GW - 28

WORK PLANS

1996

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January 31, 1996

Mr. Rich Mayer, Environmental Engineer
RCRA Permits Branch
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Transmittal of Revised Soil Removal Workplan for Three-Mile Ditch

Dear Mr. Mayer:

Enclosed please find the revisions to the "Proposed Workplan for Removal of Surficial Waste Deposits at Three-Mile Ditch". The proposed workplan was originally submitted to EPA as Attachment 2 of the October, 1995 revised RFI Phase III Report for Three-Mile Ditch and Evaporation Ponds. The current workplan submittal has been revised to respond to November 22, 1995 EPA review comments on the original workplan submittal. Our response to the comments are included as an attachment to this letter.

For convenience and consistency, the revised soil removal plan has been prepared so that it may be directly inserted as replacement pages in the January 1996 revised RFI Phase III Report for Three-Mile Ditch and Evaporation Ponds. Please replace Attachment 2 pages 2-1 through 2-5 (dated October 1, 1995) with the revised workplan pages (2-1 through 2-7, dated January 31, 1996) which are included herein. In addition, a version of the revised workplan which indicates deleted text (~~strike-through~~) and new text (**bolded**) has also been included in order to facilitate your review of the document.

If you have any questions, please do not hesitate to contact me at (505) 748-3311.

Sincerely,

Phillip L. Youngblood
Director of Environmental Affairs

PLY/sj

attachments

Response To EPA Region 6 Review Comments on the

Soil Removal Plan for Three Mile Ditch

Comment:

General Comment: *Please provide in the revised plan the name, address, and telephone numbers of the property owners in which soil removal may occur. EPA will also require that Navajo notify each property owner by certified mail. The letter should briefly describe the soil removal process and request permission from the property owner.*

Response:

The proposed soil removal activities will be conducted along a portion of the ditch that falls within the property boundary of a single private party. The work plan has been revised to provide the identity, address and telephone number for that party, which are presented in the revised work plan at the end of the second paragraph of Section 1.0.

Upon approval of the proposed soil removal work plan by the agency, Navajo will notify the affected landowner of the scheduled date and nature of the planned activities and will subsequently verify his consent to same with a follow-up telephone communication. A copy of the notification letter sent by certified mail to the concerned property owner will also be sent to the attention of the appropriate EPA Region 6 oversight representative.

Comment:

General Comment: *Navajo needs to include in the revised plan a section which addresses how the ditch will be "filled in" or leveled after soil removal.*

Response:

The work plan has been revised to include a description of site activities associated with post-excavation restoration at the site (Section 2.1, second-to-last paragraph). In brief, shallow excavation zones extending to a depth less than three-feet from surface grade will be contoured to restore the land surface to a smooth surface conformation posing no surface hazard or excessive potential for accumulation and ponding of surface water. Although considered unlikely, in the event that soil excavations exceed a depth of three feet, imported clean fill material will be used to restore any such areas to a suitable grade.

Comment:

Attachment 2-2; Corrective Action Plan: *Please include a map in the revised plan which locates the potential soil removal areas of the Three Mile Ditch. Also, please locate/indicate the property owners on the map.*

Response:

The work plan has been revised to include a site map indicating the approximate location of the portion of the ditch targeted for soil delineation and excavation activities, which is presented as Figure A2-1. The approximate boundary lines of the private property in which the ditch segment of interest resides are also indicated in the figure.

Comment:

Attachment 2-2; Sampling and Analysis: *Please include the ERT SOP No. 1713 in the revised workplan. Also, please include a more descriptive narrative on the delineation of the soils by the Navajo field team leader. In addition, EPA is assuming that the analyzer has the capability to give concentration levels of other metals such as arsenic, chromium, etc.*

Response:

Subsequent to follow-up discussions with technical representatives of the manufacturer of the proposed field analytical device (Spectrace 9000, TN Technologies, Austin, Texas), Navajo has been informed that the manufacturer does not recommend adherence to the rigorous calibration verification procedures specified in EPA document ERT SOP 1713. Manufacturer technical representatives assert that Spectrace 9000 has consistently proven to be a highly reliable portable analytical device, which, in the absence of a major equipment malfunction, is unlikely to require recalibration during the duration of the planned field work. As discussed in Section 2.4 (4th and 5th paragraphs) of the revised work plan, the Spectrace 9000 User Manual accompanying the rental device includes a standard operating check protocol which the manufacturer recommends to be conducted once daily prior to the initiation of field activities. While additional calibration checks may be conducted at the discretion of the Navajo field team leader, the manufacturer asserts that extensive field experience with the Spectrace 9000 has demonstrated that, in the absence of a major equipment malfunction, the device will not require onsite recalibration during the course of the planned field activities. Technical representatives of the manufacturer also consider the procedures presented in ERT SOP 1713 to be unwarranted and redundant. Therefore, Navajo proposes to adhere to the manufacturer-recommended standard operating check procedures rather than the more elaborate and time-consuming procedures specified in ERT SOP No. 1713.

Regarding the reviewer's request to provide a more descriptive narrative on soil delineation, Navajo has endeavored to provide further detail regarding the overall conceptual approach. However, because the surface distribution of waste residuals is expected to be both irregular and sporadic to a degree which is currently unknown, Navajo has not deemed it to be appropriate to attempt to adhere to a rigidly structured protocol for the initial delineation of soils targeted for excavation. As stated in the second paragraph of Section 2.1 of the revised workplan, the Navajo field team leader will use best professional judgment based on the historical knowledge of unit maintenance operations (e.g., side of ditch from which backhoe operated and probable reach of the backhoe bucket relative to its position along the ditch) along with various overt and subtle visual cues (soil discoloration, irregularities, in surface topography, etc.) to accomplish the initial delineation. Because those surface materials that may potentially exceed the excavation criteria can be expected to reside within a relatively narrow corridor located immediately adjacent to the

ditch, Navajo is confident that target excavation materials can be effectively delineated at the time of onsite activities. Finally, Navajo also notes that the verification sampling protocol detailed in Section 2.1 will also confirm the efficacy of the preceding delineation effort.

In response to the final review comment cited above, the reviewer is correct in assuming that the Spectrace 9000 has the capacity to analyze additional metals. However, technical representatives for the manufacturer state that the device relies upon multiple radio-nuclide excitation sources to cover the spectrum of individual elements. Soil sample through-put time is minimized by focusing on constituents of interest and minimizing count time for other elements. In this manner, appropriately detection levels for a constituent of interest can be obtained along with a minimal analytical through-put time.

Navajo's Field Team Leader will focus on lead in the surface materials. Analysis of additional elements other than lead could result in considerable additional analytical time and effort during the course of the planned field work. Navajo notes that metal constituents present in refinery wastewater residuals have consistently exhibited extremely low solubility and transport characteristics, as assessed by characterization of constituent concentration trends within the soil profile and TCLP analyses. On the basis of the nature of the surficial waste residuals and their relatively discrete localization in a narrow band adjacent to the ditch, Navajo fully anticipates that the removal of those materials exhibiting lead concentrations in excess of the clean-up criteria will also be sufficient to effect the concurrent removal of any potential hot spots for other waste-related contaminants of concern.

Comment:

Attachment 2-4; Section 2.4, 4th Paragraph: *Please include in the revised workplan the constituents that will be analyzed in the laboratory.*

Response:

The workplan has been revised at Section 2.4 (third paragraph) indicate that duplicate soil samples obtained during the verification sampling phase and which will be directed to the analytical laboratory for QA/QC purposes will be subjected to analysis according to SW-846 methods 3051 (trace metal digestion) and 7421 (total lead analysis), respectively.

ATTACHMENT 2

PROPOSED WORKPLAN FOR REMOVAL OF SURFICIAL WASTE DEPOSITS AT THREE-MILE DITCH (REVISED)

NAVAJO REFINING COMPANY
ARTESIA, NEW MEXICO

1.0 INTRODUCTION

This document presents the proposed workplan for RCRA Corrective Action Program activities associated with the Solid Waste Management Unit (SWMU) identified as Three-Mile Ditch, which was formerly operated by Navajo Refining Company, Artesia, New Mexico.

In EPA's August 22, 1995 deficiency comments to the Navajo Refining RCRA Facility Investigation-for Three-Mile Ditch and Evaporation Ponds Phase III report (RE/SPEC Inc., April 1995), EPA required that Navajo prepare a soil removal plan for those portions of the ditch at which residual deposits of surficial waste materials have been found to exhibit total lead concentrations in excess of 500 mg/kg. In response, Navajo proposes to conduct soil excavation activities along an identified ditch interval of concern which extends eastward from Bolton Road for approximately 0.5 miles. **The designated interval of concern is located in its entirety within the boundaries of private property owned by Mr. Mack Chase, Chase Farms, P.O. Box 693, Artesia, NM 88211-0693, telephone number (505) 748-3436. The approximate location of the designated interval of concern and the surrounding private property boundary in which it is contained are presented in Figure A2-1.**

Environmental sampling and analysis of surficial dredge spoils material along this segment of the unit yielded sample lead concentrations ranging from 530 to 11,600 mg/kg (Table 3-1, RFI Phase III Report). As discussed in Section 3.1.4 of the RFI Phase III report, the most upgradient interval of concern coincides with a significant decrease in the surface slope along the ditch that resulted in significant deposition of waste solids. Deposition in this area required periodic dredging to maintain a proper flow channel. The dredged deposits were placed on the ditch bank adjacent to the channel sections being cleared.

Details of the soil removal workplan for this identified ditch interval of concern are presented in the following sections. Section 2.0 describes the sampling and analysis strategy to be employed in delineating those soils targeted for excavation and removal, equipment and

procedures to be employed in those excavation operations, disposition of the excavated materials, and post-excavation sampling and analysis used to verify the efficacy of the corrective actions. Discussion of project health and safety requirements are presented in Section 3.0 and details of information to be presented in a post-corrective action report to be submitted to EPA Region 6 are described in Section 4.0.

2.0 CORRECTIVE ACTION PLAN

This section details the workplan approach to identifying and excavating soil contaminants along the unit interval of concern at the Three-Mile Ditch. In brief, soil materials exceeding the acceptance criteria (500 mg/kg) will be characterized and delineated primarily on the basis of on-site sample analyses. A field-portable X-ray fluorescence analyzer will be used to quantify total lead content of soil samples. Delineation of soils targeted for removal will begin immediately (within one to two days) prior to the beginning of soil excavation and removal operations. Subsequent to excavation completion at discrete intervals, verification sampling will be immediately conducted so that any follow-up excavation of residual hot spots can be accomplished while excavation equipment remains in the vicinity.

Excavated soils will be transported to Pond 1 by dump truck, where they will be dumped at intervals across the surface of the pond. Earth moving equipment will then distribute the excavated soils over the Pond 1 unit surface in a thin (3-5 inches) application layer, and the surface-applied materials will then be disced into the receiving soil to complete the incorporation process.

The various features of the workplan are described in further detail in the following sections.

2.1 Sampling and Analysis Strategy

A field-portable X-ray fluorescence analyzer (Spectrace 9000, TN Technologies, Inc.) will be used to obtain on-site measurements of the total lead content of surficial soil materials located adjacent to the unit. The Spectrace 9000 is well-demonstrated to be a reliable analytical tool for on-site applications. It has been employed by organizations such as the USEPA Environmental Response Team (ERT) and numerous state environmental agencies. ~~For the current proposed application, on-site equipment operating and decontamination procedures for the Spectrace 9000 unit will follow USEPA ERT Standard Operating Procedure (SOP) No. 1713~~.

Methods used to delineate soils targeted for excavation will be left to the discretion of the Navajo on-site field team leader, but are expected to be based on a combination of systematic random and biased sampling. **The Navajo field team leader will use best professional judgment based on the historical knowledge of unit maintenance operations (e.g., side of**

ditch from which backhoe operations were formerly conducted, and probable reach of the backhoe bucket relative to its position along the ditch) along with various overt and subtle visual cues (soil discoloration, irregularities in surface topography, etc.) to accomplish the initial delineation. Because those surface materials that may potentially exceed the excavation criteria can be expected to reside within a relatively narrow corridor located immediately adjacent to the ditch, Navajo is confident that target excavation materials can be effectively delineated at the time of onsite activities.

The effectiveness of the preceding delineation and excavation activities will be confirmed by collection and analysis of soil verification samples which will be in a continuous manner along the entire length of the targeted ditch section, and which will also be conducted according to the formal protocol specified herein. Beginning at the designated terminus of the ditch interval of concern, a series of consecutive 50-foot intervals will be physically defined, and a random number chart will be used to generate two random sample locations occurring between a distance of 5 and 45 feet within the confines of each such interval (this proscribed internal sample interval will ensure that samples obtained from adjacent 50-foot intervals will be separated by a minimum distance of 10 feet).

At each verification sampling location, a composite sample will be obtained by combining three subsamples collected at a sample depth extending from approximately 0-6 inches, as measured from surface grade. The subsamples will be collected along an axis perpendicular to the ditch orientation, and will be separated by a distance of three-feet or less (depending upon the width of the soil excavation corridor). In the event that the excavation width at the sample collection point exceeds a total length of 12 feet, a second independent grab sample will also be collected within one foot of the outer edge of the excavation corridor at either side, with the location to be decided by the field team leader in consultation with on-site EPA oversight personnel (if present).

In the event that a verification sample yields a lead concentration value in excess of the remediation target, the sample location will be flagged and additional samples will be collected at a distance of 10 feet to each side of the identified hot spot, and proceeding outwards thereafter from the initial sample exceedance location until no further exceedances are reported. The field team leader will then rely on the on-site sample analyses together with visual observations to delineate the additional surface area for which excavation will be required. Subsequent to the follow-up excavation, all sample locations that yielded a target concentration exceedance will be resampled to verify the efficacy of the follow-up excavation action. This process will be repeated as necessary until no further target level exceedances are reported.

