

APPENDIX E
REGULATORY RECORDS

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State of Louisiana

Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

August 26, 2004

CERTIFIED MAIL-- 7001 2510 0000 9675 0302
RETURN RECEIPT REQUESTED

Mr. Sean Cummings, Director
New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

RE: Approval of Supplemental Information
Lincoln Beach; AI No. 93800
Lincoln Beach Electrical Vaults and Light Towers
14100 Hayne Boulevard
New Orleans, LA 70128, Orleans Parish

Dear Mr. Cummings:

The Department has completed review of the Supplemental Information submitted on June 24, 2004. The Public Access Evaluation and Environmental Site Assessment Supplement prepared by Burk Kleinpeter, Inc. for the City of New Orleans, dated January 1999, is received in response to LDEQ's Supplemental Information Required - Final Corrective Action Report, dated June 9, 2004. The Burke Kleinpeter report documents the initial site investigation that reported PCB contamination from transformers in the vicinity of the electrical transformer vaults and electrical transformer lighting towers at Lincoln Beach located at 14100 Hayne Boulevard in New Orleans.

The following comments refer to each item in the response to the Department's request:

- The data and the information in this report are acceptable in response to the item number 3 referenced in the supplemental request and has been added to our file for future reference.
- A summary of the soil investigation has been filed for future reference. This submittal satisfies item number 1.

Mr. Sean Cummings -- Lincoln Beach
August 26, 2004
Page 2 of 2

- A summary of groundwater investigation at the site has been filed for future reference. This submittal satisfies item number 2.
- It is our understanding that you will provide additional information for the PCB investigation and remediation at the Diving Pool area required for this site. This response will satisfy item number 5.
- The supplemental information concerning the rebuilding and proposed construction of the beach area is noted and has been filed for future reference. This submittal satisfies item number 4.

Please contact this office at 504/736-7764 with any questions. All correspondence must reference the site information above to include the AI number and be submitted in triplicate to:

Keith L. Casanova, Administrator
Remediation Services Division
LA Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314.

Sincerely,



Claude L. Blanchard, Geologist
Environmental Technology Division

C: LDEQ HQ Room 144 - HW
LDEQ OEA/ETD - Toxicology
LDEQ OEA/ETD SERO - File
MMG, Inc. - Consultant

Final Corrective Action Report
Lincoln Beach, 14001 Hayne Boulevard, New Orleans, LA
LDEQ AI#: 93800

The Intelligent Resource

For:

**New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130**

**November 5, 2003
MMG# 2120-SV-CNO-NOL**



Materials Management Group, Inc.

5520 General DeGaulle Drive, Suite 3010
New Orleans, LA 70114 (504) 368-0568



Received by NOBC
12/3/03

B99

Materials Management Group, Inc.

November 5, 2003

Louisiana Department of Environmental Quality
Remediation Services Division
Attn: Mr. Keith Casanova, Administrator
P.O. Box 82178
Baton Rouge, LA 70884-2178

**Re: Lincoln Beach PCB Remediation Completion;
MMG File #: 2120-PCB, 2211-A-CNO**

Dear Mr. Casanova:

Enclosed please find the Final Corrective Action Plan Report for the PCB remediation activities conducted at Lincoln Beach, located at 14001 Hayne Boulevard, New Orleans, Louisiana. Based on the results of confirmatory sampling, MMG requests a No Further Action At This Time (NFA-ATT) determination from LDEQ on behalf of the property owner, the New Orleans Building Corporation.

If you have any questions, please feel free to contact me at (832) 445-0117.

Sincerely,
Materials Management Group, Inc.

Karly Allen Gibbs, Risk Assessor

cc: Ms. Lou Roberts, EPA Region 6 PCB Coordinator
Mr. Skip Blanchard, LDEQ Southeast Regional Office
Mr. Sean Cummings, NOBC Executive Director

Attachment: Corrective Action Plan Report

Final Corrective Action Report
Lincoln Beach, 14001 Hayne Boulevard, New Orleans, LA
LDEQ AI#: 93800

The Intelligent Resource

For:

**New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130**

**November 5, 2003
MMG# 2120-SV-CNO-NOL**



Materials Management Group, Inc.

3520 General DeGaulle Drive, Suite 3010
New Orleans, LA 70114 (504) 368-0568

Corrective Action Plan Report – Lincoln Beach
14001 Hayne Blvd., New Orleans, LA

November 5, 2003
2120-PCB, 2211-A-CNO

Final Report
Corrective Action Plan Implementation
for

Lincoln Beach
14001 Hayne Boulevard
New Orleans, Louisiana

Approval Page

Materials Management Group, Inc.
Claire Renault, Project Manager

Karly Gibbs

Materials Management Group, Inc.
Karly Gibbs, Risk Assessor

New Orleans Building Corporation
Sean Cummings, Executive Director

Louisiana Department of Environmental Quality
Skip Blanchard, Team Leader

EPA Region 6
Lou Roberts, Regional PCB Coordinator

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1.0 Project Background

On behalf of the New Orleans Building Corporation (NOBC), Materials Management Group, Inc. (MMG) has implemented the scope of work detailed in the Corrective Action Plan (CAP), dated January 2002, for 14001 Hayne Boulevard, New Orleans, Louisiana (see Figure 1, Site Location Map). The site under investigation is the former Lincoln Beach Amusement Park and parking lot. The park was closed in 1964 and has since not been used. The CAP was developed subsequent to Phase I and II Environmental Site Assessments, a Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) Site Assessment, and later sampling on behalf of the Environmental Protection Agency (EPA) Region 6 conducted at the site. The results of these assessments revealed PCB contamination of concrete slabs within the eight electrical vault buildings at the site, as well as PCB soil contamination at two of the vaults, electrical vault 1 (EV-1) and electrical vault 2 (EV-2), and five of the light towers (LT-2, LT-3, LT-4, LT-5, and LT-8). See Figure 2 for a Site Map.

1.1 Scope of Work

Based on the results of these site assessments and additional sampling, the scope of work for the CAP included the following:

- Demolition of the eight electrical vault buildings and removal of the concrete slabs;
- Removal of the five light towers and associated concrete foundations;
- Grid verification soil sampling (composite samples) at each of the former vault locations to meet the requirements of 40 CFR 761.61 Subpart O (to ensure removal of all PCB contamination from concrete slabs);
- Excavation of PCB contaminated soil (above the RECAP MO-1 risk level of 0.19 mg/kg) at EV-1, EV-2, LT-2, LT-3, LT-4, LT-5, and LT-8;
- LDEQ confirmatory sampling (discrete samples) in the soil excavation areas;
- Backfilling in each excavation area;
- Disposal of all soil, concrete, building materials (brick), and light tower materials at a permitted, non-hazardous landfill.

1.2 Summary of Applicable Regulations

The presence of PCBs required that the cleanup be conducted in accordance with both LDEQ RECAP and EPA regulations. Each of these regulations involves a specific cleanup level based on future use of the site (as a park or recreational area). The contamination at the site was handled under Management Option 1 (non-industrial) of RECAP. Therefore, the applicable RECAP standard was 0.19 mg/kg. All PCB soil contamination greater than 0.19 mg/kg required removal from the site. The EPA cleanup level for soil (bulk remediation waste) for a high occupancy area without any restrictions was 1 ppm. Since the RECAP cleanup level was more stringent than the EPA level,

cleanup under the RECAP requirements meets the EPA cleanup requirements. The EPA regulation also required verification sampling on a grid in addition to sampling required under RECAP.

2.0 Summary of Field Activities

2.1 Schedule

The PCB cleanup activities were conducted in three segments: initial clean up, second segment, and final segment. The initial cleanup activities were conducted from April 28 to May 13, 2003. The field crew worked four ten-hour days each workweek. The actual schedule of site activities for the initial cleanup was as follows:

April 28: Set up at site, arrival of heavy equipment, demolition of EV-3 and EV-6 (buildings and slabs)

April 29: Complete EV-3 and EV-6 demolition, building material removal, and grid verification sampling. Begin and complete demolition at EV-4, and begin demolition at EV-5. Remove LT-8, and complete confirmatory sampling. Begin demolition at LT-5.

April 30: Complete grid verification sampling at EV-4, remove building materials at EV-5, and complete demolition of EV-1. Begin removal of slab at LT-7 (discovered during cleanup at EV-5) and demolition of EV-2. Begin load out of building materials/concrete in roll off boxes.

May 1: Continue demolition at EV-2, begin at EV-8, and complete grid verification sampling at EV-5.

May 2: MMG waste coordinator onsite to oversee removal of full roll off boxes and drop off of empty roll off boxes (field crew off).

May 5: Conduct soil excavation at EV-1 and all associated confirmatory sampling, as well as grid verification sampling. Complete demolition and soil excavation at EV-2, as well as the associated confirmatory sampling. Continue demolition at EV-8, and begin at EV-7. Continue loading roll off boxes.

May 6: Continue demolition at EV-7, complete EV-8 and associated grid verification sampling. Complete grid verification sampling at EV-2. Backfill excavations at EV-2. Demolition at LT-2, LT-3, LT-4, LT-5, and LT-7. Complete confirmatory sampling at LT-2. Backfill at LT-2.

May 7: Continue cleanup at light towers. Backfill at other vault areas. Continue load out of roll off boxes. Confirmatory sampling at LT-3, LT-4, and LT-5. Solidify drummed purge water from monitoring wells at EV-2 for disposal. Complete demolition at EV-7.

May 8: Continue loading and loading out roll off boxes, backfill at EV-1 excavation areas, and complete grid verification sampling at EV-7. Smooth out backfilled areas and conduct general site cleanup.

May 12: Conduct general site cleanup.

May 13: Complete site cleanup, final waste load out, and heavy equipment pick up.

Based on the results of the confirmatory and verification sampling during the initial clean up, additional remediation was required at EV-1, EV-5, LT-2, and LT-8. This second segment was conducted from September 2 to September 9, 2003. The actual schedule was as follows:

September 2: Set up at site and arrival of heavy equipment. Complete additional excavation and confirmatory sampling at EV-5, and begin additional excavation at EV-1.

September 3: Complete additional excavation and confirmatory sampling at EV-1 and LT-2 and backfill at EV-5.

September 4: Complete additional excavation and confirmatory sampling at LT-8 and backfill at EV-1, LT-2, and LT-8. Site cleanup.

September 8: Waste load out.

The confirmatory sample results from the second segment revealed that additional excavation was necessary at EV-1, specifically along sidewall 4 of the September excavation area. This final cleanup segment was conducted **September 30, 2003**. This segment consisted of removing backfilled soil from the former excavation area, excavating an additional three feet bgs (for a total of six feet of excavation), and collecting one confirmatory soil sample.

2.2 Demolition and Disposal Activities

The eight electrical vault buildings and associated concrete slabs and five light towers and concrete foundations were demolished and removed using heavy equipment. MMG utilized a backhoe with a breaker, a trackhoe, a bobcat, and a front-end loader to demolish and load out the building materials, concrete, and light towers. The building materials and concrete pieces were sent to a non-hazardous landfill for disposal, and the light towers were reduced to manageable size using a cutting torch and taken to a recycling facility.

2.3 Excavation Activities

Excavation activities were conducted during each of the three cleanup segments.

Initial Cleanup

Excavation was required in areas that contained PCB concentrations above the RECAP MO-1 standard (0.19 mg/kg), originally in two areas at EV-1 and three areas at EV-2. In addition, MMG excavated around the base of each light tower. Electrical vault EV-1 required excavation in two areas: an area approximately one foot by one foot and one foot deep at former sample location B1, and an area two feet by two feet and four feet deep at former sample location B2. These excavation areas were merged during site activities (see Figure 4a). Electrical vault EV-2 required excavation in three areas (see Figure 4b): an area four and a half feet by five feet and three feet deep at former sample location B5, an area six feet by six and a half feet and six feet deep at former sample locations B2 and B3, and an area four and a half feet by four and a half feet and nine feet deep at

former sample location B6. The light towers were excavated to one foot below ground surface (bgs) once the foundations were removed (see Figures 4c-4g).

Second Segment

Sample results from the initial cleanup activities (April/May 2003) indicated additional excavation was necessary in four areas: in the area of Composite 3 at EV-1 (excavated to three feet bgs – see Figure 5a), the entire grid sampled area at EV-5 (excavated to three feet bgs – see Figure 5b), at sidewall 2 of LT-2 (excavated an additional three feet bgs – see Figure 5c), and the entire base of LT-8 (excavated an additional three feet bgs – see Figure 5d).

Final Segment

Confirmatory sample results from the second segment (September 2-9, 2003) excavation activities showed that further excavation was necessary at sidewall 4 of the Composite 3 EV-1 excavation area (see Figure 6a). This area was excavated an additional three feet bgs (for a total excavation depth of six feet bgs at that sidewall).

2.4 Grid Verification Sampling

Under EPA regulations (40 CFR 761.61 Subpart O), MMG conducted verification sampling using a grid system at each electrical vault (EV-1 through EV-8) during the initial cleanup. Once the concrete slabs were removed, grid nodes spaced 4.5 feet apart were placed over the potentially impacted area at each vault to assess for PCB contamination of the soil. Composite soil samples containing up to nine discrete samples were acceptable for this purpose. Depending on the size of the electrical vault, there were three to four composite samples collected for PCB analysis (SW-846 Method 8082) at each vault. The results from this sampling effort are summarized in Table 1 and discussed in Section 3.0. The actual locations of each discrete sample making up each composite are indicated in Figures 3a-3h.

2.5 Confirmatory Sampling

In addition to the verification sampling required by EPA, MMG collected confirmatory soil samples in excavation areas at two of the electrical vaults and at the five light towers during the initial clean up. The confirmatory sampling consisted of collecting samples from each of the sidewalls and the bottom of each excavation pit (as described in Section 2.3) to ensure that all unacceptable levels (above the RECAP MO-1 standard) of PCBs were removed. All samples were analyzed for PCBs (SW-846 Method 8082), and the confirmatory samples collected from EV-2 Area 3 (former borehole location B6) were also analyzed for Total Petroleum Hydrocarbons Oil Range Organics (TPH-O) due to the previous presence of phase hydrocarbons.

Confirmatory samples were also collected following the additional excavations at EV-1, EV-5, LT-2, and LT-8 conducted in September 2003 (second and final clean up segments).

The results of all confirmatory sampling are summarized in Tables 1 and 2, and discussed in Section 3.0. The locations of the confirmatory samples are indicated in Figures 4a-4g, 5a-5d, and 6a.

2.6 Exceptions and Deviations

All cleanup activities were conducted according to the Corrective Action Plan with the following two exceptions.

1. The two excavation areas at EV-1 were merged into one excavation area (see Figure 4a).
2. The construction of light towers LT-3, LT-4, and LT-5 prevented confirmatory sampling of the bottom of the excavation (the concrete foundation could not be removed). Only the four sidewalls were sampled at these locations.

3.0 Presentation and Discussion of Results

The final analytical reports are included in Appendix B. The results of all samples (verification and confirmatory) from all cleanup activities are summarized in Tables 1 and 2. Table 1 summarizes the results from the initial cleanup (conducted April/May 2003), and Table 2 summarizes the results from the second and final cleanup segments (September 2003). The results are discussed by cleanup effort below.

3.1 Initial Cleanup

The initial cleanup included two sets of sampling: verification (EPA) and confirmatory (LDEQ RECAP). These are reviewed below.

Verification Sampling Results

The results from the composite samples collected from the grid systems at each electrical vault were compared to the EPA cleanup level of 1 ppm and the LDEQ RECAP MO-1 standard of 0.19 mg/kg. The results revealed the following:

EV-1: All results were below the EPA cleanup level. Composite 3 was above the RECAP standard (concentration = 0.27 mg/kg).

EV-2: All results were below both the EPA and LDEQ RECAP levels.

EV-3: PCBs were not detected.

EV-4: All results were below both the EPA and LDEQ RECAP levels.

EV-5: All results were above both cleanup levels (Composite 1 = 3.3 mg/kg, Composite 2 = 3.7 mg/kg, and Composite 3 = 1.5 mg/kg).

EV-6: All results were below both the EPA and LDEQ RECAP levels.

EV-7: All results were below both the EPA and LDEQ RECAP levels.

EV-8: PCBs were not detected.

Confirmatory Sampling Results

The results from the confirmatory sampling in each of the excavation areas were compared to the LDEQ RECAP MO-1 standard of 0.19 mg/kg. The results revealed the following:

EV-1 Area 1/2 (combined): PCBs were not detected.

EV-2 Area 1: PCBs were not detected.

EV-2 Area 2: Although the result from sidewall 2 was above the RECAP level (concentration = 0.22 mg/kg), the 95% UCL (upper confidence limit) for the overall PCB concentration in the excavation areas is 0.082 mg/kg. Therefore, the overall result was below the RECAP standard. See Appendix C for the 95% UCL worksheet.

EV-2 Area 3: All results were below the RECAP standard.

LT-2: The sample collected from sidewall 2 was above the RECAP standard (concentration = 0.27 mg/kg). All other results were below the cleanup level.

LT-3: PCBs were not detected.

LT-4: All results were below the RECAP standard.

LT-5: PCBs were not detected.

LT-8: All results were above the RECAP standard (sidewall 1 = 1.3 mg/kg, sidewall 2 = 1.3 mg/kg, sidewall 3 = 0.54 mg/kg, sidewall 4 = 1.2 mg/kg, and bottom of pit = 0.52 mg/kg).

Initial Cleanup Findings

The verification and confirmatory sampling results indicated that additional excavation was necessary at the EV-1 Composite 3 grid sample area, the entire grid sample area of EV-5 (composites 1, 2, and 3), LT-2 sidewall 2, and the entire base of LT-8. Electrical vaults EV-2, EV-3, EV-4, EV-6, EV-7, and EV-8, as well as light towers LT-3, LT-4, and LT-5 did not require further remediation.

3.2 Second Cleanup Segment

The second segment of cleanup activities involved confirmatory sampling in each of the four excavation areas. Again the results were compared to the RECAP MO-1 standard of 0.19 mg/kg. The results are discussed below.

EV-1 Composite 3 Area: The sample collected from sidewall 4 was above the RECAP standard (concentration = 0.98 mg/kg). All other results were below the RECAP standard.

EV-5: PCBs were not detected.

LT-2 Sidewall 2: PCBs were not detected.

LT-8: PCBs were not detected.

Second Cleanup Findings

The confirmatory samples collected during this segment revealed that additional excavation was necessary along sidewall 4 of the Composite 3 excavation at EV-1. Electrical vault EV-5 and light towers LT-2 and LT-8 did not require further remediation.

3.3 Final Cleanup Segment

The final cleanup activities included collection of one confirmatory sample following additional excavation at sidewall 4 of the former Composite 3 excavation. The result was compared to the RECAP MO-1 standard of 0.19 mg/kg. The result is indicated below.

EV-1 Composite 3 Sidewall 4: PCBs were not detected.

Final Cleanup Findings

The confirmatory sample result indicated that all unacceptable levels of PCBs have been removed. Electrical vault EV-1 did not require further remediation.

4.0 Recommendations

Based on the results of all cleanup activities, no further action is necessary at the eight electrical vault areas and five light tower locations. All PCB contamination above 0.19 mg/kg (RECAP MO-1 standard) has been removed. This meets both LDEQ RECAP and EPA cleanup requirements. At this time, MMG formally requests a No Further Action At This Time (NFAATT) determination from LDEQ for the cleanup areas.

Based on the results of the deep pool investigation (February 2003 report), three of the eight concrete sample results indicate that areas of the pool concrete contain PCB concentrations that require disposal in a permitted landfill. Any concentrations above 1 mg/kg (part per million – ppm) must be disposed of at a permitted non-hazardous landfill under EPA regulation (40 CFR 761.61a). Due to the toxic nature of PCBs, MMG recommends that a trained hazardous waste contractor handle the pool floor demolition and disposal.

