

## City of Bell

### Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044  
(916) 445-0613 state.clearinghouse@opr.ca.gov

SCH #2013041025

#### PROJECT TITLE

Bell Business Center Project EIR

#### LEAD AGENCY

City of Bell

#### CONTACT PERSON

Joe Perez, Community Development Director

#### STREET ADDRESS

6330 Pine Avenue California

#### PHONE

(323) 588-6211

#### CITY

Bell

#### ZIP CODE

90201

#### COUNTY

Los Angeles

#### PROJECT LOCATION

##### COUNTY

Los Angeles

##### CITY/NEAREST COMMUNITY

City of Bell

##### CROSS STREETS

Rickenbacker Road and 3<sup>rd</sup> Street

##### ZIP CODE

90201

##### TOTAL ACRES

40.2

##### ASSESSOR'S PARCEL NUMBER

6332-002-945, 946, 948, 949, 950, 952, 954, 965

##### SECTION

18

##### TOWNSHIP

T2S

##### RANGE

R12W

##### WITHIN 2 MILES:

##### STATE HIGHWAY NUMBER

Interstate 710

##### AIRPORTS

None within 2 miles

##### SCHOOLS

##### RAILWAYS

None

##### WATERWAYS

None

#### DOCUMENT TYPE

##### CEQA

☐ NOP

☐ Early Cons

☐ Neg Dec

☒ Draft EIR

☐ Supplement/Subsequent EIR

(Prior SCH No.) \_\_\_\_\_

☐ Other

##### NEPA

☐ NOI

☐ EA

☐ Draft EIS

☐ FONSI

##### OTHER

☐ Joint Document

☐ Final Document

☐ Other \_\_\_\_\_

#### LOCAL ACTION TYPE

☐ General Plan Update

☐ General Plan Amendment

☐ General Plan Element

☐ Community Plan

☐ Specific Plan Amendment

☐ Master Plan

☐ Planned Unit Development

☒ Site Plan

☐ Rezone

☐ Prezone

☐ Use Permit

☐ Land Division (Subdivision, etc.)

☐ Annexation

☐ Redevelopment

☐ Coastal Permit

☒ Other Development Agreement

☒ Other Encroachment Permit

#### DEVELOPMENT TYPE

☐ Residential

☒ Office

☐ Shopping/Commercial

☒ Industrial

☐ Educational

☐ Recreational

☐ Other

Units \_\_\_\_\_

Sq. ft. 44,000

Sq. ft. \_\_\_\_\_

Sq. ft. 796,390

Acres \_\_\_\_\_

Acres \_\_\_\_\_

Acres \_\_\_\_\_

Acres 40.2

Employees \_\_\_\_\_

Employees \_\_\_\_\_

Employees \_\_\_\_\_

☐ Transportation

☐ Mining

☐ Waste Treatment

☐ Hazardous Waste

☐ Water Facilities

☐ Power

Type \_\_\_\_\_

Mineral \_\_\_\_\_

Type \_\_\_\_\_

Type \_\_\_\_\_

Type \_\_\_\_\_

Type \_\_\_\_\_

MGD \_\_\_\_\_

Watts \_\_\_\_\_

#### FUNDING

Federal \$ \_\_\_\_\_

State \$ \_\_\_\_\_

Total \$ \_\_\_\_\_

#### PROJECT ISSUES DISCUSSED IN DOCUMENT

☐ Aesthetic/Visual

☐ Agricultural Land

☒ Air Quality

☒ Archaeological/Historical

☐ Coastal Zone

☒ Drainage/Absorption

☐ Economic/Jobs

☐ Fiscal

☒ Flood Plain/Flooding

☐ Forest Land/Fire Hazard

☒ Geological/Seismic

☐ Minerals

☒ Noise

☒ Population/Housing Balance

☒ Public Services/Facilities

☐ Recreation/Parks

☐ Schools/Universities

☐ Septic Systems

☒ Soil Erosion/Compaction/Grading

☒ Solid Waste

☒ Toxic/Hazardous

☒ Traffic/Circulation

☐ Vegetation

☒ Water Quality

☒ Water Supply

☐ Wetland/Riparian

☐ Wildlife

☐ Growth Inducing

☒ Land Use

☒ Cumulative Effects

☐ Other \_\_\_\_\_

**PRESENT LAND USE/ZONING/GENERAL PLAN DESIGNATION:** General Plan land use designation for the project site is Industrial/ the proposed project site is Zoned C-M (Commercial Manufacturing).

#### PROJECT DESCRIPTION:

The proposed project will include eight existing Los Angeles County Assessor's parcels (Parcel A: 6332-002-965; Parcel F: 6332-002-948 and 6332-002-945; Parcel G: 6332-002-949; Parcel H: 6332-002-946, 6332-002-950, 6332-002-952, and 6332-002-954). The parcels total four building sites and are generally located east of Interstate 710 (I-710) on Rickenbacker Road west of 6th Street in the City of Bell. In total, the four buildings could result in 840,390 square feet of new industrial and ancillary office space. Rickenbacker Road will be improved with public utilities, including water, wastewater, storm drainage, and power. Utilities will be extended to serve each of the four building sites. No buildings are proposed as part of this project; however, site plans and a potential building footprint have been developed for each of the four sites. The City's intent is to approve individual entitlements for each of the four building sites via a development agreement and to consider the environmental impacts of the entire project in a single EIR.

## REVIEWING AGENCIES CHECKLIST

- ☐ Resources Agency
- ☐ Boating & Waterways
- ☐ Coastal Conservancy
- ☐ Colorado River Board
- ☐ Conservation
- ☐ Fish and Game
- ☐ Forestry & Fire Protection
- ☐ Office of Historic Preservation
- ☐ Parks and Recreation
- ☐ Reclamation Board
- ☐ San Francisco Bay Conservation & Development Commission
- ☐ Water Resources
- Business, Transportation & Housing**
- ☐ Aeronautics
- ☐ California Highway Patrol
- ☒ CALTRANS District # 7
- ☐ Department of Transportation Planning (headquarters)
- ☐ Housing & Community Development
- ☐ Food & Agriculture Health & Welfare
- ☐ Health Services \_\_\_\_\_

### State & Consumer Services

- ☐ General Services

### Environmental Protection Agency

- ☒ Air Resources Board
- ☐ California Waste Management Board
- ☐ SWRCB: Clean Water Grants
- ☐ SWRCB: Delta Unit
- ☐ SWRCB: Water Quality
- ☐ SWRCB: Water Rights
- ☒ Regional WQCB # 4 (Los Angeles Region)
- ☐ Regional WQCB # 9

### Youth & Adult Corrections

- ☐ Corrections

### Independent Commissions & Offices

- ☐ Energy Commission
- ☐ Native American Heritage Commission
- ☐ Public Utilities Commission
- ☐ Santa Monica Mountains Conservancy
- ☐ State Lands Commission
- ☐ Tahoe Regional Planning Agency

- ☐ Other

- ☐ Other

## PUBLIC REVIEW PERIOD

Starting Date Tuesday, May 21, 2013

Ending Date Friday, July 5, 2013

Signature:   
Joe Perez, Community Development Director  
City of Bell Planning Department

Date May 13, 2013

### Lead Agency (Complete if applicable):

Consulting Firm: Pacific Municipal Consultants  
Address: 6020 Cornerstone Court West  
City/State/Zip: San Diego, CA 92128  
Contact: Mark Teague, AICP  
Phone: (858) 453-3602, ext 15201

### Applicant:

Joe Perez, Community Development Director  
City of Bell  
6330 Pine Avenue  
Bell, CA 90201  
Phone: (323) 588-6211

### For SCH Use Only:

Date Received at SCH \_\_\_\_\_

Date Review Starts \_\_\_\_\_

Date to Agencies \_\_\_\_\_

Date to SCH \_\_\_\_\_

Clearance Date \_\_\_\_\_

Notes:

# CITY OF BELL

## BELL BUSINESS CENTER PROJECT

### FINAL ENVIRONMENTAL IMPACT REPORT

---

STATE CLEARINGHOUSE NO. 2013041025

*Prepared for:*

CITY OF BELL  
6330 PINE AVE.  
BELL, CALIFORNIA 90201

*Prepared by:*



6020 CORNERSTONE COURT WEST, SUITE 260  
SAN DIEGO, CA 92121

**AUGUST 2013**

**BELL-2473**

---

**CITY OF BELL**  
**BELL BUSINESS CENTER PROJECT**  
**FINAL ENVIRONMENTAL IMPACT REPORT**

---

*Prepared for:*

CITY OF BELL  
6330 PINE AVE.  
BELL, CALIFORNIA 90201

*Prepared by:*

PMC  
6020 CORNERSTONE COURT WEST, SUITE 260  
SAN DIEGO, CA 92121

**AUGUST 2013**

**BELL-2474**

**1.0 INTRODUCTION**

1.1	Background and Purpose of the EIR .....	1.0-1
1.2	Intended Use of the EIR .....	1.0-2
1.3	Organization and Scope of the Final EIR .....	1.0-2

**2.0 COMMENTS AND RESPONSES TO COMMENTS ON THE DRAFT EIR**

2.1	List of Commenters .....	2.0-1
2.2	Comments and Responses .....	2.0-1
	Letter 1, Caltrans – District 7 .....	2.0-5
	Letter 2, City of Commerce .....	2.0-16
	Letter 3, Citizens Advocating Rational Development (CARD) .....	2.0-33
	Letter 4, East Yard Communities for Environmental Justice .....	2.0-41
	Letter 5, Southern California Association of Governments (SCAG) .....	2.0-49
	Letter 6, South Coast Air Quality Management District (SCAQMD) .....	2.0-58
	Letter 7, Los Angeles County Department of Public Works (DPW) .....	2.0-67
	Letter 8, Los Angeles County Fire Department (LACFD) .....	2.0-74

**3.0 REVISIONS TO THE DRAFT EIR**

3.1	Introduction .....	3.0-1
3.2	Minor Changes and Edits to the DEIR .....	3.0-1

**APPENDICES TO THIS FINAL EIR (INCLUDED ON CD)**

A	Health Risk Calculations
B	Phase II Limited Site Investigation (Parcels F & G)
C	Supplemental Letter Report to Phase I and II Site Investigations

---

# **1.0 INTRODUCTION TO THE FINAL EIR**

---



---

## 1.0 INTRODUCTION TO THE FINAL EIR

---

This Final Environmental Impact Report (Final EIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (Section 15132). The City of Wildomar (City) is the lead agency for the environmental review of the proposed Oak Creek Canyon Residential Development (project; proposed project). The City has the principal responsibility for approving the project. This Final EIR assesses the expected environmental impacts resulting from approval and implementation of the proposed project, as well as responds to comments received on the Draft EIR.

### 1.1 BACKGROUND AND PURPOSE OF THE EIR

#### BACKGROUND OF ENVIRONMENTAL REVIEW PROCESS OF THE PROJECT

The following is an overview of the environmental review process for the proposed Bell Business Center Project that led to the preparation of this Final EIR.

#### Notice of Preparation

The Notice of Preparation (NOP) for the Draft EIR was distributed and advertised for agency and public review on Monday, April 8, 2013, with the review period ending on Wednesday, May 8, 2012. A scoping meeting was held on March 13, 2012, to solicit input from interested agencies and the public. The City received several comment letters regarding the scope and content of the Draft EIR during the NOP comment period and at the public scoping meeting. These comments, provided in **Appendix A** of the DEIR, were carefully considered in crafting the analysis and findings of the Draft EIR.

#### Draft EIR

The Draft EIR was released for public and agency review on May 21, 2013, with the 45-day review period ending on Friday, July 5, 2013. The Draft EIR contains a detailed description of the project, description of the environmental setting, identification of project impacts (direct, indirect, and cumulative) and mitigation measures for impacts found to be significant, as well as an analysis of a reasonable range of project alternatives. The Draft EIR was sent directly to responsible agencies and was made available for public review at City Hall, the Bell public library, and on the City's website.

#### Final EIR

The City received a total of eight comment letters from agencies and interest groups regarding the analysis and findings contained in the Draft EIR. Section 2.0 of this Final EIR, Responses to Comments on the Draft EIR, contains copies of the letters received along with corresponding lead agency responses as required by State CEQA Guidelines Section 15088. This document also contains minor edits to the Draft EIR, which are included in Section 3.0, Revisions to the Draft EIR. Together, these chapters constitute the Final EIR.

#### Certification of the Final EIR/Project Consideration

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete," the City may certify the Final EIR. The rule of adequacy generally holds that the EIR can be certified if it: (1) shows a good faith effort at full disclosure of environmental information; and (2) provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences.



## **1.0 INTRODUCTION TO THE FINAL EIR**

---

Upon review and consideration of the Final EIR, the City may take action to adopt, revise, or reject the proposed project. A decision to approve the proposed project would be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. Public Resources Code Section 21081.6 also requires lead agencies to adopt a mitigation monitoring and reporting program to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

### **1.2 INTENDED USES OF THE EIR**

The EIR is intended to evaluate the environmental impacts of the project to the greatest extent possible. This EIR, in accordance with CEQA Guidelines Section 15126, should be used as the primary environmental document to evaluate all planning and permitting actions associated with the project. Please refer to Section 2.0, Project Description, of the Draft EIR for a detailed discussion of the proposed project.

### **1.3 ORGANIZATION AND SCOPE OF THE FINAL EIR**

This document is organized in the following manner:

#### **SECTION 1.0 – INTRODUCTION TO THE FINAL EIR**

Section 1.0 provides an overview of the EIR process to date as well as an overview of the contents of the Final EIR.

#### **Section 2.0 – RESPONSES TO COMMENTS ON THE DRAFT EIR**

Section 2.0 provides a list of commenters, copies of written comments (coded for reference), and the lead agency responses to those comments made on the Draft EIR.

#### **Section 3.0 – REVISIONS TO THE DRAFT EIR**

Section 3.0 provides a list of revisions made to the Draft EIR as a result of comments received and other editorial changes.

---

## **2.0 COMMENTS AND RESPONSES TO COMMENTS ON THE DRAFT EIR**

---



## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

### 2.1 LIST OF COMMENTERS

The following agencies and organizations submitted written comments on the Draft EIR:

Letter	Agency/Organization	Date
1	California Department of Transportation (Caltrans) – District 7	June 28, 2013
2	City of Commerce	July 3, 2013
3	Citizens Advocating Rational Development (CARD)	July 5, 2013
4	East Yard Communities for Environmental Justice	July 5, 2013
5	Southern California Association of Governments (SCAG)	July 5, 2013
6	South Coast Air Quality Management District (SCAQMD)	July 11, 2013
7	Los Angeles County Department of Public Works (DPW)	July 8, 2013
8	Los Angeles County Fire Department (LACFD)	June 25, 2013

### 2.2 COMMENTS AND RESPONSES

#### REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

State CEQA Guidelines Section 15088 requires that lead agencies evaluate all comments on environmental issues received on the Draft EIR and prepare a written response. The written response must address the significant environmental issue raised and must be detailed, especially when specific comments or suggestions (e.g., additional mitigation measures) are not accepted. In addition, there must be a good faith and reasoned analysis in the written response. However, lead agencies need only respond to significant environmental issues associated with the project and do not need to provide all the information requested by commenters, as long as a good faith effort at full disclosure is made in the EIR (State CEQA Guidelines Section 15204).

State CEQA Guidelines Section 15204 recommends that commenters provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. State CEQA Guidelines Section 15204 also notes that commenters should provide an explanation and evidence supporting their comments. Pursuant to State CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence supporting such a conclusion.

State CEQA Guidelines Section 15088 also recommends that where a response to comments results in revisions to the Draft EIR, those revisions be incorporated as a revision to the Draft EIR or as a separate section of the Final EIR.

#### RESPONSES TO COMMENT LETTERS

Written comments on the Draft EIR are reproduced on the following pages, along with responses to those comments.

Where changes to the Draft EIR text result from responding to comments, those changes are included in the response and demarcated with revision marks (underline for new text, ~~strikeout~~ for deleted text). The responses to comments were prepared by City staff and PMC.

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN, JR., Governor

DEPARTMENT OF TRANSPORTATION  
DISTRICT 7, REGIONAL PLANNING  
IGR/CEQA BRANCH  
100 MAIN STREET, MS # 16  
LOS ANGELES, CA 90012-3606  
PHONE: (213) 897-9140  
FAX: (213) 897-1337

### Letter 1



*Flex your power!  
Be energy efficient!*

June 28, 2013

Mr. Joe Perez  
Community Development Director  
City of Bell  
6330 Pine Avenue  
Bell, CA 90201

IGR/CEQA No. 130543AL-DEIR  
Ref. IGR/CEQA No. 130418AL-NOP  
Bell Business Center Project  
Vic. LA-710, PM 21.91  
SCH # 2013041025

Dear Mr. Perez:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project will result in entitlement approval by the City of Bell to allow the construction of up to 840,390 S.F. of warehousing and ancillary office uses on four parcels totaling approximately 40.2 acres.

From the Bell Business Center Project Traffic Impact Analysis, dated May 17, 2012, Table 9 Forecast PCE-Adjusted net Trip Generation of proposed Project showed that the project will generate a net increase of 2,781 daily vehicle trips with 199 and 280 vehicle trips during AM and PM peak hours. In addition, on Table 12 Forecast PCE-Adjusted Trip Generation of Cumulative Projects will generate 1,578/2,054 AM/PM trips in the project vicinity.

The traffic impact analysis acknowledged that the I-710 freeway currently experiences Level of Service (LOS) F conditions during peak periods. The Los Angeles County Metropolitan Transportation Authority (Metro) and six partner agencies including Caltrans have proposed regional transportation long-term improvements along I-710 as part of the I-710 Corridor Improvement Project.

The proposed project is forecast to result in a significant traffic impact at the following two state-controlled study intersections:

- Atlantic Boulevard/Bandini Boulevard
- Atlantic Boulevard/I-710 Northbound Off-ramp

The proposed project is forecast to result in a cumulative significant traffic impact at the following State-controlled study intersections:

- I-710 Southbound Off-ramp/Bandini Boulevard
- Atlantic Boulevard/Bandini Boulevard
- Atlantic Boulevard/I-710 Northbound Off-ramp

*"Caltrans improves mobility across California"*

1-1

Mr. Joe Perez  
June 28, 2013  
Page 2 of 3

## Letter 1 Continued

Caltrans acknowledge that the applicant agrees to the following mitigation measures:

### **Mitigation Measure # 9- I-710 Southbound Off-ramp/Atlantic Boulevard**

Prior to issuance of a Certificate of Occupancy, the project applicant shall participate in an interim regional solution for improvements to the I-710 Southbound Off-Ramp/Atlantic Boulevard intersection, in consultation with Caltrans and/or the Metro. Additionally, the project applicant shall prepare a I-710 corridor interim improvement traffic study for the I-710 Freeway between and including the Florence Avenue and Washington Boulevard interchanges to assist Caltrans in evaluating potential interim solutions to improve the operations at the I-710 South Off-Ramp/Atlantic Boulevard State-controlled study intersection. The study will evaluate solutions such as transportation system management (TSM) measures through consideration of potential installation and placement of a changeable message sign (CMS) along the freeway. The project applicant shall also make a fair share payment to contribute to potential upgrades and improvements to the signal timing and progression at this location, if necessary.

### **Mitigation Measure #10 (same as #7)-Atlantic Boulevard/Bandini Boulevard**

Prior to issuance of a Certificate of Occupancy, the project applicant shall participate in an interim regional solution for improvements to the Atlantic Boulevard/Bandino Boulevard intersection in consultation with Caltrans and/or Metro, such as the planned Bandini Boulevard corridor signal coordination project in the vicinity of the intersection. The project applicant shall also make a fair share payment to contribute to potential upgrades and improvements to the signal timing and the signal control equipment at this location, if necessary. The project applicant shall also renew the existing striping in the vicinity of the intersection.

1-2

### **Mitigation Measure #11 (same as #8)-Atlantic Boulevard/I-710 Northbound Off-Ramp**

Prior to issuance of a Certificate of Occupancy, the project applicant shall prepare a I-710 corridor interim improvement traffic study for the I-710 corridor interim improvement traffic study for the I-710 Freeway between and including the Florence Avenue and Washington Boulevard interchanges to assist Caltrans in evaluating potential interim solutions to improve the operations at the Atlantic Boulevard/I-710 Northbound Off-Ramp State-controlled study intersection. The study will evaluate solutions such as transportation system management (TSM) measures through consideration of potential installation and placement of a changeable message sign (CMS) along the freeway. The project applicant shall also improve and renew the existing signing and striping along the northbound off-ramp.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water.

1-3

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods. In addition, a truck/traffic construction management plan is needed for this project where works are performed in or near-by State right-of-way.

1-4

*"Caltrans improves mobility across California"*

Mr. Joe Perez  
June 28, 2013  
Page 3 of 3

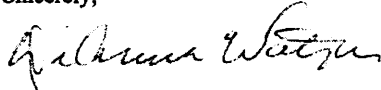
## Letter 1 Continued

Please be reminded that any work performed within the State Right-of-way will require an Encroachment Permit Caltrans. Any modifications to State facilities must meet all mandatory design standard and specifications. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

1-5

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 130543AL.

Sincerely,



DIANNA WATSON  
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

*"Caltrans improves mobility across California"*

**Letter 1      Dianna Watson, California Department of Transportation (Caltrans)**Responses

- 1-1      The commenter summarizes contents of the Traffic Impact Analysis (TIA) (May 17, 2012), highlighting the daily net increase in traffic that will be generated by the project, existing level of service (LOS) conditions on Interstate 710 (I-710) during peak period, and intersections that will experience significant and cumulatively significant impacts with project implementation.

This summarizes CEQA discussion in the DEIR. It does not raise an environmental issue; therefore, no further response is necessary.

- 1-2      The commenter acknowledges that the City agrees to implement mitigation measures identified in the Draft EIR for the three intersections under the jurisdiction of Caltrans.

This summarizes CEQA discussion in the DEIR. It does not raise an environmental issue; therefore, no response is necessary.

- 1-3      The commenter requests that the project be designed to discharge clean runoff water to prevent stormwater pollution.

The Standard Urban Stormwater Mitigation Plan (SUSMP) was prepared by the Los Angeles County Department of Public Works in September 2002 pursuant to the stormwater quality management program requirements of the National Pollutant Discharge Elimination System (NPDES) permit. The SUSMP outlines best management practices (BMPs) that must be incorporated into design plans for the various categories of development and/or redevelopment which include, but are not limited to, 100,000 or more square feet of impervious surface in industrial/commercial development, and parking lots with 5,000 square feet or more of surface area or with 25 or more parking spaces.

Additionally, development on the project site would be required to implement stormwater pollution control measures (Municipal Code Section 13.08.070), comply with urban runoff mitigation requirements (Municipal Code Section 13.08.080), and provide proof of coverage under the state General Construction Permit and certification that a stormwater pollution prevention plan has been prepared (Municipal Code Section 13.08.090). Stormwater pollution control measures would include preparation of a stormwater mitigation plan that includes BMPs necessary to control stormwater pollution from construction activities and operations.

Draft EIR Sections 3.7, Hydrology and Water Quality, and 3.11, Public Services and Utilities, discuss the necessary permits, implementation of best management practices, development and implementation of a SWPPP, and compliance with Bell Municipal Code Sections 13.08.070 and 13.08.080 in more detail.

Additionally, as required by the County of Los Angeles, the developer/successor-in-charge shall prepare a Low Impact Development (LID) program which specifically identifies the Best Management Practices (BMPs) that will be used on site to control post-construction predictable pollutant runoff. The plan shall identify the types of structural and non-structural measures to be used.



## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

The plan shall comply with the City of Bell Watershed Management Program and accompanying LID Ordinance and Green Street Policies. The MS4 Permit (Order No. R-2012-0175) was adopted by the California Regional Water Quality Control Board, Los Angeles Region on November 8, 2012 and became effective on December 28, 2012.

Particular attention should be addressed to the appendix section "Best Management Practices for Post Development." The LID shall clearly show the locations of structural BMP's, and assignment of long term maintenance responsibilities (which shall also be included in the Maintenance Agreement). The plan shall be prepared to the general form and content shown in the Los Angeles County SUSMP template and shall be submitted to the City Engineer for review and approval.

Further, prior to the issuance of a certificate of occupancy, the developer shall demonstrate that all structural Best Management Practices (BMPs) described in the project's LID have been constructed and installed. In addition, the developer is prepared to implement all non-structural BMP's described in the LID. Two (2) copies of the LID program shall be available on-site. Prior to the issuance of a certificate of occupancy, all equipment shall be in place and in good working order as indicated in the SUSMP.

Pages 3.7-13; 17; 18; and 23 in Hydrology and Water Quality and 3.11-23 and 26 in Public Services and Utilities of the DEIR have been revised to include additional text regarding the LID program. These modifications are reflected in Chapter 3.0 of the FEIR.

- 1-4 The commenter made the following remarks regarding the use of over-size vehicles to transport heavy construction equipment and materials.
- a. The commenter states that a transportation permit will be required for any oversized transport vehicles on state highways.

The City will comply and work with Caltrans to obtain all necessary permits, including a Transportation Permit for the movement of vehicles/loads exceeding statutory limitation. Section 3.0, Revisions to the Draft EIR, notes the addition of this regulatory requirement to page 3.12-15 of the Draft EIR:

### **California Department of Transportation (Caltrans)**

Caltrans policies are applicable to I-710 and are summarized in the *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002). Caltrans endeavors to maintain a target service level of LOS C on state highway facilities. For the purposes of this Draft EIR, LOS C is considered the minimum acceptable operating level for Caltrans- controlled facilities (i.e., I-710 Southbound Off-Ramp/Bandini Boulevard intersection and Atlantic Boulevard/Bandini Boulevard intersection). Additionally, Caltrans has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. As such, any vehicles/loads exceeding statutory limits on roads under the jurisdiction of Caltrans and associated with the proposed project, will require a Transportation Permit.

- b. Additionally, the commenter states that a truck/traffic construction management plan is needed for any work performed in or near the state right-of-way.

To alleviate construction-associated traffic impacts within Caltrans right-of-way, a Traffic Management Plan (TMP) will be prepared and implemented. Because the TMP is a Condition of Approval, the following text will be included in the Development Agreement as a Condition of Approval:

The project developers shall prepare a TMP prior to the issuance of any grading or building permits to address traffic and safety concerns resulting from any lane closure(s) necessary to implement the Conditions of Approval. At a minimum, the TMP shall include measures to accomplish the following:

1. Clearly denote lane closures, detours, and turning restrictions, with appropriate signs and other traffic control devices to alert travelers;
2. Ensure vehicular and emergency access to the project area is maintained during construction; and
3. Maintain pedestrian circulation; and
4. Construction equipment traffic shall be controlled by flaggers, as appropriate.

The TMP shall be reviewed and approved by the City Engineer for compliance with the California Manual on Uniform Traffic Control Devices. The TMP shall be implemented by a qualified contractor holding a valid C31 license.

- c. Further, the commenter recommends large-size truck trips be limited to off-peak commute periods. As previously discussed, a TMP will be required to address construction associated traffic impacts within Caltrans right-of-way. Another objective of the TMP will be to reduce truck trips during the morning and evening peak traffic period. As stated previously, the TMP is a Condition of Approval. As such, the text requiring the implementation of a TMP will be included in the Development Agreement as a Condition of Approval.

Once the project is operational, all truck traffic, including large-size trucks, will be required to operate on designated City Truck Routes pursuant to Municipal Code Chapter 10.20.

- 1-5 The commenter made the following remarks regarding the work within and modifications to state facilities:

- a. The commenter notes that any work performed within the state right-of-way will require an Encroachment Permit from Caltrans.

The City will comply with Caltrans and obtain all necessary permits required for any work performed within the Caltrans right-of-way. Page 2.0-4 of the DEIR has been revised and is reflected in Chapter 3.0 of the FEIR:

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

### C. Encroachment Permit

#### City of Commerce

Extension of utilities may extend into the City of Commerce along South Eastern Avenue. If work is necessary in the City of Commerce right-of-way, an encroachment permit will be required.

#### Caltrans

For any work performed within State controlled intersections or roadways, an encroachment permit will be required from Caltrans.

- b. The commenter also states that any modifications to state facilities must meet all mandatory design standards and specifications.

As stated in the Draft EIR, mitigation measures MM 3.12.1a, MM 3.12.1d, and MM 3.12.6a require approval from Caltrans for all improvements made to roadways within the Caltrans right-of-way and thus would meet all mandatory design standards and specifications.

## Letter 2



Office of the  
City Administrator

# City of Commerce

July 3, 2013

Mr. Joe Perez  
Community Development Director  
City of Bell Planning Department  
6330 Pine Avenue  
Bell, CA 90201

Re: City of Commerce Comments to Draft Environmental Impact Report (DEIR) for  
Bell Business Center Project

Dear Mr. Perez:

The purpose of this letter is to outline our findings regarding the Draft Environmental Impact Report (DEIR) prepared for the proposed Bell Business Park. The proposed project, if approved, will involve the construction of 840,390 square feet of new development. We appreciate your communication on this project and recognize the projects' importance to the City of Bell. That said, the DEIR does indicate significant and unavoidable impacts most of which are located in the City of Commerce and therefore create the need for a Statement of Overriding Considerations.

Our comments are arranged to correspond to the individual sections included in the DEIR.

### Executive Summary

The Executive Summary indicates that the proposed project would not result in any impacts on schools and certain utilities (electrical, natural gas, and communication). The rationale for this conclusion is that the uses envisioned for the proposed project are not residential. Therefore, no impacts are anticipated. Given the proposed projects size (840,390 square feet) some growth inducing or secondary impacts are likely. For example, the proposed project's potential employment would likely use local public facilities in Commerce.

2-1

### Section 1. Introduction

*Page 1.0-1.* We concur that the City of Commerce is a responsible agency for this project. Access to the project area is only possible via the City of Commerce street system. In addition, the water infrastructure is owned by the City of Commerce and operated by California Water Service. As such, the proposed project has a greater potential for impacting City of Commerce residents and businesses.

2-2

### *"Where Quality Service Is Our Tradition"*

2535 Commerce Way • Commerce, CA 90040 | Phone:323•722•4805 | [www.ci.commerce.ca.us](http://www.ci.commerce.ca.us)

## Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 2 of 7

### Section 2. Project Description

*Page 2.0-2.* The text indicates that Rickenbacker Road provided the only public access to the four project sites. The description should be expanded to indicate that "other access to this area includes Rickenbacker Road, Bandini Boulevard, and Slauson Avenue which are located within the City of Commerce."

2-3

*Figures 2.0-3 through 2.0-6.* These exhibits are conceptual in nature though the truck maneuvering diagrams indicate there may be some difficulties in truck movements into and out of the loading positions. These exhibits need to be revisited to ensure there will be sufficient clearance on-site to accommodate these movements.

2-4

*General Comment.* The number of truck loading docks for each of the proposed buildings has not been specifically identified. The DEIR should indicate the maximum number of truck loading docks for each potential building. As you are aware, truck dock doors can be indicative of trip generation. Extrapolating from the concept plans for the buildings, it looks like over 100 truck dock doors will be provided for the buildings. In addition, it is important to understand that adequate truck staging and access will be provided on the individual sites or to what extent (if any) truck parking will be allowed on Rickenbacker Road or Mansfield Way.

2-5

*Page 2.0-5.* The DEIR indicates a "development agreement" would be required though it is still being prepared. It also indicates that the development agreement will include the entitlement process that each parcel will be required to follow. We are unclear as to how the project's environmental review can proceed in the absence of a completed development agreement. The development agreement is the "project" that will lead to the physical development analyzed in the DEIR.

2-6

### Section 3. Introduction to the Environmental Analysis and the Assumptions Used

The City is concerned that no analysis was done to look at additional vehicular circulation options within the project area that could potentially mitigate traffic impacts.

2-7

#### Section 3.1 Air Quality

*Page 3.1-5.* The description indicates the types of uses that are considered to be sensitive receptors. The DEIR fails to identify the nearest sensitive receptors that could be affected by the proposed project's construction and operational emissions.

2-8

*Page 3.1-12.* The DEIR should emphasize that the proposed project does not conform to Criterion No. 2 since it will result in an exceedance of daily emissions thresholds.

2-9

## Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 3 of 7

*Page 3.1-13.* The DEIR must provide evidence that the project will not exceed the growth projections used to formulate the Growth Management Plan. The growth projections for employment, population, and households have been prepared by the Southern California Association of Governments (SCAG). This information is also included in the DEIR (refer to Table 3.10-1).

2-10

*Page 3.1-15.* The analysis of truck emissions indicates that NO<sub>x</sub> emissions will exceed the SCAQMD thresholds. The analysis should be expanded to clearly indicate the emissions impacts this truck traffic will have on sensitive receptors located in the City of Commerce. Mitigation measure(s) should be added indicating truck routes should avoid those areas where there is a concentration of homes and schools.

2-11

*Page 3.1-20.* The analysis of LSTs may underestimate the localized impacts since the assumption assumes limited use of construction equipment at any one time (two scrapers, one grader, and one rubber tired dozer). This usage corresponds to the "defaults" provided in the CalEEMod computer models. These defaults should be modified to reflect the actual size of the project which is in excess of 40 acres.

2-12

### Section 3.2 Biological Resources

*Entire Section.* We concur that the project site is disturbed and will not result in any adverse impacts on natural habitats and/or sensitive plant or animal species. The demolition and grading activities will have the potential for disturbing rodent and insect vectors within the affected properties causing them to migrate to neighboring properties. We recommend that measures be identified to address this potential impact.

2-13

### Section 3.3 Cultural Resources

We do not have any comments on this section.

### Section 3.4 Climate Change and Greenhouse Gasses

*Entire Section.* We concur that the future potential development will result in potentially significant greenhouse gas emissions over the project's operational lifetime. The mitigation focusing on water conservation and recycling is already a requirement (the 3% diversion of solid waste is less than the mandated amount). Mitigation 3.4.1.a is an excellent start though these elements should be identified as requirements.

2-14

### Section 3.5 Geology and Soils

*Page 3.5-13.* Mitigation measure 3.5.2 calls for a "design level" geotechnical study to be prepared in the future. This section of the DEIR appears to be deferring mitigation. Adequate information is available to prepare the required analysis. As

2-15

### Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 4 of 7

an alternative, the mitigation should be rewritten to indicate that building construction will be required to defer to any pertinent building code requirements.

2-15  
cont.

*Entire Section.* Are there any known or unrecorded landfills within the project area?

2-16

#### Section 3.6 Hazardous Materials

*Entire Section.* The analysis indicates that there may be a potential for some contaminated soils to be encountered during grading activities. Traces of asbestos-containing materials (ACMs), lead, PCBs, and other toxic contaminants may be encountered during site preparation activities. Specific mitigation should be identified to address this contingency given the close proximity of the homeless shelter and transitional housing facilities located nearby.

2-17

#### Section 3.7 Hydrology and Water Quality

The City of Commerce owns the water lines that serve the site; therefore this section should be corrected accordingly.

2-18

#### Section 3.8 Land Use

*Entire Section.* The analysis should evaluate the proposed project's conformity with the City's land use and development regulations (lot coverage, floor area ratio, landscaping, etc.).

2-19

#### Section 3.9 Noise

*Entire Section.* The analysis fails to clearly quantify construction and operational noise impacts. The text indicates the impacts are "less than significant" and then refers readers to the Appendix. An effort to quantify these impacts should be made given the size of the project and the presence of sensitive receptors in the immediate area.

2-20

#### Section 3.10 Population, Housing, and Employment

We do not have any comments on this section.

#### Section 3.11 Public Services and Utilities

*Entire Section.* We recommend that mitigation measures be added calling for the review of the site plans by the Los Angeles County Fire Department to conformance to any Fire Department recommendations. Mitigation measures should also be added to identify measures to further reduce water consumption and wastewater generation.

2-21

## Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 5 of 7

Page 3.11-18. The DEIR indicates utility lines in Rickenbacker Road will need upgrading to accommodate the proposed project. What is the nature and extent of these upgrades and how will they affect the City of Commerce?

2-22

Page 3.11-26. The potential increase in impervious surfaces within the 40 acre project site may lead to localized ponding impacts. The general nature of the description of impacts makes it difficult to determine the nature and extent of potential impacts to local streets in the City of Commerce.

2-23

### Section 3.12 Transportation and Circulation

The City of Commerce will bear a disproportionate impact from the vehicles accessing the project sites in your City. Furthermore, the project will have several significant and unavoidable impacts relating to transportation and circulation impacts within Commerce. Commerce understands that a Statement of Overriding Considerations will be a necessary action by the Lead Agency for the proposed project. Commerce as a Responsible Agency strongly objects to the basis for these Overriding Considerations, because the DEIR has failed to fully analyze potentially impacted intersections in Commerce and to identify and analyze potentially viable vehicular circulation options within the project area that would possibly mitigate traffic impacts. We recommend a circulation study that looks at additional options for vehicular ingress and egress to the sites. For example, an access road should be explored from Bandini at Lindbergh/Lindbergh Lane or Amelia Earhardt Way connecting to Rickenbacker or Mansfield Way. We understand this would require installation of a new at grade rail crossing over the L.A. Junction railway line, and passing over the Army Reserve Staging Depot, however the DEIR fails to acknowledge or analyze this as an option.

2-24

In addition, the Circulation Element of the 1996 City of Bell General Plan states the following:

*"In addition, this Circulation Element and the Circulation Plan contained herein, contemplates that improvement and construction of new arterial roadways within the City's industrial Cheli district. Specifically, this Element provides for the future extension of Mansfield Way or Rickenbacker Road, westerly to be connected to Lindbergh Lane. These roadway improvements will provide a continuous roadway link with the City's major industrial district".*

Lastly, the Circulation Element of the 1996 City of Bell General Plan also states the following:

*" Policy 7. Continue to require new development proposals to include design features which will mitigate any adverse impact upon the circulation system".*

The City is surprised no such additional circulation study was done, especially in light of the above stated policy in your General Plan.



### Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 6 of 7

*Figure 3.12-1.* The traffic distribution/assignment analysis indicates that 25% of the project traffic will use the segment of Eastern Avenue north of Bandini Boulevard and an additional 10% would use the segment of Eastern Avenue located south of Slauson. Even though this represents a large volume of traffic (35% of the total), no analysis of any Eastern Avenue intersections in the City of Commerce were provided. | 2-25

*Figure 3.12-1.* The traffic distribution/assignment analysis indicates that 25% of the project traffic will use the segment of Bandini Boulevard located east of Eastern Avenue. Even though this represents a large volume of traffic, no analyses of any Bandini Boulevard intersections located in the City of Commerce were provided. | 2-26

*Page 3.12-10.* The trip generation analysis did not factor in the 44,000 square feet of office uses that may have a relatively high volume of peak hour traffic. The trip generation analysis should include an analysis of both office and warehouse-related trips. | 2-27

*Page 3.12-17.* There were no intersections in the City of Commerce analyzed even though these intersections will be handling 55% of the total project traffic. The DEIR must be revised to reflect the critical intersections in the City of Commerce. | 2-28

*Page 3.12-22.* The list of cumulative projects is incomplete and in error. A number of projects shown in this table have been completed years ago while others never moved forward. More significantly, a number of related projects in the City of Commerce are missing all together. | 2-29

*Trip Generation: Table 3.12-7:* Provide full narrative and source description on percentage breakdown of vehicle classification for trip generation. Justify 10% for 4-axle truck trips generation from the project. | 2-30

*Trip Distribution: Figure 3.12-2:* No percentages are shown along Atlantic Boulevard and Washington Boulevard in the vicinity of study intersection of Washington Bl/Atlantic Bl. If Washington Boulevard and Atlantic Boulevard are not expected to carry any project related traffic, then justify inclusion of the intersection of Washington Boulevard and Atlantic Boulevard as a study intersection. | 2-31

*Levels of Service:* Please mention that the delay value shown for unsignalized intersections is for the most impacted movement/approach of the unsignalized intersection. | 2-32

*Cumulative Project Scenario:* Justify considering year 2025 for cumulative traffic scenario analysis. Most regional agencies' planning horizon is now Year 2035 or later, including Caltrans, SCAG, and Metro. | 2-33

*Mitigation Measures:* Discuss the feasibility of the mitigation measures proposed, such as right of way availability, coordination with regional improvement plans, possibility of phasing, etc. | 2-34

## Letter 2 Continued

Letter to City of Bell  
Comments to Draft Environmental Impact Report (DEIR)  
Page 7 of 7

These comments are based on the traffic engineering review of the Transportation and Circulation section of the EIR, and not the Appendix 3.12 that is to contain traffic technical data.

2-35

### Section 3.13 Effects Found to be Not Significant

We do not have any comments on this section.

### Section 4 Alternatives

*Entire Section.* Section 4.1 and 4.2 provide a very good synopsis of CEQA's requirements as they relate to the development and/or selection of project alternatives. Unfortunately, this guidance was not followed in the selection of alternatives that were ultimately considered in the DEIR. Major concerns include the following:

2-36

*Alternative 1.* This alternative does not meet the CEQA definition of a "No Project" alternative. The No Project should consider both the existing baseline (existing conditions) and the development possible under the current land use regulations (i.e. the zoning or the general plan).

2-37

*Alternative 2.* In our comments regarding the Project Description, we indicated that there may be insufficient room from truck maneuvering for all four of the project elements. As a result, a reduced footprint scenario outlined in this alternative may be beneficial in providing more maneuvering area.

2-38

*Alternative 3.* We are unclear as to the rationale for the selection of this alternative. The types of commercial development identified in the discussion would lack any visibility and easy access to adjacent arterials that most commercial development would require.

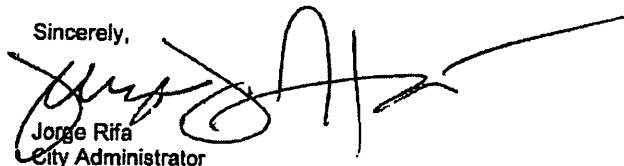
2-39

The analysis of alternatives should consider design elements that would address an identified significant impact. For example, a circulation alternative that would provide additional access would be very helpful in mitigating potential traffic impacts.

2-40

Thank you for your consideration of these comments.

Sincerely,



Jorge Rifa  
City Administrator

cc: Councilmembers

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

### Letter 2      Jorge Rifa, City Administrator, City of Commerce

#### Responses

- 2-1      The commenter states that the project will have growth inducing impacts on the City of Commerce public facilities.

The Draft EIR discusses impacts to public facilities in Section 3.11 Public Services and Utilities, and also discusses the potential for growth in Section 3.10 Population and Housing. As noted on page 3.10-1 of the Draft EIR, the City of Bell, and the surrounding cities of Commerce, Maywood and Vernon are all projected to grow in employment over the next twenty years. The Draft EIR estimates that the proposed project could generate between 453 and 542 new employees which is less than the 4,200 new employees projected in the SCAG estimates. The proposed project is consistent with the existing general plan designation and zoning and was considered as part of the background growth projected by SCAG (See also Letter 5).

The Draft EIR also notes that the unemployment rates in the area are significantly higher than the nation and state. As such it is likely that new employees may be found within the existing community and therefore already using existing public resources. Any indirect growth associated with the project would be consistent with the SCAG projections for the region and should already be included in service plans for each community.

- 2-2      The commenter states that the project will have a greater impact on the City of Commerce utilities operated by the California Water Service, residents, and businesses.

The commenter states an opinion, unsupported by facts, but does not raise an issue specific to the proposed project or the EIR. No changes or further explanation are necessary.

- 2-3      The commenter states that the EIR "...indicates that Rickenbacker Road provided the only public access to the four project sites," and that the EIR be revised to indicate that other access includes Bandini Boulevard and Slauson Avenue.

Page 2.0-2 of the Draft EIR states, "Rickenbacker Road will provide the *primary* access to all of the parcels and the only access to parcels A, F and G" [emphasis added]. The section then continues to explain the access provided by K and Sixth streets. The regional context of the project, including area roadways that provide access to the sites, is discussed in Section 3.12, Transportation and Circulation, and shown in Figure 2.0-2, Project Location, in the Draft EIR. Because the Draft EIR describes access in detail, no changes are necessary based on this comment.

- 2-4      The commenter states that Figures 2.0-3 through 2.0-6 show that there may be some difficulties in truck movements.

The figures included in the Draft EIR show that there is sufficient room within the conceptual site plans to maneuver large trucks. Final design of the sites will be approved at the building permit stage by the City of Bell. Approval of the site plan will include consideration of all access, including truck and emergency vehicles. As shown in the Draft EIR, access is available around the buildings.

- 2-5 The commenter states that the Draft EIR should indicate the maximum number of truck doors in order to estimate truck trips, and questions whether truck parking and staging will be allowed on Rickenbacker Road or Mansfield Way.

Table 3.12-6 in the Draft EIR provides the Institute of Transportation Engineers (ITE) Code used to determine trips associated with the proposed project. The ITE establishes trips in terms of thousand square feet of building area, which are then adjusted per Table 3.12-7 to reflect the number of potential trucks associated with the project.

The Traffic Impact Analysis (Appendix 3.12 of the Draft EIR) does not use truck doors as a factor in estimating truck trips. As stated on page 2.0-2 of the Draft EIR, the plans are conceptual only and the design features are shown for illustration purposes. The project description provides sufficient detail to prepare the Traffic Impact Analysis, resulting in the impacts and mitigation measures contained in Section 3.12, Transportation and Circulation, in the Draft EIR. Truck parking will not necessarily be prohibited on Rickenbacker Road or Mansfield Way, but it is not expected that queuing or other adverse impacts will result from either inadequate on-street parking or prohibition of on-street parking. As discussed, the plans presented are conceptual and the final design will allow for proper staging and access.

- 2-6 The commenter questions how the EIR can be completed while the development agreement is still being prepared.

The Draft EIR evaluates the physical impacts associated with implementing the proposed project. The terms of the development agreement are largely fiscal in nature and do not affect the physical environment. Chapter 2.0 Project Description presents sufficient detail of the proposed project to allow for a good faith effort in the analysis and disclosure of the project's probable environmental effects. CEQA does not require that a development agreement be finalized prior to completion of an EIR.

- 2-7 The commenter expressed concern that no analysis was done to look at additional vehicular circulation options within the area that could potentially mitigate traffic impacts.

As discussed in detail in Response 2-24, the City analyzed additional vehicular circulation options and deemed them infeasible. Access to the west toward Lindbergh Way and possibly Rickenbacker Road is not possible without a new at-grade signal crossing of the existing railroad. A new at grade crossing of the rail is the only possibility because it is infeasible to demolish and/or relocate the existing development west of the rail line to allow an elevated crossing. In addition, the existing rail lines may also support service spurs to one or more of the project sites which would widen any new crossing of the railroad. While the City has not pursued a new at-grade crossing connecting Rickenbacker Road to Lindbergh Way or Bandini Boulevard, these types of crossing are extremely difficult to obtain and require California Public Utility Commission approval. Further, unless the new roadway extends to Bandini Boulevard, the traffic would lead back to Eastern Avenue approximately 300 feet west of the existing Rickenbacker Road intersection with Eastern Avenue. If the roadway extends to Bandini Boulevard, the existing intersection at Pennington Way is too close to the Bandini Boulevard and I-710 ramps to allow new traffic. Access further south at Yeager or Amelia Earhart Way and Bandini Boulevard, requires a new roadway across the Federal facility. Finally, the I-710 expansion is likely to reconfigure roadways in this vicinity moving the I-710, and associate on/off ramps south along Bandini Boulevard.

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

- 2-8 The commenter states that the Draft EIR does not identify the location of sensitive receptors.

In addressing construction related effects of the project, Impact 3.1.5 on page 3.1-18 of the Draft EIR identifies the adult center vocational school and homeless shelter/clinic and transition housing adjacent to Parcel H, as well as the residential neighborhoods located due north of project site across East Washington Boulevard, southwest of project site across I-710 and the Los Angeles River, and located generally due west of project site across I-710 and the Los Angeles River. The proximity to the proposed project and the air quality impacts to these sensitive receptors are fully analyzed in the Draft EIR in Section 3.1, Air Quality.

Exposure of sensitive receptors to toxic air contaminants during operations, are analyzed in Impact 3.1.6 starting on page 3.1-20 and continuing through 3.1-24. Table 3.1-11 and Table 3.1-12 present data on estimated cancer risk and non-cancer risk, respectively.

- 2-9 The commenter states that the Draft EIR should emphasize that the proposed project does not conform to Criterion No. 2 since it will exceed the daily emissions thresholds.

As stated under Impact 3.1.1 beginning on page 3.1-12 of the Draft EIR, the project does not conform to Criterion No. 1, but does conform to Criterion No. 2.

The proposed project is consistent with the land use designation and development density presented in the City of Bell's General Plan and therefore would not exceed the population or job growth projections used by the South Coast Air Quality Management District (SCAQMD) to develop the Air Quality Management Plan. Thus, no impact would occur with regard to Criterion No. 2.

The Draft EIR does clearly state on page 3.1-13, that the proposed project is not consistent with Criterion No. 1 as the daily operational air quality standards would be exceeded, and further refers to the discussion on page 3.1-14 to 3.1-15 where the specifics of the daily exceedance is detailed.

- 2-10 The commenter states that the Draft EIR must provide evidence that the project will not exceed the growth projections used to formulate the Growth Management Plan prepared by the Southern California Association of Governments.

The site is designated Industrial on the City of Bell General Plan. The proposed warehouse/industrial project is consistent with the Industrial General Plan designation. The City of Bell General Plan was used by the Southern California Association of Governments to prepare the Growth Management Plan.

In addition, Section 3.10, Population, Housing, and Employment, of the Draft EIR evaluates the potential number of new employees associated with the proposed project. For the analysis, the City used SCAG information to calculate the potential for new employees and compared the resulting numbers to the growth estimate also provided by SCAG. As noted in DEIR Section 3.10, the proposed project is consistent with the growth estimates maintained by SCAG.

