5 November 2004 Project No. 3433.08

Mr. Barney Chan Alameda County Environmental Health Services 1131 Harbor Bay Parkway, 2nd Floor Alameda, California 94502

Subject:

**Final Project Completion** 

Mandela Gateway

1350-1400 Seventh Street Oakland, California 94607

Dear Mr. Chan:

This letter report documents the completion of required soil management actions at the Mandela Gateway site in Oakland, California. The report was prepared by Treadwell & Rollo, Inc. (Treadwell & Rollo) on behalf of Mandela Gateway Associates and is based on observations made by Treadwell & Rollo personnel and information provided to Treadwell & Rollo by Mandela Gateway Associates and James E. Roberts-Obayashi Corporation, the general contractor for the development.

### Background

The Mandela Gateway site is located at 1350 and 1400 Seventh Street in Oakland, California (Figure 1). The site consists of two partial blocks between Seventh and Eighth Streets (West Block and East Block) and is bisected by Mandela Parkway. Mandela Gateway Associates has redeveloped the site for mixed residential and commercial use, with multi-story structures that include parking garages, retail space, and residential units. A site plan of the redeveloped site is presented in Figure 2.

Extensive environmental sampling was performed by Treadwell & Rollo prior to and in support of site redevelopment. Soil sample locations are shown in Figure 3. The results of this sampling indicated the presence of residual chemicals in some shallow soil locations that exceeded calculated risk-based target levels for future site use. Chemicals found exceeding these concentrations included lead and pesticides in the West Block and lead and petroleum hydrocarbons in the East Block. The occurrence of chemicals in soil with respect to concentrations, location, and depth was reported in the Treadwell & Rollo 5 May 2003 Soil

Mr. Barney Chan Alameda County Environmental Health Services 5 November 2004 Page 2

Management and Removal Plan, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California (SMRP).

Treadwell & Rollo, in consultation with the Alameda County Environmental Health Services (ACEH), developed soil-management activities for safely managing the site soil in a manner protective of public health and the environment, which were defined in the SMRP. The SMRP was approved by ACEH in its 23 May 2003 letter titled Site #RO0002517, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, CA 94607. In addition to activities to be performed during construction, additional measures to mitigate potential exposure to future site residents included the imposition of a deed restriction on the property and preparation of a Final Soil Management Plan (FSMP). The purpose of the FSMP was to define practices protective of future site users should future site work, such as underground utility repairs, require disturbance of the site cap. The Treadwell & Rollo Final Soil Management Plan, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California, was submitted to ACEH on 4 April 2004.

Redevelopment of the site required significant excavation and movement of soil. Soil management activities during construction included health and safety procedures, dust control, profiling and off-site disposal of soil meeting criteria for hazardous waste, and capping of soil left on site that contained residual chemicals exceeding the risk-based target levels. The majority of these actions were completed between March 2003 and April 2004. The Treadwell & Rollo report titled Soil Management and Removal Documentation Report, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California (SMRDR), submitted to ACEH on 13 April 2004, documented these activities.

At the time the *SMRDR* was submitted, all soil management activities were completed, with the exception of soil capping in four discrete and relatively small landscaped areas. The remaining areas containing chemicals exceeding target levels and where soil capping was to be completed included:

- in the West Block: (1) the narrow landscaped area between the podium area and Mandela Parkway, and (2) two areas of the landscaped margins of the parking lot; and
- in the East Block, the Town Square.

In addition, two landscaped areas north of the private drive in the East Block, although not associated with confirmed residual chemical exceedances, were planned for covering with two feet of clean fill. These areas are shown on Figure 4.

This report documents the performance of these final soil management activities and provides final "as-built" figures showing the locations and thicknesses of clean fill at the Site.

Mr. Barney Chan Alameda County Environmental Health Services 5 November 2004 Page 3

# **Final Soil Management Activities**

Figures 5 and 6 show the final soil placement on the West Block and East Block, respectively. The figures show the locations of fill placed to reach the finished site grade and to replace contaminated soil removed from "focused" excavations. This fill placement took place during the period from March 2003 to September 2004. Fill placement prior to April 2004 was previously described in the *SMRDR*, with the exception of the building pads north of the private drive and initial grading in the Town Square, both in the East Block. These actions are described below, along with fill placement since April 2004.

#### West Block

During the week of 21 June 2004, approximately 130 cubic yards (cy) of soil was moved from the East Block and placed in the West Block landscaped area between the podium structure and the sidewalk along Mandela Parkway. This soil was generated during excavation for the joint utility trench in the East Block private drive and consisted of previously imported clean fill from the Letterman Digital Arts Center (Letterman site). Documentation that this soil met import requirements for the site was provided in the *SMRDR*.

During the week of 6 September 2004, approximately 45 cy of clean imported fill was placed in the landscaped strips to the north and northeast of the parking lot. The areas capped are shown in Figure 4. The source of this fill was clean imported soil excavated at the Greek Orthodox Church of the Ascension in Oakland, California. This soil was previously approved for import to the site in June 2004. A letter discussing Treadwell & Rollo's evaluation and approval activities and laboratory reports for samples of this soil, are provided in Attachment A (on CD-ROM).

As shown in Figure 5, the thickness of the clean soil cap in the landscaped areas of the West Block is 2 feet in the area east of the podium and from 2 to 2.5 feet in the landscaped strips bordering the parking lot. This completes the soil management activities in the West Block.

#### East Block

During backfilling of the podium area in June 2003, a working surface was constructed in the Town Square area with clean imported fill from the Letterman site, which was also used as backfill in the podium area. This backfilling covered the native-soil surface in this area with up to three feet of fill in the central part of the Town Square, meeting the requirement for at least two feet of clean fill.

Mr. Barney Chan Alameda County Environmental Health Services 5 November 2004 Page 4

The building pads for buildings north of the private drive were constructed in October 2003. Because of the natural slope of the site, these pads added more than one foot of soil in the southern part of the pads, decreasing to less than one-half foot in the northern part, as shown in Figure 6. The fill material used was Letterman originally placed in the podium area but later excavated for foundation construction.

During the week of 20 September 2004, approximately 30 cy of clean imported soil was placed in the landscaped areas north of the private drive shown in Figure 4. The source of this soil was the Greek Orthodox Church site discussed above.

