.00E+00	5.00E-03	8.76E-06	4.88E-05	0.00E+00	0.94	0.00E+00	2.70E-08	3.80E-09	0.00E+00	1.50E-07	2.11E-08	0.00E+00	0.00E+00	0.00E+00
Protactinium-234m	1.95		0.822	0.012	6.23E-04			1.21E-03	0.00E+00	0.00E+00	5.00E-02	6.07E-05	0.00E+00	0.00E+00	0.93	0.00E+00	2.56E-06	3.47E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Actinium-227	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thorium-227	1.98							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radium-223	2.01	5.667	0.076	0.134	7.50E-02	7.50E-02		1.51E-01	1.51E-01	0.00E+00	4.50E-02	6.78E-03	6.78E-03	0.00E+00	0.06	3.94E-02	2.64E-05	2.79E-06	3.94E-02	2.64E-05	2.79E-06	0.00E+00	0.00E+00	0.00E+00
Radon-219	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Polonium-215	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-211	2.01							0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-211	2.01	6.55	0.01	0.047				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium-207	2.01		0.493	0.002				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Americium-241	0.210	5.479	0.052	0.033				0.00E+00	0.00E+00	0.00E+00	4.20E-03	0.00E+00	0.00E+00	0.00E+00	0.16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.895		0.187	-	1.27E-03		1.62E-02	1.14E-03	0.00E+00	1.45E-02	7.00E+00	7.96E-03	0.00E+00	1.01E-01		0.00E+00	7.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00
Barium-137	0.895		0.065	0.597				0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Strontium-90	2.10		0.196		4.95E-01			1.04E+00	0.00E+00	0.00E+00	5.60E-02	5.82E-02	0.00E+00	0.00E+00		0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Yttrium-90	2.10		0.935					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt-60	0.09		0.097	2.504				0.00E+00	0.00E+00	0.00E+00	1.40E+00	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead-210	3.35							0.00E+00	0.00E+00	0.00E+00	2.00E-02	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bismuth-210	3.35		0.389					0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Neptunium-237	0.067	4.769	0.07	0.035	9.00E-03	9.00E-03		6.03E-04	6.03E-04	0.00E+00	3.84E-03	2.32E-06	2.32E-06	0.00E+00	0.15	1.13E-05	8.30E-09	6.22E-10	1.13E-05	8.30E-09	6.22E-10	0.00E+00	0.00E+00	0.00E+00
Total Ingestion Exposure from Prey (mrad/d)																1.66E-01	7.69E-04	1.90E-05	1.28E-01	7.33E-02	1.65E-02	3.36E-03	9.72E-04	6.78E-08
																3.69E-01								

Parameter		Value	Units
Ding	Internal dose rate from ingestion of contaminated prey and soil	--	mrad/day
Csoil, i	Activity of radionuclide in surface soil	--	pCi/g
Cfa	Conversion factor to change MeV/nt to g mrad/pCi d	5.12E-02	--
ξi,α/β/γ	Energy for α,β,γ emissions by nuclide i		Me V/nt
AF	Absorption factor	--	unitless
QF	Quality factor to account for the greater biological effectiveness of α particles	20	unitless, α
QF	Quality factor to account for the greater biological effectiveness of α	1	unitless, β,γ

APPENDIX E

THREATENED AND ENDANGERED SPECIES INFORMATION

Bob Taft • *Governor*

Samuel W. Speck • *Direct*

Division of Natural Areas and Preserves

Stuart Lewis • *Acting Chi*

May 23, 2000

Roy F. Weston, Inc.
Terry Bosko
3 Hawthorn Parkway
Suite 400
Vernon Hills, IL 60061

Dear Ms. Bosko:

I have reviewed our Natural Heritage maps and files for the Mound Plant project area, including a one mile radius, on the Miamisburg and Franklin Quads in Montgomery County, Ohio. We have one record within the project area. The location for Inland Rush (*Juncus interior*), a state threatened plant, is marked by a red dot on the accompanying map.