Following the completion of verification sampling, shallow excavation zones extending to a depth less than three-feet from surface grade will be contoured to restore the land surface to a smooth surface conformation posing no surface hazard or excessive potential for accumulation and ponding of surface water. Although considered unlikely, in the event that soil excavations exceed a depth of three feet, imported clean fill material will be used to restore any such areas to a suitable grade.

In addition to the samples to be collected during the execution of the sampling strategy described above, additional duplicate samples will be collected for purposes of quality assurance and quality control, as described in Section 2.4 of this workplan.

2.2 Soil Excavation and Hauling Equipment

Depending on site access conditions, either a diesel trackhoe or backhoe will be used to excavate the delineated surficial wastes and waste-contaminated soils, and a 12 or 14 cubic-yard capacity dump truck will transport the excavated materials to Pond 1. Should excavation activities result in an excessive amount of airborne dust, an 80-barrel bob-tail water truck will also be available as needed for the purpose of dust suppression.

2.3 Establishment of Remediation Acceptance Criteria

As described above, the proposed verification sampling will identify any residual areas exceeding the cleanup criteria at the time of excavation. Therefore, corrective action activities will be considered complete when all verification sampling is completed and no further samples yield lead concentration values in exceedance of the 500 mg/kg target criteria. Based on a minimum of two samples per 50-feet interval and an approximate length of 0.5 miles for the designated interval of concern, approximately 105 soil samples (minimum) will be documented during the verification sampling process. In order to verify the accuracy of the on-site sample analyses, a number of additional duplicate samples will also be evaluated, as described in the next section.

Assessment of the environmental status of Pond 1 surface soils following the receipt of the materials excavated from Three-Mile Ditch will be undertaken under a separate program in conjunction with formal unit closure activities at Pond 1.

2.4 Data Documentation and Quality Assurance/Quality Control

All sampling intervals, sample locations and associated analytical data will be recorded in the project log book along with the date and time at which each sample was collected. Each of the 50-foot verification sampling intervals will be assigned a unique identifying designator, and each sample collected from within the various intervals will also be assigned a unique designator

according to a hierarchical arrangement. The following nomenclature will be employed: TMD-VSI(x), where TMD, VS and (x) signify Three-Mile Ditch, Verification Sample Interval, and the specific interval, respectively, and specific sample locations within each interval will follow the nomenclature TMD-VSI(x)-x. To the extent possible, verification sampling intervals and specific locations will be related to distinguishing landmarks (adjacent monitoring wells, fence lines, etc.). For the case in which verification samples yield lead target exceedance and secondary excavation and resampling is required, re-samples obtained at previous sample locations will be appended with the designation 'R' to indicate a re-sampling event. Sample locations selected at 10-foot intervals at each side of the sample initially yielding a target exceedance will be designated as TMD-VSI(x)-xR-10E or -10W, where E and W correspond to their orientation from the central sample location (the unit extends along an east-west orientation) and where the numerical assignment represents the distance from the originating central sample.

Precision and repeatability of the on-site analytical measurements will be confirmed by analysis of duplicate samples at sample locations that will be selected at random at a frequency of 5 percent.

The accuracy of on-site analytical measurements will be assessed by the collection of additional duplicate samples (also randomly selected at a frequency of 5 percent), which will be placed in appropriate sample storage containers and shipped to a designated analytical laboratory, accompanied by chain-of-custody documentation.

~~In accordance with the Spectrace 9000 equipment calibration recommendations presented at Sections 7.3.1 and 7.3.2 of USEPA ERT SOP 1713, an initial energy calibration will be conducted at the initiation of field activities, and subsequent energy calibration checks, resolution checks, and blank sample checks will be conducted on a daily basis prior to the initiation of field activities.~~ **Prior to the daily initiation of onsite field activities, the field analytical device will be subject to a standard operating check in accordance with the manufacturer-provided Users Manual.** All daily calibration-related activities will be noted in the project log book.

While additional calibration checks may be conducted at the discretion of the Navajo field team leader, technical representatives of the manufacturer assert that the Spectrace 9000 is a highly reliable analytical device, which, in the absence of a major equipment malfunction, is unlikely to require re-calibration during the duration of the planned field work.

In addition to the documentation of field activities, analytical test results and QA/QC procedures and measurements, the total volume of contaminated materials excavated from the

unit and transported to Pond 1 will be tracked by recording the total number of dump truck trips to Pond 1.

3.0 PROJECT HEALTH AND SAFETY PROGRAM

Prior to the initiation of the on-site activities at Three-Mile Ditch described above, a site-specific Project Health and Safety (H&S) Plan will be developed. Primary hazards associated with the proposed field activities involve physical proximity to heavy equipment operations, and potential inhalation exposure to contaminant-bearing dust particulates. The latter concern will be addressed in the project H&S plan through the use of appropriate personal protective equipment (PPE). In particular, respirators equipped with High Efficiency Particulate-Absolute (HEPA) grade cartridge filters will be available for equipment operators directly engaged in excavation activities, and NIOSH-approved disposable dust-respirators will be available for on-site personnel engaged in auxiliary sampling and oversight activities.

The unit is located in an area which is remote from human residences or other areas of intense activities. Therefore, minimal environmental hazard to the general public is anticipated as a result of the proposed remediation activities. Since transport of excavated materials will require its passage on public roads and highways for limited distances, the bed of the dump truck will be tightly secured with a tarp cover in order to ensure that fugitive dusts are not released in public contact areas during transport of contaminated materials to Pond 1. The dump truck will be visually observed on a periodic basis during transit in order to visually confirm the containment integrity of the transported materials.

4.0 REPORTING REQUIREMENTS

A summary report describing remedial activities at the designated ditch interval of concern along the unit will be prepared and submitted to EPA Region 6 within 60 days of the completion of filed activities. The report will describe all activities associated with the execution of the remediation project, including all sample locations and associated analytical data, and total volume of excavated soil materials. A photocopy of the project log book, a photographic log, and analytical laboratory reports will also be included as appendices to the report.

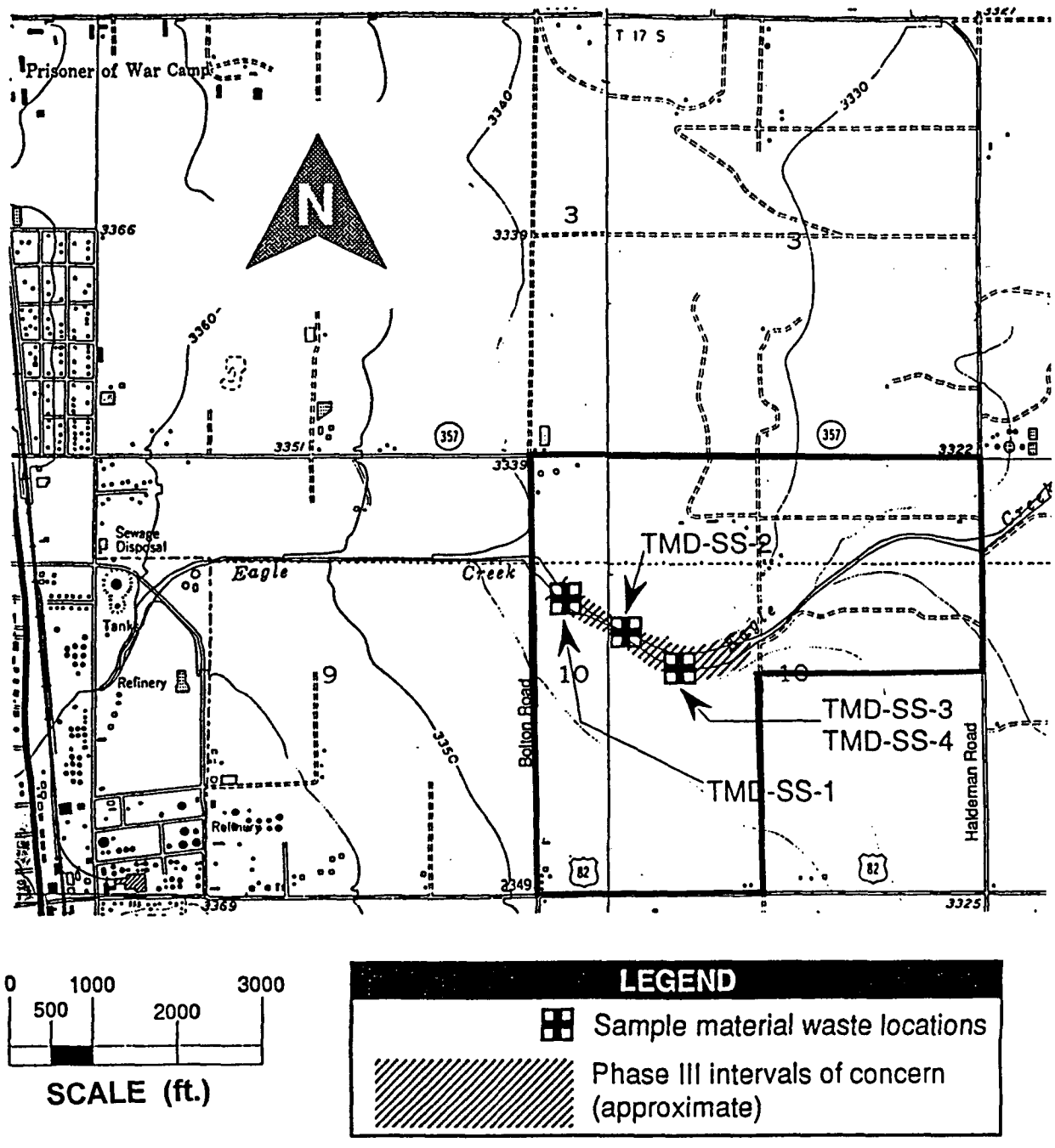

Figure A2-1. Potential Soil Removal Areas, Three-Mile Ditch

ATTACHMENT 2

PROPOSED WORKPLAN FOR REMOVAL OF SURFICIAL WASTE DEPOSITS AT THREE-MILE DITCH (REVISED)

NAVAJO REFINING COMPANY
ARTESIA, NEW MEXICO

1.0 INTRODUCTION

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Environmental sampling and analysis of surficial dredge spoils material along this segment of the unit yielded sample lead concentrations ranging from 530 to 11,600 mg/kg (Table 3-1, RFI Phase III Report). As discussed in Section 3.1.4 of the RFI Phase III report, the most upgradient interval of concern coincides with a significant decrease in the surface slope along the ditch that resulted in significant deposition of waste solids. Deposition in this area required periodic dredging to maintain a proper flow channel. The dredged deposits were placed on the ditch bank adjacent to the channel sections being cleared.

Details of the soil removal workplan for this identified ditch interval of concern are presented in the following sections. Section 2.0 describes the sampling and analysis strategy to be employed in delineating those soils targeted for excavation and removal, equipment and

procedures to be employed in those excavation operations, disposition of the excavated materials, and post-excavation sampling and analysis used to verify the efficacy of the corrective actions. Discussion of project health and safety requirements are presented in Section 3.0 and details of information to be presented in a post-corrective action report to be submitted to EPA Region 6 are described in Section 4.0.

2.0 CORRECTIVE ACTION PLAN

This section details the workplan approach to identifying and excavating soil contaminants along the unit interval of concern at the Three-Mile Ditch. In brief, soil materials exceeding the acceptance criteria (500 mg/kg) will be characterized and delineated primarily on the basis of on-site sample analyses. A field-portable X-ray fluorescence analyzer will be used to quantify total lead content of soil samples. Delineation of soils targeted for removal will begin immediately (within one to two days) prior to the beginning of soil excavation and removal operations. Subsequent to excavation completion at discrete intervals, verification sampling will be immediately conducted so that any follow-up excavation of residual hot spots can be accomplished while excavation equipment remains in the vicinity.

Excavated soils will be transported to Pond 1 by dump truck, where they will be dumped at intervals across the surface of the pond. Earth moving equipment will then distribute the excavated soils over the Pond 1 unit surface in a thin (3-5 inches) application layer, and the surface-applied materials will then be disced into the receiving soil to complete the incorporation process.

The various features of the workplan are described in further detail in the following sections.

2.1 Sampling and Analysis Strategy

A field-portable X-ray fluorescence analyzer (Spectrace 9000, TN Technologies, Inc.) will be used to obtain on-site measurements of the total lead content of surficial soil materials located adjacent to the unit. The Spectrace 9000 is well-demonstrated to be a reliable analytical tool for on-site applications. It has been employed by organizations such as the USEPA Environmental Response Team (ERT) and numerous state environmental agencies.

Methods used to delineate soils targeted for excavation will be left to the discretion of the Navajo on-site field team leader, but are expected to be based on a combination of systematic random and biased sampling. The Navajo field team leader will use best professional judgment based on the historical knowledge of unit maintenance operations (e.g., side of ditch from which backhoe operations were formerly conducted, and probable reach of the backhoe bucket relative to its position along the ditch) along with various overt and subtle visual cues (soil discoloration,

irregularities in surface topography, etc.) to accomplish the initial delineation. Because those surface materials that may potentially exceed the excavation criteria can be expected to reside within a relatively narrow corridor located immediately adjacent to the ditch, Navajo is confident that target excavation materials can be effectively delineated at the time of onsite activities.

The effectiveness of the preceding delineation and excavation activities will be confirmed by collection and analysis of soil verification samples which will be in a continuous manner along the entire length of the targeted ditch section, and which will also be conducted according to the formal protocol specified herein. Beginning at the designated terminus of the ditch interval of concern, a series of consecutive 50-foot intervals will be physically defined, and a random number chart will be used to generate two random sample locations occurring between a distance of 5 and 45 feet within the confines of each such interval (this proscribed internal sample interval will ensure that samples obtained from adjacent 50-foot intervals will be separated by a minimum distance of 10 feet).

