Appendix E Interviews



RECORD OF CONVERSATION () MEETING (X)

Date:September 18, 2018Recorded By:Gracie WaresbackTalked With:Rosie JarkinPosition:Property Manager

Job Name /#: <u>T18-3821 The Hive</u> Owner / Client: <u>Invesco</u> Of: <u>Steelwave</u> Phone: <u>949.482.8805</u>

Main Subject: On-site Interview

Targus interviewed Ms. Rosie Jarkin, Property Manager for the subject property. Ms. Jarkin indicated that she had been associated with the subject property for approximately the past three years. The owner was identified by Ms. Jarkin as SWGS Susan Street LLC. Ms. Jarkin stated that she had good knowledge of the uses and physical characteristics of the subject property and is, therefore, considered the Key Site Manager.

According to Ms. Jarkin, she was not aware of information regarding environmental liens, AULs, or governmental notification relating to past or recurrent violations of environmental laws with respect to the subject property. Targus inquired whether the Key Site Manager was aware of: (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending products in, on, or from the subject property; or (3) any notices from governmental entities regarding possible violations of environmental laws or possible liabilities relating to hazardous substances or petroleum products. Ms. Jarkin replied that she was not aware of litigation, proceedings, or notices of these types.

Ms. Jarkin provided the following information:

- Landscaping was provided to the subject property by Commercial landscape
- Pest control was proved by Fenn Termite
- Building maintenance was provided by Wisk Janitorial services.
- Electricity was provided by Southern California Edison.
- Gas was provided by Southern California Gas Company.
- Mesa Water district proved sanitary sewer and stormwater to the subject property.
- The elevator sump pumps are cleaned out every few years or as needed.



Email Transmission

To: Dan Stef	ano	From: G	racie Waresback			
Company: Costa Mesa Fire Department		tment Project:	Project: T18-3821 The			
		Hive				
Email: dan.s	tefano@costamesaca	.gov Date: 9/	/11/18			
Phone: 714.7	754.5106	Pages: 1	L			
Re: FOIA Op	en Records Request	CC:				
□Urgent	☑ For Review	Please Comment	☑ Please Reply	Please Recycle		

Targus is currently performing a Phase I Environmental Site Assessment at the following location:

The Hive 3333, 3335, 3337 South Susan Street Costa Mesa, California 92626

Your assistance and file information for this address is requested to identify potential sources of environmental concern that may have occurred. Such information may consist of fuel or chemical storage activities, drycleaner information, compliance and inspection reports, septic system, drainage and water quality, environmental enforcement activities, brownfields, underground storage tanks, wells, solid waste, permitting, emergency responses to fires, hazardous material responses, spills, and/or releases or observations noted during routine fire inspections.

We will review online records from your database and request additional files that are not available online. We have also requested records form the California Department of Toxic Substances Control, and the Orange County Healthcare Agency, and the California Regional Water Quality Control Board.

We appreciate your help with this project. Please contact **Gracie Waresback** by telephone at **972.247.7229** or via email at **GWaresback@targusassociates.com** with any questions or comments regarding this inquiry. Thank you for your time.

Sincerely, Targus Associates, LLC Gracie Waresback Staff Professional Please direct/send any public records requests to the City Clerk's Office. 714-754-5225.

Thank you.

Dan Stefano, Fire Chief City of Costa Mesa Fire & Rescue

On Sep 11, 2018, at 11:22, Gracie Waresback <<u>gwaresback@targusassociates.com</u>> wrote:

Good Afternoon,

Please see attached open records request.

We appreciate your help with this project.

Gracie Waresback

<image002.jpg>

<FOIA City Fire Fire Department.pdf>



Email Transmission

To: Brenda G	Green	From: Gra	acie Waresback			
Company: Costa Mesa City Clerk		Project: 1	Project: T18-3821 The			
		Hive				
Email: brend	la.green@costamesa	ca.gov Date: 9/1	.3/18			
Phone: 714.7	754.5221	Pages: 1				
Re: FOIA Op	en Records Request	CC:				
□Urgent	☑ For Review	Please Comment	☑ Please Reply	Please Recycle		

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Sincerely, Targus Associates, LLC Gracie Waresback Staff Professional



Fax Transmission

To: Open Records Coordinator		From: Gracie Waresback			
Company: Orange County		Project: T18-3821 The			
		Hive			
Fax:714.433	8.6424	Date: 9/1	.1/18		
Phone: 714.4	433.6000	Pages: 1			
Re: FOIA Op	en Records Request	CC:			
□Urgent	☑ For Review	Please Comment	☑ Please Reply	Please Recycle	

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Sincerely, Targus Associates, LLC Gracie Waresback Staff Professional

From:	Castellanos, Jocelyn			
То:	Gracie Waresback			
Subject:	REQUEST #30381			
Date:	Wednesday, September 26, 2018 12:11:15 PM			
Attachments:	image005.png			
	image006.jpg			
	EH RECORDS DEPT.msg			

Hello Gracie,

Attached you will find the records for the request mentioned in the subject of this email. We only found records on site 3333, however, for 3335 & 3337 there were no records found. Should you have additional questions or required additional help, please do not hesitate to contact me at the phone number provided below.

Thank you and have a great day.

Josie Castellanos

IPT (*MFF DEPT* | *CFO- FBI DEPT* | *RECORDS DEPT*) Orange County Health Care Agency | Environmental Health 1241 E. Dyer Rd #120, Santa Ana 92705-5611 714-433-6039 phone JoCastellanos@Ochca.com



Excellence Shtegrity Service

COUNTY OF ORANGE HEALTH CARE AGENCY

PUBLIC HEALTH SERVICES ENVIRONMENTAL HEALTH MARK A. REFOWITZ DIRECTOR

DAVID M. SOULELES, MPH DEPUTY AGENCY DIRECTOR

DENISE FENNESSY, REHS DIRECTOR ENVIRONMENTAL HEALTH

MAILING ADDRESS: 1241 E. DYER RD., #120 SANTA ANA, CA 92705-5611

TELEPHONE: (714) 433-6000 FAX: (714) 754-1732 E-MAIL: ehealth@ochca.com

9/26/2018

TARGUS ENVIRONMENTAL GRACIE WARESBACK 1900 SIPLOMAT DRIVE DALLAS TX 75234-

RE: EHD REQ #: 30381 3333,3335,3337 S. SUSAN ST., COSTA MESA CA 92626

Attached, please find the information that you have requested.

The information was prepared in the ordinary course of the business concerned at or near the time of the act, condition, or event, which they depict.

If you have any question, please call this office at (714) 433-6022.

Environmental Health Records Unit

Attachment(s):

0 Pages

Orange County TAX ID: 95-6000-928W

California Environmental Reporting System (CERS)

Broadcom Limited (CERSID: 10556524)

Facility Information Accepted Jun 9, 2018

Submitted on 3/13/2018 11:44:58 AM by Scott Houthuysen of Avago Technologies (San Jose, CA) Comments by Submitter: Broadcom exited this leased site in April 2017. No hazardous materials associated with Broadcom operations remain at the site. Please remove this site which was previously associated with Broadcom Limited. Please contact Scott Houthuysen at 484-397-2570 for questions. Submittal was **Accepted** on 6/9/2018 11:23:17 AM by Michael Palazzola Comments by regulator: Accepted pending on site verification. • Business Activities • Business Owner/Operator Identification **Guidance Messages** • **Warning:** 1. Business Activities - The Facility Name for CERSID: 10556524 has changed from. 'Emulex' to 'Broadcom Limited'.

Business Activities

CERS ID 10556524

EPA ID Number

No

Site Identification Broadcom Limited 3333 Susan ST COSTA MESA, CA 92626 County Orange

Submittal Status

Submitted on 3/13/2018 by Scott Houthuysen of Avago Technologies (San Jose, CA) Comments by submitter: Broadcom exited this leased site in April 2017. No hazardous materials associated with Broadcom operations remain at the site. Please remove this site which was previously associated with Broadcom Limited.

Please contact Scott Houthuysen at 484-397-2570 for questions.

Submittal was Accepted; Processed on 6/9/2018 by Michael Palazzola for Orange County Environmental Health

Comments by regulator: Accepted pending on site verification.

Hazardous Materials

Does your facility have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or is regulated under more restrictive inventory local reporting requirements (shown below if present); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?

Underground Storage Tank(s) (UST)	
Does your facility own or operate underground storage tanks?	No
the second surge Wanter	

Hazardous waste	
ls your facility a Hazardous Waste Generator?	No
Does your facility treat hazardous waste on-site?	No
Is your facility's treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	No
Does your facility consolidate hazardous waste generated at a remote site?	No
Does your facility need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?	No
Does your facility generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate In any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.	No

Is your facility a Household Hazardous Waste (HHW) Collection site?

Excluded and/or Exempted Materials

Does your facility recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	No
Does your facility own or operate ASTs above these thresholds? Store greater than 1,320 gallons of petroleum products (new or used) in aboveground tanks or containers.	No
Does your facility have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?	No

Additional Information

Broadcom exited this leased site in April 2017. No hazardous materials associated with Broadcom operations remain at the site. Please remove this site which was previously associated with Broadcom Limited.

11.1	N	*
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Business Owner Operator

Facility/Site					
Broadcom Limited	CERS ID 10556524				
3333 Susan ST COSTA MESA, CA 92626					
Submitted on 3/13/2018 by Scott Houthuysen of Avago Technologies (San Jose, CA)					

Comments by submitter: Broadcom exited this leased site in April 2017. No hazardous materials associated with Broadcom operations remain at the site. Please remove this site which was previously associated with Broadcom Limited.

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Submittal was Accepted; Processed on 6/9/2018 by Michael Palazzola for Orange County Environmental Health Comments by regulator: Accepted pending on site verification.

Identification					
	r, L.L.C See Additional Infor		Beginning Date	Ending Date	
Operator Phone NA	Business Phone NA	Business Fax	Dun & Bradstreet	SIC Code	Primary NAICS
Facility/Site Mailir	ng Address		Primary Emergency	Contact	
3333 Susan Street Costa Mesa, CA 9262	6		NA Title NA Business Phone NA	24-Hour Phone NA	Pager Number
Owner			Secondary Emerger	ncy Contact	
NA NA NA NA, CA NA			NA Title NA Business Phone NA	24-Hour Phone NA	Pager Number
Billing Contact			Environmental Con		
NA NA NA CA NA		NA NA NA, PA NA			

Name of Signer	Signer Title	Document Preparer	
Scott Houthuysen	Director, EHS	Scott Houthuysen	
Additional Information			

Broadcom exited this leased site in April 2017. No hazardous materials associated with Broadcom operations remain at the site. Please remove this site which was previously associated with Broadcom Limited. Questions, call Scott Houthuysen at (484)397-2570

Locally-collected Fields

Some or all of the following fields may be required by your local regulator(s).

Property Owner Toni Steele at SWGS SUSAN STREET, L.L.C. Phone (972) 368-2242 Mailing Address 6011 Connection Drive rving, TX 75039	Assessor Parcel Number (APN) Number of Employees O Facility ID FA0047615
--	--



Email Transmission

To: Cypress	Region	From: Gra	From: Gracie Waresback		
Company: D	TSC	Project: T18-3821 The			
		Hive			
Email: 714.4	84.5318	Date: 9/1	.1/18		
Phone: 714.4	484.5336/37	Pages: 1			
Re: FOIA Op	en Records Request	CC:			
□Urgent	☑ For Review	Please Comment	☑ Please Reply	Please Recycle	

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We will review online records from your database and request additional files that are not available online. We have also requested records from the city of Costa Mesa, Regional Water Quality Control Board, and the Orange County Health Care Agency.

We appreciate your help with this project. Please contact **Gracie Waresback** by telephone at **972.247.7229** or via email at **GWaresback@targusassociates.com** with any questions or comments regarding this inquiry. Thank you for your time.

Sincerely, Targus Associates, LLC Gracie Waresback Staff Professional





Department of Toxic Substances Control

Barbara A. Lee, Director 5796 Corporate Avenue Cypress, California 90630



Edmund G. Brown Jr. Governor

September 12, 2018

Gracie Waresback TARGUS ENVIRONMENTAL 1900 Diplomat Drive Dallas, TX 75234

THE HIVE 333, 335, 337 S SUSAN STREET, COSTA MESA, CA PR4-091118-9

Dear Ms./Mr. Waresback:

We have received your Public Records Act Request for records from Department of Toxic Substances Control.

After a thorough review of our files we have found that, no such records exist at this office pertaining to the site/facility referenced above.

We would like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. Envirostor can be accessed at: <u>http://www.envirostor.dtsc.ca.gov/public</u>.

If you have any questions, would like further information regarding your request, please contact our Regional Records Coordinator at (714) 484-5337.

Sincerely,

Sufe Johnson Julie Johnson Regional Records Coordinator Cypress Administrative Services

🙆 alendari (a. 12.), 👎 Ethnica



Email Transmission

To: Five Revi	ew Request	From: Gra	icie Waresback		
Company: Sa	inta Ana RWQCB	Project: T	Project: T18-3821 The		
		Hive			
Email:		Date: 9/1	1/18		
filereview8@	waterboards.ca.gov				
Phone: 951.7	782.4499	Pages: 1			
Re: FOIA Ope	en Records Request	CC:			
□Urgent	☑ For Review	Please Comment	☑ Please Reply	Please Recycle	

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We appreciate your help with this project. Please contact **Gracie Waresback** by telephone at **972.247.7229** or via email at **GWaresback@targusassociates.com** with any questions or comments regarding this inquiry. Thank you for your time.

Sincerely, Targus Associates, LLC Gracie Waresback Staff Professional Good morning,

After careful review of our records, we show we have no files for the following site:

3333, 3335, 3337 South Susan St. Costa Mesa

If we can be of further assistance please do not hesitate to contact us again.

File Review Desk 3737 Main St. Suite 500 Riverside, CA 92501

From: Gracie Waresback [mailto:gwaresback@targusassociates.com]
Sent: Tuesday, September 11, 2018 9:35 AM
To: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Subject: RWQCB Open Records Request

Good Morning!

Please see attached open records request.

We appreciate your help with this project!

Gracie

Appendix F Qualifications of Environmental Professionals

GRACIE WARESBACK Staff Professional

EDUCATION

Bachelor of Science in Geology, Oklahoma State University, July 2016

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, AND TRAINING

- EPA Accredited Asbestos Inspector- State Exam Passed
- EPA Accredited Lead Inspector-State Exam Passed
- Phase I ESA Training ASTM E5127-13 & All Appropriate Inquiry, Continuing Education
- Certified OSHA 40-Hour Hazardous Waste Operations

CAREER SUMMARY

Ms. Waresback entered the environmental field in April 2017 in pursuit of a career as an environmental professional. She has assisted and performed multiple Phase I and Phase II Environmental Site Assessments (ESAs). She has also compiled data related to radon, asbestos, and similar environmental due diligence services.

REPRESENTATIVE PROJECTS

PHASE I ENVIRONMENTAL SITE ASSESSMENTS -

Ms. Waresback has performed assessments of various properties including vacant/undeveloped land, office buildings, multifamily properties, and commercial/retail facilities. Responsibilities have included reviewing regulatory data, regulatory agency interaction, additional services relating to historical impact, drinking water quality, endangered species, wetlands, environmental impacts, project coordination, preparation and oversight of report and appendix materials, and client and contractor relations. Ms. Waresback's experience also includes NEPA investigations and multifamily property assessments per the U.S. Department of Housing and Urban Development (HUD) Multifamily Accelerated Processing guidelines.