There are no existing or proposed state nature preserves or scenic rivers at the project site. We are also unaware of any unique ecological sites, geologic features, breeding or non-breeding animal concentrations, champion trees, or state parks, forests or wildlife areas within a one mile radius of the project area.

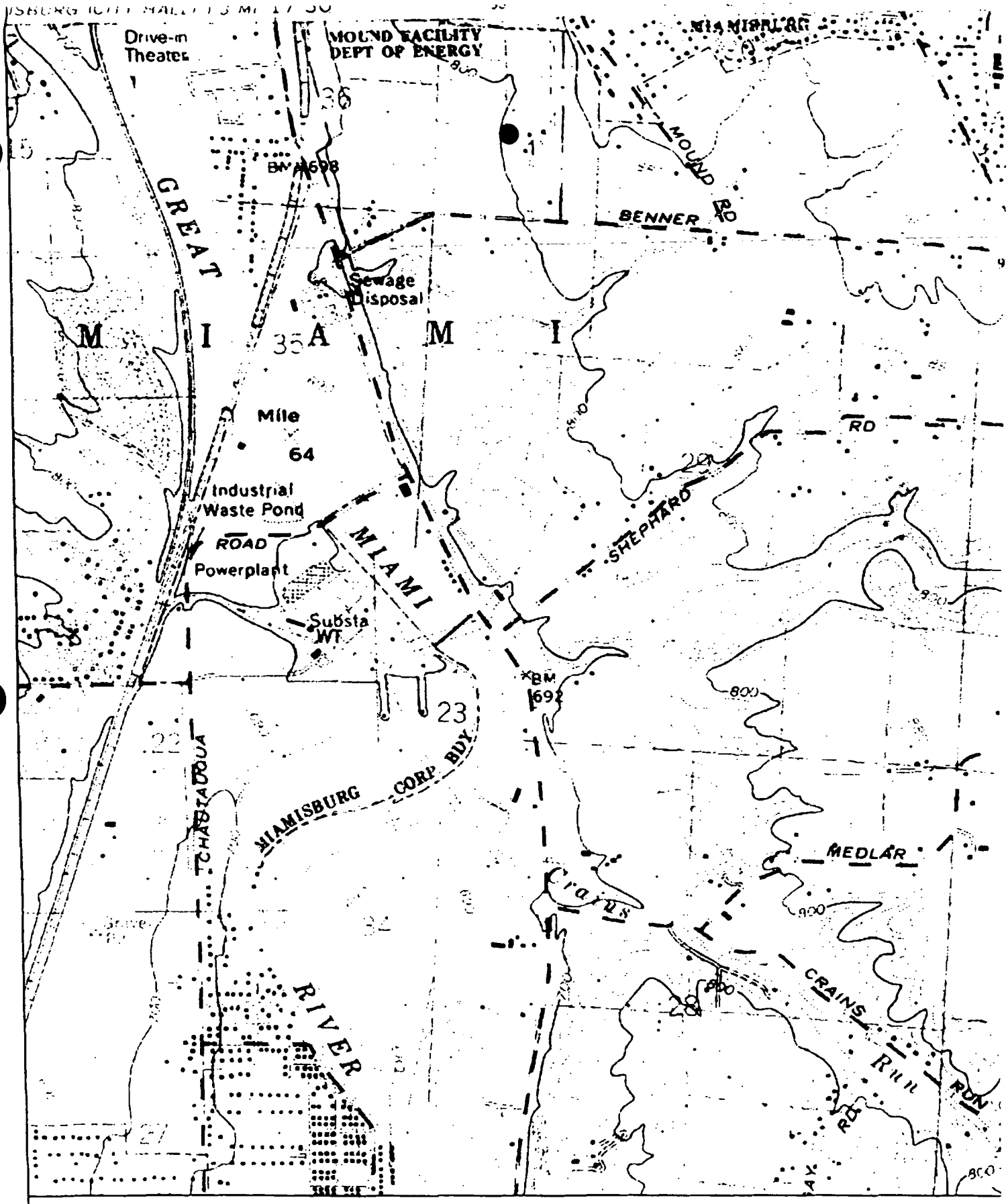
Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Please note that although we inventory all types of plant communities, we only maintain records on the highest quality areas. Also, we do not have data for all Ohio wetlands. For additional information on wetlands and National Wetlands Inventory maps, please contact Jim Given in the Division of Real Estate and Land Management at 614-265-6770.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke

Debbie Woischke, Data Specialist
Division of Natural Areas & Preserves



Name: FRANKLIN
Date: 5/22/100
Scale: 1 inch equals 1333 feet

Location: 039° 36' 30.8" N 084° 17' 03.5" W
Caption: Roy F. Weston, Inc.;
Mound Plant Project Area

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4127
(614) 469-6923
Fax: (614) 469-6919

May 31, 2000

Mr. Terry Bosko
Roy F. Weston, Inc.
Suite 400
3 Hawthorn Pkwy
Vernonn Hills, IL 60061-1450

Dear Mr. Bosko:

This is in response to your May 22, 2000 letter requesting information we may have regarding the occurrence or possible occurrence of Federally-listed threatened or endangered species within the vicinity of the proposed site. This information is being requested to prepare a Screening Level Ecological Risk Assessment for the Miami-Erie Canal and the South Property of the Mound Plant for the U.S. Department of Energy as part of CERCLA activities at the plant. The plant is located in Miamisburg, Montgomery County, Ohio.

In general, we recommend that proposed developments minimize water quality impacts and impacts to high quality fish and wildlife habitat, such as forests, streams, and wetlands. If streams and wetlands would be impacted, the Louisville District of the Corps of Engineers should be contacted for possible need of a Section 404 permit.

ENDANGERED SPECIES COMMENTS: The proposed project lies within the range of the Indiana bat, a Federally listed endangered species. Summer habitat requirements for the species are not well defined but the following are thought to be of importance:

1. Dead trees and snags (especially those with exfoliating bark) which may be used as maternity roost areas along riparian corridors.

2. Live trees (such as shagbark hickory) which have exfoliating bark.

3. Stream corridors, riparian areas, and nearby woodlots which provide forage sites.

Considering the above items, we recommend that if trees with exfoliating bark (which could be potential roost trees) are encountered along the proposed right-of-way, they should be saved wherever possible. If they must be cut, they should not be cut between April 15 and September 15.

If desirable trees are present and if the above time restriction is unacceptable, mist net or other surveys should be conducted to determine if bats are present. The survey should be designed and conducted in coordination with the endangered species coordinator for this office, Mr. Buddy Fazio. The survey should be conducted in June or July since the bats would only be expected in the project area from approximately April 15 to September 15.

The project area also lies within the range of the eastern massasauga, a docile rattlesnake that is declining throughout its national range and may soon receive status as a Federal candidate species. The snake is currently listed as endangered by the State of Ohio, and ultimately may become a Federally listed species. We encourage early project coordination to avoid potential impacts to massasaugas or their habitat.

The massasauga is often found in or near wet areas, including wetlands, wet prairie, or nearby woodland or shrub edge habitat. Wet habitat and nearby edges are utilized by the snakes especially during spring and fall. Upland areas up to 1.5 miles away are utilized during summer, if available. If crayfish holes exist in a wet area, the massasauga may live there, too. Some project management ideas include the

following:

1. At a minimum, project evaluations should contain delineations of whether or not massasauga habitat occurs within project boundaries. Descriptions should indicate the quality and amount of massasauga habitat that may be affected by the project.

2. In cases where massasaugas are known to occur or potential habitat is rated moderate to high, massasauga surveys may be necessary. If surveys are conducted, they should be performed during the period of Spring emergence from dens (usually a narrow window in April or May).