The City's analysis was reviewed by SCAG as part of the Draft EIR public review process. Comment Letter 5 includes the following statement: "Based on SCAG staff's review, the proposed project supports certain goals of the 2012-2035 RTP/SCS by developing light

industrial/warehouse uses along a major regional goods movement corridor, and includes measures to help mitigate potential impacts." With the information contained in the Draft EIR and the comment provided by SCAG, the City concludes that the proposed project is consistent with the Growth Management Plan.

- 2-11 The commenter notes that NO<sub>x</sub> emissions will exceed the SCAQMD and requests the following:

- a. Expand the analysis to indicate the NO<sub>x</sub> emission impacts truck traffic would have on the residents of Commerce.

The commenter is correct that NO<sub>x</sub> emissions will exceed the SCAQMD thresholds. This is identified in Table 3.1-7 in Section 3.1 of the DEIR. However, the nearest residential area in Commerce to the project site is over 1,000 meters to the north. SCAQMD staff has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts during project operations. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The project site is located within SRA 12. The table below shows the calculated NO<sub>x</sub> emissions for the proposed operational activities compared with the appropriate localized significance thresholds. The LST analysis only includes on-site sources; however, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in the table below include 50 percent of the project-related new mobile sources as an estimate of the amount of project-related new vehicle traffic that will occur on-site.

The table below shows that the operational emission rates would not exceed the LST thresholds for receptors at 1,000 meters. Therefore, the proposed operational activity would not result in a localized significant air quality impact.

**OPERATIONAL LOCAL SIGNIFICANCE THRESHOLD (LST) IMPACTS (POUNDS PER DAY)**

Emissions Source	Nitrogen Oxide
On-Site Emissions	41
LST Thresholds	139
Significant Emissions?	No

- b. Based on NO<sub>x</sub> emissions, add mitigation measures requiring trucks to avoid those areas where there is a concentration of homes.

No mitigation necessary since the residences will not be impacted.

- 2-12 The commenter states that the construction-related LST analysis may underestimate the localized impacts since emission projections are based on defaults of the CalEEMod computer model.

CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

of land use projects and is endorsed by the California Air Resources Board and the SCAQMD. The City of Bell feels this model is appropriate for analysis of the project's impacts.

As stated on page 3.1-19 of the DEIR, the SCAQMD has issued guidance on applying CalEEMod modeling results to localized significance threshold analyses. For the purposes of the analysis in the DEIR, air pollutant emissions associated with grading and site preparation activities were quantified for the entire project site. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, specifications are provided by the SCAQMD to determine the maximum daily disturbed acreage for comparison to local significance thresholds (see Table 3.1-9 in the DEIR).

- 2-13 The commenter requests that mitigation measures be included to preclude vectors from leaving the proposed project site during demolition and grading.

Mark Daniel of the Los Angeles County Vector Control District was contacted on July 10, 2013, and the City was told that there are no ordinances, procedures, or code provisions that govern the issue raised by the commenter. Further, the Vector Control District has had no reports of any issues involving grading of land and vector movement. There are no structures on the site.

- 2-14 The commenter notes that water conservation and solid waste mitigation is a requirement and that mitigation measure MM 3.4.1a should be identified as a requirement.

As shown on pages 3.4-18 and -19 of the DEIR, applicants of development projects located within the Bell Business Center will be required to implement water conservation and solid waste mitigation. Additionally, mitigation measure MM 3.4.1a is a requirement that will be enforced by the City of Bell Planning Division. Additionally, as part of the proposed project's development agreement, the buildings, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. Developed by the U.S. Green Building Council (USGBC), the Leadership in Energy and Environmental Design (LEED) rating system is based on buildings incorporating energy efficiency benchmarks. The Gold rating is the second highest rating behind Platinum and is a higher rating than Silver or Certified. The City requires third-party verification that the proposed project was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Because LEED certification is a private rather than public agency governed process, the development agreement also specifies that LEED Gold "or equivalent" is acceptable. In either instance, the City will require third-party verification of the energy savings and other design features associated with the project.

- 2-15 Mitigation Measure 3.5.2 calls for a geotechnical study to be completed and its recommendations enforced prior to issuance of a building permit for any structures associated with the proposed project.

Because building designs are conceptual at this time, such studies will occur in the final design process. MM 3.5.2 ensures that a licensed engineer will examine conditions on site and dictate appropriate buildings methods for the designed structures, including any required soil engineering, structural foundation types, and other construction practices

per the California Building Standards Code. Because the requirements of MM 3.5.2 outline these specific performance standards, the measure does not constitute deferred mitigation, and as such is a prudent and legally adequate mitigation measure under CEQA given the circumstances of not having final building designs complete.

- 2-16 The commenter asks if there are any known or unrecorded landfills in the project area.

The Phase I Environmental Site Assessment prepared for the proposed project did not identify any landfills within the proposed project boundaries. See Appendix 3.6 of the Draft EIR. A Phase II ESA was also prepared and similarly did not identify any landfills (See Appendix B of the Final EIR).

- 2-17 The commenter requests that mitigation be included to address the potential for contamination identified in the Draft EIR.

Appendix 3.6 of the Draft EIR makes a recommendation that additional testing be done in areas of Parcels F and G before grading. The analysis suggested potential contamination from previous industrial uses associated with the property. The City has included the recommendation as part of the analysis in the Development Agreement, and will require the additional analysis prior to any ground disturbance. As this is a condition of any ground disturbance and part of the Development Agreement, there is no need to make this a mitigation measure.

In addition, July 3, 2013, a Phase II Limited Site Investigation (LSI) was conducted evaluating the soils on Parcels F and G. The Phase II concluded that contamination contained in the soils sampled on these parcels was below regulatory levels. (See **Appendix B** to this Final EIR). The Phase II made further recommendations for sampling and characterizing the content of stockpile materials on Parcels F and G prior to their on-site use or transport off-site for disposal.

In a subsequent letter report dated July 18, 2013 (**Appendix C** to this Final EIR) the stockpile materials were sampled and tested for contaminants. The letter report concludes that detected concentrations of contaminants were below regulatory levels. The Development Agreement requires a Phase II Environmental Site Assessment as a follow up to the Phase I recommendations in the Draft EIR for Parcels A and H.

Conditions of approval will require completion of all clean-up measures required by the environmental assessments prior to issuance of grading permits.

- 2-18 The commenter requests that the Draft EIR be amended to reflect the City of Commerce as the owner of the water lines.

Page 2.0-2 of the Draft EIR has been revised and is included in Chapter 3.0 of the Final EIR, revisions to the Draft EIR, as follows:

"Water service to the site is provided by the California Water Service (Cal Water) through to the existing ~~Cal Water~~ City of Commerce line in Rickenbacker Road. When Rickenbacker Road is extended, the water line will also be extended to parcels A, F, and G."

- 2-19 The commenter states that the Draft EIR should evaluate the land use and development regulations.



## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

The City's General Plan allows for full coverage of the parcels with a floor area ratio of between 1.5 and 2.5. The proposed project is consistent with both the allowable uses and the floor area ratios established by the General Plan and enforced through provisions of Chapter 17.36 of the City of Bell Municipal Code. The City determined that the project was consistent with the provisions of the General Plan and Municipal Code during review of the project description and on page 3.8-10 of the Draft EIR.

- 2-20 The commenter states that the Draft EIR does not quantify operational or construction noise.

The Draft EIR discusses noise in Section 3.9, Noise, and specifically quantifies noise associated with construction on page 3.9-9 in the discussion of Impact 3.9.4. The projected construction noise level at a distance of 60 feet from Rickenbacker Road would be 63 dBA which is lower than both the City's 65 dBA standard for residential uses and 75 dBA standard for industrial uses. No residential uses are located within 60 feet and thus the impacts were determined to be less than significant. Nevertheless, to reduce the effects of noise as much as possible, mitigation measure MM 3.9.4 requires additional construction noise reduction measures.

Operational noise is discussed in Impact 3.9.2 beginning on page 3.9-7 of the Draft EIR. The discussion concludes that noise levels of 44 dBA during the day and 45 dBA during nighttime hours would not result in a significant impact. Sensitive receptors are identified on page 3.9-7 of the Draft EIR in relation to the estimated noise impacts.

- 2-21 The commenter made two comments regarding Public Services and Utilities analysis.

- a. The commenter recommends that a mitigation measure be added requiring compliance with all Los Angeles County Fire Department recommendations.

The Los Angeles Fire Department comment letter is included as Letter 8 from Los Angeles County Fire in this Final EIR. All conditions listed in Letter 8 have been included as conditions of approval for the proposed project. As the City of Bell standard development practices require compliance with Los Angeles Fire Department recommendations and the recommendations included in Letter 8 are now conditions of approval, it is unnecessary to add a mitigation measure to the EIR.

- b. The commenter also states that additional measures should be added to further reduce water consumption and wastewater generation.

The commenter has not provided a recommendation on the types of measures intended to further reduce water consumption and wastewater generation. Water usage is discussed beginning on page 3.11-12 of the Draft EIR. As noted in the DEIR section, the proposed project is also subject to the design requirements found in Chapter 17.99 of the City of Bell Municipal Code. As stated on page 3.11-18 of the Draft EIR, "These design requirements include, but are not limited to, limiting turf areas; ensuring the irrigation system is designed to properly infiltrate based on soil and grading conditions, and avoid overspray and runoff; providing planters and incorporating drought-tolerant ground covers, shrubs, and trees that are fast growing; including plantings that will provide shading; and grouping plantings by hydrozones."

Wastewater demand from the project is discussed on page 3.11-11 of the Draft EIR and is based on the Los Angeles County Sanitation District's projection for the types of land use

proposed. The section concludes that there is adequate wastewater collection and treatment capacity to meet the needs of the proposed project. At the time of building permit issuance, the City of Bell will ensure compliance with the Municipal Code and state law regulating landscaping and building water usage and wastewater generation.

- 2-22 The commenter requests more information on the changes needed to existing utilities to accommodate the proposed project, particularly their impact on the City of Commerce

Page 2.0-2 of the Draft EIR states that the extension of Rickenbacker Road is necessary to provide services to parcels A, F, and G. Also noted in the project description is the need to extend the existing public services in Rickenbacker Road to each of the parcels. The extension of services will require trenching, compaction, inspection, and ultimately paving of the roadway. The exact location of each service lateral has not been determined but is likely to be along property lines, or proposed property lines, associated with each parcel. Additionally, as stated on page 3.11-18, standard street improvement specifications require fire hydrant spacing approximately 300 feet apart and may require looping of one or more of the water lines. As the City of Commerce owns the water transmission pipelines beneath the project site, any relocation or replacement of the lines would be conducted in consultation with the City of Commerce.

- 2-23 The commenter states that the increase in impervious surfaces might lead to stormwater ponding and potential impacts to local streets in Commerce.

The project will be designed and engineered to collect stormwater and route it via City collection lines into the LA County Flood Control District facilities. Compliance with Chapter 13.08 of the City's Municipal Code related to stormwater is required. There is nothing unique about the proposed project or site that would result in flooding of City of Commerce streets. Stormwater analysis and findings of less-than-significant impact is further detailed on pages 3.11-25 to 3.11-26 of the Draft EIR.

- 2-24 The commenter requests that additional access to Rickenbacker Road and Lindbergh Way be included in the analysis and asserts (without supporting evidence) that the City of Commerce will bear a disproportionate share of impact from vehicles accessing the project sites.

Rickenbacker Road gains access from Eastern Avenue which is maintained by both the City of Commerce and the City of Bell depending on location. As shown in Figure 3.12-2 of the Draft EIR, the majority of the traffic will use Bandini Boulevard to gain access to I-710. Bandini Boulevard is also maintained by both cities depending on location. The extent of impact is shown in Section 3.12 Transportation and Circulation of the Draft EIR. The Draft EIR contains a number of mitigation measures **MM 3.12.1a** through **MM 3.12.1d** beginning on page 3.12-18 of the Draft EIR, and **MM 3.12.6a** through **MM 3.12.6c** beginning on page 3.12-24 of the Draft EIR, designed to reduce impacts to both the City of Bell and City of Commerce intersections. As stated in the Draft EIR, while the improvements will reduce the project impacts at these locations, the City of Bell cannot independently make improvements at these locations as they are outside of City jurisdiction.

Access to the west toward Lindbergh Way and possibly Rickenbacker Road is not possible without a new at-grade signal crossing of the existing railroad. A new at grade crossing of the rail is the only possibility because it is infeasible to demolish and/or relocate the existing development north and west of the rail line to allow an elevated

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

crossing. In addition, the existing rail lines may also support service spurs to one or more of the project sites which would widen any new crossing of the railroad. While the City has not pursued a new at-grade crossing connecting Rickenbacker Road to Lindbergh Way or Bandini Boulevard, these types of crossing are extremely difficult to obtain and require California Public Utility Commission approval. Further, unless the new roadway extends to Bandini Boulevard, the traffic would lead back to Eastern Avenue approximately 300 feet west of the existing Rickenbacker Road intersection with Eastern Avenue. If the roadway extends to Bandini Boulevard, the existing intersection at Pennington Way is too close to the Bandini Boulevard and I-710 ramps to allow new traffic. Access further south at Yeager or Amelia Earhart Way and Bandini Boulevard, requires a new roadway across the Federal facility. Finally, the I-710 expansion is likely to reconfigure roadways in this vicinity moving the I-710, and associate on/off ramps south along Bandini Boulevard.

While the Draft EIR analyzes the proposed project impacts consistent with the adopted level of service, only the City Council can determine whether the proposed project is consistent with the General Plan. This determination will be made prior to taking action on the proposed project.

- 2-25 The commenter questions the project distribution and why no intersections in the City of Commerce were analyzed. As shown in Table 3.12-1 on page 3.12-4 of the Draft EIR, several intersections along the Eastern Avenue corridor that are in the City of Commerce or are shared by the City of Commerce and the City of Bell, including Eastern-Slauson, Eastern-Mansfield, Eastern-Rickenbacker, and Eastern-Bandini were analyzed. Analysis of the Eastern-Washington intersection is necessary, given that the Intersection Traffic Impact Analysis Report for the I-710 Corridor Project EIR/EIS, found that the existing LOS C for this intersection will be maintained for the AM and PM periods for all future build alternatives, with the sole exception of the PM peak for one of the scenarios.

- 2-26 The commenter questions why additional intersections on Bandini Boulevard were not studied in the Draft EIR.

The scope of the traffic analysis was discussed during the scoping meeting held on April 25, 2013 and attended by a City of Commerce staff member. The City selected the intersections most likely to be impacted by the proposed project and included them in the traffic analysis. As noted in Table 3.12-1, on page 3.12-14 of the Draft EIR, the City analyzed 11 intersections, 5 of which were in the City of Commerce. As the city received no comments regarding the expansion of traffic scope, the original scope was followed in the Draft EIR and analysis. As noted on page 3.12-19 of the Draft EIR, mitigation measures associated with intersection 7, Eastern/Bandini Avenue, will reduce project impacts to a less than significant level. The Draft EIR also concludes that as the improvements require the cooperation of the City of Commerce, the City of Bell cannot guarantee that the improvements will be made and therefore concludes that the impacts are significant and unavoidable.

- 2-27 The commenter states that the trip generation analysis did not factor in the 44,000 square feet of office uses that may have a relatively high volume of peak hour traffic. The commenter requests that the trip generation analysis include an analysis of both office and warehouse-related trips. As stated on Page 3.12-10 of the Draft EIR, the ITE warehouse land use category assumes ancillary office uses. The ITE manual only identifies office uses separately if they represent 15-20 percent of the same building. The proposed project assumed that 44,000 of the 840,390 square feet would be office space which represents approximately five percent of the overall total. As a result, the trip generation

rates included in Table 3.12-6 and 3.12-7 of the Draft EIR include the ancillary office space.

2-28 The commenter states that no intersections in the City of Commerce were analyzed in the Draft EIR. See Response 2-25.

2-29 The commenter states that the list of cumulative projects is incomplete and in error and that the number of projects shown in the EIR were completed years ago while others never moved forward. The commenter also states that a number of related projects in the City of Commerce are missing all together.

The cumulative projects utilized in the analysis are based on discussions with City of Bell staff as well as adjacent jurisdictions including the City of Commerce. The City of Commerce cumulative projects are based on information provided by City of Commerce staff in an email sent to the City on March 22, 2013, and included all projects identified through the communications taken place at time of preparation of the analysis.

2-30 The commenter requests full narrative and source description on percentage breakdown of vehicle classification for trip generation and justification for a 10 percent 4-axle truck trip generation from the project. The traffic characterization assumption was based on a previous initial study certified by the City of Bell for the *Bandini Industrial Center Project* (SCH2012031099) and on "axle classification" counts in support of the proposed project. Axle classification counts mean that the number of axles on each vehicle was counted and then classified by vehicle type. The information concerning the Bandini and Eastern intersection (#7 in Table 3.12-8 on page of Draft EIR) is located on pages 108 through 114 of Appendix 3.12 of the Draft EIR. The vehicle ratio is shown as follows:

87.6% passenger vehicles
5.3% 2-axle trucks
2.5% 3-axle trucks
4.6% 4-axle trucks

As shown above, the traffic characterization assumptions used in the Draft EIR and shown in Table 3.12-7 on page 3.12-10, are consistent with existing traffic in the vicinity.

2-31 The commenter states that the intersection of Atlantic and Washington Boulevard is unnecessary as no project trips are expected to travel through the intersection. The commenter is correct however the inclusion of the intersection in the analysis does not affect the conclusions or mitigation measures reported in the Draft EIR.

2-32 The commenter requests that the Draft EIR be revised to mention that the delay value for unsignalized intersections is for the most impacted movement/approach of the unsignalized intersection.

Please see Section 3.0 Revisions to the Draft EIR. The following text has been revised in DEIR Section 3.12, page 3.12-16:

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

### METHODOLOGY

This section is based on the traffic data provided by RBF Consulting (2013), included as **Appendix 3.12** to this Draft EIR. Traffic counts were taken at the study area intersections, and the projected traffic was compared to existing traffic to determine impacts. The LOS methodology described in subsection 3.12.1 above was used to determine whether the project traffic would result in significant impacts. For intersections where impacts are identified, the City evaluated existing conditions to determine whether mitigation measures could result in a less than significant impact. The traffic analysis evaluated an Existing Plus Project condition as well as a Cumulative Project Condition at each of the study intersections. Because the proposed uses are anticipated to have large numbers of heavy trucks, only the PCE traffic figures and impacts from the traffic study are reported in this DEIR section. For unsignalized intersections, the delay value shown is for the most impacted movement/approach of the intersection.

- 2-33 The commenter requests justification for use of a 2025 rather than a 2035 planning horizon.

Planning horizons are useful for considering large projects with broad land use and development potential. As explained in Appendix 3.12 of the Draft EIR, the traffic analysis assumed buildout of the project by 2015. The City determined to use a 2025 horizon for cumulative analysis in order to conservatively report the project impacts on area roadways and intersections. Using 2025 rather than 2035 results in the analysis showing that the proposed project results in a greater proportionate impact on area roadways and intersections as there is less traffic attributed to background growth.

- 2-34 The commenter requests a discussion of the feasibility of the proposed mitigation measures and the coordination with regional improvement plans.

In preparation of the mitigation measures the City reviewed the existing rights of way and the proposed improvements and believes that all improvements can be constructed within the existing right of way. However, all of the traffic mitigation requires coordination with either Caltrans or the City of Commerce. The mitigation includes improvements to roadways, striping and signage that will mitigate impacts associated with the proposed project. As noted on page 3.12-9 of the Draft EIR, all of the intersections can be mitigated to a less than significant level with the exception of the Eastern Avenue/Mansfield Way stop-controlled intersection. As stated in the Draft EIR on page 3.12-20, "Note that all of the mitigation measures require coordination with other agencies. As such, even though the City of Bell intends to ensure the mitigation will occur, the City cannot compel the other agencies to implement the mitigation. As such, even with the mitigation measures, the City of Bell assumes that the impacts to the intersections identified ... will remain **significant and unavoidable**." The significant and unavoidable determination is recognition on the part of the City of Bell that some or all of the proposed mitigation may be infeasible, or not permitted by the other agencies.

- 2-35 The commenter notes that the review letter from the City of Commerce was based on the EIR section and not the detailed Appendix 3.12 that accompanied the EIR.

This comment expresses an opinion but does not affect the environmental analysis contained in the Draft EIR.

- 2-36 The commenter expresses an opinion regarding the alternatives selected for the project but does not raise an environmental issue or concern that affects the analysis provided in the Draft EIR.
- 2-37 The commenter does not believe that the No Project alternative meets the CEQA definition of "no project."

Section 15126.6 of the CEQA Guidelines states, "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. *If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed*" [emphasis added]. The proximity of the project site to local freeways, the existing industrial General Plan designation, and the surrounding similar development in the City of Commerce would likely result in a similar project being proposed if this project is not approved. It is very unlikely that the project site would remain vacant underutilized industrial land (see discussion on pages 4.0-2 to 4.0-3 of the Draft EIR). As a result, the City analyzed a No Project alternative that allowed for a different development scenario consistent with the General Plan and zoning for the sites. As stated on page 4.0-3 of the Draft EIR, the goal of this alternative is to meet the basic objectives of providing opportunity for financially viable warehouse businesses, while also providing transitional housing options and services for individuals in need.

- 2-38 The commenter expresses an unsubstantiated opinion regarding the truck movement associated with Alternative 2, but does not raise an environmental issue or concern that affects the analysis provided in the Draft EIR. Please also see Response 2-4 that addresses the same issue.
- 2-39 The commenter is unclear as to the rationale for the selection of Alternative 3.

The rationale for the alternative is discussed beginning on page 4.0-3 of the Draft EIR, as follows:

*The City of Bell Zoning Ordinance zones the site Commercial Manufacturing (CM), which is intended to provide for the development of heavy commercial-manufacturing areas. The buildings proposed with the project could contain any of the permitted uses listed in Section 17.36.020 of the Bell Municipal Code. The zone district also allows any of the permitted uses in the C-3, Heavy Commercial District. Uses in the C-3 district are commercial or service in nature (e.g., banks, barbershops, dental laboratories, photographic shops, machinery and tool sales, retail sales, variety stores). This alternative is therefore analyzed for comparative purposes to see how the impacts from the proposed project might be changed were there to be a different mix of allowed uses on the subject parcels.*

As stated in the analysis on page 4.0-8, the alternative would have a different mix of traffic with fewer large trucks and more passenger cars. With fewer large trucks, Alternative 3 would result in slightly better air quality and greenhouse gas impacts than the proposed project. As these impacts were considered significant and unavoidable in the Draft EIR, the City wanted to determine if a different land use mix would result in

## **2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR**

---

substantially less impact. As stated on page 4.0-11, since the impacts are slightly lower, this alternative is identified as the environmentally superior alternative.

- 2-40 The commenter states that more alternatives that provide additional access might be helpful in mitigating potential traffic impacts.

See response 2-24.

## Letter 3



Joe Perez

City of Bell

323 588 6211 x296

6330 Pine Avenue

Bell, CA 90201

jperez@cityofbell.org

Re: Bell Business Center Project

(State Clearing House No: 2013041025)

Dear Mr. Perez:

The undersigned represents Citizens Advocating Rational Development ("CARD"), a non-profit corporation dedicated to issues in development and growth.

This letter contains comments on the Draft Environmental Impact Report on the Bell Business Center Project, in accordance with CEQA and the Notice of Completion and Availability. Please ensure that these comments are made a part of the public record.

### ENERGY

The DEIR does not discuss any requirements that the Project adopt energy saving techniques and fixtures, nor is there any discussion of potential solar energy facilities, which could be located on the roofs of the Project. Under current building standards and codes which all jurisdictions have been advised to adopt, discussions of these energy uses are critical, the four buildings proposed for

3-1



### Letter 3 Continued

development could result in 840,390 sf of new industrial and ancillary office space will devour copious quantities of electrical energy, as well as other forms of energy.

**3-1  
cont.**

#### WATER SUPPLY

The EIR ( or DEIR – the terms are used interchangeably herein) does not adequately address the issue of water supply, which in California, is a historical environmental problem of major proportions.

What the DEIR fails to do is:

- |  |             |
|--|-------------|
| 1. Make reference to any urban water management plan;  | <b>3-2</b>  |
| 2. Document wholesale water supplies;  | <b>3-3</b>  |
| 3. Document Project demand;  | <b>3-4</b>  |
| 4. Determine reasonably foreseeable development scenarios, both near-term and long-term;   | <b>3-5</b>  |
| 5. Determine the water demands necessary to serve both near-term and long-term development and project build-out (which would have to examine likely development within the totality of the EBMUD service area); | <b>3-6</b>  |
| 6. Identify likely near-term and long-term water supply sources and, if necessary, alternative sources;  | <b>3-7</b>  |
| 7. Identify the likely yields of future water from the identified sources;   | <b>3-8</b>  |
| 8. Determine cumulative demands on the water supply system;  | <b>3-9</b>  |
| 9. Compare both near-term and long-term demand to near-term and long-term supply options, to determine water supply sufficiency;   | <b>3-10</b> |
| 10. Identify the environmental impacts of developing future sources of water; and  | <b>3-11</b> |
| 11. Identify mitigation measures for any significant environmental impacts of developing future water supplies.  | <b>3-12</b> |

There is virtually no information in the DEIR which permits the reader to draw reasonable conclusions regarding the impact of the Project on water supply, either existing or in the future.

For the foregoing reasons, this EIR is fatally flawed.

## Letter 3 Continued

### AIR QUALITY/GREENHOUSE EMISSIONS/CLIMATE CHANGE

The EIR lacks sufficient data to either establish the extent of the problem which local emissions contribute to deteriorating air quality, greenhouse emissions or the closely related problem of global warming and climate change, despite the fact that these issues are at the forefront of scientific review due to the catastrophic effects they will have on human life, agriculture, industry, sea level risings, and the many other serious consequences of global warming.

This portion of the EIR fails for the following reasons:

- |   |      |
|---|------|
| 1. The DEIR does not provide any support or evidence that the Guidelines utilized in the analysis are in fact supported by substantial evidence. References to the work of others is inadequate unless the document explains in sufficient detail the manner and methodology utilized by others.  | 3-13 |
| 2. Climate change is known to affect rainfall and snow pack, which in turn can have substantial effects on river flows and ground water recharge. The impact thereof on the project's projected source of water is not discussed in an acceptable manner. Instead of giving greenhouse emissions and global warming issues the short shrift that it does, the EIR needs to include a comprehensive discussion of possible impacts of the emissions from this project. | 3-14 |
| 3. Climate change is known to affect the frequency and or severity of air quality problems, which is not discussed adequately.  | 3-15 |
| 4. The cumulative effect of this project taken with other projects in the same geographical area on water supply, air quality and climate change is virtually missing from the document and the EIR is totally deficient in this regard.  | 3-16 |

For the foregoing reasons, the EIR is fatally flawed.

### ALTERNATIVE ANALYSIS

The alternative analysis fails in that the entire alternatives-to-the-project section provides no discussion of the effects of the project, or the absence of the project, on surrounding land uses, and the likely increase in development that will accompany the completion of the project, nor does it discuss the deleterious effects of failing to update the Bell Business Center Project upon those same surrounding properties and the land uses which may have occurred thereon.

3-17

Thank you for the opportunity to address these factors as they pertain to the referenced DEIR.

## **Letter 3 Continued**

Very truly yours,

CITIZENS ADVOCATING RATIONAL DEVELOPMENT

NICK R. Green

President

**Letter 3      Nick R. Green, Citizens Advocating Rational Development (CARD)****Responses**

- 3-1      The commenter is concerned about the energy demand of the project and that there are no energy-saving techniques required such as solar energy facilities.

This statement is not accurate, as there are in fact numerous energy-saving measures that are required of the project, as detailed in mitigation measure MM 3.4.1a on page 3.4-18:

*Applicants of development projects located within the Bell Business Center shall implement the following measures to reduce long-term emissions of greenhouse gases associated with the proposed project:*

- 1. Indoor water conservation measures shall be incorporated, such as use of low-flow toilets and faucets (bathrooms).*
- 2. The proposed project shall be designed to exceed state energy efficiency standards by 15 percent (to Tier 1 Title 24 Standards)<sup>1</sup> as directed by Appendix A5 of the 2010 California Green Building Standards (CBSC 2011). This measure helps to reduce emissions associated with building energy consumption.*
- 3. The project will be required to install Energy Star appliances in all buildings. The types of Energy Star appliances that will be installed include fans and refrigerators.*
- 4. All loading docks shall be designed to accommodate SmartWay trucks<sup>2</sup>.*
- 5. The project shall be required, prior to building permit issuance, to install rooftop solar panels or solar-panel-ready rooftops to allow for easy, cost-effective installation of solar energy systems in the future, using such solar-ready features as:*
  - Designing the building to include optimal roof orientation (between 20 to 55 degrees from the horizontal), with sufficient south-sloped roof surface.*
  - Providing clear access without obstructions (chimneys, heating and plumbing vents, etc.) on the south-sloped roof.*
  - Designing the roof framing to support the addition of solar panels.*
  - Installing electrical conduit to accept solar electric system wiring.*

---

<sup>1</sup> The developer/successor in interest will be required to demonstrate that energy consumption is at least 15 percent more efficient than that required by the state standards.

<sup>2</sup> For example, the aerodynamic equipment for trailers may include use of "boat tails" that attach to the end of the trailer and may potentially be incompatible with loading bays designed with certain dock shelters. (<http://www.epa.gov/smartway/technology/designated-tractors-trailers.htm>).

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

Drought-tolerant landscaping will also be required.

Additionally, as part of the proposed project's development agreement, the buildings, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. Developed by the U.S. Green Building Council (USGBC), the Leadership in Energy and Environmental Design (LEED) rating system is based on buildings incorporating energy efficiency benchmarks. The Gold rating is the second highest rating behind Platinum and is a higher rating than Silver or Certified. The City requires third-party verification that the proposed project was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Because LEED certification is a private rather than public agency governed process, the development agreement also specifies that LEED Gold "or equivalent" is acceptable. In either instance, the City will require third-party verification of the energy savings and other design features associated with the project. There are currently only 22 LEED Gold certified industrial (warehouse/logistics) buildings in California. The proposed project is projected to be 40 percent more energy efficient compared to an ASHRAE 90.1 baseline warehouse industrial building of similar square footage (Duke Graham, PE, LEED AP, Gaia Development).

- 3-2 The commenter claims that the EIR fails to reference any urban water management plan.

In fact, the applicable urban water management plan *2010 Urban Water Management Plan* (Cal Water 2011) is discussed in great detail in Section 3.11, Public Services and Utilities. Pages 3.11-11 through -20 include a description and contents of the plan, along with detailed information about the water provider (Cal Water), the projected near-term, long-term, and cumulative water demand of the proposed project, the sources of water available to the proposed project, and the availability and adequacy of both near-term and long-term water supplies.

- 3-3 The commenter claims that the EIR fails to document wholesale water supplies.

See response 3-2 above.

- 3-4 The commenter claims that the EIR fails to document project demand.

See response 3-2 above.

- 3-5 The commenter claims that the EIR fails to determine near-term and long-term development scenarios.

See response 3-2 above. As discussed on page 3.11-19, water demand projections were generated for the entire East Los Angeles District service area for the years 2015, 2020, and 2040, based on population projections and water demand rates. The East Los Angeles District has sufficient sources of water to meet the needs through at least the year 2040 during both normal and drought conditions (Impact 3.11.4.3 on p. 3.11-19).

- 3-6 The commenter claims that the EIR fails to determine water demands necessary to serve near-term and long-term development and references the need to examine development "within the totality of the EBMUD service area."

See response 3-2 above. Additionally, located in Oakland California, the East Bay Municipal Utility District (EBMUD) has no relevance to this project which is located in Los Angeles County.

- 3-7 The commenter claims that the EIR fails to identify near-term and long-term water supply sources and alternative sources.

See response 3-2 above. As discussed on pages 3.11-12 to 3.11-13, and 3.11-19 to 3.11-20, near-term and long-term water supply comes from both groundwater and imported sources. In addition there is a groundwater banking system in place to ensure reliable sources during drought years.

- 3-8 The commenter claims that the EIR fails to identify the likely yields of future water from the identified sources.

See response 3-2 above.

- 3-9 The commenter claims that the EIR fails to determine cumulative demands on the water supply system.

See response 3-2 above. Additionally, cumulative impacts to water supply are detailed on pages 3.11-19 and -20 of the Draft EIR.

- 3-10 The commenter claims that the EIR fails to compare near-term and long-term demand to near-term and long-term water supply.

See responses 3-2, 3-5, and 3-7 above.

- 3-11 The commenter claims that the EIR fails to identify the environmental impacts of developing future sources of water.

See response 3-2 above. No additional sources of water were identified as being necessary to serve the proposed project, and thus no impact analysis of developing such sources was conducted.

- 3-12 The commenter claims that the EIR fails to identify mitigation measures for impacts of developing future water supplies.

See responses 3-2 and 3-11 above.

- 3-13 The commenter states that the Draft EIR does not provide support or evidence that the "Guidelines" used in the analysis are supported by substantial evidence.

The City is not clear what "Guidelines" the commenter is referring to with regard to the climate change and greenhouse gas analysis contained in Section 3.4 of the DEIR. The regulatory environment and guidance from various state agencies are detailed on pages 3.4-5 through -14, and the specific thresholds and methodologies used in the analysis and the rationale for using them is also included in detail on pages 3.4-15 through -16. Contrary to the assertion in the comment, the EIR does not merely reference the work of others, but in fact undertakes a thorough quantitative analysis of the proposed project based on established methodologies approved by the overseeing

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

regulatory agencies such as the South Coast Air Quality Management District. Appendix 3.4 also includes all supporting calculations and assumptions used in the analysis.

- 3-14 The commenter states that the Draft EIR does not include a comprehensive discussion of possible emissions from this project.

Contrary to the assertion in the comment, the EIR does not give "short shrift" to the topic of climate change but in fact includes a thorough discussion of the effects of climate change (pages 3.4-4 through 5). Section 3.4 in total includes over 20 pages of discussion, research summary, applicable regulations, quantification of greenhouse gas emissions, analysis, and findings. Appendix 3.4 also includes 15 pages of supporting calculations and model runs. While the emissions are clearly identified and the resulting effects of global GHG emissions are discussed on pages 3.4-4 and 3.4-5, the incremental effect of the project's emissions on macro-level processes such as rainfall and snow pack dynamics cannot be quantified. Attempting to draw a direct link between the project's GHG emissions and changes in climate would be speculative at best.

- 3-15 The commenter asserts that the EIR does not contain adequate discussion of the effects of climate change on the frequency and severity of air quality problems.

However, no supporting data, references, or sources are provided to explain what specific problems are of concern, nor is any explanation of why the analysis is inadequate and what would constitute adequacy. In fact, the EIR discusses numerous effects of climate change on the environment and references the increased occurrence of cardiovascular and respiratory diseases and other chronic conditions and concludes that the proposed project would have a significant effect with regard to climate change. Air quality impacts are also thoroughly analyzed in Section 3.1 of the EIR and numerous mitigation measures are required of the project to reduce air quality impacts. Mitigation measure MM 3.1.3a (see pages 3.1-15 and 3.1-16 of the Draft EIR) requires that the developer/successor-in-interest provide building occupants with information related to the SCAQMD's Carl Moyer Program or other such programs that promote truck retrofits or clean vehicles and information including, but not limited to, the health effects of diesel particulate matter, the benefits of reduced idling time, CARB regulations, and the importance of not parking in residential areas. Mitigation measure 3.1.3b requires signage reminding drivers and operators that it is unlawful to keep trucks idling longer than 5 minutes. Mitigation measure 3.1.3c requires electrical hookups be provided at loading docks so that trucks with transport refrigeration units and electrical standby capabilities can plug in and turn off their engines. Additional energy saving and climate change reduction measures are described in Response 3-1 above.

- 3-16 The commenter claims that the EIR is deficient because it does not include a cumulative effect analysis of water supply, air quality, and climate change.

This claim is untrue, as the EIR in fact includes thorough cumulative impact analyses of all environmental topic areas, including water supply (pages 3.11-19 through -20), air quality (pages 3.1-24 through -25), and climate change (pages 3.4-15 through -22).

- 3-17 The commenter states that the alternatives analysis is inadequate because it provides no discussion of the project, or the absence of the project, on surrounding land uses, and the likely increase in development that will accompany the project or adverse effects of failing to "update" the project on surrounding uses.

The comment provided is a bit unclear and does not point to any specifics, however it seems the commenter is alluding to the No Project alternative and comparative effects on the surrounding environment with and without the project. Section 15126.6 of the CEQA Guidelines states, "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed" [emphasis added]. The proximity of the project site to local freeways, the existing industrial General Plan designation, and the surrounding similar development in the City of Commerce would likely result in a similar project being proposed if this project is not approved. It is very unlikely that the project site would remain vacant underutilized industrial land (see discussion on pages 4.0-2 to 4.0-3 of the Draft EIR). As a result, the City analyzed a No Project alternative that allowed for a different development scenario consistent with the General Plan and zoning for the sites. As stated on page 4.0-3 of the Draft EIR, the goal of this alternative is to meet the basic objectives of providing opportunity for financially viable warehouse businesses, while also providing transitional housing options and services for individuals in need. Analysis of the No Project Alternative, as discussed on pages 4.0-4 to 4.0-6 of the Draft EIR, concluded that it would result in similar or lesser impacts when compared to the proposed project. A summary comparison table of the alternatives is also included in the alternatives chapter as Table 4.0-1.



## Letter 4



*Fighting for Life*

East Yard Communities for Environmental Justice - 2317 Atlantic Blvd. Commerce, CA.90040

July 5, 2013

Joe Perez  
Community Development Director  
City of Bell  
6330 Pine Avenue,  
Bell, California 90201

**Re: Bell Business Center Project Comments**

Dear Mr. Joe Perez:

On behalf of East Yard Communities for Environmental Justice, we submit these comments on the Bell Business Center Project. East Yard Communities for Environmental Justice is a community-based organization working to promote a healthy and safe environment in the communities of Commerce, East Los Angeles and Long Beach, where families are disproportionately impacted by the negative health impacts of industrial pollution. As local stakeholders, we have concerns and suggestions about the proposed Bell Business Center Project.

The Bell Business Center Project includes eight existing Los Angeles County Assessor's parcels (or four building sites) in the City of Bell Annex property. The proposed project calls for an improvement of public utilities, including water, wastewater, storm drainage, and power. While no buildings are proposed as part of the current Draft Environmental Impact Review (DEIR) for the Bell Business Center, the project includes site plans and potential building footprint for all four sites. The DEIR points to several potential environmental impacts from the project's implementation and site operations that we believe are not adequately mitigated or avoided.

In particular, the impacts on air quality, greenhouse gases, noise and transportation from the proposed project implementation are concerning and should be better mitigated and avoided (when possible). The proposed project sites are located near the cities of Maywood, Commerce and Bell Gardens, areas that are already overburdened with air pollution from industrial and goods movement activities. At least three schools (Maywood Elementary, Bandini Elementary and Bell Gardens High School) are located within a five-mile radius of the proposed sites. The expected truck traffic generated from the proposed Bell Business Center will exceed applicable significance thresholds and could contribute to regional nonattainment conditions for air quality as well as conflict with the implementation of the 2012 Air Quality Management Plan. According to the DEIR, Impact 3.1.3 and Impact 3.1.1 are categorized as "Significant and Unavoidable." For Impact 3.1.3, the Mitigation Measures 3.1.3a, 3.1.3b and 3.1.3c do not comprehensively ensure that the best available technology (i.e. clean fuel heavy-duty trucks) is enforced within the operations of the Bell Business Center. Additionally, there ongoing implementation and enforcement by the City of Bell Planning Department does not list any legal accountability that fully secures that only the cleanest available technology is used in the project sites.

4-1

We also find that the Lead Agency's exclusion of AQMD's CalEEMod's<sup>1</sup> guide in the assumptions of trip generation and truck traffic volume percentage leaves the DEIR with significant flaws in the expected impacts from added truck traffic to the local area.

4-2

P.323-263-2113 F.323-263-2114 - WWW.EYCEJ.ORG

1

## Letter 4 Continued



*Fighting for Life*

East Yard Communities for Environmental Justice - 2317 Atlantic Blvd. Commerce, CA.90040

In order to ensure a real reduction of anticipated air quality impacts due to increased truck traffic, EYCEJ recommends the following: truck routes should be established far away from nearby sensitive receptors (schools, parks, housing shelters, child care facilities, and residential areas) as possible; truck retrofits and clean vehicle standards should be fully enforced and secured with real percentages tied to fleets and attainment fees to future property owner/ site operator; building sites and accompanying public utility improvement should be constructed with the cleanest available construction equipment and vehicles in a similar fashion as METRO's Clean Construction policy for upcoming transportation projects.<sup>8</sup> The Leading Agency (City of Bell) should also enforce that a significant percentage of the construction materials be environmentally efficient. Additional construction-phase practices and safeguards should be implemented so as to reduce transportation-access and air pollution impacts as much as possible, as recommended by the Coalition for Environmental Health and Justice (CEHAJ) in their comment letter to Caltrans for the I-710 Freeway Expansion Project DEIR.<sup>10</sup>

4-2  
cont.

4-3

The Leading Agency should also guarantee that future buildings on sites be equipped with air filtration systems so that warehouse workers' exposure to truck pollution is effectively reduced. The use of plants and landscaping surrounding the sites should also be encouraged to help mitigate anticipated particulate matter emissions.

4-4

In order to ensure that the anticipated negative impacts from the proposed project are further mitigated, the Leading Agency should safeguard an agreement with future developers of the sites that guarantee a significant percentage of full-time employees, instead of relying solely on temporary agencies as sources for labor. The Leading Agency should aim to mirror the workforce development and local-hire elements outlined in the City of Oakland's recent agreement with the developers of the old Army Base development.<sup>11</sup> Securing workforce development and job creation (similar to the City of Oakland) is an important step to ensure that the local residential areas are not simply further exposed to air and noise pollution without any economic or employment benefits.

4-5

Furthermore, the DEIR fails to identify the Sleepy Lagoon<sup>12</sup> as a significant historical and cultural resource that will be impacted by the project. EYCEJ recommends that the developers of the sites be strongly encouraged to establish a public art or historical monument that illustrates the historical and cultural significance of the Sleepy Lagoon in the local area. The public art monument and/or historical monument should focus not simply on the incident and trail that followed suit, but also recognize the geographical space as a historical meeting and recreational space for the Mexican-American population in the local area.

4-6

Finally, EYCEJ finds that the intent of the City of Bell to "approve individual entitlements for each of the four building sites and to consider the environmental impacts of the entire project in a single EIR" is problematic due to the inability to accurately assume the capacity and pollution levels of four potential sites as they are currently packaged.

4-7

It is important that all necessary safeguards are put in place prior to the development of the proposed sites, so that the City of Bell can bring economic viability to their city without excluding the local labor force from employment opportunities and good air quality. The environmental documents we reviewed do not comprehensively address the potential impacts and the proposed means for mitigation. We look forward to working with the City of Bell to help improve the environmental review and thus help to ensure that a better environment, economy and employment opportunities are present in this project implementation.

4-8

## Letter 4 Continued



*Fighting for Life*

---

East Yard Communities for Environmental Justice - 2317 Atlantic Blvd. Commerce, CA.90040

Please do not hesitate to contact Angelo Logan or myself at (323) 263-2113 or [alogan@eycej.org](mailto:alogan@eycej.org) or [iramirez@eycej.org](mailto:iramirez@eycej.org) if you would like to set up a meeting to more fully discuss the matters mentioned here.

Sincerely,

Isela Ramirez  
East Yard Communities for Environmental Justice

---

<sup>i</sup> AQMD, California Emission Estimator Model (CalEEMod). 2011. Link:

<http://www.aqmd.gov/calEEMod/doc/UsersGuide.pdf>

<sup>ii</sup> Metro, Clean Construction Policy, 2012. Link:

[http://media.metro.net/projects\\_studies/sustainability/images/Green\\_Construction\\_Policy.pdf](http://media.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf)

<sup>iii</sup> CEHAJ, Comment Letter & Documents for I-710 FWY Expansion Project, 2012. Link:

[http://docs.nrdc.org/smartGrowth/files/sma\\_12100301a.pdf](http://docs.nrdc.org/smartGrowth/files/sma_12100301a.pdf)

<sup>iv</sup> O'Hara, Kate, "Victory for Oakland: Army Base resolution supports good jobs." *Oakland Local*.

February 11, 2013. Link: <http://archive.oaklandlocal.com/posts/2012/02/victory-oakland-army-base-resolution-supports-good-jobs-community-voices>

<sup>v</sup> Sleepy Lagoon context: <http://research.pomona.edu/zootsuit/en/trial/>

### Letter 4      Isella Ramirez, East Yard Communities for Environmental Justice

4-1      Commenter has several concerns about the impacts on air quality, greenhouse gases, noise and transportation from the proposed project.

- a.      The commenter states that the mitigation measures do not ensure that the best available technology (i.e. clean fuel heavy-duty trucks) is enforced within the operations of the Bell Business Center.

Mitigation measures **MM 3.1.3b** and **MM 3.1.3c** are physical project modifications that can be inspected prior to occupancy of the buildings. The City Building Official and Planning Director will ensure that these features are shown on the building permit and site plans, and will require them to be installed prior to allowing occupancy and use of the buildings.

Numerous other conservation measures are required of the project, as detailed in mitigation measure **MM 3.4.1a** on page 3.4-18:

*Applicants of development projects located within the Bell Business Center shall implement the following measures to reduce long-term emissions of greenhouse gases associated with the proposed project:*

1. *Indoor water conservation measures shall be incorporated, such as use of low-flow toilets and faucets (bathrooms).*
2. *The proposed project shall be designed to exceed state energy efficiency standards by 15 percent (to Tier 1 Title 24 Standards) as directed by Appendix A5 of the 2010 California Green Building Standards (CBSC 2011). This measure helps to reduce emissions associated with energy consumption.*
3. *The project will be required to install Energy Star appliances in all buildings. The types of Energy Star appliances that will be installed include fans and refrigerators.*
4. *All loading docks shall be designed to accommodate SmartWay trucks.*
5. *The project shall be required, prior to building permit issuance, to install rooftop solar panels or solar-panel-ready rooftops to allow for easy, cost-effective installation of solar energy systems in the future, using such solar-ready features as:*
  - *Designing the building to include optimal roof orientation (between 20 to 55 degrees from the horizontal), with sufficient south-sloped roof surface.*
  - *Providing clear access without obstructions (chimneys, heating and plumbing vents, etc.) on the south-sloped roof.*
  - *Designing the roof framing to support the addition of solar panels.*
  - *Installing electrical conduit to accept solar electric system wiring.*

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

The SmartWay program is a public/private collaboration between the EPA and the freight transportation industry that helps freight shippers, carriers, and logistics companies improve fuel efficiency and save money (<http://www.epa.gov/smartway/index.htm>). SmartWay trucks are long-haul trucks fitted with components designed to result in significantly lower emissions and fuel consumption verified through testing. EPA and leaders in the freight equipment-manufacturing industry worked together to develop these performance specifications. Generally the specifications include aerodynamics, idle restrictions, and low rolling resistance tires. When manufacturers equip long-haul tractors and trailers with these specifications, they are designated and labeled as "USEPA Designated SmartWay." The USEPA Designated SmartWay label may be used at point of sale and applied to the interior of the tractors and trailers by the equipment manufacturers. Currently, SmartWay designation specifications have only been established for long-haul tractor models and 53-foot dry van trailers.

In addition, mitigation measure MM 3.1.3c on page 3.1-16 of the Draft EIR requires that the loading docks have electrical connections that allow trailers to connect to building power in order to avoid having to operate trailer-mounted refrigeration units.

Further, as part of the proposed project's development agreement, the project, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. Developed by the US Green Building Council (USGBC), the Leadership in Energy and Environmental Design (LEED) rating system is based on buildings incorporating energy efficiency benchmarks. The Gold rating is the highest rating behind Platinum and is a higher rating than Silver or Certified. The City will require third-party verification that the proposed project was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

- b. The commenter also states that there is no legal accountability ensuring that the cleanest available technology is used in the project sites.

Mitigation measures **MM 3.1.3b** and **MM 3.1.3c** are physical project modifications that can be inspected prior to occupancy of the buildings. The City will require third-party verification of the development meeting LEED Gold (or equivalent) status. The features contained in the mitigation measures must be in place and operational prior to the City allowing occupancy of the structure. Further, the City has provisions of the Development Agreement that ensure compliance with the conditions of approval.

- 4-2 The commenter expressed concerns regarding the method used to project traffic impacts and suggests measures for ameliorating or eliminating the impacts.

- a. The commenter states that the exclusion of CalEEMod defaults in terms of trip generation and truck traffic volumes is inappropriate.

Traffic data relating to the proposed project was provided by RBF Consulting, a transportation engineering firm. Technical data used for analysis is included as Appendix 3.12 in the Draft EIR. To calculate trips forecast to be generated by the proposed project, Institute of Transportation Engineers (ITE) trip generation rates were utilized by RBF Consulting. The ITE is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research,

planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. The default settings are generically based on land uses in the South Coast Air Basin, by using project-specific traffic data, the air quality impacts predicted by the model are more accurate. Further, the operation manual for Per the CalEEMod User's Guide (July 2013) states "*CalEEMod was designed to allow for ease in changing default assumptions. Site-specific information that is supported with substantial evidence required by CEQA, is preferred when it is available.*" Therefore, employment of traffic data from RBF Consulting is more appropriate to the proposed project than modeling software defaults.

- b. The commenter further states that truck traffic should be routed away from sensitive land uses and recommends truck retrofit mitigation.