PHASE II ENVIRONMENTAL SITE ASSESSMENTS -

Ms. Waresback has been involved with numerous Phase II Environmental Site Assessments on properties that have been identified as potentially impacted by adverse environmental conditions, including dry cleaning solvents and other volatile organic compounds, metals, and petroleum hydrocarbons. These projects included the collection and oversight of soil, groundwater, and soil vapor samples during sampling events from the identified sites for laboratory analyses.

CHRIS S. McCASLIN, P.G. Project Professional

EDUCATION

B.S., Geosciences, University of Texas at Dallas, 2003

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS AND TRAINING

Professional Geoscientist (PG), TX, 10490 TCEQ LPST Corrective Action Project Manager (CAPM), PM392 OSHA 40-Hour HAZWOPER Certified 8 Hour OSHA HAZWOPER Refresher Training, Annual Environmental Professional – U.S. EPA All Appropriate Inquiries (AAI) Rule (40 CFR § 312.20) Interstate Technology & Regulatory Council - Vapor Intrusion Pathway: A Practical Guideline, Portland, Oregon, 2008 Northwest Environmental Training Center – Contaminant Vapor Migration and Intrusion, Austin, Texas, 2017

CAREER SUMMARY

Mr. McCaslin is a State of Texas licensed Professional Geoscientist with more than 12 years of experience performing environmental site assessments, subsurface investigations, and site remediation. He has extensive experience performing Phase I Environmental Site Assessments, Phase II subsurface investigations, project management of remedial sites, hydrogeological field studies, risk-based health assessments/screenings, underground storage tank (UST) removals, and leaking UST risk assessments and corrective action.

Mr. McCaslin specializes in applying his knowledge of Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) and TCEQ Petroleum Storage Tank (PST) program rules to assist clients with due diligence assessments and closures of complex sites. He has managed investigation and remedial activities for sites regulated by the TCEQ Voluntary Cleanup Program (VCP), Innocent Owner/Operator Program (IOP), and Leaking Petroleum Storage Tank (LPST) Program. Mr. McCaslin has implemented a wide range of remediation technologies including chemical injection, groundwater pump and treat, bioremediation, and monitored natural attenuation, as well as decontamination through source removal (excavation) with coordinated soil disposal. In addition, Mr. McCaslin has provided environmental consulting services for sites located in many other states throughout the United States.

REPRESENTATIVE PROJECTS

Multifamily Residential Redevelopment, Marina del Rey, California. Conducted extensive site characterization activities at a six-acre inner-city tract of land historically utilized for automobile sales, vehicle maintenance, and equipment manufacturing. Subsurface assessment including soil, soil gas, and groundwater sampling confirmed widespread petroleum and chlorinated volatile organic compound (VOC) impact from both on-site and off-site operations. The property was entered into the California Land Reuse and Redevelopment Act (CLLRA) Program. Work conducted on-site included asbestos abatement, demolition of on-site buildings, removal of clarifiers (coordinated through the local Fire Department), and removal of impacted soil. Subsequent preparation of a Human Health Risk Assessment (HHRA) for the site documented that site conditions were expected to be protective of human health in consideration of certain activity and land use restrictions. The regulatory agency required the client to enter into an Operations and Maintenance Agreement that included implementation of a Soil Management Plan and groundwater monitoring for a period of at least two years. Following documentation of site characterization and remedial activities, the State of California, Department of Toxic Substances Control (DTSC) issued a Certificate of Completion.

Multifamily Residential Redevelopment, Carrollton, Texas. Conducted a Phase I ESA and limited subsurface investigation activities at a four-acre property located in historical downtown Carrollton. Historical research identified several former occupants of potential environmental concern, including automotive repair businesses, print shop operations, and an unpaved roof/floor tile storage lot. Extensive review of regulatory files identified former on-site impacts previously closed under the TCEQ Petroleum Storage Tank (PST) Division which was associated with past automotive repair operations, a former leaking underground storage tank, and groundwater impact associated with an off-site former fueling station. Subsurface assessment including soil and groundwater sampling confirmed widespread petroleum impact from both historical on-site and off-site automotive/fueling related operations, and elevated concentrations of certain metals throughout the site. The property was entered into the TCEQ VCP. Further investigation and evaluation while in the program documented that site conditions were protective of human health. A Certificate of Completion was issued for the Site within eight months of entering the program.

Trinity River Proposed Multi-Use Redevelopment, Dallas, TX. Conducted Phase I ESAs and Phase II investigations of several parcels of land located between the central business district and the Trinity River corridor, which was occupied by gasoline stations, industrial and commercial properties, and a half-mile long refrigerated warehouse. Assessments identified refrigerated support equipment including gas-fired refrigeration compressors, backup fuel for chilled water and electricity, and retail motor fuel sales associated with the gasoline station. Identified additional occupancies since the late 19th century included a rail yard with roundhouse turntable and associated mechanical service and repair. Conducted extension soil excavation to remove petroleum-affected soil and free product, as well as groundwater treatment to address dissolved-phase petroleum-impacted groundwater from historical releases associated with a former gasoline station. Residual impacts to groundwater along with chlorinated VOCs and metals identified in groundwater were addressed with a Municipal Setting Designation (MSD).

Former Retail Dry Cleaner, Dallas, Texas. Performed site characterization and remediation activities of a tetrachloroethylene (PCE) plume in clay soil over fractured limestone beneath a retail dry cleaner and extending beneath an adjoining city street and residential area. Implemented augmented bioremediation through in-situ chemical treatment, followed by natural attenuation. Off-site cleanup goals were based on residential exposures with groundwater ingestion pathway eliminated, while on-site cleanup goals were based on protection of on-site workers from dermal and inhalation exposures in combination with other criteria protective of future off-site migration.

Commercial Redevelopment of Former Industrial Area, Fort Worth, Texas. Performed evaluation, estimation of cost, and remediation of a site with prior uses including bulk oil storage, metal machining, truck transport, and light manufacturing. Based on available data, additional investigation, and the proposed redevelopment of the site with a high-rise building with a subsurface parking garage, extensive soil excavation (60,000 cubic yards) was conducted, along with dewatering of affected shallow groundwater.

Large Industrial Manufacturing Facility, New Iberia, Louisiana. Conducted a Phase I ESA and Phase II investigation of a 100-acre industrial manufacturing facility. Operations assessed included fabrication of off-shore oil platforms. Historical research indicated the prior use of the site for fabrication of ships and the historical land disposal/burial of chemical waste along an adjoining parcel. Based on the potential for site-wide impacts, an extensive Phase II site investigation was performed which identified widespread petroleum-affected groundwater beneath the majority of the site, but below regulatory cleanup standards. Based on the findings of the Phase I and II, and evaluation of business environmental risk associated with impacts to the site, the client moved forward with purchase of the multimillion dollar site.

Appendix G Information Requested From Client Excerpts from Documents Provided by Client or Others

Page 5

APPENDIX B USER INFORMATION REQUEST

In accordance with ASTM E1527-13 (All Appropriate Inquiry) in order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the **USER OF THE ASSESSMENT REPORT MUST** provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. The Key Site Manager has good knowledge of the uses and physical characteristics of the property.

User/Client Info:

Name: Scott Ballard - Invesco Phone No: 972-715-7435

Address: 2001 Ross Avenue, Suite 3400 Dallas, Texas 75201

AAI-Required Information:

- 1. Is the **USER** aware of environmental liens (federal, state, tribal, or local) associated with the *property*?
 - No C Yes If yes, please attach an explanation and copies of environmental lien information.
- 2. Is the **USER** aware of deed restrictions, engineering or institutional controls, or other Activity and Use Limitations (AULs) filed under federal, state, tribal, or local law?

No Ves If yes, please attach an explanation and copies of AUL information.

- 3. Does the **USER** possess actual or specialized knowledge or experience that is material to potential *recognized environmental conditions*?
 - ☑ No □ Yes If yes, please attach an explanation.
- 4. If the property is being purchased, is the purchase price...
 - less than fair market value? *no*
 - more than fair market value? *no*
 - the same as fair market value? *no*
 - relationship to fair market value unknown? *no*

(NOTE: You <u>do not</u> have to disclose the purchase price.)

If the purchase price is *less than* fair market value, is the **USER** aware of reasons, environmental or otherwise, that would explain the differential?

No Yes If yes, please provide an explanation. *Not applicable*

- 5. Is the **USER** aware of commonly known or reasonably ascertainable information that is material to potential *recognized environmental conditions*?
 - For example: Do you know the past uses of the property?

Do you know of specific chemicals that are present or once were present at the *property*? Do you know of spills or other chemical releases that have occurred at the *property*? Do you know of chemical cleanups that have occurred at the *property*?)

- No □ Yes If yes, please attach an explanation.
- 6. Does the **USER** possess knowledge of (1) pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; or (3) notices from governmental entity regarding possible violations of environmental laws or possible liability relating to hazardous substances or petroleum products?
 - 🗷 No 🗌 Yes If yes, please attach an explanation.

Additional Requested Information:

What is the **USER'S** reason for having the Phase I Environmental Site Assessment performed?

区 Purchase	Lease	Other (please attach explanation)
□Sale	□Loan	

In addition, the following information is needed for the assessment process. Please attach if available.

- (a) Owners name and contact information
- (b) Legal description of property
- (c) Site contact name and phone number
- (d) Tenant list

7.

- (e) Chain-of-title
- (f) Plans and specifications
- (g) Environmental site assessment reports or environmental audit reports
- (h) Environmental permits; underground and above ground storage tank registrations
- (i) Material Safety Data Sheets
- (j) Community right to know plan
- (k) Hazardous waste generator permits, notices, reports
- (I) Asbestos surveys, ACM abatement documentation, O&M Plans
- (m) Geotechnical Studies
- (*n*) The scope of services desired for the Phase I (including whether parties to the *property* transaction may have a required standard scope of services on whether considerations beyond the requirements of Practice E 1527 are to be considered

See periodic transmittals of pertinent information as it is received

SECTION 34, TOWNSHIP 2 SOUTH, RANGE 10 WEST, SAN BERNARDINO MERIDIAN, ORANGE COUNTY, CALIFORNIA

FIDELITY NATIONAL TITLE COMPANY

COMMITMENT ORDER NO. 997-30014643-JV1 - EXHIBIT A: THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF COSTA MESA IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AND IS DESCRIPED AS FOLLOWS:

PARCEL 3 OF PARCEL MAP 94-120, IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORMA, AS PER MAP FILED IN THE BOOK 284, PAGES 7 TO 10 INCLUSIVE OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECOMPT OF SAM COUNTY.

DEVELOPMENT, CONSTRUCTION OR OPERATION OF THE PROPERTY FOR GRANIEE'S INTENDED USE THEREOF, AS RESERVED IN THE GRANT DEED RECORDED FEBRUARY 5, 2004 AS INSTRUMENT NO. 2004000008951 OF OFFICIAL RECORDS.

APN: 140-041-81

FIDELITY NATIONAL TITLE COMPANY

COMMITMENT ORDER NO. 997-30014643-JV1 - EXCEPTIONS: Numbers correspond with survey-related Schedule B exception items contained in the above referenced Title

2. Easement(s) for the purpose(s) shown below and rights incidental thereta, as granted in a document:

Granted to: County Sanitation District No. 7 of Orange County, California, a Public corporation Parpose: Several American builder for the Consection of the Consec

3. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Southern Pacific Company, a corporation Purpose: Common carrier rolirood, transportation Recording Date: October 24, 1967 Recording No: In Book 8414, Page 129, Official Records Affector & Acceller of roli (and an arrow continuent) department Affects: A portion of sold land as more particularly described in sold document. (AFFECTS THE SUBJECT PROPERTY - PLOTTED AND SHOWN HEREON)

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted ta: Southern Pacific Transportation Company, a corporation Purpose: Rairead, transportation and communication Recarding Date: October 11, 1973 Recarding Mc: In Bock 10940, Page 559, Official Recards

Affects: A portion of sold land as more particularly described in sold document. (AFFECTS THE SUBJECT PROPERTY - PLOTTED AND SHOWN HEREON) 5. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Southern Collfornia Edison Company, a corporation Purpose: Public utilities Recording Dote: August 2, 1999 Recording Dote: August 2, 1999 Recording No: 19990561798, Official Records

Affects: A partien of sold land as more particularly described in sold document. (AFFECTS THE SUBJECT PROPERTY - PLOTIED AND SHOWN HEREON) 6. Natters contained in that certain document

Entitled Development Agreement for Home Ronch Dote: More 20, 2020 Separation Properties, LC and Hear of C.J. Separatrom & Sona, Separatrom Properties, LIC and Heary T. Separatrom Properties, LC Recording, No. 2020;23835, Ottobal Records

Reference is hereby made to said document for full particulars.

Said matter was pertially assigned to Emulex Corporation corporation by Partial Assignment and Assumption of Development Agreement recorded February 5, 2004 as Instrument No. 200400089554, Official Records.

Document(s) decloring modifications thereof recorded April 25, 2007 as instrument Nos. 2007000267970 and 200700267971 both of Official Records. (AFFCDT SHE SUBJECT PROPERTY - CONTUNIS NO PLOTIABLE (FEMS)

7. Matters contained in that certain document Exitilat. Agreement to Provide Timpourge and Innovabile Consent to Annexition Deads Reventor 4, 2001 Exacted by the Convertient Season State (Season Season Season

Reference is hereby mode to sold document for full particulars. (AFFECTS THE SUBJECT PROPERTY - CONTAINS NO PLOTTABLE ITEMS)

8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: City of Costa Mesa, a municipal corporation Purpose: Street and highway Recarding Date: April 3, 2003 Recarding No: 2003000568842, Official Records Affects: A portion of sold land as more particularly described in sold document. (AFFECTS THE SUBJECT PROPERTY - PLOTED AND SHOWN HEREON)

9. Matters contained in that certain document Entitled: Hold Harmiese Agreement for Private Storm Drain Lateral Connection Dated: Warch 31, 2003 Executed by: City of Casta Mesa, a municipal corporation and C.J. Segenstrom & Sons, a California general partnership Recording Date: May 16, 2003 Recording No: 2003000554591, Official Records

Reference is hereby mode to sold document for full particulars. (AFFECTS THE SUBJECT PROPERTY - AFFECTED SENERAGE LOCATION SCALED FROM GRAPHIC EXHIBIT SHOWN HEREON)

10. Natters contained in that certain document

Entitled: Naintenance and Haid Harmless Agreement for Private Storm Brain Dates: Worch 31, 2003 Executed by: City of Casta Mesa, a municipal carporation and C.J. Segerstrom & Sons, a California general partnership Recording Date: Way 16, 2003 Recording Na: 2003000554592, Official Records

Reference is hereby made to said document for full particulars. (AFFECTS THE SUBJECT PROPERTY - AFFECTED SEWERAGE LOCATION SCALED FROM GRAPHIC EXHIBIT SHOWN HEREON)

Greated for Southern California Edition Company, a comportion Purpose Public utilities Recording Date Southers 74, 2003 Recording Net Southers 74, 2003 Recording Net Southers 74, 2003 Recording Net Southers 1, 2004 Re

12. Easement(s) for the purpose(s) shown below and rights incidental thereta, as granted in a document:

Granted to: Vesa Consolidated Water District Purpose: Ppellines Recording Deta: Dearnhort 12, 2003 Recording Deta: Dearnhort 12, 2003 Recording Ne: 2003/0147/8672, Official Records Affects: A partia of a sol load as more particularly described in sold (MFPCDS THE SABACT PMOCPHY - PUDTIED AND SHOWN HERCON)

Entitled: Notice of Declaration of Land Use Restriction Executed by: City of Casta Mass and Steakware, LLC, agent far SWGS Susan Street, LLC Recarding Data: August 14, 2017 Recarding Mar: 2017000342781 of Difficial Recards

MISCELLANEOUS NOTES:

There is direct access to the subject property via Susan Street and Sunflower Avenue, both public ght=o-free; The locations of all utilities stream on the survey are from visible surface evidence only. The posted address on alle is 3333 South Suran Street, Costo Mana, California. At the time of this survey, timer was no observative autorize evidence of entimerving work, building construction or building odditions within recent months. At the time of this survey, timer was no observative evidence of the subject property being used as conductors of many, where we not obtained evention is an examination of many and the second of many and the second of the second onstruction or reports. L. The Property surveyed and shown hereon is the same property described in Schedule A of Fidelity lational Tille Company Title Commitment Order No. 997-30014643--JVI with an effective date of June 2. 2018.

