K E L L C O

FINAL REPORT

SOIL CLEARANCE TESTING FOR LEAD

PG&E SUBSTATION E
408 LINDA AVENUE
PIEDMONT, CA

2/19/04

California: 3137 Diablo Avenue • Hayward, CA 94545-2701• (510) 786-9751 • fax (510) 786-9625
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FINAL REPORT

SOIL CLEARANCE TESTING FOR LEAD

DATE: February 19, 2004

KELLCO JOB # 0008-14

CLIENT: PG&E
PO Box 770000, Mail Code B24
San Francisco, CA 94177

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

Executive Summary

Soil containing lead from paint around the Pacific Gas & Electric (PG&E) property formerly known as Substation E was excavated and disposed at a permitted disposal site. Remaining soil was tested by KELLCO and by PG&E. The lead concentrations in the remaining soil range from 33.4 to 150 milligrams per kilogram (mg/kg) and averaged 98 mg/kg. The residual lead in soil complies with the Alameda County Department of Environmental Health (ACDEH) cleanup criterion for the site (average residual lead less than 147 mg/kg). The excavation was backfilled with clean imported soil. The soil remediation was completed in accordance with the workplan approved by ACDEH.

Introduction

In September 2000, KELLCO assisted in the preparation of a Workplan (Appendix A) for PG&E to support the planned equipment removal from the inactive Piedmont Substation "E," located at 408 Linda Avenue in Piedmont, California. In preparation for property sale, the Workplan included the removal of distribution

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substation equipment (inside), cleanup of the building, and removal of lead-contaminated soil outside. In a meeting with Ms. Susan Hugo at the site during September 2000, PG&E submitted the Workplan to the Alameda County Department of Environmental Health (ACDEH), which oversaw the cleanup. In November 2000 KELLCO and PG&E developed a Soil Remediation Plan Addendum (Appendix B) that addressed comments on the Workplan from Susan Hugo of ACDEH. The Addendum modified the cleanup level to 147 mg/g, clarified remediation completion criteria, and identified six distinct areas of the property for evaluation individually after removal of lead contaminated soil. Susan Hugo of ACDEH verbally approved the Workplan and Addendum prior to PG&E proceeding with the cleanup. Subsequently, Ms Hugo verbally approved using an average residual lead concentration for comparison with the cleanup criterion.

This report provides the overall approach and procedures used to remediate soil and conduct sampling subsequent to the remediation.

Background

The Piedmont Substation "E" was originally built in 1926 to supply direct current power to the trolley line in the city of Piedmont. The substation was also used to convert 12kV to 4kV electric power that served residents and businesses in Piedmont and Oakland between 1926 and 1991.

Previous Work

Between October 1999 and March 2000, PG&E's Technical and Ecological Services (TES) tested soil at Piedmont Substation "E." Results of the 10/1999-3/2000 sampling are presented in a report entitled Site Investigation at PG&E's Piedmont Substation "E," (TES 2000), which PG&E submitted to ACDEH on July 20, 2000. TES 2000 identified the presence of lead in the soil surrounding the building above levels typically considered acceptable for residential use.

Cleanup of the Soil

Decon Environmental Services, Inc., ("Decon") implemented the soil excavation and disposal based upon the Work Plan and Soil Remediation Plan Addendum, which called for removal of lead contaminated soil. Decon removed the soil and KELLCO and PG&E tested the remaining on-site soil until the applicable clearance levels were achieved. Results of the final clearance testing are provided in Table 2 below and lab results from all soil samples are attached in Appendix C.

PG&E contracted Decon to excavate the soil, which was manifested and disposed at Chemwaste Management at Kettleman Hills, California. Manifests documenting the proper disposal of the soil are on file with PG&E and DTSC

Clearance Sample Collection and Analysis

Clearance samples were taken by KELLCO's licensed Department of Health Services (DHS) Lead Consultant and PG&E personnel. The sampling locations were based on a grid format developed by KELLCO to provide sampling that was representative of the entire area, as follows:

Table 1.

AREA	MINIMUM SAMPLES
East side yard	4 samples
North courtyard	2 samples
North yard above courtyard	2 samples
Northwest yard	1 sample
West side yard	2 samples
Front yard	1 sample

KELLCO's sampling protocol called for collection of soil using a clean disposable spoon for each sample. Samples were discreet (i.e., not composite). Approximately 50 milliliters of soil was placed into a clean sampling tube, which was sealed and transported directly to the laboratory, under chain of custody procedures.

Samples were analyzed by atomic absorption (AA) analysis. Clearance soil samples were analyzed in KELLCO's laboratory or at STLChromaLab of Pleasanton, Ca. Copies of the laboratory reports as included in Appendix .C

Final Clearance Testing Results

Clearance testing was implemented in stages as the work progressed. Figure 1 (included in Appendix D) shows the clearance sample locations. The following table summarizes the results of lead clearance test samples, including the amount of soil that was removed prior to achieving targets concentrations.

Table 2.

Map#	Lab Login #	Field #	Description of Location	Excavation Depth (inches)	Lead PPM (mg/kg)
A	0001-06-0100-001	TES 606A	Southwest Corner	24	150
B	0001-06-0100-002	TES 606B	West side yard	24	150
C	010523J-3	KSI 523-03	Next to north corner of building	20	47.94
D	010523J-2	KSI 523-02	Above courtyard wall to northeast	20	<33.56
E	010207J-4	KSI S02074	Above courtyard, 17' from S wall, 17' from E sidewalk	12	65.07
F	010207J-2	KSI S02072	Courtyard, 7' from back wall / 15' E wall	12	100.94
G	010523J-1	KSI 523-01	Courtyard northeast of sidewalk	25	33.4
H	010322L-5	KSI 05	East side	14	177.85
I	010202L-2	KSI 202-02	After 12" removal, East side, Northeast	12	41.67
J	010119Q-2	KSI S02	East yard, southeast quad	6	96.93
K	010322L-6	KSI 06	East yard	6	134.54
L	010207J-8	KSI S02078	Front next to bldg, 16' from West corner	12	139.95
AVERAGE SOIL CONCENTRATION OF DISCREET AREAS TESTED					**97.65**

In the above table a sample field number starting with KSI means sample was taken by KELLCO Services, Inc. personnel and analyzed in KELLCO's laboratory. Sample field numbers starting with TES means that that sample was taken by PG&E personnel and analyzed by STL Chromalab.

The referenced map showing final sample locations is included in Appendix D. The above data was used as input to the "LEADSPREAD" program, which evaluates the statistical potential for elevated blood lead levels based on environmental factors, including soil. Results are included in Appendix D. Leaving all other factors at the DTSC's default values and entering the average soil concentration, the program shows a 99% confidence of blood lead less than 10.1 µg/dl in a pica[1] child which indicates that the residual lead is at generally acceptable concentrations for residential sites..

REPLACEMENT SOIL

To further reduce potential for contact and exposure, excavated soil was replaced with soil certified the supplier to be free of asbestos, pesticides, hydrocarbons and Title 22 heavy metals above California acceptable levels. The courtyard was filled with ¾ inch gravel from Dumbarton Quarry Associates, Plant 2, Hayward, and the remainder of the yard was backfilled with soil from both American Soil Products of Berkeley, California, and R.C. Knapp Inc. Engineers, which provided documentation of soil testing and analysis. Their certification of the soil is included as Appendix E.

Air Monitoring

During soil excavation, air monitoring was implemented to document that airborne levels of lead were below OSHA levels requiring personal protective equipment for workers. Monitoring sample results were below OSHA limits. Air monitoring results are provided in Appendix F.

[1] A pica child is one that habitually picks up environmental objects and puts them in his/her mouth. These objects often include soil and paint. These children are considered the highest risk for environmental lead paint exposure.

Conclusion

PG&E excavated soil containing elevated lead at Substation E. The residual lead in soil is below the ACDEH criterion of 147 (mg/kg) average lead concentration. The removed soil was disposed off-site at the ChemWaste facility. The replacement topsoil was supplier certified as not containing hazardous constituents. . Please call me if you have any questions about this report.

Sincerely,

KELLCO Services, Inc.

Bonnie Lee Kellogg
DHS IMSD 762, REA 0166

Appendices:

A. Work Plan for Equipment Removal and Cleanup, Sept., 2000
B. Soil Remediation Plan of November, 2000
C. Laboratory Reports for soil testing after excavation
D. Clearance Sampling Map and LEADSPREAD Results
E. Soil Certification-Replacement Soil
F. Lead Air monitoring results

APPENDIX A

WORKPLAN FOR EQUIPMENT REMOVAL AND CLEANUP

K E L L C O

WORKPLAN
for
Equipment Removal and Cleanup
of
Pacific Gas and Electric Company Substation "E"

Piedmont, CA

Prepared by:

KELLCO Services, Inc.

3137 Diablo Avenue • Hayward, CA 94545-2701 • (510) 786-9751 • fax (510) 786-9625 • email kellco@kellco.com
Asbestos • Leaded Paint • Indoor Air Quality • Consulting • Laboratory • Site Assessments
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Table of Contents

1.0INTRODUCTION

This workplan was prepared for Pacific Gas and Electric Company to support the planned equipment removal from the inactive Piedmont Substation "E," located at 408 Linda Avenue in Piedmont, California. Distribution substation equipment is being removed to prepare it for sale, and it is anticipated that a new owner will eventually redevelop the property.

This plan presents the overall approach to environmental closure of the facility in accordance with applicable regulations. Included is the approach and procedures for cleaning up hazardous materials in the building and soil that were identified during previous testing at the property, as described in a report by Pacific Gas and Electric Company Technical and Engineering Services Department (TES 2000). The hazardous materials identified previously at the property are listed below.

- Oil residues on surfaces and equipment inside the building. Some of these areas contain polychlorinated biphenyls (PCBs) at trace levels, most below the federal cleanup criterion.
- Battery corrosion stains in a small area inside the building.
- Lead paint in surface soil outside the substation.
- Non-friable asbestos-containing materials will be encountered during the equipment removal.

It is anticipated that a variety of waste materials will require management during the planned equipment removal of the Piedmont Substation "E." This workplan presents guidelines for the cleaning and removal of electrical equipment, cleaning of residual PCBs, removal of asbestos containing materials, removal of chipping and peeling lead based paints and removal of lead contaminated soil.

1.1 Site Description And Background

Piedmont Substation "E" is located at 408 Linda Avenue in Piedmont, California. The substation contains a two-story building that formerly housed the electrical

equipment. Some of the former substation equipment has been removed, and the remaining de-energized equipment is inside the building. The property is located in a residential neighborhood and is partially surrounded by fencing.

The Piedmont Substation "E" was originally built in 1926 to supply direct current power to the trolley line in the city of Piedmont. The substation was also used to convert 12kV to 4kV electric power which served residents and businesses in Piedmont and Oakland between 1926 and 1991. It is not uncommon for substation facilities of this vintage to have some used equipment containing PCB insulating oil, lead-based paint or asbestos.

1.2 Previous Work

Between October 1999 and March 2000, Pacific Gas and Electric Company's Technical and Ecological Services (TES) performed testing at Piedmont Substation "E." The purpose of the investigation was to determine whether hazardous materials associate with the past utility operations at the property are present in the building and surrounding soil. Results of the 10/99-3/00 sampling were presented in a report entitled Site Investigation at PG&E's Piedmont Substation "E," which will be referred to in this document as "TES 2000." The TES 2000 report confirmed the presence of asbestos, lead based paint and PCBs above levels that Pacific Gas and Electric Company would allow to remain when closing the facility.

2.0PROJECT SUMMARY

Pacific Gas and Electric Company contractors will remove the equipment and cleanup Piedmont Substation "E." The objective of the cleanup is to leave a vacant property that is ready to be redeveloped by a new owner. Materials integral to the building that may contain asbestos and lead will not be removed. These may include flooring, paint and other construction materials.

The work presented in this document will be conducted in two stages as outlined below:

2.1 Equipment Removal and Cleanup of Building Interior

This stage of the project involves cleanup and removal of equipment and residual materials from the building. This stage also includes testing and cleaning the motor room sump area.

2.2 Soil Cleanup

Soil surrounding the building that contains lead concentrations above the residential soil cleanup criteria of 255 milligrams per kilogram (mg/kg) will be removed. Confirmation testing will be conducted for seventeen metals, including lead, designated by the State of California in Title 22 as hazardous. The purpose of testing for other metals is profiling the soil for off-site disposal.[1]

3.0CLEANUP AND SAMPLING PLAN

3.1 Equipment Removal and Cleanup of Building Interior

3.1.1 Cleanup Objectives

- The goal is to clean the building to below regulatory threshold levels for known chemicals.

3.1.2 Pre-Removal Cleanup and Sampling

- PCB wipe sampling will be conducted inside the building to confirm the TES 2000 report. Cleaning of machinery will be based on the sample results as follows:

- The machinery and surfaces that test for PCBs at greater than $10\mu g/100cm^2$ will be cleaned by the double wash/rinse method described in 40 CFR 761.360. Once the machinery has been cleaned according to the prescribed method, it will be managed in accordance with the regulations.

- PCB cleanup levels for high contact solid surfaces and low contact indoor surfaces will be $10\mu g/cm^2$ as indicated in 40 CFR 761.125.

- Sampling in the motor room sump will be conducted by drilling a soil boring at the proposed location shown in Figure 2. Drilling will continue to ten feet or refusal, whichever occurs first. Two samples will be taken, one at 5 feet and one at 10 feet or refusal. The samples will be analyzed for PCBs (EPA Method 6080/608), "CAM 17 Metals" (EPA Method 6010), and Total Extractable Petroleum Hydrocarbons

[1] These metals are usually referred to as "CAM 17," after the California Assessment Manual that preceded Title 22.

(TEPH, EPA Method 8015 modified for kerosene, diesel and motor oil).

- Drilling, collection of samples and sealing of the borehole will be supervised by a California registered geologist, who will log the boring using the Unified Soil Classification System. Immediately following sampling, the borehole will be sealed to the ground surface using slurry of cement and bentonite. Further action will depend on sample results.

3.1.3 Hazardous Materials Management during Equipment Removal

Asbestos and lead paint cleanup will be accomplished by a contractor and workers trained and licensed to perform the work. Air monitoring will be performed to establish that airborne levels of asbestos and lead during cleanup are below the OSHA action levels. Additional monitoring will be performed as needed. Depending on air monitoring results, cleanup of asbestos and lead cleanup may be conducted within containment with negative pressure.

- Chipping and peeling paint will be removed from equipment, collected with HEPA filtered vacuum cleaners and managed as hazardous waste.

- Asbestos materials that are part of the equipment being removed will be managed in accordance with applicable requirements. Materials used in the cleanup process will be collected and managed in accordance with applicable requirements.

- The battery room floor will be washed with an alkali solution.

3.1.4 Post Removal Cleanup and Sampling

- Confirmatory lead wipe samples on the floor in the battery acid area will be taken after the area is clean.

