ERRATA SHEET

The document number on the document cover of the final Closure Report for Housekeeping Category Corrective Action Unit 343: Areas 1, 3, & 4 Housekeeping Sites, Nevada Test Site, Nevada is incorrectly shown as DOE/NV--779. The correct approved document number is DOE/NV--799.

Per NNSA/NV May 30, 2002 Letter entitled: SUBMITTAL OF ERRATA SHEET FOR THE FINAL CLOSURE REPORT FOR HOUSEKEEPING CATEGORY CORRECTIVE ACTION UNIT 343: AREAS 1, 3, & 4 HOUSEKEEPING SITES, NEVADA TEST SITE, NEVADA, REVISION 0, FEBRUARY 2002.

DOE/NV--799

Nevada
Environmental
Restoration
Project

Closure Report for Housekeeping Category Corrective Action Unit 343: Areas 1, 3, & 4 Housekeeping Sites, Nevada Test Site, Nevada

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Revision: 0

February 2002

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U.S. Department of Energy, National Nuclear Security Administration
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CLOSURE REPORT FOR HOUSEKEEPING CATEGORY CORRECTIVE ACTION UNIT 343: AREAS 1, 3, & 4 HOUSEKEEPING SITES, NEVADA TEST SITE, NEVADA

Prepared for:
U.S. Department of Energy
National Nuclear Security Administration
Nevada Operations Office
Work Performed Under Contract No. DE-AC08-96-NV11718

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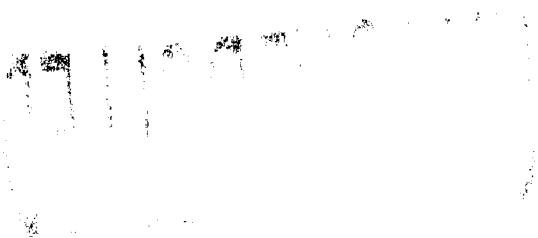

CLOSURE REPORT
FOR HOUSEKEEPING CATEGORY
CORRECTIVE ACTION UNIT 343:
AREAS 1, 3, & 4 HOUSEKEEPING SITES,
NEVADA TEST SITE, NEVADA

Approved by: /s/ Janet Appenzeller-Wing Date: 1/28/02
Janet Appenzeller-Wing, Project Manager
Industrial Sites Project

Approved by: /s/ Runore Wycoff Date: 1-28-02
Runore C. Wycoff, Director
Environmental Restoration Division

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ACRONYMS AND ABBREVIATIONS

BN	Bechtel Nevada
CAS	Corrective Action Site(s)
CAU	Corrective Action Unit
CFR	Code of Federal Regulations
COC	constituent(s) of concern
DOE/NV	U.S. Department of Energy, Nevada Operations Office
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FFACO	Federal Facility Agreement and Consent Order
ICP	Inductively Coupled Plasma
IT	International Technology Corporation
m	meter (s)
mg/kg	milligram(s) per kilogram
NAC	Nevada Administrative Code
ND	Not Detected
NDEP	Nevada Division of Environmental Protection
NNSA/NV	U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office
NTS	Nevada Test Site
PCBs	polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
PRG	preliminary remediation goal
RSM	RAD Safe Marker
SVOC	semivolatile organic compound
TPH	total petroleum hydrocarbon
VOC	volatile organic compound
XRF	X-ray Fluorescence Device

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EXECUTIVE SUMMARY

The 18 Corrective Action Sites (CAS) that comprise Corrective Action Unit (CAU) 343 were closed by the following actions:

- CAS 01-22-06: Closed with no action required.
- CAS 01-24-03: Clean closed.
- CAS 01-99-01: Moved to CAU 357.
- CAS 03-14-05: Clean closed.
- CAS 03-22-06: Clean closed.
- CAS 03-22-07: Clean closed.
- CAS 03-22-10: Clean closed.
- CAS 03-22-12: Clean closed.
- CAS 03-22-14: Clean closed.
- CAS 03-22-24: Clean closed.
- CAS 03-22-25: Clean closed
- CAS 03-22-26: Clean closed.
- CAS 03-22-30: Clean closed.
- CAS 03-22-34: Clean closed.
- CAS 03-22-37: Clean closed.
- CAS 03-24-08: Clean closed.
- CAS 03-99-10: Clean closed.
- CAS 04-26-03: Moved to CAU 357.

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1.0 INTRODUCTION

This Closure Report documents the closure activities conducted for CAU 343: Areas 1, 3, & 4 Housekeeping Sites. CAU 343 is listed in Appendix III of the Federal Facility Agreement and Consent Order (FFACO) (FFACO, 1996) and consists of the following 18 Corrective Action Sites (CASs) located in Areas 1, 3, and 4 of the Nevada Test Site (NTS) (Figures 1, 2, 3, and 4):

- CAS 01-22-06: Drums (2)
- CAS 01-24-03: Batteries (2)
- CAS 01-99-01: Boxes; Pipes
- CAS 03-14-05: Transformers; Switch Boxes
- CAS 03-22-06: Drums; Bucket; Can
- CAS 03-22-07: Buckets (2)
- CAS 03-22-10: Drum
- CAS 03-22-12: Drum
- CAS 03-22-14: Drums (2)
- CAS 03-22-24: Drum
- CAS 03-22-25: Drum
- CAS 03-22-26: Can
- CAS 03-22-30: Buckets; Cans; Debris
- CAS 03-22-34: Drum
- CAS 03-22-37: Drum
- CAS 03-24-08: Battery
- CAS 03-99-10: Gas Can
- CAS 04-26-03: Lead Bricks

Closure activities were performed in two phases. Phase I activities consisted of collecting waste characterization samples of soil at appropriate sites. The results were used to determine how waste generated during closure activities would be handled and disposed (i.e., as nonhazardous sanitary or hazardous waste). Phase 2 activities consisted of closing each CAS by removing debris and/or material, disposing of the generated waste, and verifying that each site was clean-closed by visual inspection and/or collecting soil verification samples for laboratory analysis.

One site (CAS 01-22-06) was closed with no further action. This determination was made after reviewing the Preliminary Assessment Database, which mentioned that the drums have already been removed. During several Bechtel Nevada Environmental Restoration (BN/ER) site visits, there were three pieces of scrap metal located that were previously mistaken as being remnants of drums. Additionally, determination of a no action closure was made after concurrence with Nevada Division of Environmental Protection (NDEP). Two other sites (CAS 01-99-01 and CAS 04-26-03) were moved into CAU 357 in Appendix III of the FFACO because the housekeeping process was determined not to be adequate to close them.

Copies of the analytical results for the site verification samples are included in Appendix A. Copies of the Sectored Housekeeping Site Closure Verification Forms for each of the 15 CASs are included in Appendix B.

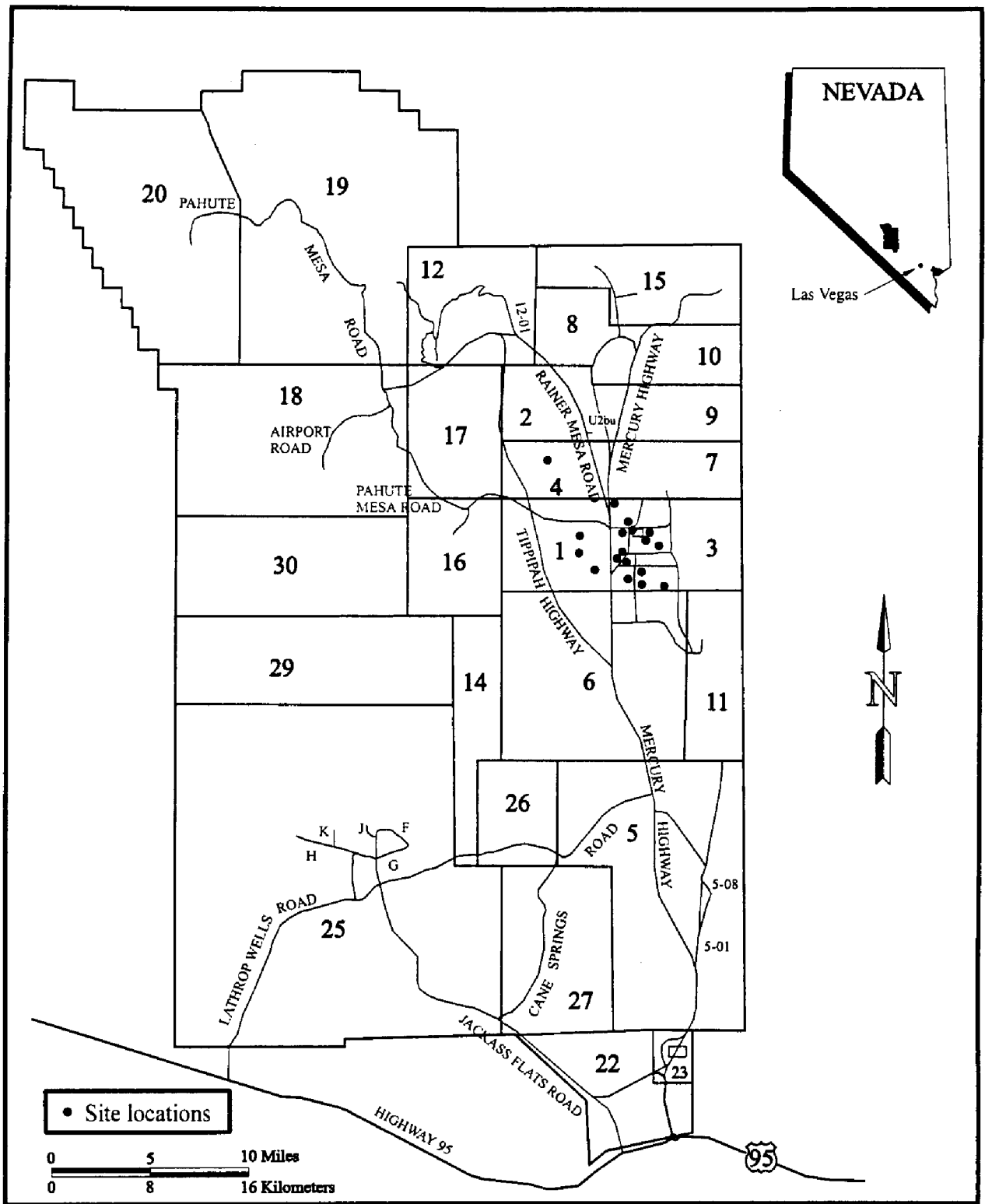

FIGURE 1
SITE LOCATION MAP
CAU 343

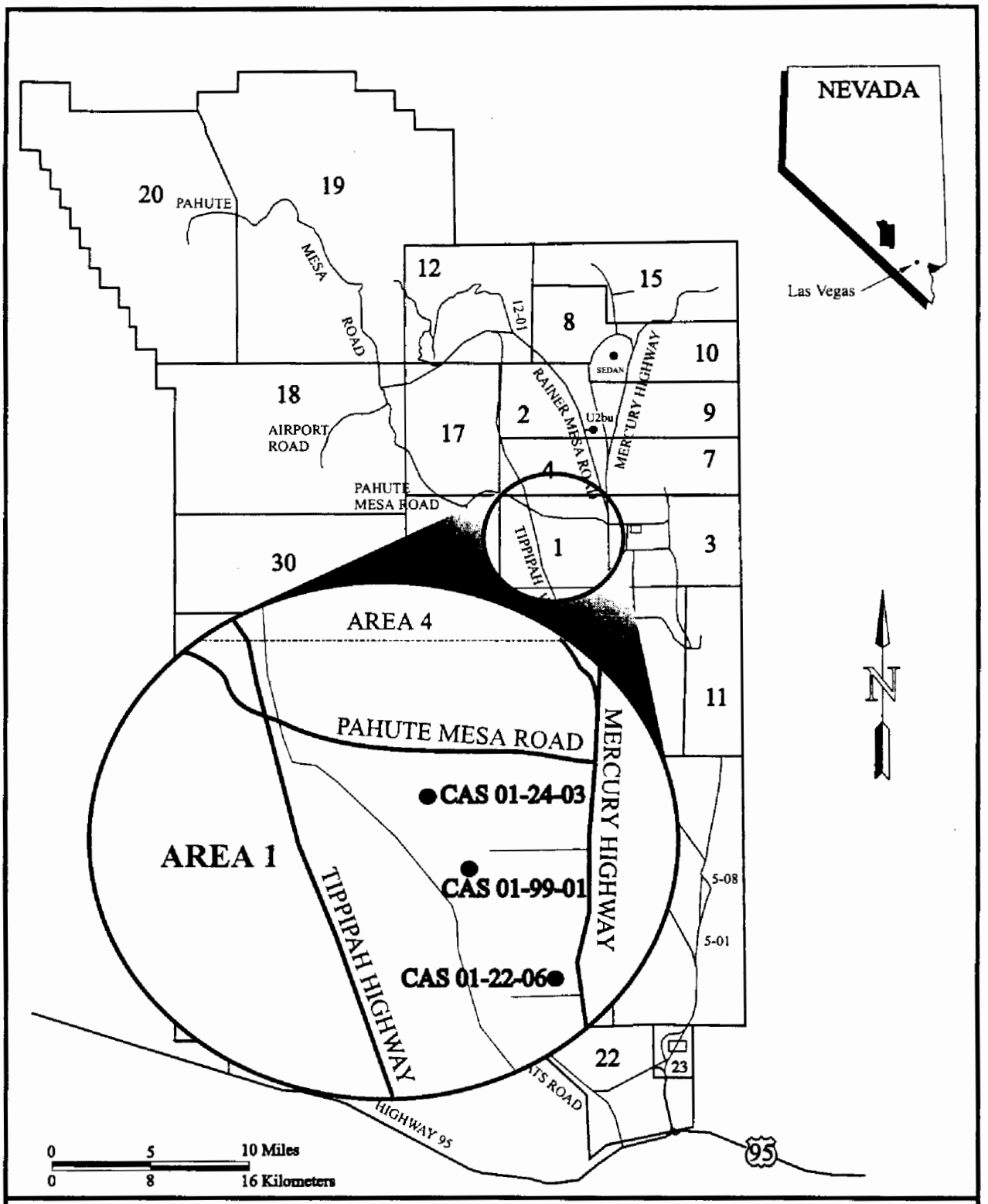

FIGURE 2
SITE LOCATION MAP
CAU 343 (AREA 1 SITES)

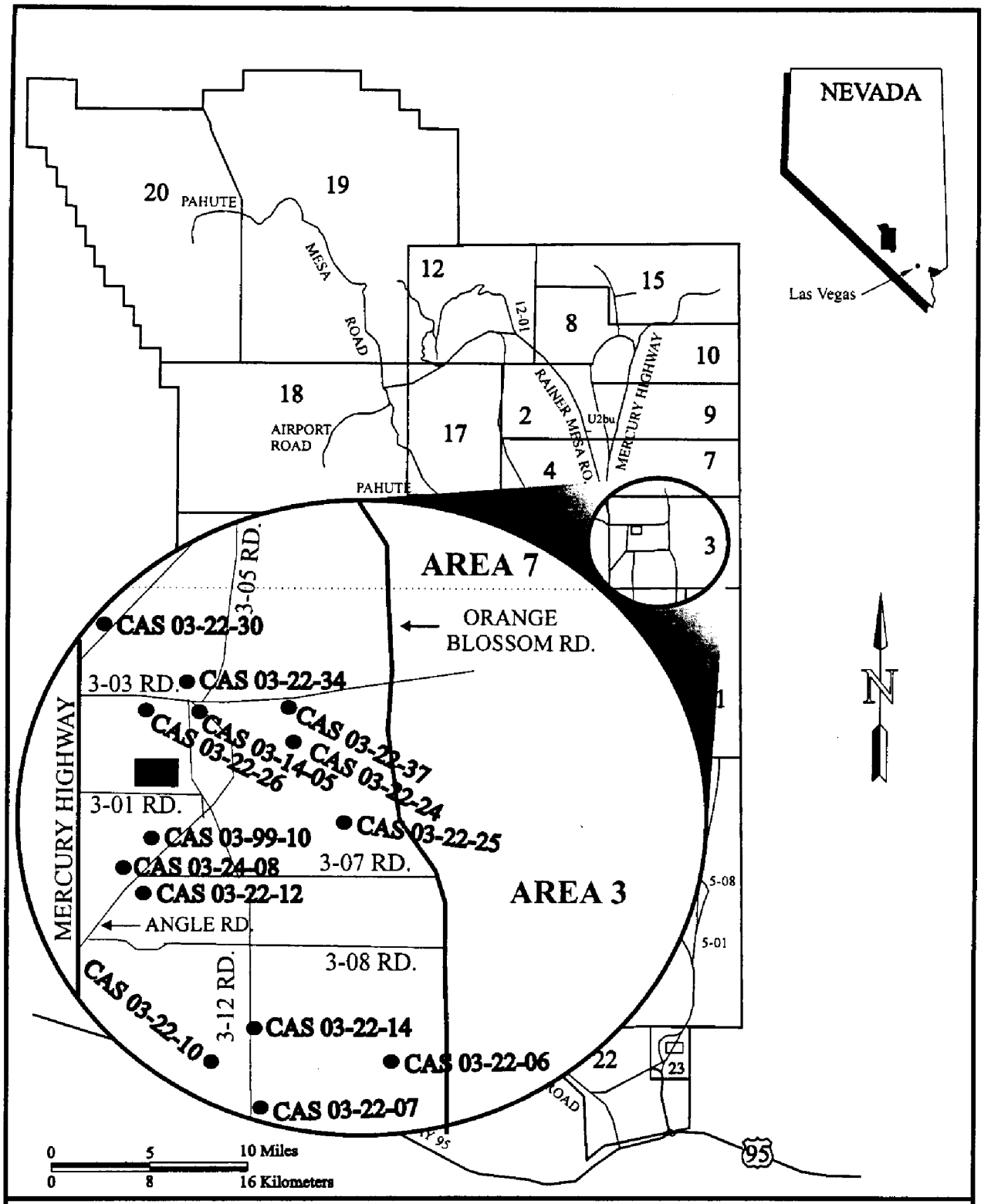

FIGURE 3
SITE LOCATION MAP
CAU 343 (AREA 3 SITES)

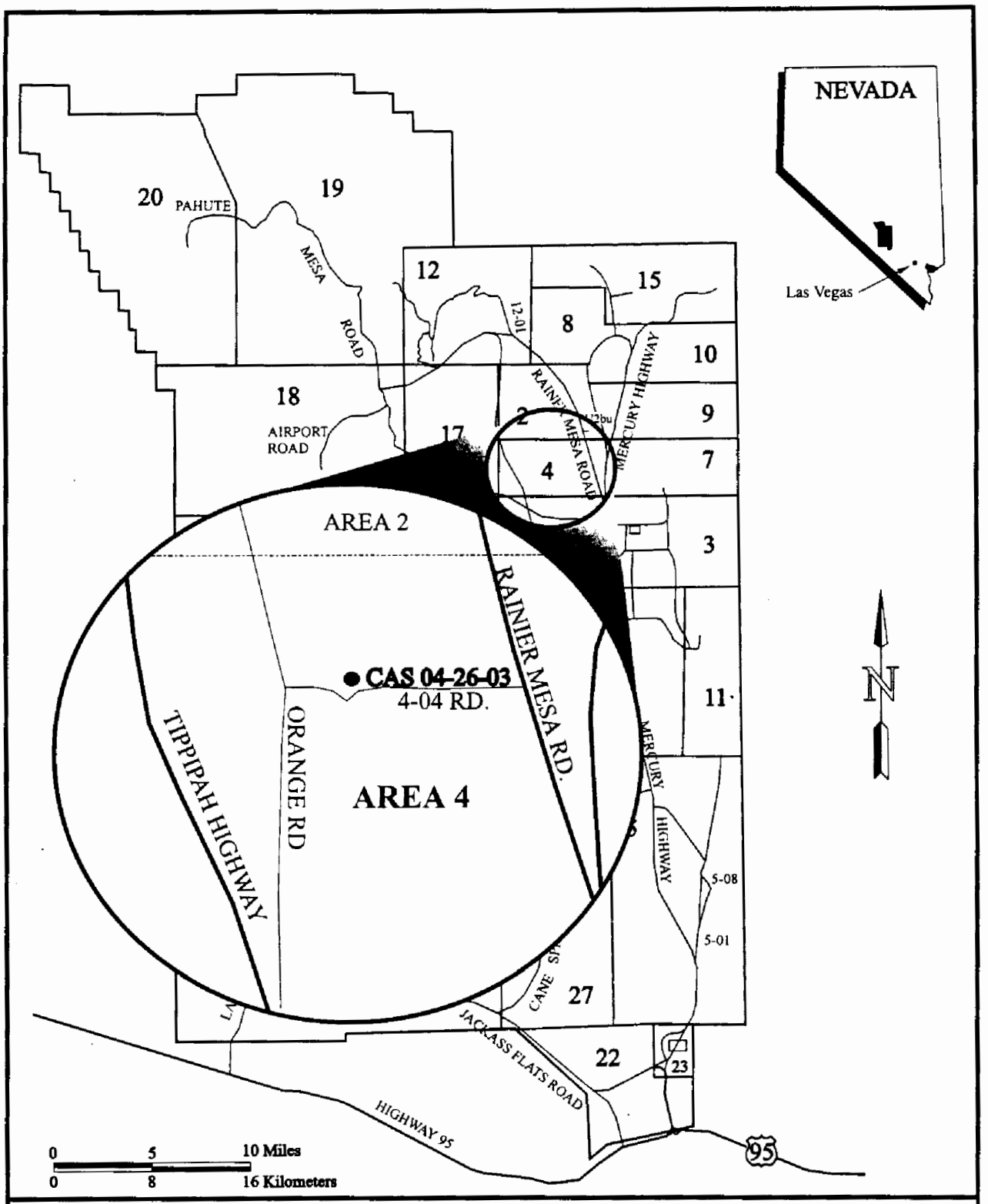

FIGURE 4
SITE LOCATION MAP
CAU 343 (AREA 4 SITE)

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2.0 CLOSURE ACTIVITIES

This section details the specific corrective action activities completed during the closure of CAU 343: Areas 1, 3, & 4 Housekeeping Sites. Copies of the analytical data reports for all verification samples are included in Appendix A and copies of the Sectored Housekeeping Site Closure Verification Forms are included in Appendix B.

2.1 DESCRIPTION OF CLOSURE ACTIVITIES

2.1.1 Preplanning and Site Preparation

Planning documents prepared prior to the beginning of closure activities include the *Sectored Clean-up Work Plan For Housekeeping Category Waste Sites* (DOE/NV, 2000); *Generic Field Management Plan for Housekeeping Category Waste Sites* (BN, 2000); *Site-Specific Health and Safety Plan for Corrective Action Unit 343: Areas 1, 3, & 4 Housekeeping Sites* (BN, 2001); *Site Maintenance Work Packages;* and *DOE/NV Real Estate/Operation Permit (BN-0179-00).* In addition, a National Environmental Policy Act checklist was prepared (NV-00-060) and a pre-activity site survey was conducted by a BN biologist. The survey confirmed the absence of sensitive animal or plant species at all 18 CASs. A Readiness Review was held on November 20, 2001, by BN/ER. BN/ER and Site Maintenance personnel held a pre-job field briefing on November 26, 2001, prior to the start of site-closure field activities.

2.2 WASTE CHARACTERIZATION ACTIVITIES

At 14 of the 18 CASs, samples of soil and/or material were collected and analyzed to characterize the waste that was expected to be generated during site-closure activities. Table 1 presents the analyses that were conducted for waste characterization samples, the results of these analyses, and the resulting waste classifications.

2.2.1 CAS 01-22-06 Waste Characterization

The Preliminary Assessment documents confirm that the drums have already been removed. In past BN/ER site visits, only pieces of scrap metal were found in the bottom of the U-1e crater. From the edge of the crater, the scrap metal appeared to be drum remnants. Upon entering the crater, the scrap metal was determined not to be drum remnants. However, soil samples were collected from underneath the pieces of scrap metal to determine if the soils were impacted.