2, 2018. There were no party wells observed of the time of the survey. 3. Rectified orthophotography was not used in the production of this survey. 1. There were no vestional foraged on the subject property at the time of the survey, nor has the unveyor been provided with maps or on environmental casesament report showing location of potenti electron

wetlands. 12. There are no appurtement easements listed in the above referenced title commitment.

BASIS OF BEARING:

The basis for all bearings shown hereon is the west line of the subject property, known as being S0021765°M, per Parosi Mop 94-120, Book 284, Pages 7 to 10 of Paroel Maps of the Drange County Personne

SURVEYOR'S OBSERVATIONS:

At the time of this survey, there was no visible evidence of encroachments or violations.

FLOOD ZONE:

By scaled map location and graphic platting only, the subject property appears to lie entirely in Zone X-Usahaded (Areas determined to be autilist the 0.2% annual chance floadplain), according to the Fload insurance Rate Map for the Country of Oronge, State of California, Community Panel No. 0656502758, Revised Date December 3, 2009.

ZONING:

As of June 22, 2018, we have not yet received the current zoning information for the subject property.

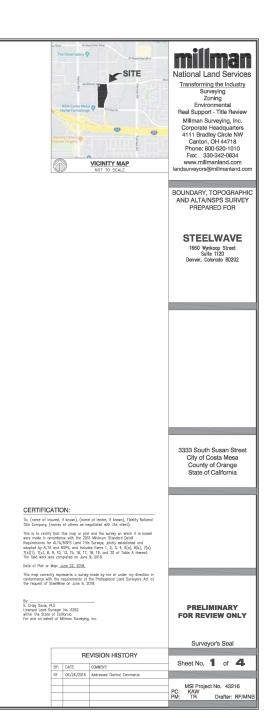
PARKING: 471 Porking Spaces 13 Handicapped Spaces 484 Total Parking Spaces

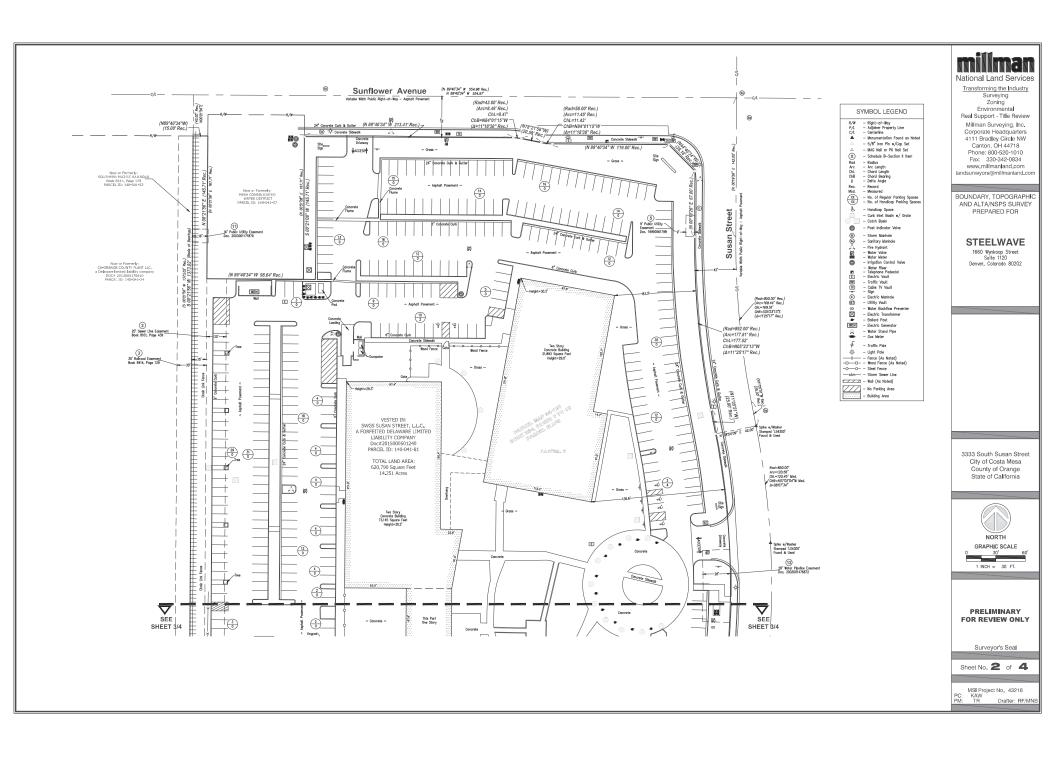
> TOTAL LAND AREA 620,790 Square Feet

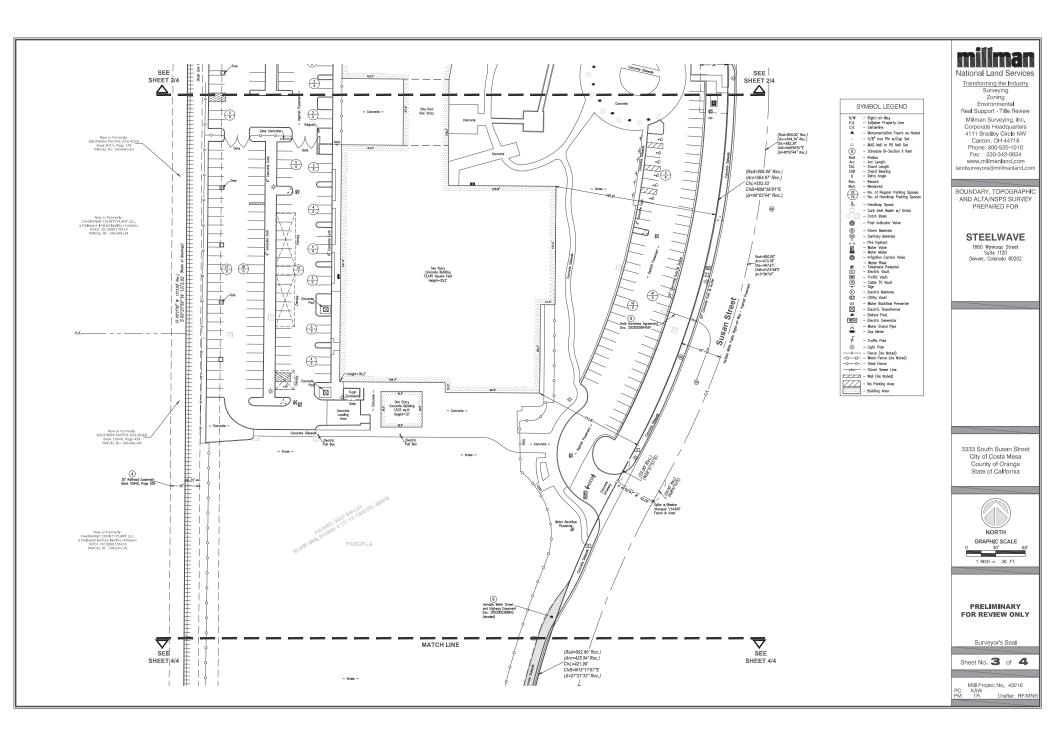
11. Ecsement(s) for the purpose(s) shown below and rights incidental thereta, as granted in a document:

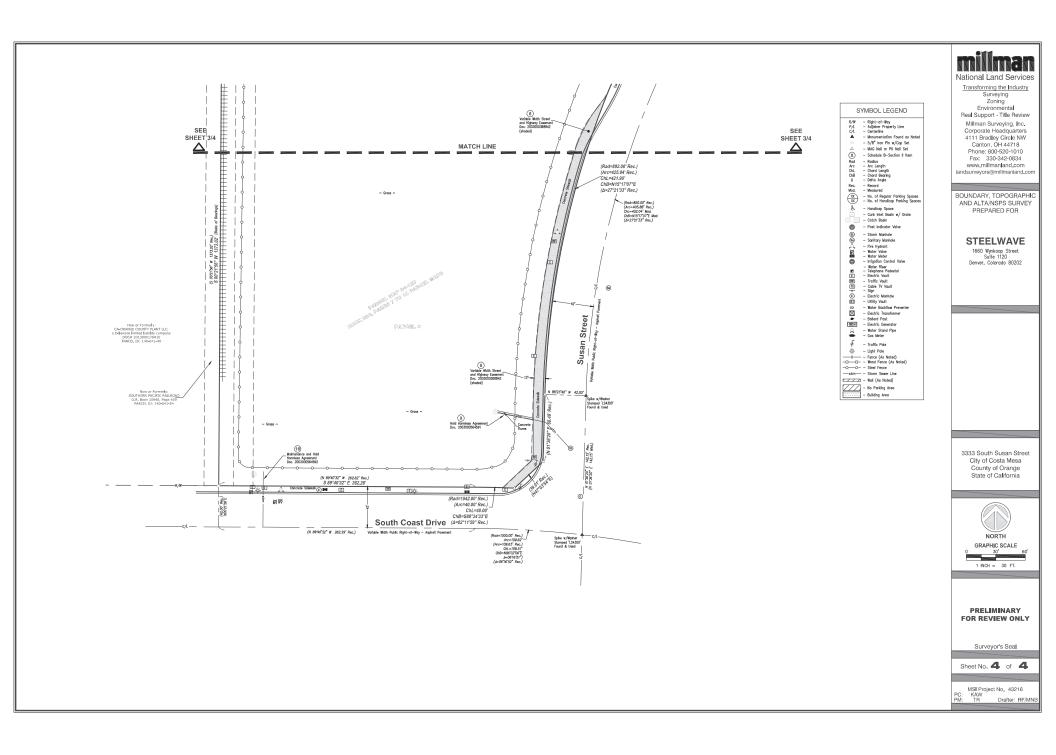
14. Matters contained in that certain document

Reference is hereby made to sold document for full particulars. (AFFECTS THE SUBJECT PROPERTY - CONTAINS NO PLOTTABLE ITEMS)









Paul, Hastings, Janofsky & Walker LLP 695 Town Center Drive, 17th Floor, Costa Mesa, CA 92626-1924 telephone 714-668-6200 / facsimile 714-979-1921 / internet www.paulhastings.com

Atlanta / London / Los Angeles / New York / San Francisco / Stamford / Tokyo / Washington, D.C.

Paul Hastings

(714) 668-6236 johnsimonis@paulhastings.com

May 14, 2002

VIA MESSENGER

C.J. Segerstrom & Sons 3315 Fairview Road Costa Mesa, A 92626 Attention: Jeffrey Reese

Re: Phase II Environmental Assessment for Emulex Site

Dear Jeff:

Enclosed please find the Phase II Environmental Assessment for the Emulex site, which I am delivering on behalf of Emulex in accordance with Section 16.1(a) of the Emulex Lease. Based upon a quick review of the findings and recommendations, it appears that the substances of potential concern (i.e. DDT/DDE, toxaphene and arsenic) are agricultural related substances which are the responsibility of the landlord pursuant to Section 14.9. Please let Emulex know as soon as possible if this is not consistent with your understanding.

I am having one of my environmental experts review the report, and would recommend that we, get the respective experts for both parties in touch in the near future to discuss what, if any, further testing and/or remedial measures are appropriate.

Very truly yours,

mory

John F. Simonis 6f PAUL, HASTINGS, JANOFSKY & WALKER LLP

JFS/ksc

Enclosures

cc: C.J. Segerstrom & Sons - Chief Financial Officer (w/encl. - via messenger) James W. Daniels, Esq. (w/encl. - via messenger) Sadie Herrera (w/encl. - via overnight delivery) Kelly Givens (w/encl. - via overnight delivery) 34558.00002

gale/jordan associates, inc.

ENVIRONMENTAL MANAGEMENT SERVICES

Privileged and Confidential – Attorney/Client Privilege

May 13, 2002

John Simonis, Esq. Paul Hastings 695 Town Center Drive, 17th Floor Costa Mesa, California 92626

Re: Limited Phase II Subsurface Soil Investigation Emulex Site, Costa Mesa, California g/ja Project No. CE02004

Dear Mr. Simonis:

gale/jordan associates, inc. (g/ja) has completed the soil sampling at the above-referenced site. The on-site portion of the project was completed on April 26, 2002.

1.0 INTRODUCTION

Based on the findings and conclusions presented in the Phase I Environmental Site Assessment (ESA) for the above-referenced site conducted for Julien J. Studley in February 2002, and the subsequent addendum dated February 19, 2002, gale/jordan associates, inc. (g/ja) recommended that a limited subsurface soil investigation be conducted at the site. The purpose of the proposed investigation was to determine if detectable concentrations of pesticides and other target contaminants possibly relating to historical site use exist in shallow subsurface soil at the subject site. The investigation was concentrated on four acres, with some sampling done in the first phase of construction (10 acres) of the subject property (See Exhibit 1, Site Location Map).

This report was prepared to summarize the scope of work, findings, conclusions and recommendations resulting from the limited Phase II subsurface investigation that was authorized by C.G. Segerstrom and Sons.

2.0 SCOPE OF WORK

On 5/4/99, g/ja personnel excavated a series of hand-augered soil borings each to a final depth of 5 ft. below surface grade elevation (bsg) at ten locations as indicated on Exhibit 2, Site Map and Boring Locations Map.

Soil samples were collected from depths of 1 ft. and 5 ft. bsg in appropriately labeled clean 6-in. by 2-in. brass sleeves with Teflon patches and plastic end caps. The sample containers were labeled, chilled in a cooler and transported to Scientific Laboratories of California, Inc. (SciLab) in Carson, California under strict chain-of-custody protocol.

The sampling equipment was decontaminated after each sample was gathered. A primary wash, consisting of decontamination detergent and distilled water was followed by a primary rinse of distilled water and then a final rinse with distilled water. Decontamination liquids were completely changed between the sampling events conducted along the railroad tracks (borings B1 through B5) and samples collected elsewhere (borings B6 through B10).

The excavations were backfilled with soil boring cuttings and a near-surface bentonite plug. A small amount of excess waste soil was stockpiled at the site.

SciLab, a State of California certified facility, was directed to test select soil samples collected at 1 ft. bsg from each boring location, and the samples collected at the terminal depth of 5 ft. bsg from each boring location were placed on-hold at the laboratory. The shallow soil samples were tested to determine if detectable concentrations of total recoverable petroleum hydrocarbons (TRPH), volatile organic compounds, organochorine pesticides, triazine herbicides, chlorinated herbicides and Title 22 metals were present utilizing EPA Method 418.1, EPA Method 8260, EPA Method 8081, EPA Method 8141, EPA Method 8151, and the appropriate methods for Title 22 metals analytes, respectively.

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3.0 FINDINGS

No apparent soil discoloration or chemical odors were observed during the drilling activities. Ground water conditions were not found during the drilling activities.

The USEPA Preliminary Remediation Goals concentrations (PRGs) can be used to screen pollutants in environmental media, trigger further investigation, and provide an initial cleanup goal if applicable. When considering PRGs as preliminary goals, residential concentrations should be used for maximum beneficial uses of a property. It is recommended that industrial PRGs be used for screening sites only in conjunction with residential values.