- Asbestos air samples will be taken after the machinery has been removed. The clearance criteria is .01 fibers/cc (10 times below the OSHA action level) with analysis by Phase Contrast Microscopy (PCM,

EPA Method 7400).

- The number and locations of confirmation samples will be taken in accordance with EPA guidelines.

3.2 Soil Remediation

3.2.1 Cleanup Objectives

The soil cleanup level is 255 ppm lead. This cleanup goal is recommended by Department of Toxic Substances Control (DTSC), for lead in residential soil.

3.2.2 Pre-Cleanup Sampling

Soil sampling was conduced by Pacific Gas and Electric Company in an extensive study (TES 2000). The lead results for soil are shown in Figure 1. Five (5) additional Title 22 ("CAM 17") metals samples will be taken for soil profiling prior to excavation and disposal

3.2.3 Cleanup Activities

The Contractor will remove six inches of topsoil from the grounds around the building exterior, as indicated in Figure 2. Additional soil samples may be taken as necessary to verify excavation limits, and analyzed for lead using EPA method 6010. The excavation activities will be monitored visually for dust, and water will be applied to the soil for dust control as needed. Excavation will not extend past the PG&E property.

3.2.4 Verification Sampling and Excavation Closure

Following removal the soil will be tested using five composite samples of 10 sub-samples each. Each sample will represent a subarea of the property surrounding the building, so that all excavated areas are sampled. If a subarea sample exceeds the cleanup goal of 255 mg/kg, then six more inches of soil will be excavated from that subarea and it will be resampled using the method described above. Once the entire property is confirmed to meet the cleanup goal, the excavations will be backfilled to grade with clean imported fill.

3.3 Notifications

WHO	WHAT	WHEN

Department Toxic Substances Control (DTSC)	Hazardous waste generator number for the site	Prior to removal of any hazardous materials from the site
Bay Area Air Quality Management District (BAAQMD)	NESHAP notification for asbestos related work	Ten (10) days prior to the start of work
Cal-OSHA	Notification of intention for asbestos related work	24 hours prior to the start of abatement
Underground Services Alert (USA)	Notification prior to boring Notification prior to excavation	2-3 days prior to boring 2-3 days prior to excavation

- As the project develops, other agencies may be notified as appropriate.

4.0HEALTH AND SAFETY

4.1 Contractor Personnel

- All site personnel training will be consistent with applicable Federal, State and local regulations as a minimum. All personnel involved in site activities shall have certificates or written assurances of competency, qualifications or training as required by law. All training records must be available for inspection.

- All contractors performing abatement for this project will submit to Pacific Gas and Electric Company a Health and Safety Plan.

4.2 Public Health and Safety

Equipment removal and cleanup of the materials at the Piedmont

Substation "E" will proceed in a manner to prevent any health threat or nuisance to the public beyond that of a normal construction project. Additional precautions that Pacific Gas and Electric Company are taking for this project include:

- Pacific Gas and Electric Company has retained KELLCO Services, Inc., a third party environmental consultant, to provide independent environmental and health and safety oversight during the project.

- A temporary fence will be installed around the site perimeter to discourage trespassers. This fence will temporarily close the pathway that crosses the property between Linda Avenue and Oakland Avenue.

- A traffic plan will be prepared with a transport plan for the large equipment required for this project. The traffic plan may have some of the following elements: temporary closure of Linda Avenue while removing heavy equipment from the building, sidewalk closure directly in front of Piedmont Substation "E". A safety/traffic monitor (flagman) will be available as needed to facilitate vehicle and pedestrian traffic.

- Work hours will comply with City of Piedmont requirements that are intended to minimize disturbance of adjacent residence.

- Water will be used during soil excavation to ensure that soil excavation does not create dust.

- During soil excavation, KELLCO will provide perimeter air monitoring to verify that airborne levels of lead are well below regulatory limits. Dust control measures are expected to suppress airborne lead. However, if the perimeter monitoring shows the airborne lead above $15\mu g/m^3$, which is half the OSHA action level, work will be suspended until more aggressive dust control measures can be employed.

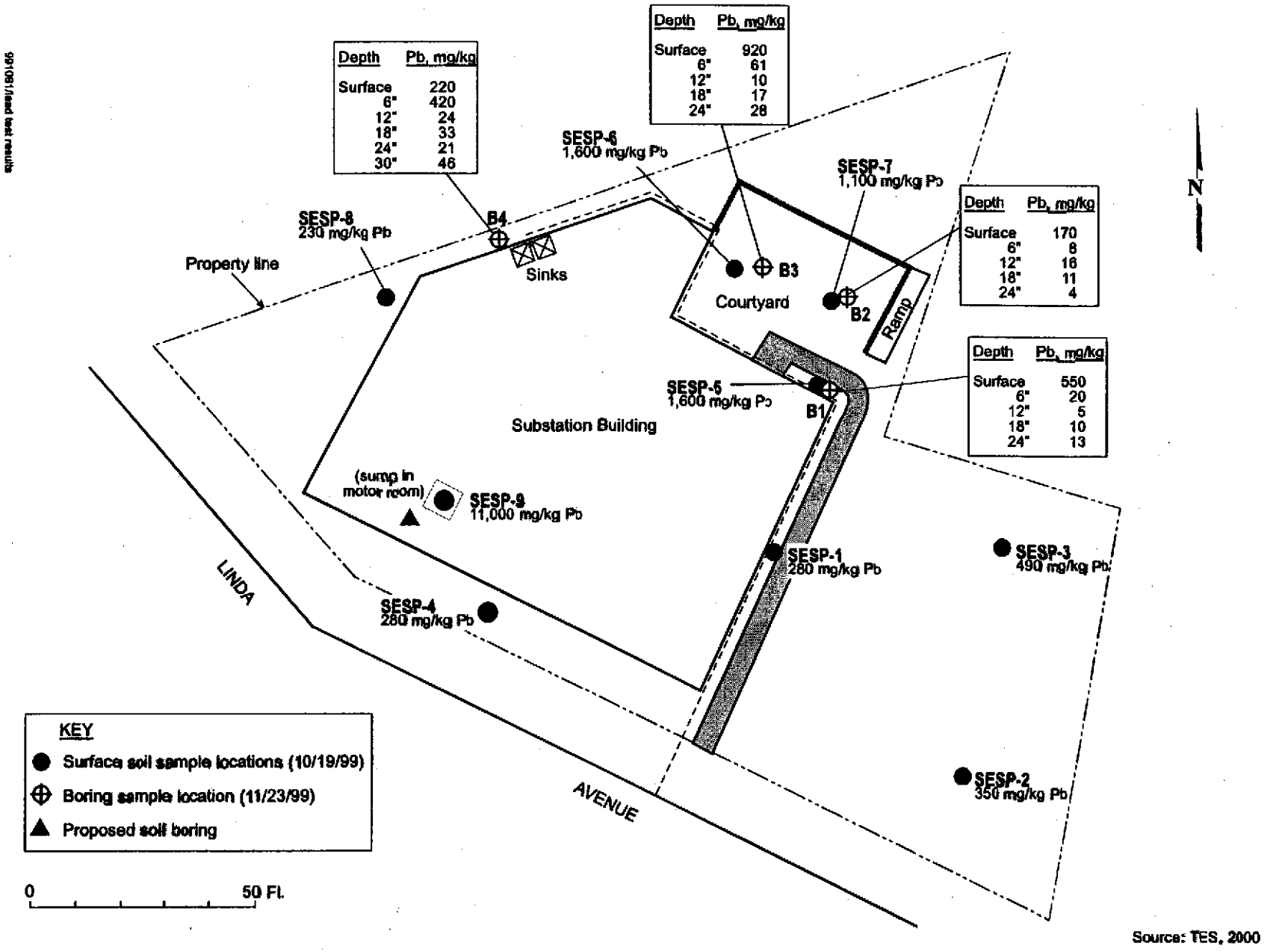
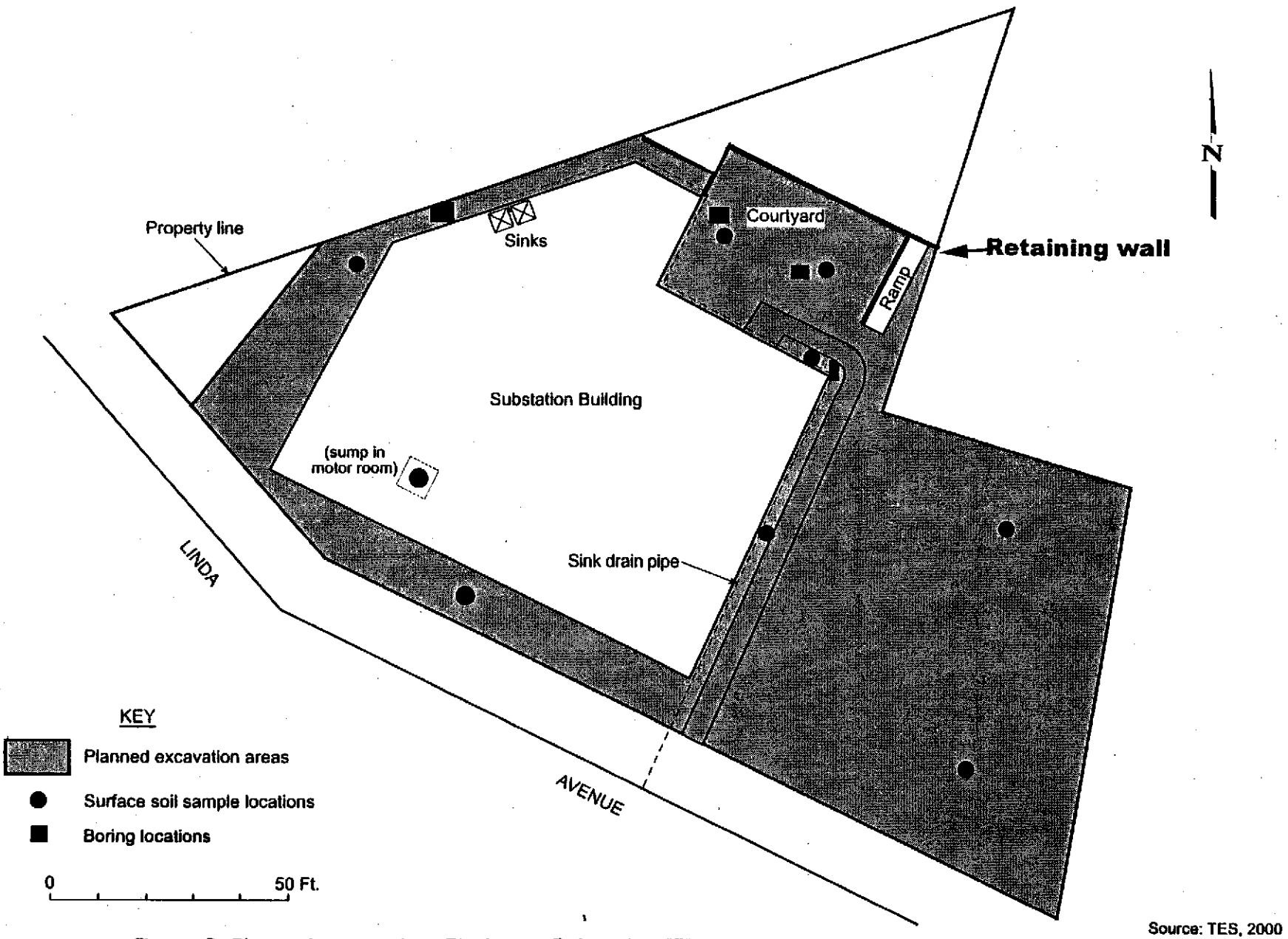


Figure 1: Lead test results in soil, Piedmont Substation "E"



Source: TES, 2000

Figure 2: Planned excavation, Piedmont Substation "E"

APPENDIX B

SOIL REMEDIATION PLAN

Pacific Gas and Electric Company

Power Generation

245 Market Street
San Francisco, CA 94105

Mailing Address
Mail Code N13Σ
P.O. Box 770000
San Francisco, CA 94177

January 10, 2001

Ms. Susan Hugo
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

RE: Resubmittal of Soil Remediation Plan Addendum
PG&E Substation "E"
Piedmont, California

Dear Ms. Hugo:

Attached please find the soil remediation plan with corrected site plan.

If you have any questions, please contact me at (415) 973-0707.

Sincerely,

Sara Everitt

Attachment

ADDENDUM TO

Workplan for Equipment Removal and Cleanup
of Pacific Gas and Electric Company
Substation "E"
Piedmont, California

Prepared for
Pacific Gas and Electric Company

November 29, 2000

This addendum supplements the *Workplan for Equipment Removal and Cleanup of Pacific Gas and Electric Company Substation "E," prepared by KELLCO Services, Inc.* ("the *Workplan,*" September 18, 2000). Substation "E" is located at 408 Linda Avenue in Piedmont, as shown on Figure 1. This addendum modifies portions of section 3.2 of the *Workplan* to address comments from Ms. Susan Hugo of the Alameda County Environmental Health Department having to do with soil remediation.

1) Cleanup Objectives (*Workplan* Section 3.2.1 Update)

The cleanup goal for soil will be 147 mg/kg, as requested by Ms. Hugo. The cleanup goal for lead is currently subject to debate, and the USEPA, California Department of Toxics Substances Control, and San Francisco Regional Water Quality Control Board have published and used health-protective screening levels for lead in residential soils that vary from 147 to 400 mg/kg. Approved cleanups for lead in residential soil fall within this range. For this project, PG&E has agreed to use the lowest screening level (147 mg/kg) because the amount of soil to be remediated is relatively small, no future controls on land use are contemplated, this will satisfy any current state and federal screening levels for lead in soil, and the site is small enough that developing an alternate goal with a specific risk assessment is not warranted.

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http://www.kellco.com email: kellco@kellco.com

2) Pre-Cleanup Sampling Results (From Workplan Section 3.2.2)
Section 3.2.2 of the Workplan indicated that additional soil samples would be collected prior to remediation. The original and supplemental test results are shown below. Laboratory reports are available upon request.

Original Surface Soil Testing – 10/14/99

Location	Sample #	Surface Lead in Soil
East side yard	SESP-1	280 mg/kg
East side yard	SESP-2	350 mg/kg
East side yard	SESP-3	490 mg/kg
Front yard	SESP-4	280 mg/kg
Courtyard (rear)	SESP-6	1600 mg/kg
Courtyard (rear)	SESP-7	1100 mg/kg
West side yard	SESP-8	230 mg/kg

Original Soil Bore Samples – 11/23/00

Location	Sample #	Surface Lead mg/kg	6" Deep Lead mg/kg	12" Deep Lead mg/kg
Courtyard (rear)	B1	550	20	5
Courtyard (rear)	B2	170	8	16
Courtyard (rear)	B3	920	61	10
Northwest yard	B4	220	440	24

Note that most of the samples at 6 inches in depth are well below the desired criteria of 147 mg/kg.

