



91 NOV 15 10:40 November 14, 1991

Alameda County Dept. of Environmental health  
Hazardous Materials Division  
80 Swan Way, #200  
Oakland, Ca 94612

Attn: Mr. Ravi Arulanantham

Re: Low Doty Cadillac  
6301 Scarlett Court, Dublin  
Phase II Investigation Report


Dear Mr. Arulanantham:

Enclosed is a copy of the Phase II Investigation Report for the above referenced location. Copies have been forwarded to all of the appropriate agencies and interested parties.

The report should be self explanatory, but if you have any questions please call (510) 831-1957.

It has been a pleasure working with you on this project

Cordially submitted,



Stephen R. Clark  
Principal

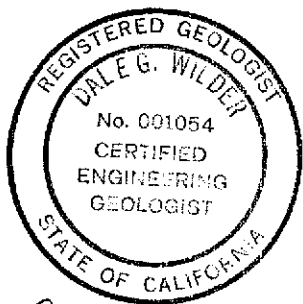
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**PHASE II  
GROUND WATER INVESTIGATION**

**Lew Doty Cadillac  
6301 Scarlett Court, Dublin, CA**

Report Date: November 13, 1991



  
Dale G. Wilder  
Certified Engineering Geologist  
EG-001054

  
Stephen R. Clark  
Project Geologist

**PHASE II  
GROUND WATER INVESTIGATION  
Lew Doty Cadillac  
6301 Scarlett Court, Dublin, CA**

Report Date: November 13, 1991

**I. INTRODUCTION**

The above referenced location (refer to Figure 1) (hereafter referred to as the property or the subject site) has been recommended by the Alameda County Dept. of Environmental Health for geotechnical ground water monitoring. pH7 Environmental was retained by BCC Bancorp, the property owner, to install one additional monitoring well and perform quarterly sampling. The purpose of the investigation is to analyze ground water for potential contamination.

All geotechnical work has been performed under the direct supervision of Mr. Dale Wilder. Mr. Wilder is a State of California Certified Engineering Geologist (CEG) (refer to Introduction Attachments). Geotechnical field work was performed by Stephen R. Clark, staff geologist (refer to Introduction Attachments).

In order to present the data in a clear, understandable order, the work will be presented chronologically. Some aspects of the work were performed more or less concurrently, but the divisions of effort should be clear. Chain of custody forms, laboratory results, permits, work plans and regulatory agency authorizations are included in the attachments associated with the following divisions of effort:

- I. INTRODUCTION
- II. CASE HISTORY
- III. GROUND WATER INVESTIGATION
  - A. Geology and Hydrology
  - B. Work Plan
  - C. Drilling and Sampling
  - D. Monitoring Well Installation
  - E. Monitoring Well Development, and Water Sampling Protocol
  - F. Laboratory Analyses of Soil and Water Samples
  - G. Hydrology and Water Level Measurements
- IV. CONCLUSIONS
- V. RECOMMENDATIONS
  - A. Drill Cuttings Disposal
  - B. Purge Water Storage
  - C. Quarterly Sampling

**II. CASE HISTORY**

In August of 1991, one (1) underground fuel storage tank was removed from the subject site (refer to Figure 2). Soil samples taken from the tank location yielded non-detectable levels of analyzed components (refer to Case History Attachments - memo dated



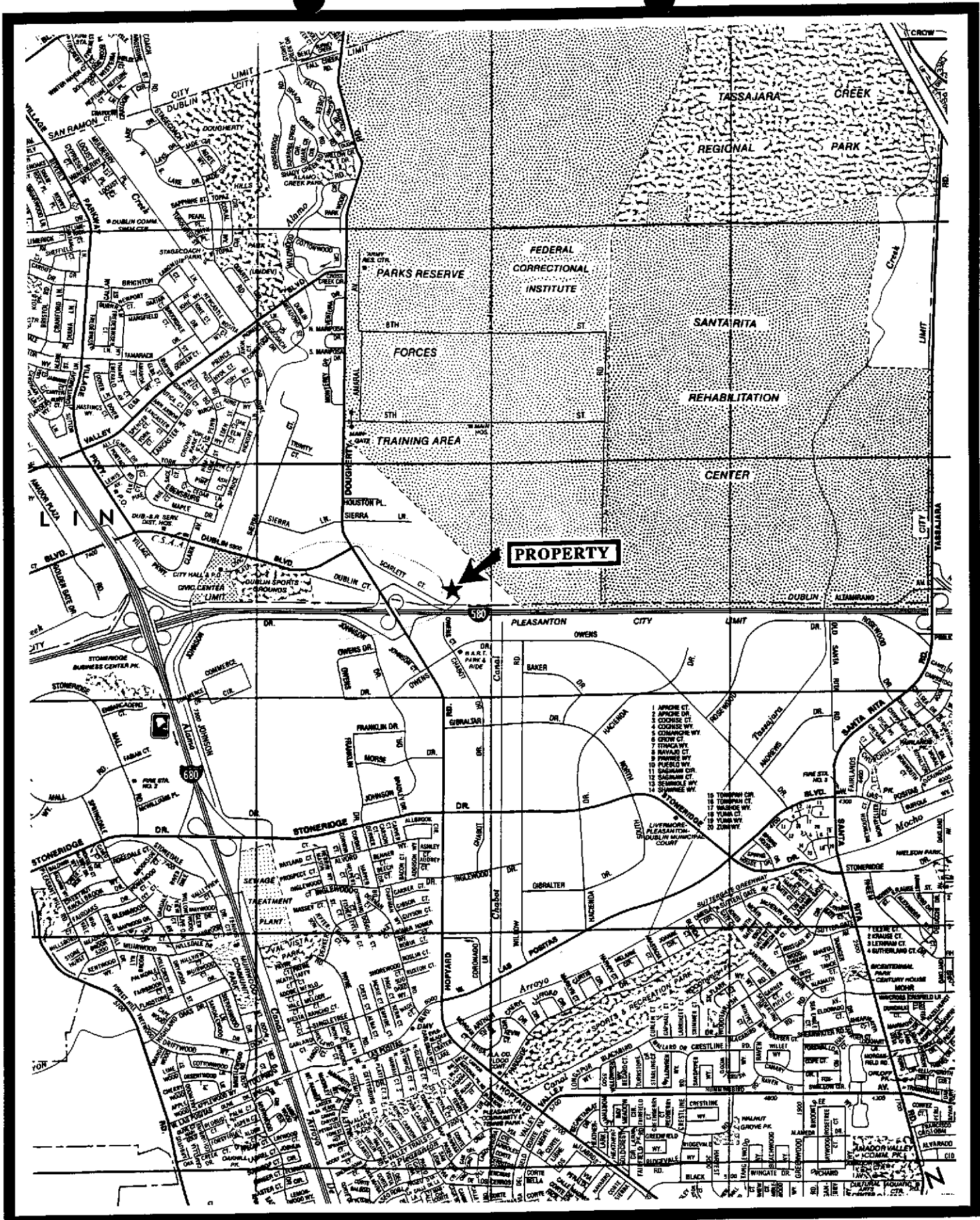
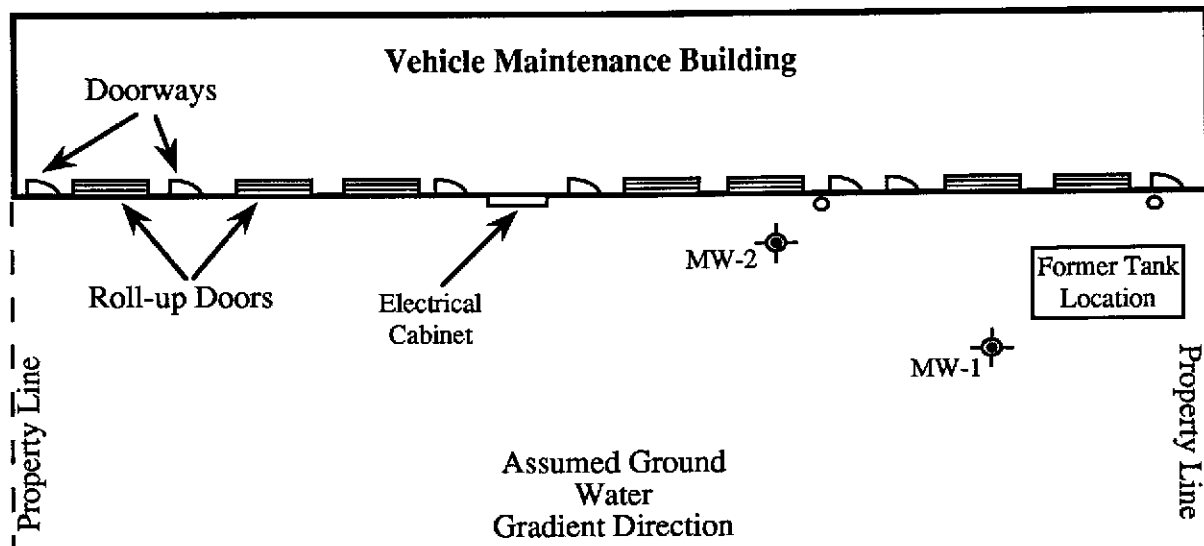