3. In portions of projects where massasaugas will be affected, clearing and construction activities should occur during Summer when air and ground temperatures are above 65° F. Massasaugas are mobile during this period and are more likely to move to upland sites.

4. Maintenance activities (mowing, cutting, burning, etc.) should be conducted within the specified seasonal temperature periods described.

This technical assistance letter is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C.661 et seq.), the Endangered Species Act of 1973, as amended, and is consistent with the intent of the National Environmental Policy Act of 1969, and the U.S. Fish and Wildlife Service's Mitigation Policy.

If you have questions, or if we may be of further assistance in this matter, please contact Megan Sullivan at extension 21 in this office.

Sincerely,

Ken Mullen
for Kent E. Kroonemeyer
Supervisor

cc: DOW, Wildlife Environmental Section, Columbus, OH

APPENDIX F

LOCATIONS EXCEEDING WILDLIFE PRGs

Locations exceeding PRGs

Aluminum

Bkg = 19000 mg/kg
EDQL = no screening level

PRG (mg/kg), at HQ = 5

Deer	15578.5	Robin	4952.5
Cardinal	81385	Shrew	16
Vole	181		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
B409	19940628	B40901	34897	Grab	0	0.5	FT	Aluminum	21400	MG/KG			

Antimony

Bkg = no bkg level
EDQL = 0 14 mg/kg

PRG (mg/kg), at HQ = 5

Deer	110	Robin	NTV
Cardinal	NTV	Shrew	1.035
Vole	1.45		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
MND33-0104	19920116	0104-0001	MND33	Grab	0	0.5	FT	Antimony	26 1	MG/KG	3	J	
MND33-0102	19920116	0102-0002	MND33	Grab	1.5	2	FT	Antimony	27.1	MG/KG	3	J	
MND33-0103	19920116	0103-0001	MND33	Grab	0	0.5	FT	Antimony	28.2	MG/KG	3	J	
MND33-0104	19920116	0104-1002	MND33	Field Duplicat	1.5	2	FT	Antimony	30.3	MG/KG	3	J	
MND33-0102	19920116	0102-1001	MND33	Field Duplicat	0	0.5	FT	Antimony	30.8	MG/KG	3	J	
MND33-0104	19920116	0104-0002	MND33	Grab	1.5	2	FT	Antimony	34	MG/KG	3	J	
MND33-0102	19920116	0102-0001	MND33	Grab	0	0.5	FT	Antimony	35	MG/KG	3	J	
MND33-0103	19920116	0103-0002	MND33	Grab	1.5	2	FT	Antimony	42.2	MG/KG	3	J	

Arsenic

Bkg = 8.6 mg/kg
EDQL = 6 mg/kg

PRG (mg/kg), at HQ = 5

Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	10.4
Vole	54.5		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
CJ	19940609	RCJ305	Apr-68	Grab	0	6	IN	Arsenic	11	MG/KG			
B406	19940622	B40601	34897	Grab	0.2	0.7	FT	Arsenic	11.8	MG/KG			

Bismuth

No PRG available

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
SGC038	19960215	NAC038	SGCSP	Grab	0	3	FT	Bismuth	1.4	MG/KG		B	
B408	19940616	B40801	34897	Grab	0	0.5	FT	Bismuth	12.3	MG/KG		B	
B408	19940616	B40811	34897	Field Duplicat	0	0.5	FT	Bismuth	14	MG/KG		B	
B409	19940628	B40901	34897	Grab	0	0.5	FT	Bismuth	14.5	MG/KG			
B401	19940614	B40101	34897	Grab	0	0.5	FT	Bismuth	17.5	MG/KG		B	
B406	19940622	B40601	34897	Grab	0.2	0.7	FT	Bismuth	19.6	MG/KG		B	
B407	19940620	B40701	34897	Grab	0	0.5	FT	Bismuth	19.6	MG/KG		B	
B405	19940622	B40501	34897	Grab	0	0.5	FT	Bismuth	28.5	MG/KG		B	
CJ	19940609	RCJ315	Apr-68	Field Duplicat	0	6	IN	Bismuth	35	MG/KG			
CH	19940609	RCH305	Apr-68	Grab	0	6	IN	Bismuth	35	MG/KG			
CH	19940609	RCH306	Apr-68	Grab	18	24	IN	Bismuth	38	MG/KG			
CJ	19940609	RCJ305	Apr-68	Grab	0	6	IN	Bismuth	40.2	MG/KG			
CJ	19940609	RCJ306	Apr-68	Grab	18	24	IN	Bismuth	70.4	MG/KG			