Tables

**Table 1: Summary of Analytical Results – Initial Clean Up
 April/May 2003**

Sample Name	Date	Sample Type	PCB Analytical Result (mg/kg)	TPH-O Analytical Result (mg/kg)**	Additional Action Required?	Comments
S-2120CNO-EV1-Comp1	5/5/03	Composite	<0.033	NA	No	
S-2120CNO-EV1-Comp2	5/5/03	Composite	0.1	NA	No	Arochlor 1260
S-2120CNO-EV1-Comp3	5/5/03	Composite	0.27	NA	Yes	Arochlor 1260
S-2120CNO-EV1-Comp4	5/5/03	Composite	0.051	NA	No	Arochlor 1260
S-2120CNO-EV2-Comp1	5/6/03	Composite	<0.033	NA	No	
S-2120CNO-EV2-Comp2	5/6/03	Composite	<0.033	NA	No	
S-2120CNO-EV2-Comp3	5/6/03	Composite	0.19	NA	No	Arochlor 1260
S-2120CNO-EV2-Comp4	5/6/03	Composite	0.14	NA	No	Arochlor 1260
S-2120CNO-EV3-Comp1	4/29/03	Composite	<0.033	NA	No	
S-2120CNO-EV3-Comp2	4/29/03	Composite	<0.033	NA	No	
S-2120CNO-EV3-Comp3	4/29/03	Composite	<0.033	NA	No	
S-2120CNO-EV4-Comp1	4/30/03	Composite	<0.033	NA	No	
S-2120CNO-EV4-Comp2	4/30/03	Composite	<0.033	NA	No	
S-2120CNO-EV4-Comp3	4/30/03	Composite	0.044	NA	No	Arochlor 1254
S-2120CNO-EV4-Comp4	4/30/03	Composite	<0.033	NA	No	
S-2120CNO-EV5-Comp1	5/1/03	Composite	3.3	NA	Yes	Arochlor 1254
S-2120CNO-EV5-Comp2	5/1/03	Composite	3.7	NA	Yes	Arochlor 1254
S-2120CNO-EV5-Comp3	5/1/03	Composite	1.5	NA	Yes	Arochlor 1260
S-2120CNO-EV6-Comp1	4/29/03	Composite	0.14	NA	No	Arochlor 1260
S-2120CNO-EV6-Comp2	4/29/03	Composite	0.1	NA	No	Arochlor 1260
S-2120CNO-EV6-Comp3	4/29/03	Composite	<0.033	NA	No	
S-2120CNO-EV6-Comp4	4/29/03	Composite	<0.033	NA	No	
S-2120CNO-EV7-Comp1	5/8/03	Composite	0.16	NA	No	Arochlor 1254
S-2120CNO-EV7-Comp2	5/8/03	Composite	<0.033	NA	No	
S-2120CNO-EV7-Comp3	5/8/03	Composite	0.085	NA	No	Arochlor 1254
S-2120CNO-EV7-Comp4	5/8/03	Composite	<0.033	NA	No	
S-2120CNO-EV8-Comp1	5/6/03	Composite	<0.33	NA	No	
S-2120CNO-EV8-Comp2	5/6/03	Composite	<0.33	NA	No	
S-2120CNO-EV8-Comp3	5/6/03	Composite	<0.33	NA	No	
S-2120CNO-EV8-Comp4	5/6/03	Composite	<0.33	NA	No	
S-2120CNO-EV1-Area2-SW1	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV1-Area2-SW2	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV1-Area2-SW3	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV1-Area2-SW4	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV1-Area2-BTM	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area1-SW1	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area1-SW2	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area1-SW3	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area1-BTM	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area2-SW1	5/5/03	Discrete	0.038	NA	No	Arochlor 1260
S-2120CNO-EV2-Area2-SW2	5/5/03	Discrete	0.22	NA	No*	Arochlor 1260
S-2120CNO-EV2-Area2-SW3	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area2-SW4	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area2-BTM	5/5/03	Discrete	<0.033	NA	No	
S-2120CNO-EV2-Area3-SW1	5/5/03	Discrete	<0.033	3.5	No	
S-2120CNO-EV2-Area3-SW2	5/5/03	Discrete	<0.033	91	No	
S-2120CNO-EV2-Area3-SW3	5/5/03	Discrete	0.17	110	No	Arochlor 1260
S-2120CNO-EV2-Area3-BTM	5/5/03	Discrete	<0.033	7.6	No	
S-2120CNO-LT2-SW1	5/6/03	Discrete	<0.033	NA	No	
S-2120CNO-LT2-SW2	5/6/03	Discrete	0.27	NA	Yes	Arochlor 1254
S-2120CNO-LT2-SW3	5/6/03	Discrete	<0.033	NA	No	
S-2120CNO-LT2-SW4	5/6/03	Discrete	<0.033	NA	No	

Corrective Action Plan Report – Lincoln Beach
 14001 Hayne Blvd., New Orleans, LA

November 5, 2003
 2120-PCB, 2211-A-CNO

S-2120CNO-LT2-BTM	5/6/03	Discrete	<0.033	NA	No	
S-2120CNO-LT3-SW1	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT3-SW2	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT3-SW3	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT3-SW4	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT4-SW1	5/7/03	Discrete	0.046	NA	No	Arochlor 1260
S-2120CNO-LT4-SW2	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT4-SW3	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT4-SW4	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT5-SW1	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT5-SW2	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT5-SW3	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT5-SW4	5/7/03	Discrete	<0.033	NA	No	
S-2120CNO-LT8-SW1	4/29/03	Discrete	1.3	NA	Yes	Arochlor 1260
S-2120CNO-LT8-SW2	4/29/03	Discrete	1.3	NA	Yes	Arochlor 1260
S-2120CNO-LT8-SW3	4/29/03	Discrete	0.54	NA	Yes	Arochlor 1260
S-2120CNO-LT8-SW4	4/29/03	Discrete	1.2	NA	Yes	Arochlor 1260
S-2120CNO-LT8-BTM	4/29/03	Discrete	0.52	NA	Yes	Arochlor 1260

Bold text indicates detected concentration.

NA = Not analyzed

*EV-2 concentration above RECAP MO-1 Limit eliminated through use of 95% UCL for cleanup data.

**TPH-O results from EV-2 Area 3 compared to RECAP Soil Screening Non-industrial (SSni) Limit of 140 mg/kg.



Concentration is above the RECAP MO-1 Limit of 0.19 mg/kg



Concentration is above the EPA limit of 1 mg/kg

Table 2: Summary of Analytical Results – Second and Final Clean Up Segments September 2003

Sample Name	Date	PCB Analytical Result (mg/kg)	Additional Action Required?	Comments
S-2211-A-11-EV1-SW1	9/3/03	<0.033	No	
S-2211-A-11-EV1-SW2	9/3/03	<0.033	No	
S-2211-A-11-EV1-SW3	9/3/03	<0.033	No	
S-2211-A-11-EV1-SW4	9/3/03	0.98	Yes*	Arochlor 1260
S-2211-A-11-EV1-SW4a	9/30/03	<0.033	No	
S-2211-A-11-EV1-BTM	9/3/03	<0.033	No	
S-2211-A-11-EV5-SW1	9/2/03	<0.033	No	
S-2211-A-11-EV5-SW2	9/2/03	<0.033	No	
S-2211-A-11-EV5-SW3	9/2/03	<0.033	No	
S-2211-A-11-EV5-SW4	9/2/03	<0.033	No	
S-2211-A-11-EV5-BTM	9/2/03	<0.033	No	
S-2211-A-11-LT2-SW2	9/3/03	<0.033	No	
S-2211-A-11-LT8-SW1	9/4/03	<0.033	No	
S-2211-A-11-LT8-SW2	9/4/03	<0.033	No	
S-2211-A-11-LT8-SW3	9/4/03	<0.033	No	
S-2211-A-11-LT8-SW4	9/4/03	<0.033	No	
S-2211-A-11-LT8-BTM	9/4/03	<0.033	No	

Bold text indicates detected concentration.

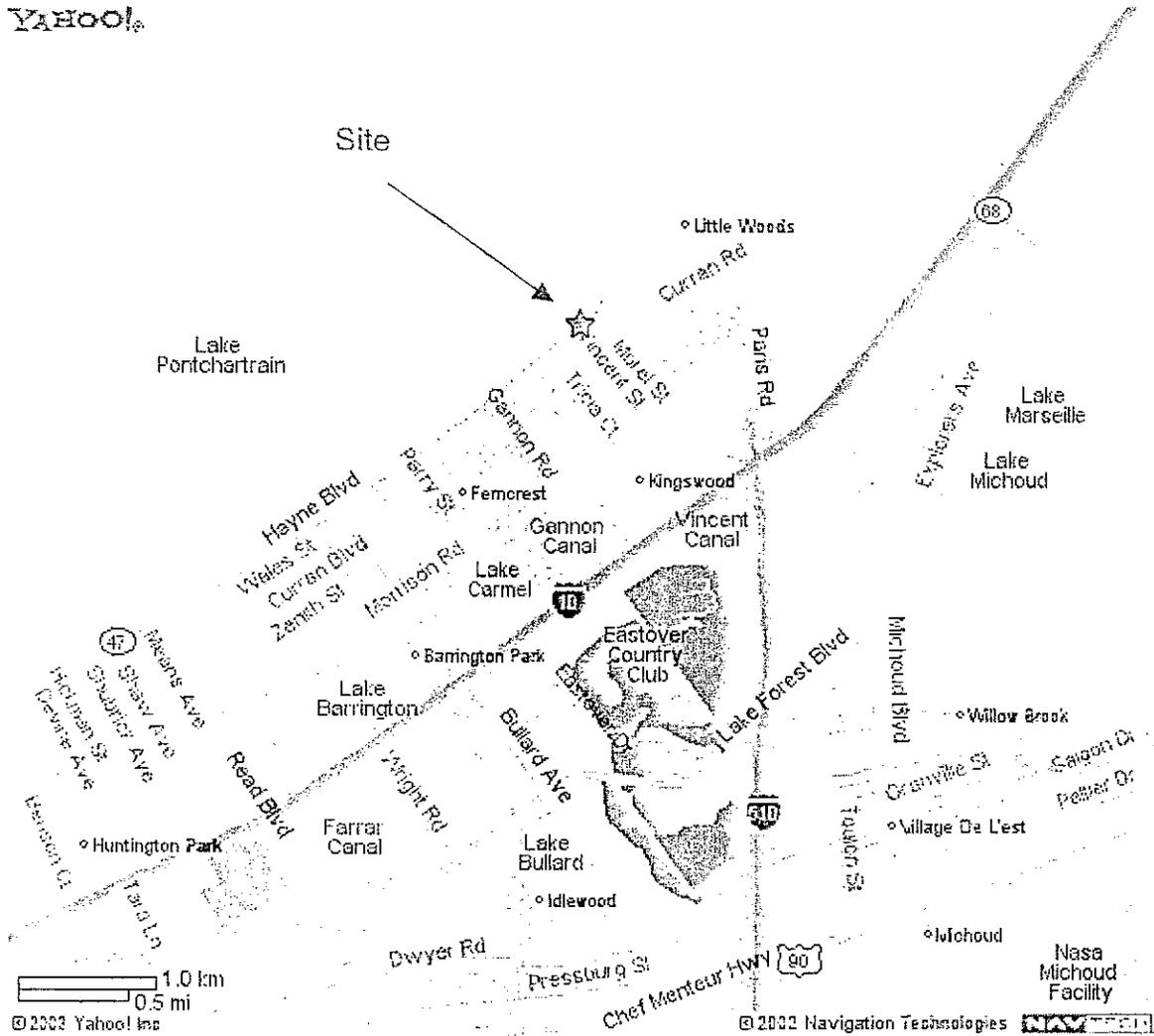
*See result for sample S-2211-A-11-EV1-SW4a, collected 9/30/03



Concentration is above the RECAP MO-1 Limit of 0.19 mg/kg

Figures

Figure 1: Site Location Map



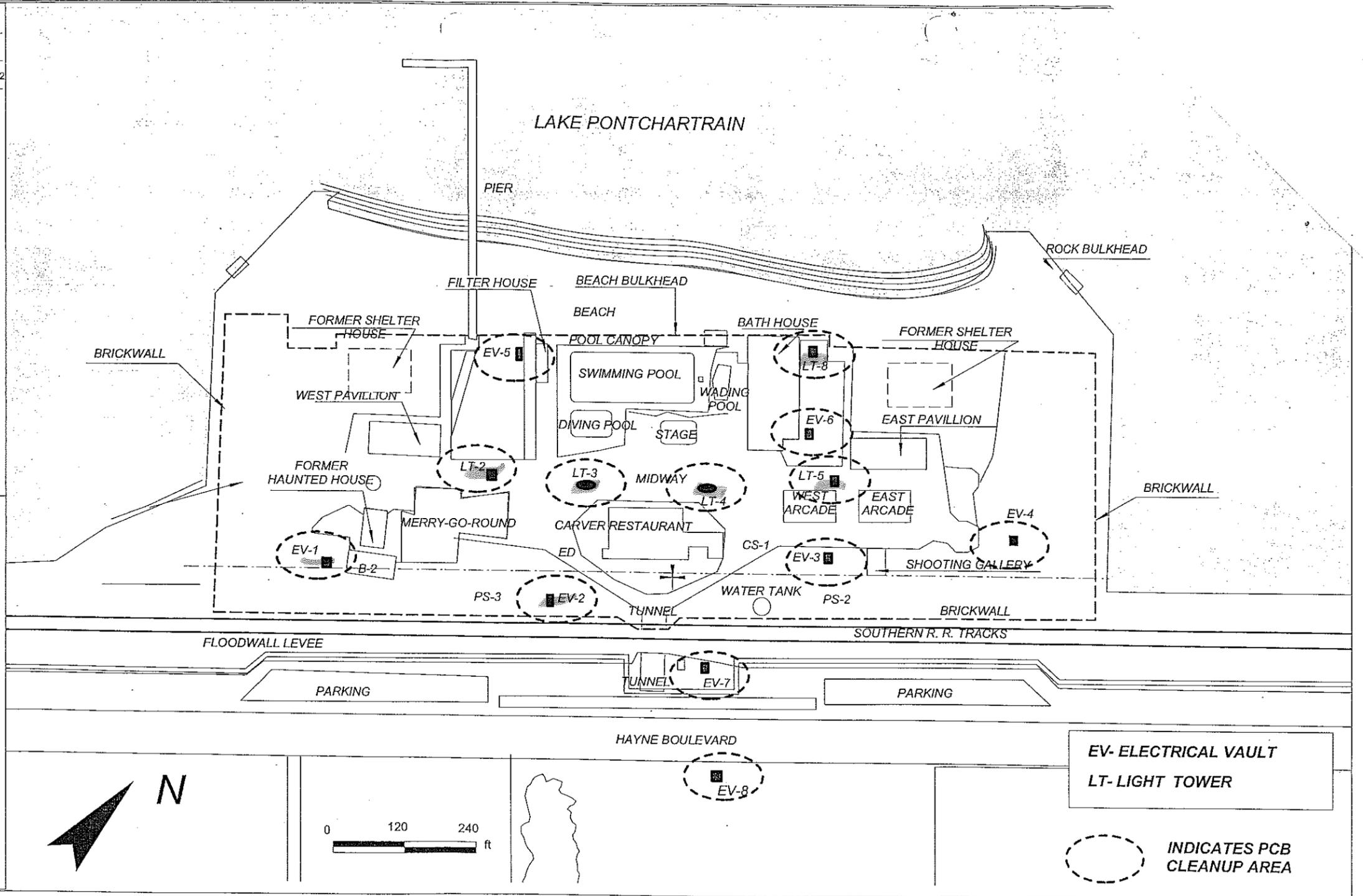
DRAWN: BEN T
 FILE: 2211-CNO
 DRAWING NAME: FIGURE 2

LINCOLN BEACH PCB CLEANUP

FIGURE 2: SITE MAP

NEW ORLEANS
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0568, FAX: 368-9403

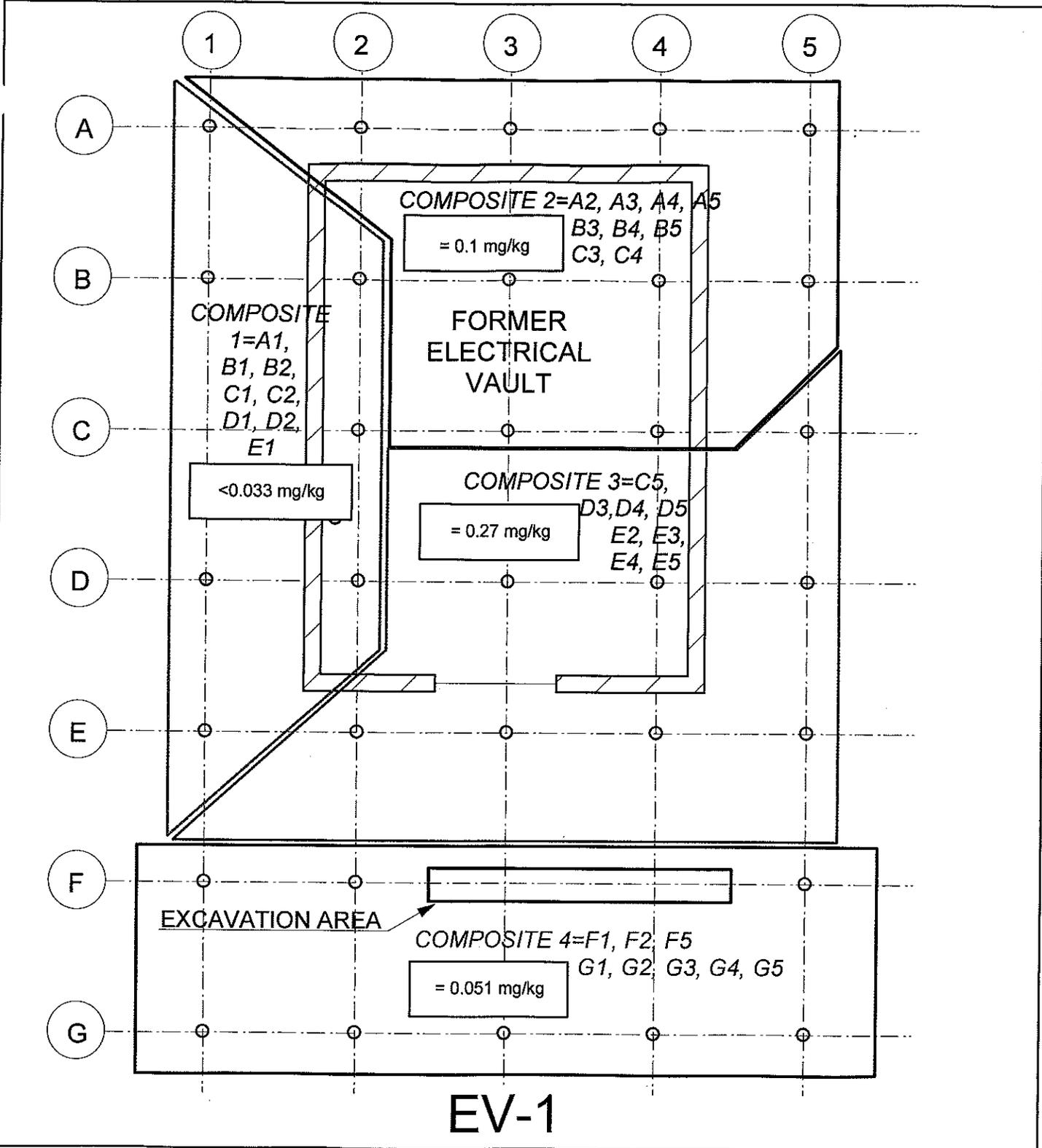
MATERIALS MANAGEMENT GROUP
 GRETNVA



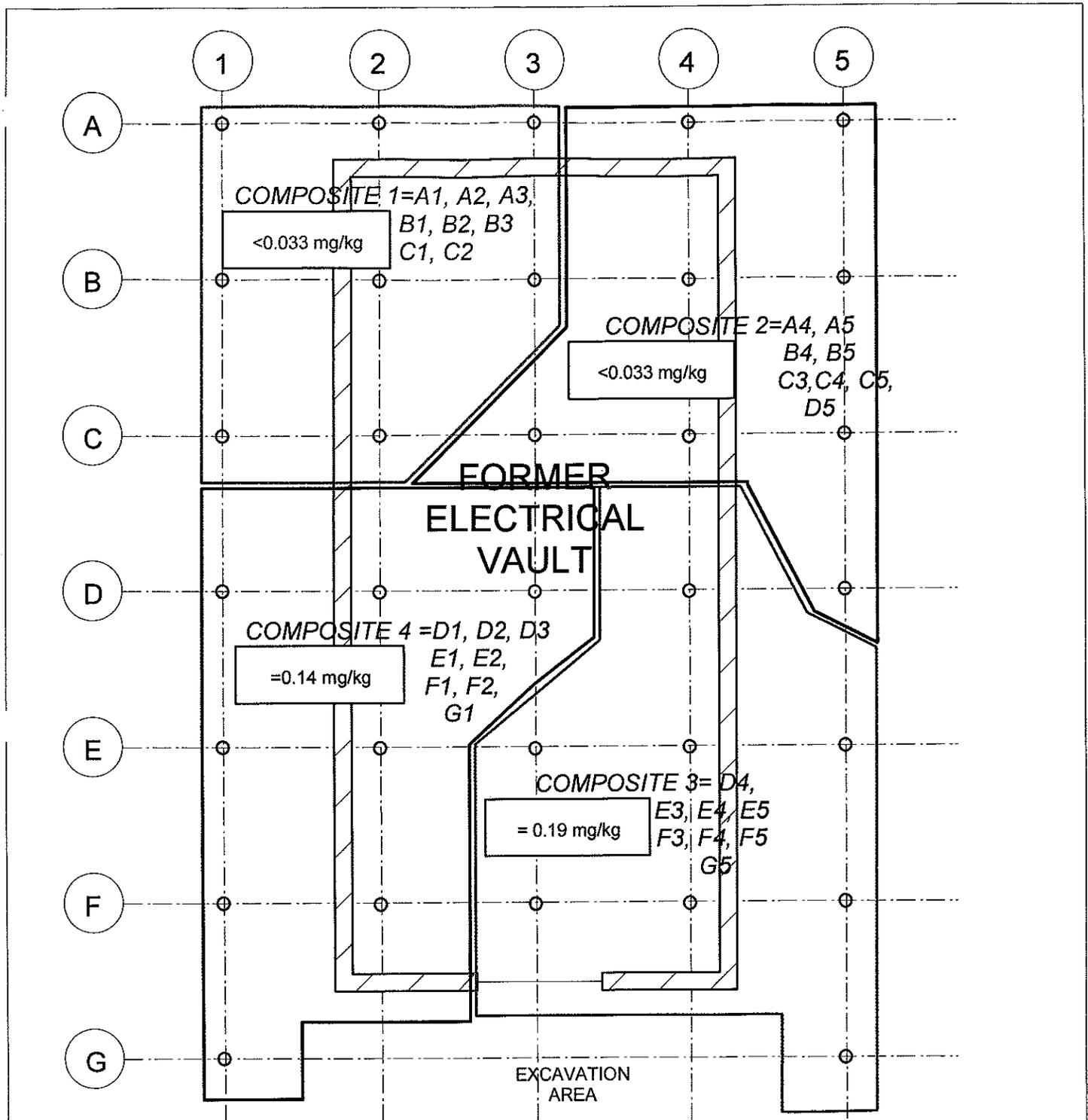
EV- ELECTRICAL VAULT
 LT- LIGHT TOWER

INDICATES PCB CLEANUP AREA

EXCAVATION OF PCB-CONTAMINATED SOIL

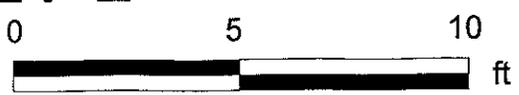


	COMPOSITE 1	LEGEND	 0 5 10 ft	 N
	COMPOSITE 2			
	COMPOSITE 3			
	COMPOSITE 4			
	DISCRETE SAMPLE LOCATION			



COMPOSITE 1
COMPOSITE 2
COMPOSITE 3
COMPOSITE 4

EV-2



○ DISCRETE SAMPLE LOCATION

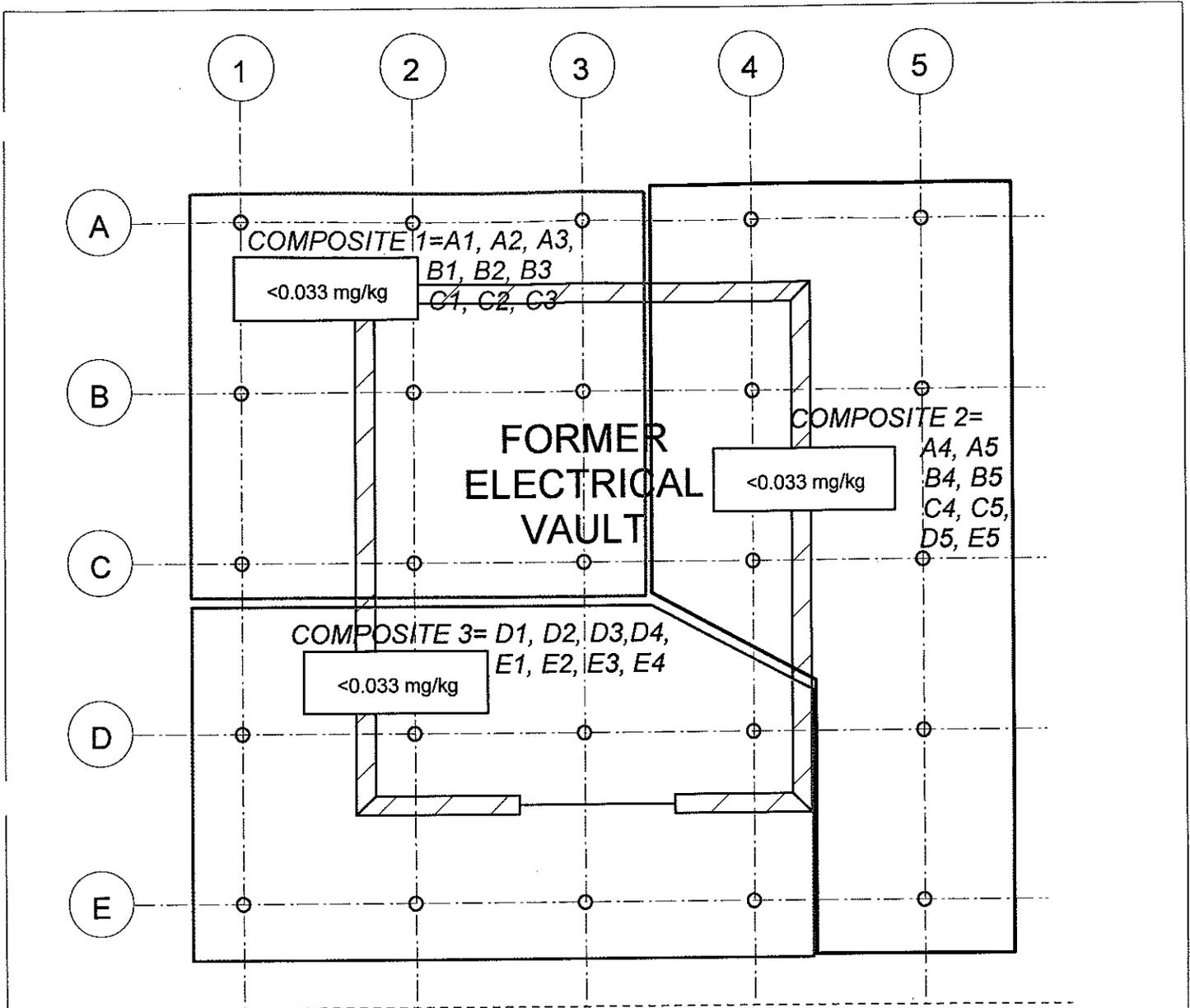
DRAWN: BEN TSAI
FILE: 2211-PCB

FIGURE:3b: ELECTRICAL VAULT EV-2
VERIFICATION SAMPLE LOCATIONS

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

MATERIALS MANAGEMENT GROUP

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NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX:368-8403