Figure 1





**LEGEND**

- MW-1  Monitoring Well MW-1 (2")
- MW-2  Monitoring Well MW-2 (2")
-  Sanitary Sewer Connection

**NOT TO SCALE**

Figure 2



September 4, 1991). A leaking tank form was not completed by the Alameda County Dept. of Environmental Health, and this case is not being regarded as a leaking underground fuel tank site by that Department.

Concurrently with the tank removal, waste oil contaminated soil was removed along the entire length of a french drain which occurred immediately adjacent to the south side of the Vehicle Maintenance building. The work was performed by Exceltech of Fremont, CA. Two (2) sewer connections in front of the building were observed as probable dumping points for the oil (refer to Figure 2). Based upon these observations, Mr. Arulanantham of the Alameda County Dept. of Environmental Health recommended that a new monitoring well be installed to monitor the westernmost sewer connection, and that the existing monitoring well be activated to monitor the easternmost sewer connection (refer to Case History Attachments - memo dated September 4, 1991).

### III. GROUND WATER INVESTIGATION

#### III. A. Geology and Hydrology

The property is underlain by a thick alluvial sequence. Subsurface materials are composed of silty clays to silty sands with stringers of interbedded gravels. The subsurface materials are characteristic of sedimentation on a gently sloping alluvial fan in the latter stages of development. This relatively low energy environment hosted shallow streams which typically carried finer deposits. The streams tended to shift rapidly, reworking older sediments and creating disconnected deposits of sands, clays, and small gravels. A general downward coarsening of materials is characteristic of alluvial deposits where the energy is decreasing with time (generally the climate becoming more arid), or where the source of the material is receding from the depositional area due to erosion.

The surface of an unconfined water table forms an inclined plane which flows slowly toward lower elevations on the plane. The direction and inclination of the surface of the water table define the ground water gradient, but localized influences such as active wells can cause perturbations in the direction. Generally, the ground water gradient conforms to the downward slope of the topography. The general direction of the gradient in this part of the Amador Valley is south to southwest. The depth to the water table beneath the property was measured at 8 feet on October 19, 1991.

#### III. B. Work Plan

At the request of Mr. Ravi Arulanantham, Alameda County Health Care Services, a geotechnical work plan was developed by pH7 Environmental and submitted to Mr. Arulanantham on October 8, 1991 for approval. The work plan was given verbal approval by Mr. Arulanantham on October 14, 1991. A monitoring well permit application was applied for by pH7 Environmental and issued by Zone 7 Alameda County Flood Control and Water Conservation District on October 10, 1991 (refer to Ground Water Investigation Attachments).

#### III C. Drilling and Sampling

In order to analyze ground water samples for potential contamination, one monitoring well was installed on October 17, 1991 under permit from Zone 7 Alameda County Flood Control and Water Conservation District. The monitoring well (MW-2) was installed



within ten (10) ft of the westernmost sanitary sewer connection (refer to Figure 2). MW-2 is to be utilized to monitor the western sanitary sewer connection, and the existing monitoring well (MW-1) will be utilized to monitor the sanitary sewer connection on the east end of the building (refer to Figure 2).

The soil cuttings generated during drilling were stockpiled on plastic plastic sheeting until receipt of the analytical results.

Drilling of the monitoring well was accomplished using a mobile drilling rig with eight inch diameter hollow stem augers. The well was drilled to a depth of eighteen (18) feet to allow for the emplacement of the well casing in a prescribed geometry in relation to the standing water level (SWL). This two foot upward shift in the well construction was a minor deviation from the original work plan necessitated by the presence of the SWL two (2) feet higher than anticipated.

During drilling, a geologist from pH7 Environmental directed the field operations and logged the soil samples as they were obtained using the Unified Soil Classification System (refer to Figures 3, 4, and 5). One soil sample was collected at a depth of five (5) ft in the unsaturated zone using a modified California sampler with a brass sample tube. The ends of the brass tube were covered with aluminum foil, then plastic end caps, and finally wrapped with a suitable tape. The soil sample was then immediately double plastic bagged to prevent possible dilution, and placed on ice for transport to a DHS certified laboratory (Med-Tox in Pleasant Hill). The soil sample was analyzed for Total Petroleum Hydrocarbons as Gasoline (TPHg) utilizing EPA Method 5030 GCFID, BTEX utilizing EPA Method 8020, and extractable hydrocarbons utilizing EPA Method 3550. Formal sample chain-of-custody records were maintained (refer to Ground Water Investigation Attachments).

#### IV. D. Monitoring Well Installation

The monitoring well was drilled to a total depth of 18.0 feet. It was constructed of 2-inch diameter, factory threaded and slotted, Schedule 40 PVC casing and screen resting on filter pack material 1.0 ft above the bottom of the hole (refer to Figure 6). The slotted interval of ten (10) feet total length extends one (1) ft above the SWL in order to accommodate seasonal fluctuations in the water table. Additionally, the filter sand (#3) was installed one (1) ft above the slotted interval in order to accommodate seasonal fluctuations in the water table. Blank 4-inch Schedule 40 casing forms the upper portion of monitoring well. A one (1) ft bentonite seal caps the filter sand, and the remaining annulus was grouted to surface with neat Portland cement.