Nevada Division of Environmental Protection (NDEP) visited the site on November 19, 2001, and verified that no drums were present at the site. NDEP observed that scrap metal was present at the site and was informed by BN/ER that soil samples had been collected at the site. Based on the results of the soil samples collected in the area where drums were previously located, NDEP concurred with the proposal for no further action at this site. On October 9, 2001, the soil samples (012206-0-1, 012206-0-2, and 012206-0-3) were analyzed for total petroleum hydrocarbons (TPH) full scan, total Resource Conservation and Recovery Act (RCRA) metals,

TABLE 1-SUMMARY OF ANALYTICAL RESULTS FOR WASTE CHARACTERIZATION SOIL SAMPLES

CAS	SAMPLE TYPE	ANALYSIS	ANALYTICAL RESULTS	WASTE TYPE
01-22-06	Soil	TPH full scan[a], total RCRA metals[b], VOCs[c], SVOCs[d], PCBs[e], and gamma spectroscopy[f]	All analyses lower than action levels.	No Action
01-24-03	Soil	TCLP metals (lead) and pH	TCLP-lead is 35 mg/L	Hazardous waste (lead)
01-99-01	N/A	N/A	N/A	No Action Being removed from CAU 343
03-14-05	N/A	N/A	N/A	Sanitary and Recyclable
03-22-06	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action levels.	Sanitary
03-22-07	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	Several SVOCs higher than action levels. One VOC higher than action levels. Full-scan TPH higher than action levels.	Hydrocarbon
03-22-10	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action	Sanitary
03-22-12	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	Full-scan TPH higher than action levels	Hydrocarbon
03-22-14	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	One SVOC higher than action levels. Full-scan TPH higher than action levels.	Hydrocarbon

TABLE 1-SUMMARY OF ANALYTICAL RESULTS FOR WASTE CHARACTERIZATION SOIL SAMPLES (continued)

CAS	SAMPLE TYPE	ANALYSIS	ANALYTICAL RESULTS	WASTE TYPE
03-22-24	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action	Sanitary
03-22-25	Soil	Total RCRA metals, pH, and gamma spectroscopy	pH is higher than action levels	Sanitary
03-22-26	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action levels.	Sanitary
03-22-30	N/A	N/A	N/A	Sanitary (debris)
03-22-34	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action levels.	Sanitary
03-22-37	Soil	TPH full scan, total RCRA metals, VOCs, SVOCs, PCBs, and gamma spectroscopy	All analyses lower than action levels.	Sanitary
03-24-08	Soil	TCLP metals (lead) and pH	All analyses lower than action	Recyclable
03-99-10	Soil	TPH (gasoline) and TCLP metals (lead)	All analyses lower than action levels.	Sanitary
04-26-03	N/A	N/A	N/A	No Action Being removed from CAU 343

[a]Total petroleum hydrocarbons (TPH) analysis performed by U.S. Environmental Protection Agency (EPA) Method SW-846 8015M (EPA, 1996b). See analytical reports in Appendix A for detection limits.
[b]Resource Conservation and Recovery Act (RCRA) metals analysis performed by EPA Method SW-846 6010, 7471A (EPA, 1996b).
[c]Volatile organic compounds (VOC) analysis performed by EPA Method SW-846 8260B (EPA, 1996b). See analytical reports in Appendix A for detection limits.
[d]Semivolatile organic compounds (SVOC) analysis performed by EPA Method SW-846 8270C (EPA, 1996b). See analytical reports in Appendix A for detection limits.
[e]Polychlorinated biphenyls (PCBs) analysis performed by EPA Method SW-846 8082 (EPA, 1996b). See analytical reports in Appendix A for detection limits.
[f]Gamma spectroscopy analysis performed by EPA Method SW-846 901.1 (EPA, 1996b). See analytical reports in Appendix A for detection limits.

polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and gamma spectroscopy. Waste characterization sampling confirms that no constituents of concern (COCs) are present. The site was left with no further action because the drums have been documented as already being removed and the pieces of scrap metal at the bottom of the U-1e crater pose no threat to the environment.

2.2.2 CAS 01-24-03 Waste Characterization

Waste generated at this site included a small area that included broken pieces of a lead battery and a pile of approximately 30 to 40 50-caliber brass shells. On October 9, 2001, the soil sample (012403-0-1) was collected from the surface within the area of the broken pieces of battery and analyzed for TCLP metals-lead and soil pH. Results for TCLP metals-lead were higher than the Region 9 Preliminary Remediation Goals (PRGs) (EPA, 1996a) for industrial soils and was determined to be hazardous waste from Title 40 Code of Federal Regulations (CFR) 261.24 Table 1 (EPA, 1996c). The soil underneath the broken pieces of battery was sampled to determine if the pieces impacted the soil underneath. Based on waste characterization results, the lead-contaminated soil was categorized as hazardous waste. The 50-caliber brass shells were disposed of as sanitary waste.

2.2.3 CAS 03-14-05 Waste Characterization

Waste generated at this site included two transformers (non-PCB) and oils from two switches. No waste characterization sampling was required at this site because the transformers were dry and the switches were intact and contained in a concrete vault. The two transformers were free to be released as sanitary waste. The oils drained from the switches were recycled by the Site Services Department.

2.2.4 CAS 03-22-06 Waste Characterization

Waste generated at this site included two small piles of magnetite and associated soil. A magnet was used in the field to confirm that the material was magnetite. On October 11, 2001, the soil samples (032226-0-0 and 032226-0-1) were collected on the piles of magnetite and analyzed for TPH full scan, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. Waste characterization sampling confirmed that COCs are not present. Based on waste characterization results, the magnetite was disposed of as sanitary waste.

2.2.5 CAS 03-22-07 Waste Characterization

Waste generated at this site included two 5-gallon metal buckets containing tar and scattered debris, which consisted of a wood cable spool, wood, rope and scrap metal. On October 11, 2001, the sample (032207-0-1) was collected from inside the two 5-gallon buckets and analyzed for TPH full scan, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. Results for TPH were higher than the state of Nevada action levels (Nevada Administrative Code [NAC], 2000). Results for SVOCs and VOCs were higher than the Region 9 PRGs for industrial soils, but below 40 CFR 261.24 Table 1 values for the determination of hazardous

waste (EPA, 1996c). Based on waste characterization results, the two 5-gallon buckets containing tar was categorized as hydrocarbon waste. The debris that was generated from closure was disposed of as sanitary waste.

2.2.6 CAS 03-22-10 Waste Characterization

Waste generated at this site included an empty 55-gallon drum. On October 10, 2001, the soil samples (032210-0-0 and 032210-0-1) were collected underneath the drum from the surface soil and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The soil beneath the drum was sampled to determine if contents from the now empty drum impacted the soil beneath. Waste characterization sampling confirmed that COCs are not present. The empty 55-gallon drum was disposed of as sanitary waste.

2.2.7 CAS 03-22-12 Waste Characterization

Waste generated at this site included a 55-gallon drum containing a small amount of lubricating grease. On October 11, 2001, the soil sample (032212-0-1) was collected from the lubricating grease inside of the drum and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The results for the lubricating grease sample analyzed for TPH was higher than the state of Nevada action levels (NAC, 2000). Based on waste characterization results, the waste generated from closure was categorized as hydrocarbon waste. The drum was located on a historical mud pit and because drilling mud may already contain TPH, no sample was collected from beneath the drum. The mud pit will be closed as per the *Mud Pit Identification Report, Nevada Test Site, Nevada* (DOE/NV, 2001).

2.2.8 CAS 03-22-14 Waste Characterization

Waste generated at this site included two 5-gallon buckets containing small amounts of tar with some spilled on soil. On October 10, 2001, the soil sample (032214-0-1) was collected from inside of the buckets and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. Results for TPH were higher than the state of Nevada action levels (NAC, 2000). Results for SVOCs were higher than the Region 9 PRGs for industrial soils, but below 40 CFR 264.24 Table 1 values for the determination of hazardous waste (EPA, 1996c). Based on waste characterization results, the waste generated from closure was categorized as hydrocarbon waste.

2.2.9 CAS 03-22-24 Waste Characterization

Waste generated at this site included an empty 55-gallon drum. On November 6, 2001, the soil sample (032224-0-1) was collected from the surface soil underneath the drum and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The soil beneath the drum was sampled to determine if contents from the now empty drum impacted the soil beneath. Waste characterization sampling confirmed that COCs are not present and the drum was disposed of as sanitary waste.

2.2.10 CAS 03-22-25 Waste Characterization

Waste generated at this site included three 5-gallon containers in which one container was empty and two were full with a white powder material. On October 11, 2001, the sample (032225-0-1) was collected from inside the container was analyzed for total RCRA metals, Inductively Coupled Plasma (ICP) analysis for metals, pH, and gamma spectroscopy. Results for the ICP and pH showed that the white powder material is sodium hydroxide. Since the sodium hydroxide is already containerized and in a solid form, the material was disposed of as sanitary waste.

2.2.11 CAS 03-22-26 Waste Characterization

Waste generated at this site included an empty 5-gallon can. On October 9, 2001, the samples (032226-0-0 and 032226-0-1) were collected from the surface soil underneath the can and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The soil beneath the can was sampled to determine if contents from the now empty can impacted the soil beneath. Waste characterization sampling confirmed that COCs are not present. The can was disposed of as sanitary waste.

2.2.12 CAS 03-22-30 Waste Characterization

Waste generated at this site included a large pile of debris, which contained empty non-pressurized aerosol cans, wood, scrap metal, cable, wire, and electrical conduit. No waste characterization sampling was done, due to process knowledge that the debris is discarded construction material and does not contain COCs. The debris was free to be released as sanitary waste.

2.2.13 CAS 03-22-34 Waste Characterization

Waste generated at this site included an empty 15-gallon drum. On October 9, 2001, the sample (032234-0-1) was collected from surface soil underneath the drum and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The soil beneath the drum was sampled to determine if contents from the now empty drum impacted the soil beneath. Waste characterization sampling confirmed that COCs are not present and the waste material was free to be released as sanitary waste.

2.2.14 CAS 03-22-37 Waste Characterization

Waste generated at this site included a 5-gallon bucket that was partially buried in soil. On October 7, 2001, the soil sample (032237-0-1) was collected from underneath the bucket and analyzed for TPH, total RCRA metals, PCBs, VOCs, SVOCs, and gamma spectroscopy. The soil sample was a composite of soil inside the bucket and beneath it. Based on waste characterization results, the waste material was free to be released as sanitary waste and the soil does not contain COCs.

2.2.15 CAS 03-24-08 Waste Characterization

Waste generated at this site included a vehicle battery that was intact and appeared to be in good condition. On October 10, 2001, the soil sample (032408-0-1) was collected directly underneath the vehicle battery from the surface soil and analyzed for TCLP metals-lead and soil pH. Based on waste characterization results, the soils were free of COCs. The vehicle battery was released to Fleet Operations to be recycled.

2.2.16 CAS 03-99-10 Waste Characterization

Waste generated at this site included an empty 5-gallon gasoline can. On October 10, 2001, the sample (039910-0-1) was collected from the surface soil underneath the gasoline can and analyzed for TCLP metals-lead and TPH-gasoline range. The soil beneath the can was sampled to determine if contents from the now empty can impacted the soil beneath. Based on waste characterization results, the gasoline can was free to be released as sanitary waste.

2.3 SITE CLOSURE ACTIVITIES

2.3.1 CAS 01-24-03: Batteries (2)

A small pile of 50-caliber shells and soil containing broken battery pieces were removed from the site on November 29, 2001. The shells were placed into plastic bags and transported to the Area 9 U10c Landfill for disposal. The soil containing broken battery pieces was characterized as being hazardous waste (lead) and placed into a 15-gallon drum staged in a Satellite Accumulation Area (#NTS0105). The lead impacted soil was removed using shovels. A hand-held water sprayer was used to reduce a lead dust hazard during the soil removal activities. Waste Management will have the drum transported off-site for disposal. A field screening method (X-ray Fluorescence Device [XRF]) was used to determine how much soil needed to be removed. Verification soil sample (012403-0-V) was collected from the excavation created by removing the broken battery pieces. The sample was taken at approximately 3 inches in depth and analyzed for TCLP metals-lead. Results showed TCLP metals-lead lower than the EPA Region 9 PRGs for Industrial Soil (EPA, 1996a). Analytical results for the verification sample are given in Table 2. All closure activities were documented with photographs and field notes. No further actions are required at this site.

2.3.2 CAS 03-14-05: Transformers; Switch Boxes

Two transformers (non-PCB) were removed from the vault on December 12, 2001, and two associated switches were drained, one in the vault and the other outside the vault. The switch located outside the vault was left in place because it was still active in Area 3. The oils were drained on November 30, 2001, and transported to Site Services Department to be recycled. The two transformers were transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.3 CAS 03-22-06: Drums; Bucket; Can

The Preliminary Assessment Database documents state that the drum, bucket, and can have already been removed. Several past BN/ER site visits concur that the debris material has been removed. The two small piles of magnetite also associated with this site were removed on November 29, 2001. The magnetite was placed into an end-dump using a front-end loader and taken to the Area 9 U10c Landfill for disposal. All closure activities were documented with photographs and field notes. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. No further action is required at this site.

2.3.4 CAS 03-22-07: Buckets (2)

The two 5-gallon buckets containing tar and scattered debris were removed on November 27, 2001. The two 5-gallon buckets were removed by hand and transported to the Area 6 Hydrocarbon Landfill for disposal. A verification soil sample (032207-0-V) was collected from the former location of the buckets at approximately 2 inches in depth and analyzed for TPH, SVOCs, and VOCs. Results showed TPH lower than the state of Nevada action level (NAC, 2000). Results showed SVOCs and VOCs lower than the Region 9 PRGs for industrial soils (EPA, 1996a). Analytical results for the verification samples are given in Tables 3 and 4. The scattered debris, which included a wood cable spool, wood, rope, and scrap metal were also removed at the same time and transported to the Area 9 U10c Landfill for disposal. All closure activities were documented with photographs and field notes. No further actions are required at this site.

2.3.5 CAS 03-22-10: Drum

The empty 55-gallon drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.6 CAS 03-22-12: Drum

The 55-gallon drum containing small amounts of lubricating grease was removed by hand on November 27, 2001, and transported to the Area 6 Hydrocarbon Landfill for disposal. Clean closure of this site was verified by visual inspection. Verification samples were not collected because the lubricating grease was contained inside of the drum and the drum was located inside a mud pit. It would not be possible to differentiate mud pit COCs from a spill from the drum. The mud pit will be closed as per the *Mud Pit Identification Report, Nevada Test Site, Nevada* (DOE/NV, 2001). All closure activities were documented with photographs and field notes. No further action is required at this site.

TABLE 2-SUMMARY OF ANALYTICAL RESULTS FOR TCLP METALS-LEAD AND pH IN VERIFICATION SOIL SAMPLES

SAMPLE IDENTIFICATION	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
EPA Industrial PRG[a] (mg/kg)[b]	440	100,000	810	450	750	610	10,000	10,000
CAS 01-24-03								
012403-0-V	N/A[c]	N/A	N/A	N/A	ND[d]	N/A	N/A	N/A

Note: All samples analyzed by U.S. Environmental Protection Agency (EPA) Method SW-846 6010 (EPA, 1996b). See analytical reports in Appendix A for detection limits.
[a]EPA Region 9 Industrial Preliminary Remediation Goasl (PRGs) for 1996 (EPA, 1996b).
[b]mg/kg=milligram per kilogram.
[c]analysis did not apply to this sample.
[d]ND=not detected at the reporting limit.

SAMPLE IDENTIFICATION	pH (white powder material inside containers)	pH (soil underneath containers after cleanup completed)
CAS 03-22-25		
032225-0-V	13.4	9.62

TABLE 3-SUMMARY OF ANALYTICAL RESULTS FOR SVOCs AND VOCs IN VERIFICATION SOIL SAMPLES

SAMPLE IDENTIFICATION	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Carbazole	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-c,d) pyrene	Napthalene
SVOCs									
EPA Industrial PRG[a] (mg/kg)[b]	2.9	2.9	29	.29	120	290	.29	2.9	190
CAS 03-22-07									
032207-0-1	ND[c]	ND	ND	ND	ND	ND	ND	ND	ND
CAS 03-22-14									
032214-0-1	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs									
EPA Industrial PRG (mg/kg)	N/A[d]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	190
CAS 03-22-07									
032207-0-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND

Note: All samples analyzed by U.S. Environmental Protection Agency (EPA) Method SW-846 8270 and 8260 (EPA, 1996a). See analytical reports in Appendix A for detection limits.

[a]EPA Region 9 Industrial Preliminary Remediation Goasl (PRGs) for 1996 (EPA, 1996a).

[b]mg/kg=milligram per kilogram.

[c]ND=not detected at the reporting limit.

[d]analysis did not apply to this sample.

TABLE 4-SUMMARY OF ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN VERIFICATION SOIL SAMPLES

SAMPLE IDENTIFICATION	GASOLINE RANGE (mg/kg)	DIESEL RANGE (mg/kg)	OIL RANGE (mg/kg)	TOTAL PETROLEUM HYDROCARBONS (mg/kg)
NDEP[a] Action Level (mg/kg)[b]	100	100	100	100
CAS 03-22-07				
032207-0-V	ND[c]	ND	ND	ND
CAS 03-22-14				
032214-0-V	ND	ND	ND	ND

[a]NDEP-Nevada Division of Environmental Protection.
[b]mg/kg=milligrams per kilogram.
[c]ND=not detected for the laboratory reporting limits.

2.3.7 CAS 03-22-14: Drums (2)

The Preliminary Assessment Database describes the site as containing two drums, however after several BN/ER site visits, it was determined that the drums were actually two 5-gallon buckets containing a small amount of spilled tar. The buckets and tar were removed using shovels on November 27, 2001, and transported to the Area 6 Hydrocarbon Landfill for disposal. Verification soil sample (032214-0-V) was collected from the former location of the buckets at approximately 3 inches in depth and analyzed for TPH and SVOCs. Results showed TPH lower than the state of Nevada action level and SVOCs lower than the Region 9 PRGs for industrial soils (NAC, 2000; EPA, 1996a), verifying that the site was clean-closed. Analytical results for the verification samples are given in Tables 3 and 4. All closure activities were documented with photographs and field notes. No further actions are required at this site.

2.3.8 CAS 03-22-24: Drum

The empty 55-gallon drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.9 CAS 03-22-25: Drum

The Preliminary Assessment Database describes the site as containing a drum, however after several BN/ER site visits, it was determined that the site contained three 5-gallon containers. Two containers were full of sodium hydroxide (solid), while the third container was empty. This was determined from waste characterization sampling results. The three 5-gallon containers were removed on January 25, 2002, and transported to the Area 9 U10c Landfill for disposal. Verification soil sample (032225-0-V) was collected from the surface soil at the former location of the containers and analyzed for soil pH. Results showed that pH in the soil underneath the containers was at an acceptable range for desert soils to show that the site was clean closed. Analytical results for verification samples are given in Table 2. All closure activities were documented with photographs and field notes. No further actions are required at this site.

2.3.10 CAS 03-22-26: Can

The empty 5-gallon can was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.11 CAS 03-22-30: Buckets; Cans; Debris

The large pile of debris, which included empty non-pressurized aerosol cans, wood debris, scrap metal, cable, wire and electrical conduit, were removed on November 29, 2001, by placing debris into an end dump using a front-end loader and transporting it to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.12 CAS 03-22-34: Drum

The empty 15-gallon drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.13 CAS 03-22-37: Drum

The Preliminary Assessment Database describes the site as containing a drum, however after several BN/ER site visits, it was determined that the site contained a partially buried, 5-gallon bucket. The 5-gallon bucket was removed by hand on December 5, 2001, and transported to the Area 9 U10c Landfill for disposal. Waste characterization sample results verified that no COCs were present underneath or inside

the bucket. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.14 CAS 03-24-08: Battery

The vehicle battery was removed by hand on November 27, 2001, and transported to Fleet Operations to be recycled. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

2.3.15 CAS 03-99-10: Gas Can

The empty 5-gallon gasoline can was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. Clean closure of this site was verified by visual inspection; no verification samples were required or collected. All closure activities were documented with photographs and field notes. No further action is required at this site.

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3.0 WASTE DISPOSITION

Wastes generated during the closure of CAU 343: Areas 1, 3, & 4 Housekeeping Sites were disposed as follows:

- CAS 01-24-03: A 15-gallon drum was filled with lead-impacted soil. The drum containing soil is now staged at the Hazardous Waste Storage Pad in Area 5 and will be shipped off-site for disposal within one year. In addition, approximately 30 to 40 50-caliber brass shells were disposed of in the Area 9 U10c Landfill

- CAS 03-14-05: Two transformers (non-PCB) were disposed of as sanitary waste in the Area 9 U10c Landfill. Drained oils from two switches were recycled by Site Services Department.

- CAS 03-22-06: Approximately 10.8 cubic meters (14 cubic yards) of magnetite and associated soil disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-07: Two 5-gallon buckets containing tar and associated soils were disposed of in the Area 6 Hydrocarbon Landfill, while debris disposed of as sanitary waste was disposed of in the Area 9 U10c Landfill.

- CAS 03-22-10: An empty 55-gallon drum was disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-12: A 55-gallon drum containing a small amount of lubricating grease inside of the drum was disposed of in the Area 6 Hydrocarbon Landfill.

- CAS 03-22-14: Two 5-gallon buckets containing tar and small amounts of spilled tar/associated soils were disposed of in the Area 6 Hydrocarbon Landfill.

- CAS 03-22-24: An empty 55-gallon drum was disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-25: Three 5-gallon containers, two containing sodium hydroxide (solid) and the third was empty. All containers were disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-26: An empty 5-gallon can was disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-30: A large pile of debris was disposed of as sanitary waste in the Area 9 U10c Landfill.

- CAS 03-22-34: An empty 15-gallon drum was disposed of as sanitary waste in the Area 9 U10c Landfill.
- CAS 03-22-37: A partially buried 5-gallon bucket was disposed of as sanitary waste in the Area 9 U10c Landfill.
- CAS 03-24-08: A vehicle battery was transported to Fleet Operations to be recycled.
- CAS 03-99-10: An empty 5-gallon gasoline can was disposed of as sanitary waste in the Area 9 U10c Landfill.

4.0 CLOSURE VERIFICATION

The following four CASs required verification soil sampling:

- 01-24-03
- 03-22-07
- 03-22-14
- 03-22-25

Samples were collected from a total of four CASs after the removal of debris and small amounts of soil as determined by field screening and/or by visible inspection. The samples were collected with clean disposable plastic scoops and placed in labeled sample containers secured with custody seals. The sample containers were placed on ice in a cooler; transported under chain of custody to the BN Sample Management group in Mercury, Nevada; and shipped to an off-site laboratory for analysis. The four CASs requiring verification sampling were analyzed for the following:

- CAS 01-24-03: TCLP metals-lead
- CAS 03-22-07: TPH, SVOCs, and VOCs
- CAS 03-22-14: TPH and SVOCs
- CAS 03-22-25: soil pH

The analytical results verify that the levels of SVOCs, VOCs, TCLP metals-lead, and TPH remaining in the ground at three CASs are non-detectable or below EPA Region 9 PRGs for industrial soil (EPA, 1996a), and the state of Nevada action level for TPH (i.e., 100 mg/kg) (NAC, 2000). At CAS 03-22-25 soil pH was normal for NTS soils. The analytical results for SVOCs, VOCs, TCLP metals-lead, pH, and TPH are summarized in Tables 2, 3, and 4, respectively; the analytical reports are included in Appendix A.

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5.0 SUMMARY AND RECOMMENDATIONS

5.1 SUMMARY

The following site closure activities were performed at the 15 of the 18 CASs comprising CAU 343 and are documented in the report:

- All debris (e.g., wood, metal cable, scrap metal, rope, electrical debris, wire, empty non-pressurized aerosol cans, rubber, 50-caliber brass shells, and dry transformers) were removed from the sites and disposed of in the Area 9 U10c Landfill.

- All containers (e.g., drums, cans, buckets, and containers) were disposed of in either the Area 9 U10c Landfill or the Area 6 Hydrocarbon Landfill, depending on its contents.

- An intact vehicle battery was removed from one site and transported to Fleet Operations to be recycled. Another site contained broken pieces of a battery in soil and was determined to be hazardous waste (lead). This waste is now being staged at the Hazardous Waste Storage Pad in Area 5 to eventually be shipped off-site for disposal.

- All soil containing TPH levels at or above the state of Nevada TPH action level (i.e., 100 mg/kg) (NAC, 2000) was removed and disposed of in the NTS Area 6 Hydrocarbon Landfill. These CASs include, CAS 03-22-07 and CAS 03-22-14.

- All material, including soil, containing magnetite was removed from one site and disposed of in the Area 9 U10c Landfill.

5.2 RECOMMENDATIONS

Since the closure activities for CAU 343 have been completed following the NDEP-approved *Sectored Clean-up Work Plan for Housekeeping Category Waste Sites* (DOE/NV, 2000) as documented in this report, the U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office (NNSA/NV) requests the following:

- A Notice of Completion be provided by the NDEP to the NNSA/NV for the closure of CAU 343 (CAS 01-22-06, CAS 01-24-03, CAS 03-14-05, CAS 03-22-06, CAS 03-22-07, CAS 03-22-10, CAS 03-22-12, CAS 03-22-14, CAS 03-22-24, CAS 03-22-25, CAS 03-22-26, CAS 03-22-30, CAS 03-22-34, CAS 03-22-37, CAS 03-24-08 and CAS 03-99-10).

- CAU 343 be moved from Appendix III to Appendix IV of the FFACO *Closed Corrective Action Units* (FFACO, 1996).

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6.0 REFERENCES

BN, see Bechtel Nevada.

Bechtel Nevada. 2000. *Generic Field Management Plan for Housekeeping Category Waste Sites*, Las Vegas, NV.

Bechtel Nevada. 2001. *Site-Specific Health and Safety Plan for Corrective Action Unit 343: Areas 1, 3, & 4 Housekeeping Sites, Nevada Test Site, Nevada*, Las Vegas, NV.

DOE/NV, see U.S. Department of Energy, Nevada Operations Office.

EPA, see U.S. Environmental Protection Agency.

FFACO, see Federal Facility Agreement and Consent Order.

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

NAC, see Nevada Administrative Code.

Nevada Administrative Code. 2000. 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. 2000. *Sectored Clean-up Work Plan for Housekeeping Category Waste Sites*, Rev. 0, DOE/NV--579, Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. September 2001. *Mud Pit Identification Report, Nevada Test Site, Nevada,* DOE/NV--752, 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. Washington, D.C.