PAVEMENT

EV-3

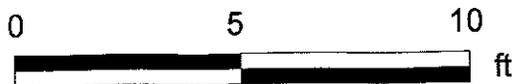
EDGE OF PAVEMENT



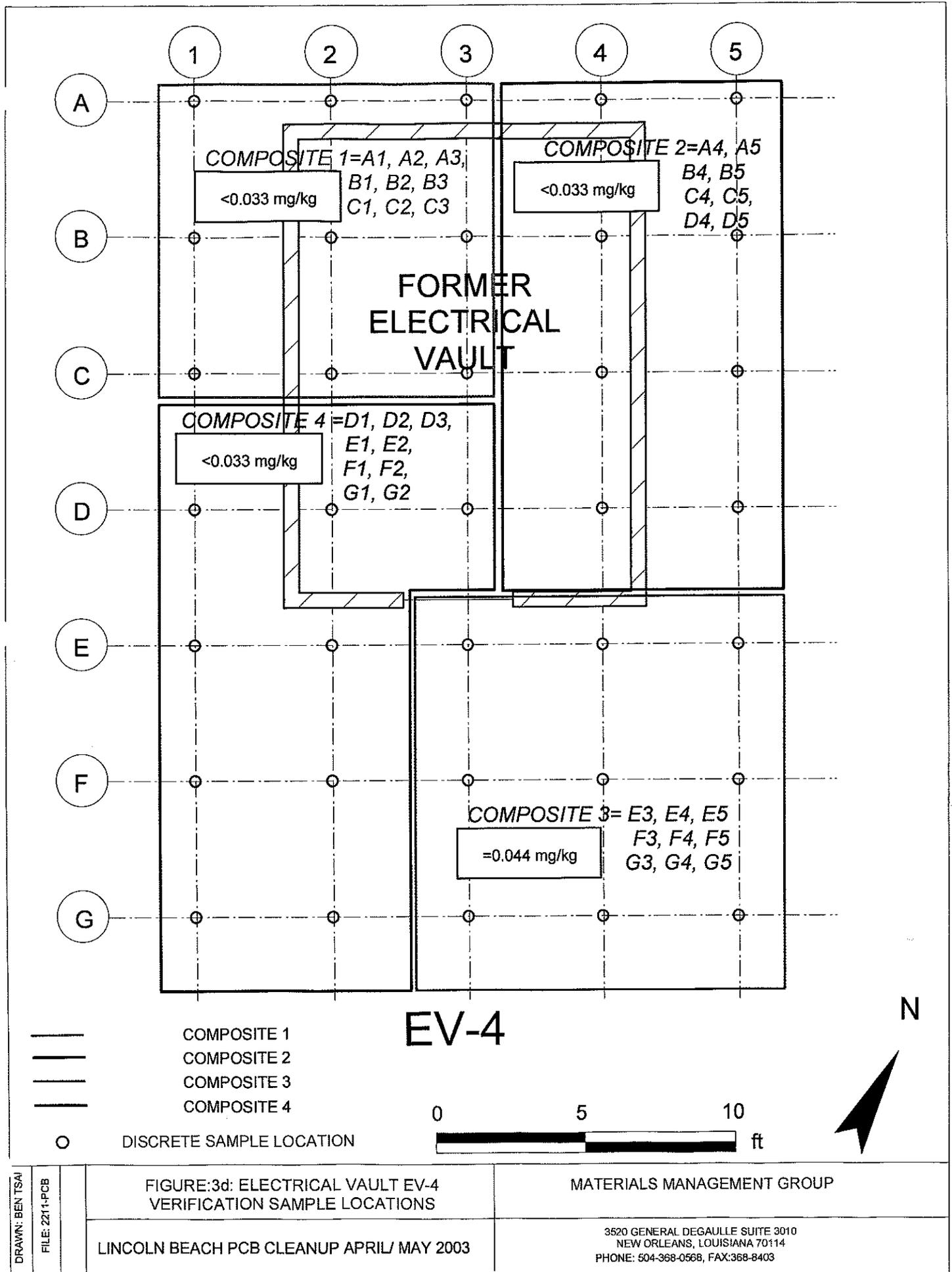
COMPOSITE 1
COMPOSITE 2
COMPOSITE 3



DISCRETE SAMPLE LOCATION



DRAWN: BEN TSAI FILE: 2211-PCB	FIGURE:3c: ELECTRICAL VAULT EV-3 VERIFICATION SAMPLE LOCATIONS	MATERIALS MANAGEMENT GROUP
	LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003	3520 GENERAL DEGAULLE SUITE 3010 NEW ORLEANS, LOUISIANA 70114 PHONE: 504-368-0568, FAX:368-8403



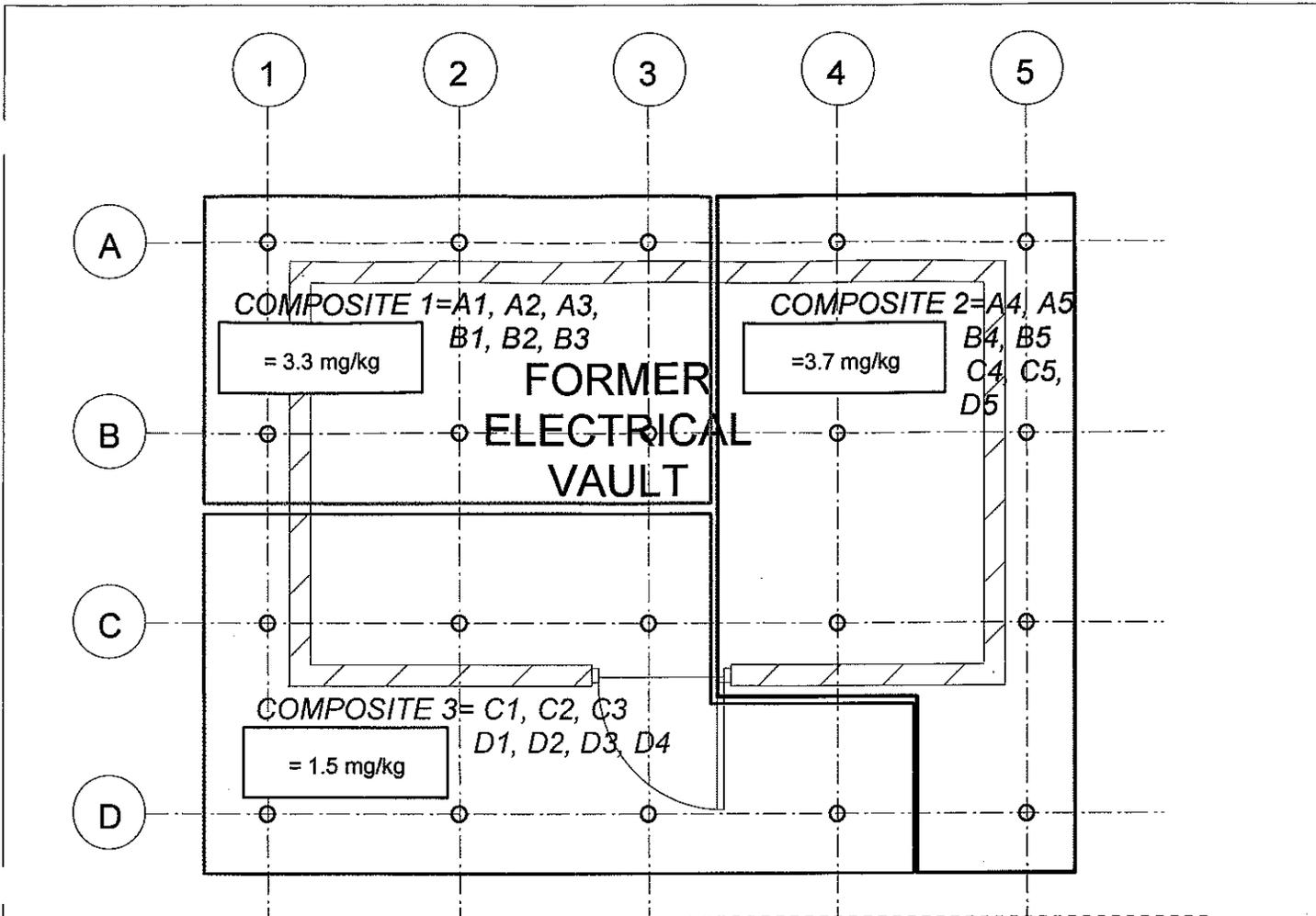
DRAWN: BEN TSAI
 FILE: 2214-PCB

FIGURE:3d: ELECTRICAL VAULT EV-4
 VERIFICATION SAMPLE LOCATIONS

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MATERIALS MANAGEMENT GROUP

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 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0568, FAX:368-8403



PAVEMENT

EDGE OF CONCRETE



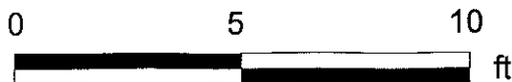
COMPOSITE 1
COMPOSITE 2
COMPOSITE 3

EV-5



N

○ DISCRETE SAMPLE LOCATION



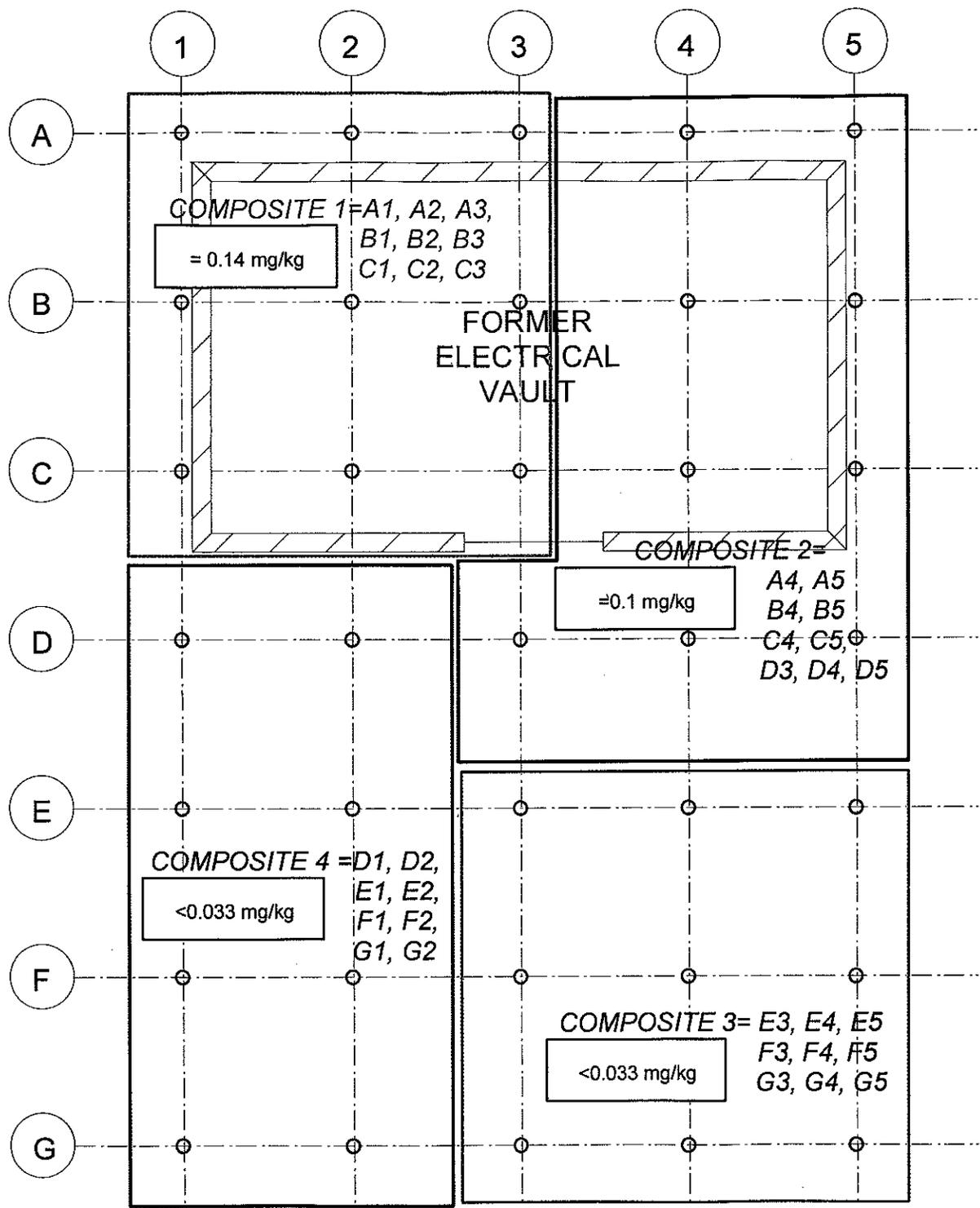
DRAWN: BEN TSAI
FILE: 2212-PCB

FIGURE:3e: ELECTRICAL VAULT EV-5
VERIFICATION SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

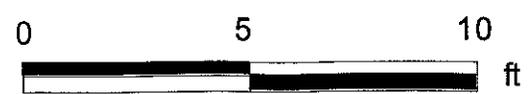
LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

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NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX:368-8403



-  COMPOSITE 1
-  COMPOSITE 2
-  COMPOSITE 3
-  COMPOSITE 4
-  DISCRETE SAMPLE LOCATION

EV-6



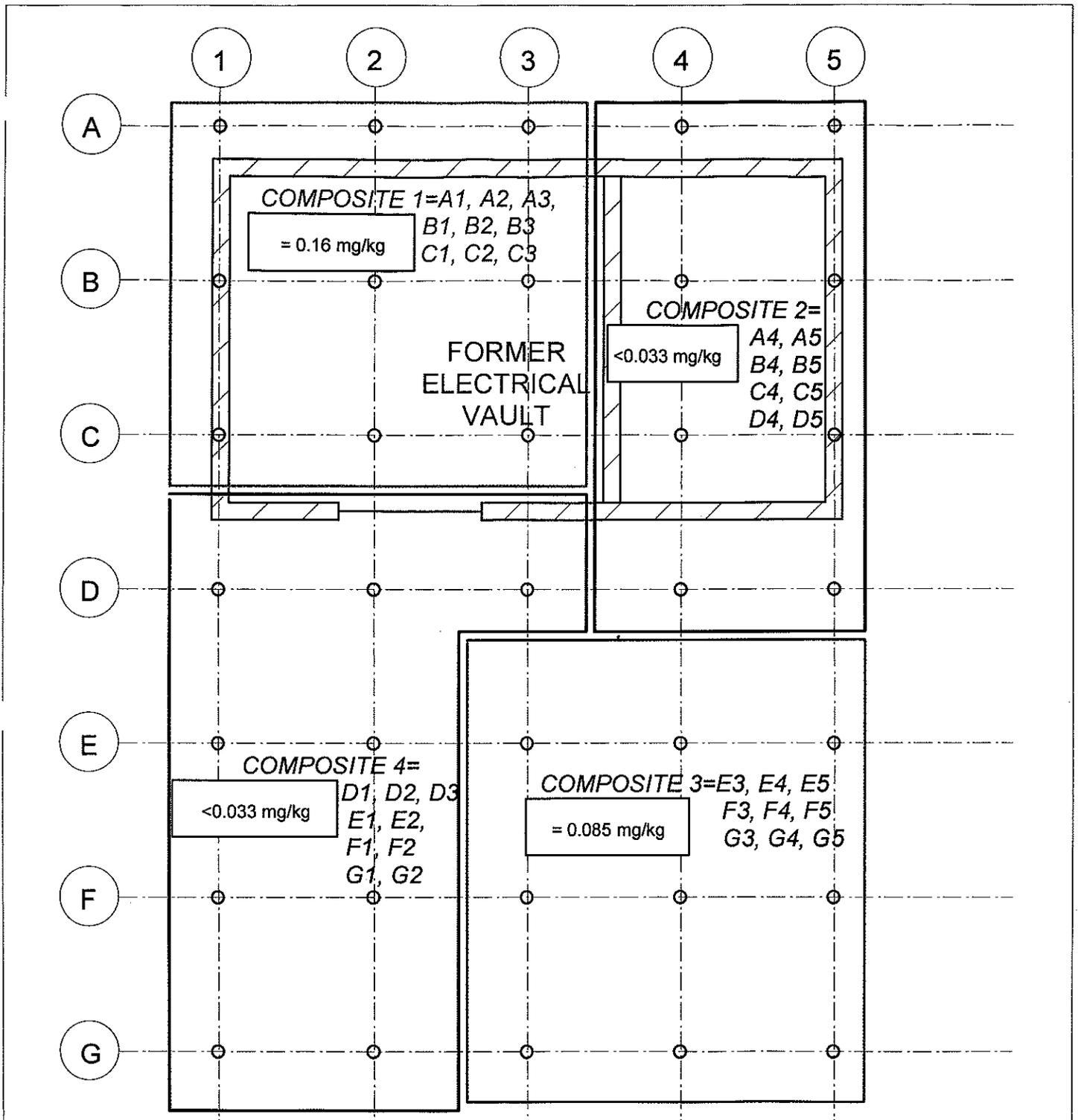
DRAWN: BEN TSAI
FILE: 2211-PCB

FIGURE 3f: ELECTRICAL VAULT EV-6
VERIFICATION SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

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NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX: 368-8403



COMPOSITE 1
 COMPOSITE 2
 COMPOSITE 3
 COMPOSITE 4

○ DISCRETE SAMPLE LOCATION

EV-7



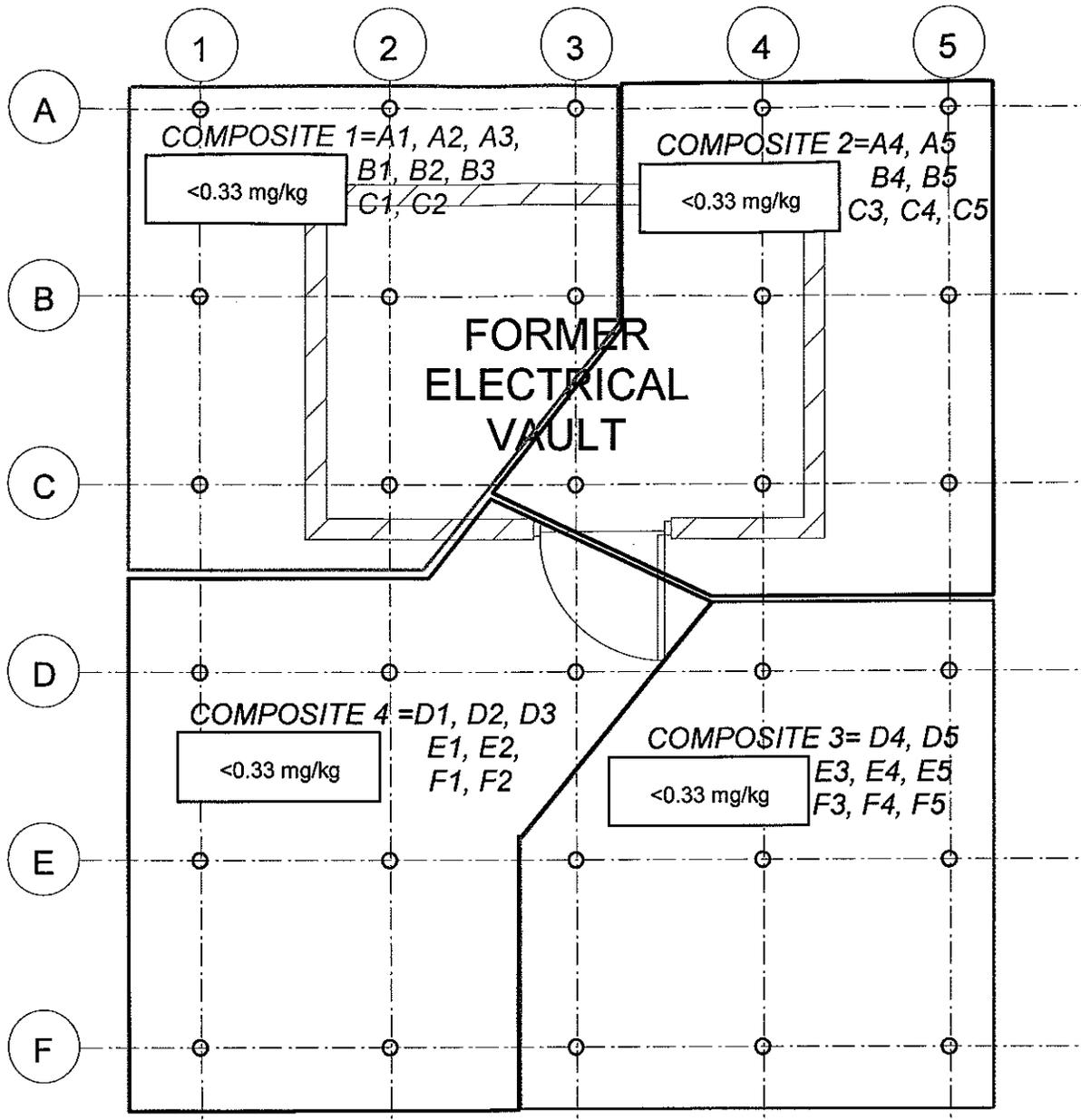
DRAWN: BEN TSAI
 FILE: 2211-PCB

FIGURE:3g: ELECTRICAL VAULT EV-7
 VERIFICATION SAMPLE LOCATIONS

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

MATERIALS MANAGEMENT GROUP

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 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0568, FAX:368-8403