The top of the monitoring well was enclosed in a locking field cover to prevent vandalism which in turn was enclosed in a heavy duty, traffic cover with the top set slightly above grade to prevent surface infiltration, or contamination.

#### IV. E. Monitoring Well Development, and Water Sampling Protocol

Well development was performed by pH7 Environmental on October 23, 1991. The well was developed by mechanical pumping using a vented surge block to remove suspended sediment and settle the sand pack (refer to Ground Water Investigation Attachments).

A minimum of twenty four (24) hours after well development was allowed to elapse before water sampling in order to allow for the separation and accumulation of free product. The well was developed on October 23, 1991 and the samples were obtained from both MW-1



# PROJECT: 6301 Scarlett Court, Dublin

Date Drilled: October 15, 1991

Remarks: Vertical datum - None

Type of Boring: 6" hollow stem auger

(see legend sheet for sampler types and laboratory tests)

Hammer: 140 pounds/30" fall

Logged by: S. R. Clark

## Lithologic Log of Monitoring Well MW-2

Depth Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	TPH gas ppm	TPH oil ppm	BTEX ppb
0						
5	E8689	12	Dark gray, silty clay (CL)	ND	ND	B (ND) T (2.0) E (ND) X (ND)
10						
15			Dark tan, silty clay (CL)			
20			TD 18.0 feet			

Figure 3





# PROJECT: 6301 Scarlett Court, Dublin

Date Drilled: October 15, 1991

Remarks: Vertical datum - N/A

Type of Boring: 6" hollow stem auger

Hammer: 140 pounds/30" fall

Logged by: S. R. Clark

## Lithologic Log Legend Sheet

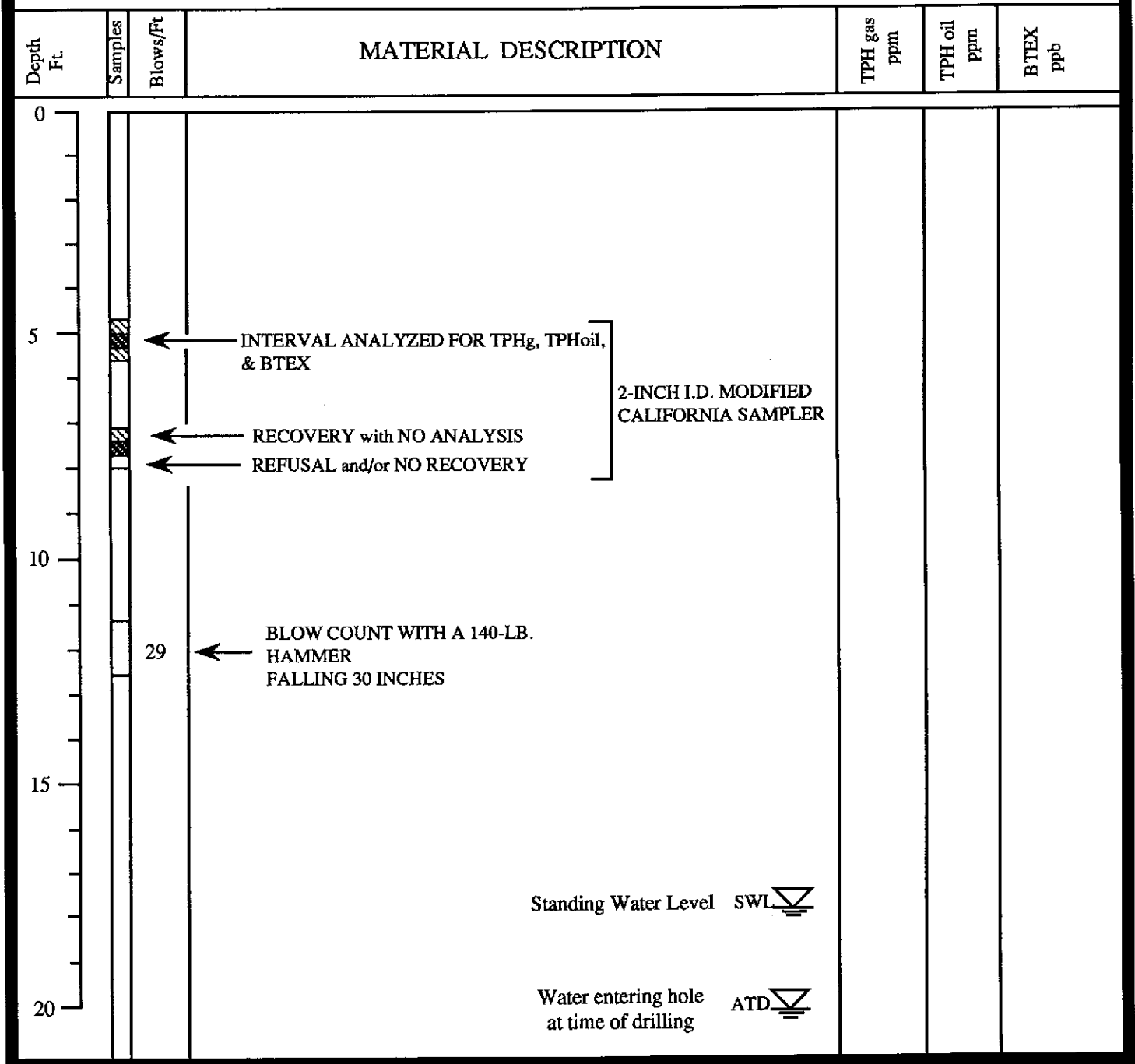


Figure 4



# UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		TYPICAL NAMES													
<b>COARSE GRAINED SOILS</b>	<b>GRAVEL</b> MORE THAN HALF OF THE COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVEL WITH LESS THAN 5% FINES	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center; width: 10%;">GW</td> <td style="width: 15%;"></td> <td style="width: 75%;">WELL GRADED GRAVEL, GRAVEL-SAND MIXTURE</td> </tr> <tr> <td style="text-align: center;">GP</td> <td></td> <td>POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE</td> </tr> <tr> <td style="text-align: center;">GM</td> <td></td> <td>SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURE</td> </tr> <tr> <td style="text-align: center;">GC</td> <td></td> <td>CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURE</td> </tr> </table>	GW		WELL GRADED GRAVEL, GRAVEL-SAND MIXTURE	GP		POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE	GM		SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURE	GC		CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURE
		GW		WELL GRADED GRAVEL, GRAVEL-SAND MIXTURE											
		GP		POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE											
		GM		SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURE											
	GC		CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURE												
	GRAVEL WITH OVER 12% FINES	GW		WELL GRADED GRAVEL, GRAVEL-SAND MIXTURE											
		GP		POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE											
	SAND	CLEAN SAND WITH LESS THAN 5% FINES	SW		WELL GRADED SAND, GRAVELLY SAND										
SP				POORLY GRADED SAND, GRAVELLY SAND											
SAND WITH OVER 12% FINES		SM		SILTY SAND, GRAVEL-SAND-SILT MIXTURE											
		SC		CLAYEY SAND, GRAVEL-SAND-CLAY MIXTURE											
<b>FINE GRAINED SOILS</b> MORE THAN HALF IS < No. 200 SIEVE	<b>SILT AND CLAY</b> LIQUID LIMIT LESS THAN 50		ML		INORGANIC SILT, ROCK FLOUR, SANDY OR CLAYEY SILT WITH LOW PLASTICITY										
			CL		INORGANIC CLAY OF LOW TO MEDIUM PLASTICITY, GRAVELLY, SANDY OR SILTY CLAY (LEAN)										
			OL		ORGANIC CLAY AND ORGANIC SILTY CLAY OF LOW PLASTICITY										
	<b>SILT AND CLAY</b> LIQUID LIMIT GREATER THAN 50		MH		INORGANIC SILT, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOIL, ELASTIC SILT										
			CH		INORGANIC CLAY OF HIGH PLASTICITY, GRAVELLY, SANDY OR SILTY CLAY (FAT)										
			OH		ORGANIC CLAY OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILT										
<b>HIGHLY ORGANIC SOILS</b>		PT		PEAT AND OTHER HIGHLY ORGANIC SOILS											