At each verification sampling location, a composite sample will be obtained by combining three subsamples collected at a sample depth extending from approximately 0-6 inches, as measured from surface grade. The subsamples will be collected along an axis perpendicular to the ditch orientation, and will be separated by a distance of three-feet or less (depending upon the width of the soil excavation corridor). In the event that the excavation width at the sample collection point exceeds a total length of 12 feet, a second independent grab sample will also be collected within one foot of the outer edge of the excavation corridor at either side, with the location to be decided by the field team leader in consultation with on-site EPA oversight personnel (if present).

In the event that a verification sample yields a lead concentration value in excess of the remediation target, the sample location will be flagged and additional samples will be collected at a distance of 10 feet to each side of the identified hot spot, and proceeding outwards thereafter from the initial sample exceedance location until no further exceedances are reported. The field team leader will then rely on the on-site sample analyses together with visual observations to delineate the additional surface area for which excavation will be required. Subsequent to the follow-up excavation, all sample locations that yielded a target concentration exceedance will be resampled to verify the efficacy of the follow-up excavation action. This process will be repeated as necessary until no further target level exceedances are reported.

Following the completion of verification sampling, shallow excavation zones extending to a depth less than three-feet from surface grade will be contoured to restore the land surface to a smooth surface conformation posing no surface hazard or excessive potential for accumulation

and ponding of surface water. Although considered unlikely, in the event that soil excavations exceed a depth of three feet, imported clean fill material will be used to restore any such areas to a suitable grade.

In addition to the samples to be collected during the execution of the sampling strategy described above, additional duplicate samples will be collected for purposes of quality assurance and quality control, as described in Section 2.4 of this workplan.

2.2 Soil Excavation and Hauling Equipment

Depending on site access conditions, either a diesel trackhoe or backhoe will be used to excavate the delineated surficial wastes and waste-contaminated soils, and a 12 or 14 cubic-yard capacity dump truck will transport the excavated materials to Pond 1. Should excavation activities result in an excessive amount of airborne dust, an 80-barrel bob-tail water truck will also be available as needed for the purpose of dust suppression.

2.3 Establishment of Remediation Acceptance Criteria

As described above, the proposed verification sampling will identify any residual areas exceeding the cleanup criteria at the time of excavation. Therefore, corrective action activities will be considered complete when all verification sampling is completed and no further samples yield lead concentration values in exceedance of the 500 mg/kg target criteria. Based on a minimum of two samples per 50-feet interval and an approximate length of 0.5 miles for the designated interval of concern, approximately 105 soil samples (minimum) will be documented during the verification sampling process. In order to verify the accuracy of the on-site sample analyses, a number of additional duplicate samples will also be evaluated, as described in the next section.

Assessment of the environmental status of Pond 1 surface soils following the receipt of the materials excavated from Three-Mile Ditch will be undertaken under a separate program in conjunction with formal unit closure activities at Pond 1.

2.4 Data Documentation and Quality Assurance/Quality Control

All sampling intervals, sample locations and associated analytical data will be recorded in the project log book along with the date and time at which each sample was collected. Each of the 50-foot verification sampling intervals will be assigned a unique identifying designator, and each sample collected from within the various intervals will also be assigned a unique designator according to a hierarchical arrangement. The following nomenclature will be employed: TMD-VSI(x), where TMD, VS and (x) signify Three-Mile Ditch, Verification Sample Interval, and the specific interval, respectively, and specific sample locations within each interval will follow the

nomenclature TMD-VSI(x)-x. To the extent possible, verification sampling intervals and specific locations will be related to distinguishing landmarks (adjacent monitoring wells, fence lines, etc.). For the case in which verification samples yield lead target exceedance and secondary excavation and resampling is required, re-samples obtained at previous sample locations will be appended with the designation 'R' to indicate a re-sampling event. Sample locations selected at 10-foot intervals at each side of the sample initially yielding a target exceedance will be designated as TMD-VSI(x)-xR-10E or -10W, where E and W correspond to their orientation from the central sample location (the unit extends along an east-west orientation) and where the numerical assignment represents the distance from the originating central sample.

Precision and repeatability of the on-site analytical measurements will be confirmed by analysis of duplicate samples at sample locations that will be selected at random at a frequency of 5 percent.

The accuracy of on-site analytical measurements will be assessed by the collection of additional duplicate samples (also randomly selected at a frequency of 5 percent), which will be placed in appropriate sample storage containers and shipped to a designated analytical laboratory, accompanied by chain-of-custody documentation.

Prior to the daily initiation of onsite field activities, the field analytical device will be subject to a standard operating check in accordance with the manufacturer-provided Users Manual. All daily calibration-related activities will be noted in the project log book.

While additional calibration checks may be conducted at the discretion of the Navajo field team leader, technical representatives of the manufacturer assert that the Spectrace 9000 is a highly reliable analytical device, which, in the absence of a major equipment malfunction, is unlikely to require re-calibration during the duration of the planned field work.

In addition to the documentation of field activities, analytical test results and QA/QC procedures and measurements, the total volume of contaminated materials excavated from the unit and transported to Pond 1 will be tracked by recording the total number of dump truck trips to Pond 1.

3.0 PROJECT HEALTH AND SAFETY PROGRAM

Prior to the initiation of the on-site activities at Three-Mile Ditch described above, a site-specific Project Health and Safety (H&S) Plan will be developed. Primary hazards associated with the proposed field activities involve physical proximity to heavy equipment operations, and potential inhalation exposure to contaminant-bearing dust particulates. The latter concern will be addressed in the project H&S plan through the use of appropriate personal protective equipment (PPE). In particular, respirators equipped with High Efficiency Particulate-Absolute (HEPA) grade cartridge filters will be available for equipment operators directly engaged in excavation activities, and NIOSH-approved disposable dust-respirators will be available for on-site personnel engaged in auxiliary sampling and oversight activities.

The unit is located in an area which is remote from human residences or other areas of intense activities. Therefore, minimal environmental hazard to the general public is anticipated as a result of the proposed remediation activities. Since transport of excavated materials will require its passage on public roads and highways for limited distances, the bed of the dump truck will be tightly secured with a tarp cover in order to ensure that fugitive dusts are not released in public contact areas during transport of contaminated materials to Pond 1. The dump truck will be visually observed on a periodic basis during transit in order to visually confirm the containment integrity of the transported materials.

4.0 REPORTING REQUIREMENTS

A summary report describing remedial activities at the designated ditch interval of concern along the unit will be prepared and submitted to EPA Region 6 within 60 days of the completion of filed activities. The report will describe all activities associated with the execution of the remediation project, including all sample locations and associated analytical data, and total volume of excavated soil materials. A photocopy of the project log book, a photographic log, and analytical laboratory reports will also be included as appendices to the report.

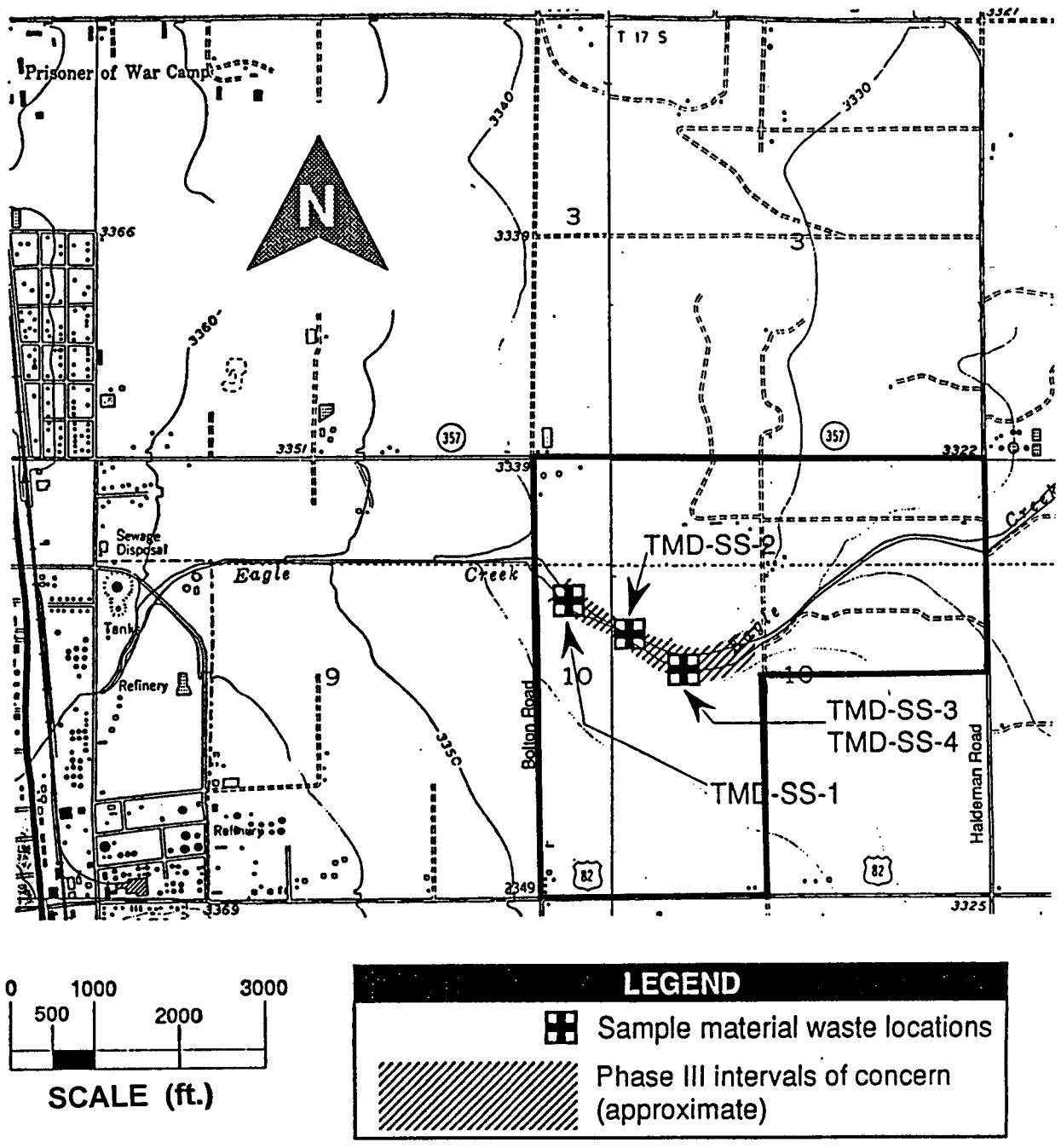


Figure A2-1. Potential Soil Removal Areas, Three-Mile Ditch

TELEPHONE
(505) 748-3311

EASYLINK
62905278

NAVAJO REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

FAX
(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

January 31, 1996

Mr. Rich Mayer, Environmental Engineer
RCRA Permits Branch
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Transmittal of Supplemental Pond 1 Soil Sampling Data

Dear Mr. Mayer:

Please find the enclosed as Attachment I the analytical laboratory report package for environmental soil samples collected at Pond 1. The soil sampling was conducted in response to a requirement for additional Pond 1 soils data, as specified in the October 18, 1995 EPA Region 6 review comments on the revised Corrective Measures (CMS) workplan for Pond 1.

The requested Pond 1 soil sampling was subsequently conducted by Navajo on December 13, 1995. As shown in the attached figure, soil samples were collected at three locations within the peripheral "ring areas" of the unit. The collection of the soil samples was conducted according to the procedures employed at the time of the RFI Phase II soil sampling that was previously conducted at the unit. In brief, a trackhoe was used to create trenches from which samples were collected directly from the trench (3-foot sample interval depth) of from the trackhoe bucket (six and nine-foot sample intervals).

The soil samples were analyzed for the following constituents:

Volatile organics (SW-846 Method 8240)
Semivolatile organics (SW-846 Method 8270)
TCLP volatiles and semivolatiles and metals (Method 1311).

The laboratory analyses of these most recent Pond 1 soil samples yielded results that are consistent with the preceding evaluation of Pond 1 soil samples performed during the RFI Phase II (presented as Attachment 2 to this transmittal). No TC Rule constituents (organics or metals) were reported at levels above specified TC Rule limits. A summary of those hazardous organic constituents for which analytical detection events were reported is presented in Table 1 enclosed with this letter.

Soil samples collected at the time of the December 13, 1995 sampling event were not analyzed according to the diesel range-crude oil range fractionation method previously employed as an analytical technique for Pond 1 soils (Revised Pond 1 Corrective Measures Study Workplan, August 1995). Navajo is currently planning the additional sampling and analytical work necessary to acquire these analyses for the target Pond 1 soil sample locations. The remaining analytical data will be submitted to you on or before April 1. 1996.

Please contact me at (505) 748-3311 if you have any questions regarding this matter.

