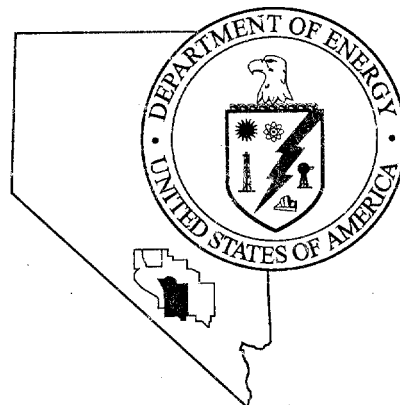


Nevada
Environmental
Restoration
Project

DOE/NV-615



Closure Report for
Corrective Action Unit 340:
NTS Pesticide Release Sites
Nevada Test Site, Nevada

Controlled Copy No.:

UNCONTROLLED

Revision: 0

May 2000

Environmental Restoration
Division

U.S. Department of Energy
Nevada Operations Office

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**CLOSURE REPORT
FOR CORRECTIVE ACTION UNIT 340:
NTS PESTICIDE RELEASE SITES,
NEVADA TEST SITE, NEVADA**

Controlled Copy No. 1

Revision 0

UNCONTROLLED

May 2000

**Prepared for the U.S. Department of Energy
Nevada Operations Office
under Contract No. DE-AC08-96NV11718**

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**CLOSURE REPORT FOR
CORRECTIVE ACTION UNIT 340:
NTS PESTICIDE RELEASE SITES,
NEVADA TEST SITE, NEVADA**

Approved by: Janet L. Appenzeller-Wing
Janet L. Appenzeller-Wing, Project Manager
Industrial Sites Project

Date: 5/24/00

Approved by: Runore C. Wycoff
Runore C. Wycoff, Division Director
Environmental Restoration Division

Date: 5/24/00

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BN	Bechtel Nevada
CADD	Corrective Action Decision Document
CAP	Corrective Action Plan
CAS	Corrective Action Site
CAU	Corrective Action Unit
CR	Closure Report
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FFACO	Federal Facility Agreement and Consent Order
ft	foot
gal	gallon
L	liter
m	meter
m ³	cubic meter
mg/kg	milligram per kilogram
mg/L	milligram per liter

ACRONYMS AND ABBREVIATIONS (continued)

NDEP	Nevada Division of Environmental Protection
NTS	Nevada Test Site
PRG	Preliminary Remediation Goal
TCLP	Toxicity Characteristic Leachate Procedure
TSDF	Treatment, Storage, and Disposal Facility
ug/kg	microgram per kilogram
ug/L	microgram per liter
yd ³	cubic yard

EXECUTIVE SUMMARY

The NTS Pesticide Release Sites are identified in the Federal Facility Agreement and Consent Order as Corrective Action Unit (CAU) 340. CAU 340 consists of the following three Corrective Action Sites (CASs) located in Areas 15 and 23 of the Nevada Test Site (NTS):

- CAS 15-18-02: Area 15 Quonset Hut 15-11 Pesticide Storage
- CAS 23-21-01: Area 23 Quonset Hut 800 Pesticide Release Ditch
- CAS 23-28-03: Area 23 Skid Huts Pesticide Storage

The Area 15 Quonset Hut 15-11 was formerly used for pesticide storage. The site characterization investigation did not find pesticides above U.S. Environmental Protection Agency (EPA) Industrial Preliminary Remediation Goals (PRGs) so corrective action was not required. EPA Industrial PRGs for pesticides and the Nevada Division of Environmental Protection (NDEP) Action Level for petroleum hydrocarbons were exceeded at the two CAU 340 sites in Area 23. The Area 23 Quonset Hut 800 was formerly used to steam-clean pesticide and herbicide equipment. The rinsate occasionally overflowed a sump into drainage ditches that ran south and southeast from the quonset hut. The Area 23 Skid Huts were formerly used for storing and mixing pesticide and herbicide solutions. Excess solutions were released directly to the ground near the skid huts. Clean-closure corrective actions were required for these two CASs in Area 23.

Based on analytical results reported in the site characterization report, soil in three broad areas at the Area 23 sites exceeded EPA Industrial PRGs for pesticides. Within these areas, soil in one location also exceeded the EPA hazardous waste level for pesticide toxicity. Soil in that location, and in two other locations, exceeded the NDEP Action Level for petroleum hydrocarbons. Finally, site debris, including remaining skid huts, needed to be removed and properly disposed.

The clean-closure corrective action consisted of excavation, disposal, verification sampling, partial backfilling, and regrading. Field activities began on November 3, 1999, and ended on January 13, 2000. Soil that exceeded the EPA hazardous waste level was excavated, staged in a covered rolloff bin within a 90-Day Pad, and hauled off-site for disposal. Soil that exceeded EPA Industrial PRGs for pesticides and the NDEP Action Level for petroleum hydrocarbons was excavated and disposed, along with the remaining skid huts and other site debris, in appropriate landfills at the NTS. Verification soil samples were collected and analyzed to determine if clean closure had been achieved. Some areas required additional excavation before resampling verified clean closure. Clean borrow soil was hauled to the site and used to backfill selected excavations. All excavations were then regraded to promote drainage and minimize ponding of surface water.

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1.0 INTRODUCTION

This Closure Report (CR) describes the remediation activities performed at the Nevada Test Site (NTS) Pesticide Release Sites where pesticides and herbicides were formerly stored, handled, and disposed. The NTS Pesticide Release Sites are identified in the Federal Facility Agreement and Consent Order (FFACO) of 1966 as Corrective Action Unit (CAU) 340 (FFACO, 1996). Remediation of CAU 340 is required under the FFACO (FFACO, 1996). CAU 340 consists of the following Corrective Action Sites (CASs) in Areas 15 and 23 of the NTS (Figure 1):

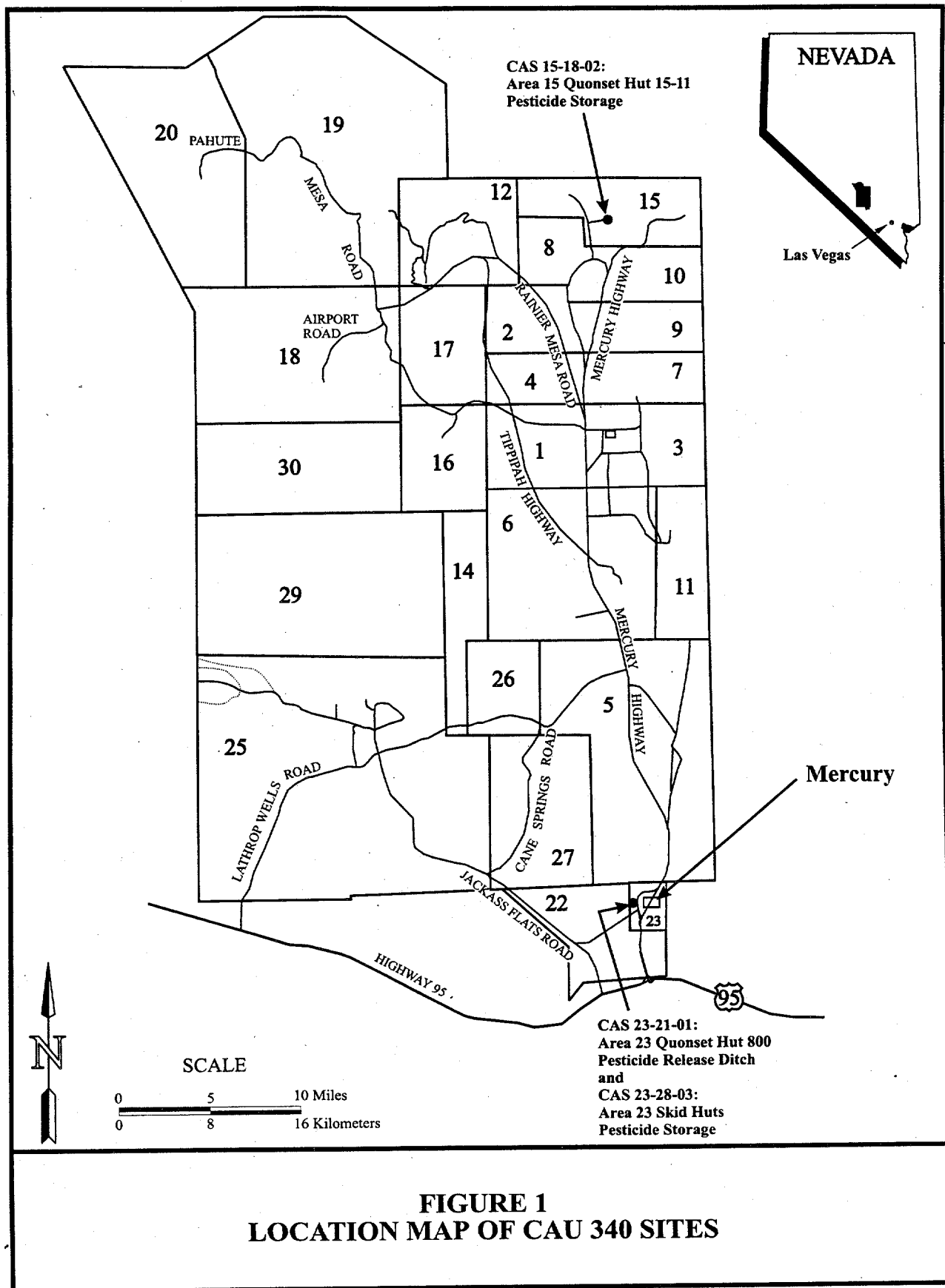
- CAS 15-18-02: Area 15 Quonset Hut 15-11 Pesticide Storage
- CAS 23-21-01: Area 23 Quonset Hut 800 Pesticide Release Ditch
- CAS 23-28-03: Area 23 Skid Huts Pesticide Storage

1.1 PURPOSE

The purpose of this report is to provide documentation of the completed corrective action and to provide data confirming the corrective action. The corrective action was performed in accordance with the approved Corrective Action Plan (CAP) (U.S. Department of Energy [DOE], 1999) and consisted of clean closure by excavation and disposal.

The Area 15 Quonset Hut 15-11 was formerly used for storage of farm supplies including pesticides, herbicides, and fertilizers. The Area 23 Quonset Hut 800 was formerly used to clean pesticide and herbicide equipment. Steam-cleaning rinsate and sink drainage occasionally overflowed a sump into adjoining drainage ditches. One ditch flows south and is referred to as the quonset hut ditch. The other ditch flows southeast and is referred to as the inner drainage ditch. The Area 23 Skid Huts were formerly used for storing and mixing pesticide and herbicide solutions. Excess solutions were released directly to the ground near the skid huts. The skid huts were moved to a nearby location prior to the site characterization performed in 1998 and reported in the Corrective Action Decision Document (CADD) (DOE, 1998). The vicinity and site plans of the Area 23 sites are shown in Figures 2 and 3, respectively.

The CADD (DOE, 1998) reported that at the Area 15 site, soil pesticide concentrations did not exceed U.S. Environmental Protection Agency (EPA) Region 9 Industrial Preliminary Remediation Goals (PRGs) to a depth of 0.3 meters (m) (1 foot [ft]) below ground surface (bgs) (EPA, 1996a). Corrective actions at the Area 15 site were therefore not required.



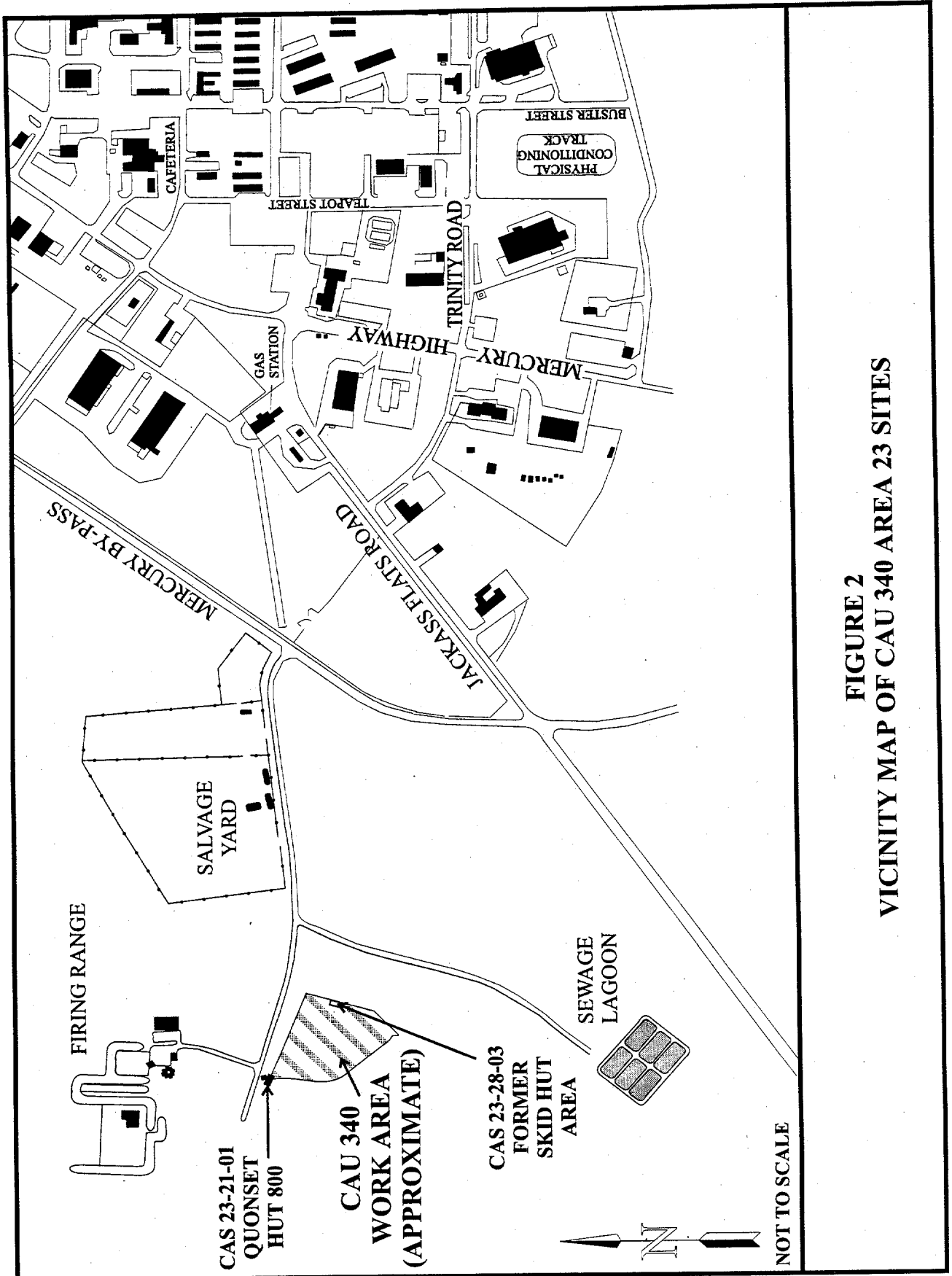
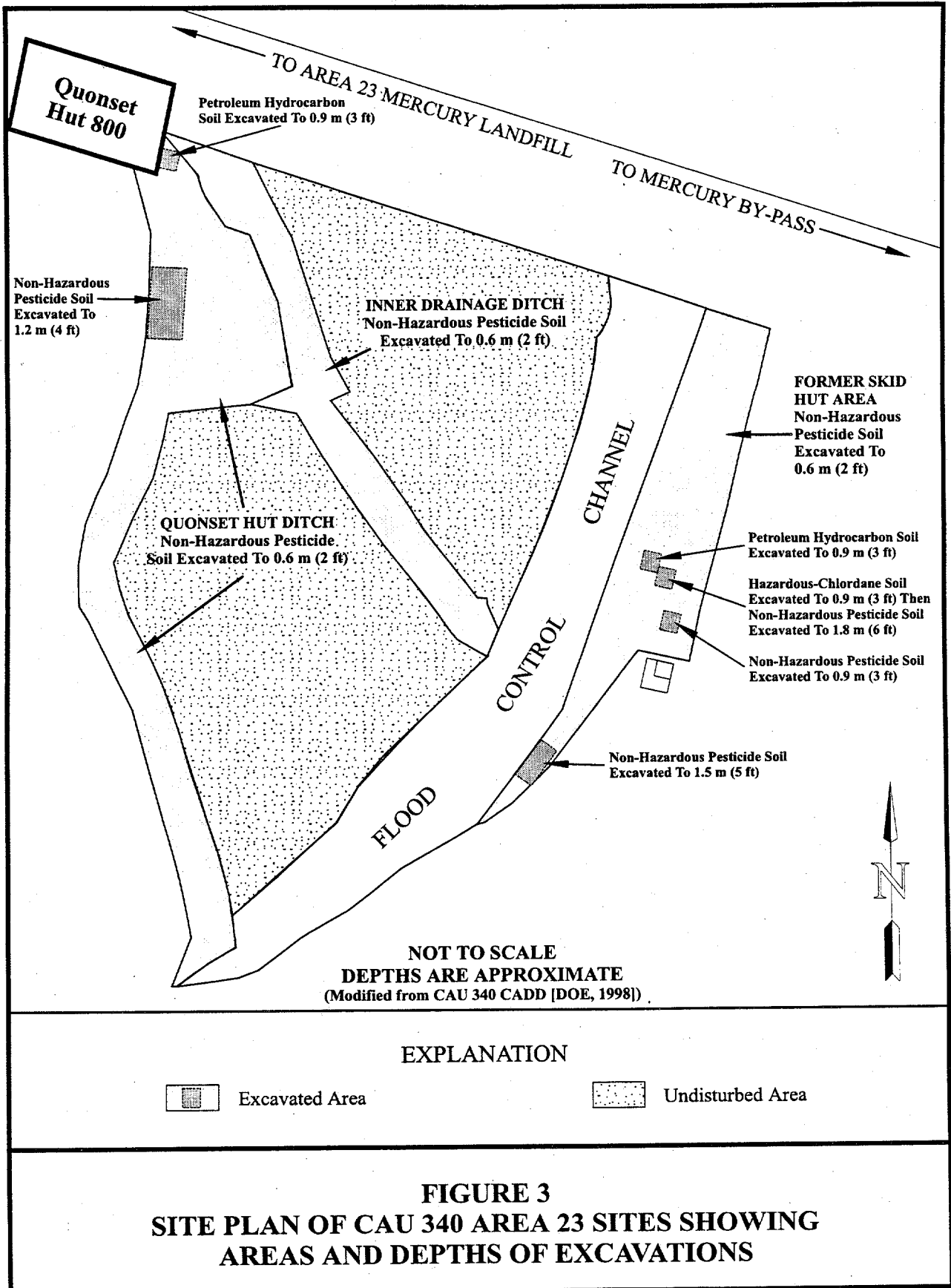


FIGURE 2
VICINITY MAP OF CAU 340 AREA 23 SITES



The CADD (DOE, 1998) reported that at the Area 23 sites (Quonset Hut 800 ditches and former skid hut area), soil exceeded EPA Industrial PRGs (EPA, 1996a) between the depths of 0 and 0.6 m (0 and 2 ft) for the following pesticides:

- 4,4'-Dichloro Diphenyl Dichloro Ethane
- 4,4'-Dichloro Diphenyl Dichloro Ethylene
- 4,4'-Dichloro Diphenyl Trichloro Ethane
- Chlordane
- Aldrin
- Dieldrin
- Heptachlor
- Heptachlor Epoxide

Soil in one location in the former skid hut area exceeded the EPA Toxicity Characteristic Leachate Procedure (TCLP) hazardous-waste concentration for the pesticide Chlordane (EPA, 1996c). The soil from this location and in two other locations exceeded the Nevada Division of Environmental Protection (NDEP) Action Level for petroleum hydrocarbons (Nevada Administrative Code, 1996). Corrective actions at the Area 23 sites were therefore required.

The NTS Resource Management Plan Annual Summary (DOE, 2000) reiterated that characterization and remediation of FFACO sites are performed to industrial standards, which restricts future use of these sites to industrial use. Therefore, formal land-use restrictions are not necessary for sites that meet industrial standards.

1.2 SCOPE

The corrective action as implemented consisted of the following activities:

- Preplanning and site preparation, including preparation of plans and permits, delineation of excavation boundaries, and mobilization of equipment and personnel to the site.
- Excavation of soil exceeding the TCLP hazardous waste level for the pesticide Chlordane. The excavated soil was staged in a temporary 90-day hazardous waste area and then transported to an off-site treatment, storage, and disposal facility (TSDF).
- Excavation of soil exceeding the NDEP Action Level for petroleum hydrocarbons. This soil was transported to the NTS Area 6 Hydrocarbon Class III Industrial Solid Waste Disposal Site (commonly referred to as the Hydrocarbon Landfill).
- Excavation of soil exceeding pesticide PRGs. This soil was transported to the NTS Area 23 Class II Municipal and Industrial Solid Waste Disposal Site (commonly referred to as the Mercury Landfill) for disposal.

- Visually inspecting excavations, field screening samples, and collecting verification soil samples for laboratory analysis. Based on results of field screening and verification samples, additional excavation was done in certain areas and resampled.
- Transporting clean borrow soil to the site for backfilling.
- Regrading the excavations to promote drainage and minimize ponding of surface water.
- Site cleanup, including disposal of remaining skid huts, fencing, and other site debris in the NTS Area 9 U10c Class III Industrial Solid Waste Disposal Site (commonly referred to as the U10c Landfill).

1.3 CLOSURE REPORT CONTENTS

This document is divided into the following sections in accordance with the approved FFACO CR standardized outline:

- Section 1.0 - Introduction (purpose, scope, contents).
- Section 2.0 - Closure Activities (description, deviations, schedule, site plan).
- Section 3.0 - Waste Disposition (wastes encountered and their appropriate disposal).
- Section 4.0 - Closure Verification Results (laboratory analysis).
- Section 5.0 - Summary and Recommendations.
- Section 6.0 - References.

Certain sections and appendices of this document have been modified from the approved FFACO outline. The following FFACO sections and appendices have not been included or revised as indicated below:

- Use Restriction - Not applicable. Clean closure of FFACO sites to industrial standards restricts future use to industrial use (DOE, 2000).
- Closure Certification - Not applicable.
- As-Built Documentation - Not applicable. No engineered structures were constructed.
- Modifications to the Post-Closure Plan - Not applicable for this clean close site.

The appendices included in this document are provided as follows:

- Appendix A: Photographs of Closure Activity Work Areas.
- Appendix B: Waste Disposition Documentation.
- Appendix C: Verification Sample Analytical Reports.

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2.0 CLOSURE ACTIVITIES

This section of the CR details the specific corrective action activities implemented and completed during the closure of CAU 340. This section also provides a detailed schedule of site activities as completed. Photographs showing the work areas before, during, and after closure activities are included in Appendix A.

2.1 DESCRIPTION OF CORRECTIVE ACTION ACTIVITIES

2.1.1 Preplanning and Site Preparation

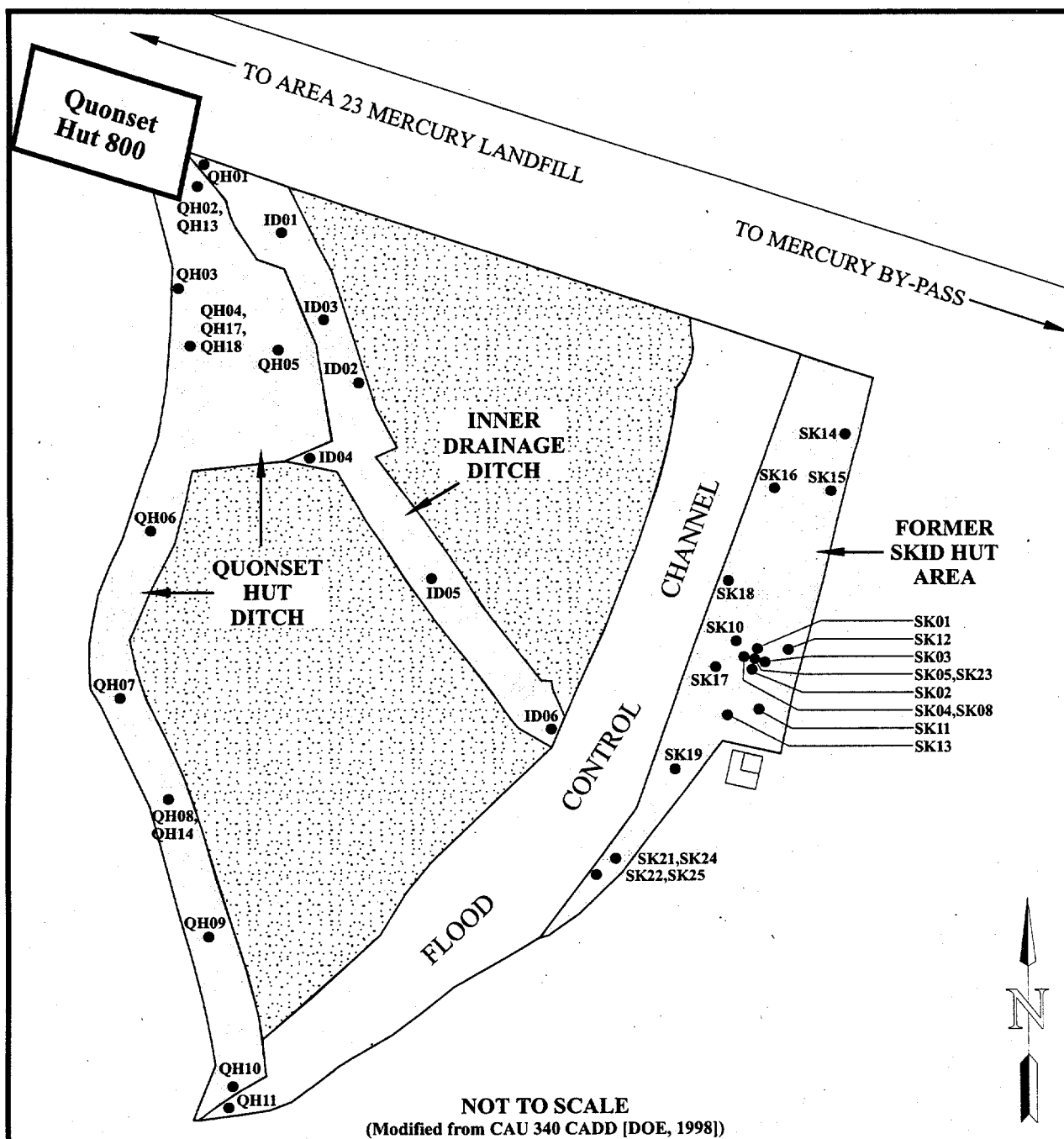
Planning documents prepared prior to beginning CAU 340 corrective action activities include the CAP (DOE, 1999), Field Management Plan (Bechtel Nevada [BN], 1999a), Site Specific Health and Safety Plan (BN, 1999b), a construction work package, and an excavation permit. Above-ground and underground utilities were identified prior to starting work. Based on process knowledge and analytical results from the site characterization, a Radiological Control Technician exempted the waste loads from radiological survey. In addition, a National Environmental Policy Act checklist was prepared and a pre-activity site survey was performed by a biologist. The survey confirmed the absence of sensitive animal or plant species. Planned excavation boundaries were identified. A Readiness Review meeting was conducted on October 20, 1999. On November 3, 1999, the pre-job briefing was held and personnel and equipment were mobilized to the site.