### KEY TO TEST DATA

EI - Expansion Index	TxUU - Unconsolidated Undrained Triaxial	
Consol - Consolidation	TxCU - Consolidated Undrained Triaxial	
LL - Liquid Limit (in %)	DSCD - Consolidated Drained Direct Shear	
PL - Plastic Limit (in %)	FVS - Field Vane Shear	
PI - Plasticity Index	LVS - Laboratory Vane Shear	
SA - Sieve Analysis	UC - Unconfined Compression	
G <sub>s</sub> - Specific Gravity	UC(P) - Laboratory Penetrometer	
- "Undisturbed Sample"		
- Bulk Sample		

Shear Strength, psf	Confining Pressure, psf
320 (2600)	320 (2600)
320 (2600)	2750 (2000)
2750 (2000)	470
470	700
700	2000 *
2000 *	700 *

Notes: (1) All strength tests on 2.8" or 2.4" diameter samples unless otherwise indicated

\* Compressive Strength

Figure 5



# PROJECT: 6301 Scarlett Court, Dublin

Drilled and constructed by: Bay Area Exploration, Suisun, CA  
Designed by S. R. Clark  
Completion Date: October 17, 1991

Alameda County Permit # 91593

Depth, Ft.

## Construction of Monitoring Well MW-2

Depth, Ft.

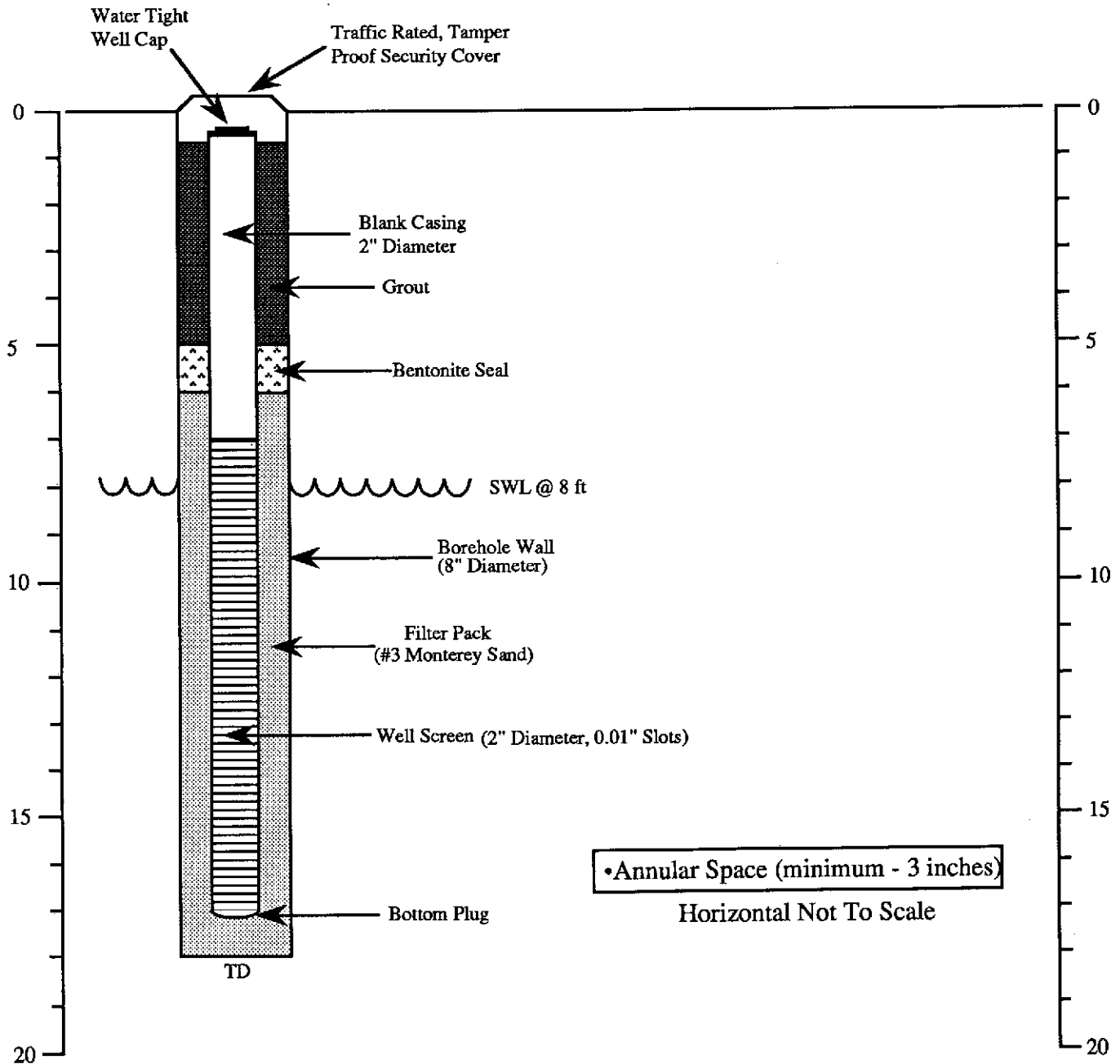


Figure 6



and MW-2 on October 25, 1991. Water finding and gas finding paste were utilized to test for free product prior to sampling, but none was detected. Three borehole volumes of water were purged from each well by bailing before samples were taken using a Teflon sampling bailer. Care was taken during purging to minimize potential aeration. The field parameters of pH, electrical conductivity, and temperature were monitored, recorded and observed to essentially stabilize during purging before the water was sampled (refer to Table I). Water discharged during purging operations was stored on-site in 55 gallon drums until final disposal. Disposal of the purge waters is the responsibility of the land owner.