Supplemental Soil Surface Samples –10/31/00

LOCATION	SAMPLE #	LEAD mg/kg
East side yard	001031-3	14
North yard, above courtyard	001031-4	200
West yard)	001031-5	53

3) Cleanup Activities (Workplan Section 3.2.3 Update)

a) East side yard (between building and house)

This area will be excavated to a depth of 6 inches from the building to ten feet of the east property line. Initially the sidewalk will be left in place. If it is the opinion of the contractor that the surrounding excavation has weakened the foundation of the sidewalk, the sidewalk will be removed. The area will be back-filled with clean soil.

b) Rear (north) courtyard and rear yard (uphill from courtyard) and northwest between building and property line

This area will be excavated to a depth of 6 inches from the building to the east and west property lines. The area will be back-filled with clean soil.

c) West side yard (between building and bridge.

This area will be excavated to a depth of 10 inches from the building to 20 feet west of the building, where surface soil had less than the target level of lead. Excavated areas will be back-filled with clean soil.

d) South (front) from building to sidewalk.

This area will be excavated to 6 inches from the building to the sidewalk. The area will be back-filled with clean soil.

4) Verification Sampling and Excavation Closure (*Workplan* Section 3.2.4 Update)

a) Rationale

Clearance samples will be taken after excavation and before the areas are back-filled with clean dirt. This will demonstrate that the excavation depth has been sufficient to reach lead levels below the goal of 147 mg/kg.

b) Number of samples

The minimum sampling plan is as follows:

AREA	MINIMUM SAMPLES
East side yard	4 samples
North courtyard	2 samples
North yard above courtyard	2 samples
Northwest yard	1 sample
West side yard	2 samples
Front yard	1 sample

c) Approximate sample locations are indicated on the attached drawing.

d) Type of analysis
Samples will be analyzed by Atomic Absorption in a laboratory accredited the State of California for analysis of lead in soil.

e) Clearance criteria
Soil samples are expected to show that lead is below 147 mg/kg of soil.

Removed soil will be replaced with soil that is certified by the supplier to be free of asbestos, pesticides, hydrocarbons and Title 22 heavy metals above California acceptable levels. The soil supplier will provide adequate documentation of soil testing and analysis.

APPENDIX C

LABORATORY RESULTS FOR SOIL AFTER EXCAVATION

P.G.& E-SF Power Generation
Mail Stop N-13J
PO Box 770000
San Francisco, CA 94177

Attn.: Sara W. Everitt

Project: Peidmont Sub Station

Attached is our report for your samples received on Wednesday June 6, 2001
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after July 21, 2001 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: gcook@chromalab.com

Sincerely,

Gary Cook

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0100

Total Lead by AA

P.G.& E-SF Power Generation

Mail Stop N-13J
San Francisco, CA 94177

Attn: Sara W. Everitt

Phone: (415) 973-0707 Fax: (415) 973-7668

Project #:

Project: Peidmont Sub Station

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
606A	Soil	06/06/2001 15:30	1
606B	Soil	06/06/2001 15:30	2

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0100

To: **P.G.& E-SF Power Generation**
Attn.: Sara W. Everitt

Test Method: 7420
Prep Method: 3050B

Total Lead by AA

Sample ID: **606A**
Project: Peidmont Sub Station
Sampled: 06/06/2001 15:30
Matrix: Soil

Lab Sample ID: **2001-06-0100-001**
Received: 06/06/2001 17:00
Extracted: 06/07/2001 09:31
QC-Batch: 2001/06/07-01.17

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	150	5.0	mg/Kg	1.00	06/07/2001 12:55	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0100

To: **P.G.& E-SF Power Generation**
Attn.: Sara W. Everitt

Test Method: 7420
Prep Method: 3050B

Total Lead by AA

Sample ID:	**606B**	Lab Sample ID:	**2001-06-0100-002**
Project:	Peidmont Sub Station	Received:	06/06/2001 17:00
		Extracted:	06/07/2001 09:31
Sampled:	06/06/2001 15:30	QC-Batch:	2001/06/07-01.17
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	150	5.0	mg/Kg	1.00	06/07/2001 12:57	

To: **P.G.& E-SF Power Generation**
Attn.: Sara W. Everitt

Test Method: 7420
Prep Method: 3050B

Batch QC Report
Total Lead by AA

Method Blank | **Soil** | **QC Batch # 2001/06/07-01.17**

MB: 2001/06/07-01.17-010

Date Extracted: 06/07/2001 09:31

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	5	mg/Kg	06/07/2001 12:41	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0100

To: **P.G.& E-SF Power Generation**

Attn: Sara W. Everitt

Test Method: 7420

Prep Method: 3050B

Batch QC Report

Total Lead by AA

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/07-01.17**

LCS: 2001/06/07-01.17-011 Extracted: 06/07/2001 09:31 Analyzed 06/07/2001 12:41

LCSD: 2001/06/07-01.17-012 Extracted: 06/07/2001 09:31 Analyzed 06/07/2001 12:42

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Lead	257	264	250	250	102.8	105.6	2.7	85-115	20		

Pacific Gas and Electric Company

02-1174 (Rev 2/99)
Environmental Affairs

Chain of Custody Record

2001-06-0100

59685

From: Pacific Gas & Electric Company ☒ PG&E Facility ☐ Sample Site
Address or Location: 3400 Crow Canyon Rd
City: _____, CA (Zip) _____
Contact Name/Phone No.: _____

Ship To: Lab Name: _____
Address: _____
City: _____, CA (Zip) _____
Phone No. _____
Contact Name: _____

☐ NORMAL (10 days or less) ☒ RUSH Turnaround Time ASAP Due Date & Time ☐ OTHER, Specify _____

☐ TELEPHONE ☐ FAX Give Results to: SARA EVERETT Name PH/FAX

Project Name: FEIDMONT SUB STATION
Project Supervisor (Name/Phone No.):

Sampled by: (Signature) MIKE VAN BUREN (Print Name)

RUSH

Sample No./ Equipment Serial No.	Sampled Date	Sampled Time	Sample Type/Description	Containers No.	Containers Size	Analysis Requested: PB	Remarks
1. CO6A	6/7	1530	SOIL	A	250	X	TOTAL LEAD
2. CO6B	6/7	1530	SOIL	B	250	X	RUSH TAT
3.							E-MAILED TO SARA EVERETT
4.							SAVE1@PGE.COM
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

Relinquished by (Name&Dept.):	Date&Time:	Received by (Name&Dept.):	Date&Time:	Ship Via:
[illegible] PG&E	6/6/01 1704	Denise Harrington	6/6/01 @1700	
Relinquished by (Name&Dept.):	Date&Time:	Received by (Name&Dept.):	Date&Time:	Bill of Lading/Airbill No.:
Relinquished by (Name&Dept.):	Date&Time:	Received by (Name&Dept.):	Date&Time:	

SAP Accounting Data: | Billing Contact: | Billing Address:

Notes:
1. Samples are discarded by the laboratory 90 days after results are reported unless other arrangements are made.
2. File a copy of this Chain of Custody Record, complete with appropriate laboratory signatures, with the test analysis results.
3. The first "Relinquished by/Date" is the shipping date unless otherwise noted.
4. The final PCB results will be the cumulative results added together for each PCB.
5. When this form is computer-generated, send the completed original to the laboratory, and make copies for the originator and sampler.

Distribution (See note #5)
White: Laboratory
Canary: Originator
Pink: Sampler

 November, 1998

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010119Q

DATE COLLECTED: 1/19/01
DATE RECEIVED: 1/19/01
DATE ANALYZED: 1/22/01
DATE REPORT: 8/22/01

PAGE#: 1 of 3

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	202 µg	101.0 %
QC 5.0 ppm Std.:	4.73 ppm	94.6 %
QC NIST 2710 SRM (5532 ppm):	4893.4 ppm	88.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
010119Q-1	S01, East yard, southwest quad Soil after excavation	738	59.0	0.0080	79.9	33.9
010119Q-2	S02, East yard, southeast quad Soil after excavation	748	72.5	0.0097	96.9	33.4
010119Q-3	S03, East yard, northeast quad Soil after excavation	782	172.0	0.0220	219.9	32.0
010119Q-4	S04, East yard, northwest quad Soil after excavation	763	222.5	0.0292	291.6	32.8
010119Q-5	S05, Lower courtyard, closest to building Soil after excavation	745	139.5	0.0187	187.2	33.6

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead. Total lead <25.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

Heidi Fruhlinger

FRUHLINGER, M.A.
RATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010119Q

DATE COLLECTED: 1/19/01
DATE RECEIVED: 1/19/01
DATE ANALYZED: 1/22/01
DATE REPORT: 8/22/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	202 µg	101.0 %
QC 5.0 ppm Std.:	4.73 ppm	94.6 %
QC NIST 2710 SRM (5532 ppm):	4893.4 ppm	88.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
010119Q-6	S06, Lower courtyard, farthest from building Soil after excavation	758	139.5	0.0184	184.0	33.0
010119Q-7	S07, Above courtyard, closest to building Soil after excavation	741	155.0	0.0209	209.2	33.7
010119Q-8	S08, Above courtyard, farthest from building Soil after excavation	735	721.5	0.0982	981.6	34.0
010119Q-9	S09, Northwest yard Soil after excavation	759	399.0	0.0526	525.7	32.9
010119Q-10	S10, West side yard, closest to building Soil after excavation	749	219.0	0.0292	292.4	33.4

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead. Total lead <25.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

Heidi Fruhlinger

FRUHLINGER, M.A.
ORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010119Q

DATE COLLECTED: 1/19/01
DATE RECEIVED: 1/19/01
DATE ANALYZED: 1/22/01
DATE REPORT: 8/22/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	202 µg	101.0 %
QC 5.0 ppm Std.:	4.73 ppm	94.6 %
QC NIST 2710 SRM (5532 ppm):	4893.4 ppm	88.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
010119Q-11	S11, West side yard, farthest from building Soil after excavation	765	298.0	0.0390	389.5	32.7

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes. Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead. Total lead <25.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

Heidi Fruhlinger

FRUHLINGER, M.A.
ORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010123M

DATE COLLECTED: 1/23/01
DATE RECEIVED: 1/23/01
DATE ANALYZED: 1/24/01
DATE REPORT: 8/22/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	225 µg	112.5 %
QC 5.0 ppm Std.:	4.88 ppm	97.6 %
QC NIST 2710 SRM (5532 ppm):	5339.1 ppm	96.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
123M-1	S21, North side of building Soil	773	98.5	0.0127	127.4	32.3
010123M-2	S22, East side of building, 6' south of northeast corner Soil	757	278.0	0.0367	367.2	33.0
010123M-3	S23, South side of building, 16' east of southwest corner Soil	777	247.0	0.0318	317.9	32.2

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes. Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead. Total lead <25.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

Heidi Fruhlinger

FRUHLINGER, M.A.
RATORY DIRECTOR

K E L L C O

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric Attn: John Meade/Sara Everitt
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201
CLIENT REF#:
LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010202L
DATE COLLECTED: 2/2/01
DATE RECEIVED: 2/2/01
DATE ANALYZED: 2/6/01
DATE REPORT: 2/12/01
PAGE#: 1 of 1
ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	213 µg	106.5 %
QC 5.0 ppm Std.:	5 ppm	100.0 %
QC 10.0 ppm Std.:	9.95 ppm	99.5 %
QC NIST 2710 SRM (5532 ppm):	5281 ppm	95.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
202L-1	202-01, After 12" removal, East side, Northwest Soil	769	159.0	0.0207	206.8	32.5
010202L-2	202-02, After 12" removal, East side, Northeast Soil	744	31.0	0.0042	41.7	33.6

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead.
Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

K E L L C O

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave.
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010207J

DATE COLLECTED: 2/7/01
DATE RECEIVED: 2/7/01
DATE ANALYZED: 2/8/01
DATE REPORT: 2/12/01

PAGE#: 1 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	207 µg	103.5 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.08 ppm	100.8 %
QC NIST 2710 SRM (5532 ppm):	5310.1 ppm	96.0 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
`07J-1	S02071, Courtyard, 4' from bldg, sidewalk 22'	749	174.0	0.0232	232.3	33.4
010207J-2	S02072, Courtyard, 7' from back wall / 15' E wall	743	75.0	0.0101	100.9	33.6
010207J-3	S02073, Above courtyard, 7' from S wall, 17' from E sidewalk	753	125.0	0.0166	166.0	33.2
010207J-4	S02074, Above courtyard, 17' from S wall, 17' from E sidewalk	753	49.0	0.0065	65.1	33.2
010207J-5	S02075, NW side next to bldg, 14' from E corner	745	1655.0	0.2221	2221.5	33.6

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead.
Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201
CLIENT REF#:
LOCATION: Substation E
408 Linda Ave.
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010207J

DATE COLLECTED: 2/7/01
DATE RECEIVED: 2/7/01
DATE ANALYZED: 2/8/01
DATE REPORT: 2/12/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	207 µg	103.5 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.08 ppm	100.8 %
QC NIST 2710 SRM (5532 ppm):	5310.1 ppm	96.0 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
010207J-6	S02076, W side next to bldg, 10' from NW corner	752	400.5	0.0533	532.6	33.2
010207J-7	S02077, W side 10' from bldg, 10' from NW corner	753	194.0	0.0258	257.6	33.2
010207J-8	S02078, Front next to bldg, 16' from West corner	761	106.5	0.0140	139.9	32.9

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead.
Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric Attn: S. Everitt
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201
CLIENT REF#:
LOCATION: Sub Station E
408 Linda Ave.
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010322L

DATE COLLECTED: 3/22/01
DATE RECEIVED: 3/22/01
DATE ANALYZED: 3/23/01
DATE REPORT: 3/27/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 100.0µg Spike:	92.5 µg	92.5 %
QC 5.0 ppm Std.:	4.93 ppm	98.6 %
QC NIST 2710 SRM (5532 ppm):	4950.4 ppm	89.5 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
)322L-1	01, Northwest side Soil clearance	753	449.5	0.0597	596.9	33.2
010322L-2	02, Courtyard Soil clearance	733	123.0	0.0168	167.8	34.1
010322L-3	03, West side Soil clearance	744	238.0	0.0320	319.9	33.6
010322L-4	04, Upper yard (north) Soil clearance	745	291.0	0.0391	390.6	33.6
010322L-5	05, East side Soil clearance	745	132.5	0.0178	177.9	33.6

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead.
Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

FRUHLINGER, M.A.
ORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric Attn: S. Everitt
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Ave.
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010322L

DATE COLLECTED: 3/22/01
DATE RECEIVED: 3/22/01
DATE ANALYZED: 3/23/01
DATE REPORT: 3/27/01

PAGE#: 2 of 2

ANALYST: J. Neth

Rush

Q.C. Data	Measured Value	Percent Recovery
QC 100.0µg Spike:	92.5 µg	92.5 %
QC 5.0 ppm Std.:	4.93 ppm	98.6 %
QC NIST 2710 SRM (5532 ppm):	4950.4 ppm	89.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
010322L-6	06, East yard Soil clearance	747	100.5	0.0135	134.5	33.5
010322L-7	07, East yard, west side Soil clearance	761	193.0	0.0254	253.6	32.9

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes.
Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead.
Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

FRUHLINGER, M.A.
ORATORY DIRECTOR

K E L L C O

FLAME ATOMIC ABSORPTION SPECTROSCOPY

EPA Method 7420 for Lead Soil Analysis

CLIENT: Pacific Gas and Electric Attn: S. Everett
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: 408 Linda Ave.
Sub Station

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010523J

DATE COLLECTED: 5/23/01
DATE RECEIVED: 5/24/01
DATE ANALYZED: 5/25/01
DATE REPORT: 7/17/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	229 µg	114.5 %
QC 5.0 ppm Std.:	5.07 ppm	101.4 %
QC NIST 2710 SRM (5532 ppm):	5134.5 ppm	92.8 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	SAMPLE WEIGHT (milligrams)	TOTAL LEAD (µg)	LEAD CONC. (wt.%)	LEAD CONC. (µg/g, ppm)	DETECTION LIMIT (ppm)
523J-1	523-01, Courtyard northeast of sidewalk Soil	748	< 25.0	< 0.0033	< 33.4	33.4
010523J-2	523-02, Above courtyard wall to northeast Soil	745	< 25.0	< 0.0034	< 33.6	33.6
010523J-3	523-03, Next to north corner of building Soil	751	36.0	0.0048	47.9	33.3
010523J-4	523-04, 20' south of northwest corner/4' from building Soil	752	155.5	0.0207	206.8	33.2
010523J-5	523-05, West side of building approximately 15' from building/northwest corner Soil	757	135.0	0.0178	178.3	33.0

Standard, NIST 2710 Standard Reference Material and Spike values are reported for quality control purposes. Regulatory level (EPA): <400 ppm is no hazard, 400-2000 ppm requires interim conrols if children are present; 2000-5000 ppm requires interim controls for adults; >5000 ppm requires abatement. Reporting limit is 25.0 µg total lead. Total lead <25.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA methods 3051 and 7420 for lead analysis by AA. This is an elemental analysis, not compound specific.