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
VERIFICATION SAMPLE ANALYTICAL RESULTS

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APPENDIX A TABLE OF CONTENTS

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NEL LABORATORIES
Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: Bechtel Nevada
P.O. Box 98521, M/S NTS273
Las Vegas, NV 89193-8521
ATTN: Ted Redding

PROJECT NAME: V1366
PROJECT NUMBER: 30033

NEL ORDER ID: L0112008

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 12/3/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

/s/ Signature on file

Stan Van Wagenen
Laboratory Manager

12/10/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1366
PROJECT #: 30033

CLIENT ID: **012403-0-V**
DATE SAMPLED: 11/29/01
NEL SAMPLE ID: L0112008-01

TEST: **TCLP Metals**
MATRIX: Solid

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	TCLP/STLC EXTRACTION DATE	DIGESTED	ANALYZED
Lead	ND	0.05 mg/L	1	EPA 6010	12/4/01	12/5/01	12/6/01

D.F. - Dilution Factor

ND - Not Detected

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	**Method Blank**
PROJECT ID:	V1366	DATE SAMPLED:	NA
PROJECT #:	30033	NEL SAMPLE ID:	1205-1.1PB-BLK
TEST:	**TCLP Metals**		
MATRIX:	TCLP Extract		

PARAMETER	RESULT	REPORTING LIMIT	D. F.	TCLP/STLC EXTRACTION METHOD	DATE	DIGESTED	ANALYZED
Lead	ND	0.05 mg/L	1	EPA 6010	12/4/01	12/5/01	12/6/01

D.F. - Dilution Factor

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1366
PROJECT #: 30033
TEST: **TCLP/STLC Metals**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Lead	1205-1.1PB-LCS	1	0.928	93	85 - 115	
Lead	P0111052-06-MS	1	0.858	86	75 - 125	
Lead	P0111052-06-MSD	1	0.868	87	75 - 125	1.2

ND - Not Detected

LEVEL 1 DUE 1/10 12/2/2008

Bechtel Nevada

ANALYTICAL SERVICES LABORATORY

SERVICES REQUEST & CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT/ CLIENT INFORMATION

Project: CAU 343 BN Org#:
Charge No.: SH11A#21 ASL Prog.:
Project Manager: Wayne Johnson
Phone: 702-295-0573 Fax: 702-295-7761 M/S: NTS306

REPORT INFORMATION

Send Report to: Marcus Dixon
Phone: 702-295-4001 Fax: 702-295-7761 M/S: NTS306
Turnaround: ( ) Standard - 30 days Non-rad, 60 Days Rad, Other:
(X) Rush Preliminary by: 14 Days Final by:
Final report format: (X) Standard ( ) NTS-WAC ( ) Other:

SAMPLE INFORMATION

Sampling Site: CAU 343
The samples submitted contain (check);
( ) Hazardous ( ) Radioactive (X) Unknown contamination. If known, attach a brief narrative summary identifying contaminants. This information will ensure compliance with applicable regulations and allow for the safe handling of the sample materials.

LAB USE ONLY

Rad SDG: Non-Rad SDG: V13662
Rad Packet: Non-Rad Packet:
Client Services Representative:
Will these analyses be performed under a signed SOW? ( ) YES ( ) NO
If so, do analyses entered here agree with the SOW? ( ) YES ( ) NO ( ) N/A
If not, identify the variation
CSR initials indicating review and approval: Date:

ANALYSES & METHOD

ITEM	ID / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	TCLP Metals - Lead (6010) PAY ITEM: 9.25
01 0	012403-0-V	11/24/08	14:06	soil	X
1	LAST ITEM				
2					
3					
4					
5					
6					
7					
8					
9					

SAMPLE RECEIPT INFORMATION

Are all sample containers received intact (X) Yes ( ) No
Comments:

Do the labels agree with this form? (X) Yes ( ) No
Comments:

Was a Material Clearance Tag submitted? (X) Yes ( ) No
Comments:

COMMENTS
(Preservative, size/volume, MS/MSD, special analysis, rad matrix code, count time, etc.)

1 x 250 mL

1°C

Transfer of samples submitted for analyses

Sampled/Relinquished (Signature/Organization)	DATE / TIME	Received by (Signature/Organization)
/s/ Signature on file	12-03-01/0804	/s/ Signature on file

Complete for samples shipped to an OFF-SITE Subcontract Laboratory NEL

Relinquished (BN Representative Signature)	DATE / TIME	Received (Courier & Tracking Info.)
/s/ Signature on file	12-03-01/1210	/s/ Signature on file
Relinquished (Courier & Tracking Info.)	DATE / TIME	Received (1st tier Subcontractor Rep)
/s/ Signature on file	12-3-08/1645	/s/ Signature on file
Relinquished (1st tier Subcontractor Rep)	DATE / TIME	Received (2nd tier Subcontractor Rep)

Distribution: Original - To be retained by laboratory performing final analysis
Copy 1 - To be retained by laboratory performing intermediate analysis
Copy 2 - To be retained by Analytical Services Laboratory
Copy 3 - To be retained by sampler

BN-0732 (02/98)

NEL LABORATORIES
Reno • Las Vegas
Phoenix • Boise

Las Vegas Divisio..
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-157⁷
1-888-368-328

CLIENT: Bechtel Nevada
P.O. Box 98521, M/S NTS273
Las Vegas, NV 89193-8521
ATTN: Ted Redding

PROJECT NAME: V1370
PROJECT NUMBER: 30033

NEL ORDER ID: L0112019

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 12/4/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

/s/ Signature on file

Stan Van Wagenen
Laboratory Manager

12/11/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	032225-0-V
PROJECT ID:	V1370	DATE SAMPLED:	12/3/01
PROJECT #:	30033	NEL SAMPLE ID:	L0112019-01

TEST: **Inorganic Non-Metals**
MATRIX: Solid

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
pH	9.62	2.	1	EPA 9045C	pH Units	12/6/01
pH Temperature	23.2	1.	1	EPA 9045C	°C	12/6/01

R.L. - Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1370
PROJECT #: 30033
TEST: **Inorganic Non-Metals**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
7.00 Buffer	011206PHS-LCS	7	7.03	100	99 - 101	

ND - Not Detected

CHANGE 4 12/11 WILL 2019

Bechtel Nevada

ANALYTICAL SERVICES LABORATORY

SERVICES REQUEST & CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT/ CLIENT INFORMATION

Project: CAU 343 BN Org#: 2156
Charge No.: SH11AH21 ASL Prog.:
Project Manager: Wayne Johnson
Phone: 702-295-0573 Fax: 702-295-7761 M/S: NTS306

REPORT INFORMATION

Send Report to: Marcus Dixon
Phone: 702-295-4001 Fax: 702-295-7761 M/S: NTS306
Turnaround: ( ) Standard - 30 days Non-rad, 60 Days Rad, Other:
(X) Rush Preliminary by: 14 Days Final by:
Final report format: (X) Standard ( ) NTS-WAC ( ) Other:

SAMPLE INFORMATION

Sampling Site: CAU 343
The samples submitted contain (check);
( ) Hazardous ( ) Radioactive ( ) Unknown
contamination. If known, attach a brief narrative summary identifying contaminants. This information will ensure compliance with applicable regulations and allow for the safe handling of the sample materials.

LAB USE ONLY

Rad SGD: Non-Rad SDG: V1370
Rad Packet: Non-Rad Packet:
Client Services Representative:

Will these analyses be performed under a signed SOW? ( ) YES ( ) NO
If so, do analyses entered here agree with the SOW? ( ) YES ( ) NO ( ) N/A
If not, identify the variation
CSR initials indicating review and approval: Date:

ANALYSES & METHOD

ITEM	ID / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	pH (9045)	PAY ITEM: 10.5										
0	032225-0-V	12/3/19	9:30	soil	X											
1	Last Item															
2																
3																
4																
5																
6																
7																
8																
9																

SAMPLE RECEIPT INFORMATION

Are all sample containers received intact (X) Yes ( ) No
Comments:

Do the labels agree with this form? (X) Yes ( ) No
Comments:

Was a Material Clearance Tag submitted? (X) Yes ( ) No
Comments:

COMMENTS
(Preservative, size/volume, MS/MSD, special analysis, rad matrix code, count time, etc.)

1x250mL

4°C

Transfer of samples submitted for analyses

Sampled/Relinquished (Signature/Organization)	DATE / TIME	Received by (Signature/Organization)
/s/ Signature on file	12-03-01/1543	/s/ Signature on file

Complete for samples shipped to an OFF-SITE Subcontract Laboratory NEL

Relinquished (BN Representative Signature)	DATE / TIME	Received (Courier & Tracking Info.)
/s/ Signature on file	12-04-01/1320	/s/ Signature on file
Relinquished (Courier & Tracking Info.)	DATE / TIME	Received (1st tier Subcontractor Rep)
/s/ Signature on file	12-4-01/1530	/s/ Signature on file
Relinquished (1st tier Subcontractor Rep)	DATE / TIME	Received (2nd tier Subcontractor Rep)

Distribution: Original - To be retained by laboratory performing final analysis
Copy 1 - To be retained by laboratory performing intermediate analysis
Copy 2 - To be retained by Analytical Services Laboratory
Copy 3 - To be retained by sampler

BN-0732 (02/98)

A-

NEL LABORATORIES
Reno • Las Vegas
Phoenix • Boise

Las Vegas Divisio
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-328

CLIENT: Bechtel Nevada
P.O. Box 98521, M/S NTS273
Las Vegas, NV 89193-8521
ATTN: Ted Redding

PROJECT NAME: V1358
PROJECT NUMBER: 30033

NEL ORDER ID: L0111248

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 11/29/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

Some results have been flagged as follows:

J - This concentration should be considered an estimate due laboratory control sample failure.

Jm - This concentration should be considered an estimate due to probable matrix effects. The surrogate associated with this analyte was outside acceptance limits in the original analysis and upon reanalysis.

Some QA results have been flagged as follows:

J - This concentration should be considered an estimate due laboratory control sample failure.

Jl - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.

M2 - Matrix spike recovery was low, the method control sample recovery was acceptable.

R5 - RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

/s/ Signature on file

Stan Van Wagenen
Laboratory Manager

12/6/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT:	Bechtel Nevada	CLIENT ID:	CAU343-TB9
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-01
TEST:	**Volatile Organic Compounds by EPA 8260B, December 1996**		
METHOD:	EPA 8260	EXTRACTED:	NA
MATRIX:	Aqueous	ANALYZED:	12/2/01
DILUTION:	1	ANALYST:	DMH - Las Vegas Division

PARAMETER	Result µg/L	Reporting Limit	PARAMETER	Result µg/L	Reporting Limit
Acetone	ND	25. µg/L	1,1-Dichloropropene	ND	5. µg/L
Benzene	ND	5. µg/L	cis-1,3-Dichloropropene	ND	5. µg/L
Bromobenzene	ND	5. µg/L	trans-1,3-Dichloropropene	ND	5. µg/L
Bromochloromethane	ND	5. µg/L	Ethylbenzene	ND	5. µg/L
Bromodichloromethane	ND	5. µg/L	Hexachlorobutadiene	ND	5. µg/L
Bromoform	ND	5. µg/L	2-Hexanone	ND	25. µg/L
Bromomethane	ND	5. µg/L	Iodomethane	ND	5. µg/L
2-Butanone	ND	25. µg/L	Isopropylbenzene	ND	5. µg/L
n-Butylbenzene	ND	5. µg/L	p-Isopropyltoluene	ND	5. µg/L
sec-Butylbenzene	ND	5. µg/L	Methylene chloride (Dichloromethane)	ND	5. µg/L
tert-Butylbenzene	ND	5. µg/L	4-Methyl-2-pentanone	ND	25. µg/L
Carbon disulfide	ND	5. µg/L	MTBE	ND	5. µg/L
Carbon tetrachloride	ND	5. µg/L	Naphthalene	ND	10. µg/L
Chlorobenzene	ND	5. µg/L	n-Propylbenzene	ND	5. µg/L
Chloroethane	ND	5. µg/L	Styrene	ND	5. µg/L
Chloroform	ND	5. µg/L	1,1,1,2-Tetrachloroethane	ND	5. µg/L
Chloromethane	ND	5. µg/L	1,1,2,2-Tetrachloroethane	ND	5. µg/L
2-Chlorotoluene	ND	5. µg/L	Tetrachloroethene (PCE)	ND	5. µg/L
4-Chlorotoluene	ND	5. µg/L	Toluene	ND	5. µg/L
Dibromochloromethane	ND	5. µg/L	1,2,3-Trichlorobenzene	ND	5. µg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	10. µg/L	1,2,4-Trichlorobenzene	ND	5. µg/L
1,2-Dibromoethane (EDB)	ND	5. µg/L	1,1,1-Trichloroethane (1,1,1-TCA)	ND	5. µg/L
Dibromomethane	ND	5. µg/L	1,1,2-Trichloroethane (1,1,2-TCA)	ND	5. µg/L
1,2-Dichlorobenzene (o-DCB)	ND	5. µg/L	Trichloroethene (TCE)	ND	5. µg/L
1,3-Dichlorobenzene (m-DCB)	ND	5. µg/L	Trichlorofluoromethane (Freon 11)	ND	10. µg/L
1,4-Dichlorobenzene (p-DCB)	ND	5. µg/L	1,2,3-Trichloropropane	ND	5. µg/L
Dichlorodifluoromethane (Freon 12)	ND	5. µg/L	1,2,4-Trimethylbenzene	ND	5. µg/L
1,1-Dichloroethane (1,1-DCA)	ND	5. µg/L	1,3,5-Trimethylbenzene	ND	5. µg/L
1,2-Dichloroethane (1,2-DCA)	ND	5. µg/L	Vinyl chloride	ND	5. µg/L
1,1-Dichloroethene (1,1-DCE)	ND	5. µg/L	o-Xylene	ND	5. µg/L
cis-1,2-Dichloroethene	ND	5. µg/L	m,p-Xylene	ND	10. µg/L
trans-1,2-Dichloroethene	ND	5. µg/L			
1,2-Dichloropropane	ND	5. µg/L			
1,3-Dichloropropane	ND	5. µg/L			
2,2-Dichloropropane	ND	10. µg/L			

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	93	76 - 111
Dibromofluoromethane	103	88 - 114
Toluene-d8	100	95 - 108

ND - Not Detected

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	CAU343-TB10
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-02
TEST:	**Volatile Organic Compounds by EPA 8260B, December 1996**		
METHOD:	EPA 8260	EXTRACTED:	NA
MATRIX:	Aqueous	ANALYZED:	12/2/01
DILUTION:	1	ANALYST:	DMH - Las Vegas Division

PARAMETER	Result µg/L	Reporting Limit	PARAMETER	Result µg/L	Reporting Limit
Acetone	ND	25. µg/L	1,1-Dichloropropene	ND	5. µg/L
Benzene	ND	5. µg/L	cis-1,3-Dichloropropene	ND	5. µg/L
Bromobenzene	ND	5. µg/L	trans-1,3-Dichloropropene	ND	5. µg/L
Bromochloromethane	ND	5. µg/L	Ethylbenzene	ND	5. µg/L
Bromodichloromethane	ND	5. µg/L	Hexachlorobutadiene	ND	5. µg/L
Bromoform	ND	5. µg/L	2-Hexanone	ND	25. µg/L
Bromomethane	ND	5. µg/L	Iodomethane	ND	5. µg/L
2-Butanone	ND	25. µg/L	Isopropylbenzene	ND	5. µg/L
n-Butylbenzene	ND	5. µg/L	p-Isopropyltoluene	ND	5. µg/L
sec-Butylbenzene	ND	5. µg/L	Methylene chloride (Dichloromethane)	ND	5. µg/L
tert-Butylbenzene	ND	5. µg/L	4-Methyl-2-pentanone	ND	25. µg/L
Carbon disulfide	ND	5. µg/L	MTBE	ND	5. µg/L
Carbon tetrachloride	ND	5. µg/L	Naphthalene	ND	10. µg/L
Chlorobenzene	ND	5. µg/L	n-Propylbenzene	ND	5. µg/L
Chloroethane	ND	5. µg/L	Styrene	ND	5. µg/L
Chloroform	ND	5. µg/L	1,1,1,2-Tetrachloroethane	ND	5. µg/L
Chloromethane	ND	5. µg/L	1,1,2,2-Tetrachloroethane	ND	5. µg/L
2-Chlorotoluene	ND	5. µg/L	Tetrachloroethene (PCE)	ND	5. µg/L
4-Chlorotoluene	ND	5. µg/L	Toluene	ND	5. µg/L
Dibromochloromethane	ND	5. µg/L	1,2,3-Trichlorobenzene	ND	5. µg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	10. µg/L	1,2,4-Trichlorobenzene	ND	5. µg/L
1,2-Dibromoethane (EDB)	ND	5. µg/L	1,1,1-Trichloroethane (1,1,1-TCA)	ND	5. µg/L
Dibromomethane	ND	5. µg/L	1,1,2-Trichloroethane (1,1,2-TCA)	ND	5. µg/L
1,2-Dichlorobenzene (o-DCB)	ND	5. µg/L	Trichloroethene (TCE)	ND	5. µg/L
1,3-Dichlorobenzene (m-DCB)	ND	5. µg/L	Trichlorofluoromethane (Freon 11)	ND	10. µg/L
1,4-Dichlorobenzene (p-DCB)	ND	5. µg/L	1,2,3-Trichloropropane	ND	5. µg/L
Dichlorodifluoromethane (Freon 12)	ND	5. µg/L	1,2,4-Trimethylbenzene	ND	5. µg/L
1,1-Dichloroethane (1,1-DCA)	ND	5. µg/L	1,3,5-Trimethylbenzene	ND	5. µg/L
1,2-Dichloroethane (1,2-DCA)	ND	5. µg/L	Vinyl chloride	ND	5. µg/L
,1-Dichloroethene (1,1-DCE)	ND	5. µg/L	o-Xylene	ND	5. µg/L
is-1,2-Dichloroethene	ND	5. µg/L	m,p-Xylene	ND	10. µg/L
rans-1,2-Dichloroethene	ND	5. µg/L			
,2-Dichloropropane	ND	5. µg/L			
,3-Dichloropropane	ND	5. µg/L			
2,2-Dichloropropane	ND	10. µg/L			

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	94	76 - 111
Dibromofluoromethane	105	88 - 114
Toluene-d8	101	95 - 108

ND - Not Detected

CLIENT:	Bechtel Nevada	CLIENT ID:	032214-0-V
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-03
TEST:	**Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**		
METHOD:	EPA 8270	EXTRACTED:	11/29/01
MATRIX:	Solid	ANALYZED:	11/30/01
DILUTION:	1	ANALYST:	JRW - Las Vegas Division

PARAMETER	Result µg/kg		Reporting Limit	PARAMETER	Result µg/kg	Reporting Limit
Acenaphthene	ND		330. µg/kg	Dimethyl phthalate	ND	330. µg/kg
Acenaphthylene	ND		330. µg/kg	4,6-Dinitro-2-methyl phenol	ND	330. µg/kg
Aniline	ND		330. µg/kg	2,4-Dinitrotoluene (DNT)	ND	330. µg/kg
Anthracene	ND		330. µg/kg	2,6-Dinitrotoluene (DNT)	ND	330. µg/kg
Azobenzene	ND		330. µg/kg	2,4-Dinitrophenol	ND	330. µg/kg
Benzo (a) anthracene	ND		330. µg/kg	Di-n-octyl phthalate	ND	330. µg/kg
Benzo (b) fluoranthene	ND		330. µg/kg	Fluoranthene	ND	330. µg/kg
Benzo (k) fluoranthene	ND		330. µg/kg	Fluorene	ND	330. µg/kg
Benzoic Acid	ND	J	330. µg/kg	Hexachlorobenzene	ND	330. µg/kg
Benzo (g,h,i) perylene	ND		330. µg/kg	Hexachlorobutadiene	ND	330. µg/kg
Benzo (a) pyrene	ND		330. µg/kg	Hexachlorocyclopentadiene	ND	330. µg/kg
Benzyl alcohol	ND		330. µg/kg	Hexachloroethane	ND	330. µg/kg
bis (2-Chloroethyl) ether	ND		330. µg/kg	Indeno (1,2,3-c,d) pyrene	ND	330. µg/kg
bis (2-Chloroethoxy) methane	ND		330. µg/kg	Isophorone	ND	330. µg/kg
bis (2-chloroisopropyl) ether	ND		330. µg/kg	2-Methylnaphthalene	ND	330. µg/kg
bis (2-Ethylhexyl)phthalate	ND		330. µg/kg	2-Methylphenol	ND	330. µg/kg
Butyl benzyl phthalate	ND		330. µg/kg	3,4-Methylphenol (isomeric pair)	ND	330. µg/kg
4-Bromophenyl phenyl ether	ND		330. µg/kg	Naphthalene	ND	330. µg/kg
Carbazole	ND		330. µg/kg	2-Nitroaniline	ND	330. µg/kg
4-Chloroaniline	ND		330. µg/kg	3-Nitroaniline	ND	330. µg/kg
4-Chloro-3-methyl phenol	ND		330. µg/kg	4-Nitroaniline	ND	330. µg/kg
2-Chloronaphthalene	ND		330. µg/kg	Nitrobenzene	ND	330. µg/kg
2-Chlorophenol	ND		330. µg/kg	2-Nitrophenol	ND	330. µg/kg
4-Chlorophenyl phenyl ether	ND		330. µg/kg	4-Nitrophenol	ND	330. µg/kg
Chrysene	ND		330. µg/kg	N-Nitrosodi-n-propylamine	ND	330. µg/kg
Dibenz (a,h) anthracene	ND		330. µg/kg	N-Nitrosodimethylamine	ND	330. µg/kg
Dibenzofuran	ND		330. µg/kg	N-Nitrosodiphenylamine	ND	330. µg/kg
Di-n-butyl phthalate	ND		330. µg/kg	Pentachlorophenol	ND	330. µg/kg
1,2-Dichlorobenzene (o-DCB)	ND		330. µg/kg	Phenol	ND	330. µg/kg
1,3-Dichlorobenzene (m-DCB)	ND		330. µg/kg	Phenanthrene	ND	330. µg/kg
1,4-Dichlorobenzene (p-DCB)	ND		330. µg/kg	Pyrene	ND	330. µg/kg
2,4-Dichlorophenol	ND		330. µg/kg	Pyridine	ND	330. µg/kg
3,3'-Dichlorobenzidine	ND		330. µg/kg	1,2,4-Trichlorobenzene	ND	330. µg/kg
Diethyl phthalate	ND		330. µg/kg	2,4,5-Trichlorophenol	ND	330. µg/kg
2,4-Dimethylphenol	ND		330. µg/kg	2,4,6-Trichlorophenol	ND	330. µg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
2,4,6-Tribromophenol	68	19 - 122
2-Fluorobiphenyl	46	30 - 115
2-Fluorophenol	45	25 - 121
Nitrobenzene-d5	43	23 - 120
p-Terphenyl-d14	62	18 - 137

ND - Not Detected

CLIENT:	Bechtel Nevada	CLIENT ID:	032207-0-V
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-04
TEST:	**Volatile Organic Compounds by EPA 8260B, December 1996**		
METHOD:	EPA 8260	EXTRACTED:	NA
MATRIX:	Solid	ANALYZED:	12/2/01
DILUTION:	1	ANALYST:	DMH - Las Vegas Division

PARAMETER	Result µg/kg	Reporting Limit	PARAMETER	Result µg/kg	Reporting Limit
Acetone	ND	25. µg/kg	1,1-Dichloropropene	ND	5. µg/kg
Benzene	ND	5. µg/kg	cis-1,3-Dichloropropene	ND	5. µg/kg
Bromobenzene	ND	5. µg/kg	trans-1,3-Dichloropropene	ND	5. µg/kg
Bromochloromethane	ND	5. µg/kg	Ethylbenzene	ND	5. µg/kg
Bromodichloromethane	ND	5. µg/kg	Hexachlorobutadiene	ND	5. µg/kg
Bromoform	ND	5. µg/kg	2-Hexanone	ND	25. µg/kg
Bromomethane	ND	5. µg/kg	Iodomethane	ND	5. µg/kg
2-Butanone	ND	25. µg/kg	Isopropylbenzene	ND	5. µg/kg
n-Butylbenzene	ND	5. µg/kg	p-Isopropyltoluene	ND	5. µg/kg
sec-Butylbenzene	ND	5. µg/kg	Methylene chloride (Dichloromethane)	ND	5. µg/kg
tert-Butylbenzene	ND	5. µg/kg	4-Methyl-2-pentanone	ND	25. µg/kg
Carbon disulfide	ND	5. µg/kg	MTBE	ND	5. µg/kg
Carbon tetrachloride	ND	5. µg/kg	Naphthalene	ND	10. µg/kg
Chlorobenzene	ND	5. µg/kg	n-Propylbenzene	ND	5. µg/kg
Chloroethane	ND	5. µg/kg	Styrene	ND	5. µg/kg
Chloroform	ND	5. µg/kg	1,1,1,2-Tetrachloroethane	ND	5. µg/kg
Chloromethane	ND	5. µg/kg	1,1,2,2-Tetrachloroethane	ND	5. µg/kg
2-Chlorotoluene	ND	5. µg/kg	Tetrachloroethene (PCE)	ND	5. µg/kg
4-Chlorotoluene	ND	5. µg/kg	Toluene	ND	5. µg/kg
Dibromochloromethane	ND	5. µg/kg	1,2,3-Trichlorobenzene	ND	5. µg/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10. µg/kg	1,2,4-Trichlorobenzene	ND	5. µg/kg
1,2-Dibromoethane (EDB)	ND	5. µg/kg	1,1,1-Trichloroethane (1,1,1-TCA)	ND	5. µg/kg
Dibromomethane	ND	5. µg/kg	1,1,2-Trichloroethane (1,1,2-TCA)	ND	5. µg/kg
1,2-Dichlorobenzene (o-DCB)	ND	5. µg/kg	Trichloroethene (TCE)	ND	5. µg/kg
1,3-Dichlorobenzene (m-DCB)	ND	5. µg/kg	Trichlorofluoromethane (Freon 11)	ND	10. µg/kg
1,4-Dichlorobenzene (p-DCB)	ND	5. µg/kg	1,2,3-Trichloropropane	ND	5. µg/kg
Dichlorodifluoromethane (Freon 12)	ND	5. µg/kg	1,2,4-Trimethylbenzene	ND	5. µg/kg
1,1-Dichloroethane (1,1-DCA)	ND	5. µg/kg	1,3,5-Trimethylbenzene	ND	5. µg/kg
1,2-Dichloroethane (1,2-DCA)	ND	5. µg/kg	Vinyl chloride	ND	5. µg/kg
1,1-Dichloroethene (1,1-DCE)	ND	5. µg/kg	o-Xylene	ND	5. µg/kg
cis-1,2-Dichloroethene	ND	5. µg/kg	m,p-Xylene	ND	10. µg/kg
trans-1,2-Dichloroethene	ND	5. µg/kg			
1,2-Dichloropropane	ND	5. µg/kg			
1,3-Dichloropropane	ND	5. µg/kg			
2,2-Dichloropropane	ND	10. µg/kg			