TABLE I  
Field Parameters During Well Purging

<u>Well</u>	<u>Date</u>	<u>Well Volumes</u>	<u>Temperature (f)</u>	<u>pH</u>	<u>Conductivity (µmhos)</u>
MW-1	10/25/91	0	69.5	6.86	0.73
		1	70.1	7.64	0.76
		2	69.4	7.25	0.76
		3	69.5	7.02	0.76

Samples E8692 (TPH oil) and E8693 (TPHg & BTEX)

MW-2	10/25/91	0	69.5	6.86	0.73
		1	70.1	7.64	0.76
		2	69.4	7.25	0.76
		3	69.5	7.02	0.76

Samples E8690 (TPH oil) and E8691 (TPHg & BTEX)

Note - No free product measured with gasoline & water finding paste.

Water samples were collected using a clean Teflon bailer equipped with a ball valve and new cotton cord. The bailer was decontaminated before sampling by washing in a trisodium phosphate solution followed by a distilled water rinse. Samples were carefully decanted into 40 ml volatile organic analysis container (VOA) sample bottles and one liter amber bottles provided by the laboratory, placed in a shipping cooler with ice, and transported to Med-Tox in Pleasant Hill, CA. It was ensured that no air bubbles or head space were present in the full sample bottles. Chain of custody procedures were observed (refer to Ground Water Investigation Attachments). Laboratory analyses were EPA Methods 5030 and 8015 for TPH as gasoline and BTEX respectively, and EPA Method 3550 for waste oil.

### III. F. Laboratory Analyses of Soil and Water Samples

One (1) soil sample from the 5-5.5 ft depth interval in MW-2 was submitted to the laboratory for TPH<sub>g</sub>, BTEX, and TPH<sub>oil</sub> analyses. All analytes were Non Detect (ND) except for toluene which yielded a value of 2 parts per billion (ppb) (refer to Table II). Water samples from both wells contained no identified analytes. However, two (2) unknown compounds were detected in the water samples from both wells (refer to Ground Water Investigation Attachments).



TABLE II

Summary of Laboratory Results

<u>Well</u>	<u>Depth</u>	<u>Sample Type</u>	<u>TPH oil</u>	<u>TPHg</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylene</u>
MW-2	5-5.5	Soil	ND	ND	ND	2	ND	ND
MW-1	N/A	Water	ND	ND	ND	ND	ND	ND
MW-2	N/A	Water	ND	ND	ND	ND	ND	ND

Results are in parts per million (ppm), excepting toluene in parts per billion (ppb)

ND = Not Detected

III. G. Hydrology and Water Level Measurements

MW-2 was essentially dry to a depth of eight (8) ft where the unconfined phreatic water table was encountered. The water levels in MW-1 and MW-2 were 8.04 ft and 8.39 ft below the tops of their respective well casings on October 25, 1991. The wells have not been surveyed, but visually MW-2 appears to be slightly higher than MW-1 so the depth to the SWL in each well may be roughly equivalent.

IV. CONCLUSIONS

The soil sample from the 5-5.5 ft depth interval in MW-2 contained 2 parts per billion toluene. No other hydrocarbon contamination was detected in the soil sample.

The water in the monitoring wells MW-1 and MW-2 contained no detectable hydrocarbon or BTEX contamination on October 25, 1991. Two unknown compounds were detected in the water samples from both monitoring wells.

V. RECOMMENDATIONS

V. A. Drill Cuttings Disposal

Two (2) parts per billion toluene were detected in the soil sample from MW-2. No other identified contaminants were detected in the soil sample or the water from either well. The approximate 5 cubic feet of drill cuttings from MW-2 has been exposed to the atmosphere during the last month of very warm weather and should be well aerated. Therefore, pH7 Environmental recommends that the drill cuttings from MW-2 be disposed on-site without the implementation of any further remedial measures.



## V. B Purge Water Storage

Ground water purged during well development and sampling has been stored in 55 gallon DOT approved drums in a safe position adjacent to the maintenance building. The water from each well has been placed in separate barrels.

A small quantity of contaminated water can legally be stored up to one year before manifested disposal. At this time, there is no identified contamination in the water. However, if the unknown compounds in the wells are identified as a hazardous material, then disposal of the water under manifest may be eventually necessary.

pH7 Environmental recommends that the barrels remain in their present location and utilized for the storage of the waters purged during the remaining quarterly samplings.

## V. C. Quarterly Sampling

In accordance with the requirements of Mr. Ravi Arulanantham, quarterly water sampling and chemical analyses for TPH as gasoline, TPH as oil, and BTEX will be performed and reported for a period of two years. At the end of the first year, pH7 Environmental will negotiate with the property owner for an additional year of quarterly sampling to satisfy the requirements of the Alameda County Health Care Services.

Mr. Arulanantham has been informed of the presence of the two unknown compounds in the water samples from both wells. He has requested that the compounds be identified using EPA Method 8240 (GC/MS) if they occur in the next quarterly sampling.

cc: Mr. Ravi Arulanantham, Alameda County Health, Oakland  
Mr. Craig A. Mayfield, Zone 7 Water District, Pleasanton  
Mr. Eddy So, RWQCB, Oakland  
Mr. Rene' Brochier, Bishop Hawk Real Estate, Santa Clara  
Mr. Robert Heasman, CCB Bancorp, C/O Price Waterhouse, Victoria B. C.



Introduction  
Attachments

## Stephen R. Clark

### Geologist Registered Environmental Assessor

Mr. Stephen R. Clark received his Bachelors of Science degree in Geology from California State University at Sacramento in 1976. In 1987 he became a State of California Registered Environmental Assessor. In the past Mr. Clark has applied his technical expertise extensively in the public and private sectors. His numerous accomplishments include:

- Currently the founder and President of pH7 Environmental, San Ramon, CA.
- Served as Operations Manager for EnviroGroup, Lafayette, California with qualifications and experience in the practice of industrial hygiene. Two years of field experience encompassed environmental assessments for property transfers, asbestos surveys and removal surveillance, "sick building syndrome" investigations, pesticide surveys, and site surveys for hazardous materials including installation of monitoring wells. Laboratory duties included extensive analyses of bulk samples for asbestos content.
- Characterized nuclear weapons test emplacement holes over a span of eight years at the Nevada Test Site for Lawrence Livermore National Laboratory, including structural geologic interpretation and material property analyses.
- Served as the general manager for Gasch & Associates, a geophysical/geology consulting firm in Sacramento. Performed engineering geophysics, ground water investigations, well installations, and hydrologic testing for a period of three years.

#### CERTIFICATIONS

State of California Registered Environmental Assessor (REA - 01334)

Certificate in Hazardous Materials Management; U. C. Davis; 1991

Accredited Asbestos Inspector, Management Planner, Response Planner, EPA

Optical Mineralogy and Microscopic Identification of Asbestos, 1988

#### PUBLICATIONS

"Structural Analysis with Borehole Gravity - A Case History", Society of Exploration Geophysicists International Conference, Las Vegas, Nevada, 1984

"Oriented Logging Tools at the Nevada Test Site", 3rd Containment Symposium, Idaho Falls, Idaho, 1985



**Dale G. Wilder**  
**Professional Hydrogeologist**  
**Certified Engineering Geologist**  
**Professional Civil Engineer**

Mr. Dale G. Wilder received his Bachelors of Science degree in Geology from Brigham Young University in 1966, and Masters of Civil Engineering degree from Brigham Young in 1968.