Sincerely,

David G. Griffin
Manager of Environmental
Affairs for Water & Waste

DGG/te

encl.

cc: Phil Youngblood
Navajo Director of
Environmental Affairs

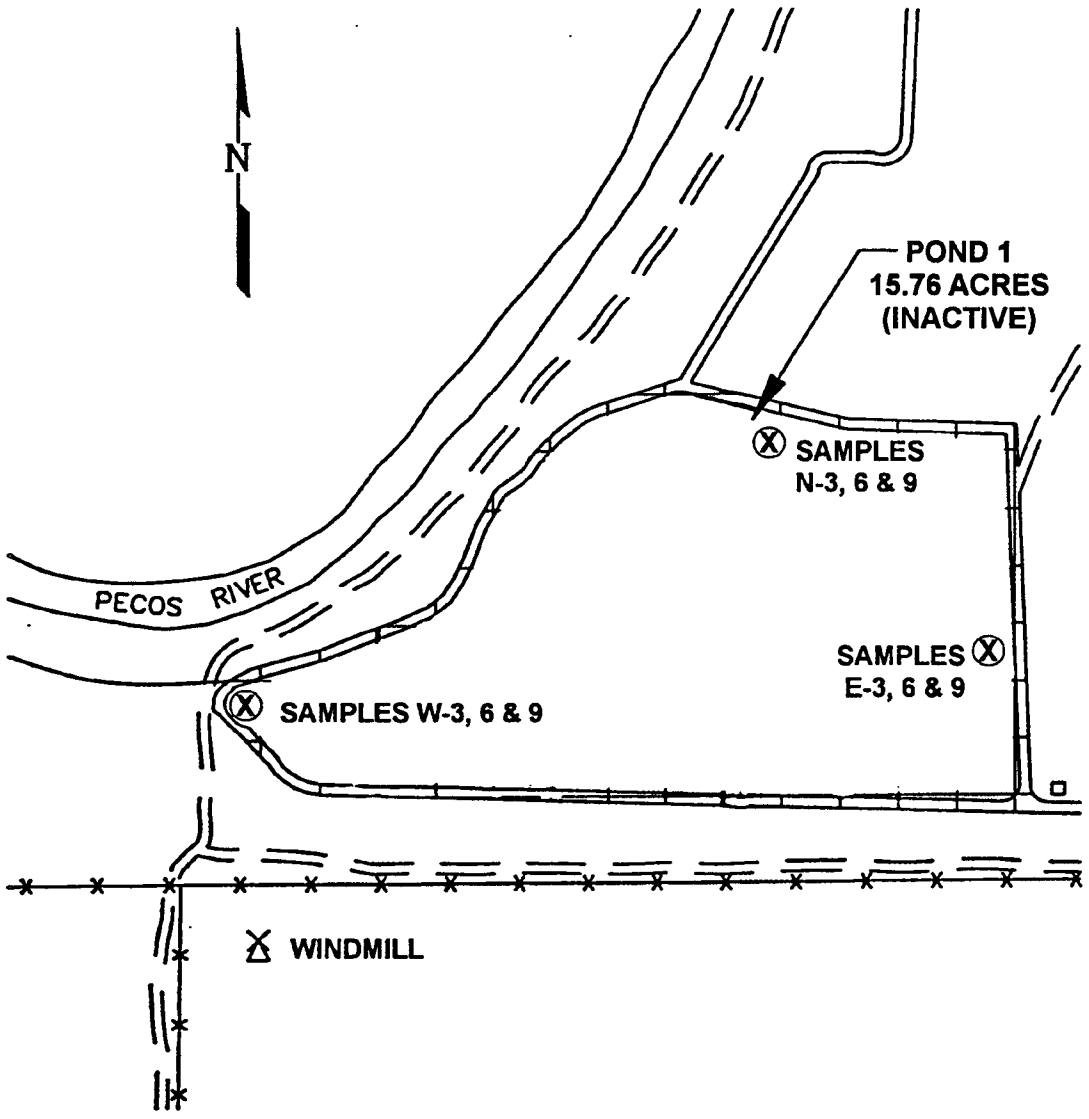
Table 1. Summary of Analytical Results for December 13, 1995 Soil Sampling Event at Pond 1

Constituent	Sample Location								
	E-3	E-6	E-9	W-3	W-6	W-9	N-3	N-6	N-9
Volatiles (mg/kg)									
benzene	<0.025	<0.025	<0.025	<0.250	<0.250	< 0.025	< 0.025	< 0.025	< 0.025
toluene	<0.025	<0.025	0.077	<0.250	<0.250	< 0.025	< 0.025	< 0.025	0.046
ethylbenzene	<0.025	<0.025	<0.025	1.57	0.284	< 0.025	< 0.025	< 0.025	< 0.025
xylenes	<0.025	<0.025	<0.025	1.07	<0.250	< 0.025	< 0.025	< 0.025	< 0.025
Semivolatiles (mg/kg)									
anthracene	<25	<25	<25	133	26.6	<2.5	<2.5	<2.5	<2.5
fluorene	<25	<25	<25	38.6	<25	<2.5	<2.5	<2.5	<2.5
2-methyl-naphthalene	<25	<25	<25	50.9	<25	<2.5	<2.5	<2.5	<2.5
pyrene	<25	<25	<25	36.1	<25	<2.5	<2.5	<2.5	<2.5

Attachment 1

Evaporation Pond 1 Soil Sampling Data
December 13, 1995

Rich Mayer
January 31, 1996



Attachment 1
Pond 1 soil sample locations,
December 13, 1995

5665-73

TraceAnalysis, Inc.

6701 Aberdeen Avenue Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: DARRELL MOORE
Phone #: 505-748-3311
FAX #: 505-748-9077

Company Name & Address: NAVAJO REFINING

Project #:
Project Name :

Project Location: ARTESIA NM 88211
Sampler Signature: Neal Pageau

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	BTEX, MTBE	TPH	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	8240/8260	8270
45665	EVA-POND1-E3 Hole #1	1	8 oz		X					X	X	12-13-95	1:32	X			X	X	X		X	X
66	EVA-POND1-E6 Hole #1	1	"		X					X	X	"	1:39	X			X	X	X		X	X
67	EVA-POND1-E9 Hole #1	1	"		X					X	X	"	1:48	X			X	X	X		X	X
68	EVA-POND1-W3 Hole #3	1	"		X					X	X	"	2:20	X			X	X	X		X	X
69	EVA-POND1-W6 "	1	"		X					X	X	"	2:25	X			X	X	X		X	X
70	EVA-POND1-W9 "	1	"		X					X	X	"	2:40	X			X	X	X		X	X
71	EVA-POND1-N3 Hole #2	1	"		X					X	X	"	2:00	X			X	X	X		X	X
72	EVA-POND1-N6 Hole #2	1	"		X					X	X	"	2:06	X			X	X	X		X	X
73	EVA-POND1-N9 Hole #2	1	"		X					X	X	"	2:15	X			X	X	X		X	X

D.W. 12-14-95

SPECIAL HANDLING
Turn around # of days
Fax ASAP
Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
David W. Griffin	12/13/95	16:30			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: ML CF	12-14-95	

REMARKS

348AM

348AM

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/20/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

TCLP METALS (mg/L)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ba	Ag	Hg
	EPA LIMIT =	5.0	1.0	5.0	1.0	5.0	100.0	5.0	0.20
T45665	EVA-POND 1-E3 Hole #1	0.2	0.1	0.62	0.11	0.2	0.6	0.02	<0.01
QC	Quality Control	5.8	5.8	5.9	6.1	5.6	6.0	1.2	0.050
Reporting Limit		0.1	0.1	0.05	0.02	0.1	0.2	0.01	0.01
RPD		4	2	2	2	2	2	0	0
% Extraction Accuracy		131	142	127	126	103	128	111	102
% Instrument Accuracy		117	116	118	122	113	119	115	100

METHODS: EPA SW 846-1311, 6010, 7470.
TCLP METALS SPIKE: 8.0 mg/L As, Se, Ba; 0.8 mg/L Cr; 0.2 mg/L Cd, Ag; 2.0 mg/L Pb; and 0.050 mg/L Hg.
TCLP METALS QC: 5.0 mg/L As, Se, Cr, Cd, Pb, Ba; 1.0 mg/L Ag; 0.050 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/20/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

TCLP METALS (mg/L)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ba	Ag	Hg
	EPA LIMIT =	5.0	1.0	5.0	1.0	5.0	100.0	5.0	0.20
T45666	EVA-POND 1-E6 Hole #1	<0.1	0.1	0.61	<0.02	<0.1	0.6	<0.01	<0.01
T45667	EVA-POND 1-E9 Hole #1	<0.1	<0.1	0.14	<0.02	<0.1	0.7	<0.01	<0.01
T45668	EVA-POND 1-W3 Hole #3	<0.1	<0.1	0.21	<0.02	0.2	1.5	<0.01	<0.01
T45669	EVA-POND 1-W6 Hole #3	<0.1	<0.1	0.15	<0.02	<0.1	0.3	<0.01	<0.01
T45670	EVA-POND 1-W9 Hole #3	<0.1	<0.1	0.09	<0.02	<0.1	1.0	<0.01	<0.01
T45671	EVA-POND 1-N3 Hole #2	<0.1	0.2	0.26	<0.02	<0.1	0.9	<0.01	<0.01
T45672	EVA-POND 1-N6 Hole #2	<0.1	0.2	0.15	<0.02	<0.1	0.9	<0.01	<0.01
T45673	EVA-POND 1-N9 Hole #2	<0.1	0.1	0.13	<0.02	<0.1	0.7	<0.01	<0.01
QC	Quality Control	6.3	6.5	6.1	6.3	5.7	6.2	1.2	0.050
Reporting Limit		0.1	0.1	0.05	0.02	0.1	0.2	0.01	0.01
RPD		2	6	0	2	2	2	4	0
% Extraction Accuracy		117	128	99	93	91	97	94	102
% Instrument Accuracy		126	130	122	125	114	123	116	100

METHODS: EPA SW 846-1311, 6010, 7470.
TCLP METALS SPIKE: 8.0 mg/L As, Se, Ba; 0.8 mg/L Cr; 0.2 mg/L Cd, Ag; 2.0 mg/L Pb; and 0.050 mg/L Hg.
TCLP METALS QC: 5.0 mg/L As, Se, Cr, Cd, Pb, Ba; 1.0 mg/L Ag; 0.050 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/19/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45665 EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.117	3	121	117
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.097	12	162	97
Chloroform	6.00	0.05	ND	0.091	3	94	91
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.091	5	93	91
Carbon Tetrachloride	0.50	0.05	ND	0.088	3	105	88
Trichloroethene	0.50	0.05	ND	0.083	5	90	83
Tetrachloroethene	0.70	0.05	ND	0.086	3	103	86
Chlorobenzene	100.00	0.05	ND	0.095	4	92	95
1,4-Dichlorobenzene	7.50	0.05	ND	0.094	3	94	94

SURROGATES	% Recovery
Dibromofluoromethane	114
Toluene-d8	107
4-Bromofluorobenzene	98

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
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FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/19/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45666 EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.117	3	121	117
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.097	12	162	97
Chloroform	6.00	0.05	ND	0.091	3	94	91
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.091	5	93	91
Carbon Tetrachloride	0.50	0.05	ND	0.088	3	105	88
Trichloroethene	0.50	0.05	ND	0.083	5	90	83
Tetrachloroethene	0.70	0.05	ND	0.086	3	103	86
Chlorobenzene	100.00	0.05	ND	0.095	4	92	95
1,4-Dichlorobenzene	7.50	0.05	ND	0.094	3	94	94

SURROGATES	% Recovery
Dibromofluoromethane	112
Toluene-d8	106
4-Bromofluorobenzene	97

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
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FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/20/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45667 EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.117	3	121	117
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.097	12	162	97
Chloroform	6.00	0.05	ND	0.091	3	94	91
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.091	5	93	91
Carbon Tetrachloride	0.50	0.05	ND	0.088	3	105	88
Trichloroethene	0.50	0.05	ND	0.083	5	90	83
Tetrachloroethene	0.70	0.05	ND	0.086	3	103	86
Chlorobenzene	100.00	0.05	ND	0.095	4	92	95
1,4-Dichlorobenzene	7.50	0.05	ND	0.094	3	94	94

SURROGATES	**% Recovery**
Dibromofluoromethane	114
Toluene-d8	106
4-Bromofluorobenzene	98

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/20/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45668 EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.117	3	121	117
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.097	12	162	97
Chloroform	6.00	0.05	ND	0.091	3	94	91
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.091	5	93	91
Carbon Tetrachloride	0.50	0.05	ND	0.088	3	105	88
Trichloroethene	0.50	0.05	ND	0.083	5	90	83
Tetrachloroethene	0.70	0.05	ND	0.086	3	103	86
Chlorobenzene	100.00	0.05	ND	0.095	4	92	95
1,4-Dichlorobenzene	7.50	0.05	ND	0.094	3	94	94

SURROGATES	**% Recovery**
Dibromofluoromethane	110
Toluene-d8	107
4-Bromofluorobenzene	100

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, ~~Dr.~~ Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/20/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45669 EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.117	3	121	117
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.097	12	162	97
Chloroform	6.00	0.05	ND	0.091	3	94	91
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.091	5	93	91
Carbon Tetrachloride	0.50	0.05	ND	0.088	3	105	88
Trichloroethene	0.50	0.05	ND	0.083	5	90	83
Tetrachloroethene	0.70	0.05	ND	0.086	3	103	86
Chlorobenzene	100.00	0.05	ND	0.095	4	92	95
1,4-Dichlorobenzene	7.50	0.05	ND	0.094	3	94	94

SURROGATES	% Recovery
Dibromofluoromethane	115
Toluene-d8	105
4-Bromofluorobenzene	98

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/20/95
Analysis Date: 12/23/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45670 EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.103	3	121	103
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.100	12	162	100
Chloroform	6.00	0.05	ND	0.087	3	94	87
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.086	5	93	86
Carbon Tetrachloride	0.50	0.05	ND	0.082	3	105	82
Trichloroethene	0.50	0.05	ND	0.081	5	90	81
Tetrachloroethene	0.70	0.05	ND	0.081	3	103	81
Chlorobenzene	100.00	0.05	ND	0.088	4	92	88
1,4-Dichlorobenzene	7.50	0.05	ND	0.108	3	94	108