As stated on page 3.12-2 of the Draft EIR, access to the project site is provided from I-710 and its interchange with Atlantic Boulevard. From Atlantic Boulevard, primary access is provided via Bandini Boulevard to Eastern Avenue and finally to Rickenbacker Road. Currently, the existing use on Parcel A gains its only access via Mansfield Way and K Street. While all of the surrounding uses are designated for industrial development as shown on Figure 3.8-2 of the Draft EIR, there are existing sensitive uses located along K Street as shown on Figure 3.8-1 and described on page 3.9-1 of the Draft EIR. The proposed project will ultimately eliminate truck traffic associated with Parcel A from K Street, moving the drive access to Rickenbacker Road. There are no alternate routes that would avoid truck travel along Rickenbacker Road adjacent to the Los Angeles Unified School District Adult Center. The air quality impacts to the Adult Center are discussed in Section 3.1 of the Draft EIR. Figure 3.12-2 of the Draft EIR shows the assumed distribution of traffic leaving Rickenbacker Road, with 80 percent traveling north and then east along Bandini Boulevard or continuing north on Easter Avenue to gain access to regional highways. The primary route is assumed to be Rickenbacker Road to Eastern Avenue then Bandini Boulevard to I-710. Once past the Adult Center, this route is devoid of residential land uses, or schools.

- c. The commenter further states recommends truck retrofit mitigation and clean vehicle standards be required of future property owners or site operators.

Concerning truck emission mitigation, mitigation measure MM 3.1.3c (see pages 3.1-15 and 3.1-16 of the Draft EIR) requires that the developer/successor-in-interest provide building occupants with information related to the SCAQMD's Carl Moyer Program or other such programs that promote truck retrofits or clean vehicles and provide information including, but not limited to, the health effects of diesel particulate matter, the benefits of reduced idling time, CARB regulations, and the importance of not parking in residential areas. See also 4-1 a. above regarding building modifications.

- d. The commenter suggests use of construction phase practices to minimize or eliminate transportation and air quality impacts and specifically refers to measures recommended by the Coalition for Environmental Health and Justice (CEHAJ) contained in their comment letter to Caltrans in response to the I-710 Freeway Expansion Project DEIR.

The City accessed the CEHAJ letter referenced by the commenter, but could not readily identify any such construction phase practices related to transportation and air quality impacts. The referenced document is 832 pages and indicates an air quality study/response in the Table of Contents as Attachment C. No measures were readily

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

identifiable in review of the 75 page Attachment C either. The commenter is encouraged to provide the City with actual measures for review or direct the City to a specific page number(s) in the CEHAJ letter to allow for review of such measures. As documented on page 3.1-14 of the Draft EIR (see Table 3.1-16), the proposed project would not result in significant construction phase air quality impacts, and thus no mitigation measures are proposed. However, as noted in response 4-1 a. above, the building will have numerous provisions that will reduce air quality and GHG impacts of the building itself. The project will be required by the City to achieve LEED Gold (or equivalent) status. The LEED process includes construction materials standards.

- e. The commenter states that the City of Bell should require a significant percentage of the construction materials be environmental efficient.

As part of the proposed project's development agreement, the project, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. Developed by the U.S. Green Building Council (USGBC), the Leadership in Energy and Environmental Design (LEED) rating system is based on buildings incorporating energy efficiency benchmarks. The Gold rating is the second highest rating behind Platinum and is a higher rating than Silver or Certified. The City requires third-party verification that the proposed project was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

- f. The commenter also references the Coalition for Environmental Health and Justice (CEHAJ) comment letter to Caltrans but does not indicate which of the 832 pages or comments pertain to the proposed project.

- 4-3 The commenter requests that the future buildings be equipped with air filtration and that landscaping be encouraged to help mitigate anticipated particulate matter emissions.

As discussed in response 4-2d above, the LEED Gold designation (or equivalent) requires building design, site planning and landscape design incorporate strategies for environmental health and indoor environmental quality.

- 4-4 The commenter states the City should put an agreement in place to guarantee that a significant percentage of employees at the project are full-time positions and local hires in order to further mitigate for the other adverse impacts of the proposed project.

Hiring and employment agreements fall outside of the scope of environmental analysis under CEQA however the opinion has been included in this Final EIR for consideration by the City before taking action on the proposed project.

- 4-5 The commenter requests that the Sleepy Lagoon historic site be identified as a significant historical resource and that the developers be encouraged to install an historical monument and/or public art component that recognizes the historicity of the Sleepy Lagoon events and geographical space.

The City of Bell will require that such a historical monument and/or art component be included in the development by including such a requirement in the development agreement. The City will work with the developer, EYCEJ, and others with historical expertise in the Sleepy Lagoon events to determine the proper scope, size, and placement of the historical/art component.

- 4-6 The commenter suggests that the consideration of all four entitlements in a single EIR is problematic due to the inability to accurately assume the capacity and pollution levels of the four sites.

Table 2.0-1 on page 2.0-2 of the Draft EIR establishes assumed building square footage and land uses for the proposed project. These assumptions were used to develop the traffic analysis which analyzed the project. The results of the traffic analysis were used to develop the air quality, greenhouse gas and noise analysis of the Draft EIR.

While the Draft EIR provides several building design studies (see Figure 2.0-3 through Figure 2.0-6 of the Draft EIR) the City used the largest total building area in providing the analysis. Each of the four sites will require a building permit and must comply with the mitigation measures contained in this Draft EIR. Further, each project design must be consistent with the Development Agreement and standard conditions of approval. The City Community Development Department is responsible for ensuring that all mitigation measures and conditions of approval are met. The City regularly hires technical staff to assist City staff in meeting building and construction requirements.

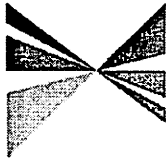
- 4-8 This is a summary statement. No specific new environmental issues are raised; however concerns about use of local labor force and air quality issues are reiterated

Issues related to the proposed project's labor force are addressed in response 4-5, while issues related to air quality are addressed in response 4-1.



## Letter 5

SOUTHERN CALIFORNIA



**ASSOCIATION of  
GOVERNMENTS**

**Main Office**

818 West Seventh Street  
12th Floor  
Los Angeles, California  
90017-3435

t (213) 236-1800  
f (213) 236-1825

[www.scag.ca.gov](http://www.scag.ca.gov)

**Officers**

President  
Glen Becerra, Simi Valley

First Vice President  
Greg Pettis, Cathedral City

Second Vice President  
Carl Morehouse, San Buenaventura  
Immediate Past President  
Pam O'Connor, Santa Monica

**Executive/Administration  
Committee Chair**

Glen Becerra, Simi Valley

**Policy Committee Chairs**

Community, Economic and  
Human Development  
Paula Lantz, Pomona

Energy & Environment  
Cheryl Viegas-Walker, El Centro

Transportation  
Keith Millhouse, Ventura County  
Transportation Commission

July 5, 2013

Mr. Joe Perez  
Community Development Director  
City of Bell Planning Department  
6330 Pine Avenue  
Bell, CA 90201  
[jperez@cityofbell.org](mailto:jperez@cityofbell.org)

**RE: Comments on the Draft Environmental Impact Report for the Bell Business Center Project [SCAG No. I20130132]**

Dear Mr. Perez:

Thank you for submitting the Draft Environmental Impact Report for the Bell Business Center Project to the Southern California Association of Governments (SCAG) for review and comment. Based on SCAG staff's review, the proposed project supports certain goals of the 2012-2035 RTP/SCS by developing light industrial/warehouse uses along a major regional goods movement corridor, and includes measures to help mitigate potential impacts. SCAG staff comments are detailed in the attachment to this letter.

When available, please send a copy of the Final Environmental Impact Report to the attention of Pamela Lee at SCAG, 818 West 7<sup>th</sup> Street, 12<sup>th</sup> floor, Los Angeles, California, 90017 or by email to [leep@scag.ca.gov](mailto:leep@scag.ca.gov). If you have any questions regarding the attached comments, please contact Pamela Lee at (213) 236-1895 or [leep@scag.ca.gov](mailto:leep@scag.ca.gov). Thank you.

Sincerely,

Jonathan Nadler,  
Manager, Compliance and Performance Assessment

The Regional Council is comprised of 84 elected officials representing 191 cities, six counties, six County Transportation Commissions and a Tribal Government representative within Southern California.

2012.05.07

## Letter 5 Continued

July 5, 2013  
Mr. Perez

SCAG No. I20130132

### SCAG STAFF COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE BELL BUSINESS CENTER PROJECT [SCAG NO. I20130132]

#### SUMMARY

SCAG is the designated Regional Transportation Planning Agency under state law responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the adopted 2012-2035 RTP/SCS. Based on SCAG staff review, the proposed project supports a number of applicable goals of the 2012-2035 RTP/SCS while providing mitigation for identified impacts.

#### 2012-2035 RTP/SCS GOALS

The 2012-20135 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see <http://rtpscs.scag.ca.gov>). The goals included in the 2012 RTP/SCS, listed below, may be pertinent to the proposed project.

2012-2035 RTP/SCS GOALS	
RTP/SCS G1:	<i>Align the plan investments and policies with improving regional economic development and competitiveness</i>
RTP/SCS G2:	<i>Maximize mobility and accessibility for all people and goods in the region</i>
RTP/SCS G3:	<i>Ensure travel safety and reliability for all people and goods in the region</i>
RTP/SCS G4:	<i>Preserve and ensure a sustainable regional transportation system</i>
RTP/SCS G5:	<i>Maximize the productivity of our transportation system</i>
RTP/SCS G6:	<i>Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)</i>
RTP/SCS G7:	<i>Actively encourage and create incentives for energy efficiency, where possible</i>
RTP/SCS G8:	<i>Encourage land use and growth patterns that facilitate transit and non-motorized transportation</i>
RTP/SCS G9:	<i>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies</i>

5-1

#### SCAG Staff Comments

*The proposed project would support the regional economy, improve mobility of goods, and help maximize the productivity of our transportation system by locating approximately 800,000 square feet of warehousing and light industrial space adjacent to a main regional goods movement corridor. As identified in the Draft EIR, the*

5-2

Page 2

## Letter 5 Continued

July 5, 2013  
Mr. Perez

SCAG No. I20130132

proposed project would be expected to result in increased truck traffic and emissions in the project area (DEIR p. 3.1-16). However, by locating immediately adjacent to Interstate 710, within 20 miles of the Ports of Los Angeles and Long Beach, this project would be expected to reduce longer heavy-duty truck trips to outlying warehousing.

SCAG promotes the development of advanced clean fuel infrastructure and use of clean vehicle technology, especially for heavy duty trucks, where feasible and applicable. Further, to accommodate business growth and associated goods movement logistics, SCAG has included a clean technology freight corridor, including along the I-710, in its 2012-2035 RTP/SCS.

To help mitigate potential impacts, the DEIR includes, but is not limited to, the following.

The developer/successor-in-interest shall participate in an interim regional solution for improvements to impacted intersections in consultation with Caltrans and/or Los Angeles County Metropolitan Transportation Authority. The project shall also make a fair share payment to contribute to potential upgrades and improvements. (DEIR 3.12.19)I.

The project promotes "clean" truck fleets and will include electrical hookups at all loading docks in order to allow transport refrigeration units with electric standby capabilities to use them. Trucks incapable of utilizing the electrical hookups shall be prohibited from accessing the site. Idling in excess of 5 minutes shall be prohibited, subject to on-site verification. (DEIR p. 3.1-15) Loading docks will also be designed to accommodate SmartWay trucks. (DEIR 3.4.18)

The project also incorporates advanced design (solar panel-ready roofs, energy efficiency measures, indoor water conservation) to reduce energy use and emissions from stationary sources. (DEIR 3.4.18)

5-2  
cont.

### 2012-2035 RTP/SCS REGIONAL GROWTH FORECASTS

The EIR for the Bell Business Center Project should reflect the most recently adopted SCAG forecasts, which are the 2012-2035 RTP/SCS population, household and employment forecasts (adopted by the SCAG regional Council in April 2012). The forecasts for the region and jurisdiction are below.

Adopted SCAG Region Wide Forecasts			Adopted City of Bell Forecasts		
	Year 2020	Year 2035		Year 2020	Year 2035
Population	19,663,000	22,091,000	Population	35,900	36,400
Households	6,458,000	7,325,000	Households	8,900	9,000
Employment	8,414,000	9,441,000	Employment	9,300	9,700

5-3

### SCAG Staff Comments

Page 3.10-1 indicates that the Draft EIR population and employment analyses were based on the adopted SCAG 2012-2035 RTP/SCS Regional Growth Forecasts. The household analysis in the Final EIR should also be based upon the adopted RTP/SCS growth forecasts.

5-4

### MITIGATION

#### SCAG Staff Comments

The Draft EIR includes appropriate mitigation measures, a couple of which are highlighted above. SCAG staff recommends review of the SCAG 2012-2035 RTP/SCS Final Program EIR List of Mitigation Measures Appendix ([http://scag.ca.gov/igr/pdf/SCAG\\_IGRMMRP\\_2012.pdf](http://scag.ca.gov/igr/pdf/SCAG_IGRMMRP_2012.pdf)) for additional guidance, as appropriate.

5-5

**Letter 5      Jonathan Nadler, Southern California Association of Governments**Responses

- 5-1      The commenter lists goals included in the 2012 RTP/SCS that may be pertinent to the proposed project.

The proposed project would promote economic growth and strengthening of the city's industrial area through capital investment that attracts new light industrial, warehousing, or distribution uses and results in the creation of new jobs, the establishment of new businesses, and the expansion of the city's tax base. This satisfies RTP/SCS Goal G1.

Additionally, the Los Angeles County Metropolitan Transportation Authority (Metro) and six partner agencies (including SCAG) have proposed regional transportation improvements along Interstate 710 as part of the I-710 Corridor Project. The I-710 Corridor Project proposes various improvements between State Route 60 to the north and the Ports of Los Angeles and Long Beach to the south, with the intent of enhancing mobility and safety while reducing congestion. This satisfies RTP/SCS Goals G2 and G3.

The project includes numerous proposed improvements to interchanges and intersections within and surrounding Bell. The I-710 Corridor Project acknowledges existing deficient conditions at the Atlantic Boulevard/Bandini Boulevard intersection and includes substantial roadway and ramp improvements intended to accommodate anticipated growth in cargo and vehicular demand at this location. These proposed improvements would help to facilitate mobility and improve vehicle capacity in the proposed project environs. Thus, the project would satisfy RTP/SCS Goals G2, G3, and G5.

Public transportation in Bell is provided by LA County Metro, which is a transportation planner, designer, builder, and operator serving one of the largest and most populous counties in the nation. Metro operates both bus and rail lines, which start around 4 AM and operates past midnight every day. Bell is served by numerous Rapid and Local Metro lines, and there are eight Metro bus stops within a quarter mile of the project site. In addition, the Commerce Metrolink Station is less than 1.5 miles from the project site. As such, the proposed project site is served by and in proximity to several different local transit options. Therefore, the proposed project satisfies RTP/SCS Goals G4, G6, and G8.

As part of the proposed project's development agreement, the project, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. The City requires third-party verification that the proposed project was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Additionally, mitigation measure MM 3.4.1a (page 3.4-18 of the Draft EIR) outlines requirements of future development projects to reduce long-term greenhouse gas emissions by implementing energy-efficient design features. As such, RTP/SCS Goal G7 is satisfied.

RTP/SCS Goal G9 aims to "maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies." The proposed project would not adversely affect the security of the regional transportation system. The City of Bell consulted with both local and regional transportation agencies in the review and analysis of the project, as well as local agencies and departments tasked with safety and security (i.e., L.A. County Fire and Bell

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

Police). No security issues emerged during this coordination process and the City and its security functions remain available and willing to continue coordination throughout the life of the project should any security issues arise.

As described above, and in concurrence with the commenter, the proposed project implements the goals of the 2012–2035 RTP/SCS.

- 5-2 The commenter summarizes how the proposed project supports the regional economy, improves the mobility of goods, and helps maximize the productivity of the transportation system to meet all the goals identified in comment 5-1.

The City concurs with SCAG's findings.

- 5-3 The commenter notes that the proposed project should reflect the most recently adopted SCAG forecasts (2013–2035 RTP/SCS population, household, and employment) to project growth.

The information contained in the EIR uses these forecasts (Table 3.10-1). The addition of 453 to 542 employees into Bell would not exceed the SCAG estimate of a total of 700 new employees by 2035. As the project is located near Commerce and Maywood, and within a short commute time, it is likely that some of the employees will live in those communities. The total of 453 to 542 employees is less than the projected 4,200 new employee growth estimated by SCAG for the combined communities. The unemployment rates for Bell and Commerce are substantially higher than the national unemployment rates and any increase in employment in this area is seen as beneficial. Workers for the proposed project are expected to be drawn from the local population and thus not result in population or housing growth in the city or the surrounding area.

- 5-4 The commenter notes that the Draft EIR uses SCAG's 2012–2035 RTP/SCS Regional Growth Forecasts (page 3.10-1) to develop analyses for population and employment. The commenter suggests using the 2012–2035 RTP/SCS Regional Growth Forecasts to also develop the household analysis in the Final EIR.

As discussed on page 3.10-4 of the EIR and in response 5-3 above, the proposed project is expected to draw heavily from the local worker pool and not result in relocation of workers such that changes in housing dynamics would occur.

- 5-5 The commenter provides staff comments stating the Draft EIR includes appropriate mitigation measures, some of which were highlighted in the comment letter. Also, the commenter requests that the SCAG 2012–2035 RTP/SCS Final Program EIR List of Mitigation Measures be reviewed for additional guidance, as appropriate.

In developing the mitigation measures for this project, the City has carefully analyzed the list of mitigation measures included in the SCAG 012-2035 RTP/SCS Final Program EIR List of Mitigation Measures. Based on this analysis, the mitigation in the Bell Business Center EIR are most appropriate were drafted to address the specific and unique impacts of the proposed project.

## Letter 6


**South Coast  
Air Quality Management District**

 21865 Copley Drive, Diamond Bar, CA 91765-4178  
 (909) 396-2000 • www.aqmd.gov

E-MAILED: JULY 11, 2013

July 11, 2013

 Mr. Joe Perez, [jperez@cityofbell.org](mailto:jperez@cityofbell.org)  
 Community Development Director  
 Planning Department  
 City of Bell  
 6330 Pine Avenue  
 Bell, CA 90201

**Draft Environmental Impact Report (Draft EIR) for the Proposed Bell Business  
Center Project (SCH No. 2013041025)**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document. We appreciate the lead agency considering these late comments, especially since we did not receive the full technical modeling information until July 9.

The lead agency proposes to construct four buildings totaling 840,390 square feet of building space on eight existing parcels for prospective new industrial/warehouse and associated office space uses on a total of 40.2 acres. The proposed project is planned to operate 24 hours per day, seven days per week. Additional building activities will include other on-site improvements and an extension to Rickenbacker Road for site access. Construction would start in early 2015 and project operations would begin in February 2017.

The SCAQMD staff requests that the vehicle fleet mixture and trip lengths used in the supporting air quality and health effect analyses be more fully explained to support the lead agency's determinations that these impacts are less than significant. In addition, the health risk assessment used a variety of non-standard methods that potentially result in underestimated impacts. Finally, the SCAQMD staff requests that additional mitigation measures be considered in the Final EIR to reduce any significant impacts should the lead agency, after further review, determine that project air quality or health effect impacts exceed the recommended significance thresholds.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The SCAQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

6-1

*Cleaning the air that we breathe*

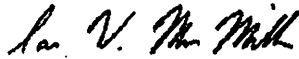
## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

2

July 11, 2013

Sincerely,



Ian MacMillan  
Program Supervisor, Inter-Governmental Review  
Planning, Rule Development & Area Sources

Attachment

IM:GM

LAC130523-02  
Control Number

## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

3

July 11, 2013

### Traffic Assumptions in the Air Quality Analysis

1. The trip generation values may not appropriately reflect a conservative air quality analysis under CEQA. For example, Tables 7 and 8 of Appendix 3.12-7 indicate that with a trip rate of 3.56 trips per 1,000 square feet of building area, a total of 1496 vehicles will visit the project sites each day. In the traffic and air quality analyses, only 20% of the vehicles are anticipated to be trucks. This means that approximately 1200 passenger vehicles will visit these sites each day, however only approximately 570 parking spaces are provided. This limited amount of passenger car parking indicates that the projected amount of passenger vehicle traffic may not actually be anticipated at these facilities. Given the goods movement purpose of this project, and the location of the site adjacent to the I-710 freeway and between the ports and Commerce rail yards, SCAQMD staff recommends that the air quality analysis consider a greater percentage of truck traffic. Consistent with guidance in Appendix E of the CalEEMod User Guide, the analysis should consider at least 40% of vehicles visiting this site should be heavy duty diesel trucks unless restrictions are placed on the project limiting truck traffic.

6-2

2. It is not clear how the total number of daily trips was calculated in Table 6 of Appendix 3.12-7. A footnote to this table indicates that the total daily trips were derived from measured peak hour trips, however the highly specialized existing land use may not follow typical traffic patterns. Further clarification should be provided regarding the existing traffic patterns and how the total number of daily trips was calculated.

6-3

3. The trip lengths used to determine regional air quality impacts used the air basin-wide default lengths provided in the CalEEMod model. These trip lengths are appropriate for passenger vehicle trips typically associated with residential or commercial development projects, however they may not be appropriate for trucks serving the specialized goods movement land use proposed for this project. Trucks accessing this site will likely travel to and from the ports of LA and Long Beach (approximately 15-20 miles away), and may travel to farther destinations in the basin. Some trucks may also travel short distances to nearby rail yards. The EIR should include additional clarification regarding truck trip lengths and should provide a reasonable worst case analysis when comparing potential emissions against SCAQMD thresholds.

6-4

### Health Risk Assessment Methodology

4. The HIRA methodology used for this project is inadequate to determine potential health risks from the proposed trucking activity. Several factors detailed below result in reported health risks that do not accurately reflect future activities. SCAQMD staff recommends that the lead agency provide a more robust analysis of health risk, including the use of AERMOD dispersion modeling, prior to determining the significance of this impact. The CEQA document should also contain a complete description of the health risk assessment calculations and methodology as this information was missing from the Draft EIR.

6-5



## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

4

July 11, 2013

- |   |      |
|---|------|
| a) The analysis only evaluated the idling of trucks and did not consider the movement of trucks on and around the site. SCAQMD staff recommends that the HRA include an analysis of all trucking activity from the project site up to the freeway entrances/exits that are used or to their ultimate destination if freeways are not used (e.g., travel to a nearby rail yard). This is especially important for this project as the primary truck routes will pass adjacent to an existing vocational school that serves high school age children and an onsite daycare.   | 6-6  |
| b) The analysis assumes that trucks will only idle for 5 minutes per visit to each facility. SCAQMD staff recommends that a more conservative 15 minutes be used for idling to account for multiple idling events per visit. For example, 5-minute idling may occur while queuing to enter the site, once at the dock, and another time upon exit.  | 6-7  |
| c) Several parameters in the calculation of health risk do not follow recommended OEHHA or SCAQMD guidance. The exposure duration for residential land uses should include 350 days per year over a period of 70 years. The assumption of only 87 days per year of exposure for schools does not appear reasonable. At a minimum for occupational uses, exposure duration should equal 240 days per year over a period of 40 years. High school age students and daycare age children also appear to use the facility and it is not clear that the HRA included their attendance in the exposure assumptions. Lastly, the 60 day exposure period for the transitional housing may not be appropriate if some residents have repeated stays. | 6-8  |
| d) The distances specified in the SCREEN3 analysis do not appear to correspond to actual distances between the sources and receptors. For example, Parcel H is adjacent to the school site and is only 25 m from the transitional housing facility, but the closest modeled distance for this parcel is 150 m.  | 6-9  |
| e) The project site only includes approximately 100 loading docks that are supposed to accommodate approximately 300 trucks per day using the EIR's assumptions (see trip generation comments above). This volume of traffic compared to the limited truck parking indicates that there may be significant queuing of trucks as they access each site. The air quality impacts of this queuing activity (slower vehicle speeds, longer idling periods) should be considered in the air quality and health risk assessments.   | 6-10 |
| f) The air quality analysis and health risk assessment did not consider additional sources of pollution that sometimes are present at facilities such as those proposed. These sources include hostlers used to shuttle trailers onsite and between adjacent sites, Transportation Refrigeration Units (TRU's), and emergency generators. The analysis should include a discussion of the possibility of these sources onsite and should quantify emissions from them if they may be used. Further, given the potentially significant air quality impacts, mitigation should be included to reduce emissions from these sources. Specifically,  | 6-11 |

## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

5

July 11, 2013

electrical outlets should be provided at docks to allow TRU's to plug in, hostlers should utilize non-diesel technologies, and emergency generators should use diesel traps (which also may be required per SCAQMD rules).

6-11  
cont.

### Mitigation Measures for Operational Air Quality Impacts (Mobile Sources)

5. Should the lead agency determine that results from the operational air quality analysis exceed the SCAQMD recommended daily significance thresholds, feasible and enforceable mitigation measures should be included in the Final EIR to reduce these impacts to below significant threshold levels. Since these impacts are primarily from mobile source emissions related to vehicle trips associated with the proposed project, the following related transportation mitigation measures are recommended, if applicable and feasible:

- Require the use of 2010 and newer diesel haul trucks (e.g., goods/materials delivery trucks) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOx emissions requirements;
- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas;
- Improve traffic flow by signal synchronization;
- Provide food options, fueling, truck repair and or convenience stores on-site to minimize the need for trucks to traverse through residential neighborhoods;
- Electrify service equipment at facilities (e.g., forklifts and yard hostlers). Where it is not feasible for equipment to be electrically powered the lead agency should ensure that it is not fueled by diesel, and
- Provide electric vehicle (EV) Charging Stations (see the discussion below regarding EV charging stations).

6-12

### Electric Vehicle (EV) Charging Stations

6. Trucks that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. Further, trucks that run at least partially on electricity are projected to become available during the life of the project as discussed in the 2012 Regional Transportation Plan and in the I-710 Draft EIR.<sup>1</sup> It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, the SCAQMD staff recommends the lead agency require each warehouse and other project areas that allow truck parking to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff

<sup>1</sup> SCAG 2012 RTP, Chapter 7: <http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx>, Caltrans District 7 – I-710 Draft EIR: <http://www.dot.ca.gov/dist07/resources/envdocs/docs/710corridor/>.

## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

6

July 11, 2013

recommends that the lead agency require at least five percent of all vehicle parking spaces (including for trucks) include EV charging stations.<sup>2</sup> At a minimum, the electrical panels should be sufficiently sized to allow future upgrades and wiring should be provided to docks.

6-12  
cont.

### Mitigation Measures for Operational Air Quality Impacts (Other Area Sources)

7. In addition to the mobile source mitigation measures identified above the lead agency, the SCAQMD staff recommends the following onsite area source mitigation measures below be incorporated to reduce the project's overall significant regional air quality impacts from NOx emissions during operations. These mitigation measure should be incorporated pursuant to CEQA Guidelines §15126.4
  - a) Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
  - b) Require all lighting fixtures, including signage, to be state-of-the art and energy efficient, and require that new traffic signals have light-emitting diode (LED) bulbs and require that light fixtures be energy efficient compact fluorescent and/or LED light bulbs. Where feasible use solar powered lighting.
  - c) Maximize the planting of trees in landscaping and parking lots.
  - d) Use light colored paving and roofing materials.
  - e) Use passive heating, natural cooling, solar hot water systems, and reduced pavement.
  - f) Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
  - g) Install light colored "cool" roofs and cool pavements.
  - h) Limit the use of outdoor lighting to only that needed for safety and security purposes.
  - i) Require use of electric lawn mowers and leaf blowers.
  - j) Require use of electric or alternatively fueled sweepers with HEPA filters.
  - k) Use of water-based or low VOC cleaning products.

6-13

### Air Quality Analysis

#### Construction

8. In the air quality analysis, the lead agency estimated project construction air quality impacts using the CalEEMod land use model, Version 2011.1.1, of which a revised version is imminently due for release. This model's current version uses default and user-defined settings to estimate emissions based on the expected land use and emission factors from the California Air Resources Board (CARB) OFFROAD2007 emission factors. Based on User Entered Comments, review of the inputs to the model's off-road equipment list, and footnotes to Table 3.1-6 on page 3.1-14 of the Draft EIR, the lead agency has modified the default settings for the load factor listed

6-14

<sup>2</sup> [http://ladbs.org/LADBSWeb/LADBS\\_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf](http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf)

## Letter 6 Continued

Mr. Joe Perez,  
Community Development Director

7

July 11, 2013

for the types of off-road equipment selected reducing each default load factor by a factor of about one third, effectively lowering the emissions calculated from these emission sources by one third. This one-third reduction is based on an incorrect interpretation of CARB's conclusion that overall statewide emissions are reduced by one-third, but this recommendation, however, does not extend to project specific analysis. For example, the CalEEMod default load factor for a rubber tired dozer is 0.59; a tractor/loaders/backhoe has a load factor of 0.55; and a scraper is 0.72. In the air quality analysis, the lead agency used 0.40 as a load factor for rubber tired dozer; a load factor of 0.37 for a tractor/loaders/backhoe; and 0.48 for a scraper. These edits to load factors are not recommended by the SCAQMD staff without substantial evidence to support their use. If the lead agency would like to take credit for recent CARB Rulemaking, the newer OFFROAD 2011 model should be used<sup>3</sup>. The revised version of OFFROAD2011 will be incorporated in the newer version of CalEEMod. Otherwise, the lead agency should commit to enforcing the assumed lower emission factors or use the default load factors provided in CalEEMod.

6-14  
cont.

<sup>3</sup> OFFROAD 2011 shows that additional parameters affect emissions besides load factor, and that some equipment-specific emission factors can be either higher or lower than the OFFROAD 2007 emission factors used in CalEEMod. The release of the new version of CalEEMod that incorporates ARB's OFFROAD 2011 is imminent.

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

### **Letter 6      Ian MacMillan, Program Supervisor, South Coast Air Quality Management District**

Note: This comment letter was received after the close of the comment period.

#### Responses

- 6-1      The commenter summarizes the proposed project and provides a list of requests.

It is understood that this comment is an introductory comment and further review is forthcoming in the specific responses to subsequent comments.

- 6-2      a. The commenter questions the appropriateness of the traffic impact analysis prepared for the proposed project, specifically in terms of the projected number of passenger vehicle trips and projected number of heavy duty diesel truck trips.

Traffic data relating to the proposed project was provided by RBF Consulting, a transportation engineering firm. Technical data used for analysis is included as Appendix 3.12 in the Draft EIR. Trip generation rates were based on the 2012 ITE Trip Generation Manual, 9<sup>th</sup> Edition (Warehouse, ITE Code 150) issued by the Institute of Transportation Engineers (ITE). The ITE is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. The trip generation rate methodologies employed for the Draft EIR are further detailed on pages 12-15 of the traffic study contained in Appendix 3.12 of the Draft EIR.

- b. The commenter notes that approximately 570 parking spaces are provided and this will limit the number of passenger vehicles and indicates a greater proportion of truck traffic.

As an industrial warehouse operation, not all vehicles will arrive and leave the site at the same time, so the number of parking spaces will not necessarily match the passenger vehicle trips. Also, as noted in Chapter 2.0, Project Description, the site plans provided in the EIR are conceptual in nature and represent potential developments that could occur on the subject parcels, not actual parking spaces. The project description further notes that multiple building configurations and combinations have been explored and the ones selected for analysis in the EIR represent the largest possible building area. The City believes that the actual development will have less building area (2.0 Project Description, page 2.0-2) Regardless, the parking spaces shown on the plan are conceptual and therefore not an appropriate indicator of vehicle mix.

- 6-3      The commenter requests further clarification on how the total daily trips were calculated in Table 6 of Appendix 3.12 of the Draft EIR.

The daily trips included in Table 6 were extrapolated from the actual AM and PM peak field observations on May, 2, 2013. The ADT for existing land use was calculated as follows:

$$ADT = 11 \times [(AM \text{ Total}) + (PM \text{ Total})]/2$$

In other words: average of AM and PM times a factor of 11, which is consistent with the published ITE trip generation rates ratio between peak hour & ADT for Warehouse land use.

- 6-4 The commenter notes that the default trip lengths used to determine regional air quality impacts were based on air basin-wide default lengths provided in the CalEEMod model and further states that, instead, estimated truck trip lengths should be based on destinations the commenter believes project truck trips are likely to travel to and from.

The CalEEMod model is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operational impacts from a variety of land use projects, including warehouse uses. The model was developed in collaboration with the air districts of California. Default data (e.g., trip lengths) have been provided by the various California air districts to account for local requirements and conditions. The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California and the City of Bell considers CalEEMod defaults for trip lengths to be more appropriate for analyzing emissions associated with the proposed project than speculative truck trip destinations based on little substantial evidence since the ultimate tenants of the project and their types of operations are unknown.

- 6-5 a. The commenter states that the analysis of health risk contained in the Draft EIR is inadequate and should be redone using the AERMOD dispersion model.

As stated on page 3.1-12 of the Draft EIR, toxic air contaminant quantification was modeled using the EPA's SCREEN3 air pollutant dispersion model in conjunction with the California Air Resources Board's (CARB's) EMFAC2011 heavy-duty truck idling factors. Potential health risk impacts on surrounding land uses in proximity to the project site were evaluated using the California Office of Environmental Health Hazard Assessment (OEHHA) Tier I risk assessment methodology. SCREEN3 is a single source Gaussian plume model which provides maximum ground-level concentrations for point, area, flare, and volume sources, as well as concentrations in the cavity zone, and concentrations due to inversion break-up and shoreline fumigation. For these reasons, and since SCREEN3 is approved by the EPA, the City of Bell considers this software appropriate for analyzing toxic air contaminant emissions associated with the proposed project.

- b. In addition, the commenter requests that health risk calculations be provided.

Calculations related to the health risk assessment were included in Appendix 3.1 of the Draft EIR. Supplemental information requested by SCAQMD via email was subsequently provided and is included in **Appendix A** of this Final EIR. The input assumptions provided further clarify the calculations conducted as part of the HRA that were included in the Draft EIR.

- 6-6 The commenter recommends that the analysis of health risk consider emissions from trucks traveling from the project site to the freeway entrances/exits.

The commenter is referred to Impact 3.1-4 beginning on page 3.1-16 of the Draft EIR. Impact 3.1-4 evaluates the project's contribution to localized concentrations of mobile-source carbon monoxide (CO), which is a health risk pollutant. As noted in Table 3.1-8 on page 3.1-18, under future conditions, predicted maximum 1-hour and 8-hour CO concentrations at project vicinity intersections would not exceed even the most stringent

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

corresponding California ambient air quality standards (CAAQS). Therefore, the proposed project would not contribute to predicted localized concentrations of mobile-source CO.

In terms of particulate matter emissions, SCAQMD staff has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts during project operations. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The project site is located within SRA 12. The table below shows the calculated fine particulate matter emissions for the proposed operational activities compared with the appropriate localized significance thresholds. The LST analysis only includes on-site sources; however, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in the table below include 50 percent of the project-related new PM<sub>2.5</sub> mobile sources as an estimate of the amount of project-related new vehicle traffic that will occur both on-site and the small areas in between the project site and freeway entrances/exits.

The table below shows that the operational emission rates would not exceed the LST thresholds for receptors at 25 meters. Therefore, the proposed operational activity would not result in a localized significant air quality impact.

**TABLE 3.1-8A. OPERATIONAL LOCAL SIGNIFICANCE THRESHOLD (LST) IMPACTS (POUNDS PER DAY)**

Emissions Source	Fine Particulate Matter
On-Site Emissions	1.7
LST Thresholds	2
Significant Emissions?	No

Section 3.0 of the Final EIR makes these changes to page 3.1-18 of the Draft EIR.

- 6-7 The commenter recommends that the analysis be redone to assume 15 minutes of truck idling as opposed to 5 minutes.

All trucks were assumed to idle in the loading areas for 5 minutes in accordance with mitigation measure MM 3.1.3b (see page 3.1-16 of the Draft EIR) and the Heavy-Duty Vehicle Idling Emission Reduction Program. The Heavy-Duty Vehicle Idling Emission Reduction Program prohibits all truck idling in excess of 5 minutes. Mitigation measure MM 3.1.3b requires posted signage on the project site stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes.

- 6-8 The commenter states that the health risk analysis should account for a greater amount of exposure days.

As stated on page 3.1-21 of the Draft EIR, cancer risks are based on mathematical calculations that estimate the probability of the number of people who will develop cancer after exposure to diesel PM. For the purpose of evaluating the project's effect on the three nearest residential neighborhoods, cancer risks calculations account for

exposure 24 hours a day, 260 days a year (excludes weekends and holidays) at the same concentration for a period of 70 years. For the Adult Vocational School, calculated days of exposure were adjusted to account for daily operational length of 8 hours for 260 days of the year (equivalent to an exposure of 24 hours a day for 87 days a year at the same concentration for a period of 70 years). Calculated days of exposure were adjusted for the Transitional Housing/Shelter Facility to account for the Salvation Army-identified Long-Term Residential length of 30+ days. 60 days were accounted for in order to achieve a conservative analysis (equivalent to 24 hours a day, 60 days a year at the same concentration for a period of 70 years). The City of Bell considers this methodology to be appropriate for analyzing the effects of the proposed project.

- 6-9 The commenter states that the distances between project sources of emissions and receptors do not appear to be accurate.

The distances between project sources of emissions and receptors used in the Draft EIR account for the specific location of the proposed loading docks identified in Figures 2.0-3 through 2.0-6, not the nearest edge of the building.

- 6-10 The commenter states that there may be significant queuing of trucks as they access the site and that this should be considered in the Draft EIR.

The analysis contained in Section 3.1 of the Draft EIR relies upon the traffic data relating to the proposed project provided by RBF Consulting, a transportation engineering firm. The number of loading docks will not be the same as the number of daily trucks, as the trucks will be arriving and departing at different times throughout the day. Additionally, as noted in response 6-2 above, the plans provided in the Draft EIR are conceptual and don't reflect the final design for the number of loading docks that will be constructed or used. Tenants of the ultimate development will configure their space and number of overall docks in use to ensure that loading/unloading queues do not occur. Queuing and idling impacts associated with over-subscribed loading docks are not expected to occur and are considered speculative and not warranted for analysis. The City of Bell considers the traffic data and analysis provided by RBF Consulting to reflect a worst-case scenario and the most appropriate data set for analyzing emissions associated with the proposed project.

- 6-11 The commenter states that the analysis in the Draft EIR did not consider additional sources of pollution that are sometimes associated with warehouse land uses, such as hostlers, transportation refrigeration units, and emergency generators.

The analysis did not consider hostlers or emergency generators as they are not proposed as part of the project. Mitigation measure MM 3.1.3c on page 3.1-16 of the Draft EIR addresses transportation refrigeration units by requiring electrical hookups at all loading docks.

- 6-12 The commenter provides a list of recommended operational mitigation measures such as truck route signage and the provisions of electric vehicle charging stations.

As demonstrated on pages 3.1-15 and 3.1-16 of the Draft EIR, operational mitigation measures are required of the proposed project. These mitigation measures (see mitigation measures MM 3.1.3a through 3.1.3c) include the promotion of alternative fuels and support for "clean" truck fleets, a requirement that signage be posted stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes under the



## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

Heavy-Duty Vehicle Idling Emission Reduction Program, and electrical hookups at all loading docks. While the City of Bell has determined these mitigation measures to be adequate and appropriate for addressing the air quality impacts of the proposed project, the following changes, which include the provision of electric vehicle charging stations, will be made on pages 3.1-15 through 3.1-16 of the Draft EIR to further reduce impacts:

**MM 3.1.3b**      **Signs.** Signage shall be posted stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program. Additionally, to prevent trucks from entering into residential areas, truck routes shall be marked with trailblazer signs.

**MM 3.1.3c**      **Electrical Hookups/Electrically Powered Equipment.**

1. To ensure the technology can be employed when it becomes commercially available, the developer(s)/successor(s)-in-charge shall install electrical infrastructure to accommodate various electrical equipment needed during the operational phase of the proposed project.
2. Where transport refrigeration units (TRUs) are in use, electrical hookups shall be installed at all loading docks in order to allow TRUs with electric standby capabilities to use them. Trucks incapable of utilizing the electrical hookups shall be prohibited from accessing the site as set forth. Idling in excess of 5 minutes shall be prohibited, subject to on-site verification. Quarterly inspection reports shall be available on-site at all times.
3. Service equipment (i.e., forklifts and yard hostlers) shall be electrically powered, where feasible.
4. The developer/successor-in-charge shall ensure the installation of a minimum of one Electric Vehicle charging station per site.

Section 3.0 of the Final EIR makes these changes to pages 3.1-15 and 3.1-16 of the Draft EIR.

6-13      The commenter provides an additional list of recommended operational mitigation measures such as the installation of solar panels and the use of passive heating.

While it is noted that the use of the provided mitigation measures could be an effective strategy to reduce impacts, the proposed project is not required to employ them specifically. As demonstrated on pages 3.1-15 and 3.1-16 of the Draft EIR, operational mitigation measures are required of the proposed project. This mitigation (see mitigation measures MM 3.1.3a through 3.1.3c) includes the promotion of alternative fuels and support for "clean" truck fleets, signage shall be posted stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program, and electrical hookups at all loading docks. While the City of Bell has determined these mitigation measures to be adequate and appropriate for addressing the air quality impacts of the proposed project, the following changes will be made on pages 3.1-15 through 3.1-16 of the Draft EIR to further reduce impacts:

### MM 3.1.3a

**Mobile and Other Area Source Emissions Reduction.** The developer/successor-in-charge shall ensure the following design measures be implemented to reduce impacts associated with operational emissions from other area sources:

1. In order to promote alternative fuels and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to the SCAQMD's Carl Moyer Program or other such programs that promote truck retrofits or clean vehicles and information including, but not limited to, the health effects of diesel particulate matter, the benefits of reduced idling time, CARB regulations, and the importance of not parking in residential areas. If trucks older than the 2007 model year will be used at the project facilities, the developer/successor-in-interest shall require, within one year of signing a lease or purchasing the property, future tenants to apply in good faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer Program or others, as identified by the SCAQMD. Tenants shall be required to use those funds, if awarded.
2. All building roof tops on site shall be designed to accommodate solar power and the use of solar energy (i.e., solar panels).
3. All roofing shall be constructed of light colored roofing materials;
4. All lighting fixtures, including signage, be state-of-the art and energy efficient, and light fixtures be energy efficient compact fluorescent and/or LED light bulbs. Where feasible, the use of solar powered lighting be implemented;
5. Parking lots shall be constructed with cool pavement technologies (i.e, 100 percent concrete) as opposed to conventional paving materials;
6. Trees shall be planted to shade parking areas;
7. Use, where feasible, Energy Star heating, cooling and listing devices and appliances; and
8. All outdoor lighting shall be limited to only those needed for safety and security purposes.

Section 3.0 of the Final EIR makes these changes to pages 3.1-15 and 3.1-16 of the Draft EIR.

In addition, as part of the proposed project's development agreement, the project, when designed, will be required by the City to achieve LEED Gold (or equivalent) status. Developed by the U.S. Green Building Council (USGBC), the Leadership in Energy and Environmental Design (LEED) rating system is based on buildings incorporating energy efficiency benchmarks. The Gold rating is the highest rating behind Platinum and is a higher rating than Silver or Certified. The City will require third-party verification that the proposed project was designed and built using strategies aimed at achieving high

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

performance in key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

- 6-14 The commenter notes that diesel-fueled construction equipment load factors were reduced in the Draft EIR analysis by 33 percent in order to account for off-road load factor overestimation included as part of the CalEEMod modeling software. The commenter further states that the reduction of diesel-fueled construction equipment load factors should not be applied to the estimated construction emission modeling for the proposed project.

The commenter is correct that the Draft EIR analysis of construction emissions includes the reduction of diesel-fueled construction equipment load factors by 33 percent. The justification for this reduction is contained in CARB's 2010 *Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements* (October 2010). As stated in this document, load factors used to identify state-wide off-road diesel-fueled emissions were overestimated by CARB's OFFROAD2007 emissions model and recommended to be reduced by 33 percent in order to calculate an accurate projection of state-wide off-road diesel-fueled emissions. The air quality analysis prepared for the proposed project used the CalEEMod land use model, Version 2011.1.1, which in turns utilizes CARB's OFFROAD2007 emissions factors. Since CARB's OFFROAD2007 emissions factors were used to identify state-wide off-road diesel-fueled emissions, and CARB subsequently recommended that load factors be reduced by 33 percent in order to get a more accurate emission estimation, the City of Bell determined it appropriate to also reduce diesel-fueled construction equipment load factors for the purposes of the Draft EIR.

## Letter 7

**From:** Dubiel, Matthew [<mailto:MDUBIEL@dpw.lacounty.gov>]  
**Sent:** Wednesday, July 03, 2013 9:32 AM  
**To:** Bob Stark  
**Cc:** Pletyak, Jeff; Duong, Toan; Ngumba, Andrew; Lau, Suen Fei  
**Subject:** RE: Bell Business Center DEIR

Hi Bob.

We have received the DEIR and have no comments at this time.

For future submittals to the LA County Department of Public Works please use the following:

County of Los Angeles Department of Public Works  
900 S. Fremont Ave  
Alhambra, CA 91803  
Attn: Matthew Dubiel  
Land Development Division, CUP/CEQA/B&T Planning Unit

7-1

Thank you.

Matthew Dubiel, P.E.  
County of Los Angeles Department of Public Works  
Land Development Division, Subdivision Mapping Section,  
CUP/CEQA/B&T Planning Unit  
☎ (626) 458-4921 📠 (626) 458-4949  
[Please click here to take our customer service survey](#)



**From:** bstark@pmcworld.com [<mailto:bstark@pmcworld.com>]  
**Sent:** Monday, July 01, 2013 11:12 AM  
**To:** Dubiel, Matthew  
**Subject:** Bell Business Center DEIR

Hi Matt,  
Here's the link to the Draft EIR and Traffic Study. Please confirm receipt and let me know if you need anything else.

Our mail receipts show that the DEIR was delivered to this address on May 23:

County of Los Angeles Department of Public Works  
900 S. Fremont Ave.

1

## **Letter 7 Continued**

Alhambra, CA 91803  
Attn: Intergovernmental/CEQA Review

Thanks,  
Bob

### **The Files**

- [Appendix-3.12-Traffic.pdf](#) - 1.59 MB
- [Bell-Business-Center-Project-DEIR.pdf](#) - 10.67 MB

Need to send files to PMC? <http://sendfiles.pmcworld.com/>  
Note: These files will be deleted on Monday, July 15, 2013

**Letter 7      Mathew Dubiel, Los Angeles County Department of Public Works**

Response

- 7-1      The commenter states that the Department of Public Works has no comments at this time.

## Letter 8



### COUNTY OF LOS ANGELES

#### FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE  
LOS ANGELES, CALIFORNIA 90063-3294  
(323) 881-2401

DARYL L. OSBY  
FIRE CHIEF  
FORESTER & FIRE WARDEN

June 25, 2013

Joe Perez, Director  
City of Bell  
Community Development Department  
6330 Pine Avenue  
Bell, CA 90201

Dear Mr. Perez:

**DRAFT ENVIRONMENTAL IMPACT REPORT, "BELL BUSINESS CENTER PROJECT"  
INCLUDES EIGHT EXISTING LOS ANGELES COUNTY ASSESSOR'S PARCELS TO DEVELOP  
NEW INDUSTRIAL AND ANCILLARY OFFICE SPACE, AND INTENT TO APPROVE INDIVIDUAL  
ENTITLEMENTS, RICKENBACKER ROAD WEST OF 6TH STREET, BELL (FFER #201300084)**

The Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

#### PLANNING DIVISION:

##### 3.11.1 FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

##### 3.11.1.1 EXISTING SETTING

##### FIRE PROTECTION

Paragraph 1, should be corrected as follows:

The City of Bell is part of the Consolidated Fire Protection District of Los Angeles County, commonly referred to as the Los Angeles County Fire Department (LACFD). The LACFD provides fire protection and emergency medical services to the project site. Fire stations are located in Bell and the surrounding area to meet the demand for fire protection in the area. The department serves 58 cities and has a service area covering over 2,305 square miles. There are 170 fire stations throughout the

8-1

#### SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS	CALABASAS	DIAMOND BAR	HIDDEN HILLS	LA MIRADA	MALIBU	POMONA	SIGNAL HILL
ARTESIA	CARSON	DUARTE	HUNTRINGTON PARK	LA PUENTE	MAYWOOD	RANCHO PALOS VERDES	SOUTH EL MONTE
AZUSA	CERRITOS	EL MONTE	INDUSTRY	LAKEWOOD	NORWALK	ROLLING HILLS	SOUTH GATE
BALDWIN PARK	CLAREMONT	GARDENA	INGLEWOOD	LANCASTER	PALMDALE	ROLLING HILLS ESTATES	TEMPLE CITY
BELL	COMMERCE	GLENDALE	IRVINDALE	LAWDALE	PALOS VERDES ESTATES	ROSEMEAD	WALNUT
BELL GARDENS	COVINA	HAWAIIAN GARDENS	LA CANADA FLINTRIDGE	LOMITA	PARAMOUNT	SAN DIMAS	WEST HOLLYWOOD
BELLFLOWER	CUDAHY	HAWTHORNE	LA HABRA	LYNWOOD	PICO RIVERA	SANTA CLARITA	WESTLAKE VILLAGE
BRADBURY							WHITTIER

## Letter 8 Continued

Joe Perez, Director  
June 25, 2013  
Page 2

county that respond to approximately 300,000 calls per year. The project site is located in the service area of Battalion 3, within Division IX of the East Region Bureau (LACFD 2012).

8-1  
cont.