2.1.2 Excavation of Hazardous-Chlordane Soil

The CADD (DOE, 1998) identified one location in the former skid hut area where soil exceeded the TCLP level for the pesticide Chlordane (Figure 3). This soil required removal as hazardous waste. A 3 by 3 m (10 by 10 ft) excavation was delineated, centered on the original site-characterization soil-sampling location.

On November 9, 1999, the hazardous-Chlordane soil was excavated to a depth of 0.9 m (3 ft) bgs, 0.3 m (1 ft) below the deepest sample reported in the CADD (DOE, 1998) to exceed the TCLP level. Using a backhoe, the soil was excavated and loaded directly into a 15 cubic meter (m^3) (20 cubic yard [yd^3]) rolloff bin provided by the off-site TSDF subcontractor. The bin was covered with a tarp and staged in a 90-day hazardous waste area pending transport to an off-site TSDF. The completed excavation was visually inspected and no staining or discoloration was observed.

Soil samples collected in the former skid hut area are identified with a "SK" prefix. The samples were collected from the sides (SK01 through SK04) and bottom (SK05) of the hazardous-chlordane excavation at locations shown in Figure 4. Splits of the soil samples were field



EXPLANATION

- | | | |
|--|---|---|
|  Excavated Area |  Sample ID |  Undisturbed Area |
|--|---|---|

FIGURE 4
SITE PLAN OF CAU 340 AREA 23 SITES SHOWING
VERIFICATION SOIL SAMPLE LOCATIONS

screened for pesticides and petroleum hydrocarbons using test kits but the results were inconclusive. The remaining sample portions were sent to an off-site laboratory for verification analyses. Details of soil sampling, handling, analyses, and results are discussed in Section 4.1.

The analytical results indicate that TCLP levels for pesticides and the NDEP Action Level for petroleum hydrocarbons are not exceeded. However, the bottom soil sample (SK05) exceeded the Chlordane PRG. Therefore an additional 0.9 m (3 ft) of soil was excavated to a final depth of 1.8 m (6 ft) bgs on January 3, 2000. A final verification soil sample (SK23) was collected from the bottom of the deepened excavation (Figure 4). The analytical results are discussed in Section 4.1 and indicate that pesticide PRGs are not exceeded and no further excavation is needed.

On December 16, 1999, approximately 9 m³ (12 yd³) (16 tons) of hazardous-Chlordane soil was transported off-site for disposal by the TSDF subcontractor. On January 3, 2000, approximately 7 m³ (9 yd³) (12 tons) of nonhazardous pesticide soil was disposed in the NTS Area 23 Mercury Landfill. Waste disposition is discussed in Section 3.0. Backfilling activities are discussed in Section 2.1.6.

2.1.3 Excavation of Petroleum Hydrocarbon Soil

The CADD (DOE, 1998) identified three locations where soil exceeded the petroleum hydrocarbon NDEP Action Level and pesticide PRGs. The first location was the hazardous-Chlordane soil described in the previous section. The second location was also in the former skid hut area, adjacent to the hazardous-Chlordane soil. The third location was in the quonset hut ditch. The second and third locations were delineated for excavation (Figure 3), each approximately 3 by 3 m (10 by 10 ft) and centered on the original site-characterization soil-sampling locations.

On November 8, 16, and 17, 1999, petroleum hydrocarbon soil was excavated to a depth of 0.9 m (3 ft) bgs using a backhoe and loaded into end dumps using a front-end loader. The completed excavations were visually inspected and no staining or discoloration was observed.

Soil samples collected in the former skid hut area and quonset hut ditch are identified with "SK" and "QH" prefixes, respectively. The samples were collected from the bottom of the two petroleum hydrocarbon excavations (SK10 and QH02/QH13, respectively) at locations shown in Figure 4. Splits of the soil samples were field screened for pesticides and petroleum hydrocarbons using test kits but the results were inconclusive. The remaining sample portions were sent to an off-site laboratory for verification analyses. Details of soil sampling, handling, analyses, and results are discussed in Section 4.1. The analytical results indicate that the NDEP Action Level and pesticide PRGs are not exceeded and no further excavation is needed.

Approximately 41 m³ (53 yd³) (71 tons) of nonhazardous petroleum hydrocarbon soil were disposed in the NTS Area 6 Hydrocarbon Landfill. Waste disposition is discussed in Section 3.0. Backfilling activities are discussed in Section 2.1.6.

2.1.4 Excavation of Nonhazardous Pesticide Soil

The CADD (DOE, 1998) identified three broad areas where pesticide soil concentrations exceeded PRGs but not TCLP levels (Figure 3): former skid hut area, quonset hut ditch, and inner drainage ditch. Areas were delineated for excavation based on the original site-characterization soil-sampling locations.

On November 10-16, 1999, nonhazardous pesticide soil was excavated to a depth of 0.6 m (2 ft) bgs using a front-end loader and scraper. A small area, approximately 3 by 3 m (10 by 10 ft) and near the hazardous-Chlordane excavation, was excavated to a depth of 0.9 m (3 ft) bgs, 0.3 m (1 ft) below a sample reported in the CADD (DOE, 1998) to exceed a PRG. The completed excavations were visually inspected and no staining or discoloration was observed.

Soil samples collected in the former skid hut area, quonset hut ditch, and inner drainage ditch are identified with an "SK," "QH," and "ID" prefixes, respectively. Verification soil samples (SK11-SK22, QH01 and QH03-QH11, and ID01-ID06, respectively) were collected from the bottom of the excavations at locations shown in Figure 4. Details of soil sampling, handling, analyses, and results are discussed in Section 4.1. The analytical results indicate that pesticide PRGs are not exceeded except at locations QH04, SK21, and SK22, which exceeded the Chlordane PRG.

On January 3-4, 2000, two locations, each approximately 3 by 9 m (10 by 30 ft) and centered on SK21/SK22 and QH04, were excavated deeper. The SK21/SK22 location was excavated an additional 0.9 m (3 ft) to a final depth of 1.5 m (5 ft) bgs. The QH04 location was excavated an additional 0.6 m (2 ft) to a final depth of 1.2 m (4 ft) bgs. Soil samples were collected from the bottom of both excavations (SK24/SK25 and QH17/QH18[duplicate], respectively). Splits of the soil samples were field screened for pesticides and petroleum hydrocarbons using test kits but the results were inconclusive. The remaining sample portions were sent to an off-site laboratory for verification analyses. The analytical results are discussed in Section 4.1 and indicate that pesticide PRGs are not exceeded in the remaining soil and no further excavation is needed.

Approximately 1,700 m³ (2,200 yd³) (2,900 tons) of nonhazardous pesticide soil was disposed in the NTS Area 23 Mercury Landfill. Waste disposition is discussed in Section 3.0. Backfilling activities are discussed in Section 2.1.6.

2.1.5 Disposal of Other Wastes

On January 13, 2000, two skid huts that had been relocated away from the excavation area and a pallet of debris were hauled to the NTS Area 9 U10c Landfill for disposal.

2.1.6 Backfilling and Regrading of Excavations

Prior to the start of field activities, a source of backfill material was identified and used to backfill the former skid hut area excavation and portions of the quonset hut ditch and inner drainage ditch excavations in order to restore drainage and minimize ponding of surface water.

Between November 3, 1999, and November 18, 1999, clean borrow soil was stockpiled on-site. The borrow soil was subsequently placed in the excavations and wheel compacted using the front-end loader, grader, or water truck, as needed. In small excavations with restricted access, the soil was compacted with downward blows of the backhoe bucket until wheel compaction was possible. Final site regrading was completed on January 13, 2000.

2.1.7 Decontamination of Equipment

After the final load of hazardous-Chlordane soil was handled, equipment that had contacted the soil (backhoe bucket and shovel) was cleaned by first brushing off visible residue, then washing with a laboratory-grade detergent solution, and followed by a tap water rinse. Equipment decontamination was performed over the rolloff bin in order to contain rinsate in the excavated soil. Less than 4 liters [L] (1 gallon [gal]) of detergent solution and water rinse was used and was completely absorbed into the waste soil.

Soil sampling scoops were decontaminated before and after for sample collection using a laboratory-grade detergent solution, an isopropanol rinse and deionized water rinses. Less than 4 L (1 gal) of detergent solution and rinsate was generated from the decontamination of scoops used to sample hazardous-Chlordane soil and was completely absorbed into soil in the rolloff bin. Less than 4 L (1 gal) of detergent solution and rinsate was generated from the decontamination of other scoops and was completely absorbed in soil later disposed in the NTS Area 23 Mercury Landfill.

2.2 DEVIATIONS FROM THE CAP AS APPROVED

No significant deviations occurred from the approved scope of work as outlined in the CAP (DOE, 1999). The following minor deviations occurred from the approved scope of work:

- Some locations were excavated as much as 1.2 m (4 ft) deeper than the planned depths of 0.3 to 0.6 m (1 to 2 ft) bgs. The planned excavation depth at some locations was the same depth as the site-characterization soil samples that exceeded regulatory levels (DOE, 1998 and 1999). At these locations, the soil was excavated 0.3 m (1 ft) deeper than planned to increase the likelihood that all the waste would be removed at one time. Despite these precautions, some soil samples did exceed the Chlordane EPA Industrial PRG and further excavation was necessary to remove all the waste. Those locations were excavated an additional 0.6 to 0.9 m (2 to 3 ft) and then re-sampled.
- Verification soil samples were collected in four more locations than planned. Chlordane concentrations at locations QH04, SK05, SK21, and SK22, exceeded the EPA Industrial PRG and prompted further excavation and re-sampling of those locations at greater depths (QH17/QH18, SK23, SK24, and SK25, respectively).
- Actual volumes of generated waste varied from planned volumes. A slightly greater volume of hazardous-Chlordane soil was excavated and disposed (9 m^3 [12 yd^3]) than planned (7.5 m^3 [10 yd^3]) because that excavation was dug 0.3 m (1 ft) deeper than planned. The volume of nonhazardous petroleum-hydrocarbon soil was not estimated separately from nonhazardous pesticide soil in the plan but 41 m^3 (53 yd^3) were excavated and disposed. A smaller volume of nonhazardous pesticide soil was excavated and disposed ($1,700 \text{ m}^3$ [$2,200 \text{ yd}^3$]) than planned ($2,300 \text{ m}^3$ [$3,000 \text{ yd}^3$]) because the construction equipment excavated the ditches more efficiently than expected, concentrating the excavation along the deepest portion of the ditches where overflow from the quonset hut would have traveled.
- The former skid hut area excavation was completely backfilled with clean fill and leveled to existing grade, as planned. The quonset hut ditch and inner drainage ditch excavations were not fully backfilled, as had been planned. The ditches needed only partial backfilling before regrading to restore the drainages to more natural conditions.
- All nonhazardous and non-petroleum hydrocarbon waste was disposed in the NTS Area 23 Mercury Landfill, as planned, except for a load of two skid huts and a pallet of debris which was disposed in the NTS Area 9 U10c Landfill.

2.3 CORRECTIVE ACTION SCHEDULE AS COMPLETED

The corrective action field activities began on November 3, 1999, and were completed on January 13, 2000. A corrective action schedule as completed is provided in Table 1.

2.4 SITE PLAN / SURVEY PLAT

The final site plan is shown in Figure 3.

TABLE 1
CAU 340 CORRECTIVE ACTION SCHEDULE AS COMPLETED

Activity ID	Activity Description	Cal ID	Actual Start	Actual Finish
CAU 340 CORRECTIVE ACTION PLAN - AS COMPLETED				
C34001	Mobilize Excavation Equipment	2	03NOV99	04NOV99
C34011	Haul In Borrow Material From Area 6	2	04NOV99	18NOV99
C34021	Excav. Non-Haz. Petrol. QH Soil/Haul to A6LF	2	08NOV99	08NOV99
C34025	Excav. Haz. Pest. SK Soil/Stage in 90-Day Pad	2	09NOV99	09NOV99
C34027	Collect Verification Soil Samples (Initial)	2	09NOV99	17NOV99
C34028	Excav. Non-Haz. Pest. Soil/Haul to A23LF	2	10NOV99	17NOV99
C34031	Excav. Non-Haz. Petrol. SK Soil/Haul to A6LF	2	17NOV99	17NOV99
C34051	Ship Haz. Pesticide Soil For Offsite Disposal	2	16DEC99	16DEC99
C34071	Deepen Non-Haz. Pest. Excav./Haul to A23LF	2	03JAN00	04JAN00
C34081	Collect Verification Soil Samples (Resample)	2	03JAN00	04JAN00
C34091	Backfill/Regrade Excavations	2	03JAN00	12JAN00
C34101	Haul Two Remaining Skid Huts to A9LF	2	13JAN00	13JAN00
C34111	Demobilize Excavation Equipment	1	13JAN00	13JAN00

FY00				JAN
OCT	NOV	DEC		

3.0 WASTE DISPOSITION

Wastes generated during the closure of CAU 340 were disposed as follows:

- Approximately 9 m³ (12 yd³) (16 tons) of hazardous-Chlordane soil was staged on-site in a 90-Day Pad (#90D016) and then transported off-site as hazardous waste to the TSDF on December 16, 1999.
- Approximately 41 m³ (53 yd³) (71 tons) of nonhazardous petroleum-hydrocarbon soil was disposed in the NTS Area 6 Hydrocarbon Landfill on November 8, 16, and 17, 1999.
- Approximately 1,700 m³ (2,200 yd³) (2,900 tons) of nonhazardous pesticide soil was disposed in the NTS Area 23 Mercury Landfill on November 10-16, 1999, and on January 3-4, 2000.
- Approximately 21 tons of solid waste, including the two remaining skid huts, were disposed in the NTS Area 9 U10c Landfill on January 13, 2000.
- Potentially hazardous waste, consisting of spent carbon tetrachloride, hydrochloric acid, and methanol, was generated during field screening of soil samples. This waste was managed in a temporary on-site Satellite Accumulation Area (#NTS087) until closure activities were completed. The total volume for these wastes was less than 0.5 L (0.13 gal) of liquids. Sampling of this small volume of waste to determine hazardous characteristics consumed the entire waste volume.

Waste disposition records, including the Uniform Hazardous Waste Manifest and NTS landfill documents, are available in NTS Waste Operations files and are summarized in Appendix B.

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4.0 CLOSURE VERIFICATION RESULTS

4.1 VERIFICATION SAMPLE ANALYSES

Verification soil samples were collected from 35 locations after the excavations reached designated boundaries and no visible staining was observed. The samples were collected with decontaminated stainless steel sampling scoops and placed in labeled sample containers secured with custody seals. The containers were placed in an ice-filled chest, transported under chain-of-custody to the Analytical Services Laboratory in Mercury, Nevada, then forwarded to an off-site laboratory for analyses. Samples from all 35 locations were analyzed for total pesticides (EPA, 1996b). Samples from eight of these locations were also analyzed for total petroleum hydrocarbons and one was also analyzed for TCLP pesticides (EPA, 1996b).

Chlordane was the only pesticide EPA Industrial PRG exceeded (1,500 micrograms/kilogram [ug/kg]) in soil samples QH04 (2,200 ug/kg), SK05 (5,700 ug/kg), SK21 (5,800 ug/kg), and SK22 (5,000 ug/kg). After additional excavation, deeper soil samples were collected (QH17/QH18[duplicate], SK23, SK24, and SK25, respectively) which did not exceed pesticide PRGs. In the sample analyzed for TCLP pesticides (SK05), only Lindane was detected at a concentration (0.3 micrograms per liter [ug/L]) well below the TCLP level (400 ug/L). None of the eight samples analyzed for total petroleum hydrocarbons exceeded the NDEP Action Level of 100 milligrams per kilogram.

The analytical results verify that pesticides and petroleum hydrocarbons remaining in the ground are below EPA TCLP levels, EPA Industrial PRGs, and the NDEP Action Level. The analytical results for pesticides and petroleum hydrocarbons are summarized in Tables 2 and 3, respectively, and the analytical reports are included in Appendix C.

4.2 BACKFILLING AND REGRADING OF EXCAVATIONS

Excavations were backfilled and/or regraded after verification sampling indicated clean closure was achieved. Clean backfill was placed and compacted by downward blows of the backhoe bucket (in areas of limited access) and/or by several passes of the loader or other heavy equipment. The site was then graded to restore natural drainage patterns and minimize ponding. A water truck was used to condition the borrow soil and for dust suppression. Verification testing of compaction was not required or performed.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS FOR DETECTED PESTICIDES IN VERIFICATION SAMPLES

SAMPLE IDENTIFICATION	SAMPLE DEPTH	4,4'-DDD	4,4'-DDE	4,4'-DDT	TECHNICAL CHLORDANE ^A	ALDRIN	DIELDRIN	ENDRIN KETONE	GAMMA-BHC (LINDANE)	HEPTACHLOR	HEPTACHLOR EPOXIDE	METHOXYCHLOR
FORMER SKID HUT AREA												
EPA TCLP ^B (ug/L)		NL	NL	NL	30	NL	NL	NL	400	[	]	
CAU340SK05	0.9 m (3 ft)	nr	nr	nr	nd	nr	nr	nr	0.3	nd	nd	10,000
EPA Industrial PRG ^D (ug/kg)		7,900	5,600	5,600	1,500	110	120	NL	1500	420	210	3,400,000
CAU340SK01	0.9 m (3 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340SK02	0.9 m (3 ft)	nd	nd	nd	3.9 J	nd	nd	nd	nd	nd	nd	nd
CAU340SK03	0.9 m (3 ft)	nd	22	130	170	nd	3.3	nd	nd	nd	nd	nd
CAU340SK04	0.9 m (3 ft)	nd	nd	4.4	23	nd	nd	nd	nd	nd	nd	nd
CAU340SK08 (SK04 duplicate)	0.9 m (3 ft)	nd	nd	4.3	1.2 J	nd	nd	nd	nd	nd	nd	nd
CAU340SK05	0.9 m (3 ft)	nd	280	2,700	5,700	nd	nd	nd	8.9	nd	nd	nd
CAU340SK23 (beneath SK05)	1.8 m (6 ft)	nd	8.7	nd	374	nd	nd	nd	nd	15	nd	nd
CAU340SK10	0.9 m (3 ft)	nd	25	200	148	nd	nd	nd	nd	nd	nd	nd
CAU340SK11	0.9 m (3 ft)	nd	nd	4.4	7	nd	nd	nd	nd	1.7 J	12	nd
CAU340SK12	0.6 m (2 ft)	nd	nd	5.5	13	nd	nd	nd	nd	1.0 J	nd	nd
CAU340SK13	0.6 m (2 ft)	nd	44	140	100	nd	nd	nd	nd	nd	nd	nd
CAU340SK14	0.6 m (2 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340SK15	0.6 m (2 ft)	nd	nd	5.8	15	nd	nd	nd	nd	nd	nd	nd
CAU340SK16	0.6 m (2 ft)	nd	690	870	270	nd	nd	5.1	nd	8.2	nd	nd
CAU340SK17	0.6 m (2 ft)	8.6	4.4	38	20	nd	nd	nd	nd	nd	nd	nd
CAU340SK18	0.6 m (2 ft)	nd	64	270	170	nd	nd	nd	nd	nd	nd	nd
CAU340SK19	0.6 m (2 ft)	nd	37	220	230	nd	nd	2.2 J	nd	6.4	nd	nd
CAU340SK20	0.6 m (2 ft)	nd	nd	6.9	8	nd	nd	nd	nd	nd	nd	nd
CAU340SK21	0.6 m (2 ft)	nd	nd	nd	5,800	nd	nd	nd	3.5	280	nd	nd
CAU340SK24 (beneath SK21)	1.5 m (5 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340SK22	0.6 m (2 ft)	nd	1100	4,000	5,000	nd	170	nd	1.4 J	nd	nd	24,000
CAU340SK25 (beneath SK22)	1.5 m (5 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

TABLE 2 (continued)
 SUMMARY OF ANALYTICAL RESULTS FOR DETECTED PESTICIDES IN VERIFICATION SAMPLES

SAMPLE IDENTIFICATION	SAMPLE DEPTH	4,4'-DDD	4,4'-DDE	4,4'-DDT	TECHNICAL CHLORDANE ^a	ALDRIN	DIELDRIN	ENDRIN KETONE	GAMMA-BHC (LINDANE)	HEPTACHLOR	HEPTACHLOR EPOXIDE	METHOXYCHLOR
EPA Industrial PRG ^b (ug/kg)		7,900	5,600	5,600	1,500	110	120	NL	1500	420	210	3,400,000
QUONSET HUT DITCH												
CAU340QH01	0.6 m (2 ft)	nd	5.4	nd	310	11	nd	nd	nd	nd	nd	nd
CAU340QH02	0.9 m (3 ft)	nd	nd	nd	550	19	6.4	nd	nd	nd	nd	nd
CAU340QH13 (QH02 duplicate)	0.9 m (3 ft)	nd	nd	nd	880	36	11	nd	nd	nd	nd	nd
CAU340QH03	0.6 m (2 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340QH04	0.6 m (2 ft)	nd	nd	nd	2,200	nd	8.1	nd	nd	nd	55	nd
CAU340QH17 (beneath QH04)	1.2 m (4 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340QH18 (QH17 duplicate)	1.2 m (4 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340QH05	0.6 m (2 ft)	nd	nd	nd	7	nd	nd	nd	nd	nd	nd	nd
CAU340QH06	0.6 m (2 ft)	nd	nd	nd	22	0.92 J	nd	nd	nd	nd	4.1	nd
CAU340QH07	0.6 m (2 ft)	nd	2.0 J	nd	17	nd	nd	nd	nd	nd	nd	nd
CAU340QH08	0.6 m (2 ft)	nd	nd	nd	5	nd	nd	nd	nd	nd	nd	nd
CAU340QH14 (QH08 duplicate)	0.6 m (2 ft)	nd	nd	nd	4	nd	nd	nd	nd	nd	16	nd
CAU340QH09	0.6 m (2 ft)	nd	nd	nd	59	nd	nd	nd	nd	nd	nd	nd
CAU340QH10	0.6 m (2 ft)	nd	2.4 J	nd	83	nd	nd	nd	nd	nd	nd	nd
CAU340QH11	0.6 m (2 ft)	nd	2.3 J	nd	120	nd	nd	nd	nd	nd	nd	nd
INNER DRAINAGE DITCH												
CAU340ID01	0.6 m (2 ft)	nd	nd	5.1	172 E	nd	nd	nd	nd	nd	nd	nd
CAU340ID02	0.6 m (2 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340ID03	0.6 m (2 ft)	nd	nd	2.4 J	35	nd	nd	nd	nd	nd	2.0	nd
CAU340ID04	0.6 m (2 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340ID05	0.6 m (2 ft)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CAU340ID06	0.6 m (2 ft)	nd	nd	2.2 J	29	nd	nd	nd	nd	nd	nd	nd

**TABLE 2 (continued)
 SUMMARY OF ANALYTICAL RESULTS FOR DETECTED PESTICIDES IN VERIFICATION SAMPLES**

Notes:

Remediation-standard pesticides for CAU 340 were identified in the CADD (DOE, 1998) and CAP (DOE, 1999). EPA Method SW846 8081A (EPA, 1996b). See analytical reports in Appendix B for detection limits.

Analytical results for blank and ms/msd QA/QC samples are not shown.

A - Technical Chlordane is the sum of chlordane, alpha-chlordane, and gamma-chlordane.

B - EPA Toxicity Characteristic Leachate Procedure (TCLP) for 1996 (EPA, 1996c).

