

FAXCOVER

 **KRAZAN & ASSOCIATES, INC.**

545 PARROTT STREET, SAN JOSE, CA 95112

(408) 271-2200, (408) 271-2201 FAX

OFFICES SERVING THE WESTERN UNITED STATES

SHEET

Attention: Ms. Susan Hugo

Fax #: 510-337-9335

Telephone #: _____

Company Name: Alameda County

Date: 7/28/00

From: Alex Gallego

COMMENTS: Susan: Attached is the information regarding the installation of the piezometers and the groundwater sampling for lead. Based on the uniform lithology at the site site (i.e.: 5 feet of fill and then Merritt Sands), we did not prepare boring logs. I have also included the revised figure for the Conceptual Site Model/Risk Assessment, the revised contingency plan flow chart, and a revised site plan showing the elevator shafts. All will be included in the final documents. Please call at your earliest convenience regarding my voice mail. Thank You.

Please advise us immediately if you do not receive complete transmittal or if you have received this transmittal in error.

No. of pages, including transmittal sheet 15

Original will not follow

Original will follow

Regular Mail

Courier

Federal Express

Other _____

GEOTECHNICAL



ENVIRONMENTAL



CONSTRUCTION TESTING

*SMC 6690
pg 2 - 10 - pg 3*

 **Krazan & ASSOCIATES, INC.**

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

July 26, 2000

Project No. 044-00006

Ms. Susan Hugo, Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 230
Alameda, CA 94502

RE: Proposed Commercial Development
720 Second Street and 229 Castro Street
Oakland, California

Dear Ms. Hugo:

On behalf of M.A. Mortenson Company (Mortenson), Krazan & Associates Inc. (Krazan) has prepared this letter to transmit documents related to the installation of piezometers and the collection of groundwater samples at the above referenced Site (Figure 1). The three piezometers were installed to assess shallow groundwater levels for the purposes of the proposed future construction at the Site. The locations of the monitoring wells are shown on Figure 2. The borings for the monitoring wells were drilled on May 25, 2000, using a truck-mounted, hollow-stem auger rig equipped with 8-inch augers. Drilling services were provided by Krazan. Because the lithologies at the subject site had been established, and the borings for the monitoring wells were within a few feet of previously-installed borings, sampling for lithologic purposes was limited to 5, 10, and 15 feet below the ground surface (BGS). The subsurface conditions were logged by a State-registered geologist from Krazan. ✓

Based on the lithologies encountered at the subject site, piezometers were constructed to a depth of 20 feet BGS in all three piezometers. The screen interval was 9.5 to 19.5 feet BGS. The piezometers were constructed of flush-jointed, threaded, 2-inch I.D., Schedule 40 PVC casing with 0.020-inch machined slots. The filter pack consisted of #3 Lonestar Sand. The slot size and filter pack was selected with the intent to minimize the amount of native lithologic and filter pack material entering the monitoring well. During placement of the filter pack, the well casing was suspended in the augers. The augers were lifted 2 to 4 feet and the sand filter pack was poured into the annulus. The augers were then slowly lifted with sand filter pack placed "continuously" until the sand backfill was approximately 2 foot above the top of the screen. An approximately 2-foot thick layer of bentonite was placed above the sand filter pack. The

Project No. 044-00006

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annulus above the bentonite was backfilled with a cement grout slurry. The cement grout was extended to a depth of approximately 1-foot below the ground surface. Well construction details for the three piezometers are presented in Figure 3. Vaults equipped with traffic-rated covers were placed above the well casings and set in concrete. The vaults were set approximately 2-inches above the ground surface to allow for surface drainage away from the wells. A locking device was installed to minimize the likelihood of unauthorized access to the piezometers.

→ ?
Trap location
identified
here

The sampling equipment was cleaned prior to sampling and between borings to minimize the likelihood of cross-contamination. The work was performed at the direction of a California-registered professional geologist from Krazan. Chain-of-custody (COC) procedures were used to document the handling and transport of samples from the time the samples were collected to the time they were delivered to the laboratory for analysis.

