

92 NOV 11 11:39

LETTER OF TRANSMITTAL

TO:

Ms. Juliette Shin
Alameda County Health Care Services Agency
Hazardous Materials Division
80 Swan Way, Room #200
Oakland, CA 94621

DATE:

November 2, 1992
College of Alameda

PROJECT

469.006

SCI JOB NUMBER:

WE ARE SENDING YOU:

1 copies

- | | |
|---|--|
| <input checked="" type="checkbox"/> of our final report | <input checked="" type="checkbox"/> if you have any questions, please call |
| <input type="checkbox"/> a draft of our report | <input type="checkbox"/> for your review and comment |
| <input type="checkbox"/> a Service Agreement | <input type="checkbox"/> please return an executed copy |
| <input type="checkbox"/> a proposed scope of services | <input type="checkbox"/> for geotechnical services |
| <input type="checkbox"/> specifications | <input type="checkbox"/> with our comments |
| <input type="checkbox"/> grading/foundation plans | <input type="checkbox"/> with Chain of Custody documents |
| <input type="checkbox"/> soil samples/groundwater samples | <input checked="" type="checkbox"/> for your use |
| <input type="checkbox"/> an executed contract | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

REMARKS: Enclosed is one copy of the following:

- 1) Letter report Quarterly Groundwater Monitoring Event 2,
and 2) Letter report Quarterly Groundwater Monitoring Event
No. 3.

COPIES TO:

BY: Marianne Watada
Marianne Watada

■ Subsurface Consultants, Inc.

August 3, 1992
SCI 469.006

Mr. Robert Mibach
Director, Physical Plant
Peralta Community College District
333 East 8th Avenue
Oakland, California 94606

Quarterly Groundwater Monitoring
Sampling Event 2, June 1992
College of Alameda
555 Atlantic Avenue
Alameda, California

Dear Mr. Mibach:

This letter records the results of the second sampling event for the groundwater monitoring program at the referenced site. The program has been implemented in accordance with Regional Water Quality Control Board and Alameda County Health Care Services Agency (ACHCSA) guidelines due to the presence of petroleum hydrocarbons in the soil beneath previous underground fuel storage tanks.

Additional Development of MW-3

Prior to the second sampling event, additional development of MW-3 was performed. On June 4, 1992, approximately 1.5 gallons of water were removed from the well, before it went dry. The well was bailed dry again on June 9 and June 15, 1992. Approximately 1 gallon of water was removed each time before the well went dry. Temperature, pH, and conductivity measurements were recorded during each development event. Copies of the well development forms are attached.

Groundwater Level Measurements and Sampling

Groundwater level measurements are being obtained monthly, due to the widely fluctuating groundwater level readings. The depth to groundwater is measured in the wells using an electric well sounder. A summary of groundwater elevation data is presented in Table 1. The groundwater flow direction and contours for this event are shown on Plate 1.

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Mr. Robert Mibach
Director, Physical Plant
Peralta Community College District
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Prior to sampling, wells MW-1 and MW-2 were purged by bailing with a disposable bailer. Measurements of the temperature, pH, and conductivity of the purge water from MW-1 and MW-2 are presented on the attached well sampling forms. Since well MW-3 was redeveloped prior to this sampling event, it was not purged.

After wells MW-1 and MW-2 had recharged to within approximately 80 percent of their initial volume, they were sampled using a disposable bailer. Well MW-3 was sampled on the same day as the other wells. Due to the slow rate of recharge MW-3 was not allowed to recharge to within 80% of its initial volume. The samples were retained in glass containers pre-cleaned by the supplier in accordance with EPA protocol. The samples were placed in an ice chest and transmitted to Curtis and Tompkins, LTD, a State of California Department of Health Services certified analytical laboratory.