As shown in Figure 6, the thickness of the clean soil cap in the landscaped areas of the East Block is two feet in the areas north of the private drive and more than two feet in the landscaped areas of the Town Square. This completes the soil management activities in the West Block.

### **Summary and Conclusions**

The Mandela Gateway site has been redeveloped for mixed residential and commercial use. To protect redevelopment workers and future site users, the 5 May 2003 Soil Management and Removal Plan, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California defined soil management activities necessary to address residual chemicals in site soil. These soil management procedures were approved by the ACEH.

Performance of the required soil management activities from March 2003 to April 2004 were documented in the Soil Management and Removal Documentation Report, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California (SMRDR), which was submitted to ACEH on 13 April 2004. In this letter, Treadwell & Rollo has documented the final required soil management activities: the capping of discrete landscaped areas in the West and East Blocks of the site.

A Final Soil Management Plan, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California (FSMP) was submitted to ACEH on 4 April 2004 containing procedures for maintaining the cap at the site for continuing protection of site users in the future. A deed restriction has also been submitted to ACEH that, when filed, will ensure procedures stipulated in the FSMP will be followed in the future.

With the final capping activities in landscaped areas described in this letter, and the submittal of the *FSMP* and deed restriction, soil management activities have been completed. We request ACEH issue a "No Further Action" letter for the Mandela Gateway site.

Mr. Barney Chan Alameda County Environmental Health Services 5 November 2004 Page 5

We appreciate the opportunity to work with you on this project. If you have any questions, please call.

Sincerely yours, TREADWELL & ROLLO, INC.

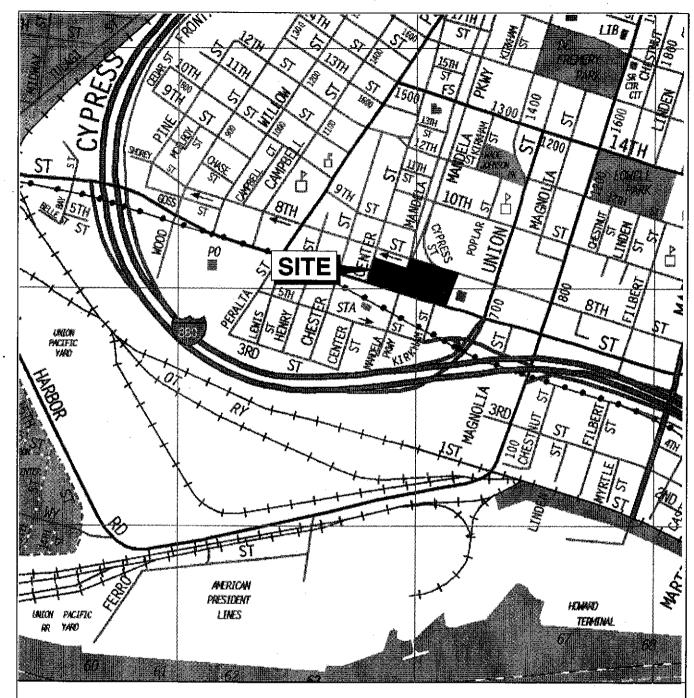
Grover Buhr, R. Senior Geologis

34330826.OAK

Attachment

Mhu

Michael P. McGuire, P.E. Principal Engineer



Base map: The Thomas Guide Alameda County 1999



No scale

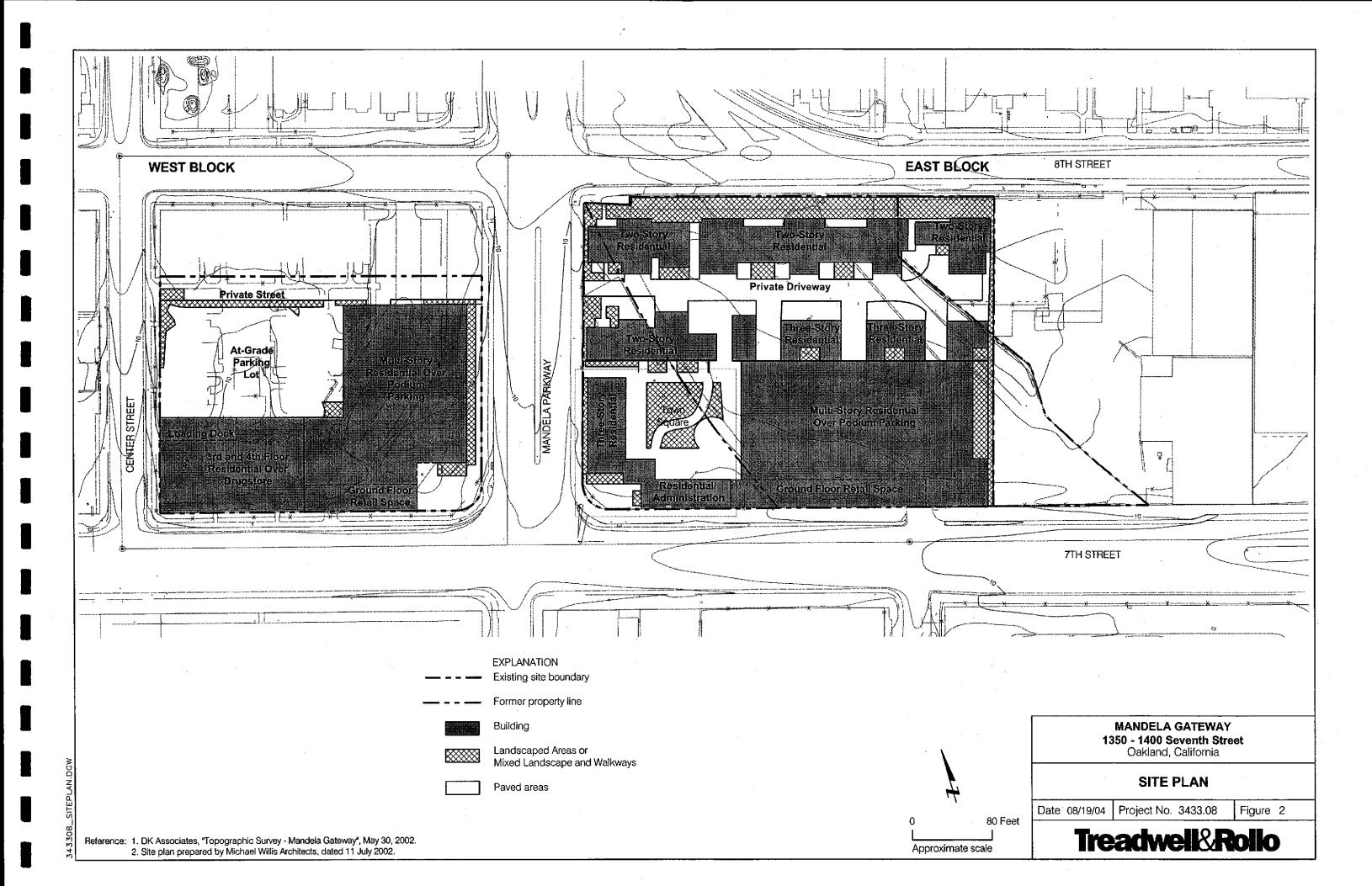
MANDELA GATEWAY 1350 - 1400 Seventh Street Oakland, California