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	102	74 - 121
Dibromofluoromethane	102	80 - 120
Toluene-d8	104	81 - 117

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033

CLIENT ID: 032207-0-V
DATE SAMPLED: 11/27/01
NEL SAMPLE ID: L0111248-04

TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
METHOD: EPA 8270
MATRIX: Solid
DILUTION: 1

EXTRACTED: 11/29/01
ANALYZED: 11/30/01
ANALYST: JRW - Las Vegas Division

PARAMETER	Result µg/kg		Reporting Limit	PARAMETER	Result µg/kg		Reporting Limit
Acenaphthene	ND		330. µg/kg	Dimethyl phthalate	ND		330. µg/kg
Acenaphthylene	ND		330. µg/kg	4,6-Dinitro-2-methyl phenol	ND		330. µg/kg
Aniline	ND		330. µg/kg	2,4-Dinitrotoluene (DNT)	ND		330. µg/kg
Anthracene	ND		330. µg/kg	2,6-Dinitrotoluene (DNT)	ND		330. µg/kg
Azobenzene	ND		330. µg/kg	2,4-Dinitrophenol	ND		330. µg/kg
Benzo (a) anthracene	ND		330. µg/kg	Di-n-octyl phthalate	ND		330. µg/kg
Benzo (b) fluoranthene	ND		330. µg/kg	Fluoranthene	ND		330. µg/kg
Benzo (k) fluoranthene	ND		330. µg/kg	Fluorene	ND		330. µg/kg
Benzoic Acid	ND	J	330. µg/kg	Hexachlorobenzene	ND		330. µg/kg
Benzo (g,h,i) perylene	ND		330. µg/kg	Hexachlorobutadiene	ND		330. µg/kg
Benzo (a) pyrene	ND		330. µg/kg	Hexachlorocyclopentadiene	ND	Jm	330. µg/kg
Benzyl alcohol	ND		330. µg/kg	Hexachloroethane	ND		330. µg/kg
bis (2-Chloroethyl) ether	ND		330. µg/kg	Indeno (1,2,3-c,d) pyrene	ND		330. µg/kg
bis (2-Chloroethoxy) methane	ND		330. µg/kg	Isophorone	ND		330. µg/kg
bis (2-chloroisopropyl) ether	ND		330. µg/kg	2-Methylnaphthalene	ND		330. µg/kg
bis (2-Ethylhexyl)phthalate	ND		330. µg/kg	2-Methylphenol	ND		330. µg/kg
Butyl benzyl phthalate	ND		330. µg/kg	3,4-Methylphenol (isomeric pair)	ND		330. µg/kg
4-Bromophenyl phenyl ether	ND		330. µg/kg	Naphthalene	ND		330. µg/kg
Carbazole	ND		330. µg/kg	2-Nitroaniline	ND		330. µg/kg
4-Chloroaniline	ND		330. µg/kg	3-Nitroaniline	ND		330. µg/kg
4-Chloro-3-methyl phenol	ND		330. µg/kg	4-Nitroaniline	ND		330. µg/kg
2-Chloronaphthalene	ND		330. µg/kg	Nitrobenzene	ND		330. µg/kg
2-Chlorophenol	ND		330. µg/kg	2-Nitrophenol	ND		330. µg/kg
4-Chlorophenyl phenyl ether	ND		330. µg/kg	4-Nitrophenol	ND		330. µg/kg
Chrysene	ND		330. µg/kg	N-Nitrosodi-n-propylamine	ND		330. µg/kg
Dibenz (a,h) anthracene	ND		330. µg/kg	N-Nitrosodimethylamine	ND		330. µg/kg
Dibenzofuran	ND		330. µg/kg	N-Nitrosodiphenylamine	ND		330. µg/kg
Di-n-butyl phthalate	ND		330. µg/kg	Pentachlorophenol	ND		330. µg/kg
1,2-Dichlorobenzene (o-DCB)	ND		330. µg/kg	Phenol	ND		330. µg/kg
1,3-Dichlorobenzene (m-DCB)	ND		330. µg/kg	Phenanthrene	ND		330. µg/kg
1,4-Dichlorobenzene (p-DCB)	ND		330. µg/kg	Pyrene	ND		330. µg/kg
2,4-Dichlorophenol	ND		330. µg/kg	Pyridine	ND		330. µg/kg
3,3'-Dichlorobenzidine	ND		330. µg/kg	1,2,4-Trichlorobenzene	ND		330. µg/kg
Diethyl phthalate	ND		330. µg/kg	2,4,5-Trichlorophenol	ND		330. µg/kg
2,4-Dimethylphenol	ND		330. µg/kg	2,4,6-Trichlorophenol	ND		330. µg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
2,4,6-Tribromophenol	95	19 - 122
2-Fluorobiphenyl	59	30 - 115
2-Fluorophenol	59	25 - 121
Nitrobenzene-d5	55	23 - 120
p-Terphenyl-d14	86	18 - 137

ND - Not Detected

CLIENT:	Bechtel Nevada	CLIENT ID:	**Method Blank**
PROJECT ID:	V1358	DATE SAMPLED:	NA
PROJECT #:	30033	NEL SAMPLE ID:	011129-8270S-BLK
TEST:	**Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**		
METHOD:	EPA 8270	ANALYST:	JRW - Las Vegas Division
MATRIX:	Solid	EXTRACTED:	11/29/01
		ANALYZED:	11/30/01

PARAMETER	Result µg/kg	Reporting Limit	PARAMETER	Result µg/kg	Reporting Limit
Acenaphthene	ND	330 µg/kg	Diethyl phthalate	ND	330 µg/kg
Acenaphthylene	ND	330 µg/kg	2,4-Dimethylphenol	ND	330 µg/kg
Aniline	ND	330 µg/kg	Dimethyl phthalate	ND	330 µg/kg
Anthracene	ND	330 µg/kg	4,6-Dinitro-2-methyl phenol	ND	330 µg/kg
Azobenzene	ND	330 µg/kg	2,4-Dinitrotoluene (DNT)	ND	330 µg/kg
Benzo (a) anthracene	ND	330 µg/kg	2,6-Dinitrotoluene (DNT)	ND	330 µg/kg
Benzo (b) fluoranthene	ND	330 µg/kg	2,4-Dinitrophenol	ND	330 µg/kg
Benzo (k) fluoranthene	ND	330 µg/kg	Di-n-octyl phthalate	ND	330 µg/kg
Benzoic Acid	ND	330 µg/kg	Fluoranthene	ND	330 µg/kg
Benzo (g,h,i) perylene	ND	330 µg/kg	Fluorene	ND	330 µg/kg
Benzo (a) pyrene	ND	330 µg/kg	Hexachlorobenzene	ND	330 µg/kg
Benzyl alcohol	ND	330 µg/kg	Hexachlorobutadiene	ND	330 µg/kg
bis (2-Chloroethyl) ether	ND	330 µg/kg	Hexachlorocyclopentadiene	ND	330 µg/kg
bis (2-Chloroethoxy) methane	ND	330 µg/kg	Hexachloroethane	ND	330 µg/kg
bis (2-chloroisopropyl) ether	ND	330 µg/kg	Indeno (1,2,3-c,d) pyrene	ND	330 µg/kg
bis (2-Ethylhexyl)phthalate	ND	330 µg/kg	Isophorone	ND	330 µg/kg
Butyl benzyl phthalate	ND	330 µg/kg	2-Methylnaphthalene	ND	330 µg/kg
4-Bromophenyl phenyl ether	ND	330 µg/kg	2-Methylphenol	ND	330 µg/kg
Carbazole	ND	330 µg/kg	3,4-Methylphenol (isomeric pair)	ND	330 µg/kg
4-Chloroaniline	ND	330 µg/kg	Naphthalene	ND	330 µg/kg
4-Chloro-3-methyl phenol	ND	330 µg/kg	2-Nitroaniline	ND	330 µg/kg
2-Chloronaphthalene	ND	330 µg/kg	3-Nitroaniline	ND	330 µg/kg
2-Chlorophenol	ND	330 µg/kg	4-Nitroaniline	ND	330 µg/kg
4-Chlorophenyl phenyl ether	ND	330 µg/kg	Nitrobenzene	ND	330 µg/kg
Chrysene	ND	330 µg/kg	2-Nitrophenol	ND	330 µg/kg
Dibenz (a,h) anthracene	ND	330 µg/kg	4-Nitrophenol	ND	330 µg/kg
Dibenzofuran	ND	330 µg/kg	N-Nitrosodi-n-propylamine	ND	330 µg/kg
Di-n-butyl phthalate	ND	330 µg/kg	N-Nitrosodimethylamine	ND	330 µg/kg
1,2-Dichlorobenzene (o-DCB)	ND	330 µg/kg	N-Nitrosodiphenylamine	ND	330 µg/kg
1,3-Dichlorobenzene (m-DCB)	ND	330 µg/kg	Pentachlorophenol	ND	330 µg/kg
1,4-Dichlorobenzene (p-DCB)	ND	330 µg/kg	Phenol	ND	330 µg/kg
2,4-Dichlorophenol	ND	330 µg/kg	Phenanthrene	ND	330 µg/kg
3,3'-Dichlorobenzidine	ND	330 µg/kg	Pyrene	ND	330 µg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
2,4,6-Tribromophenol	74	19 - 122
2-Fluorobiphenyl	57	30 - 115
2-Fluorophenol	57	25 - 121
Nitrobenzene-d5	57	23 - 120
p-Terphenyl-d14	73	18 - 137
Phenol-d6		24 - 113

ND - Not Detected

CLIENT:	Bechtel Nevada	CLIENT ID:	**Method Blank**
PROJECT ID:	V1358	DATE SAMPLED:	NA
PROJECT #:	30033	NEL SAMPLE ID:	011202AQ60_2A-BLK
TEST:	**Volatile Organic Compounds by EPA 8260B, December 1996**		
METHOD:	EPA 8260	ANALYST:	DMH - Las Vegas Division
MATRIX:	Aqueous	EXTRACTED:	NA
		ANALYZED:	12/2/01

PARAMETER	Result µg/L	Reporting Limit	PARAMETER	Result µg/L	Reporting Limit
Acetone	ND	25 µg/L	1,3-Dichloropropane	ND	5 µg/L
Benzene	ND	5 µg/L	2,2-Dichloropropane	ND	10 µg/L
Bromobenzene	ND	5 µg/L	1,1-Dichloropropene	ND	5 µg/L
Bromochloromethane	ND	5 µg/L	cis-1,3-Dichloropropene	ND	5 µg/L
Bromodichloromethane	ND	5 µg/L	trans-1,3-Dichloropropene	ND	5 µg/L
Bromoform	ND	5 µg/L	Ethylbenzene	ND	5 µg/L
Bromomethane	ND	5 µg/L	Hexachlorobutadiene	ND	5 µg/L
2-Butanone	ND	25 µg/L	2-Hexanone	ND	25 µg/L
n-Butylbenzene	ND	5 µg/L	Iodomethane	ND	5 µg/L
sec-Butylbenzene	ND	5 µg/L	Isopropylbenzene	ND	5 µg/L
tert-Butylbenzene	ND	5 µg/L	p-Isopropyltoluene	ND	5 µg/L
Carbon disulfide	ND	5 µg/L	Methylene chloride (Dichloromethane)	ND	5 µg/L
Carbon tetrachloride	ND	5 µg/L	4-Methyl-2-pentanone	ND	25 µg/L
Chlorobenzene	ND	5 µg/L	MTBE	ND	5 µg/L
Chloroethane	ND	5 µg/L	Naphthalene	ND	10 µg/L
Chloroform	ND	5 µg/L	n-Propylbenzene	ND	5 µg/L
Chloromethane	ND	5 µg/L	Styrene	ND	5 µg/L
2-Chlorotoluene	ND	5 µg/L	1,1,1,2-Tetrachloroethane	ND	5 µg/L
4-Chlorotoluene	ND	5 µg/L	1,1,2,2-Tetrachloroethane	ND	5 µg/L
Dibromochloromethane	ND	5 µg/L	Tetrachloroethene (PCE)	ND	5 µg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	10 µg/L	Toluene	ND	5 µg/L
1,2-Dibromoethane (EDB)	ND	5 µg/L	1,2,3-Trichlorobenzene	ND	5 µg/L
Dibromomethane	ND	5 µg/L	1,2,4-Trichlorobenzene	ND	5 µg/L
1,2-Dichlorobenzene (o-DCB)	ND	5 µg/L	1,1,1-Trichloroethane (1,1,1-TCA)	ND	5 µg/L
1,3-Dichlorobenzene (m-DCB)	ND	5 µg/L	1,1,2-Trichloroethane (1,1,2-TCA)	ND	5 µg/L
1,4-Dichlorobenzene (p-DCB)	ND	5 µg/L	Trichloroethene (TCE)	ND	5 µg/L
Dichlorodifluoromethane (Freon 12)	ND	5 µg/L	Trichlorofluoromethane (Freon 11)	ND	10 µg/L
1,1-Dichloroethane (1,1-DCA)	ND	5 µg/L	1,2,3-Trichloropropane	ND	5 µg/L
1,2-Dichloroethane (1,2-DCA)	ND	5 µg/L	1,2,4-Trimethylbenzene	ND	5 µg/L
1,1-Dichloroethene (1,1-DCE)	ND	5 µg/L	1,3,5-Trimethylbenzene	ND	5 µg/L
cis-1,2-Dichloroethene	ND	5 µg/L	Vinyl chloride	ND	5 µg/L
trans-1,2-Dichloroethene	ND	5 µg/L	o-Xylene	ND	5 µg/L
1,2-Dichloropropane	ND	5 µg/L	m,p-Xylene	ND	10 µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	88	76 - 111
Dibromofluoromethane	100	88 - 114
Toluene-d8	98	95 - 108

ND - Not Detected

CLIENT:	Bechtel Nevada	CLIENT ID:	**Method Blank**
PROJECT ID:	V1358	DATE SAMPLED:	NA
PROJECT #:	30033	NEL SAMPLE ID:	011202SD60_1A-BLK
TEST:	**Volatile Organic Compounds by EPA 8260B, December 1996**		
METHOD:	EPA 8260	ANALYST:	DMH - Las Vegas Division
MATRIX:	Solid	EXTRACTED:	NA
		ANALYZED:	12/2/01

PARAMETER	Result µg/kg	Reporting Limit	PARAMETER	Result µg/kg	Reporting Limit
Acetone	ND	25 µg/kg	1,3-Dichloropropane	ND	5 µg/kg
Benzene	ND	5 µg/kg	2,2-Dichloropropane	ND	10 µg/kg
Bromobenzene	ND	5 µg/kg	1,1-Dichloropropene	ND	5 µg/kg
Bromochloromethane	ND	5 µg/kg	cis-1,3-Dichloropropene	ND	5 µg/kg
Bromodichloromethane	ND	5 µg/kg	trans-1,3-Dichloropropene	ND	5 µg/kg
Bromoform	ND	5 µg/kg	Ethylbenzene	ND	5 µg/kg
Bromomethane	ND	5 µg/kg	Hexachlorobutadiene	ND	5 µg/kg
2-Butanone	ND	25 µg/kg	2-Hexanone	ND	25 µg/kg
n-Butylbenzene	ND	5 µg/kg	Iodomethane	ND	5 µg/kg
sec-Butylbenzene	ND	5 µg/kg	Isopropylbenzene	ND	5 µg/kg
tert-Butylbenzene	ND	5 µg/kg	p-Isopropyltoluene	ND	5 µg/kg
Carbon disulfide	ND	5 µg/kg	Methylene chloride (Dichloromethane)	ND	5 µg/kg
Carbon tetrachloride	ND	5 µg/kg	4-Methyl-2-pentanone	ND	25 µg/kg
Chlorobenzene	ND	5 µg/kg	MTBE	ND	5 µg/kg
Chloroethane	ND	5 µg/kg	Naphthalene	ND	10 µg/kg
Chloroform	ND	5 µg/kg	n-Propylbenzene	ND	5 µg/kg
Chloromethane	ND	5 µg/kg	Styrene	ND	5 µg/kg
2-Chlorotoluene	ND	5 µg/kg	1,1,1,2-Tetrachloroethane	ND	5 µg/kg
4-Chlorotoluene	ND	5 µg/kg	1,1,2,2-Tetrachloroethane	ND	5 µg/kg
Dibromochloromethane	ND	5 µg/kg	Tetrachloroethene (PCE)	ND	5 µg/kg
1,2-Dibromo-3-chloropropane (DBCP)	ND	10 µg/kg	Toluene	ND	5 µg/kg
1,2-Dibromoethane (EDB)	ND	5 µg/kg	1,2,3-Trichlorobenzene	ND	5 µg/kg
Dibromomethane	ND	5 µg/kg	1,2,4-Trichlorobenzene	ND	5 µg/kg
1,2-Dichlorobenzene (o-DCB)	ND	5 µg/kg	1,1,1-Trichloroethane (1,1,1-TCA)	ND	5 µg/kg
1,3-Dichlorobenzene (m-DCB)	ND	5 µg/kg	1,1,2-Trichloroethane (1,1,2-TCA)	ND	5 µg/kg
1,4-Dichlorobenzene (p-DCB)	ND	5 µg/kg	Trichloroethene (TCE)	ND	5 µg/kg
Dichlorodifluoromethane (Freon 12)	ND	5 µg/kg	Trichlorofluoromethane (Freon 11)	ND	10 µg/kg
1,1-Dichloroethane (1,1-DCA)	ND	5 µg/kg	1,2,3-Trichloropropane	ND	5 µg/kg
1,2-Dichloroethane (1,2-DCA)	ND	5 µg/kg	1,2,4-Trimethylbenzene	ND	5 µg/kg
1,1-Dichloroethene (1,1-DCE)	ND	5 µg/kg	1,3,5-Trimethylbenzene	ND	5 µg/kg
cis-1,2-Dichloroethene	ND	5 µg/kg	Vinyl chloride	ND	5 µg/kg
trans-1,2-Dichloroethene	ND	5 µg/kg	o-Xylene	ND	5 µg/kg
1,2-Dichloropropane	ND	5 µg/kg	m,p-Xylene	ND	10 µg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	103	74 - 121
Dibromofluoromethane	103	80 - 120
Toluene-d8	105	81 - 117

ND - Not Detected

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	03221-0-V
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-03

TEST: **Total Extractable Petroleum Hydrocarbons Fuel Finger Print by EPA Method 8015M, July 1992**

METHOD:	EPA 8015M	ANALYST:	PXC - Division
MATRIX:	Solid	EXTRACTED:	11/30/01
DILUTION:	1	ANALYZED:	12/3/01

PARAMETER	Result	Reporting Limit
Gasoline Range (C8-C12)	ND	10. mg/kg
Diesel Range (C12-C22)	ND	10. mg/kg
Oil Range (C22-C34)	ND	50. mg/kg
Total	ND	10. mg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
Octacosane	73	54 - 130

ND - Not Detected

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	032207-0-V
PROJECT ID:	V1358	DATE SAMPLED:	11/27/01
PROJECT #:	30033	NEL SAMPLE ID:	L0111248-04

TEST: **Total Extractable Petroleum Hydrocarbons Fuel Finger Print by EPA Method 8015M, July 1992**

METHOD:	EPA 8015M	ANALYST:	PXC - Division
MATRIX:	Solid	EXTRACTED:	11/30/01
DILUTION:	1	ANALYZED:	12/3/01

PARAMETER	Result	Reporting Limit
Gasoline Range (C8-C12)	ND	10. mg/kg
Diesel Range (C12-C22)	ND	10. mg/kg
Oil Range (C22-C34)	ND	50. mg/kg
Total	ND	10. mg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
Octacosane	69	54 - 130

ND - Not Detected

NEL LABORATORIES

CLIENT:	Bechtel Nevada	CLIENT ID:	**Method Blank**
PROJECT ID:	V1358	DATE SAMPLED:	NA
PROJECT #:	30033	NEL SAMPLE ID:	011130TPHS-FP-BLK

TEST: **Total Extractable Petroleum Hydrocarbons Fuel Finger Print by EPA Method 8015M, July 1992**

METHOD:	EPA 8015M	ANALYST:	PXC - Division
MATRIX:	Solid	EXTRACTED:	11/30/01
		ANALYZED:	12/3/01

PARAMETER	Result	Reporting Limit
Gasoline Range (C8-C12)	ND	10. mg/kg
Diesel Range (C12-C22)	ND	10. mg/kg
Oil Range (C22-C34)	ND	50. mg/kg
Total	ND	10. mg/kg

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
Octacosane	93	54 - 130

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Acenaphthene	011129-8270S-LCS	1667	1444	87		31 - 137	
Acenaphthene	011129-8270S-LCSD	1667	1213	73		31 - 137	17.4
Acenaphthene	L0111248-04-MS	1667	1087	65		31 - 137	
Acenaphthene	L0111248-04-MSD	1667	1173	70		31 - 137	7.6
Acenaphthylene	011129-8270S-LCS	1667	1455	87		50 - 120	
Acenaphthylene	011129-8270S-LCSD	1667	1210	73		50 - 120	18.4
Acenaphthylene	L0111248-04-MS	1667	1101	66		50 - 120	
Acenaphthylene	L0111248-04-MSD	1667	1161	70		50 - 120	5.3
Aniline	011129-8270S-LCS	1667	1507	90		11 - 77	
Aniline	011129-8270S-LCSD	1667	1310	79		11 - 77	14.
Aniline	L0111248-04-MS	1667	647	39		11 - 77	
Aniline	L0111248-04-MSD	1667	895	54	R5	11 - 77	32.2
Anthracene	011129-8270S-LCS	1667	1532	92		50 - 120	
Anthracene	011129-8270S-LCSD	1667	1355	81		50 - 120	12.3
Anthracene	L0111248-04-MS	1667	1339	80		50 - 120	
Anthracene	L0111248-04-MSD	1667	1357	81		50 - 120	1.3
Azobenzene	011129-8270S-LCS	1667	1379	83		22 - 123	
Azobenzene	011129-8270S-LCSD	1667	1210	73		22 - 123	13.1
Azobenzene	L0111248-04-MS	1667	1192	72		22 - 123	
Azobenzene	L0111248-04-MSD	1667	1197	72		22 - 123	0.4
Benzo (a) Anthracene	011129-8270S-LCS	1667	1581	95		50 - 120	
Benzo (a) Anthracene	011129-8270S-LCSD	1667	1292	78		50 - 120	20.1
Benzo (a) Anthracene	L0111248-04-MS	1667	1267	76		50 - 120	
Benzo (a) Anthracene	L0111248-04-MSD	1667	1307	78		50 - 120	3.1
Benzoic Acid	011129-8270S-LCS	1667	267	16	J	50 - 120	
Benzoic Acid	011129-8270S-LCSD	1667	267	16	J	50 - 120	0.
Benzoic Acid	L0111248-04-MS	1667	591	35	J	50 - 120	
Benzoic Acid	L0111248-04-MSD	1667	833	50	J	50 - 120	34.
Benzo (g,h,i) perylene	011129-8270S-LCS	1667	1397	84		50 - 120	
Benzo (g,h,i) perylene	011129-8270S-LCSD	1667	1217	73		50 - 120	13.8
Benzo (g,h,i) perylene	L0111248-04-MS	1667	1332	80		50 - 120	
Benzo (g,h,i) perylene	L0111248-04-MSD	1667	1400	84		50 - 120	5.
Benzo (a) pyrene	011129-8270S-LCS	1667	1554	93		50 - 130	
Benzo (a) pyrene	011129-8270S-LCSD	1667	1381	83		50 - 130	11.8
Benzo (a) pyrene	L0111248-04-MS	1667	1284	77		50 - 130	
Benzo (a) pyrene	L0111248-04-MSD	1667	1384	83		50 - 130	7.5
Benzyl alcohol	011129-8270S-LCS	1667	1405	84		0 - 116	
Benzyl alcohol	011129-8270S-LCSD	1667	1151	69		0 - 116	19.9

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Benzyl alcohol	L0111248-04-MS	1667	1058	63		0 - 116	
Benzyl alcohol	L0111248-04-MSD	1667	1082	65		0 - 116	2.2
bis (2-Chloroethyl) ether	011129-8270S-LCS	1667	1329	80		15 - 107	
bis (2-Chloroethyl) ether	011129-8270S-LCSD	1667	1075	64		15 - 107	21.1
bis (2-Chloroethyl) ether	L0111248-04-MS	1667	946	57		15 - 107	
bis (2-Chloroethyl) ether	L0111248-04-MSD	1667	959	58		15 - 107	1.4
bis (2-Chloroethoxy) methane	011129-8270S-LCS	1667	1360	82		26 - 97	
bis (2-Chloroethoxy) methane	011129-8270S-LCSD	1667	1121	67		26 - 97	19.3
bis (2-Chloroethoxy) methane	L0111248-04-MS	1667	997	60		26 - 97	
bis (2-Chloroethoxy) methane	L0111248-04-MSD	1667	1071	64		26 - 97	7.2
bis (2-chloroisopropyl) ether	011129-8270S-LCS	1667	1381	83		50 - 120	
bis (2-chloroisopropyl) ether	011129-8270S-LCSD	1667	1138	68		50 - 120	19.3
bis (2-chloroisopropyl) ether	L0111248-04-MS	1667	969	58		50 - 120	
bis (2-chloroisopropyl) ether	L0111248-04-MSD	1667	1000	60		50 - 120	3.1
bis (2-Ethylhexyl)phthalate	011129-8270S-LCS	1667	1568	94		50 - 120	
bis (2-Ethylhexyl)phthalate	011129-8270S-LCSD	1667	1339	80		50 - 120	15.8
bis (2-Ethylhexyl)phthalate	L0111248-04-MS	1667	1289	77		50 - 120	
bis (2-Ethylhexyl)phthalate	L0111248-04-MSD	1667	1366	82		50 - 120	5.8
Butyl benzyl phthalate	011129-8270S-LCS	1667	1556	93		50 - 120	
Butyl benzyl phthalate	011129-8270S-LCSD	1667	1298	78		50 - 120	18.1
Butyl benzyl phthalate	L0111248-04-MS	1667	1296	78		50 - 120	
Butyl benzyl phthalate	L0111248-04-MSD	1667	1314	79		50 - 120	1.4
4-Bromophenyl phenyl ether	011129-8270S-LCS	1667	1573	94		50 - 120	
4-Bromophenyl phenyl ether	011129-8270S-LCSD	1667	1353	81		50 - 120	15.
4-Bromophenyl phenyl ether	L0111248-04-MS	1667	1340	80		50 - 120	
4-Bromophenyl phenyl ether	L0111248-04-MSD	1667	1358	81		50 - 120	1.3
Carbazole	011129-8270S-LCS	1667	1586	95		50 - 120	
Carbazole	011129-8270S-LCSD	1667	1371	82		50 - 120	14.5
Carbazole	L0111248-04-MS	1667	1322	79		50 - 120	
Carbazole	L0111248-04-MSD	1667	1350	81		50 - 120	2.1
4-Chloroaniline	011129-8270S-LCS	1667	1291	77		1 - 68	
4-Chloroaniline	011129-8270S-LCSD	1667	1120	67		1 - 68	0.
4-Chloroaniline	L0111248-04-MS	1667	619	37		1 - 68	
4-Chloroaniline	L0111248-04-MSD	1667	864	52	R5	1 - 68	33.
4-Chloro-3-methyl phenol	011129-8270S-LCS	1667	1459	88		26 - 103	
4-Chloro-3-methyl phenol	011129-8270S-LCSD	1667	1244	75		26 - 103	15.9
4-Chloro-3-methyl phenol	L0111248-04-MS	1667	1269	76		26 - 103	
4-Chloro-3-methyl phenol	L0111248-04-MSD	1667	1282	77		26 - 103	1.