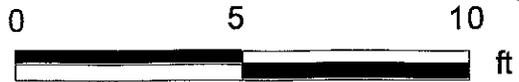


COMPOSITE 1
 COMPOSITE 2
 COMPOSITE 3
 COMPOSITE 4

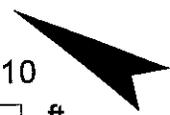


DISCRETE SAMPLE LOCATION

EV-8



N



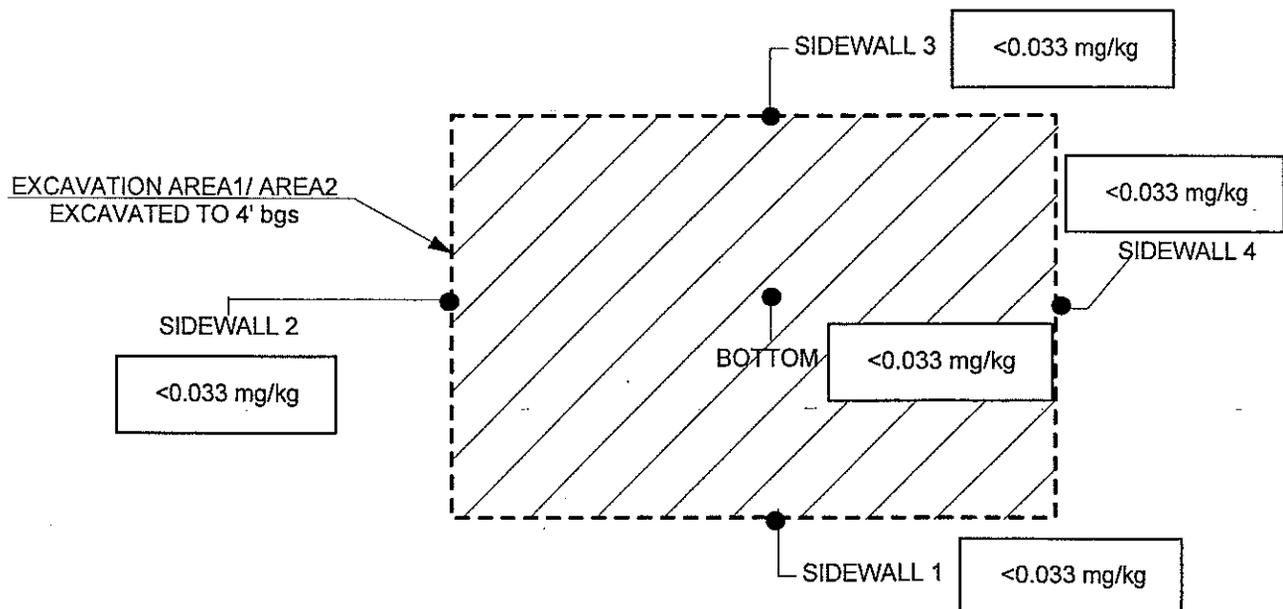
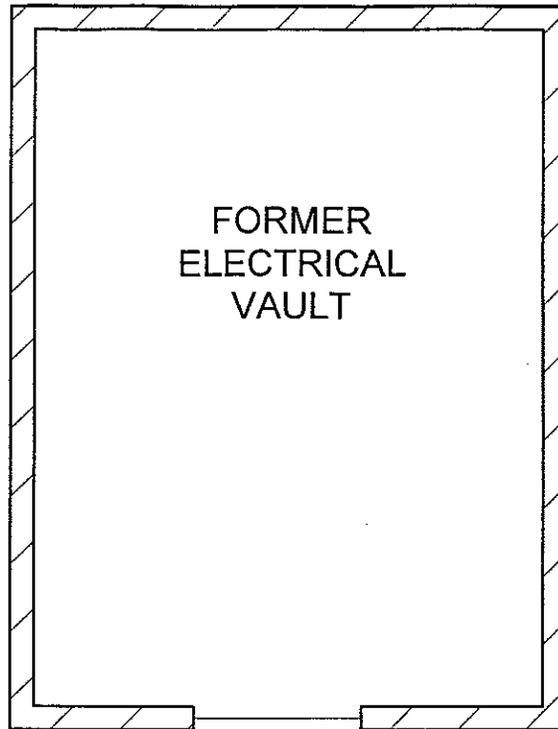
DRAWN: BEN TSAI
 FILE: 2212-PCB

FIGURE:3h: ELECTRICAL VAULT EV-8
 VERIFICATION SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

3520 GENERAL DEGAULLE SUITE 3010
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 PHONE: 504-368-0568, FAX:368-8403



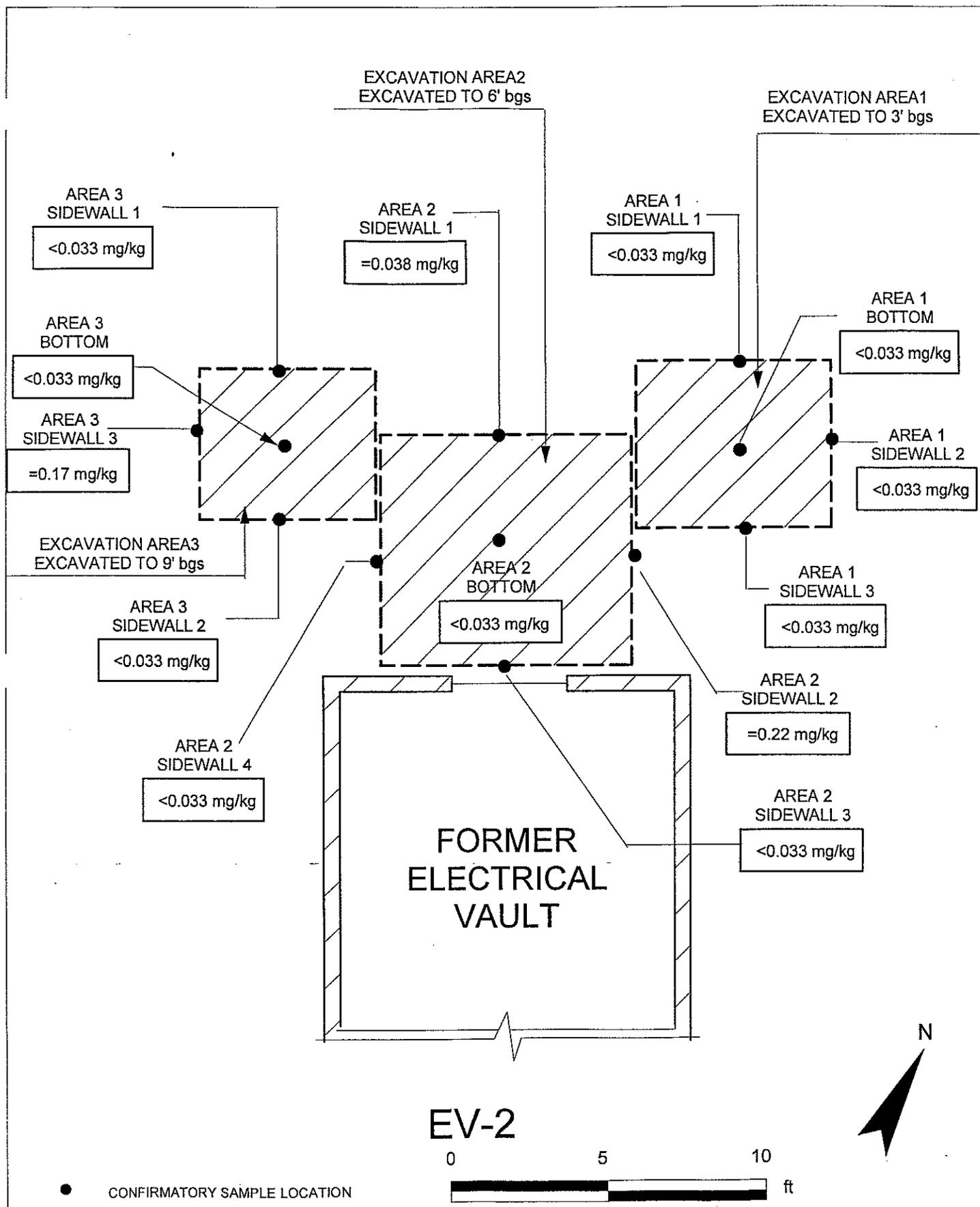
EV-1

LEGEND

● CONFIRMATORY SAMPLE LOCATION



DRAWN: BEN TSAI FILE: 2211.PCB	FIGURE:4a: ELECTRICAL VAULT EV-1 EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS	MATERIALS MANAGEMENT GROUP
	LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003	3520 GENERAL DEGAULLE SUITE 3010 NEW ORLEANS, LOUISIANA 70114 PHONE: 504-368-0568, FAX:368-8403



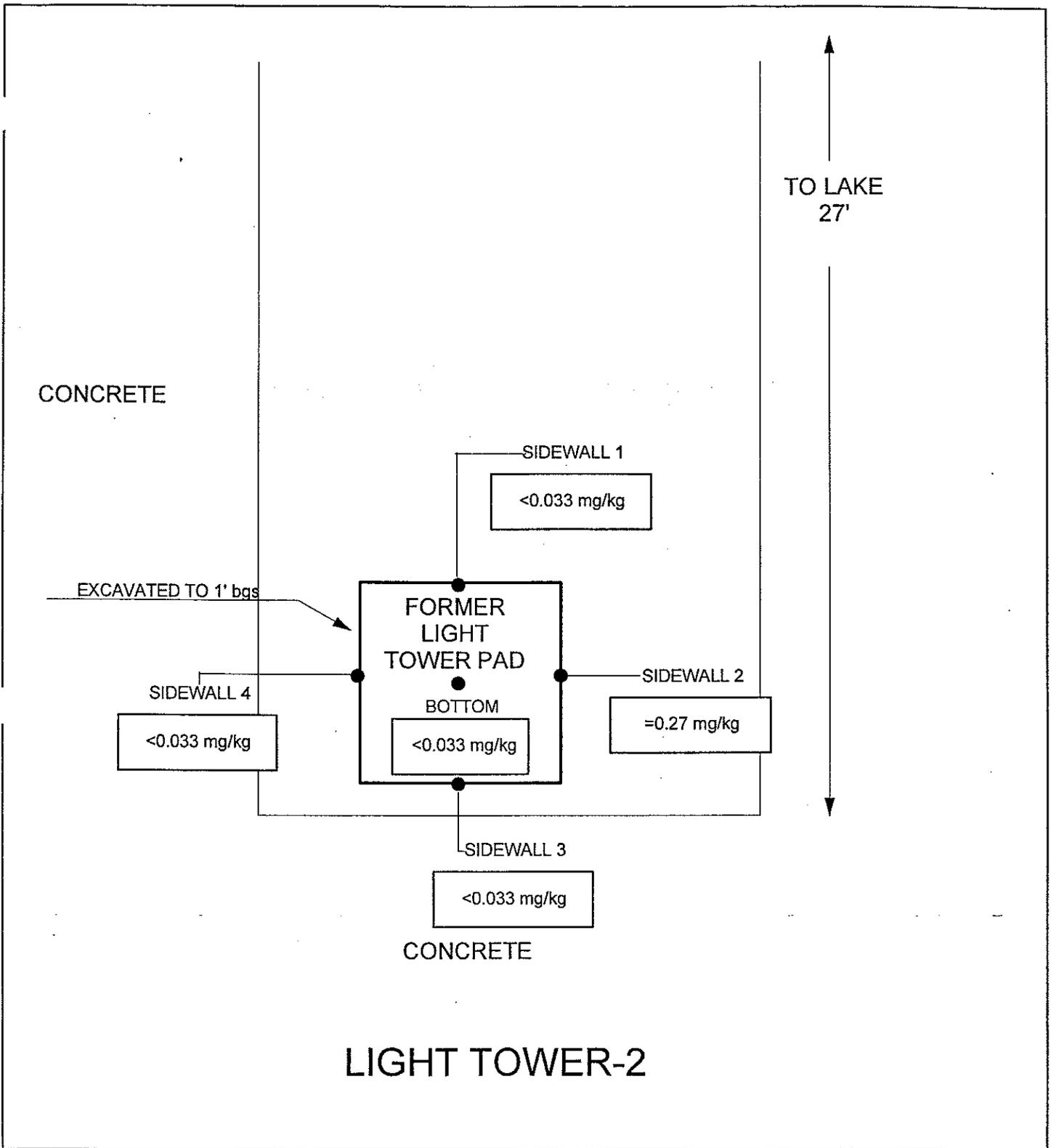
DRAWN: BENTSON
FILE: 2211-PCB

FIGURE 4b: ELECTRICAL VAULT EV-2 EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

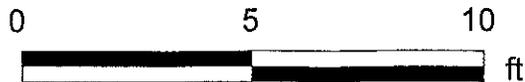
3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX: 368-8403



LIGHT TOWER-2

LEGEND

● CONFIRMATORY SAMPLE LOCATION



DRAWN: BENTSON

FILE: 2211-PCB

FIGURE:4c: LIGHT TOWER LT-2 EXCAVATION
AREA / CONFIRMATORY SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX:368-8403

DRAWN: BEN TL

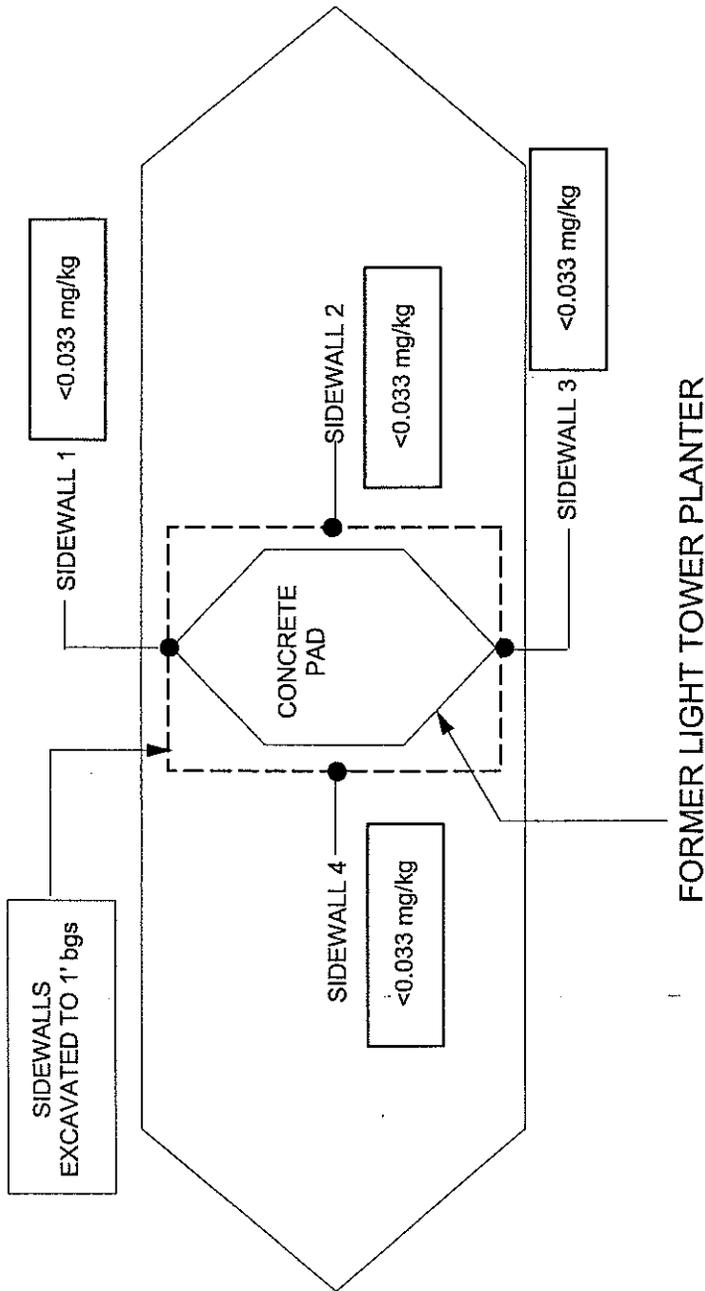
FILE: 2211-PCB

FIGURE 4d: LIGHT TOWER LT-3 EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

MATERIALS MANAGEMENT GROUP

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LIGHT TOWER-3

LEGEND

- CONFIRMATORY SAMPLE LOCATION

NOTE: NO BOTTOM OF PIT SAMPLE COLLECTED



DRAWN: BEN TC

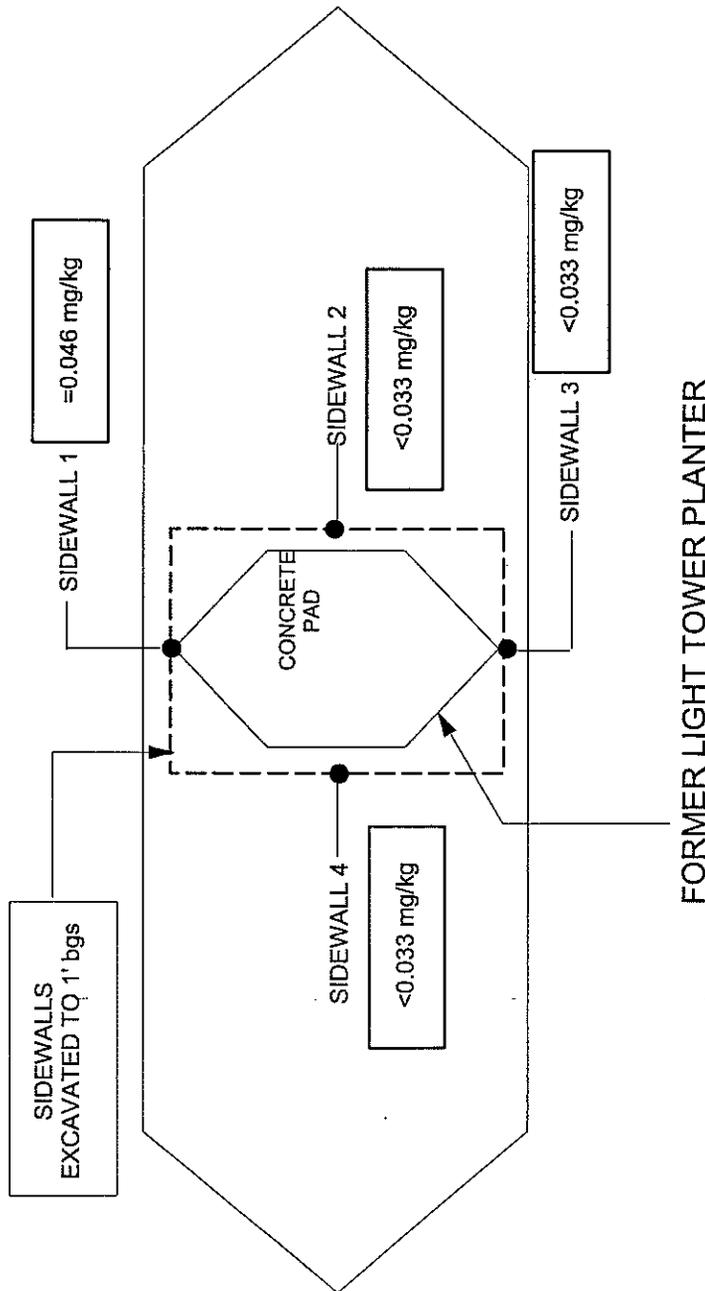
FILE: 2120-CNO

FIGURE 4e: LIGHT TOWER LT-4 EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