Heidi Fruhlinger

FRUHLINGER, M.A.
LABORATORY DIRECTOR

APPENDIX D

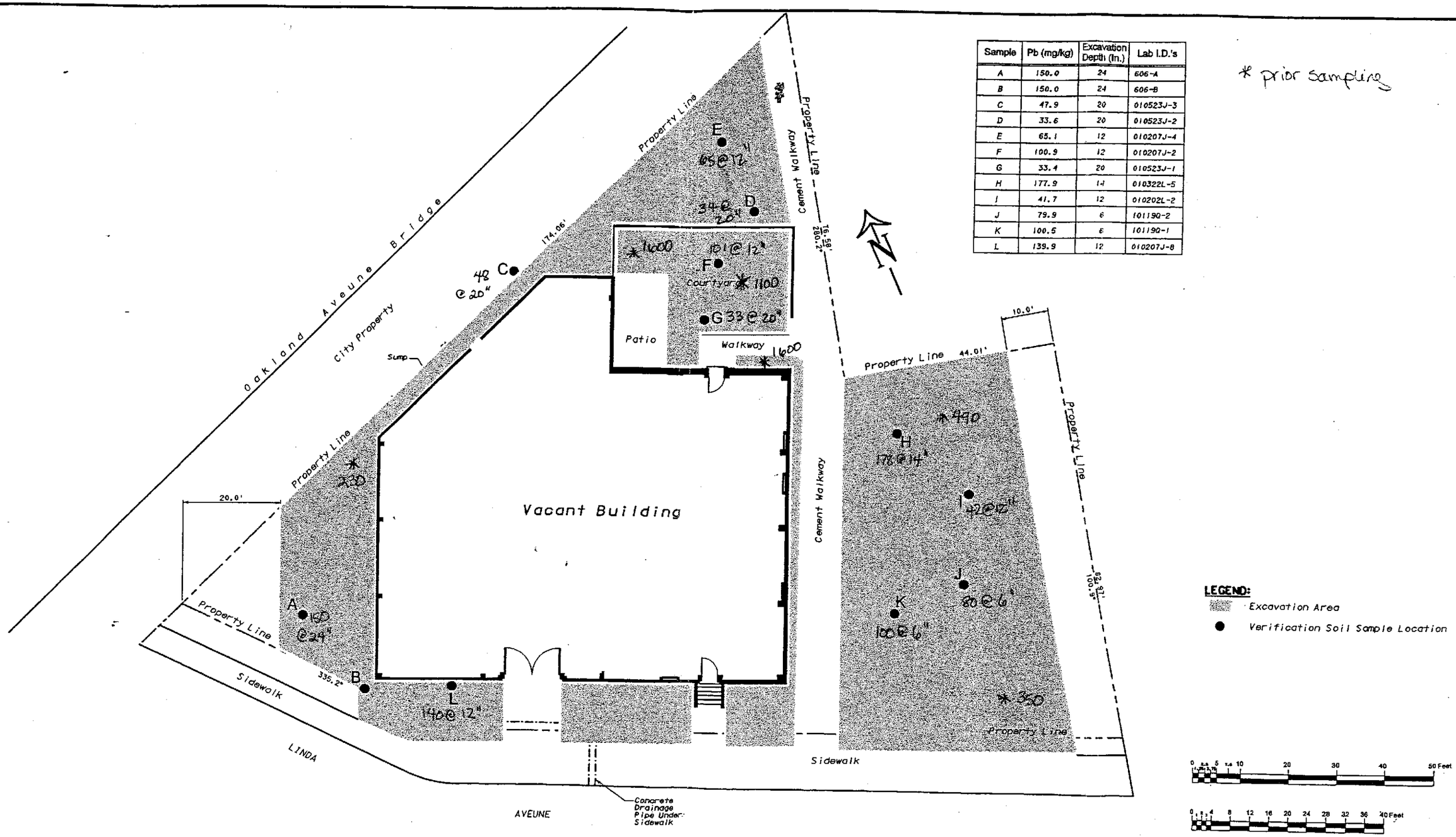
CLEARANCE SAMPLING MAP

AND

LEADSPREAD RESULTS

Sample	Pb (mg/kg)	Excavation Depth (In.)	Lab I.D.'s
A	150.0	24	606-A
B	150.0	24	606-B
C	47.9	20	010523J-3
D	33.6	20	010523J-2
E	65.1	12	010207J-4
F	100.9	12	010207J-2
G	33.4	20	010523J-1
H	177.9	14	010322L-5
I	41.7	12	010202L-2
J	79.9	6	10119Q-2
K	100.5	6	10119Q-1
L	139.9	12	010207J-8

* prior sampling



POWER GENERATION
PACIFIC GAS & ELECTRIC CO.

ENVIRONMENTAL
SITE PLAN
CLEAN CONFIRMATION SAMPLE RESULTS
PIEDMONT SUBSTATION 'E'

FIGURE 1

by S.W. Everitt November 5, 2001

Sara,
This is what I faxed to Susan, and what she approved as being done.

EXTERNAL ONLY
ENVIRONMENTAL SERVICES DEPARTMENT
77 BEALE STREET, 24th FLOOR
SAN FRANCISCO, CA 94106
FAX: (415) 973-9201

David
cc: John Meade

DATE: 6/14/01

TO: Susan Hugo

COMPANY: Alameda County Environmental Health

ADDRESS:

TELECOPY#: 510-337-9335 CONFIRMATION#:

TOTAL NUMBERS OF PAGES INCLUDING COVER LETTER: 4

FROM PG&E: David Harnish

EXTERNAL#: 415-973-6902

COMMENTS: Susan, Attached are a site map w/ verification sample locations, and a table of results with summary statistics. The 95% Upper confidence limit, which DTSC recommends as the input parameter in LEADSPREAD, meets our cleanup criteria. The confirmatory LEADSPREAD calculation also is attached. We are planning to backfill remaining areas (A-G) upon your approval.

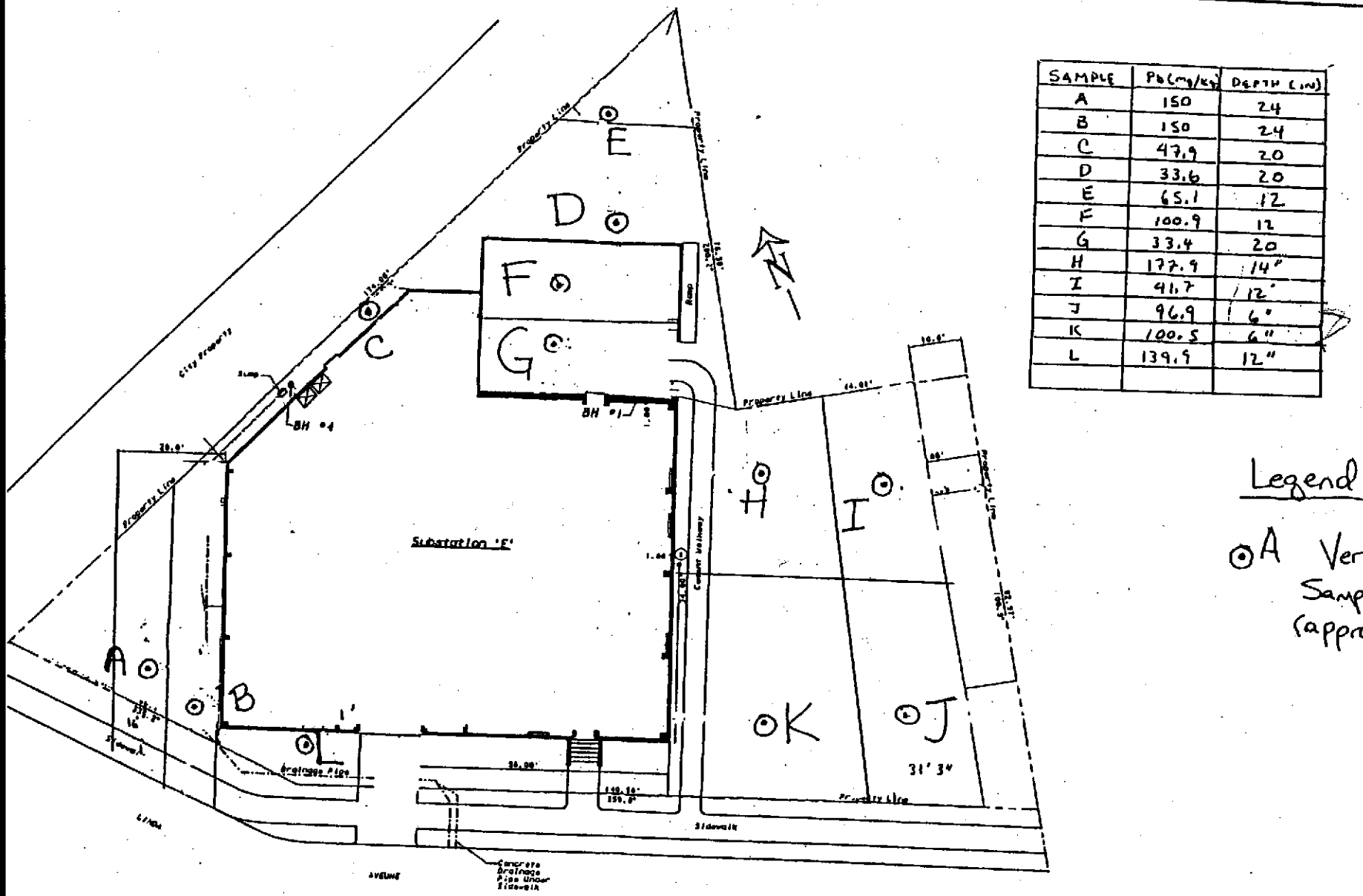
IF YOU DO NOT RECEIVE ALL THE PAGES, OR IF YOU HAVE ANY QUESTIONS, PLEASE CALL (415)973-[redacted]

David

Table
Soil Excavation Verification Sample Results
Former Substation E, Linda Avenue, Piedmont

Sample ID	Depth (ft)	Lead (mg/kg)
A	2.0	150
B	2.0	150
C	1.7	47.9
D	1.7	33.6
E	1.0	65.1
F	1.0	100.9
G	1.7	33.4
H	1.2	177.9
I	1.0	41.7
J	0.5	96.9
K	0.5	100.5
L	1.0	139.9

Summary Statistics for Lead Concentrations	
Mean	94.8
Median	98.7
Standard Deviation	50.9
Minimum	33.4
Maximum	177.9
Count	12.0
Confidence Level(95.0%)	32.4
95% Upper Confidence Limit	127.2



SITE PLAN

SAMPLE	Pb (mg/kg)	DEPTH (in)
A	150	24
B	150	24
C	47.9	20
D	33.6	20
E	65.1	12
F	100.9	12
G	33.4	20
H	177.9	14"
I	91.7	12"
J	96.9	6"
K	100.5	6"
L	139.9	12"

Legend

⊙A Verification Sample Location (approximate)

6/12/01

4028448

LEAD RISK ASSESSMENT SPREADSHEET
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

SER'S GUIDE to version 7

INPUT	
MEDIUM	LEVEL
Lead in Air (ug/m^3)	0.028
Lead in Soil/Dust (ug/g)	127.2
Lead in Water (ug/l)	5
% Home-grown Produc	7%
(ug/m^3)	1.5

OUTPUT							
	Percentile Estimate of Blood Pb (ug/dl)					PRG-99	PRG-95
	50th	90th	95th	98th	99th	(ug/g)	(ug/g
BLOOD Pb, ADULT	1.0	1.8	2.1	2.5	2.9	845	1232
BLOOD Pb, CHILD	2.5	4.5	5.3	6.5	7.4	197	298
BLOOD Pb, PICA CHILD	3.4	6.1	7.3	8.8	10.1	126	191
BLOOD Pb, OCCUPATIO	0.6	1.1	1.4	1.6	1.9	4344	6333

EXPOSURE PARAMETERS			
	units	adults	children
Days per week	days/wk	7	
Days per week, occupational		5	
Geometric Standard Deviation		1.6	
Blood lead level of concern (ug/dl		10	
Skin area, residential	cm^2	5700	2900
Skin area occupational	cm^2	2900	
Soil adherence	ug/cm^2	70	200
rmal uptake constant	(ug/dl)/(ug/d	0.0001	
Soil ingestion	mg/day	50	100
Soil ingestion, pica	mg/day		200
Ingestion constant	(ug/dl)/(ug/d	0.04	0.16
Bioavailability	unitless	0.44	
Breathing rate	m^3/day	20	6.8
Inhalation constant	(ug/dl)/(ug/d	0.08	0.19
Water ingestion	l/day	1.4	0.4
Food ingestion	kg/day	1.9	1.1
Lead in market basket	ug/kg	3.1	
Lead in home-grown produce	ug/kg	57.2	

Click here for REFERENCES

PATHWAYS						
ADULTS	Residential			Occupational		
	Pathway contribution			Pathway contribution		
Pathway	PEF	ug/dl	percent	PEF	ug/dl	percent
Soil Contact	3.8E-5	0.00	1%	1.4E-5	0.00	0%
Soil Ingestion	8.8E-4	0.11	12%	6.3E-4	0.08	13%
Inhalation, bkgrnd		0.05	5%		0.03	5%
Inhalation	2.5E-6	0.00	0%	1.8E-6	0.00	0%
Water Ingestion		0.28	29%		0.28	45%
Food Ingestion, bkgrnd		0.22	22%		0.23	37%
Food Ingestion	2.4E-3	0.30	32%		-	0%

CHILDREN	typical			with pica		
	Pathway contribution			Pathway contribution		
Pathway	PEF	ug/dl	percent	PEF	ug/dl	percent
Soil Contact	5.6E-5	0.01	0%		0.01	0%
Soil Ingestion	7.0E-3	0.90	36%	1.4E-2	1.79	53%
Inhalation	2.0E-6	0.00	0%		0.00	0%
Inhalation, bkgrnd		0.04	1%		0.04	1%
Water Ingestion		0.32	13%		0.32	10%
Food Ingestion, bkgrnd		0.50	20%		0.50	15%
Food Ingestion	5.5E-3	0.71	29%		0.71	21%

APPENDIX E

REPLACEMENT SOIL CERTIFICATION

American Soil Products

P.O. Box 8238, Berkeley, CA 94707
(510) 558-7802 • Fax (510) 526-3175

MEMORANDUM

Date: April 2, 2001
To: Dave Erickson, Primary Solutions
From: Barton Blum
Re: Certification of product

To Whom It May Concern:

This letter certifies that the import topsoil that is proposed for the project at 408 Linda St. in Piedmont is free of any hazardous constituents or deleterious materials, including asbestos, hydrocarbons, or pesticides. The import topsoil meets all E.P.A. guidelines for nonhazardous soil. Please contact me if you have any questions or inquiries at (510) 558-7802.