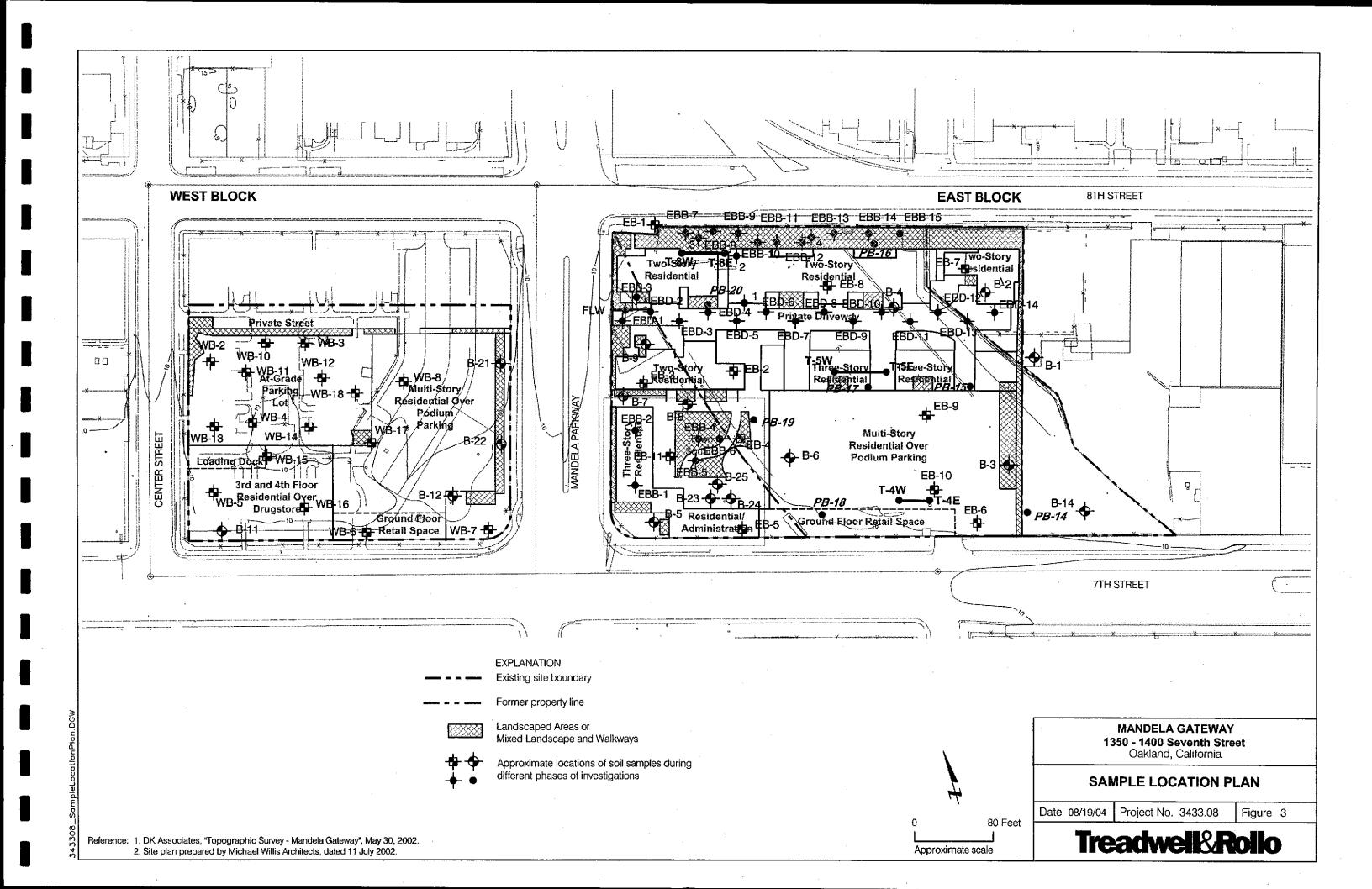
Treadwell&Rollo

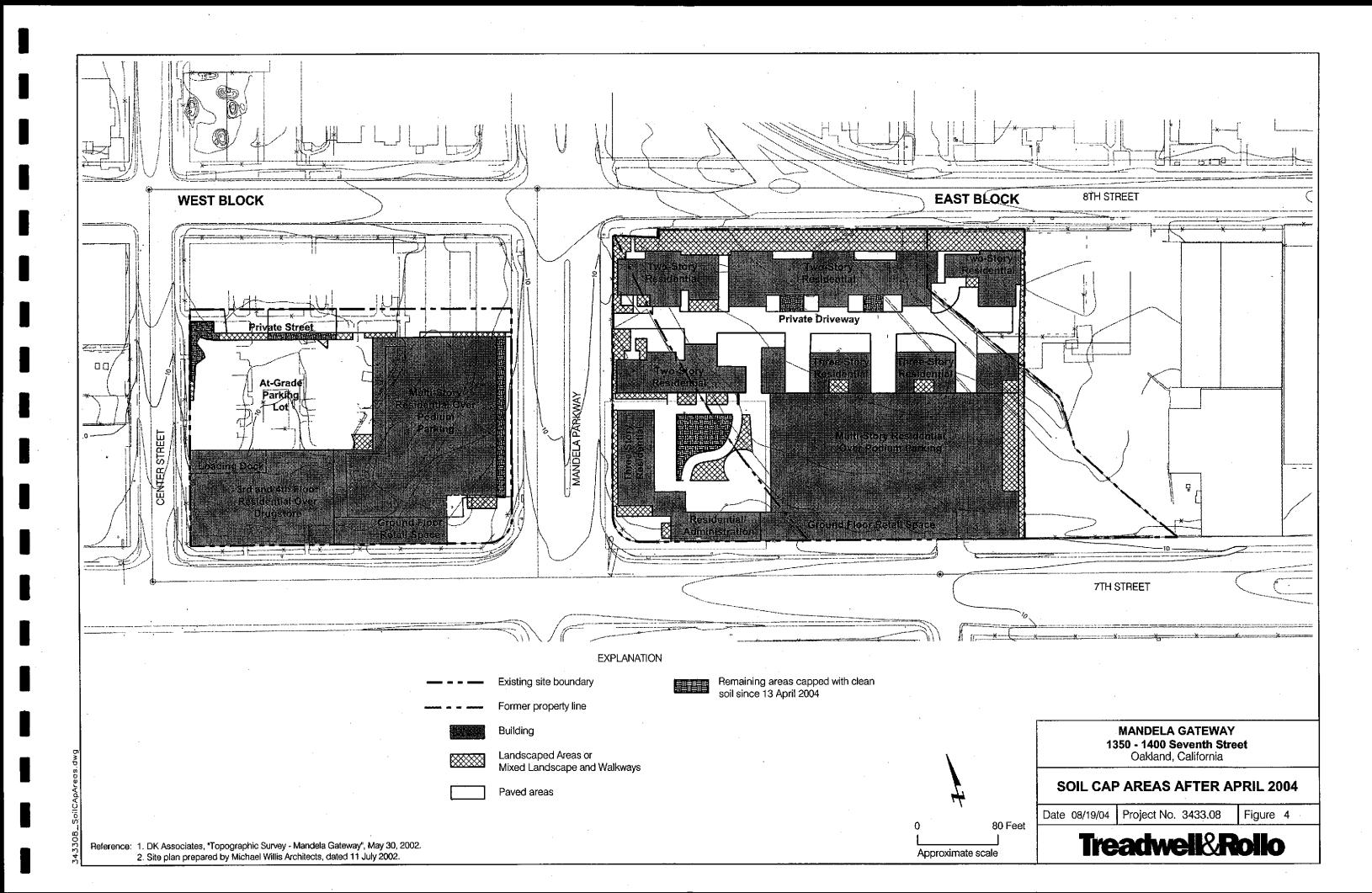
SITE LOCATION MAP

Date 03/16/04 | Project No. 3433.08

Figure 1







**WEST-BLOCK** MANDELA PARKWAY CENTER STREET ● WBM MB13 🗪 .**●**₩B15

**EXPLANATION** 

Existing property line

Podium area (soil excavation and recompaction)