MATERIALS MANAGEMENT GROUP

3520 GENERAL DEGAULLE SUITE 3010
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PHONE: 504-368-0568, FAX:368-8403



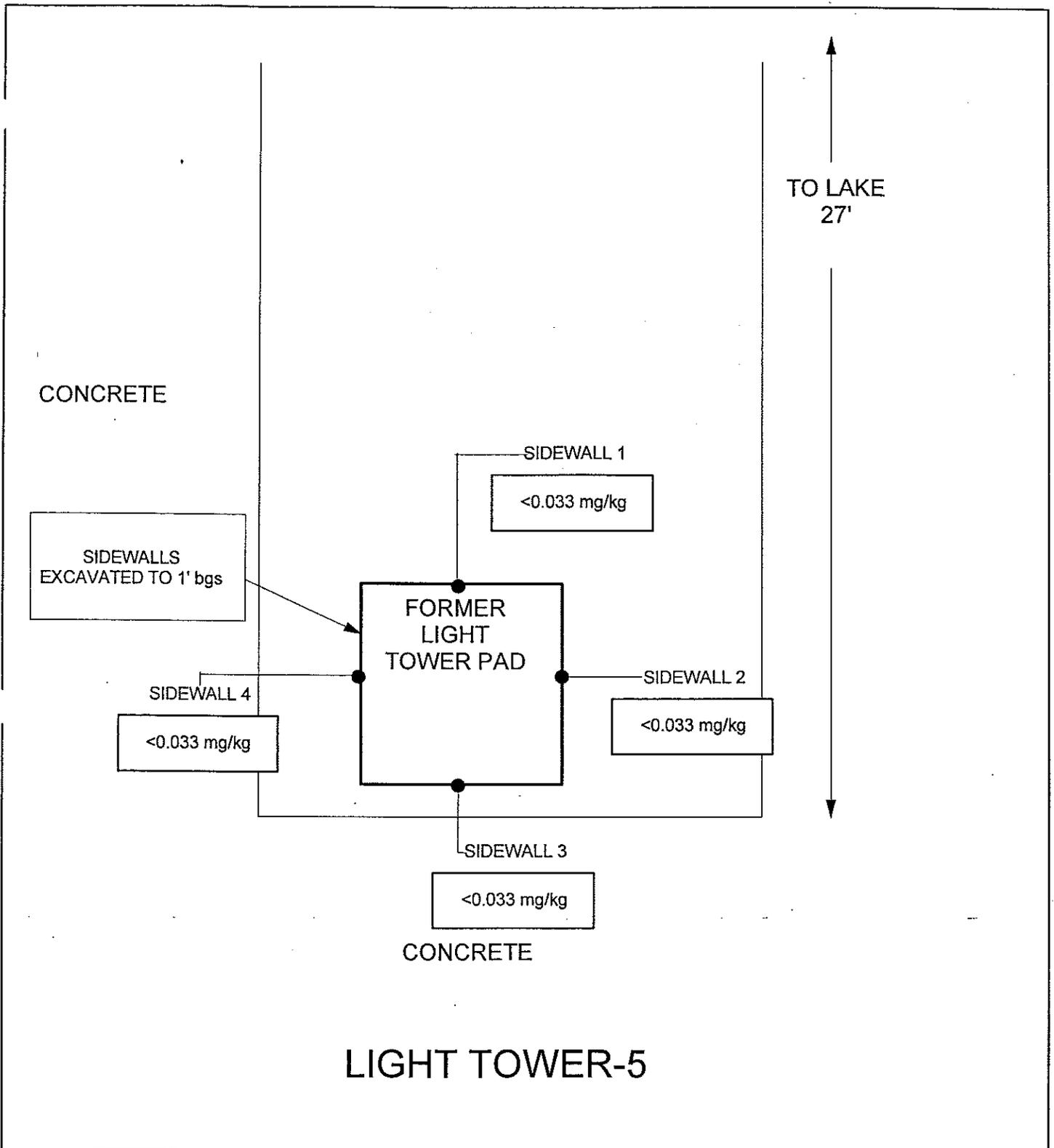
LIGHT TOWER-4

LEGEND

- CONFIRMATORY SAMPLE LOCATION

NOTE: NO BOTTOM OF PIT SAMPLE COLLECTED

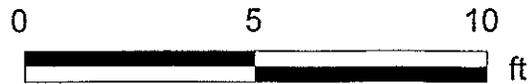




LEGEND

● CONFIRMATORY SAMPLE LOCATION

NOTE: NO BOTTOM OF PIT SAMPLE COLLECTED



DRAWN: BEN TSAI

FILE: 2211-PCB

FIGURE 4f: LIGHT TOWER LT-5 EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

MATERIALS MANAGEMENT GROUP

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NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX: 368-8403

LAKE PONCHARTRAIN

BULKHEAD
(CONCRETE)

SIDEWALL 1

=1.3 mg/kg

EXCAVATED TO 1' bgs

SIDEWALL 4

=1.2 mg/kg

FORMER
LIGHT
TOWER PAD
BOTTOM

=0.52 mg/kg

SIDEWALL 2

=1.3 mg/kg

SIDEWALL 3

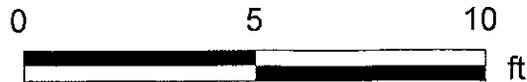
=0.54 mg/kg

CONCRETE
BATH HOUSE

LIGHT TOWER-8

LEGEND

● CONFIRMATORY SAMPLE LOCATION



DRAWN: BEN TSAR

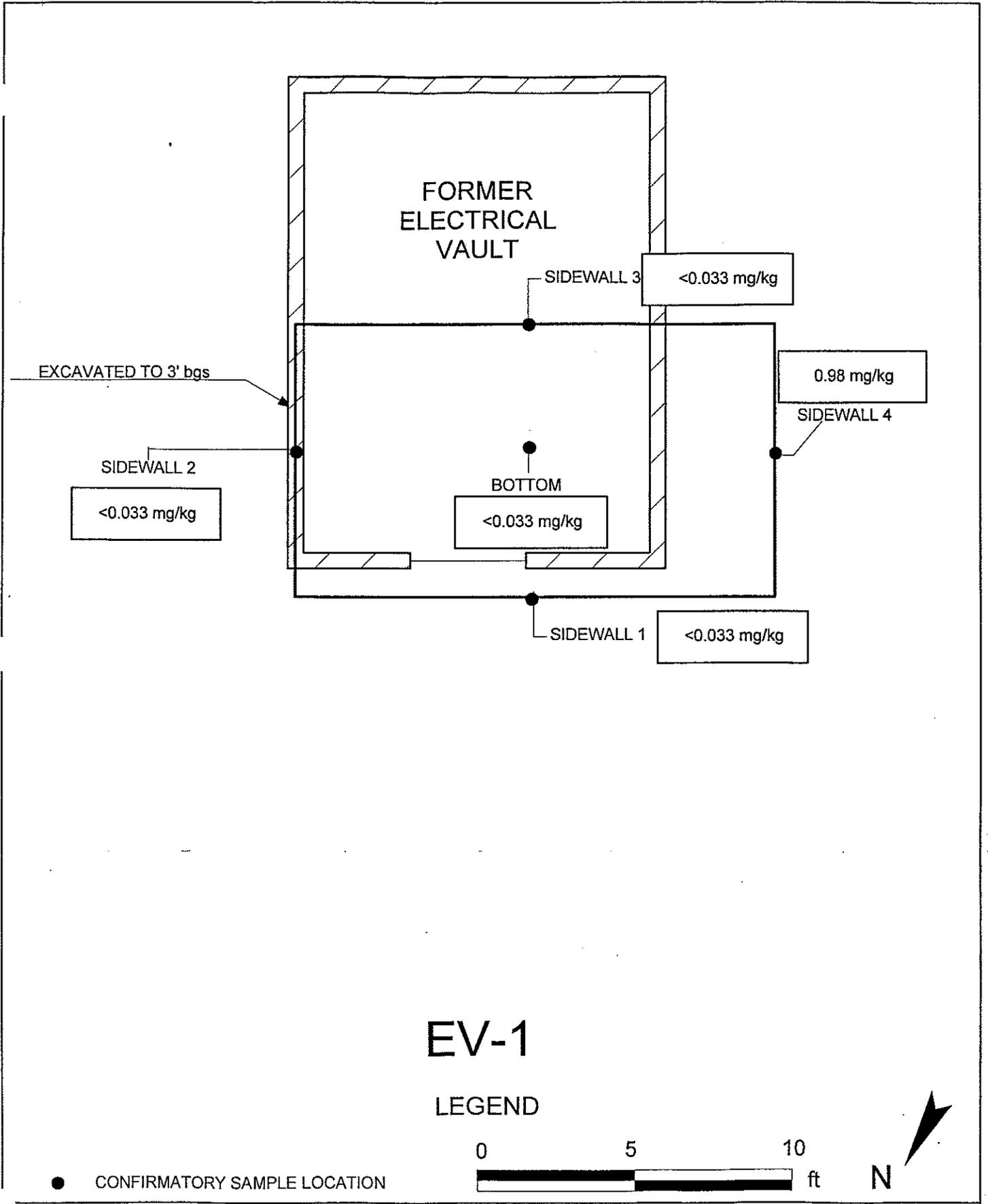
FILE: 2211-PCB

FIGURE: 4g LIGHT TOWER LT-8 EXCAVATION AREA
/ CONFIRMATORY SAMPLE LOCATIONS

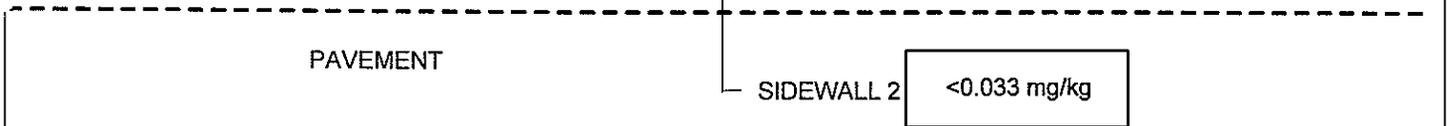
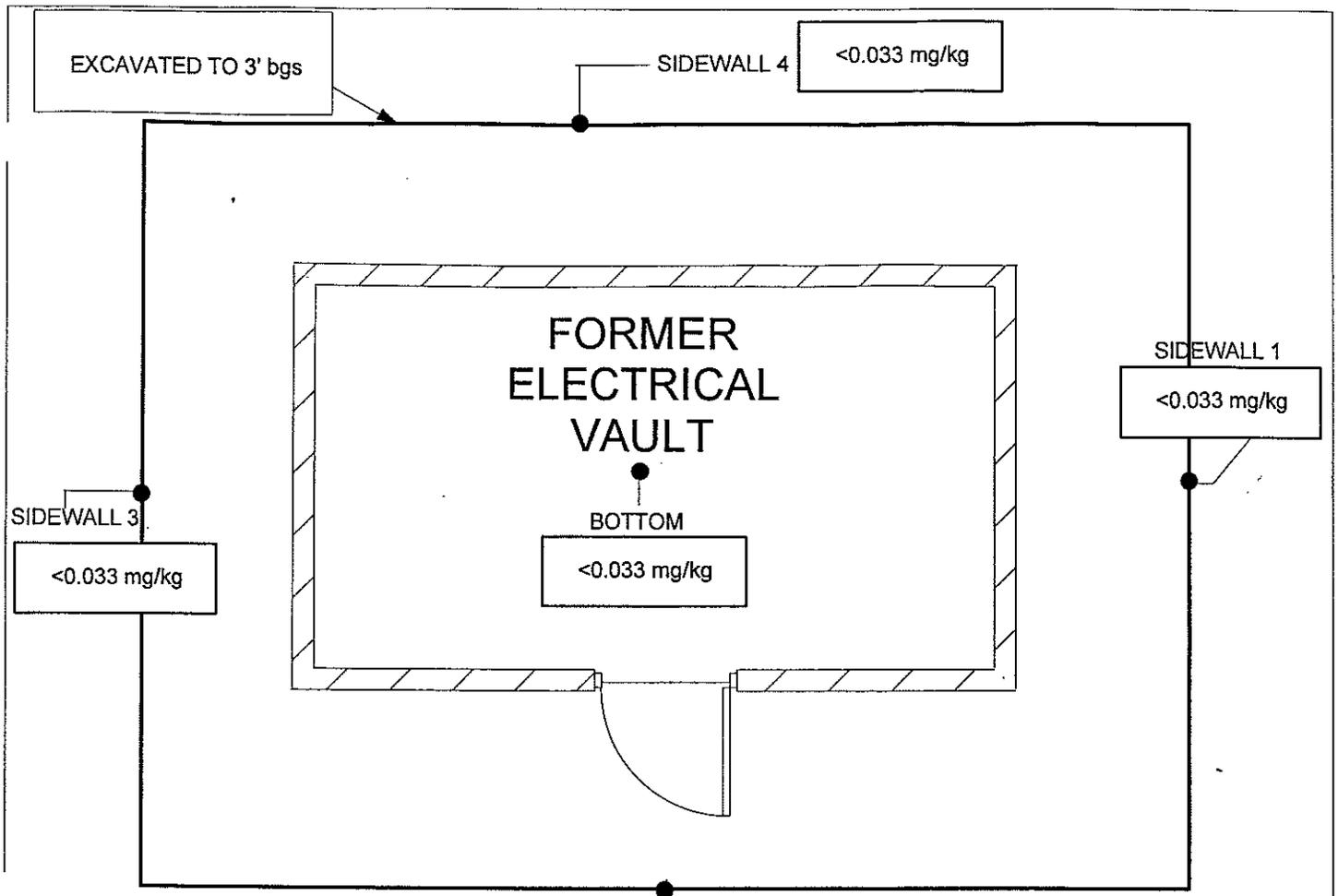
MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP APRIL/ MAY 2003

3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-358-0568, FAX: 368-6403



DRAWN: BEN TSAH FILE: 2211-PCB	FIGURE:5a: ELECTRICAL VAULT EV-1 ADDITIONAL EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS	MATERIALS MANAGEMENT GROUP
	LINCOLN BEACH PCB CLEANUP SEPT. 2003	3520 GENERAL DEGAULLE SUITE 3010 NEW ORLEANS, LOUISIANA 70114 PHONE: 504-368-0568, FAX:368-8403

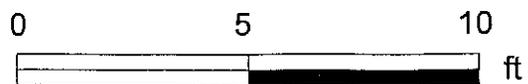


EV-5



--- EDGE OF CONCRETE PAVEMENT

● CONFIRMATORY SAMPLE LOCATION



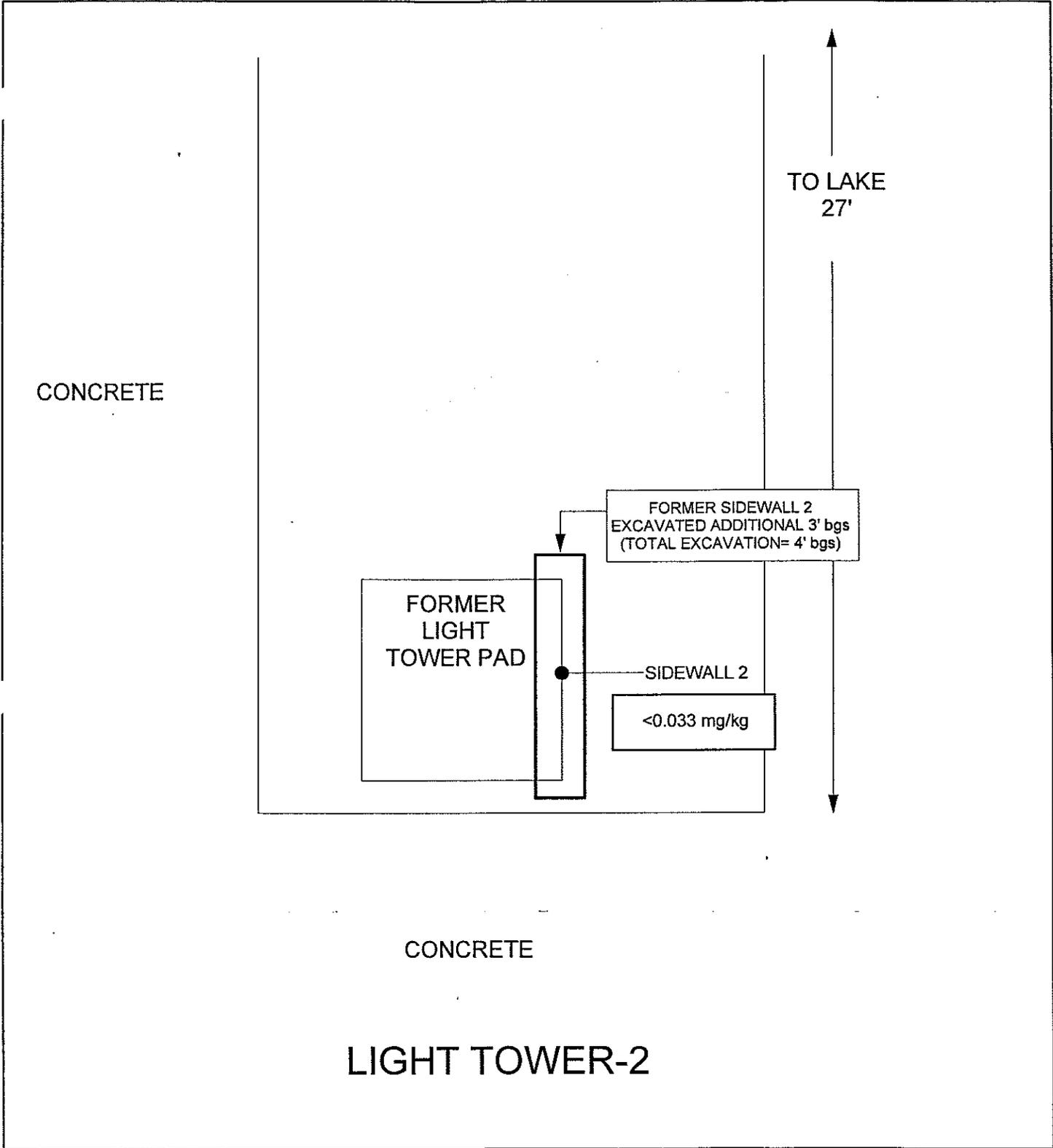
DRAWN: BEN TS-
FILE: 2212-PCB

FIGURE:5b: ELECTRICAL VAULT EV-5 ADDITIONAL EXCAVATION AREA/ CONFIRMATORY SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP SEPT. 2003

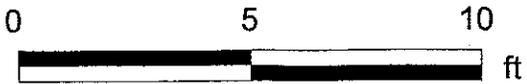
3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX:368-8403



LEGEND



CONFIRMATORY SAMPLE LOCATION



DRAWN: BEN TSAI FILE: 2211-PCB	FIGURE:5c: LIGHT TOWER LT-2 ADDITIONAL EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATIONS	MATERIALS MANAGEMENT GROUP
	LINCOLN BEACH PCB CLEANUP SEPT. 2003	3520 GENERAL DEGAULLE SUITE 3010 NEW ORLEANS, LOUISIANA 70114 PHONE: 504-368-0568, FAX:368-8403

LAKE PONCHARTRAIN

BULKHEAD
(CONCRETE)

SIDEWALL 1

<0.033mg/kg

EXCAVATED ADDITIONAL 3' bgs
(TOTAL EXCAVATION= 4' bgs)

FORMER
LIGHT
TOWER PAD
BOTTOM

<0.033 mg/kg

SIDEWALL 2

<0.033 mg/kg

SIDEWALL 4

<0.033 mg/kg

SIDEWALL 3

<0.033 mg/kg

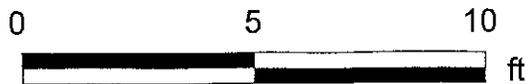
CONCRETE
BATH HOUSE

LIGHT TOWER-8

LEGEND



CONFIRMATORY SAMPLE LOCATION



DRAWN: BEN TSAI

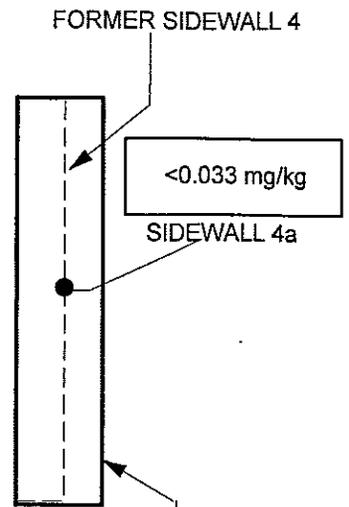
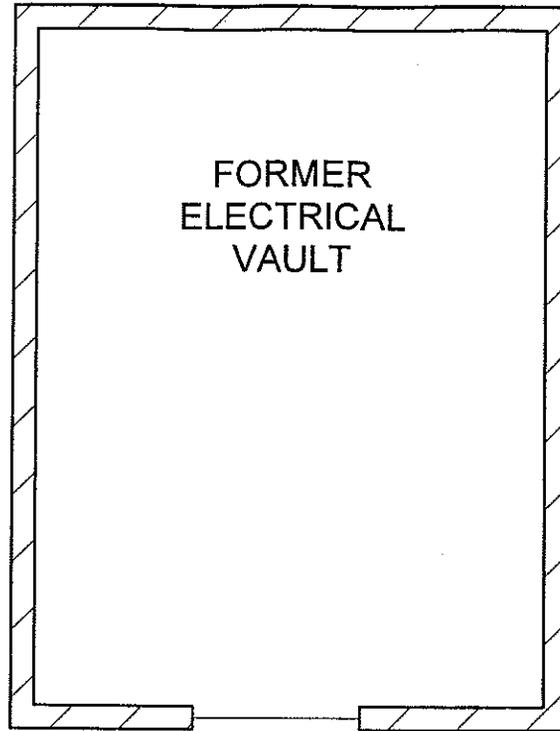
FILE: 2211-PCB

FIGURE:5d LIGHT TOWER LT-8 ADDITIONAL EXCAVATION
AREA / CONFIRMATORY SAMPLE LOCATIONS

MATERIALS MANAGEMENT GROUP

LINCOLN BEACH PCB CLEANUP SEPT. 2003

3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-368-0568, FAX:368-8403

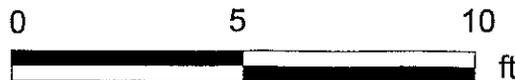


FINAL EXCAVATION AREA -
EXCAVATED ADDITIONAL 3ft. bgs
(TOTAL EXCAVATION= 6ft. bgs)

EV-1

LEGEND

● CONFIRMATORY SAMPLE LOCATION



DRAWN: BEN TSAI FILE: 2211-PCB	FIGURE:6a: ELECTRICAL VAULT EV-1 FINAL EXCAVATION AREA / CONFIRMATORY SAMPLE LOCATION	MATERIALS MANAGEMENT GROUP
	LINCOLN BEACH PCB CLEANUP SEPT. 2003	3520 GENERAL DEGAULLE SUITE 3010 NEW ORLEANS, LOUISIANA 70114 PHONE: 504-368-0568, FAX:368-8403

Appendix F: Photographs



Photo 1: Electrical Vault Demolition



Photo 2: Stockpiled Electrical Vault Foundation

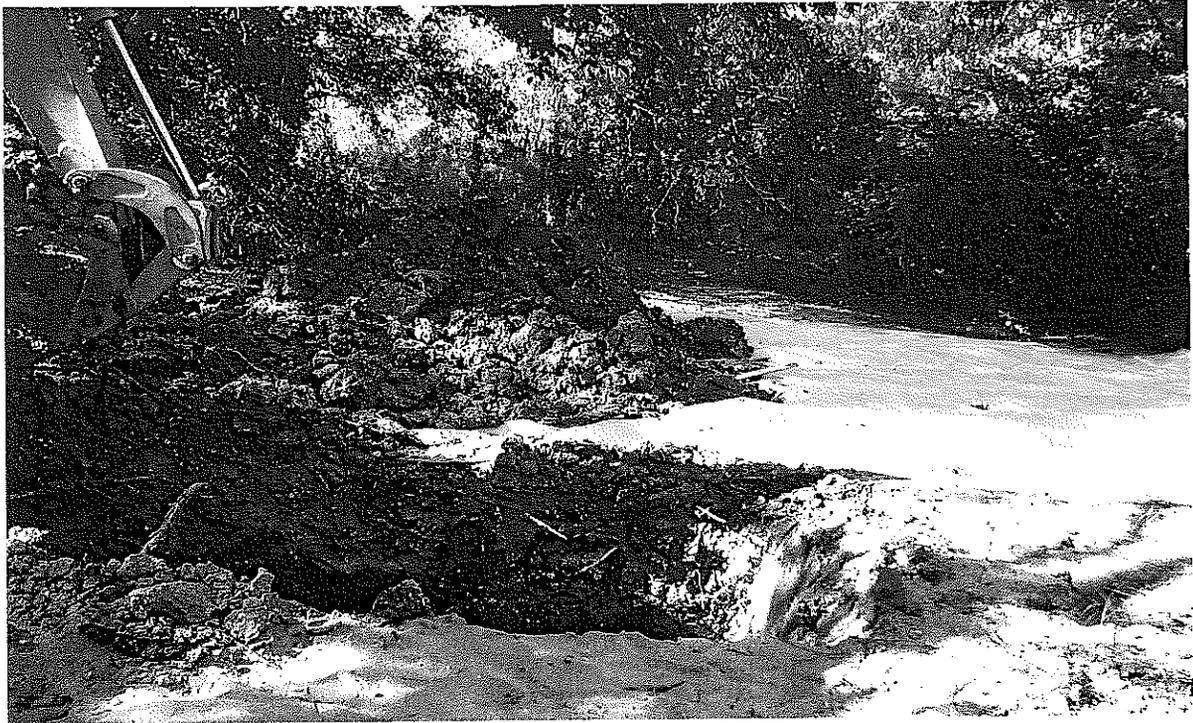


Photo 3: Excavation at Electrical Vault EV-1



Photo 4: Former Electrical Vault (EV-4) Area



Photo 5: Light Tower Demolition



Photo 6: Waste Load Out

**Materials Management Group, Inc.**

May 4, 2004

Keith L. Casanova, Administrator
Remediation Services Division
LA Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

**Re: Additional Response to Notice of Deficiency –
Final Corrective Action Report, dated January 28, 2004
Lincoln Beach Electrical Vaults
14100 Hayne Blvd, New Orleans, LA
AI: 93800
MMG File #s: 2120-CNO, 2211-CNO**

Dear Mr. Casanova:

This letter serves to further clarify Items 1&2 listed on the Notice of Deficiencies List regarding the Lincoln Beach Electrical Vaults, included in the letter from LDEQ dated January 28, 2004.