In the past Mr. Wilder has applied his technical expertise extensively in the private and public sectors. He has broad experience as an engineering geologist and civil engineer, with extensive experience in supervision and project management, including budgets, cost control, schedules, planning, hiring, contracts, contractor selection, quality assurance programs, and public and governmental interfacing. His numerous accomplishments include:

- Assessment of hazardous waste disposal sites.
- Foundation analyses of commercial buildings, small high rise apartments, and private residences.
- Underground waste repository studies, including geologic characterization, geotechnical instrumentation, data analysis, and comparison of rock response to prediction by models.
- Development of ground water for large municipal water supplies.
- California "special seismic study zone" fault studies.

**CERTIFICATIONS**

Certification as an Engineering Geologist, State of California.  
Professional Civil Engineer, State of California.  
Professional Geologist, State of Georgia.  
Professional Engineer, State of North Carolina.  
Professional Hydrogeologist, American Institute of Hydrogeologists.

**PROFESSIONAL MEMBERSHIPS**

AEG - Association of Engineering Geologists, currently on ground water committee.  
ASCE - American Society of Civil Engineers.  
NWWA - National Water Well Association, currently on Radioactive Waste Management Committee.  
MGLS - Charter member of Minerals and Geotechnical Logging Society.

Case History  
Attachments

white -env.health  
 yellow -facility  
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200  
 Oakland, CA 94621  
 (415) 271-4320

Hazardous Materials Division Inspection Form

page 1 |

Site ID# \_\_\_\_\_ Site Name Old Lew Doty Cadillac Today's Date 9/14/91  
 Site Address 6301 Scarlett Court EPA ID# \_\_\_\_\_  
 City Dublin Zip 94568 Phone 532-7484

MAX Amt. Stored > 500lbs/55g/200cr? Y N  
 Hazardous Waste generated per month? \_\_\_\_\_

Inspection Categories:  
 I. Haz. Mat/Waste GENERATOR/TRANSPORTER  
 II. Business Plans, Acute Hazardous Materials  
 III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

- LA GENERATOR (Title 22)**
- \_\_\_ 1. Waste ID \* 66471
  - \_\_\_ 2. EPA ID 66472
  - \_\_\_ 3. > 90 days 66508
  - \_\_\_ 4. Label dates 66508
  - \_\_\_ 5. Biennial 66493
- 
- Manifest**
- \_\_\_ 6. Records 66492
  - \_\_\_ 7. Correct 66484
  - \_\_\_ 8. Copy sent 66492
  - \_\_\_ 9. Exception 66484
  - \_\_\_ 10. Copies Rec'd 66492
- 
- Misc.**
- \_\_\_ 11. Treatment 66371
  - \_\_\_ 12. On-site Disp. (H.S.&C.) 26189.5
  - \_\_\_ 13. Ex Haz. Waste 66570
- 
- Prevention**
- \_\_\_ 14. Communications 67121
  - \_\_\_ 15. Aisle Space 67124
  - \_\_\_ 16. Local Authority 67126
  - \_\_\_ 17. Maintenance 67120
  - \_\_\_ 18. Training 67105
- 
- Confin. Agency**
- \_\_\_ 19. Prepared 67140
  - \_\_\_ 20. Name List 67141
  - \_\_\_ 21. Copies 67141
  - \_\_\_ 22. Emg. Coord. Trng. 67144
- 
- Containers, Tanks**
- \_\_\_ 23. Condition 67241
  - \_\_\_ 24. Compatibility 67242
  - \_\_\_ 25. Maintenance 67243
  - \_\_\_ 26. Inspection 67244
  - \_\_\_ 27. Buffer Zone 67246
  - \_\_\_ 28. Tank Inspection 67259
  - \_\_\_ 29. Containment 67245
  - \_\_\_ 30. Safe Storage 67261
  - \_\_\_ 31. Reeboard 67257

Comments:

Today I had a meeting with Mr. Rene E. Brochier and Bob Difley regarding this project.

I was present at the Dublin site this morning and inspected the remedial work.

I have also carefully reviewed the final soil remediation report prepared by Resna.

The Tank results all show N.D. for all the components analysed. Based on the soil core sampling it appears, at present, there is no significant contamination left underneath the main building. However this office recommends to install a new monitoring well and to activate the existing monitoring well. These two monitoring wells

- LB TRANSPORTER (Title 22)**
- \_\_\_ 32. Applic./Insurance 66428
  - \_\_\_ 33. Comp. Cert./CHP insp. 66448
  - \_\_\_ 34. Containers 66465
- 
- Manifest**
- \_\_\_ 35. Vehicles 66465
  - \_\_\_ 36. EPA ID #s 66531
  - \_\_\_ 37. Correct 66541
  - \_\_\_ 38. HW Delivery 66543
  - \_\_\_ 39. Records 66544
- 
- Confin.**
- \_\_\_ 40. Name/ Covers 66545
  - \_\_\_ 41. Recyclables 66501

Rev 6/88

Contact: ROBERT DIFLEY, G.M.  
 Title: \_\_\_\_\_  
 Signature: Rene Brochier  
RENE BROCHIER

Inspector: A.R. Arulanandhan  
 Signature: A.R. Arulanandhan

white -env.health  
 yellow -facility  
 pink -files

# ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200  
 Oakland, CA 94621  
 (415) 271-4320

## Hazardous Materials Division Inspection Form

page 2

Site ID# \_\_\_\_\_ Site Name Old Low Duty Cadillac Today's Date 9/4/91  
 Site Address 6301 Scarlett Court EPA ID# \_\_\_\_\_  
 City Dublin Zip 94 Phone \_\_\_\_\_

MAX Amt. Stored > 500lbs/55g/200cf?  Y  N  
 Hazardous Waste generated per month? \_\_\_\_\_

### Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

### LA GENERATOR (Title 22)

- |                             |                           |                             |         |
|-----------------------------|---------------------------|-----------------------------|---------|
| _____                       | 1. Waste ID               | 66471                       |         |
| _____                       | 2. EPA ID                 | 66472                       |         |
| _____                       | 3. > 90 days              | 66508                       |         |
| _____                       | 4. Label dates            | 66508                       |         |
| _____                       | 5. Biennial               | 66493                       |         |
| <hr/>                       |                           |                             |         |
| Manifest                    | _____                     | 6. Records                  | 66492   |
|                             | _____                     | 7. Correct                  | 66484   |
|                             | _____                     | 8. Copy sent                | 66492   |
|                             | _____                     | 9. Exception                | 66484   |
|                             | _____                     | 10. Copies Rec'd            | 66492   |
| <hr/>                       |                           |                             |         |
| Misc.                       | _____                     | 11. Treatment               | 66371   |
|                             | _____                     | 12. On-site Disp. (H.S.&C.) | 26189.5 |
|                             | _____                     | 13. Ex Haz. Waste           | 66570   |
| <hr/>                       |                           |                             |         |
| Prevention                  | _____                     | 14. Communications          | 67121   |
|                             | _____                     | 15. Aisle Space             | 67124   |
|                             | _____                     | 16. Local Authority         | 67126   |
|                             | _____                     | 17. Maintenance             | 67120   |
|                             | _____                     | 18. Training                | 67105   |
| <hr/>                       |                           |                             |         |
| Cont'n. gency               | _____                     | 19. Prepared                | 67140   |
|                             | _____                     | 20. Name List               | 67141   |
|                             | _____                     | 21. Copies                  | 67141   |
|                             | _____                     | 22. Eng. Coord. Trng.       | 67144   |
| <hr/>                       |                           |                             |         |
| Containers, Tanks           | _____                     | 23. Condition               | 67241   |
|                             | _____                     | 24. Compatibility           | 67242   |
|                             | _____                     | 25. Maintenance             | 67243   |
|                             | _____                     | 26. Inspection              | 67244   |
|                             | _____                     | 27. Buffer Zone             | 67246   |
|                             | _____                     | 28. Tank Inspection         | 67259   |
|                             | _____                     | 29. Containment             | 67245   |
|                             | _____                     | 30. Safe Storage            | 67261   |
|                             | _____                     | 31. Freeboard               | 67257   |
| <hr/>                       |                           |                             |         |
| I.B. TRANSPORTER (Title 22) |                           |                             |         |
| _____                       | 32. Applic./Insurance     | 66428                       |         |
| _____                       | 33. Comp. Cert./CHP Insp. | 66448                       |         |
| _____                       | 34. Containers            | 66465                       |         |
| <hr/>                       |                           |                             |         |
| Manifest                    | _____                     | 35. Vehicles                | 66465   |
|                             | _____                     | 36. EPA ID #s               | 66531   |
|                             | _____                     | 37. Correct                 | 66541   |
|                             | _____                     | 38. HW Delivery             | 66543   |
|                             | _____                     | 39. Records                 | 66544   |
| <hr/>                       |                           |                             |         |
| Cont'n's                    | _____                     | 40. Name/ Covers            | 66545   |
|                             | _____                     | 41. Recyclables             | 66809   |

### Comments:

Must ~~be~~ be monitored every 3 months for the first two years. Further monitoring may be necessary depending on the nature and extent of Contaminant

### Recommendations:

1. Based on the analytical results no further Soil removal is necessary.
2. Continue to monitor the two wells for two more years.
3. If any further contamination is found at this property this office will require further remediation.

Rev 6/88

Contact: ROBERT DIFLEY  
 Title: \_\_\_\_\_  
 Signature: \_\_\_\_\_

RENÉ BROCHIER

René Brochier

Inspector:  
 Signature:

A.R. Anilanthan  
A.R. Anilanthan

Ground Water  
Investigation  
Attachments



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 (415) 484-2600

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 6301 SCARLETT CT. DUBLIN CA 94568 (OLD LEW DOTY CAPILLAS)

PERMIT NUMBER 91593 LOCATION NUMBER

CLIENT Name CCB Bancorp c/o Price Waterhouse, Suite 620 Address 880 Douglas St Phone 604 383 4191 City VICTORIA B.C. Zip VBW 2B7

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT Name PH7 ENVIRONMENTAL

Address 18211 BOLLINGER CYN RD Phone 510 831 1957 City SAN RAMON Zip 94587

TYPE OF PROJECT Well Construction Geotechnical Investigation Cathodic Protection General Water Supply Contamination Monitoring Well Destruction

PROPOSED WATER SUPPLY WELL USE Domestic Industrial Other Municipal Irrigation

DRILLING METHOD: Mud Rotary Air Rotary Auger Cable Other

DRILLER'S LICENSE NO. 522125 (C57)

WELL PROJECTS Drill Hole Diameter 6 in. Maximum Casing Diameter 2 in. Depth 25 ft. Surface Seal Depth 7 ft. Number 1

GEOTECHNICAL PROJECTS Number of Borings Maximum Hole Diameter in. Depth ft.

ESTIMATED STARTING DATE 10/19/91 ESTIMATED COMPLETION DATE 10/19/91

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] Date 10/7/91

- A. GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects. 3. Permit is void if project not begun within 90 days of approval date. B. WATER WELLS, INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of cement grout placed by tremie. 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings. D. CATHODIC. Fill hole above anode zone with concrete placed by tremie. E. WELL DESTRUCTION. See attached.

Approved [Signature] Date 10 Oct 91

## MONITORING WELL DEVELOPMENT

6301 Scarlett Court, Dublin  
October 23, 1991

### PHYSICAL PARAMETERS

Monitoring Well Number	MW-2
Diameter of Well (inches)	2.00
Total Depth of Well (ft)	16.66
Depth Datum Reference	Top of Casing
Depth to Free Product (ft)	N/A
Depth to Ground Water (ft)	8.43
Ground Water in Well Column (gals)	1.34
Total Water Purged (gals)	40.00
Manway or Stovepipe	Manway
Water Tight or Not (yes of no)	Yes
Type of Well Column Seal	Brass Locking

### WELL PURGING DATA

TIME	pH	TEMP °f	CONDUCTANCE µmhos	WATER CONDITION	GALLONS PURGED
0830	7.2	74.1	1,900	Tan,silty	5.0
0850	7.1	73.6	1,800	Tan,silty	5.0
0910	6.9	73.4	1,800	Tan,silty	5.0
0930	7.0	72.8	1,900	Tan,clearing	5.0
0950	6.9	72.1	1,800	Tan,clearing	5.0
1010	6.8	71.7	1,800	Tan,clearing	5.0
1030	6.9	71.5	1,700	Slightly tan	5.0
1050	7.0	71.7	1,700	Slightly tan	5.0

# ANALYTICAL SERVICES



DOHS CERTIFICATION NO: E772

## CERTIFICATE OF ANALYSIS

PAGE 1 OF 4

PH7 ENVIRONMENTAL  
18211 BOLLINGER CANYON RD.  
SAN RAMON, CA 94583

REPORT DATE: 10/28/91

DATE SAMPLED: 10/17/91

ATTN: STEVE CLARK

DATE RECEIVED: 10/18/91

CLIENT PROJ. ID: 6301 SCARLETT CT.  
DUBLIN

MED-TOX JOB NO: 9110156

ANALYSIS OF: SOIL SAMPLE

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/kg)	Extractable Hydrocarbons as Oil (mg/kg)
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E8689	01A	ND	ND
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Detection Limit		10	20
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Method: 3550 GCFID

Instrument: E

Date Extracted: 10/21/91

Date Analyzed: 10/21/91

ND = Not Detected

Andrew Bradeen, Manager  
Organic Laboratory

Results FAXed 10/24/91



## PH7 ENVIRONMENTAL

CLIENT ID: E8689  
CLIENT PROJ. ID: 6301 SCARLETT CT, DUBLIN  
DATE SAMPLED: 10/17/91  
DATE RECEIVED: 10/18/91  
REPORT DATE: 10/28/91

MED-TOX LAB NO: 9110156-01A  
MED-TOX JOB NO: 9110156  
DATE ANALYZED: 10/21/91  
INSTRUMENT: H

## BTEX AND HYDROCARBONS (SOIL MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Benzene	71-43-2	ND	1
Toluene	108-88-3	2	1
Ethylbenzene	100-41-4	ND	1
Xylenes, Total	1330-20-7	ND	3