Cadmium

Bkg = 2.1 mg/kg
EDQL = 0.0022 mg/kg

PRG (mg/kg), at HQ = 5

Deer	HQ<1	Robin	16.6
Cardinal	HQ<1	Shrew	8.15
Vole	6.7		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
MND33-0103	19920116	0103-0002	MND33	Grab	1.5	2	FT	Cadmium	7.7	MG/KG	0.2		J

Chloride

Bkg = 107 mg/kg
EDQL = NSL mg/kg

PRG (mg/kg), at HQ = 5

Deer	NTV	Robin	NTV
Cardinal	NTV	Shrew	NTV
Vole	NTV		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
B401	19940614	B40101	34897	Grab	0	0.5	FT	Chloride	183	MG/KG			J

Chromium

Bkg = 20 mg/kg
EDQL = 0.40 mg/kg

PRG (mg/kg), at HQ = 5

Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	29.15
Vole	HQ<1		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
MND33-0103	19920116	0103-0002	MND33	Grab	1.5	2	FT	Chromium	30.5	MG/KG	1		

Copper

Bkg = 26 mg/kg
EDQL = 0.31 mg/kg

PRG (mg/kg), at HQ = 5

Deer	HQ<1	Robin	HQ<1

Cardinal	HQ<1	Shrew	99.9	
Vole	73.5			

No Locations exceeding PRG

Lithium
Bkg = 26 mg/kg
EDQL = NSL

PRG (mg/kg), at HQ = 5			
Deer	HQ<1	Robin	NTV
Cardinal	NTV	Shrew	79.4
Vole	HQ<1		

No Locations exceeding PRG

Selenium
Bkg = NBL
EDQL = 0.03 mg/kg

PRG (mg/kg), at HQ = 5			
Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	1.65
Vole	HQ<1		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
CJ	19940609	RCJ305	Apr-68	Grab	0	6	IN	Selenium	2.2	MG/KG			J

Silver
Bkg = 1.7 mg/kg
EDQL = 4.04 mg/kg

PRG (mg/kg), at HQ = 5			
Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	3.1
Vole	2.295		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
MND33-0104	19920116	0104-0001	MND33	Grab	0	0.5	FT	Silver	12	MG/KG	1		
MND33-0103	19920116	0103-0001	MND33	Grab	0	0.5	FT	Silver	14.1	MG/KG	1		
MND33-0102	19920116	0102-0002	MND33	Grab	1.5	2	FT	Silver	14.7	MG/KG	1		
MND33-0102	19920116	0102-1001	MND33	Field Duplicat	0	0.5	FT	Silver	14.8	MG/KG	1		
MND33-0104	19920116	0104-1002	MND33	Field Duplicat	1.5	2	FT	Silver	15.2	MG/KG	1		
MND33-0104	19920116	0104-0002	MND33	Grab	1.5	2	FT	Silver	15.3	MG/KG	1		
MND33-0102	19920116	0102-0001	MND33	Grab	0	0.5	FT	Silver	15.7	MG/KG	1		
MND33-0103	19920116	0103-0002	MND33	Grab	1.5	2	FT	Silver	17	MG/KG	1		