Sincerely,

Barton Blum
Vice President

R.C. KNAPP, INC.

CONTRACTORS LICENSE NO. 670230

General Engineering

TEL (510) 233-0346
FAX (510) 233-9730

P.O. BOX 20730
EL SOBRANTE, CA 94820

EQUIPMENT RENTAL AGREEMENT

Contract No. ..... Dated: 7-2-01 ~~19~~

Firm Name: PG+E Lessee

Business Address: ..... Tel. No. .....

Job Address: 408 LINDA ST PIEDMONT

1 SEMI END DUMP

$150. A LOAD

5 LOAD'S

The equipment rented and leased herein is subject to the terms, provisions and conditions on the reverse side hereof and made a part hereof as though fully set forth herein

I hereby admit receipt of a copy of this Equipment Rental Agreement and agree to be bound by all of the terms and conditions on the reverse side which is made a part hereof

Signature Brad Knapp

Lessee

R.C. KNAPP, INC.

CONTRACTORS LICENSE NO 670230

General Engineering

TEL. (510) 233-0346
FAX (510) 233-9730

P.O. BOX 20730
EL SOBRANTE, CA 94820

EQUIPMENT RENTAL AGREEMENT

Contract No. PG+E Dated. 7-9-01 ~~19~~

Firm Name: DECON ENVIRONMENTAL Lessee

Business Address: ..... Tel. No. .....

Job Address: LINDA ST PIEDMONT

$1.50 A LOAD

3 LOAD'S

The equipment rented and leased herein is subject to the terms, provisions and conditions on the reverse side hereof and made a part hereof as though fully set forth herein

I hereby admit receipt of a copy of this Equipment Rental Agreement and agree to be bound by all of the terms and conditions on the reverse side which is made a part hereof

Signature Brad Knapp

Lessee

RECEIVED JUL - 6 2001

ChromaLab
Environmental Services (CA 1094)

Invoice#: 72001037
Submission#: 2001-06-0501
Invoice Date: June 29, 2001

Project Manager: Vincent Vancil

INVOICE

Samples Received From	Report Results To
Decon Env. Services, Inc. Contact: Raymond La Borde 23490 Connecticut Street Hayward, CA 94545	Decon Env. Services, Inc. Contact: Raymond La Borde 23490 Connecticut Street Hayward, CA 94545

Bill To 382871 / DECON

Decon Environmental Services Inc.
Attn: Kathy Ishak
23490 Connecticut Street
Hayward, CA 94545

Received: June 21, 2001 12:00 AM

Project: PGE

Qty	Matrix	Analysis	TAT		Unit Price	RC	Tax	Total
1	Soil	PCBs	1	Day	$100.00	100%		$200.00
					Total Due:			$200.00

Terms and conditions:
Net30

Please Send Payment to: Severn Trent Laboratories, Inc.
Lock Box - PO Box 7777 W4305
Philadelphia, PA 19175-4305
Phone: (925) 484-1919 Fax: (925) 484-1096

dk
OK

1880 - 32006
2607

RC = Rush Charge

RECEIVED JUL - 2 200

ChromaLab
Environmental Services (CA 1094)

Project Manager: Vincent Vandl

Invoice#: 72000923
Submission#: 2001-06-0398
Invoice Date: June 27, 2001

INVOICE

Samples Received From	Report Results To
Decon Env. Services, Inc. Contact: Raymond La Borde 23490 Connecticut Street Hayward, CA 94545	Decon Env. Services, Inc. Contact: Raymond La Borde 23490 Connecticut Street Hayward, CA 94545

Bill To 382871 / DECON

Decon Environmental Services Inc.
Attn: Kathy Ishak
23490 Connecticut Street
Hayward, CA 94545

Received: June 21, 2001 01:40 PM

Project: PG&E √ 360

Qty	Matrix	Analysis	TAT		Unit Price	RC	Tax	Total
1	Soil	Gas/BTEX Compounds by 8015M/8020	1	Day	$65.00	100%		$130.00
1	Soil	Metals	1	Day	$150.00	100%		$300.00
1	Soil	Organochlorine Pesticides Analysis	1	Day	$125.00	50%		$187.50
1	Soil	Subcontract - Asbestos	1	Day	$25.00	50%		$37.50
						Total Due:		$655.00

Terms and conditions:
Net30

Please Send Payment to: Severn Trent Laboratories, Inc.
Lock Box - PO Box 7777 W4305
Philadelphia, PA 19175-4305
Phone: (925) 484-1919 Fax: (925) 484-1096

1BV-360

RC = Rush Charge

DECON ENVIRONMENTAL SERVICES, INC.

FAX TRANSMISSION

DECON Environmental Services, Inc.
23490 Connecticut Street
Hayward, CA 94545
Phone (510) 732-6444
Fax (510) 782-8584

TO: John Meade FAX: (415) 973-5121

COMPANY: PG&E PHONE: (415) 972-5878

FROM: Chris Kuska / Ray DATE: 6/25 TIME: 8:40

REFERENCE: Backfill Soil - Analytical

TOTAL NUMBER OF PAGES SENT (Including Cover Sheet): 10

Original To Follow By:

- ☐ U.S. Mail
- ☐ Express Overnight Mail
- ☐ Courier
- ☒ No Hard Copy To Follow

COMMENTS:

John:

Here's analytical results on soil for backfill. Looks clean to me. We need written approval to order the soil.

Chris

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn: Raymond La Borde

Test Method: 8081
Prep Method: 3550/8081

Legend & Notes

Organochlorine Pesticides Analysis

Analysis Flags

lrn

Reporting limits raised due to high level of non-target analyte materials.

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.** Test Method: 8081

Attn: Raymond La Borde Prep Method: 3550/8081

Batch QC Report

Organochlorine Pesticides Analysis

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/21-02.13**

LCS: 2001/06/21-02.13-002 Extracted: 06/21/2001 10:13 Analyzed 06/22/2001 03:05

LCSD: 2001/06/21-02.13-003 Extracted: 06/21/2001 10:13 Analyzed 06/22/2001 03:36

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Aldrin	11.9	12.7	16.7	16.7	71.3	76.0	6.4	37-136	25		
Dieldrin	12.1	13.2	16.7	16.7	72.5	79.0	8.6	50-135	35		
Endrin	12.2	13.3	16.7	16.7	73.1	79.6	8.5	50-134	35		
Heptachlor	11.7	12.5	16.7	16.7	70.1	74.9	6.6	40-136	20		
4,4'-DDT	12.1	13.3	16.7	16.7	72.5	79.6	9.3	55-132	35		
gamma-BHC (Lindane)	11.8	12.7	16.7	16.7	70.7	76.0	7.2	37-137	35		
Surrogate(s)											
2,4,5,6-Tetrachloro-m-xyl	34.4	36.0	50	50	68.8	72.0		50-125			
Decachlorobiphenyl	31.7	36.1	50	50	63.4	72.2		46-142			

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.** Test Method: 8081

Attn.: Raymond La Borde Prep Method: 3550/8081

Batch QC Report

Organochlorine Pesticides Analysis

Method Blank **Soil** **QC Batch # 2001/06/21-02.13**

MB: 2001/06/21-02.13-001 Date Extracted: 06/21/2001 10:13

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	06/22/2001 02:34	
Dieldrin	ND	2.0	ug/Kg	06/22/2001 02:34	
Endrin aldehyde	ND	2.0	ug/Kg	06/22/2001 02:34	
Endrin	ND	2.0	ug/Kg	06/22/2001 02:34	
Endrin ketone	ND	2.0	ug/Kg	06/22/2001 02:34	
Heptachlor	ND	2.0	ug/Kg	06/22/2001 02:34	
Heptachlor epoxide	ND	2.0	ug/Kg	06/22/2001 02:34	
4,4`-DDT	ND	2.0	ug/Kg	06/22/2001 02:34	
4,4`-DDE	ND	2.0	ug/Kg	06/22/2001 02:34	
4,4`-DDD	ND	2.0	ug/Kg	06/22/2001 02:34	
Endosulfan I	ND	2.0	ug/Kg	06/22/2001 02:34	
Endosulfan II	ND	2.0	ug/Kg	06/22/2001 02:34	
alpha-BHC	ND	2.0	ug/Kg	06/22/2001 02:34	
beta-BHC	ND	2.0	ug/Kg	06/22/2001 02:34	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	06/22/2001 02:34	
delta-BHC	ND	2.0	ug/Kg	06/22/2001 02:34	
Endosulfan sulfate	ND	2.0	ug/Kg	06/22/2001 02:34	
4,4`-Methoxychlor	ND	2.0	ug/Kg	06/22/2001 02:34	
Toxaphene	ND	100	ug/Kg	06/22/2001 02:34	
Chlordane (Technical)	ND	50	ug/Kg	06/22/2001 02:34	
alpha-Chlordane	ND	2.0	ug/Kg	06/22/2001 02:34	
gamma-Chlordane	ND	2.0	ug/Kg	06/22/2001 02:34	
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	69.8	50-125	%	06/22/2001 02:34	
Decachlorobiphenyl (Pest/8081)	67.0	46-142	%	06/22/2001 02:34	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8081
Prep Method: 3550/8081

Organochlorine Pesticides Analysis

Sample ID: **BACK FILL**
Project: OG&E
Sampled: 06/21/2001 13:00
Matrix: Soil

Lab Sample ID: **2001-06-0398-001**
Received: 06/21/2001 13:40
Extracted: 06/21/2001 10:13
QC-Batch: 2001/06/21-02.13

Sample/Analysis Flag Im (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Dieldrin	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endrin aldehyde	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endrin	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endrin ketone	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Heptachlor	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Heptachlor epoxide	ND	10	ug/Kg	5.00	06/22/2001 13:04	
4,4`-DDT	ND	10	ug/Kg	5.00	06/22/2001 13:04	
4,4`-DDE	ND	10	ug/Kg	5.00	06/22/2001 13:04	
4,4`-DDD	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endosulfan I	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endosulfan II	ND	10	ug/Kg	5.00	06/22/2001 13:04	
alpha-BHC	ND	10	ug/Kg	5.00	06/22/2001 13:04	
beta-BHC	ND	10	ug/Kg	5.00	06/22/2001 13:04	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	06/22/2001 13:04	
delta-BHC	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Endosulfan sulfate	ND	10	ug/Kg	5.00	06/22/2001 13:04	
4,4`-Methoxychlor	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Toxaphene	ND	500	ug/Kg	5.00	06/22/2001 13:04	
Chlordane (Technical)	ND	250	ug/Kg	5.00	06/22/2001 13:04	
alpha-Chlordane	ND	10	ug/Kg	5.00	06/22/2001 13:04	
gamma-Chlordane	ND	10	ug/Kg	5.00	06/22/2001 13:04	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	85.3	50-125	%	5.00	06/22/2001 13:04	
Decachlorobiphenyl (Pest/8081)	76.5	46-142	%	5.00	06/22/2001 13:04	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

Organochlorine Pesticides Analysis

Decon Env. Services, Inc.
23490 Connecticut Street
Hayward, CA 94545

Attn: Raymond La Borde
Phone: (510) 732-6444 Fax: (510) 782-8584

Project #:
Project: OG&E

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BACK FILL	Soil	06/21/2001 13:00	1

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.** Test Method: 8020

Attn: Raymond La Borde Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/ZZ-01.01**

LCS: 2001/06/22-01.01-004 Extracted: 06/22/2001 08:46 Analyzed 06/22/2001 08:46

LCSD: 2001/06/22-01.01-005 Extracted: 06/22/2001 09:18 Analyzed 06/22/2001 09:18

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	0.0937	0.0978	0.1000	0.1000	93.7	97.8	4.3	77-123	35		
Toluene	0.0951	0.0997	0.1000	0.1000	95.1	99.7	4.7	78-122	35		
Ethyl benzene	0.0968	0.100	0.1000	0.1000	96.8	100.0	4.3	70-130	35		
Xylene(s)	0.275	0.288	0.300	0.300	91.7	96.0	4.6	75-125	35		
Surrogate(s)											
Trifluorotoluene	474	492	500	500	94.8	98.4		53-125			

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8015M
8020
Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Method Blank **Soil** **QC Batch # 2001/06/22-01.01**

MB: 2001/06/22-01.01-003 Date Extracted: 06/22/2001 08:13

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	06/22/2001 08:13	
Toluene	ND	0.0050	mg/Kg	06/22/2001 08:13	
Ethyl benzene	ND	0.0050	mg/Kg	06/22/2001 08:13	
Xylene(s)	ND	0.0050	mg/Kg	06/22/2001 08:13	
Surrogate(s)					
Trifluorotoluene	93.8	53-125	%	06/22/2001 08:13	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8020
Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	**BACK FILL**	Lab Sample ID:	**2001-06-0398-001**
Project:	OG&E	Received:	06/21/2001 13:40
		Extracted:	06/22/2001 13:30
Sampled:	06/21/2001 13:00	QC-Batch:	2001/06/22-01.01
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	06/22/2001 13:30	
Toluene	ND	0.0050	mg/Kg	1.00	06/22/2001 13:30	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/22/2001 13:30	
Xylene(s)	ND	0.0050	mg/Kg	1.00	06/22/2001 13:30	
Surrogate(s)						
Trifluorotoluene	66.3	53-125	%	1.00	06/22/2001 13:30	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

Gas/BTEX Compounds by 8015M/8020

Decon Env. Services, Inc.