Title 22 of the California Code of Regulations provides toxicity characteristics for potentially hazardous metals and for persistent and bioaccumulative substances as concentrations based on Total Threshold Limit Concentration (TTLC) and Soluble Threshold Limit Concentration (STLC) values. Generally, listed substances may be considered toxic in concentrations at or exceeding the TTLC or STLC values. For this investigation, only TTLC tests were conducted. STLC tests have not been performed. In lieu of additional STLC testing, for this discussion and in keeping with common use and professional practice in similar site screening activities, a factor of 10X STLC values will be used to evaluate potentially hazardous substances. (It is assumed that a TTLC test result of 10X the STLC value for a given analyte in a given sample would produce an STLC test result exceeding the STLC for that analyte if tested using the STLC or Wet Extraction method).

DDE concentrations were found at levels below residential site PRGs and below Total Threshold Limit Concentration (TTLC) and 10X Soluble Threshold Limit Concentration (STLC) values in shallow samples at each boring location. DDT was detected in shallow samples at soil borings B-1 through B-8, and concentrations were found to be below residential site PRGs and TTLC and 10X STLC levels. DDT was not detected in the shallow samples collected from soil borings B-9 and B-10.

Toxaphene was detected in shallow samples collected at borings B-6, B-7, B-8 and B-10, but not in samples from the other soil borings. Levels found exceed the PRG at each location. Toxaphene concentrations however do not exceed the TTLC or 10X STLC levels.

Other organochlorine pesticides were not found at detectable concentrations in samples tested.

Volatile organic compounds were not detected in shallow soil samples collected from each of the soil borings.

Total recoverable petroleum hydrocarbons were detected only in the shallow soil sample collected at boring B-8, and the found concentrations are considered to be low.

The arsenic concentrations found in shallow samples collected at each soil boring exceed the PRG value for residential sites, and exceed the Title 22 STLC value by a factor of 10X or greater at borings B-1, B-2, B-4, B-6, B-8 and B-10. Other Title 22 metal analytes were not detected in samples tested at levels exceeding the PRG, above TTLC levels, or at or above 10X Title 22 STLC levels.

Triazine herbicides and chlorinated herbicides were not found in detectable concentration in samples tested.

Analytical testing results are presented in the following tables. The official laboratory reports, QA/QC documents and chain-of-custody records are attached to this report as Exhibit 3. The USEPA's PRG values and Title 22 TTLC and STLC values are presented for comparative purposes in Table 1 and Table 2, and in Tables 5 through 14.

Table 1

	Org	anochlorine Pes EPA Meth	,	/DDT	
Location	4,4-DDE	4,4-DDT (mg/kg) (mg/kg)	PRG <u>(mg/kg)</u>	TTLC (mg/kg)	STLC (mg/kg)
B-1	0.0541	0.035	1.7	1.0	0.1
B-2	0.0233	0.0015	1.7	1.0	0.1
B-3	0.0081	0.0013	1.7	1.0	0.1
B-4	0.0231	0.0029	1.7	1.0	0.1
B-5	0.0135	0.00168	1.7	1.0	0.1
B-6	0.102	0.0308	1.7	1.0	0.1
B-7	0.102	0.0291	1.7	1.0	0.1
B-8	0.0829	0.0291	1.7	1.0	0.1
B-9	0.0229	ND*	1.7	1.0	0.1
B-10	0.162	ND*	1.7	1.0	0.1

(Note: ND* denotes not detected at detection limit of 0.00006 mg/kg.)

Table 2Organochlorine Pesticides, ToxapheneEPA Method 8081

Location	Results (mg/kg)	Detection Limit (mg/kg)	USEPA PRG (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)
B-6	0.541	0.0012	0.44	5.	0.5
B-7	0.658	0.0012	0.44	5.	0.5
B-8	0.657	0.0012	0.44	5.	0.5
B-10	0.649	0.0012	0.44	5.	0.5

Table 3Volatile Organic CompoundsEPA Method 8260

All Non-detect

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Location	Detection Results (mg/kg)	Limit (mg/kg)
B-1	ND	10.
B-2	ND	10.
B-3	ND	- 10.
B-4	ND	10.
B-5	ND	10.
B-6	ND	10.
B-7	ND	10.
B-8	39.	10.
B-9	ND	10.
B-10	ND	10.

Table 4Total Recoverable Petroleum HydrocarbonsEPA Method 418.1

Table 5Boring B-1Title 22 Metals

TIODD

				Detection	USEPA
	Results	TTLC	STLC	Limits	PRG
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	(mg/kg)
Silver	ND	500.	5.	0.15	3,900.
Arsenic	65.	500.	5.	4.	0.39
Barium	130.	10,000.	100.	0.5.	5,400.
Beryllium	0.7	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	24.	2,500.	5.	0.35	210.
Copper	28.	2,500.	25.	0.15	2,900.
Mercury	0.06	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	19.	2,000.	20.	1.	150.*
Lead	8.5	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	7.9	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	50.	2,400.	24.	0.3	5,500.
Zinc	85.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes "not detected at indicated detection limits.)

Tab	le 6
Borin	g B-2
Title 22	Metals

Analyte	Results (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)	Detection Limits (mg/kg)	USEPA PRG (mg/kg)
Silver	ND	500.	5.	0.15	3,900.
Arsenic	50.	500.	5.	4.	0.39
Barium	120.	10,000.	100.	0.5	5,400.
Beryllium	0.65	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	24.	2,500.	5.	0.35	210.
Copper	24.	2,500.	25.	0.15	2,900.
Mercury	0.08	20.	0.2	0.06	23.
Molybdenum	1.0	3,500.	350.	1.	3,900.
Nickel	18.	2,000.	20.	1.	150.*
Lead	5.5	1,000.	5.0	3.	400.
Antimony	ND	500. –	15.	4.	31.
Selenium	ND	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	50.	2,400.	24.	0.3	5,500.
Zinc	75.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 7
Boring B-3
Title 22 Metals

				Detection USEPA	
	Results	TTLC	STLC	Limits	PRG
Analyte	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	3,900.
Arsenic	41.	500.	5.	4.	0.39
Barium	140.	10,000.	100.	0.5	5,400.
Beryllium	0.75	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	12.	8,000.	80.	0.5	4,700.
Chromium	26.	2,500.	5.	0.35	210.
Copper	29.	2,500.	25.	0.15	2,900.
Mercury	ND	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	20.	2,000.	20.	1.	150.*
Lead	7.0	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	ND	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	55.	2,400.	24.	2.3	5,500.
Zinc	90.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 8						
Boring B-4						
Title 22 Metals						

Austra	Results	TTLC	STLC	Detection Limits	PRG
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	3,900.
Arsenic	50.	500.	5.	4.	0.39
Barium	140.	10,000.	100.	0.5	5,400.
Beryllium	0.75	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	25.	2,500.	5.	0.35	210.
Copper	30.	2,500.	25.	0.15	2,900.
Mercury	0.7	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	20.	2,000.	20.	1.	150.*
Lead	8.5	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	7.1	100. –	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	50.	2,400.	24.	0.3	5,500.
Zinc	85.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 9						
Boring B-5						
Title	22	Metals				

				Detection	USEPA
	Results	TTLC	STLC	Limits	PRG
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	3,900.
Arsenic	49.	500.	5.	4.	0.39
Barium	160.	10,000.	100.	0.5	5,400.
Beryllium	0.8	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	26.	2,500.	5.	0.35	210.
Copper	34.	2,500.	25.	0.15	2,900.
Mercury	0.07	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	20.	2,000.	20.	1.	150.*
Lead	6.5	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	5.9	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	55.	2,400.	24.	0.3	5,500.
Zinc	95.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 10
Boring B-6
Title 22 Metals

Analyte	Results (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)	Detection Limits (mg/kg)	USEPA PRG <u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	3,900.
Arsenic	50.	500.	5.	4.	0.39
Barium	160.	10,000.	100.	0.5.	5,400.
Beryllium	0.8	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	25.	2,500.	5.	0.35	210.
Copper	30.	2,500.	25.	0.15	2,900.
Mercury	0.080	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	19.	2,000.	20.	1.	150.*
Lead	9.5	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	5.6	100.	1.0	4.	10,000.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	55.	2,400.	24.	0.3	5,500.
Zinc	90.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 11	
Boring B-	7
Title 22 Me	tals

Analyte	Results (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)	Detection Limits (mg/kg)	USEPA EPA (mg/kg)
Silver	ND	500.	5.	0.15	10,000.
Arsenic	43.	500.	5.	4.	0.39
Barium	140.	10,000.	100.	0.5	5,400.
Beryllium	0.70	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10	8,000.	80.	0.5	4,700.
Chromium	24.	2,500.	5.	0.35	210.
Copper	30.	2,500.	25.	0.15	2,900.
Mercury	0.090	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	18.	2,000.	20.	1.	150.*
Lead	8.0	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	ND	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	50.	2,400.	24.	0.3	5,500.
Zinc	85.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 12Boring B-8Title 22 Metals

				Detection	USEPA
	Results	TTLC	STLC	Limits	PRG
Analyte	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	3,900.
Arsenic	50.	500.	5.	4.	0.39
Barium	160.	10,000.	100.	0.5	5,400.
Beryllium	0.80	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	10.	8,000.	80.	0.5	4,700.
Chromium	26.	2,500.	5.	0.35	210.
Copper	44.	2,500.	25.	0.15	2,900.
Mercury	0.090	20.	0.2	0.06	23.
Molybdenum	1.2	3,500.	350.	1.	3,900.
Nickel	20.	2,000.	20.	1.	150.*
Lead	10.	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	5.3	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	55.	2,400.	24.	0.3	5,500.
Zinc	100.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 13
Boring B-9
Title 22 Metals

Analyte	Results (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)	Detection Limits (mg/kg)	USEPA PRG (mg/kg)
Silver	ND	500.	5.	0.15	3,900.
Arsenic	38.	500.	5.	4.	0.39
Barium	100.	10,000.	100.	0.5	5,400.
Beryllium	0.49	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	8.5	8,000.	80.	0.5	4,700.
Chromium	18.	2,500.	5.	0.35	210.
Copper	17.	2,500.	25.	0.15	2,900.
Mercury	0.070	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	16.	2,000.	20.	1.	150.*
Lead -	3.2	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	ND	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	42.	2,400.	24.	0.3	5,500.
Zinc	65.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 14Boring B-10Title 22 Metals

Analyte	Results (mg/kg)	TTLC (mg/kg)	STLC (mg/kg)	Detection Limits (mg/kg)	USEPA PRG (mg/kg)
Silver	ND	500.	5.	0.15	3,900.
Arsenic	50.	500.	5.	4.	0.39
Barium	120.	10,000.	100.	0.5	5,400.
Beryllium	0.60	75.	0.75	0.1	150.
Cadmium	ND	100.	1.0	0.2	37.
Cobalt	9.0	8,000.	80.	0.5	4,700.
Chromium	21.	2,500.	5.	0.35	210.
Copper	23.	2,500.	25.	0.15	2,900.
Mercury	0.080	20.	0.2	0.06	23.
Molybdenum	ND	3,500.	350.	1.	3,900.
Nickel	16.	2,000.	20.	1.	150.*
Lead	6.5	1,000.	5.0	3.	400.
Antimony	ND	500.	15.	4.	31.
Selenium	ND	100.	1.0	4.	3,900.
Thallium	ND	700.	7.0	4.	5.2
Vanadium	48.	2,400.	24.	0.3	5,500.
Zinc	75.	5,000.	250.	0.75	23,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 15 Triazine Herbicides EPA Method 8141

All Non-detect.

Table 16Chlorinated HerbicidesEPA Method 8151

All Non-detect.

4.0 CONCLUSIONS

Based on the results of this limited soil investigation, relatively low levels of DDE and DDT were found in shallow soil samples at the site. Potentially significant levels of toxaphene and arsenic exist in shallow soil at the site. Preliminary screening methods used in this investigation indicate that significant health-based risks related to the found concentrations of arsenic and toxaphene may exist at the site. Furthermore, the hazardous levels of on-site soil contaminants in the form of toxaphene and arsenic may require special handling of soils in the event of the development of future on-site improvements.

The horizontal limits of detectable DDE, DDT, toxaphene and arsenic are roughly known and the vertical limits of detectable concentrations of these compounds are unknown.

Based on the findings and conclusions of the Phase I Environmental Site Assessment report for the site conducted in January 2002, historical land use at the subject site has been primarily agricultural. Based on the agricultural land-use history at the site, pesticides, herbicides, and/or fungicides are the likely source(s) of DDE, DDT, toxaphene and arsenic found at the subject site.

5.0 **RECOMMENDATIONS**

Further field investigation should be conducted to determine the vertical limits of significant DDE, DDT, toxaphene and arsenic levels, and gain a better understanding of the horizontal distribution of these compounds. Also, any available records maintained by Orange County Health Care Agency regarding the natural presence of elevated background arsenic levels in the subject site vicinity should be investigated.

Privileged and Confidential - Attorney/Client Privilege

6.0 LIMITATIONS

The conclusions presented in this report are based solely upon the services described therein and are based upon the scope of work for this survey.

Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable geologists and environmental scientists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Any change in the existing conditions at the subject site should be brought immediately to the attention of g/ja. If the information related to g/ja, or further observations by g/ja, reveal unanticipated or changed conditions, g/ja reserves the right to make alterations or additions to the original recommendations.

The recommendations have been prepared specifically for the subject site and are to be used only by the C.J Segerstrom & Sons and their authorized consultants, and subcontractors on this subject site. No information contained herein may be reproduced, imitated, or used in any way other than for the above referenced project.

The opportunity to be of service is appreciated. If there are any questions, please contact this office.