C - Heptachlor and its epoxide.

D - EPA Region IX Industrial Preliminary Remediation Goals (PRGs) for 1996 (EPA, 1996a).

E - Value above quantitation range.

ft - Foot

J - Analyte detected below quantitation limit.

m - Meter

na - Not applicable.

nd - Not detected at the reporting limit.

NL - Not listed.

nr - Not reported.

ug/kg - Microgram per kilogram.

ug/L - Microgram per liter.

TABLE 3
SUMMARY OF ANALYTICAL RESULTS FOR TPH IN VERIFICATION SAMPLES

SAMPLE IDENTIFICATION	SAMPLE DEPTH	GASOLINE C6-C10	DIESEL C10-C22
NDEP Action Level (mg/kg)		100	100
FORMER SKID HUT AREA			
CAU340SK01	0.9 m (3 ft)	nd	nd
CAU340SK02	0.9 m (3 ft)	nd	nd
CAU340SK03	0.9 m (3 ft)	nd	7.7
CAU340SK04	0.9 m (3 ft)	nd	nd
CAU340SK08 (SK04 duplicate)	0.9 m (3 ft)	nd	nd
CAU340SK05	0.9 m (3 ft)	nd	35
CAU340SK10	0.9 m (3 ft)	nd	6.3 J
QUONSET HUT DITCH			
CAU340QH02	0.9 m (3 ft)	nd	nd
CAU340QH13 (QH02 duplicate)	0.9 m (3 ft)	nd	nd
CAU340QH04	0.6 m (2 ft)	nd	8 J

Notes:

EPA Method SW8015B (EPA, 1996b). See analytical reports in Appendix B for detection limits.

Analytical results for blank and ms/msd QA/QC samples are not shown.

ft - Foot

J - Analyte detected below quantitation limit

m - Meter

mg/kg - Milligram per kilogram

na - Not applicable

nd - Not detected at the reporting limit

TPH - Total petroleum hydrocarbons

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5.0 SUMMARY AND RECOMMENDATIONS

5.1 SUMMARY

The following site closure activities were performed at the two CAU 340 sites located in Area 23 and are documented in this report:

- All soil containing pesticides at or above EPA TCLP hazardous-waste levels was removed and transported off-site to a TSDF.
- All soil containing pesticides at or above EPA Industrial PRGs (but below EPA TCLP hazardous-waste levels) was removed and disposed in the NTS Area 23 Mercury Landfill.
- All soil containing petroleum hydrocarbons at or above the NDEP Action Level was removed and disposed in the NTS Area 6 Hydrocarbon Landfill.
- The remaining skid huts and other debris were disposed in the NTS Area 9 U10c Landfill.
- The excavations were backfilled with borrow soil and/or regraded to promote drainage and minimize ponding of surface water.
- The field closure activities conducted at CAU 340 were completed following the approved CAP (DOE, 1999).

5.2 RECOMMENDATIONS

Since the closure activities for CAU 340 have been completed following the NDEP-approved CAP (DOE, 1999) as documented in this CR, the DOE requests:

- A Notice of Completion be provided by the NDEP to DOE for the closure of CAU 340 (CAS 15-18-02; CAS 23-21-01; and CAS 23-28-03).
- CAU 340 be moved from Appendix III to Appendix IV of the FFACO "Closed Corrective Action Units."

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6.0 REFERENCES

BN, see Bechtel Nevada.

Bechtel Nevada, 1999a. Field Management Plan for Corrective Action Unit 340: Area 23 Pesticide Release Site, Nevada Test Site, Nevada, Las Vegas, NV.

Bechtel Nevada, 1999b. Site Specific Health and Safety Plan for Corrective Action Unit 340: Area 23 Pesticide Release Site, Nevada Test Site, Nevada, Las Vegas, NV.

DOE, see U.S. Department of Energy.

EPA, see U.S. Environmental Protection Agency

FFACO, see Federal Facility Agreement and Consent Order.

Federal Facility Agreement and Consent Order of 1996. Prepared by Nevada Division of Environmental Protection, U.S. Department of Energy, and U.S. Department of Defense.

Nevada Administrative Code, 1996. NAC 445A.2272, "Contamination of soil: Establishment of action levels," As adopted by the Nevada Environmental Commission, October, Carson City, NV.

U.S. Department of Energy, Nevada Operations Office, 1998. Corrective Action Decision Document for Corrective Action Unit 340: Pesticide Release Sites, Nevada Test Site, Nevada, DOE/NV--525, Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office, 1999. Corrective Action Plan for Corrective Action Unit 340: Pesticide Release Site, Nevada Test Site, Nevada, DOE/NV--560, Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office, 2000. Nevada Test Site Resource Management Plan Annual Summary, January 2000, DOE/NV--604, Las Vegas, NV.

U.S. Environmental Protection Agency, 1996a, Region IX Preliminary Remediation Goals (PRGs), San Francisco, CA.

U.S. Environmental Protection Agency, 1996b, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition.

U.S. Environmental Protection Agency, 1996c, Title 40 Code of Federal Regulations 261.24, "Toxicity Characteristic," Washington, D.C.

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APPENDIX A
Work Site Photographs

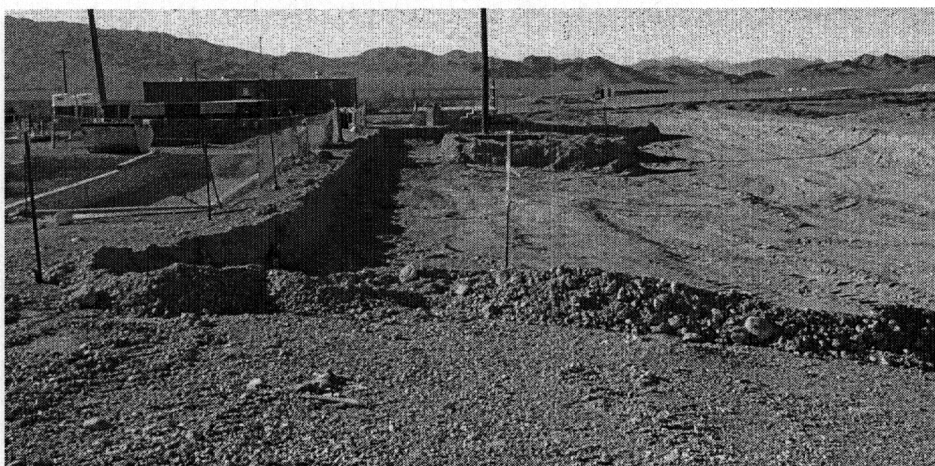
APPENDIX A

**PHOTOGRAPHS OF
CLOSURE ACTIVITY WORK AREAS**

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Downstream view on 06 Oct 1999, before excavation.

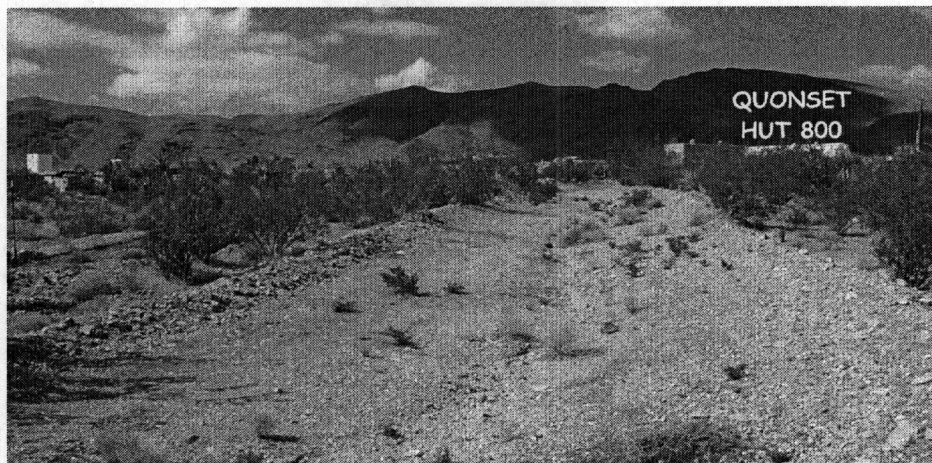


Downstream view on 18 Nov 1999, during excavation.

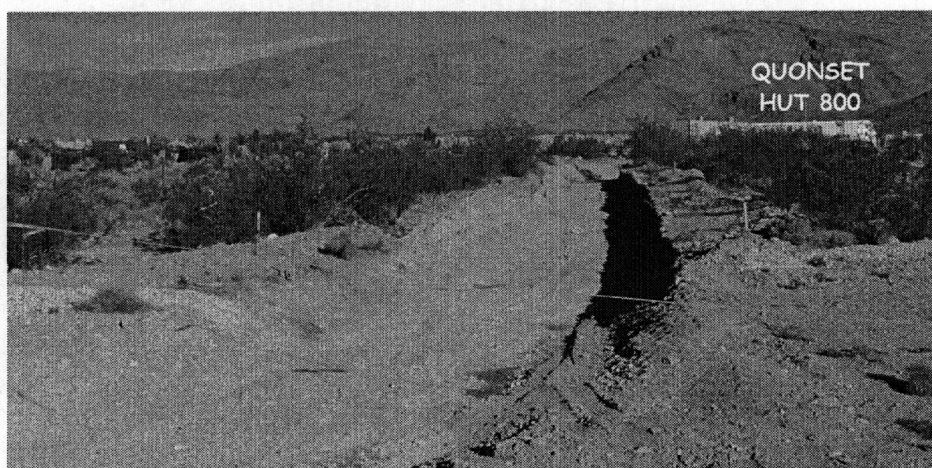


Upstream view on 27 Jan 2000, after backfilling.

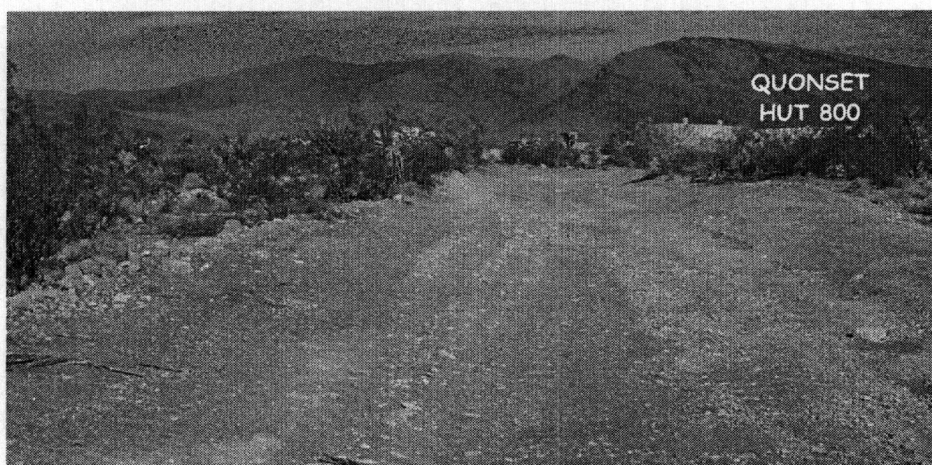
PLATE 1: PHOTOGRAPHS OF FORMER SKID HUT AREA



Upstream view on 06 Oct 1999, before excavation.



Upstream view on 18 Nov 1999, during excavation.

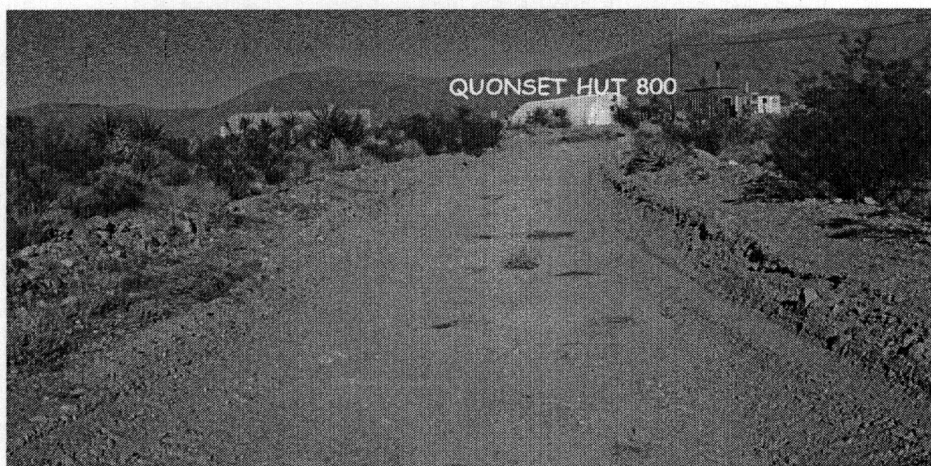


Upstream view on 27 Jan 2000, after regrading.

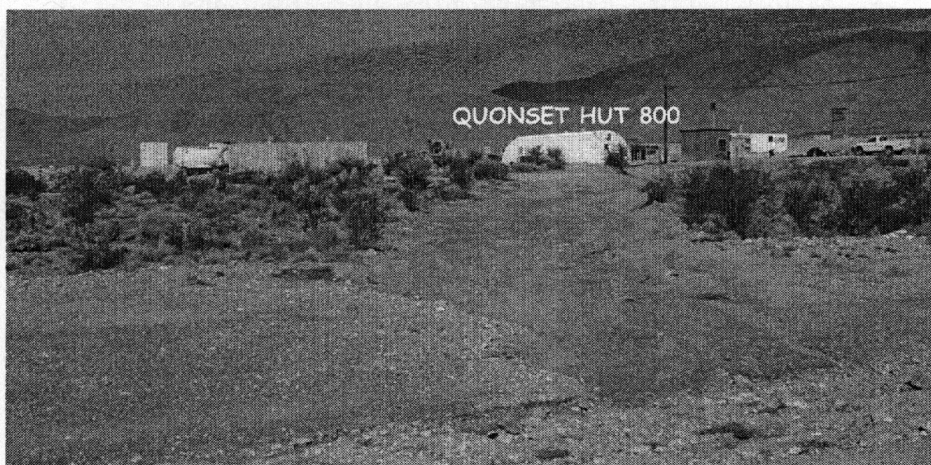
PLATE 2: PHOTOGRAPHS OF QUONSET HUT DITCH



Upstream view on 06 Oct 1999, before excavation.



Upstream view on 18 Nov 1999, after excavation.



Upstream view on 27 Jan 2000, after regrading.

PLATE 3: PHOTOGRAPHS OF INNER DRAINAGE DITCH

APPENDIX B
Waste Documentation

APPENDIX B

WASTE DISPOSITION DOCUMENTATION

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Interoffice Memorandum

To: W. F. Johnson

Date: February 14, 2000

From: C. A. Stowell, Project Manager
Solid Waste Operations

No.: 2150-CS-00-0025

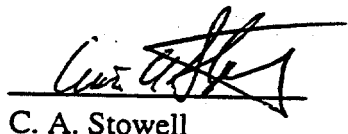
Subject: Waste Disposal Documentation for Corrective Action Unit (CAU) 340 and 342
Project No. N/A

Between November 8, 1999 and January 13, 2000, Nevada Test Site (NTS) landfills received approximately 3,029 tons of waste from CAU 340 remediation activities.

- Approximately 71 tons of hydrocarbon impacted waste were disposed at the NTS Area 6 Hydrocarbon Class III Industrial Solid Waste Disposal Site (SWDS).
- Approximately 2,937 tons of waste were disposed at the NTS Area 23 Class II Municipal and Industrial SWDS.
- Approximately 21 tons of waste were disposed at the NTS Area 9 U10c Class III Industrial SWDS.

Additionally, on December 16, 1999, approximately 16 tons of hazardous waste from CAU 340 remediation activities was transported from the NTS to Aragonite, UT for disposal. Enclosed is a copy of the Uniform Hazardous Waste Manifest associated with this waste.

Between October 25, 1999 and November 3, 1999, the Area 6 Hydrocarbon Class III Industrial Solid Waste Disposal Site received approximately 2,118 tons of hydrocarbon impacted waste from CAU 342 remediation activities.



C. A. Stowell

FEC/CAS:cjs
Subject Code: WMT3

Enclosures: as stated

cc w/o encls.
Correspondence Control, NLV008
J. M. Holden, NTS207
C. J. Schwartze, NTS207

00, Feb 25 21 51 00

Please print or type. (Form designed for use on a 2-pitch) typewriter.)

27509

994130

Form Approved OMB No. 2050-0039

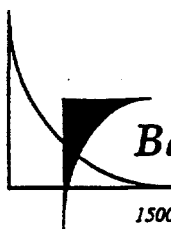
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N.V.3.8.9.0.0.9.0.0.0.1.0.0.0.0.2		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Bechtel Nevada for USDOE PO Box 98521 M/S NTS 207 Las Vegas, NV 89193-8521				A. State Manifest Document Number		B. State Generator's ID			
4. Generator's Phone (702)295-6400 CONTACT: ATTN: Craig Stowell				C. State Transporter's ID		D. Transporter's Phone (800)324-1139			
5. Transporter 1 Company Name TRIAD Transport				6. US EPA ID Number OKD981588791		E. State Transporter's ID			
7. Transporter 2 Company Name				8. US EPA ID Number		F. Transporter's Phone			
9. Designated Facility Name and Site Address Safety-Kleen Aragonite, Utah 11600 NORTH APTUS ROAD Aragonite, UT 84029				10. US EPA ID Number UTD981552177		G. State Facility's ID			
				H. Facility's Phone (801) 531-4245					
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. ☒ RQ Hazardous waste, solid, n.o.s., 9, NA3077, PG-III (Chlordane, Aldrin, 4,4-DDT) 0020				0 0 1 D T		3.2620		P	
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above A: 000024;ERG171; Profile #3000793 B: C: D:				K. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information 24 HR EMERGENCY CONTACT # (702) 295-6400 Certificate of Destruction is REQUIRED. Use proper PPE when handling containers.									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name CRAIG A. STOWELL for USDOE				Signature Craig A. Stowell		Month Day Year 11/21/61919			
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed/Typed Name Michael Nelson		Signature Michael Nelson		Month Day Year 11/21/61919	
18. Transporter 2 Acknowledgement of Receipt of Materials				Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.									
Printed/Typed Name Hannah Wilkowska				Signature Hannah Wilkowska		Month Day Year 11/21/61919			

APPENDIX C
Analytical Reports

APPENDIX C

VERIFICATION SAMPLE ANALYTICAL REPORTS

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Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Ted Redding
Bechtel Nevada Corp.
P.O. Box 98521
MS NTS 273
Las Vegas, NV 89193-8521

Phone: 1-702-295-7220
Fax: 1-702-295-4773

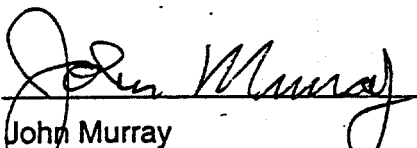
Work Order: 9911097
Project: SEIR CAU-340-1-0

Dear Ted Redding,

Barringer Laboratories received 7 samples on 11/11/99 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.


John Murray
Organic Laboratory Manager


Clarence Lott
Project Review

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Barringer Laboratories, Inc.

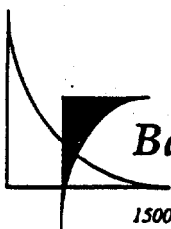
15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: SEIR CAU-340-1-0
Work Order: 9911097
Date Received: 11/11/99
Temp Received: 4°C

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Matrix	Bottle and Preservation
9911097-01A	CAU340SK01		11/9/99	Soil	8oz amber glass, unpreserved
9911097-02A	CAU340SK02		11/9/99	Soil	8oz amber glass, unpreserved
9911097-03A	CAU340SK03		11/9/99	Soil	8oz amber glass, unpreserved
9911097-04A	CAU340SK04		11/9/99	Soil	8oz amber glass, unpreserved
9911097-05A	CAU340SK05		11/9/99	Soil	8oz amber glass, unpreserved
9911097-06A	CAU340SK08			Soil	8oz amber glass, unpreserved
9911097-07A	CAU340SK09		11/9/99	Aqueous	1L cubitainer, unpreserved
9911097-07B	CAU340SK09		11/9/99	Aqueous	40mL VOA vial, unpreserved



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: SEIR CAU-340-1-0
Work Order: 9911097

CASE NARRATIVE

All reported values in this report have been rounded to the correct number of significant figures. All calculations have been performed before applying significant figures, therefore, not all calculations may be reproducible with the results printed in this report.

Analytical Comments for method SW846 8081A: There are some analytes that are being reported as estimated due to the analyte being above our calibration curve. The client is aware of this and does not require the samples analyzed at the required dilution to bring all analytes within the calibration range.

The temperature range for the TCLP extraction was 20-22C.

Analytical Comments for method SW8015BDRO, sample 9911097-05A: There was an interfering peak that coeluted with the surrogate which caused the recovery to exceed the set QC limit.

Analytical Comments for METHOD SW846 8015BGRO, SAMPLE 9911097-07BMS/MSD: The normal concentration of the matrix spike is normally 1.5 ug/mL but were spiked at 2.0 ug/ml by accident. There was insufficeint sample for respiking. Therefore the recoveries reported for this matrix spike, matrix spike duplicate reflect the actual spiking concentration of 2.0 ug/mL.

Analytical Comments for METHOD SW846 8015BGRO, SAMPLE MBLK: The surrogate exceeded the set QC limit for the method blank which was non-detect for gasoline. Because the surrogate was high we feel we could have detected gasoline if present and therefore consider the data to be valid as reported.

This report has been amended from the report dated 11/30/1999 to include the dilutions of the samples that were previously reported with estimated results for method SW846-8081A.

Analytical Comments for METHOD SW846 8081A, SAMPLE 9911097-03A: The result for gamma-Chlordane was taken from the second column because of an interfering peak on the primary column.

Analytical Comments for METHOD SW846 8081A, SAMPLE 9911097-05A: The result for gamma-Chlordane was taken from the second column because of an interfering peak on the primary column.

Barringer Laboratories, Inc.

CLIENT SAMPLE REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client:	Bechtel Nevada Corp.	Lab Sample ID:	9911097-01A								
Work Order:	9911097	Date Collected:	11/09/1999								
Project:	SEIR CAU-340-1-0	Matrix:	Soil								
Client Sample ID: CAU340SK01											
Tag Number:											
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/12/1999	11/17/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/23/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	77	30-120		%REC	1	11/12/1999	11/17/1999	MTB	P2034
Surr: Trifluorotoluene	98-08-8	SW8015B	120	60-130		%REC	1		11/23/1999	MTB	A3258

Client Sample ID: CAU340SK01

Tag Number:

4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	106	50-163		%REC	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	87	31-115		%REC	1	11/11/1999	11/13/1999	RDH	P1993

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Client: **Bechtel Nevada Corp.**
 Work Order: **9911097**
 Project: **SEIR CAU-340-1-0**
 Client Sample ID: **CAU340SK02**
 Tag Number:
 Lab Sample ID: **9911097-02A**
 Date Collected: **11/09/1999**
 Matrix: **Soil**

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/12/1999	11/17/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/23/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	86	30-120		%REC	1	11/12/1999	11/17/1999	MTB	P2034
Surr: Trifluorotoluene	98-08-8	SW8015B	118	60-130		%REC	1		11/23/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	1.7	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	2.2	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	108	50-163		%REC	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	91	31-115		%REC	1	11/11/1999	11/13/1999	RDH	P1993

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1637 Fax (303) 277-1689

Client: Bechtel Nevada Corp.

Work Order: 9911097

Project: SEIR CAU-340-1-0

Client Sample ID: CAU340SK03

Tag Number:

Lab Sample ID: 9911097-03A

Date Collected: 11/09/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	7.7	10	J	mg/Kg	1	11/12/1999	11/17/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/23/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	86	30-120	%REC		1	11/12/1999	11/17/1999	MTB	P2034
Surr: Trifluorotoluene	98-08-8	SW8015B	129	60-130	%REC		1		11/23/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	22	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	130	30		µg/Kg	10	11/11/1999	12/03/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	170	20		µg/Kg	10	11/11/1999	12/03/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	3.3	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	20		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	104	200		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	101	50-163	%REC		1	11/11/1999	11/13/1999	RDH	P1993
				31-115	%REC		1	11/11/1999	11/13/1999	RDH	P1993

Qualifiers:
 ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.