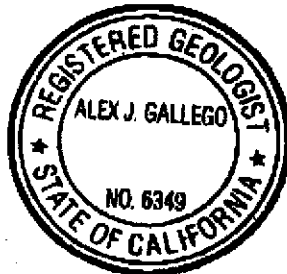
Following your request to add lead as a target analyte in groundwater as presented in your letter to Mortenson and the Port of Oakland dated June 23, 2000, Krazan collected groundwater samples from the three piezometers. Prior to the collection of groundwater samples, the piezometers were developed by surging and bailing. Development was conducted to remove fine-grained sediment that accumulated in the piezometer and filter pack, and to increase the hydraulic communication with the aquifer material. Following development, groundwater samples were collected from the wells with dedicated disposable bailers. The sampled groundwater was transferred to laboratory-supplied containers specific for the anticipated analyses. The samples were labeled with the sample number, collection date, and project number and retained on ice in an insulated chest. The samples were immediately delivered to Entech Analytical Labs, Inc. (Entech) of Sunnyvale, California, a State of California certified analytical laboratory (CA ELAP# 2346). The samples were filtered and preserved by Entech prior to analyses for lead in accordance with Environmental Protection Agency (EPA) Method 200.7. Lead was not detected in the three groundwater samples. A copy of the laboratory analytical report and chain-of-custody form are attached to this letter.

KRAZAN & ASSOCIATES, INC.
Offices Serving the Western United States

ACHCSA-well

Project No. 044-00006
Page No. 3

We hope that this letter, and the reports provided have fully addressed the concerns raised in your June 23 letter. If you have any further questions, please do not hesitate to contact me at (408) 271-2200.