## PURGEABLE HYDROCARBONS AS:

Gasoline ND mg/kg 0.2 mg/kg

ND = Not Detected

QUALITY CONTROL DATA

PH7 ENVIRONMENTAL

CLIENT PROJECT ID: 6301 SCARLETT CT., DUBLIN

MED-TOX JOB NO: 9110156

DATE EXTRACTED: 10/21/91  
DATE ANALYZED: 10/21/91  
CLIENT PROJ. ID: 6301 SCARLETT CT.  
DUBLIN

MED-TOX JOB NO: 9110156  
SAMPLE SPIKED: 9110130-04A  
INSTRUMENT: E

**MATRIX SPIKE RECOVERY SUMMARY  
TPH EXTRACTABLE SOILS  
METHOD 3550 GCFID  
(SOIL MATRIX; EXTRACTION METHOD)**

ANALYTE	Spike Conc. (mg/kg)	Sample Result (mg/kg)	MS Result (mg/kg)	MSD Result (mg/kg)	Average Percent Recovery	RPD
Diesel	84.8	ND	61.2	61.6	72.4	0.7

**CURRENT QC LIMITS (Revised 08/15/91)**

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(60.3-106.9)	19.7

MS = Matrix Spike  
MSD = Matrix Spike Duplicate  
RPD = Relative Percent Difference  
ND = Not Detected

DATE ANALYZED: 10/21/91

MED-TOX JOB NO: 9110156

SAMPLE SPIKED: 9110156-01A

INSTRUMENT: H

**MATRIX SPIKE RECOVERY SUMMARY  
METHOD TPHBTS  
5030 w/GCFID/8020**

ANALYTE	Spike Conc. (ug/kg)	Sample Result (ug/kg)	MS Result (ug/kg)	MSD Result (ug/kg)	Average Percent Recovery	RPD
Benzene	23.5	ND	24.5	26.8	109.2	9.0
Toluene	103	1.7	108	119	110.2	9.7
Hydrocarbons as Gasoline	1040	ND	940	983	92.5	4.5

**CURRENT QC LIMITS (Revised 08/15/91)**

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Benzene	(80.0-125.2)	9.6
Toluene	(82.7-119.1)	10.2
Gasoline	(54.0-120.1)	14.8

MS = Matrix Spike  
MSD = Matrix Spike Duplicate  
RPD = Relative Percent Difference  
ND = Not Detected



DOHS CERTIFICATION NO: E772

**CERTIFICATE OF ANALYSIS**

PAGE 1 OF 5

PH7 ENVIRONMENTAL  
18211 BOLLINGER CANYON RD.  
SAN RAMON, CA 94583

REPORT DATE: 11/07/91

DATE SAMPLED: 10/25/91  
DATE RECEIVED: 10/25/91

ATTN: STEVE CLARK

ADDITIONAL ANALYSIS  
REQUESTED: 10/29/91

CLIENT PROJ. ID: 6301 SCARLETT CT.  
DUBLIN

MED-TOX JOB NO: 9110199

ANALYSIS OF: WATER SAMPLES


Sample Identification		Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Oil (mg/L)
Client Id.	Lab No.		
E8690	01A	ND	ND
E8692	03A	ND	ND
Detection Limit		0.05	0.1

Method: 3510 GCFID

Instrument: E

Date Extracted: 11/01/91  
Date Analyzed: 11/01/91

ND = Not Detected

  
Andrew Bradeen, Manager  
Organic Laboratory

Results FAXed 11/05/91

## PH7 ENVIRONMENTAL

CLIENT ID: E8691  
CLIENT PROJ. ID: 6301 SCARLETT CT., DUBLIN  
DATE SAMPLED: 10/25/91  
DATE RECEIVED: 10/25/91  
REPORT DATE: 11/07/91

MED-TOX LAB NO: 9110199-02A  
MED-TOX JOB NO: 9110199  
DATE ANALYZED: 10/28/91  
INSTRUMENT: F

## BTEX AND HYDROCARBONS (WATER MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

Gasoline	ND mg/L	0.05 mg/L
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ND = Not Detected

Note: Two unknown compounds detected (low ppb level).

## PH7 ENVIRONMENTAL

CLIENT ID: E8693  
CLIENT PROJ. ID: 6301 SCARLETT CT., DUBLIN  
DATE SAMPLED: 10/25/91  
DATE RECEIVED: 10/25/91  
REPORT DATE: 11/07/91

MED-TOX LAB NO: 9110199-04A  
MED-TOX JOB NO: 9110199  
DATE ANALYZED: 10/28/91  
INSTRUMENT: F

## BTEX AND HYDROCARBONS (WATER MATRIX)

METHOD: EPA 8020, 5030 GCFID

	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1
PURGEABLE HYDROCARBONS AS:			
Gasoline		ND mg/L	0.05 mg/L

ND = Not Detected

Note: Two unknown compounds detected (low ppb level).



QUALITY CONTROL DATA

PH7 ENVIRONMENTAL

CLIENT PROJECT ID: 6301 SCARLETT CT., DUBLIN

MED-TOX JOB NO: 9110199

DATE EXTRACTED: 11/01/91  
 DATE ANALYZED: 11/01/91  
 CLIENT PROJ. ID: 6301 SCARLETT CT.  
 DUBLIN

MED-TOX JOB NO: 9110199  
 SAMPLE SPIKED: D.I. WATER  
 INSTRUMENT: E

**MATRIX SPIKE RECOVERY SUMMARY  
 TPH EXTRACTABLE WATERS  
 METHOD 3510 GCFID  
 (WATER MATRIX; EXTRACTION METHOD)**

ANALYTE	Spike Conc. (mg/L)	Sample Result (mg/L)	MS Result (mg/L)	MSD Result (mg/L)	Average Percent Recovery	RPD
Diesel	0.636	ND	0.541	0.486	80.7	10.7

**CURRENT QC LIMITS (Revised 08/15/91)**

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(49.3-101.4)	29.0

MS = Matrix Spike  
 MSD = Matrix Spike Duplicate  
 RPD = Relative Percent Difference  
 ND = Not Detected

DATE ANALYZED: 10/28/91

MED-TOX JOB NO: 9110199

SAMPLE SPIKED: 9110199-02A

INSTRUMENT: F

**MATRIX SPIKE RECOVERY SUMMARY**  
**METHOD 5030 w/GCFID/8020**  
**(WATER MATRIX)**

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
Benzene	14.5	ND	15.8	14.7	105.2	7.2
Toluene	61.9	ND	67.5	62.7	105.2	7.4
Hydrocarbons as Gasoline	519	ND	451	492	90.8	8.7

CURRENT QC LIMITS (Revised 08/15/91)

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Benzene	(77.7-118.0)	10.3
Toluene	(80.7-116.2)	10.1
Gasoline	(72.5-110.7)	13.6

MS = Matrix Spike  
MSD = Matrix Spike Duplicate  
RPD = Relative Percent Difference  
ND = Not Detected