Approximate location of soil sample

Clean Letterman fill

Area of focussed excavation

Thickness of fill

**MANDELA GATEWAY** 1350 - 1400 Seventh Street Oakland, California

**FINAL SOIL PLACEMENT WEST BLOCK** 

Date 08/19/04 | Project No. 3433.08

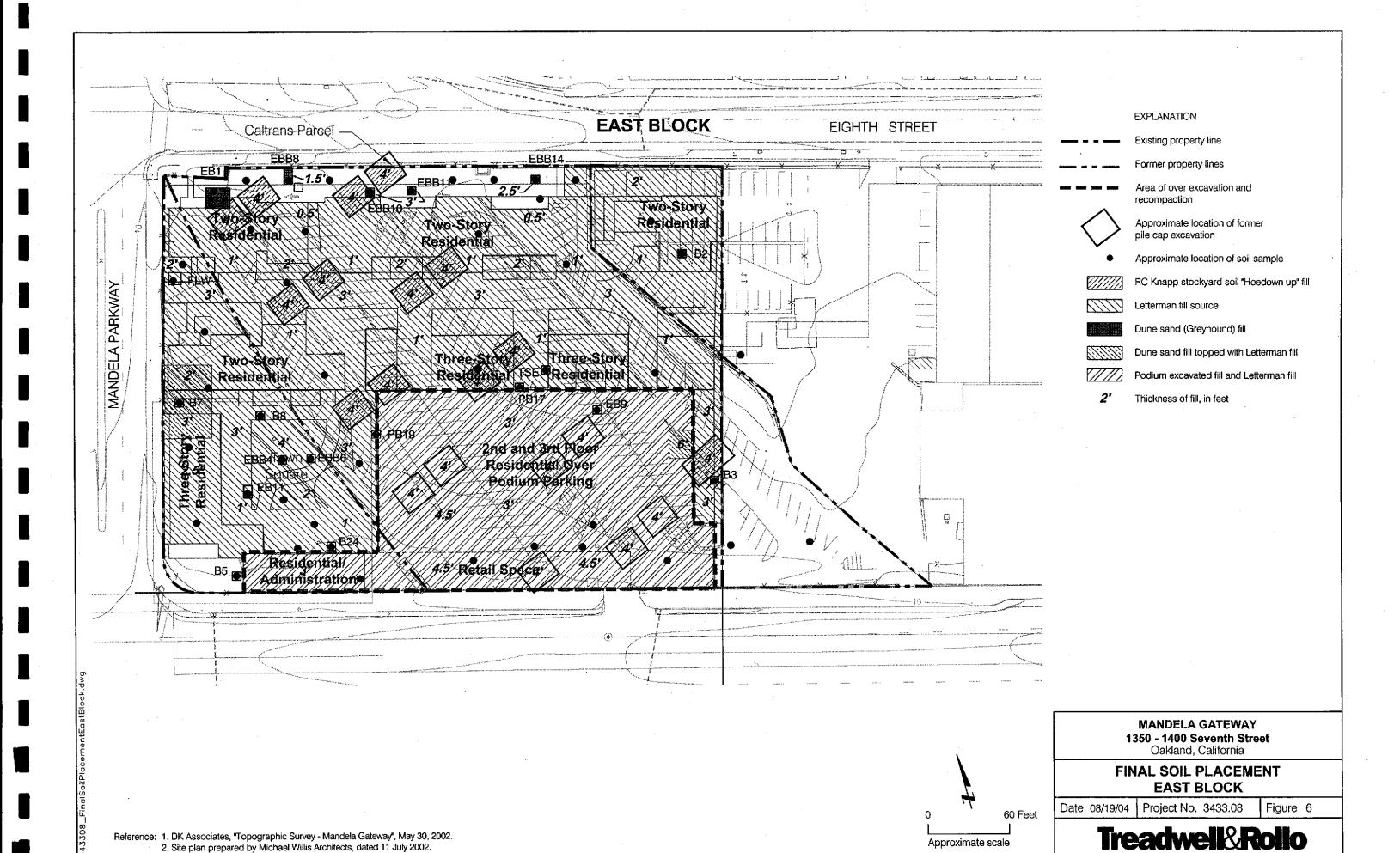
Figure 5

Reference: 1. DK Associates, "Topographic Survey - Mandela Gateway", May 30, 2002.

2. Site plan prepared by Michael Willis Architects, dated 11 July 2002.

60 Feet Approximate scale

Treadwell&Rollo



# FILE COPY

# Treadwell&Rollo

10 June 2004 Project No. 3433.09

Mr. Jesse Wu BRIDGE Housing Corporation 345 Spear Street, Suite 700 San Francisco, California 94105-1673

Subject:

Acceptance of Soil from Greek Orthodox Cathedral of the Ascension

Parcel A Townhomes

Eighth Street and Mandela Parkway

Oakland, California

Dear Mr. Wu:

On 7 April 2004, you requested Treadwell & Rollo, Inc. to evaluate approximately 1,500 cubic yards of excavated soil at the Greek Orthodox Cathedral of the Ascension, located at 4700 Lincoln Avenue in Oakland, California, for its appropriateness as imported fill at the Parcel A site.

We evaluated this soil with respect to its chemical constituents and geotechnical properties in conformance with criteria set forth in:

- the Treadwell & Rollo 5 May 2003 Soil Management and Removal Plan, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California;
- the Treadwell & Rollo 8 August 2003 letter Imported Soil Acceptance Criteria, Mandela Gateway Redevelopment Site, Seventh Street and Mandela Parkway, Oakland, California;
- the Alameda County Environmental Health Services Division's (ACEH) 14 August 2003 leter Soil Reuse Criteria for Mandela Gateway Project, Seventh Street and Mandela Parkway, Oakland, CA 94607;
- the Treadwell & Rollo 10 October 2003 Geotechnical Investigation, Parcel A Parcel Map 8058, Oakland, California.

To evaluate this soil, we reviewed a previous environmental report for the church site, collected and analyzed six soil samples, and reviewed the laboratory results. Soil at the church has been excavated to depths up to 30 feet below the ground surface as part of construction of as parking garage. The soil in question was excavated from depths between 5 and 20 feet bgs, and has not been previously been disturbed, so we consider it "native" soil. Based on our review of a 30 October 2003 report titled *Environmental Site Assessment, Greek Orthodox Cathedral of the Ascension, 4700 Lincoln Avenue, Oakland, California*, prepared by RGA Environmental, Inc. of Emeryville, California, there appear to be no environmental conditions at the site that indicate the release of hazardous materials or petroleum products to this soil.

Mr. Jesse Wu BRIDGE Housing Corporation 10 June 2003 Page 2