SURROGATES	**% Recovery**
Dibromofluoromethane	108
Toluene-d8	104
4-Bromofluorobenzene	99

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/21/95
Analysis Date: 12/23/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45671 EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.103	3	121	103
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.100	12	162	100
Chloroform	6.00	0.05	ND	0.087	3	94	87
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.086	5	93	86
Carbon Tetrachloride	0.50	0.05	ND	0.082	3	105	82
Trichloroethene	0.50	0.05	ND	0.081	5	90	81
Tetrachloroethene	0.70	0.05	ND	0.081	3	103	81
Chlorobenzene	100.00	0.05	ND	0.088	4	92	88
1,4-Dichlorobenzene	7.50	0.05	ND	0.108	3	94	108

SURROGATES	% Recovery
Dibromofluoromethane	108
Toluene-d8	104
4-Bromofluorobenzene	96

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/21/95
Analysis Date: 12/23/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45672 EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.103	3	121	103
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.100	12	162	100
Chloroform	6.00	0.05	ND	0.087	3	94	87
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.086	5	93	86
Carbon Tetrachloride	0.50	0.05	ND	0.082	3	105	82
Trichloroethene	0.50	0.05	ND	0.081	5	90	81
Tetrachloroethene	0.70	0.05	ND	0.081	3	103	81
Chlorobenzene	100.00	0.05	ND	0.088	4	92	88
1,4-Dichlorobenzene	7.50	0.05	ND	0.108	3	94	108

SURROGATES	% Recovery
Dibromofluoromethane	103
Toluene-d8	105
4-Bromofluorobenzene	98

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

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Director, Dr. Bruce McDonell

1/4/96
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/21/95
Analysis Date: 12/23/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP VOLATILES (mg/L)	EPA LIMIT	Reporting Limit	T45673 EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
Vinyl chloride	0.20	0.05	ND	0.103	3	121	103
1,1-Dichloroethene	0.70	0.05	ND	0.086	4	110	86
Methyl Ethyl Ketone	200.0	0.5	ND	0.100	12	162	100
Chloroform	6.00	0.05	ND	0.087	3	94	87
1,2-Dichloroethane	0.50	0.05	ND	0.096	3	78	96
Benzene	0.50	0.05	ND	0.086	5	93	86
Carbon Tetrachloride	0.50	0.05	ND	0.082	3	105	82
Trichloroethene	0.50	0.05	ND	0.081	5	90	81
Tetrachloroethene	0.70	0.05	ND	0.081	3	103	81
Chlorobenzene	100.00	0.05	ND	0.088	4	92	88
1,4-Dichlorobenzene	7.50	0.05	ND	0.108	3	94	108

SURROGATES	**% Recovery**
Dibromofluoromethane	110
Toluene-d8	106
4-Bromofluorobenzene	98

ND = Not Detected

METHODS: EPA SW 846-1311, 8260.

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Director, Dr. Bruce McDonell

1/4/96
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45665 EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	78						
Nitrobenzene-d5	94						
2-Fluorobiphenyl	120						
2,4,6-Tribromophenol	72						
Terphenyl-d14	110						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45666 EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	86						
Phenol-d6	82						
Nitrobenzene-d5	98						
2-Fluorobiphenyl	128						
2,4,6-Tribromophenol	78						
Terphenyl-d14	114						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/8/96
DATE

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45667 EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	82						
Phenol-d6	78						
Nitrobenzene-d5	98						
2-Fluorobiphenyl	128						
2,4,6-Tribromophenol	62						
Terphenyl-d14	116						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45668 EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	82						
Phenol-d6	80						
Nitrobenzene-d5	98						
2-Fluorobiphenyl	108						
2,4,6-Tribromophenol	70						
Terphenyl-d14	114						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45669 EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
Pyridine	5.0	0.25	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.25	ND	100	10	91	100
o-Cresol	200.0	0.25	ND	102	13	106	102
m,p-Cresol	200.0	0.25	ND	96	3	130	96
Total Cresol	200.0	0.25	ND	---	---	---	---
Hexachloroethane	3.0	0.25	ND	100	9	94	100
Nitrobenzene	2.0	0.25	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.05	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.25	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.25	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.05	ND	102	14	106	102
2,4-D	10.0	0.25	ND	120	30	19	120
Hexachlorobenzene	0.13	0.05	ND	105	10	101	105
2,4,5-TP	1.0	0.25	ND	111	27	29	111
Pentachlorophenol	100.0	0.25	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	82						
Phenol-d6	68						
Nitrobenzene-d5	90						
2-Fluorobiphenyl	95						
2,4,6-Tribromophenol	75						
Terphenyl-d14	113						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45670 EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
Pyridine	5.0	0.25	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.25	ND	100	10	91	100
o-Cresol	200.0	0.25	ND	102	13	106	102
m,p-Cresol	200.0	0.25	ND	96	3	130	96
Total Cresol	200.0	0.25	ND	---	---	---	---
Hexachloroethane	3.0	0.25	ND	100	9	94	100
Nitrobenzene	2.0	0.25	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.05	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.25	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.25	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.05	ND	102	14	106	102
2,4-D	10.0	0.25	ND	120	30	19	120
Hexachlorobenzene	0.13	0.05	ND	105	10	101	105
2,4,5-TP	1.0	0.25	ND	111	27	29	111
Pentachlorophenol	100.0	0.25	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	87						
Phenol-d6	77						
Nitrobenzene-d5	83						
2-Fluorobiphenyl	100						
2,4,6-Tribromophenol	73						
Terphenyl-d14	115						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45671 EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	80						
Nitrobenzene-d5	98						
2-Fluorobiphenyl	112						
2,4,6-Tribromophenol	66						
Terphenyl-d14	114						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45672 EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	80						
Nitrobenzene-d5	96						
2-Fluorobiphenyl	110						
2,4,6-Tribromophenol	66						
Terphenyl-d14	116						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 East Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Extraction Date: 12/15/95
Analysis Date: 12/18/95
Sampling Date: 12/13/95
Sample Condition: I & C
Sample Received by: ML
Project Name: NA

TCLP Semi-Volatiles (mg/L)	EPA Limit	Reporting Limit	T45673 EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
Pyridine	5.0	0.5	ND	114	14	68	114
1,4-Dichlorobenzene	7.5	0.5	ND	100	10	91	100
o-Cresol	200.0	0.5	ND	102	13	106	102
m,p-Cresol	200.0	0.5	ND	96	3	130	96
Total Cresol	200.0	0.5	ND	---	---	---	---
Hexachloroethane	3.0	0.5	ND	100	9	94	100
Nitrobenzene	2.0	0.5	ND	99	10	91	99
Hexachlorobutadiene	0.5	0.1	ND	106	10	96	106
2,4,6-Trichlorophenol	2.0	0.5	ND	106	15	99	106
2,4,5-Trichlorophenol	400.0	0.5	ND	104	21	109	104
2,4-Dinitrotoluene	0.13	0.1	ND	102	14	106	102
2,4-D	10.0	0.5	ND	120	30	19	120
Hexachlorobenzene	0.13	0.1	ND	105	10	101	105
2,4,5-TP	1.0	0.5	ND	111	27	29	111
Pentachlorophenol	100.0	0.5	ND	103	14	98	103
Chlordane	0.03	0.001	ND	0.052	6	98	104
Toxaphene	0.5	0.05	ND	2.11	36	101	105
Lindane	0.4	0.001	ND	0.024	4	104	96
Heptachlor	0.008	0.001	ND	0.025	8	108	100
Heptachlor epoxide	0.008	0.001	ND	0.026	58	108	104
Total Heptachlor	0.008	0.001	ND	---	---	---	---
Endrin	0.02	0.001	ND	0.053	0	118	106
Methoxychlor	10.0	0.1	ND	0.268	19	108	107
Surrogates	**% RECOVERY**						
2-Fluorophenol	84						
Phenol-d6	80						
Nitrobenzene-d5	98						
2-Fluorobiphenyl	116						
2,4,6-Tribromophenol	64						
Terphenyl-d14	118						

Methods: EPA SW 846-1311, 8270, 8080.
ND - Not Detected

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

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Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45665 EVA-POND 1-E3 Hole #1	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45665 EVA-POND 1-E3 Hole #1	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (ug/kg)

(1) Unknown	512
(2) Unknown	354
(3) Unknown	174
(4) Unknown	134
(5) Unknown	229

SURROGATES	**% RECOVERY**
Dibromofluoromethane	90
Toluene-d8	92
4-Bromofluorobenzene	97

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45666 EVA-POND 1-E6 Hole #1	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45666 EVA-POND 1-E6 Hole #1	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (ug/kg)

(1) Unknown	492
(2) Unknown	416
(3) Unknown	198
(4) Unknown	133
(5) Unknown	297

SURROGATES	**% RECOVERY**
Dibromofluoromethane	96
Toluene-d8	98
4-Bromofluorobenzene	104

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45667 EVA-POND 1-E9 Hole #1	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	77	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45667 EVA-POND 1-E9 Hole #1	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (ug/kg)

(1) Cyclohexane	47
(2) Unknown	48
(3) Unknown	64
(4) Unknown	65
(5) Unknown	51

SURROGATES	**% RECOVERY**
Dibromofluoromethane	97
Toluene-d8	100
4-Bromofluorobenzene	107

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45668 EVA-POND 1-W3 Hole #3	Reporting Limit
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	1,250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Iodomethane	ND	1,250
Carbon disulfide	ND	250
Methylene chloride	ND	1,250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2-Butanone	ND	12,500
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Carbon Tetrachloride	ND	250
1,2-Dichloropropane	ND	250
Trichloroethene	ND	250
Bromodichloromethane	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	12,500
trans-1,3-Dichloropropene	ND	250
Toluene	ND	250
1,1,2-Trichloroethane	ND	250
2-Hexanone	ND	12,500

8240 Compounds (ug/kg)	T45668 EVA-POND 1-W3 Hole #3	Reporting Limit
Dibromochloromethane	ND	250
Tetrachloroethene	ND	250
Chlorobenzene	ND	250
Ethylbenzene	1,570	250
m & p-Xylene	ND	250
Bromoform	ND	250
Styrene	ND	250
o-Xylene	1,070	250
1,1,2,2-Tetrachloroethane	ND	250
trans 1,4-Dichloro-2-butene	ND	1,250
cis 1,4-Dichloro-2-butene	ND	1,250
1,4-Dichlorobenzene	ND	500
1,3-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (ug/kg)

(1) methyl-cyclohexane	2,830
(2) ethyl-cyclohexane	2,350
(3) Nonane	2,100
(4) 1-ethyl-2-methyl-benzene	3,300
(5) 1,2,4-trimethylbenzene	2,120

SURROGATES	**% RECOVERY**
Dibromofluoromethane	102
Toluene-d8	106
4-Bromofluorobenzene	110

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/21/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45669 EVA- POND 1-W6 Hole #3	Reporting Limit
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	1,250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Iodomethane	ND	1,250
Carbon disulfide	ND	250
Methylene chloride	ND	1,250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2-Butanone	ND	12,500
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Carbon Tetrachloride	ND	250
1,2-Dichloropropane	ND	250
Trichloroethene	ND	250
Bromodichloromethane	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	12,500
trans-1,3-Dichloropropene	ND	250
Toluene	ND	250
1,1,2-Trichloroethane	ND	250
2-Hexanone	ND	12,500

8240 Compounds (ug/kg)	T45669 EVA-POND 1-W6 Hole #3	Reporting Limit
Dibromochloromethane	ND	250
Tetrachloroethene	ND	250
Chlorobenzene	ND	250
Ethylbenzene	284	250
m & p-Xylene	ND	250
Bromoform	ND	250
Styrene	ND	250
o-Xylene	ND	250
1,1,2,2-Tetrachloroethane	ND	250
trans 1,4-Dichloro-2-butene	ND	1,250
cis 1,4-Dichloro-2-butene	ND	1,250
1,4-Dichlorobenzene	ND	500
1,3-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (ug/kg)

(1)	**ethyl-cyclohexane**	143
(2)	**Unidentified hydrocarbon**	114
(3)	**Unidentified hydrocarbon**	172
(4)	**Unidentified hydrocarbon**	137
(5)	**Unidentified hydrocarbon**	173
(6)	**Unidentified hydrocarbon**	126
(7)	**Unidentified hydrocarbon**	151
(8)	**Unidentified hydrocarbon**	109
(9)	**Unidentified hydrocarbon**	199
(10)	**Unidentified hydrocarbon**	110

SURROGATES	**% RECOVERY**
Dibromofluoromethane	106
Toluene-d8	112
4-Bromofluorobenzene	107

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, ~~Dr.~~ Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45670 EVA-POND 1-W9 Hole #3	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45670 EVA-POND 1-W9 Hole #3	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	90
Toluene-d8	92
4-Bromofluorobenzene	99

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45671 EVA- POND 1-N3 Hole #2	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

NAVAJO REFINING
Project Location: Artesia, NM 88211

8240 Compounds (ug/kg)	T45671 EVA- POND 1-N3 Hole #2	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	91
Toluene-d8	96
4-Bromofluorobenzene	102

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/19/95
Analysis Date: 12/19/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45672 EVA-POND 1-N6 Hole #2	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45672 EVA-POND 1-N6 Hole #2	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	95
Toluene-d8	98
4-Bromofluorobenzene	106

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

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ANALYTICAL RESULTS FOR
NAVAJO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Project No: NA
Project Location: Artesia, NM 88211

Prep Date: 12/21/95
Analysis Date: 12/21/95
Sampling Date: 12/13/95
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: NA

8240 Compounds (ug/kg)	T45673 EVA-POND 1-N9 Hole #2	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	46	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T45673 EVA-POND 1-N9 Hole #2	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	92
Toluene-d8	96
4-Bromofluorobenzene	90