Sincerely, gale/jordan associates, inc.

tucoff

David L. Lucero REA No. 04294

Exhibit 1

Site Location Map

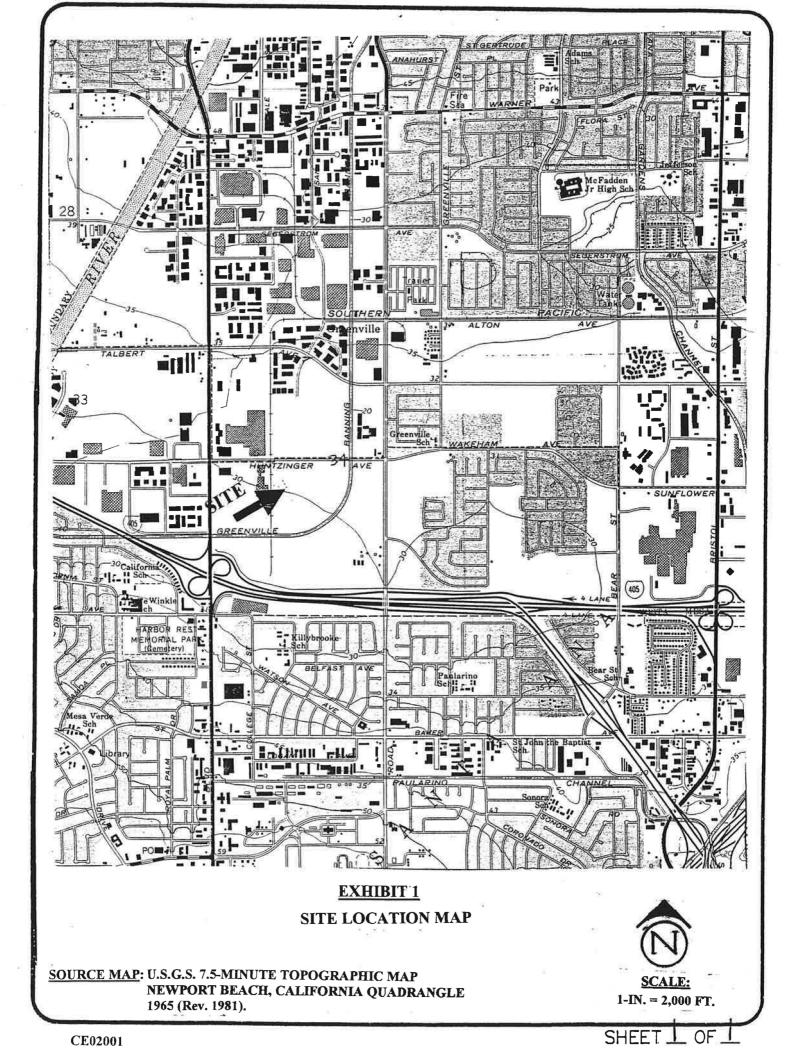
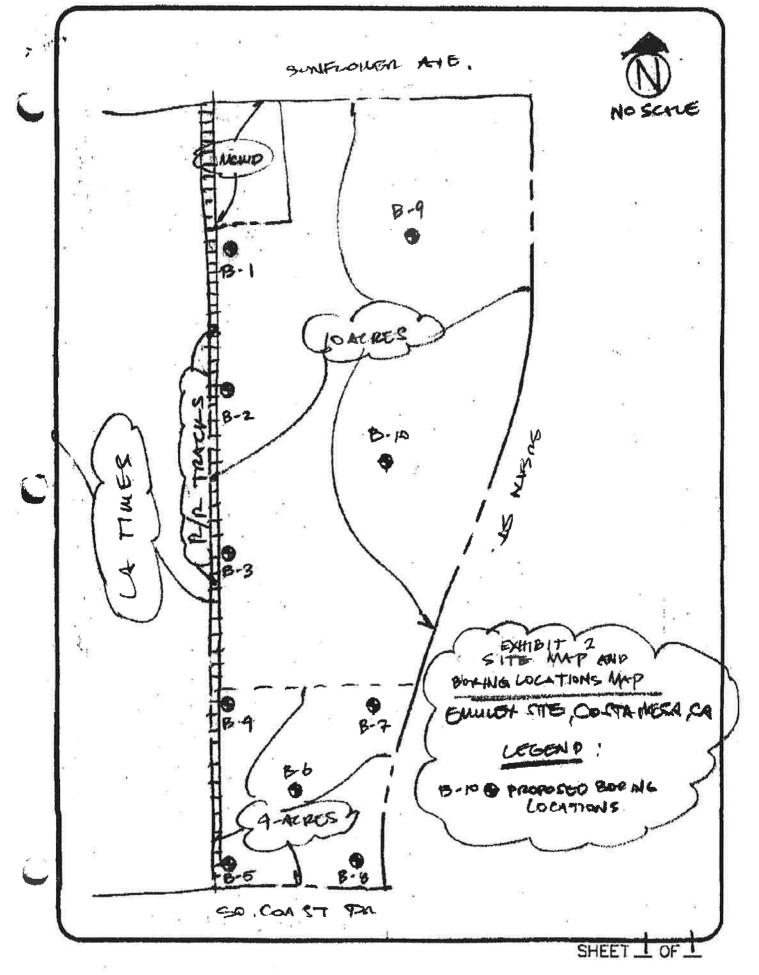


Exhibit 2

Boring Locations Map



PHASE II INVESTIGATION REPORT

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PROPOSED EMULEX SITE SUNFLOWER AVENUE AT SUSAN STREET COSTA MESA, CALIFORNIA

June 13, 2002

MFG, Inc. consulting scientists and engineers



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PHASE II INVESTIGATION REPORT

PROPOSED EMULEX SITE SUNFLOWER AVENUE AT SUSAN STREET COSTA MESA, CALIFORNIA

June 13, 2002

Prepared for:

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MFG Project No. 110123

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A Laboratory Reports

1.0 INTRODUCTION

The following Phase II Investigation Report for the proposed Emulex site (the Site, Figure 1) was prepared by MFG, Inc. at the request of C.J. Segerstrom & Sons. The objective of this investigation was to verify the results of a Limited Phase II Subsurface Soil Investigation performed by gale/jordan associates, inc. (g/ja), dated May 13, 2002 (g/ja, 2002). Work for this project was performed in accordance with MFG's proposal dated May 16, 2002, authorized by C.J. Segerstrom & Sons on May 17, 2002.

2.0 PREVIOUS WORK

Previous Phase II work performed at the Site consists of a Limited Phase II Subsurface Soil Investigation performed by g/ja. The g/ja investigation consisted of drilling and sampling ten hand auger soil borings to a depth of five feet below land surface (bls). Five of the soil borings (B1 to B5) were located adjacent to the railroad tracks along the west side of the Site; the remaining borings were located within the field itself. Soil samples were collected from the borings at a depth of one and five feet. The soil samples collected at a depth of one foot (samples CEO2004 B1-1' to CEO2004 B10-1') were analyzed for the following

- Total recoverable petroleum hydrocarbons (TRPH; EPA Method 418.1);
- Volatile organic compounds (VOCs; EPA Method 8260B);
- California Title 22 metals (metals; EPA Methods 6010B and 7471);
- Organochlorine pesticides (OC pesticides; EPA Method 8080);
- Organophosphorous pesticides (EPA Method 8141); and
- Chlorinated herbicides (EPA Method 8151).

The results of the g/ja investigation were as follows:

- TRPH was detected in one soil sample, at a concentration of 39 milligrams per kilogram (mg/kg).
- VOCs were not detected in any of the soil samples.
- With the exception of arsenic, metals concentrations were below USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential land use and California hazardous waste criteria. Arsenic concentrations as high as 65 mg/kg were detected at the Site. Arsenic concentrations exceed both the residential PRG of 0.39 mg/kg, and the California hazardous waste screening criterion of ten times the Soluble Threshold Limit Concentration (10X STLC), or 50 mg/kg. Waste Extraction Test (WET) analyses were not performed to determine whether the arsenic concentrations were hazardous.
- The OC pesticides DDT, DDE, and toxaphene were detected at concentrations of up to 0.035, 0.162, and 0.652 mg/kg, respectively. Toxaphene concentrations exceeded the residential PRG of 0.44 mg/kg; DDT and DDE values were below their respective residential PRGs. DDT, DDE, and toxaphene concentrations were all below California hazardous waste criteria.
- Organophosphorous pesticides were not detected in any of the soil samples.
- Chlorinated herbicides were not detected in any of the soil samples.

Based upon these results, g/ja concluded that the DDE and DDT concentrations did not represent a concern. Toxaphene and arsenic concentrations were regarded as potentially significant from a human health risk standpoint, and could potentially require special handling of soils during Site development. Historical agricultural chemical use was regarded at the most likely source of the DDT, DDE, toxaphene, and arsenic.

3.0 SCOPE OF WORK

The scope of work for the Phase II investigation was as follows:

- Request transfer of the soil samples collected by g/ja to a laboratory designated by MFG (Sierra Analytical of Laguna Hills, California; ELAP No. 2320). Five soil samples (the samples collected at a depth of one foot bls from g/ja borings B6 to B10) were analyzed for arsenic using EPA Method 7060A (graphite furnace atomic absorption spectroscopy). In addition, the one-foot sample from g/ja boring B6 was digested and reanalyzed in duplicate.
- Prepare a site-specific Health & Safety Plan.
- Drill 12 soil borings to a depth of ten feet using a Geoprobe direct-push drilling rig. Each soil boring was sampled continuously from the surface to a depth of three feet bls. Additional samples were obtained at depths of five and ten feet bls.
- Prepare one shallow composite soil sample from each boring, The composite samples consisted of an equal-weight mixture of soil from all of the discrete samples collected between the surface and three feet below grade (i.e., the interval anticipated to be overexcavated and recompacted during development of the Site).
- Analyze the composite samples, and the samples collected at a depth of ten feet, for arsenic using EPA Method 7060A, and for OC pesticides using EPA Method 8081A. In addition, one randomly selected sample was analyzed in duplicate for both arsenic and OC pesticides.
- Perform a statistical analysis of the data, including calculating statistically valid estimates of average chemical concentrations in soils at the Site.

4.0 FIELD INVESTIGATION

The field investigation was performed by MFG on May 18, 2002. A total of 12 soil borings (designated B-1 to B-12) were drilled to a total depth of 10.5 feet each, using a Geoprobe direct-push drilling rig. Drilling and soil sampling were performed by Vironex, Inc., a California C-57 licensed drilling contractor. Field work was observed by an MFG California Registered Geologist.

4.1 Sampling Program

4.1.1 Sampling Design

The data presented in the g/ja report suggests that no "hot spots" or specific areas of concern are present at the Site. This is generally consistent with agricultural practices, in that pesticides are applied to fields in a relatively uniform manner. A simple random sampling program (e.g., Gilbert, 1987; USEPA, 1986) was therefore selected as the most efficient design for obtaining statistically valid estimates of chemical concentrations at the Site.

Pesticide residues in soil commonly exhibit strong vertical concentration gradients, due to the persistence and relative immobility of these chemicals. Because shallow soils would be overexcavated and recompacted during grading, it is anticipated that mixing and homogenization of the upper portion of the soil column would occur during Site development. Based on discussions with C.J. Segerstrom & Sons, the anticipated depth of overexcavation is approximately three feet across the entire Site. To improve the efficiency of the field investigation, MFG utilized composite rather than discrete samples for analysis. The purpose of compositing multiple samples was to obtain data that would best represent conditions at the Site at the completion of development.

4.1.2 Selection of Sampling Locations

The soil boring locations were selected using a procedure similar to that described in USEPA (1986). A 100 by 100 foot square grid comprised of 60 squares was superimposed onto a drawing of the Site (Figure 2). Twelve of the 60 grid squares were then picked at random for sampling. The grid squares were selected by generating a sequence of random numbers between one and 60 using the

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Microsoft Excel "randbetween" function. Duplicate numbers generated in the sequence of random numbers were rejected.

4.2 Soil Sampling Procedures

Prior to sampling, the approximate center of each selected grid square was located and staked in the field by measuring from the southeast corner of the property. All of the soil borings were drilled at approximate center of the chosen squares.

Undisturbed soil samples were collected using a 24-inch long solid-barrel sampler lined with sixinch long, one-inch diameter brass sampling sleeves. Initially, the sampler was driven from the surface to a depth of two feet. The sampler was then retrieved from the borehole, and the four brass sleeves were removed and labeled according to borehole number and depth interval (for example., the sleeve representing the 1.0 to 1.5-foot interval from boring B-3 was labeled B-3-1.5'). If sample recovery was less than 100 percent, a clean brass sleeve was inserted directly into the soil to sample the 0.0 to 0.5-foot interval. A second set of samples was then collected by driving the sampler from a depth of one to three feet in a second borehole located within one foot of the initial borehole. The samples representing the 2.0 to 2.5 and 2.5 to 3.0-foot intervals were then recovered and labeled as described above. Additional samples were collected at greater depths by driving the sampler from 4.0 to 6.0 feet, and from 8.5 to 10.5 feet; the sleeves representing the 5.0 to 5.5 and the 10.0 to 10.5-foot intervals were also labeled and reserved for analysis.

The labeled soil samples were prepared for shipment to the laboratory by covering the ends of the brass sleeves with Teflon sheets and plastic caps. The samples were then sealed in waterproof plastic bags, and stored in an ice chest at 4°C pending delivery to the laboratory under chain-of-custody protocol.

All sampling equipment was decontaminated between each use by washing with a laboratorygrade detergent, followed by two rinses in tap water and one rinse in distilled water.

4.3 Laboratory Analysis

The soil samples were submitted to Sierra Analytical for analysis. Sierra was directed to prepare composites of the six samples from each boring collected between 0.0 and 3.0 feet. The composite samples, and the samples collected between 10.0 and 10.5 feet, were analyzed for arsenic using EPA Method 7060A, and for OC pesticides using EPA Method 8081A. Sierra was also requested to digest and analyze the composite sample from boring B-9 in duplicate, to assess the reproducibility of the sample preparation and analytical procedure.

In addition, ten soil samples collected by g/ja (samples CEO2004-B1-1' to CEO2004-B10-1') were transferred by courier from Scientific Laboratories of California, Inc. of Carson, California (Scilab; the laboratory utilized in the g/ja investigation), to Sierra Analytical. These samples were released by Scilab in an unrefrigerated state and without chain-of-custody documentation. Sierra Analytical notified MFG of these conditions upon receipt of the samples. Although the samples were transferred without proper chain-of-custody documentation, Sierra indicated that there was no obvious indication of sample tampering. Sierra was directed to analyze five of the samples (CEO2004-B6-1' to CEO2004-B10-1') for arsenic, using EPA Method 7060A. Sierra was also directed to digest and analyze sample CEO2004-B6-1' in duplicate to assess the overall reproducibility of the sample preparation and analytical procedure.

5.0 RESULTS

5.1 Pesticides

Analytical results for pesticides are summarized in Table 1. Copies of the original laboratory reports are provided in Appendix A. The principal features of the data are as follows:

- Toxaphene was detected in five of the 12 shallow composite samples. Toxaphene concentrations ranged from <0.04 to 0.15 mg/kg. Toxaphene was not detected in any of the samples collected at a depth of 10.0 to 10.5 feet bls.
- DDE was detected in 11 of the 12 shallow composite samples analyzed. DDE concentrations ranged from <0.001 to 0.033 mg/kg. DDE was not detected in any of the samples collected at 10.0 to 10.5 feet bls.
- DDT was not detected in any of the soil samples.

5.2 Arsenic

Analytical results for arsenic in the soil samples collected by g/ja are summarized in Table 1; copies of the original laboratory reports are provided in Appendix A. The results include the following:

• Arsenic was detected in all of the soil samples collected at a depth of one foot, at concentrations ranging from 3.22 to 5.22 mg/kg.

Arsenic results for the soil samples collected during this investigation are also summarized in Table 1. Copies of the original laboratory reports are provided in Appendix A The results include the following:

- Arsenic was detected in all of the shallow composite samples analyzed, at concentrations ranging from 2.55 to 5.69 mg/kg.
- Arsenic was also detected in all 10.0-10.5 foot samples, at concentrations ranging from 1.15 to 5.35 mg/kg.

6.0 DISCUSSION OF RESULTS

6.1 Comparison with Previous Results

6.1.1 Pesticides

OC pesticides are highly persistent and immobile in soils. As a result, these chemicals tend to occur at higher concentrations in the uppermost portion of the soil column, and rapidly attenuate with depth. A discrete soil sample collected at a depth of one foot bls would be expected to have a higher pesticide concentration than a composite comprised of samples collected between the surface and three feet bls, because the deeper soil would tend to have lower pesticide concentrations, effectively diluting the higher concentrations found in shallower soil.

For the purpose of comparing results for the shallow composite samples collected during this investigation with the discrete samples collected during the g/ja investigation, it is useful to consider the maximum amount of dilution that could potentially occur as a result of the compositing process. g/ja collected soil samples in six-inch long brass sleeves, whereas the composite samples were prepared from six discreet soil samples, also collected in six-inch long brass sleeves. The maximum possible dilution that could be attributed to differences in the sampling methodologies would be a factor of six. This factor is used in the following three sections of this report to assess the consistence of the results of the two investigations.