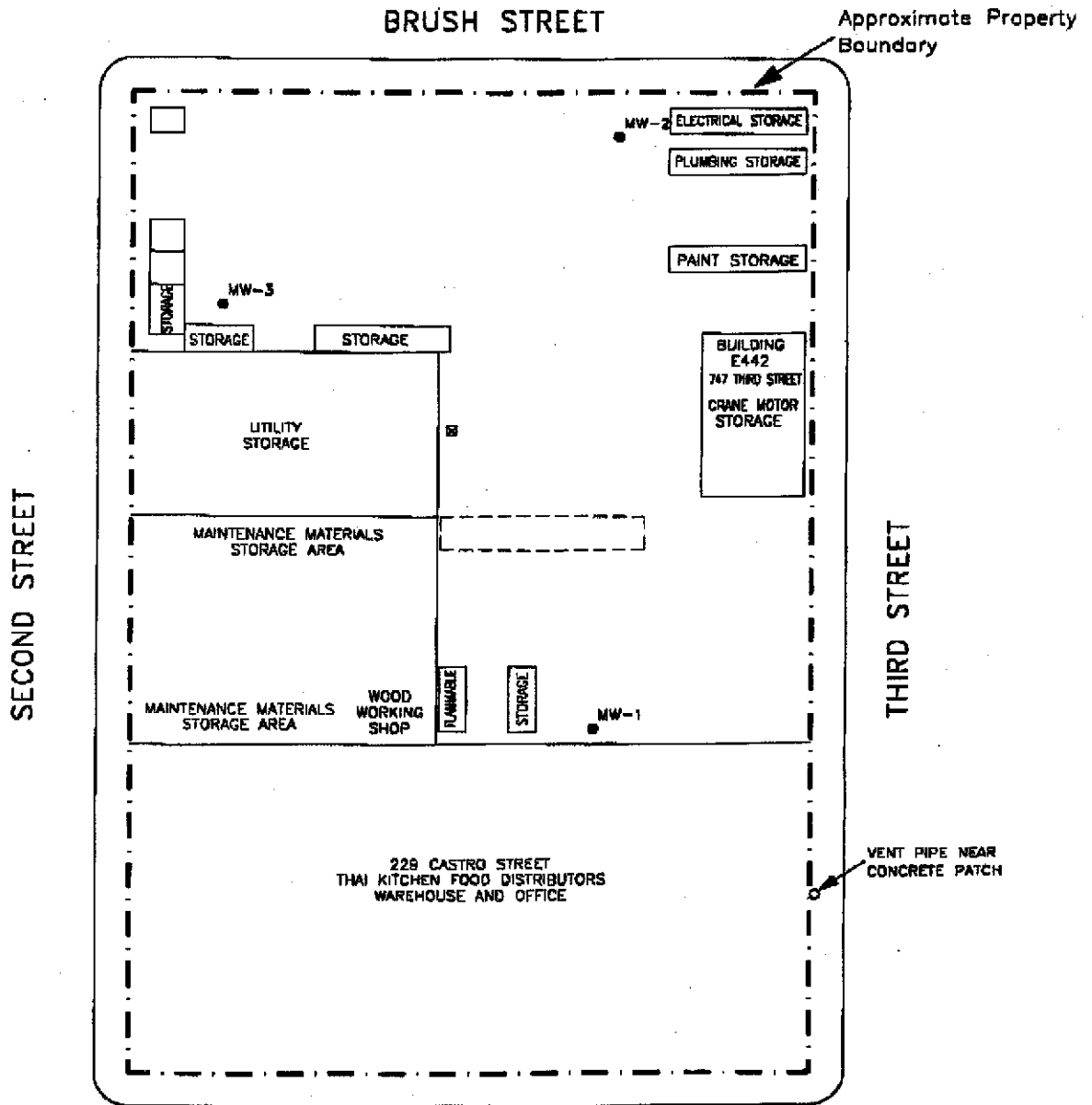


Very truly yours,
Krazan & Associates, Inc.

A handwritten signature in black ink that reads "Alex J. Gallego".

ALEX J. GALLEGO, RG 6349
Director of Environmental Services

- CC: Mr. Stuart Block, Cox, Castle & Nicholson, LLP
Mr. Marvin Doster, Thomas Management West
Mr. James Fey
Mr. Douglas Herman, Port of Oakland
Ms. Yane Nordhav, Baseline Environmental, Inc.



CASTRO STREET

EXPLANATION

▣ STORM DRAIN

MW-1
● MONITORING WELL LOCATIONS AND DESIGNATIONS

prismatics



- NOTES:
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2. BASE MAP FROM FIELD MEASUREMENTS AND SANBORN MAPS

<p>LOCATION MAP City Block Bound By: Second, Third, Castro, & Brush Streets Oakland, California</p>	Scale:	Date:	<p>Krazan ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS Offices Serving the Western United States</p>
	AS SHOWN	03/00	
	Drawn by:	Approved by:	
	AJG	AJG	
Project No.	Figure No.		
044-00006	2		



Krazan & Associates, Inc.
 Environmental Department
 545 Parrott Street
 San Jose, California 95112
 (408) 271-2200

WELL INSTALLATION DIAGRAM FOR MW-1, MW-2, AND MW-3

PROJECT: M.A. MORTENSON COMPANY PROJECT NO: 044-00006 DATE: 7/24/00
 LOCATION: 720 SECOND STREET, OAKLAND, CALIFORNIA DRILLED BY: KRAZAN & ASSOCIATES