Attn: Raymond La Borde

Project #:

23490 Connecticut Street.
Hayward, CA 94545

Phone: (510) 732-6444 Fax: (510) 782-8584

Project: OG&E

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BACK FILL	Soil	06/21/2001 13:00	1

DECON ENVIRONMENTAL SERVICES, INC.

FAX TRANSMISSION

DECON Environmental Services, Inc.
23490 Connecticut Street
Hayward, CA 94545
Phone (510) 732-6444
Fax (510) 782-8584

TO: John Meade

FAX:

COMPANY: PG+E

PHONE: (415) 973-5121

FROM: Raymond LaBoeuf

DATE: 6/28/01

TIME:

REFERENCE:

TOTAL NUMBER OF PAGES SENT (Including Cover Sheet): 6

Original To Follow By:

- ☐ U.S. Mail
- ☐ Express Overnight Mail
- ☐ Courier
- ☐ No Hard Copy To Follow

COMMENTS:

PCB Analytical

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0501

PCBs

Decon Env. Services, Inc.

23490 Connecticut Street
Hayward, CA 94545

Attn: Raymond La Borde

Phone: (510) 732-6444 Fax: (510) 782-8584

Project #:

Project: PGE

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BACK FILL	Soil	06/21/2001 13:00	1

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0501

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8082
Prep Method: 3550/8082

PCBs

Sample ID: **BACK FILL**
Project: PGE
Sampled: 06/21/2001 13:00
Matrix: Soil

Lab Sample ID: **2001-06-0501-001**
Received: 06/21/2001
Extracted: 06/27/2001 09:42
QC-Batch: 2001/06/27-01.14

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aroclor 1016	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1221	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1232	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1242	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1248	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1254	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Aroclor 1260	ND	0.050	mg/Kg	1.00	06/28/2001 21:30	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	78.4	50-125	%	1.00	06/28/2001 21:30	
Decachlorobiphenyl (PCB/8082)	68.4	46-142	%	1.00	06/28/2001 21:30	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0501

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8082
Prep Method: 3550/8082

Batch QC Report
PCBs

Method Blank **Soil** **QC Batch # 2001/06/27-01.14**

MB: 2001/06/27-01.14-001 Date Extracted: 06/27/2001 09:42

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Aroclor 1016	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1221	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1232	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1242	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1248	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1254	ND	0.05	mg/Kg	06/27/2001 18:47	
Aroclor 1260	ND	0.05	mg/Kg	06/27/2001 18:47	
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	79.8	50-125	%	06/27/2001 18:47	
Decachlorobiphenyl (PCB/8082)	73.4	46-142	%	06/27/2001 18:47	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0501

To: **Decon Env. Services, Inc.**
Attn: Raymond La Borde

Test Method: 8082
Prep Method: 3550/8082

Batch QC Report

PCBs

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/27-01.14**

LCS: 2001/06/27-01.14-002 Extracted: 06/27/2001 09:42 Analyzed 06/27/2001 19:20
LCSD: 2001/06/27-01.14-003 Extracted: 06/27/2001 09:42 Analyzed 06/27/2001 19:52

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Aroclor 1016	0.0704	0.0751	0.0667	0.0667	105.5	112.6	6.5	65-135	30		
Aroclor 1260	0.0654	0.0714	0.0667	0.0667	98.1	107.0	8.7	65-135	30		
Surrogate(s)											
2,4,5,6-Tetrachloro-m-xyl	39.2	41.6	50	50	78.4	83.2		50-125			
Decachlorobiphenyl	33.8	37.1	50	50	67.6	74.2		46-142			

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0501

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 8082
Prep Method: 3550/8082

Batch QC Report

PCBs

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2001/06/27-01.14**

Sample ID: **BACK FILL** Lab Sample ID: 2001-06-0501-001

MS: 2001/06/27-01.14-004 Extracted: 06/27/2001 09:42 Analyzed: 06/27/2001 20:25 Dilution: 1.0
MSD: 2001/06/27-01.14-005 Extracted: 06/27/2001 09:42 Analyzed: 06/27/2001 20:58 Dilution: 1.0

Compound	Conc. [mg/Kg]			Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Aroclor 1016	0.0698	0.0727	ND	0.0657	0.0656	106.2	110.8	4.2	65-135	30		
Aroclor 1260	0.0626	0.0647	ND	0.0657	0.0656	95.3	98.6	3.4	65-135	30		
Surrogate(s)												
2,4,5,6-Tetrachloro-m-xyl	38.3	40.6		50	50	76.6	81.2		50-125			
Decachlorobiphenyl	33.4	35.6		50	50	66.8	71.2		46-142			

Forensic Analytical
Analytical Report

Preliminary FAX

Bulk Asbestos Analysis

(EPA Method 600/R-93-116)

STL Chromalab Inc
Project Manager

1220 Quarry Ln
Pleasanton, CA 94566-4756

Client ID: 2595
Report Number: B030501
Date Received: 06/22/01
Date Analyzed: 06/22/01
Date Printed: 06/22/01

Job ID / Site: Job# 2001-06-0398 - PG&E

FASI Job ID: 2595-255

Sample Number	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BACK FILL	10099283						
Layer Brown Soil			ND				

Total Composite Values of Fibrous Components: **Asbestos:(ND)** Cellulose (Trace) Fibrous Glass (ND)

Post-it® Fax Note 7671		Date 6/26/01	# of pages ▶ 7
To John Meade		From Chris / Ray	
Co./Dept. PG&E		Co. DECON	
Phone #		Phone #	
Fax # (925) 682-6371		Fax #	

Note: Limit of Quantification (LOQ) = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = None Detected

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**

Attn.: Raymond La Borde

Test Method: 6010B
7471A

Prep Method: 3050B
7471A

Metals

Sample ID: **BACK FILL**

Project: OG&E

Sampled: 06/21/2001 13:00

Matrix: Soil

Lab Sample ID: **2001-06-0398-001**

Received: 06/21/2001 13:40

Extracted: 06/22/2001 11:41

QC-Batch: 2001/06/22-04.16
2001/06/22-05.15

TTLC

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	06/22/2001 16:39	
Arsenic	3.7	1.0	mg/Kg	1.00	06/22/2001 16:39	
Barium	110	1.0	mg/Kg	1.00	06/22/2001 16:39	
Beryllium	ND	0.50	mg/Kg	1.00	06/22/2001 16:39	
Cadmium	ND	0.50	mg/Kg	1.00	06/22/2001 16:39	
Chromium	24	1.0	mg/Kg	1.00	06/22/2001 16:39	
Cobalt	6.9	1.0	mg/Kg	1.00	06/22/2001 16:39	
Copper	17	1.0	mg/Kg	1.00	06/22/2001 16:39	
Lead	9.4	1.0	mg/Kg	1.00	06/22/2001 16:39	
Molybdenum	ND	1.0	mg/Kg	1.00	06/22/2001 16:39	
Nickel	21	1.0	mg/Kg	1.00	06/22/2001 16:39	
Selenium	ND	2.0	mg/Kg	1.00	06/22/2001 16:39	
Silver	ND	1.0	mg/Kg	1.00	06/22/2001 16:39	
Thallium	ND	1.0	mg/Kg	1.00	06/22/2001 16:39	
Vanadium	29	1.0	mg/Kg	1.00	06/22/2001 16:39	
Zinc	39	1.0	mg/Kg	1.00	06/22/2001 16:39	
Mercury	0.065	0.050	mg/Kg	1.00	06/22/2001 17:15	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

Metals

Decon Env. Services, Inc.
23490 Connecticut Street.
Hayward, CA 94545
Attn: Raymond La Borde
Phone: (510) 732-6444 Fax: (510) 782-8584
Project #:
Project: OG&E

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BACK FILL	Soil	06/21/2001 13:00	1

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 6010B
Prep Method: 3050B

Batch QC Report
Metals

Method Blank | **Soil** | **QC Batch # 2001/06/22-05.15**

MB: 2001/06/22-05.15-012 Date Extracted: 06/22/2001 11:41

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	06/22/2001 14:52	
Arsenic	ND	1.0	mg/Kg	06/22/2001 14:52	
Barium	ND	1.0	mg/Kg	06/22/2001 14:52	
Beryllium	ND	0.50	mg/Kg	06/22/2001 14:52	
Cadmium	ND	0.50	mg/Kg	06/22/2001 14:52	
Chromium	ND	1.0	mg/Kg	06/22/2001 14:52	
Cobalt	ND	1.0	mg/Kg	06/22/2001 14:52	
Copper	ND	1.0	mg/Kg	06/22/2001 14:52	
Lead	ND	1.0	mg/Kg	06/22/2001 14:52	
Molybdenum	ND	1.0	mg/Kg	06/22/2001 14:52	
Nickel	ND	1.0	mg/Kg	06/22/2001 14:52	
Selenium	ND	2.0	mg/Kg	06/22/2001 14:52	
Silver	ND	1.0	mg/Kg	06/22/2001 14:52	
Thallium	ND	1.0	mg/Kg	06/22/2001 14:52	
Vanadium	ND	1.0	mg/Kg	06/22/2001 14:52	
Zinc	ND	1.0	mg/Kg	06/22/2001 14:52	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn.: Raymond La Borde

Test Method: 7471A
Prep Method: 7471A

Batch QC Report
Metals

Method Blank | **Soil** | **QC Batch # 2001/06/22-04.16**

MB: 2001/06/22-04.16-029 | Date Extracted: 06/22/2001 11:43

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	06/22/2001 17:05	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn: Raymond La Borde

Test Method: 6010B
Prep Method: 3050B

Batch QC Report

Metals

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/22-05.15**

LCS: 2001/06/22-05.15-013 Extracted: 06/22/2001 11:41 Analyzed 06/22/2001 14:56
LCSD: 2001/06/22-05.15-014 Extracted: 06/22/2001 11:41 Analyzed 06/22/2001 15:00

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Antimony	91.5	87.1	100.0	100.0	91.5	87.1	4.9	80-120	20		
Arsenic	96.6	93.0	100.0	100.0	96.6	93.0	4.0	80-120	20		
Barium	95.8	91.7	100.0	100.0	95.8	91.7	4.4	80-120	20		
Beryllium	98.1	95.4	100.0	100.0	98.1	95.4	2.8	80-120	20		
Cadmium	96.3	92.2	100.0	100.0	96.3	92.2	4.4	80-120	20		
Chromium	97.0	92.8	100.0	100.0	97.0	92.8	4.4	80-120	20		
Cobalt	96.6	92.5	100.0	100.0	96.6	92.5	4.3	80-120	20		
Copper	97.6	93.3	100.0	100.0	97.6	93.3	4.5	80-120	20		
Lead	96.0	91.7	100.0	100.0	96.0	91.7	4.6	80-120	20		
Molybdenum	97.5	92.9	100.0	100.0	97.5	92.9	4.8	80-120	20		
Nickel	96.0	91.9	100.0	100.0	96.0	91.9	4.4	80-120	20		
Selenium	92.3	88.8	100.0	100.0	92.3	88.8	3.9	80-120	20		
Silver	92.2	88.3	100.0	100.0	92.2	88.3	4.3	80-120	20		
Thallium	93.7	89.9	100.0	100.0	93.7	89.9	4.1	80-120	20		
Vanadium	97.6	93.1	100.0	100.0	97.6	93.1	4.7	80-120	20		
Zinc	97.1	93.2	100.0	100.0	97.1	93.2	4.1	80-120	20		

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0398

To: **Decon Env. Services, Inc.**
Attn: Raymond La Borde

Test Method: 7471A
Prep Method: 7471A

Batch QC Report

Metals

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2001/06/22-04.16**

LCS: 2001/06/22-04.16-030 Extracted: 06/22/2001 11:43 Analyzed 06/22/2001 17:07
LCSD: 2001/06/22-04.16-031 Extracted: 06/22/2001 11:43 Analyzed 06/22/2001 17:08

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Mercury	0.515	0.517	0.500	0.500	103.0	103.4	0.4	85-115	20		

APPENDIX F

LEAD AIR MONITORING RESULTS

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010103D

DATE COLLECTED: 1/2/01
DATE RECEIVED: 1/3/01
DATE ANALYZED: 1/4/01
DATE REPORT: 8/22/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 60.0µg Spike:	209.0 µg	348.3 %
QC 5.0 ppm Std.:	4.94 ppm	98.8 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010103D-2	02, IWA, personal Bobcat operator	L. Johnson 552-84-9328	1/2/01	305	2.31	704.5	<5.0	<7.09	<4.51
010103D-3	03, IWA, southeast corner Digging & piling dirt	Area	1/2/01	242	7.21	1744.8	<5.0	<2.87	
010103D-4	04, IWA, southwest corner Digging & piling dirt	Area	1/2/01	242	7.21	1744.8	<5.0	<2.87	
010103D-5	05, IWA, northwest corner Digging & piling dirt	Area	1/2/01	242	7.21	1744.8	<5.0	<2.87	

Standard and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead. Total lead < 5.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA method 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific. Samples are not blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010105L

DATE COLLECTED: 1/4/01
DATE RECEIVED: 1/5/01
DATE ANALYZED: 1/8/01
DATE REPORT: 8/22/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 60.0µg Spike:	204.0 µg	340.0 %
QC 5.0 ppm Std.:	4.97 ppm	99.4 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010105L-1	01, Personal Back hoe operator	D. Harley 547-41-7962	1/4/01	100	2.41	241.0	<5.0	<20.75	<4.32
010105L-2	02, West side Digging and loading dirt	Area	1/4/01	105	7.21	757.0	<5.0	<6.61	
010105L-3	03, North end Digging and loading dirt	Area	1/4/01	102	7.21	735.4	<5.0	<6.80	

Standard and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead. Total lead < 5.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA method 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific. Samples are not blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

Heidi Fruhlinger

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010105EE

DATE COLLECTED: 1/5/01
DATE RECEIVED: 1/5/01
DATE ANALYZED: 1/8/01
DATE REPORT: 8/22/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 60.0µg Spike:	200.0 µg	333.3 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010105EE-1	01, Personal, operator Digging and loading dirt	L. Johnson 552-84-9328	1/5/01	390	2.09	813.2	<5.0	<6.15	<5.0
010105EE-2	02, East side Digging and loading dirt	Area	1/5/01	392	2.17	850.6	<5.0	<5.88	
010105EE-3	03, West side Digging and loading dirt	Area	1/5/01	379	7.21	2732.6	22.8	8.34	
010105EE-4	04, North side Digging and loading dirt	Area	1/5/01	376	7.21	2711.0	<5.0	<1.84	

Standard and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead. Total lead < 5.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA method 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific. Samples are not blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