The testing program for this event included analyses for total volatile hydrocarbons (TVH), total extractable hydrocarbons (TEH), benzene, toluene, ethylbenzene, and xylenes (BTEX), oil and grease, and purgeable halocarbons. The results of all analytical testing events are presented in Table 2. Analytical test reports and Chain-of-Custody forms are attached.

Conclusions

A. Groundwater Flow Direction and Gradient

Based on the available data it appears that the groundwater flow direction is toward the southeast under a gradient of about 1 to 2%. However, we believe this data to be inconsistent with the general hydrology of the area which would suggest that the flow direction is toward the harbor channel (i.e. northerly) at a relatively flat gradient. We judge that the inconsistency is primarily due to varying subsurface conditions and well construction details. Well MW-3 was screened entirely within low permeability clayey soils, whereas wells MW-1 and MW-2 are screened through both permeable sandy soils and impermeable clayey soils. Another construction difference is that MW-2 and MW-3 are situated in paved areas and MW-1 is in a landscaped area. These factors appear to be influencing the reliability of the data leading us to suspect that to date we have not observed stabilized water levels. We recommend that water level data continue to be measured on a monthly basis.

Mr. Robert Mibach
Director, Physical Plant
Peralta Community College District
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B. Petroleum Hydrocarbon Concentrations

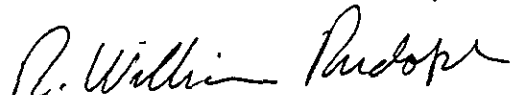
The analytical results indicate that no detectable concentrations of gasoline, nor its constituents are present in the groundwater at well location MW-2, near the previous gasoline tank. Extractable hydrocarbons were detected in the groundwater samples obtained near the former fuel oil tank and the former waste oil tank areas.

In accordance with the monitoring program, the next sampling event will be conducted during the month of September 1992.

If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



R. William Rudolph
Geotechnical Engineer 741 (expires 12/31/92)

MFW:JNA:RWR:sld

2 copies submitted

Attachments: Table 1 - Groundwater Elevations
 Table 2 - Summary of Analytical Test Results
 Plate 1 Study Area Plan
 Analytical Test Report
 Chain-of-Custody Form
 Well Development Forms
 Well Sampling Forms

Table 1.
Groundwater Elevations

<u>Well</u>	<u>TOC¹ Elevation</u>	<u>Date</u>	<u>Groundwater Depth² (feet)</u>	<u>Groundwater Elevation (feet)</u>
MW-1	100.72	2/24/92	1.64	92.68
		3/09/92	4.28	96.44
		3/24/92	4.33	96.39
		4/28/92	4.54	96.18
		6/29/92	5.92	94.80
		7/27/92	5.74	94.98
MW-2	99.54	2/24/92	4.45	95.09
		3/09/92	3.70	95.84
		3/24/92	3.73	95.81
		4/28/92	4.25	95.29
		6/29/92	4.40	95.14
		7/27/92	4.00	95.54
MW-3	101.19	2/24/92	13.12	88.07
		3/09/92	8.75	92.44
		3/24/92	6.87	94.32
		4/28/92	6.31	94.88
		6/04/92	7.10	94.09
		6/29/92	10.78	90.41
		7/27/92	6.88	94.31

¹ TOC = Top of Casing elevation relative to an assumed project datum.
² Measured below TOC

Table 2.
Contaminant Concentrations in Groundwater

Tank Area	Sampling Date	TVH ¹ (ug/l) ⁴	TEH ²		TOG ³ (mg/l) ⁵	Benzene (ug/l)	Toluene (ug/l)	Ethyl- Benzene (ug/l)	Total Xylenes (ug/l)	EPA 8010 Chemicals
			Kerosene Range (ug/l)	Diesel Range (ug/l)						
Fuel Oil MW-1	2/19/92	-- ⁶	<50	94	--	<0.5	<0.5	<0.5	<0.5	--
	6/29/92	--	<50	110	--	<0.5	<0.5	<0.5	<0.5	--
Gasoline MW-2	2/19/92	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	--
	6/29/92	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	--
Waste Oil MW-3	2/19/92	<5000 ⁷	680	<50	<5	<50	<50	<50	84	ND ⁸
	6/29/92	<50	*	190	<5	<0.5	<0.5	<0.5	<0.5	ND