***ND = Not Detected**

METHODS: EPA SW 846-5030, 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
[redacted]TO REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decem[redacted] 29, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/21/95

T45665

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	25.0	ND				
2-Picoline	25.0	ND				
Methyl methanesulfonate	25.0	ND				
Ethyl methanesulfonate	25.0	ND	1			
Phenol	25.0	ND	100	6	79	100
Aniline	125.0	ND				
bis(2-Chloroethyl)ether	125.0	ND				
2-Chlorophenol	125.0	ND		5	91	
1,3-Dichlorobenzene	25.0	ND				
1,4-Dichlorobenzene	25.0	ND	106	5	95	106
Benzyl alcohol	125.0	ND				
1,2-Dichlorobenzene	25.0	ND				
2-Methylphenol	25.0	ND				
bis(2-chloroisopropyl)ether	125.0	ND				
4-Methylphenol/3-Methylphenol	25.0	ND				
Acetophenone	125.0	ND				
n-Nitrosodi-n-propylamine	25.0	ND		1	88	
Hexachloroethane	25.0	ND				
Nitrobenzene	25.0	ND				
N-Nitrosopiperidine	125.0	ND				
Isophorone	125.0	ND				
2-Nitrophenol	125.0	ND	100			100
2,4-Dimethylphenol	125.0	ND				
bis(2-Chloroethoxy)methane	25.0	ND				
Benzoic acid	250.0	ND				
2,4-Dichlorophenol	125.0	ND	97			97
1,2,4-Trichlorobenzene	25.0	ND		14	106	
a,a-Dimethylphenethylamine	250.0	ND				
Naphthalene	25.0	ND				

T45665

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
4-Chloroaniline	125.0	ND				
2,6-Dichlorophenol	125.0	ND				
Hexachlorobutadiene	25.0	ND	107			107
N-Nitroso-di-n-butylamine	125.0	ND				
4-Chloro-3-methylphenol	125.0	ND	96	12	98	96
2-Methylnaphthalene	25.0	ND				
1,2,4,5-Tetrachlorobenzene	25.0	ND				
Hexachlorocyclopentadiene	25.0	ND				
2,4,6-Trichlorophenol	125.0	ND	100			100
2,4,5-Trichlorophenol	125.0	ND				
2-Chloronaphthalene	25.0	ND				
1-Chloronaphthalene	25.0	ND				
2-Nitroaniline	125.0	ND				
Dimethylphthalate	25.0	ND				
Acenaphthylene	25.0	ND				
2,6-Dinitrotoluene	25.0	ND				
3-Nitroaniline	125.0	ND				
Acenaphthene	25.0	ND	100	5	101	100
2,4-Dinitrophenol	125.0	ND				
Dibenzofuran	125.0	ND				
Pentachlorobenzene	25.0	ND				
4-Nitrophenol	125.0	ND		18	40	
1-Napthylamine	125.0	ND				
2,4-Dinitrotoluene	25.0	ND		6	84	
2-Napthylamine	125.0	ND				
2,3,4,6-Tetrachlorophenol	125.0	ND				
Fluorene	25.0	ND				
Diethylphthalate	25.0	ND				
4-Chlorophenyl-phenylether	25.0	ND				
4-Nitroaniline	125.0	ND				
4,6-Dinitro-2-methylphenol	25.0	ND				
n-Nitrosodiphenylamine & Diphenylamine	25.0	ND	103			103
Diphenylhydrazine	125.0	ND				

T45665

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	25.0	ND				
Phenacetin	125.0	ND				
Hexachlorobenzene	25.0	ND				
4-Aminobiphenyl	125.0	ND				
Pentachlorophenol	125.0	ND	101	18	32	101
Pentachloronitrobenzene	125.0	ND				
Pronamide	25.0	ND				
Phenanthrene	25.0	ND				
Anthracene	25.0	ND				
Di-n-butylphthalate	25.0	ND				
Fluoranthene	25.0	ND	103			103
Benzidine	250.0	ND				
Pyrene	25.0	ND		1	116	
p-Dimethylaminoazobenzene	25.0	ND				
Butylbenzylphthalate	25.0	ND				
Benzo[a]anthracene	25.0	ND				
3,3-Dichlorobenzidine	25.0	ND				
Chrysene	25.0	ND				
bis(2-Ethylhexyl)phthalate	25.0	ND				
Di-n-octlphthalate	25.0	ND				
Benzo[b]fluoranthene	25.0	ND				
7,12-Dimethylbenz(a)anthracene	25.0	ND				
Benzo[k]fluoranthene	25.0	ND				
Benzo[a]pyrene	25.0	ND	97			97
3-Methylcholanthrene	25.0	ND				
Dibenzo(a,j)acridine	25.0	ND				
Indeno[1,2,3-cd]pyrene	25.0	ND				
Dibenz[a,h]anthracene	25.0	ND				
Benzo[g,h,i]perylene	25.0	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45665

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E3 Hole #1	QC	RPD	%EA	%IA
a-BHC	0.25	ND	0.028	0	108	112
b-BHC	0.25	ND	0.025	13	96	100
g-BHC	0.25	ND	0.027	0	88	108
d-BHC	0.25	ND	0.025	17	88	100
Heptachlor	0.25	ND	0.028	11	68	112
Aldrin	0.25	ND	0.028	7	108	112
Heptachlor epoxide	0.25	ND	0.028	32	96	112
Endosulfan-1	0.25	ND	0.027	13	112	108
Endosulfan-2	0.5	ND	0.052	71	64	104
P,P'-DDE	0.5	ND	0.054	16	112	108
Dieldrin	0.5	ND	0.053	13	124	106
Endrin	0.5	ND	0.049	33	100	98
P,P'-DDD	0.5	ND	0.049	36	88	98
Endrin Aldehyde	0.5	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.5	ND	0.100	22	123	100
Endrin Ketone	0.5	ND	0.049	65	102	98
Methoxychlor	2.5	ND	0.243	27	128	96
a-Chlordane	0.25	ND	0.027	11	108	108
g-Chlordane	0.25	ND	0.027	8	96	108
Toxaphene	25.0	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	85
Phenol-d6 SURR	90
Nitrobenzene-d5 SURR	90
2-Fluorobiphenyl SURR	100
2,4,6-Tribromophenol SURR	80
Terphenyl-d14 SURR	100

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
NA[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decemb[redacted]9, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/21/95

T45666

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	25.0	ND				
2-Picoline	25.0	ND				
Methyl methanesulfonate	25.0	ND				
Ethyl methanesulfonate	25.0	ND	1			
Phenol	25.0	ND	100	6	79	100
Aniline	125.0	ND				
bis(2-Chloroethyl)ether	125.0	ND				
2-Chlorophenol	125.0	ND		5	91	
1,3-Dichlorobenzene	25.0	ND				
1,4-Dichlorobenzene	25.0	ND	106	5	95	106
Benzyl alcohol	125.0	ND				
1,2-Dichlorobenzene	25.0	ND				
2-Methylphenol	25.0	ND				
bis(2-chloroisopropyl)ether	125.0	ND				
4-Methylphenol/3-Methylphenol	25.0	ND				
Acetophenone	125.0	ND				
n-Nitrosodi-n-propylamine	25.0	ND		1	88	
Hexachloroethane	25.0	ND				
Nitrobenzene	25.0	ND				
N-Nitrosopiperidine	125.0	ND				
Isophorone	125.0	ND				
2-Nitrophenol	125.0	ND	100			100
2,4-Dimethylphenol	125.0	ND				
bis(2-Chloroethoxy)methane	25.0	ND				
Benzoic acid	250.0	ND				
2,4-Dichlorophenol	125.0	ND	97			97
1,2,4-Trichlorobenzene	25.0	ND		14	106	
a,a-Dimethylphenethylamine	250.0	ND				
Naphthalene	25.0	ND				

T45666

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
4-Chloroaniline	125.0	ND				
2,6-Dichlorophenol	125.0	ND				
Hexachlorobutadiene	25.0	ND	107			107
N-Nitroso-di-n-butylamine	125.0	ND				
4-Chloro-3-methylphenol	125.0	ND	96	12	98	96
2-Methylnaphthalene	25.0	ND				
1,2,4,5-Tetrachlorobenzene	25.0	ND				
Hexachlorocyclopentadiene	25.0	ND				
2,4,6-Trichlorophenol	125.0	ND	100			100
2,4,5-Trichlorophenol	125.0	ND				
2-Chloronaphthalene	25.0	ND				
1-Chloronaphthalene	25.0	ND				
2-Nitroaniline	125.0	ND				
Dimethylphthalate	25.0	ND				
Acenaphthylene	25.0	ND				
2,6-Dinitrotoluene	25.0	ND				
3-Nitroaniline	125.0	ND				
Acenaphthene	25.0	ND	100	5	101	100
2,4-Dinitrophenol	125.0	ND				
Dibenzofuran	125.0	ND				
Pentachlorobenzene	25.0	ND				
4-Nitrophenol	125.0	ND		18	40	
1-Napthylamine	125.0	ND				
2,4-Dinitrotoluene	25.0	ND		6	84	
2-Napthylamine	125.0	ND				
2,3,4,6-Tetrachlorophenol	125.0	ND				
Fluorene	25.0	ND				
Diethylphthalate	25.0	ND				
4-Chlorophenyl-phenylether	25.0	ND				
4-Nitroaniline	125.0	ND				
4,6-Dinitro-2-methylphenol	25.0	ND				
n-Nitrosodiphenylamine & Diphenylamine	25.0	ND	103			103
Diphenylhydrazine	125.0	ND				

T45666

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	25.0	ND				
Phenacetin	125.0	ND				
Hexachlorobenzene	25.0	ND				
4-Aminobiphenyl	125.0	ND				
Pentachlorophenol	125.0	ND	101	18	32	101
Pentachloronitrobenzene	125.0	ND				
Pronamide	25.0	ND				
Phenanthrene	25.0	ND				
Anthracene	25.0	ND				
Di-n-butylphthalate	25.0	ND				
Fluoranthene	25.0	ND	103			103
Benzidine	250.0	ND				
Pyrene	25.0	ND		1	116	
p-Dimethylaminoazobenzene	25.0	ND				
Butylbenzylphthalate	25.0	ND				
Benzo[a]anthracene	25.0	ND				
3,3-Dichlorobenzidine	25.0	ND				
Chrysene	25.0	ND				
bis(2-Ethylhexyl)phthalate	25.0	ND				
Di-n-octlphthalate	25.0	ND				
Benzo[b]fluoranthene	25.0	ND				
7,12-Dimethylbenz(a)anthracene	25.0	ND				
Benzo[k]fluoranthene	25.0	ND				
Benzo[a]pyrene	25.0	ND	97			97
3-Methylcholanthrene	25.0	ND				
Dibenzo(a,j)acridine	25.0	ND				
Indeno[1,2,3-cd]pyrene	25.0	ND				
Dibenz[a,h]anthracene	25.0	ND				
Benzo[g,h,i]perylene	25.0	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45666

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E6 Hole #1	QC	RPD	%EA	%IA
a-BHC	0.00125	ND	0.028	0	108	112
b-BHC	0.00125	ND	0.025	13	96	100
g-BHC	0.00125	ND	0.027	0	88	108
d-BHC	0.00125	ND	0.025	17	88	100
Heptachlor	0.00125	ND	0.028	11	68	112
Aldrin	0.00125	ND	0.028	7	108	112
Heptachlor epoxide	0.00125	ND	0.028	32	96	112
Endosulfan-1	0.00125	ND	0.027	13	112	108
Endosulfan-2	0.0025	ND	0.052	71	64	104
P,P'-DDE	0.0025	ND	0.054	16	112	108
Dieldrin	0.0025	ND	0.053	13	124	106
Endrin	0.0025	ND	0.049	33	100	98
P,P'-DDD	0.0025	ND	0.049	36	88	98
Endrin Aldehyde	0.0025	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.0025	ND	0.100	22	123	100
Endrin Ketone	0.0025	ND	0.049	65	102	98
Methoxychlor	0.0125	ND	0.243	27	128	96
a-Chlordane	0.00125	ND	0.027	11	108	108
g-Chlordane	0.00125	ND	0.027	8	96	108
Toxaphene	0.125	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	95
Phenol-d6 SURR	100
Nitrobenzene-d5 SURR	100
2-Fluorobiphenyl SURR	109
2,4,6-Tribromophenol SURR	90
Terphenyl-d14 SURR	112

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

1/14/96
Date

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ANALYTICAL RESULTS FOR
NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decembe[redacted], 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/20/95

T45667

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	25.0	ND				
2-Picoline	25.0	ND				
Methyl methanesulfonate	25.0	ND				
Ethyl methanesulfonate	25.0	ND				
Phenol	25.0	ND	98	6	79	98
Aniline	125.0	ND				
bis(2-Chloroethyl)ether	125.0	ND				
2-Chlorophenol	125.0	ND		5	91	
1,3-Dichlorobenzene	25.0	ND				
1,4-Dichlorobenzene	25.0	ND	105	5	95	105
Benzyl alcohol	125.0	ND				
1,2-Dichlorobenzene	25.0	ND				
2-Methylphenol	25.0	ND				
bis(2-chloroisopropyl)ether	125.0	ND				
4-Methylphenol/3-Methylphenol	25.0	ND				
Acetophenone	125.0	ND				
n-Nitrosodi-n-propylamine	25.0	ND		1	88	
Hexachloroethane	25.0	ND				
Nitrobenzene	25.0	ND				
N-Nitrosopiperidine	125.0	ND				
Isophorone	125.0	ND				
2-Nitrophenol	125.0	ND	99			99
2,4-Dimethylphenol	125.0	ND				
bis(2-Chloroethoxy)methane	25.0	ND				
Benzoic acid	250.0	ND				
2,4-Dichlorophenol	125.0	ND	97			97
1,2,4-Trichlorobenzene	25.0	ND		14	106	
a,a-Dimethylphenethylamine	250.0	ND				
Naphthalene	25.0	ND				