On 20 April 2004, Treadwell & Rollo personnel collected six discrete, representative soil samples for analytical testing. These samples were analyzed by STL-San Francisco Laboratory of Pleasanton, California for organochlorine pesticides by EPA Method 3550/8081 and total lead by EPA Method 3050B. No pesticides were detected. Lead was detected at concentrations that ranged from 3.4 milligrams per kilogram (mg/kg) to 23 mg/kg. These concentrations are below remedial target levels for Parcel A, the acceptance criteria for import fill set forth in the documents cited above, and waste disposal criteria.

Based on the our observation at the church site, the results of the environmental site assessment report, and our analysis of the samples, this soil is acceptable with respect to chemical criteria for import to Parcel A. As required in the Treadwell & Rollo *SMRP*, the test results, soil volumes, and placement locations for imported fill will be described in the final Soil Management and Removal Documentation Report, to be prepared at the completion of the project.

In addition to the chemical testing, we collected one bulk sample of the proposed import soil to measure the plasticity index (PI) in accordance with the geotechnical acceptance criteria. The results of the testing indicate the sample has a liquid limit of 26 and a PI of 6, which meets the acceptance criteria in our geotechnical investigation report. Therefore, we conclude the soil is also acceptable for use at the site from a geotechnical standpoint.

Michael P. McGuire, P.E.

Principal Engineer

Please do not hesitate to call if you have any questions.

Sincerely yours,

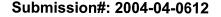
TREADWELL & ROLLO, INC.

Grover Buhr, R.G. Senior Geologist

34330913.OAK

cc:

Mr. John Gregory, Farella Braun + Martel





#### Treadwell & Rollo Oakland

April 27, 2004

501 14th Street, third floor Oakland. CA 94612

Attn.:

Grover Buhr

. .......

Project#: 3433.09

Project:

Mandela Import(Greek Orthodox Church)

Dear Mr. Buhr,

Attached is our report for your samples received on 04/20/2004 17:15 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 06/04/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

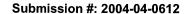
You can also contact me via email. My email address is: ssidhu@stl-inc.com

mider Solhy.

Sincerely,

Surinder Sidhu

Project Manager





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

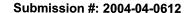
Project: 3433.09

Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

#### **Samples Reported**

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GC-2	04/20/2004 07:12	Soil	2
GC-3	04/20/2004 07:14	Soil	3
GC-4	04/20/2004 07:16	Soil	4
GC-5	04/20/2004 07:18	Soil	5
GC-6	04/20/2004 07:20	Soil	6





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3050B

Sample ID: GC-1

Sampled: 04/20/2004 07:10

Matrix:

Soil

Test(s):

6010B

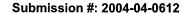
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2004-04-0612 - 1

Extracted:

4/21/2004 14:22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	5.1	1.0	mg/Kg	1.00	04/22/2004 22:20	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s):

3050B

Test(s):

6010B

Sample ID: GC-2

Lab ID:

2004-04-0612 - 2

Sampled: 04/20/2004 07:12

Lab ID.