### EMERGENCY MEDICAL SERVICES

Paragraphs 1 and 2, should be modified as follows:

The Emergency Medical Services (EMS) Agency, a division of the Los Angeles County Department of Health Services is responsible for coordinating the county's emergency medical services system, which includes hospitals, fire departments, and ambulance companies. The Ambulance Services Section provides non-emergency transport of patients to County-operated hospitals 24 hours a day. The Department of Health Services operates a modern ambulance fleet, staffed with emergency medical technicians to provide non-emergency patient care and transportation between the patient's residence and County facilities. In addition to the general ambulance fleet of 40, the County has added two ambulances equipped for neonatal transportation and an ambulance designed to handle the needs of bariatric patients. ~~The Ambulance Services Section is administered by the EMS Agency and handles approximately 4,000 transports per month through the Central Dispatch Office. Any calls that are not be handled by the Ambulance Services Section are contracted out to private ambulance companies. As previously mentioned, Fire Station #50 in Commerce is staffed with a paramedic squad.~~

8-2

As first responders, the LACFD responds to all emergency medical calls for assistance in the City of Bell. All uniformed personnel are trained to, at a minimum, at the Emergency Medical Technician-1 (EMT-1) level and are capable to provide basic life support until an advanced life support unit (paramedic squad) arrives on scene (as previously stated, Fire Station 50 in the City of Commerce is staffed with a paramedic squad). Transportation to a hospital, if needed, is provided by a private ambulance contractor.

The Department also has three 24-hour air squads staffed with two fire fighter/paramedics that provide paramedic treatment and transport.

### 3.11.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

#### CUMULATIVE SETTING

The paragraph under this section should be corrected as follows:

The cumulative setting for fire protection and emergency medical services includes the service area boundaries for the East Region Bureau of the LACFD. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the LACFD East Region service area that currently place demand on fire protection services or are expected to place demand on services in the future. The East Region includes the jurisdictions of Bell, Claremont, Glendora, La Verne (county), Padua Hills, San Dimas, Baldwin Park, Covina, Azusa, Duarte, Bradbury, Irwindale,

8-3



## Letter 8 Continued

Joe Perez, Director  
June 25, 2013  
Page 3

La Habra, Whittier, Basset, Rowland Heights, Hacienda Heights, South El Monte, Industry, South San Gabriel, La Puente, Temple City, Pico Rivera, Valinda, Rosemead, Whittier (county), Altadena, Angeles Coast, Arcadia (county), El Monte, ~~La Cañada Flintridge, La Cressenta, Montrose, Pasadena~~ (county), San Gabriel (county), Commerce, Bell Gardens, Belvedere, City Terrace, Cudahy, East Los Angeles, Maywood, Diamond Bar, Pomona, Walnut, Artesia, Bellflower, Cerritos, Compton (county), Hawaiian Gardens, Lakewood, La Mirada, Norwalk, Paramount, and Signal Hill.

8-3  
cont.

### LAND DEVELOPMENT UNIT:

1. The statutory responsibilities of the County of Los Angeles Fire Department, Land Development Unit, are the review of, and comment on, all projects within the unincorporated areas of the County of Los Angeles. Our emphasis is on the availability of sufficient water supplies for firefighting operations and local/regional access issues. However, we review all projects for issues that may have a significant impact on the County of Los Angeles Fire Department. We are responsible for the review of all projects within Contract Cities (cities that contract with the County of Los Angeles Fire Department for fire protection services). We are responsible for all County facilities, located within non-contract Cities.

8-4

The County of Los Angeles Fire Department, Land Development Unit may also comment on conditions that may be imposed on a project by the Fire Prevention Division, which may create a potentially significant impact to the environment.

2. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.
3. When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.
4. The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues.
5. Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
6. Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems, it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.
7. The development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on

8-5

8-6

8-7

8-8

8-9

8-10

## Letter 8 Continued

Joe Perez, Director  
June 25, 2013  
Page 4

- |  |                              |
|--|------------------------------|
| <p>the size of buildings, its relationship to other structures, property lines, and types of construction used.</p>  | <p><b>8-10<br/>cont.</b></p> |
| <p>8. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:</p> <ul style="list-style-type: none"> <li>a) No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.</li> <li>b) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.</li> <li>c) Additional hydrants will be required if hydrant spacing exceeds specified distances.</li> <li>d) When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.</li> <li>e) A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.</li> </ul>   | <p><b>8-11</b></p>           |
| <p>9. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs.</p>  | <p><b>8-12</b></p>           |
| <p>10. All on-site driveways/roadways shall provide a minimum unobstructed width of 28 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to and within 30 feet of an exterior wall on one side of the proposed structure.</p>  | <p><b>8-13</b></p>           |
| <p>11. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:</p> <ul style="list-style-type: none"> <li>a) Provide 34 feet in-width, when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.</li> <li>b) Provide 42 feet in-width, when parallel parking is allowed on each side of the access roadway/driveway.</li> <li>c) Any access way less than 34 feet in-width shall be labeled "Fire Lane" on the final recording map, and final building plans.</li> <li>d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.</li> </ul> | <p><b>8-14</b></p>           |

## Letter 8 Continued

Joe Perez, Director  
June 25, 2013  
Page 5

- |   |             |
|---|-------------|
| 12. All access devices and gates shall meet the following requirements:<br><br>a) Any single gated opening used for ingress and egress shall be a minimum of 26 feet in-width, clear-to-sky.<br><br>b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky.<br><br>c) Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way, and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an Intercom system is used, the 50 feet shall be measured from the right-of-way to the Intercom control device.<br><br>d) All limited access devices shall be of a type approved by the Fire Department.<br><br>e) Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates. | <b>8-15</b> |
| 13. Notify the County of Los Angeles Fire Department, Fire Stations FS 27 (323) 721-4140, FS 39 (562) 927-1211, and FS 50 (323) 721-7011, at least three days in advance of any street closures that may affect Fire/Paramedic responses in the area.   | <b>8-16</b> |
| 14. Disruptions to water service shall be coordinated with the County of Los Angeles Fire Department and alternate water sources shall be provided for fire protection during such disruptions.   | <b>8-17</b> |
| 15. The County of Los Angeles Fire Department, Land Development Unit's comments are only general requirements. Specific fire and life safety requirements will be addressed at the building and fire plan check phase. There may be additional requirements during this time.   | <b>8-18</b> |
| 16. When developing the infrastructure and when construction is proposed, all requirements as indicated on this report shall be incorporated into the proposed development plan submittals.   | <b>8-19</b> |
| 17. Submit proposals for all street vacations (closures) to the County of Los Angeles Fire Department, Land Development Unit for review and approval. The proposal shall be submitted through the Department of Public Works.   | <b>8-20</b> |
| 18. Submit three sets of water plans to the County of Los Angeles Fire Department, Land Development Unit. The plans must show all proposed changes to the fire protection water system, such as fire hydrant locations and main sizes. The plans shall be submitted through the local water company.  | <b>8-21</b> |
| 19. Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department, Fire Prevention, Land Development Unit Inspector, Nancy Rodeheffer, at (323) 890-4243 or <a href="mailto:nrodeheffer@fire.lacounty.gov">nrodeheffer@fire.lacounty.gov</a> .   | <b>8-22</b> |
| 20. The County of Los Angeles Fire Department, Land Development Unit appreciates the opportunity to comment on this project.  | <b>8-23</b> |

## Letter 8 Continued

Joe Perez, Director  
June 25, 2013  
Page 6

**FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:**

1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance.
2. The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division have been addressed.

8-24

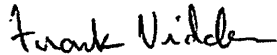
**HEALTH HAZARDOUS MATERIALS DIVISION:**

1. Based on the Phase I and historical site use, it is requested that the project site to be assessed and if necessary mitigated under oversight of the State or local governmental agency prior to grading and construction.

8-25

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,



FRANK VIDALES, ACTING CHIEF, FORESTRY DIVISION  
PREVENTION SERVICES BUREAU

FV:ljl

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

**Letter 8**      **Frank Vidales, Acting Chief, Forestry Division, Los Angeles County Fire Department**

### Responses

- 8-1      The commenter requests the following changes be made in the first paragraph under the Fire Protection subheading in subsection 3.11.1.1, Existing Setting, on page 3.11-1 of the Draft EIR:

#### FIRE PROTECTION

The City of Bell is part of the Consolidated Fire Protection District of Los Angeles County, commonly referred to as the Los Angeles County Fire Department (LACFD). The LACFD provides fire protection and emergency medical services to the project site. Fire stations are located in Bell and the surrounding area to meet the demand for fire protection in the area. The department serves 58 cities and has a service area covering over 2,305 square miles. There are 170 fire stations throughout the county that respond to approximately 300,000 calls per year. The project site is located in the service area of Battalion #3, within Division IX of the East Region Bureau (LACFD 2012).

Section 3.0 of the Final EIR makes these changes to page 3.11-1 of the Draft EIR.

- 8-2      The commenter requests the following changes be made to paragraphs 1 and 2 under the Emergency Medical Services subheading in subsection 3.11.1.1, Existing Setting, on page 3.11-1 and -2 of the Draft EIR:

#### EMERGENCY MEDICAL SERVICES

The Emergency Medical Services (EMS) Agency, a division of the Los Angeles County Department of Health Services, is responsible for coordinating the county's emergency medical services system, which includes hospitals, fire departments, and ambulance companies. The Ambulance Services Section provides non-emergency transport of patients to County-operated hospitals 24 hours a day. The Department of Health Services operates a modern ambulance fleet, staffed with emergency medical technicians to provide non-emergency patient care and transportation between the patient's residence and County facilities.

~~In addition to the general ambulance fleet of 40, the County has added two ambulances equipped for neonatal transportation and an ambulance designed to handle the needs of bariatric patients. The Ambulance Services Section is administered by the EMS Agency and handles approximately 4,000 transports per month through the Central Dispatch Office. Any calls that are not be handled by the Ambulance Services Section are contracted out to private ambulance companies. As previously mentioned, Fire Station #50 in Commerce is staffed with a paramedic squad.~~

As first responders, the LACFD responds to all emergency medical calls for assistance in the City of Bell. All uniformed personnel are trained, at a minimum, at the Emergency Medical Technician-1 (EMT-1) level and are capable to provide basic life support until an advanced life support unit (paramedic squad) arrives on scene (as previously stated, Fire Station 50 in Commerce is staffed with a paramedic squad).

## 2.0 RESPONSES TO COMMENTS ON THE DRAFT EIR

---

Transportation to a hospital, if needed is provided by a private ambulance contractor.

The LACFD also has three 24-hour air squads staffed with two firefighter/paramedics that provide paramedic treatment and transport.

Section 3.0 of the Final EIR makes these changes to page 3.11-1 and -2 of the Draft EIR.

- 8-3 The commenter requests the following changes be made to under the Cumulative Setting subheading in subsection 3.11.1.4, Cumulative Setting, Impacts, and Mitigation Measures, on page 3.11-5 of the Draft EIR:

The cumulative setting for fire protection and emergency medical services includes the service area boundaries for the East Region Bureau of the LACFD. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the LACFD East Region service area that currently place demand on fire protection services or are expected to place demand on services in the future. The East Region includes the jurisdictions of Bell, Claremont, Glendora, La Verne (county), Padua Hills, San Dimas, Baldwin Park, Covina, Azusa, Duarte, Bradbury, Irwindale, La Habra, Whittier, Basset, Rowland Heights, Hacienda Heights, South El Monte, Industry, South San Gabriel, La Puente, Temple City, Pico Rivera, Valinda, Rosemead, Whittier (county), Altadena, Angeles Coast, Arcadia (county), El Monte, ~~La Cañada Flintridge, La Crescenta, Montrose~~, Pasadena (county), San Gabriel (county), Commerce, Bell Gardens, Belvedere, City Terrace, Cudahy, East Los Angeles, Maywood, Diamond Bar, Pomona, Walnut, Artesia, Bellflower, Cerritos, Compton (county), Hawaiian Gardens, Lakewood, La Mirada, Norwalk, Paramount, and Signal Hill.

Section 3.0 of the Final EIR makes these changes to page 3.11-5 of the Draft EIR.

- 8-4- 8-25 These comments are related to design and fire prevention measures which are more appropriately addressed as Conditions of Approval. As such, the City of Bell will incorporate these design and fire prevention measures into the proposed project's Development Agreement as Conditions of Approval.

---

## **3.0 REVISIONS TO THE DRAFT EIR**

---





### 3.1 INTRODUCTION

This section includes text revisions and other edits to the DEIR. These modifications resulted from comments received during the DEIR public review period.

Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, nor do they alter the conclusions of the environmental analysis. Changes are provided in revision marks (underline for new text and ~~strike-out~~ for deleted text) and are organized by section of the DEIR.

### 3.2 MINOR CHANGES AND EDITS TO THE DEIR

The following changes are made to the Draft EIR based on comments received on the project and review of those comments by the City and by the technical experts responsible for the supporting studies.

#### ES EXECUTIVE SUMMARY

The following text has been revised in DEIR Executive Summary, page ES-18:

**MM 3.7.1c** As part of the plan review process, the City of Bell shall ensure that project plans identify a suite of stormwater quality BMPs that are designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed project, consistent with the Low Impact Development program Standard Urban Stormwater Mitigation Plan. Pollutant sources to be addressed by these BMPs include, but are not necessarily limited to, parking lots, landscaped areas, trash storage locations, and storm drain inlets. The design and location of these BMPs will be subject to review and comment by the City but shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program. ~~Implementation of these BMPs shall be assured by the City Engineer p~~ Prior to the issuance of a certificate of occupancy-grading or building permits, the developer shall demonstrate that all structural Best Management Practices (BMPs) and Green Street policies described in the project's LID have been constructed and installed. In addition, the developer is prepared to implement all non-structural BMP's described in the LID.

Timing/Implementation: Prior to grading the issuance of a certificate of occupancy.

Enforcement/Monitoring: City of Bell Planning Division

### 1.0 INTRODUCTION

No revisions.

### 2.0 PROJECT DESCRIPTION

The following text has been revised in DEIR Section 2.0, page 2.0-1:

### 3.0 REVISIONS TO THE DRAFT EIR

---

The proposed project is located in an industrially designated and constructed area of the City of Bell and is adjacent to similarly industrial and commercial areas in the cities of Commerce and Vernon (see **Figure 2.0-1, Regional Vicinity Map**). Regional access to the project area is from Interstate 710 (I-710) and the Bandini Road interchange leading to Bandini Road. Local access to the project site is from Rickenbacker Road that intersects South Eastern Avenue approximately 1,500 feet south of Bandini Road. Regional access is also provided to each of the site from the Burlington Northern Santa Fe (BNSF) railroad.

The following text has been revised in DEIR Section 2.0, page 2.0-1:

The proposed project will include eight existing Los Angeles County Assessor's parcels totaling four building sites located on Rickenbacker Road West of 6th Street in Bell (Table 2.0-1). Rickenbacker Road will be improved with public utilities, including water, wastewater, storm drainage, and power. Utilities will be extended to serve each of the four building sites. ~~No buildings are proposed as part of this project; however, site plans and a potential building footprint have been developed for each of the four sites along with a development agreement, approval of a parcel map, and an encroachment permit for the overall project.~~ In total, the four buildings could result in 840,390 square feet of new industrial and ancillary office space.

In addition to the on-site improvements described above, utilities, including water, wastewater, storm drainage, and power, will be extended to each site. Rickenbacker Road is the sole access to parcel A, F, and G, and will need to be extended past the current terminus onto parcel A. In addition to the roadway extension, road edge improvements such as curb, gutter, parking lane, etc., will also be constructed along the south side of Rickenbacker Road near parcel G. The City's intent is to approve individual entitlements for each of the four building sites in conjunction with the sale of the properties by the Bell Public Financing Authority and to consider the environmental impacts of the entire project in a single EIR.

The following text has been revised in DEIR Section 2.0, page 2.0-2:

Water service to the site is provided by the California Water Service (Cal Water) through the existing ~~Cal Water~~ City of Commerce line in Rickenbacker Road. When Rickenbacker Road is extended, the water line will also be extended to parcels A, F, and G. In addition to the water line, the roadway improvements will require both on- and off-site fire hydrants at regular spacing and may require looping of the water line on one or more of the parcels.

The following text has been revised in DEIR Section 2.0, page 2.0-4:

#### C. ENCROACHMENT PERMIT

##### City of Commerce

Extension of utilities may extend into the City of Commerce along South Eastern Avenue. If work is necessary in the City of Commerce right-of-way, an encroachment permit will be required.

##### Caltrans

For any work performed within State controlled intersections or roadways, an encroachment permit will be required from Caltrans.

**3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED**

No revisions.

**3.1 AIR QUALITY**

The following text has been revised in DEIR Section 3.1, page 3.1-15 through -16:

**MM 3.1.3a**      **Mobile and Other Area Source Emissions Reduction.** The developer/successor-in-charge shall ensure the following design measures be implemented to reduce impacts associated with operational emissions from other area sources:

1. In order to promote alternative fuels and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to the SCAQMD's Carl Moyer Program or other such programs that promote truck retrofits or clean vehicles and information including, but not limited to, the health effects of diesel particulate matter, the benefits of reduced idling time, CARB regulations, and the importance of not parking in residential areas. If trucks older than the 2007 model year will be used at the project facilities, the developer/successor-in-interest shall require, within one year of signing a lease or purchasing the property, future tenants to apply in good faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer Program or others, as identified by the SCAQMD. Tenants shall be required to use those funds, if awarded.
2. All building roof tops on site shall be designed to accommodate solar power and the use of solar energy (i.e., solar panels).
3. All roofing shall be constructed of light colored roofing materials;
4. All lighting fixtures, including signage, be state-of-the art and energy efficient, and light fixtures be energy efficient compact fluorescent and/or LED light bulbs. Where feasible, the use of solar powered lighting be implemented;
5. Parking lots shall be constructed with cool pavement technologies (i.e, 100 percent concrete) as opposed to conventional paving materials;
6. Trees shall be planted to shade parking areas;
7. Use, where feasible, Energy Star heating, cooling and listing devices and appliances; and
8. All outdoor lighting shall be limited to only those needed for safety and security purposes.

**MM 3.1.3b**      **Signs.** Signage shall be posted stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling

### 3.0 REVISIONS TO THE DRAFT EIR

---

Emission Reduction Program. Additionally, to prevent trucks from entering into residential areas, truck routes shall be marked with trailblazer signs.

#### MM 3.1.3c

#### **Electrical Hookups/Electrically Powered Equipment.**

1. To ensure the technology can be employed when it becomes commercially available, the developer(s)/successor(s)-in-charge shall install electrical infrastructure to accommodate various electrical equipment needed during the operational phase of the proposed project.
2. Where transport refrigeration units (TRUs) are in use, electrical hookups shall be installed at all loading docks in order to allow TRUs with electric standby capabilities to use them. Trucks incapable of utilizing the electrical hookups shall be prohibited from accessing the site as set forth. Idling in excess of 5 minutes shall be prohibited, subject to on-site verification. Quarterly inspection reports shall be available on-site at all times.
3. Service equipment (i.e., forklifts and yard hostlers) shall be electrically powered, where feasible.
4. The developer/successor-in-charge shall ensure the installation of a minimum of one Electric Vehicle charging station per site.

The following text and the following table have been added to the DEIR Section 3.1, page 3.1-18:

In terms of particulate matter emissions, SCAQMD staff has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts during project operations. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The project site is located within SRA 12. The table below shows the calculated fine particulate matter emissions for the proposed operational activities compared with the appropriate localized significance thresholds. The LST analysis only includes on-site sources; however, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in the table below include 50 percent of the project-related new PM<sub>2.5</sub> mobile sources as an estimate of the amount of project-related new vehicle traffic that will occur both on-site and the small areas in between the project site and freeway entrances/exits.

The table below shows that the operational emission rates would not exceed the LST thresholds for receptors at 25 meters. Therefore, the proposed operational activity would not result in a localized significant air quality impact.

**TABLE 3.18A. OPERATIONAL LOCAL SIGNIFICANCE THRESHOLD (LST) IMPACTS (POUNDS PER DAY)**

Emissions Source	Fine Particulate Matter
On-Site Emissions	1.7
LST Thresholds	2
Significant Emissions?	No

Table 3.1-11 has been revised in DEIR Section 3.1, page 3.1-22:

**TABLE 3.1-11  
CANCER RISK AT SENSITIVE RECEPTORS IN PROJECT VICINITY FROM PROJECT TRAFFIC**

Sensitive Receptors	Predicted Cancer Risk per Million				
	Parcel A	Parcel F	Parcel G	Parcel H	Cumulative Sum
<b>Receptor Areas</b>					
Adult Vocational School	0.9	2.3	<del>4.9</del> <u>4.5</u>	<del>1.0</del> <u>1.1</u>	<del>9.1</del> <u>8.8</u>
Transitional Housing/Shelter Facility	0.2	0.7	0.3	7.8	9.0
Neighborhood #1 (located generally due west of project site across I-710 and LA River)	0.4	0.7	1.1	1.2	3.4
Neighborhood #2 (located southwest of project site across I-710 and LA River)	0.8	<del>0.1</del> <u>0.4</u>	0.8	2.0	<del>3.7</del> <u>4.0</u>
Neighborhood #3 (located due north of project site across East Washington Blvd.)	0.3	0.3	0.2	<del>0.5</del> <u>0.4</u>	<del>1.3</del> <u>1.2</u>
Potentially Significant Impact Threshold	10	10	10	10	10
Exceed Threshold?	No	No	No	No	No

Source: Diesel PM concentrations were modeled with Screen3 software; cancer risk was calculated per OEHHA Tier I risk assessment methodology. Calculated days of exposure adjusted for Adult Vocational School to account for daily operational length of 8 hours (Occupational Center Staff 2013). Calculated days of exposure adjusted for Transitional Housing/Shelter Facility Long-Term Residential length of 30+ days (Salvation Army 2013) (assumed 60 days for conservative analysis).

### 3.2 BIOLOGICAL RESOURCES

No revisions.

### 3.3 CULTURAL RESOURCES

No Revisions.

### 3.4 CLIMATE CHANGE AND GREENHOUSE GASSES

No revisions.

### 3.0 REVISIONS TO THE DRAFT EIR

---

#### 3.5 GEOLOGY AND SOILS

No revisions.

#### 3.6 HAZARDS AND HAZARDOUS MATERIALS

No revisions.

#### 3.7 HYDROLOGY AND WATER QUALITY

The following text has been revised in DEIR Section 3.7, page 3.7-13:

As part of Phase II, the SWRCB adopted a General Permit for the Discharge of Storm Water from Small MS4s (~~WQ Order No. 2003-0005-DWQ~~ Order No. R-2012-0175) to provide permit coverage for smaller municipalities, including nontraditional small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

The following text has been added to DEIR Section 3.7, page 3.7-13:

##### **Los Angeles Flood Control District Low Impact Development**

Low Impact Development, or LID, is a design strategy using naturalistic, on-site Best Management Practices to lessen the impacts of development on stormwater quality and quantity. The goal of LID is to mimic the undeveloped runoff conditions of the development site with the post-development conditions.

The following text has been revised in DEIR Section 3.7, page 3.7-17-18:

##### **Long-Term Operation**

The proposed project is subject to the Los Angeles County Flood Control District, which Department of Public Works requirement for the Standard Urban Stormwater Mitigation Plan (SUSMP) under the "Redevelopment" category. As detailed in the SUSMP, the proposed project would include a range of permanent best management practices to control the off site discharge of pollutants in accordance with NPDES requirements. requires the implementation of an LID program identifying the Best Management Practices (BMP's) that will be used on site to control predictable pollutant runoff. The plan shall identify the types of structural and non-structural measures to be used. The plan shall comply with the City of Bell Watershed Management Program accompanying LID Ordinance and Green Street Policies. The MS4 Permit (Order No. R-2012-0175) was adopted by the California Regional Water Quality Control Board, Los Angeles Region on November 8, 2012 and became effective on December 28, 2012. Particular attention should be addressed to the appendix section "Best Management Practices for Post Development."

The following materials are anticipated to be used in activities at the project site, which would potentially contribute to pollutants to stormwater runoff:

- Vehicle fluids, including oil, grease, petroleum, and coolants from personal vehicles
- Landscaping materials and wastes (topsoil, plant materials, herbicides, fertilizers, mulch, pesticides)

- General trash debris and litter

In order to minimize the impact of the potential pollutants, the project includes BMPs for scour control and treatment. These proposed best management practices are described below.

- **Site Design BMPs.** The project proposes minimizing impervious area/maximizing permeability by constructing the parking stalls with pervious pavement.
- **Treatment BMPs.** The project proposes vegetated (grass) strips, vegetated (grass) swales, drain inserts, porous pavement detention, and media filters.
- **Source Control BMPs.** The proposed project would include a range of source control BMPs to minimize impacts from potential on-site pollution sources. Source control BMPs consist of non-structural and structural BMPs. Non-structural BMPs are generally managerial, educational, inspection, and/or maintenance oriented. Non-structural BMPs proposed for the project include education for employees and occupants, common area landscape management, employee training, and catch basin inspection.

Structural BMPs would be installed by the project applicant through construction and development of the project. Structural BMPs proposed for the project include filtration systems, efficient irrigation, runoff-minimizing landscape design, trash container (dumpster) areas, catch basin stenciling, and inlet trash racks.

The property owner would be responsible for implementing the BMPs detailed in the LID program Standard Urban Stormwater Mitigation Plan and for cleaning and maintaining the BMPs on a regular basis. The SUSMP LID identifies the inspection, maintenance, and responsibility for the best management practices.

The following text has been revised in DEIR Section 3.7, page 3.7-18:

**MM 3.7.1c**

As part of the plan review process, the City of Bell shall ensure that project plans identify a suite of stormwater quality BMPs that are designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed project, consistent with the Low Impact Development program Standard Urban Stormwater Mitigation Plan. Pollutant sources to be addressed by these BMPs include, but are not necessarily limited to, parking lots, landscaped areas, trash storage locations, and storm drain inlets. The design and location of these BMPs will be subject to review and comment by the City but shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program. Implementation of these BMPs shall be assured by the City Engineer p Prior to the issuance of a certificate of occupancy-grading or building permits, the developer shall demonstrate that all structural BMPs described in the project's LID have been constructed and installed. In addition, the developer/successor in charge is prepared to implement all non-structural BMP's described in the LID.

Timing/Implementation: Prior to grading the issuance of a certificate of occupancy.

Enforcement/Monitoring: City of Bell Planning Division

### 3.0 REVISIONS TO THE DRAFT EIR

---

The following text has been revised in DEIR Section 3.7, page 3.7-23:

From an operational standpoint, the proposed project, in combination with other planned and approved projects, would not violate water quality standards or waste discharge requirements because the proposed project is subject to the Los Angeles County Flood Control District Low Impact Development program. ~~Department of Public Works requirement for the Standard Urban Stormwater Mitigation Plan under the "Redevelopment" category.~~ As detailed in the LIDSUSMP, the proposed project would include a range of best management practices to control off-site discharge of pollutants ~~in accordance with NPDES requirements.~~ As such, the proposed project in conjunction with other planned and approved projects would not result in cumulatively considerable impacts to hydrology and water quality.

#### 3.8 LAND USE AND PLANNING

Page numbering for this entire section is incorrect; the entire section should be numbered consecutively from 3.8-1 through -13 rather than 3.9-1 through -13.

#### 3.9 NOISE

No revisions.

#### 3.10 POPULATION AND HOUSING

Some page numbering for this section is incorrect; pages 3.9-3 and 3.9-5 should be 3.10-3 and 3.10-5, respectively.

#### 3.11 PUBLIC SERVICES AND UTILITIES

The following text has been revised in DEIR Section 3.11, page 3.11-1:

##### FIRE PROTECTION

The City of Bell is part of the Consolidated Fire Protection District of Los Angeles County, commonly referred to as the Los Angeles County Fire Department (LACFD). The LACFD provides fire protection and emergency medical services to the project site. Fire stations are located in Bell and the surrounding area to meet the demand for fire protection in the area. The department serves 58 cities and has a service area covering over 2,305 square miles. There are 170 fire stations throughout the county that respond to approximately 300,000 calls per year. The project site is located in the service area of Battalion #3, within Division IX of the East Region Bureau (LACFD 2012).

The following text has been revised in DEIR Section 3.11, page 3.11-1 and 3.11-2:

##### EMERGENCY MEDICAL SERVICES

The Emergency Medical Services (EMS) Agency, a division of the Los Angeles County Department of Health Services, is responsible for coordinating the county's emergency medical services system, which includes hospitals, fire departments, and ambulance companies. The Ambulance Services Section provides non-emergency transport of patients to County-operated hospitals 24 hours a day. The Department of Health Services operates a modern ambulance fleet, staffed with emergency medical technicians to provide non-emergency patient care and transportation between the patient's residence and County facilities.



In addition to the general ambulance fleet of 40, the County has added two ambulances equipped for neonatal transportation and an ambulance designed to handle the needs of bariatric patients. ~~The Ambulance Services Section is administered by the EMS Agency and handles approximately 4,000 transports per month through the Central Dispatch Office. Any calls that are not be handled by the Ambulance Services Section are contracted out to private ambulance companies. As previously mentioned, Fire Station #50 in Commerce is staffed with a paramedic squad.~~

As first responders, the LACFD responds to all emergency medical calls for assistance in the City of Bell. All uniformed personnel are trained to, at a minimum, at the Emergency Medical Technician-1 (EMT-1) level and are capable to provide basic life support until an advanced life support unit (paramedic squad) arrives on scene (as previously stated, Fire Station 50 in the City of Commerce is staffed with a paramedic squad). Transportation to a hospital, if needed is provided by a private ambulance contractor.

The Department also has three 24-hour air squads staffed with two fire fighter/paramedics that provide paramedic treatment and transport.

The following text has been revised in DEIR Section 3.11, page 3.11-5:

The cumulative setting for fire protection and emergency medical services includes the service area boundaries for the East Region Bureau of the LACFD. The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the LACFD East Region service area that currently place demand on fire protection services or are expected to place demand on services in the future. The East Region includes the jurisdictions of Bell, Claremont, Glendora, La Verne (county), Padua Hills, San Dimas, Baldwin Park, Covina, Azusa, Duarte, Bradbury, Irwindale, La Habra, Whittier, Basset, Rowland Heights, Hacienda Heights, South El Monte, Industry, South San Gabriel, La Puente, Temple City, Pico Rivera, Valinda, Rosemead, Whittier (county), Altadena, Angeles Coast, Arcadia (county), El Monte, ~~La Cañada Flintridge, La Crescenta, Montrose,~~ Pasadena (county), San Gabriel (county), Commerce, Bell Gardens, Belvedere, City Terrace, Cudahy, East Los Angeles, Maywood, Diamond Bar, Pomona, Walnut, Artesia, Bellflower, Cerritos, Compton (county), Hawaiian Gardens, Lakewood, La Mirada, Norwalk, Paramount, and Signal Hill.

The following text has been revised in DEIR Section 3.11, page 3.11-18:

The water supply assessment ~~prepared by Cal Water~~ estimates that the proposed project would need 40.2 acre feet per year. This represents approximately 0.40 percent of the 2010 water demand and 0.27 percent of the total adjudicated water supply. ~~Cal Water has provided a The~~ water supply assessment ~~that~~ states during non-drought conditions that there is sufficient water to meet the projected needs of the project (**Appendix 3.11**).

The following text has been revised in DEIR Section 3.11, page 3.11-24:

#### **Los Angeles Flood Control District Low Impact Development**

Low Impact Development, or LID, is a design strategy using naturalistic, on-site Best Management Practices to lessen the impacts of development on stormwater quality and quantity. The goal of LID is to mimic the undeveloped runoff conditions of the development site with the post-development conditions.

The following text has been revised in DEIR Section 3.11, page 3.11-26:

### 3.0 REVISIONS TO THE DRAFT EIR

---

#### Cumulative Storm Drainage Infrastructure Impacts

**Impact 3.11.5.2** Implementation of the proposed project, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would contribute to the cumulative demand for storm drainage infrastructure. However, required compliance with the NPDES permit, ~~and the SUSMP, and the LID program~~ reduces the amount and improves the quality of stormwater runoff generated in the urban areas and discharged to the Los Angeles River. This impact is **less than cumulatively considerable**.

Future development associated with the proposed project, combined with other existing, planned, proposed, approved, and reasonably foreseeable development in the Los Angeles watershed, would contribute to the amount of runoff discharged to the Los Angeles River and the San Pedro Bay downstream. All development that discharges to a municipal storm drainage system is required to comply with the NPDES permit requirements, ~~and the SUSMP, and the LID program~~ which reduce the potential for urban contaminants to pollute waters downstream and minimize the amount of stormwater generated by construction activities, ~~and development, and post-development~~. Compliance with the NPDES permit and on-site treatment of the storm drainage will ensure that this impact is **less than cumulatively considerable**.

#### 3.12 TRANSPORTATION AND CIRCULATION

The following text has been revised in DEIR Section 3.12, page 3.12-3:

##### Transit System

Public transportation within Bell is provided by Metro, which is a transportation planner, designer, builder, and operator serving one of the largest and most populous counties in the nation. Metro operates both bus and rail lines, which start around 4 AM and keep running past midnight every day. Bell is served by numerous Rapid and Local Metro lines, and there are eight Metro bus stops within a quarter mile of the project site. In addition, the Commerce Metrolink Station is less than 1.5 miles from the project site.

In addition to passenger rail, there are existing rail lines adjacent to all of the proposed project sites. The only line currently used regularly serves the US Army facility on the north side of Rickenbacker Road adjacent to site F.

The following text has been revised in DEIR Section 3.12, page 3.12-15:

##### California Department of Transportation (Caltrans)

Caltrans policies are applicable to I-710 and are summarized in the *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002). Caltrans endeavors to maintain a target service level of LOS C on state highway facilities. For the purposes of this Draft EIR, LOS C is considered the minimum acceptable operating level for Caltrans- controlled facilities (i.e., I-710 Southbound Off-Ramp/Bandini Boulevard intersection and Atlantic Boulevard/Bandini Boulevard intersection). Additionally, Caltrans has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. As such, any vehicles/loads exceeding statutory limits on roads under the jurisdiction of Caltrans and associated with the proposed project, will require a Transportation Permit.

The following text has been revised in DEIR Section 3.12, page 3.12-16:

#### METHODOLOGY

This section is based on the traffic data provided by RBF Consulting (2013), included as **Appendix 3.12** to this Draft EIR. Traffic counts were taken at the study area intersections, and the projected traffic was compared to existing traffic to determine impacts. The LOS methodology described in subsection 3.12.1 above was used to determine whether the project traffic would result in significant impacts. For intersections where impacts are identified, the City evaluated existing conditions to determine whether mitigation measures could result in a less than significant impact. The traffic analysis evaluated an Existing Plus Project condition as well as a Cumulative Project Condition at each of the study intersections. Because the proposed uses are anticipated to have large numbers of heavy trucks, only the PCE traffic figures and impacts from the traffic study are reported in this DEIR section. For unsignalized intersections, the delay value shown is for the most impacted movement/approach of the intersection.

#### 5.0 OTHER CEQA ANALYSIS

No revisions.

## Health Risk Calculations

Emission Rate: 0.13 grams per hour per vehicle

Source: Emfac2011 Web Based Data Access at <http://www.arb.ca.gov/msei/modeling.htm> [see HD idling emission rates spreadsheet tab]

Grams per hour to grams per second: 0.000036

5 minute idling time plus daily truck traffic equals 22 hours of idling per day

### Cancer Risk Calculations

#### Neighborhood #1

Parcel A (935 meters distance)

Cancer Dose	0.00000041
Cancer Risk	0.44

Parcel F (660 meters distance)

Cancer Dose	0.00000006
Cancer Risk	0.68

Parcel G (540 meters distance)

Cancer Dose	0.00000010
Cancer Risk	1.14

Parcel H (1,120 meters distance)

Cancer Dose	0.00000011
Cancer Risk	1.25

#### Neighborhood #2

Parcel A (640 meters distance)

Cancer Dose	0.00000008
Cancer Risk	0.86

Parcel F (835 meters distance)

Cancer Dose	0.00000004
Cancer Risk	0.45

Parcel G (615 meters distance)

Cancer Dose	0.00000008
Cancer Risk	0.88

Parcel H (810 meters distance)

Cancer Dose	0.00000019
Cancer Risk	2.09

## Health Risk Calculations

### Neighborhood #3

Parcel A (1,160 meters distance)		
Cancer Dose	0.0000003	
Cancer Risk	0.33	
Parcel F (1,185 meters distance)		
Cancer Dose	0.0000003	
Cancer Risk	0.33	
Parcel G (1,145 meters distance)		
Cancer Dose	0.0000002	
Cancer Risk	0.22	
Parcel H (1,750 meters distance)		
Cancer Dose	0.0000004	
Cancer Risk	0.44	

### Vocational School

Hours of operation = 7:30-4:00 (8 hours). 8hrs \* 260 days = 2,080 hrs/24hrs = 87 days

Parcel A (320 meters)		
Cancer Dose	0.0000009	
Cancer Risk	0.99	
Parcel F (182 meters distance)		
Cancer Dose	0.0000021	
Cancer Risk	2.31	
Parcel G (115 meters distance)		
Cancer Dose	0.0000041	
Cancer Risk	4.51	
Parcel H (600 meters distance)		
Cancer Dose	0.0000010	
Cancer Risk	1.1	

## Health Risk Calculations

### Transitional Shelter

Long term residence stays = 30+ days. Assume 60 days

#### Parcel A (640 meters distance)

Cancer Dose	0.0000002
Cancer Risk	0.22

#### Parcel F (598 meters distance)

Cancer Dose	0.0000002
Cancer Risk	0.21

#### Parcel G (540 meters distance)

Cancer Dose	0.0000002
Cancer Risk	0.26

#### Parcel H (150 meters distance)

Cancer Dose	0.0000071
Cancer Risk	7.86

# LIMITED SITE INVESTIGATION

PROPOSED BELL BUSINESS CENTER  
NORTHEAST OF RICKENBACKER ROAD AND 1ST STREET  
CITY OF BELL, LOS ANGELES COUNTY, CALIFORNIA

July 3, 2013

Terracon Project No. 60137736A



**Prepared for:**

Pacific Industrial

Long Beach, California

**Prepared by:**

Terracon Consultants, Inc.

Irvine, California

Offices Nationwide  
Employee-Owned

Established in 1965  
[terracon.com](http://terracon.com)

# Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

July 3, 2013



Pacific Industrial  
6272 E. Pacific Coast Highway, Ste E  
Long Beach, CA 90803

Attn: Mr. Candace Ondrejcka  
T: (818) 468-6481  
E: [www.pac-industrial.com](http://www.pac-industrial.com)

Re: Limited Site Investigation  
Proposed Bell Business Center  
Northeast of Rickenbacker Road and 1st Street  
City of Bell, Los Angeles County, California 90201  
Project No. 60137736A

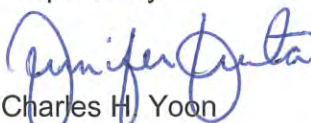
Dear Mr. Ondrejcka:

Terracon Consultants, Inc. (Terracon) is pleased to submit the Limited Site Investigation (LSI) report for the above referenced site. This investigation was performed in accordance with Terracon's Proposal Number P60130091, dated April 11, 2013.

We appreciate the opportunity to perform these services for Pacific Industrial. Please contact either of the undersigned at (949) 261.0051 if you have questions regarding the information provided in the report.

Sincerely,  
**Terracon Consultants, Inc.**

Prepared by:


(for)   
Charles H. Yoon  
Staff Scientist



Reviewed by:

  
Fouad Abuhamdan (Fred Hamdan), P.E.  
Senior Project Manager

Reviewed by:

  
(for) Carl A. Parten  
Office Manager

Terracon Consultants, Inc. 2817 McGaw Avenue Irvine, California 92614  
P [949] 261.0051 F [949] 261.6110 [terracon.com](http://terracon.com)

Geotechnical

Environmental

Construction Materials

BELL 2574 Facilities



## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Site Description .....	1
1.2	Scope of Work .....	1
1.3	Standard of Care .....	2
1.4	Additional Scope Limitations .....	2
1.5	Reliance.....	3
<b>2.0</b>	<b>FIELD ACTIVITIES .....</b>	<b>3</b>
2.1	Pre-Mobilization.....	3
2.2	Soil Borings .....	3
2.3	Soil Sampling.....	4
2.4	Soil Gas Sample Installation and Collection.....	4
<b>3.0</b>	<b>LABORATORY ANALYTICAL METHODS .....</b>	<b>6</b>
<b>4.0</b>	<b>DATA EVALUATION .....</b>	<b>7</b>
4.1	Soil Samples.....	7
4.2	Soil Gas Samples .....	7
<b>5.0</b>	<b>FINDINGS AND RECOMMENDATIONS .....</b>	<b>8</b>

## APPENDICES

APPENDIX A	Figures
APPENDIX B	Boring Logs
APPENDIX C	Tables
APPENDIX D	Laboratory Data Sheets and Corresponding Chains-of-Custody Forms

**LIMITED SITE INVESTIGATION  
PROPOSED BELL BUSINESS CENTER  
NORTHEAST OF RICKENBACKER ROAD AND 1ST STREET  
CITY OF BELL, LOS ANGELES COUNTY, CALIFORNIA**

**Terracon Project No. 60137736A  
July 3, 2013**

## **1.0 INTRODUCTION**

### **1.1 Site Description**

<b>Site Name</b>	Proposed Bell Business Center
<b>Site Location/Address</b>	Northeast of Rickenbacker Road and 1st Street, City of Bell, California
<b>General Site Description</b>	<p>The site is located at Northeast of Rickenbacker Road and 1st Street in City of Bell, Los Angeles County, California. Based on the plans provided by the client, the approximate area of this site is 11.8 acres.</p> <p>It is our understanding the the new development will comprise of four parcels. This report will address Parcels F and G only. Parcels E &amp; H are beyond the scope of this report.</p>

A topographic map is included as Figure 1 and a site plan is included as Figure 2 of Appendix A.

### **1.2 Scope of Work**

Terracon conducted a Limited Site Investigation (LSI) at the Dexia Properties, located Northeast of Rickenbacker Road and 1st Street, City of Bell, California (the site, Parcel F). At your request, the proposed scope of work was in response to the Phase I ESA, dated July 26, 2012. Based on the findings of the ESA, the following recognized environmental conditions (RECs) were identified in connection with the site:

- Construction debris, including asphalt, concrete, 55-gallon drums containing concrete, brick, clay sewer pipe, painted wood and discolored soil disposed on APN 6332002945 and 6332002948. Discolored soils graded onto a portion of the site and a large gravel pile.
- Construction debris, including asphalt, soil, painted wood, concrete and clay sewer pipe disposed on APN 6332002949.
- Three previously abandoned oil wells in close proximity to the site.

It is our understanding that Parcel F represents parcels APN 6332002945 and 6332002948, and Parcel G represents APN 6332002949.

## Limited Site Investigation

Proposed Bell Business Center ■ City of Bell, California

July 3, 2013 ■ Terracon Project No. 60137736A



It should be noted that during the initial site observation prior to commencement of the LSI, surface discoloration was observed in a gravel parking/drive area located on the southeastern portion of Parcel F.

No odors or discoloration/staining was observed associated with the stockpiles located within Parcels F and G, and the stockpiles appeared to be comprised of soils and construction debris.

Further observations of the surface discoloration appeared to suggest that it was a result of previous standing water that had evaporated. No odors or staining was observed; however, due to the proximity of the surface discoloration and the adjacent stockpiles, the two soil borings performed as part of this scope of work were located within this observed area.

The objective of this LSI was to evaluate the presence of total petroleum hydrocarbons gasoline range (TPH GRO), diesel range (TPH DRO), and waste oil range (TPH ORO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and Title 22 metals above relevant laboratory reporting limits in the on-site shallow soils near the discolored soils at the site (Parcel F). In addition, the shallow soil borings were evaluated for the presence of methane and fixed gases in soil gas.

### 1.3 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These LSI services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-97.

### 1.4 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSI. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our

## Limited Site Investigation

Proposed Bell Business Center ■ City of Bell, California

July 3, 2013 ■ Terracon Project No. 60137736A



recommendations are based solely upon data obtained at the time and within the scope of these services.

### 1.5 Reliance

This report has been prepared for the exclusive use of Pacific Industrial and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Pacific Industrial and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, LSI report, and Terracon's Terms and Conditions. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

## 2.0 FIELD ACTIVITIES

Terracon's field activities were conducted on June 18, 2013 by a staff scientist under the oversight of a Principal Geologist with Terracon. A site-specific health and safety plan was followed by Terracon during field activities for all phases of this investigation.

### 2.1 Pre-Mobilization

Prior to drilling activities, the soil boring locations were marked and an Underground Service Alert (Dig Alert Ticket No: A31620204) service was requested by Terracon personnel for clearance of public underground utilities. The scope of work did not require any regulatory agency permits.

### 2.2 Soil Borings

As part of the approved scope of work, two soil borings, SV-1 and SV-2, were located in the southeastern portion of the site (Parcel F) in the vicinity of the stockpiles and an area of surface discoloration within the gravel parking/drive area. The soil borings were advanced to an approximate depth of 5 feet below grade surface (bgs). The borings were advanced using a truck-mounted hydraulic push rig, and were subsequently converted into temporary soil gas probes.

Drilling services were performed by Interphase Environmental, Inc., a State-of-California C-57 licensed drilling company. Continuous soil samples were collected using five-foot samplers and single-use acetate sleeves. Drilling and sampling equipment was cleaned using an Alconox<sup>®</sup> wash and potable water rinse prior to the beginning of the project and before collecting each soil sample.

## Limited Site Investigation

Proposed Bell Business Center ■ City of Bell, California

July 3, 2013 ■ Terracon Project No. 60137736A



Soil samples were collected continuously and observed to document soil lithology, color, moisture content, and sensory evidence of impairment. The soil samples were field-screened using a photoionization detector (PID) to indicate the presence of total organic vapors (TOVs). The materials encountered beneath soil/gravel during sample collection consisted of poorly graded sand to the maximum depth of exploration of about 5 feet bgs.

Detailed lithologic descriptions are presented on the soil boring logs included in Appendix B. Groundwater was not encountered during the advancement of borings SV-1 and SV-2 to the maximum termination depth of 5 feet bgs. The groundwater flow direction and the depth to shallow groundwater would likely vary depending upon seasonal variations in rainfall and depth to the soil/bedrock interface. Without the benefit of a minimum of three on-site groundwater monitoring wells surveyed to a datum, groundwater flow direction beneath the site cannot be ascertained.

No odors were observed in the soil samples collected from borings SV-1 and SV-2. PID readings for TOVs ranged from background concentrations of less than 1.0 part per million by volume (ppmv). The PID readings were recorded on the soil boring logs and included in Appendix B.

Subsequent to completion of soil and soil gas sampling, the borings were backfilled to the surface with hydrated bentonite chips.

Following completion of the investigation activities, the soil cuttings were temporarily stored in a 5-gallon plastic bucket. Due to the relatively small quantity of IDW (less than 5 gallons), the soil cuttings were transported offsite by the drilling contractor (Interphase Drilling) to be disposed at a later date under their general disposal permit.

### 2.3 Soil Sampling

Terracon's soil sampling program involved submitting one soil sample from each soil boring for laboratory analysis. Since no elevated PID reading was observed, the samples were collected from the interval of most likely environmental impact (shallow soil from 1-2 feet bgs). Soil sample intervals for each boring are presented with the soil sample analytical results (Table 1) and are provided on the lithologic boring logs included in Appendix B.

### 2.4 Soil Gas Sample Installation and Collection

After soil sample collection, as described in Section 2.3, borings SV-1 and SV-2 were converted to soil gas probes, and screened from 4.5 to 5.0 feet bgs. Details of the installation and sampling procedures are provided below.

## Limited Site Investigation

Proposed Bell Business Center ■ City of Bell, California

July 3, 2013 ■ Terracon Project No. 60137736A



Each sampling probe was constructed in general accordance with California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board (LARWQCB) and San Francisco Regional Water Quality Control Board guidance document, dated April, 2012, as follows:

- The sampling line was comprised of new dedicated 0.25-inch outer-diameter nyla flow ® tubing, with a six-inch sampling screen, and cut to length leaving approximately one foot of tubing extending from the asphalt surface at each sampling location. A three-way in-line check valve was fitted to the up-hole end of the tubing to prevent ambient air from infiltrating the probe installation through the sample line. The sample tubing was marked at the ground surface to indicate the probe location, depth, and time of installation.
- Sand was added to create a sand pack surrounding the probe tip at the base of the boring. Dry granular bentonite chips were used to fill the borehole annular space around the nyla flow sampling line, from the sand pack to approximately three feet below grade. Hydrated granular bentonite chips were added from three feet below grade to the surface. Sufficient water was added to hydrate the bentonite to insure proper sealing, and care used in placement of the bentonite to prevent post-emplacement expansion which might compromise the probe seal.

Following probe emplacement, soil gas sampling was performed at approximately 2 to 3 hours following temporary soil gas probe installation to allow the bentonite seal to cure and to allow for subsurface conditions to equilibrate. The soil gas samples were collected using the following procedures:

- Each temporary soil gas probe was purged prior to sample collection. The purge volume of each soil gas probe installation was estimated as the summation of the volumes of the nyla flow sample line and the sand pack around the tip of the tubing. After waiting for at least 2 hours following probe installation, the sampling assembly was purged a standard three volumes by drawing the soil gas from the probe using a disposable syringe and discharging it to ambient air. The flow rate during purging and sampling was moderated to between 150 milliliters per minute (mL/min) to limit stripping of chemical compounds, to prevent ambient air from diluting the soil gas samples, and to reduce the variability of purging and sampling rates.
- Once the sampling assembly was purged, a soil gas sample was drawn from the sample line into a 1-Liter summa canister. The summa canister was immediately labeled and logged as described below. The samples and the completed chain-of-custody form were relinquished to Cal-Science Laboratories, a State-of-

California certified laboratory, in Garden Grove, California for analysis. Samples were submitted for analysis on a standard 5-day turnaround time.