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
2-Chloronaphthalene	011129-8270S-LCS	1667	1399	84	50 - 120	
2-Chloronaphthalene	011129-8270S-LCSD	1667	1133	68	50 - 120	21.
2-Chloronaphthalene	L0111248-04-MS	1667	1046	63	50 - 120	
2-Chloronaphthalene	L0111248-04-MSD	1667	1095	66	50 - 120	4.6
2-Chlorophenol	011129-8270S-LCS	1667	1340	80	25 - 102	
2-Chlorophenol	011129-8270S-LCSD	1667	1135	68	25 - 102	16.6
2-Chlorophenol	L0111248-04-MS	1667	1014	61	25 - 102	
2-Chlorophenol	L0111248-04-MSD	1667	1033	62	25 - 102	1.9
4-Chlorophenyl phenyl ether	011129-8270S-LCS	1667	1442	87	50 - 120	
4-Chlorophenyl phenyl ether	011129-8270S-LCSD	1667	1242	75	50 - 120	14.9
4-Chlorophenyl phenyl ether	L0111248-04-MS	1667	1185	71	50 - 120	
4-Chlorophenyl phenyl ether	L0111248-04-MSD	1667	1200	72	50 - 120	1.3
Chrysene	011129-8270S-LCS	1667	1511	91	50 - 120	
Chrysene	011129-8270S-LCSD	1667	1317	79	50 - 120	13.7
Chrysene	L0111248-04-MS	1667	1221	73	50 - 120	
Chrysene	L0111248-04-MSD	1667	1339	80	50 - 120	9.2
Dibenz (a,h) anthracene	011129-8270S-LCS	1667	1492	90	50 - 120	
Dibenz (a,h) anthracene	011129-8270S-LCSD	1667	1293	78	50 - 120	14.3
Dibenz (a,h) anthracene	L0111248-04-MS	1667	1367	82	50 - 120	
Dibenz (a,h) anthracene	L0111248-04-MSD	1667	1446	87	50 - 120	5.6
Dibenzofuran	011129-8270S-LCS	1667	1386	83	50 - 120	
Dibenzofuran	011129-8270S-LCSD	1667	1173	70	50 - 120	16.6
Dibenzofuran	L0111248-04-MS	1667	1122	67	50 - 120	
Dibenzofuran	L0111248-04-MSD	1667	1212	73	50 - 120	7.7
Di-n-butyl phthalate	011129-8270S-LCS	1667	1647	99	50 - 120	
Di-n-butyl phthalate	011129-8270S-LCSD	1667	1366	82	50 - 120	18.7
Di-n-butyl phthalate	L0111248-04-MS	1667	1371	82	50 - 120	
Di-n-butyl phthalate	L0111248-04-MSD	1667	1518	91	50 - 120	10.2
1,2-Dichlorobenzene (o-DCB)	011129-8270S-LCS	1667	1391	83	42 - 93	
1,2-Dichlorobenzene (o-DCB)	011129-8270S-LCSD	1667	1097	66	42 - 93	23.6
1,2-Dichlorobenzene (o-DCB)	L0111248-04-MS	1667	979	59	42 - 93	
1,2-Dichlorobenzene (o-DCB)	L0111248-04-MSD	1667	989	59	42 - 93	1.
1,3-Dichlorobenzene (m-DCB)	011129-8270S-LCS	1667	1305	78	41 - 89	
1,3-Dichlorobenzene (m-DCB)	011129-8270S-LCSD	1667	1054	63	41 - 89	21.3
1,3-Dichlorobenzene (m-DCB)	L0111248-04-MS	1667	925	55	41 - 89	
1,3-Dichlorobenzene (m-DCB)	L0111248-04-MSD	1667	967	58	41 - 89	4.4
1,4-Dichlorobenzene (p-DCB)	011129-8270S-LCS	1667	1312	79	42 - 93	
1,4-Dichlorobenzene (p-DCB)	011129-8270S-LCSD	1667	1056	63	42 - 93	21.6

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
1,4-Dichlorobenzene (p-DCB)	L0111248-04-MS	1667	931	56	42 - 93	
1,4-Dichlorobenzene (p-DCB)	L0111248-04-MSD	1667	933	56	42 - 93	0.2
2,4-Dichlorophenol	011129-8270S-LCS	1667	1472	88	50 - 120	
2,4-Dichlorophenol	011129-8270S-LCSD	1667	1165	70	50 - 120	23.3
2,4-Dichlorophenol	L0111248-04-MS	1667	1205	72	50 - 120	
2,4-Dichlorophenol	L0111248-04-MSD	1667	1279	77	50 - 120	6.
3,3'-Dichlorobenzidine	011129-8270S-LCS	1667	1427	86	11 - 85	
3,3'-Dichlorobenzidine	011129-8270S-LCSD	1667	1208	72	11 - 85	0.
3,3'-Dichlorobenzidine	L0111248-04-MS	1667	974	58	11 - 85	
3,3'-Dichlorobenzidine	L0111248-04-MSD	1667	985	59	11 - 85	1.1
Diethyl Phthalate	011129-8270S-LCS	1667	1543	93	50 - 120	
Diethyl Phthalate	011129-8270S-LCSD	1667	1340	80	50 - 120	14.1
Diethyl Phthalate	L0111248-04-MS	1667	1275	76	50 - 120	
Diethyl Phthalate	L0111248-04-MSD	1667	1272	76	50 - 120	0.2
2,4-Dimethylphenol	011129-8270S-LCS	1667	1409	85	50 - 120	
2,4-Dimethylphenol	011129-8270S-LCSD	1667	1191	71	50 - 120	16.8
2,4-Dimethylphenol	L0111248-04-MS	1667	1023	61	50 - 120	
2,4-Dimethylphenol	L0111248-04-MSD	1667	1118	67	50 - 120	8.9
Dimethyl phthalate	011129-8270S-LCS	1667	1497	90	50 - 120	
Dimethyl phthalate	011129-8270S-LCSD	1667	1316	79	50 - 120	12.9
Dimethyl phthalate	L0111248-04-MS	1667	1217	73	50 - 120	
Dimethyl phthalate	L0111248-04-MSD	1667	1290	77	50 - 120	5.8
4,6-Dinitro-2-methyl phenol	011129-8270S-LCS	1667	875	52	20 - 120	
4,6-Dinitro-2-methyl phenol	011129-8270S-LCSD	1667	831	50	20 - 120	5.2
4,6-Dinitro-2-methyl phenol	L0111248-04-MS	1667	1342	81	20 - 120	
4,6-Dinitro-2-methyl phenol	L0111248-04-MSD	1667	1422	85	20 - 120	5.8
2,4-Dinitrotoluene (DNT)	011129-8270S-LCS	1667	1476	89	50 - 111	
2,4-Dinitrotoluene (DNT)	011129-8270S-LCSD	1667	1261	76	50 - 111	15.7
2,4-Dinitrotoluene (DNT)	L0111248-04-MS	1667	1224	73	50 - 111	
2,4-Dinitrotoluene (DNT)	L0111248-04-MSD	1667	1236	74	50 - 111	1.
2,6-Dinitrotoluene (DNT)	011129-8270S-LCS	1667	1470	88	50 - 120	
2,6-Dinitrotoluene (DNT)	011129-8270S-LCSD	1667	1257	75	50 - 120	15.6
2,6-Dinitrotoluene (DNT)	L0111248-04-MS	1667	1184	71	50 - 120	
2,6-Dinitrotoluene (DNT)	L0111248-04-MSD	1667	1223	73	50 - 120	3.2
2,4-Dinitrophenol	011129-8270S-LCS	1667	625	37	20 - 120	
2,4-Dinitrophenol	011129-8270S-LCSD	1667	534	32	20 - 120	15.7
2,4-Dinitrophenol	L0111248-04-MS	1667	1132	68	20 - 120	
2,4-Dinitrophenol	L0111248-04-MSD	1667	1185	71	20 - 120	4.6

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Di-n-octyl phthalate	011129-8270S-LCS	1667	1624	97		50 - 120	
Di-n-octyl phthalate	011129-8270S-LCSD	1667	1413	85		50 - 120	13.9
Di-n-octyl phthalate	L0111248-04-MS	1667	1360	82		50 - 120	
Di-n-octyl phthalate	L0111248-04-MSD	1667	1405	84		50 - 120	3.3
Fluoranthene	011129-8270S-LCS	1667	1540	92		50 - 120	
Fluorene	011129-8270S-LCS	1667	1474	88		50 - 120	
Hexachlorobenzene	011129-8270S-LCS	1667	1565	94		50 - 120	
Hexachlorobenzene	011129-8270S-LCSD	1667	1391	83		50 - 120	11.8
Hexachlorobenzene	L0111248-04-MS	1667	1349	81		50 - 120	
Hexachlorobenzene	L0111248-04-MSD	1667	1398	84		50 - 120	3.6
Hexachlorobutadiene	011129-8270S-LCS	1667	1450	87		30 - 120	
Hexachlorobutadiene	011129-8270S-LCSD	1667	1213	73		30 - 120	17.8
Hexachlorobutadiene	L0111248-04-MS	1667	1037	62		30 - 120	
Hexachlorobutadiene	L0111248-04-MSD	1667	1118	67		30 - 120	7.5
Hexachlorocyclopentadiene	011129-8270S-LCS	1667	972	58		20 - 120	
Hexachlorocyclopentadiene	011129-8270S-LCSD	1667	773	46		20 - 120	22.8
Hexachlorocyclopentadiene	L0111248-04-MS	1667	61.71	4	M2	20 - 120	
Hexachlorocyclopentadiene	L0111248-04-MSD	1667	548	33	R5	20 - 120	0.
Hexachloroethane	011129-8270S-LCS	1667	1171	70		30 - 120	
Hexachloroethane	011129-8270S-LCSD	1667	985	59		30 - 120	17.3
Hexachloroethane	L0111248-04-MS	1667	851	51		30 - 120	
Hexachloroethane	L0111248-04-MSD	1667	894	54		30 - 120	4.9
Indeno (1,2,3-c,d) pyrene	011129-8270S-LCS	1667	1487	89		50 - 120	
Indeno (1,2,3-c,d) pyrene	011129-8270S-LCSD	1667	1306	78		50 - 120	13.
Indeno (1,2,3-c,d) pyrene	L0111248-04-MS	1667	1375	82		50 - 120	
Indeno (1,2,3-c,d) pyrene	L0111248-04-MSD	1667	1480	89		50 - 120	7.4
Isophorone	011129-8270S-LCS	1667	1302	78		24 - 99	
Isophorone	011129-8270S-LCSD	1667	1050	63		24 - 99	21.4
Isophorone	L0111248-04-MS	1667	975	58		24 - 99	
Isophorone	L0111248-04-MSD	1667	1025	61		24 - 99	5.
2-Methylnaphthalene	011129-8270S-LCS	1667	1346	81		50 - 120	
2-Methylnaphthalene	011129-8270S-LCSD	1667	1106	66		50 - 120	19.6
2-Methylnaphthalene	L0111248-04-MS	1667	1035	62		50 - 120	
2-Methylnaphthalene	L0111248-04-MSD	1667	1123	67		50 - 120	8.2
2-Methylphenol	011129-8270S-LCS	1667	1394	84		14 - 108	
2-Methylphenol	011129-8270S-LCSD	1667	1125	67		14 - 108	21.4
2-Methylphenol	L0111248-04-MS	1667	1019	61		14 - 108	
2-Methylphenol	L0111248-04-MSD	1667	1014	61		14 - 108	0.5

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Naphthalene	011129-8270S-LCS	1667	1363	82	50 - 120	
Naphthalene	011129-8270S-LCSD	1667	1138	68	50 - 120	18.
Naphthalene	L0111248-04-MS	1667	1018	61	50 - 120	
Naphthalene	L0111248-04-MSD	1667	1049	63	50 - 120	3.
2-Nitroaniline	011129-8270S-LCS	1667	1476	89	30 - 120	
2-Nitroaniline	011129-8270S-LCSD	1667	1289	77	30 - 120	13.5
2-Nitroaniline	L0111248-04-MS	1667	1216	73	30 - 120	
2-Nitroaniline	L0111248-04-MSD	1667	1244	75	30 - 120	2.3
3-Nitroaniline	011129-8270S-LCS	1667	1388	83	30 - 120	
3-Nitroaniline	011129-8270S-LCSD	1667	1242	75	30 - 120	11.1
3-Nitroaniline	L0111248-04-MS	1667	928	56	30 - 120	
3-Nitroaniline	L0111248-04-MSD	1667	1044	63	30 - 120	11.8
4-Nitroaniline	011129-8270S-LCS	1667	1487	89	30 - 120	
4-Nitroaniline	011129-8270S-LCSD	1667	1299	78	30 - 120	13.5
4-Nitroaniline	L0111248-04-MS	1667	1411	85	30 - 120	
4-Nitroaniline	L0111248-04-MSD	1667	1417	85	30 - 120	0.4
Nitrobenzene	011129-8270S-LCS	1667	1383	83	23 - 103	
Nitrobenzene	011129-8270S-LCSD	1667	1123	67	23 - 103	20.8
Nitrobenzene	L0111248-04-MS	1667	1022	61	23 - 103	
Nitrobenzene	L0111248-04-MSD	1667	1087	65	23 - 103	6.2
2-Nitrophenol	011129-8270S-LCS	1667	1672	100	42 - 86	
2-Nitrophenol	011129-8270S-LCSD	1667	1253	75	42 - 86	0.
2-Nitrophenol	L0111248-04-MS	1667	1222	73	42 - 86	
2-Nitrophenol	L0111248-04-MSD	1667	1255	75	42 - 86	2.7
4-Nitrophenol	011129-8270S-LCS	1667	1487	89	22 - 151	
4-Nitrophenol	011129-8270S-LCSD	1667	1299	78	22 - 151	13.5
4-Nitrophenol	L0111248-04-MS	1667	1411	85	22 - 151	
4-Nitrophenol	L0111248-04-MSD	1667	1417	85	22 - 151	0.4
N-Nitrosodimethylamine	011129-8270S-LCS	1667	1471	88	9 - 97	
N-Nitrosodimethylamine	011129-8270S-LCSD	1667	1192	72	9 - 97	21.
N-Nitrosodimethylamine	L0111248-04-MS	1667	1036	62	9 - 97	
N-Nitrosodimethylamine	L0111248-04-MSD	1667	1053	63	9 - 97	1.6
N-Nitrosodi-n-propylamine	011129-8270S-LCS	1667	1334	80	41 - 126	
N-Nitrosodi-n-propylamine	011129-8270S-LCSD	1667	1124	67	41 - 126	17.1
N-Nitrosodi-n-propylamine	L0111248-04-MS	1667	958	57	41 - 126	
N-Nitrosodi-n-propylamine	L0111248-04-MSD	1667	1018	61	41 - 126	6.1
N-Nitrosodiphenylamine	011129-8270S-LCS	1667	1499	90	50 - 120	
N-Nitrosodiphenylamine	011129-8270S-LCSD	1667	1286	77	50 - 120	15.3

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Semi-Volatile Organic Compounds by EPA 8270C, Dec. 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
N-Nitrosodiphenylamine	L0111248-04-MS	1667	1272	76		50 - 120	
N-Nitrosodiphenylamine	L0111248-04-MSD	1667	1300	78		50 - 120	2.2
Pentachlorophenol	011129-8270S-LCS	1667	862	52		17 - 109	
Pentachlorophenol	011129-8270S-LCSD	1667	585	35	R5	17 - 109	38.3
Pentachlorophenol	L0111248-04-MS	1667	1222	73		17 - 109	
Pentachlorophenol	L0111248-04-MSD	1667	1092	66		17 - 109	11.2
Phenol	011129-8270S-LCS	1667	1308	78		52 - 113	
Phenol	011129-8270S-LCSD	1667	1052	63		52 - 113	21.7
Phenol	L0111248-04-MS	1667	951	57		52 - 113	
Phenol	L0111248-04-MSD	1667	1010	61		52 - 113	6.
Phenanthrene	011129-8270S-LCS	1667	1536	92		50 - 120	
Phenanthrene	011129-8270S-LCSD	1667	1341	80		50 - 120	13.6
Phenanthrene	L0111248-04-MS	1667	1323	79		50 - 120	
Phenanthrene	L0111248-04-MSD	1667	1399	84		50 - 120	5.6
Pyrene	011129-8270S-LCS	1667	1534	92		50 - 120	
Pyrene	011129-8270S-LCSD	1667	1298	78		50 - 120	16.7
Pyrene	L0111248-04-MS	1667	1249	75		50 - 120	
Pyrene	L0111248-04-MSD	1667	1374	82		50 - 120	9.5
Pyridine	011129-8270S-LCS	1667	1021	61		4 - 71	
Pyridine	011129-8270S-LCSD	1667	818	49		4 - 71	22.1
Pyridine	L0111248-04-MS	1667	738	44		4 - 71	
Pyridine	L0111248-04-MSD	1667	745	45		4 - 71	0.9
1,2,4-Trichlorobenzene	011129-8270S-LCS	1667	1387	83		38 - 107	
1,2,4-Trichlorobenzene	011129-8270S-LCSD	1667	1144	69		38 - 107	19.2
1,2,4-Trichlorobenzene	L0111248-04-MS	1667	1004	60		38 - 107	
1,2,4-Trichlorobenzene	L0111248-04-MSD	1667	1067	64		38 - 107	6.1
2,4,5-Trichlorophenol	011129-8270S-LCS	1667	1370	82		50 - 120	
2,4,5-Trichlorophenol	011129-8270S-LCSD	1667	1173	70		50 - 120	15.5
2,4,5-Trichlorophenol	L0111248-04-MS	1667	1303	78		50 - 120	
2,4,5-Trichlorophenol	L0111248-04-MSD	1667	1319	79		50 - 120	1.2
2,4,6-Trichlorophenol	011129-8270S-LCS	1667	1328	80		50 - 120	
2,4,6-Trichlorophenol	011129-8270S-LCSD	1667	951	57	R5	50 - 120	33.1
2,4,6-Trichlorophenol	L0111248-04-MS	1667	1203	72		50 - 120	
2,4,6-Trichlorophenol	L0111248-04-MSD	1667	1268	76		50 - 120	5.3

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Total Extractable Petroleum Hydrocarbons Fuel Finger Print by EPA Method 8015M, July 1992**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Diesel Range (C12-C22)	011130TPHS-FP-LCS	166.7	120	72	53 - 91	
Diesel Range (C12-C22)	011130TPHS-FP-LCSD	166.7	95	57	53 - 91	23.3
Diesel Range (C12-C22)	L0111248-04-MS	166.7	111	67	34 - 114	
Diesel Range (C12-C22)	L0111248-04-MSD	166.7	100	60	34 - 114	10.4
Total	011130TPHS-FP-LCS	166.7	120	72	53 - 91	
Total	011130TPHS-FP-LCSD	166.7	95	57	53 - 91	23.3
Total	L0111248-04-MS	166.7	111	67	34 - 114	
Total	L0111248-04-MSD	166.7	100	60	34 - 114	10.4

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Acetone	011202AQ60_2A-LCS	50	52.64	105		70 - 130	
Acetone	L0111210-01-MS	50	42.91	86		70 - 130	
Acetone	L0111210-01-MSD	50	48.26	97		70 - 130	11.7
Benzene	011202AQ60_2A-LCS	50	54.61	109		70 - 130	
Benzene	L0111210-01-MS	50	53.14	106		70 - 130	
Benzene	L0111210-01-MSD	50	50.56	101		70 - 130	5.
Bromobenzene	011202AQ60_2A-LCS	50	53.55	107		70 - 130	
Bromobenzene	L0111210-01-MS	50	57.67	115		70 - 130	
Bromobenzene	L0111210-01-MSD	50	53.67	107		70 - 130	7.2
Bromochloromethane	011202AQ60_2A-LCS	50	48.81	98		70 - 130	
Bromochloromethane	L0111210-01-MS	50	50.94	102		70 - 130	
Bromochloromethane	L0111210-01-MSD	50	48.44	97		70 - 130	5.
Bromodichloromethane	011202AQ60_2A-LCS	50	48.44	97		70 - 130	
Bromodichloromethane	L0111210-01-MS	50	47.11	94		70 - 130	
Bromodichloromethane	L0111210-01-MSD	50	45.68	91		70 - 130	3.1
Bromoform	011202AQ60_2A-LCS	50	50.78	102		70 - 130	
Bromoform	L0111210-01-MS	50	50.61	101		70 - 130	
Bromoform	L0111210-01-MSD	50	52.28	105		70 - 130	3.2
Bromomethane	011202AQ60_2A-LCS	50	48.4	97		70 - 130	
Bromomethane	L0111210-01-MS	50	49.78	100		70 - 130	
Bromomethane	L0111210-01-MSD	50	47.76	96		70 - 130	4.1
2-Butanone	011202AQ60_2A-LCS	50	54.31	109		70 - 130	
2-Butanone	L0111210-01-MS	50	43.03	86		70 - 130	
2-Butanone	L0111210-01-MSD	50	48.56	97		70 - 130	12.1
n-Butylbenzene	011202AQ60_2A-LCS	50	53.98	108		70 - 130	
n-Butylbenzene	L0111210-01-MS	50	54.54	109		70 - 130	
n-Butylbenzene	L0111210-01-MSD	50	53.24	106		70 - 130	2.4
sec-Butylbenzene	011202AQ60_2A-LCS	50	59.52	119		70 - 130	
sec-Butylbenzene	L0111210-01-MS	50	63.1	126		70 - 130	
sec-Butylbenzene	L0111210-01-MSD	50	59.91	120		70 - 130	5.2
tert-Butylbenzene	011202AQ60_2A-LCS	50	56.42	113		70 - 130	
tert-Butylbenzene	L0111210-01-MS	50	60.6	121		70 - 130	
tert-Butylbenzene	L0111210-01-MSD	50	57.66	115		70 - 130	5.
Carbon disulfide	011202AQ60_2A-LCS	50	96.17	192	J	70 - 130	
Carbon disulfide	L0111210-01-MS	50	94.8	190	J	70 - 130	
Carbon disulfide	L0111210-01-MSD	50	87.03	174	J	70 - 130	8.5
Carbon tetrachloride	011202AQ60_2A-LCS	50	48.73	97		70 - 130	
Carbon tetrachloride	L0111210-01-MS	50	53	106		70 - 130	

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Carbon tetrachloride	L0111210-01-MSD	50	53.71	107	70 - 130	1.3
Chlorobenzene	011202AQ60_2A-LCS	50	55.25	111	70 - 130	
Chlorobenzene	L0111210-01-MS	50	56.47	113	70 - 130	
Chlorobenzene	L0111210-01-MSD	50	53.46	107	70 - 130	5.5
Chloroethane	011202AQ60_2A-LCS	50	51.66	103	70 - 130	
Chloroethane	L0111210-01-MS	50	46.33	93	70 - 130	
Chloroethane	L0111210-01-MSD	50	43.92	88	70 - 130	5.3
Chloroform	011202AQ60_2A-LCS	50	46.16	92	70 - 130	
Chloroform	L0111210-01-MS	50	43.79	88	70 - 130	
Chloroform	L0111210-01-MSD	50	41.15	82	70 - 130	6.2
Chloromethane	011202AQ60_2A-LCS	50	48.05	96	70 - 130	
Chloromethane	L0111210-01-MS	50	41.31	83	70 - 130	
Chloromethane	L0111210-01-MSD	50	38.4	77	70 - 130	7.3
2-Chlorotoluene	011202AQ60_2A-LCS	50	56.37	113	70 - 130	
2-Chlorotoluene	L0111210-01-MS	50	56.03	112	70 - 130	
2-Chlorotoluene	L0111210-01-MSD	50	51.31	103	70 - 130	8.8
4-Chlorotoluene	011202AQ60_2A-LCS	50	54.09	108	70 - 130	
4-Chlorotoluene	L0111210-01-MS	50	53.58	107	70 - 130	
4-Chlorotoluene	L0111210-01-MSD	50	49.42	99	70 - 130	8.1
Dibromochloromethane	011202AQ60_2A-LCS	50	47.95	96	70 - 130	
Dibromochloromethane	L0111210-01-MS	50	48.3	97	70 - 130	
Dibromochloromethane	L0111210-01-MSD	50	48.38	97	70 - 130	0.2
1,2-Dibromo-3-chloropropane (DBCP)	011202AQ60_2A-LCS	50	48.8	98	70 - 130	
1,2-Dibromo-3-chloropropane (DBCP)	L0111210-01-MS	50	37.73	75	70 - 130	
1,2-Dibromo-3-chloropropane (DBCP)	L0111210-01-MSD	50	45.77	92	70 - 130	19.3
1,2-Dibromoethane (EDB)	011202AQ60_2A-LCS	50	47.98	96	70 - 130	
1,2-Dibromoethane (EDB)	L0111210-01-MS	50	46.14	92	70 - 130	
1,2-Dibromoethane (EDB)	L0111210-01-MSD	50	48.09	96	70 - 130	4.1
Dibromomethane	011202AQ60_2A-LCS	50	48.91	98	70 - 130	
Dibromomethane	L0111210-01-MS	50	46.45	93	70 - 130	
Dibromomethane	L0111210-01-MSD	50	46.72	93	70 - 130	0.6
1,2-Dichlorobenzene (o-DCB)	011202AQ60_2A-LCS	50	51.47	103	70 - 130	
1,2-Dichlorobenzene (o-DCB)	L0111210-01-MS	50	54.29	109	70 - 130	
1,2-Dichlorobenzene (o-DCB)	L0111210-01-MSD	50	51.55	103	70 - 130	5.2
1,3-Dichlorobenzene (m-DCB)	011202AQ60_2A-LCS	50	52.77	106	70 - 130	
1,3-Dichlorobenzene (m-DCB)	L0111210-01-MS	50	56.89	114	70 - 130	
1,3-Dichlorobenzene (m-DCB)	L0111210-01-MSD	50	53.58	107	70 - 130	6.
1,4-Dichlorobenzene (p-DCB)	011202AQ60_2A-LCS	50	52.87	106	70 - 130	