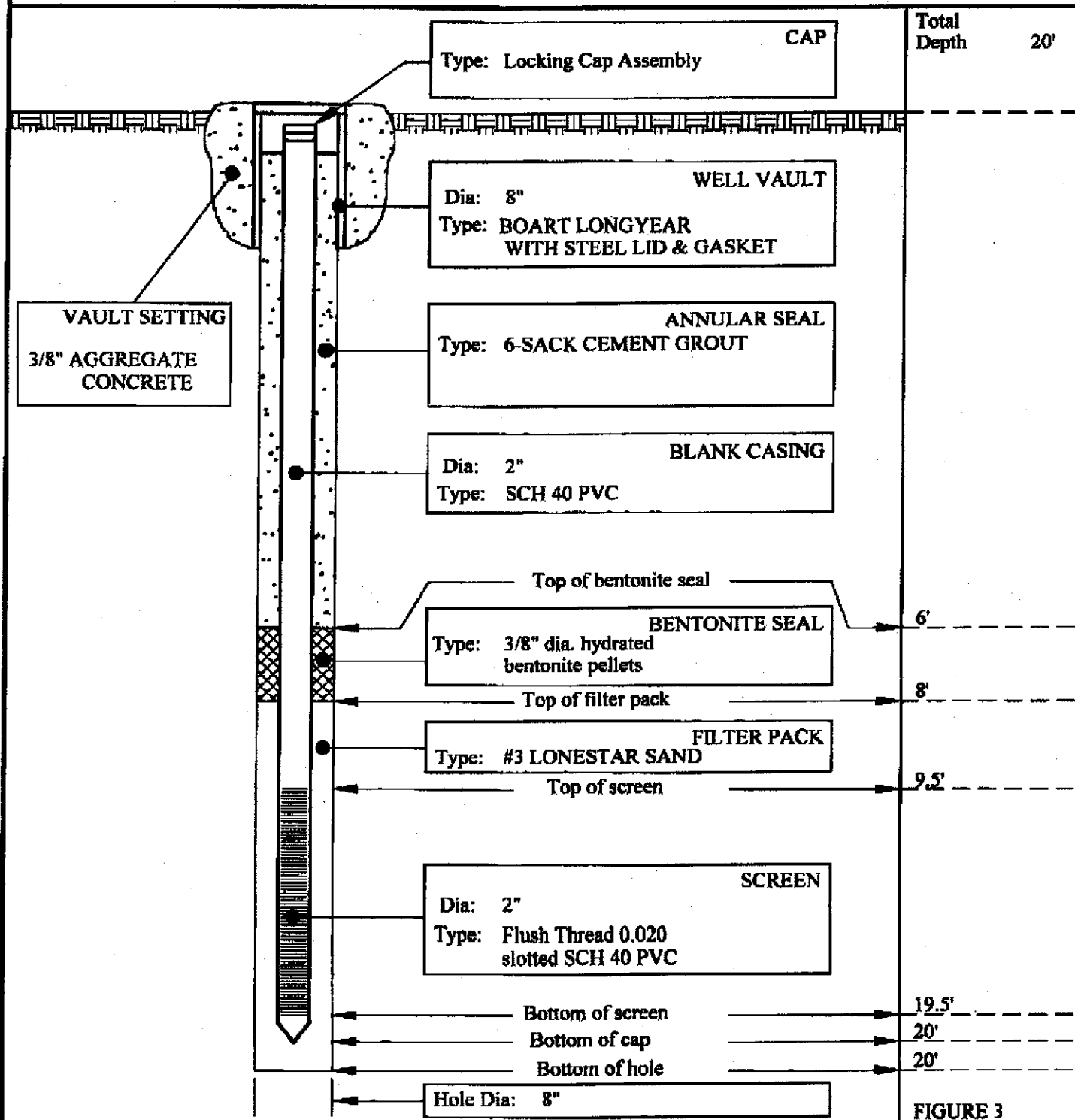


FIGURE 3

ATTACHMENT

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

June 30, 2000

Alex Gallego
Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112

Order: 21165
Project Name:
Project Number: 04400006
Project Notes:

Date Collected: 6/27/00
Date Received: 6/27/00
P.O. Number:

On June 27, 2000, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Liquid	Lead	EPA 200.7

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,



Michelle L. Anderson
Lab Director

Environmental Analysis Since 1983

Eutech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: ICP
Laboratory Control Spikes

