

# MITTELHAUSER corporation

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San Ramon, California 94583  
(415) 743-0335

August 23, 1991

Mr. Ravi Arulanantham  
Alameda County Environmental Health Services  
80 Swan Way, Suite 200  
Oakland, CA 94621

Subject: Report of Soil Excavation and Sampling  
6700 Golden Gate Drive  
Dublin, California

Dear Mr. Arulanantham:

This report presents the results of an excavation and stockpiled-soil sampling at 6700 Golden Gate Drive, in Dublin, Alameda County, California on August 14, 1991. The work was done on behalf of Bedford Properties related to removal of additional soil from the former underground storage tank pit at that address. The project site is located south of Dublin Boulevard, northeast of and adjacent to the Unisource building.

## PURPOSE

The purpose of the work was to identify the point at which contaminated soil had been removed, collect representative samples from the newly-exposed surface, and sample the stockpiled soil. The samples were to be analyzed for the contaminants of concern. Based on the analytical results, recommendations would be made for treatment and/or disposal of the stockpiled soil.

## EVALUATION OF THE EXCAVATION

Excavation of soil from the pit was performed by W. A. Craig Company of Napa, California. Observations of the exposed portion of the final excavated subgrade indicated no abnormal discoloration or odor indicative of chemical contamination. Inspection of the soil samples with a Photovac Tip II air analyzer detected no ionizable chemical constituents.

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Soil excavated from the floor of the completed pit was sampled by pounding a 2" by 6" brass tube into soil in the excavator bucket. Ends of the tube were sealed and the tube was labelled to indicate its contents. The sample was delivered under chain of custody documentation to a state certified analytical laboratory.

Laboratory analyses indicated that the soil sample collected from the bottom of the pit did not contain contaminants of concern above laboratory detection limits. The chemical substances analyzed included Total Petroleum Hydrocarbons as Gasoline (TPH-G), Total Petroleum Hydrocarbons as Diesel (TPH-D), Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Total Oil and Grease (TOG), and organic lead.

#### STOCKPILED SOIL SAMPLES

Five samples were collected at randomly chosen depths and locations in the soil stockpile which had been spread to five foot thickness to facilitate sampling. These were handled in a manner similar to that described above for the bottom sample and delivered for laboratory analysis.

Laboratory analysis did not reveal the presence of TPH-G and BTEX beyond the detection level; however, oil and grease was detected at concentrations ranging from 14 to 130 mg/k.

Laboratory reports and chain-of-custody documentation are attached with this report.

#### DISCUSSIONS AND CONCLUSIONS

Based on observations of the tank pit overexcavation and laboratory analyses of the collected soil samples, the removal of contaminated soils from the tank pit appears to be complete. Arrangements have been made to emplace engineered fill consisting of silty gravel. This material was selected to provide sufficient fine-grained sediments to function as a binding matrix in the compacted fill for subsequent installation of a monitoring well.

You have been apprised of the present status of the tank pit and have approved the tank pit for backfilling. We also understand from you that the stockpile material cannot be used as backfill and must be removed from the project site.

Options for stockpile disposal include transport to an approved disposal site or offsite bioremediation. We understand

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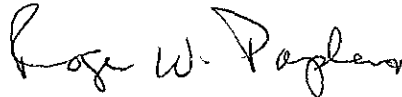
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that Bedford Properties prefers the disposal option, and these arrangements are in progress.

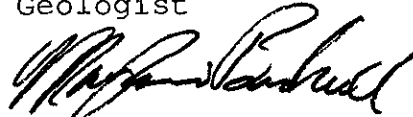
Should you have any questions, please do not hesitate to contact me at (415) 743-0335.

Sincerely,

MITTELHAUSER CORPORATION



Roger W. Papler  
Geologist



Marjorie Bushnell  
Registered Geologist



RWP:MB/jk  
1753L3

Attachments: Laboratory analyses  
Chain of Custody

cc: Ms. Gina Dimiteo, Bedford Properties

# CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E884)

August 20, 1991

ChromaLab File No.: 0891142

MITTELHAUSER CORPORATION

Attn: Roger Papler

RE: Five rush soil samples for Gasoline/BTEX and Oil & Grease analyses

Project Name: BEDFORD / DUBLIN

Project Number: P 1753.2

Date Sampled: Aug. 15, 1991

Date Extracted: Aug. 19-20, 1991

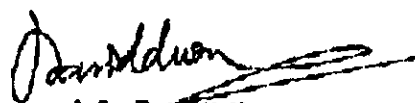
Date Submitted: Aug. 16, 1991

Date Analyzed: Aug. 19-20, 1991

RESULTS:

Sample I.D.	Gasoline (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)	Oil & Grease (mg/kg)
A-2	N.D.	N.D.	N.D.	N.D.	N.D.	82
B-3	N.D.	N.D.	N.D.	N.D.	N.D.	78
C-4	N.D.	N.D.	N.D.	N.D.	N.D.	52
D-1	N.D.	N.D.	N.D.	N.D.	N.D.	14
E-2	N.D.	N.D.	N.D.	N.D.	N.D.	130
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE REC.	83.0%	81.7%	94.1%	91.9%	90.9%	----
DUP SPIKE REC	104.9%	102.2%	84.6%	100.4%	102.2%	----
DET. LIMIT	1.0	5.0	5.0	5.0	5.0	10
METHOD OF ANALYSIS	5030/ 8015	8020	8020	8020	8020	5520/ E & F