Work Order: 9911097

Project: SEIR CAU-340-1-0

Client Sample ID: CAU340SK04

Tag Number:

Lab Sample ID: 9911097-04A

Date Collected: 11/09/1999

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/12/1999	11/17/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/23/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	85	30-120		%REC	1	11/12/1999	11/17/1999	MTB	P2034
Surr: Trifluorotoluene	98-08-8	SW8015B	110	60-130		%REC	1		11/23/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	4.4	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	9.4	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	10		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin ketone	53494-70-5	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	ND	3		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor	76-44-8	SW846 8081A	14	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	2		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	20		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	ND	200		μ g/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	97	50-163		%REC	1	11/11/1999	11/13/1999	RDH	P1993
			92	31-115		%REC	1	11/11/1999	11/13/1999	RDH	P1993

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp. Work Order: 9911097
 Project: SEIR CAU-340-1-0 Client Sample ID: CAU340SK05
 Tag Number: Lab Sample ID: 9911097-05A
 Date Collected: 11/09/1999
 Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	35	10		mg/Kg	1	11/12/1999	11/17/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/23/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	157	30-120	S	%REC	1	11/12/1999	11/17/1999	MTB	P2034
Surr: Trifluorotoluene	98-08-8	SW8015B	123	60-130		%REC	1		11/23/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	280	200		µg/Kg	50	11/11/1999	12/03/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	2700	200		µg/Kg	50	11/11/1999	12/03/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	2500	80		µg/Kg	50	11/11/1999	12/03/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	8.9	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	3200	80		µg/Kg	50	11/11/1999	11/13/1999	RDH	P1993
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	85	50-163		%REC	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	91	31-115		%REC	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane, TCLP	57-74-9	SW846 8081A	ND	0.7		µg/L	1	11/24/1999	11/25/1999	RDH	P2190

Qualifiers:
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 Y - Unspiked sample > 4 times amount spiked
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CLIENT SAMPLE REPORT

Endrin, TCPLP	72-20-8	SW846 8081A	ND	0.3	µg/L	1	11/24/1999	11/25/1999	RDH	P2190
gamma-BHC, TCPLP	58-89-9	SW846 8081A	0.30	0.2	µg/L	1	11/24/1999	11/25/1999	RDH	P2190
Heptachlor, TCPLP	76-44-8	SW846 8081A	ND	0.2	µg/L	1	11/24/1999	11/25/1999	RDH	P2190
Methoxychlor, TCPLP	72-43-5	SW846 8081A	ND	9	µg/L	1	11/24/1999	11/25/1999	RDH	P2190
Toxaphene, TCPLP	8001-35-2	SW846 8081A	ND	10	µg/L	1	11/24/1999	11/25/1999	RDH	P2190
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	107	60-161	%REC	1	11/24/1999	11/25/1999	RDH	P2190
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	90	29-109	%REC	1	11/24/1999	11/25/1999	RDH	P2190

Client: Bechtel Nevada Corp.
 Work Order: 9911097
 Project: SEIR CAU-340-1-0
 Client Sample ID: CAU340SK08
 Tag Number:
 Lab Sample ID: 9911097-06A
 Date Collected:
 Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/12/1999	11/18/1999	MTB	P2034
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/24/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	89	30-120		%REC	1	11/12/1999	11/18/1999	MTB	P2034
Surr: Trifluorobluene	98-08-8	SW8015B	128	60-130		%REC	1		11/24/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
4,4'-DDT	50-29-3	SW846 8081A	4.3	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
alpha-Chlordane	5103-71-9	SW846 8081A	1.2	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Endrin kelone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993

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CLIENT SAMPLE REPORT

Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	106	50-163	%REC	1	11/11/1999	11/13/1999	RDH	P1993
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	84	31-115	%REC	1	11/11/1999	11/13/1999	RDH	P1993

Client: Bechtel Nevada Corp.
 Work Order: 9911097
 Project: SEIR CAU-340-1-0
 Tag Number: CAU340SK09
 Lab Sample ID: 9911097-07A
 Date Collected: 11/09/1999
 Matrix: Aqueous

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	1		mg/L	1	11/15/1999	11/18/1999	MTB	P2036
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	91	30-120		%REC	1	11/15/1999	11/18/1999	MTB	P2036
4,4'-DDD	72-54-8	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
4,4'-DDE	72-55-9	SW846 8081A	ND	0.04		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
4,4'-DDT	50-29-3	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Aldrin	309-00-2	SW846 8081A	ND	0.04		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
alpha-BHC	319-84-6	SW846 8081A	ND	0.03		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
alpha-Chlordane	5103-71-9	SW846 8081A	ND	0.06		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
beta-BHC	319-85-7	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Chlordane	57-74-9	SW846 8081A	ND	0.09		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
delta-BHC	319-86-8	SW846 8081A	ND	0.02		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Dieldrin	60-57-1	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endosulfan I	959-98-8	SW846 8081A	ND	0.04		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endosulfan II	33212-65-9	SW846 8081A	ND	0.7		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	0.06		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endrin	72-20-8	SW846 8081A	ND	0.2		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endrin aldehyde	7421-93-4	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Endrin ketone	53494-70-5	SW846 8081A	ND	0.04		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
gamma-BHC	58-89-9	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
gamma-Chlordane	5566-34-7	SW846 8081A	ND	0.04		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Heptachlor	76-44-8	SW846 8081A	ND	0.06		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	0.03		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Methoxychlor	72-43-5	SW846 8081A	ND	0.1		µg/L	1	11/11/1999	11/13/1999	RDH	P1994
Toxaphene	8001-35-2	SW846 8081A	ND	2		µg/L	1	11/11/1999	11/13/1999	RDH	P1994

Qualifiers: ND - Not detected at the reporting limit
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 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Surr: Decachlorobiphenyl 2051-24-3 SW846 8081A 68 18-125 %REC 1 11/11/1999 11/13/1999 RDH P1994
 Surr: Tetrachloro-m-xylene 877-09-8 SW846 8081A 99 23-110 %REC 1 11/11/1999 11/13/1999 RDH P1994

Client: Bechtel Nevada Corp. Lab Sample ID: 9911097-07B
 Work Order: 9911097 Tag Number: CAU340SK09
 Project: SEIR CAU-340-1-0 Date Collected: 11/09/1999
 Analyte Matrix: Aqueous

ANALYTE	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C6-C10	98-08-8	SW846 8015B	ND	0.5		mg/L	1		11/18/1999	MTB	A3172
Surr: Trifluorotoluene		SW846 8015B	99	60-130		%REC	1		11/18/1999	MTB	A3172

Qualifiers:
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 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
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Date: 07-Dec-99

Barringer Laboratories, Inc.

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.	Batch ID: A3172	Sample ID: MBLK	Method: SW846 8015B	Prepped:	
Work Order: 9911097	Method Blank	Seq No: 59916	Unit: mg/L	Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Run ID: LARRY_991118A	Matrix: Aqueous	Analyst: MTB	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit
T/R Hydrocarbons: C6-C10	ND	0.5			
Surr: Trifluorotoluene			100	60	130
Client: Bechtel Nevada Corp.	Batch ID: A3172	Sample ID: 9911097-07BMS	Method: SW846 8015B	Prepped:	
Work Order: 9911097	Matrix Spike	Seq No: 59918	Unit: mg/L	Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Run ID: LARRY_991118A	Matrix: Aqueous	Analyst: MTB	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit
T/R Hydrocarbons: C6-C10	2.1	0.5			
Surr: Trifluorotoluene			100	60	130
Client: Bechtel Nevada Corp.	Batch ID: A3172	Sample ID: 9911097-07BMSD	Method: SW846 8015B	Prepped:	
Work Order: 9911097	Matrix Spike Duplicate	Seq No: 59919	Unit: mg/L	Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Run ID: LARRY_991118A	Matrix: Aqueous	Analyst: MTB	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit
T/R Hydrocarbons: C6-C10	2.1	0.5			
Surr: Trifluorotoluene			100	60	130
Client: Bechtel Nevada Corp.	Batch ID: A3258	Sample ID: MBLK	Method: SW8015B	Prepped:	
Work Order: 9911097	Method Blank	Seq No: 61513	Unit: mg/L	Analyzed: 11/23/99	
Project: SEIR CAU-340-1-0		Run ID: LARRY_991123A	Matrix: Aqueous	Analyst: MTB	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit
T/R Hydrocarbons: C6-C10	ND	0.5			
Surr: Trifluorotoluene			135	60	130
Client: Bechtel Nevada Corp.	Batch ID: A3258	Sample ID: 9911097-01AMS	Method: SW8015B	Prepped:	
Work Order: 9911097	Matrix Spike	Seq No: 61515	Unit: mg/Kg	Analyzed: 11/23/99	
Project: SEIR CAU-340-1-0		Run ID: LARRY_991123A	Matrix: Soil	Analyst: MTB	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit
T/R Hydrocarbons: C6-C10	1.3	1			
Surr: Trifluorotoluene			84	70	130
			103	60	130

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S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Barringer Laboratories, Inc.

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.	Batch ID: A3258	Sample ID: 9911097-01AMSD	Method: SW8015B	Prepped:				
Work Order: 9911097		Seq No: 61516	Unit: mg/Kg	Analyzed: 11/23/99				
Project: SEIR CAU-340-1-0		Run ID: LARRY_991123A	Matrix: Soil	Analyst: MTB				
Analyte	Limit	SpikeVal	SpikeRefVal	%REC LowLimit HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
T/R Hydrocarbons: C6-C10	1.2	1	1.5	ND	78 70 130	1.3	7	20
Surr: Trifluorotoluene				104 60 130				

Client: Bechtel Nevada Corp.	Batch ID: P1993	Sample ID: LCS-1993	Method: SW846 8081A	Prepped: 11/11/99						
Work Order: 9911097	Laboratory Control Spike	Seq No: 57553	Unit: µg/Kg	Analyzed: 11/13/99						
Project: SEIR CAU-340-1-0		Run ID: MOE 991112A	Matrix: Soil	Analyst: RDH						
Analyte	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	32	3	33		96	25	160			
Aldrin	11	2	13		82	42	122			
Dieldrin	30	3	33		89	36	146			
Endrin	31	3	33		92	30	147			
gamma-BHC	11	2	13		83	32	127			
Heptachlor	11	2	13		80	34	111			
Surr: Decachlorobiphenyl					112	50	163			
Surr: Tetrachloro-m-xylene					89	31	115			

Client: Bechtel Nevada Corp.	Batch ID: P1993	Sample ID: LCS-D-1993	Method: SW846 8081A	Prepped: 11/11/99						
Work Order: 9911097	Laboratory Control Spike Duplicate	Seq No: 57554	Unit: µg/Kg	Analyzed: 11/13/99						
Project: SEIR CAU-340-1-0		Run ID: MOE 991112A	Matrix: Soil	Analyst: RDH						
Analyte	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	34	3	33	101	25	160	32	5	20	
Aldrin	12	2	13	86	42	122	11	6	20	
Dieldrin	30	3	33	90	36	146	30	2	20	
Endrin	32	3	33	95	30	147	31	3	20	
gamma-BHC	12	2	13	87	32	127	11	5	20	
Heptachlor	11	2	13	85	34	111	11	6	20	
Surr: Decachlorobiphenyl				113	50	163				
Surr: Tetrachloro-m-xylene				93	31	115				

Qualifiers: ND - Not detected at the reporting limit
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S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
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Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.		Batch ID: P1993		Method Blank		Sample ID: MBLK-1993		Method: SW846 8081A		Prepped: 11/11/99	
Work Order: 9911097						Seq No: 57552		Unit: µg/Kg		Analyzed: 11/12/99	
Project: SEIR CAU-340-1-0						Run ID: MOE 991112A		Matrix: Soil		Analyst: RDH	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDD	ND	3									
4,4'-DDE	ND	3									
4,4'-DDT	ND	3									
Aldrin	ND	2									
alpha-BHC	ND	2									
alpha-Chlordane	ND	2									
beta-BHC	ND	2									
Chlordane	ND	2									
delta-BHC	ND	10									
Dieldrin	ND	2									
Endosulfan I	ND	3									
Endosulfan II	ND	2									
Endosulfan sulfate	ND	3									
Endrin	ND	3									
Endrin aldehyde	ND	3									
Endrin ketone	ND	3									
gamma-BHC	ND	2									
gamma-Chlordane	ND	2									
Heptachlor	ND	2									
Heptachlor epoxide	ND	2									
Methoxychlor	ND	20									
Toxaphene	ND	200									
Surr: Decachlorobiphenyl		111				50					163
Surr: Tetrachloro-m-xylene		86				31					115

Client: Bechtel Nevada Corp.		Batch ID: P1993				Sample ID: 9911097-01AMS		Method: SW846 8081A		Prepped: 11/11/99	
Work Order: 9911097						Seq No: 57556		Unit: µg/Kg		Analyzed: 11/13/99	
Project: SEIR CAU-340-1-0		Matrix Spike				Run ID: MOE_991112A		Matrix: Soil		Analyst: RDH	
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC	LowLimit	HighLimit	DupReVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	32	3	33	ND	97	3	169				
Aldrin	11	2	13	ND	81	10	142				
Dieldrin	28	3	33	ND	84	15	158				

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
	J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
	E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

Endrin	29	3	33	ND	88	20	112												
gamma-BHC	11	2	13	ND	81	30	114												
Heptachlor	11	2	13	ND	79	18	141												
Surr: Decachlorobiphenyl					110	50	163												
Surr: Tetrachloro-m-xylene					89	31	115												

Client:	Bechtel Nevada Corp.	Batch ID: P1993	Sample ID: 9911097-01AMSD	Method: SW846 8081A	Prepped: 11/11/99
Work Order:	9911097		Seq No: 57557	Unit: µg/Kg	Analyzed: 11/13/99
Project:	SEIR CAU-340-1-0	Matrix Spike Duplicate	Run ID: MOE_991112A	Matrix: Soil	Analyst: RDH

Analyte	Result	± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal	± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	27		3	33	ND	81	3	169	32		19	20	
Aldrin	9.3		2	13	ND	70	10	142	11		15	20	
Dieldrin	24		3	33	ND	72	15	158	28		15	20	
Endrin	25		3	33	ND	75	20	112	29		16	20	
gamma-BHC	9.4		2	13	ND	71	30	114	11		14	20	
Heptachlor	9.5		2	13	ND	72	18	141	11		10	20	
Surr: Decachlorobiphenyl						101	50	163					
Surr: Tetrachloro-m-xylene						80	31	115					

Client: Bechtel Nevada Corp.		Batch ID: P1994		Sample ID: LCS-1994		Method: SW846 8081A		Prepped: 11/11/99			
Work Order: 9911097				Seq No: 57564		Unit: µg/L		Analyzed: 11/13/99			
Project: SEIR CAU-340-1-0		Laboratory Control Spike		Run ID: MOE_991112B		Matrix: Aqueous		Analyst: RDH			
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	0.93	0.1	1.0		93	33	143				
Aldrin	0.34	0.04	0.40		86	1	136				
Dieldrin	0.88	0.02	1.0		88	15	138				
Endrin	0.92	0.06	1.0		92	1	150				
gamma-BHC	0.36	0.04	0.40		89	7	124				
Heptachlor	0.33	0.03	0.40		83	24	132				
Surr: Decachlorobiphenyl					114	18	125				
Surr: Tetrachloro-m-xylene					98	23	110				

Client:	Bechtel Nevada Corp.	Batch ID: P1994	Sample ID: LCSD-1994	Method: SW846 8081A	Prepped: 11/11/99
Work Order:	9911097		Seq No: 57565	Unit: µg/L	Analyzed: 11/13/99
Project:	SEIR CAU-340-1-0	Laboratory Control Spike Duplicate	Run ID: MOE_991112B	Matrix: Aqueous	Analyst: RDH
Analyte		Result ± 2 sigma	%REC LowLimit HighLimit	DupReVal ± 2 sigma	RPD/RER RPD/Limit Qual
		Limit	SpikeReVal	SpikeVal	

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
J - Analyte detected below quantitation limits		X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
E - Value above quantitation range		S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.**BATCH QC SUMMARY REPORT**

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4,4'-DDT	0.82	0.1	1.0	82	33	143	0.93	13	20
Aldrin	0.32	0.04	0.40	80	1	136	0.34	7	20
Dieldrin	0.82	0.02	1.0	82	15	138	0.88	7	20
Endrin	0.84	0.06	1.0	84	1	150	0.92	9	20
gamma-BHC	0.33	0.04	0.40	83	7	124	0.36	7	20
Heptachlor	0.32	0.03	0.40	79	24	132	0.33	5	20
Surr: Decachlorobiphenyl				107	18	125			
Surr: Tetracloro-m-xylene				94	23	110			

Client:	Bechtel Nevada Corp.	Batch ID:	P1994	Sample ID:	MBLK-1994	Method:	SW846 8081A	Prepped:	11/11/99	
Work Order:	9911097			Seq No:	57563	Unit:	µg/L	Analyzed:	11/13/99	
Project:	SEIR CAU-340-1-0			Run ID:	MOE_991112B	Matrix:	Aqueous	Analyst:	RDH	
Analyte				SpikeVal	SpikeRefVal	%REC LowLimit HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
4.4'-DDD		Result ± 2 sigma	Limit							

4,4'-DDD	ND	0.1						
4,4'-DDE	ND	0.04						
4,4'-DDT	ND	0.1						
Aldrin	ND	0.04						
alpha-BHC	ND	0.03						
alpha-Chlordane	ND	0.06						
beta-BHC	ND	0.06						
Chlordane	ND	0.1						
delta-BHC	ND	0.09						
Dieldrin	ND	0.02						
Endosulfan I	ND	0.1						
Endosulfan II	ND	0.04						
Endosulfan sulfate	ND	0.7						
Endrin	ND	0.06						
Endrin aldehyde	ND	0.2						
Endrin ketone	ND	0.1						
gamma-BHC	ND	0.04						
gamma-Chlordane	ND	0.06						
Heptachlor	ND	0.03						
Heptachlor epoxide	ND	0.1						
Methoxychlor	ND	0.1						
Toxaphene	ND	2						
Surr: Decachlorobiphenyl				107	18	125		

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

Date: 07-Dec-99

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BATCH QC SUMMARY REPORT

Surr: Tetrachloro-m-xylene

95 23 110

Client: Bechtel Nevada Corp.		Batch ID: P2034		Sample ID: LCS-2034		Method: SW8015B		Prepped: 11/12/99				
Work Order: 9911097				Seq No: 59863		Unit: mg/Kg		Analyzed: 11/17/99				
Project: SEIR CAU-340-1-0		Laboratory Control Spike		Run ID: CURLY_991117B		Matrix: Soil		Analyst: MTB				
Analyte		Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
T/R Hydrocarbons: C10-C22		21	10	33		64	30	120				
Surr: 4-Terphenyl-d14						76	30	120				

Client: Bechtel Nevada Corp.		Batch ID: P2034		Sample ID: LCS-2034		Method: SW8015B		Prepped: 11/12/99					
Work Order: 9911097				Seq No: 59864		Unit: mg/Kg		Analyzed: 11/17/99					
Project: SEIR CAU-340-1-0		Laboratory Control Spike Duplicate		Run ID: CURLY_991117B		Matrix: Soil		Analyst: MTB					
Analyte		Result ± 2 sigma		Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
T/R Hydrocarbons: C10-C22		26		10	33		77	30	120	21	18	20	
Surr: 4-Terphenyl-d14							75	30	120				

Client: Bechtel Nevada Corp.	Batch ID: P2034		Sample ID: MBLK-2034		Method: SW8015B		Prepped: 11/12/99				
Work Order: 9911097			Seq No: 59862		Unit: mg/Kg		Analyzed: 11/17/99				
Project: SEIR CAU-340-1-0	Method Blank		Run ID: CURLY 991117B		Matrix: Soil		Analyst: MTB				
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
T/R Hydrocarbons: C10-C22	ND	10									
Surr: 4-Terphenyl-d14											

Client:	Bechtel Nevada Corp.	Batch ID: P2034	Sample ID: 9911097-01AMS	Method: SW8015B	Prepped: 11/12/99
Work Order:	9911097		Seq No: 59866	Unit: mg/Kg	Analyzed: 11/17/99
Project:	SEIR CAU-340-1-0	Matrix Spike	Run ID: CURLY_991117B	Matrix: Soil	Analyst: MTB
Analyte					
T/R Hydrocarbons: C10-C22		Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal
		20	10	33	ND
					%REC
					LowLimit
					HighLimit
					DupRefVal ± 2 sigma
					RPD/REER
					RPDLimit
					Qual

Client: Bechtel Nevada Corp.	Batch ID: P2034	Sample ID: 9911097-01AMS	Method: SW8015B	Prepped: 11/12/99							
Work Order: 9911097		Seq No: 59867	Unit: mg/Kg	Analyzed: 11/17/99							
Project: SEIR CAU-340-1-0	Matrix Spike Duplicate	Run ID: CURLY_991117B	Matrix: Soil	Analyst: MTB							
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
T/R Hydrocarbons: C10-C22	22	10	33	ND	67	30	120	20	10	20	
Surr: 4-Terphenyl-d14					84	30	120				

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp.		Batch ID: P2036		Sample ID: LCS-2036		Method: SW8015B		Prepped: 11/15/99	
Work Order: 9911097		Laboratory Control Spike		Seq No: 59898		Unit: mg/L		Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Result ± 2 sigma		Run ID: CURLY_991117C		Matrix: Aqueous		Analyst: MTB	
Analyte	T/R Hydrocarbons: C10-C22	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	RPD/REC	RPD/Limit
	Surr: 4-Terphenyl-d14	0.5	1.0			62	120		
						102	30		
							30		
Client: Bechtel Nevada Corp.		Batch ID: P2036		Sample ID: LCS-2036		Method: SW8015B		Prepped: 11/15/99	
Work Order: 9911097		Laboratory Control Spike Duplicate		Seq No: 59899		Unit: mg/L		Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Result ± 2 sigma		Run ID: CURLY_991117C		Matrix: Aqueous		Analyst: MTB	
Analyte	T/R Hydrocarbons: C10-C22	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	RPD/REC	RPD/Limit
	Surr: 4-Terphenyl-d14	0.5	1.0			67	120		
						99	30		
							30		
Client: Bechtel Nevada Corp.		Batch ID: P2036		Sample ID: MBLK-2036		Method: SW8015B		Prepped: 11/15/99	
Work Order: 9911097		Method Blank		Seq No: 59897		Unit: mg/L		Analyzed: 11/18/99	
Project: SEIR CAU-340-1-0		Result ± 2 sigma		Run ID: CURLY_991117C		Matrix: Aqueous		Analyst: MTB	
Analyte	T/R Hydrocarbons: C10-C22	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	RPD/REC	RPD/Limit
	Surr: 4-Terphenyl-d14	1							
Client: Bechtel Nevada Corp.		Batch ID: P2190		Sample ID: LCS-2190		Method: SW846 8081A		Prepped: 11/24/99	
Work Order: 9911097		Laboratory Control Spike		Seq No: 62872		Unit: µg/L		Analyzed: 11/25/99	
Project: SEIR CAU-340-1-0		Result ± 2 sigma		Run ID: MOE_991124A		Matrix: Solid		Analyst: RDH	
Analyte	Endrin	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	RPD/REC	RPD/Limit
	gamma-BHC	0.3	5.0			79	19		
	Heptachlor	0.2	2.0			75	43		
	Surr: Decachlorobiphenyl	0.2	2.0			73	3		
Analyte	Surr: Tetrachloro-m-xylene					101	60		
						82	29		
							109		
Client: Bechtel Nevada Corp.		Batch ID: P2190		Sample ID: LCS-2190		Method: SW846 8081A		Prepped: 11/24/99	
Work Order: 9911097		Laboratory Control Spike Duplicate		Seq No: 62873		Unit: µg/L		Analyzed: 11/25/99	
Project: SEIR CAU-340-1-0		Result ± 2 sigma		Run ID: MOE_991124A		Matrix: Solid		Analyst: RDH	
Analyte	T/R Hydrocarbons: C10-C22	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	RPD/REC	RPD/Limit
	Surr: 4-Terphenyl-d14	0.5	1.0			67	120		
						99	30		
							30		

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range
 R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

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Endrin	3.8	0.3	5.0	76	19	120	3.9	3	20
gamma-BHC	1.5	0.2	2.0	76	43	128	1.5	1	20
Heptachlor	1.5	0.2	2.0	75	3	161	1.5	2	20
Surr: Decachlorobiphenyl				92	60	161			
Surr: Tetrachloro-m-xylene				84	29	109			

Client:	Bechtel Nevada Corp.	Batch ID: P2190	Sample ID: MBLK-2190	Method: SW846 8081A	Prepped: 11/24/99				
Work Order:	9911097		Seq No: 62871	Unit: µg/L	Analyzed: 11/25/99				
Project:	SEIR CAU-340-1-0	Method Blank	Run ID: MOE_991124A	Matrix: Solid	Analyst: RDH				
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC LowLimit HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
Chlordane	ND	0.7							
Endrin	ND	0.3							
gamma-BHC	ND	0.2							
Heptachlor	ND	0.2							
Methoxychlor	ND	9							
Toxaphene	ND	10							
Surr: Decachlorobiphenyl					92	60		161	
Surr: Tetrachloro-m-xylene					84	29		109	

Client: Bechtel Nevada Corp.	Batch ID: P2190	Sample ID: 9911097-05AMS	Method: SW846 8081A	Prepped: 11/24/99							
Work Order: 9911097		Seq No: 62875	Unit: µg/L	Analyzed: 11/25/99							
Project: SEIR CAU-340-1-0	Matrix Spike	Run ID: MOE_991124A	Matrix: Solid	Analyst: RDH							
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/REER	RPDLimit	Qual
Endrin	4.3	0.3	5.0	ND	85	16	118				
gamma-BHC	1.9	0.2	2.0	0.30	81	8	139				
Heptachlor	2.0	0.2	2.0	ND	101	1	135				
Surr: Decachlorobiphenyl					99	60	161				
Surr: Tetrachloro-m-xylene					84	29	109				

Client:	Bechtel Nevada Corp.	Batch ID: P2190	Sample ID: 9911097-05AMS	Method: SW846 8081A	Prepped: 11/24/99					
Work Order:	9911097		Seq No: 62876	Unit: µg/L	Analyzed: 11/25/99					
Project:	SEIR CAU-340-1-0	Matrix Spike Duplicate	Run ID: MOE_991124A	Matrix: Solid	Analyst: RDH					
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC LowLimit HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual	
Endrin	4.3	0.3	5.0	ND	86	16	118	4.3	1	20
gamma-BHC	1.9	0.2	2.0	0.30	80	8	139	1.9	2	20
Heptachlor	2.0	0.2	2.0	ND	100	1	135	2.0	1	20

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

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BATCH QC SUMMARY REPORT

Surr: Decachlorobiphenyl
Surr: Tetrachloro-m-xylene

94	60	161
85	29	109

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
	J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
	E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

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9911097

Job Number: 23220

Facility ID: NTS

Sampling Event: CAU 340

COC Number: CAU 340-1

Laboratory: BARINGR

Cooler ID:

Cooler Temp:

Number of Coolers:

Cooler Units:

Logbook No.:

Delivery Order ID:

SEIR No.: CAU 340-1-0

Charge Code: C00024AA

Sampled By:

Jeffrey B...