Heidi Fruhlinger

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010215H

DATE COLLECTED: 2/15/01
DATE RECEIVED: 2/15/01
DATE ANALYZED: 2/16/01
DATE REPORT: 2/21/01

PAGE#: 1 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	200.0 µg	100.0 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.05 ppm	100.5 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.6 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010215H-1	01, Southeast end on barrier fence Shoveling dirt & paint chips	Area	2/15/01	390	5.45	2125.5	<5.0	<2.35	
010215H-2	02, Center on barrier fence Shoveling dirt & paint chips	Area	2/15/01	388	5.45	2114.6	<5.0	<2.36	
010215H-3	03, Southwest end on barrier fence Shoveling dirt & paint chips	Area	2/15/01	388	5.45	2114.6	<5.0	<2.36	
010215H-4	04, In snorkel baskets Shoveling dirt & paint chips	Area	2/15/01	400	2.08	832.0	<5.0	<6.01	
010215H-5	05, Blank		2/15/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010215H

DATE COLLECTED: 2/15/01
DATE RECEIVED: 2/15/01
DATE ANALYZED: 2/16/01
DATE REPORT: 2/21/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	200.0 µg	100.0 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.05 ppm	100.5 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.6 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010215H-6	06, Box Blank		2/15/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010216R

DATE COLLECTED: 2/16/01
DATE RECEIVED: 2/16/01
DATE ANALYZED: 2/19/01
DATE REPORT: 2/19/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	196.0 µg	98.0 %
QC 5.0 ppm Std.:	5.05 ppm	101.0 %
QC 10.0 ppm Std.:	9.94 ppm	99.4 %
QC NIST 2581 SRM (0.449%):	0.43 %	94.9 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010216R-1	01, Southwest corner on barrier fence Scraping & repainting outside	Area	2/16/01	355	5.45	1934.7	<5.0	<2.58	
010216R-2	02, Center on barrier fence Scraping & repainting outside	Area	2/16/01	358	5.45	1951.1	<5.0	<2.56	
010216R-3	03, Southeast corner on barrier fence Scraping & repainting outside	Area	2/16/01	361	5.45	1967.4	<5.0	<2.54	
010216R-4	04, Blank		2/16/01				<5.0		
010216R-5	05, Box Blank		2/16/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

PHASE CONTRAST MICROSCOPY

NIOSH 7400A (4th Edition, #2, 8/15/94)

DATE: 8/22/01
KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010123L

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177

TEL#/FAX#: 415-973-6902 / 415-973-9201

PAGE#: 1 of 2
ANALYST: E. Catbagan

ROTAMETER#: HV-45
MONITORED BY: MARVIN PETERSON
CERTIFICATION#: M0879

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Avenue
Piedmont, CA

RECEIVED DATE: 1/23/01
ANALYZED DATE: 1/23/01

MEDIUM: 25MM FILTER MEMBRANE
STANDARD: 0.1 FIBERS/CC KELLCO CV: 0.208

KELLCO ID#	LOCATION AND ACTIVITY	WORKER AND SS#	MASK TYPE	DATE	TIME (MIN)	FLOW (LPM)	VOL. (Liter)	LAB COUNTS FIBERS	LAB COUNTS FIELDS	FIBERS /CC	L.O.Q.*	95% ONE-SIDED UCL	REMARKS
010123L-1	01, Small transformer regulator room. Loading Transite panels	Area		1/23/01	155	5.51	854.05	4.5	100	< **0.003**	0.045	0.037	
010123L-2	02, By dumpster. Loading Transite panels	Area		1/23/01	127	5.51	699.77						Could not read, sample covered with welding dust
010123L-3	03, Small transformer regulator room. Loading Transite panels	Area		1/23/01	100	5.51	551.00						Could not read, sample covered with welding dust
010123L-4	04, Small transformer regulator room. Loading Transite panels	Area		1/23/01	121	5.51	666.71	6.5	100	**0.005**	0.058	0.039	
010123L-5	05, Big room south end inside doorway. Loading Transite panels	Area		1/23/01	65	5.51	358.15						Could not read, sample covered with welding dust

* (U.C.L.) 95% one sided upper confidence limit for a single sample: [NIOSH 7400 method EQ: FIBERS/CC + (1.645*CV*STANDARD)]
CV derived from the KELLCO CV program and the standard is 0.1 FIBERS/CC unless requested otherwise.
*(L.O.D.) Limit of detection for this method: 5.5 FIBERS/100 FIELDS per NIOSH 7400A.
*(L.O.Q.) Smallest fiber concentration that can be calculated for this sample with statistical reliability based on 78.5 FIBERS/100 FIELDS (NIOSH 7400 method). NIOSH has determined that the statistically optimal filter loading is between 100 and 1300 FIBERS/SQ. MM (or 78.5 FIBERS per 100 FIELDS and 205 FIBERS per 20 FIELDS.) Samples outside this range have an increased probability of variability and bias.
Samples are blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

MASK TYPES:
HF Half Face Dual Cartridge
FF Full Face Dual Cartridge
PAPR Powered Air Purifying Respirator
SAR Supplied Air Respirator
(blank) Not reported to the lab

PHASE CONTRAST MICROSCOPY

NIOSH 7400A (4th Edition, #2, 8/15/94)

DATE: 8/22/01
KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010123L

CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177

TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Sub Station E
408 Linda Avenue
Piedmont, CA

PAGE#: 2 of 2
ANALYST: E. Catbagan

ROTAMETER#: HV-45
MONITORED BY: MARVIN PETERSON
CERTIFICATION#: M0879

RECEIVED DATE: 1/23/01
ANALYZED DATE: 1/23/01

MEDIUM: 25MM FILTER MEMBRANE
STANDARD: 0.1 FIBERS/CC KELLCO CV: 0.208

KELLCO ID#	LOCATION AND ACTIVITY	WORKER AND SS#	MASK TYPE	DATE	TIME (MIN)	FLOW (LPM)	VOL. (Liter)	LAB COUNTS FIBERS	LAB COUNTS FIELDS	FIBERS /CC	L.O.Q.*	95% ONE-SIDED UCL	REMARKS
010123L-6	06, Blank						1.0		100				

* (U.C.L.) 95% one sided upper confidence limit for a single sample: [NIOSH 7400 method EQ: FIBERS/CC + (1.645*CV*STANDARD)]
CV derived from the KELLCO CV program and the standard is 0.1 FIBERS/CC unless requested otherwise.
*(L.O.D.) Limit of detection for this method: 5.5 FIBERS/100 FIELDS per NIOSH 7400A.
*(L.O.Q.) Smallest fiber concentration that can be calculated for this sample with statistical reliability based on 78.5 FIBERS/100 FIELDS (NIOSH 7400 method). NIOSH has determined that the statistically optimal filter loading is between 100 and 1300 FIBERS/SQ. MM (or 78.5 FIBERS per 100 FIELDS and 205 FIBERS per 20 FIELDS.) Samples outside this range have an increased probability of variability and bias.

Samples are blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

MASK TYPES:
HF Half Face Dual Cartridge
FF Full Face Dual Cartridge
PAPR Powered Air Purifying Respirator
SAR Supplied Air Respirator
(blank) Not reported to the lab

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: 408 Linda St

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010131T

DATE COLLECTED: 1/31/01
DATE RECEIVED: 1/31/01
DATE ANALYZED: 2/1/01
DATE REPORT: 8/22/01

PAGE#: 1 of 1

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 60.0µg Spike:	213.0 µg	355.0 %
QC 5.0 ppm Std.:	4.86 ppm	97.2 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010131T-1	01, IWA, Mezzanine, East side Lead paint scrape	Area	1/31/01	422	6.64	2804.2	645.75	230.30	
010131T-2	02, IWA, 2nd floor, North side Lead paint scrape	Area	1/31/01	420	6.97	2927.4	621.0	212.16	
010131T-3	03, IWA, Mezzanine, center Lead paint scrape	Area	1/31/01	417	2.42	1011.2	234.6	232.05	
010131T-4	04, OWA, Personal Site monitor	M. Peterson 475-34-3777	1/31/01	416	2.51	1044.2	58.2	55.75	48.31

Standard and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead. Total lead < 5.0 µg: lead not found at the detection limit of this method and instrument. Samples analyzed in accordance with EPA method 7420 for lead analysis by AA. NIOSH method 7082 for quantitation of lead is also referenced. This is an elemental analysis, not compound specific. Samples are not blank corrected. The 8 hour TWA assumes no exposure for the unsampled time of the 8 hour shift. Actual exposure values are based on the data supplied by the client.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010201Y

DATE COLLECTED: 2/1/01
DATE RECEIVED: 2/1/01
DATE ANALYZED: 2/2/01
DATE REPORT: 2/2/01

PAGE#: 1 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	214.0 µg	107.0 %
QC 5.0 ppm Std.:	4.87 ppm	97.4 %
QC 10.0 ppm Std.:	9.82 ppm	98.2 %
QC NIST 2581 SRM (0.449%):	0.43 %	96.0 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010201Y-1	01, IWA, interior 2nd floor, south side center area Scrape paint	Area	2/1/01	346	3.47	1202.3	54.9	45.66	
010201Y-2	02, IWA, interior 2nd floor, east side next to restroom Scrape paint	Area	2/1/01	345	3.47	1198.9	58.35	48.91	
010201Y-3	03, Outdoors, fence at sidewalk btwn telephone pole & SE corner of building Soil remediation	Area	2/1/01	419	3.35	1403.6	<5.0	<3.56	
010201Y-4	04, Outdoors, SW corner of fence for apartment bldg NE of site bldg Soil remediation	Area	2/1/01	405	3.35	1356.8	<5.0	<3.68	
010201Y-5	05, IWA, inside building, south center area under stairs Scrape paint	Area	2/1/01	316	3.35	1058.6	80.55	76.06	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010201Y

DATE COLLECTED: 2/1/01
DATE RECEIVED: 2/1/01
DATE ANALYZED: 2/2/01
DATE REPORT: 2/2/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	214.0 µg	107.0 %
QC 5.0 ppm Std.:	4.87 ppm	97.4 %
QC 10.0 ppm Std.:	9.82 ppm	98.2 %
QC NIST 2581 SRM (0.449%):	0.43 %	96.0 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010201Y-6	06, Personal, in loader area Loader operator		2/1/01	378	2.34	884.5	<5.0	<5.65	<4.45
010201Y-7	07, Outdoors, fence at east side of site next to 420 Linda Soil remediation	Area	2/1/01	360	3.09	1110.6	<5.0	<4.50	
010201Y-8	08, Sidewalk outside bay doors on south side of building Soil remediation	Area	2/1/01	243	3.68	894.2	45.0	50.34	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: 408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010202T

DATE COLLECTED: 2/2/01
DATE RECEIVED: 2/2/01
DATE ANALYZED: 2/5/01
DATE REPORT: 2/6/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	208.0 µg	104.0 %
QC 5.0 ppm Std.:	4.99 ppm	99.8 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.0 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010202T-1	01, IWA, 2nd floor mezzanine, Southeast end Vacuuming & wet wiping	Area	2/2/01	435	3.35	1457.3	105.0	72.06	
010202T-2	02, IWA, 2nd floor, West Vacuuming & wet wiping	Area	2/2/01	433	3.35	1450.5	82.95	57.17	
010202T-3	03, IWA, 1st floor, West, by big door Vacuuming & wet wiping	Area	2/2/01	423	3.35	1417.0	28.95	20.43	
010202T-4	04, IWA, 1st floor, West, center room Vacuuming & wet wiping	Area	2/2/01	421	3.35	1410.3	105.6	74.89	
010202T-5	05, IWA, Outside, N.West corner, on fence Loading dirt	Area	2/2/01	285	3.35	954.8	<5.0	<5.24	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: 408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010202T

DATE COLLECTED: 2/2/01
DATE RECEIVED: 2/2/01
DATE ANALYZED: 2/5/01
DATE REPORT: 2/6/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	208.0 µg	104.0 %
QC 5.0 ppm Std.:	4.99 ppm	99.8 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.0 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010202T-6	06, IWA, Outside, South on barrier fence Loading dirt	Area	2/2/01	291	3.35	974.8	<5.0	<5.13	
010202T-7	07, Personal, OWA Air monitoring	Marvin Peterson 475-34-3777	2/2/01	390	2.34	912.6	17.55	19.22	15.62
010202T-8	08, IWA, East side on barrier fence Loading dirt	Area	2/2/01	252	3.17	798.8	<5.0	<6.26	
010202T-9	09, IWA, Loader operator Digging & piling dirt	Area	2/2/01	128	3.17	405.8	<5.0	<12.32	
010202T-10	10, OWA, South side, West side of bldg, on barrier fence Digging & piling dirt	Area	2/2/01	140	3.35	469.0	<5.0	<10.66	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: 408 Linda Avenue
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010202T

DATE COLLECTED: 2/2/01
DATE RECEIVED: 2/2/01
DATE ANALYZED: 2/5/01
DATE REPORT: 2/6/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	208.0 µg	104.0 %
QC 5.0 ppm Std.:	4.99 ppm	99.8 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.0 %

RUSH

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010202T-11	11, Blank		2/2/01				<5.0		
010202T-12	12, Field Blank		2/2/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010205FF

DATE COLLECTED: 2/5/01
DATE RECEIVED: 2/5/01
DATE ANALYZED: 2/6/01
DATE REPORT: 2/9/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	209.0 µg	104.5 %
QC 5.0 ppm Std.:	5.04 ppm	100.8 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.3 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010205FF-1	01, 2nd floor mezzanine, center Lead paint clean up with high pressure washer	Area	2/5/01	400	3.35	1340.0	<5.0	<3.73	
010205FF-2	02, 2nd floor, west side Lead paint clean up with high pressure washer	Area	2/5/01	400	3.35	1340.0	<5.0	<3.82	
010205FF-3	03, 1st floor, center room Lead paint clean up with high pressure washer	Area	2/5/01	400	3.35	1340.0	5.55	4.14	
010205FF-4	04, 1st floor, west room by big doors Lead paint clean up with high pressure washer	Area	2/5/01	397	3.35	1329.9	<5.0	<3.76	
010205FF-5	05, West side bldg., outdoors, south end. Moved to east side 10:00 AM Loading soil	Area	2/5/01	397	3.35	1329.9	<5.0	<3.76	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010205FF

DATE COLLECTED: 2/5/01
DATE RECEIVED: 2/5/01
DATE ANALYZED: 2/6/01
DATE REPORT: 2/9/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	209.0 µg	104.5 %
QC 5.0 ppm Std.:	5.04 ppm	100.8 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.3 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010205FF-6	06, Operator Loading soil	L. Johnson	2/5/01	392	2.43	954.5	<5.0	<5.26	<4.29
010205FF-7	07, East side of bldg., outdoors, southwest end Loading soil	Area	2/5/01	337	3.35	1128.9	<5.0	<4.43	
010205FF-8	08, Blank		2/5/01				<5.0		
010205FF-9	09, Box Blank		2/5/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
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This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