6.1.1.1 Toxaphene

Toxaphene concentrations in the shallow composite soil samples ranged from <0.04 to 0.15 mg/kg. Assuming a factor of six dilution, a single discrete sample collected between the surface and three feet could have a toxaphene concentration as high as 0.9 mg/kg. For comparison, the discrete soil samples collected by g/ja had toxaphene concentrations ranging from <0.0012 to 0.658 mg/kg. The results of the two investigations are therefore considered to be consistent.

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6.1.1.2 DDE

DDE concentrations in the shallow composite soil samples ranged from <0.001 to 0.033 mg/kg. Assuming a factor of six dilution, a single discrete sample collected between the surface and three feet could have a DDE concentration as high as 0.20 mg/kg. This maximum value is consistent with the range of 0.0081 to 0.162 mg/kg observed in the discrete samples collected by g/ja.

6.1.1.3 DDT

DDT was not detected above the practical quantitation limit of 0.003 mg/kg in the shallow composite soil samples. Using the above reasoning, DDT concentrations as high as 0.018 mg/kg could be present in one of the discrete samples used to make the composite. This value is similar to the maximum DDT concentration of 0.035 mg/kg reported by g/ja, an indication that the results for the two investigations are consistent.

6.1.2 Arsenic

Like the OC pesticides, arsenical pesticides are highly persistent, and under certain conditions, relatively immobile in soils (Hiltbold, 1974). Arsenic concentrations in the twelve soil shallow composite soil samples ranged from 2.55 to 5.69 mg/kg, compared with a range of 38 to 65 mg/kg for the ten discrete soil samples collected by g/ja. Superficially, the dilution model discussed above would suggest that arsenic concentrations in the composite samples are consistent with the maximum arsenic concentration reported by g/ja. However, the results for the five g/ja soil samples reanalyzed as part of this investigation range from 3.22 to 5.22 mg/kg, very similar to the concentrations found in the shallow composite samples. The Wilcoxon rank sum test (Gilbert, 1987; California Department of Toxic Substances Control [DTSC], 1997), a non-parametric statistical test for evaluating whether measurements from one population tend to be consistently larger than those from another, was used to assess whether the five reanalyzed discrete soil samples had a higher mean than the 12 shallow composite samples, and therefore represent a different population. The results of this test indicated that the g/ja discrete samples do not have a higher mean than the composite samples at the 95% confidence level. This result suggests that the shallow composite samples and the reanalyzed g/ja samples represent a single population, and that strong vertical gradients in arsenic concentrations may not be present at the Site.

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A likely explanation for the differences between the arsenic results presented by g/ja and those presented in this investigation is that an error may have occurred in sample preparation, laboratory analysis, or data reduction. Quality control/quality assurance data are within laboratory control limits for the analytical data presented in this investigation, and the results of duplicate analyses (Table 1) suggest that the laboratory data has good reproducibility. Quality control/quality assurance data was not included in the laboratory reports provided in the g/ja report. Further inquiry regarding the possibility of laboratory error is beyond the scope of the project.

6.2 Comparison with Human Health Risk Criteria

The 95% upper confidence limit (95% UCL) of either the sample mean (for normally-distributed populations) or the minimum variance unbiased estimator μ (for lognormally-distributed populations) is generally used by risk assessors as a site concentration for the purpose of evaluating human health risk. 95% UCLs for toxaphene, DDE, and arsenic were computed using conventional parametric statistics (e.g., Gilbert, 1987), which assume that the underlying population has either a normal or lognormal distribution. 95% UCLs were also estimated using the standard bootstrap and pivotal bootstrap methods (Singh et al, 1997), two non-parametric statistical techniques which do not rely on assumptions concerning the distribution of the underlying population. The standard bootstrap method was used to estimate the 95% UCL of both the sample mean and the minimum variance unbiased estimator, μ . The pivotal bootstrap method was used to obtain a direct estimate of the 95th quantile which is independent of the form of the underlying distribution.

The statistical analysis was conducted in four steps:

- **Evaluate data distribution:** a quantitative method (the Shapiro-Wilks W-test; Gilbert, 1987) was used to evaluate whether each set of data were distributed normally, lognormally, or non-parametrically.
- **Compute summary statistics:** basic descriptive statistics (mean, standard deviation, etc.) were computed for each data set, using parametric methods appropriate for the distribution as evaluated in step one.
- Estimate 95% UCL: the 95% UCL of the mean was computed for each of the data sets, using statistical procedures appropriate for the distribution as evaluated in step one.

• **Compare 95% UCL values with regulatory standards:** the estimated 95% UCL values were then compared with USEPA Region 9 PRGs for both residential and industrial land use, to assess potential health risk concerns.

The results of the statistical analysis are summarized in Table 2. Briefly, the arsenic data (a combined data set which includes both the 12 samples collected by MFG and the five g/ja samples which were reanalyzed as part of this investigation) were found to be consistent with either a normal or a lognormal distribution; the toxaphene data were compatible with neither a normal nor a lognormal distribution; and the DDE data were found to be consistent with a normal distribution. 95% UCL values for toxaphene and DDE are well below residential and industrial PRG values.

The 95% UCL values for the arsenic data exceeds both the residential and industrial PRG values of 0.39 and 2.7 mg/kg, respectively. As noted by Smucker (2000) in the documentation accompanying the PRG tables, arsenic is one of several metals for which naturally-occurring background levels in soil commonly exceed PRG values. Both USEPA Region 9 and DTSC have policies stating that remediation to levels below background values is not necessary. Consequently, it is common practice to use an upper percentile (often the 95th or 99th percentile) of a background data set as a criterion to assess whether site concentrations might require cleanup.

A background data set for arsenic is not available for the Site and vicinity. However, Bradford et al. (1996) have provided an estimate of the upper quartile (75th percentile) of arsenic concentrations for soils from the State of California, based on analytical data for 50 soil samples collected statewide. This value, 4.7 mg/kg, is higher than any of the estimates of the 95% UCL for the Site. It is likely that the arsenic concentrations measured at the Site represent background conditions, and therefore would not require remediation on the basis of health risk.

6.3 Comparison with Hazardous Waste Criteria

California and Federal hazardous waste criteria for toxaphene, DDE, and arsenic are summarized in Table 2. Both individual sample concentrations and the 95% UCL values estimated for the Site as a whole are well below hazardous waste criteria.

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7.0 CONCLUSIONS

The conclusions of this investigation are as follows:

- OC pesticide (toxaphene, DDT, and DDE) residues in soils at the Site would pose an insignificant (less than one in a million) risk to human health after development has been completed.
- Arsenic concentrations in soils at the Site are consistent with naturally-occurring background concentrations in the State of California. Remediation would not be required by either USEPA or DTSC on the basis of arsenic concentrations.
- The concentrations of arsenic, toxaphene, DDT, and DDE are well below California and Federal hazardous waste criteria.

8.0 **REFERENCES**

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TABLES

TABL

SUMMARY OF ANAL ARSENIC AND ORGANOC

Proposed Em Costa Mesa, (

Boring:	Boring: B-1		B-2		B-3		B-4		
Sample No.:	Composite B-1	B-1-10.5	Composite B-2	B-2-10.5	Composite B-3	B-3-10.5	Composite B-4	B-4-10.5	Composite B-5
Depth (feet):	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0
Metals							TOPS - D' - Top Zan	and a survey for	the state of the second
Arsenic ¹	5.59	3.80	5.08	3.31	4.58	2.54	3.92	4.71	2.96
÷:									
Pesticides ²			4						
Aldrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
alpha-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
beta-BHC	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
delta-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
gamma-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chlordane	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
4,4'-DDD	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
4,4'-DDE	0.021	< 0.001	0.014	< 0.001	0.013	< 0.001	0.013	< 0.001	0.0086
4,4'-DDT	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Dieldrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endosulfan I	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Endosulfan II	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	<0.004
Endosulfan sulfate	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Endrin aldehyde	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002
Endrin ketone	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	<0.002
Heptachlor	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Heptachlor epoxide	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001
Methoxychlor	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	<0.01
Toxaphene	0.15	< 0.04	<0.04	< 0.04	<0.04	< 0.04	<0.04	< 0.04	<0.04

Notes

All results are in milligrams per kilogram (mg/kg).

Shading indicates analyte detected. -- indicates not analyzed.

1) Arsenic analyzed using EPA Method 7060A.

2) Organochlorine pesticides, analyzed using EPA Method 8081A.

YTICAL RESULTS HLORINE PESTICIDES

iulex Site California

B-5		B-	6	B-	-7	B-	8		B-9	
e	B-5-10.5	Composite B-6	B-6-10.5	Composite B-7	B-7-10.5	Composite B-8	B-8-10.5	Composite B-9	Composite B-9 (dup)	B-9-10.5
	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	0.0-3.0	10.0-10.5
103	2.62			2.00	5.95	2/2	2.72	2 EE	2.63	1.93
100	2.63	2.72	1.15	2.90	5.35	3.63	3.73	2.55	2.03	1.95
	< 0.001	<0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	< 0.001	0.013	< 0.001	< 0.001	< 0.001	0.020	< 0.001	0.003	0.006	< 0.001
	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001
	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	0.15	< 0.04	< 0.04	< 0.04	< 0.04

 $\widehat{\mathbf{x}}$

SUMMARY OF ANA ARSENIC AND ORGANO

Proposed E Costa Mesa

Boring:	B-1	0	B-	B-12		
Sample No.:	Composite B-10	B-10-10.5	Composite B-11	B-11-10.5	Composite B-12	1
Depth (feet):	0.0-3.0	10.0-10.5	0.0-3.0	10.0-10.5	0.0-3.0	:
Metals						
Arsenic ¹	3.45	1.19	3.28	3.8	5.69	Ň
Pesticides ²						
Aldrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
alpha-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
beta-BHC	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	
delta-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
gamma-BHC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Chlordane	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	
4,4'-DDD	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	
4,4'-DDE	0.033	< 0.001	0.018	< 0.001	0.008	
4,4'-DDT	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	
Dieldrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Endosulfan I	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
Endosulfan II	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	
Endosulfan sulfate	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Endrin	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Endrin aldehyde	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
Endrin ketone	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
Heptachlor	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Heptachlor epoxide	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Methoxychlor	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Toxaphene	0.15	< 0.04	0.13	< 0.04	0.13	

Notes

- All results are in millig
- Shading indicates analy
- -- indicates not analyze
- 1) Arsenic analyzed us
- 2) Organochlorine pes

TABLE 1

ANALYTICAL RESULTS ANOCHLORINE PESTICIDES

sed Emulex Site Mesa, California

B-12		g/ja B6	g/ja B6	g/ja B7	g/ja B8	g/ja B9	g/ja B10
te	B-12-10.5	CEO2004- B6-1'	CEO2004- B6-1' (dup)	CEO2004- B7-1'	CEO2004- B8-1'	CEO2004- B9-1'	CEO2004- B10-1'
	10.0-10.5	1'	1'	1'	1'	1'	1'
	2.57	5.13	5.21	4.94	5.22	3.22	3.28
	<0.001		-				
	< 0.001						
	< 0.004						
	< 0.001						
	< 0.001						
	< 0.004						
	< 0.003						
	< 0.001						
	< 0.003						
	< 0.001						
	< 0.002						
	< 0.004						
	< 0.001		22				
	< 0.001						
	< 0.002						
	< 0.002		0.000				
	< 0.001						
	< 0.001						
7,140	< 0.01						
	< 0.04		(***)				