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
1,4-Dichlorobenzene (p-DCB)	L0111210-01-MS	50	57.16	114	70 - 130	
1,4-Dichlorobenzene (p-DCB)	L0111210-01-MSD	50	53.66	107	70 - 130	6.3
Dichlorodifluoromethane (Freon 12)	011202AQ60_2A-LCS	50	48.05	96	70 - 130	
Dichlorodifluoromethane (Freon 12)	L0111210-01-MS	50	41.31	83	70 - 130	
Dichlorodifluoromethane (Freon 12)	L0111210-01-MSD	50	38.4	77	70 - 130	7.3
1,1-Dichloroethane (1,1-DCA)	011202AQ60_2A-LCS	50	52.15	104	70 - 130	
1,1-Dichloroethane (1,1-DCA)	L0111210-01-MS	50	46.4	93	70 - 130	
1,1-Dichloroethane (1,1-DCA)	L0111210-01-MSD	50	43.86	88	70 - 130	5.6
1,2-Dichloroethane (1,2-DCA)	011202AQ60_2A-LCS	50	45.88	92	70 - 130	
1,2-Dichloroethane (1,2-DCA)	L0111210-01-MS	50	38.71	77	70 - 130	
1,2-Dichloroethane (1,2-DCA)	L0111210-01-MSD	50	38.49	77	70 - 130	0.6
1,1-Dichloroethene (1,1-DCE)	011202AQ60_2A-LCS	50	52.75	106	70 - 130	
1,1-Dichloroethene (1,1-DCE)	L0111210-01-MS	50	54.78	110	70 - 130	
1,1-Dichloroethene (1,1-DCE)	L0111210-01-MSD	50	55.3	111	70 - 130	0.9
cis-1,2-Dichloroethene	011202AQ60_2A-LCS	50	52.31	105	70 - 130	
cis-1,2-Dichloroethene	L0111210-01-MS	50	54.45	109	70 - 130	
cis-1,2-Dichloroethene	L0111210-01-MSD	50	51.23	102	70 - 130	6.1
trans-1,2-Dichloroethene	011202AQ60_2A-LCS	50	53.31	107	70 - 130	
trans-1,2-Dichloroethene	L0111210-01-MS	50	57.05	114	70 - 130	
trans-1,2-Dichloroethene	L0111210-01-MSD	50	55.11	110	70 - 130	3.5
1,2-Dichloropropane	011202AQ60_2A-LCS	50	52.79	106	70 - 130	
1,2-Dichloropropane	L0111210-01-MS	50	47.16	94	70 - 130	
1,2-Dichloropropane	L0111210-01-MSD	50	44.6	89	70 - 130	5.6
1,3-Dichloropropane	011202AQ60_2A-LCS	50	50.58	101	70 - 130	
1,3-Dichloropropane	L0111210-01-MS	50	45.07	90	70 - 130	
1,3-Dichloropropane	L0111210-01-MSD	50	43.86	88	70 - 130	2.7
2,2-Dichloropropane	011202AQ60_2A-LCS	50	53.82	108	70 - 130	
2,2-Dichloropropane	L0111210-01-MS	50	39.42	79	70 - 130	
2,2-Dichloropropane	L0111210-01-MSD	50	39.02	78	70 - 130	1.
1,1-Dichloropropene	011202AQ60_2A-LCS	50	55.05	110	70 - 130	
1,1-Dichloropropene	L0111210-01-MS	50	54.77	110	70 - 130	
1,1-Dichloropropene	L0111210-01-MSD	50	53.23	106	70 - 130	2.9
cis-1,3-Dichloropropene	011202AQ60_2A-LCS	50	50.34	101	70 - 130	
cis-1,3-Dichloropropene	L0111210-01-MS	50	46.31	93	70 - 130	
cis-1,3-Dichloropropene	L0111210-01-MSD	50	44.07	88	70 - 130	5.
trans-1,3-Dichloropropene	011202AQ60_2A-LCS	50	44.83	90	70 - 130	
trans-1,3-Dichloropropene	L0111210-01-MS	50	39.8	80	70 - 130	
trans-1,3-Dichloropropene	L0111210-01-MSD	50	39.86	80	70 - 130	0.2

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Ethylbenzene	011202AQ60_2A-LCS	50	55.09	110		70 - 130	
Ethylbenzene	L0111210-01-MS	50	58.07	116		70 - 130	
Ethylbenzene	L0111210-01-MSD	50	54.96	110		70 - 130	5.5
Hexachlorobutadiene	011202AQ60_2A-LCS	50	46.82	94		70 - 130	
Hexachlorobutadiene	L0111210-01-MS	50	54.2	108		70 - 130	
Hexachlorobutadiene	L0111210-01-MSD	50	58.59	117		70 - 130	7.8
2-Hexanone	011202AQ60_2A-LCS	50	51.35	103		70 - 130	
2-Hexanone	L0111210-01-MS	50	32.91	66	J1	70 - 130	
2-Hexanone	L0111210-01-MSD	50	40.34	81		70 - 130	20.3
Iodomethane	011202AQ60_2A-LCS	50	55.51	111		70 - 130	
Iodomethane	L0111210-01-MS	50	58.69	117		70 - 130	
Iodomethane	L0111210-01-MSD	50	57.53	115		70 - 130	2.
Isopropylbenzene	011202AQ60_2A-LCS	50	59.29	119		70 - 130	
Isopropylbenzene	L0111210-01-MS	50	62.92	126		70 - 130	
Isopropylbenzene	L0111210-01-MSD	50	56.81	114		70 - 130	10.2
p-Isopropyltoluene	011202AQ60_2A-LCS	50	54.92	110		70 - 130	
p-Isopropyltoluene	L0111210-01-MS	50	59.57	119		70 - 130	
p-Isopropyltoluene	L0111210-01-MSD	50	55.84	112		70 - 130	6.5
Methylene chloride (Dichloromethane)	011202AQ60_2A-LCS	50	49.95	100		70 - 130	
Methylene chloride (Dichloromethane)	L0111210-01-MS	50	48.21	96		70 - 130	
Methylene chloride (Dichloromethane)	L0111210-01-MSD	50	46.67	93		70 - 130	3.2
4-Methyl-2-pentanone	011202AQ60_2A-LCS	50	52.39	105		70 - 130	
4-Methyl-2-pentanone	L0111210-01-MS	50	35.74	71		70 - 130	
4-Methyl-2-pentanone	L0111210-01-MSD	50	41.1	82		70 - 130	14.
MTBE	011202AQ60_2A-LCS	50	49.64	99		70 - 130	
MTBE	L0111210-01-MS	50	43.42	87		70 - 130	
MTBE	L0111210-01-MSD	50	43.38	87		70 - 130	0.1
Naphthalene	011202AQ60_2A-LCS	50	51.77	104		70 - 130	
Naphthalene	L0111210-01-MS	50	60.55	121		70 - 130	
Naphthalene	L0111210-01-MSD	50	67.24	134	J1	70 - 130	10.5
n-Propylbenzene	011202AQ60_2A-LCS	50	58.53	117		70 - 130	
n-Propylbenzene	L0111210-01-MS	50	59.69	119		70 - 130	
n-Propylbenzene	L0111210-01-MSD	50	55.7	111		70 - 130	6.9
Styrene	011202AQ60_2A-LCS	50	55.55	111		70 - 130	
Styrene	L0111210-01-MS	50	54.85	110		70 - 130	
Styrene	L0111210-01-MSD	50	52.4	105		70 - 130	4.6
,1,1,2-Tetrachloroethane	011202AQ60_2A-LCS	50	50.27	101		70 - 130	
,1,1,2-Tetrachloroethane	L0111210-01-MS	50	53.39	107		70 - 130	

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
1,1,1,2-Tetrachloroethane	L0111210-01-MSD	50	50.98	102		70 - 130	4.6
1,1,2,2-Tetrachloroethane	011202AQ60_2A-LCS	50	53.33	107		70 - 130	
1,1,2,2-Tetrachloroethane	L0111210-01-MS	50	56.66	113		70 - 130	
1,1,2,2-Tetrachloroethane	L0111210-01-MSD	50	48.65	97		70 - 130	15.2
Tetrachloroethene (PCE)	011202AQ60_2A-LCS	50	61.7	123		70 - 130	
Tetrachloroethene (PCE)	L0111210-01-MS	50	68.53	137	J1	70 - 130	
Tetrachloroethene (PCE)	L0111210-01-MSD	50	66.23	132	J1	70 - 130	3.4
Toluene	011202AQ60_2A-LCS	50	53.45	107		70 - 130	
Toluene	L0111210-01-MS	50	55.14	110		70 - 130	
Toluene	L0111210-01-MSD	50	51.9	104		70 - 130	6.1
1,2,3-Trichlorobenzene	011202AQ60_2A-LCS	50	85.55	171	J	70 - 130	
1,2,3-Trichlorobenzene	L0111210-01-MS	50	88.96	178	J	70 - 130	
1,2,3-Trichlorobenzene	L0111210-01-MSD	50	111.95	224	J	70 - 130	22.9
1,2,4-Trichlorobenzene	011202AQ60_2A-LCS	50	49.62	99		70 - 130	
1,2,4-Trichlorobenzene	L0111210-01-MS	50	52.07	104		70 - 130	
1,2,4-Trichlorobenzene	L0111210-01-MSD	50	58.08	116		70 - 130	10.9
1,1,1-Trichloroethane (1,1,1-TCA)	011202AQ60_2A-LCS	50	45.47	91		70 - 130	
1,1,1-Trichloroethane (1,1,1-TCA)	L0111210-01-MS	50	47.34	95		70 - 130	
1,1,1-Trichloroethane (1,1,1-TCA)	L0111210-01-MSD	50	46.22	92		70 - 130	2.4
1,1,2-Trichloroethane (1,1,2-TCA)	011202AQ60_2A-LCS	50	48.46	97		70 - 130	
1,1,2-Trichloroethane (1,1,2-TCA)	L0111210-01-MS	50	46.65	93		70 - 130	
1,1,2-Trichloroethane (1,1,2-TCA)	L0111210-01-MSD	50	47.37	95		70 - 130	1.5
Trichloroethene (TCE)	011202AQ60_2A-LCS	50	53.63	107		70 - 130	
Trichloroethene (TCE)	L0111210-01-MS	50	56.53	113		70 - 130	
Trichloroethene (TCE)	L0111210-01-MSD	50	54.72	109		70 - 130	3.3
Trichlorofluoromethane (Freon 11)	011202AQ60_2A-LCS	50	39.57	79		70 - 130	
Trichlorofluoromethane (Freon 11)	L0111210-01-MS	50	38.46	77		70 - 130	
Trichlorofluoromethane (Freon 11)	L0111210-01-MSD	50	40.85	82		70 - 130	6.
1,2,3-Trichloropropane	011202AQ60_2A-LCS	50	49.41	99		70 - 130	
1,2,3-Trichloropropane	L0111210-01-MS	50	45.92	92		70 - 130	
1,2,3-Trichloropropane	L0111210-01-MSD	50	48.13	96		70 - 130	4.7
1,2,4-Trimethylbenzene	011202AQ60_2A-LCS	50	56.41	113		70 - 130	
1,2,4-Trimethylbenzene	L0111210-01-MS	50	62.83	126		70 - 130	
1,2,4-Trimethylbenzene	L0111210-01-MSD	50	57.42	115		70 - 130	9.
1,3,5-Trimethylbenzene	011202AQ60_2A-LCS	50	56.41	113		70 - 130	
1,3,5-Trimethylbenzene	L0111210-01-MS	50	59.33	119		70 - 130	
1,3,5-Trimethylbenzene	L0111210-01-MSD	50	54.68	109		70 - 130	8.2
Vinyl chloride	011202AQ60_2A-LCS	50	50.56	101		70 - 130	

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Vinyl chloride	L0111210-01-MS	50	45.1	90	70 - 130	
Vinyl chloride	L0111210-01-MSD	50	42.95	86	70 - 130	4.9
o-Xylene	011202AQ60_2A-LCS	50	54.87	110	70 - 130	
o-Xylene	L0111210-01-MS	50	59.4	119	70 - 130	
o-Xylene	L0111210-01-MSD	50	54.51	109	70 - 130	8.6
m,p-Xylene	011202AQ60_2A-LCS	100	110.69	111	70 - 130	
m,p-Xylene	L0111210-01-MS	100	119.85	120	70 - 130	
m,p-Xylene	L0111210-01-MSD	100	113.35	113	70 - 130	5.6

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Acetone	011202SD60_1A-LCS	50	74.01	148	J	70 - 130	
Acetone	L0111248-04-MS	50	94.41	189	J	70 - 130	
Acetone	L0111248-04-MSD	50	72.03	144	J	70 - 130	26.9
Benzene	011202SD60_1A-LCS	50	49.82	100		70 - 130	
Benzene	L0111248-04-MS	50	49.89	100		70 - 130	
Benzene	L0111248-04-MSD	50	49.85	100		70 - 130	0.1
Bromobenzene	011202SD60_1A-LCS	50	46.33	93		70 - 130	
Bromobenzene	L0111248-04-MS	50	50.47	101		70 - 130	
Bromobenzene	L0111248-04-MSD	50	49.88	100		70 - 130	1.2
Bromochloromethane	011202SD60_1A-LCS	50	52.39	105		70 - 130	
Bromochloromethane	L0111248-04-MS	50	60.36	121		70 - 130	
Bromochloromethane	L0111248-04-MSD	50	60.44	121		70 - 130	0.1
Bromodichloromethane	011202SD60_1A-LCS	50	52.23	104		70 - 130	
Bromodichloromethane	L0111248-04-MS	50	51.19	102		70 - 130	
Bromodichloromethane	L0111248-04-MSD	50	52.42	105		70 - 130	2.4
Bromoform	011202SD60_1A-LCS	50	47.09	94		70 - 130	
Bromoform	L0111248-04-MS	50	55.59	111		70 - 130	
Bromoform	L0111248-04-MSD	50	49.46	99		70 - 130	11.7
Bromomethane	011202SD60_1A-LCS	50	53.89	108		70 - 130	
Bromomethane	L0111248-04-MS	50	57.44	115		70 - 130	
Bromomethane	L0111248-04-MSD	50	60.69	121		70 - 130	5.5
2-Butanone	011202SD60_1A-LCS	50	76.48	153	J	70 - 130	
2-Butanone	L0111248-04-MS	50	102.23	204	J	70 - 130	
2-Butanone	L0111248-04-MSD	50	78.87		J	70 - 130	157.7
n-Butylbenzene	011202SD60_1A-LCS	50	47.62	95		70 - 130	
n-Butylbenzene	L0111248-04-MS	50	39.36	79		70 - 130	
n-Butylbenzene	L0111248-04-MSD	50	38.01	76		70 - 130	3.5
sec-Butylbenzene	011202SD60_1A-LCS	50	50.49	101		70 - 130	
sec-Butylbenzene	L0111248-04-MS	50	44.78	90		70 - 130	
sec-Butylbenzene	L0111248-04-MSD	50	44.13	88		70 - 130	1.5
tert-Butylbenzene	011202SD60_1A-LCS	50	47.16	94		70 - 130	
tert-Butylbenzene	L0111248-04-MS	50	45.83	92		70 - 130	
tert-Butylbenzene	L0111248-04-MSD	50	44.78	90		70 - 130	2.3
Carbon disulfide	011202SD60_1A-LCS	50	105.31	211	J	70 - 130	
Carbon disulfide	L0111248-04-MS	50	114.46	229	J	70 - 130	
Carbon disulfide	L0111248-04-MSD	50	114.27	229	J	70 - 130	0.2
Carbon tetrachloride	011202SD60_1A-LCS	50	49.52	99		70 - 130	
Carbon tetrachloride	L0111248-04-MS	50	48.49	97		70 - 130	

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Carbon tetrachloride	L0111248-04-MSD	50	48.52	97		70 - 130	0.1
Chlorobenzene	011202SD60_1A-LCS	50	49.6	99		70 - 130	
Chlorobenzene	L0111248-04-MS	50	51.34	103		70 - 130	
Chlorobenzene	L0111248-04-MSD	50	50.21	100		70 - 130	2.2
Chloroethane	011202SD60_1A-LCS	50	50.52	101		70 - 130	
Chloroethane	L0111248-04-MS	50	58.51	117		70 - 130	
Chloroethane	L0111248-04-MSD	50	61.36	123		70 - 130	4.8
Chloroform	011202SD60_1A-LCS	50	54.67	109		70 - 130	
Chloroform	L0111248-04-MS	50	60.84	122		70 - 130	
Chloroform	L0111248-04-MSD	50	62.15	124		70 - 130	2.1
Chloromethane	011202SD60_1A-LCS	50	63.57	127		70 - 130	
Chloromethane	L0111248-04-MS	50	64.37	129		70 - 130	
Chloromethane	L0111248-04-MSD	50	66.17	132	J1	70 - 130	2.8
2-Chlorotoluene	011202SD60_1A-LCS	50	46.39	93		70 - 130	
2-Chlorotoluene	L0111248-04-MS	50	47.2	94		70 - 130	
2-Chlorotoluene	L0111248-04-MSD	50	48.21	96		70 - 130	2.1
4-Chlorotoluene	011202SD60_1A-LCS	50	45.9	92		70 - 130	
4-Chlorotoluene	L0111248-04-MS	50	47.77	96		70 - 130	
4-Chlorotoluene	L0111248-04-MSD	50	46.09	92		70 - 130	3.6
Dibromochloromethane	011202SD60_1A-LCS	50	51.58	103		70 - 130	
Dibromochloromethane	L0111248-04-MS	50	52.11	104		70 - 130	
Dibromochloromethane	L0111248-04-MSD	50	50.75	101		70 - 130	2.6
1,2-Dibromo-3-chloropropane (DBCP)	011202SD60_1A-LCS	50	60.58	121		70 - 130	
1,2-Dibromo-3-chloropropane (DBCP)	L0111248-04-MS	50	82.73	165	J1	70 - 130	
1,2-Dibromo-3-chloropropane (DBCP)	L0111248-04-MSD	50	69.81	140	J1	70 - 130	16.9
1,2-Dibromoethane (EDB)	011202SD60_1A-LCS	50	49.69	99		70 - 130	
1,2-Dibromoethane (EDB)	L0111248-04-MS	50	52.23	104		70 - 130	
1,2-Dibromoethane (EDB)	L0111248-04-MSD	50	48.63	97		70 - 130	7.1
Dibromomethane	011202SD60_1A-LCS	50	48.9	98		70 - 130	
Dibromomethane	L0111248-04-MS	50	51.2	102		70 - 130	
Dibromomethane	L0111248-04-MSD	50	50.09	100		70 - 130	2.2
1,2-Dichlorobenzene (o-DCB)	011202SD60_1A-LCS	50	46.1	92		70 - 130	
1,2-Dichlorobenzene (o-DCB)	L0111248-04-MS	50	45.82	92		70 - 130	
1,2-Dichlorobenzene (o-DCB)	L0111248-04-MSD	50	45.1	90		70 - 130	1.6
1,3-Dichlorobenzene (m-DCB)	011202SD60_1A-LCS	50	46.71	93		70 - 130	
1,3-Dichlorobenzene (m-DCB)	L0111248-04-MS	50	46.18	92		70 - 130	
1,3-Dichlorobenzene (m-DCB)	L0111248-04-MSD	50	46.18	92		70 - 130	0.
1,4-Dichlorobenzene (p-DCB)	011202SD60_1A-LCS	50	47.27	95		70 - 130	

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
1,4-Dichlorobenzene (p-DCB)	L0111248-04-MS	50	47.82	96	70 - 130	
1,4-Dichlorobenzene (p-DCB)	L0111248-04-MSD	50	46.8	94	70 - 130	2.2
Dichlorodifluoromethane (Freon 12)	011202SD60_1A-LCS	50	60.74	121	70 - 130	
Dichlorodifluoromethane (Freon 12)	L0111248-04-MS	50	62.99	126	70 - 130	
Dichlorodifluoromethane (Freon 12)	L0111248-04-MSD	50	64.8	130	70 - 130	2.8
1,1-Dichloroethane (1,1-DCA)	011202SD60_1A-LCS	50	54.72	109	70 - 130	
1,1-Dichloroethane (1,1-DCA)	L0111248-04-MS	50	62.14	124	70 - 130	
1,1-Dichloroethane (1,1-DCA)	L0111248-04-MSD	50	64.39	129	70 - 130	3.6
1,2-Dichloroethane (1,2-DCA)	011202SD60_1A-LCS	50	47.75	96	70 - 130	
1,2-Dichloroethane (1,2-DCA)	L0111248-04-MS	50	49.65	99	70 - 130	
1,2-Dichloroethane (1,2-DCA)	L0111248-04-MSD	50	50.35	101	70 - 130	1.4
1,1-Dichloroethene (1,1-DCE)	011202SD60_1A-LCS	50	55.72	111	70 - 130	
1,1-Dichloroethene (1,1-DCE)	L0111248-04-MS	50	63.17	126	70 - 130	
1,1-Dichloroethene (1,1-DCE)	L0111248-04-MSD	50	62.51	125	70 - 130	1.1
cis-1,2-Dichloroethene	011202SD60_1A-LCS	50	56.71	113	70 - 130	
cis-1,2-Dichloroethene	L0111248-04-MS	50	64.49	129	70 - 130	
cis-1,2-Dichloroethene	L0111248-04-MSD	50	64.19	128	70 - 130	0.5
trans-1,2-Dichloroethene	011202SD60_1A-LCS	50	55.1	110	70 - 130	
trans-1,2-Dichloroethene	L0111248-04-MS	50	63.5	127	70 - 130	
trans-1,2-Dichloroethene	L0111248-04-MSD	50	63.49	127	70 - 130	0.
1,2-Dichloropropane	011202SD60_1A-LCS	50	51.98	104	70 - 130	
1,2-Dichloropropane	L0111248-04-MS	50	52.25	105	70 - 130	
1,2-Dichloropropane	L0111248-04-MSD	50	51.44	103	70 - 130	1.6
1,3-Dichloropropane	011202SD60_1A-LCS	50	46.81	94	70 - 130	
1,3-Dichloropropane	L0111248-04-MS	50	51.99	104	70 - 130	
1,3-Dichloropropane	L0111248-04-MSD	50	50.75	101	70 - 130	2.4
2,2-Dichloropropane	011202SD60_1A-LCS	50	46.08	92	70 - 130	
2,2-Dichloropropane	L0111248-04-MS	50	57.19	114	70 - 130	
2,2-Dichloropropane	L0111248-04-MSD	50	58.27	117	70 - 130	1.9
1,1-Dichloropropene	011202SD60_1A-LCS	50	52.29	105	70 - 130	
1,1-Dichloropropene	L0111248-04-MS	50	52.3	105	70 - 130	
1,1-Dichloropropene	L0111248-04-MSD	50	51.59	103	70 - 130	1.4
cis-1,3-Dichloropropene	011202SD60_1A-LCS	50	51.03	102	70 - 130	
cis-1,3-Dichloropropene	L0111248-04-MS	50	47.42	95	70 - 130	
cis-1,3-Dichloropropene	L0111248-04-MSD	50	46.79	94	70 - 130	1.3
trans-1,3-Dichloropropene	011202SD60_1A-LCS	50	46.85	94	70 - 130	
trans-1,3-Dichloropropene	L0111248-04-MS	50	45.99	92	70 - 130	
trans-1,3-Dichloropropene	L0111248-04-MSD	50	44.87	90	70 - 130	2.5