KELLCO

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010206M

DATE COLLECTED: 2/6/01
DATE RECEIVED: 2/6/01
DATE ANALYZED: 2/7/01
DATE REPORT: 2/12/01

PAGE#: 1 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	205.0 µg	102.5 %
QC 5.0 ppm Std.:	4.98 ppm	99.6 %
QC 10.0 ppm Std.:	9.89 ppm	98.9 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.1 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010206M-1	01, 2nd floor mezzanine, center	Area	2/6/01	395	3.35	1323.3	<5.0	<3.78	
010206M-2	02, 2nd floor, West side	Area	2/6/01	395	3.35	1323.3	<5.0	<3.78	
010206M-3	03, 1st floor center room, South center	Area	2/6/01	395	3.35	1323.3	<5.0	<3.78	
010206M-4	04, 1st floor center room, Northwest	Area	2/6/01	395	3.35	1323.3	<5.0	<3.78	
010206M-5	05, Outside, Southwest on barrier fence Loading dirt	Area	2/6/01	395	3.35	1323.3	<5.0	<3.78	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010206M

DATE COLLECTED: 2/6/01
DATE RECEIVED: 2/6/01
DATE ANALYZED: 2/7/01
DATE REPORT: 2/12/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	205.0 µg	102.5 %
QC 5.0 ppm Std.:	4.98 ppm	99.6 %
QC 10.0 ppm Std.:	9.89 ppm	98.9 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.1 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010206M-6	06, Outside, East side on barrier fence by 420 Linda Loading dirt	Area	2/6/01	394	3.35	1319.9	<5.0	<3.79	
010206M-7	07, Personal Loader operator	Larry Johnson	2/6/01	390	2.51	978.9	<5.0	<5.11	<4.15
010206M-8	08, Personal	Marvin Peterson 475-34-3777	2/6/01	391	2.51	981.4	<5.0	<5.10	<4.15
010206M-9	09, Blank		2/6/01				<5.0		
010206M-10	10, Box Blank		2/6/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010207V

DATE COLLECTED: 2/7/01
DATE RECEIVED: 2/7/01
DATE ANALYZED: 2/8/01
DATE REPORT: 2/12/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	207.0 µg	103.5 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.08 ppm	100.8 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010207V-1	01, 2nd floor mezzanine, center No lead work	Area	2/7/01	360	4.23	1522.8	<5.0	<3.28	
010207V-2	02, 2nd floor West, by steps No lead work	Area	2/7/01	359	4.23	1518.6	<5.0	<3.29	
010207V-3	03, 1st floor, center room, South center No lead work	Area	2/7/01	357	4.23	1510.1	<5.0	<3.31	
010207V-4	04, Outside South barrier fence, SW by dumpster Loading dirt	Area	2/7/01	362	4.23	1531.3	<5.0	<3.27	
010207V-5	05, Outside East barrier fence by 420 Linda Loading dirt	Area	2/7/01	362	4.23	1531.3	<5.0	<3.27	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010207V

DATE COLLECTED: 2/7/01
DATE RECEIVED: 2/7/01
DATE ANALYZED: 2/8/01
DATE REPORT: 2/12/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	207.0 µg	103.5 %
QC 5.0 ppm Std.:	5.01 ppm	100.2 %
QC 10.0 ppm Std.:	10.08 ppm	100.8 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.5 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010207V-6	06, 1st floor center room, NW corner No lead work	Area	2/7/01	354	4.23	1497.4	<5.0	<3.34	
010207V-7	07, Personal, bobcat operator Bobcat operator	Larry Johnson	2/7/01	340	2.94	999.6	<5.0	<5.0	<3.54
010207V-8	08, North end center on fence by Apt bldg Loading & digging dirt	Area	2/7/01	335	4.12	1380.2	<5.0	<3.62	
010207V-9	09, Blank		2/7/01				<5.0		
010207V-10	10, Box Blank		2/7/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010208W

DATE COLLECTED: 2/8/01
DATE RECEIVED: 2/9/01
DATE ANALYZED: 2/9/01
DATE REPORT: 2/15/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	209.0 µg	104.5 %
QC 5.0 ppm Std.:	4.97 ppm	99.4 %
QC 10.0 ppm Std.:	9.94 ppm	99.4 %
QC NIST 2581 SRM (0.449%):	0.43 %	94.9 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010208W-1	01, 1st floor, West room, South side at bay doors Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	411	3.94	1619.3	20.55	12.69	
010208W-2	02, 1st floor, center room at South side of concrete rack Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	411	4.12	1693.3	6.60	3.90	
010208W-3	03, 2nd floor, center area at S.W. stairs to West room Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	410	4.01	1644.1	5.85	3.56	
010208W-4	04, Outdoors, 15 ft S.W. of bldg on barrier fence at sidewalk Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	409	3.97	1625.8	<5.0	<3.08	
010208W-5	05, Outdoors, 15 ft N.W. of bldg on apartment fence Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	409	3.59	1468.3	<5.0	<3.41	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010208W

DATE COLLECTED: 2/8/01
DATE RECEIVED: 2/9/01
DATE ANALYZED: 2/9/01
DATE REPORT: 2/15/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	209.0 µg	104.5 %
QC 5.0 ppm Std.:	4.97 ppm	99.4 %
QC 10.0 ppm Std.:	9.94 ppm	99.4 %
QC NIST 2581 SRM (0.449%):	0.43 %	94.9 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010208W-6	06, On barrier fence at N.W. corner of 420 Linda property Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	409	3.60	1472.4	<5.0	<3.40	
010208W-7	07, On barrier fence at S.E. corner of PG&E site Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	410	3.31	1355.1	<5.0	<3.69	
010208W-8	08, Outdoors on barrier fence at sidewalk outside bay doors Soil remediation outdoors, cutting ducts & removing indoors	Area	2/8/01	400	4.01	1604.0	<5.0	<3.12	
010208W-9	09, Field Blank		2/8/01				<5.0		
010208W-10	10, Box Blank		2/8/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010209Q

DATE COLLECTED: 2/9/01
DATE RECEIVED: 2/9/01
DATE ANALYZED: 2/12/01
DATE REPORT: 2/15/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	213.0 µg	106.5 %
QC 5.0 ppm Std.:	5.00 ppm	100.0 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	96.7 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010209Q-1	01, 1st floor. S.E. room, North doorway Equipment mobilization & component (panels) removal	Area	2/9/01	320	3.94	1260.8	<5.0	<3.97	
010209Q-2	02, 1st floor, North doorway (door open) Equipment mobilization & component (panels) removal	Area	2/9/01	320	3.59	1148.8	6.00	5.22	
010209Q-3	03, 1st floor, center area, South end of concrete racks Equipment mobilization & component (panels) removal	Area	2/9/01	320	4.01	1283.2	7.20	5.61	
010209Q-4	04, 1st floor, S.W. room South end next to bay doors Equipment mobilization & component (panels) removal	Area	2/9/01	320	4.01	1283.2	8.85	6.90	
010209Q-5	05, 1st floor, S.W. room, N.W. corner Equipment mobilization & component (panels) removal	Area	2/9/01	320	4.01	1283.2	10.95	8.53	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI PRUHLINGER, M.A
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010209Q

DATE COLLECTED: 2/9/01
DATE RECEIVED: 2/9/01
DATE ANALYZED: 2/12/01
DATE REPORT: 2/15/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	213.0 µg	106.5 %
QC 5.0 ppm Std.:	5.00 ppm	100.0 %
QC 10.0 ppm Std.:	9.97 ppm	99.7 %
QC NIST 2581 SRM (0.449%):	0.43 %	96.7 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010209Q-6	06, 2nd floor, center area at top of East stairs Equipment mobilization & component (panels) removal	Area	2/9/01	318	4.01	1275.2	6.30	4.94	
010209Q-7	07, Outdoors on barrier fence at sidewalk adj to S.E. corner of bldg Equipment mobilization & component (panels) removal	Area	2/9/01	315	3.17	998.6	<5.0	<5.01	
010209Q-8	08, Outdoors on barrier fence at sidewalk next to bay doors Equipment mobilization & component (panels) removal	Area	2/9/01	315	3.17	998.6	<5.0	<5.01	
010209Q-9	09, Field Blank		2/9/01				<5.0		
010209Q-10	10, Box Blank		2/9/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010212L

DATE COLLECTED: 2/12/01
DATE RECEIVED: 2/12/01
DATE ANALYZED: 2/13/01
DATE REPORT: 2/15/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	213.0 µg	106.5 %
QC 5.0 ppm Std.:	4.94 ppm	98.8 %
QC 10.0 ppm Std.:	9.90 ppm	99.0 %
QC NIST 2581 SRM (0.449%):	0.42 %	94.3 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010212L-1	01, 2nd floor, center Painting, encaping, scraping loose lead paint	Area	2/12/01	375	5.45	2043.7	9.30	4.55	
010212L-2	02, 2nd floor mezzanine, South end Painting, encaping, scraping loose lead paint	Area	2/12/01	373	5.45	2032.8	6.60	3.25	
010212L-3	03, 1st floor, center room Painting, encaping, scraping loose lead paint	Area	2/12/01	374	5.45	2038.3	6.75	3.31	
010212L-4	04, 1st floor, office Northwest Painting, encaping, scraping loose lead paint	Area	2/12/01	376	5.45	2049.2	<5.0	<2.44	
010212L-5	05, Outside big doors Painting, encaping, scraping loose lead paint	Area	2/12/01	376	5.45	2049.2	<5.0	<2.44	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010212L

DATE COLLECTED: 2/12/01
DATE RECEIVED: 2/12/01
DATE ANALYZED: 2/13/01
DATE REPORT: 2/15/01

PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	213.0 µg	106.5 %
QC 5.0 ppm Std.:	4.94 ppm	98.8 %
QC 10.0 ppm Std.:	9.90 ppm	99.0 %
QC NIST 2581 SRM (0.449%):	0.42 %	94.3 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010212L-6	06, Personal Monitoring	Marvin Peterson	2/12/01	373	2.34	872.8	<5.0	<5.73	<4.45
010212L-7	07, Personal Encap, scrape loose paint		2/12/01	369	2.34	863.5	<5.0	<5.79	<4.45
010212L-8	08, Blank		2/12/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010213O

DATE COLLECTED: 2/13/01
DATE RECEIVED: 2/14/01
DATE ANALYZED: 2/14/01
DATE REPORT: 2/19/01

PAGE#: 1 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	210.0 µg	105.0 %
QC 5.0 ppm Std.:	4.93 ppm	98.6 %
QC 10.0 ppm Std.:	9.95 ppm	99.5 %
QC NIST 2581 SRM (0.449%):	0.43 %	94.9 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010213O-1	01, 2nd Mezzanine, center Painting over loose lead paint	Area	2/13/01	400	5.45	2180.0	8.70	3.99	
010213O-2	02, 2nd Floor mezzanine, South center Painting over loose lead paint	Area	2/13/01	400	5.45	2180.0	10.35	4.75	
010213O-3	03, Center room, center Painting over loose lead paint	Area	2/13/01	400	5.45	2180.0	<5.0	<2.29	
010213O-4	04, Office, Northwest corner Painting over loose lead paint	Area	2/13/01	400	5.45	2180.0	<5.0	<2.29	
010213O-5	05, Outside big doors Painting over loose lead paint	Area	2/13/01	383	5.45	2087.3	<5.0	<2.40	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
Samples analyzed in accordance with EPA method 7420 for lead analysis by AA.
NIOSH method 7082 for quantitation of lead is also referenced.
This is an elemental analysis, not compound specific.

HEIDI FRUHLINGER, M.A.
LABORATORY DIRECTOR

FLAME ATOMIC ABSORPTION SPECTROSCOPY

NIOSH Method 7082 for Airborne Lead Analysis

CLIENT#:1387
CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010213O

DATE COLLECTED: 2/13/01
DATE RECEIVED: 2/14/01
DATE ANALYZED: 2/14/01
DATE REPORT: 2/19/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	210.0 µg	105.0 %
QC 5.0 ppm Std.:	4.93 ppm	98.6 %
QC 10.0 ppm Std.:	9.95 ppm	99.5 %
QC NIST 2581 SRM (0.449%):	0.43 %	94.9 %

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010213O-6	06, Personal, pump Painting over loose lead paint		2/13/01	370	2.34	865.8	<5.0	<5.77	<4.45
010213O-7	07, Blank		2/13/01				<5.0		
010213O-8	08, Box Blank		2/13/01				<5.0		

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NIOSH Method 7082 for Airborne Lead Analysis

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CLIENT: Pacific Gas and Electric
P.O. Box 770000, Mail Code B24
San Francisco, CA 94177
TEL#/FAX#: 415-973-6902 / 415-973-9201

CLIENT REF#:

LOCATION: Substation E
408 Linda Ave
Piedmont, CA

KELLCO JOB#: 0008-14
KELLCO LOGIN#: 010214R

DATE COLLECTED: 2/14/01
DATE RECEIVED: 2/14/01
DATE ANALYZED: 2/15/01
DATE REPORT: 2/19/01

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	204.0 µg	102.0 %
QC 5.0 ppm Std.:	4.94 ppm	98.8 %
QC 10.0 ppm Std.:	9.89 ppm	98.9 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.3 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010214R-1	01, 2nd floor, center Painting over loose lead paint	Area	2/14/01	390	5.45	2125.5	35.55	16.72	
010214R-2	02, 2nd floor mezzanine, South end Painting over loose lead paint	Area	2/14/01	389	5.45	2120.0	20.25	9.55	
010214R-3	03, 1st floor, center room Painting over loose lead paint	Area	2/14/01	390	5.45	2125.5	26.10	12.28	
010214R-4	04, 1st floor, office area, Southwest Painting over loose lead paint	Area	2/14/01	389	5.45	2120.0	13.05	6.16	
010214R-5	05, Outside big doors, South wall Painting over loose lead paint	Area	2/14/01	390	5.45	2125.5	<5.0	<2.35	

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
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This is an elemental analysis, not compound specific.

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FLAME ATOMIC ABSORPTION SPECTROSCOPY

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PAGE#: 2 of 2

ANALYST: J. Neth

Q.C. Data	Measured Value	Percent Recovery
QC 200.0µg Spike:	204.0 µg	102.0 %
QC 5.0 ppm Std.:	4.94 ppm	98.8 %
QC 10.0 ppm Std.:	9.89 ppm	98.9 %
QC NIST 2581 SRM (0.449%):	0.43 %	95.3 %

Rush

KELLCO ID#	CLIENT SAMPLE ID AND DESCRIPTION	WORKER SS#	DATE	TIME (min)	FLOW (liters/min)	VOL. (liters)	TOTAL LEAD (µg)	ACTUAL EXPOSURE (µg/m3)	8 HR TWA (µg/m3)
010214R-6	06, Personal Painting	Maurice Williams, Sr	2/14/01	240	2.34	561.6	<5.0	<9.51	<4.75
010214R-7	07, Blank		2/14/01				<5.0		

Standard, NIST 2581 Standard Reference Material and Spike values are reported for quality control purposes. OSHA Action is 30 µg/m3 for the 8 hour TWA. OSHA PEL is 50.0 µg/m3 for the 8 hour TWA. Reporting limit is 5.0 µg total lead.
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