QC Batch #: WM000619

Matrix: Liquid

Units: mg/L

Date Analyzed: 06/27/00

Date Digested: 06/26/00

Quality Control Sample: Blank Spike

PARAMETER	Method #	MB mg/L	SA mg/L	SR mg/L	SP mg/L	SP %R	SPD mg/L	SPD %R	RPD	QC LIMITS	
										%R	RPD
Antimony	200.7	<0.005	0.50	ND	0.54	108	0.55	111	2.2	75- 125	25.0
Arsenic	200.7	<0.005	0.50	ND	0.53	107	0.57	114	6.4	75- 125	25.0
Barium	200.7	<0.005	0.50	ND	0.54	107	0.54	108	0.9	75- 125	25.0
Beryllium	200.7	<0.005	0.50	ND	0.54	108	0.54	109	0.5	75- 125	25.0
Cadmium	200.7	<0.005	0.50	ND	0.53	105	0.52	105	0.5	75- 125	25.0
Chromium	200.7	<0.005	0.50	ND	0.53	107	0.54	109	1.9	75- 125	25.0
Cobalt	200.7	<0.005	0.50	ND	0.54	108	0.55	110	1.8	75- 125	25.0
Copper	200.7	<0.005	0.50	ND	0.54	107	0.53	107	0.1	75- 125	25.0
Lead	200.7	<0.005	0.50	ND	0.55	110	0.56	112	2.1	75- 125	25.0
Molybdenum	200.7	<0.005	0.50	ND	0.55	110	0.54	109	1.2	75- 125	25.0
Nickel	200.7	<0.005	0.50	ND	0.54	108	0.55	110	1.9	75- 125	25.0
Selenium	200.7	<0.005	0.50	ND	0.61	122	0.61	121	0.1	75- 125	25.0
Silver	200.7	<0.005	0.50	ND	0.53	106	0.53	105	0.4	75- 125	25.0
Thallium	200.7	<0.005	0.50	ND	0.48	96	0.48	96	0.2	75- 125	25.0
Vanadium	200.7	<0.005	0.50	ND	0.52	105	0.53	107	1.6	75- 125	25.0
Zinc	200.7	<0.005	0.50	ND	0.55	110	0.55	111	0.7	75- 125	25.0

Definition of Terms:

MB: Method Blank

nc: Not Calculated due to high levels of analyte found in sample

na: Not analyzed in QC batch

SA: Spike Added

SR: Sample Result

SP: Spike Result

SP (%R) Spike % Recovery

SPD Spike Duplicate Result

SPD (%R) Spike % Recovery

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112
Attn: Alex Gallego

Date: 6/30/00
Date Received: 6/27/00
Project Name:
Project Number: 04400006
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID:	21165	Lab Sample ID:	21165-001	Client Sample ID:	MW-1				
Sample Time:	11:30 AM	Sample Date:	6/27/00	Matrix:	Liquid				
Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Lead	ND	1	0.015	0.015	mg/L	6/27/00	6/29/00	WM000619	EPA 200.7
Order ID:	21165	Lab Sample ID:	21165-002	Client Sample ID:	MW-2				
Sample Time:	11:45 AM	Sample Date:	6/27/00	Matrix:	Liquid				
Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Lead	ND	1	0.015	0.015	mg/L	6/27/00	6/29/00	WM000619	EPA 200.7
Order ID:	21165	Lab Sample ID:	21165-003	Client Sample ID:	MW-3				
Sample Time:	12:00 PM	Sample Date:	6/27/00	Matrix:	Liquid				
Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Lead	ND	1	0.015	0.015	mg/L	6/27/00	6/29/00	WM000619	EPA 200.7