Print

Sign

Print

Sign

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK01	GRAB	SO				

Pay Item	Description	Parameter Code	Anal Cd	Fltr Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	NORM	U	2	D	D	Diesel & Oil Range
6.21	Gasoline Range Organics	NORM	U	2	D	D	
8.19	Pesticides	REG	U	2	D	D	

23	CAU 340	CAU340SK02	GRAB	SO				
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Pay Item	Description	Parameter Code	Anal Cd	Fltr Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	NORM	U	2	D	D	Diesel & Oil Range
6.21	Gasoline Range Organics	NORM	U	2	D	D	
8.19	Pesticides	REG	U	2	D	D	

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK03	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
6.20	Diesel Range Organics		NORM	U	2	D	Diesel & Oil Range	
6.21	Gasoline Range Organics		NORM	U	2	D		
8.19	Pesticides		REG	U	2	D		
23	CAU 340	CAU340SK04	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
6.20	Diesel Range Organics		NORM	U	2	D	Diesel & Oil Range	
6.21	Gasoline Range Organics		NORM	U	2	D		
8.19	Pesticides		REG	U	2	D		
23	CAU 340	CAU340SK05	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
6.20	Diesel Range Organics		NORM	U	2	D	Diesel & Oil Range	
6.21	Gasoline Range Organics		NORM	U	2	D		
8.19	Pesticides		REG	U	2	D		
23	CAU 340	CAU340SK06	MS	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
6.20	Diesel Range Organics		MS	U	2	D	Diesel & Oil Range	
6.21	Gasoline Range Organics		MS	U	2	D		
8.19	Pesticides		MS	U	2	D		

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK07	MSD	SO				

Pay Item	Description	Parameter Code	Anal Cd	Flt Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	MSD	U	2	D	D	Diesel & Oil Range
6.21	Gasoline Range Organics	MSD	U	2	D	D	
8.19	Pesticides	MSD	U	2	D	D	

23	CAU 340	CAU340SK08	FD	SO				
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Pay Item	Description	Parameter Code	Anal Cd	Flt Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	REG	U	2	D	D	Diesel & Oil Range
6.21	Gasoline Range Organics	REG	U	2	D	D	
8.19	Pesticides	REG	U	2	D	D	

23	CAU 340	CAU340SK09	EB	W				
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Pay Item	Description	Parameter Code	Anal Cd	Flt Cd	Prior Lvl	Anal Lvl	Comments
1.33	Diesel Range Organics	REG	U	2	D	D	Diesel & Oil Range
1.34	Gasoline Range Organics	REG	U	2	D	D	
3.4	Organochlorine Pesticides	REG	U	2	D	D	

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filter Code	pH	Container Type	Comments
CAU340SK01	CAU340SK0101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline, Diesel, Oil Sample
CAU340SK01	CAU340SK0102	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK02	CAU340SK0201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline, Diesel, Oil Sample
CAU340SK02	CAU340SK0202	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK03	CAU340SK0301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline, Diesel, Oil Sample
CAU340SK03	CAU340SK0302	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK04	CAU340SK0401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline, Diesel, Oil Sample
CAU340SK04	CAU340SK0402	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK05	CAU340SK0501	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline, Diesel, Oil Sample
CAU340SK05	CAU340SK0502	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK06	CAU340SK0601	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas & Diesel MS; take from -0501
CAU340SK06	CAU340SK0602	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide MS; take from -0502
CAU340SK07	CAU340SK0701	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas & Diesel MSD; take from -0502
CAU340SK07	CAU340SK0702	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide MSD; take from -0502
CAU340SK08	CAU340SK0801	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gasoline & Diesel Sample
CAU340SK08	CAU340SK0802	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340SK09	CAU340SK0901	COOL 4C			AMBER GLASS 1 L	Diesel & Oil Sample
CAU340SK09	CAU340SK0902	COOL 4C			GLASS VOA CONTAINER 40 ML	Gasoline Sample
CAU340SK09	CAU340SK0903	COOL 4C			AMBER GLASS 1 L	Pesticide Sample

Transfer Information:

Relinquished By	Received By	Transfer Date/Time	Reason	Shipper	Airbill No.	Traffic Report No.
<i>[Signature]</i>	<i>CD Castaneda</i>	<i>11/9/99/1500</i>				
<i>CD Castaneda</i>	<i>Federal Express</i>	<i>11/10/99 01300</i>	<i>Shipping Samples</i>	<i>FED EX</i>	<i>8157 9965 9876</i>	
	<i>John Murray</i>	<i>11/11/99 10:00</i>	<i>Receipt by LAB</i>			

Comments:

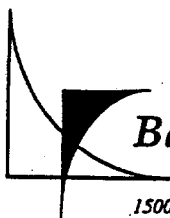
This COC generated for J. Bonn

Potential Contamination Yes No

Radiological

Chemical

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Barringer Laboratories, Inc.

Date: 07-Dec-99

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Ted Redding
Bechtel Nevada Corp.
P.O. Box 98521
MS NTS 273
Las Vegas, NV 89193-8521
Phone: 1-702-295-7220
Fax: 1-702-295-4773

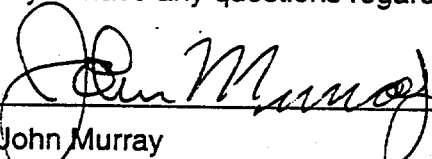
Work Order: 9911141
Project: 23220/ SDG#:V721

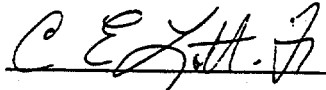
Dear Ted Redding,

Barringer Laboratories received 15 samples on 11/17/99 for the analyses presented in the following report.

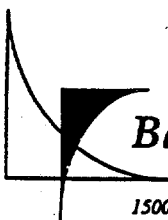
There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.


John Murray
Organic Laboratory Manager


Clarence Lott
Project Review

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Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: 23220/ SDG#:V721
Work Order: 9911141

CASE NARRATIVE

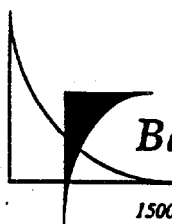
All reported values in this report have been rounded to the correct number of significant figures. All calculations have been performed before applying significant figures, therefore, not all calculations may be reproducible with the results printed in this report.

Analytical Comments for METHOD SW846 8015BGRO, SAMPLE MBLK: The surrogate exceeded the set QC limit for the method blank which was non-detect for gasoline. Because the surrogate was high we believe we could have detected gasoline if present and therefore consider the data to be valid as reported.

Analytical Comments for method SW8015BGRO, sample 9911141-02A: The surrogate exceeded the set QC limit for this sample which was non-detect for gasoline. Because the surrogate was high we believe we could have detected gasoline if present in the sample and therefore we consider the data to be valid as reported.

Analytical Comments for method SW846 8081A: There are some analytes that are being reported as estimated due to the analyte being above our calibration curve. The client is aware of this and does not require the samples analyzed at the required dilution to bring all analytes within the calibration range.

This report has been amended from the report dated 11/30/1999 to include the dilutions of the samples that were previously reported with estimated results for method SW846-8081A.



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Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: 23220/ SDG#:V721
Work Order: 9911141
Date Received: 11/17/99
Temp Received: 6°C

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Matrix	Bottle and Preservation
9911141-01A	CAU340QH01		11/15/99	Soil	8oz amber glass, unpreserved
9911141-02A	CAU340QH02		11/15/99	Soil	8oz amber glass, unpreserved
9911141-04A	CAU340QH04		11/15/99	Soil	8oz amber glass, unpreserved
9911141-05A	CAU340QH05		11/15/99	Soil	8oz amber glass, unpreserved
9911141-06A	CAU340QH06		11/15/99	Soil	8oz amber glass, unpreserved
9911141-07A	CAU340QH07		11/15/99	Soil	8oz amber glass, unpreserved
9911141-08A	CAU340QH08		11/15/99	Soil	8oz amber glass, unpreserved
9911141-09A	CAU340QH09		11/15/99	Soil	8oz amber glass, unpreserved
9911141-10A	CAU340QH10		11/15/99	Soil	8oz amber glass, unpreserved
9911141-11A	CAU340QH11		11/15/99	Soil	8oz amber glass, unpreserved
9911141-12A	CAU340QH12		11/15/99	Aqueous	1L amber glass, unpreserved
9911141-13A	CAU340QH13			Soil	8oz amber glass, unpreserved
9911141-14A	CAU340QH14		11/15/99	Soil	8oz amber glass, unpreserved
9911141-15A	CAU340QH15		11/15/99	Soil	8oz amber glass, unpreserved
9911141-16A	CAU340QH16		11/15/99	Soil	8oz amber glass, unpreserved

CLIENT SAMPLE REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH01

Tag Number:

Lab Sample ID: 9911141-01A

Date Collected: 11/15/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	5.4	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	11	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	130	8		$\mu\text{g/Kg}$	5	11/18/1999	12/03/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	180	8		$\mu\text{g/Kg}$	5	11/18/1999	12/03/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	109	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	83	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH02

Tag Number:

Lab Sample ID: 9911141-02A

Date Collected: 11/15/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/18/1999	11/20/1999	MTB	P2118
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/24/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	84	30-120		%REC	1	11/18/1999	11/20/1999	MTB	P2118

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

CLIENT SAMPLE REPORT

Surr: Trifluorotoluene	98-08-8	SW8015B	132	60-130	S	%REC	1	11/24/1999	MTB	A3258	
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	19	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	290	8		µg/Kg	5	11/18/1999	12/03/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	6.4	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	260	8		µg/Kg	5	11/18/1999	12/03/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	109	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	84	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#: V721

Client Sample ID: CAU340QH04

Tag Number:

Lab Sample ID: 9911141-04A

Date Collected: 11/15/1999

Matrix:

Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	8.0	10	J	mg/Kg	1	11/18/1999	11/20/1999	MTB	P2118
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1	11/24/1999	11/24/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	86	30-120		%REC	1	11/18/1999	11/20/1999	MTB	P2118
Surr: Trifluorotoluene	98-08-8	SW8015B	124	60-130		%REC	1	11/24/1999	11/24/1999	MTB	A3258

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

4,4'-DDD	72-54-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	1100	30	µg/Kg	20	11/18/1999	12/03/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	8.1	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	1100	30	µg/Kg	20	11/18/1999	12/03/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	55	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	116	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	85	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.		Client Sample ID: CAU340QH05				Lab Sample ID: 9911141-05A					
Work Order: 9911141						Date Collected: 11/15/1999					
Project: 23220/ SDG#: V721						Matrix: Soil					
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Qualifiers: ND - Not detected at the reporting limit											
J - Analyte detected below quantitation limits											
E - Value above quantitation range											
R - RPD outside accepted recovery limits											
Y - Unspiked sample > 4 times amount spiked											
X - Duplicate sample(s) < 5 times limit											
B - Analyte detected in the associated method blank											
S - Spike recovery outside accepted recovery limits											
Z - Sample > 10 times blank result											

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Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

alpha-Chlordane	5103-71-9	SW846 8081A	3.2	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	3.7	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	116	200	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetachloro-m-xylene	877-09-8	SW846 8081A	88	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
				31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.		Lab Sample ID: 9911141-06A									
Work Order: 9911141		Date Collected: 11/15/1999									
Project: 23220/ SDG#:V721		Matrix: Soil									
Client Sample ID: CAU340QH06											
Tag Number:											
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	0.92	2	J	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	11	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
			ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

Notes: R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits

Interpretation: Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

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Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	11	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	4.1	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	103	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	85	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH07

Tag Number:

Lab Sample ID: 9911141-07A

Date Collected: 11/15/1999

Matrix:

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3	J	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	2.0	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	7.2	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	10	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

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Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	104	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	82	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp. Client Sample ID: CAU340QH08
Work Order: 9911141
Project: 23220/ SDG#:V721 Tag Number:
Lab Sample ID: 9911141-08A
Date Collected: 11/15/1999
Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	5103-71-9	SW846 8081A	2.5	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	58-89-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	5566-34-7	SW846 8081A	2.6	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	72-43-5	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	8001-35-2	SW846 8081A	ND	20		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
	2051-24-3	SW846 8081A	ND	200		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	877-09-8	SW846 8081A	93	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117	

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

Date: 07-Dec-99

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CLIENT SAMPLE REPORT

Client: **Bechtel Nevada Corp.** Lab Sample ID: **9911141-09A**
 Work Order: **9911141** Date Collected: **11/15/1999**
 Project: **23220/ SDG#:V721** Matrix: **Soil**

Client Sample ID: **CAU340QH09**

Tag Number:

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	21	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	38	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	16	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	128	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	105	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: **Bechtel Nevada Corp.** Lab Sample ID: **9911141-10A**
 Work Order: **9911141** Date Collected: **11/15/1999**
 Project: **23220/ SDG#:V721** Matrix: **Soil**

Client Sample ID: **CAU340QH10**

Tag Number:

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	2.4	3	J	$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit R - RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
 J - Analyte detected below quantitation limits X - Duplicate sample(s) < 5 times limit B - Analyte detected in the associated method blank
 E - Value above quantitation range S - Spike recovery outside accepted recovery limits Z - Sample > 10 times blank result

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CLIENT SAMPLE REPORT

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	40	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	43	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	128	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	101	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH11

Tag Number:

Lab Sample ID: 9911141-11A

Date Collected: 11/15/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	2.3	3	J	$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	58	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

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CLIENT SAMPLE REPORT

Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	62	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	113	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	89	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH12

Tag Number:

Lab Sample ID: 9911141-12A

Date Collected: 11/15/1999

Matrix: Aqueous

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	0.1		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
4,4'-DDE	72-55-9	SW846 8081A	ND	0.04		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
4,4'-DDT	50-29-3	SW846 8081A	ND	0.1		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Aldrin	309-00-2	SW846 8081A	ND	0.04		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
alpha-BHC	319-84-6	SW846 8081A	ND	0.03		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
alpha-Chlordane	5103-71-9	SW846 8081A	ND	0.06		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
beta-BHC	319-85-7	SW846 8081A	ND	0.06		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Chlordane	57-74-9	SW846 8081A	ND	0.1		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
delta-BHC	319-86-8	SW846 8081A	ND	0.09		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Dieldrin	60-57-1	SW846 8081A	ND	0.02		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endosulfan I	959-98-8	SW846 8081A	ND	0.1		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endosulfan II	33212-65-9	SW846 8081A	ND	0.04		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	0.7		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endrin	72-20-8	SW846 8081A	ND	0.06		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endrin aldehyde	7421-93-4	SW846 8081A	ND	0.2		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Endrin ketone	53494-70-5	SW846 8081A	ND	0.1		µg/L	1	11/18/1999	11/21/1999	RDH	P2120
gamma-BHC	58-89-9	SW846 8081A	ND	0.04		µg/L	1	11/18/1999	11/21/1999	RDH	P2120

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

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CLIENT SAMPLE REPORT

gamma-Chlordane	5566-34-7	SW846 8081A	ND	0.06	µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Heptachlor	76-44-8	SW846 8081A	ND	0.03	µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	0.1	µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Methoxychlor	72-43-5	SW846 8081A	ND	0.1	µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Toxaphene	8001-35-2	SW846 8081A	ND	2	µg/L	1	11/18/1999	11/21/1999	RDH	P2120
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	83	18-125	%REC	1	11/18/1999	11/21/1999	RDH	P2120
Surr: Tetracloro-m-xylene	877-09-8	SW846 8081A	98	23-110	%REC	1	11/18/1999	11/21/1999	RDH	P2120

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Client Sample ID: CAU340QH13

Tag Number:

Lab Sample ID: 9911141-13A

Date Collected:

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	ND	10		mg/Kg	1	11/18/1999	11/20/1999	MTB	P2118
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1	11/24/1999		MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	94	30-120		%REC	1	11/18/1999	11/20/1999	MTB	P2118
Surr: Trifluorotoluene	98-08-8	SW8015B	125	60-130		%REC	1	11/24/1999		MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	36	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	470	20		µg/Kg	10	11/18/1999	12/03/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	11	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	410	20		µg/Kg	10	11/18/1999	12/03/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	110	50-163	%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetracloro-m-xylene	877-09-8	SW846 8081A	89	31-115	%REC	1	11/18/1999	11/21/1999	RDH	P2117

Client: **Bechtel Nevada Corp.**
 Work Order: **9911141**
 Project: **23220/ SDG#:V721**
 Client Sample ID: **CAU340QH14**
 Tag Number:
 Lab Sample ID: **9911141-14A**
 Date Collected: **11/15/1999**
 Matrix: **Soil**

Analyte	CAS#	Method	Result ± 2 sigma	Matrix:			Soil		Batch		
				Limit	Qual	Unit	DF	Prepped		Analyzed	Analyst
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	2.3	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Gamma-Chlordane	5566-34-7	SW846 8081A	2.1	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	112	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetracloro-m-xylene	877-09-8	SW846 8081A	92	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range
 R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

Date: 07-Dec-99

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CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#: V721

Client Sample ID: CAU340QH15

Tag Number:

Lab Sample ID: 9911141-15A

Date Collected: 11/15/1999

Matrix: Soil

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	2.2	3	J	$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	31	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Aldrin	309-00-2	SW846 8081A	11	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	43	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	28	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	28	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	9.6	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	42	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	11	2		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	114	50-163		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	71	31-115		%REC	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A									

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#: V721

Client Sample ID: CAU340QH16

Tag Number:

Lab Sample ID: 9911141-16A

Date Collected: 11/15/1999

Matrix: Soil

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	3.3	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117
4,4'-DDT	50-29-3	SW846 8081A	34	3		$\mu\text{g/Kg}$	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

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CLIENT SAMPLE REPORT

Aldrin	309-00-2	SW846 8081A	9.4	2	1	11/18/1999	11/21/1999	RDH	P2117
alpha-BHC	319-84-6	SW846 8081A	ND	2	1	11/18/1999	11/21/1999	RDH	P2117
alpha-Chlordane	5103-71-9	SW846 8081A	7.9	2	1	11/18/1999	11/21/1999	RDH	P2117
beta-BHC	319-85-7	SW846 8081A	ND	2	1	11/18/1999	11/21/1999	RDH	P2117
Chlordane	57-74-9	SW846 8081A	ND	10	1	11/18/1999	11/21/1999	RDH	P2117
delta-BHC	319-86-8	SW846 8081A	ND	2	1	11/18/1999	11/21/1999	RDH	P2117
Dieldrin	60-57-1	SW846 8081A	27	3	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan I	959-98-8	SW846 8081A	ND	2	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan II	33212-65-9	SW846 8081A	ND	3	1	11/18/1999	11/21/1999	RDH	P2117
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	1	11/18/1999	11/21/1999	RDH	P2117
Endrin	72-20-8	SW846 8081A	28	3	1	11/18/1999	11/21/1999	RDH	P2117
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	1	11/18/1999	11/21/1999	RDH	P2117
Endrin ketone	53494-70-5	SW846 8081A	ND	3	1	11/18/1999	11/21/1999	RDH	P2117
gamma-BHC	58-89-9	SW846 8081A	9.1	2	1	11/18/1999	11/21/1999	RDH	P2117
gamma-Chlordane	5566-34-7	SW846 8081A	12	2	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor	76-44-8	SW846 8081A	10	2	1	11/18/1999	11/21/1999	RDH	P2117
Heptachlor epoxide	1024-57-3	SW846 8081A	3.8	2	1	11/18/1999	11/21/1999	RDH	P2117
Methoxychlor	72-43-5	SW846 8081A	ND	20	1	11/18/1999	11/21/1999	RDH	P2117
Toxaphene	8001-35-2	SW846 8081A	ND	200	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	115	50-163	1	11/18/1999	11/21/1999	RDH	P2117
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	73	31-115	1	11/18/1999	11/21/1999	RDH	P2117

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

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BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp.		Batch ID: A3258		Sample ID: MBLK		Method: SW8015B		Prepped:	
Work Order: 9911141		Method Blank		Seq No: 61513		Unit: mg/L		Analyzed: 11/23/99	
Project: 23220/ SDG#:V721		Result ± 2 sigma		Run ID: LARRY_991123A		Matrix: Aqueous		Analyst: MTB	
Analyte		Limit	SpikeVal	SpikeRelVal	%REC LowLimit HighLimit	DupRelVal ± 2 sigma		RPD/RER	RPDLimit Qual
T/R Hydrocarbons: C6-C10		0.5							
Surr: Trifluorotoluene									S
135					60				
130									
Client: Bechtel Nevada Corp.		Batch ID: A3258		Sample ID: 9911097-01AMS		Method: SW8015B		Prepped:	
Work Order: 9911141		Matrix Spike		Seq No: 61515		Unit: mg/Kg		Analyzed: 11/23/99	
Project: 23220/ SDG#:V721		Result ± 2 sigma		Run ID: LARRY_991123A		Matrix: Soil		Analyst: MTB	
Analyte		Limit	SpikeVal	SpikeRelVal	%REC LowLimit HighLimit	DupRelVal ± 2 sigma		RPD/RER	RPDLimit Qual
T/R Hydrocarbons: C6-C10		1	1.5	ND	84 70 130				
Surr: Trifluorotoluene									
103					60				
130									
Client: Bechtel Nevada Corp.		Batch ID: A3258		Sample ID: 9911097-01AMSD		Method: SW8015B		Prepped:	
Work Order: 9911141		Matrix Spike Duplicate		Seq No: 61516		Unit: mg/Kg		Analyzed: 11/23/99	
Project: 23220/ SDG#:V721		Result ± 2 sigma		Run ID: LARRY_991123A		Matrix: Soil		Analyst: MTB	
Analyte		Limit	SpikeVal	SpikeRelVal	%REC LowLimit HighLimit	DupRelVal ± 2 sigma		RPD/RER	RPDLimit Qual
T/R Hydrocarbons: C6-C10		1	1.5	ND	78 70 130				
Surr: Trifluorotoluene									
104					60				
130									
1.3									
7									
20									
Client: Bechtel Nevada Corp.		Batch ID: P2117		Sample ID: LCS-2117		Method: SW846 8081A		Prepped: 11/18/99	
Work Order: 9911141		Laboratory Control Spike		Seq No: 60927		Unit: µg/Kg		Analyzed: 11/21/99	
Project: 23220/ SDG#:V721		Result ± 2 sigma		Run ID: MOE_991120B		Matrix: Soil		Analyst: RDH	
Analyte		Limit	SpikeVal	SpikeRelVal	%REC LowLimit HighLimit	DupRelVal ± 2 sigma		RPD/RER	RPDLimit Qual
4,4'-DDT		3	33		29 25 160				
Aldrin		2	13		52 42 122				
Dieldrin		3	33		58 36 146				
Erdin		3	33		49 30 147				
gamma-BHC		2	13		54 32 127				
Heptachlor		2	13		38 34 111				
Surr: Decachlorobiphenyl					78 50 163				
Surr: Tetrachloro-m-xylene					72 31 115				

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.	Batch ID: P2117	Sample ID: LCSD-2117	Method: SW846 8081A	Prepped: 11/18/99							
Work Order: 9911141		Seq No: 60928	Unit: µg/Kg	Analyzed: 11/21/99							
Project: 23220/ SDG#:V721		Run ID: MOE 991120B	Matrix: Soil	Analyst: RDH							
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	14	3	33	33	42	25	160	9.7	38	20	X
Aldrin	7.8	2	13	13	59	42	122	7.0	11	20	
Dieldrin	22	3	33	33	65	36	146	19	12	20	
Endrin	19	3	33	33	58	30	147	16	16	20	
gamma-BHC	7.9	2	13	13	59	32	127	7.1	10	20	
Heptachlor	6.2	2	13	13	46	34	111	5.1	20	20	
Surr: Decachlorobiphenyl					103	50	163				
Surr: Tetrachloro-m-xylene					77	31	115				

Client: Bechtel Nevada Corp.	Batch ID: P2117	Sample ID: MBLK-2117	Method: SW846 8081A	Prepped: 11/18/99							
Work Order: 9911141		Seq No: 60926	Unit: µg/Kg	Analyzed: 11/21/99							
Project: 23220/ SDG#: V721		Run ID: MOE_991120B	Matrix: Soil	Analyst: RDH							
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4,4'-DDD	ND	3									
4,4'-DDE	ND	3									
4,4'-DDT	ND	3									
Aldrin	ND	2									
alpha-BHC	ND	2									
alpha-Chlordane	ND	2									
beta-BHC	ND	2									
Chlordane	ND	10									
delta-BHC	ND	2									
Dieldrin	ND	3									
Endosulfan I	ND	2									
Endosulfan II	ND	3									
Endosulfan sulfate	ND	3									
Endrin	ND	3									
Endrin aldehyde	ND	3									
Endrin ketone	ND	3									
gamma-BHC	ND	2									
gamma-Chlordane	ND	2									
Heptachlor	ND	2									

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result



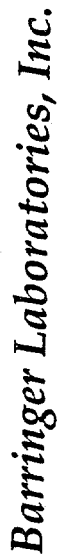
Date: 07-Dec-99

BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp.		Batch ID: P2117		Sample ID: 9911141-06AMS		Method: SW846 8081A		Prepped: 11/18/99			
Work Order: 9911141				Seq No: 60942		Unit: µg/Kg		Analyzed: 11/21/99			
Project: 23220/ SDG#: V721		Matrix Spike		Run ID: MOE 991120B		Matrix: Soil		Analyst: RDH			
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal ± 2 sigma	RPD/REL	RPDLimit	Qual
4,4'-DDT	31	3	33	ND	94	3	169				
Aldrin	11	2	13	0.92	77	10	142				
Dieldrin	28	3	33	ND	83	15	158				
Endrin	28	3	33	ND	85	20	112				
gamma-BHC	9.6	2	13	ND	72	30	114				
heptachlor	11	2	13	ND	82	18	141				
Surr: Decachlorobiphenyl					114	50	163				
Surr: Tetrachloro-p-m-xylene					71	31	115				

Client:	Bechtel Nevada Corp.	Batch ID: P2118	Sample ID: LCS-2118	Method: SW8015B	Prepped: 11/18/99								
Work Order:	9911141	Laboratory Control Spike	Seq No: 61415	Unit: mg/Kg	Analyzed: 11/20/99								
Project:	23220/ SDG#:V721		Run ID: CURLY 991120A	Matrix: Soil	Analyst: MTB								
Relay:													
		Result: ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal	± 2 sigma	RPD/RER	RPDLimit	Qual

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank	
E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result	



BATCH QC SUMMARY REPORT

Date: 07-Dec-99

BATCH QC SUMMARY REPORT

[illegible]

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
	J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
	E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

Barringer Laboratories, Inc.