1 Total volatile hydrocarbons as gasoline, EPA 8015/5030 modified

2 Total extractable hydrocarbons, EPA 3550/8015 modified

3 Total oil and grease, EPA 3550 and SMWW 17:5520 E&F

4 Micrograms per liter or parts per billion (ppb)






5 Milligrams per liter or parts per million (ppm)

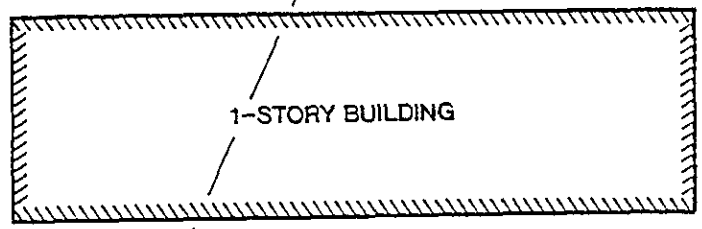
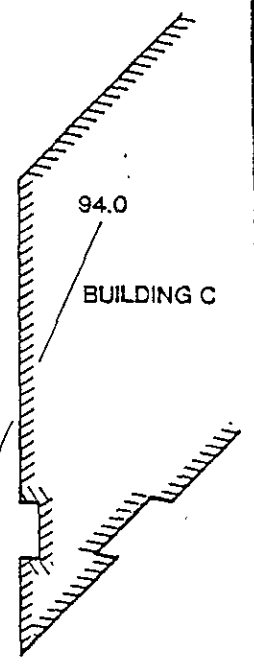
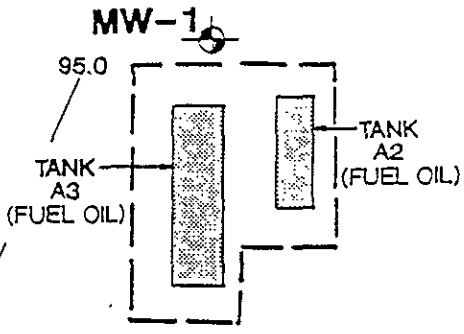
6 Test not requested

7 Sample diluted due to foaming during purge and trap extraction

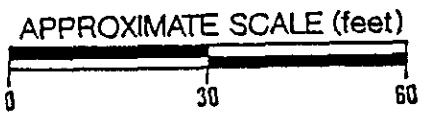
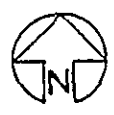
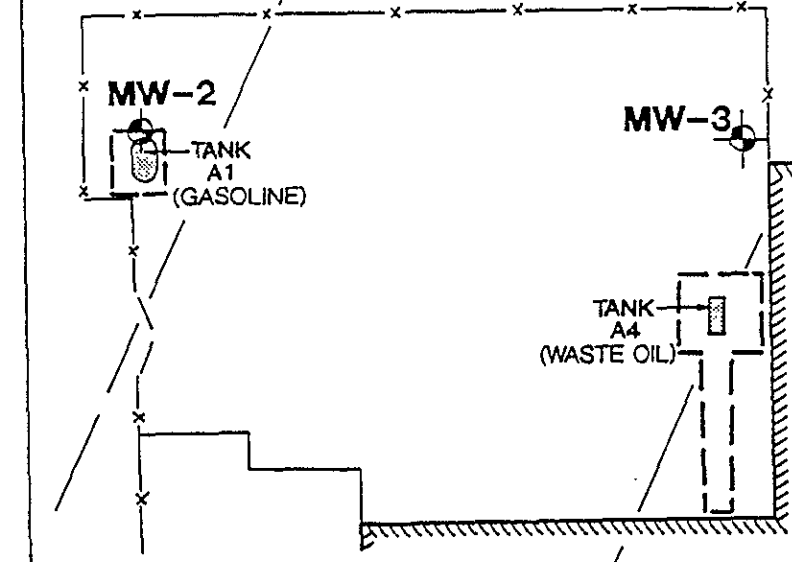
8 Not detected at or above reporting limits. Reporting limits vary from 1.0 to 20 ug/l. See test reports for individual reporting limits.