Item 1: The analytical data collected during implementation of the Corrective Action Plan were of sufficient quality for use in making risk-based decisions about the site. Please see the attached summary of the laboratory QA/QC samples used in determining the usability of the data.

Item 2: The nature of the phase product observed in borehole B6 at Electrical Vault 2 during the RECAP Site Assessment was not unknown. Rather it was PCB oil, which is known to be a highly refined mineral oil. Based on RECAP Appendix D, Table D-1, there are no indicator compounds for this type of oil; only TPH-O analysis is required for characterization. MMG met this requirement during CAP implementation, by analyzing confirmatory samples in this area for TPH-O. All results were below the limiting RECAP screening standard (SSni) of 140 mg/kg.

Please feel free to contact me at (832) 445-0117 with any questions regarding these items.

Sincerely,
Materials Management Group, Inc.

A handwritten signature in black ink that reads "Karly Allen Gibbs". The signature is written in a cursive, flowing style.

Karly Allen Gibbs, Risk Assessor

cc: Mr. Sean Cummings, Director, New Orleans Building Corporation
Mr. Claude Blanchard, Team Leader, LDEQ Southeast Regional Office

Attachments: Summary of Laboratory QA Samples, CAP Implementation

3520 General DeCaulle Drive, Suite 3010 • New Orleans, Louisiana 70114

(504) 368-0568 • Fax (504) 368-8403

Laboratory QA/QC

The laboratory quality assurance/quality control (QA/QC) sampling included analysis of method blanks, laboratory control samples to assess the validity of the analytical procedures, and matrix spike/matrix spike duplicate (MS/MSD) analysis to check for matrix interference. Based on a review of the case narratives in the final analytical reports from the laboratory and the results of laboratory control samples, method blanks, and MS/MSD analysis, the analytical data obtained during the PCB cleanup (confirmatory and verification sampling) are of sufficient quality to make risk-based decisions. In other words, the data can be used to indicate that all unacceptable contamination has been removed from the site.

The relative percent differences (RPDs) for all duplicate samples were within the acceptable range (in general, RPDs were less than 5%, with the highest being 10% – the RPD limit is 30%).

All method blanks were non-detect, indicating there is no concern for laboratory contamination.

In addition, the samples did not show matrix interference. All percent recoveries were within the acceptable range(s): the range for laboratory control samples is 70-130%, while the range for MS/MSD samples is 44-139%. The laboratory control sample percent recoveries were typically around 100%, with a low of 77% and a high of 110%. The MS/MSD sample recoveries were generally around 80-90%, with a low of 64% and a high of 114%.

**Complete Summary of Analytical Results
Lincoln Beach PCB Cleanup
14100 Hayne Boulevard, New Orleans, Louisiana**

The Intelligent Resource

For:

**New Orleans Building
Corporation**

World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130



**May 3, 2004
MMG# 2120- CNO**



Materials Management Group, Inc.

3520 General DeGaulle Drive, Suite 3010
New Orleans, LA 70114 (504) 368-0568

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1.0 Introduction

Materials Management Group, Inc. (MMG) has completed extensive sampling for polychlorinated biphenyls (PCBs) at the Lincoln Beach Brownfields site in New Orleans, Louisiana. The areas of investigation have included the eight electrical vaults and six light towers. The results of both MMG's and previous sampling efforts are summarized in this document.

2.0 Sampling Efforts

The results of all sampling at each of the areas of investigation are briefly summarized below. Additional information is included in the RECAP Submittal (October 2001), RECAP Submittal Addendum (January 2002), Proposed PCB Remediation Plan (November 2002), and Final CAP Report (November 2003). Additional information about the previous sampling efforts can be found in the previous Phase II report (Burk Kleinpeter 1999). Throughout the course of sampling, MMG has both horizontally and vertically delineated the extent of PCB soil contamination. Contamination was localized around each vault or light tower, indicating that PCB contamination has not been spread from the source areas.

Electrical Vault 1

Burk Kleinpeter Inc. (BKI) sampled soil two feet from the vault door at 0-2 feet below ground surface (bgs). The result (0.037 mg/kg) was below RECAP soil screening non-industrial use (SSni) (0.092 mg/kg). Therefore, MMG did not include this vault in the RECAP Site Assessment. EPA required that three soil samples be collected from each area; therefore, in October 2002, MMG collected two additional surface soil samples (0-6 inches bgs). The results were above RECAP RSni (0.19 mg/kg) and the EPA limit (1 ppm). Therefore, MMG collected two samples adjacent to the original locations as well as four additional samples to delineate the horizontal extent of contamination (all samples collected from 0-3 feet bgs). All results were non-detect (0.033 mg/kg) or below RSni, with the exception of one sample (adjacent to the original elevated sample). This area was addressed as part of the cleanup along with the other elevated 0-6 inch interval. The cleanup involved excavating the contaminated area to four feet bgs and collecting confirmatory samples (the two elevated areas were combined into a ten-foot by 12-foot area). The confirmatory samples were non-detect. However, one of the composite verification samples (EPA requirement) collected from under the former building slab was above the RECAP RSni. Therefore, MMG excavated a ten-foot by 15-foot area to three feet bgs, encompassing all of the discrete samples making up that composite sample. All confirmatory samples were non-detect except the western sidewall sample (SW4), which was above RECAP RSni. MMG then excavated the area around SW4 an additional three feet bgs (for a total excavation depth of six feet bgs at SW4) and resampled the area. The sample result was non-detect.

Electrical Vault 2

BKI collected four soil samples from the 0-2 foot bgs interval. These samples were located two feet, five feet, six feet, and ten feet from the vault door. The samples two and five feet from the door were above RECAP SSni (the highest was 1.76 mg/kg). The two farther samples were non-detect, however, the detection limits failed RECAP. MMG initially collected samples from three boreholes during the RECAP Site Assessment; these boreholes were located inside the vault doorway, two feet from the door, and five feet from the door. Samples were collected from the 0-3 and 3-6 foot intervals. Based on the results (the highest result was 1.3 mg/kg), MMG drilled six additional boreholes to define the horizontal and vertical extent of contamination. Two of these six were drilled to nine feet bgs, two were drilled to 12 feet bgs, one was drilled to 15 feet bgs (where phase was encountered), and one was drilled to three feet bgs due to an obstruction. In addition, deeper boreholes (to nine feet bgs) were drilled adjacent to the original three boreholes (for vertical extent of contamination). As a result of the nine boreholes drilled, three areas were above the RECAP MO-1 RSni (0.19 mg/kg) and required remediation. These were located in front of the vault building. One area required excavation to three feet bgs (former borehole B5), one area required excavation to six feet bgs (former boreholes B2 and B3), and one area required excavation to nine feet bgs (former borehole B6 – where phase was encountered). Electrical vault 2 was not included in the additional soil sampling for EPA since more than three samples had been collected. During the cleanup, all composite verification samples (from below the concrete slab) were non-detect or below the RECAP RSni. All confirmatory samples were non-detect or below the RECAP RSni except one. The confirmatory sample from SW2 of excavation area 2 exceeded the RSni (0.22 mg/kg). However, this concentration was eliminated based on calculation of the 95% UCL for the cleanup results (discrete samples). Therefore, all unacceptable contamination was removed during the cleanup.

In addition, three temporary monitoring wells were installed at EV-2. These wells were installed due to the presence of phase in one of the boreholes. The three monitoring wells were installed to triangulate the site. Soil samples were collected from the 0-3 foot and 3-6 foot intervals prior to well installation and sampled for PCBs; the results were all non-detect. This soil sampling further delineated the extent of contamination (indicating contamination did not extend past the immediate area around the vault building). The wells were developed and groundwater samples were collected for PCB analysis. All samples were non-detect with detection limits meeting the RECAP groundwater screening standard (GWss). Groundwater at the site is not impacted. All three monitoring wells were plugged and abandoned upon receipt of the analytical results.

Electrical Vault 3

BKI collected one sample from the 0-2 foot soil interval at two feet from the vault door. The result was non-detect, however, the detection limit failed RECAP. Therefore, MMG included EV-3 in the RECAP Site Assessment. MMG drilled

three boreholes, one inside the vault doorway, one two feet from the door, and one five feet from the door. Samples were collected from the 0-3 foot interval in all three boreholes, and from the 3-6 foot interval in the boreholes outside the building. There was poor recovery from the borehole inside the building. All sample results were non-detect. Two additional soil samples (0-6 inches bgs) were collected at EV-3 during the additional sampling for EPA (as requested by EPA to characterize soil not immediately in front of the doorway). The results were below the RECAP RSni. The composite verification samples collected during the cleanup were non-detect.

Electrical Vault 4

BKI collected two samples from the 0-2 foot interval, at two feet and ten feet from the vault door. The results were non-detect (<0.017 mg/kg); therefore, MMG did not include this vault in the RECAP Site Assessment. In order to meet EPA requirements, MMG collected an additional sample (and a split) (0-6 inches bgs) six feet out from the front of the vault building (four and a half feet west of the door). The results were non-detect. The composite verification sample results from the cleanup were non-detect or below the RECAP screening level.

Electrical Vault 5

BKI collected one sample from the 0-2 foot interval at two feet from the vault door. The result was below RECAP SSni. MMG did not include this vault in the RECAP Site Assessment. In order to meet EPA requirements, MMG collected two additional soil samples (0-6 inches bgs) from in front of the vault building. The results were below the RECAP RSni. During the cleanup, all three of the composite verification samples (from 0-6 inches bgs under the former concrete slab) exceeded the RECAP RSni as well as the EPA limit. Therefore, MMG excavated the entire area under the former slab to three feet bgs and collected confirmatory samples. The results were non-detect.

Electrical Vault 6

BKI collected samples from two feet, four feet, six feet, and eight feet out from the vault door, as well as a sample from two feet from the corner of the building. Samples were collected from 0-2 feet bgs in all five locations. At four feet from the door, a sample was also collected from 2-4 feet bgs. The surface samples at two and four feet from the door were above screening, and although the other samples (including the deeper interval) were non-detect, the detection limits failed RECAP. Therefore, MMG included EV-6 in the RECAP Site Assessment. MMG drilled three boreholes (two feet, four feet, and six feet from the doorway) to six feet bgs, with samples collected from the 0-3 foot and 3-6 foot intervals. The results were all non-detect, except one hit that was below RECAP SSni (0.060 mg/kg) in the surface soil at two feet from the door. Since three locations were sampled as part of the RECAP Site Assessment, EPA did not require additional soil sampling. During the cleanup, all composite verification samples (0-6 inches bgs) were non-detect or below the RECAP RSni.

Electrical Vault 7

BKI collected four samples at EV-7: two feet, six feet, nine feet, and 11 feet from the vault door. The samples were collected from the 0-2 foot interval. The sample collected two feet from the door was above RECAP SSni, and although the remaining samples were non-detect, the detection limits failed RECAP. Therefore, MMG drilled three boreholes at EV-7 during the RECAP Site Assessment. The boreholes were drilled inside the doorway, and two feet and four feet from the doorway. Samples were collected from the 0-3 foot and 3-6 foot intervals. All sample results were non-detect. Since samples were collected from three locations, EPA did not require additional soil sampling. During the cleanup, the composite verification samples (0-6 inches bgs) were non-detect or below the RECAP RSni.

Electrical Vault 8

BKI collected one sample from the 0-2 foot interval at two feet from the vault door. The result was non-detect (<0.017 mg/kg). MMG did not include EV-8 in the RECAP Site Assessment. As part of the additional soil sampling for EPA, MMG collected two samples (0-6 inches bgs), one seven feet out from the door, and one six feet northwest of the door and three feet from the building. The results were non-detect or below RECAP SSni. During the cleanup, all composite verification samples (0-6 inches bgs) were non-detect.

Light Tower 2

BKI collected one sample from 0-2 feet bgs at the base of the light tower. The result was non-detect (<0.017 mg/kg). MMG did not include light tower 2 in the RECAP Site Assessment. MMG collected two soil samples from 0-6 inches bgs to meet EPA requirements; the results were above the RECAP RSni. During the cleanup, MMG removed the light tower foundation, excavated to one foot bgs, and collected confirmatory soil samples. The results were non-detect except one of the sidewalls (SW2) was above the RECAP RSni. MMG then excavated an additional three feet at SW2 (for a total of four feet bgs) and collected an additional confirmatory sample. The result was non-detect.

BKI also collected a sample of groundwater from the borehole at the base of the light tower. This sample indicated a PCB concentration of 0.0018 mg/l. However, this sample was collected from the borehole and was not filtered. BKI then installed a temporary monitoring well six feet from the borehole (the well could not be installed in the same area due to the light tower foundation). The groundwater sample collected from the monitoring well was non-detect for PCBs. The detected concentration in the previous sample was attributed to suspended solids (PCBs are insoluble and have a tendency for adsorption). Based on the results of this investigation, groundwater at the site is not impacted. The monitoring well was plugged and abandoned.

Light Tower 3

BKI did not investigate this light tower (it has a different construction – the base is a planter). MMG also did not include this light tower in the RECAP Site Assessment. Under the EPA additional sampling, MMG identified it as a light tower and collected three samples around the base (in the planter) from 0-6 inches bgs. The results of two of the samples were above the RECAP RSni; the other sample was below RECAP SSni. Therefore, under the cleanup MMG removed the planter and soil contents and collected confirmatory soil samples. The results were all non-detect.

Light Tower 4

BKI did not investigate this light tower (it also has a different construction – the base is a planter). MMG also did not include this light tower in the RECAP Site Assessment. Under the EPA additional sampling, MMG identified it as a light tower and collected three samples around the base (in the planter) from 0-6 inches bgs. The results of all of the samples were above the RECAP RSni. Therefore, under the cleanup MMG removed the planter and soil contents and collected confirmatory soil samples. The results were all non-detect or below RECAP SSni.

Light Tower 5

BKI collected one sample from 0-2 feet bgs at the base of this light tower. The result was non-detect (<0.017 mg/kg). MMG did not include this light tower in the RECAP Site Assessment. EPA required that two additional soil samples be collected; MMG collected two samples from 0-6 inches bgs from around the base. The results of both samples were above the RECAP RSni, and one of the samples exceeded the EPA limit. Therefore, during the cleanup MMG removed the light tower foundation, excavated to one foot bgs, and collected confirmatory samples. The results were all non-detect.

Light Tower 7

The foundation of this light tower was not identified until the cleanup (it was buried). Therefore, it was not included in BKI's investigation, the RECAP Site Assessment, or in the additional sampling for EPA. This light tower was adjacent to Electrical Vault 5, so the foundation was removed and the area was included in the vault excavation and confirmatory sampling. All sample results were non-detect.

Light Tower 8

The foundation of this light tower was not identified until the additional investigation required by EPA. Therefore, it was not included the BKI investigation or the RECAP Site Assessment. During the soil sampling for EPA, MMG collected three 0-6 inch bgs soil samples around the foundation. Two of the samples were below the RECAP RSni, and the third was above the RECAP RSni. During the cleanup, MMG removed the foundation, excavated the soil to one foot bgs, and collected confirmatory samples. All of the samples exceeded

the RECAP RSni, and three of the samples exceeded the EPA limit. Therefore, MMG excavated to an additional three feet (for a total excavation of four feet bgs) and collected additional confirmatory samples. The results were all non-detect. All PCB contaminated soil was removed.

3.0 Conclusions

As a result of the sampling conducted under the RECAP Site Assessment and EPA requirements as well as the samples collected during the cleanup, the extent of PCB contamination was identified. All unacceptable PCB contamination (under both LDEQ and EPA requirements) has been removed.

Light Tower Summary

Legend	
Sampling Event	Date
BKI = Burk Kleinpeter Phase II	April 1998 - May 1998
RECAP = MMG RECAP Site Assessment	August 2001 - November 2001
EPA = EPA required sampling to meet TSCA disposal regulations	October 2002
CAP1 = 1 st segment of cleanup	April 2003 - May 2003
CAP2 = 2 nd segment of cleanup	September 2003
CAP3 = Final segment of cleanup	September 2003

Light Tower: LT2		
Sampling Event	Highest Conc. (mg/kg)	Location
BKI	<0.017	
RECAP	NA	
EPA	0.37	0-6"
CAP1	0.27	SW2
CAP2	<0.033	
GW BKI	0.0018 ml/l	Borehole
GW BKI	<0.0005 mg/l	Well

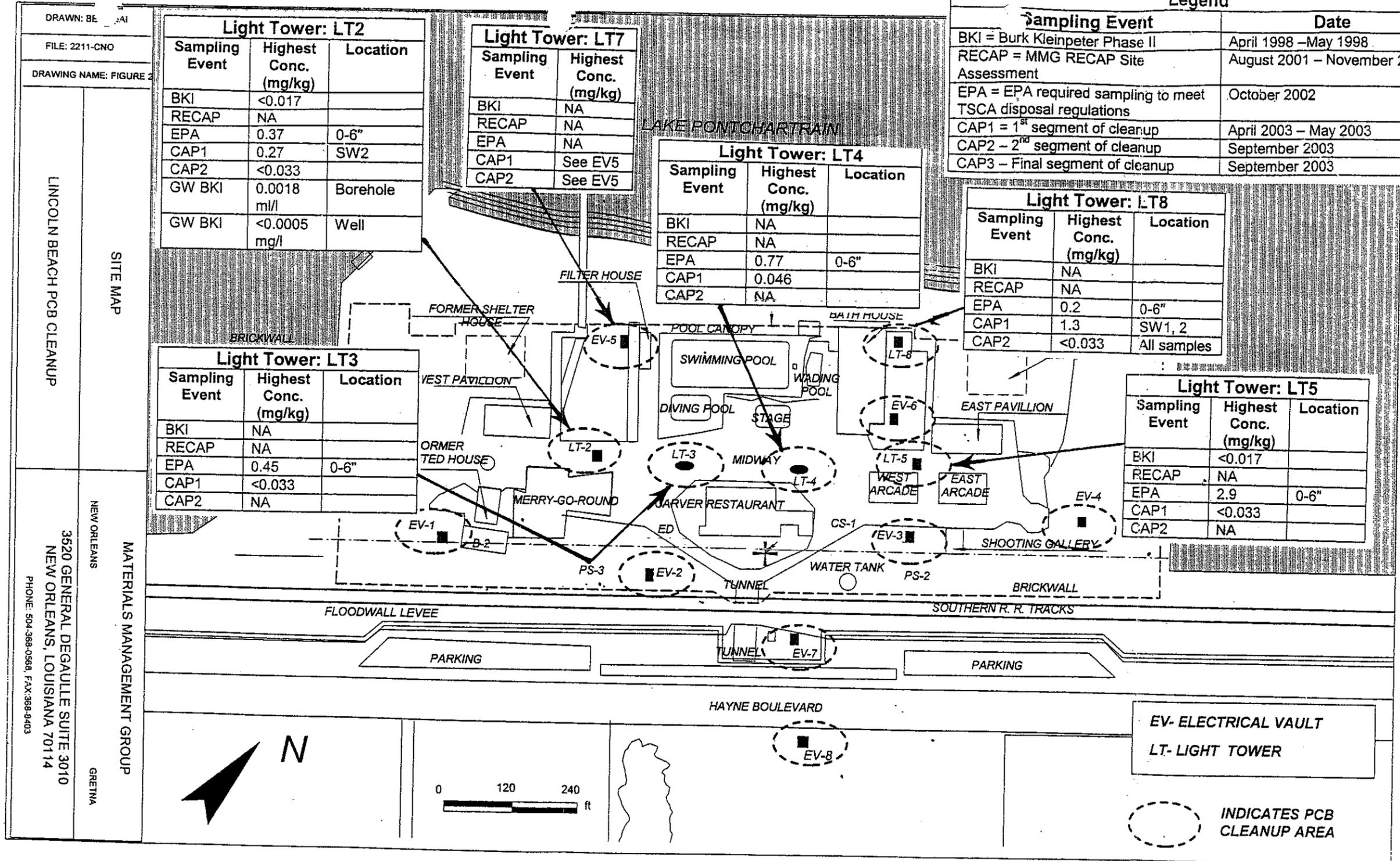
Light Tower: LT7	
Sampling Event	Highest Conc. (mg/kg)
BKI	NA
RECAP	NA
EPA	NA
CAP1	See EV5
CAP2	See EV5