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Ethylbenzene	011202SD60_1A-LCS	50	48.76	98		70 - 130	
Ethylbenzene	L0111248-04-MS	50	48.96	98		70 - 130	
Ethylbenzene	L0111248-04-MSD	50	47.98	96		70 - 130	0.
Hexachlorobutadiene	011202SD60_1A-LCS	50	45.97	92		70 - 130	
Hexachlorobutadiene	L0111248-04-MS	50	24.07	48	JI	70 - 130	
Hexachlorobutadiene	L0111248-04-MSD	50	27.29	55	JI	70 - 130	12.5
2-Hexanone	011202SD60_1A-LCS	50	81.54	163	J	70 - 130	
2-Hexanone	L0111248-04-MS	50	69.12	138	J	70 - 130	
2-Hexanone	L0111248-04-MSD	50	51.79	104		70 - 130	28.7
Iodomethane	011202SD60_1A-LCS	50	56.76	114		70 - 130	
Iodomethane	L0111248-04-MS	50	59.38	119		70 - 130	
Iodomethane	L0111248-04-MSD	50	56.54	113		70 - 130	4.9
Isopropylbenzene	011202SD60_1A-LCS	50	48.94	98		70 - 130	
Isopropylbenzene	L0111248-04-MS	50	50.85	102		70 - 130	
Isopropylbenzene	L0111248-04-MSD	50	49.67	99		70 - 130	2.3
p-Isopropyltoluene	011202SD60_1A-LCS	50	47.62	95		70 - 130	
p-Isopropyltoluene	L0111248-04-MS	50	42.59	85		70 - 130	
p-Isopropyltoluene	L0111248-04-MSD	50	42.3	85		70 - 130	0.7
Methylene chloride (Dichloromethane)	011202SD60_1A-LCS	50	52.87	106		70 - 130	
Methylene chloride (Dichloromethane)	L0111248-04-MS	50	60.51	121		70 - 130	
Methylene chloride (Dichloromethane)	L0111248-04-MSD	50	61.66	123		70 - 130	1.9
4-Methyl-2-pentanone	011202SD60_1A-LCS	50	73.35	147	J	70 - 130	
4-Methyl-2-pentanone	L0111248-04-MS	50	77.06	154	J	70 - 130	
4-Methyl-2-pentanone	L0111248-04-MSD	50	66.63	133	J	70 - 130	14.5
MTBE	011202SD60_1A-LCS	50	54.86	110		70 - 130	
MTBE	L0111248-04-MS	50	66.5	133	JI	70 - 130	
MTBE	L0111248-04-MSD	50	64.19	128		70 - 130	3.5
Naphthalene	011202SD60_1A-LCS	50	61.37	123		70 - 130	
Naphthalene	L0111248-04-MS	50	62.42	125		70 - 130	
Naphthalene	L0111248-04-MSD	50	61.81	124		70 - 130	1.
n-Propylbenzene	011202SD60_1A-LCS	50	47.43	95		70 - 130	
n-Propylbenzene	L0111248-04-MS	50	46.69	93		70 - 130	
n-Propylbenzene	L0111248-04-MSD	50	45.92	92		70 - 130	1.7
Styrene	011202SD60_1A-LCS	50	50.15	100		70 - 130	
Styrene	L0111248-04-MS	50	50.87	102		70 - 130	
Styrene	L0111248-04-MSD	50	49.31	99		70 - 130	3.1
1,1,1,2-Tetrachloroethane	011202SD60_1A-LCS	50	47.34	95		70 - 130	
1,1,1,2-Tetrachloroethane	L0111248-04-MS	50	49.98	100		70 - 130	

ND - Not Detected

NEL LABORATORIES

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
1,1,1,2-Tetrachloroethane	L0111248-04-MSD	50	49.6	99		70 - 130	0.8
1,1,2,2-Tetrachloroethane	011202SD60_1A-LCS	50	50.6	101		70 - 130	
1,1,2,2-Tetrachloroethane	L0111248-04-MS	50	62.54	125		70 - 130	
1,1,2,2-Tetrachloroethane	L0111248-04-MSD	50	52.84	106		70 - 130	16.8
Tetrachloroethene (PCE)	011202SD60_1A-LCS	50	47.83	96		70 - 130	
Tetrachloroethene (PCE)	L0111248-04-MS	50	47.73	95		70 - 130	
Tetrachloroethene (PCE)	L0111248-04-MSD	50	45.97	92		70 - 130	3.8
Toluene	011202SD60_1A-LCS	50	51.16	102		70 - 130	
Toluene	L0111248-04-MS	50	50.72	101		70 - 130	
Toluene	L0111248-04-MSD	50	49.2	98		70 - 130	3.
1,2,3-Trichlorobenzene	011202SD60_1A-LCS	50	59.03	118		70 - 130	
1,2,3-Trichlorobenzene	L0111248-04-MS	50	39.23	78		70 - 130	
1,2,3-Trichlorobenzene	L0111248-04-MSD	50	46	92		70 - 130	15.9
1,2,4-Trichlorobenzene	011202SD60_1A-LCS	50	45.16	90		70 - 130	
1,2,4-Trichlorobenzene	L0111248-04-MS	50	33.01	66	J1	70 - 130	
1,2,4-Trichlorobenzene	L0111248-04-MSD	50	36.09	72		70 - 130	8.9
1,1,1-Trichloroethane (1,1,1-TCA)	011202SD60_1A-LCS	50	51.37	103		70 - 130	
1,1,1-Trichloroethane (1,1,1-TCA)	L0111248-04-MS	50	59.31	119		70 - 130	
1,1,1-Trichloroethane (1,1,1-TCA)	L0111248-04-MSD	50	58.72	117		70 - 130	1.
1,1,2-Trichloroethane (1,1,2-TCA)	011202SD60_1A-LCS	50	51.36	103		70 - 130	
1,1,2-Trichloroethane (1,1,2-TCA)	L0111248-04-MS	50	53.92	108		70 - 130	
1,1,2-Trichloroethane (1,1,2-TCA)	L0111248-04-MSD	50	50.97	102		70 - 130	5.6
Trichloroethene (TCE)	011202SD60_1A-LCS	50	51.02	102		70 - 130	
Trichloroethene (TCE)	L0111248-04-MS	50	52.6	105		70 - 130	
Trichloroethene (TCE)	L0111248-04-MSD	50	53.07	106		70 - 130	0.9
Trichlorofluoromethane (Freon 11)	011202SD60_1A-LCS	50	66.72	133	J	70 - 130	
Trichlorofluoromethane (Freon 11)	L0111248-04-MS	50	70.45	141	J	70 - 130	
Trichlorofluoromethane (Freon 11)	L0111248-04-MSD	50	71.98	144	J	70 - 130	2.1
1,2,3-Trichloropropane	011202SD60_1A-LCS	50	52.87	106		70 - 130	
1,2,3-Trichloropropane	L0111248-04-MS	50	73.81	148	J1	70 - 130	
1,2,3-Trichloropropane	L0111248-04-MSD	50	61.92	124		70 - 130	17.5
1,2,4-Trimethylbenzene	011202SD60_1A-LCS	50	47.12	94		70 - 130	
1,2,4-Trimethylbenzene	L0111248-04-MS	50	49.03	98		70 - 130	
1,2,4-Trimethylbenzene	L0111248-04-MSD	50	48.08	96		70 - 130	2.
1,3,5-Trimethylbenzene	011202SD60_1A-LCS	50	46.92	94		70 - 130	
1,3,5-Trimethylbenzene	L0111248-04-MS	50	47.44	95		70 - 130	
1,3,5-Trimethylbenzene	L0111248-04-MSD	50	46.91	94		70 - 130	1.1
Vinyl chloride	011202SD60_1A-LCS	50	56.07	112		70 - 130	

ND - Not Detected

CLIENT: Bechtel Nevada
PROJECT ID: V1358
PROJECT #: 30033
TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**
MATRIX: Solid

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery		Acceptable Range	RPD
Vinyl chloride	L0111248-04-MS	50	65.46	131	J1	70 - 130	
Vinyl chloride	L0111248-04-MSD	50	65.42	131	J1	70 - 130	0.1
o-Xylene	011202SD60_1A-LCS	50	50.14	100		70 - 130	
o-Xylene	L0111248-04-MS	50	51.2	102		70 - 130	
o-Xylene	L0111248-04-MSD	50	49.74	99		70 - 130	2.9
m,p-Xylene	011202SD60_1A-LCS	100	96.37	96		70 - 130	
m,p-Xylene	L0111248-04-MS	100	98.72	99		70 - 130	
m,p-Xylene	L0111248-04-MSD	100	97.51	98		70 - 130	1.2

ND - Not Detected

Crater 7 Pace 14/6 L011/245

Bechtel Nevada

ANALYTICAL SERVICES LABORATORY

SERVICES REQUEST & CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT/ CLIENT INFORMATION

Project: CAU 343 BN Org#: 2156
Charge No.: 5H11AH21 ASL Prog.:
Project Manager: Wayne Johnson
Phone: 702-295-0573 Fax: 702-295-7761 M/S: NTS306

REPORT INFORMATION

Send Report to: Marcus Dixon
Phone: 702-295-4001 Fax: 702-295-7761 M/S: NTS306
Turnaround: ( ) Standard - 30 days Non-rad, 60 Days Rad, Other:
(X) Rush Preliminary by: 14 Days Final by:
Final report format: (X) Standard ( ) NTS-WAC ( ) Other:

SAMPLE INFORMATION

Sampling Site: CAU343
The samples submitted contain (check):
( ) Hazardous ( ) Radioactive (X) Unknown contamination. If known, attach a brief narrative summary identifying contaminants. This information will ensure compliance with applicable regulations and allow for the safe handling of the sample materials.

LAB USE ONLY

Rad SGD: Non-Rad SDG: V1358
Rad Packet: Non-Rad Packet:
Client Services Representative:
Will these analyses be performed under a signed SOW? ( ) YES ( ) NO
If so, do analyses entered here agree with the SOW? ( ) YES ( ) NO ( ) N/A
If not, identify the variation
CSR initials indicating review and approval: Date:

SAMPLE RECEIPT INFORMATION

Are all sample containers received intact (X) Yes ( ) No
Comments:
Do the labels agree with this form? (X) Yes ( ) No
Comments:
Was a Material Clearance Tag submitted? (X) Yes ( ) No
Comments:

ITEM	ID / DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	PAY ITEM: 10.19, 10.31 TPH Full Scan (8015)	PAY ITEM: 7.1 Total Semi-Volatiles (8270)	PAY ITEM: 7.8, 7.9 Total Volatiles (8260)	PAY ITEM: 1.28 Total Volatiles (8260)	COMMENTS (Preservative, size/volume, MS/MSD, special analysis, rad matrix code, count time, etc.)
01 0	CAU343-TB9	11/27/01	7:01	water				X	1x40mL vial
02 1	CAU343-TB10	11/27/01	7:05	water				X	1x40mL vial
03 2	032214-0-V	11/27/01	13:15	Soil	X	X			2x250mL
04 3	032207-0-V	11/27/01	14:10	soil	X	X	X		2x250mL, 2x120mL
4	LAST ITEM								
5									39
6									
7									
8									
9									

Transfer of samples submitted for analyses

Sampled/Relinquished (Signature/Organization)	DATE / TIME	Received by (Signature/Organization)
/s/ Signature on file	11-28-01/1516	/s/ Signature on file

Complete for samples shipped to an OFF-SITE Subcontract Laboratory NEL

Relinquished (BN Representative Signature)	DATE / TIME	Received (Courier & Tracking Info.)
/s/ Signature on file	11-29-01/1000	/s/ Signature on file
Relinquished (Courier & Tracking Info.)	DATE / TIME	Received (1st tier Subcontractor Rep)
/s/ Signature on file	11-29-01/1545	/s/ Signature on file
Relinquished (1st tier Subcontractor Rep)	DATE / TIME	Received (2nd tier Subcontractor Rep)

Distribution: Original - To be retained by laboratory performing final analysis
Copy 1 - To be retained by laboratory performing intermediate analysis
Copy 2 - To be retained by analytical services laboratory
Copy 3 - To be retained by sampler

(02/9[illegible])

A-4

APPENDIX B
SECTORED HOUSEKEEPING
SITE CLOSURE VERIFICATION FORMS

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APPENDIX B TABLE OF CONTENTS

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Sectored Housekeeping Site Closure Verification Form

Closure Verification Date: 11/29/2001
CAS Number (if applicable): 01-24-03 (50-caliber brass shell casings)
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, 5-Story Tower
Elevation: 1246 meters (m)
Northing: 4,100,058.44 m (UTM Zone: 11) **Latitude:** 37 02.6947
Easting: 582,444.90 m (UTM Zone: 11) **Longitude:** 116 04.4257

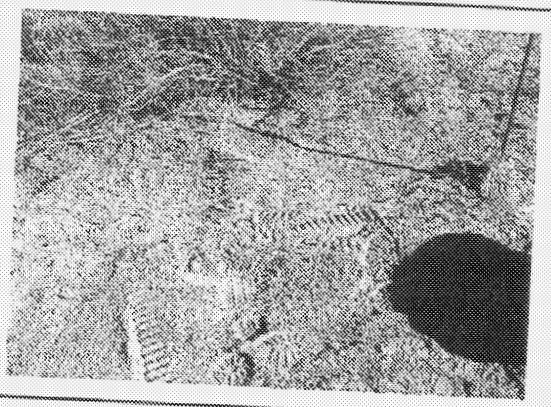
Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Mercury Highway north to Pahute Mesa Road. Turn left (west) on Pahute Mesa Road and proceed to RSM A-6. Turn left (south) on the dirt road just past the RSM A-6 sign, turn left at light blue crate with post sticking out of it. Proceed 0.5 mile on the dirt road, then turn left (east) and proceed 0.2 mile. The road bears southeast towards the concrete towers and the geodetic survey shell.

Waste Item(s) Originally at Site	Apparent Waste Type*
50-caliber brass shells	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other

Housekeeping Site Before Closure
(taken 05/09/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on May 26, 1993. The 50-caliber brass shells were removed on November 27, 2001 by using shovels. The debris was transported to the Area 9 U10c Landfill for disposal. The site is currently clear of all waste material.

__X__ **No Further Action Required at Housekeeping Site**

Marcus Dixon — /s/ Signature on file — 12/13/2001
Corrective Action Coordinator/Designee **Signature** **Date**

Sectored Housekeeping Site Closure Verification Form

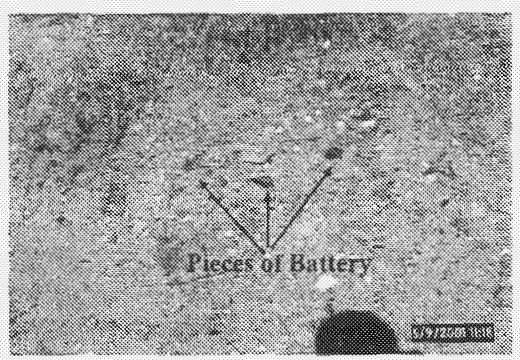
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 01-24-03 (pieces of lead battery)
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, 5-Story Tower
Elevation: 1246 meters (m)
Northing: 4,100,058.44 m (UTM Zone: 11) **Latitude:** 37 02.6947
Easting: 582,444.90 m (UTM Zone: 11) **Longitude:** 116 04.4257

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Mercury Highway north to Pahute Mesa Road. Turn left (west) on Pahute Mesa Road and proceed to RSM A-6. Turn left (south) on the dirt road just past the RSM A-6 sign, turn left at light blue crate with post sticking out of it. Proceed 0.5 mile on the dirt road, then turn left (east) and proceed 0.2 mile. The road bears southeast towards the concrete towers and the geodetic survey shell.

Waste Item(s) Originally at Site	Apparent Waste Type*
Pieces of lead battery	Hazardous (lead)

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/09/2001)

Housekeeping Site Before Closure
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on May 26, 1993. The pieces of lead battery and associated soil were removed using a shovel on November 27, 2001, and placed into 20-gallon container for hazardous waste disposal. The site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

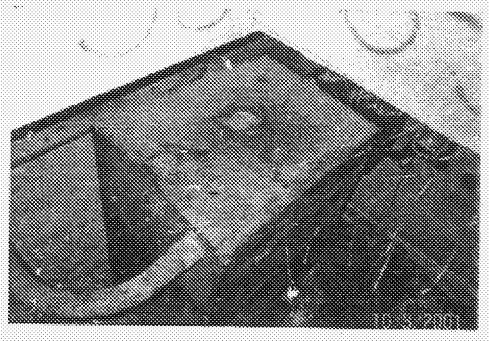
Closure Verification Date: 12/12/2001
CAS Number (if applicable): 03-14-05
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, Bunker 3-53
Elevation: 1223 meters (m)
Northing: 4,100,379.33 m (UTM Zone: 11) **Latitude:** 37 02.8484
Easting: 586,128.69 m (UTM Zone: 11) **Longitude:** 116 01.9382

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

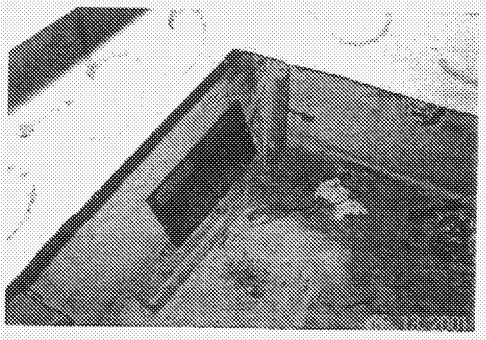
Site Access Route: Mercury Highway north to 3-03 Road, turn right (east) onto 3-03 Road. Proceed approximately 1.1 miles toward the intersection of 3-05 Road and 3-03 Road. The site is located on the southeast corner of the intersection just outside the yellow fencing northwest of Bunker 3-53 and north of Bunker 3-300.

Waste Item(s) Originally at Site	Apparent Waste Type*
(2) transformers (non-PCB) and oil from switches.	Ordinary and recyclable

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 10/03/2001)



Housekeeping Site After Cleanup
(taken 12/13/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on December 6, 1994. The oil was drained from the switches on November 30, 2001, and the transformers were removed on December 12, 2001. The transformers were transported to the Area 9 U10c Landfill as sanitary waste. The site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/19/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

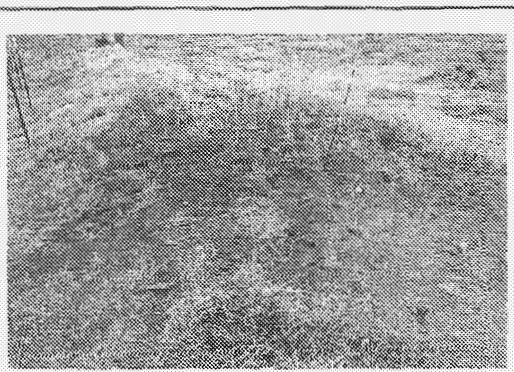
Closure Verification Date: 11/29/2001
CAS Number (if applicable): 03-22-06
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3Lu Crater
Elevation: 1199 meters (m)
Northing: 4,094,745.87 m (UTM Zone: 11) **Latitude:** 36 59.7876
Easting: 588,680.86 m (UTM Zone: 11) **Longitude:** 116 00.2561

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

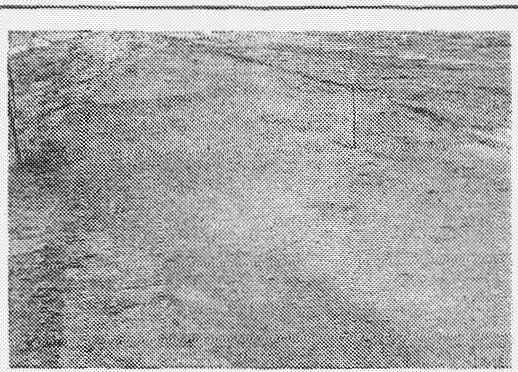
Site Access Route: Proceed on Mercury Highway north to 6-09 Road. Turn right (east) on 6-09 Road and proceed for 2.65 miles to U-3Lu Crater. The first marker is located south of crater fence (no debris found at this site marker) and the second marker is located east of crater fence.

Waste Item(s) Originally at Site	Apparent Waste Type*
Magnetite	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/10/2001)



Housekeeping Site After Closure
(taken 11/29/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on September 1, 1993. The magnetite and associated soil were removed on November 29, 2001, using shovels and a front-end loader, then transported to the Area 9 U10c Landfill for disposal. The site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-07 (buckets containing tar)
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3jh Crater
Elevation: 1201 meters (m)
Northing: 4,094,438.63 m (UTM Zone: 11) **Latitude:** 36 59.6324
Easting: 586,749.63 m (UTM Zone: 11) **Longitude:** 116 01.5603

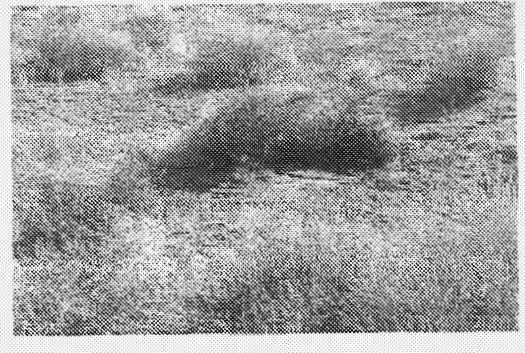
Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Take Mercury Highway north to Tweezer Road, turn right (east) to the 3-12 Road and turn left (north). Proceed 1.0 mile to the U-3jh Crater located on the right side (east) of 3-12 Road. Proceed east across the desert to the crater. The site marker is located along the west perimeter of the crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
Metal buckets containing tar	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other

Housekeeping Site Before Closure
(taken 11/27/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on September 1, 1993. The buckets containing tar were removed by hand on November 27, 2001, and transported to the Area 6 Hydrocarbon Landfill for disposal. This site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

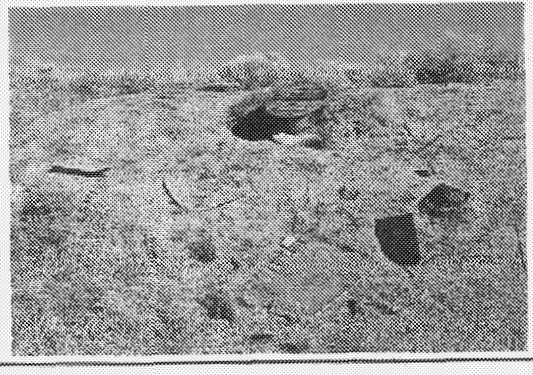
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-07 (scattered debris)
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3jh Crater
Elevation: 1201 meters (m)
Northing: 4,094,438.63 m (UTM Zone: 11) **Latitude: 36 59.6324**
Easting: 586,749.63 m (UTM Zone: 11) **Longitude: 116 01.5603**

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

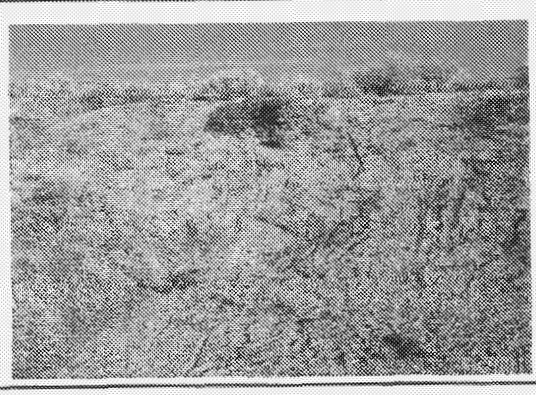
Site Access Route: Take Mercury Highway north to Tweezer Road, turn right (east) to the 3-12 Road and turn left (north). Proceed 1.0 mile to the U-3jh Crater located on the right side (east) of 3-12 Road. Proceed east across the desert to the crater. The site marker is located along the west perimeter of the crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
Wood cable spool, wood, rope and scrap metal	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 11/27/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on September 1, 1993. The scattered debris was removed by hand on November 27, 2001, and disposed of the Area 9 U10c Landfill. This site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

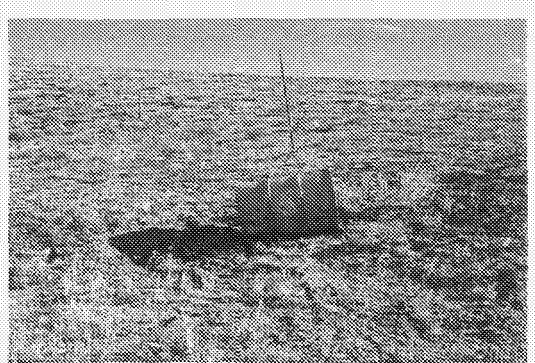
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-10
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3ki Crater
Elevation: 1205 meters (m)
Northing: 4,095,809.34 m (UTM Zone: 11) **Latitude:** 37 00.3771
Easting: 586,102.66 m (UTM Zone: 11) **Longitude:** 116 01.9871

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

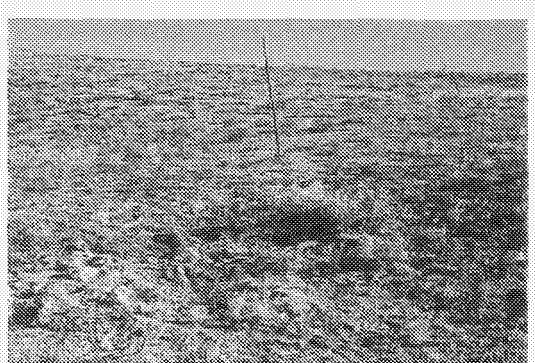
Site Access Route: Take Mercury Highway north to Tweezer Road and turn right (east) on Tweezer Road. Proceed to 3-12 Road, turn left (north) and proceed 1.6 mile to a weather trailer on the left side of the road (approximately 150 feet from road). Proceed from trailer in a north-northwest direction through the desert 0.35 mile to the site marker located on west side of U-3ki Crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
Empty 55-gallon drum	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 11/27/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on September 1, 1993. The empty drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. This site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

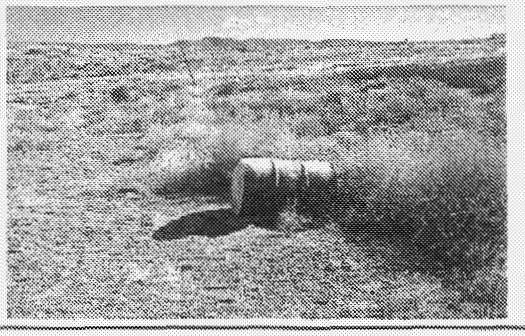
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-12
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3jL Crater
Elevation: 1211 meters (m)
Northing: 4,097,715.15 m (UTM Zone: 11) **Latitude:** 37 01.4103
Easting: 585,638.80 m (UTM Zone: 11) **Longitude:** 116 02.2869