- A leak test was performed in conjunction with each collected soil gas sample, to verify that ambient air was not diluting the sample or contaminating the sample with external contaminants. After the sampling assembly was purged and immediately before the sample was collected, a leak detection compound (isopropyl alcohol) was used to saturate a rag which was placed near the locations where ambient air could enter the sampling system or where cross contamination could occur. These locations included sample system connections and the surface bentonite seal.

Upon completion of the soil vapor sampling, the temporary soil vapor probe tubing was removed and the borehole was backfilled with bentonite.

### **3.0 LABORATORY ANALYTICAL METHODS**

The soil samples collected from borings SV-1 and SV-2 were analyzed for total petroleum hydrocarbons, gasoline range organics (TPH GRO), diesel range organics (TPH DRO) and oil range organics (TPH ORO) by United States Environmental Protection Agency (USEPA) Method 8015B, VOCs by EPA Method 8260B, SVOCs by EPA Method 8270C, Title-22 Metals by EPA Method 6010B/7471A and Mercury by EPA Method 7471A.

The soil gas samples collected from soil gas probes SV-1 and SV-2 were analyzed for methane by Gas Chromatography (GC) and Fixed Gases (carbon dioxide, oxygen, and nitrogen) by American Society for Testing and Materials (ASTM) Method D1946.

The soil and soil gas samples were analyzed by Cal-Science Laboratories, Garden Grove, California, a California-state-certified laboratory.

The laboratory results for soil and soil gas are summarized in Table 1 through 3 and included in Appendix C. The corresponding laboratory data sheets and executed chain-of-custody forms are provided in Appendix D.

## **4.0 DATA EVALUATION**

### **4.1 Soil Samples**

#### TPH, VOCs and SVOCs

The soil samples collected from borings SV-1 and SV-2 did not exhibit TPH, VOCs or SVOCs concentrations above the laboratory method reporting limits, except for a TPH-DRO concentration of 5.5 milligrams per kilograms (mg/Kg) and a pyrene concentration of 0.68 mg/Kg reported for the soil sample collected from SV-1. A summary of the results are presented in Tables 1 and 2 of Appendix C. The results of the soil investigation were compared to Region 4 of the RWQCB - Los Angeles Region, maximum screening levels (MSLs) and the Region 9 Preliminary Screening Goal (PRG) Soil Screening Levels, assuming a conservative Dilution Attenuation Factor (DAF) of 1. The TPH-DRO concentration detected from SV-1 obtained during this LSI below the applicable MSLs for TPH-DRO of 1,000 mg/kg. The pyrene concentration of 0.68 mg/Kg is well below the Region 9 PRG Soil Screening Level of 210 mg/Kg.

#### Metals

The soil samples collected from borings SV-1 and SV-2 exhibited various metals, including: arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium and zinc at concentrations above the laboratory method reporting limits. A summary of the results are presented in Table 2 of Appendix C. The detected metals concentrations were compared to the California Human Health Risk Screening Levels (CHHSLs) for commercial/industrial land use. The detected concentrations are below the applicable CHHSLs values, except for arsenic concentrations detected at 2.42 mg/Kg from SV-1, which is above the CHHSL value of 0.24 mg/Kg.

The Department of Toxic Substances Control (DTSC) established a regional background arsenic concentration in soil that can be used as a screening tool for sites throughout southern California. The term “background” collectively refers to both naturally occurring and anthropogenic concentrations in shallow soil. Statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound background arsenic concentration of 12 mg/kg. The analysis for 5 counties in southern California also gave an upper-bound background arsenic concentration of 12 mg/kg. The detected arsenic concentrations at the site are below the DTSC’s established regional background concentration screening level.

### **4.2 Soil Gas Samples**

The soil gas samples collected from borings SV-1 and SV-2 did not exhibit methane concentrations above the laboratory method reporting limits. Fixed gases, including oxygen, carbon dioxide, and nitrogen were reported at levels that appear to be typical of subsurface soil



conditions. A summary of analytical results for methane and fixed gases are presented in Table 3 of Appendix C.

The soil gas concentrations reported during this LSI are below applicable DTSC's action levels for methane.

## **5.0 FINDINGS AND RECOMMENDATIONS**

The findings and recommendations of this investigation are as follows:

- The soil samples collected from borings SV-1 and SV-2 did not exhibit TPH, VOCs or SVOCs concentrations above the laboratory method reporting limits, except for a TPH-DRO concentration of 5.5 milligrams per kilograms (mg/Kg) which is below the applicable MSLs for TPH-DRO of 1,000 mg/kg, and the pyrene concentration of 0.68 mg/Kg which is well below the Region 9 PRG Soil Screening Level of 210 mg/Kg.
- Groundwater was not encountered or evaluated during this LSI.
- The soil samples collected from borings SV-1 and SV-2 exhibited various metals, including: arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium and zinc at concentrations above the laboratory method reporting limits. A summary of the results are presented in Table 2 of Appendix C. The detected metals concentrations were compared to the California Human Health Risk Screening Levels (CHHSLs) for commercial/industrial land use. The detected concentrations are below the applicable CHHSLs values, except for arsenic concentrations detected at 2.42 mg/Kg from SV-1, which is above the CHHSL value of 0.24 mg/Kg.
- The Department of Toxic Substances Control (DTSC) established a regional background arsenic concentration in soil that can be used as a screening tool for sites throughout southern California. The term "background" collectively refers to both naturally occurring and anthropogenic concentrations in shallow soil. Statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound background arsenic concentration of 12 mg/kg. The analysis for 5 counties in southern California also gave an upper-bound background arsenic concentration of 12 mg/kg. The detected arsenic concentrations at the site are below the DTSC's established regional background concentration screening level.

## Limited Site Investigation

Proposed Bell Business Center ■ City of Bell, California

July 3, 2013 ■ Terracon Project No. 60137736A



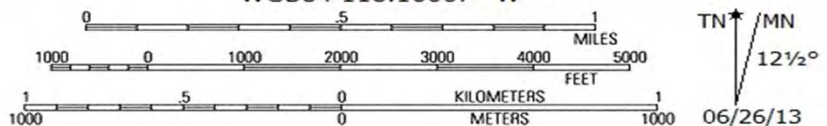
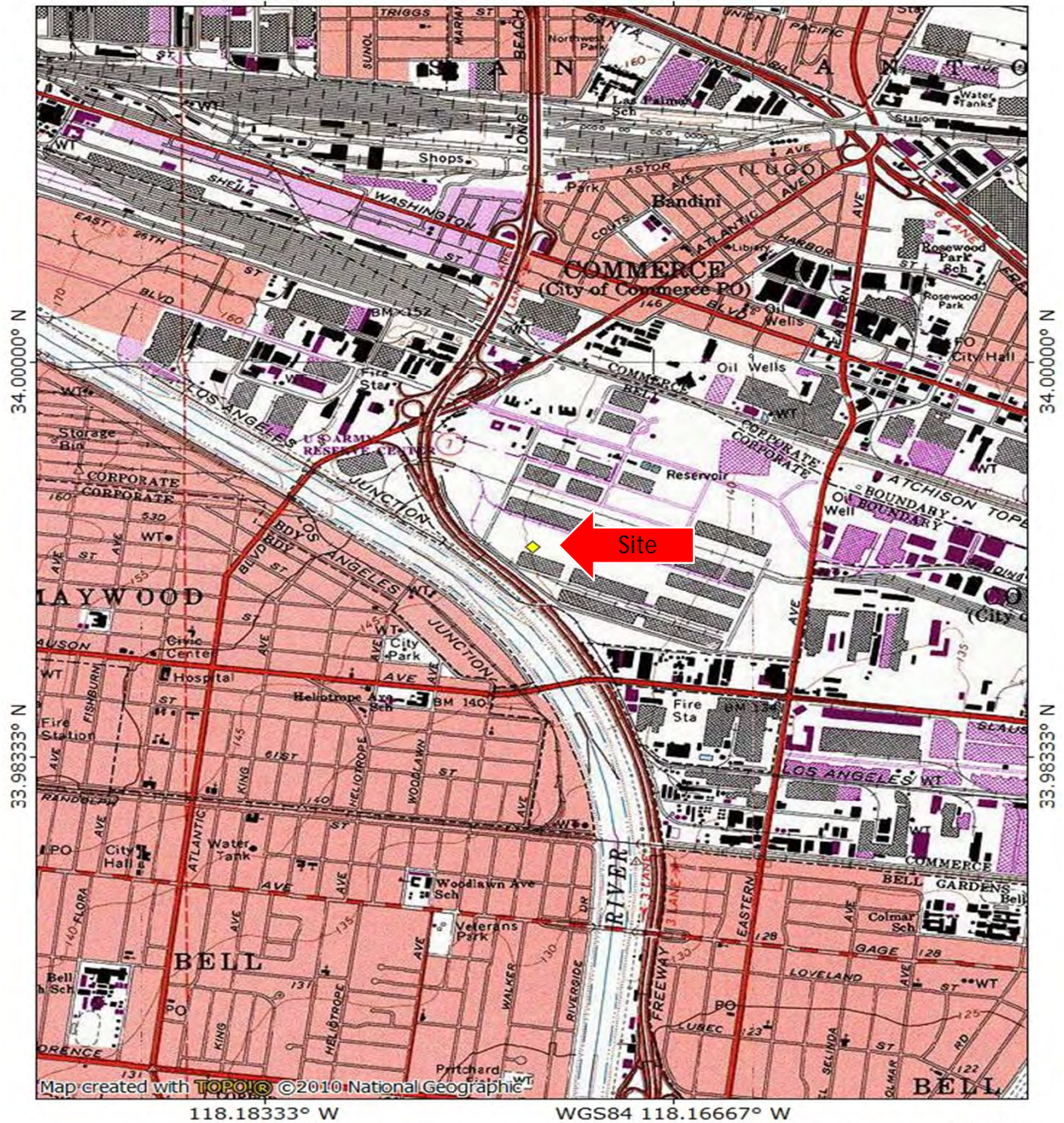
- The soil gas samples collected from borings SV-1 and SV-2 did not exhibit methane concentrations above the laboratory method reporting limits.
- The objective of the proposed LSI was to evaluate the presence of TPH, VOCs, SVOCs and Title-22 Metals above relevant laboratory reporting limits in the subsurface soils, and methane in the soil gas in the vicinity of the discolored soils at the site (Parcel F). Based on the analytical results obtained during this investigation, additional investigation for subsurface soils does not appear warranted at this time.
- Terracon recommends that the stockpile materials be sampled and properly characterized prior to use or transport off-site for disposal.

## **APPENDIX A**

### **Figures**



TOPO! map printed on 06/26/13 from "Untitled.tpo"  
 118.18333° W WGS84 118.16667° W



# USGS TOPOGRAPHIC QUADRANGLE MAP

Bell, California

Dated: 6/26/13

PROJECT NO. 60137736A



## Proposed Texas Roadhouse

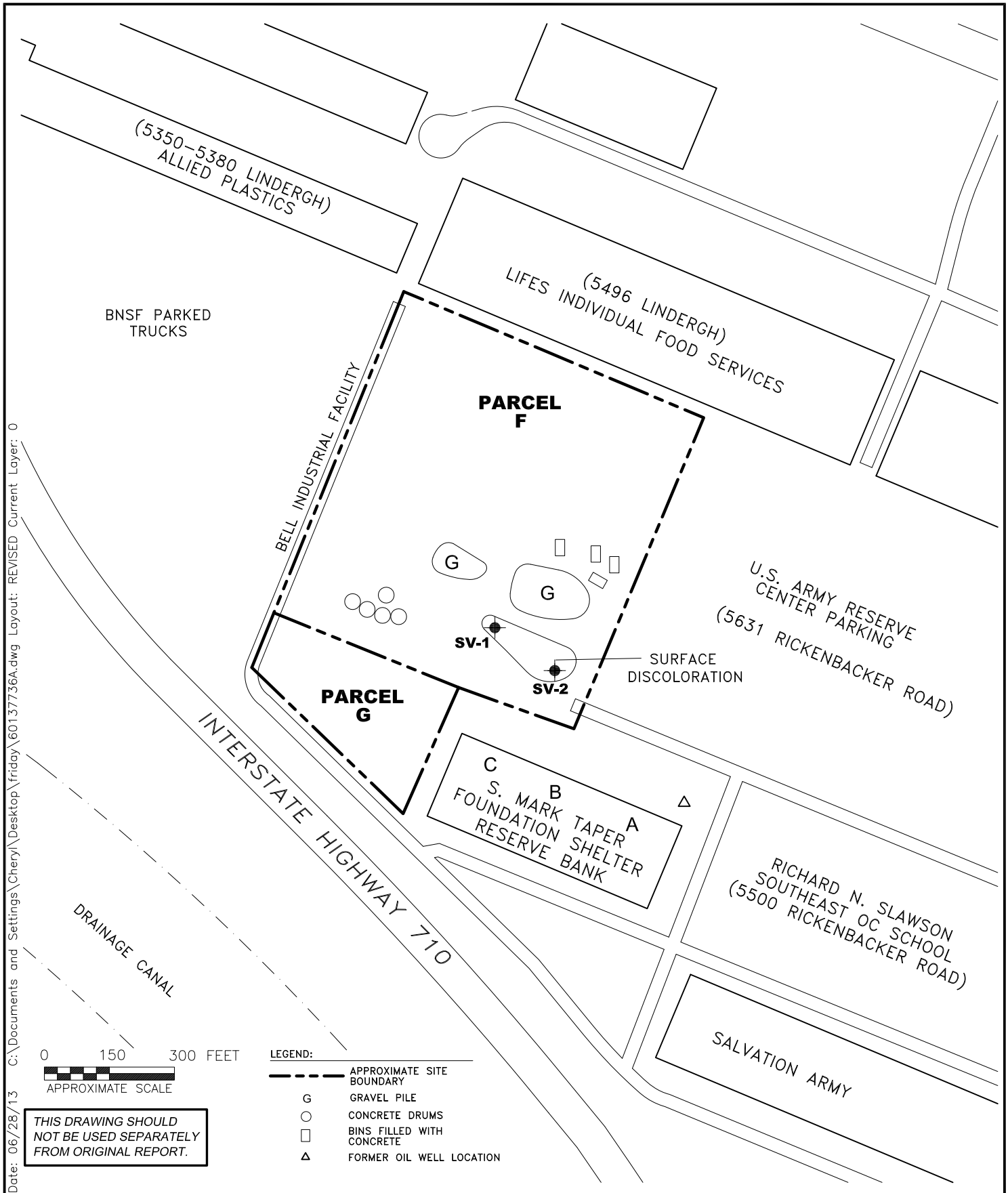
Rickenbacker Road and 3rd Street

Bell, Los Angeles County, California

FIGURE 1: TOPOGRAPHIC MAP

BELL-2586





Project Mngt:	CHY	Project No.	60137736A	<b>Terracon</b> Consulting Engineers and Scientists 2817 McGAW AVENUE IRVINE, CALIFORNIA 92614 PH. (949) 261-0051 FAX. (949) 261-6110	<b>SITE DIAGRAM</b>  PROPOSED BELL BUSINESS CENTER NORTHEAST OF RICKENBACKER ROAD AND 1ST STREET CITY OF BELL, CALIFORNIA <b>BELL-2587</b>	EXHIBIT
Drawn By:	CDD	Scale:	AS SHOWN			2
Checked By:	CHY	Date:	06/28/13			
Approved By:	CHY					

## **APPENDIX B**

### **Boring Logs**

# SOIL BORING / MONITORING WELL LOG

PROJECT: <u>CITY OF BELL</u>	DRILLING COMPANY: <u>Interphase Drilling</u>
PROJECT NUMBER: <u>60137736A</u>	DRILLER: <u>Marco</u>
CLIENT: <u>Pacific Industrial</u>	DRILLING METHOD: <u>Geoprobe 6600</u>
BORING / WELL NUMBER: <u>SV-1</u>	BORE HOLE DIAMETER: <u>2 1/4"</u>
TOTAL DEPTH: <u>5.0'</u>	SCREEN: Diam. <u>N/A</u> Length <u>N/A</u> Slot Size <u>N/A</u>
TOP OF CASING: _____	CASING: Diam. <u>N/A</u> Length <u>N/A</u> Type <u>N/A</u>
FIELD PERSONNEL: <u>Charles H. Yoon</u>	DATE DRILLED: <u>6-18-13</u>

PAGE 1 of 1

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
0							GRAVEL	0
1			<1.0		1.0		Poorly graded SAND (SP); dark brown; fine-grained sand; dry, no odor, no staining	1
2			<1.0		2.0	2.0		2
3			<1.0			3.0	Poorly graded SAND (SP); brown; medium-grained sand; dry, no odor, no staining	3
4			<1.0		4.0		Poorly graded SAND (SP); dark brown; fine-grained sand; dry, no odor, no staining	4
5			<1.0		5.0	5.0		5
6							Bottom of boring at 5.0' bgs	6
7								7
8								8
9								9
10								10

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT

**Terracon**

**BELL-2589**

MWL10 60137736A.GPJ 6/27/13

# SOIL BORING / MONITORING WELL LOG

PROJECT: <u>CITY OF BELL</u>	DRILLING COMPANY: <u>Interphase Drilling</u>
PROJECT NUMBER: <u>60137736A</u>	DRILLER: <u>Marco</u>
CLIENT: <u>Pacific Industrial</u>	DRILLING METHOD: <u>Geoprobe 6600</u>
BORING / WELL NUMBER: <u>SV-2</u>	BORE HOLE DIAMETER: <u>2 1/4"</u>
TOTAL DEPTH: <u>5.0'</u>	SCREEN: Diam. <u>N/A</u> Length <u>N/A</u> Slot Size <u>N/A</u>
TOP OF CASING: _____	CASING: Diam. <u>N/A</u> Length <u>N/A</u> Type <u>N/A</u>
FIELD PERSONNEL: <u>Charles H. Yoon</u>	DATE DRILLED: <u>6-18-13</u>

PAGE 1 of 1

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
0							<b>GRAVEL</b> Poorly graded SAND (SP); brown; fine-medium-grained sand; dry, no odor, no staining	0
1			<1.0		1.0			1
2			<1.0		2.0			2
3			<1.0					3
4			<1.0		4.0			4
5			<1.0		5.0	5.0		5
6							Bottom of boring at 5.0' bgs	6
7								7
8								8
9								9
10								10

REMARKS:

**Terracon**

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT **BELL-2590**



## **APPENDIX C**

### **Tables**

<b>TABLE 1</b> <b>SOIL SAMPLE ANALYTICAL RESULTS - VOCs and TPH</b> Dexia Properties Rickenbacker Road and 3rd Street City of Bell, California Terracon Project No. 60127736A							
Sample I.D.	Sample Date	Sample Depth (ft bgs)	VOCs	SVOCs	Total Petroleum Hydrocarbons		
					TPH GRO	TPH DRO	TPH ORO
			EPA Method 8260B	EPA Method 8270C (mg/Kg)	EPA Method 8015M (mg/Kg)		
SV-1 (1-2)	6/18/13	1 to 2	ND	Pyrene - 0.68	<0.50	5.5	<25
SV-2 (1-2)	6/18/13	1 to 2	ND	ND	<0.50	<5.0	<25
<b>MSL<sup>(1)</sup></b>			<b>NE</b>	<b>NE</b>	<b>500</b>	<b>1000</b>	<b>10000</b>
<b>PRG<sup>(2)</sup></b>			<b>NE</b>	<b>Pyrene - 210</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>

Notes:

ft bgs = feet below grade surface

mg/Kg = milligrams per kilograms

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organics

TPH = Total Petroleum Hydrocarbons

EPA= Environmental Protection Agency

ND = Constituents were not detected above laboratory reporting limits

NE = Not Established

TPH GRO = total petroleum hydrocarbons in gasoline carbon range (C6-C10)

TPH DRO = total petroleum hydrocarbons in diesel carbon range (C10-C28)

TPH ORO = total petroleum hydrocarbons in waste oil carbon range (C29-C44)

(1) Maximum Screening Levels (MSLs) for soils 20-150 feet for distance above groundwater, Region 4, Regional Water Quality Control Board-Los Angeles Region, Interim Site Assessment & Cleanup Guidebook, January 2005

(2) Region 9 Preliminary Screening Goal (PRG), soil screening level assuming a conservative dilution attenuation factor (DAF) of 1

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS - METALS**  
Dexia Properties  
Rickenbacker Road and 3rd Street  
City of Bell, Los Angeles County, California  
Terracon Project No. 60137736A

Sample I.D.	Sample Depth (feet bgs)	Sample Depth (feet bgs)	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc	Other Metals
			EPA Method 6010/7000 (Title-22 Metals)												
			mg/Kg												
SV-1 (1-2)	9/18/13	1 to 2	2.42*	101	0.309	0.504	10.6	8.20	13.8	10.3	<0.0835	8.71	24.3	48.7	ND
SV-2 (1-2)	9/18/13	1 to 2	<0.750	44.1	<0.250	<0.500	4.36	4.12	4.52	1.16	<0.0835	3.60	11.6	20.9	ND
CHHSLs <sup>(1)</sup>			0.24	63,000	1,700	7.50	37	3,200	38,000	320	180	16,000	6,700	100,000	

Notes:

EPA= Environmental Protection Agency

< = not detected above laboratory reporting limits

bgs= below ground surface

mg/Kg = milligrams per kilograms

(1) California Human Health Screening Levels (CHHSLs) for Soil and Comparison to Other Potential Environmental Concerns for Commerical/Industrial land use only

\* - The Department of Toxic Substances Control (DTSC ) established a regional background arsenic concentration in soil that can be used as a screening tool for sites throughout southern California. The term "background" collectively refers to both naturally occurring and anthropogenic concentrations in shallow soil. Statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound background arsenic concentration of 12 mg/kg. The analysis for 5 counties in southern California also gave an upper-bound background arsenic concentration of 12 mg/kg. The detected arsenic concentrations at the site are below the DTSC's established regional background concentration screening level.

<b>TABLE 3</b> <b>SOIL GAS ANALYTICAL RESULTS - DETECTED METHANE AND FIXED GASES</b> Dexia Properties Rickenbacker Road and 3rd Street City of Bell, Los Angeles County, California Terracon Project No. 60137736A							
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Methane	Isopropanol (Isopropyl Alcohol)	Carbon Dioxide	Oxygen	Nitrogen
			METHANE	LEAK COMPOUND	FIXED GASES		
			GC / (ppmv)		ASTM D1946 (%)		
SV-1	6/18/13	4.5 to 5	<5,000	<5.0	2.76	15.4	81.8
SV-2	6/18/13	4.5 to 5	<5,000	<5.0	0.542	20.3	79.2
CHHSLs <sup>(1)</sup>			NE	NE	NE	NE	NE
DTSC Screening Levels <sup>(2)</sup>		Cautionary Value	1,000	NA			
		Response Action	5,000				

Notes:

ft bgs = feet below grade surface

ASTM = American Society for Testing and Materials

EPA= Environmental Protection Agency

DTSC = Department of Toxic Substances Control

GC= Gas Chromatography

% = Percentage

NE = Not established

NA = Not Applicable

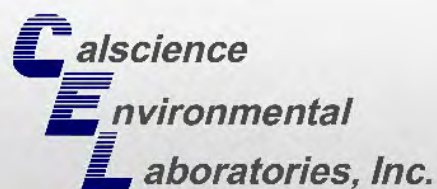
ppmv = parts per million volume

(1) California Human Health Screening Levels for commercial properties

(2) Screening levels from DTSC "Advisory on Methane Assessment and Common Remedies at School Sites, School Property Evaluations and Cleanup Division." June, 2005

## **APPENDIX D**

### **Laboratory Data Sheets and Corresponding Chains-of-Custody Forms**



## Supplemental Report 1

The original report has been revised/corrected.



# CALSCIENCE

## WORK ORDER NUMBER: 13-06-1201

*The difference is service*



AIR :: SOIL :: WATER :: MARINE CHEMISTRY

### Analytical Report For

**Client:** Terracon Consultants, Inc

**Client Project Name:** City of Bell / 60137736A

**Attention:** Carl Parten  
2817 McGaw Avenue  
Irvine, CA 92614-5835

*Amanda Porter*

Approved for release on 06/26/2013 by:  
Amanda Porter  
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501 • [www.calscience.com](http://www.calscience.com)

NELAP ID: 03220CA | DoD-ELAP ID: L10-41 | CSDLAC ID: 10105 • BELL-2596 • 0A0830

## Contents

---

Client Project Name: City of Bell / 60137736A

Work Order Number: 13-06-1201

1	Work Order Narrative . . . . .	3
2	Detections Summary . . . . .	4
3	Client Sample Data . . . . .	5
	3.1 EPA 8015B DRO (Solid) . . . . .	5
	3.2 EPA 8015B (M) TPH Motor Oil (Solid) . . . . .	6
	3.3 EPA 8015B GRO (Solid) . . . . .	7
	3.4 EPA 8270C Semi-Volatile Organics (Solid) . . . . .	8
	3.5 EPA 8260B Volatile Organics + Oxygenates (Solid) . . . . .	11
	3.6 EPA 6010B/7471A CAC Title 22 Metals / EPA 7471A Mercury (Solid) . . . . .	14
4	Quality Control Sample Data . . . . .	16
	4.1 MS/MSD and/or Duplicate . . . . .	16
	4.2 LCS/LCSD . . . . .	22
5	Glossary of Terms and Qualifiers . . . . .	29
6	Chain of Custody/Sample Receipt Form . . . . .	30

**Condition Upon Receipt:**

Samples were received under Chain of Custody (COC) on 06/18/2013. They were assigned to Work Order 13-06-1201.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time ( $HT \leq 15$  minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Additional Comments:**

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**Subcontract Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.





Client: Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835  
Attn: Carl Parten

Work Order: 13-06-1201  
Project name: City of Bell / 60137736A  
Received: 06/18/13 16:30

### DETECTIONS SUMMARY

#### Client Sample ID

Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
SV-1 (1-2) (13-06-1201-1)						
Arsenic	2.42		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	101		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.309		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.504		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.20		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	13.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	10.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.71		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.7		1.00	mg/kg	EPA 6010B	EPA 3050B
Diesel Range Organics	5.5	HD	5.0	mg/kg	EPA 8015B	EPA 3550B
Pyrene	0.68		0.50	mg/kg	EPA 8270C	EPA 3545
SV-2 (1-2) (13-06-1201-3)						
Barium	44.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	4.36		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	4.12		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	4.52		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.16		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.60		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	11.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	20.9		1.00	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

\*MDL is shown.

# Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SV-1 (1-2)</b>	<b>13-06-1201-1-A</b>	<b>06/18/13 08:30</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/19/13 20:50</b>	<b>130619B09</b>

Comment(s): -TPH as DRO is quantified in the carbon range C10-C28.

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	5.5	5.0	1	HD	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	73	61-145	

<b>SV-2 (1-2)</b>	<b>13-06-1201-3-A</b>	<b>06/18/13 09:05</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/19/13 21:05</b>	<b>130619B09</b>
-------------------	-----------------------	-----------------------	--------------	--------------	-----------------	-----------------------	------------------

Comment(s): -TPH as DRO is quantified in the carbon range C10-C28.

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	72	61-145	

<b>Method Blank</b>	<b>099-15-414-234</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/19/13 16:25</b>	<b>130619B09</b>
---------------------	-----------------------	------------	--------------	--------------	-----------------	-----------------------	------------------

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	73	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

# Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B (M)

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SV-1 (1-2)</b>	<b>13-06-1201-1-A</b>	<b>06/18/13 08:30</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/20/13 17:42</b>	<b>130619B10</b>

Comment(s): -TPH as Motor Oil is quantified in the carbon range C29-C44.

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	110	61-145	

<b>SV-2 (1-2)</b>	<b>13-06-1201-3-A</b>	<b>06/18/13 09:05</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/20/13 17:57</b>	<b>130619B10</b>
-------------------	-----------------------	-----------------------	--------------	--------------	-----------------	-----------------------	------------------

Comment(s): -TPH as Motor Oil is quantified in the carbon range C29-C44.

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	113	61-145	

<b>Method Blank</b>	<b>099-15-420-474</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 47</b>	<b>06/19/13</b>	<b>06/20/13 16:40</b>	<b>130619B10</b>
---------------------	-----------------------	------------	--------------	--------------	-----------------	-----------------------	------------------

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	106	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

# Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8015B

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SV-1 (1-2)</b>	<b>13-06-1201-1-A</b>	<b>06/18/13 08:30</b>	<b>Solid</b>	<b>GC 57</b>	<b>06/18/13</b>	<b>06/22/13 15:28</b>	<b>130622B01</b>

Comment(s): -TPH as GRO is quantified in the carbon range C6-C10.

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	42-126	

<b>SV-2 (1-2)</b>	<b>13-06-1201-3-A</b>	<b>06/18/13 09:05</b>	<b>Solid</b>	<b>GC 57</b>	<b>06/18/13</b>	<b>06/22/13 16:00</b>	<b>130622B01</b>
-------------------	-----------------------	-----------------------	--------------	--------------	-----------------	-----------------------	------------------

Comment(s): -TPH as GRO is quantified in the carbon range C6-C10.

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

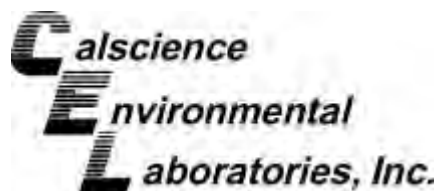
Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	69	42-126	

<b>Method Blank</b>	<b>099-12-024-718</b>	<b>N/A</b>	<b>Solid</b>	<b>GC 57</b>	<b>06/22/13</b>	<b>06/22/13 11:01</b>	<b>130622B01</b>
---------------------	-----------------------	------------	--------------	--------------	-----------------	-----------------------	------------------

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	74	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3545  
Method: EPA 8270C  
Units: mg/kg

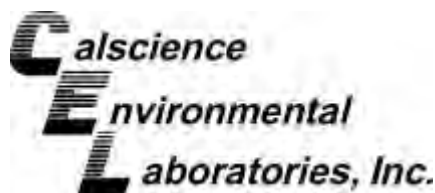
Project: City of Bell / 60137736A

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1 (1-2)	13-06-1201-1-A	06/18/13 08:30	Solid	GC/MS CCC	06/19/13	06/21/13 20:47	130619L09

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	0.68	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	78	38-134			2-Fluorophenol	79	42-120		
Nitrobenzene-d5	76	42-150			p-Terphenyl-d14	91	35-167		
Phenol-d6	83	46-118			2,4,6-Tribromophenol	82	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3545  
Method: EPA 8270C  
Units: mg/kg

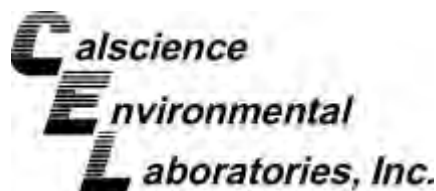
Project: City of Bell / 60137736A

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2 (1-2)	13-06-1201-3-A	06/18/13 09:05	Solid	GC/MS CCC	06/19/13	06/21/13 21:13	130619L09

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	67	38-134			2-Fluorophenol	58	42-120		
Nitrobenzene-d5	54	42-150			p-Terphenyl-d14	91	35-167		
Phenol-d6	60	46-118			2,4,6-Tribromophenol	74	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3545  
Method: EPA 8270C  
Units: mg/kg

Project: City of Bell / 60137736A

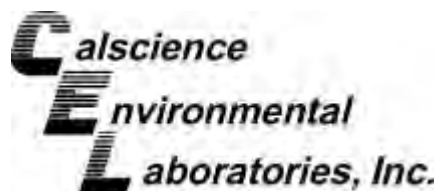
Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-549-2,502	N/A	Solid	GC/MS CCC	06/19/13	06/20/13 10:58	130619L09

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	0.50	1		2,4-Dimethylphenol	ND	0.50	1	
Acenaphthylene	ND	0.50	1		4,6-Dinitro-2-Methylphenol	ND	2.5	1	
Aniline	ND	0.50	1		2,4-Dinitrophenol	ND	2.5	1	
Anthracene	ND	0.50	1		2,4-Dinitrotoluene	ND	0.50	1	
Azobenzene	ND	0.50	1		2,6-Dinitrotoluene	ND	0.50	1	
Benzidine	ND	10	1		Fluoranthene	ND	0.50	1	
Benzo (a) Anthracene	ND	0.50	1		Fluorene	ND	0.50	1	
Benzo (a) Pyrene	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	0.50	1	
Benzo (b) Fluoranthene	ND	0.50	1		Hexachlorobenzene	ND	0.50	1	
Benzo (g,h,i) Perylene	ND	0.50	1		Hexachlorocyclopentadiene	ND	2.5	1	
Benzo (k) Fluoranthene	ND	0.50	1		Hexachloroethane	ND	0.50	1	
Benzoic Acid	ND	2.5	1		Indeno (1,2,3-c,d) Pyrene	ND	0.50	1	
Benzyl Alcohol	ND	0.50	1		Isophorone	ND	0.50	1	
Bis(2-Chloroethoxy) Methane	ND	0.50	1		2-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroethyl) Ether	ND	2.5	1		1-Methylnaphthalene	ND	0.50	1	
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		2-Methylphenol	ND	0.50	1	
Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		3/4-Methylphenol	ND	0.50	1	
4-Bromophenyl-Phenyl Ether	ND	0.50	1		N-Nitroso-di-n-propylamine	ND	0.50	1	
Butyl Benzyl Phthalate	ND	0.50	1		N-Nitrosodimethylamine	ND	0.50	1	
4-Chloro-3-Methylphenol	ND	0.50	1		N-Nitrosodiphenylamine	ND	0.50	1	
4-Chloroaniline	ND	0.50	1		Naphthalene	ND	0.50	1	
2-Chloronaphthalene	ND	0.50	1		4-Nitroaniline	ND	0.50	1	
2-Chlorophenol	ND	0.50	1		3-Nitroaniline	ND	0.50	1	
4-Chlorophenyl-Phenyl Ether	ND	0.50	1		2-Nitroaniline	ND	0.50	1	
Chrysene	ND	0.50	1		Nitrobenzene	ND	2.5	1	
Di-n-Butyl Phthalate	ND	0.50	1		4-Nitrophenol	ND	0.50	1	
Di-n-Octyl Phthalate	ND	0.50	1		2-Nitrophenol	ND	0.50	1	
Dibenz (a,h) Anthracene	ND	0.50	1		Pentachlorophenol	ND	2.5	1	
Dibenzofuran	ND	0.50	1		Phenanthrene	ND	0.50	1	
1,2-Dichlorobenzene	ND	0.50	1		Phenol	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		Pyrene	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Pyridine	ND	0.50	1	
3,3'-Dichlorobenzidine	ND	10	1		1,2,4-Trichlorobenzene	ND	0.50	1	
2,4-Dichlorophenol	ND	0.50	1		2,4,6-Trichlorophenol	ND	0.50	1	
Diethyl Phthalate	ND	0.50	1		2,4,5-Trichlorophenol	ND	0.50	1	
Dimethyl Phthalate	ND	0.50	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
2-Fluorobiphenyl	85	38-134			2-Fluorophenol	84	42-120		
Nitrobenzene-d5	85	42-150			p-Terphenyl-d14	97	35-167		
Phenol-d6	86	46-118			2,4,6-Tribromophenol	76	36-132		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: mg/kg

Project: City of Bell / 60137736A

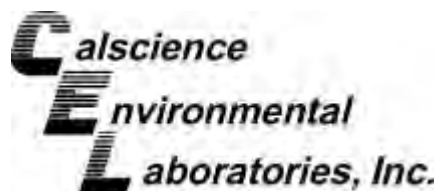
Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1 (1-2)	13-06-1201-1-A	06/18/13 08:30	Solid	GC/MS LL	06/18/13	06/19/13 14:51	130619L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.12	1		c-1,3-Dichloropropene	ND	0.0050	1	
Benzene	ND	0.0050	1		t-1,3-Dichloropropene	ND	0.0050	1	
Bromobenzene	ND	0.0050	1		Ethylbenzene	ND	0.0050	1	
Bromochloromethane	ND	0.0050	1		2-Hexanone	ND	0.050	1	
Bromodichloromethane	ND	0.0050	1		Isopropylbenzene	ND	0.0050	1	
Bromoform	ND	0.0050	1		p-Isopropyltoluene	ND	0.0050	1	
Bromomethane	ND	0.025	1		Methylene Chloride	ND	0.050	1	
2-Butanone	ND	0.050	1		4-Methyl-2-Pentanone	ND	0.050	1	
n-Butylbenzene	ND	0.0050	1		Naphthalene	ND	0.050	1	
sec-Butylbenzene	ND	0.0050	1		n-Propylbenzene	ND	0.0050	1	
tert-Butylbenzene	ND	0.0050	1		Styrene	ND	0.0050	1	
Carbon Disulfide	ND	0.050	1		1,1,1,2-Tetrachloroethane	ND	0.0050	1	
Carbon Tetrachloride	ND	0.0050	1		1,1,2,2-Tetrachloroethane	ND	0.0050	1	
Chlorobenzene	ND	0.0050	1		Tetrachloroethene	ND	0.0050	1	
Chloroethane	ND	0.0050	1		Toluene	ND	0.0050	1	
Chloroform	ND	0.0050	1		1,2,3-Trichlorobenzene	ND	0.010	1	
Chloromethane	ND	0.025	1		1,2,4-Trichlorobenzene	ND	0.0050	1	
2-Chlorotoluene	ND	0.0050	1		1,1,1-Trichloroethane	ND	0.0050	1	
4-Chlorotoluene	ND	0.0050	1		1,1,2-Trichloroethane	ND	0.0050	1	
Dibromochloromethane	ND	0.0050	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1	
1,2-Dibromo-3-Chloropropane	ND	0.010	1		Trichloroethene	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		1,2,3-Trichloropropane	ND	0.0050	1	
Dibromomethane	ND	0.0050	1		1,2,4-Trimethylbenzene	ND	0.0050	1	
1,2-Dichlorobenzene	ND	0.0050	1		Trichlorofluoromethane	ND	0.050	1	
1,3-Dichlorobenzene	ND	0.0050	1		1,3,5-Trimethylbenzene	ND	0.0050	1	
1,4-Dichlorobenzene	ND	0.0050	1		Vinyl Acetate	ND	0.050	1	
Dichlorodifluoromethane	ND	0.0050	1		Vinyl Chloride	ND	0.0050	1	
1,1-Dichloroethane	ND	0.0050	1		p/m-Xylene	ND	0.0050	1	
1,2-Dichloroethane	ND	0.0050	1		o-Xylene	ND	0.0050	1	
1,1-Dichloroethene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
c-1,2-Dichloroethene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
t-1,2-Dichloroethene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
1,2-Dichloropropane	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
1,3-Dichloropropane	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
2,2-Dichloropropane	ND	0.0050	1		Ethanol	ND	0.25	1	
1,1-Dichloropropene	ND	0.0050	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	97	60-132			Dibromofluoromethane	113	63-141		
1,2-Dichloroethane-d4	110	62-146			Toluene-d8	100	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: mg/kg

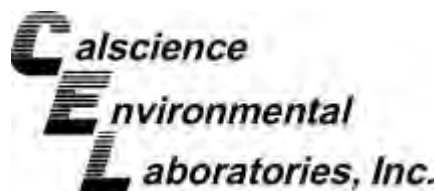
Project: City of Bell / 60137736A

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-2 (1-2)	13-06-1201-3-A	06/18/13 09:05	Solid	GC/MS LL	06/18/13	06/19/13 14:24	130619L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.12	1		c-1,3-Dichloropropene	ND	0.0050	1	
Benzene	ND	0.0050	1		t-1,3-Dichloropropene	ND	0.0050	1	
Bromobenzene	ND	0.0050	1		Ethylbenzene	ND	0.0050	1	
Bromochloromethane	ND	0.0050	1		2-Hexanone	ND	0.050	1	
Bromodichloromethane	ND	0.0050	1		Isopropylbenzene	ND	0.0050	1	
Bromoform	ND	0.0050	1		p-Isopropyltoluene	ND	0.0050	1	
Bromomethane	ND	0.025	1		Methylene Chloride	ND	0.050	1	
2-Butanone	ND	0.050	1		4-Methyl-2-Pentanone	ND	0.050	1	
n-Butylbenzene	ND	0.0050	1		Naphthalene	ND	0.050	1	
sec-Butylbenzene	ND	0.0050	1		n-Propylbenzene	ND	0.0050	1	
tert-Butylbenzene	ND	0.0050	1		Styrene	ND	0.0050	1	
Carbon Disulfide	ND	0.050	1		1,1,1,2-Tetrachloroethane	ND	0.0050	1	
Carbon Tetrachloride	ND	0.0050	1		1,1,2,2-Tetrachloroethane	ND	0.0050	1	
Chlorobenzene	ND	0.0050	1		Tetrachloroethene	ND	0.0050	1	
Chloroethane	ND	0.0050	1		Toluene	ND	0.0050	1	
Chloroform	ND	0.0050	1		1,2,3-Trichlorobenzene	ND	0.010	1	
Chloromethane	ND	0.025	1		1,2,4-Trichlorobenzene	ND	0.0050	1	
2-Chlorotoluene	ND	0.0050	1		1,1,1-Trichloroethane	ND	0.0050	1	
4-Chlorotoluene	ND	0.0050	1		1,1,2-Trichloroethane	ND	0.0050	1	
Dibromochloromethane	ND	0.0050	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1	
1,2-Dibromo-3-Chloropropane	ND	0.010	1		Trichloroethene	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		1,2,3-Trichloropropane	ND	0.0050	1	
Dibromomethane	ND	0.0050	1		1,2,4-Trimethylbenzene	ND	0.0050	1	
1,2-Dichlorobenzene	ND	0.0050	1		Trichlorofluoromethane	ND	0.050	1	
1,3-Dichlorobenzene	ND	0.0050	1		1,3,5-Trimethylbenzene	ND	0.0050	1	
1,4-Dichlorobenzene	ND	0.0050	1		Vinyl Acetate	ND	0.050	1	
Dichlorodifluoromethane	ND	0.0050	1		Vinyl Chloride	ND	0.0050	1	
1,1-Dichloroethane	ND	0.0050	1		p/m-Xylene	ND	0.0050	1	
1,2-Dichloroethane	ND	0.0050	1		o-Xylene	ND	0.0050	1	
1,1-Dichloroethene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
c-1,2-Dichloroethene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
t-1,2-Dichloroethene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
1,2-Dichloropropane	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
1,3-Dichloropropane	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
2,2-Dichloropropane	ND	0.0050	1		Ethanol	ND	0.25	1	
1,1-Dichloropropene	ND	0.0050	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	98	60-132			Dibromofluoromethane	112	63-141		
1,2-Dichloroethane-d4	105	62-146			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: mg/kg

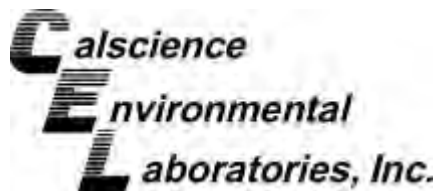
Project: City of Bell / 60137736A

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-7,337	N/A	Solid	GC/MS LL	06/19/13	06/19/13 13:31	130619L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.12	1		c-1,3-Dichloropropene	ND	0.0050	1	
Benzene	ND	0.0050	1		t-1,3-Dichloropropene	ND	0.0050	1	
Bromobenzene	ND	0.0050	1		Ethylbenzene	ND	0.0050	1	
Bromochloromethane	ND	0.0050	1		2-Hexanone	ND	0.050	1	
Bromodichloromethane	ND	0.0050	1		Isopropylbenzene	ND	0.0050	1	
Bromoform	ND	0.0050	1		p-Isopropyltoluene	ND	0.0050	1	
Bromomethane	ND	0.025	1		Methylene Chloride	ND	0.050	1	
2-Butanone	ND	0.050	1		4-Methyl-2-Pentanone	ND	0.050	1	
n-Butylbenzene	ND	0.0050	1		Naphthalene	ND	0.050	1	
sec-Butylbenzene	ND	0.0050	1		n-Propylbenzene	ND	0.0050	1	
tert-Butylbenzene	ND	0.0050	1		Styrene	ND	0.0050	1	
Carbon Disulfide	ND	0.050	1		1,1,1,2-Tetrachloroethane	ND	0.0050	1	
Carbon Tetrachloride	ND	0.0050	1		1,1,2,2-Tetrachloroethane	ND	0.0050	1	
Chlorobenzene	ND	0.0050	1		Tetrachloroethene	ND	0.0050	1	
Chloroethane	ND	0.0050	1		Toluene	ND	0.0050	1	
Chloroform	ND	0.0050	1		1,2,3-Trichlorobenzene	ND	0.010	1	
Chloromethane	ND	0.025	1		1,2,4-Trichlorobenzene	ND	0.0050	1	
2-Chlorotoluene	ND	0.0050	1		1,1,1-Trichloroethane	ND	0.0050	1	
4-Chlorotoluene	ND	0.0050	1		1,1,2-Trichloroethane	ND	0.0050	1	
Dibromochloromethane	ND	0.0050	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1	
1,2-Dibromo-3-Chloropropane	ND	0.010	1		Trichloroethene	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		1,2,3-Trichloropropane	ND	0.0050	1	
Dibromomethane	ND	0.0050	1		1,2,4-Trimethylbenzene	ND	0.0050	1	
1,2-Dichlorobenzene	ND	0.0050	1		Trichlorofluoromethane	ND	0.050	1	
1,3-Dichlorobenzene	ND	0.0050	1		1,3,5-Trimethylbenzene	ND	0.0050	1	
1,4-Dichlorobenzene	ND	0.0050	1		Vinyl Acetate	ND	0.050	1	
Dichlorodifluoromethane	ND	0.0050	1		Vinyl Chloride	ND	0.0050	1	
1,1-Dichloroethane	ND	0.0050	1		p/m-Xylene	ND	0.0050	1	
1,2-Dichloroethane	ND	0.0050	1		o-Xylene	ND	0.0050	1	
1,1-Dichloroethene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
c-1,2-Dichloroethene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
t-1,2-Dichloroethene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
1,2-Dichloropropane	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
1,3-Dichloropropane	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
2,2-Dichloropropane	ND	0.0050	1		Ethanol	ND	0.25	1	
1,1-Dichloropropene	ND	0.0050	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	99	60-132			Dibromofluoromethane	112	63-141		
1,2-Dichloroethane-d4	107	62-146			Toluene-d8	100	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3050B / EPA 7471A Total  
Method: EPA 6010B / EPA 7471A  
Units: mg/kg

Project: City of Bell / 60137736A

Page 1 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1 (1-2)	13-06-1201-1-A	06/18/13 08:30	Solid	ICP 7300	06/19/13	06/19/13 20:46	130619L01

Comment(s): -Mercury analysis was performed on 06/19/13 13:31 with batch 130619L03.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Mercury	ND	0.0835	1	
Arsenic	2.42	0.750	1		Molybdenum	ND	0.250	1	
Barium	101	0.500	1		Nickel	8.71	0.250	1	
Beryllium	0.309	0.250	1		Selenium	ND	0.750	1	
Cadmium	0.504	0.500	1		Silver	ND	0.250	1	
Chromium	10.6	0.250	1		Thallium	ND	0.750	1	
Cobalt	8.20	0.250	1		Vanadium	24.3	0.250	1	
Copper	13.8	0.500	1		Zinc	48.7	1.00	1	
Lead	10.3	0.500	1						

SV-2 (1-2)	13-06-1201-3-A	06/18/13 09:05	Solid	ICP 7300	06/19/13	06/19/13 20:48	130619L01
------------	----------------	----------------	-------	----------	----------	----------------	-----------

Comment(s): -Mercury analysis was performed on 06/19/13 13:33 with batch 130619L03.

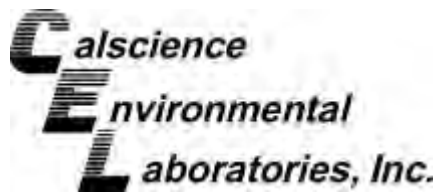
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Mercury	ND	0.0835	1	
Arsenic	ND	0.750	1		Molybdenum	ND	0.250	1	
Barium	44.1	0.500	1		Nickel	3.60	0.250	1	
Beryllium	ND	0.250	1		Selenium	ND	0.750	1	
Cadmium	ND	0.500	1		Silver	ND	0.250	1	
Chromium	4.36	0.250	1		Thallium	ND	0.750	1	
Cobalt	4.12	0.250	1		Vanadium	11.6	0.250	1	
Copper	4.52	0.500	1		Zinc	20.9	1.00	1	
Lead	1.16	0.500	1						

Method Blank	099-04-007-9,376	N/A	Solid	Mercury	06/19/13	06/19/13 13:26	130619L03
--------------	------------------	-----	-------	---------	----------	----------------	-----------

Comment(s): -Preparation/analysis for Mercury was performed by EPA 7471A.