BATCH QC SUMMARY REPORT

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Aldrin	0.36	0.04	0.40	89	1	136	
Dieldrin	0.92	0.02	1.0	92	15	138	
Endrin	0.93	0.06	1.0	93	1	150	
gamma-BHC	0.37	0.04	0.40	93	7	124	
Heptachlor	0.34	0.03	0.40	86	24	132	
Surr: Decachlorobiphenyl				128	18	125	S
Surr: Tetrachloro-m-xylene				98	23	110	

Batch ID: P2120

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Sample ID: LCSD-2120

Seq No: 61187

Run ID: MOE_991120C

Method: SW846 8081A

Unit: µg/L

Matrix: Aqueous

Prepped: 11/18/99

Analyzed: 11/21/99

Analyst: RDH

Laboratory Control Spike Duplicate

Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	0.82	0.1	1.0		82	33	143	0.89		8	20	
Aldrin	0.35	0.04	0.40		88	1	136	0.36		2	20	
Dieldrin	0.91	0.02	1.0		91	15	138	0.92		1	20	
Endrin	0.89	0.06	1.0		89	1	150	0.93		4	20	
gamma-BHC	0.36	0.04	0.40		89	7	124	0.37		4	20	
Heptachlor	0.33	0.03	0.40		82	24	132	0.34		5	20	
Surr: Decachlorobiphenyl					127	18	125					S
Surr: Tetrachloro-m-xylene					95	23	110					

Batch ID: P2120

Client: Bechtel Nevada Corp.

Work Order: 9911141

Project: 23220/ SDG#:V721

Sample ID: MBLK-2120

Seq No: 61185

Run ID: MOE_991120C

Method: SW846 8081A

Unit: µg/L

Matrix: Aqueous

Prepped: 11/18/99

Analyzed: 11/21/99

Analyst: RDH

Method Blank

Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDD	ND	0.1										
4,4'-DDE	ND	0.04										
4,4'-DDT	ND	0.1										
Aldrin	ND	0.04										
alpha-BHC	ND	0.03										
alpha-Chlordane	ND	0.06										
beta-BHC	ND	0.06										
Chlordane	ND	0.1										
delta-BHC	ND	0.09										
Dieldrin	ND	0.02										
Endosulfan I	ND	0.1										

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

BATCH QC SUMMARY REPORT

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Endosulfan II	ND	0.04	116	18	125
Endosulfan sulfate	ND	0.7	96	23	110
Endrin	ND	0.06			
Endrin aldehyde	ND	0.2			
Endrin ketone	ND	0.1			
gamma-BHC	ND	0.04			
gamma-Chlordane	ND	0.06			
Heptachlor	ND	0.03			
Heptachlor epoxide	ND	0.1			
Methoxychlor	ND	0.1			
Toxaphene	ND	2			
Surr: Decachlorobiphenyl					
Surr: Tetrachloro-m-xylene					

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-4

COPY

Page 1 of 1

Job Number: 23220

Facility ID: NTS

Sampling Event: CAU 340

COC Number: CAU 340-4

Laboratory: BARINOR

Cooler ID:

Cooler Temp:

Number of Coolers:

Cooler Units:

Logbook No.:

Delivery Order ID:

SEIR No.: CAU 340-4-0

Charge Code:

Sampled By: *Jerry Born*

Print

Sign

Print

Sign

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340QH01	GRAB	SO				

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides	REG		U	2	D	

23	CAU 340	CAU340QH02	GRAB	SO				
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Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	REG		U	2	D	
6.21	Gasoline Range Organics	REG		U	2	D	
8.19	Pesticides	REG		U	2	D	

23	CAU 340	CAU340QH03	GRAB	SO				
----	---------	------------	------	----	--	--	--	--

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides	REG		U	2	D	

No Sample Collected
JB 11/15/99

COPY

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340QH04	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	6.20	Diesel Range Organics		NORM	U	2	D	
	6.21	Gasoline Range Organics		NORM	U	2	D	
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH05	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH06	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH07	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-4

Page 3 of 3

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Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340QH08	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH09	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH10	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	
23	CAU 340	CAU340QH11	GRAB	SO				
	Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
	8.19	Pesticides		NORM	U	2	D	

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340QH12	EB	W				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
3.4	Organochlorine Pesticides	REG	U	2	D			
23	CAU 340	CAU340QH13	FRP	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
6.20	Diesel Range Organics	REG	U	2	D			
6.21	Gasoline Range Organics	REG	U	2	D			
8.19	Pesticides	REG	U	2	D			
23	CAU 340	CAU340QH14	FRP	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides	REG	U	2	D			
23	CAU 340	CAU340QH15	MS	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides	NORM	U	2	D	MS - take from sample 06		

COPY

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340QH16	MSD	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D	MSD - take from sample 06	

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filter Code	pH	Container Type	Comments
CAU340QH01	CAU340QH0101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340QH02	CAU340QH0201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas, Diesel, & Oil Sample
CAU340QH02	CAU340QH0202	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340QH03	CAU340QH0301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340QH04	CAU340QH0401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas, Diesel, & Oil Sample
CAU340QH04	CAU340QH0402	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340QH05	CAU340QH0501	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340QH06	CAU340QH0601	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH07	CAU340QH0701	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH08	CAU340QH0801	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH09	CAU340QH0901	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH10	CAU340QH1001	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH11	CAU340QH1101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH12	CAU340QH1201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340QH13	CAU340QH1301	COOL 4C			AMBER GLASS 1 L	
CAU340QH13	CAU340QH1302	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas, Diesel, & Oil Sample
CAU340QH14	CAU340QH1401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample
CAU340QH14	CAU340QH1401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticide Sample

701

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s., UN2910.

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Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Ted Redding
Bechtel Nevada Corp.
P.O. Box 98521
MS NTS 273
Las Vegas, NV 89193-8521

Phone: 1-702-295-7220
Fax: 1-702-295-4773

Work Order: 9911154

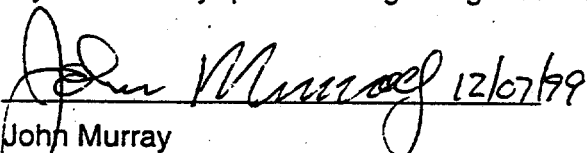
Project: SDG#V723. DO W1762, job 23220, SEIR CAU 340

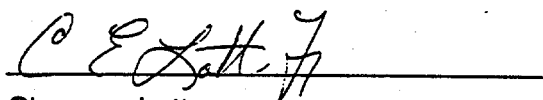
Dear Ted Redding,

Barringer Laboratories received 15 samples on 11/18/99 for the analyses presented in the following report.

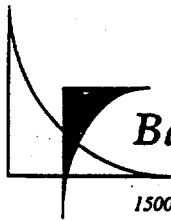
There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.


John Murray
Organic Laboratory Manager


Clarence Lott
Project Review 12/7/99

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Barringer Laboratories, Inc.

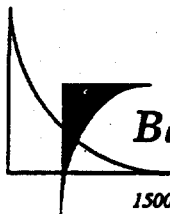
15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: SDG#V723. DO W1762, job 23220, SEIR
Work Order: 9911154
Date Received: 11/18/99
Temp Received: 4°C

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Matrix	Bottle and Preservation
9911154-01A	CAU340SH11		11/16/99 8:05:00 AM	Soil	8oz amber glass, unpreserved
9911154-02A	CAU340SK15		11/16/99 10:15:00 AM	Soil	8oz amber glass, unpreserved
9911154-03A	CAU340SK16		11/16/99 10:20:00 AM	Soil	8oz amber glass, unpreserved
9911154-04A	CAU340SK17		11/16/99 10:25:00 AM	Soil	8oz amber glass, unpreserved
9911154-05A	CAU340SK19		11/16/99 10:30:00 AM	Soil	8oz amber glass, unpreserved
9911154-06A	CAU340SK20		11/16/99 10:35:00 AM	Soil	8oz amber glass, unpreserved
9911154-07A	CAU340SK21		11/16/99 10:40:00 AM	Soil	8oz amber glass, unpreserved
9911154-08A	CAU340SK22		11/16/99 10:00:00 AM	Soil	8oz amber glass, unpreserved
9911154-09A	CAU340SQH03		11/16/99 8:45:00 AM	Soil	8oz amber glass, unpreserved
9911154-10A	CAU340ID01		11/16/99 8:35:00 AM	Soil	8oz amber glass, unpreserved
9911154-11A	CAU340ID02		11/16/99 9:45:00 AM	Soil	8oz amber glass, unpreserved
9911154-12A	CAU340ID03		11/16/99 8:30:00 AM	Soil	8oz amber glass, unpreserved
9911154-13A	CAU340ID04		11/16/99 8:25:00 AM	Soil	8oz amber glass, unpreserved
9911154-14A	CAU340ID05		11/16/99 8:20:00 AM	Soil	8oz amber glass, unpreserved
9911154-15A	CAU340ID06		11/16/99 8:15:00 AM	Soil	8oz amber glass, unpreserved



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

Client: Bechtel Nevada Corp.
Project: SDG#V723. DO W1762, job 23220, SEIR
Work Order: 9911154

CASE NARRATIVE

All reported values in this report have been rounded to the correct number of significant figures. All calculations have been performed before applying significant figures, therefore, not all calculations may be reproducible with the results printed in this report.

Analytical Comments for method SW846 8081A: There are some analytes that are being reported as estimated due to the analyte being above our calibration curves linear range. The client is aware of this and does not want the samples analyzed at the required dilution to bring all analytes within the calibration range.

This report has been amended from the report dated 11/30/1999 to include the dilutions of the samples that were previously reported with estimated results for method SW846-8081A.

CLIENT SAMPLE REPORT

Client: **Bechtel Nevada Corp.** Work Order: **9911154** Lab Sample ID: **9911154-01A**
 Project: **SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0** Tag Number: **CAU340SH11** Date Collected: **11/16/1999**
 Analyte Matrix: **Soil**

CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
4,4'-DDE	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
4,4'-DDT	SW846 8081A	4.4	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Aldrin	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
alpha-BHC	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
alpha-Chlordane	SW846 8081A	7.4	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
beta-BHC	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Chlordane	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
delta-BHC	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Dieldrin	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan I	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan II	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan sulfate	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endrin	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endrin aldehyde	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Endrin ketone	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
gamma-BHC	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
gamma-Chlordane	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Heptachlor	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Heptachlor epoxide	SW846 8081A	1.7	2	J	µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Methoxychlor	SW846 8081A	12	2		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Toxaphene	SW846 8081A	ND	20		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Surr: Decachlorobiphenyl	SW846 8081A	ND	200		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	SW846 8081A	125	50-163		%REC	1	11/19/1999	11/21/1999	RDH	P2121
	SW846 8081A	101	31-115		%REC	1	11/19/1999	11/21/1999	RDH	P2121

Client: **Bechtel Nevada Corp.** Work Order: **9911154** Lab Sample ID: **9911154-02A**
 Project: **SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0** Tag Number: **CAU340SK15** Date Collected: **11/16/1999**
 Analyte Matrix: **Soil**

CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
4,4'-DDE	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121
4,4'-DDT	SW846 8081A	5.8	3		µg/Kg	1	11/19/1999	11/21/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range
 R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

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CLIENT SAMPLE REPORT

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Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	6.9	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	8.4	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	11/19/1999	11/21/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	116	50-163		%REC	1	11/19/1999	11/21/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	97	31-115		%REC	1	11/19/1999	11/21/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDG#V723. DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Client Sample ID: CAU340SK16

Lab Sample ID: 9911154-03A

Date Collected: 11/16/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	690	70		$\mu\text{g/Kg}$	20	11/19/1999	12/03/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	870	70		$\mu\text{g/Kg}$	20	11/19/1999	12/03/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	120	30		$\mu\text{g/Kg}$	20	11/19/1999	12/03/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

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CLIENT SAMPLE REPORT

Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	5.1	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	150	30	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	8.2	2	µg/Kg	1	11/19/1999	12/03/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	109	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	91	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Client Sample ID: CAU340SK17

Lab Sample ID: 9911154-04A

Date Collected: 11/16/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	8.6	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	4.4	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	38	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	7.1	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

gamma-Chlordane	5566-34-7	SW846 8081A	13	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	76	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	85	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Client Sample ID: CAU340SK19

Lab Sample ID: 9911154-05A

Project: SDG#V723. DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Date Collected: 11/16/1999

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	37	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	220	20		µg/Kg	5	11/19/1999	12/03/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	110	8		µg/Kg	5	11/19/1999	12/03/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	2.2	3	J	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	120	8		µg/Kg	5	11/19/1999	12/03/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	6.4	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	110	50-163	%REC	1	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	97	31-115	%REC	1	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result



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Date: 07-Dec-99

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.		Client Sample ID: CAU340SK20				Lab Sample ID: 9911154-06A					
Work Order: 9911154						Date Collected: 11/16/1999					
Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0		Tag Number:				Matrix: Soil					
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	6.9	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	7.5	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	105	50-163		%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	97	31-115		%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.		Client Sample ID: CAU340SK21				Lab Sample ID: 9911154-07A					
Work Order: 9911154		Tag Number:				Date Collected: 11/16/1999					
Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0						Matrix: Soil					
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121
Qualifiers: ND - Not detected at the reporting limit J - Analyte detected below quantitation limits E - Value above quantitation range R - RPD outside accepted recovery limits X - Duplicate sample(s) < 5 times limit S - Spike recovery outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked B - Analyte detected in the associated method blank Z - Sample > 10 times blank result											

CLIENT SAMPLE REPORT

4,4'-DDT	50-29-3	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	2700	80	µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	3.5	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	3100	80	µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	280	80	µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	111	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	98	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDGW723. DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Client Sample ID: CAU340SK22

Lab Sample ID: 9911154-08A

Date Collected: 11/16/1999

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	1100	200		µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	4000	200		µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	2300	80		µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers:

ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits

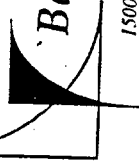
X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300

Golden, Colorado 80401-5047

(800) 654-0506 (303) 277-1637 Fax (303) 277-1689

Date: 07-Dec-99

CLIENT SAMPLE REPORT

Dieldrin	60-57-1	SW846 8081A	170	200	µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	1.4	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	2700	80	µg/Kg	50	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	12/03/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	24000	800	µg/Kg	50	11/19/1999	12/03/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	108	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	100	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0

Tag Number:

Client Sample ID: CAU340SQH03

Lab Sample ID: 9911154-09A

Date Collected: 11/16/1999

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RTD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

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CLIENT SAMPLE REPORT

gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	105	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	94	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Client Sample ID: CAU340ID01

Lab Sample ID: 9911154-10A

Date Collected: 11/16/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	5.1	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	81	2	E	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	91	2	E	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	105	50-163		%REC	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

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CLIENT SAMPLE REPORT

Surr: Tetrachloro-m-xylene 877-09-8 SW846 8081A 87 31-115 %REC 1 11/19/1999 11/22/1999 RDH P2121

Client Sample ID: CAU340ID02											
Client: Bechtel Nevada Corp.		Lab Sample ID: 9911154-11A									
Work Order: 9911154		Date Collected: 11/16/1999									
Project: SDG#V723. DO W1762, Job 23220, SEIR CAU 340-2-0		Matrix: Soil									
Tag Number:											
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	20		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	121	200		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	99	50-163		%REC	1	11/19/1999	11/22/1999	RDH	P2121
				31-115		%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.		Client Sample ID: CAU340ID03				Lab Sample ID: 9911154-12A					
Work Order: 9911154		Tag Number:				Date Collected: 11/16/1999					
Project: SDG#V723. DO W1762, Job 23220, SEIR CAU 340-2-0						Matrix: Soil					
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

Date: 07-Dec-99

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

CLIENT SAMPLE REPORT

4,4'-DDE	72-55-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	2.4	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	18	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	17	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	2.0	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	106	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	89	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Project: SDGW723. DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Client Sample ID: CAU340ID04

Lab Sample ID: 9911154-13A

Date Collected: 11/16/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma			Soil				
			Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	ND	3	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result



15000 W 6th Avenue Suite 300

Golden, Colorado 80401-5047

(800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 07-Dec-99

CLIENT SAMPLE REPORT

delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	3	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/19/1999 11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	108	50-163	%REC	1	11/19/1999 11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	90	31-115	%REC	1	11/19/1999 11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.		Client Sample ID: CAU340ID05									
Work Order: 9911154		Lab Sample ID: 9911154-14A									
Project: SDG#V723, DO W1762, Job 23220, SEIR CAU 340-2-0		Date Collected: 11/16/1999									
Tag Number:		Matrix: Soil									
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
	J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
	E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	11/19/1999	11/22/1999	RDH	P2121
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	109	50-163	%REC	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	90	31-115	%REC	11/19/1999	11/22/1999	RDH	P2121

Client: Bechtel Nevada Corp.

Work Order: 9911154

Client Sample ID: CAU340ID06

Lab Sample ID: 9911154-15A

Project: SDGW723. DO W1762, Job 23220, SEIR CAU 340-2-0 Tag Number:

Date Collected: 11/16/1999

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
4,4'-DDT	50-29-3	SW846 8081A	2.2	3	J	µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
alpha-Chlordane	5103-71-9	SW846 8081A	13	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Chlordane	57-74-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-BHC	58-89-9	SW846 8081A	ND	3		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor	76-44-8	SW846 8081A	16	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Methoxychlor	72-43-5	SW846 8081A	ND	2		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121
Toxaphene	8001-35-2	SW846 8081A	ND	200		µg/Kg	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	115	50-163	%REC	1	11/19/1999	11/22/1999	RDH	P2121
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	102	31-115	%REC	1	11/19/1999	11/22/1999	RDH	P2121

Qualifiers:

ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

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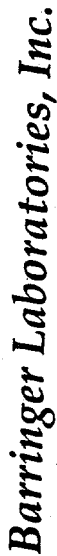
BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp.		Batch ID: P2121		Sample ID: LCS-2121		Method: SW846 8081A		Prepped: 11/19/99	
Work Order: 9911154		Seq No: 61190		Run ID: MOE_991120D		Unit: µg/Kg		Analyzed: 11/21/99	
Project: SDG#V723, DO W1762, Job 23220		Laboratory Control Spike		Matrix: Soil		DupRetVal ± 2 sigma		Analyst: RDH	
Analyte	Limit	SpikeVal	SpikeRetVal	%REC	LowLimit	HighLimit	RPD/RER	RPDLimit	Qual
4,4'-DDT	34	33	33	103	25	160			
Aldrin	2	43	42	92	42	122			
Dieldrin	3	33	36	92	36	146			
Endrin	3	33	30	95	30	147			
gamma-BHC	2	13	32	91	32	127			
Heptachlor	2	13	34	95	34	111			
Surr: Decachlorobiphenyl				131	50	163			
Surr: Tetrachloro-m-xylene				102	31	115			

Client: Bechtel Nevada Corp.		Batch ID: P2121		Sample ID: LCS-2121		Method: SW846 8081A		Prepped: 11/19/99	
Work Order: 9911154		Seq No: 61191		Run ID: MOE_991120D		Unit: µg/Kg		Analyzed: 11/21/99	
Project: SDG#V723, DO W1762, Job 23220		Laboratory Control Spike Duplicate		Matrix: Soil		DupRetVal ± 2 sigma		Analyst: RDH	
Analyte	Limit	SpikeVal	SpikeRetVal	%REC	LowLimit	HighLimit	RPD/RER	RPDLimit	Qual
4,4'-DDT	25	33	33	76	25	160	30	20	R
Aldrin	2	13	42	78	42	122	16	20	
Dieldrin	3	33	36	78	36	146	17	20	
Endrin	3	33	30	78	30	147	19	20	
gamma-BHC	2	13	32	79	32	127	14	20	
Heptachlor	2	13	34	79	34	111	18	20	
Surr: Decachlorobiphenyl				112	50	163			
Surr: Tetrachloro-m-xylene				90	31	115			

Client: Bechtel Nevada Corp.		Batch ID: P2121		Sample ID: MBLK-2121		Method: SW846 8081A		Prepped: 11/19/99	
Work Order: 9911154		Seq No: 61189		Run ID: MOE_991120D		Unit: µg/Kg		Analyzed: 11/21/99	
Project: SDG#V723, DO W1762, Job 23220		Method Blank		Matrix: Soil		DupRetVal ± 2 sigma		Analyst: RDH	
Analyte	Limit	SpikeVal	SpikeRetVal	%REC	LowLimit	HighLimit	RPD/RER	RPDLimit	Qual
4,4'-DDD	ND								
4,4'-DDE	ND								
4,4'-DDT	ND								
Aldrin	ND								
alpha-BHC	ND								
alpha-Chlordane	ND								

Qualifiers:		ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
		J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
		E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result



Date: 07-Dec-9c

BATCH QC SUMMARY REPORT

128	50	163
96	31	115

Surr: Decachlorobiphenyl
Surr: Tetrachloro-m-xylene

[illegible]

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank	
E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result	

BATCH QC SUMMARY REPORT

4,4'-DDT	34	3	33	4.4	89	3	169	36	5	20
Aldrin	10	2	13	ND	77	10	142	11	8	20
Dieldrin	28	3	33	ND	85	15	158	31	8	20
Endrin	29	3	33	ND	87	20	112	32	9	20
gamma-BHC	11	2	13	ND	84	30	114	12	5	20
Heptachlor	12	2	13	1.7	75	18	141	13	7	20
Surr: Decachlorobiphenyl					112	50	163			
Surr: Tetrachloro-m-xylene					95	31	115			

Qualifiers:	ND - Not detected at the reporting limit	R - RPD outside accepted recovery limits	Y - Unspiked sample > 4 times amount spiked
	J - Analyte detected below quantitation limits	X - Duplicate sample(s) < 5 times limit	B - Analyte detected in the associated method blank
	E - Value above quantitation range	S - Spike recovery outside accepted recovery limits	Z - Sample > 10 times blank result

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11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-2

Page

1 of 6

Job Number: 23220

Facility ID: NTS

Sampling Event: CAU 340

COC Number: CAU 340-2

Laboratory: BARINGER

Cooler ID:

Cooler Temp:

Number of Coolers:

Cooler Units:

Logbook No.:

Sampled By: *DERP B...*

Print

Sign

Print

Sign

Delivery Order ID:

SEIR No.: CAU 340-2-0

Charge Code: C00024AA

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK10	GRAB	SO				

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics		NORM	U	2	D	Diesel & Oil Range
6.21	Gasoline Range Organics		NORM	U	2	D	Gasoline - take from Diesel jar
6.19	Pesticides		NORM	U	2	D	

No Spills Contained

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
23	CAU 340	CAU340SK11	GRAB	SO			
6.19	Pesticides		NORM	U	2	D	

11/16/99 0805 11/16/99

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
23	CAU 340	CAU340SK12	GRAB	SO			
6.19	Pesticides		NORM	U	2	D	

No Spills Contained

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	-CAU340SK13-	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D	No Sample Collected	
23	CAU 340	-CAU340SK14-	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D	No Sample Collected	
23	CAU 340	CAU340SK15	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		
23	CAU 340	CAU340SK16	GRAB	SO				
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK17	GRAB	SO	11/16/99	1025	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK18	GRAB	SO	11/16/99	1030	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D	Comments No. Sample Contaminated	

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK19	GRAB	SO	11/16/99	1030	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK20	GRAB	SO	11/16/99	1035	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340SR21	GRAB	SO	11/16/99	1040	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides				NORM	U 2 D		