T45667

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
4-Chloroaniline	125.0	ND				
2,6-Dichlorophenol	125.0	ND				
Hexachlorobutadiene	25.0	ND	99			99
N-Nitroso-di-n-butylamine	125.0	ND				
4-Chloro-3-methylphenol	125.0	ND	96	12	98	96
2-Methylnaphthalene	25.0	ND				
1,2,4,5-Tetrachlorobenzene	25.0	ND				
Hexachlorocyclopentadiene	25.0	ND				
2,4,6-Trichlorophenol	125.0	ND	97			97
2,4,5-Trichlorophenol	125.0	ND				
2-Chloronaphthalene	25.0	ND				
1-Chloronaphthalene	25.0	ND				
2-Nitroaniline	125.0	ND				
Dimethylphthalate	25.0	ND				
Acenaphthylene	25.0	ND				
2,6-Dinitrotoluene	25.0	ND				
3-Nitroaniline	125.0	ND				
Acenaphthene	25.0	ND	99	5	101	99
2,4-Dinitrophenol	125.0	ND				
Dibenzofuran	125.0	ND				
Pentachlorobenzene	25.0	ND				
4-Nitrophenol	125.0	ND		18	40	
1-Napthylamine	125.0	ND				
2,4-Dinitrotoluene	25.0	ND		6	84	
2-Napthylamine	125.0	ND				
2,3,4,6-Tetrachlorophenol	125.0	ND				
Fluorene	25.0	ND				
Diethylphthalate	25.0	ND				
4-Chlorophenyl-phenylether	25.0	ND				
4-Nitroaniline	125.0	ND				
4,6-Dinitro-2-methylphenol	25.0	ND				
n-Nitrosodiphenylamine & Diphenylamine	25.0	ND	100			100
Diphenylhydrazine	125.0	ND				

T45667

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	25.0	ND				
Phenacetin	125.0	ND				
Hexachlorobenzene	25.0	ND				
4-Aminobiphenyl	125.0	ND				
Pentachlorophenol	125.0	ND	101	18	32	101
Pentachloronitrobenzene	125.0	ND				
Pronamide	25.0	ND				
Phenanthrene	25.0	ND				
Anthracene	25.0	ND				
Di-n-butylphthalate	25.0	ND				
Fluoranthene	25.0	ND	101			101
Benzidine	250.0	ND				
Pyrene	25.0	ND		1	116	
p-Dimethylaminoazobenzene	25.0	ND				
Butylbenzylphthalate	25.0	ND				
Benzo[a]anthracene	25.0	ND				
3,3-Dichlorobenzidine	25.0	ND				
Chrysene	25.0	ND				
bis(2-Ethylhexyl)phthalate	25.0	ND				
Di-n-octlphthalate	25.0	ND				
Benzo[b]fluoranthene	25.0	ND				
7,12-Dimethylbenz(a)anthracene	25.0	ND				
Benzo[k]fluoranthene	25.0	ND				
Benzo[a]pyrene	25.0	ND	99			99
3-Methylcholanthrene	25.0	ND				
Dibenzo(a,j)acridine	25.0	ND				
Indeno[1,2,3-cd]pyrene	25.0	ND				
Dibenz[a,h]anthracene	25.0	ND				
Benzo[g,h,i]perylene	25.0	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45667

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-E9 Hole #1	QC	RPD	%EA	%IA
a-BHC	0.125	ND	0.028	0	108	112
b-BHC	0.125	ND	0.025	13	96	100
g-BHC	0.125	ND	0.027	0	88	108
d-BHC	0.125	ND	0.025	17	88	100
Heptachlor	0.125	ND	0.028	11	68	112
Aldrin	0.125	ND	0.028	7	108	112
Heptachlor epoxide	0.125	ND	0.028	32	96	112
Endosulfan-1	0.125	ND	0.027	13	112	108
Endosulfan-2	0.25	ND	0.052	71	64	104
P,P'-DDE	0.25	ND	0.054	16	112	108
Dieldrin	0.25	ND	0.053	13	124	106
Endrin	0.25	ND	0.049	33	100	98
P,P'-DDD	0.25	ND	0.049	36	88	98
Endrin Aldehyde	0.25	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.25	ND	0.100	22	123	100
Endrin Ketone	0.25	ND	0.049	65	102	98
Methoxychlor	1.25	ND	0.243	27	128	96
a-Chlordane	0.125	ND	0.027	11	108	108
g-Chlordane	0.125	ND	0.027	8	96	108
Toxaphene	12.5	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	94
Phenol-d6 SURR	98
Nitrobenzene-d5 SURR	98
2-Fluorobiphenyl SURR	112
2,4,6-Tribromophenol SURR	80
Terphenyl-d14 SURR	106

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decembe[redacted]9, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/21/95

T45668

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	25.0	ND				
2-Picoline	25.0	ND				
Methyl methanesulfonate	25.0	ND				
Ethyl methanesulfonate	25.0	ND	1			
Phenol	25.0	ND	100	6	79	100
Aniline	125.0	ND				
bis(2-Chloroethyl)ether	125.0	ND				
2-Chlorophenol	125.0	ND		5	91	
1,3-Dichlorobenzene	25.0	ND				
1,4-Dichlorobenzene	25.0	ND	106	5	95	106
Benzyl alcohol	125.0	ND				
1,2-Dichlorobenzene	25.0	ND				
2-Methylphenol	25.0	ND				
bis(2-chloroisopropyl)ether	125.0	ND				
4-Methylphenol/3-Methylphenol	25.0	ND				
Acetophenone	125.0	ND				
n-Nitrosodi-n-propylamine	25.0	ND		1	88	
Hexachloroethane	25.0	ND				
Nitrobenzene	25.0	ND				
N-Nitrosopiperidine	125.0	ND				
Isophorone	125.0	ND				
2-Nitrophenol	125.0	ND	100			100
2,4-Dimethylphenol	125.0	ND				
bis(2-Chloroethoxy)methane	25.0	ND				
Benzoic acid	250.0	ND				
2,4-Dichlorophenol	125.0	ND	97			97
1,2,4-Trichlorobenzene	25.0	ND		14	106	
a,a-Dimethylphenethylamine	250.0	ND				
Naphthalene	25.0	ND				

T45668

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
4-Chloroaniline	125.0	ND				
2,6-Dichlorophenol	125.0	ND				
Hexachlorobutadiene	25.0	ND	107			107
N-Nitroso-di-n-butylamine	125.0	ND				
4-Chloro-3-methylphenol	125.0	ND	96	12	98	96
2-Methylnaphthalene	25.0	50.9				
1,2,4,5-Tetrachlorobenzene	25.0	ND				
Hexachlorocyclopentadiene	25.0	ND				
2,4,6-Trichlorophenol	125.0	ND	100			100
2,4,5-Trichlorophenol	125.0	ND				
2-Chloronaphthalene	25.0	ND				
1-Chloronaphthalene	25.0	ND				
2-Nitroaniline	125.0	ND				
Dimethylphthalate	25.0	ND				
Acenaphthylene	25.0	ND				
2,6-Dinitrotoluene	25.0	ND				
3-Nitroaniline	125.0	ND				
Acenaphthene	25.0	ND	100	5	101	100
2,4-Dinitrophenol	125.0	ND				
Dibenzofuran	125.0	ND				
Pentachlorobenzene	25.0	ND				
4-Nitrophenol	125.0	ND		18	40	
1-Napthylamine	125.0	ND				
2,4-Dinitrotoluene	25.0	ND		6	84	
2-Napthylamine	125.0	ND				
2,3,4,6-Tetrachlorophenol	125.0	ND				
Fluorene	25.0	38.6				
Diethylphthalate	25.0	ND				
4-Chlorophenyl-phenylether	25.0	ND				
4-Nitroaniline	125.0	ND				
4,6-Dinitro-2-methylphenol	25.0	ND				
n-Nitrosodiphenylamine & Diphenylamine	25.0	ND	103			103
Diphenylhydrazine	125.0	ND				

T45668

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	25.0	ND				
Phenacetin	125.0	ND				
Hexachlorobenzene	25.0	ND				
4-Aminobiphenyl	125.0	ND				
Pentachlorophenol	125.0	ND	101	18	32	101
Pentachloronitrobenzene	125.0	ND				
Pronamide	25.0	ND				
Phenanthrene	25.0	ND				
Anthracene	25.0	133				
Di-n-butylphthalate	25.0	ND				
Fluoranthene	25.0	ND	103			103
Benzidine	250.0	ND				
Pyrene	25.0	36.1		1	116	
p-Dimethylaminoazobenzene	25.0	ND				
Butylbenzylphthalate	25.0	ND				
Benzo[a]anthracene	25.0	ND				
3,3-Dichlorobenzidine	25.0	ND				
Chrysene	25.0	ND				
bis(2-Ethylhexyl)phthalate	25.0	ND				
Di-n-octlphthalate	25.0	ND				
Benzo[b]fluoranthene	25.0	ND				
7,12-Dimethylbenz(a)anthracene	25.0	ND				
Benzo[k]fluoranthene	25.0	ND				
Benzo[a]pyrene	25.0	ND	97			97
3-Methylcholanthrene	25.0	ND				
Dibenzo(a,j)acridine	25.0	ND				
Indeno[1,2,3-cd]pyrene	25.0	ND				
Dibenz[a,h]anthracene	25.0	ND				
Benzo[g,h,i]perylene	25.0	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45668

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W3 Hole #3	QC	RPD	%EA	%IA
a-BHC	1.25	ND	0.028	0	108	112
b-BHC	1.25	ND	0.025	13	96	100
g-BHC	1.25	ND	0.027	0	88	108
d-BHC	1.25	ND	0.025	17	88	100
Heptachlor	1.25	ND	0.028	11	68	112
Aldrin	1.25	ND	0.028	7	108	112
Heptachlor epoxide	1.25	ND	0.028	32	96	112
Endosulfan-1	1.25	ND	0.027	13	112	108
Endosulfan-2	2.5	ND	0.052	71	64	104
P,P'-DDE	2.5	ND	0.054	16	112	108
Dieldrin	2.5	ND	0.053	13	124	106
Endrin	2.5	ND	0.049	33	100	98
P,P'-DDD	2.5	ND	0.049	36	88	98
Endrin Aldehyde	2.5	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	2.5	ND	0.100	22	123	100
Endrin Ketone	2.5	ND	0.049	65	102	98
Methoxychlor	12.5	ND	0.243	27	128	96
a-Chlordane	1.25	ND	0.027	11	108	108
g-Chlordane	1.25	ND	0.027	8	96	108
Toxaphene	125.0	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

(1) 2,3-dimethylnapthalene	152
(2) 2,6,10,14-tetramethyl-pentadecane	147
(3) 2,6,10,14-tetramethyl-hexadecane	208
(4) Nonadecane	231
(5) Eicosane	142
(6) 2,5-dimethylphenanthrene	151
(7) Heneicosane	140
(8) Docosane	159
(9) Tetrasocane	147

	% RECOVERY
2-Fluorophenol SURR	94
Phenol-d6 SURR	100
Nitrobenzene-d5 SURR	92
2-Fluorobiphenyl SURR	100
2,4,6-Tribromophenol SURR	92
Terphenyl-d14 SURR	106

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, ~~Dr.~~ Blair Leftwich

Director, Dr. Bruce McDonell

1/16/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
NAVA[redacted]REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

December[redacted], 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/20/95

T45669

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	25.0	ND				
2-Picoline	25.0	ND				
Methyl methanesulfonate	25.0	ND				
Ethyl methanesulfonate	25.0	ND				
Phenol	25.0	ND	98	6	79	98
Aniline	125.0	ND				
bis(2-Chloroethyl)ether	125.0	ND				
2-Chlorophenol	125.0	ND		5	91	
1,3-Dichlorobenzene	25.0	ND				
1,4-Dichlorobenzene	25.0	ND	105	5	95	105
Benzyl alcohol	125.0	ND				
1,2-Dichlorobenzene	25.0	ND				
2-Methylphenol	25.0	ND				
bis(2-chloroisopropyl)ether	125.0	ND				
4-Methylphenol/3-Methylphenol	25.0	ND				
Acetophenone	125.0	ND				
n-Nitrosodi-n-propylamine	25.0	ND		1	88	
Hexachloroethane	25.0	ND				
Nitrobenzene	25.0	ND				
N-Nitrosopiperidine	125.0	ND				
Isophorone	125.0	ND				
2-Nitrophenol	125.0	ND	99			99
2,4-Dimethylphenol	125.0	ND				
bis(2-Chloroethoxy)methane	25.0	ND				
Benzoic acid	250.0	ND				
2,4-Dichlorophenol	125.0	ND	97			97
1,2,4-Trichlorobenzene	25.0	ND		14	106	
a,a-Dimethylphenethylamine	250.0	ND				
Naphthalene	25.0	ND				