Sulfate
Bkg = 150 mg/kg
EDQL = NSL

PRG (mg/kg), at HQ = 5			
Deer	NTV	Robin	NTV
Cardinal	NTV	Shrew	NTV
Vole	NTV		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
B408	19940616	B40811	34897	Field Duplicat	0	0.5	FT	Sulfate	182	MG/KG			J
B408	19940616	B40801	34897	Grab	0	0.5	FT	Sulfate	298	MG/KG			J
B407	19940620	B40701	34897	Grab	0	0.5	FT	Sulfate	328	MG/KG			J
B409	19940628	B40901	34897	Grab	0	0.5	FT	Sulfate	331	MG/KG			J
B401	19940614	B40101	34897	Grab	0	0.5	FT	Sulfate	356	MG/KG			J
B405	19940622	B40501	34897	Grab	0	0.5	FT	Sulfate	359	MG/KG			
B406	19940622	B40601	34897	Grab	0.2	0.7	FT	Sulfate	795	MG/KG			

Thallium
Bkg = 0.46 mg/kg
EDQL = 0.06 mg/kg

PRG (mg/kg), at HQ = 5			
Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	0.1085
Vole	1.23		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
CJ	19940609	RCJ306	Apr-68	Grab	18	24	IN	Thallium	0.94	MG/KG		B	

Vanadium
Bkg = 25 mg/kg
EDQL = 1.59 mg/kg

PRG (mg/kg), at HQ = 5			
Deer	HQ<1	Robin	HQ<1
Cardinal	HQ<1	Shrew	1.75
Vole	19.05		

Location_name	Collection_date	Sample_id	Project_code	Sample_type	Start_dept	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
SGC039	19960214	NAC039	SGCSP	Grab	0	3	FT	Vanadium	29.3	MG/KG			
CJ	19940609	RCJ315	Apr-68	Field Duplicat	0	6	IN	Vanadium	29.4	MG/KG		E	J
CJ	19940609	RCJ305	Apr-68	Grab	0	6	IN	Vanadium	31.2	MG/KG		E	J
B409	19940628	B40901	34897	Grab	0	0.5	FT	Vanadium	37	MG/KG			

Location_name	Collection_date	Sample_id	Project_code	Start_depth	End_depth	Depth_unit	Value_name	Measured_value	Value_units	Detection_limit	Lab_qualifier	Data_qualifier
2,4,6-Trinitrotoluene												
No PRG available												
B405	19940622	B40501	34897	0	0.5	FT	2,4,6-Trinitrotoluene	0.2	UG/KG		J	J
Benzoic Acid												
No PRG available												
MND33-0104	19920116	0104-0002	MND33	1.5	2	FT	Benzoic Acid	12	UG/KG	3600	J	J
Di-n-butylphthalate		PRG- HQ = 5										
Bkg = not available		Robin =	2.99 ug/kg									
EDQL = 149.79 ug/kg		All other receptors, HQ<1										
NPS4	19940505	NPS004	Apr-68	0	12	IN	Di-n-butyl Phthalate	180	UG/KG		J	J
SGC038	19960215	NAC038	SGCSP	0	3	FT	Di-n-butyl Phthalate	240	UG/KG		J	
NPS3	19940505	NPS003	Apr-68	0	12	IN	Di-n-butyl Phthalate	240	UG/KG		J	J
NPS5	19940505	NPS005	Apr-68	0	12	IN	Di-n-butyl Phthalate	420	UG/KG			
Endrin ketone												
No PRG available												
B407	19940620	B40701	34897		0.5	FT	Endrin Ketone	0.25	UG/KG		J	J

BWX Technologies, Inc.
a McDermott company

BWXT of Ohio, Inc.
1 Mound Road
P.O. Box 3030
Miamisburg, Ohio 45343-3030
(937) 865-4020