Light Tower: LT4		
Sampling Event	Highest Conc. (mg/kg)	Location
BKI	NA	
RECAP	NA	
EPA	0.77	0-6"
CAP1	0.046	
CAP2	NA	

Light Tower: LT8		
Sampling Event	Highest Conc. (mg/kg)	Location
BKI	NA	
RECAP	NA	
EPA	0.2	0-6"
CAP1	1.3	SW1, 2
CAP2	<0.033	All samples

Light Tower: LT3		
Sampling Event	Highest Conc. (mg/kg)	Location
BKI	NA	
RECAP	NA	
EPA	0.45	0-6"
CAP1	<0.033	
CAP2	NA	

Light Tower: LT5		
Sampling Event	Highest Conc. (mg/kg)	Location
BKI	<0.017	
RECAP	NA	
EPA	2.9	0-6"
CAP1	<0.033	
CAP2	NA	



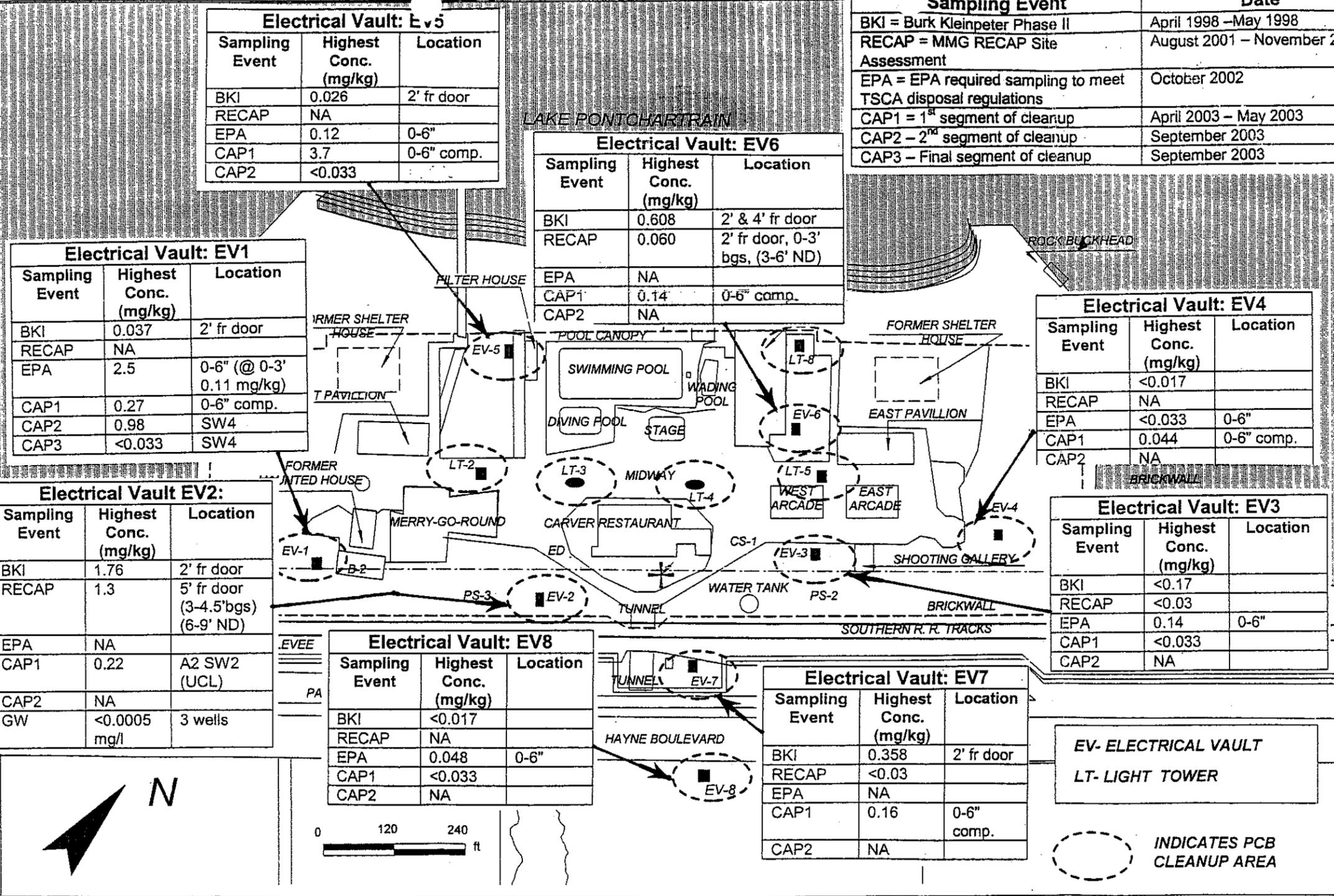
DRAWN: BE [unclear]
 FILE: 2211-CNO
 DRAWING NAME: FIGURE 2
 LINCOLN BEACH PCB CLEANUP
 SITE MAP

NEW ORLEANS
 MATERIALS MANAGEMENT GROUP
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-388-0568, FAX: 388-9403
 GREINA

Electrical Vault Summary

Legend	
Sampling Event	Date
BKI = Burk Kleinpeter Phase II	April 1998 - May 1998
RECAP = MMG RECAP Site Assessment	August 2001 - November 2001
EPA = EPA required sampling to meet TSCA disposal regulations	October 2002
CAP1 = 1 st segment of cleanup	April 2003 - May 2003
CAP2 = 2 nd segment of cleanup	September 2003
CAP3 = Final segment of cleanup	September 2003

DRAWN: B JAI
 FILE: 2211-CNO
 DRAWING NAME: FIGURE 2
 LINCOLN BEACH PCB CLEANUP
 NEW ORLEANS
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0568, FAX: 368-9403
 MATERIALS MANAGEMENT GROUP
 GREINA



Sampling Event	Highest Conc. (mg/kg)	Location
BKI	0.026	2' fr door
RECAP	NA	
EPA	0.12	0-6"
CAP1	3.7	0-6" comp.
CAP2	<0.033	

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	0.608	2' & 4' fr door
RECAP	0.060	2' fr door, 0-3' bgs, (3-6' ND)
EPA	NA	
CAP1	0.14	0-6" comp.
CAP2	NA	

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	0.037	2' fr door
RECAP	NA	
EPA	2.5	0-6" (@ 0-3' 0.11 mg/kg)
CAP1	0.27	0-6" comp.
CAP2	0.98	SW4
CAP3	<0.033	SW4

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	1.76	2' fr door
RECAP	1.3	5' fr door (3-4.5'bgs) (6-9' ND)
EPA	NA	
CAP1	0.22	A2 SW2 (UCL)
CAP2	NA	
GW	<0.0005 mg/l	3 wells

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	<0.017	
RECAP	NA	
EPA	0.048	0-6"
CAP1	<0.033	
CAP2	NA	

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	<0.017	
RECAP	NA	
EPA	<0.033	0-6"
CAP1	0.044	0-6" comp.
CAP2	NA	

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	<0.17	
RECAP	<0.03	
EPA	0.14	0-6"
CAP1	<0.033	
CAP2	NA	

Sampling Event	Highest Conc. (mg/kg)	Location
BKI	0.358	2' fr door
RECAP	<0.03	
EPA	NA	
CAP1	0.16	0-6" comp.
CAP2	NA	

EV- ELECTRICAL VAULT
 LT- LIGHT TOWER
 ○ INDICATES PCB CLEANUP AREA

**Final Summary Report
Lincoln Beach Deep Pool PCB Clean-up
14100 Hayne Boulevard, New Orleans, Louisiana**

The Intelligent Resource

For:

**New Orleans Building
Corporation**

World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130



**October 15, 2004
MMG# 2211- CNO**



Materials Management Group, Inc.

3520 General DeGaulle Drive, Suite 3010
New Orleans, LA 70114 (504) 368-0568



Materials Management Group, Inc.

October 12, 2004

Mr. Sean Cummings
Director
New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

**Re: Deep Pool Cleanup Update; Lincoln Beach
MMG File#: 2211-CNO-A12**

Dear Mr. Cummings:

MMG has completed the excavation of PCB containing soil located under the deep pool at Lincoln Beach. LDEQ confirmatory and EPA verification soil samples collected after completing the deep pool excavation indicate that the PCB concentrations in soil remaining at the site are below both EPA and LDEQ regulatory levels. The final summary report is in draft form undergoing quality control review. The report will be ready for LDEQ and EPA submittal October 15, 2004. LDEQ will be required to review, and if approved, provide a No Further Action At This Time (NFA-ATT) at this time.

MMG is pleased that the current budget for the deep pool excavation provides sufficient funding to obtain the necessary LDEQ stormwater permits to complete the backfill of the excavation pit. MMG will keep you updated as to the progress of this task as it requires coordination with LDEQ.

In addition, MMG is attaching correspondence from LDEQ indicating approval of the Electrical Vault and Light Tower remediation completed in 2003; therefore, prompting the payment of MMG's invoice to NOBC (Invoice # 102430 for \$18,556.38, October 31.

It continues to be a pleasure working with NOBC on this inspiring project. Please contact me at (504) 368-0568 if you have any questions.

Sincerely,
Materials Management Group, Inc.

Claire Renault,
Project Manager

cc: Brian Gibbs

3520 General DeGaulle Drive, Suite 3010 • New Orleans, Louisiana 70114

*Attachment 1 → letter from LDEQ 8-26-04
Attachment 2 → invoice from MMG 10-31-03*

(504) 368-0568 • Fax (504) 368-8403



State of Louisiana
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

August 26, 2004

CERTIFIED MAIL— 7001 2510 0000 9675 0302
RETURN RECEIPT REQUESTED

Mr. Sean Cummings, Director
New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

RE: Approval of Supplemental Information
Lincoln Beach; AI No. 93800
Lincoln Beach Electrical Vaults and Light Towers
14100 Hayne Boulevard
New Orleans, LA 70128, Orleans Parish

Dear Mr. Cummings:

The Department has completed review of the Supplemental Information submitted on June 24, 2004. The Public Access Evaluation and Environmental Site Assessment Supplement prepared by Burk Kleinpeter, Inc. for the City of New Orleans, dated January 1999, is received in response to LDEQ's Supplemental Information Required – Final Corrective Action Report, dated June 9, 2004. The Burke Kleinpeter report documents the initial site investigation that reported PCB contamination from transformers in the vicinity of the electrical transformer vaults and electrical transformer lighting towers at Lincoln Beach located at 14100 Hayne Boulevard in New Orleans.

The following comments refer to each item in the response to the Department's request:

- The data and the information in this report are acceptable in response to the item number 3 referenced in the supplemental request and has been added to our file for future reference.
- A summary of the soil investigation has been filed for future reference. This submittal satisfies item number 1.

Mr. Sean Cummings -- Lincoln Beach
August 26, 2004
Page 2 of 2

- A summary of groundwater investigation at the site has been filed for future reference. This submittal satisfies item number 2.
- It is our understanding that you will provide additional information for the PCB investigation and remediation at the Diving Pool area required for this site. This response will satisfy item number 5.
- The supplemental information concerning the rebuilding and proposed construction of the beach area is noted and has been filed for future reference. This submittal satisfies item number 4.

Please contact this office at 504/736-7764 with any questions. All correspondence must reference the site information above to include the AI number and be submitted in triplicate to:

Keith L. Casanova, Administrator
Remediation Services Division
LA Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314.

Sincerely,



Claude L. Blanchard, Geologist
Environmental Technology Division

C: LDEQ HQ Room 144 - HW
LDEQ OEA/ETD - Toxicology
LDEQ OEA/ETD SERO - File
MMG, Inc. - Consultant



Materials Management Group, Inc.

October 31, 2003

INVOICE

New Orleans Building Corp
2 Canal Street, Suite 1843
New Orleans, LA 70130
Attn: Mr. Sean Cummings

Terms: Net 30 Days

Invoice #: 102430
Our Job #: 2211-CNO-A-11-CAPITAL

RE: Lincoln Beach PCB Cleanup (Task 11) Retainage Fee for Work
Invoiced between September 2002 and August 2003 \$18,566.38

TOTAL AMOUNT DUE THIS INVOICE **\$18,566.38**



Materials Management Group, Inc.

October 14, 2004

Mr. Sean Cummings
Director
New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

**Re: Deep Pool Cleanup Summary Report; Lincoln
Beach
MMG File#: 2211-CNO-A12**

Dear Mr. Cummings:

MMG has completed the Summary Report for the Lincoln Beach Deep Pool PCB Cleanup. The report has been forwarded to LDEQ and EPA for approval. LDEQ will be required to review, and if approved, provide a No Further Action At This Time (NFA-ATT) determination. Please contact me at (504) 368-0568 if you have any questions.

MMG understands that it has been a cooperative stair-step of assessment and remediation activities that has brought the PCB cleanup to a successful end. NOBC's patience and understanding of this process continues to be greatly appreciated.

Sincerely,
Materials Management Group, Inc.

A handwritten signature in black ink, appearing to read 'C. Renault', with a long horizontal flourish extending to the right.

Claire Renault,
Project Manager / Geologist

cc: Brian Gibbs

Attachment: **Final Summary Report Lincoln Beach Deep Pool PCB Cleanup**





Materials Management Group, Inc.

October 14, 2004

Keith L. Casanova, Administrator
Remediation Services Division
Louisiana Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

**Re: Deep Pool Cleanup Summary Report; Lincoln
Beach
AI # 93800
MMG File#: 2211-CNO-A12**

Dear Mr. Casanova:

Materials Management Group, Inc. (MMG) has completed the PCB cleanup of the Deep Pool at Lincoln Beach, New Orleans, Louisiana (Agency Number 93800). Three copies of the Summary Report for the Lincoln Beach Deep Pool PCB Cleanup are submitted for your review. With this submittal, MMG requests a No Further Action At This Time (NFA-ATT) determination from LDEQ. Please contact me at (504) 368-0568 if you have any questions.

Thank you for your expeditious response to this request for NFA-ATT.

Sincerely,
Materials Management Group, Inc.

A handwritten signature in black ink, appearing to read 'Claire Renault', with a long horizontal line extending to the right.

Claire Renault,
Project Manager / Geologist

cc: Mr. Skip Blanchard; LDEQ Team Leader
✓ Mr. Sean Cummings; NOBC
Mr. Brian Gibbs; NOBC

Attachment: **Final Summary Report Lincoln Beach Deep Pool PCB Cleanup**



Materials Management Group, Inc.

October 14, 2004

Mr. Sean Cummings
Director
New Orleans Building Corporation
World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

**Re: Deep Pool Cleanup Summary Report; Lincoln
Beach
MMG File#: 2211-CNO-A12**

Dear Mr. Cummings:

MMG has completed the Summary Report for the Lincoln Beach Deep Pool PCB Cleanup. The report has been forwarded to LDEQ and EPA for approval. LDEQ will be required to review, and if approved, provide a No Further Action At This Time (NFA-ATT) determination. Please contact me at (504) 368-0568 if you have any questions.

MMG understands that it has been a cooperative stair-step of assessment and remediation activities that has brought the PCB cleanup to a successful end. NOBC's patience and understanding of this process continues to be greatly appreciated.

Sincerely,
Materials Management Group, Inc.

A handwritten signature in black ink, appearing to read 'C. Renault', with a long horizontal flourish extending to the right.

Claire Renault,
Project Manager / Geologist

✓cc: Brian Gibbs

Attachment: Final Summary Report Lincoln Beach Deep Pool PCB Cleanup



Materials Management Group, Inc.

October 14, 2004

Keith L. Casanova, Administrator
Remediation Services Division
Louisiana Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

**Re: Deep Pool Cleanup Summary Report; Lincoln
Beach
AI # 93800
MMG File#: 2211-CNO-A12**

Dear Mr. Casanova:

Materials Management Group, Inc. (MMG) has completed the PCB cleanup of the Deep Pool at Lincoln Beach, New Orleans, Louisiana (Agency Number 93800). Three copies of the Summary Report for the Lincoln Beach Deep Pool PCB Cleanup are submitted for your review. With this submittal, MMG requests a No Further Action At This Time (NFA-ATT) determination from LDEQ. Please contact me at (504) 368-0568 if you have any questions.

Thank you for your expeditious response to this request for NFA-ATT.

Sincerely,
Materials Management Group, Inc.

A handwritten signature in black ink, appearing to read 'Claire Renault', with a long horizontal line extending to the right.

Claire Renault,
Project Manager / Geologist

cc: Mr. Skip Blanchard; LDEQ Team Leader
Mr. Sean Cummings; NOBC
✓ Mr. Brian Gibbs; NOBC

Attachment: Final Summary Report Lincoln Beach Deep Pool PCB Cleanup

**Final Summary Report
Lincoln Beach Deep Pool PCB Clean-up
14100 Hayne Boulevard, New Orleans, Louisiana**

The Intelligent Resource

For:

**New Orleans Building
Corporation**

World Trade Center
2 Canal Street, Suite 1843
New Orleans, LA 70130

**October 15, 2004
MMG# 2211- CNO**



Materials Management Group, Inc.

**3520 General DeGaulle Drive, Suite 3010
New Orleans, LA 70114 (504) 368-0568**

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Sample Locations

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Sample Locations

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1.0 Introduction

Materials Management Group, Inc. (MMG) has completed the deep pool cleanup at the Lincoln Beach site in New Orleans on behalf of the New Orleans Building Corporation (NOBC). The cleanup activities were conducted under MMG's environmental services contract with the City of New Orleans.

2.0 Background

The recent excavation and confirmatory sampling activities complete the deep pool cleanup of PCB contamination. Previous investigations revealed PCB contamination (above RECAP Screening and Management Option 1 standards as well as the EPA threshold) in soil around the electrical vaults and light towers onsite. During these investigations, two transformers were found in the deep pool. The transformers were sent for disposal at TransCycle Industries in Alabama. Samples of the water in the pool did not contain PCBs and the water was pumped out. In December 2002 following removal of the water and all debris in the pool, eight concrete cores were collected from the pool bottom for analysis for PCBs (for characterization for disposal at a non-hazardous landfill under the 40 CFR 761.61a). While the samples met the criteria for non-hazardous disposal (less than 50 ppm), three of the samples (P2, P3, and P5) exceeded the RECAP Screening and Management Option 1 standards (0.092 mg/kg and 0.19 mg/kg respectively) and the EPA threshold for soil (1 ppm). Therefore, it was necessary for MMG to remove and dispose of the contaminated concrete (pool bottom) during site demolition activities. At that time, MMG also excavated soil from beneath the deep pool and collected soil samples to ensure that all PCBs had been removed. Based on the sample results, MMG subsequently conducted additional excavation and sampling to remove all PCB contamination.

3.0 Summary of Field Activities

The field activities conducted in removal of the contaminated concrete and two phases of excavation and confirmatory sampling (initial and final cleanup efforts) are described below.

3.1 Schedule

The deep pool cleanup was completed in two phases. The schedule was as follows:

Initial Cleanup Effort

June 30: Delineation of contaminated concrete areas in the pool, Concrete Busters begin deep pool demolition and stockpiling of contaminated concrete
July 13: Confirmatory and verification soil sampling; soil and concrete disposal

Final Cleanup Effort

August 3: Sample rainwater accumulated in pool

August 17: Pump and filter water in pool pit, discharge water; additional excavation; sample collection

August 18: Waste load out

August 19: Completion of waste load out; general site cleanup

3.2 Concrete Removal and Disposal

MMG used spray paint to delineate the areas of the deep pool bottom where elevated (above LDEQ and/or EPA levels) PCBs were identified. NOBC's demolition contractor (Concrete Busters) broke up the pool bottom and stockpiled the contaminated concrete. When pool demolition was complete, MMG placed the pieces of contaminated concrete in roll-off boxes along with excavated soil (see Section 3.3) and transported the waste to Jefferson Parish Landfill for disposal. All PCB concentrations were less than 50 ppm; therefore, disposal at a non-hazardous waste landfill was acceptable under 40 CFR 761.61.

3.3 Soil Excavation and Disposal

Initial Cleanup Effort

Following removal of the concrete, MMG used a trackhoe to excavate two areas (see Figure 1). An area approximately 20 feet by 25 feet was excavated to a minimum of three feet below the surface of the pool bottom to remove any PCB contamination associated with former concrete sample location P2 and P3 (see Figures 2 and 3). An area approximately 15 by 20 feet was excavated to three feet below the surface of the pool bottom to remove any PCB contamination associated with former concrete sample location P5 (see Figures 2 and 3). The excavated soil was placed in roll-off boxes along with the contaminated concrete and sent for disposal at Jefferson Parish Landfill. A total of 157.3 tons of soil and concrete were sent for disposal.

Final Cleanup Effort

Based on the results of confirmatory and verification samples, additional excavation was necessary in both of the excavation areas (P2/P3 and P5). MMG therefore conducted additional excavation in both areas. MMG removed all backfilled soil near the P2 and P3 sample locations (see Figure 3 and 5). An additional three feet of native soil was excavated from the bottom (leaving the final excavation bottom at approximately 11 feet below ground surface (bgs)). There was some cave-in during excavation of this area. MMG also excavated further at the P5 sample location. Since the eastern sidewall sample from July 2004 showed an elevated PCB concentration, the excavation was extended beyond the sidewall of the original excavation. This entailed excavating from the existing ground surface down through the side of the pool and below the pool bottom as well as below the bottom of the original excavation for a final depth of 11.5 feet bgs (see Figures 4 and 5 for the limits of both excavations (P2/P3 and P5)). All excavated soil (a total of 60.67 tons) was placed in roll-off boxes and sent for disposal at Jefferson Parish Landfill.

3.4 Confirmatory Soil Sampling

Initial Cleanup Effort

Ten confirmatory soil samples were collected (five from each excavation) following the initial excavation efforts (see Figure 2). The sampling consisted of collecting five discrete samples from each excavation area: one from each sidewall and one from the bottom of the pit. The samples were sent to Southern Petroleum Laboratories, Inc. (SPL) in Scott, LA for analysis for PCBs (EPA SW-846 Method 8082).

Final Cleanup Effort

Following the final excavation, three confirmatory soil samples were collected (see Figure 5). Due to the size of the P2/P3 excavation (25 feet), two bottom samples were collected (designated as east and west). In addition, one sample was collected from the bottom of the P5 pit. All samples were sent to SPL for analysis for PCBs (EPA SW-846 Method 8082).

3.5 Verification Sampling

Initial Cleanup Effort

In addition to the confirmatory samples, MMG collected three composite verification samples. This is an EPA requirement under 40 CFR 761 Subpart O to ensure that all PCB contamination has been removed. Based on the size of each excavation area, MMG collected two verification samples from the P2/P3 excavation, and one verification sample from the P5 excavation. Each composite consisted of nine discrete samples (see Figures 3 and 5 for sample locations). The discrete samples were located 4.5 feet apart.