DF - Dilution Factor

ND - Not Detected

DLR - Detection Limit Reported

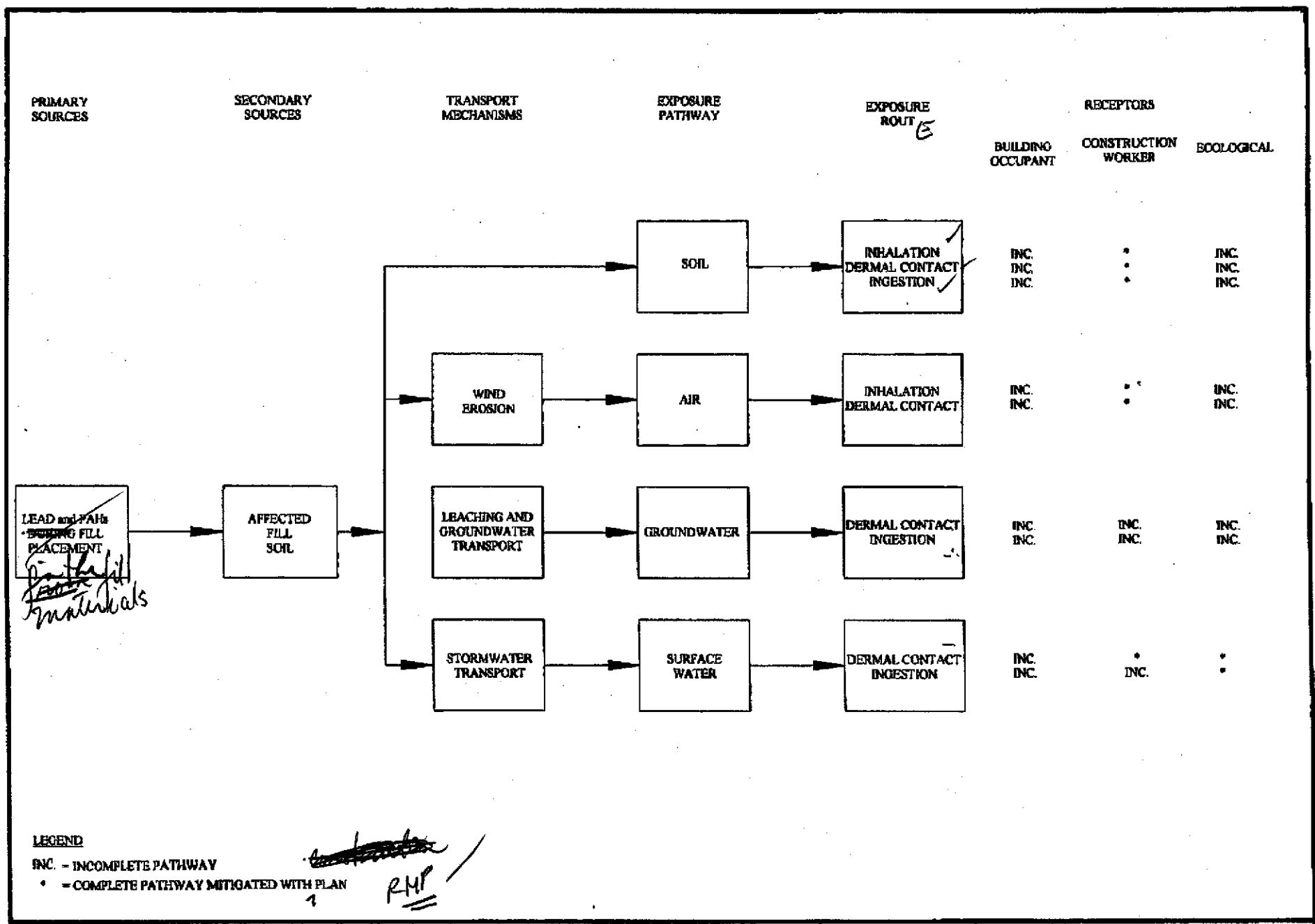
PQL - Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)



