■ ADVANCED ENVIRONMENTAL CONCEPTS INC ■

September 13, 2001

SEP 18 2001

Mr. Don Hwang
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Regarding: **Summary "Hi-Vac" Workplan**
Former Vogue Tyres Facility
240 West MacArthur Boulevard
Oakland, California

Dear Mr. Hwang,

Please find enclosed the Summary "Hi-Vac" Workplan prepared by **Advanced Environmental Concepts, Inc.** (AEC) for the above referenced project/location.

Enclosed please find that report which AEC is submitting for your review.

Should you have any questions or require clarification on any aspects of the enclosed, please do not hesitate to contact our office at (661) 831-1646.

Respectfully yours,

Advanced Environmental Concepts, Inc.

Debbie Irwin
Office Administrator

Attachments: Workplan (1)

cc: Mr. Warren Dodson

■ ADVANCED ENVIRONMENTAL CONCEPTS INC ■

September 11, 2001

SEP 18 2001

Mr. Don Hwang
Alameda County Health Care Services
Environmental Health Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Summary "Hi-Vac" Workplan
Former Vogue Tyres Facility
240 West MacArthur Boulevard
Oakland, California

Dear Mr. Hwang:

Advanced Environmental Concepts, Inc. (AEC) is pleased to present the following summary workplan describing interim corrective action at the former Vogue Tyres facility, 240 West MacArthur Boulevard, Oakland, California.

The remediation method termed "hi-vac" or "bio-slurping" has gained popularity in recent years as an effective treatment method that does not occupy valuable space and resources at an active business that a permanent soil and groundwater treatment system will. The "hi-vac" method to be implemented is described as follows:

A bobtail vacuum truck will be used to remove hydrocarbon impacted groundwater and soil vapors from the contaminated areas. AEC will concentrate the "hi-vac" effort on monitoring wells MW-1 and MW-5, with lesser time applied to MW-2. A clean 1-inch diameter PVC "stinger" will be inserted through a rubber cap into the annular space of the monitoring well to approximately 1-foot from the well bottom. The cap will be secured to the well head using an adjustable pipe clamp. The vacuum truck will apply a vacuum to the casing (approximately 100-inches of water equivalent) and the groundwater within the interior of the casing will be removed and stored inside the vacuum truck. The vacuum will create a stabile drawdown of the groundwater thereby exposing the hydrocarbon impacted saturated soil zone. The vacuum will be applied to this zone and affect extraction of the gasoline vapors. Monitoring Wells MW-1, MW-2, and MW-5 will be pumped for two consecutive hours each. Monitoring Wells MW-3 and MW-6 will be put under vacuum for a minimum of one hour each. The monitoring wells will be pumped at this consistent vacuum and time duration for an initial three day period. The process will be repeated for an additional three weeks thus entailing a one month treatment period. Prior to initiating remediation all wells will be sampled to establish a current baseline. Following the month of treatment (12 working days) the wells will again be sampled to establish an exit baseline. The exit groundwater sample analyses should exhibit a marked decreasing trend, and based on the remaining gasoline concentrations AEC may recommend installation of a 4-inch, or 6-inch diameter dedicated groundwater extraction well. All extracted groundwater will be disposed under non-hazardous manifest at the DeMenno Kerdoom acceptance facility, Compton, California.

The advantage of "hi-vac" over a traditional onsite soil and groundwater treatment system are as follows:

- The vacuum truck can park on the street and not occupy valuable space at the facility.
- There are no permitting fees for the treatment system.
- No enclosure is necessary for the mobile treatment system.
- No underground trenching, pipe laying, and manifold construction are required.
- The ancillary electrical costs required to power a sparge blower and vapor extraction blower are not required.
- The vacuum truck provides greater flexibility in vacuum application.
- No space is required for aboveground extracted water storage.

AEC appreciates the opportunity to prepare this conceptual workplan for Mr. Warren Dodson, property owner. If you have any questions, or require clarification, please do not hesitate to contact our office at your convenience.