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0835	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



# Analytical Report



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3050B / EPA 7471A Total  
Method: EPA 6010B / EPA 7471A  
Units: mg/kg

Project: City of Bell / 60137736A

Page 2 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-16,937	N/A	Solid	ICP 7300	06/19/13	06/19/13 13:17	130619L01

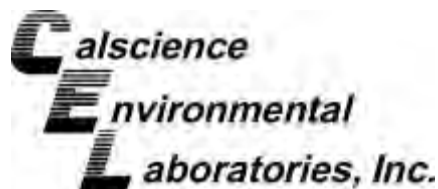
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Lead	ND	0.500	1	
Arsenic	ND	0.750	1		Molybdenum	ND	0.250	1	
Barium	ND	0.500	1		Nickel	ND	0.250	1	
Beryllium	ND	0.250	1		Selenium	ND	0.750	1	
Cadmium	ND	0.500	1		Silver	ND	0.250	1	
Chromium	ND	0.250	1		Thallium	ND	0.750	1	
Cobalt	ND	0.250	1		Vanadium	ND	0.250	1	
Copper	ND	0.500	1		Zinc	ND	1.00	1	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

BELL 2610



## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3050B  
Method: EPA 6010B

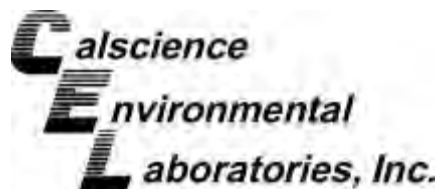
Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-1214-4	Solid	ICP 7300	06/19/13	06/19/13	130619S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.468	26	5.918	24	50-115	9	0-20	3
Arsenic	2.103	25.00	24.77	91	25.78	95	75-125	4	0-20	
Barium	43.20	25.00	83.64	162	72.14	116	75-125	15	0-20	3
Beryllium	ND	25.00	26.12	104	26.14	105	75-125	0	0-20	
Cadmium	ND	25.00	24.66	99	24.80	99	75-125	1	0-20	
Chromium	8.722	25.00	33.74	100	33.85	101	75-125	0	0-20	
Cobalt	3.831	25.00	30.29	106	30.23	106	75-125	0	0-20	
Copper	5.076	25.00	28.99	96	29.53	98	75-125	2	0-20	
Lead	63.86	25.00	93.17	117	120.2	225	75-125	25	0-20	3,4
Molybdenum	ND	25.00	22.39	90	22.36	89	75-125	0	0-20	
Nickel	3.914	25.00	29.40	102	36.57	131	75-125	22	0-20	3,4
Selenium	ND	25.00	19.94	80	20.05	80	75-125	1	0-20	
Silver	ND	12.50	12.69	102	12.88	103	75-125	2	0-20	
Thallium	ND	25.00	13.75	55	18.09	72	75-125	27	0-20	3,4
Vanadium	21.57	25.00	46.02	98	53.04	126	75-125	14	0-20	3
Zinc	44.83	25.00	67.26	90	67.56	91	75-125	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

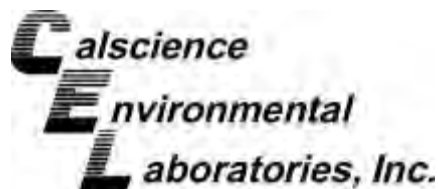
Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B

Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV-2 (1-2)	Solid	GC 47	06/19/13	06/19/13	130619S09

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Diesel Range Organics	ND	400.0	355.2	89	364.6	91	64-130	3	0-15	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

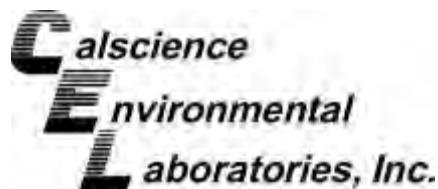
Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B (M)

Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV-2 (1-2)	Solid	GC 47	06/19/13	06/20/13	130619S10

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Motor Oil	ND	400.0	397.5	99	420.9	105	64-130	6	0-15	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 7471A Total  
Method: EPA 7471A

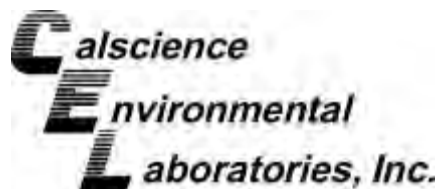
Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV-2 (1-2)	Solid	Mercury	06/19/13	06/19/13	130619S03

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	ND	0.8350	0.7846	94	0.7858	94	71-137	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit





## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 3545  
Method: EPA 8270C

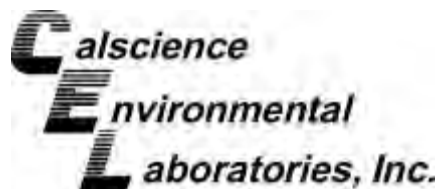
Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-1196-4	Solid	GC/MS CCC	06/19/13	06/20/13	130619S09

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	ND	10.00	5.583	56	5.614	56	49-133	1	0-18	
Acenaphthylene	ND	10.00	5.711	57	5.717	57	50-150	0	0-20	
Butyl Benzyl Phthalate	ND	10.00	5.683	57	5.594	56	50-150	2	0-20	
4-Chloro-3-Methylphenol	ND	10.00	5.391	54	5.414	54	50-128	0	0-17	
2-Chlorophenol	ND	10.00	5.242	52	5.214	52	57-111	1	0-17	3
1,4-Dichlorobenzene	ND	10.00	5.364	54	5.343	53	49-127	0	0-20	
Dimethyl Phthalate	ND	10.00	5.258	53	5.310	53	50-150	1	0-20	
2,4-Dinitrotoluene	ND	10.00	5.052	51	5.220	52	50-128	3	0-18	
Fluorene	ND	10.00	5.857	59	5.938	59	50-150	1	0-20	
N-Nitroso-di-n-propylamine	ND	10.00	5.242	52	5.157	52	54-144	2	0-17	3
Naphthalene	ND	10.00	5.574	56	5.549	55	50-150	0	0-20	
4-Nitrophenol	ND	10.00	3.041	30	3.146	31	30-144	3	0-21	
Pentachlorophenol	ND	10.00	2.049	20	2.202	22	29-113	7	0-22	3
Phenol	ND	10.00	4.820	48	4.738	47	57-123	2	0-16	3
Pyrene	ND	10.00	6.101	61	5.905	59	47-149	3	0-20	
1,2,4-Trichlorobenzene	ND	10.00	5.595	56	5.614	56	42-132	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

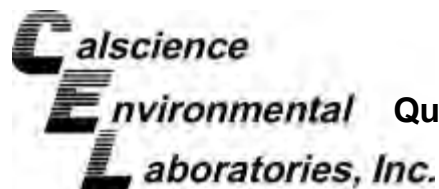
Date Received: 06/18/13  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8260B

Project City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV-2 (1-2)	Solid	GC/MS LL	06/18/13	06/19/13	130619S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.05000	0.05875	117	0.05801	116	61-127	1	0-20	
Carbon Tetrachloride	ND	0.05000	0.06607	132	0.06671	133	51-135	1	0-29	
Chlorobenzene	ND	0.05000	0.04802	96	0.04711	94	57-123	2	0-20	
1,2-Dibromoethane	ND	0.05000	0.05110	102	0.05175	104	64-124	1	0-20	
1,2-Dichlorobenzene	ND	0.05000	0.04534	91	0.04560	91	35-131	1	0-25	
1,2-Dichloroethane	ND	0.05000	0.05656	113	0.05536	111	80-120	2	0-20	
1,1-Dichloroethene	ND	0.05000	0.05707	114	0.05959	119	47-143	4	0-25	
Ethylbenzene	ND	0.05000	0.05335	107	0.05272	105	57-129	1	0-22	
Toluene	ND	0.05000	0.05793	116	0.05710	114	63-123	1	0-20	
Trichloroethene	ND	0.05000	0.05720	114	0.05591	112	44-158	2	0-20	
Vinyl Chloride	ND	0.05000	0.06960	139	0.07369	147	49-139	6	0-47	3
p/m-Xylene	ND	0.1000	0.1045	105	0.1036	104	70-130	1	0-30	
o-Xylene	ND	0.05000	0.05086	102	0.05099	102	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	0.05000	0.05601	112	0.06034	121	57-123	7	0-21	
Tert-Butyl Alcohol (TBA)	ND	0.2500	0.2629	105	0.2509	100	30-168	5	0-34	
Diisopropyl Ether (DIPE)	ND	0.05000	0.05342	107	0.05595	112	57-129	5	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	0.05000	0.05699	114	0.06178	124	55-127	8	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	0.05000	0.05761	115	0.05851	117	58-124	2	0-20	
Ethanol	ND	0.5000	0.4648	93	0.4741	95	17-167	2	0-47	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 3050B  
Method: EPA 6010B

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-16,937	Solid	ICP 7300	06/19/13	130619-I-01_54.icp	130619L01

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers
Antimony	25.00	25.62	102	80-120	73-127	
Arsenic	25.00	24.62	98	80-120	73-127	
Barium	25.00	27.40	110	80-120	73-127	
Beryllium	25.00	26.47	106	80-120	73-127	
Cadmium	25.00	26.86	107	80-120	73-127	
Chromium	25.00	25.40	102	80-120	73-127	
Cobalt	25.00	28.20	113	80-120	73-127	
Copper	25.00	25.32	101	80-120	73-127	
Lead	25.00	24.54	98	80-120	73-127	
Molybdenum	25.00	26.23	105	80-120	73-127	
Nickel	25.00	27.25	109	80-120	73-127	
Selenium	25.00	23.82	95	80-120	73-127	
Silver	12.50	12.67	101	80-120	73-127	
Thallium	25.00	24.94	100	80-120	73-127	
Vanadium	25.00	25.72	103	80-120	73-127	
Zinc	25.00	29.79	119	80-120	73-127	

Total number of LCS compounds : 16

Total number of ME compounds: 0

Total number of ME compounds allowed : 1

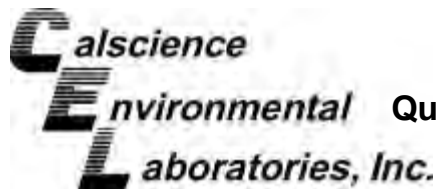
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2617**

Return to Contents



Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-15-414-234	Solid	GC 47	06/19/13	13061916	130619B09

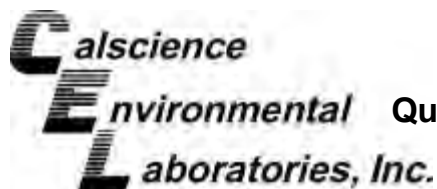
Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Diesel Range Organics	400.0	335.2	84	75-123	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

BELL-2618



## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 3550B  
Method: EPA 8015B (M)

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-15-420-474	Solid	GC 47	06/20/13	13062012	130619B10

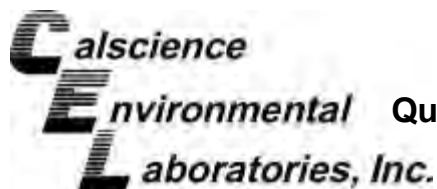
Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
TPH as Motor Oil	400.0	388.8	97	75-123	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2619**



## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8015B

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-024-718	Solid	GC 57	06/22/13	13062205	130622B01

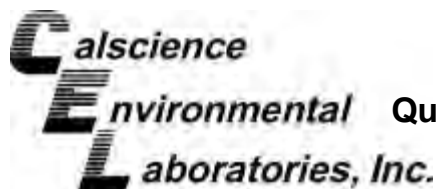
Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Gasoline Range Organics	10.00	9.137	91	70-118	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2620**



## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 7471A Total  
Method: EPA 7471A

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-007-9,376	Solid	Mercury	06/19/13	130619-I-03.icp	130619L03

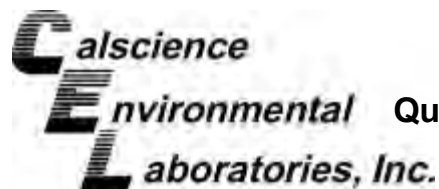
<u>Parameter</u>	<u>Conc Added</u>	<u>Conc Recovered</u>	<u>LCS %Rec</u>	<u>%Rec CL</u>	<u>Qualifiers</u>
Mercury	0.8350	0.7654	92	85-121	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2621**



## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 3545  
Method: EPA 8270C

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-549-2,502	Solid	GC/MS CCC	06/20/13	20JUN004.rr	130619L09

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers
Acenaphthene	10.00	8.025	80	59-125	48-136	
Acenaphthylene	10.00	7.815	78	33-145	14-164	
Butyl Benzyl Phthalate	10.00	7.916	79	0-152	0-177	
4-Chloro-3-Methylphenol	10.00	8.111	81	61-121	51-131	
2-Chlorophenol	10.00	8.084	81	60-114	51-123	
1,4-Dichlorobenzene	10.00	8.358	84	61-121	51-131	
Dimethyl Phthalate	10.00	7.812	78	0-112	0-131	
2,4-Dinitrotoluene	10.00	7.761	78	51-141	36-156	
Fluorene	10.00	8.337	83	59-121	49-131	
N-Nitroso-di-n-propylamine	10.00	6.952	70	64-136	52-148	
Naphthalene	10.00	8.159	82	21-133	2-152	
4-Nitrophenol	10.00	6.451	65	38-152	19-171	
Pentachlorophenol	10.00	5.606	56	38-116	25-129	
Phenol	10.00	7.440	74	59-125	48-136	
Pyrene	10.00	8.865	89	51-141	36-156	
1,2,4-Trichlorobenzene	10.00	8.414	84	58-118	48-128	

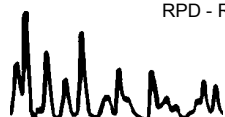
Total number of LCS compounds : 16

Total number of ME compounds: 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2622**





## Quality Control - Laboratory Control Sample



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1201  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-796-7,337	Solid	GC/MS LL	06/19/13	19JUN003.rr	130619L01

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers
Benzene	0.05000	0.05652	113	78-120	71-127	
Carbon Tetrachloride	0.05000	0.06590	132	49-139	34-154	
Chlorobenzene	0.05000	0.04604	92	79-120	72-127	
1,2-Dibromoethane	0.05000	0.05060	101	80-120	73-127	
1,2-Dichlorobenzene	0.05000	0.04520	90	75-120	68-128	
1,2-Dichloroethane	0.05000	0.05376	108	80-120	73-127	
1,1-Dichloroethene	0.05000	0.05612	112	74-122	66-130	
Ethylbenzene	0.05000	0.05151	103	76-120	69-127	
Toluene	0.05000	0.05498	110	77-120	70-127	
Trichloroethene	0.05000	0.05458	109	80-120	73-127	
Vinyl Chloride	0.05000	0.06895	138	68-122	59-131	X
p/m-Xylene	0.1000	0.1014	101	75-125	67-133	
o-Xylene	0.05000	0.04962	99	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	0.05000	0.06001	120	77-120	70-127	
Tert-Butyl Alcohol (TBA)	0.2500	0.2388	96	68-122	59-131	
Diisopropyl Ether (DIPE)	0.05000	0.05319	106	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	0.05000	0.05962	119	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	0.05000	0.05938	119	75-120	68-128	
Ethanol	0.5000	0.4496	90	56-140	42-154	

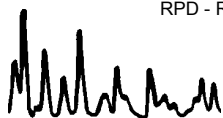
Total number of LCS compounds : 19

Total number of ME compounds: 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

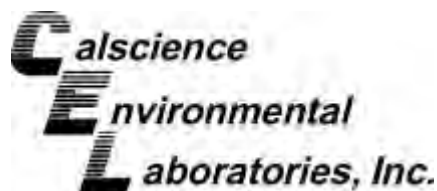
RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

**BELL-2623**

Return to Contents



## Glossary of Terms and Qualifiers



Work Order Number: 13-06-1201

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT)  $\leq$  15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

[illegible]

WORK ORDER #: **13-06-**1201

# **SAMPLE RECEIPT FORM**

Cooler 1 of 1

CLIENT: TERRA CON

DATE: 06/18/13

**TEMPERATURE:** Thermometer ID: SC1 (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Temperature 2.6 °C - 0.2°C (CF) = 2.4 °C ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter

Initial: dey

## **CUSTODY SEALS INTACT:**

☐ Cooler ☐ \_\_\_\_\_ ☐ No (Not Intact) ☒ Not Present ☐ N/A

Initial: dey

☐ Sample ☐ \_\_\_\_\_ ☐ No (Not Intact) ☒ Not Present

Initial: HH

## **SAMPLE CONDITION:**

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## **CONTAINER TYPE:**

**Solid:** ☒ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (\_\_\_\_) ☐ EnCores® ☐ TerraCores® ☐ \_\_\_\_\_

**Water:** ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na2</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 1AGB ☐ 1AGB<sub>na2</sub> ☐ 1AGB<sub>s</sub>

☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> ☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> ☐ 1PB ☐ 1PB<sub>na</sub> ☐ 500PB

☐ 250PB ☐ 250PB<sub>n</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> ☐ 100PJ ☐ 100PJ<sub>na2</sub> ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

**Air:** ☐ Tedlar® ☐ Canister **Other:** ☐ \_\_\_\_\_ **Trip Blank Lot#:** \_\_\_\_\_ **Labeled/Checked by:** HH

**Container:** C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WJ

**Preservative:** h: HCL n: HNO<sub>3</sub> na<sub>2</sub>: Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> na: NaOH p: H<sub>3</sub>PO<sub>4</sub> s: H<sub>2</sub>SO<sub>4</sub> u: Ultra-pure znna: ZnAc<sub>2</sub>+NaOH f: Filtered **Scanned by:** WJ

WORK ORDER #: 13-06-120/

## SAMPLE ANOMALY FORM

**SAMPLES - CONTAINERS & LABELS:**

Comments:

- ☐ Sample(s) NOT RECEIVED but listed on COC  
☐ Sample(s) received but NOT LISTED on COC  
☐ Holding time expired – list sample ID(s) and test  
☐ Insufficient quantities for analysis – list test  
☐ Improper container(s) used – list test  
☐ Improper preservative used – list test  
☐ No preservative noted on COC or label – list test & notify lab  
☐ Sample labels illegible – note test/container type  
☒ Sample label(s) do not match COC – Note in comments
- ☐ Sample ID  
☒ Date and/or Time Collected  
☐ Project Information  
☐ # of Container(s)  
☐ Analysis
- ☐ Sample container(s) compromised – Note in comments
- ☐ Water present in sample container  
☐ Broken
- ☐ Sample container(s) not labeled  
☐ Air sample container(s) compromised – Note in comments
- ☐ Flat  
☐ Very low in volume  
☐ Leaking (Not transferred - duplicate bag submitted)  
☐ Leaking (transferred into Calscience Tedlar® Bag\*)  
☐ Leaking (transferred into Client's Tedlar® Bag\*)
- ☐ Other: \_\_\_\_\_

*C-17 collection time per label @ 8:15*

**HEADSPACE – Containers with Bubble > 6mm or ¼ inch:**

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: \_\_\_\_\_

\*Transferred at Client's request.

Initial / Date: *JH* 06/18/13



The original report has been revised/corrected.



**CALSCIENCE**

**WORK ORDER NUMBER: 13-06-1200**

*The difference is service*



AIR :: SOIL :: WATER :: MARINE CHEMISTRY

**Analytical Report For**

**Client:** Terracon Consultants, Inc

**Client Project Name:** City of Bell / 60137736A

**Attention:** Carl Parten  
2817 McGaw Avenue  
Irvine, CA 92614-5835

*Amanda Porter*

Approved for release on 06/26/2013 by:  
Amanda Porter  
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



**Condition Upon Receipt:**

Samples were received under Chain of Custody (COC) on 06/18/2013. They were assigned to Work Order 13-06-1200.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time ( $HT \leq 15$  minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Additional Comments:**

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

**Subcontract Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.



# Analytical Report

Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: ASTM D-1946  
Units: ppm (v/v)

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	13-06-1200-1-A	06/18/13 11:20	Air	GC 65	N/A	06/19/13 13:12	130619L01

Parameter	Result	RL	DF	Qual
Methane	ND	5000	1	

SV-2	13-06-1200-2-A	06/18/13 12:00	Air	GC 65	N/A	06/19/13 12:39	130619L01
------	----------------	----------------	-----	-------	-----	----------------	-----------

Parameter	Result	RL	DF	Qual
Methane	ND	5000	1	

Method Blank	099-03-002-1,841	N/A	Air	GC 65	N/A	06/19/13 10:54	130619L01
--------------	------------------	-----	-----	-------	-----	----------------	-----------

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	5000	1		Oxygen + Argon	ND	5000	1	
Carbon Dioxide	ND	5000	1		Nitrogen	ND	5000	1	
Carbon Monoxide	ND	5000	1						

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



# Analytical Report

Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: ASTM D-1946  
Units: %v

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-1	13-06-1200-1-A	06/18/13 11:20	Air	GC 65	N/A	06/19/13 13:12	130619L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	15.4	0.500	1	
Carbon Dioxide	2.76	0.500	1		Nitrogen	81.8	0.500	1	
Carbon Monoxide	ND	0.500	1						

SV-2	13-06-1200-2-A	06/18/13 12:00	Air	GC 65	N/A	06/19/13 12:39	130619L01
------	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	20.3	0.500	1	
Carbon Dioxide	0.542	0.500	1		Nitrogen	79.2	0.500	1	
Carbon Monoxide	ND	0.500	1						

Method Blank	099-03-002-1,841	N/A	Air	GC 65	N/A	06/19/13 10:54	130619L01
--------------	------------------	-----	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1		Oxygen + Argon	ND	0.500	1	
Carbon Dioxide	ND	0.500	1		Nitrogen	ND	0.500	1	
Carbon Monoxide	ND	0.500	1						

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: 06/18/13  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: EPA TO-15

Project: City of Bell / 60137736A

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SV-1</b>	<b>13-06-1200-1-A</b>	<b>06/18/13 11:20</b>	<b>Air</b>	<b>GC/MS K</b>	<b>N/A</b>	<b>06/20/13 21:28</b>	<b>130620L01</b>

Parameter	Result	RL	DF	Qual	Units
Isopropanol	ND	5.0	1		ppb (v/v)

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	68-134	
1,2-Dichloroethane-d4	90	67-133	
Toluene-d8	98	70-130	

<b>SV-2</b>	<b>13-06-1200-2-A</b>	<b>06/18/13 12:00</b>	<b>Air</b>	<b>GC/MS K</b>	<b>N/A</b>	<b>06/20/13 22:21</b>	<b>130620L01</b>
-------------	-----------------------	-----------------------	------------	----------------	------------	-----------------------	------------------

Parameter	Result	RL	DF	Qual	Units
Isopropanol	ND	5.0	1		ppb (v/v)

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	68-134	
1,2-Dichloroethane-d4	119	67-133	
Toluene-d8	97	70-130	

<b>Method Blank</b>	<b>095-01-021-11,583</b>	<b>N/A</b>	<b>Air</b>	<b>GC/MS K</b>	<b>N/A</b>	<b>06/20/13 14:02</b>	<b>130620L01</b>
---------------------	--------------------------	------------	------------	----------------	------------	-----------------------	------------------

Parameter	Result	RL	DF	Qual	Units
Isopropanol	ND	5.0	1		ppb (v/v)

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	68-134	
1,2-Dichloroethane-d4	90	67-133	
Toluene-d8	96	70-130	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: ASTM D-1946

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,841	Air	GC 65	N/A	06/19/13	130619L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	45100	44030	98	43990	98	80-120	0	0-30	
Carbon Dioxide	150200	156200	104	155100	103	80-120	1	0-30	
Carbon Monoxide	70100	71190	102	70950	101	80-120	0	0-30	
Oxygen + Argon	40100	40540	101	40560	101	80-120	0	0-30	
Nitrogen	694500	679300	98	678100	98	80-120	0	0-30	

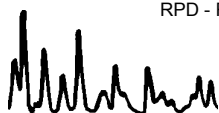
Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: EPA TO-15

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument		Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
095-01-021-11,583	Air	GC/MS K		N/A	06/20/13	130620L01				
Parameter	<u>SPIKE</u> <u>ADDED</u>	<u>LCS</u> <u>CONC</u>	<u>LCS</u> <u>%REC</u>	<u>LCSD</u> <u>CONC</u>	<u>LCSD</u> <u>%REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Acetone	25.00	28.02	112	21.23	85	67-133	56-144	28	0-30	
Benzene	25.00	27.67	111	24.33	97	70-130	60-140	13	0-30	
Benzyl Chloride	25.00	29.81	119	25.52	102	38-158	18-178	15	0-30	
Bromodichloromethane	25.00	26.85	107	23.46	94	70-130	60-140	13	0-30	
Bromoform	25.00	27.53	110	23.25	93	63-147	49-161	17	0-30	
Bromomethane	25.00	27.72	111	21.01	84	70-139	58-150	28	0-30	
2-Butanone	25.00	29.21	117	22.85	91	66-132	55-143	24	0-30	
Carbon Disulfide	25.00	24.03	96	24.70	99	68-146	55-159	3	0-30	
Carbon Tetrachloride	25.00	26.08	104	22.71	91	70-136	59-147	14	0-30	
Chlorobenzene	25.00	28.38	114	23.91	96	70-130	60-140	17	0-30	
Chloroethane	25.00	29.02	116	22.29	89	65-149	51-163	26	0-30	
Chloroform	25.00	27.84	111	22.06	88	70-130	60-140	23	0-30	
Chloromethane	25.00	26.65	107	20.81	83	69-141	57-153	25	0-30	
Dibromochloromethane	25.00	27.70	111	23.47	94	70-138	59-149	17	0-30	
Dichlorodifluoromethane	25.00	27.32	109	21.01	84	67-139	55-151	26	0-30	
Diisopropyl Ether (DIPE)	25.00	28.22	113	23.07	92	63-130	52-141	20	0-30	
1,1-Dichloroethane	25.00	28.93	116	23.34	93	70-130	60-140	21	0-30	
1,1-Dichloroethene	25.00	25.75	103	26.33	105	70-135	59-146	2	0-30	
1,2-Dibromoethane	25.00	29.33	117	24.63	99	70-133	60-144	17	0-30	
Dichlorotetrafluoroethane	25.00	26.53	106	20.59	82	51-135	37-149	25	0-30	
1,2-Dichlorobenzene	25.00	28.35	113	24.64	99	48-138	33-153	14	0-30	
1,2-Dichloroethane	25.00	28.40	114	22.32	89	70-132	60-142	24	0-30	
1,2-Dichloropropane	25.00	27.48	110	23.93	96	70-130	60-140	14	0-30	
1,3-Dichlorobenzene	25.00	28.00	112	24.12	96	56-134	43-147	15	0-30	
1,4-Dichlorobenzene	25.00	28.19	113	24.36	97	52-136	38-150	15	0-30	
c-1,3-Dichloropropene	25.00	29.31	117	25.59	102	70-130	60-140	14	0-30	
c-1,2-Dichloroethene	25.00	30.64	123	24.33	97	70-130	60-140	23	0-30	
t-1,2-Dichloroethene	25.00	30.11	120	24.50	98	70-130	60-140	21	0-30	
t-1,3-Dichloropropene	25.00	30.55	122	26.39	106	70-147	57-160	15	0-30	
Ethanol	100.0	110.7	111	85.24	85	37-139	20-156	26	0-30	
Ethyl-t-Butyl Ether (ETBE)	25.00	29.32	117	23.37	93	67-130	56-140	23	0-30	
Ethylbenzene	25.00	28.22	113	23.88	96	70-130	60-140	17	0-30	

RPD - Relative Percent Difference , CL - Control Limit



Terracon Consultants, Inc  
2817 McGaw Avenue  
Irvine, CA 92614-5835

Date Received: N/A  
Work Order No: 13-06-1200  
Preparation: N/A  
Method: EPA TO-15

Project: City of Bell / 60137736A

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed		LCS/LCSD Batch Number			
095-01-021-11,583	Air	GC/MS K	N/A		06/20/13		130620L01			
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME_CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
4-Ethyltoluene	25.00	28.29	113	24.16	97	68-130	58-140	16	0-30	
Hexachloro-1,3-Butadiene	25.00	30.66	123	27.47	110	44-146	27-163	11	0-30	
2-Hexanone	25.00	31.43	126	26.87	107	70-136	59-147	16	0-30	
Methyl-t-Butyl Ether (MTBE)	25.00	27.49	110	22.14	89	68-130	58-140	22	0-30	
Methylene Chloride	25.00	24.71	99	26.01	104	69-130	59-140	5	0-30	
4-Methyl-2-Pentanone	25.00	29.04	116	25.44	102	70-130	60-140	13	0-30	
o-Xylene	25.00	27.73	111	23.30	93	69-130	59-140	17	0-30	
p/m-Xylene	50.00	55.99	112	47.26	95	70-132	60-142	17	0-30	
Styrene	25.00	29.24	117	24.55	98	65-131	54-142	17	0-30	
Tert-Amyl-Methyl Ether (TAME)	25.00	30.48	122	26.95	108	69-130	59-140	12	0-30	
Tert-Butyl Alcohol (TBA)	50.00	60.65	121	62.18	124	66-144	53-157	2	0-30	
Tetrachloroethene	25.00	28.25	113	24.09	96	70-130	60-140	16	0-30	
Toluene	25.00	28.02	112	23.91	96	70-130	60-140	16	0-30	
Trichloroethene	25.00	27.37	109	23.97	96	70-130	60-140	13	0-30	
Trichlorofluoromethane	25.00	26.46	106	20.19	81	63-141	50-154	27	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	25.00	22.82	91	24.62	98	70-136	59-147	8	0-30	
1,1,1-Trichloroethane	25.00	28.46	114	22.40	90	70-130	60-140	24	0-30	
1,1,2-Trichloroethane	25.00	28.37	113	24.62	98	70-130	60-140	14	0-30	
1,3,5-Trimethylbenzene	25.00	27.53	110	23.51	94	62-130	51-141	16	0-30	
1,1,2,2-Tetrachloroethane	25.00	26.79	107	22.76	91	63-130	52-141	16	0-30	
1,2,4-Trimethylbenzene	25.00	28.66	115	24.77	99	60-132	48-144	15	0-30	
1,2,4-Trichlorobenzene	25.00	33.02	132	28.56	114	31-151	11-171	14	0-30	
Vinyl Acetate	25.00	29.62	118	23.53	94	58-130	46-142	23	0-30	
Vinyl Chloride	25.00	27.85	111	21.50	86	70-134	59-145	26	0-30	
1,1-Difluoroethane	25.00	28.08	112	22.18	89	70-131	60-141	23	0-30	
Isopropanol	25.00	27.42	110	21.12	84	57-135	44-148	26	0-30	

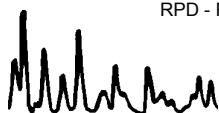
Total number of LCS compounds : 58

Total number of ME compounds : 0

Total number of ME compounds allowed : 3

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

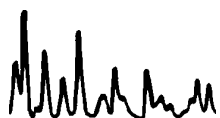


## Summa Canister Vacuum Summary

Work Order Number: **13-06-1200**

---

Sample Name	Vacuum Out		Vacuum In		Equipment	Description
SV-1	-29.80	in Hg	-1.50	in Hg	LC620	Summa Canister 1L
SV-2	-29.70	in Hg	-5.00	in Hg	LC125	Summa Canister 1L



Work Order Number: 13-06-1200

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT)  $\leq$  15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



# Terracon

Consulting Engineers & Scientists

Office Location Irvine, CALaboratory: Cal-ScienceAddress: Garden GroveContact: Michelle, A. Don

Phone: \_\_\_\_\_

Project Manager Carl Parten

PO/SO #: \_\_\_\_\_

Sampler's Name

Sampler's Signature

CHARLES H. YOONCharles H. Yoon

Proj. No.

60137736A

Project Name

CITY of Brea

No/Type of Containers

Identifying Marks of Sample(s)

G  
o  
m  
pC  
o  
m  
p

Date

Matrix

VOA

Depth

Depth

AVG

250

ml

PIO

Lab Sample ID (Lab Use Only)

Lab Sample ID (Lab Use Only)

SV-1

4.5

5

5

5

5

5

5

5

SV-2

"

"

"

"

"

"

"

"

LC620, SEM 248

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC125, SEM 254

LC



# SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: TERRACON

DATE: 06 / 18 / 13

**TEMPERATURE:** Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature        °C - 0.2 °C (CF) =        °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:       ).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☒ Air ☐ Filter

Initial: AM

## CUSTODY SEALS INTACT:

☐ Cooler ☐        ☐ No (Not Intact) ☐ Not Present ☒ N/A  
☐ Sample ☐        ☐ No (Not Intact) ☒ Not Present

Initial: AM

Initial: RS

## SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## CONTAINER TYPE:

**Solid:** ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (        ) ☐ EnCores® ☐ TerraCores® ☐       

**Water:** ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na2</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 1AGB ☐ 1AGB<sub>na2</sub> ☐ 1AGB<sub>s</sub>

☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub> ☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> ☐ 1PB ☐ 1PB<sub>na</sub> ☐ 500PB

☐ 250PB ☐ 250PB<sub>n</sub> ☐ 125PB ☐ 125PB<sub>znna</sub> ☐ 100PJ ☐ 100PJ<sub>na2</sub> ☐        ☐        ☐       

**Air:** ☐ Tedlar® ☒ Canister **Other:** ☐        **Trip Blank Lot#:**        **Labeled/Checked by:** RS

**Container:** C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** W

**Preservative:** h: HCL n: HNO<sub>3</sub> na<sub>2</sub>: Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> na: NaOH p: H<sub>3</sub>PO<sub>4</sub> s: H<sub>2</sub>SO<sub>4</sub> u: Ultra-pure znna: ZnAc<sub>2</sub>+NaOH f: Filtered **Scanned by:** W

July 18, 2013



Pacific Industrial  
6272 E. Pacific Coast Highway, Ste E  
Long Beach, CA 90803

Attn: Ms. Candace Ondrejcka  
T: (818) 468-6481  
E: candaceo@pac-industrial.com

Re: Limited Stockpile Characterization and Sampling  
Proposed Bell Business Center  
Northeast of Rickenbacker Road and 1st Street  
City of Bell, Los Angeles County, California 90201  
Project No. 60137736A

Dear Ms. Ondrejcka:

Terracon Consultants, Inc. (Terracon) is pleased to present this letter report summarizing the findings from Terracon's assessment of stockpiled materials observed at the above-referenced site. Approximately 10 stockpiles were observed on parcels F and G at the above-referenced site. The stockpiled materials appeared to be comprised of a mixture of soil and gravel and/or concrete and asphalt debris. No odors, discoloration or staining was observed associated with the observed materials.

Terracon's sampling activities consisted of the collection of representative samples from the observed stockpiles on July 2, 2013. Due to laboratory error, a sample container was damaged and was subsequently resampled on July 8, 2013. The composite soil samples, SP-1 through SP-3, were collected from the observed materials, as depicted in Figure 1, attached.

The samples were analyzed for total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO) and oil range organics (ORO) by United States Environmental Protection Agency (USEPA) Method 8015B, volatile organic compounds (VOCs) by EPA Method 8260B, and Title-22 Metals and Mercury by EPA Method 6010B/7471A.

Based on laboratory analysis of the stockpiled materials, the samples did not exhibit TPH or VOCs concentrations above the laboratory method reporting limits, except for a TPH-DRO concentration of 15 milligrams per kilogram (mg/Kg) from SP-2, and TPH-ORO concentrations of 8.3 mg/Kg, 43 mg/Kg and 5.2 mg/Kg from SP-1, SP-2 and SP-3, respectively.

The stockpiled materials additionally exhibited various metals, including: arsenic, barium, chromium, cobalt, copper, lead, mercury, nickel, vanadium and zinc at concentrations above the laboratory method reporting limits. A summary of the laboratory results are presented in Tables 1 and 2 (attached).

Terracon evaluated the reported concentrations of metals with Total Threshold Limit Concentration (TTLC), Soluble Threshold Limit Concentration (STLC) and Toxicity



Terracon Consultants, Inc. 2817 McGaw Irvine, California 92614  
P [949] 261 0051 F [949] 261 6110 terracon.com

Geotechnical



Environmental



Construction Materials



Facilities

BELL-2640

**Limited Stockpile Characterization and Sampling**

Proposed Bell Business Center ■ City of Bell, California

July 18, 2013 ■ Terracon Project No. 60137736A




Characterisitic Leaching Procedure (TCLP). The detected concentrations are below the applicable TTLC, STLC and TCLP values. Based on analytical results, Terracon anticipates that the material will be characterized as non-hazardous equivalent waste and may be disposed off-site at an approved landfill disposal facility. Terracon recommends that in the event that the material is not to be reused onsite, that the material be transported off-site under manifest and disposed at an approved landfill disposal facility following proper waste profiling and approval from the landfill. It should be noted that the disposal facility may require additional sampling and analysis to complete the waste characterization process, based on local restrictions and limits.

We appreciate the opportunity to perform these services for Pacific Industrial. Please contact either of the undersigned if you have questions regarding the information provided in this report.

Sincerely,

**Terracon Consultants, Inc.**

(fr)   
Charles H. Yoon, CSST  
Staff Scientist

  
Carl A. Parten  
Office Manager

ATTACHMENTS

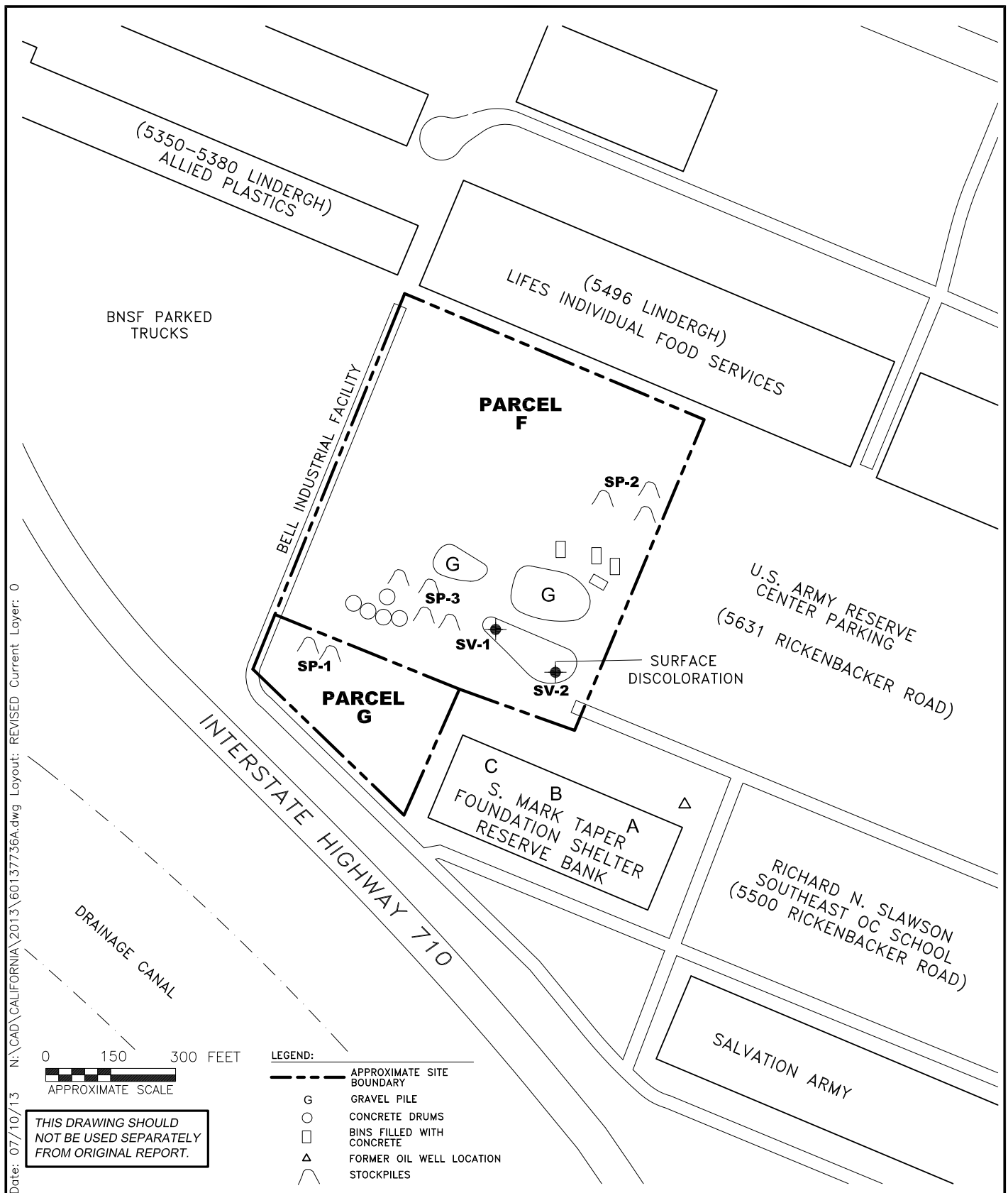
Figure 1

Tables 1 and 2

Laboratory Data Sheets and Chain-of-Custody Form

**ATTACHMENT A**

**Figure**



Project Mgr:	CHY	Project No.	60137736A	<b>Terracon</b> Consulting Engineers and Scientists 2817 McGAW AVENUE IRVINE, CALIFORNIA 92614 PH. (949) 261-0051 FAX. (949) 261-6110	<b>SITE DIAGRAM</b>  PROPOSED BELL BUSINESS CENTER NORTHEAST OF RICKENBACKER ROAD AND 1ST STREET CITY OF BELL, CALIFORNIA	EXHIBIT  2
Drawn By:	CDD	Scale:	AS SHOWN			
Checked By:	CHY	Date:	07/10/13			
Approved By:	CHY					

BELL-2643

## **ATTACHMENT B**

### **Tables**

<div> <div>TABLE 1</div> <div>STOCKPILE SAMPLE ANALYTICAL RESULTS - VOCs and TPH</div> <div> Dexia Properties  Rickenbacker Road and 3rd Street  City of Bell, California  Terracon Project No. 60127736A </div> </div>						
Sample I.D.	Sample Date	Sample Depth (ft bgs)	VOCs  EPA Method 8260B	Total Petroleum Hydrocarbons		
				TPH GRO	TPH DRO	TPH ORO
SP-1	7/2/13	Composite	ND	<0.39	<5.1	8.3
SP-2	7/8/13	Composite	ND	<0.39	15	43
SP-3	7/2/13	Composite	ND	<0.39	<5.0	5.2

Notes:

ft bgs = feet below grade surface  
mg/Kg = milligrams per kilograms  
VOCs = Volatile Organic Compounds  
TPH = Total Petroleum Hydrocarbons  
ND = Constituents were not detected above laboratory reporting limits

STLC = Soluble Threshold Limit Concentration  
TTLC = Total Threshold Limit Concentration  
TCLP = Toxicity Characteristic Leaching Procedure

STLC/TTLC are for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3.

\* No threshold limits established for TPHs

TABLE 2 STOCKPILE SAMPLE ANALYTICAL RESULTS - METALS Dexia Properties Rickenbacker Road and 3rd Street City of Bell, Los Angeles County, California Terracon Project No. 60137736A												
Sample I.D.	Sample Date	EPA Method 6010/7000 (Title-22 Metals)										
		Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc	Other Metals
		mg/Kg										
SP-1	7/2/13	5.3	65	15	7.4	15	8.6	<0.0020	13	31	56	ND
SP-2	7/8/13	4.8	100	21	7.2	19	37	0.052	15	38	110	ND
SP-3	7/2/13	2.9	39	7.8	3.5	7.6	5.7	<0.020	5.5	19	51	ND
		500	10,000	2,500	8,000	2,500	1,000	20	2,000	2,400	5,000	NA
		5.0	100	5	80	25	5.0	0.2	20	24	250	NA
		5.0	100	5	NE	NE	5.0	0.2	NE	NE	NE	NE
CHHSLs <sup>(1)</sup>		0.24	63,000	37	3,200	38,000	320	180	16,000	6,700	100,000	

**Notes:**

EPA= Environmental Protection Agency

< = not detected above laboratory reporting limits

bgs= below ground surface

mg/Kg = milligrams per kilograms

TTLc = Total Threshold Limit Concentration

STLc = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

STLc/TTLc are for California regulated hazardous waste. Source is California Code of Regulations, Title 22, Chapter 11, Article 3.

\* If a substance less than the TTLc level, it is considered a non-hazardous toxic waste.

\*\* If a substance is less than ten times (by rule of thumb) the STLc value, it is considered non-hazardous toxic waste.

\*\*\* If a substance is less than twenty times (by rule of thumb) the TCLP value, it is considered non-hazardous toxic waste.

(1) California Human Health Screening Levels (CHHSLs) for Soil and Comparison to Other Potential Environmental Concerns for Commercial/Industrial land use only

\* - The Department of Toxic Substances Control (DTSC) established a regional background arsenic concentration in soil that can be used as a screening tool for sites throughout southern California. The term "background" collectively refers to naturally occurring and anthropogenic concentrations of arsenic in soil. Statistical analysis of data from sites in Los Angeles County and an upper-bound background arsenic concentration of 12 mg/kg. The analysis for 5 counties in southern California also gave an upper-bound background arsenic concentration of 12 mg/kg. The detected arsenic concentrations are all below DTSC's statewide regional background concentration screening level.



**ATTACHMENT C**

**Laboratory Data Sheets and Chain-of-Custody Form**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-50635-1

Client Project/Site: Bell Business Center

For:

Terracon Consulting Eng & Scientists

2817 McGaw Ave

Irvine, California 92614

Attn: Carl Parten



Authorized for release by:

7/5/2013 3:57:32 PM

Lena Davidkova, Project Manager I

[lena.davidkova@testamericainc.com](mailto:lena.davidkova@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

**BELL-2648**

1

2

3

4

5

6

7

8

9

10

11

12

13

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Client Sample Results . . . . .	6
Method Summary . . . . .	11
Chronicle . . . . .	12
QC Sample Results . . . . .	13
QC Association . . . . .	25
Definitions . . . . .	27
Certification Summary . . . . .	28
Chain of Custody . . . . .	29
Receipt Checklists . . . . .	30



## Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-50635-1	SP-1	Solid	07/02/13 10:34	07/02/13 11:59
440-50635-3	SP-3	Solid	07/02/13 10:59	07/02/13 11:59

1

2

3

4

5

6

7

8

9

10

11

12

13

TestAmerica Irvine

## Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

**Job ID: 440-50635-1**

**Laboratory: TestAmerica Irvine**

### Narrative

#### Job Narrative 440-50635-1

#### Comments

Container for sample SP-2 was accidentally broken by the lab. Client has been contacted and new sample will be provided. Result for sample SP-2 will be reported under separate report.

#### Receipt

The samples were received on 7/2/2013 11:59 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC VOA

Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (CCVRT 440-115691/1). BFB surrogate coeluted with TPH standard. Data not impacted.

Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (440-50635-3 MS). BFB surrogate coeluted with TPH standard. Data not impacted.

Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (CCV 440-115588/33), (CCV 440-115588/46), (CCVRT 440-115588/1), (LCS 440-115588/34). BFB surrogate coeluted with TPH standard. Data not impacted.

No other analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: (440-50359-1 MS), (440-50359-1 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B: The matrix spike (MS) recoveries associated with batch 115552 were outside control limits: (440-50359-1 MS), (440-50359-1 MSD). Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8015B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 115552 was outside control limits. Non-homogeneity of the sample matrix is suspected.

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: SP-2 (440-50635-2). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries and %RPD for batch 115415 were outside control limits. This is attributed to an abundance of target analytes at concentrations significantly higher than the spike concentration. Analyte affected: Zinc.

Method(s) 7471A: The method blank for preparation batch 115755 contained Hg above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed. SP-1 (440-50635-1), SP-3 (440-50635-3)

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

## Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

---

### Job ID: 440-50635-1 (Continued)

---

#### Laboratory: TestAmerica Irvine (Continued)

##### Organic Prep

No analytical or quality issues were noted.

##### VOA Prep

No analytical or quality issues were noted.