ESC-067/01
April 19, 2001

Mr. Richard B. Provencher, Director
Miamisburg Environmental Management Project
U. S. Department of Energy
P. O. Box 66
Miamisburg, OH 45343-0066

ATTENTION: Robert S. Rothman

SUBJECT: Contract No. DE-AC24-97OH20044
PARCEL 4 CERCLA DOCUMENTS – FINAL

REFERENCE: Statement of Work Requirement C.7.1e—Regulator Reports

Dear Mr. Provencher:

Rob Rothman of your office has approved the release to USEPA, OEPA, ODH, MMCIC, the administrative record, and the Public Reading Room of the Final version of the following documents for Parcel 4:

Human Health Residual Risk Evaluation (RRE)
Ecological Risk Evaluation (ERE)
Record of Decision (ROD)
Environmental Summary (ES)

If you have any questions regarding the documents, or if additional support is needed, please contact Dave Rakel at extension 4203.

Sincerely,

Jeffrey S. Stapleton
Manager, Environmental Safeguards & Compliance

JSS/DAR:jdg

cc: Tim Fischer, USEPA, w/attachments (1-RRE, 1-ERE, 5-ROD, 1-ES)
Brian Nickel, OEPA, w/attachments (1-RRE, 1-ERE, 2-ROD, 1-ES)
Ruth Vandegrift, ODH, w/attachments (2-RRE, 2-ERE, 2-ROD, 1-ES)
John Ebersole DOE/OH, w/1 of each attachment
Torrence Tracey DOE/HQ, w/1 of each attachment
Monte Williams 1 w/1 of each attachment
Dann Bird MMCIC w/attachments (2-RRE, 2-ERE, 2-ROD, 1-ES)
Public Reading Room, w/5 of each attachment
Administrative Record, w/2 of each attachment
DCC

Legend

- Gm-Mesic grassland
- Gx-Subxerix grassland
- SF2a- Low gradient upland forest with level or nearly level topography
- S/Sa-Early successional scrub/shrub
- S/Sb-Late successional scrub/shrub
- SF2-Low gradient upland forest dominated by south and west aspects