Final Cleanup Effort

Although the results of the three verification samples from the first excavation were below the EPA threshold, the result of one of the confirmatory samples at P5 exceeded the EPA level. Therefore, it was necessary to collect one composite verification sample from the second P5 excavation (see Figure 5). Based on the size of the excavation, the composite consisted of six discrete samples (collected at 4.5 foot intervals).

3.6 Water Removal and Discharge

Between the initial and final cleanup excavations, there was significant rainfall and water accumulated in the excavation areas in the deep pool. Therefore, MMG collected a sample of the water on August 3, 2004 and sent it to SPL for analysis for PCBs. The results were non-detect; therefore, during the final cleanup effort, MMG pumped the water into a dewatering pit. MMG constructed the dewatering pit by excavating an area in the western part of the deep pool (unaffected by the excavation efforts). The dewatering pit was separated from the rest of the pool by a berm. The dewatering pit contained a silt trap consisting of four bales of hay covered by landscape fabric. This allowed for filtration of solids from the water. This method eliminated the need to discharge the water.

MMG removed the water from the excavation area to the dewatering pit using a three-inch trash pump.

4.0 Findings

All analytical results are summarized in Tables 1 and 2, and the final analytical reports from the laboratory are included in Appendix C.

Initial Cleanup Effort

The results indicated that confirmatory samples from two areas (the bottom of the P2/P3 excavation area and the eastern sidewall of the P5 excavation) exceeded the applicable RECAP standard of 0.19 mg/kg (see Table 1); the results were 0.86 mg/kg and 2.0 mg/kg, respectively. The confirmatory sample from the eastern sidewall of P5 (2.0 mg/kg) also exceeded the EPA threshold of 1 ppm. In addition, all three of the EPA (composite) verification samples exceeded the RECAP standard (likely the result of the two elevated areas identified by the confirmatory sample results), although they were below the EPA threshold (see Table 1).

Final Cleanup Effort

The results of the three confirmatory samples and one verification sample were non-detect for PCBs. Therefore, all unacceptable PCB concentrations have been removed from the soil under the deep pool.

5.0 Recommendations

Based on the results of all deep pool cleanup activities, no further action is necessary. All PCB contamination above 0.19 mg/kg (RECAP MO-1 standard) has been removed. This meets both LDEQ RECAP and EPA cleanup requirements. At this time, MMG formally requests a No Further Action At This Time (NFAATT) determination from LDEQ for the deep pool.

Tables

Table 1: Initial Cleanup Effort – Soil Sample Summary

Sample Name/Regulatory Standard	PCB Result (mg/kg)	Sample Type	Comments
RECAP MO-1 RSni	0.19	NA	NA
EPA Threshold (for proposed use)	1.0	NA	NA
CS-2211-CNO-P2/3-SWN	<0.033	Discrete	Confirmatory
CS-2211-CNO-P2/3-SWE	<0.033	Discrete	Confirmatory
CS-2211-CNO-P2/3-SWS	<0.033	Discrete	Confirmatory
CS-2211-CNO-P2/3-SWW	<0.033	Discrete	Confirmatory
CS-2211-CNO-P2/3-BT	0.86	Discrete	Confirmatory, 1254
CS-2211-CNO-P5-SWN	0.048	Discrete	Confirmatory, 1254
CS-2211-CNO-P5-SWE	2.0	Discrete	Confirmatory, 1254
CS-2211-CNO-P5-SWS	<0.033	Discrete	Confirmatory
CS-2211-CNO-P5-SWW	0.042	Discrete	Confirmatory, 1254
CS-2211-CNO-P5-BT	<0.033	Discrete	Confirmatory
S-2211-CNO-P2-EPA-COMP-1	0.44	Composite	EPA Verification, 1254
S-2211-CNO-P3-EPA-COMP-2	0.78	Composite	EPA Verification, 1254
S-2211-CNO-P5-EPA-COMP-3	0.27	Composite	EPA Verification, 1254

Table 2: Final Cleanup Effort – Soil Sample Summary

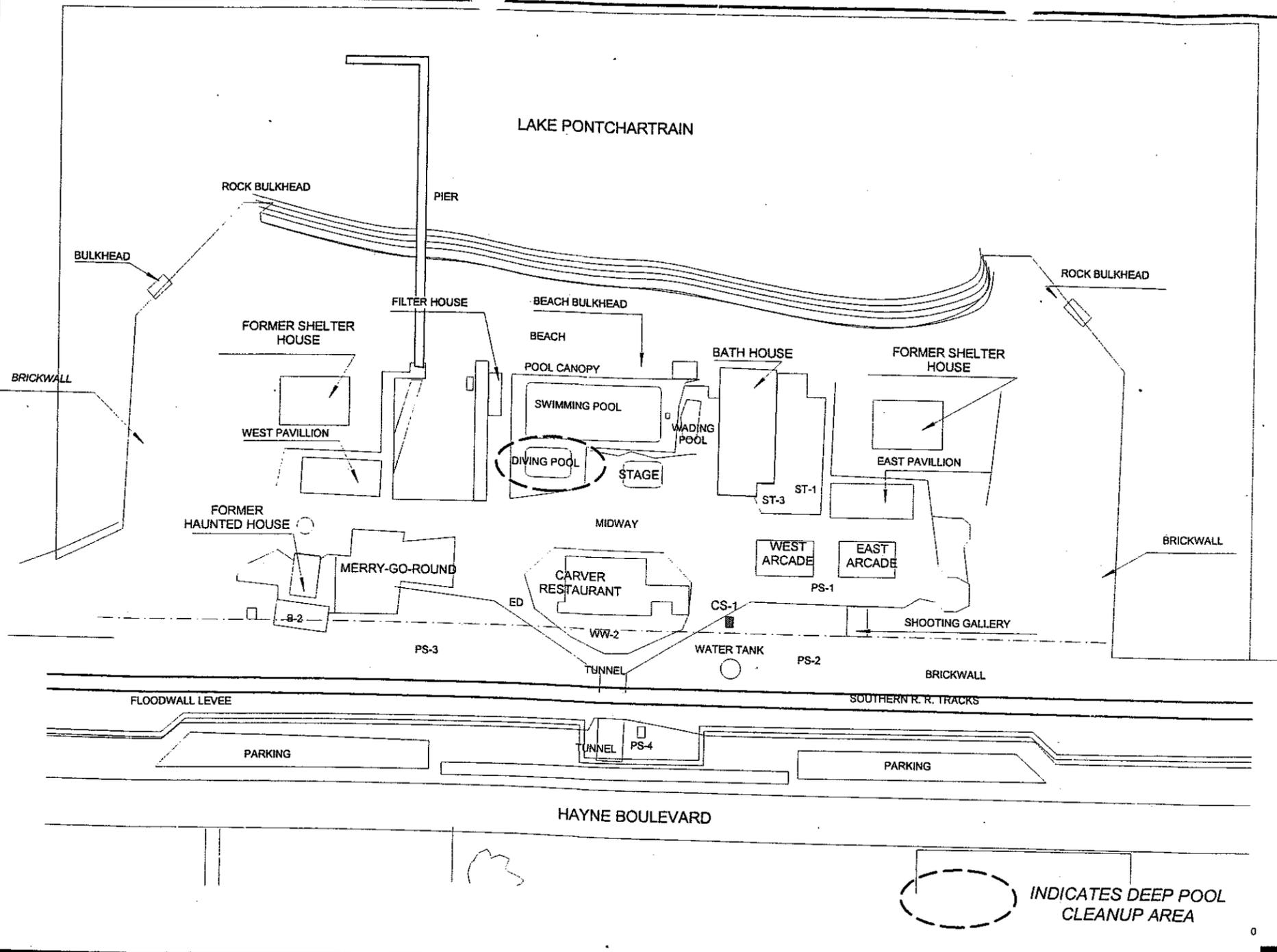
Sample Name/Regulatory Standard	PCB Result (mg/kg)	Sample Type	Comments
RECAP MO-1 RSni	0.19	NA	NA
EPA Threshold (for proposed use)	1.0	NA	NA
CS-2211-CNO-P2/3-BTM-W-11'	<0.033	Discrete	Confirmatory
CS-2211-CNO-P2/3-BTM-E-11'5"	<0.033	Discrete	Confirmatory
CS-2211-CNO-P5-BTM-11'5"	<0.033	Discrete	Confirmatory
S-2211-CNO-P5-EPA-EX2-11'5"	<0.033	Composite	EPA Verification

Figures

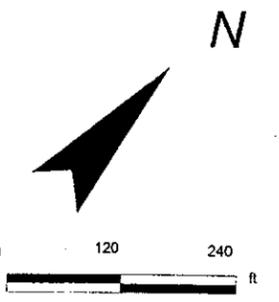
DRAWN: BEN TSAI
 FILE: 2211-CNO
 10/12/2004

Figure 1: Site Location Map (deep Pool)
 LINCOLN BEACH DEEP POOL FINAL EXCAVATION

MATERIALS MANAGEMENT GROUP, INC.
 NEW ORLEANS
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-388-0588, FAX: 388-9403
 GREINA



INDICATES DEEP POOL
 CLEANUP AREA



DRAWN: BEN TSAI
 FILE: 2211-CNO
 10/12/2004

Figure 2: Initial Cleanup Effort-Excavation Limits and LDEQ Confirmatory Sample Locations
 LINCOLN BEACH DEEP POOL INITIAL EXCAVATION

MATERIALS MANAGEMENT GROUP
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-388-0588, FAX: 388-8403

CS-2211-CNO-P2/P3-SWS	CS-2211-CNO-P2/P3-SWW	CS-2211-CNO-P2/P3-SWN	CS-2211-CNO-P2/P3-BT	CS-2211-CNO-P2/P3-SWE
8 ft < 0.033 mg/kg	8 ft < 0.033 mg/kg	8 ft < 0.033 mg/kg	8 ft 0.86 mg/kg	8 ft < 0.033 mg/kg

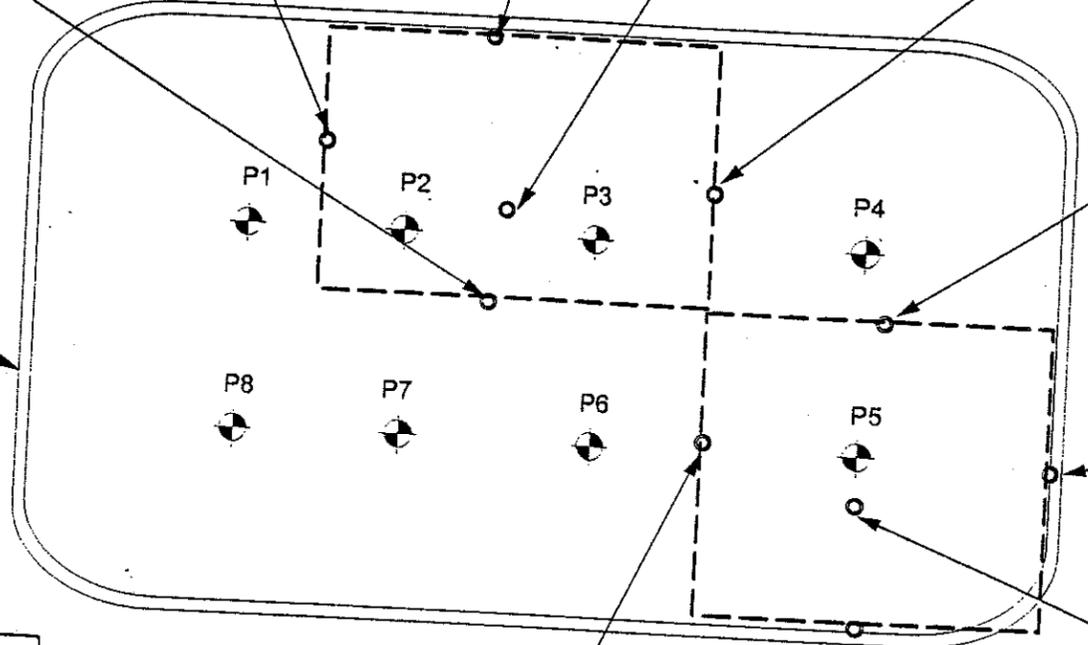
CS-2211-CNO-P5-SWN
8 ft 0.048 mg/kg

CS-2211-CNO-P5-SWE
8 ft 2.0 mg/kg

CS-2211-CNO-P5-BT
8 ft < 0.033 mg/kg

CS-2211-CNO-P5-SWW
8 ft 0.042 mg/kg

CS-2211-CNO-P5-SWS
8 ft < 0.033 mg/kg



SAMPLE NAME(LDEQ confirmatory)	
sample depth (feet)	PCB concentration (mg/kg)

- AREA EXCAVATED
- LDEQ Confirmatory Sample Location
- P1 Concrete Sample #
- ⊙ Concrete Sample Location

DRAWN: BEN TSAI

FILE: 2211-CNO

10/12/2004

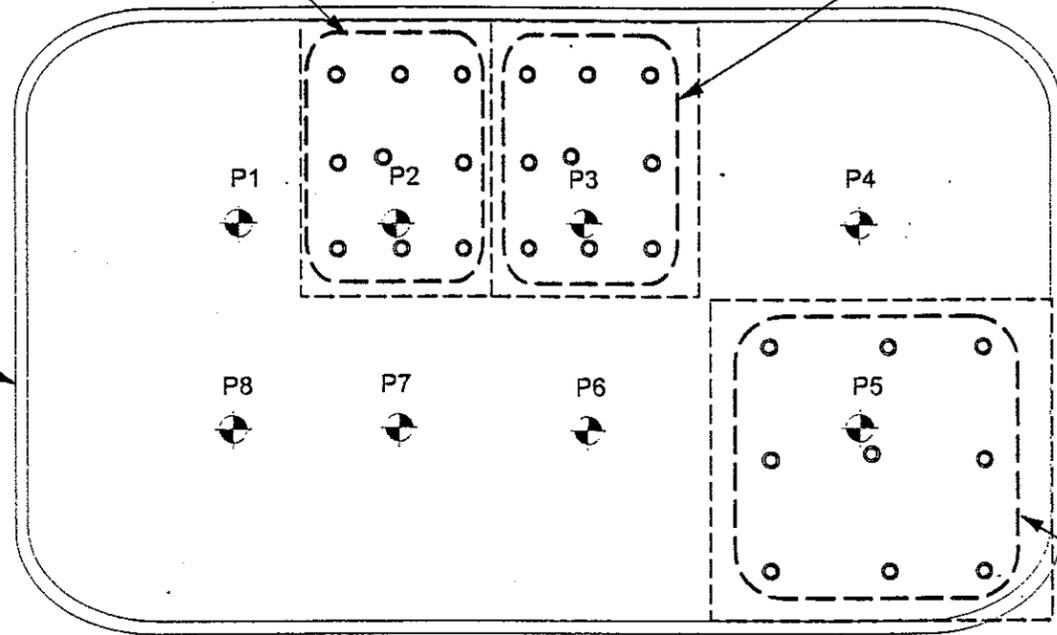
Figure 3: Initial Cleanup Effort-Excavation Limits and EPA Confirmatory Sample Locations
LINCOLN BEACH DEEP POOL INITIAL EXCAVATION

MATERIALS MANAGEMENT GROUP
3520 GENERAL DEGAULLE SUITE 3010
NEW ORLEANS, LOUISIANA 70114
PHONE: 504-388-0568, FAX: 388-8403

○ CS-2211-CNO-P2-EPA-COMP-1	
8 ft	< 0.44 mg/kg

○ CS-2211-CNO-P3-EPA-COMP-2	
8 ft	0.78 mg/kg

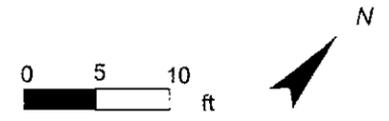
DEEP POOL



CS-2211-CNO-P5-COMP-3	
8 ft	0.27 mg/kg

SAMPLE NAME(EPA Verification) Location of 1 composite of 9 discrete	
sample depth (feet)	PCB concentration (mg/kg)

- AREA EXCAVATED
- EPA Verification Sample Location
- P1 Concrete Sample #
- ☛ Concrete Sample Location



DRAWN: BEN TSAI
 FILE: 2211-CNO
 10/12/2004

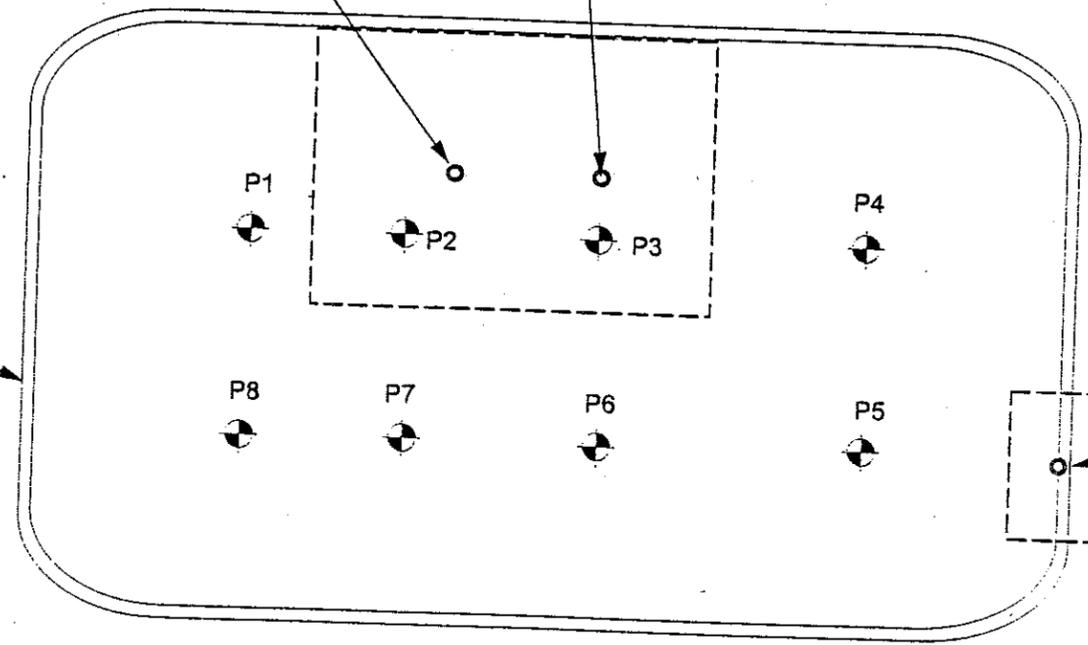
LINCOLN BEACH DEEP POOL FINAL EXCAVATION
 Figure 4: Final Cleanup Effort-Excavation Limits and LDEQ Confirmatory Sample Locations

MATERIALS MANAGEMENT GROUP
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0568, FAX: 368-8403

CS-2211-CNO-P2/P3-BTM-W-11'		CS-2211-CNO-P2/P3-E-11'5"	
11'	< 0.033 mg/kg	11' 5"	< 0.033 mg/kg

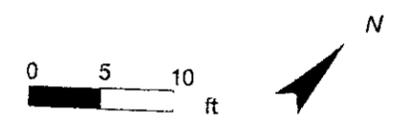
CS-2211-CNO-P5-BTM-11'5"	
11'5"	<0.033 mg/kg

DEEP POOL



SAMPLE NAME(LDEQ confirmatory)	
sample depth (feet)	PCB concentration (mg/kg)

- AREA EXCAVATED
- LDEQ Confirmatory Sample Location
- P1 Concrete Sample #
- ⊗ Concrete Sample Location

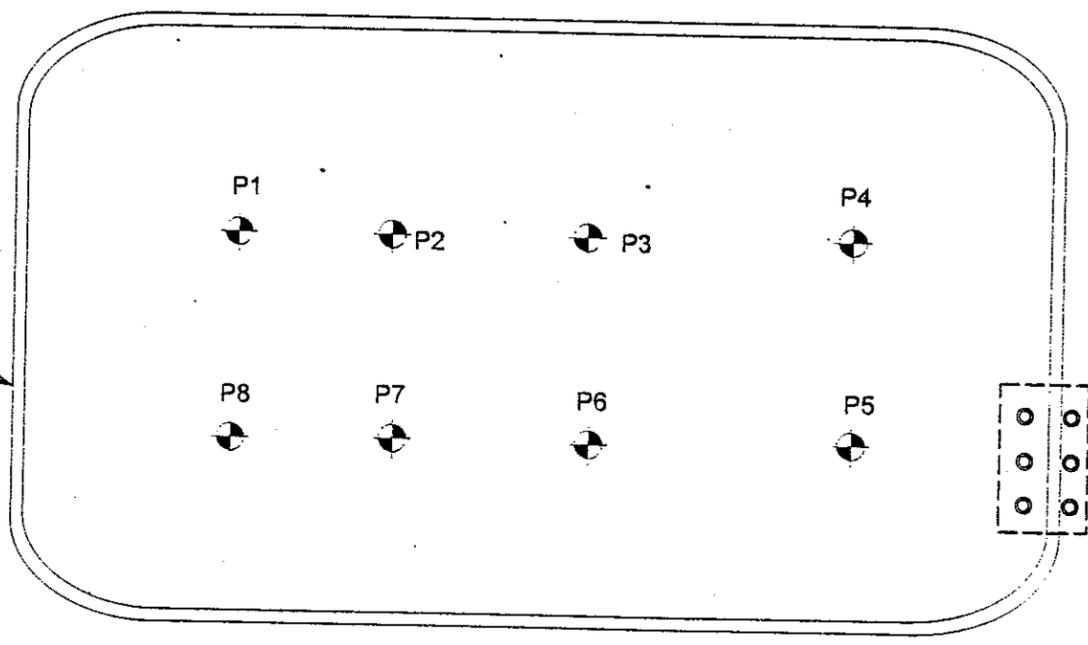


DRAWN: BEN TSAI
 FILE: 2211-CNO
 10/12/2004

LINCOLN BEACH DEEP POOL FINAL EXCAVATION
 Figure 5: Final Cleanup Effort-Excavation Limits and EPA Confirmatory Sample Locations

MATERIALS MANAGEMENT GROUP
 3520 GENERAL DEGAULLE SUITE 3010
 NEW ORLEANS, LOUISIANA 70114
 PHONE: 504-368-0566, FAX: 368-8403

DEEP POOL



CS-2211-CNO-P5-EPA-EX2-11'5"	
11'5"	<0.033 mg/kg

SAMPLE NAME(EPA confirmatory)	
sample depth (feet)	PCB concentration (mg/kg)

- AREA EXCAVATED
- EPA Verification Sample Location
- P1 Concrete Sample #
- ⊗ Concrete Sample Location