Michelle L. Anderson, Laboratory Director

Page 1 of 1

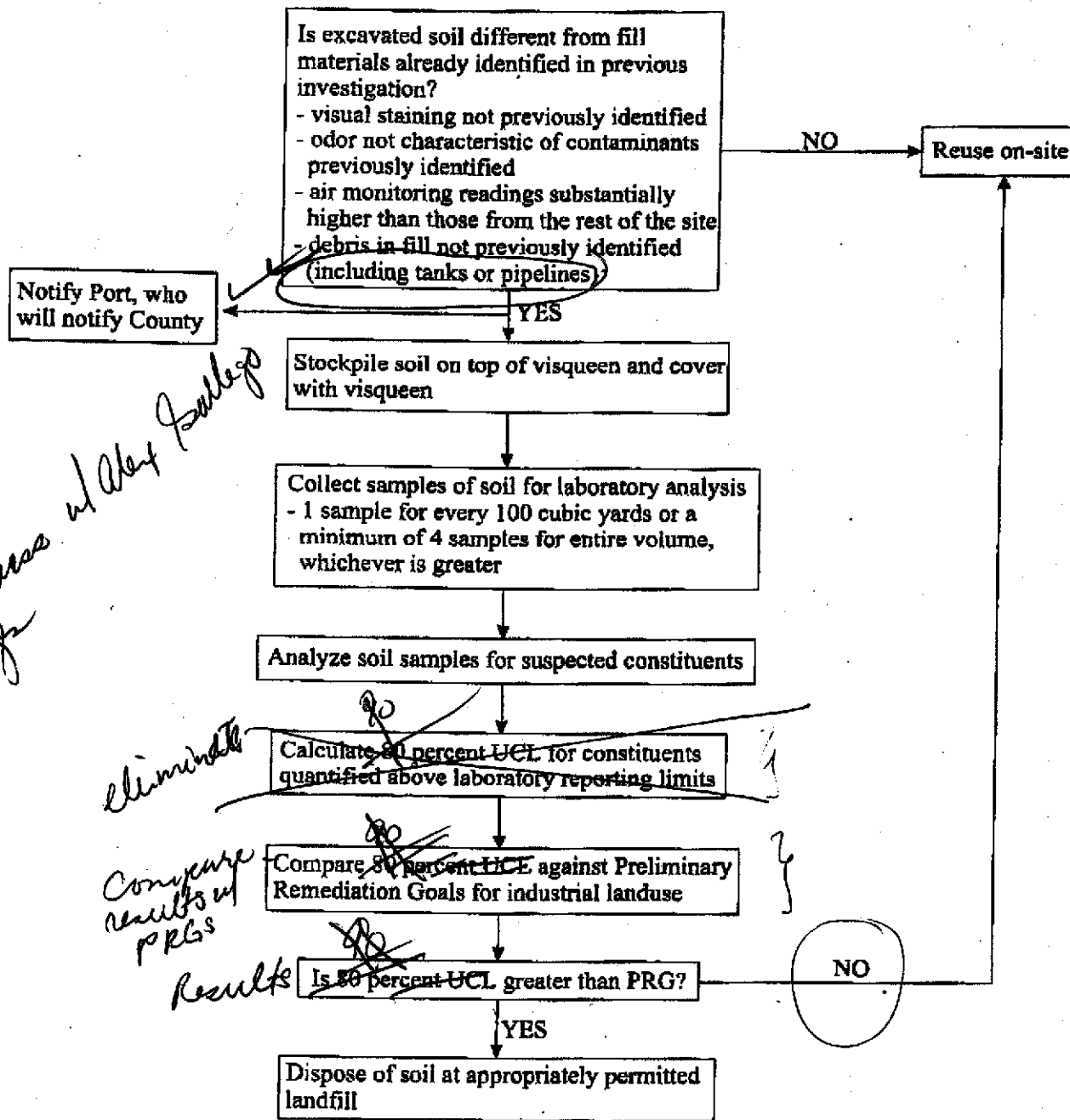
Environmental Analysis Since 1983



LEGEND
 INC. - INCOMPLETE PATHWAY
 • - COMPLETE PATHWAY MITIGATED WITH PLAN 1
RMP

CONCEPTUAL SITE MODEL CITY BLOCK BOUND BY: SECOND, THIRD, CASTRO, & BRUSH STREETS OAKLAND, CALIFORNIA	Scale:	Date:	 Krazan SITE DEVELOPMENT ENGINEERS Offices Serving the Western United States
	AS SHOWN	6/00	
	Drawn by:	Approved by:	
	C.G.	A.J.G.	
Project No.	Figure No.		
044-00006	5		

"Hot Spot" Management Procedures Telecommunications Building, Oakland



NOTES:

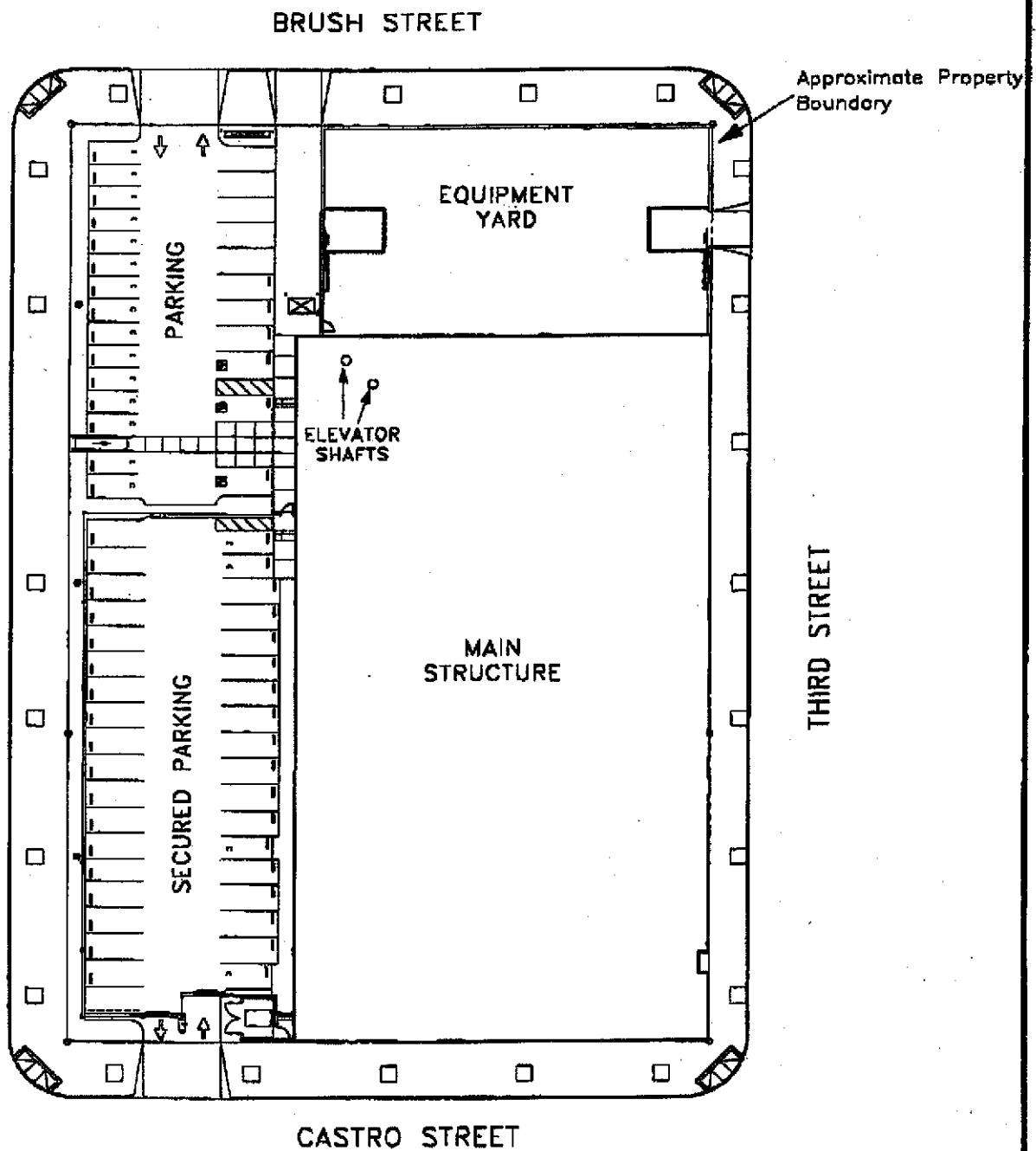
1. FROM BASELINE ENVIRONMENTAL CONSULTING AND THE PORT OF OAKLAND.

CONTINGENCY PLAN FLOW CHART

City Block Bound By:
Second, Third, Castro, &
Brush Streets
Oakland, California

Scale:	AS SHOWN	Date:	07/00
Drawn by:	AJG	Approved by:	AJG
Project No.	044-00006	Figure No.	5

Krazan
ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS
Offices Serving the Western United States



- NOTES:
 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
 2. BASE MAP FROM CARILLO ARCHITECTURAL GROUP

PROPOSED SITE PLOT PLAN City Block Bound By: Second, Third, Castro, & Brush Streets Oakland, California	Scale:	Date:	 Krazan ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS <i>Offices Serving the Western United States</i>
	AS SHOWN	06/00	
	Drawn by:	Approved by:	
	AJG	AJG	
Project No.	Figure No.		
044-00006	3		