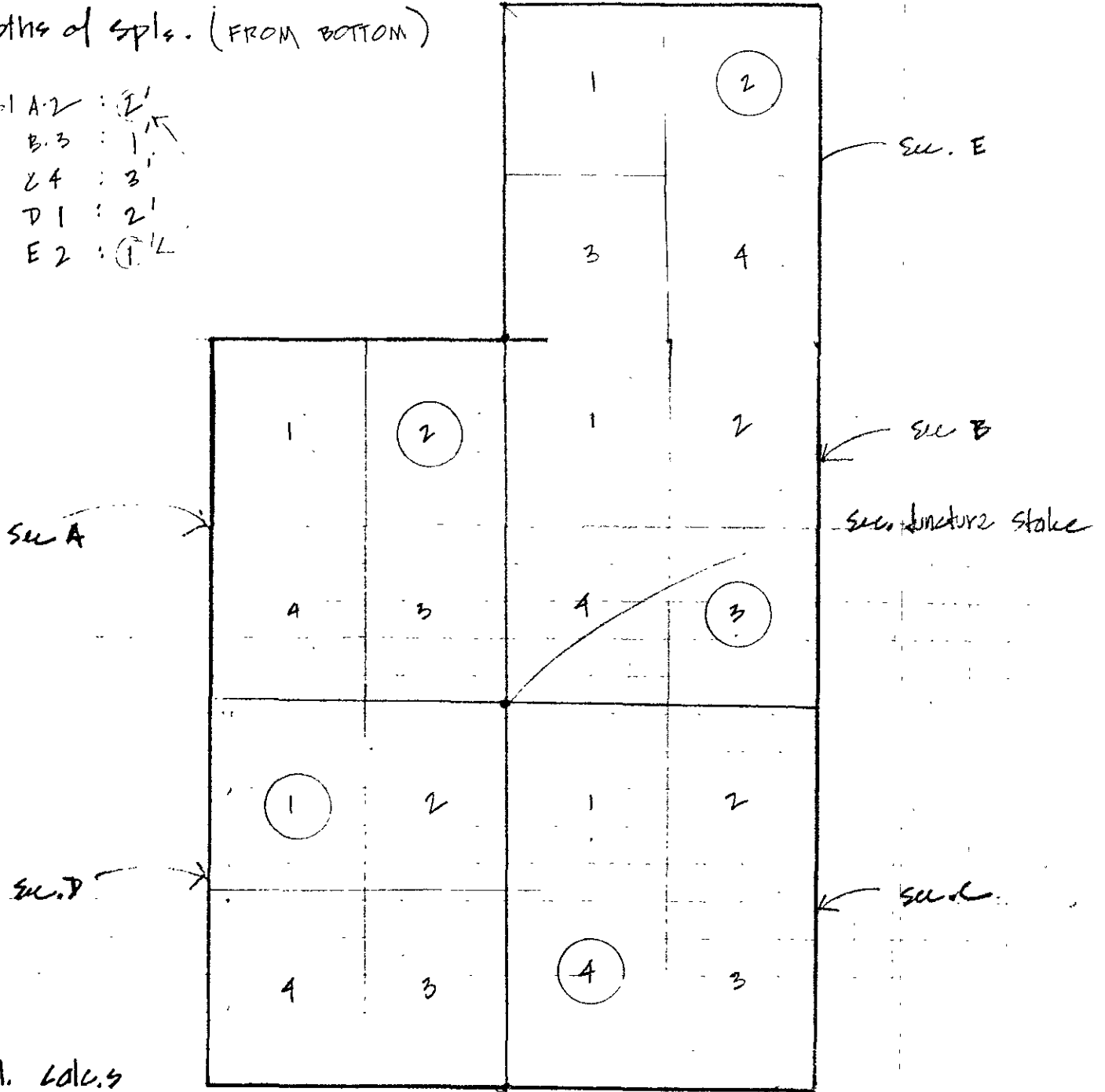
ChromaLab, Inc.

  
 David Duong  
 Chief Chemist

  
 Eric Tam  
 Laboratory Director

Depths of spls. (FROM BOTTOM)

- Spl A-2 : 2'
- B-3 : 1'
- C-4 : 3'
- D-1 : 2'
- E-2 : 1'

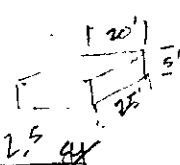


Vol. Calc.s

SECS A-D

Dim.s of Main Rectangle : 20 x 25 x 5'

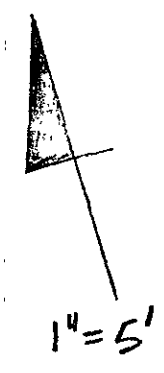
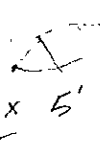
Vol. of " " : 2500 ft<sup>3</sup> = 92.5 cu yd



SEC. E

Dim. of Projecting Portion : 10 x 12 x 5'

Vol. of " " :  $\frac{1}{2}$  Area base x 5' = 300 ft<sup>3</sup> = 11 cu yd



TOTAL VOL. : ~ 103.5 cu yd