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

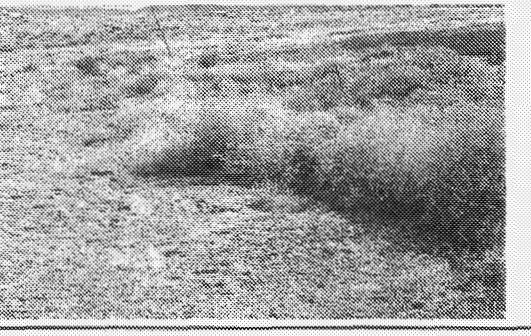
Site Access Route: Proceed (north) on Mercury Highway to Angle Road. Turn right (northeast) and proceed 1.15 miles. The U-3jL Crater is approximately 0.1 mile to the right (south) of Angle Road. No road now exists leading to the U-3jL Crater. A field must be crossed to reach the crater. The site marker is located on the west side of the crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
55-gallon drum containing small amounts of lubricating grease	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 11/27/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on October 10, 1993. The drum was removed by hand on November 27, 2001, and transported to the Area 6 Hydrocarbon Landfill for disposal. This site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

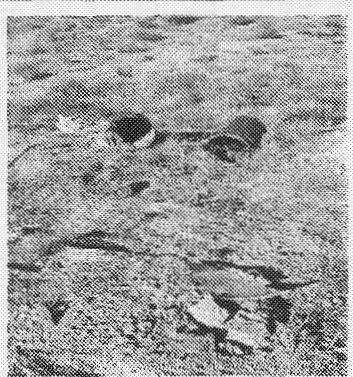
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-14
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3jy Crater
Elevation: 1205 meters (m)
Northing: 4,096,267.29 m (UTM Zone: 11) **Latitude:** 37 00.6212
Easting: 586,747.97 m (UTM Zone: 11) **Longitude:** 116 01.5488

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

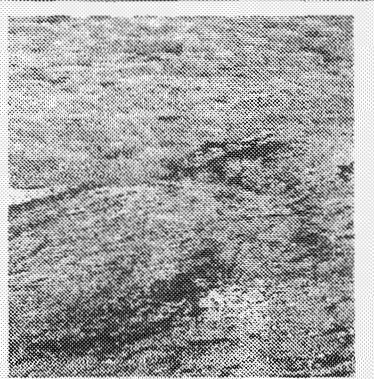
Site Access Route: Take Mercury Highway north to Tweezer Road and turn right (east). Proceed to the 3-12 Road and turn left (north) and travel 2.1 miles to dirt road on right side of road. Proceed approximately 300 feet to U-3jy Crater. The crater is located on the left side of the dirt road. The site marker is located 100 feet from the dirt road on top of a dirt mound on the southwest side of the crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
Buckets containing spilled tar	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 10/03/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on October 5, 1993. The buckets containing epoxy tar were removed by hand on November 27, 2001, and transported to the Area 6 Hydrocarbon Landfill for disposal. This site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

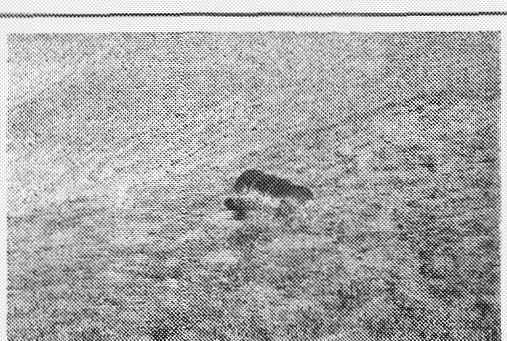
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-24
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3bj Crater
Elevation: 1219 meters (m)
Northing: 4,099,664.27 m (UTM Zone: 11) **Latitude: 37 02.4577**
Easting: 586,852.08 m (UTM Zone: 11) **Longitude: 116 01.4551**

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Proceed on Mercury Highway north to 3-03 Road. Turn right (east) on 3-03 Road to 3-05 Road. Turn right (south) on 3-05 Road to a fork in the road. Turn left (southeast) at the fork (dirt road "A" Road) and proceed for approximately 0.55 mile to a dirt road. Turn left (east) on the dirt road and proceed for approximately 0.4 mile. U-3bj is on the south side of the road. The site marker is located on the south side of crater fence.

Waste Item(s) Originally at Site	Apparent Waste Type*
Empty 55-gallon drum	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other

	
Housekeeping Site Before Closure (taken 11/27/2001)	Housekeeping Site After Cleanup (taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on February 7, 1995. The empty drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. This site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

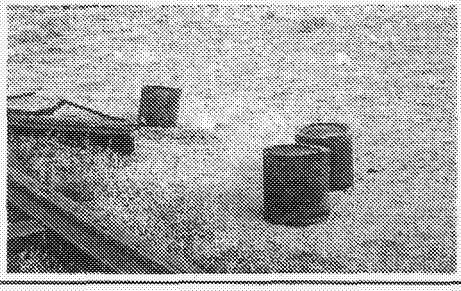
Closure Verification Date: 12/03/2001
CAS Number (if applicable): 03-22-25
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3dk Crater
Elevation: 1216 meters (m)
Northing: 4,099,080.38 m (UTM Zone: 11) **Latitude: 37 02.1364**
Easting: 587,844.03 m (UTM Zone: 11) **Longitude: 116 00.7900**

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

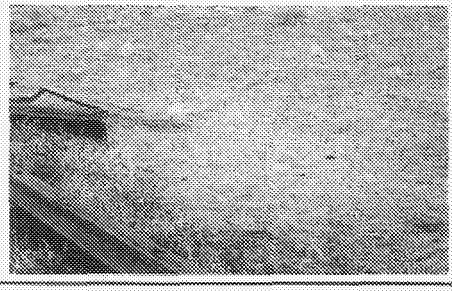
Site Access Route: Take Mercury Highway north to Angle Road. Turn right (northeast) on Angle Road and proceed to 3-07 Road (3B Road). Turn right (east) on 3-07 Road and proceed past 3-12 Road for approximately 1.0 mile to a skid trail on the north side of road. Turn left (north) on skid trail and proceed for approximately 0.6 mile to RSM 3 R 4. Turn left (west) on a skid trail and proceed for approximately 0.3 mile to U-3dk is approximately 200 feet south of the road. The site marker is located on the north side of crater fence near metal debris.

Waste Item(s) Originally at Site	Apparent Waste Type*
(3) 5-gallon containers (Two containing sodium hydroxide and one empty)	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 12/03/2001)



Housekeeping Site After Cleanup
(taken 12/03/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on October 7, 1993. The containers and material were removed by hand on December 3, 2001, and transported to the Area 9 U10c Landfill for disposal. The site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

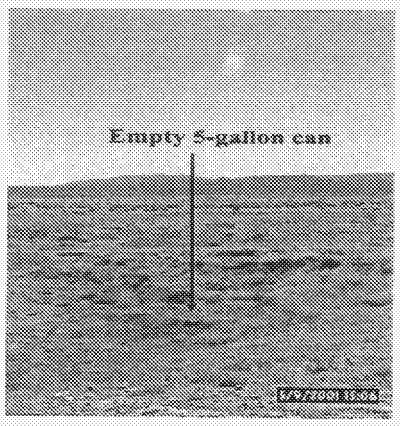
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-26
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3as Crater
Elevation: 1222 meters (m)
Northing: 4,100,347.77 m (UTM Zone: 11) **Latitude:** 37 02.8340
Easting: 585,642.26 m (UTM Zone: 11) **Longitude:** 116 02.2666

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

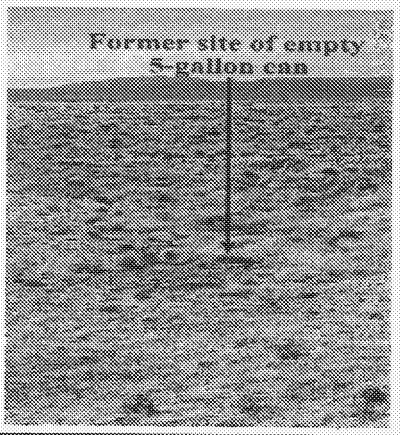
Site Access Route: Take Mercury Highway north to 3-03 Road. Turn right (east) on 3-03 Road and proceed approximately 0.8 mile to a dirt road on south side of road. Turn south on the dirt road. U-3as Crater will be on the east side of the road. The site marker is located on the west side of the crater.

Waste Item(s) Originally at Site	Apparent Waste Type*
Empty 5-gallon can	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/09/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on October 7, 1993. The empty 5-gallon can was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. This site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

Closure Verification Date: 11/29/2001
CAS Number (if applicable): 03-22-30
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3kz
Elevation: 1237 meters (m)
Northing: 4,102,441.48 m (UTM Zone: 11) **Latitude:** 37 03.9730
Easting: 584,404.35 m (UTM Zone: 11) **Longitude:** 116 03.0877

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Proceed on Mercury Highway north to 7-01 Road. Turn right (northeast) onto 7-01 Road and proceed 0.1 mile from Mercury Highway. Site is on the north side of the road, 60 feet east of the cement pad. Located near the U-3kz Crater. The site marker is located in the middle of the debris pile, 140 feet north and 60 feet east of the southeast corner of the concrete pad.

Waste Item(s) Originally at Site	Apparent Waste Type*
Wood debris, empty non-pressurized aerosol cans, scrap metal, cable, wire and electrical conduit.	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other

Housekeeping Site Before Closure
(taken 05/09/2001)

Housekeeping Site After Cleanup
(taken 11/29/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on August 31, 1993. The debris was removed on November 29, 2001, using a front-end loader and transported to the Area 9 U10c Landfill for disposal. The site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

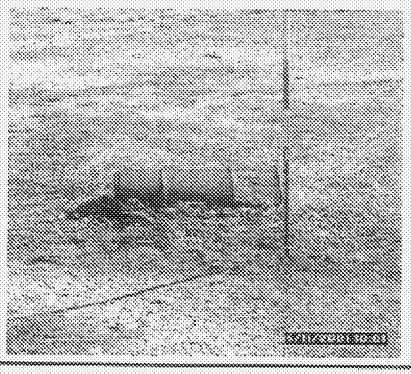
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-22-34
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3ay Crater
Elevation: 1224 meters (m)
Northing: 4,100,570.00 m (UTM Zone: 11) **Latitude: 37 02.9520**
Easting: 586,040.50 m (UTM Zone: 11) **Longitude: 116 01.9964**

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

Site Access Route: Take Mercury Highway north to 3-03 Road. Turn right (east) and proceed to 3-05 Road (south). Opposite 3-05 Road (south), turn left (north) and proceed along Crater/Rad Control fence approximately 500 feet. Located near the U-3ay Crater. The site marker is located south of the drum; 27 feet northwest of the drain.

Waste Item(s) Originally at Site	Apparent Waste Type*
Empty 15-gallon drum	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/11/2001)

Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on October 7, 1993. The empty drum was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. This site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

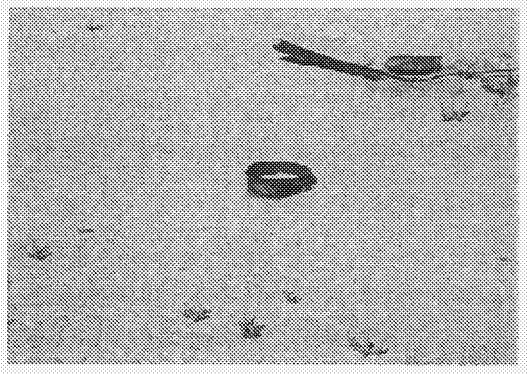
Closure Verification Date: 10/03/2001
CAS Number (if applicable): 03-22-37
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3bu Crater
Elevation: 1225 meters (m)
Northing: 4,100,307.82 m (UTM Zone: 11) **Latitude: 37 02.8017**
Easting: 587,574.72 m (UTM Zone: 11) **Longitude: 116 00.9631**

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

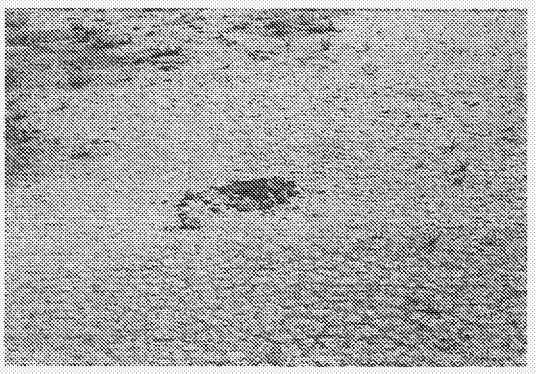
Site Access Route: Take Mercury Highway north to 3-03 Road. Turn right (east) on 3-03 Road and proceed approximately 2.0 miles. There is a "Caution Radioactive Material" sign on the right (south) side of the road, turn right just after the sign and follow the line of signs for approximately 0.05 mile to Crater U-3bu. The site marker is located on the northeast side of the U-3bu Crater fence.

Waste Item(s) Originally at Site	Apparent Waste Type*
Partially buried 5-gallon bucket	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 10/03/2001)



Housekeeping Site After Cleanup
(taken 12/05/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first Identified by an International Technology Corporation (IT) field crew in a site survey performed on August 24, 1995. The bucket was removed by hand on October 3, 2001, and transported to the Area 9 U10c Landfill for disposal. The site is currently clear of all waste material.

X No Further Action Required at Housekeeping Site

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

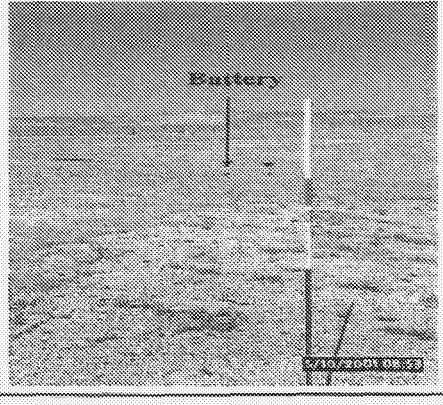
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-24-08
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3kq Crater
Elevation: 1215 meters (m)
Northing: 4,098,142.52 m (UTM Zone: 11) **Latitude:** 37 01.6423
Easting: 585,478.21 m (UTM Zone: 11) **Longitude:** 116 02.3923

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

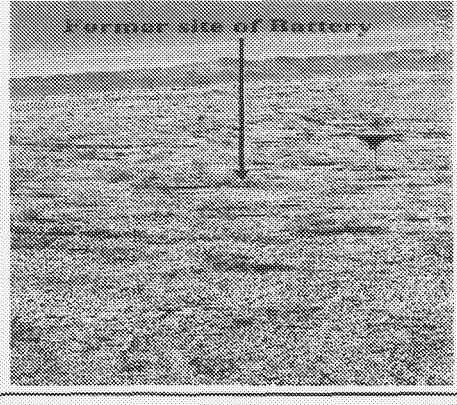
Site Access Route: Mercury Highway north to Angle Road and turn right (northeast) onto Angle Road. Proceed toward 3-07 Road, turn left (west) onto unnamed dirt road across from 3-07 Road. Proceed approximately 500 feet west to U-3kq Crater. The site marker is located at the east side of the crater fence.

Waste Item(s) Originally at Site	Apparent Waste Type*
Battery	Recyclable

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/10/2001)



Housekeeping Site After Closure
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on December 6, 1994. The battery was removed by hand on November 27, 2001, and transported to Fleet Operations to be recycled. The site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/13/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

Sectored Housekeeping Site Closure Verification Form

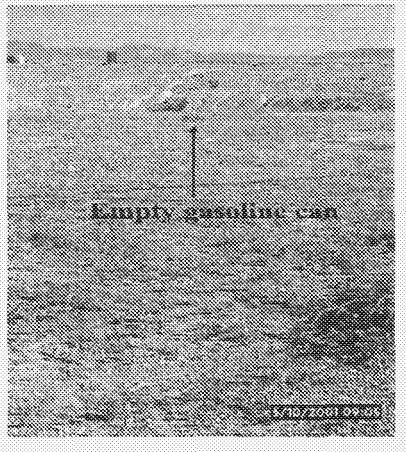
Closure Verification Date: 11/27/2001
CAS Number (if applicable): 03-99-10
CAU Number (if applicable): 343
Sector Designation: NTS
Housekeeping Site General Location: Nevada Test Site, U-3gd Crater
Elevation: 1215 meters (m)
Northing: 4,098,418.77 m (UTM Zone: 11) **Latitude:** 37 017895
Easting: 585,879.56 m (UTM Zone: 11) **Longitude:** 116 02.1197

Coordinate/Elevation Data Obtained from: North American Datum, 1927.

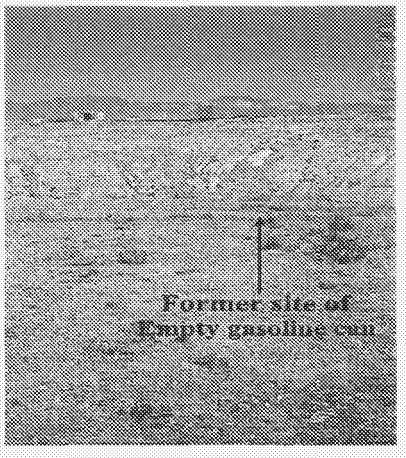
Site Access Route: Mercury Highway north to Angle Road. Turn right (northeast) on Angle Road and proceed approximately 1.58 miles to "C" road sign. The site is located 220 feet west of sign.

Waste Item(s) Originally at Site	Apparent Waste Type*
Empty 5-gallon gasoline can	Ordinary

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other



Housekeeping Site Before Closure
(taken 05/10/2001)



Housekeeping Site After Cleanup
(taken 11/27/2001)

Current Site Description/Observations: This Corrective Action Site (CAS) was first identified by an International Technology Corporation (IT) field crew in a site survey performed on June 27, 1995. The empty gasoline can was removed by hand on November 27, 2001, and transported to the Area 9 U10c Landfill for disposal. This site is currently clear of all waste material.

X **No Further Action Required at Housekeeping Site**

Marcus Dixon	/s/ Signature on file	12/3/2001
Corrective Action Coordinator/Designee	**Signature**	**Date**

APPENDIX C
CAS SPECIFIC SAMPLING AND ANALYSIS PLAN

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APPENDIX C TABLE OF CONTENTS

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SAMPLING STRATEGY FOR CORRECTIVE ACTION UNIT 343: AREAS 1, 3, & 4 HOUSEKEEPING SITES

Corrective Action Unit (CAU) 343 consists of 18 Corrective Action Sites (CAS) located in Areas 1, 3 and 4 of the Nevada Test Site. However, only four sites require verification samples to show that all waste has been removed. Soil samples will be collected at each CAS from the surface using hand trowels.

All samples will be labeled with a unique sample number using the following nomenclature:

032207-0-V

where:

032207 is the CAS number

0 is the sample depth in feet

V represents type of sample

Quality control samples (blind replicates) will be collected. They will be labeled with their own distinct sample number so that the laboratory will not be able to identify them as quality control samples.

All samples will be collected with disposable sampling scoops and placed in appropriate sample containers. PPE involved with characterization sampling will include steel-toed boots, safety glasses, chemical resistant gloves and/or work gloves. Hard hats are required when overhead hazards exist. The disposable sampling scoops and latex gloves will be placed into the trash so decontamination will not be an issue. Samples will be placed on ice in coolers and transported under chain-of-custody to Environmental Technical Services in Mercury, Nevada for shipment to an off-site laboratory. Samples may be transported directly to the analytical laboratory by BN ER personnel during weekends or off-hours.

Soil samples will be preserved by cooling to 4°C. Trip blanks will be preserved with hydrochloric acid to a pH <2, then cooled to 4°C.

A Chain-of-Custody form will be filled out for each sample batch prior to shipment. Additionally, a Radiological Clearance Form (Green Tag) will be issued for each sample batch for shipment within and off the NTS.

The following tables show the sampling parameters for each CAS.

CAS No. 01-24-03

SAMPLE ID(s)	PARAMETERS	NUMBER OF QUALITY CONTROL SAMPLES	SAMPLE TOTAL	ANALYTICAL METHOD	SAMPLE CONTAINER
012403-0-V	TCLP Metals (Lead)		1	EPA 6010	250 ml glass/sample

CAS No. 03-22-25

SAMPLE ID(s)	PARAMETERS	NUMBER OF QUALITY CONTROL SAMPLES	SAMPLE TOTAL	ANALYTICAL METHOD	SAMPLE CONTAINER
032225-0-V	pH		1	EPA 9045	250 ml glass/sample

CAS No. 03-22-14

SAMPLE ID(s)	PARAMETERS	NUMBER OF QUALITY CONTROL SAMPLES	SAMPLE TOTAL	ANALYTICAL METHOD	SAMPLE CONTAINER
032214-0-V	TPH Full Scan		1	EPA 8015M	250 ml glass/sample; zero HS

CAS No. 03-22-07

SAMPLE ID(s)	PARAMETERS	NUMBER OF QUALITY CONTROL SAMPLES	SAMPLE TOTAL	ANALYTICAL METHOD	SAMPLE CONTAINER
032207-0-V	TPH Full Scan		1	EPA 8015M	250 ml glass/sample; zero HS
	Total VOCs		1	EPA 8260	2-120 ml glass/sample; zero HS
	Total SVOCs		1	EPA 8270	250 ml glass/sample

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APPENDIX D
COMMENT RESPONSE DOCUMENTATION

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DOCUMENT REVIEW SHEET

1. Document Title/Number **CR for Housekeeping Category CAU 343**
2. Document Date **January 2002**
3. Revision Number **0**
4. Originator/Organization **BN Environmental Restoration**
5. Responsible DOE/NV ERP Subproject Mgr.
6. Date Comments Due **January 24, 2002**
7. Review Criteria **Nevada Division of Environmental Protection, Bureau of Federal Facilities**
8. Reviewer/Organization/Phone No. **(775) 687-4670**

9. Comment Number/ Location	10. Type[a]	11. Comment	12. Comment Response
Sec. 1.0, page 1, 3rd paragraph, last sentence	M	For tracking purposes, specify the CAU (CAU 357) to which CASs 01-99-01 and 04-26-03 were transferred.	Text in Sec. 1.0, paragraph 1, 3rd paragraph has been modified to read "CAU 357".
Sec. 2.2.1, page 7	M	Remove the sentence "The site was visited by NDEP and was determined that it required no further action." NDEP visited the site on November 19, 2001, and verified that no drums were present at the site. NDEP observed that scrap metal was present at the site and was informed that soil samples had been collected at the site. Based on the results of soil samples collected in the area where drums were previously located, NDEP concurred with the proposal for no further action at this site. Verbiage, which reflects the above-mentioned visit, may be added to this section.	Verbiage was added in Sec. 2.2.1, page 7 that reflects the NDEP visit.
Secs 2.2.2 and 2.2.4, page 10	M	Additional details regarding the collection of soil samples are necessary (sample locations, sample collection methods, depth of samples collected, rationale for what the samples represent, etc.)	Details were added to reflect the collection of soil samples for each CAS in the text.
Sec. 2.2.5, page 10	M	Explain why results which exceeded VOC and SVOC PRGs were not considered in the waste disposal decision)i.e., were concentrations less than TCLP limits?)	Explanation was added to text in Sec. 2.2.5, page 10
Sec. 2.2.6, page 11	M	The drum at this site was empty; additional details regarding the collection of soil samples are necessary (sample locations, sample collection methods, depth of samples collected, rationale for what the samples represent, etc.)	Details were added to text regarding the collection of soil samples.

Sec. 2.2.7, page 11	M	Clarify whether a soil sample was collected at this site, or whether the contents of the drum were sampled.	Clarification was added in the text that the contents of the drum was sampled.
Sec. 2.2.8, page 11	M	Clarify whether a soil sample was collected at this site, or whether the contents of the 5-gallon buckets sampled. Also, explain why results which exceeded SVOC PRGs were not considered in the waste disposal decision.	Clarification was made in the text of where the sample was collected. Explanation was also added to text for results that exceeded SVOC PRGs for waste disposal decision.
Sec. 2.2.9, page 11	M	The drum at this site was empty; additional details regarding the collection of soil samples are necessary (sample locations, sample collection methods, depth of samples collected, rationale for what the samples represent, etc.).	Details were added to the text explaining the sampling collection procedure taken at this CAS.
Sec. 2.2.11, page 11	M	Additional details regarding the collection of samples are necessary (sample locations, sample collection methods, depth of samples collected, rationale for what the samples represent, etc.).	Details were added to the text explaining the sampling collection procedure taken at this CAS.
Secs. 2.2.13-2.2.16 page 12	M	The drums/containers at these sites were empty; additional details regarding sample collection are necessary (sample location, sample collection method, rationale for what the sample represents, etc.).	Details were added to the text explaining the sampling collection procedures taken at the CASs.
Secs. 2.3.1, 2.3.4, page 13	M	Provide additional details regarding the verification samples collected at these sites (sample locations, depths, etc.).	Details were added to the text regarding details for the collection of verification samples at these CASs.
Secs. 2.3.7, 2.3.9, page 18	M	Provide additional details regarding the verification samples collected at these sites (sample locations, depths, etc.).	Details were added to the text regarding details for the collection of verification samples at these CASs.
Sec. 2.3.13, page 19	M	The contents of the partially buried bucket are not presented. Explain why verification sampling was not performed at this site.	Additional information was added to text addressing the contents of the bucket. Explanation for why verification sampling was not performed was addressed in the text.
Sec. 5.1, 4th bullet, page 25	M	Based on waste disposition as described in Section 3.0, no soil exceeding the TPH action level was disposed. Define which CASs exceed the TPH action level of 100mg/kg.	CASs were added to the text that exceeded the TPH action level of 100 mg/kg.
General comment	M	Adding a CAS specific Sampling and Analysis Plan to document	A CAS specific Sampling and Analysis Plan was added in as Appendix C.

[a] Comment Type: M = Mandatory, S = Suggested

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