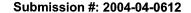
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Matrix:

Soil

Extracted: QC Batch#:

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	5.8	1.0	mg/Kg	1.00	04/22/2004 22:45	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s):

3050B

Sample ID: GC-3

Matrix:

Sampled: 04/20/2004 07:14

Soil

Test(s):

6010B

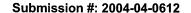
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2004-04-0612 - 3

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4/21/2004 14:22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	3.4	1.0	mg/Kg	1.00	04/22/2004 22:48	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3050B

Sample ID: GC-4

Soil

Sampled: 04/20/2004 07:16

Matrix:

Test(s):

6010B

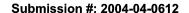
Lab ID:

2004-04-0612 - 4

Extracted:

4/21/2004 14:22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	6.6	1.0	mg/Kg	1.00	04/22/2004 22:51	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Matrix:

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3050B

Sample ID: GC-5

04/20/2004 07:18

Sampled: Soil

Test(s):

6010B

Lab ID:

2004-04-0612 - 5

Extracted:

4/21/2004 14:22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	4.8	1.0	mg/Kg	1.00	04/22/2004 22:55	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3050B

Sample ID: GC-6

Sampled: 04/20/2004 07:20

Matrix:

Soil

Test(s):

6010B

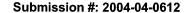
Lab ID:

2004-04-0612 - 6

Extracted:

4/21/2004 14:22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	23	1.0	mg/Kg	1.00	04/22/2004 22:58	





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

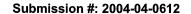
Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

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MB: 2004/04/21-05.15-035	Date Extracted: 04/21/2004 14:22

Compound	Conc.	RL	Unit	Analyzed	Flag
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Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

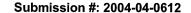
Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

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Laborat	ory Control Spik	(e		Soil			Q	C Batch	# 200	04/04/21	1-05.15
LCS	2004/04/21-05		Extracted:	04/21/20	04		Analyze	ed: 04	/22/2004	1 21:18	
LCSD	LCSD 2004/04/21-05.15-037			Extracted:	04/21/20	104		Analyze	ed: 04/	/22/2004	121:22
Compound		Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ags
•		LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead		91.1	92.3	100.0	91.1	92.3	1.3	8 <del>0</del> -120	20		





Treadwell & Rollo Oakland

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501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

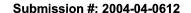
Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

#### **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab#
GC-1	04/20/2004 07:10	Soil	1
GC-2	04/20/2004 07:12	Soil	2
GC-3	04/20/2004 07:14	Soil	3
GC-4	04/20/2004 07:16	Soil	4
GC-5	04/20/2004 07:18	Soil	5
GC-6	04/20/2004 07:20	Soil	6





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Sample ID: GC-1

Matrix:

Sampled: 04/20/2004 07:10

Soil

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09 Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

Prep(s): 3550/8081

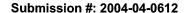
Test(s):

8081

Lab ID: 2004-04-0612 - 1

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Aldrin	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Dieldrin	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endrin aldehyde	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endrin	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endrin ketone	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Heptachlor	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Heptachlor epoxide	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
4,4`-DDT	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
4,4`-DDE	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
4,4`-DDD	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endosulfan I	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endosulfan II	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
alpha-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
beta-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
delta-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Endosulfan sulfate	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
4,4`-Methoxychlor	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Toxaphene	ND	100	ug/Kg	1.00	04/23/2004 13:56	
Chlordane (Technical)	ND	50	ug/Kg	1.00	04/23/2004 13:56	
alpha-Chlordane	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
gamma-Chlordane	ND	2.0	ug/Kg	1.00	04/23/2004 13:56	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	69.6	50-125	%	1.00	04/23/2004 13:56	
Decachlorobiphenyl (Pest/8081)	84.5	46-142	%	1.00	04/23/2004 13:56	





Treadwell & Rollo Oakland

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Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3550/8081

Sample ID: GC-2

Matrix:

Sampled: 04/20/2004 07:12

Soil

Test(s): 8081

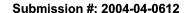
Lab ID:

2004-04-0612 - 2

Extracted:

4/21/2004 12:59

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Dieldrin	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endrin aldehyde	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endrin	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endrin ketone	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Heptachlor	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Heptachlor epoxide	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
4,4`-DDT	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
4,4`-DDE	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
4,4`-DDD	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endosulfan I	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endosulfan II	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
alpha-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
beta-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
delta-BHC	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Endosulfan sulfate	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
4,4`-Methoxychlor	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Toxaphene	ND	100	ug/Kg	1.00	04/23/2004 14:27	
Chlordane (Technical)	ND	50	ug/Kg	1.00	04/23/2004 14:27	
alpha-Chlordane	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
gamma-Chlordane	ND	2.0	ug/Kg	1.00	04/23/2004 14:27	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	74.5	50-125	%	1.00	04/23/2004 14:27	
Decachlorobiphenyl (Pest/8081)	82.1	46-142	%	1.00	04/23/2004 14:27	





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Project: 3433.09 Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

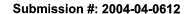
Prep(s): 3550/8081 Test(s): 8081

Sample ID: **GC-3** Lab ID: 2004-04-0612 - 3 Sampled: 04/20/2004 07:14 Extracted: 4/21/2004 12:59