TABLE 2

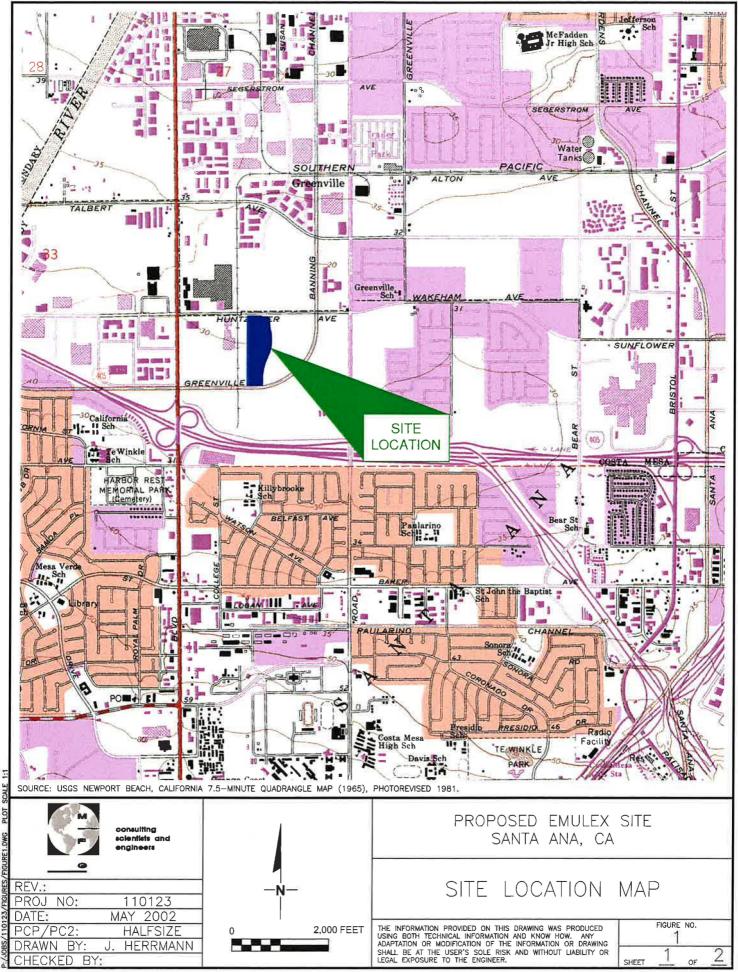
SUMMARY OF STATISTICAL ANALYSIS RESULTS

Proposed Emulex Site Costa Mesa, California

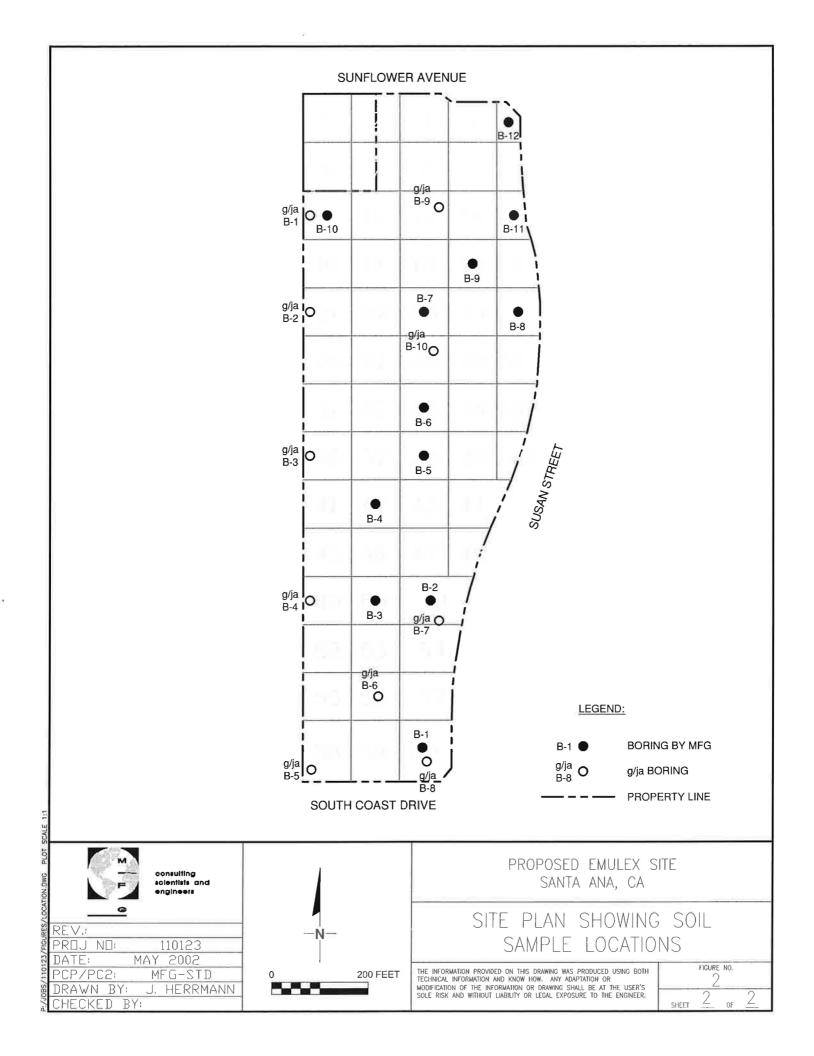
	Ĭ Aw	senic	m		4.4'-DDE	
			Toxaphene		,	
Ohan ing Willia W/ Teat	Normal	Lognormal	Normal	Lognormal	Normal	Lognormal
Shapiro-Wilks W-Test	0.000	0.017	0.670	0.650	0.054	0.700
W-statistic	0.900	0.915	0.678	0.658	0.954	0.790
95 th Quantile	0.892	0.892	0.859	0.859	0.859	0.859
Test Result:	Yes	Yes	No	No	Yes	No
Summary Statistics						
Number of Samples	17	17	12	12	12	12
Maximum	5.69	1.74	0.15	-1.90	0.033	-3.41
Minimum	2.55	0.936	0.020	-3.91	0.0005	-7.60
Mean	4.01	4.01	0.071	0.071	0.014	0.017
Standard Deviation	1.08	1.10	0.063	0.079	0.0087	0.021
95% Upper Confidence Limit						
Parametric	4.02	4.55	0.072	0.18	0.014	0.052
Standard Bootstrap	4.44	4.42	0.099	0.11	0.018	0.021
Pivotal Bootstrap	4	.12	0.080		0.015	
USEPA Region 9 PRGs						
Residential (cancer)	0	.39		1.7		.44
Residential (non-cancer)		22			**:	
Industrial (cancer)		2.7		12		1.2
Industrial (non-cancer)	1	40				
mausariar (non-cancer)				-		
Hazardous Waste Criteria						
TTLC	5	00		5.0	1	1.0
10 STLC		50		5.0	1	1.0
20 x TCLP	1	00		10		

FIGURES

3



R5 /11013/100/06/01



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Paul Hastings

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July 12, 2002

34558.00002

<u>VIA OVERNITE EXPRESS</u> Sadie Herrera Emulex 3535 Harbor Boulevard Costa Mesa, CA 92626

Re: Phase II Environmental Reports for Home Ranch Site

Dear Sadie:

Enclosed, for your files, please find the following Phase II Environmental Reports for your new headquarters site at Sunflower Avenue and Susan Street:

- Gale/Jordan Associates, Inc. Revised Report Limited Phase II Subsurface Soil Investigation dated July 1, 2002; and
- MFG, Inc. Phase II Investigation Report dated June 13, 2002.

Please note that the Gale/Jordan report concludes that there is no significant concern with regard to the found levels of detected chemicals at the subject site and recommends that no further action appears to be warranted. The MFG Phase II reaffirms this conclusion. If you have any questions, please do not hesitate to call me.

Very truly yours.

Shy Fimonias

John F. Simonis of PAUL, HASTINGS, JANOFSKY & WALKER LLP

JFS:ksc Enclosures cc: Royce Sharf (all via facsimile and w/o encls.) Kelly Givens Matthew L. Shaps, Esq.

gale/jordan associates, inc.

ENVIRONMENTAL MANAGEMENT SERVICES

Privileged and Confidential – Attorney/Client Privilege

July 1, 2002

John Simonis, Esq. Paul, Hastings, Janofsky & Walker LLP 695 Town Center Drive, 17th Floor Costa Mesa, California 92626

Re: Revised Report Limited Phase II Subsurface Soil Investigation Emulex Site, Costa Mesa, California g/ja Project No. CE02004

Dear Mr. Simonis:

gale/jordan associates, inc. (g/ja) has completed the soil sampling at the above-referenced site. The on-site portion of the project was completed on April 26, 2002. Please find the project report below.

1.0 INTRODUCTION

Based on the findings and conclusions presented in the Phase I Environmental Site Assessment (ESA) for the above-referenced site conducted for Julien J. Studley in February 2002, and the subsequent addendum dated February 19, 2002, gale/jordan associates, inc. (g/ja) recommended that a limited subsurface soil investigation be conducted at the site. The purpose of the proposed investigation was to determine if detectable concentrations of pesticides and other target contaminants possibly relating to historical site use exist in shallow subsurface soil at the subject site. The investigation was concentrated on four acres, with some sampling done in the first phase of construction (10 acres) of the subject property (See Exhibit 1, Site Location Map).

This report was prepared to summarize the scope of work, findings, conclusions and recommendations resulting from the limited Phase II subsurface investigation that was authorized by C.G. Segerstrom and Sons.

2.0 SCOPE OF WORK

On 5/4/99, g/ja personnel excavated a series of hand-augered soil borings each to a final depth of 5 ft. below surface grade elevation (bsg) at ten locations as indicated on Exhibit 2, Site Map and Boring Locations Map.

Soil samples were collected from depths of 1 ft. and 5 ft. bsg in appropriately labeled clean 6-in. by 2-in. brass sleeves with Teflon patches and plastic end caps. The sample containers were labeled, chilled in a cooler and transported to Scientific Laboratories of California, Inc. (SciLab) in Carson, California under strict chain-of-custody protocol.

The sampling equipment was decontaminated after each sample was gathered. A primary wash, consisting of decontamination detergent and distilled water was followed by a primary rinse of distilled water and then a final rinse with distilled water. Decontamination liquids were completely changed between the sampling events conducted along the railroad tracks (borings B1 through B5) and samples collected elsewhere (borings B6 through B10).

The excavations were backfilled with soil boring cuttings and a near-surface bentonite plug. A small amount of excess waste soil was stockpiled at the site.

SciLab, a State of California certified facility, was directed to test select soil samples collected at 1 ft. bsg from each boring location, and the samples collected at the terminal depth of 5 ft. bsg from each boring location were placed on-hold at the laboratory. The shallow soil samples were tested to determine if detectable concentrations of total recoverable petroleum hydrocarbons (TRPH), volatile organic compounds, organochorine pesticides, triazine herbicides, chlorinated herbicides and Title 22 metals were present utilizing EPA Method 418.1, EPA Method 8260, EPA Method 8081, EPA Method 8141, EPA Method 8151, and the appropriate methods for Title 22 metals analytes, respectively. Flame Atomic Absorption, EPA Method 7060A, was used for the investigation of arsenic in the soil.

3.0 FINDINGS

No apparent soil discoloration or chemical odors were observed during the drilling activities. Ground water conditions were not found during the drilling activities.

The USEPA Region 9 Preliminary Remediation Goals concentrations (PRGs) can be used to screen pollutants in environmental media, trigger further investigation, and provide an initial cleanup goal if applicable. In this report, a Cal-Modified PRG based on the California EPA toxicity value for nickel is used, as noted in the test result summary tables below. It is also noted below in this report that the USEPA has released separate PRGs for carcinogenic and non-carcinogenic risks related to arsenic.

Title 22 of the California Code of Regulations provides toxicity characteristics for potentially hazardous metals and for persistent and bioaccumulative substances as concentrations based on Total Threshold Limit Concentration (TTLC) and Soluble Threshold Limit Concentration (STLC) values. Generally, listed substances may be considered toxic in concentrations at or exceeding the TTLC or STLC values. For this investigation, only TTLC tests were conducted. STLC tests have not been performed. In lieu of additional STLC testing, for this discussion and in keeping with common use and professional practice in similar site screening activities, a factor of 10X STLC values will be used to evaluate potentially hazardous substances. (It is assumed that a TTLC test result of 10X the STLC value for a given analyte in a given sample would produce an STLC test result exceeding the STLC for that analyte if tested using the STLC or Wet Extraction method).

DDE concentrations were found at levels below residential site and industrial site PRGs, below TTLC levels, and below 10X STLC levels in shallow samples at each boring location. DDT was detected in shallow samples at boring B-1 through B-8 at concentrations below residential site and industrial site PRGs, below TTLC levels, and below 10X STLC levels in shallow samples at each boring location. DDT was not detected in borings B-9 and B-10.

Toxaphene was detected in shallow soil samples collected at borings B-6, B-7, B-8 and B-10, but not in samples from the other borings. Levels found exceed the residential site PRG at each location, but do not exceed the industrial site PRG, TTLC or 10X STLC levels.

Other organochlorine pesticides were not found at detectable concentrations in samples tested.

Volatile organic compounds were not detected in shallow soil samples collected from each of the soil borings.

Total recoverable petroleum hydrocarbons were detected only in the shallow soil sample collected at boring B-8, and the found concentrations are considered to be low.

Triazine herbicides and chlorinated herbicides were not found in detectable concentration in samples tested.

Preliminary laboratory analysis's showed Arsenic concentrations found in shallow soil samples collected at each soil boring as below the non-carcinogenic PRG for residential and industrial sites, but exceeding the carcinogenic PRG for residential and industrial sites. Re-analysis's by GFAA of the original borings at two laboratories suggests that the original arsenic results were skewed by "spectral interference" and that the actual levels for arsenic are in line with expected California back ground levels. Other Title 22 metals analytes were not detected at levels exceeding the PRGs, or above TTLC, or above 10X STLC levels, in the samples tested.

Analytical testing results are presented in the following tables. The official laboratory reports, QA/QC documents and chain-of-custody records are attached to this report as Exhibit 3. The USEPA's PRG values for residential and industrial sites, and Title 22 TTLC and STLC values, are presented for comparative purposes in Table 1 and Table 2, and in Tables 5 through 14.

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Organochlorine Pesticides, DDE/DDT <u>EPA Method 8081</u>							
Location	4,4-DDE (mg/kg)	4,4-DDT (mg/kg)	Res./Ind. PRGs <u>(mg/kg)</u>	TTLC <u>(mg/kg)</u>	STLC (mg/kg)		
B-1	0.0541	0.035	1.7/120.0	1.0	0.1		
B-2 B-3	0.0233 0.0081	0.0015 0.0013	1.7/120.0 1.7/120.0	$1.0\\1.0$	0.1 0.1		
B-4 B-5	0.0231	0.0029 0.00168	1.7/120.0	1.0 1.0	$\begin{array}{c} 0.1 \\ 0.1 \end{array}$		
B-6 B-7	0.102 0.102	0.0308 0.0291	1.7/120.0 1.7/120.0	1.0	0.1 0.1		
B-8	0.0829	0.0291	1.7/120.0	1.0	0.1		
B-9 B-10	0.0229 0.162	ND* ND*	1.7/120.0 1.7/120.0	$1.0\\1.0$	0.1 0.1		

Table 1

(Note: ND* denotes not detected at detection limit of 0.00006 mg/kg.)

Table 2 **Organochlorine Pesticides, Toxaphene** EPA Method 8081

Results (mg/kg)	Detection Limit (mg/kg)	Res./Ind. PRGs <u>(mg/kg)</u>	TTLC (mg/kg)	STLC (mg/kg)
0.541	0.0012	0.44/2.2	5.	0.5
0.658	0.0012	0.44/2.2	5.	0.5
0.657	0.0012	0.44/2.2	5.	0.5
0.649	0.0012	0.44/2.2	5.	0.5
	<u>(mg/kg)</u> 0.541 0.658 0.657	ResultsLimit(mg/kg)(mg/kg)0.5410.00120.6580.00120.6570.0012	ResultsLimitPRGs(mg/kg)(mg/kg)(mg/kg)0.5410.00120.44/2.20.6580.00120.44/2.20.6570.00120.44/2.2	ResultsLimitPRGsTTLC (mg/kg) (mg/kg) (mg/kg) (mg/kg) 0.5410.00120.44/2.25.0.6580.00120.44/2.25.0.6570.00120.44/2.25.

Table 3 **Volatile Organic Compounds** EPA Method 8260

All Non-detect

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Location	Results (mg/kg)	Detection Limit (mg/kg)
B-1	ND	10.
B-2	ND	10.
B-3	ND	10.
B-4	ND	10.
B-5	ND	10.
B-6	ND	10.
B-7	ND	10.
B-8	39.	10.
B-9	ND	10.
B-10	ND	10.

Table 4Total Recoverable Petroleum HydrocarbonsEPA Method 418.1

Table 5Boring B-1Title 22 MetalsEPA SW-846 Method 6010B

				Detection	n Res./Ind.	
	Results	TTLC	STLC	Limits	PRGs	
Analyte	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)	(mg/kg)	<u>(mg/kg)</u>	
Silver	ND	500.	5.	0.15	390./10,000.	
Barium	130.	10,000.	100.	0.5.	5,400./100,000.	
Beryllium	0.7	75.	0.75	0.1	150./2,200.	
Cadmium	ND	100.	1.0	0.2	37./810.	
Cobalt	10.	8,000.	80.	0.5	4,700./100,000.	
Chromium	24.	2,500.	5.	0.35	210./450.	
Copper	28.	2,500.	25.	0.15	2,900./76,000.	
Mercury	0.06	20.	0.2	0.06	23./610.	
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.	
Nickel	19.	2,000.	20.	1.	150.*/41,000.	
Lead	8.5	1,000.	5.0	3.	400./750.	
Antimony	ND	500.	15.	4.	31./820.	
Selenium	7.9	100.	1.0	4.	390./10,000.	
Thallium	ND	700.	7.0	4.	5.2/130.	
Vanadium	50.	2,400.	24.	0.3	550./14,000.	
Zinc	85.	5,000.	250.	0.75	23,000./100,000.	

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Table 6Boring B-2Title 22 MetalsEPA SW-846 Method 6010B

				Detection	n Res./ Ind.
	Results	TTLC	STLC	Limits	PRGs
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)
Silver	ND	500.	5.	0.15	390./10,000.
Barium	120.	10,000.	100.	0.5	5,400./100,000.
Beryllium	0.65	75.	0.75	0.1	150./2,200.
Cadmium	ND	100.	1.0	0.2	37./810.
Cobalt	10.	8,000.	80.	0.5	4,700./100,000.
Chromium	24.	2,500.	5.	0.35	210./450.
Copper	24.	2,500.	25.	0.15	2,900./76,000.
Mercury	0.08	20.	0.2	0.06	23./610.
Molybdenum	1.0	3,500.	350.	1.	3,900./10,000.
Nickel	18.	2,000.	20.	1.	150.*/41,000.
Lead	5.5	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	ND	100.	1.0	4.	390./10,000
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	50.	2,400.	24.	0.3	550./14,000,
Zinc	75.	5,000.	250.	0.75	23,000./100,000.

Table 7Boring B-3Title 22 MetalsEPA SW-846 Method 6010B

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				Detectio	on Res./Ind.
	Results	TTLC	STLC	Limits	PRGs
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	(mg/kg)	(mg/kg)	(mg/kg)
Silver	ND	500.	5.	0.15	390./10,000.
Barium	140.	10,000.	100.	0.5	5,400./100,000.
Beryllium	0.75	75.	0.75	0.1	150./2,200.
Cadmium	ND	100.	1.0	0.2	37./810.
Cobalt	12.	8,000.	80.	0.5	4,700./100,000.
Chromium	26.	2,500.	5.	0.35	210./450.
Copper	29.	2,500.	25.	0.15	2,900./76,000.
Mercury	ND	20.	0.2	0.06	23./610.
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.
Nickel	20.	2,000.	20.	1.	150.*/41,000.
Lead	7.0	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	ND	100.	1.0	4.	390./10,000.
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	55.	2,400.	24.	2.3	550./14,000.
Zinc	90.	5,000.	250.	0.75	23,000./100,000.