1

2

3

4

5

6

7

8

9

10

11

12

13

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

Client Sample ID: SP-1

Lab Sample ID: 440-50635-1

Date Collected: 07/02/13 10:34

Matrix: Solid

Date Received: 07/02/13 11:59

Percent Solids: 98.7

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
1,1,1-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,1,2-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,1-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,1-Dichloroethene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
1,1-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,2,3-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
1,2,3-Trichloropropane	<0.010		0.010	mg/Kg	☼		07/05/13 12:13	1
1,2,4-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
1,2,4-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
1,2-Dibromoethane (EDB)	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,2-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,2-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,3,5-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,3-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,3-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
1,4-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
2,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
2-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
4-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Benzene	<0.0010		0.0010	mg/Kg	☼		07/05/13 12:13	1
Bromobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Bromochloromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Bromodichloromethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Bromoform	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Bromomethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Carbon tetrachloride	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Chlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Chloroethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Chloroform	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Chloromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
cis-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
cis-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Dibromochloromethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Dibromomethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Dichlorodifluoromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Ethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Hexachlorobutadiene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Isopropylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
m,p-Xylene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Methylene Chloride	<0.020		0.020	mg/Kg	☼		07/05/13 12:13	1
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Naphthalene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
n-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
N-Propylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
o-Xylene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1

TestAmerica Irvine

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

Client Sample ID: SP-1

Lab Sample ID: 440-50635-1

Date Collected: 07/02/13 10:34

Matrix: Solid

Date Received: 07/02/13 11:59

Percent Solids: 98.7

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Styrene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Tert-amyl-methyl ether (TAME)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
tert-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Tetrachloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Toluene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
trans-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
trans-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Trichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Trichlorofluoromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Vinyl chloride	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Xylenes, Total	<0.0040		0.0040	mg/Kg	☼		07/05/13 12:13	1
Isopropyl Ether (DIPE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:13	1
tert-Butyl alcohol (TBA)	<0.10		0.10	mg/Kg	☼		07/05/13 12:13	1
p-Isopropyltoluene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	110		80 - 120				07/05/13 12:13	1
4-Bromofluorobenzene (Surr)	106		80 - 120				07/05/13 12:13	1
Dibromofluoromethane (Surr)	100		80 - 125				07/05/13 12:13	1

## Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.39		0.39	mg/Kg	☼		07/03/13 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		65 - 140				07/03/13 16:03	1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	<5.1		5.1	mg/Kg	☼	07/03/13 15:15	07/03/13 23:34	1
<b>C23-C40</b>	<b>8.3</b>		5.1	mg/Kg	☼	07/03/13 15:15	07/03/13 23:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane	74		40 - 140			07/03/13 15:15	07/03/13 23:34	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<10		10	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Arsenic</b>	<b>5.3</b>		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Barium</b>	<b>65</b>		1.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Beryllium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Cadmium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Chromium</b>	<b>15</b>		1.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Cobalt</b>	<b>7.4</b>		1.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Copper</b>	<b>15</b>		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Lead</b>	<b>8.6</b>		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Molybdenum	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
<b>Nickel</b>	<b>13</b>		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Selenium	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5

TestAmerica Irvine



# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

**Client Sample ID: SP-1**

**Lab Sample ID: 440-50635-1**

**Date Collected: 07/02/13 10:34**

**Matrix: Solid**

**Date Received: 07/02/13 11:59**

## Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<10		10	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Vanadium	31		1.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Zinc	56		5.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5
Silver	<1.0		1.0	mg/Kg		07/03/13 07:40	07/03/13 14:30	5

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/Kg		07/05/13 12:28	07/05/13 14:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.3		0.10	%			07/02/13 22:19	1

**Client Sample ID: SP-3**

**Lab Sample ID: 440-50635-3**

**Date Collected: 07/02/13 10:59**

**Matrix: Solid**

**Date Received: 07/02/13 11:59**

**Percent Solids: 99.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
1,1,1-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,1,2-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,1-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,1-Dichloroethene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
1,1-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,2,3-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
1,2,3-Trichloropropane	<0.010		0.010	mg/Kg	☼		07/05/13 12:43	1
1,2,4-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
1,2,4-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
1,2-Dibromoethane (EDB)	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,2-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,2-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,3,5-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,3-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,3-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
1,4-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
2,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
2-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
4-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Benzene	<0.0010		0.0010	mg/Kg	☼		07/05/13 12:43	1
Bromobenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Bromochloromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Bromodichloromethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Bromoform	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Bromomethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Carbon tetrachloride	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Chlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1

TestAmerica Irvine

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

**Client Sample ID: SP-3**

**Lab Sample ID: 440-50635-3**

**Date Collected: 07/02/13 10:59**

**Matrix: Solid**

**Date Received: 07/02/13 11:59**

**Percent Solids: 99.6**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Chloroform	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Chloromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
cis-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
cis-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Dibromochloromethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Dibromomethane	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Dichlorodifluoromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Ethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Hexachlorobutadiene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Isopropylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
m,p-Xylene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Methylene Chloride	<0.020		0.020	mg/Kg	☼		07/05/13 12:43	1
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Naphthalene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
n-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
N-Propylbenzene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
o-Xylene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
sec-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Styrene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Tert-amyl-methyl ether (TAME)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
tert-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Tetrachloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Toluene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
trans-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
trans-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Trichloroethene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1
Trichlorofluoromethane	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Vinyl chloride	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Xylenes, Total	<0.0040		0.0040	mg/Kg	☼		07/05/13 12:43	1
Isopropyl Ether (DIPE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0050	mg/Kg	☼		07/05/13 12:43	1
tert-Butyl alcohol (TBA)	<0.10		0.10	mg/Kg	☼		07/05/13 12:43	1
p-Isopropyltoluene	<0.0020		0.0020	mg/Kg	☼		07/05/13 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	109		80 - 120		07/05/13 12:43	1
4-Bromofluorobenzene (Surr)	106		80 - 120		07/05/13 12:43	1
Dibromofluoromethane (Surr)	100		80 - 125		07/05/13 12:43	1

## Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.39		0.39	mg/Kg	☼		07/03/13 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		65 - 140		07/03/13 19:01	1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	<5.0		5.0	mg/Kg	☼	07/03/13 15:15	07/03/13 23:56	1

TestAmerica Irvine

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

**Client Sample ID: SP-3**

**Lab Sample ID: 440-50635-3**

**Date Collected: 07/02/13 10:59**

**Matrix: Solid**

**Date Received: 07/02/13 11:59**

**Percent Solids: 99.6**

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C23-C40	5.2		5.0	mg/Kg	☼	07/03/13 15:15	07/03/13 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane	79		40 - 140			07/03/13 15:15	07/03/13 23:56	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<9.9		9.9	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Arsenic	2.9		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Barium	39		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Beryllium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Cadmium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Chromium	7.8		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Cobalt	3.5		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Copper	7.6		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Lead	5.7		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Molybdenum	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Nickel	5.5		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Selenium	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Thallium	<9.9		9.9	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Vanadium	19		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Zinc	51		5.0	mg/Kg		07/03/13 07:40	07/03/13 14:33	5
Silver	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:33	5

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/Kg		07/05/13 12:28	07/05/13 14:40	1

## General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	0.44		0.10	%			07/02/13 22:19	1

TestAmerica Irvine

## Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Gasoline Range Organics - (GC)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV
Moisture	Percent Moisture	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

**Client Sample ID: SP-1**

**Date Collected: 07/02/13 10:34**

**Date Received: 07/02/13 11:59**

**Lab Sample ID: 440-50635-1**

**Matrix: Solid**

**Percent Solids: 98.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.03 g	10 mL	115666	07/05/13 12:13	AL	TAL IRV
Total/NA	Analysis	8015B		1	5.19 g	10 mL	115691	07/03/13 16:03	IM	TAL IRV
Total/NA	Prep	CA LUFT			30.01 g	1 mL	115552	07/03/13 15:15	SJ	TAL IRV
Total/NA	Analysis	8015B		1			115437	07/03/13 23:34	KW	TAL IRV
Total/NA	Prep	3050B			2.01 g	50 mL	115415	07/03/13 07:40	DT	TAL IRV
Total/NA	Analysis	6010B		5			115550	07/03/13 14:30	TK	TAL IRV
Total/NA	Prep	7471A			0.49 g	50 mL	115755	07/05/13 12:28	MM	TAL IRV
Total/NA	Analysis	7471A		1			115786	07/05/13 14:37	MP	TAL IRV
Total/NA	Analysis	Moisture		1			115379	07/02/13 22:19	DK	TAL IRV

**Client Sample ID: SP-3**

**Date Collected: 07/02/13 10:59**

**Date Received: 07/02/13 11:59**

**Lab Sample ID: 440-50635-3**

**Matrix: Solid**

**Percent Solids: 99.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.02 g	10 mL	115666	07/05/13 12:43	AL	TAL IRV
Total/NA	Analysis	8015B		1	5.17 g	10 mL	115588	07/03/13 19:01	IM	TAL IRV
Total/NA	Prep	CA LUFT			30.04 g	1 mL	115552	07/03/13 15:15	SJ	TAL IRV
Total/NA	Analysis	8015B		1			115437	07/03/13 23:56	KW	TAL IRV
Total/NA	Prep	3050B			2.02 g	50 mL	115415	07/03/13 07:40	DT	TAL IRV
Total/NA	Analysis	6010B		5			115550	07/03/13 14:33	TK	TAL IRV
Total/NA	Prep	7471A			0.50 g	50 mL	115755	07/05/13 12:28	MM	TAL IRV
Total/NA	Analysis	7471A		1			115786	07/05/13 14:40	MP	TAL IRV
Total/NA	Analysis	Moisture		1			115379	07/02/13 22:19	DK	TAL IRV

## Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-115666/4

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
1,1,1-Trichloroethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,1,2-Trichloroethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,1-Dichloroethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,1-Dichloroethene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
1,1-Dichloropropene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,2,3-Trichlorobenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
1,2,3-Trichloropropane	<0.010		0.010	mg/Kg			07/05/13 09:04	1
1,2,4-Trichlorobenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
1,2,4-Trimethylbenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
1,2-Dibromoethane (EDB)	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,2-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,2-Dichloroethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,2-Dichloropropane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,3,5-Trimethylbenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,3-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,3-Dichloropropane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
1,4-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
2,2-Dichloropropane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
2-Chlorotoluene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
4-Chlorotoluene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Benzene	<0.0010		0.0010	mg/Kg			07/05/13 09:04	1
Bromobenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Bromochloromethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Bromodichloromethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Bromoform	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Bromomethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Carbon tetrachloride	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Chlorobenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Chloroethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Chloroform	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Chloromethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
cis-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
cis-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Dibromochloromethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Dibromomethane	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Dichlorodifluoromethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Ethylbenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Hexachlorobutadiene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Isopropylbenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
m,p-Xylene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Methylene Chloride	<0.020		0.020	mg/Kg			07/05/13 09:04	1
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Naphthalene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
n-Butylbenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
N-Propylbenzene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-115666/4

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.0020	MB MB	0.0020	mg/Kg			07/05/13 09:04	1
sec-Butylbenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Styrene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Tert-amyl-methyl ether (TAME)	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
tert-Butylbenzene	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Tetrachloroethene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Toluene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
trans-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
trans-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Trichloroethene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1
Trichlorofluoromethane	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Vinyl chloride	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Xylenes, Total	<0.0040		0.0040	mg/Kg			07/05/13 09:04	1
Isopropyl Ether (DIPE)	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0050	mg/Kg			07/05/13 09:04	1
tert-Butyl alcohol (TBA)	<0.10		0.10	mg/Kg			07/05/13 09:04	1
p-Isopropyltoluene	<0.0020		0.0020	mg/Kg			07/05/13 09:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	109		80 - 120		07/05/13 09:04	1
4-Bromofluorobenzene (Surr)	107		80 - 120		07/05/13 09:04	1
Dibromofluoromethane (Surr)	104		80 - 125		07/05/13 09:04	1

Lab Sample ID: LCS 440-115666/5

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.0601		mg/Kg		120	70 - 130
1,1,1-Trichloroethane	0.0500	0.0550		mg/Kg		110	65 - 135
1,1,2,2-Tetrachloroethane	0.0500	0.0499		mg/Kg		100	55 - 140
1,1,2-Trichloroethane	0.0500	0.0554		mg/Kg		111	65 - 135
1,1-Dichloroethane	0.0500	0.0446		mg/Kg		89	70 - 130
1,1-Dichloroethene	0.0500	0.0527		mg/Kg		105	70 - 125
1,1-Dichloropropene	0.0500	0.0539		mg/Kg		108	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.0501		mg/Kg		100	60 - 130
1,2,3-Trichloropropane	0.0500	0.0463		mg/Kg		93	60 - 135
1,2,4-Trichlorobenzene	0.0500	0.0536		mg/Kg		107	70 - 135
1,2,4-Trimethylbenzene	0.0500	0.0546		mg/Kg		109	70 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.0429		mg/Kg		86	50 - 135
1,2-Dibromoethane (EDB)	0.0500	0.0570		mg/Kg		114	70 - 130
1,2-Dichlorobenzene	0.0500	0.0523		mg/Kg		105	75 - 120
1,2-Dichloroethane	0.0500	0.0559		mg/Kg		112	60 - 140
1,2-Dichloropropene	0.0500	0.0452		mg/Kg		90	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.0539		mg/Kg		108	70 - 125
1,3-Dichlorobenzene	0.0500	0.0530		mg/Kg		106	75 - 125
1,3-Dichloropropane	0.0500	0.0516		mg/Kg		103	70 - 125
1,4-Dichlorobenzene	0.0500	0.0519		mg/Kg		104	75 - 120

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-115666/5

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	0.0500	0.0602		mg/Kg		120	60 - 145
2-Chlorotoluene	0.0500	0.0507		mg/Kg		101	70 - 125
4-Chlorotoluene	0.0500	0.0513		mg/Kg		103	75 - 125
Benzene	0.0500	0.0504		mg/Kg		101	65 - 120
Bromobenzene	0.0500	0.0548		mg/Kg		110	75 - 120
Bromochloromethane	0.0500	0.0570		mg/Kg		114	70 - 135
Bromodichloromethane	0.0500	0.0608		mg/Kg		122	70 - 135
Bromoform	0.0500	0.0524		mg/Kg		105	55 - 135
Bromomethane	0.0500	0.0617		mg/Kg		123	60 - 145
Carbon tetrachloride	0.0500	0.0609		mg/Kg		122	65 - 140
Chlorobenzene	0.0500	0.0525		mg/Kg		105	75 - 120
Chloroethane	0.0500	0.0518		mg/Kg		104	60 - 140
Chloroform	0.0500	0.0542		mg/Kg		108	70 - 130
Chloromethane	0.0500	0.0526		mg/Kg		105	45 - 145
cis-1,2-Dichloroethene	0.0500	0.0568		mg/Kg		114	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0589		mg/Kg		118	75 - 125
Dibromochloromethane	0.0500	0.0562		mg/Kg		112	65 - 140
Dibromomethane	0.0500	0.0585		mg/Kg		117	70 - 130
Dichlorodifluoromethane	0.0500	0.0585		mg/Kg		117	35 - 160
Ethylbenzene	0.0500	0.0533		mg/Kg		107	70 - 125
Hexachlorobutadiene	0.0500	0.0557		mg/Kg		111	60 - 135
Isopropylbenzene	0.0500	0.0562		mg/Kg		112	75 - 130
m,p-Xylene	0.100	0.112		mg/Kg		112	70 - 125
Methylene Chloride	0.0500	0.0446		mg/Kg		89	55 - 135
Methyl-t-Butyl Ether (MTBE)	0.0500	0.0541		mg/Kg		108	60 - 140
Naphthalene	0.0500	0.0403		mg/Kg		81	55 - 135
n-Butylbenzene	0.0500	0.0519		mg/Kg		104	70 - 130
N-Propylbenzene	0.0500	0.0541		mg/Kg		108	70 - 130
o-Xylene	0.0500	0.0536		mg/Kg		107	70 - 125
sec-Butylbenzene	0.0500	0.0540		mg/Kg		108	70 - 125
Styrene	0.0500	0.0527		mg/Kg		105	75 - 130
Tert-amyl-methyl ether (TAME)	0.0500	0.0541		mg/Kg		108	60 - 145
tert-Butylbenzene	0.0500	0.0532		mg/Kg		106	70 - 125
Tetrachloroethene	0.0500	0.0544		mg/Kg		109	70 - 125
Toluene	0.0500	0.0544		mg/Kg		109	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0548		mg/Kg		110	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0583		mg/Kg		117	70 - 135
Trichloroethene	0.0500	0.0555		mg/Kg		111	70 - 125
Trichlorofluoromethane	0.0500	0.0689		mg/Kg		138	60 - 145
Vinyl chloride	0.0500	0.0599		mg/Kg		120	55 - 135
Isopropyl Ether (DIPE)	0.0500	0.0455		mg/Kg		91	60 - 140
Ethyl-t-butyl ether (ETBE)	0.0500	0.0466		mg/Kg		93	60 - 140
tert-Butyl alcohol (TBA)	0.250	0.245		mg/Kg		98	70 - 135
p-Isopropyltoluene	0.0500	0.0518		mg/Kg		104	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	111		80 - 120
4-Bromofluorobenzene (Surr)	106		80 - 120

TestAmerica Irvine



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-115666/5

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	106		80 - 125

Lab Sample ID: 440-50544-A-4 MS

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Sample	Sample	Spike	MS	MS					%Rec.
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1,2-Tetrachloroethane	<0.0050	0.0499	0.0618		mg/Kg		124	65 - 145	
1,1,1-Trichloroethane	<0.0020	0.0499	0.0545		mg/Kg		109	65 - 145	
1,1,2,2-Tetrachloroethane	<0.0020	0.0499	0.0495		mg/Kg		99	40 - 160	
1,1,2-Trichloroethane	<0.0020	0.0499	0.0535		mg/Kg		107	65 - 140	
1,1-Dichloroethane	<0.0020	0.0499	0.0421		mg/Kg		84	65 - 135	
1,1-Dichloroethene	<0.0050	0.0499	0.0527		mg/Kg		106	65 - 135	
1,1-Dichloropropene	<0.0020	0.0499	0.0555		mg/Kg		111	65 - 135	
1,2,3-Trichlorobenzene	<0.0050	0.0499	0.0530		mg/Kg		106	45 - 145	
1,2,3-Trichloropropane	<0.0099	0.0499	0.0446		mg/Kg		89	50 - 150	
1,2,4-Trichlorobenzene	<0.0050	0.0499	0.0563		mg/Kg		113	50 - 140	
1,2,4-Trimethylbenzene	<0.0020	0.0499	0.0574		mg/Kg		115	65 - 140	
1,2-Dibromo-3-Chloropropane	<0.0050	0.0499	0.0379		mg/Kg		76	40 - 150	
1,2-Dibromoethane (EDB)	<0.0020	0.0499	0.0557		mg/Kg		112	65 - 140	
1,2-Dichlorobenzene	<0.0020	0.0499	0.0547		mg/Kg		110	70 - 130	
1,2-Dichloroethane	<0.0020	0.0499	0.0521		mg/Kg		104	60 - 150	
1,2-Dichloropropane	<0.0020	0.0499	0.0453		mg/Kg		91	65 - 130	
1,3,5-Trimethylbenzene	<0.0020	0.0499	0.0586		mg/Kg		117	65 - 135	
1,3-Dichlorobenzene	<0.0020	0.0499	0.0563		mg/Kg		113	70 - 130	
1,3-Dichloropropane	<0.0020	0.0499	0.0500		mg/Kg		100	65 - 140	
1,4-Dichlorobenzene	<0.0020	0.0499	0.0543		mg/Kg		109	70 - 130	
2,2-Dichloropropane	<0.0020	0.0499	0.0581		mg/Kg		116	65 - 150	
2-Chlorotoluene	<0.0050	0.0499	0.0543		mg/Kg		109	60 - 135	
4-Chlorotoluene	<0.0050	0.0499	0.0553		mg/Kg		111	65 - 135	
Benzene	<0.00099	0.0499	0.0497		mg/Kg		100	65 - 130	
Bromobenzene	<0.0050	0.0499	0.0582		mg/Kg		117	65 - 140	
Bromochloromethane	<0.0050	0.0499	0.0521		mg/Kg		104	65 - 145	
Bromodichloromethane	<0.0020	0.0499	0.0589		mg/Kg		118	65 - 145	
Bromoform	<0.0050	0.0499	0.0512		mg/Kg		103	50 - 145	
Bromomethane	<0.0050	0.0499	0.0593		mg/Kg		119	60 - 155	
Carbon tetrachloride	<0.0050	0.0499	0.0631		mg/Kg		127	60 - 145	
Chlorobenzene	<0.0020	0.0499	0.0539		mg/Kg		108	70 - 130	
Chloroethane	<0.0050	0.0499	0.0510		mg/Kg		102	60 - 150	
Chloroform	<0.0020	0.0499	0.0513		mg/Kg		103	65 - 135	
Chloromethane	<0.0050	0.0499	0.0504		mg/Kg		101	40 - 145	
cis-1,2-Dichloroethene	<0.0020	0.0499	0.0539		mg/Kg		108	65 - 135	
cis-1,3-Dichloropropene	<0.0020	0.0499	0.0573		mg/Kg		115	70 - 135	
Dibromochloromethane	<0.0020	0.0499	0.0549		mg/Kg		110	60 - 145	
Dibromomethane	<0.0020	0.0499	0.0545		mg/Kg		109	65 - 140	
Dichlorodifluoromethane	<0.0050	0.0499	0.0585		mg/Kg		117	30 - 160	
Ethylbenzene	<0.0020	0.0499	0.0560		mg/Kg		112	70 - 135	
Hexachlorobutadiene	<0.0050	0.0499	0.0611		mg/Kg		122	50 - 145	

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50544-A-4 MS

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	<0.0020		0.0499	0.0616		mg/Kg		124	70 - 145
m,p-Xylene	<0.0020		0.0998	0.116		mg/Kg		116	70 - 130
Methylene Chloride	<0.020		0.0499	0.0412		mg/Kg		83	55 - 145
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0499	0.0489		mg/Kg		98	55 - 155
Naphthalene	<0.0050		0.0499	0.0418		mg/Kg		79	40 - 150
n-Butylbenzene	<0.0050		0.0499	0.0591		mg/Kg		118	55 - 145
N-Propylbenzene	<0.0020		0.0499	0.0587		mg/Kg		116	65 - 140
o-Xylene	<0.0020		0.0499	0.0561		mg/Kg		112	65 - 130
sec-Butylbenzene	<0.0050		0.0499	0.0591		mg/Kg		118	60 - 135
Styrene	<0.0020		0.0499	0.0562		mg/Kg		113	70 - 140
Tert-amyl-methyl ether (TAME)	<0.0050		0.0499	0.0500		mg/Kg		100	60 - 150
tert-Butylbenzene	<0.0050		0.0499	0.0587		mg/Kg		118	60 - 140
Tetrachloroethene	<0.0020		0.0499	0.0584		mg/Kg		117	65 - 135
Toluene	<0.0020		0.0499	0.0547		mg/Kg		110	70 - 130
trans-1,2-Dichloroethene	<0.0020		0.0499	0.0540		mg/Kg		108	70 - 135
trans-1,3-Dichloropropene	<0.0020		0.0499	0.0568		mg/Kg		114	60 - 145
Trichloroethene	<0.0020		0.0499	0.0559		mg/Kg		112	65 - 140
Trichlorofluoromethane	<0.0050		0.0499	0.0679		mg/Kg		136	55 - 155
Vinyl chloride	<0.0050		0.0499	0.0592		mg/Kg		119	55 - 140
Isopropyl Ether (DIPE)	<0.0050		0.0499	0.0426		mg/Kg		85	60 - 150
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0499	0.0443		mg/Kg		89	60 - 145
tert-Butyl alcohol (TBA)	<0.099		0.250	0.265		mg/Kg		106	65 - 145
p-Isopropyltoluene	<0.0020		0.0499	0.0585		mg/Kg		117	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	111		80 - 120
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	96		80 - 125

Lab Sample ID: 440-50544-A-4 MSD

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.0050		0.0499	0.0610		mg/Kg		122	65 - 145	1	20
1,1,1-Trichloroethane	<0.0020		0.0499	0.0527		mg/Kg		106	65 - 145	3	20
1,1,2,2-Tetrachloroethane	<0.0020		0.0499	0.0507		mg/Kg		102	40 - 160	2	30
1,1,2-Trichloroethane	<0.0020		0.0499	0.0556		mg/Kg		112	65 - 140	4	30
1,1-Dichloroethane	<0.0020		0.0499	0.0426		mg/Kg		85	65 - 135	1	25
1,1-Dichloroethene	<0.0050		0.0499	0.0521		mg/Kg		104	65 - 135	1	25
1,1-Dichloropropene	<0.0020		0.0499	0.0554		mg/Kg		111	65 - 135	0	20
1,2,3-Trichlorobenzene	<0.0050		0.0499	0.0529		mg/Kg		106	45 - 145	0	30
1,2,3-Trichloropropane	<0.0099		0.0499	0.0454		mg/Kg		91	50 - 150	2	30
1,2,4-Trichlorobenzene	<0.0050		0.0499	0.0562		mg/Kg		113	50 - 140	0	30
1,2,4-Trimethylbenzene	<0.0020		0.0499	0.0558		mg/Kg		112	65 - 140	3	25
1,2-Dibromo-3-Chloropropane	<0.0050		0.0499	0.0393		mg/Kg		79	40 - 150	4	30
1,2-Dibromoethane (EDB)	<0.0020		0.0499	0.0564		mg/Kg		113	65 - 140	1	25
1,2-Dichlorobenzene	<0.0020		0.0499	0.0533		mg/Kg		107	70 - 130	3	25

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50544-A-4 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 115666

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	<0.0020		0.0499	0.0526		mg/Kg		105	60 - 150	1	25
1,2-Dichloropropane	<0.0020		0.0499	0.0461		mg/Kg		92	65 - 130	2	20
1,3,5-Trimethylbenzene	<0.0020		0.0499	0.0571		mg/Kg		114	65 - 135	3	25
1,3-Dichlorobenzene	<0.0020		0.0499	0.0554		mg/Kg		111	70 - 130	2	25
1,3-Dichloropropane	<0.0020		0.0499	0.0520		mg/Kg		104	65 - 140	4	25
1,4-Dichlorobenzene	<0.0020		0.0499	0.0526		mg/Kg		105	70 - 130	3	25
2,2-Dichloropropane	<0.0020		0.0499	0.0585		mg/Kg		117	65 - 150	1	25
2-Chlorotoluene	<0.0050		0.0499	0.0520		mg/Kg		104	60 - 135	4	25
4-Chlorotoluene	<0.0050		0.0499	0.0539		mg/Kg		108	65 - 135	3	25
Benzene	<0.00099		0.0499	0.0503		mg/Kg		101	65 - 130	1	20
Bromobenzene	<0.0050		0.0499	0.0561		mg/Kg		112	65 - 140	4	25
Bromochloromethane	<0.0050		0.0499	0.0524		mg/Kg		105	65 - 145	1	25
Bromodichloromethane	<0.0020		0.0499	0.0607		mg/Kg		122	65 - 145	3	20
Bromoform	<0.0050		0.0499	0.0524		mg/Kg		105	50 - 145	2	30
Bromomethane	<0.0050		0.0499	0.0593		mg/Kg		119	60 - 155	0	25
Carbon tetrachloride	<0.0050		0.0499	0.0615		mg/Kg		123	60 - 145	3	25
Chlorobenzene	<0.0020		0.0499	0.0534		mg/Kg		107	70 - 130	1	25
Chloroethane	<0.0050		0.0499	0.0502		mg/Kg		101	60 - 150	2	25
Chloroform	<0.0020		0.0499	0.0511		mg/Kg		102	65 - 135	0	20
Chloromethane	<0.0050		0.0499	0.0511		mg/Kg		103	40 - 145	2	25
cis-1,2-Dichloroethene	<0.0020		0.0499	0.0536		mg/Kg		107	65 - 135	0	25
cis-1,3-Dichloropropene	<0.0020		0.0499	0.0582		mg/Kg		117	70 - 135	2	25
Dibromochloromethane	<0.0020		0.0499	0.0549		mg/Kg		110	60 - 145	0	25
Dibromomethane	<0.0020		0.0499	0.0570		mg/Kg		114	65 - 140	4	25
Dichlorodifluoromethane	<0.0050		0.0499	0.0565		mg/Kg		113	30 - 160	3	35
Ethylbenzene	<0.0020		0.0499	0.0542		mg/Kg		109	70 - 135	3	25
Hexachlorobutadiene	<0.0050		0.0499	0.0616		mg/Kg		123	50 - 145	1	35
Isopropylbenzene	<0.0020		0.0499	0.0590		mg/Kg		118	70 - 145	4	25
m,p-Xylene	<0.0020		0.0998	0.113		mg/Kg		113	70 - 130	2	25
Methylene Chloride	<0.020		0.0499	0.0409		mg/Kg		82	55 - 145	1	25
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0499	0.0515		mg/Kg		103	55 - 155	5	35
Naphthalene	<0.0050		0.0499	0.0439		mg/Kg		84	40 - 150	5	40
n-Butylbenzene	<0.0050		0.0499	0.0575		mg/Kg		115	55 - 145	3	30
N-Propylbenzene	<0.0020		0.0499	0.0565		mg/Kg		112	65 - 140	4	25
o-Xylene	<0.0020		0.0499	0.0553		mg/Kg		111	65 - 130	1	25
sec-Butylbenzene	<0.0050		0.0499	0.0570		mg/Kg		114	60 - 135	4	25
Styrene	<0.0020		0.0499	0.0545		mg/Kg		109	70 - 140	3	25
Tert-amyl-methyl ether (TAME)	<0.0050		0.0499	0.0523		mg/Kg		105	60 - 150	5	25
tert-Butylbenzene	<0.0050		0.0499	0.0569		mg/Kg		114	60 - 140	3	25
Tetrachloroethene	<0.0020		0.0499	0.0566		mg/Kg		113	65 - 135	3	25
Toluene	<0.0020		0.0499	0.0547		mg/Kg		110	70 - 130	0	20
trans-1,2-Dichloroethene	<0.0020		0.0499	0.0538		mg/Kg		108	70 - 135	0	25
trans-1,3-Dichloropropene	<0.0020		0.0499	0.0575		mg/Kg		115	60 - 145	1	25
Trichloroethene	<0.0020		0.0499	0.0560		mg/Kg		112	65 - 140	0	25
Trichlorofluoromethane	<0.0050		0.0499	0.0657		mg/Kg		132	55 - 155	3	25
Vinyl chloride	<0.0050		0.0499	0.0575		mg/Kg		115	55 - 140	3	30
Isopropyl Ether (DIPE)	<0.0050		0.0499	0.0436		mg/Kg		87	60 - 150	2	25
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0499	0.0452		mg/Kg		91	60 - 145	2	30

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50544-A-4 MSD

Matrix: Solid

Analysis Batch: 115666

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	<0.099		0.250	0.264		mg/Kg		106	65 - 145	1	30
p-Isopropyltoluene	<0.0020		0.0499	0.0561		mg/Kg		112	60 - 140	4	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Toluene-d8 (Surr)	113		80 - 120								
4-Bromofluorobenzene (Surr)	107		80 - 120								
Dibromofluoromethane (Surr)	98		80 - 125								

### Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-115588/36

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.40		0.40	mg/Kg			07/03/13 17:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		65 - 140				07/03/13 17:58	1

Lab Sample ID: LCS 440-115588/34

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	1.60	1.37		mg/Kg		86	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	142	X	65 - 140				

Lab Sample ID: LCSD 440-115588/37

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	1.60	1.41		mg/Kg		88	70 - 135	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	140		65 - 140						

Lab Sample ID: 440-50635-3 MS

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: SP-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	<0.39		1.60	1.36		mg/Kg	☼	85	60 - 140

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-50635-3 MS

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: SP-3

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	145	X	65 - 140

Lab Sample ID: 440-50635-3 MSD

Matrix: Solid

Analysis Batch: 115588

Client Sample ID: SP-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	<0.39		1.57	1.23		mg/Kg	☼	79	60 - 140	10	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	137		65 - 140								

Lab Sample ID: MB 440-115691/11

Matrix: Solid

Analysis Batch: 115691

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.20		0.20	mg/Kg			07/03/13 15:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		65 - 140				07/03/13 15:08	1

Lab Sample ID: LCS 440-115691/9

Matrix: Solid

Analysis Batch: 115691

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	0.800	0.736		mg/Kg		92	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	114		65 - 140				

Lab Sample ID: LCSD 440-115691/10

Matrix: Solid

Analysis Batch: 115691

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	0.800	0.730		mg/Kg		91	70 - 135	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	112		65 - 140						

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-50635-1 MS

Matrix: Solid

Analysis Batch: 115691

Client Sample ID: SP-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	<0.39		1.59	1.41		mg/Kg	☼	89	60 - 140
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	112		65 - 140						

Lab Sample ID: 440-50635-1 MSD

Matrix: Solid

Analysis Batch: 115691

Client Sample ID: SP-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	<0.39		1.60	1.39		mg/Kg	☼	87	60 - 140	2	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	98		65 - 140								

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-115552/1-A

Matrix: Solid

Analysis Batch: 115437

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 115552

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	<5.0		5.0	mg/Kg		07/03/13 15:15	07/03/13 22:48	1
C23-C40	<5.0		5.0	mg/Kg		07/03/13 15:15	07/03/13 22:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
n-Octacosane	68		40 - 140	07/03/13 15:15	07/03/13 22:48	1		

Lab Sample ID: LCS 440-115552/2-A

Matrix: Solid

Analysis Batch: 115437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	33.3	21.4		mg/Kg		64	45 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane	69		40 - 140				

Lab Sample ID: 440-50359-B-1-F MS

Matrix: Solid

Analysis Batch: 115443

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 115552

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	87		33.3	36.3	F	mg/Kg		-151	40 - 120

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

### Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 440-50359-B-1-F MS  
Matrix: Solid  
Analysis Batch: 115443

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 115552

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
n-Octacosane	19	X	40 - 140

Lab Sample ID: 440-50359-B-1-G MSD  
Matrix: Solid  
Analysis Batch: 115443

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 115552

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
C10-C28	87		33.3	71.3	F	mg/Kg		-46	40 - 120	65		30
Surrogate	MSD MSD		Limits									
	%Recovery	Qualifier										
n-Octacosane	28	X	40 - 140									

### Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-115415/1-A ^5  
Matrix: Solid  
Analysis Batch: 115550

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 115415

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Antimony	<9.9		9.9	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Arsenic	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Barium	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Beryllium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Cadmium	<0.50		0.50	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Chromium	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Cobalt	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Copper	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Lead	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Molybdenum	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Nickel	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Selenium	<2.0		2.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Thallium	<9.9		9.9	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Vanadium	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Zinc	<5.0		5.0	mg/Kg		07/03/13 07:40	07/03/13 14:06	5
Silver	<0.99		0.99	mg/Kg		07/03/13 07:40	07/03/13 14:06	5

Lab Sample ID: LCS 440-115415/2-A ^5  
Matrix: Solid  
Analysis Batch: 115550

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 115415

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Antimony	49.8	47.9		mg/Kg		96	80 - 120	
Arsenic	49.8	47.5		mg/Kg		95	80 - 120	
Barium	49.8	48.3		mg/Kg		97	80 - 120	
Beryllium	49.8	47.1		mg/Kg		95	80 - 120	
Cadmium	49.8	48.5		mg/Kg		98	80 - 120	
Chromium	49.8	47.8		mg/Kg		96	80 - 120	
Cobalt	49.8	49.8		mg/Kg		100	80 - 120	

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-115415/2-A ^5

Matrix: Solid

Analysis Batch: 115550

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115415

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	49.8	48.0		mg/Kg		96	80 - 120
Lead	49.8	48.7		mg/Kg		98	80 - 120
Molybdenum	49.8	47.3		mg/Kg		95	80 - 120
Nickel	49.8	50.0		mg/Kg		101	80 - 120
Selenium	49.8	45.9		mg/Kg		92	80 - 120
Thallium	49.8	48.1		mg/Kg		97	80 - 120
Zinc	49.8	45.5		mg/Kg		91	80 - 120
Silver	24.9	23.6		mg/Kg		95	80 - 120

Lab Sample ID: 440-50359-A-1-E MS ^5

Matrix: Solid

Analysis Batch: 115550

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 115415

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<10		49.5	50.4		mg/Kg		102	75 - 125
Arsenic	<2.0		49.5	50.9		mg/Kg		103	75 - 125
Barium	5.2		49.5	58.6		mg/Kg		108	75 - 125
Beryllium	<0.50		49.5	52.0		mg/Kg		105	75 - 125
Cadmium	<0.50		49.5	53.7		mg/Kg		108	75 - 125
Chromium	7.8		49.5	61.0		mg/Kg		108	75 - 125
Cobalt	<1.0		49.5	54.3		mg/Kg		109	75 - 125
Copper	6.8		49.5	62.9		mg/Kg		113	75 - 125
Lead	4.8		49.5	58.6		mg/Kg		109	75 - 125
Molybdenum	2.6		49.5	52.1		mg/Kg		100	75 - 125
Nickel	6.6		49.5	61.6		mg/Kg		111	75 - 125
Selenium	<2.0		49.5	47.8		mg/Kg		97	75 - 125
Thallium	<10		49.5	51.8		mg/Kg		105	75 - 125
Zinc	88		49.5	185	F	mg/Kg		196	75 - 125
Silver	<1.0		24.8	25.7		mg/Kg		104	75 - 125

Lab Sample ID: 440-50359-A-1-F MSD ^5

Matrix: Solid

Analysis Batch: 115550

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 115415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<10		49.8	50.6		mg/Kg		102	75 - 125	0	20
Arsenic	<2.0		49.8	50.7		mg/Kg		102	75 - 125	0	20
Barium	5.2		49.8	57.1		mg/Kg		104	75 - 125	3	20
Beryllium	<0.50		49.8	51.3		mg/Kg		103	75 - 125	1	20
Cadmium	<0.50		49.8	52.9		mg/Kg		106	75 - 125	1	20
Chromium	7.8		49.8	60.3		mg/Kg		105	75 - 125	1	20
Cobalt	<1.0		49.8	54.7		mg/Kg		109	75 - 125	1	20
Copper	6.8		49.8	64.6		mg/Kg		116	75 - 125	3	20
Lead	4.8		49.8	63.1		mg/Kg		117	75 - 125	7	20
Molybdenum	2.6		49.8	51.4		mg/Kg		98	75 - 125	1	20
Nickel	6.6		49.8	61.5		mg/Kg		110	75 - 125	0	20
Selenium	<2.0		49.8	47.9		mg/Kg		96	75 - 125	0	20
Thallium	<10		49.8	51.6		mg/Kg		104	75 - 125	0	20
Zinc	88		49.8	445	F	mg/Kg		716	75 - 125	82	20

TestAmerica Irvine



## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Terracon Blanket

TestAmerica Job ID: 440-50635-1

### Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-50359-A-1-F MSD ^5

Matrix: Solid

Analysis Batch: 115550

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 115415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.0		24.9	25.4		mg/Kg		102	75 - 125	1	20

### Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-115755/1-A

Matrix: Solid

Analysis Batch: 115786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 115755

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0851		0.020	mg/Kg		07/05/13 12:28	07/05/13 14:24	1

Lab Sample ID: LCS 440-115755/2-A

Matrix: Solid

Analysis Batch: 115786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115755

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.800	0.932		mg/Kg		117	80 - 120

Lab Sample ID: 440-50523-A-2-F MS

Matrix: Solid

Analysis Batch: 115786

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 115755

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.027		0.800	0.874		mg/Kg		106	70 - 130

Lab Sample ID: 440-50523-A-2-G MSD

Matrix: Solid

Analysis Batch: 115786

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 115755

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.027		0.784	0.857		mg/Kg		106	70 - 130	2	20

### Method: Moisture - Percent Moisture

Lab Sample ID: 440-50639-A-1 DU

Matrix: Solid

Analysis Batch: 115379

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	76		76		%		0.2	20

TestAmerica Irvine

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

### GC/MS VOA

#### Analysis Batch: 115666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	8260B	
440-50635-3	SP-3	Total/NA	Solid	8260B	

### GC VOA

#### Analysis Batch: 115588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-3	SP-3	Total/NA	Solid	8015B	

#### Analysis Batch: 115691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	8015B	

### GC Semi VOA

#### Analysis Batch: 115437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	8015B	115552
440-50635-3	SP-3	Total/NA	Solid	8015B	115552

#### Prep Batch: 115552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	CA LUFT	
440-50635-3	SP-3	Total/NA	Solid	CA LUFT	

### Metals

#### Prep Batch: 115415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	3050B	
440-50635-3	SP-3	Total/NA	Solid	3050B	

#### Analysis Batch: 115550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	6010B	115415
440-50635-3	SP-3	Total/NA	Solid	6010B	115415

#### Prep Batch: 115755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	7471A	
440-50635-3	SP-3	Total/NA	Solid	7471A	

#### Analysis Batch: 115786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	7471A	115755
440-50635-3	SP-3	Total/NA	Solid	7471A	115755

TestAmerica Irvine

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

### General Chemistry

#### Analysis Batch: 115379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50635-1	SP-1	Total/NA	Solid	Moisture	
440-50635-3	SP-3	Total/NA	Solid	Moisture	

1

2

3

4

5

6

7

8

9

10

11

12

13

TestAmerica Irvine

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50635-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-28-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Irvine

## Consulting Engineers & Scientists

Laboratory: Test America

**Address:**

## Contact

**Phone:** \_\_\_\_\_

PO/SO #

**Sampler's Signature**

Proj. No.

6037736A

Project Name

Ball Business Center

No/Type of Containers

**Lab Sample ID (Lab Use Only)**ANALYSIS  
REQUESTED

ANALYSIS  
REQUESTED

TPH 8015  
VOCs 8260B  
Title 22 Metals 6010/7000

Lab use only  
Due Date:

Due Date

Temp. of coolers  
when received (C°)

Page 1 of 1

440-50635 Chain of Custody

### Results due by Friday

7.3C

**Orange County Office**

16662 Milikan Avenue  
Irvine, California 92606

Office (949) 660-9718  
Fax (949) 660-9732

## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 440-50635-1

Login Number: 50635

List Source: TestAmerica Irvine

List Number: 1

Creator: Avila, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Charles Yoon
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-50956-1

Client Project/Site: Bell Business Center

For:

Terracon Consulting Eng & Scientists

2817 McGaw Ave

Irvine, California 92614

Attn: Carl Parten



Authorized for release by:

7/9/2013 7:47:45 PM

Lena Davidkova, Project Manager I

[lena.davidkova@testamericainc.com](mailto:lena.davidkova@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

BELL-2678

1

2

3

4

5

6

7

8

9

10

11

12

13



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Client Sample Results . . . . .	5
Method Summary . . . . .	8
Chronicle . . . . .	9
QC Sample Results . . . . .	10
QC Association . . . . .	21
Definitions . . . . .	23
Certification Summary . . . . .	24
Chain of Custody . . . . .	25
Receipt Checklists . . . . .	26



Sample Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-50956-1	SP-2	Solid	07/08/13 10:40	07/08/13 11:50

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

## Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

**Job ID: 440-50956-1**

**Laboratory: TestAmerica Irvine**

### Narrative

#### Job Narrative 440-50956-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 7/8/2013 11:50 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

#### GC/MS VOA

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 116143 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### GC Semi VOA

Method(s) 8015B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 116295 was outside control limits. Non-homogeneity of the sample matrix is suspected. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8015B: The matrix spike (MS) recoveries associated with batch 116295 were outside control limits: (440-50956-1 MS). Non homogeneity of the sample is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: (440-50956-1 MS), (440-50956-1 MSD), SP-2 (440-50956-1). Evidence of matrix interference is present and confirmed by the sample/MS and MSD analyses.

No other analytical or quality issues were noted.

#### Metals

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: SP-2 (440-50956-1). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Ba,Sb,Zn for batch 116269 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (440-50956-1 MS), (440-50956-1 MSD)

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

#### VOA Prep

No analytical or quality issues were noted.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

**Client Sample ID: SP-2**

**Date Collected: 07/08/13 10:40**

**Date Received: 07/08/13 11:50**

**Lab Sample ID: 440-50956-1**

**Matrix: Solid**

**Percent Solids: 99.1**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
1,1,1-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,1,2-Trichloroethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,1-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,1-Dichloroethene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
1,1-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,2,3-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
1,2,3-Trichloropropane	<0.010		0.010	mg/Kg	☼		07/08/13 20:26	1
1,2,4-Trichlorobenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
1,2,4-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
1,2-Dibromoethane (EDB)	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,2-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,2-Dichloroethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,3,5-Trimethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,3-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,3-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
1,4-Dichlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
2,2-Dichloropropane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
2-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
4-Chlorotoluene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Benzene	<0.0010		0.0010	mg/Kg	☼		07/08/13 20:26	1
Bromobenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Bromochloromethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Bromodichloromethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Bromoform	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Bromomethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Carbon tetrachloride	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Chlorobenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Chloroethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Chloroform	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Chloromethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
cis-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
cis-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Dibromochloromethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Dibromomethane	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Dichlorodifluoromethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Ethylbenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Hexachlorobutadiene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Isopropylbenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
m,p-Xylene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Methylene Chloride	<0.020		0.020	mg/Kg	☼		07/08/13 20:26	1
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Naphthalene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
n-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
N-Propylbenzene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
o-Xylene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1

TestAmerica Irvine

# Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

Client Sample ID: SP-2

Date Collected: 07/08/13 10:40

Date Received: 07/08/13 11:50

Lab Sample ID: 440-50956-1

Matrix: Solid

Percent Solids: 99.1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Styrene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Tert-amyl-methyl ether (TAME)	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
tert-Butylbenzene	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Tetrachloroethene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Toluene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
trans-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
trans-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Trichloroethene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Trichlorofluoromethane	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Vinyl chloride	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Xylenes, Total	<0.0040		0.0040	mg/Kg	☼		07/08/13 20:26	1
Isopropyl Ether (DIPE)	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0050	mg/Kg	☼		07/08/13 20:26	1
tert-Butyl alcohol (TBA)	<0.10		0.10	mg/Kg	☼		07/08/13 20:26	1
p-Isopropyltoluene	<0.0020		0.0020	mg/Kg	☼		07/08/13 20:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		80 - 120				07/08/13 20:26	1
4-Bromofluorobenzene (Surr)	103		80 - 120				07/08/13 20:26	1
Dibromofluoromethane (Surr)	107		80 - 125				07/08/13 20:26	1

## Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.39		0.39	mg/Kg	☼		07/08/13 15:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		65 - 140				07/08/13 15:00	1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	15		5.0	mg/Kg	☼	07/09/13 09:56	07/09/13 16:22	1
C23-C40	43		5.0	mg/Kg	☼	07/09/13 09:56	07/09/13 16:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane	25	X	40 - 140			07/09/13 09:56	07/09/13 16:22	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<10		10	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Arsenic	4.8		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Barium	100		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Beryllium	<0.50		0.50	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Cadmium	<0.50		0.50	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Chromium	21		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Cobalt	7.2		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Copper	19		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Lead	37		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Molybdenum	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Nickel	15		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Selenium	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5

TestAmerica Irvine

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

**Client Sample ID: SP-2**

**Lab Sample ID: 440-50956-1**

**Date Collected: 07/08/13 10:40**

**Matrix: Solid**

**Date Received: 07/08/13 11:50**

### Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<10		10	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Vanadium	38		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Zinc	110		5.0	mg/Kg		07/09/13 08:49	07/09/13 13:28	5
Silver	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:34	10

### Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.052		0.020	mg/Kg		07/09/13 12:09	07/09/13 14:44	1

### General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	0.91		0.10	%			07/08/13 14:12	1

TestAmerica Irvine

## Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Gasoline Range Organics - (GC)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV
Moisture	Percent Moisture	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

## Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

**Client Sample ID: SP-2**

**Date Collected: 07/08/13 10:40**

**Date Received: 07/08/13 11:50**

**Lab Sample ID: 440-50956-1**

**Matrix: Solid**

**Percent Solids: 99.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.06 g	10 mL	116143	07/08/13 20:26	MR	TAL IRV
Total/NA	Analysis	8015B		1	5.22 g	10 mL	115938	07/08/13 15:00	IM	TAL IRV
Total/NA	Prep	CA LUFT			30.00 g	1 mL	116295	07/09/13 09:56	SJ	TAL IRV
Total/NA	Analysis	8015B		1			116267	07/09/13 16:22	JR	TAL IRV
Total/NA	Prep	3050B			2.00 g	50 mL	116269	07/09/13 08:49	MP	TAL IRV
Total/NA	Analysis	6010B		5			116368	07/09/13 13:28	VS	TAL IRV
Total/NA	Prep	3050B			2.00 g	50 mL	116269	07/09/13 08:49	MP	TAL IRV
Total/NA	Analysis	6010B		10			116368	07/09/13 13:34	VS	TAL IRV
Total/NA	Prep	7471A			0.49 g	50 mL	116327	07/09/13 12:09	MM	TAL IRV
Total/NA	Analysis	7471A		1			116391	07/09/13 14:44	DB	TAL IRV
Total/NA	Analysis	Moisture		1			116103	07/08/13 14:12	DK	TAL IRV

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine



# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-116143/3

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
1,1,1-Trichloroethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,1,2-Trichloroethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,1-Dichloroethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,1-Dichloroethene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
1,1-Dichloropropene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,2,3-Trichlorobenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
1,2,3-Trichloropropane	<0.010		0.010	mg/Kg			07/08/13 19:17	1
1,2,4-Trichlorobenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
1,2,4-Trimethylbenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
1,2-Dibromoethane (EDB)	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,2-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,2-Dichloroethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,2-Dichloropropane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,3,5-Trimethylbenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,3-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,3-Dichloropropane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
1,4-Dichlorobenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
2,2-Dichloropropane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
2-Chlorotoluene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
4-Chlorotoluene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Benzene	<0.0010		0.0010	mg/Kg			07/08/13 19:17	1
Bromobenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Bromochloromethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Bromodichloromethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Bromoform	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Bromomethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Carbon tetrachloride	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Chlorobenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Chloroethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Chloroform	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Chloromethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
cis-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
cis-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Dibromochloromethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Dibromomethane	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Dichlorodifluoromethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Ethylbenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Hexachlorobutadiene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Isopropylbenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
m,p-Xylene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Methylene Chloride	<0.020		0.020	mg/Kg			07/08/13 19:17	1
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Naphthalene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
n-Butylbenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
N-Propylbenzene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-116143/3

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	Result	MB MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
sec-Butylbenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Styrene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Tert-amyl-methyl ether (TAME)	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
tert-Butylbenzene	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Tetrachloroethene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Toluene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
trans-1,2-Dichloroethene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
trans-1,3-Dichloropropene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Trichloroethene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1
Trichlorofluoromethane	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Vinyl chloride	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Xylenes, Total	<0.0040		0.0040	mg/Kg			07/08/13 19:17	1
Isopropyl Ether (DIPE)	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0050	mg/Kg			07/08/13 19:17	1
tert-Butyl alcohol (TBA)	<0.10		0.10	mg/Kg			07/08/13 19:17	1
p-Isopropyltoluene	<0.0020		0.0020	mg/Kg			07/08/13 19:17	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	111		80 - 120		07/08/13 19:17	1
4-Bromofluorobenzene (Surr)	109		80 - 120		07/08/13 19:17	1
Dibromofluoromethane (Surr)	99		80 - 125		07/08/13 19:17	1