0 50 100 200 300
Scale in Feet

MOUND
Environmental Restoration Geographic Information System

ISS	DATE	REVISION	BY	CHKR	ENG	M
0	04/27/00	ORIGINAL ISSUE	DCW			

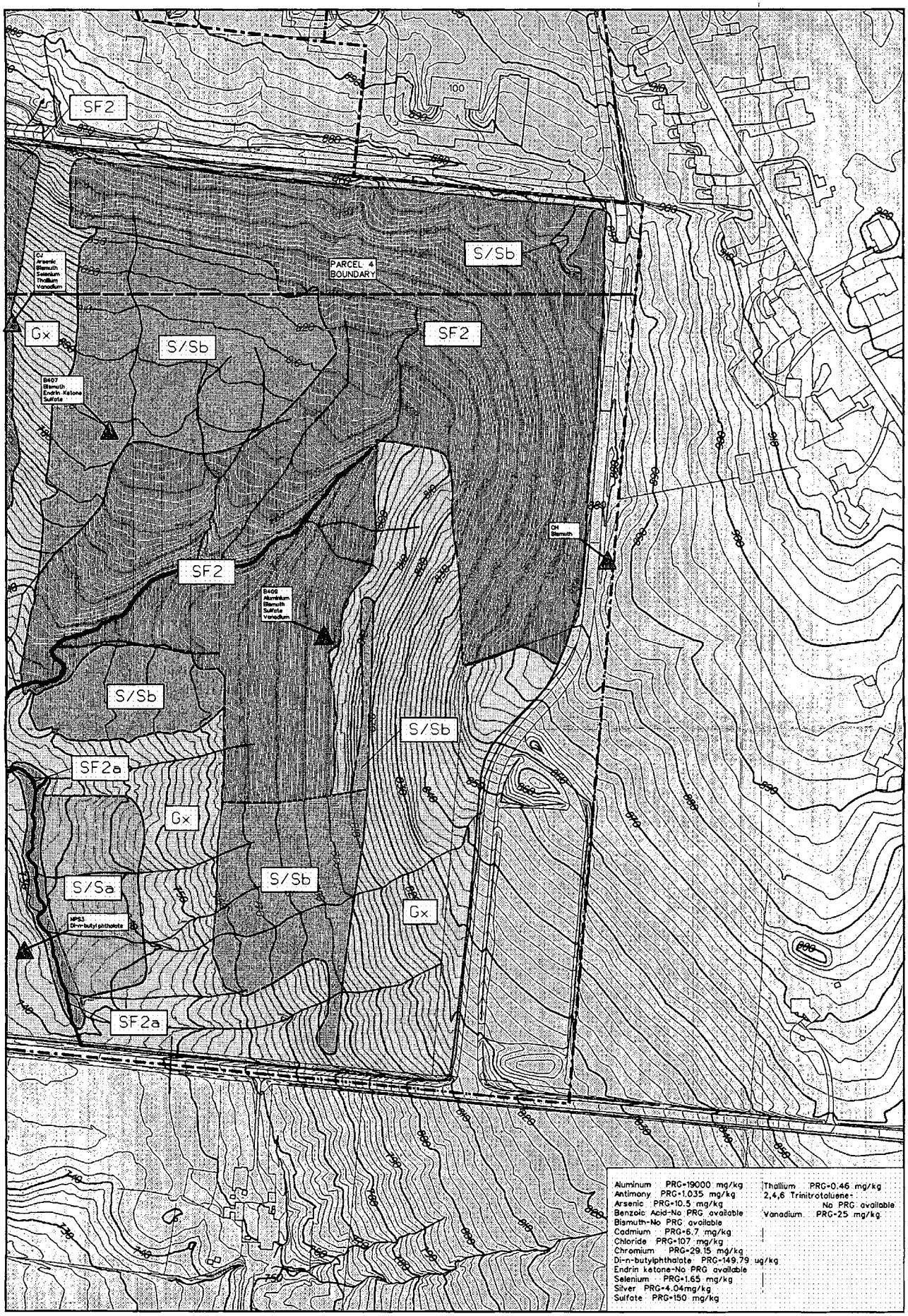
DRAWING NUMBER: south_prop1.dgn

SHEET 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ISSUE
SHEET 1 2 3 4 5 6
ISSUE 0
PART CLASSIFICATION

( ) TITLE CLASSIFICATION

PARCEL 4 (SOUTH PROPERTY) AREA ECOLOGICAL RISK ASSESSMENT

DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE: D
DRAWING NUMBER: south_prop1.dgn
JOB NUMBER:
DWG TYPE: SITE
PRNG:
CAGE: 14065
SCALE: 1"=100'
SHEET 1 OF 2
STATUS: MD-REL-04/27/00
ORIGIN: MSTATION 5.0



Legend

- Gm-Mesic grassland
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- SF2-Low gradient upland forest dominated by south and west aspects

0 50 100 200 300
Scale in Feet

MOUND
Environmental Restoration Geographic Information System

ISS	DATE	REVISION	BY	CHKR	ENG	M
0	04/27/00	ORIGINAL ISSUE	DCW			

DRAWING NUMBER: south_prop2.dgn

SHEET 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ISSUE
SHEET 1 2 3 4 5 6
ISSUE 0
PART CLASSIFICATION

( ) TITLE CLASSIFICATION

PARCEL 4
(SOUTH PROPERTY)
AREA ECOLOGICAL
RISK ASSESSMENT

DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE: D
DRAWING NUMBER: south_prop2.dgn
JOB NUMBER:
DWG TYPE: SITE
PRIME:
CAGE: 14065
SCALE: 1"=100'
SHEET 2 OF 2
STATUS: MD-REL-04/27/00
ORIGIN: MSTATION 5.0