Sampled: 04/20/2004 07:14 Extracted: 4/21/2004 12:59

Matrix: Soil QC Batch#: 2004/04/21-01.13

Compound Conc. RL Unit Dilution Flag Analyzed Aldrin ND 2.0 ug/Kg 1.00 04/24/2004 08:10 Dieldrin ND 2.0 1.00 04/24/2004 08:10 ug/Kg 1.00 Endrin aldehyde ND 2.0 ug/Kg 04/24/2004 08:10 **Endrin** ND 2.0 1.00 04/24/2004 08:10 ug/Kg Endrin ketone ND 2.0 ug/Kg 1.00 04/24/2004 08:10 2.0 1.00 Heptachlor ND 04/24/2004 08:10 ug/Kg Heptachlor epoxide ND 2.0 1.00 04/24/2004 08:10 ug/Kg 2.0 4,4'-DDT ND ug/Kg 1.00 04/24/2004 08:10 4,4`-DDE 2.0 1.00 ND 04/24/2004 08:10 ug/Kg 4,4`-DDD 2.0 ND ug/Kg 1.00 04/24/2004 08:10 2.0 Endosulfan I ND ug/Kg 1.00 04/24/2004 08:10 Endosulfan II ND 2.0 ug/Kg 1.00 04/24/2004 08:10 2.0 1.00 alpha-BHC ND ug/Kg 04/24/2004 08:10 2.0 beta-BHC ND ug/Kg 1.00 04/24/2004 08:10 04/24/2004 08:10 gamma-BHC (Lindane) ND 2.0 ug/Kg 1.00 delta-BHC ND 2.0 ug/Kg 1.00 04/24/2004 08:10 2.0 Endosulfan sulfate ND ug/Kg 1.00 04/24/2004 08:10 2.0 1.00 4.4'-Methoxychlor ND 04/24/2004 08:10 ug/Kg Toxaphene ND 100 ug/Kg 1.00 04/24/2004 08:10 Chlordane (Technical) ND 50 ug/Kg 1.00 04/24/2004 08:10 alpha-Chlordane ND 2.0 1.00 04/24/2004 08:10 ug/Kg 2.0 1.00 gamma-Chlordane ND ug/Kg 04/24/2004 08:10 Surrogate(s) 2,4,5,6-Tetrachloro-m-xylene 79.0 50-125 1.00 l 04/24/2004 08:10 % Decachlorobiphenyl (Pest/8081) 1.00 87.0 46-142 % 04/24/2004 08:10





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Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s): 3550/8081

Sample ID: GC-4

Sampled: 04/20/2004 07:16

Matrix: Soil Test(s): 8081

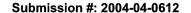
2004-04-0612 - 4

Extracted:

Lab ID:

4/21/2004 12:59

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Dieldrin	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endrin aldehyde	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endrin	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endrin ketone	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Heptachlor	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Heptachlor epoxide	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
4,4`-DDT	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
4,4`-DDE	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
4,4`-DDD	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endosulfan I	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endosulfan II	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
alpha-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
beta-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
delta-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Endosulfan sulfate	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
4,4`-Methoxychlor	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Toxaphene	ND	100	ug/Kg	1.00	04/24/2004 09:43	
Chlordane (Technical)	ND	50	ug/Kg	1.00	04/24/2004 09:43	
alpha-Chlordane	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
gamma-Chlordane	ND	2.0	ug/Kg	1.00	04/24/2004 09:43	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	74.1	50-125	%	1.00	04/24/2004 09:43	
Decachlorobiphenyl (Pest/8081)	81.8	46-142	%	1.00	04/24/2004 09:43	





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Project: 3433.09 Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

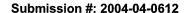
Prep(s): 3550/8081 Test(s): 8081

Sample ID: **GC-5** Lab ID: 2004-04-0612 - 5 Sampled: 04/20/2004 07:18 Extracted: 4/21/2004 12:59

Sampled: 04/20/2004 07:18 Extracted: 4/21/2004 12:59

Matrix: Soil QC Batch#: 2004/04/21-01.13

Compound RL Unit Conc. Dilution Flag Analyzed Aldrin ND 2.0 ug/Kg 1.00 04/24/2004 10:15 2.0 1.00 Dieldrin ND ug/Kg 04/24/2004 10:15 Endrin aldehyde ND 2.0 ug/Kg 1.00 04/24/2004 10:15 2.0 1.00 **Endrin** ND ug/Kg 04/24/2004 10:15 ND 2.0 1.00 04/24/2004 10:15 Endrin ketone ug/Kg 2.0 1.00 Heptachlor ND ug/Kg 04/24/2004 10:15 ND 2.0 1.00 04/24/2004 10:15 Heptachlor epoxide ug/Kg 4,4`-DDT ND 2.0 ug/Kg 1.00 04/24/2004 10:15 4,4`-DDE 2.0 1.00 04/24/2004 10:15 ND ug/Kg 4,4\`-DDD ND 2.0 1.00 04/24/2004 10:15 ug/Kg Endosulfan I ND 2.0 ug/Kg 1.00 04/24/2004 10:15 Endosulfan II ND 2.0 1.00 04/24/2004 10:15 ug/Kg 2.0 alpha-BHC ND ug/Kg 1.00 04/24/2004 10:15 2.0 ug/Kg beta-BHC ND 1.00 04/24/2004 10:15 gamma-BHC (Lindane) ND 2.0 ug/Kg 1.00 04/24/2004 10:15 delta-BHC ND 2.0 ug/Kg 1.00 04/24/2004 10:15 2.0 Endosulfan sulfate ND ug/Kg 1.00 04/24/2004 10:15 2.0 1.00 4,4'-Methoxychlor ND ug/Kg 04/24/2004 10:15 Toxaphene ND 100 ug/Kg 1.00 | 04/24/2004 10:15 Chlordane (Technical) ND 50 ug/Kg 1.00 04/24/2004 10:15 alpha-Chlordane ND 1.00 04/24/2004 10:15 2.0 ug/Kg gamma-Chlordane ND 2.0 ug/Kg 1.00 04/24/2004 10:15 Surrogate(s) 2,4,5,6-Tetrachloro-m-xylene 55.2 50-125 % 1.00 04/24/2004 10:15 1.00 Decachlorobiphenyl (Pest/8081) 61.4 46-142 % 04/24/2004 10:15





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Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

Prep(s):

3550/8081

Test(s):

8081

Sample ID: GC-6

Lab ID:

2004-04-0612 - 6

Sampled: 04/20/2004 07:20

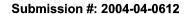
Extracted:

4/21/2004 12:59

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Dieldrin	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endrin aldehyde	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endrin	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endrin ketone	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Heptachlor	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Heptachlor epoxide	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
4,4`-DDT	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
4,4`-DDE	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
4,4`-DDD	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endosulfan I	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endosulfan II	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
alpha-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
beta-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
delta-BHC	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Endosulfan sulfate	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
4,4`-Methoxychlor	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Toxaphene	ND	100	ug/Kg	1.00	04/24/2004 10:46	
Chlordane (Technical)	ND	50	ug/Kg	1.00	04/24/2004 10:46	
alpha-Chlordane	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
gamma-Chlordane	ND	2.0	ug/Kg	1.00	04/24/2004 10:46	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	63.1	50-125	%	1.00	04/24/2004 10:46	
Decachlorobiphenyl (Pest/8081)	69.7	46-142	%	1.00	04/24/2004 10:46	





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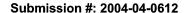
Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

	Batch QC Report
Prep(s): 3550/8081	Test(s): 8081
Method Blank	Soil QC Batch # 2004/04/21-01.13
MB: 2004/04/21-01.13-001	Date Extracted: 04/21/2004 12:59

Compound	Conc.	RL	Unit	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	04/23/2004 11:51	
Dieldrin	ND	2.0	ug/Kg	04/23/2004 11:51	
Endrin aldehyde	ND	2.0	ug/Kg	04/23/2004 11:51	
Endrin	ND	2.0	ug/Kg	04/23/2004 11:51	
Endrin ketone	ND	2.0	ug/Kg	04/23/2004 11:51	
Heptachlor	ND	2.0	ug/Kg	04/23/2004 11:51	
Heptachlor epoxide	ND	2.0	ug/Kg	04/23/2004 11:51	
4,4`-DDT	ND	2.0	ug/Kg	04/23/2004 11:51	
4,4`-DDE	ND	2.0	ug/Kg	04/23/2004 11:51	
4,4`-DDD	ND	2.0	ug/Kg	04/23/2004 11:51	
Endosulfan I	ND	2.0	ug/Kg	04/23/2004 11:51	
Endosulfan II	ND	2.0	ug/Kg	04/23/2004 11:51	
alpha-BHC	ND	2.0	ug/Kg	04/23/2004 11:51	
beta-BHC	ND	2.0	ug/Kg	04/23/2004 11:51	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	04/23/2004 11:51	
delta-BHC	ND	2.0	ug/Kg	04/23/2004 11:51	
Endosulfan sulfate	ND	2.0	ug/Kg	04/23/2004 11:51	
4,4`-Methoxychlor	ND	2.0	ug/Kg	04/23/2004 11:51	
Toxaphene	ND	100	ug/Kg	04/23/2004 11:51	
Chlordane (Technical)	ND	50	ug/Kg	04/23/2004 11:51	
alpha-Chlordane	ND	2.0	ug/Kg	04/23/2004 11:51	
gamma-Chlordane	ND	2.0	ug/Kg	04/23/2004 11:51	
Surrogates(s)					
2,4,5,6-Tetrachloro-m-xylene	81.9	50-125	%	04/23/2004 11:51	
Decachlorobiphenyl (Pest/8081)	88.2	46-142	%	04/23/2004 11:51	





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Project: 3433.09

Surrogates(s)

Decachlorobiphenyl

2,4,5,6-Tetrachloro-m-xylene

Received: 04/20/2004 17:15

Mandela Import(Greek Orthodox Church)

42.6

45.6

43.6

45.4

			Batch QC Re	eport						
Prep(s): 3550/8081									Test(s	): 8081
Laboratory Control S <sub>l</sub>	oike		Soil			Q	C Batch	ı # 200	04/04/2	1-01.13
LCS 2004/04/21-0 LCSD 2004/04/21-0			Extracted: ( Extracted: (				Analyze Analyze			
Compound	Conc.	ug/Kg	Exp.Conc.	Reco	overy %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Aldrin	13.9	14.2	16.6	83.7	85.5	2.1	37-136	35		
Dieldrin	13.9	14.1	16.6	83.7	84.9	1.4	58-135	35		
Endrin	13.7	13.9	16.6	82.5	83.7	1.4	58-134	35		
Heptachlor	14.4	14.7	16.6	86.7	88.6	2.2	40-136	35		
4,4`-DDT	13.4	13.5	16.6	80.7	81.3	0.7	55-132	35		
gamma-BHC (Lindane)	13.9	14.1	16.6	83.7	84.9	1.4	37-137	35		

50

50

85.1

91.2

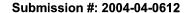
87.3

90.8

50-125

46-142

0





Treadwell & Rollo Oakland

Attn.: Grover Buhr

501 14th Street, third floor Oakland, CA 94612

Phone: (510) 874-4500 Fax: (510) 874-4507

Project: 3433.09

Mandela Import(Greek Orthodox Church)

Received: 04/20/2004 17:15

	Batch QC Report		
Prep(s): 3550/8081			Test(s): 8081
Matrix Spike ( MS / MSD )	Soil	QC Bat	ch # 2004/04/21-01.13
GC-3 >> MS		Lab ID:	2004-04-0612 - 003
MS: 2004/04/21-01.13-004	Extracted: 04/21/2004	Analyzed:	04/26/2004 15:55
		Dilution:	1.00
MSD: 2004/04/21-01.13-005	Extracted: 04/21/2004	Analyzed:	04/26/2004 16:26
		Dilution:	1.00

Compound	Conc.	ug	/Kg	Spk.Level	R	ecovery	%	Limits	%	Fl	ags
	мѕ	MSD	Sample	ug/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Aldrin	13.9	9.78	ND	16.6	83.7	58.9	34.8	37-136	35		
Dieldrin	14.6	10.2	ND	16.6	88.0	61.4	35.6	58-135	35		mso
Endrin	14.7	10.2	ND	16.6	88.6	61.4	36.3	58-134	35		mso
Heptachlor	14.1	10.1	ND	16.6	84.9	60.8	33.1	40-136	35		
4,4`-DDT	16.4	11.1	ND	16.6	98.8	66.9	38.5	55-132	35		mso
gamma-BHC (Lindane)	14.2	10.4	ND	16.6	85.5	62.7	30.8	37-137	35		
Surrogate(s)							į				
2,4,5,6-Tetrachloro-m-xylen	43.3	33.1		50	86.6	66.1		50-125	0		
Decachlorobiphenyl	56.6	37.6		50	113.2	75.2		46-142	0		

# 2004-04-0612

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77-23		07/4		Х						XX									
70-4		07//		X						XX									
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