23	CAU 340	CAU340SR22	GRAB	SO	11/16/99	1000	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides				NORM	U 2 D		

CAU340A403

PESTICIDES

11/16/99 0845 11/16/99

ADDED SAMPLES

NORM U 2 D

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-2

Page 8 of 8

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filler Code	pH	Container Type	Comments
CAU340SK10	CAU340SK1001	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas, Diesel, & Oil Range
CAU340SK10	CAU340SK1003	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides <i>No Sample Contents</i>
CAU340SK11	CAU340SK1101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK12	CAU340SK1201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides <i>No Sample Contents</i>
CAU340SK13	CAU340SK1301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK14	CAU340SK1401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides <i>No Sample Contents</i>
CAU340SK15	CAU340SK1501	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK16	CAU340SK1601	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK17	CAU340SK1701	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK18	CAU340SK1801	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides <i>No Sample Contents</i>
CAU340SK19	CAU340SK1901	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK20	CAU340SK2001	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK21	CAU340SK2101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK22	CAU340SK2201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides

CAU 3404403

"

"

"

AAPD Sample

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-2

Page 6 of 6

Transfer Information:

Relinquished By	Received By	Transfer Date/Time	Reason	Shipper	Airbill No.	Traffic Report No.
<i>[Signature]</i>	<i>[Signature]</i>	11/16/99 1500				
<i>[Signature]</i>	<i>Federal Express</i>	11/17/99 1300	<i>Shipping Samples</i>	<i>Fed Ex</i>	<i>816090904558</i>	

Comments:

Potential Contamination Yes No

Radiological
Chemical☒
☐

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-3

9911154

V723

Page 1 of 4

Job Number: 23220

Facility ID: WTS

Sampling Event: CAU 340

COC Number: CAU 340-3

Laboratory: BARINGER

Cooler ID:

Cooler Temp:

Number of Coolers:

Cooler Units:

Logbook No.:

Delivery Order ID:

SEIR No.: CAU 340-3-0

Charge Code:

C00024AA

Sampled By:

JERRY BORN

Print

Sign

Print

Sign

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340ID01	GRAB	SO	11/16/99	0835	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides				U	2	D	

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340ID02	GRAB	SO	11/16/99	0845	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides				U	2	D	

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340ID03	GRAB	SO	11/16/99	0830	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides				U	2	D	

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340ID04	GRAB	SO	11.16.99	08.25	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		
23	CAU 340	CAU340ID05	GRAB	SO	11.16.99	08.20	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		
23	CAU 340	CAU340ID06	GRAB	SO	11.16.99	08.15	11/16/99	
Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments	
8.19	Pesticides		NORM	U	2	D		

11/09/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-3

Page 3 of 4

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filter Code	pH	Container Type	Comments
CAU340ID01	CAU340ID0101	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340ID02	CAU340ID0201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340ID03	CAU340ID0301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340ID04	CAU340ID0401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340ID05	CAU340ID0501	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340ID06	CAU340ID0601	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides

Transfer Information:

Relinquished By	Received By	Transfer Date/Time	Reason	Shipper	Airbill No.	Traffic Report No.
<i>Spurna</i>	<i>Spurna</i>	<i>4/16/99 1500</i>				
<i>Spurna</i>	<i>Federal Express</i>	<i>4/17/99 1300</i>	<i>Shipping Samples</i>	<i>Fed Ex</i>	<i>816090904558</i>	

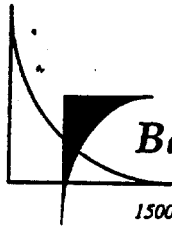
Comments:

Potential Contamination Yes No

Radiological

Chemical

☒ ☐



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 11-Feb-00

Ted Redding
Bechtel Nevada Corp.
P.O. Box 98521
MS NTS 273
Las Vegas, NV 89193-8521
Phone: 1-702-295-7220
Fax: 1-702-295-4773

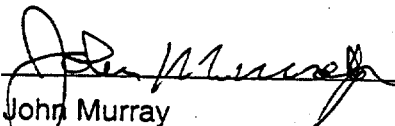
Work Order: 9911170
Project: V725

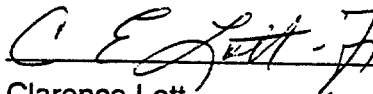
Dear Ted Redding,

Barringer Laboratories received 5 samples on 11/19/99 for the analyses presented in the following report.

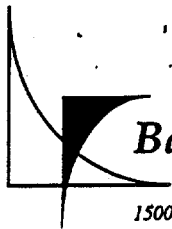
There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.

 2/11/2000
John Murray
Organic Laboratory Manager

 2/11/2000
Clarence Lott
Project Review

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Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 14-Feb-00

Client: Bechtel Nevada Corp.
Project: V725
Work Order: 9911170

CASE NARRATIVE

All reported values in this report have been rounded to the correct number of significant figures. All calculations have been performed before applying significant figures, therefore, not all calculations may be reproducible with the results printed in this report.

Analytical Comments for METHOD SW846 8015BGRO, SAMPLE MBLK: The surrogate exceeded the set QC limit for the method blank which was non-detect for gasoline. Because the surrogate was high, we believe gasoline would be detected if present and therefore consider the data to be valid as reported.

Analytical Comments for METHOD SW846 8081A, SAMPLE 9911170-01AMS: The high concentration of 4,4-DDT in the sample caused the percent recovery and RPD to fail their set QC limits.

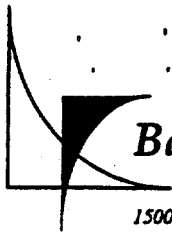
Analytical Comments for METHOD SW846 8081A, SAMPLE 9911170-01A: The result for gamma-Chlordane is being reported from the second column because of an interfering peak on the primary column.

Analytical Comments for METHOD SW846 8081A, SAMPLE 9911170-03A: The result for gamma-Chlordane is being reported from the second column because of an interfering peak on the primary column.

Analytical Comments for METHOD SW846 8015BDRO: The sample was originally extracted on 11/29/1999 but when analyzed the QC failed for the LCS/LCSD and MS/MSD. They were re-extracted on 12/3/1999, which was beyond the recommended holding time for soils. The QC passed on the re-extracted and re-analyzed samples. Both analysis had results below the reporting limit of 10 mg/kg with a 30% difference in the analytical result, the first analysis being 4.6 mg/kg and the second being 6.3 mg/kg.

This report has been amended from the previous report dated 12/9/99 to remove the 10X dilution result for alpha-chlordane associated with sample 9911170-03A as requested by Ted Redding on 2/10/2000. The extract was analyzed twice once undiluted and once at a 10X dilution with both analyses yielding a result of 49 ug/Kg.

The sample ID was corrected based on the c.o.c. for sample 9911170-02A at the request of Ted Redding on 2/10/2000 from CAU340S12 to CAU340SK12.



Barringer Laboratories, Inc.

Date: 14-Feb-00

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.
Project: V725
Work Order: 9911170
Date Received: 11/19/99
Temp Received: 6°C

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Matrix	Bottle and Preservation
9911170-01A	CAU340SK10		11/17/99 9:10:00 AM	Soil	8oz amber glass, unpreserved
9911170-02A	CAU340SK12		11/17/99 9:20:00 AM	Soil	8oz amber glass, unpreserved
9911170-03A	CAU340SK13		11/12/99 9:30:00 AM	Soil	8oz amber glass, unpreserved
9911170-04A	CAU340SK14		11/17/99 9:40:00 AM	Soil	8oz amber glass, unpreserved
9911170-05A	CAU340SK18		11/17/99 9:50:00 AM	Soil	8oz amber glass, unpreserved

Date: 14-Feb-00

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.

Work Order: 9911170

Project: V725

Client Sample ID: CAU340SK10

Tag Number:

Lab Sample ID: 9911170-01A

Date Collected: 11/17/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
T/R Hydrocarbons: C10-C22		SW8015B	6.3	10	J	mg/Kg	1	12/03/1999	12/07/1999	MTB	P2317
T/R Hydrocarbons: C6-C10		SW8015B	ND	1		mg/Kg	1		11/24/1999	MTB	A3258
Surr: 4-Terphenyl-d14	1718-51-0	SW8015B	112	30-120		%REC	1	12/03/1999	12/07/1999	MTB	P2317
Surr: Trifluorotoluene	98-08-8	SW8015B	128	60-130		%REC	1		11/24/1999	MTB	A3258
4,4'-DDD	72-54-8	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDE	72-55-9	SW846 8081A	25	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDT	50-29-3	SW846 8081A	200	30		μ g/Kg	10	11/22/1999	12/03/1999	RDH	P2151
Aldrin	309-00-2	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-BHC	319-84-6	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-Chlordane	5103-71-9	SW846 8081A	66	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
beta-BHC	319-85-7	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Chlordane	57-74-9	SW846 8081A	ND	10		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
delta-BHC	319-86-8	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Dieldrin	60-57-1	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan I	959-98-8	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan II	33212-65-9	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin	72-20-8	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin ketone	53494-70-5	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-BHC	58-89-9	SW846 8081A	ND	3		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-Chlordane	5566-34-7	SW846 8081A	62	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor	76-44-8	SW846 8081A	ND	20		μ g/Kg	10	11/22/1999	12/03/1999	RDH	P2151
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Methoxychlor	72-43-6	SW846 8081A	ND	2		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Toxaphene	8001-35-2	SW846 8081A	ND	20		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	ND	200		μ g/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	122	50-163		%REC	1	11/22/1999	12/03/1999	RDH	P2151
			98	31-115		%REC	1	11/22/1999	12/03/1999	RDH	P2151

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 14-Feb-00

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.

Work Order: 9911170

Project: V725

Client Sample ID: CAU340SK12

Tag Number:

Lab Sample ID: 9911170-02A

Date Collected: 11/17/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDT	50-29-3	SW846 8081A	5.5	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
alpha-Chlordane	5103-71-9	SW846 8081A	5.6	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Chlordane	57-74-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
delta-BHC	319-86-8	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Dieldrin	60-57-1	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan I	959-98-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan II	33212-65-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
gamma-BHC	58-89-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
gamma-Chlordane	5586-34-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor	76-44-8	SW846 8081A	7.2	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor epoxide	1024-57-3	SW846 8081A	1.0	2	J	$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Methoxychlor	72-43-5	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Toxaphene	8001-35-2	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	119	200		%REC	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	105	50-163		%REC	1	11/22/1999	12/03/1999	RDH	P2151
				31-115			1	11/22/1999	12/03/1999	RDH	P2151

Client: Bechtel Nevada Corp.

Work Order: 9911170

Project: V725

Client Sample ID: CAU340SK13

Tag Number:

Lab Sample ID: 9911170-03A

Date Collected: 11/12/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDE	72-55-9	SW846 8081A	44	3		$\mu\text{g/Kg}$	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDT	50-29-3	SW846 8081A	140	30		$\mu\text{g/Kg}$	10	11/22/1999	12/03/1999	RDH	P2151

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

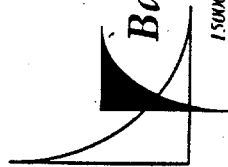
X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result



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Date: 14-Feb-00

CLIENT SAMPLE REPORT

Aldrin	309-00-2	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-BHC	319-84-6	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-Chlordane	5103-71-9	SW846 8081A	49	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
beta-BHC	319-85-7	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Chlordane	57-74-9	SW846 8081A	ND	10	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
delta-BHC	319-86-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Dieldrin	60-57-1	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-Chlordane	5566-34-7	SW846 8081A	51	20	µg/Kg	10	11/22/1999	12/03/1999	RDH	P2151
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	92	50-163	%REC	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	86	31-115	%REC	1	11/22/1999	12/03/1999	RDH	P2151

Client: Bechtel Nevada Corp. Lab Sample ID: 991170-04A
Work Order: 9911170 Date Collected: 11/17/1999
Project: V725 Matrix: Soil

Client Sample ID: CAU340SK14

Tag Number:

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range
R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits
Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

Date: 14-Feb-00

CLIENT SAMPLE REPORT

Endosulfan I	959-98-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan II	33212-65-9	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin	72-20-8	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin ketone	53494-70-5	SW846 8081A	ND	3	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-BHC	58-89-9	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	107	50-163	%REC	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	96	31-115	%REC	1	11/22/1999	12/03/1999	RDH	P2151

Client: Bechtel Nevada Corp.

Work Order: 9911170

Project: V725

Client Sample ID: CAU340SK18

Tag Number:

Lab Sample ID: 9911170-05A

Date Collected: 11/17/1999

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDE	72-55-9	SW846 8081A	64	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
4,4'-DDT	50-29-3	SW846 8081A	270	30		µg/Kg	10	11/22/1999	12/03/1999	RDH	P2151
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
alpha-Chlordane	5103-71-9	SW846 8081A	82	20		µg/Kg	10	11/22/1999	12/03/1999	RDH	P2151
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Dieldrin	60-57-1	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan I	959-98-8	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan II	33212-65-9	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 14-Feb-00

Barringer Laboratories, Inc.

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CLIENT SAMPLE REPORT

gamma-Chlordane	5566-34-7	SW846 8081A	88	20	µg/Kg	10	11/22/1999	12/03/1999	RDH	P2151
Heptachlor	76-44-8	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	108	50-163	%REC	1	11/22/1999	12/03/1999	RDH	P2151
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	94	31-115	%REC	1	11/22/1999	12/03/1999	RDH	P2151

Qualifiers:

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 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

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BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp. Work Order: 9911170 Project: V725 Analyte: T/R Hydrocarbons: C6-C10 Surr: Trifluorotoluene									
Batch ID: A3258 Method: SW8015B Unit: mg/L Matrix: Aqueous DupRelVal ± 2 sigma Prepped: 11/23/99 Analyzed: 11/23/99 Analyst: MTB									
Sample ID: MBLK	Seq No: 61513	Run ID: LARRY_991123A	%REC LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
Limit	0.5								
Result	± 2 sigma	ND							
135	60	130							S
Client: Bechtel Nevada Corp. Work Order: 9911170 Project: V725 Analyte: T/R Hydrocarbons: C6-C10 Surr: Trifluorotoluene									
Batch ID: A3258 Method: SW8015B Unit: mg/Kg Matrix: Soil DupRelVal ± 2 sigma Prepped: 11/23/99 Analyzed: 11/23/99 Analyst: MTB									
Sample ID: 9911097-01AMS	Seq No: 61515	Run ID: LARRY_991123A	%REC LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
Limit	1								
Result	± 2 sigma	1.3							
1	84	70	130						
103	60	130							
Client: Bechtel Nevada Corp. Work Order: 9911170 Project: V725 Analyte: T/R Hydrocarbons: C6-C10 Surr: Trifluorotoluene									
Batch ID: A3258 Method: SW8015B Unit: mg/Kg Matrix: Soil DupRelVal ± 2 sigma Prepped: 11/23/99 Analyzed: 11/23/99 Analyst: MTB									
Sample ID: 9911097-01AMS	Seq No: 61516	Run ID: LARRY_991123A	%REC LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
Limit	1								
Result	± 2 sigma	1.2							
1	78	70	130						
104	60	130							
1.3									
7									
Client: Bechtel Nevada Corp. Work Order: 9911170 Project: V725 Analyte: 4,4'-DDT Surr: Aldrin Surr: Dieldrin Surr: Endrin Surr: gamma-BHC Surr: Heptachlor Surr: Decachlorobiphenyl Surr: Tetrachloro-m-xylene									
Batch ID: P2151 Method: SW846 8081A Unit: μ g/Kg Matrix: Soil DupRelVal ± 2 sigma Prepped: 11/22/99 Analyzed: 12/3/99 Analyst: RDH									
Sample ID: LCS-2151	Seq No: 65132	Run ID: MOE_991202B	%REC LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/RER	RPDLimit	Qual
Limit	3								
Result	± 2 sigma	30							
3	91	25	160						
2	75	42	122						
3	76	36	146						
3	81	30	147						
2	76	32	127						
2	77	34	111						
102	50	163							
85	31	115							

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range
 R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

Date: 11-Feb-00

Barringer Laboratories, Inc.**BATCH QC SUMMARY REPORT**

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Client: Bechtel Nevada Corp.	Batch ID: P2151	Sample ID: LCSD-2151	Method: SW846 8081A	Prepped: 11/22/99							
Work Order: 9911170		Seq No: 65133	Unit: µg/Kg	Analyzed: 12/3/99							
Project: V725		Run ID: MOE_991202B	Matrix: Soil	Analyst: RDH							
Laboratory Control Spike Duplicate											
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDD	26	3	33		78	25	160	30	15	20	
Aldrin	9.7	2	13		73	42	122	10	4	20	
Dieldrin	23	3	33		70	36	146	25	8	20	
Endrin	24	3	33		73	30	147	27	10	20	
gamma-BHC	9.5	2	13		71	32	127	10	6	20	
Heptachlor	9.9	2	13		75	34	111	10	3	20	
Surr: Decachlorobiphenyl					93	50	163				
Surr: Tetrachloro-m-xylene					77	31	115				

Client: Bechtel Nevada Corp.	Batch ID: P2151	Sample ID: MBLK-2151	Method: SW846 8081A	Prepped: 11/22/99							
Work Order: 9911170		Seq No: 65131	Unit: µg/Kg	Analyzed: 12/3/99							
Project: V725	Method Blank	Run ID: MOE_991202B	Matrix: Soil	Analyst: RDH							
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDD	ND	3									
4,4'-DDE	ND	3									
4,4'-DDT	ND	3									
Aldrin	ND	2									
alpha-BHC	ND	2									
alpha-Chlordane	ND	2									
beta-BHC	ND	2									
Chlordane	ND	10									
delta-BHC	ND	2									
Dieldrin	ND	3									
Endosulfan I	ND	2									
Endosulfan II	ND	3									
Endosulfan sulfate	ND	3									
Endrin	ND	3									
Endrin aldehyde	ND	3									
Endrin ketone	ND	3									
gamma-BHC	ND	2									
gamma-Chlordane	ND	2									
Heptachlor	ND	2									

Qualifiers: ND - Not detected at the reporting limit
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BATCH QC SUMMARY REPORT

Date: 11-Feb-00

Barringer Laboratories, Inc.

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Compound	Concentration (ppm)	Response
Heptachlor epoxide	ND	2
Methoxychlor	ND	20
Toxaphene	ND	200

Surr: Decachlorobiphenyl
Surr: Tetrachloro-m-xylene

Client: **Bechtel Nevada Corp.** Work Order: **9911170**
Balch ID: **P2151**

Project: **V725**

Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	Run ID:		MOE 991202B		Matrix: Soil		Analyst: RDH		Qual
					%REC	LowLimit	HighLimit	DupRelVal ± 2 sigma	RPD/REF	RPDLimit			
DDT	190	3	33	300	-340	3	169						
ldrin	12	2	13	ND	89	10	142						
ieldrin	26	3	33	ND	78	15	158						
ndrin	28	3	33	ND	85	20	112						
gamma-BHC	10	2	13	ND	79	30	114						
eptachlor	12	2	13	ND	91	18	141						
Surr: Decachlorobiphenyl					113	50	163						
Surr: Tetrachloro-m-xylene					90	31	115						

Surr: Decachlorobiphenyl
Surr: Tetrachloro-m-xylene

Client: Bechtel Nevada Corp.
Batch ID: P2151
Work Order: 0011170

Project: V725

Sample	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	Hun ID	MOE 991202B			Matrix: Soil		Analyst: RDH		
						%REC	LowLimit	HighLimit	DupReVal	± 2 sigma	RPD/RER	RPDLimit	Qual
DDT	280	3	33	300		-48	3	169	190		41	20	YRE
drin	12	2	13	ND		93	10	142	12		5	20	
eldrin	27	3	33	ND		81	15	158	26		4	20	
drin	30	3	33	ND		90	20	112	28		6	20	
mma-BHC	11	2	13	ND		83	30	114	10		5	20	
plachlor	13	2	13	ND		96	18	141	12		5	20	
Surr: Decachlorobiphenyl						110	50	163					
Surr: Tetrachloro-m-xylene						88	31	115					

curr: Decachlorobiphenyl
curr: Tetrachloro-m-xylene

Client: Bechtel Nevada Corp. Batch ID: P2317

Subject: V725

Analyste	Run ID:	CURLY_991207A	Matrix:	Soil	Analyst:	MTB
	Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC LowLimit HighLimit	DupReVal ± 2 sigma
					RPD/RRR	RPD/limit
						Qual

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantilation range

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X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 11-Feb-00

Barringer Laboratories, Inc.**BATCH QC SUMMARY REPORT**

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

T/R Hydrocarbons: C10-C22 25 10 33 76 30 120
 Surr: 4-Terphenyl-d14 81 30 120

Client: Bechtel Nevada Corp. Batch ID: P2317
 Work Order: 9911170
 Project: V725
 Analyte: Laboratory Control Spike Duplicate
 Method: SW8015B
 Unit: mg/Kg
 Matrix: Soil
 Sample ID: LCSD-2317
 Seq No: 66275
 Run ID: CURLY 991207A
 Prep: 12/3/99
 Analyzed: 12/7/99
 Analyst: MTB

Result	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/REC	RPD/Limit	Qual
26	10	33		79	30	120	25		4	20	
T/R Hydrocarbons: C10-C22											
Surr: 4-Terphenyl-d14											

Client: Bechtel Nevada Corp. Batch ID: P2317
 Work Order: 9911170
 Project: V725
 Analyte: Method Blank
 Method: SW8015B
 Unit: mg/Kg
 Matrix: Soil
 Sample ID: MBLK-2317
 Seq No: 66273
 Run ID: CURLY 991207A
 Prep: 12/3/99
 Analyzed: 12/7/99
 Analyst: MTB

Result	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/REC	RPD/Limit	Qual
ND	10			78	30	120					
T/R Hydrocarbons: C10-C22											
Surr: 4-Terphenyl-d14											

Client: Bechtel Nevada Corp. Batch ID: P2317
 Work Order: 9911170
 Project: V725
 Analyte: Matrix Spike
 Method: SW8015B
 Unit: mg/Kg
 Matrix: Soil
 Sample ID: 9911170-01AMS
 Seq No: 66277
 Run ID: CURLY 991207A
 Prep: 12/3/99
 Analyzed: 12/7/99
 Analyst: MTB

Result	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/REC	RPD/Limit	Qual
29	10	33	6.3	67	30	120					
T/R Hydrocarbons: C10-C22											
Surr: 4-Terphenyl-d14											

Client: Bechtel Nevada Corp. Batch ID: P2317
 Work Order: 9911170
 Project: V725
 Analyte: Matrix Spike Duplicate
 Method: SW8015B
 Unit: mg/Kg
 Matrix: Soil
 Sample ID: 9911170-01AMSD
 Seq No: 66278
 Run ID: CURLY 991207A
 Prep: 12/3/99
 Analyzed: 12/7/99
 Analyst: MTB

Result	Limit	SpikeVal	SpikeRelVal	%REC	LowLimit	HighLimit	DupRelVal	± 2 sigma	RPD/REC	RPD/Limit	Qual
33	10	33	6.3	81	30	120	29		14	20	S
T/R Hydrocarbons: C10-C22											
Surr: 4-Terphenyl-d14											

Qualifiers: ND - Not detected at the reporting limit
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 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits
 Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

11/17/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-5

Page 1 of 4

Job Number: 23220

Facility ID: NTS

Sampling Event: CAU 340

COC Number: CAU 340-5

Laboratory: BARINGR

Cooler ID:

Cooler Temp:

Number of Coolers:

Cooler Units:

Logbook No.:

Sampled By:

Curtis Obi

Print

Print

Sign

Delivery Order ID:

SEIR No.: CAU 340-2-0

Charge Code: C00024AA

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK10	GRAB	SO	11/17/99	09:10		

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
6.20	Diesel Range Organics	REG	U	2	D	D	Diesel & Oil Range
6.21	Gasoline Range Organics	REG	U	2	D	D	
8.19	Pesticides	REG	U	2	D	D	

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK12	GRAB	SO	11/17/99	09:20		

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides	REG	U	2	D	D	

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time
23	CAU 340	CAU340SK13	GRAB	SO	11/17/99	09:30		

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides	REG	U	2	D	D	

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340SK14	GRAB	SO	11/17/99	09:40		

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides		REG	U	2	D	

23	CAU 340	CAU340SK18	GRAB	SO	11/17/99	09:50		
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Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
8.19	Pesticides		REG	U	2	D	

11/17/1999

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-5

Page 3 of 4

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filter Code	pH	Container Type	Comments
CAU340SK10	CAU340SK1001	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Gas, Diesel, & Oil Range
CAU340SK10	CAU340SK1002	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides
CAU340SK12	CAU340SK1201	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340SK13	CAU340SK1301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340SK14	CAU340SK1401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	
CAU340SK18	CAU340SK1801	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	

Transfer Information:

Relinquished By	Received By	Transfer Date/Time	Reason	Shipper	Airbill No.	Traffic Report No.
<i>Charles Clark</i>	<i>Spencer</i>	<i>4/17/99 13:36</i>				
<i>Spencer</i>	<i>Federal Express</i>	<i>4/18/99 1300</i>	<i>Shipping Sample</i>	<i>FedEx</i>	<i>816090904293</i>	

Comments:

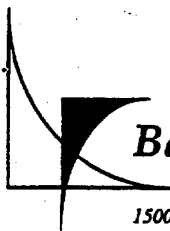
Potential Contamination Yes No

Radiological

Chemical

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Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 17-Jan-00

Ted Redding
Bechtel Nevada Corp.
P.O. Box 98521
MS NTS 273
Las Vegas, NV 89193-8521

Phone: 1-702-295-7220
Fax: 1-702-295-4773

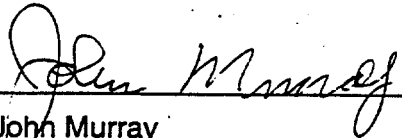
Work Order: 0001029
Project: 23220

Dear Ted Redding,

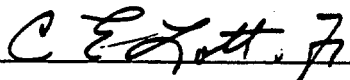
Barringer Laboratories received 6 samples on 01/06/00 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.