Lab Sample ID: LCS 440-116143/4

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.0535		mg/Kg		107	70 - 130
1,1,1-Trichloroethane	0.0500	0.0497		mg/Kg		99	65 - 135
1,1,2,2-Tetrachloroethane	0.0500	0.0526		mg/Kg		105	55 - 140
1,1,2-Trichloroethane	0.0500	0.0515		mg/Kg		103	65 - 135
1,1-Dichloroethane	0.0500	0.0489		mg/Kg		98	70 - 130
1,1-Dichloroethene	0.0500	0.0519		mg/Kg		104	70 - 125
1,1-Dichloropropene	0.0500	0.0526		mg/Kg		105	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.0527		mg/Kg		105	60 - 130
1,2,3-Trichloropropane	0.0500	0.0496		mg/Kg		99	60 - 135
1,2,4-Trichlorobenzene	0.0500	0.0519		mg/Kg		104	70 - 135
1,2,4-Trimethylbenzene	0.0500	0.0505		mg/Kg		101	70 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.0494		mg/Kg		99	50 - 135
1,2-Dibromoethane (EDB)	0.0500	0.0544		mg/Kg		109	70 - 130
1,2-Dichlorobenzene	0.0500	0.0495		mg/Kg		99	75 - 120
1,2-Dichloroethane	0.0500	0.0522		mg/Kg		104	60 - 140
1,2-Dichloropropane	0.0500	0.0475		mg/Kg		95	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.0496		mg/Kg		99	70 - 125
1,3-Dichlorobenzene	0.0500	0.0497		mg/Kg		99	75 - 125
1,3-Dichloropropane	0.0500	0.0524		mg/Kg		105	70 - 125
1,4-Dichlorobenzene	0.0500	0.0490		mg/Kg		98	75 - 120

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-116143/4

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	0.0500	0.0498		mg/Kg		100	60 - 145
2-Chlorotoluene	0.0500	0.0496		mg/Kg		99	70 - 125
4-Chlorotoluene	0.0500	0.0490		mg/Kg		98	75 - 125
Benzene	0.0500	0.0472		mg/Kg		94	65 - 120
Bromobenzene	0.0500	0.0510		mg/Kg		102	75 - 120
Bromochloromethane	0.0500	0.0509		mg/Kg		102	70 - 135
Bromodichloromethane	0.0500	0.0544		mg/Kg		109	70 - 135
Bromoform	0.0500	0.0473		mg/Kg		95	55 - 135
Bromomethane	0.0500	0.0544		mg/Kg		109	60 - 145
Carbon tetrachloride	0.0500	0.0530		mg/Kg		106	65 - 140
Chlorobenzene	0.0500	0.0511		mg/Kg		102	75 - 120
Chloroethane	0.0500	0.0528		mg/Kg		106	60 - 140
Chloroform	0.0500	0.0519		mg/Kg		104	70 - 130
Chloromethane	0.0500	0.0558		mg/Kg		112	45 - 145
cis-1,2-Dichloroethene	0.0500	0.0543		mg/Kg		109	70 - 125
cis-1,3-Dichloropropene	0.0500	0.0545		mg/Kg		109	75 - 125
Dibromochloromethane	0.0500	0.0580		mg/Kg		116	65 - 140
Dibromomethane	0.0500	0.0535		mg/Kg		107	70 - 130
Dichlorodifluoromethane	0.0500	0.0550		mg/Kg		110	35 - 160
Ethylbenzene	0.0500	0.0509		mg/Kg		102	70 - 125
Hexachlorobutadiene	0.0500	0.0475		mg/Kg		95	60 - 135
Isopropylbenzene	0.0500	0.0521		mg/Kg		104	75 - 130
m,p-Xylene	0.100	0.0997		mg/Kg		100	70 - 125
Methylene Chloride	0.0500	0.0502		mg/Kg		100	55 - 135
Methyl-t-Butyl Ether (MTBE)	0.0500	0.0531		mg/Kg		106	60 - 140
Naphthalene	0.0500	0.0488		mg/Kg		98	55 - 135
n-Butylbenzene	0.0500	0.0473		mg/Kg		95	70 - 130
N-Propylbenzene	0.0500	0.0479		mg/Kg		96	70 - 130
o-Xylene	0.0500	0.0535		mg/Kg		107	70 - 125
sec-Butylbenzene	0.0500	0.0475		mg/Kg		95	70 - 125
Styrene	0.0500	0.0513		mg/Kg		103	75 - 130
Tert-amyl-methyl ether (TAME)	0.0500	0.0523		mg/Kg		105	60 - 145
tert-Butylbenzene	0.0500	0.0480		mg/Kg		96	70 - 125
Tetrachloroethene	0.0500	0.0501		mg/Kg		100	70 - 125
Toluene	0.0500	0.0489		mg/Kg		98	70 - 125
trans-1,2-Dichloroethene	0.0500	0.0516		mg/Kg		103	70 - 125
trans-1,3-Dichloropropene	0.0500	0.0557		mg/Kg		111	70 - 135
Trichloroethene	0.0500	0.0507		mg/Kg		101	70 - 125
Trichlorofluoromethane	0.0500	0.0677		mg/Kg		135	60 - 145
Vinyl chloride	0.0500	0.0572		mg/Kg		114	55 - 135
Isopropyl Ether (DIPE)	0.0500	0.0501		mg/Kg		100	60 - 140
Ethyl-t-butyl ether (ETBE)	0.0500	0.0517		mg/Kg		103	60 - 140
tert-Butyl alcohol (TBA)	0.250	0.246		mg/Kg		98	70 - 135
p-Isopropyltoluene	0.0500	0.0461		mg/Kg		92	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	110		80 - 120
4-Bromofluorobenzene (Surr)	111		80 - 120

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-116143/4

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	104		80 - 125

Lab Sample ID: 440-50910-A-4 MS

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Sample	Sample	Spike	MS	MS					%Rec.
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1,2-Tetrachloroethane	<0.0050	0.0491	0.0508		mg/Kg		103	65 - 145	
1,1,1-Trichloroethane	<0.0020	0.0491	0.0508		mg/Kg		104	65 - 145	
1,1,2,2-Tetrachloroethane	<0.0020	0.0491	0.0598		mg/Kg		122	40 - 160	
1,1,2-Trichloroethane	<0.0020	0.0491	0.0525		mg/Kg		107	65 - 140	
1,1-Dichloroethane	<0.0020	0.0491	0.0508		mg/Kg		103	65 - 135	
1,1-Dichloroethene	<0.0050	0.0491	0.0542		mg/Kg		110	65 - 135	
1,1-Dichloropropene	<0.0020	0.0491	0.0539		mg/Kg		110	65 - 135	
1,2,3-Trichlorobenzene	<0.0050	0.0491	0.0453		mg/Kg		92	45 - 145	
1,2,3-Trichloropropane	<0.0099	0.0491	0.0559		mg/Kg		114	50 - 150	
1,2,4-Trichlorobenzene	<0.0050	0.0491	0.0454		mg/Kg		89	50 - 140	
1,2,4-Trimethylbenzene	<0.0020	0.0491	0.0566		mg/Kg		115	65 - 140	
1,2-Dibromo-3-Chloropropane	<0.0050	0.0491	0.0434		mg/Kg		88	40 - 150	
1,2-Dibromoethane (EDB)	<0.0020	0.0491	0.0530		mg/Kg		108	65 - 140	
1,2-Dichlorobenzene	<0.0020	0.0491	0.0509		mg/Kg		104	70 - 130	
1,2-Dichloroethane	<0.0020	0.0491	0.0528		mg/Kg		108	60 - 150	
1,2-Dichloropropane	<0.0020	0.0491	0.0502		mg/Kg		102	65 - 130	
1,3,5-Trimethylbenzene	<0.0020	0.0491	0.0565		mg/Kg		115	65 - 135	
1,3-Dichlorobenzene	<0.0020	0.0491	0.0541		mg/Kg		110	70 - 130	
1,3-Dichloropropane	<0.0020	0.0491	0.0526		mg/Kg		107	65 - 140	
1,4-Dichlorobenzene	<0.0020	0.0491	0.0510		mg/Kg		104	70 - 130	
2,2-Dichloropropane	<0.0020	0.0491	0.0449		mg/Kg		91	65 - 150	
2-Chlorotoluene	<0.0050	0.0491	0.0549		mg/Kg		112	60 - 135	
4-Chlorotoluene	<0.0050	0.0491	0.0550		mg/Kg		112	65 - 135	
Benzene	<0.00099	0.0491	0.0498		mg/Kg		101	65 - 130	
Bromobenzene	<0.0050	0.0491	0.0590		mg/Kg		120	65 - 140	
Bromochloromethane	<0.0050	0.0491	0.0543		mg/Kg		111	65 - 145	
Bromodichloromethane	<0.0020	0.0491	0.0520		mg/Kg		106	65 - 145	
Bromoform	<0.0050	0.0491	0.0406		mg/Kg		83	50 - 145	
Bromomethane	<0.0050	0.0491	0.0545		mg/Kg		111	60 - 155	
Carbon tetrachloride	<0.0050	0.0491	0.0515		mg/Kg		105	60 - 145	
Chlorobenzene	<0.0020	0.0491	0.0600		mg/Kg		122	70 - 130	
Chloroethane	<0.0050	0.0491	0.0550		mg/Kg		112	60 - 150	
Chloroform	<0.0020	0.0491	0.0542		mg/Kg		110	65 - 135	
Chloromethane	<0.0050	0.0491	0.0579		mg/Kg		118	40 - 145	
cis-1,2-Dichloroethene	<0.0020	0.0491	0.0577		mg/Kg		117	65 - 135	
cis-1,3-Dichloropropene	<0.0020	0.0491	0.0557		mg/Kg		114	70 - 135	
Dibromochloromethane	<0.0020	0.0491	0.0544		mg/Kg		111	60 - 145	
Dibromomethane	<0.0020	0.0491	0.0539		mg/Kg		110	65 - 140	
Dichlorodifluoromethane	<0.0050	0.0491	0.0557		mg/Kg		113	30 - 160	
Ethylbenzene	<0.0020	0.0491	0.0520		mg/Kg		106	70 - 135	
Hexachlorobutadiene	<0.0050	0.0491	0.0354		mg/Kg		72	50 - 145	

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50910-A-4 MS

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	<0.0020		0.0491	0.0611		mg/Kg		124	70 - 145
m,p-Xylene	<0.0020		0.0982	0.102		mg/Kg		104	70 - 130
Methylene Chloride	<0.020		0.0491	0.0504		mg/Kg		103	55 - 145
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0491	0.0551		mg/Kg		112	55 - 155
Naphthalene	<0.0050		0.0491	0.0498		mg/Kg		101	40 - 150
n-Butylbenzene	0.041		0.0491	0.0625	F	mg/Kg		44	55 - 145
N-Propylbenzene	<0.0020		0.0491	0.0554		mg/Kg		113	65 - 140
o-Xylene	<0.0020		0.0491	0.0539		mg/Kg		110	65 - 130
sec-Butylbenzene	0.021		0.0491	0.0595		mg/Kg		79	60 - 135
Styrene	<0.0020		0.0491	0.0525		mg/Kg		107	70 - 140
Tert-amyl-methyl ether (TAME)	<0.0050		0.0491	0.0546		mg/Kg		111	60 - 150
tert-Butylbenzene	<0.0050		0.0491	0.0556		mg/Kg		113	60 - 140
Tetrachloroethene	<0.0020		0.0491	0.0515		mg/Kg		105	65 - 135
Toluene	<0.0020		0.0491	0.0498		mg/Kg		101	70 - 130
trans-1,2-Dichloroethene	<0.0020		0.0491	0.0538		mg/Kg		110	70 - 135
trans-1,3-Dichloropropene	<0.0020		0.0491	0.0560		mg/Kg		114	60 - 145
Trichloroethene	<0.0020		0.0491	0.0534		mg/Kg		109	65 - 140
Trichlorofluoromethane	<0.0050		0.0491	0.0698		mg/Kg		142	55 - 155
Vinyl chloride	<0.0050		0.0491	0.0616		mg/Kg		125	55 - 140
Isopropyl Ether (DIPE)	<0.0050		0.0491	0.0512		mg/Kg		104	60 - 150
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0491	0.0534		mg/Kg		109	60 - 145
tert-Butyl alcohol (TBA)	<0.099		0.246	0.232		mg/Kg		94	65 - 145
p-Isopropyltoluene	0.011		0.0491	0.0524		mg/Kg		84	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	110		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	104		80 - 125

Lab Sample ID: 440-50910-A-4 MSD

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.0050		0.0500	0.0585		mg/Kg		117	65 - 145	14	20
1,1,1-Trichloroethane	<0.0020		0.0500	0.0520		mg/Kg		104	65 - 145	2	20
1,1,2,2-Tetrachloroethane	<0.0020		0.0500	0.0692		mg/Kg		138	40 - 160	15	30
1,1,2-Trichloroethane	<0.0020		0.0500	0.0567		mg/Kg		113	65 - 140	8	30
1,1-Dichloroethane	<0.0020		0.0500	0.0541		mg/Kg		108	65 - 135	6	25
1,1-Dichloroethene	<0.0050		0.0500	0.0584		mg/Kg		117	65 - 135	7	25
1,1-Dichloropropene	<0.0020		0.0500	0.0558		mg/Kg		112	65 - 135	4	20
1,2,3-Trichlorobenzene	<0.0050		0.0500	0.0434		mg/Kg		87	45 - 145	4	30
1,2,3-Trichloropropane	<0.0099		0.0500	0.0607		mg/Kg		121	50 - 150	8	30
1,2,4-Trichlorobenzene	<0.0050		0.0500	0.0420		mg/Kg		81	50 - 140	8	30
1,2,4-Trimethylbenzene	<0.0020		0.0500	0.0594		mg/Kg		119	65 - 140	5	25
1,2-Dibromo-3-Chloropropane	<0.0050		0.0500	0.0411		mg/Kg		82	40 - 150	5	30
1,2-Dibromoethane (EDB)	<0.0020		0.0500	0.0586		mg/Kg		117	65 - 140	10	25
1,2-Dichlorobenzene	<0.0020		0.0500	0.0515		mg/Kg		103	70 - 130	1	25

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50910-A-4 MSD

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	<0.0020		0.0500	0.0562		mg/Kg		112	60 - 150	6	25
1,2-Dichloropropane	<0.0020		0.0500	0.0533		mg/Kg		107	65 - 130	6	20
1,3,5-Trimethylbenzene	<0.0020		0.0500	0.0603		mg/Kg		121	65 - 135	7	25
1,3-Dichlorobenzene	<0.0020		0.0500	0.0575		mg/Kg		115	70 - 130	6	25
1,3-Dichloropropane	<0.0020		0.0500	0.0587		mg/Kg		117	65 - 140	11	25
1,4-Dichlorobenzene	<0.0020		0.0500	0.0531		mg/Kg		106	70 - 130	4	25
2,2-Dichloropropane	<0.0020		0.0500	0.0429		mg/Kg		86	65 - 150	5	25
2-Chlorotoluene	<0.0050		0.0500	0.0582		mg/Kg		116	60 - 135	6	25
4-Chlorotoluene	<0.0050		0.0500	0.0580		mg/Kg		116	65 - 135	5	25
Benzene	<0.00099		0.0500	0.0525		mg/Kg		105	65 - 130	5	20
Bromobenzene	<0.0050		0.0500	0.0643		mg/Kg		129	65 - 140	9	25
Bromochloromethane	<0.0050		0.0500	0.0556		mg/Kg		111	65 - 145	2	25
Bromodichloromethane	<0.0020		0.0500	0.0550		mg/Kg		110	65 - 145	6	20
Bromoform	<0.0050		0.0500	0.0443		mg/Kg		89	50 - 145	9	30
Bromomethane	<0.0050		0.0500	0.0559		mg/Kg		112	60 - 155	2	25
Carbon tetrachloride	<0.0050		0.0500	0.0544		mg/Kg		109	60 - 145	6	25
Chlorobenzene	<0.0020		0.0500	0.0725	F	mg/Kg		145	70 - 130	19	25
Chloroethane	<0.0050		0.0500	0.0581		mg/Kg		116	60 - 150	5	25
Chloroform	<0.0020		0.0500	0.0575		mg/Kg		115	65 - 135	6	20
Chloromethane	<0.0050		0.0500	0.0587		mg/Kg		117	40 - 145	1	25
cis-1,2-Dichloroethene	<0.0020		0.0500	0.0594		mg/Kg		119	65 - 135	3	25
cis-1,3-Dichloropropene	<0.0020		0.0500	0.0610		mg/Kg		122	70 - 135	9	25
Dibromochloromethane	<0.0020		0.0500	0.0608		mg/Kg		122	60 - 145	11	25
Dibromomethane	<0.0020		0.0500	0.0577		mg/Kg		115	65 - 140	7	25
Dichlorodifluoromethane	<0.0050		0.0500	0.0560		mg/Kg		112	30 - 160	0	35
Ethylbenzene	<0.0020		0.0500	0.0564		mg/Kg		113	70 - 135	8	25
Hexachlorobutadiene	<0.0050		0.0500	0.0262		mg/Kg		52	50 - 145	30	35
Isopropylbenzene	<0.0020		0.0500	0.0671		mg/Kg		134	70 - 145	9	25
m,p-Xylene	<0.0020		0.100	0.111		mg/Kg		111	70 - 130	8	25
Methylene Chloride	<0.020		0.0500	0.0535		mg/Kg		107	55 - 145	6	25
Methyl-t-Butyl Ether (MTBE)	<0.0050		0.0500	0.0584		mg/Kg		117	55 - 155	6	35
Naphthalene	<0.0050		0.0500	0.0528		mg/Kg		106	40 - 150	6	40
n-Butylbenzene	0.041		0.0500	0.0761		mg/Kg		71	55 - 145	20	30
N-Propylbenzene	<0.0020		0.0500	0.0585		mg/Kg		117	65 - 140	5	25
o-Xylene	<0.0020		0.0500	0.0590		mg/Kg		118	65 - 130	9	25
sec-Butylbenzene	0.021		0.0500	0.0657		mg/Kg		90	60 - 135	10	25
Styrene	<0.0020		0.0500	0.0569		mg/Kg		114	70 - 140	8	25
Tert-amyl-methyl ether (TAME)	<0.0050		0.0500	0.0586		mg/Kg		117	60 - 150	7	25
tert-Butylbenzene	<0.0050		0.0500	0.0548		mg/Kg		110	60 - 140	1	25
Tetrachloroethene	<0.0020		0.0500	0.0551		mg/Kg		110	65 - 135	7	25
Toluene	<0.0020		0.0500	0.0546		mg/Kg		109	70 - 130	9	20
trans-1,2-Dichloroethene	<0.0020		0.0500	0.0570		mg/Kg		114	70 - 135	6	25
trans-1,3-Dichloropropene	<0.0020		0.0500	0.0581		mg/Kg		116	60 - 145	4	25
Trichloroethene	<0.0020		0.0500	0.0557		mg/Kg		111	65 - 140	4	25
Trichlorofluoromethane	<0.0050		0.0500	0.0704		mg/Kg		141	55 - 155	1	25
Vinyl chloride	<0.0050		0.0500	0.0612		mg/Kg		122	55 - 140	1	30
Isopropyl Ether (DIPE)	<0.0050		0.0500	0.0565		mg/Kg		113	60 - 150	10	25
Ethyl-t-butyl ether (ETBE)	<0.0050		0.0500	0.0563		mg/Kg		113	60 - 145	5	30

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-50910-A-4 MSD

Matrix: Solid

Analysis Batch: 116143

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	<0.099		0.250	0.271		mg/Kg		108	65 - 145	16	30
p-Isopropyltoluene	0.011		0.0500	0.0544		mg/Kg		86	60 - 140	4	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Toluene-d8 (Surr)	111		80 - 120								
4-Bromofluorobenzene (Surr)	108		80 - 120								
Dibromofluoromethane (Surr)	104		80 - 125								

### Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-115938/4

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	<0.40		0.40	mg/Kg			07/08/13 08:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		65 - 140				07/08/13 08:58	1

Lab Sample ID: LCS 440-115938/2

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	1.60	1.50		mg/Kg		94	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	104		65 - 140				

Lab Sample ID: LCSD 440-115938/3

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	1.60	1.38		mg/Kg		86	70 - 135	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		65 - 140						

Lab Sample ID: 440-50910-A-13 MS

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	<0.40		1.57	1.34		mg/Kg		86	60 - 140

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-50910-A-13 MS

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		65 - 140

Lab Sample ID: 440-50910-A-13 MSD

Matrix: Solid

Analysis Batch: 115938

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	<0.40		1.53	1.26		mg/Kg		82	60 - 140	6	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	110		65 - 140								

### Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-116295/1-A

Matrix: Solid

Analysis Batch: 116267

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 116295

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	<5.0		5.0	mg/Kg		07/09/13 09:56	07/09/13 14:50	1
C23-C40	<5.0		5.0	mg/Kg		07/09/13 09:56	07/09/13 14:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane	55		40 - 140			07/09/13 09:56	07/09/13 14:50	1

Lab Sample ID: LCS 440-116295/2-A

Matrix: Solid

Analysis Batch: 116267

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 116295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	33.3	24.1		mg/Kg		72	45 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane	63		40 - 140				

Lab Sample ID: 440-50956-1 MS

Matrix: Solid

Analysis Batch: 116267

Client Sample ID: SP-2

Prep Type: Total/NA

Prep Batch: 116295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	44		33.6	46.4	F	mg/Kg	☼	7	40 - 120
Surrogate	MS %Recovery	MS Qualifier	Limits						
n-Octacosane	24	X	40 - 140						

TestAmerica Irvine



## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 440-50956-1 MSD

Matrix: Solid

Analysis Batch: 116267

Client Sample ID: SP-2

Prep Type: Total/NA

Prep Batch: 116295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	44		33.6	67.6	F	mg/Kg	☼	70	40 - 120	37	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
n-Octacosane	25	X	40 - 140								

### Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-116269/1-A ^5

Matrix: Solid

Analysis Batch: 116368

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 116269

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<10		10	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Arsenic	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Barium	<1.0		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Beryllium	<0.50		0.50	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Cadmium	<0.50		0.50	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Chromium	<1.0		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Cobalt	<1.0		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Copper	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Lead	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Molybdenum	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Nickel	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Selenium	<2.0		2.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Thallium	<10		10	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Vanadium	<1.0		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Zinc	<5.0		5.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5
Silver	<1.0		1.0	mg/Kg		07/09/13 08:49	07/09/13 13:23	5

Lab Sample ID: LCS 440-116269/2-A ^5

Matrix: Solid

Analysis Batch: 116368

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 116269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	49.5	46.4		mg/Kg		94	80 - 120
Arsenic	49.5	47.0		mg/Kg		95	80 - 120
Barium	49.5	48.3		mg/Kg		98	80 - 120
Beryllium	49.5	48.2		mg/Kg		97	80 - 120
Cadmium	49.5	47.6		mg/Kg		96	80 - 120
Chromium	49.5	47.2		mg/Kg		95	80 - 120
Cobalt	49.5	48.1		mg/Kg		97	80 - 120
Copper	49.5	47.4		mg/Kg		96	80 - 120
Lead	49.5	47.8		mg/Kg		97	80 - 120
Molybdenum	49.5	46.8		mg/Kg		95	80 - 120
Nickel	49.5	49.1		mg/Kg		99	80 - 120
Selenium	49.5	43.9		mg/Kg		89	80 - 120
Thallium	49.5	47.9		mg/Kg		97	80 - 120
Vanadium	49.5	47.2		mg/Kg		95	80 - 120

TestAmerica Irvine

# QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-116269/2-A ^5

Matrix: Solid

Analysis Batch: 116368

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 116269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	49.5	45.2		mg/Kg		91	80 - 120
Silver	24.8	23.1		mg/Kg		93	80 - 120

Lab Sample ID: 440-50956-1 MS

Matrix: Solid

Analysis Batch: 116368

Client Sample ID: SP-2

Prep Type: Total/NA

Prep Batch: 116269

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<10		50.3	22.6	F	mg/Kg		45	75 - 125
Arsenic	4.8		50.3	54.9		mg/Kg		100	75 - 125
Barium	100		50.3	176	F	mg/Kg		142	75 - 125
Beryllium	<0.50		50.3	54.4		mg/Kg		108	75 - 125
Cadmium	<0.50		50.3	51.3		mg/Kg		102	75 - 125
Chromium	21		50.3	74.3		mg/Kg		106	75 - 125
Cobalt	7.2		50.3	57.8		mg/Kg		101	75 - 125
Copper	19		50.3	74.9		mg/Kg		111	75 - 125
Lead	37		50.3	87.6		mg/Kg		100	75 - 125
Molybdenum	<2.0		50.3	48.4		mg/Kg		96	75 - 125
Nickel	15		50.3	67.2		mg/Kg		104	75 - 125
Selenium	<2.0		50.3	49.1		mg/Kg		98	75 - 125
Thallium	<10		50.3	46.7		mg/Kg		93	75 - 125
Vanadium	38		50.3	97.8		mg/Kg		119	75 - 125
Zinc	110		50.3	176	F	mg/Kg		135	75 - 125
Silver	ND		25.1	22.7		mg/Kg		90	75 - 125

Lab Sample ID: 440-50956-1 MSD

Matrix: Solid

Analysis Batch: 116368

Client Sample ID: SP-2

Prep Type: Total/NA

Prep Batch: 116269

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<10		50.5	21.1	F	mg/Kg		42	75 - 125	7	20
Arsenic	4.8		50.5	58.2		mg/Kg		106	75 - 125	6	20
Barium	100		50.5	180	F	mg/Kg		150	75 - 125	3	20
Beryllium	<0.50		50.5	55.5		mg/Kg		109	75 - 125	2	20
Cadmium	<0.50		50.5	52.3		mg/Kg		104	75 - 125	2	20
Chromium	21		50.5	77.1		mg/Kg		111	75 - 125	4	20
Cobalt	7.2		50.5	59.9		mg/Kg		104	75 - 125	4	20
Copper	19		50.5	76.8		mg/Kg		114	75 - 125	2	20
Lead	37		50.5	88.2		mg/Kg		101	75 - 125	1	20
Molybdenum	<2.0		50.5	50.5		mg/Kg		100	75 - 125	4	20
Nickel	15		50.5	70.9		mg/Kg		110	75 - 125	5	20
Selenium	<2.0		50.5	53.8		mg/Kg		107	75 - 125	9	20
Thallium	<10		50.5	48.4		mg/Kg		96	75 - 125	4	20
Vanadium	38		50.5	99.3		mg/Kg		121	75 - 125	2	20
Zinc	110		50.5	187	F	mg/Kg		156	75 - 125	6	20
Silver	ND		25.3	23.4		mg/Kg		93	75 - 125	3	20

TestAmerica Irvine

## QC Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-116327/1-A  
Matrix: Solid  
Analysis Batch: 116391

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 116327

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/Kg		07/09/13 12:09	07/09/13 14:39	1

Lab Sample ID: LCS 440-116327/2-A  
Matrix: Solid  
Analysis Batch: 116391

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 116327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.800	0.800		mg/Kg		100	80 - 120

Lab Sample ID: 440-50956-1 MS  
Matrix: Solid  
Analysis Batch: 116391

Client Sample ID: SP-2  
Prep Type: Total/NA  
Prep Batch: 116327

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.052		0.784	0.855		mg/Kg		102	70 - 130

Lab Sample ID: 440-50956-1 MSD  
Matrix: Solid  
Analysis Batch: 116391

Client Sample ID: SP-2  
Prep Type: Total/NA  
Prep Batch: 116327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	Limit
Mercury	0.052		0.800	0.873		mg/Kg		103	70 - 130	2	20

### Method: Moisture - Percent Moisture

Lab Sample ID: 440-50962-A-1 DU  
Matrix: Solid  
Analysis Batch: 116103

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD RPD	Limit
Percent Moisture	5.8		5.6		%		4	20

TestAmerica Irvine

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### GC/MS VOA

#### Analysis Batch: 116143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50910-A-4 MS	Matrix Spike	Total/NA	Solid	8260B	
440-50910-A-4 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
440-50956-1	SP-2	Total/NA	Solid	8260B	
LCS 440-116143/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-116143/3	Method Blank	Total/NA	Solid	8260B	

### GC VOA

#### Analysis Batch: 115938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50910-A-13 MS	Matrix Spike	Total/NA	Solid	8015B	
440-50910-A-13 MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	
440-50956-1	SP-2	Total/NA	Solid	8015B	
LCS 440-115938/2	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 440-115938/3	Lab Control Sample Dup	Total/NA	Solid	8015B	
MB 440-115938/4	Method Blank	Total/NA	Solid	8015B	

### GC Semi VOA

#### Analysis Batch: 116267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	8015B	116295
440-50956-1 MS	SP-2	Total/NA	Solid	8015B	116295
440-50956-1 MSD	SP-2	Total/NA	Solid	8015B	116295
LCS 440-116295/2-A	Lab Control Sample	Total/NA	Solid	8015B	116295
MB 440-116295/1-A	Method Blank	Total/NA	Solid	8015B	116295

#### Prep Batch: 116295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	CA LUFT	
440-50956-1 MS	SP-2	Total/NA	Solid	CA LUFT	
440-50956-1 MSD	SP-2	Total/NA	Solid	CA LUFT	
LCS 440-116295/2-A	Lab Control Sample	Total/NA	Solid	CA LUFT	
MB 440-116295/1-A	Method Blank	Total/NA	Solid	CA LUFT	

### Metals

#### Prep Batch: 116269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	3050B	
440-50956-1 MS	SP-2	Total/NA	Solid	3050B	
440-50956-1 MSD	SP-2	Total/NA	Solid	3050B	
LCS 440-116269/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
MB 440-116269/1-A ^5	Method Blank	Total/NA	Solid	3050B	

#### Prep Batch: 116327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	7471A	
440-50956-1 MS	SP-2	Total/NA	Solid	7471A	
440-50956-1 MSD	SP-2	Total/NA	Solid	7471A	

TestAmerica Irvine

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Metals (Continued)

#### Prep Batch: 116327 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-116327/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 440-116327/1-A	Method Blank	Total/NA	Solid	7471A	

#### Analysis Batch: 116368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	6010B	116269
440-50956-1	SP-2	Total/NA	Solid	6010B	116269
440-50956-1 MS	SP-2	Total/NA	Solid	6010B	116269
440-50956-1 MSD	SP-2	Total/NA	Solid	6010B	116269
LCS 440-116269/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	116269
MB 440-116269/1-A ^5	Method Blank	Total/NA	Solid	6010B	116269

#### Analysis Batch: 116391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	7471A	116327
440-50956-1 MS	SP-2	Total/NA	Solid	7471A	116327
440-50956-1 MSD	SP-2	Total/NA	Solid	7471A	116327
LCS 440-116327/2-A	Lab Control Sample	Total/NA	Solid	7471A	116327
MB 440-116327/1-A	Method Blank	Total/NA	Solid	7471A	116327

### General Chemistry

#### Analysis Batch: 116103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-50956-1	SP-2	Total/NA	Solid	Moisture	
440-50962-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

TestAmerica Irvine

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

#### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

#### Metals

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Bell Business Center

TestAmerica Job ID: 440-50956-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-28-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Irvine

ENVIRONMENTAL, GEOTECHNICAL AND CONSTRUCTION MATERIALS SERVICES

CHAIN OF CUSTODY RECORD

# Terracon

Consulting Engineers & Scientists

Office Location Irvine, CA

Project Manager (Signature) Yoon

Sampler's Name (Signature) H.K.

Sampler's Signature

Laboratory: Test 1, Irvine, CA

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

PO/ISO #: \_\_\_\_\_

ANALYSIS REQUESTED

TPH 8015  
VOC 8260B  
Title 22 Metals 6010/9000

Lab use only  
Due Date: \_\_\_\_\_

Temp. of coolers  
when received (C°):

1 2 3 4 5

Page 1 of 1

Proj. No. 60137126A

Project Name Bell Business Center

No. Type of Containers 2 / 4" x 6" Jar

Matrix Date Time 7/8/13 1040

Identifying Marks of Sample(s) SP-2

Start Depth End Depth VOA AG 1L 250 ml PO

Lab Sample ID (Lab Use Only)



440-50956 Chain of Custody

Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush

Relinquished by (Signature) (Signature)

Date: 7/8/13 Time: \_\_\_\_\_

Received by (Signature) Lina Davidov

Date: 7/8/13 Time: 11:50

NOTES:

25th Rush

Relinquished by (Signature) (Signature)

Date: 7/8/13 Time: 11:50

Received by (Signature) \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by (Signature) \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by (Signature) \_\_\_\_\_

Date: 7/8/13 Time: 11:50

Matrix Container WW - Wastewater  
VOA - 40 ml Vial

W - Water  
AG - Amber / Or Glass 1 Liter

S - Soil  
SD - Solid  
L - Liquid  
A - Air Bag

C - Charcoal tube  
P/O - Plastic or other

SL - Sludge  
O - Oil

Orange County Office

16662 Millikan Avenue  
Irvine, California 92606

Office (949) 660-9718  
Fax (949) 660-9732

36043.1°C



## Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 440-50956-1

Login Number: 50956

List Source: TestAmerica Irvine

List Number: 1

Creator: Avila, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Charles Yoon
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# **BELL BUSINESS CENTER PROJECT**

## **MITIGATION MONITORING AND REPORTING PROGRAM**

---

### **1 INTRODUCTION**

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the **Bell Business Center Project**. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." An MMRP is required for the proposed project because the EIR has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

### **2 MITIGATION MONITORING AND REPORTING PROGRAM**

As the lead agency, the City of Bell will be responsible for monitoring compliance with all mitigation measures. Different departments within the City are responsible for various aspects of the project. The MMRP identifies the department with the responsibility for ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below.

- **Mitigation Measure:** The mitigation measures are taken from the Environmental Impact Report (EIR), in the same order they appear in the EIR.
- **Timing:** Identifies at which stage of the project the mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department within the City with responsibility for mitigation monitoring.
- **Verification (Date and Initials):** Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

As the project is of statewide, regional, or area-wide importance, any transportation information generated by this monitoring or reporting program will be submitted to the California Department of Transportation (Caltrans).

# BELL BUSINESS CENTER PROJECT MITIGATION MONITORING AND REPORTING PROGRAM

## MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<b>3.1 Air Quality</b>			
<b>MM 3.1.3a Mobile and Other Area Source Emissions Reduction.</b> The developer/successor-in-charge shall ensure the following design measures be implemented to reduce impacts associated with operational emissions from other area sources:  1. In order to promote alternative fuels and help support “clean” truck fleets, the developer/successor-in-interest shall provide building occupants with information related to the SCAQMD’s Carl Moyer Program or other such programs that promote truck retrofits or clean vehicles and information including, but not limited to, the health effects of diesel particulate matter, the benefits of reduced idling time, CARB regulations, and the importance of not parking in residential areas. If trucks older than the 2007 model year will be used at the project facilities, the developer/successor-in-interest shall require, within one year of signing a lease or purchasing the property, future tenants to apply in good faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer Program or others, as identified by the SCAQMD. Tenants shall be required to use those funds, if awarded.  2. All building rooftops on-site shall be designed to accommodate solar power and the use of solar energy (i.e., solar panels).  3. All roofing shall be constructed of light-colored roofing materials.  4. All lighting fixtures, including signage, shall be state of the art and energy efficient, and light fixtures energy efficient compact fluorescent and/or LED light bulbs. Where feasible, the use of solar powered	Ongoing	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>lighting be implemented.</p> <p>5. Parking lots shall be constructed with cool pavement technologies (i.e., 100 percent concrete) as opposed to conventional paving materials.</p> <p>6. Trees shall be planted to shade parking areas.</p> <p>7. Where feasible, Energy Star heating, cooling, and lighting devices and appliances shall be used.</p> <p>8. All outdoor lighting shall be limited to only those needed for safety and security purposes.</p>			
<p><b>MM 3.1.3b</b> <b>Signs.</b> Signage shall be posted stating the State-mandated prohibition of all on-site trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program. Additionally, to prevent trucks from entering into residential areas, truck routes shall be marked with trailblazer signs.</p>	Ongoing	City of Bell Planning Division	
<p><b>MM 3.1.3c</b> <b>Electrical Hookups/Electrically Powered Equipment.</b></p> <p>1. To ensure the technology can be employed when it becomes commercially available, the developer(s)/successor(s)-in-charge shall install electrical infrastructure to accommodate various electrical equipment needed during the operational phase of the proposed project.</p> <p>2. Where transport refrigeration units (TRUs) are in use, electrical hookups shall be installed at all loading docks in order to allow TRUs with electric standby capabilities to use them. Trucks incapable of utilizing the electrical hookups shall be prohibited from accessing the site as set forth. Idling in excess of 5 minutes shall be prohibited, subject to on-site verification. Quarterly inspection reports shall be available on-site at all times.</p> <p>3. Service equipment (i.e., forklifts and yard hostlers) shall be electrically powered, where feasible.</p> <p>4. The developer/successor-in-charge shall ensure the installation of a minimum of one electric vehicle</p>	Ongoing	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
charging station per site.			
<b>3.2 Biological Resources</b>			
<b>MM 3.2.2a Burrowing Owl.</b> If clearing and construction activities occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct focused surveys for burrowing owls on and adjacent to the project site. Surveys shall be conducted in accordance with the California Department of Fish and Game's (CDFG) <i>Staff Report on Burrowing Owl Mitigation</i> , published March 7, 2012. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.  If no burrowing owls are detected, no further mitigation is required. If active burrowing owl nest sites are detected, the project applicant shall implement the avoidance, minimization, and mitigation methodologies outlined in the CDFG's <i>Staff Report on Burrowing Owl Mitigation</i> prior to initiating project-related activities that may impact burrowing owls.	Prior to construction activities	City of Bell Planning Division	
<b>MM 3.2.2b Migratory Birds and Raptors.</b> If vegetation removal or ground surface disturbance (any form of grading) is to occur during migratory bird and raptor nesting season (January 15–August 15), the project applicant shall retain a qualified biologist to conduct a focused survey for active nests within 14 days prior to the disturbance of the construction area. Nesting surveys for small birds are only fully effective if carried out between dawn and 11 A.M., as many species become inactive during the middle of the day. If active nests are found, trees/shrubs with nesting birds shall not be disturbed until abandoned by the birds or a qualified biologist deems disturbance potential to be minimal (in consultation with the USFWS and/or the CDFW, where appropriate). If applicable, tree removal and grading shall be restricted to a period following fledging of chicks, which typically occurs between late July and early August. If an active nest is	Reference to this requirement and to the MBTA shall be included in the construction specifications. Pre-construction nest surveys will be conducted prior to the initiation of construction activities, as applicable.	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
located within 50 feet (250 feet for raptors) of construction activities, other restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 50 feet or 250 feet, as appropriate, around the nest as confirmed by the appropriate resource agency) or alteration of the construction schedule. If construction activities or tree removal are proposed to occur during the non-breeding season, a survey is not required, no further studies are necessary, and no mitigation is required.			
<b>MM 3.2.2c Surveys of Potential Bat Roosts.</b> Demolition of abandoned structures will be preceded by a survey for bat presence. Structures being used by bats will not be removed until it has been determined that bats are no longer using the site or until demolition can be carried out without harming any bats.	Pre-construction bat surveys will be conducted prior to the initiation of construction activities, as applicable.	City of Bell Planning Division	
<b>3.3 Cultural Resources – None required</b>	N/A	N/A	N/A
<b>3.4 Climate Change and Greenhouse Gases</b>			
<b>MM 3.4.1a</b> Applicants of development projects located within the Bell Business Center shall implement the following measures to reduce long-term emissions of greenhouse gases associated with the proposed project: 1. Indoor water conservation measures shall be incorporated, such as use of low-flow toilets and faucets (bathrooms). 2. The proposed project shall be designed to exceed state energy efficiency standards by 15 percent (to Tier 1 Title 24 Standards) as directed by Appendix A5 of the 2010 California Green Building Standards (CBSC 2011). This measure helps to reduce emissions associated with energy consumption. 3. The project will be required to install Energy Star appliances in all buildings. The types of Energy Star appliances that will be installed include fans and	Prior to the issuance of occupancy permits	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>refrigerators.</p> <p>4. All loading docks shall be designed to accommodate SmartWay<sup>1</sup> trucks.</p> <p>5. The project shall be required, prior to building permit issuance, to install rooftop solar panels or solar-panel-ready rooftops to allow for easy, cost-effective installation of solar energy systems in the future, using such solar-ready features as:</p> <ul style="list-style-type: none"> <li>• Designing the building to include optimal roof orientation (between 20 to 55 degrees from the horizontal), with sufficient south-sloped roof surface.</li> <li>• Providing clear access without obstructions (chimneys, heating and plumbing vents, etc.) on the south-sloped roof.</li> <li>• Designing the roof framing to support the addition of solar panels.</li> <li>• Installing electrical conduit to accept solar electric system wiring.</li> </ul>			
<p><b>MM 3.4.1b</b> The project is required to reduce waste by 3 percent through a waste diversion program that requires recycling from all uses on the project site. Prior to issuance of occupancy permits, the applicant will complete the following measures:</p> <p>1. All businesses will subscribe to waste collection and recycling services provided by the City's franchised waste collection company.</p> <p>2. All businesses will participate in the recycling program offered through the City's franchised waste collection company. Businesses will recycle all items available through the company's program, or an equivalent method, which ensures that the waste is diverted away</p>	<p>Prior to the issuance of occupancy permits</p>	<p>City of Bell Planning Division</p>	

<sup>1</sup> For example, the aerodynamic equipment for trailers may include use of "boat tails" that attach to the end of the trailer and may potentially be incompatible with loading bays designed with certain dock shelters. (<http://www.epa.gov/smartway/technology/designated-tractors-trailers.htm>).

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>from landfill disposal.</p> <p>3. Adequate space for waste and recycling containers will be constructed at the complex to ensure ease of collection by the City's franchised waste collection company. The units housing the containers shall be constructed to allow sufficient space for the quantity of containers needed to ensure that the waste and recyclables can be collected in an efficient manner. The franchised waste collection company will be consulted to ensure that sufficient space is available for recycling and trash containers.</p>			
<b>3.5 Geology and Soils</b>			
<p><b>MM 3.5.2</b> Prior to the issuance of building permits for each building on the project site, the project applicant shall submit a design-level geotechnical study and building plans to the City of Bell for review and approval. The design-level geotechnical study shall be prepared by a qualified engineer and identify grading and building practices necessary to ensure stable building conditions. The project applicant shall incorporate the recommendations of the approved project-level geotechnical study into project plans. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the latest adopted version of the California Building Standards Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.</p>	Prior to grading	City of Bell Planning Division	
<b>3.6 Hazards and Hazardous Materials – None required</b>	N/A	N/A	N/A
<b>3.7 Hydrology and Water Quality</b>			



<b>Mitigation Measure</b>	<b>Timing</b>	<b>Monitoring Responsibility</b>	<b>Verification (Date and Initials)</b>
<b>MM 3.7.1a</b> Prior to grading permit issuance and as part of the project's compliance with the NPDES requirements, a Notice of Intent (NOI) shall be prepared and submitted to the State Water Resources Quality Control Board (SWRCB), providing notification and intent to comply with the State of California General Permit.	Prior to grading	City of Bell Planning Division	
<b>MM 3.7.1b</b> The proposed project shall conform to the requirements of an approved stormwater pollution prevention plan (SWPPP) (to be applied for during the grading plan process) and the NPDES Permit for General Construction Activities No. CAS000002, Order No, 2009-0009-DWQ, including implementation of all recommended best management practices (BMPs), as approved by the State Water Resources Quality Control Board.	Prior to grading	City of Bell Planning Division	
<b>MM 3.7.1c</b> As part of the plan review process, the City of Bell shall ensure that project plans identify a suite of stormwater quality BMPs that are designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed project, consistent with the Low Impact Development program. Pollutant sources to be addressed by these BMPs include, but are not necessarily limited to, parking lots, landscaped areas, trash storage locations, and storm drain inlets. The design and location of these BMPs will be subject to review and comment by the City but shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program. Prior to the issuance of a certificate of occupancy, the developer shall demonstrate that all structural BMPs described in the project's LID have been constructed and installed. In addition, the developer/successor in charge is prepared to implement all non-structural BMPs described in the LID.	Prior to the issuance of a certificate of occupancy	City of Bell Planning Division	
<b>MM 3.7.1d</b> Upon completion of project construction, the project applicant shall submit a Notice of Termination (NOT) to the State Water Resources Quality Control Board to	Completion of project construction	State Water Resources Quality Control Board	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
indicate that construction is complete.			
<b>3.8 Land Use and Planning – None required</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>3.9 Noise</b>			
<b>MM 3.9.4</b> The project contractor shall implement the following mitigation to reduce construction-related noise impacts associated with the project: 1) Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. 2) Place all stationary construction equipment on the west side of the project so that emitted noise is directed away from sensitive receptors. 3) Locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors to the south of the site during all project construction. 4) Limit all construction, maintenance, or demolition activities within the City of Bell's boundary to the hours between 7:00 a.m. and 6:00 p.m.	During project construction	City of Bell Planning Division	
<b>3.10 Population, Housing, and Employment – None required</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>3.11 Public Services and Utilities – None required</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>3.12 Transportation and Circulation</b>			
<b>MM 3.12.1a Atlantic Boulevard/Bandini Boulevard. (Intersection #3)</b> The developer/successor-in-interest shall participate in an interim regional solution for improvements to the Atlantic Boulevard/Bandini Boulevard intersection in consultation with Caltrans and/or Los Angeles County Metropolitan Transportation Authority, such as the planned Bandini Boulevard corridor signal coordination project in the vicinity of the intersection. The project shall also make a fair share payment to contribute to potential upgrades and improvements to the signal timing and the signal control equipment at this location, if	Prior to occupancy	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
necessary. The project shall also renew the existing striping in the vicinity of the intersection. This intersection is in the Caltrans right-of-way, and all improvements must be approved by Caltrans.			
<b>MM 3.12.1b Eastern Avenue/Bandini Boulevard. (Intersection #7)</b> The developer/successor-in-interest shall make a fair-share contribution to change the northbound Eastern Avenue approach from two left turn lanes, one through lane, and one shared through/right-turn lane to consist of three left-turn lanes, one through lane, and one shared through/right turn lane. As this intersection is shared with the City of Commerce, the extent of improvements must be coordinated with the City of Commerce.	Prior to occupancy	City of Bell Planning Division	
<b>MM 3.12.1c Eastern Avenue/Rickenbacker Road. (Intersection #8)</b> The developer/successor-in-interest shall restripe the eastbound Rickenbacker Road approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane and one shared left-turn/through/right-turn lane. Restripe the westbound Rickenbacker Road approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane and one right-turn lane with right-turn overlap phasing (adding a westbound right-turn overlap phase). Modify the Eastern Avenue/Rickenbacker Road traffic signal by changing the eastbound and westbound Rickenbacker Road approach signal phasing from permitted-phase to split-phase. As this intersection is shared with the City of Commerce, the extent of improvements must be coordinated with the City of Commerce.	Prior to occupancy	City of Bell Planning Division	
<b>MM 3.12.1d Atlantic Boulevard/I-710 Northbound Off-Ramp. (Intersection #11)</b> The developer/successor-in-interest shall prepare a I-710 corridor interim improvement traffic study for the I-710 Freeway between and including the Florence Avenue and Washington Boulevard interchanges to assist Caltrans in evaluating potential interim solutions to improve the operations at the	Prior to occupancy	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>Atlantic Boulevard/I-710 Northbound Off-Ramp State-controlled study intersection. The study will evaluate solutions such as transportation system management (TSM) measures through consideration of potential installation and placement of a changeable message sign (CMS) along the freeway. The project shall also improve and renew the existing signing and striping along the northbound off-ramp. This intersection is in the Caltrans right-of-way, and all improvements must be approved by Caltrans.</p>			
<p><b>MM 3.12.6a I-710 Southbound Off-Ramp/Atlantic Boulevard. (Intersection #1)</b> The developer/successor-in-interest shall participate in an interim regional solution for improvements to the I-710 Southbound Off-Ramp/Atlantic Boulevard intersection, in consultation with Caltrans and/or the Los Angeles County Metropolitan Transportation Authority. Additionally, the project shall prepare a I-710 corridor interim improvement traffic study for the I-710 Freeway between and including the Florence Avenue and Washington Boulevard interchanges to assist Caltrans in evaluating potential interim solutions to improve the operations at the I-710 South Off-Ramp/Atlantic Boulevard State-controlled study intersection. The study will evaluate solutions such as transportation system management (TSM) measures through consideration of potential installation and placement of a changeable message sign (CMS) along the freeway. The project shall also make a fair share payment to contribute to potential upgrades and improvements to the signal timing and progression at this location, if necessary.</p>	Prior to occupancy	City of Bell Planning Division	
<p><b>MM 3.12.6b Eastern Avenue/Bandini Boulevard. (Intersection #7)</b> The developer/successor-in-interest shall make a fair-share contribution to change the northbound Eastern Avenue approach from two left turn lanes, one through lane, and one shared through/right-turn lane to consist of three left-turn lanes, one through lane, and one shared</p>	Prior to occupancy	City of Bell Planning Division	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<p>through/right turn lane. Widen the eastbound Bandini Boulevard approach from one left turn lane, three through lanes, and one right turn lane with right turn overlap phasing to consist of one left turn lane, three through lanes, and two right turn lanes with right turn overlap phasing. As this intersection is shared with the City of Commerce, the extent of improvements must be coordinated with the City of Commerce.</p>			
<p><b>MM 3.12.6c Eastern Avenue/Rickenbacker Road. (Intersection #8)</b>  The developer/successor-in-interest shall make a fair share contribution to restripe the eastbound Rickenbacker Road approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane and one shared left turn/through/right-turn lane. The project shall make a fair share contribution to restripe the westbound Rickenbacker Road approach from one shared left turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane and one right turn lane with right-turn overlap phasing (adding a westbound right-turn overlap phase). The project shall make a fair share contribution to modify the Eastern Avenue/Rickenbacker Road traffic signal by changing the eastbound and westbound Rickenbacker Road approach signal phasing from permitted phase to split phase. The project shall make a fair share contribution to widen the southbound Eastern Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. As this intersection is shared with the City of Commerce, the extent of improvements must be coordinated with the City of Commerce.</p>	<p>Prior to occupancy</p>	<p>City of Bell Planning Division</p>	