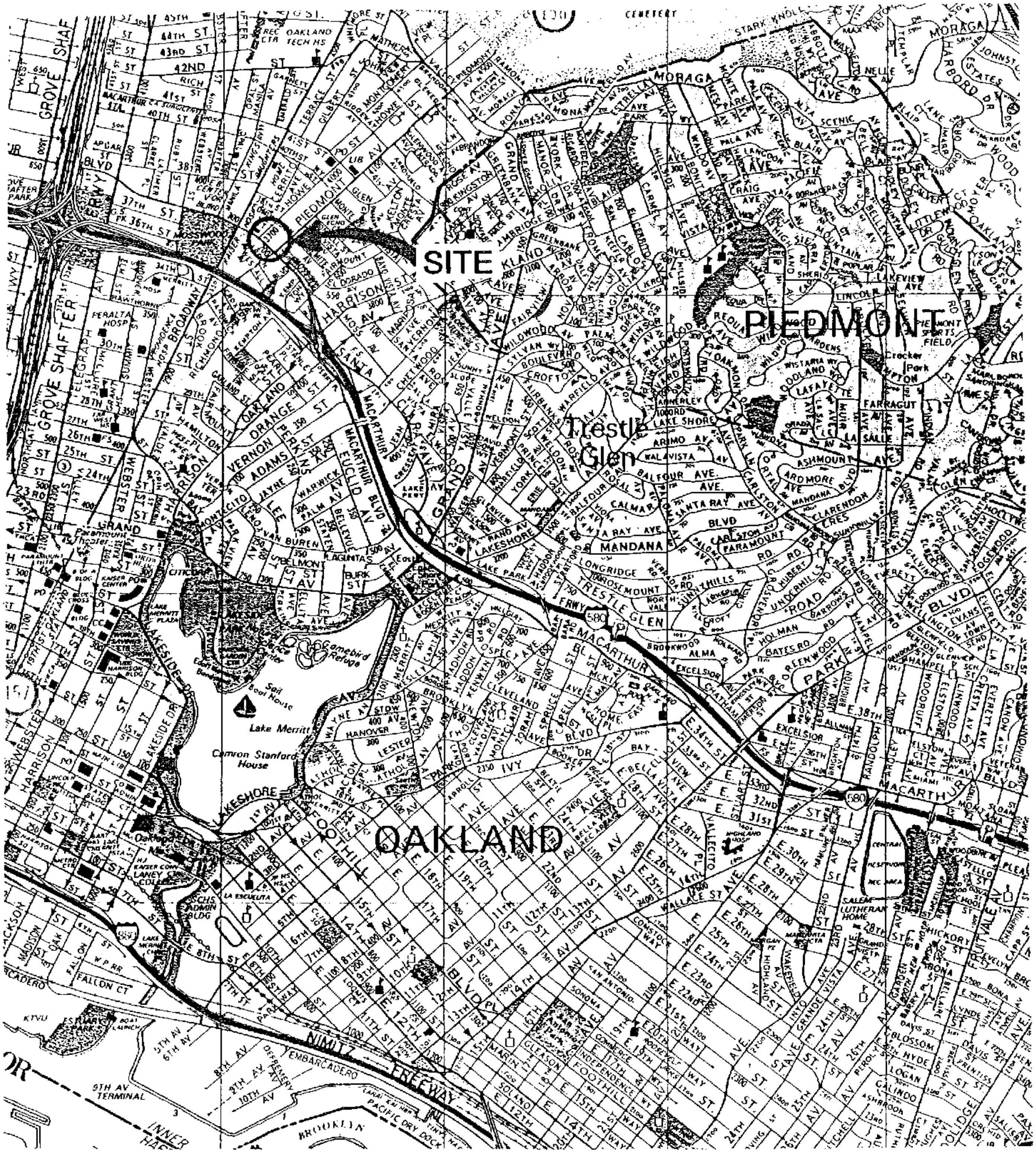
Sincerely,

Jonathan L. Buck
Senior Geologist

This report has been technically reviewed by the following:

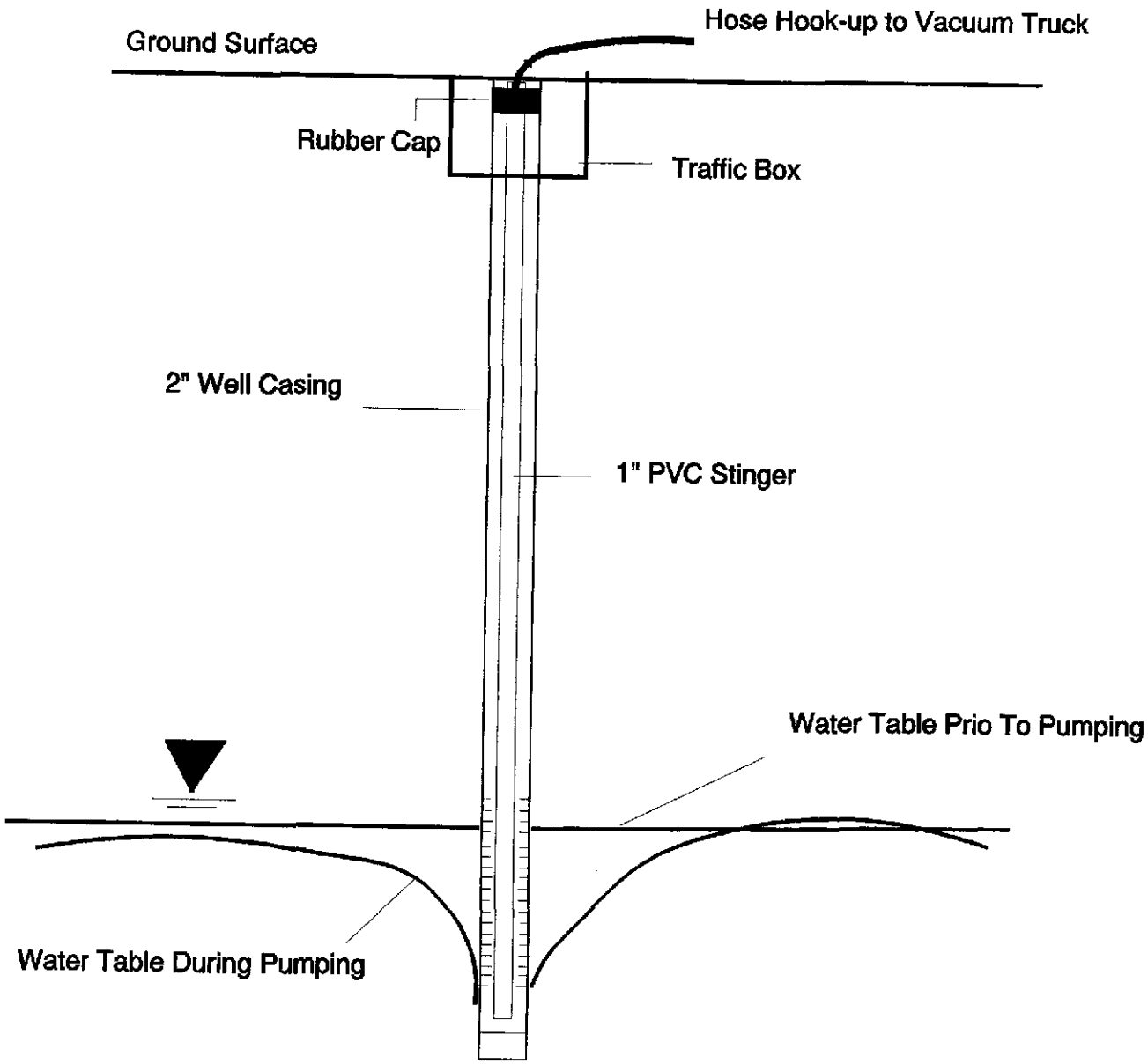
Christian Bellue
Registered professional Engineer #C53934

4400 ASHE ROAD #206 • BAKERSFIELD, CA 93313 661/831-1646 • FAX 661/831-1771



Map Source: Thomas Maps

ADVANCED ENVIRONMENTAL CONCEPTS INC *ADVANCED ENVIRONMENTAL CONCEPTS* *P.O. BOX 40672 BAKERSFIELD, CA 93384*	**- SITE AREA -** Prestige Products Corporation 240 West MacArthur Blvd. County of Alameda - Oakland, California	**FIGURE** 1



ADVANCED ENVIRONMENTAL CONCEPTS INC

ADVANCED ENVIRONMENTAL CONCEPTS
P.O. BOX 40672 BAKERSFIELD, CA 93384

"Hi-Vac" Well Configuration

Former Vogue Tyres Facility

240 West MacArthur Boulevard

County of Alameda • Oakland, CA

FIGURE

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