T45669

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
4-Chloroaniline	125.0	ND				
2,6-Dichlorophenol	125.0	ND				
Hexachlorobutadiene	25.0	ND	99			99
N-Nitroso-di-n-butylamine	125.0	ND				
4-Chloro-3-methylphenol	125.0	ND	96	12	98	96
2-Methylnaphthalene	25.0	ND				
1,2,4,5-Tetrachlorobenzene	25.0	ND				
Hexachlorocyclopentadiene	25.0	ND				
2,4,6-Trichlorophenol	125.0	ND	97			97
2,4,5-Trichlorophenol	125.0	ND				
2-Chloronaphthalene	25.0	ND				
1-Chloronaphthalene	25.0	ND				
2-Nitroaniline	125.0	ND				
Dimethylphthalate	25.0	ND				
Acenaphthylene	25.0	ND				
2,6-Dinitrotoluene	25.0	ND				
3-Nitroaniline	125.0	ND				
Acenaphthene	25.0	ND	99	5	101	99
2,4-Dinitrophenol	125.0	ND				
Dibenzofuran	125.0	ND				
Pentachlorobenzene	25.0	ND				
4-Nitrophenol	125.0	ND		18	40	
1-Napthylamine	125.0	ND				
2,4-Dinitrotoluene	25.0	ND		6	84	
2-Napthylamine	125.0	ND				
2,3,4,6-Tetrachlorophenol	125.0	ND				
Fluorene	25.0	ND				
Diethylphthalate	25.0	ND				
4-Chlorophenyl-phenylether	25.0	ND				
4-Nitroaniline	125.0	ND				
4,6-Dinitro-2-methylphenol	25.0	ND				
n-Nitrosodiphenylamine & Diphenylamine	25.0	ND	100			100
Diphenylhydrazine	125.0	ND				

T45669

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	25.0	ND				
Phenacetin	125.0	ND				
Hexachlorobenzene	25.0	ND				
4-Aminobiphenyl	125.0	ND				
Pentachlorophenol	125.0	ND	101	18	32	101
Pentachloronitrobenzene	125.0	ND				
Pronamide	25.0	ND				
Phenanthrene	25.0	ND				
Anthracene	25.0	26.6				
Di-n-butylphthalate	25.0	ND				
Fluoranthene	25.0	ND	101			101
Benzidine	250.0	ND				
Pyrene	25.0	ND		1	116	
p-Dimethylaminoazobenzene	25.0	ND				
Butylbenzylphthalate	25.0	ND				
Benzo[a]anthracene	25.0	ND				
3,3-Dichlorobenzidine	25.0	ND				
Chrysene	25.0	ND				
bis(2-Ethylhexyl)phthalate	25.0	ND				
Di-n-octlphthalate	25.0	ND				
Benzo[b]fluoranthene	25.0	ND				
7,12-Dimethylbenz(a)anthracene	25.0	ND				
Benzo[k]fluoranthene	25.0	ND				
Benzo[a]pyrene	25.0	ND	99			99
3-Methylcholanthrene	25.0	ND				
Dibenzo(a,j)acridine	25.0	ND				
Indeno[1,2,3-cd]pyrene	25.0	ND				
Dibenz[a,h]anthracene	25.0	ND				
Benzo[g,h,i]perylene	25.0	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45669

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W6 Hole #3	QC	RPD	%EA	%IA
a-BHC	1.25	ND	0.028	0	108	112
b-BHC	1.25	ND	0.025	13	96	100
g-BHC	1.25	ND	0.027	0	88	108
d-BHC	1.25	ND	0.025	17	88	100
Heptachlor	1.25	ND	0.028	11	68	112
Aldrin	1.25	ND	0.028	7	108	112
Heptachlor epoxide	1.25	ND	0.028	32	96	112
Endosulfan-1	1.25	ND	0.027	13	112	108
Endosulfan-2	2.5	ND	0.052	71	64	104
P,P'-DDE	2.5	ND	0.054	16	112	108
Dieldrin	2.5	ND	0.053	13	124	106
Endrin	2.5	ND	0.049	33	100	98
P,P'-DDD	2.5	ND	0.049	36	88	98
Endrin Aldehyde	2.5	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	2.5	ND	0.100	22	123	100
Endrin Ketone	2.5	ND	0.049	65	102	98
Methoxychlor	12.5	ND	0.243	27	128	96
a-Chlordane	1.25	ND	0.027	11	108	108
g-Chlordane	1.25	ND	0.027	8	96	108
Toxaphene	125.0	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

(1) 2,6,10,14-tetramethyl-pentadecane	37.4
(2) 2,6,10,14-tetramethyl-hexadecane	42.9
(3) 9-methylanthracene	35.6
(4) 2-methylphenanthrene	37.3

	% RECOVERY
2-Fluorophenol SURR	92
Phenol-d6 SURR	96
Nitrobenzene-d5 SURR	98
2-Fluorobiphenyl SURR	110
2,4,6-Tribromophenol SURR	82
Terphenyl-d14 SURR	104

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decembe[redacted], 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/20/95

T45670

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	98	6	79	98
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	91	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	105	5	95	105
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		1	88	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	99			99
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	97			97
1,2,4-Trichlorobenzene	2.5	ND		14	106	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

T45670

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	99			99
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	96	12	98	96
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	97			97
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	99	5	101	99
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		18	40	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		6	84	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
n-Nitrosodiphenylamine & Diphenylamine	2.5	ND	100			100
Diphenylhydrazine	12.5	ND				

T45670

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	101	18	32	101
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	101			101
Benzidine	25.0	ND				
Pyrene	2.5	ND		1	116	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	99			99
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45670

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-W9 Hole #3	QC	RPD	%EA	%IA
a-BHC	1.25	ND	0.028	0	108	112
b-BHC	1.25	ND	0.025	13	96	100
g-BHC	1.25	ND	0.027	0	88	108
d-BHC	1.25	ND	0.025	17	88	100
Heptachlor	1.25	ND	0.028	11	68	112
Aldrin	1.25	ND	0.028	7	108	112
Heptachlor epoxide	1.25	ND	0.028	32	96	112
Endosulfan-1	1.25	ND	0.027	13	112	108
Endosulfan-2	2.5	ND	0.052	71	64	104
P,P'-DDE	2.5	ND	0.054	16	112	108
Dieldrin	2.5	ND	0.053	13	124	106
Endrin	2.5	ND	0.049	33	100	98
P,P'-DDD	2.5	ND	0.049	36	88	98
Endrin Aldehyde	2.5	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	2.5	ND	0.100	22	123	100
Endrin Ketone	2.5	ND	0.049	65	102	98
Methoxychlor	12.5	ND	0.243	27	128	96
a-Chlordane	1.25	ND	0.027	11	108	108
g-Chlordane	1.25	ND	0.027	8	96	108
Toxaphene	125.0	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

(1) Benzenemethanthiol	4.8
(2) 3,4-dimethylthiophenol	5.9
(3) 2,4-dimethylthiophenol	6.4

	% RECOVERY
2-Fluorophenol SURR	67
Phenol-d6 SURR	76
Nitrobenzene-d5 SURR	74
2-Fluorobiphenyl SURR	84
2,4,6-Tribromophenol SURR	69
Terphenyl-d14 SURR	85

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decemb[redacted]9, 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/21/95

T45671

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND	1			
Phenol	2.5	ND	100	6	79	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	91	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	106	5	95	106
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		1	88	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	100			100
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	97			97
1,2,4-Trichlorobenzene	2.5	ND		14	106	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

T45671

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	107			107
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	96	12	98	96
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	100			100
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	100	5	101	100
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		18	40	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		6	84	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
n-Nitrosodiphenylamine & Diphenylamine	2.5	ND	103			103
Diphenylhydrazine	12.5	ND				

T45671

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	101	18	32	101
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	103			103
Benzidine	25.0	ND				
Pyrene	2.5	ND		1	116	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	97			97
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45671

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N3 Hole #2	QC	RPD	%EA	%IA
a-BHC	0.03125	ND	0.028	0	108	112
b-BHC	0.03125	ND	0.025	13	96	100
g-BHC	0.03125	ND	0.027	0	88	108
d-BHC	0.03125	ND	0.025	17	88	100
Heptachlor	0.03125	ND	0.028	11	68	112
Aldrin	0.03125	ND	0.028	7	108	112
Heptachlor epoxide	0.03125	ND	0.028	32	96	112
Endosulfan-1	0.03125	ND	0.027	13	112	108
Endosulfan-2	0.0625	ND	0.052	71	64	104
P,P'-DDE	0.0625	ND	0.054	16	112	108
Dieldrin	0.0625	ND	0.053	13	124	106
Endrin	0.0625	ND	0.049	33	100	98
P,P'-DDD	0.0625	ND	0.049	36	88	98
Endrin Aldehyde	0.0625	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.0625	ND	0.100	22	123	100
Endrin Ketone	0.0625	ND	0.049	65	102	98
Methoxychlor	0.3125	ND	0.243	27	128	96
a-Chlordane	0.03125	ND	0.027	11	108	108
g-Chlordane	0.03125	ND	0.027	8	96	108
Toxaphene	3.125	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	96
Phenol-d6 SURR	100
Nitrobenzene-d5 SURR	100
2-Fluorobiphenyl SURR	90
2,4,6-Tribromophenol SURR	92
Terphenyl-d14 SURR	120

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. ~~Blair~~ Leftwich

Director, Dr. Bruce McDonell

1/4/96

Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decembe[redacted], 1995
Receiving Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/21/95

T45672

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND	1			
Phenol	2.5	ND	100	6	79	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	91	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	106	5	95	106
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		1	88	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	100			100
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	97			97
1,2,4-Trichlorobenzene	2.5	ND		14	106	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

T45672

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	107			107
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	96	12	98	96
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	100			100
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	100	5	101	100
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		18	40	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		6	84	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
n-Nitrosodiphenylamine & Diphenylamine	2.5	ND	103			103
Diphenylhydrazine	12.5	ND				

T45672

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	101	18	32	101
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	103			103
Benzidine	25.0	ND				
Pyrene	2.5	ND		1	116	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	97			97
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

T45672

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N6 Hole #2	QC	RPD	%EA	%IA
a-BHC	0.03125	ND	0.028	0	108	112
b-BHC	0.03125	ND	0.025	13	96	100
g-BHC	0.03125	ND	0.027	0	88	108
d-BHC	0.03125	ND	0.025	17	88	100
Heptachlor	0.03125	ND	0.028	11	68	112
Aldrin	0.03125	ND	0.028	7	108	112
Heptachlor epoxide	0.03125	ND	0.028	32	96	112
Endosulfan-1	0.03125	ND	0.027	13	112	108
Endosulfan-2	0.0625	ND	0.052	71	64	104
P,P'-DDE	0.0625	ND	0.054	16	112	108
Dieldrin	0.0625	ND	0.053	13	124	106
Endrin	0.0625	ND	0.049	33	100	98
P,P'-DDD	0.0625	ND	0.049	36	88	98
Endrin Aldehyde	0.0625	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.0625	ND	0.100	22	123	100
Endrin Ketone	0.0625	ND	0.049	65	102	98
Methoxychlor	0.3125	ND	0.243	27	128	96
a-Chlordane	0.03125	ND	0.027	11	108	108
g-Chlordane	0.03125	ND	0.027	8	96	108
Toxaphene	3.125	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	78
Phenol-d6 SURR	80
Nitrobenzene-d5 SURR	78
2-Fluorobiphenyl SURR	90
2,4,6-Tribromophenol SURR	70
Terphenyl-d14 SURR	96

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

1/4/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR

NAV[redacted] REFINING
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Decembe[redacted]9, 1995
Receivin[redacted] Date: 12/14/95
Sample Type: Soil
Sampling Date: 12/13/95
Project Location: Artesia, NM 88211
Sample Condition: Intact & Cool
Sample Received by: ML
Extraction Date: 12/16/95
Analysis Date: 12/20/95

T45673

EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND	1			
Phenol	2.5	ND	100	6	79	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	91	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	106	5	95	106
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		1	88	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	100			100
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	97			97
1,2,4-Trichlorobenzene	2.5	ND		14	106	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

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EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	99			99
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	96	12	98	96
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	97			97
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	99	5	101	99
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		18	40	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		6	84	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
n-Nitrosodiphenylamine & Diphenylamine	2.5	ND	100			100
Diphenylhydrazine	12.5	ND				

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EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	101	18	32	101
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	101			101
Benzidine	25.0	ND				
Pyrene	2.5	ND	1	1	116	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	99			99
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

NAVAJO REFINING

Project Location: Artesia, NM 88211

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EPA 8270 (mg/kg)	Reporting Limit	EVA-POND 1-N9 Hole #2	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	0.028	0	108	112
b-BHC	0.0125	ND	0.025	13	96	100
g-BHC	0.0125	ND	0.027	0	88	108
d-BHC	0.0125	ND	0.025	17	88	100
Heptachlor	0.0125	ND	0.028	11	68	112
Aldrin	0.0125	ND	0.028	7	108	112
Heptachlor epoxide	0.0125	ND	0.028	32	96	112
Endosulfan-1	0.0125	ND	0.027	13	112	108
Endosulfan-2	0.025	ND	0.052	71	64	104
P,P'-DDE	0.025	ND	0.054	16	112	108
Dieldrin	0.025	ND	0.053	13	124	106
Endrin	0.025	ND	0.049	33	100	98
P,P'-DDD	0.025	ND	0.049	36	88	98
Endrin Aldehyde	0.025	ND	0.050	82	66	100
Endosulfan Sulfate/P,P'-DDT	0.025	ND	0.100	22	123	100
Endrin Ketone	0.025	ND	0.049	65	102	98
Methoxychlor	0.125	ND	0.243	27	128	96
a-Chlordane	0.0125	ND	0.027	11	108	108
g-Chlordane	0.0125	ND	0.027	8	96	108
Toxaphene	1.25	ND	2.10	6	97	105
PCB's	0.25	ND	0.50	14	113	99

	% RECOVERY
2-Fluorophenol SURR	92
Phenol-d6 SURR	96
Nitrobenzene-d5 SURR	96
2-Fluorobiphenyl SURR	106
2,4,6-Tribromophenol SURR	70
Terphenyl-d14 SURR	102

ND = NOT DETECTED

METHOD: EPA SW 846-3550, 8270, 8080.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

1/4/96
Date