John Murray

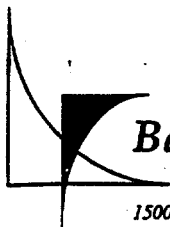
Organic Laboratory Manager


Clarence Lott

Project Review

1/17/2000

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Barringer Laboratories, Inc.

Date: 17-Jan-00

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Client: Bechtel Nevada Corp.
Project: 23220
Work Order: 0001029
Date Received: 1/6/00
Temp Received: 6°C

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Matrix	Bottle and Preservation
0001029-01A	CAU340QH17		1/4/00 12:00:00 PM	Soil	8oz amber glass, unpreserved
0001029-02A	CAU340QH18		1/4/00 12:05:00 PM	Soil	8oz amber glass, unpreserved
0001029-03A	CAU340QH19		1/4/00 7:50:00 AM	Aqueous	1L amber glass, unpreserved
0001029-04A	CAU340SK23		1/3/00 2:30:00 PM	Soil	8oz amber glass, unpreserved
0001029-05A	CAU340SK24		1/4/00 10:30:00 AM	Soil	8oz amber glass, unpreserved
0001029-06A	CAU340SK25		1/4/00 10:35:00 AM	Soil	8oz amber glass, unpreserved



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 17-Jan-00

Client: Bechtel Nevada Corp.
Project: 23220
Work Order: 0001029

CASE NARRATIVE

All reported values in this report have been rounded to the correct number of significant figures. All calculations have been performed before applying significant figures, therefore, not all calculations may be reproducible with the results printed in this report.

Date: 17-Jan-00

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.

Work Order: 0001029

Project: 23220

Client Sample ID: CAU340QH17

Tag Number:

Lab Sample ID: 0001029-01A

Date Collected: 01/04/2000

Matrix: Soil

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Aldrin	309-00-2	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
alpha-BHC	319-84-6	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
beta-BHC	319-85-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Chlordane	57-74-9	SW846 8081A	ND	10		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
delta-BHC	319-86-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Dieldrin	60-57-1	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan I	959-98-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan II	33212-65-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin	72-20-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin ketone	53494-70-5	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
gamma-BHC	58-69-9	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor	76-44-8	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Methoxychlor	72-43-5	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Toxaphene	8001-35-2	SW846 8081A	ND	200		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	99	50-163		%REC	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	87	31-115		%REC	1	01/06/2000	01/08/2000	RDH	P2723

Client: Bechtel Nevada Corp.

Work Order: 0001029

Project: 23220

Client Sample ID: CAU340QH18

Tag Number:

Lab Sample ID: 0001029-02A

Date Collected: 01/04/2000

Matrix: Soil

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDE	72-55-9	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDT	50-29-3	SW846 8081A	ND	3		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

Date: 17-Jan-00

CLIENT SAMPLE REPORT

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
Aldrin	309-00-2	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
alpha-BHC	319-84-6	SW846 8081A	ND	0.04		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
alpha-Chlordane	5103-71-9	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
beta-BHC	319-85-7	SW846 8081A	ND	0.04		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Chlordane	57-74-9	SW846 8081A	ND	0.03		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
delta-BHC	319-86-8	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Dieldrin	60-57-1	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan I	959-98-8	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan II	33212-65-9	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin	72-20-8	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin aldehyde	7421-93-4	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Endrin ketone	53494-70-5	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
gamma-BHC	58-89-9	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
gamma-Chlordane	5566-34-7	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor	76-44-8	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Methoxychlor	72-43-5	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2723
Toxaphene	8001-35-2	SW846 8081A	ND	20		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	87	200		$\mu\text{g/Kg}$	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	82	50-163		%REC	1	01/06/2000	01/08/2000	RDH	P2723
				31-115		%REC	1	01/06/2000	01/08/2000	RDH	P2723

Client: Bechtel Nevada Corp.

Work Order: 0001029

Project: 23220

Client Sample ID: CAU340QH19

Tag Number:

Lab Sample ID: 0001029-03A

Date Collected: 01/04/2000

Matrix: Aqueous

Analyte	CAS#	Method	Result $\pm$ 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
4,4'-DDE	72-55-9	SW846 8081A	ND	0.04		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
4,4'-DDT	50-29-3	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
Aldrin	309-00-2	SW846 8081A	ND	0.04		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
alpha-BHC	319-84-6	SW846 8081A	ND	0.03		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
alpha-Chlordane	5103-71-9	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
beta-BHC	319-85-7	SW846 8081A	ND	0.06		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
Chlordane	57-74-9	SW846 8081A	ND	0.1		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
delta-BHC	319-86-8	SW846 8081A	ND	0.09		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722
Dieldrin	60-57-1	SW846 8081A	ND	0.02		$\mu\text{g/L}$	1	01/06/2000	01/08/2000	RDH	P2722

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

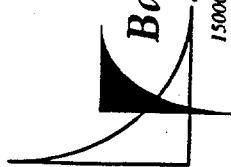
X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result



Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

Date: 17-Jan-00

CLIENT SAMPLE REPORT

Endosulfan I	959-98-8	SW846 8081A	ND	0.1	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Endosulfan II	33212-65-9	SW846 8081A	ND	0.04	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	0.7	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Endrin	72-20-8	SW846 8081A	ND	0.06	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Endrin aldehyde	7421-93-4	SW846 8081A	ND	0.2	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Endrin ketone	53494-70-5	SW846 8081A	ND	0.1	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
gamma-BHC	58-89-9	SW846 8081A	ND	0.04	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
gamma-Chlordane	5566-34-7	SW846 8081A	ND	0.06	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Heptachlor	76-44-8	SW846 8081A	ND	0.03	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	0.1	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Methoxychlor	72-43-5	SW846 8081A	ND	0.1	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Toxaphene	8001-35-2	SW846 8081A	ND	2	µg/L	1	01/06/2000	01/08/2000	RDH	P2722
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	103	18-125	%REC	1	01/06/2000	01/08/2000	RDH	P2722
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	83	23-110	%REC	1	01/06/2000	01/08/2000	RDH	P2722

Client: Bechtel Nevada Corp.

Work Order: 0001029

Project: 23220

Client Sample ID: CAU340SK23

Tag Number:

Lab Sample ID: 0001029-04A

Date Collected: 01/03/2000

Matrix: Soil

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDE	72-55-9	SW846 8081A	8.7	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDT	50-29-3	SW846 8081A	200	20		µg/Kg	5	01/06/2000	01/13/2000	RDH	P2723
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
alpha-Chlordane	5103-71-9	SW846 8081A	31	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Chlordane	57-74-9	SW846 8081A	310	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
delta-BHC	319-86-8	SW846 8081A	ND	10		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
gamma-BHC	58-89-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

gamma-Chlordane	5566-34-7	SW846 8081A	33	2	µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor	76-44-8	SW846 8081A	15	2	µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2	µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Methoxychlor	72-43-5	SW846 8081A	ND	20	µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Toxaphene	8001-35-2	SW846 8081A	ND	200	µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	102	50-163	%REC	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	91	31-115	%REC	1	01/06/2000	01/08/2000	RDH	P2723

Client: Bechtel Nevada Corp.

Client Sample ID: CAU340SK24

Lab Sample ID: 0001029-05A

Work Order: 0001029

Date Collected: 01/04/2000

Tag Number:

Matrix: Soil

Project: 23220

Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDE	72-55-9	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
4,4'-DDT	50-29-3	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
alpha-BHC	319-84-6	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
alpha-Chlordane	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
beta-BHC	319-85-7	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Chlordane	57-74-9	SW846 8081A	ND	10		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
delta-BHC	319-86-8	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Dieldrin	60-57-1	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan I	959-98-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan II	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endosulfan sulfate	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin	72-20-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin aldehyde	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin ketone	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
gamma-BHC	58-89-9	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
gamma-Chlordane	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor	76-44-8	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor epoxide	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Methoxychlor	72-43-5	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Toxaphene	8001-35-2	SW846 8081A	ND	20		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Decachlorobiphenyl	2051-24-3	SW846 8081A	98	50-163	%REC	1	1	01/06/2000	01/08/2000	RDH	P2723
Surr: Tetrachloro-m-xylene	877-09-8	SW846 8081A	84	31-115	%REC	1	1	01/06/2000	01/08/2000	RDH	P2723

Qualifiers:

ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Value above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

CLIENT SAMPLE REPORT

Client: Bechtel Nevada Corp.		Lab Sample ID: 0001029-06A									
Work Order: 0001029		Date Collected: 01/04/2000									
Project: 23220		Matrix: Soil									
Client Sample ID: CAU340SK25		Tag Number:									
Analyte	CAS#	Method	Result ± 2 sigma	Limit	Qual	Unit	DF	Prepped	Analyzed	Analyst	Batch
4,4'-DDD	72-54-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	72-55-9	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	50-29-3	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Aldrin	309-00-2	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	319-84-6	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	5103-71-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
alpha-Chlordane	319-85-7	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	57-74-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	319-86-8	SW846 8081A	ND	10		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
beta-BHC	60-57-1	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	959-98-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	33212-65-9	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Chlordane	1031-07-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	72-20-8	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	7421-93-4	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin aldehyde	53494-70-5	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	58-89-9	SW846 8081A	ND	3		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	5566-34-7	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
Endrin ketone	76-44-8	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	1024-57-3	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	72-43-5	SW846 8081A	ND	2		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
gamma-BHC	8001-35-2	SW846 8081A	ND	20		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	2051-24-3	SW846 8081A	ND	200		µg/Kg	1	01/06/2000	01/08/2000	RDH	P2723
	877-09-8	SW846 8081A	106	50-163		%REC	1	01/06/2000	01/08/2000	RDH	P2723
gamma-Chlordane			95	31-115		%REC	1	01/06/2000	01/08/2000	RDH	P2723
Heptachlor											
Heptachlor epoxide											
Methoxychlor											
Toxaphene											
Surr: Decachlorobiphenyl											
Surr: Tetrachloro-m-xylene											

Qualifiers: ND - Not detected at the reporting limit
J - Analyte detected below quantitation limits
E - Value above quantitation range

R - RPD outside accepted recovery limits
X - Duplicate sample(s) < 5 times limit
S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
B - Analyte detected in the associated method blank
Z - Sample > 10 times blank result

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BATCH QC SUMMARY REPORT

Client: Bechtel Nevada Corp.		Batch ID: P2722		Sample ID: LCS-2722		Method: SW846 8081A		Prepped: 1/6/00				
Work Order: 0001029				Seq No: 76347		Unit: µg/L		Analyzed: 1/8/00				
Project: 23220				Run ID: MOE_000107A		Matrix: Aqueous		Analyst: RDH				
Analyte		Result ± 2 sigma	Limit	SpikeVal	SpikeReVal	%REC	LowLimit	HighLimit	DupReVal ± 2 sigma	RPD/REr	RPDLimit	Qual
4,4'-DDT		0.84	0.1	1.0		84	33	143				
Aldrin		0.31	0.04	0.40		77	1	136				
Dieldrin		0.75	0.02	1.0		75	15	138				
Endrin		0.78	0.06	1.0		78	1	150				
gamma-BHC		0.30	0.04	0.40		74	7	124				
Heptachlor		0.30	0.03	0.40		75	24	132				
Surr: Decachlorobiphenyl						101	18	125				
Surr: Tetrachloro-m-xylene						85	23	110				

Client: Bechtel Nevada Corp.		Batch ID: P2722				Sample ID: LCSD-2722		Method: SW846 8081A		Prepped: 1/6/00		
Work Order: 0001029						Seq No: 76348		Unit: µg/L		Analyzed: 1/8/00		
Project: 23220						Run ID: MOE_000107A		Matrix: Aqueous		Analyst: RDH		
Analyte		Result ±2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal ± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT		0.96	0.1	1.0		96	33	143	0.84	13	20	
Aldrin		0.33	0.04	0.40		82	1	136	0.31	6	20	
Dieldrin		0.80	0.02	1.0		80	15	138	0.75	7	20	
Endrin		0.84	0.06	1.0		84	1	150	0.78	8	20	
gamma-BHC		0.32	0.04	0.40		79	7	124	0.30	7	20	
Heptachlor		0.33	0.03	0.40		82	24	132	0.30	8	20	
Surr: Decachlorobiphenyl						106	18	125				
Surr: Tetrachloro-m-xylene						89	23	110				

Client: Bechtel Nevada Corp.		Batch ID: P2722		Sample ID: MBLK-2722		Method: SW846 8081A		Prepped: 1/6/00																	
Work Order: 0001029				Seq No: 76346		Unit: µg/L		Analyzed: 1/8/00																	
Project: 23220				Run ID: MOE_000107A		Matrix: Aqueous		Analyst: RDH																	
Analyte		Result ± 2 sigma		Limit		SpikeVal		SpikeReVal		%REC		LowLimit		HighLimit		DupReVal		± 2 sigma		RPD/RER		RPDLimit		Qual	
4,4'-DDD		ND		0.1																					
4,4'-DDE		ND		0.04																					
4,4'-DDT		ND		0.1																					
Aldrin		ND		0.04																					
alpha-BHC		ND		0.03																					
alpha-Chlordane		ND		0.06																					

Qualifiers:		ND - Not detected at the reporting limit		R - RPD outside accepted recovery limits		Y - Unspiked sample > 4 times amount spiked	
		J - Analyte detected below quantitation limits		X - Duplicate sample(s) < 5 times limit		B - Analyte detected in the associated method blank	
		E - Value above quantitation range		S - Spike recovery outside accepted recovery limits		Z - Sample > 10 times blank result	

Date: 17-Jan-00

Barringer Laboratories, Inc.

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

beta-BHC	ND	0.06
Chlordane	ND	0.1
delta-BHC	ND	0.09
Dieldrin	ND	0.02
Endosulfan I	ND	0.1
Endosulfan II	ND	0.04
Endosulfan sulfate	ND	0.7
Endrin	ND	0.06
Endrin aldehyde	ND	0.2
Endrin ketone	ND	0.1
gamma-BHC	ND	0.04
gamma-Chlordane	ND	0.06
Heptachlor	ND	0.03
Heptachlor epoxide	ND	0.1
Methoxychlor	ND	0.1
Toxaphene	ND	2

Surr: Decachlorobiphenyl

Surr: Tetrachloro-m-xylene

105 18 125
91 23 110

Client: Bechtel Nevada Corp.		Batch ID: P2723		Sample ID: LCS-2723		Method: SW846 8081A		Prepped: 1/6/00	
Work Order: 0001029		Project: 23220		Seq No: 76351		Unit: µg/Kg		Analyzed: 1/8/00	
Analyte		Result ± 2 sigma		Run ID: MOE_000107B		Matrix: Soil		Analyst: RDH	
4,4'-DDT		Limit		%REC LowLimit HighLimit		DupRetVal ± 2 sigma		RPD/REr RPDLimit Qual	
Aldrin		31		33		94		25 160	
Dieldrin		10		13		78		42 122	
Endrin		25		33		76		36 146	
gamma-BHC		27		33		81		30 147	
Heptachlor		10		13		79		32 127	
Surr: Decachlorobiphenyl		9.7		13		73		34 111	
Surr: Tetrachloro-m-xylene						107		50 163	
						82		31 115	

Client: Bechtel Nevada Corp.		Batch ID: P2723		Sample ID: LCS-2723		Method: SW846 8081A		Prepped: 1/6/00	
Work Order: 0001029		Project: 23220		Seq No: 76352		Unit: µg/Kg		Analyzed: 1/8/00	
Analyte		Result ± 2 sigma		Run ID: MOE_000107B		Matrix: Soil		Analyst: RDH	
		Limit		%REC LowLimit HighLimit		DupRetVal ± 2 sigma		RPD/REr RPDLimit Qual	

Qualifiers: ND - Not detected at the reporting limit

J - Analyte detected below quantitation limits

E - Values above quantitation range

R - RPD outside accepted recovery limits

X - Duplicate sample(s) < 5 times limit

S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked

B - Analyte detected in the associated method blank

Z - Sample > 10 times blank result

BATCH QC SUMMARY REPORT

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

4,4'-DDT	29	3	33	87	25	160	31	8	20
Aldrin	9.8	2	13	74	42	122	10	6	20
Dieldrin	24	3	33	72	36	146	25	6	20
Endrin	25	3	33	76	30	147	27	6	20
gamma-BHC	9.8	2	13	73	32	127	10	7	20
Heptachlor	9.6	2	13	72	34	111	9.7	2	20
Surr: Decachlorobiphenyl				101	50	163			
Surr: Tetrachloro-m-xylene				79	31	115			

Client: Bechtel Nevada Corp.		Batch ID: P2723		Sample ID: MBLK-2723		Method: SW846 8081A		Prepped: 1/5/00	
Work Order: 0001029		Project: 23220		Seq No: 76350		Unit: µg/Kg		Analyzed: 1/8/00	
Analyte		Result ± 2 sigma		Run ID: MOE_000107B		Matrix: Soil		Analyst: RDH	
4,4'-DDD		Limit		SpikeVal		SpikeRefVal		DupRefVal ± 2 sigma	
4,4'-DDE		ND		3		3		RPD/Limit	
4,4'-DDT		ND		3		3		Qual	
Aldrin		ND		3		3			
alpha-BHC		ND		2		2			
alpha-Chlordane		ND		2		2			
beta-BHC		ND		2		2			
Chlordane		ND		2		2			
delta-BHC		ND		10		10			
Dieldrin		ND		2		2			
Endosulfan I		ND		3		3			
Endosulfan II		ND		2		2			
Endosulfan sulfate		ND		3		3			
Endrin		ND		3		3			
Endrin aldehyde		ND		3		3			
Endrin ketone		ND		3		3			
gamma-BHC		ND		3		3			
gamma-Chlordane		ND		2		2			
Heptachlor		ND		2		2			
Heptachlor epoxide		ND		2		2			
Methoxychlor		ND		2		2			
Toxaphene		ND		20		20			
Surr: Decachlorobiphenyl		ND		200		200			
				110		50		163	

Qualifiers: ND - Not detected at the reporting limit R - RPD outside accepted recovery limits Y - Unspiked sample > 4 times amount spiked
 J - Analyte detected below quantitation limits X - Duplicate sample(s) < 5 times limit B - Analyte detected in the associated method blank
 E - Value above quantitation range S - Spike recovery outside accepted recovery limits Z - Sample > 10 times blank result

Date: 17-Jan-00

Barringer Laboratories, Inc.

15000 W 6th Avenue Suite 300 Golden, Colorado 80401-5047 (800) 654-0506 (303) 277-1687 Fax (303) 277-1689

BATCH QC SUMMARY REPORT

Surr: Tetrachloro-m-xylene

84. 31 115

Client: Bechtel Nevada Corp.	Batch ID: P2723	Sample ID: 0001029-01AMS	Method: SW846 8081A	Prepped: 1/8/00								
Work Order: 0001029		Seq No: 76354	Unit: µg/Kg	Analyzed: 1/8/00								
Project: 23220		Run ID: MOE_000107B	Matrix: Soil	Analyst: RDH								
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal	± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	33	3	33	ND	100	3	169					
Aldrin	10	2	13	ND	78	10	142					
Dieldrin	26	3	33	ND	79	15	158					
Endrin	28	3	33	ND	84	20	112					
gamma-BHC	11	2	13	ND	80	30	114					
Heptachlor	11	2	13	ND	82	18	141					
Surr: Decachlorobiphenyl					98	50	163					
Surr: Tetrachloro-m-xylene					87	31	115					

Client: Bechtel Nevada Corp.	Batch ID: P2723	Sample ID: 0001029-01AMS	Method: SW846 8081A	Prepped: 1/6/00								
Work Order: 0001029		Seq No: 76355	Unit: µg/Kg	Analyzed: 1/8/00								
Project: 23220		Run ID: MOE 000107B	Matrix: Soil	Analyst: RDH								
Analyte	Result ± 2 sigma	Limit	SpikeVal	SpikeRefVal	%REC	LowLimit	HighLimit	DupRefVal	± 2 sigma	RPD/RER	RPDLimit	Qual
4,4'-DDT	35	3	33	ND	104	3	169	33		4	20	
Aldrin	11	2	13	ND	81	10	142	10		3	20	
Dieldrin	27	3	33	ND	80	15	158	26		1	20	
Endrin	29	3	33	ND	86	20	112	28		3	20	
gamma-BHC	11	2	13	ND	81	30	114	11		2	20	
Heptachlor	12	2	13	ND	87	18	141	11		6	20	
Surr: Decachlorobiphenyl					100	50	163					
Surr: Tetrachloro-m-xylene					91	31	115					

Qualifiers: ND - Not detected at the reporting limit
 J - Analyte detected below quantitation limits
 E - Value above quantitation range

R - RPD outside accepted recovery limits
 X - Duplicate sample(s) < 5 times limit
 S - Spike recovery outside accepted recovery limits

Y - Unspiked sample > 4 times amount spiked
 B - Analyte detected in the associated method blank
 Z - Sample > 10 times blank result

01/03/2000
NTS - PRODUCTION
SDG #: V744
Page 1 of 4
W1786

CHAIN OF CUSTODY RECORD: CAU 340-6

Job Number: 23220
Facility ID: NTS
Sampling Event: CAU 340
COC Number: CAU 340-6
Laboratory: BARINGER

Cooler ID:
Cooler Temp:
Number of Coolers:
Cooler Units:
Logbook No.:

Delivery Order ID:
SEIR No.: CAU 340-5-0
Charge Code: C00024AA

Sampled By: *Curtis Obi*
Print Sign

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Collection End Date	Start Time	End Time	Print	Sign
23	CAU 340	CAU340QH17	GRAB	SO	1-4-2000	1-4-2000	12:00	12:00		
Pay Item	Description	Parameter Code	Anal Cd	Fill Cd	Prior Lvl	Anal Lvl	Comments			
8.19	Pesticides		REG	U	7	D				

23	CAU 340	CAU340QH18	GRAB	SO	1-4-2000	1-4-2000	12:05	12:05		
Pay Item	Description	Parameter Code	Anal Cd	Fill Cd	Prior Lvl	Anal Lvl	Comments			
8.19	Pesticides		NORM	U	7	D				

23	CAU 340	CAU340QH19	EB	W	1-4-2000	1-4-2000	07:50	07:50		
Pay Item	Description	Parameter Code	Anal Cd	Fill Cd	Prior Lvl	Anal Lvl	Comments			
3.4	Organochlorine Pesticides		REG	U	7	D				

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	Start Time	Collection End Date	End Time
23	CAU 340	CAU340SK23	GRAB	SO	1-3-2000	14:30	1-3-2000	14:30
	Pay Item	Description			Parameter Code	Anal Cd	Filt Cd	Prior Anal Lvl
	8.19	Pesticides				NORM	U	7 D
10:30								
23	CAU 340	CAU340SK24	GRAB	SO	1-4-2000	10:30	1-4-2000	10:30
	Pay Item	Description			Parameter Code	Anal Cd	Filt Cd	Prior Anal Lvl
	8.19	Pesticides				NORM	U	7 D
10:35								
23	CAU 340	CAU340SK25	GRAB	SO	1-4-2000	10:35	1-4-2000	10:35
	Pay Item	Description			Parameter Code	Anal Cd	Filt Cd	Prior Anal Lvl
	8.19	Pesticides				NORM	U	7 D

Containers Included on C.O.C.:

Sample ID	Container ID	Preservative	Filter Code	pH	Container Type	Comments
CAU340QR17	CAU340QR1701	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides by 8081A
CAU340QR18	CAU340QR1801	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides by 8081A
CAU340QR19	CAU340QR1901	COOL 4C			AMBER GLASS 1 L	Pesticides by 8081A
CAU340SK23	CAU340SK2301	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides by 8081A
CAU340SK24	CAU340SK2401	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides by 8081A
CAU340SK25	CAU340SK2501	COOL 4C			CLEAR WIDE-MOUTH GLASS 250 ML	Pesticides by 8081A

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s., UN2910.

01/03/2000

NTS - PRODUCTION

CHAIN OF CUSTODY RECORD: CAU 340-6

Page

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<i>Curtis D. Evans</i>	<i>Spencer</i>	<i>1/4/00 13:40</i>				
<i>CD Contaminated</i>	<i>FED EX</i>	<i>01/05/00 1300</i>	<i>Laboratory Analysis</i>	<i>FED EX</i>	<i>815799659670</i>	
Comments: <i>free from Rad based on prior sample analysis</i> <i>1-4-2000</i>						

Potential Contamination Yes No

Radiological

Chemical

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**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
DOCUMENT REVIEW SHEET**

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DOCUMENT REVIEW SHEET

Document Title/Number: <u>Draft Closure Report for Corrective Action Unit 340: NTS Pesticide Release Sites</u> Document Date: March 2000 Revision Number: DRAFT Originator/Organization: Bechtel Nevada /Environmental Restoration Date Comments Due: March 31, 2000 Reviewer/Organization: NDEP (letter dated May 10, 2000, from Michael D. McKinnon to Runore C. Wycoff)				
Comment Number/ Location	Type	Comment	Comment Response	Accept
1	M	Since this CAU was remediated to Industrial PRG standards, a land-use restriction (LUR) must be imposed and registered which restricts future use of this site to industrial uses.	Wording has been added to text in Section 1 to reiterate that FFACO sites are remediated to industrial standards and future uses are restricted to industrial uses. Therefore, formal land-use restrictions are not necessary.	No

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