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Table 8Boring B-4Title 22 MetalsEPA SW-846 Method 6010B

	D			Detection Res./Ind.	
	Results	TTLC	STLC	Limits PRGs	
Analyte	(mg/kg)	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u> (mg/kg)	
Silver	ND	500.	5.	0.15 390./10,00)0.
Barium	140.	10,000.	100.	0.5 5,400./100,	000.
Beryllium	0.75	75.	0.75	0.1 150./2,200).
Cadmium	ND	100.	1.0	0.2 37./810.	
Cobalt	10.	8,000.	80.	0.5 4,700./100	,000.
Chromium	25.	2,500.	5.	0.35 210./450.	
Copper	30.	2,500.	25.	0.15 2,900./76,	000.
Mercury	0.7	20.	0.2	0.06 23./610.	
Molybdenum	ND	3,500.	350.	1. 3,900./10,	000.
Nickel	20.	2,000.	20.	1. 150.*/41,0)00.
Lead	8.5	1,000.	5.0	3. 400./750.	
Antimony	ND	500.	15.	4. 31./820.	
Selenium	7.1	100.	1.0	4. 390./10,00)0.
Thallium	ND	700.	7.0	4. 5.2/130.	
Vanadium	50.	2,400.	24.	0.3 550./14,00)0.
Zinc	85.	5,000.	250.	0.75 23,000./100),000.

Table 9Boring B-5Title 22 MetalsEPA SW-846 Method 6010B

				Detectio	n Res./Ind.
	Results	TTLC	STLC	Limits	PRGs
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	390./10,000.
Barium	160.	10,000.	100.	0.5	5,400./100,000.
Beryllium	0.8	75.	0.75	0.1	150./2,200.
Cadmium	ND	100.	1.0	0.2	37./810.
Cobalt	10.	8,000.	80.	0.5	4,700./100,000.
Chromium	26.	2,500.	5.	0.35	210./450.
Copper	34.	2,500.	25.	0.15	2,900./76,000.
Mercury	0.07	20.	0.2	0.06	23./610.
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.
Nickel	20.	2,000.	20.	1.	150.*/41,000.
Lead	6.5	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	5.9	100.	1.0	4.	390./10,000.
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	55.	2,400.	24.	0.3	550./14,000.
Zinc	95.	5,000.	250.	0.75	23,000./100,000.

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Table 10Boring B-6Title 22 MetalsEPA SW-846 Method 6010B

	Results	TTLC	STLC	Limits	Res./Ind. PRGs
Analyte	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	390./10,000.
Barium	160.	10,000.	100.	0.5.	5,400./100,000.
Beryllium	0.8	75.	0.75	0.1	150./2,200.
Cadmium	ND	100.	1.0	0.2	37./810.
Cobalt	10.	8,000.	80.	0.5	4,700./100,000.
Chromium	25.	2,500.	5.	0.35	210./450.
Copper	30.	2,500.	25.	0.15	2,900/76,000
Mercury	0.080	20.	0.2	0.06	23./610.
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.
Nickel	19.	2,000.	20.	1.	150.*/41,000.
Lead	9.5	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	5.6	100.	1.0	4.	390./10,000.
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	55.	2,400.	24.	0.3	550./14,000.
Zinc	90.	5,000.	250.	0.75	23,000./100,000.

Table 11Boring B-7Title 22 MetalsEPA SW-846 Method 6010B

				Detection Res./Ind.		
	Results	TTLC	STLC	Limits	PRGs	
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	<u>(mg/kg)</u>	
Silver	ND	500.	5.	0.15	390./10,000.	
Barium	140.	10,000.	100.	0.5	5,400./100,000.	
Beryllium	0.70	75.	0.75	0.1	150./2,200.	
Cadmium	ND	100.	1.0	0.2	37./810.	
Cobalt	10	8,000.	80.	0.5	4,700./100,000.	
Chromium	24.	2,500.	5.	0.35	210./450.	
Copper	30.	2,500.	25.	0.15	2,900./76,000.	
Mercury	0.090	20.	0.2	0.06	23./610.	
Molybdenum	ND	3,500.	350.	1.	3,900.10,000.	
Nickel	18.	2,000.	20.	1.	150.*/41,000.	
Lead	8.0	1,000.	5.0	3.	400./750.	
Antimony	ND	500.	15.	4.	31./820.	
Selenium	ND	100.	1.0	4.	390./10,000.	
Thallium	ND	700.	7.0	4.	5.2/130.	
Vanadium	50.	2,400.	24.	0.3	550./14,000.	
Zinc	85.	5,000.	250.	0.75	23,000./100,000.	

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Table 12Boring B-8Title 22 MetalsEPA SW-846 Method 6010B

				Detection	n Res./Ind.
	Results	TTLC	STLC	Limits	PRGs
Analyte	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)	<u>(mg/kg)</u>	(mg/kg)
Silver	ND	500.	5.	0.15	390./10,000.
Barium	160.	10,000.	100.	0.5	5,400./100,000.
Beryllium	0.80	75.	0.75	0.1	150./2,200.
Cadmium	ND -	100.	1.0	0.2	37./810.
Cobalt	10.	8,000.	80.	0.5	4,700./100,000.
Chromium	26.	2,500.	5.	0.35	210./450.
Copper	44.	2,500.	25.	0.15	2,900/76,000
Mercury	0.090	20.	0.2	0.06	23./610.
Molybdenum	1.2	3,500.	350.	1.	3,900./10,000.
Nickel	20.	2,000.	20.	1.	150.*/41,000.
Lead	10.	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	5.3	100.	1.0	4.	390./10,000.
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	55.	2,400.	24.	0.3	550./14,000.
Zinc	100.	5,000.	250.	0.75	23,000./100,000.

Table 13Boring B-9Title 22 MetalsEPA SW-846 Method 6010B

				Detection Res./Ind.		
	Results	TTLC	STLC	Limits	PRGs	
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Silver	ND	500.	5.	0.15	390./10,000.	
Barium	100.	10,000.	100.	0.5	5,400./100,000.	
Beryllium	0.49	75.	0.75	0.1	150./2,200.	
Cadmium	ND	100.	1.0	0.2	37./810.	
Cobalt	8.5	8,000.	80.	0.5	4,700./100,000.	
Chromium	18.	2,500.	5.	0.35	210./450.	
Copper	17.	2,500.	25.	0.15	2,900./76,000.	
Mercury	0.070	20.	0.2	0.06	23./610.	
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.	
Nickel	16.	2,000.	20.	1.	150.*/41,000.	
Lead	3.2	1,000.	5.0	3.	400./750.	
Antimony	ND	500.	15.	4.	31./820.	
Selenium	ND	100.	1.0	4.	390./10,000.	
Thallium	ND	700.	7.0	4.	5.2/130.	
Vanadium	42.	2,400.	24.	0.3	550./14,000.	
Zinc	65.	5,000.	250.	0.75	23,000./100,000.	

Table 14Boring B-10Title 22 MetalsEPA SW-846 Method 6010B

				Detection Res./Ind.	
	Results	TTLC	STLC	Limits	PRG
Analyte	(mg/kg)	(mg/kg)	(mg/kg)	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver	ND	500.	5.	0.15	390./10,000.
Barium	120.	10,000.	100.	0.5	5,400./100,000.
Beryllium	0.60	75.	0.75	0.1	150./2,200.
Cadmium	ND	100.	1.0	0.2	37./810.
Cobalt	9.0	8,000.	80.	0.5	4,700./100,000.
Chromium	21.	2,500.	5.	0.35	210./450.
Copper	23.	2,500.	25.	0.15	2,900./76,000.
Mercury	0.080	20.	0.2	0.06	23./610.
Molybdenum	ND	3,500.	350.	1.	3,900./10,000.
Nickel	16.	2,000.	20.	1.	150.*/41,000.
Lead	6.5	1,000.	5.0	3.	400./750.
Antimony	ND	500.	15.	4.	31./820.
Selenium	ND	100.	1.0	4.	390./10,000.
Thallium	ND	700.	7.0	4.	5.2/130.
Vanadium	48.	2,400.	24.	0.3	550./14,000.
Zinc	75.	5,000.	250.	0.75	23,000./100,000.

(Note: * denotes California Modified PRG for residential sites. ND denotes not detected at indicated detection limits.)

Table 15 Triazine Herbicides EPA Method 8141

All Non-detect.

Table 16Chlorinated HerbicidesEPA Method 8151

All Non-detect.

EPA Method 7060A								
Client Sample ID No.	GFAA Result	TTLC/STLC (mg/kg)	Res./Ind.	Res./Ind.				
<u>110.</u>	(mg/kg)	(<u>mg/kg)</u>	PRGs, non- carcinogenic	PRGs, carcinogenic				
			(mg/kg)	(mg/kg)				
CE02004-B1-1'	4.43	500./5.	22./440.	0.39/2.7				
CE02004-B2-1'	3.88	500./5.	22./440.	0.39/2.7				
CE02004-B3-1'	4.10	500./5.	22./440.	0.39/2.7				
CE02004-B4-1'	5.00	500./5.	22./440.	0.39/2.7				
CE02004-B5-1'	5.38	500./5.	22./440.	0.39/2.7				
CE02004-B6-1'	5.40	500./5.	22./440.	0.39/2.7				
CE02004-B7-1'	5.03	500./5.	22./440.	0.39/2.7				
CE02004-B8-1'	5.80	500./5.	22./440.	0.39/2.7				
CE02004-B9-1'	3.55	500./5.	22./440.	0.39/2.7				
CE02004-B10-1'	3.08	500./5.	22./440.	0.39/2.7				

Table 17Arsenic by GFAAEPA Method 7060A

4.0 ADDITIONAL RECORDS

g/ja personnel reviewed a report titled, "Draft Phase II Investigation Report, Proposed Emulex Site, Sunflower Avenue at Susan St., Costa Mesa, California," that was published by MFG, Inc. (MFG) for C.J. Segerstrom & Sons, dated 5/28/02. g/ja concurs with MFG's conclusions as noted below. Among other things, MFG notes in this report that arsenic is one of several metals for which naturally-occurring background levels in soil commonly exceed PRG values and that it is likely that the arsenic concentrations measured at the site represent background conditions:

"The 95% upper confidence limit (95% UCL) of either the sample mean (for normallydistributed populations) or the minimum variance unbiased estimator u (for lognormallydistributed populations) is generally used by risk assessors as a site concentration for the purpose of evaluating human health risk.

The 95% UCL values for the arsenic data exceeds both the residential and industrial PRG values of 0.39 and 2.7 mg/kg, respectively. As noted by Smucker (2000) in the documentation accompanying the PRG tables, arsenic is one of several metals for which naturally-occurring background levels in soil commonly exceed PRG values. Both USEPA Region 9 and DTSC have policies stating that remediation to levels below background values is not necessary. Consequently, it is common practice to use an upper percentile (often the 95th or 99th percentile) of a background data set as a criterion to assess whether site concentrations might require clean up.

A background data set for arsenic is not available for the Site and vicinity. However, Bradford et al. (1996) have provided an estimate of the upper quartile (75th percentile) of arsenic concentrations for soils from the State of California, based on analytical data for 50 soil samples collected statewide. This value, 4.7 mg/kg, is higher than any of the estimates of the 95% UCL for the Site. It is likely that the arsenic concentrations measured at the Site represent background conditions, and therefore would not require remediation on the basis of health risk."

MFG also determined the apparent vertical limits of DDE and toxaphene at the site, and did not detect DDT in shallow soil samples.

5.0 CONCLUSIONS

Based on the proposed improvements that are reported to be non-residential in nature, there appears to be no significant concern with regard to the found levels of detected chemicals at the subject site.

6.0 **RECOMMENDATIONS**

No further action appears to be warranted at the site with regard to the limited subsurface investigation addressed by this project at this time.

7.0 LIMITATIONS

The conclusions presented in this report are based solely upon the services described therein and are based upon the scope of work for this survey.

Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable geologists and environmental scientists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Any change in the existing conditions at the subject site should be brought immediately to the attention of g/ja. If the information related to g/ja, or further observations by g/ja, reveal unanticipated or changed conditions, g/ja reserves the right to make alterations or additions to the original recommendations.

The recommendations have been prepared specifically for the subject site and are to be used only by the C.J Segerstrom & Sons and their authorized consultants, and subcontractors on this subject site. No information contained herein may be reproduced, imitated, or used in any way other than for the above referenced project.

The opportunity to be of service is appreciated. If there are any questions, please contact this office.

Sincerely, gale/jordan associates, inc.

tavid Sum M

David L. Lucero REA No. 04294

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Exhibit 1

Site Location Map

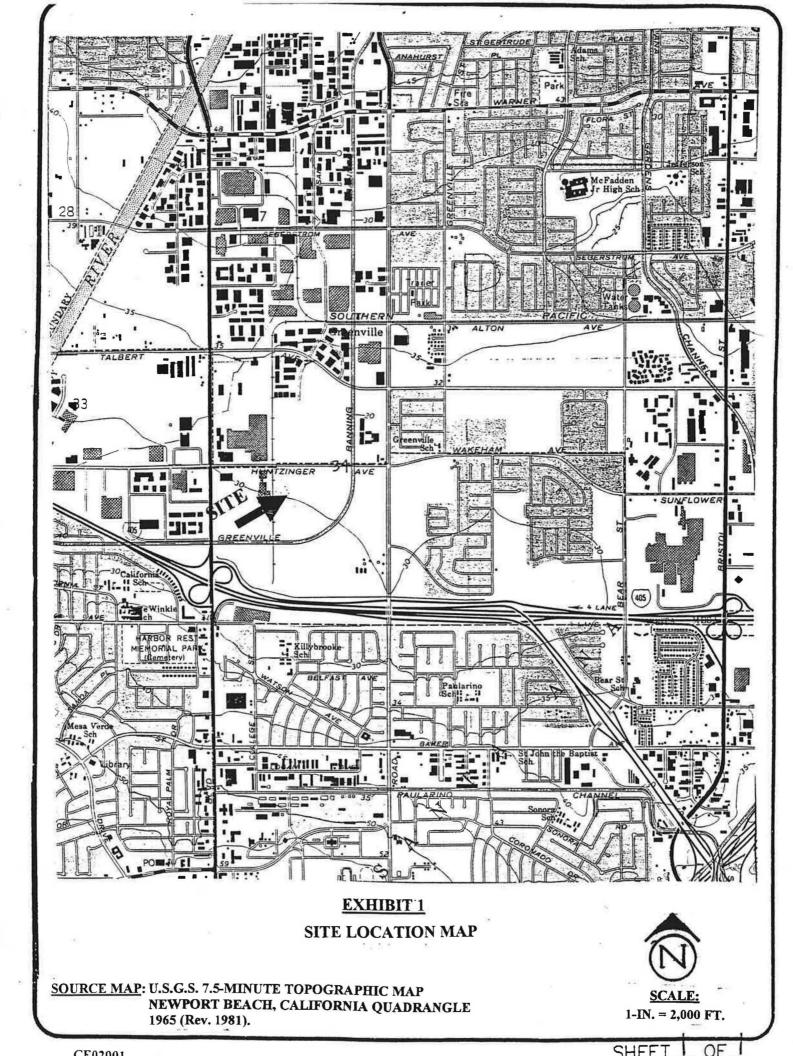


Exhibit 2

Boring Locations Map