* Quantitated as diesel *What concentration?*

 MONITORING WELL
 LIMITS OF PREVIOUS EXCAVATION
 FORMER TANK LOCATION
 REFERENCE ELEVATION: TOP OF CURB AT FIRE HYDRANT. ASSUMED TO BE 100 FEET
 94.0 GROUNDWATER ELEVATION CONTOUR 6/92



DIRECTION OF GROUNDWATER FLOW

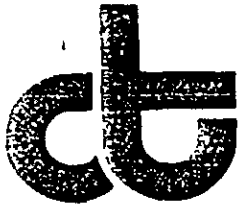


STUDY AREA PLAN

Subsurface Consultants

COLLEGE OF ALAMEDA - ALAMEDA, CA		
JOB NUMBER	DATE	APPROVED
469.006	7/14/92	MW

PLATE
1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 06/29/92
DATE REPORTED: 07/07/92

LABORATORY NUMBER: 107807

CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 469.006

LOCATION: COLLEGE OF ALAMEDA

RESULTS: SEE ATTACHED

Reviewed By

Reviewed By

Berkeley

Wilmington

Los Angeles

LABORATORY NUMBER: 107807
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 469.006
 LOCATION: COLLEGE OF ALAMEDA

DATE SAMPLED: 06/29/92
 DATE RECEIVED: 06/29/92
 DATE ANALYZED: 07/02/92
 DATE REPORTED: 07/07/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
107807-2	MW-2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
107807-3	MW-3	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit
 indicated in parentheses.

QA/QC SUMMARY

RPD, % 4
 RECOVERY, % 106

LABORATORY NUMBER: 107807
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 469.006
 LOCATION: COLLEGE OF ALAMEDA

DATE SAMPLED: 06/29/92
 DATE RECEIVED: 06/29/92
 DATE ANALYZED: 07/02/92
 DATE REPORTED: 07/07/92

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020
 Extraction by EPA 5030 Purge and Trap

LAB ID	CLIENT ID	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)	REPORTING LIMIT * (ug/L)
107807-1	MW-1	ND	ND	ND	ND	0.5

ND = Not detected at or above reporting limit.

* Reporting Limit applies to all analytes.

QA/QC SUMMARY

RPD, %	4
RECOVERY, %	98

LABORATORY NUMBER: 107807-3
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 469.006
 LOCATION: COLLEGE OF ALAMEDA
 SAMPLE ID: MW-3

DATE SAMPLED: 06/29/92
 DATE RECEIVED: 06/29/92
 DATE ANALYZED: 07/02/92
 DATE REPORTED: 07/07/92

EPA 8010
 Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	ND	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethylene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	1
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

=====

Surrogate Recovery, %

=====

103

LABORATORY NUMBER: 107807
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 469.006
 LOCATION: COLLEGE OF ALAMEDA
 SAMPLE ID: METHOD BLANK

DATE ANALYZED: 07/02/92
 DATE REPORTED: 07/07/92

EPA 8010
 Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2
Bromomethane	ND	2
Vinyl chloride	ND	2
Chloroethane	ND	2
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
Chloroform	ND	1
Freon 113	ND	1
1,2-Dichloroethane	ND	1
1,1,1-Trichloroethane	ND	1
Carbon tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
cis-1,3-Dichloropropene	ND	1
Trichloroethylene	ND	1
1,1,2-Trichloroethane	ND	1
trans-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
2-Chloroethylvinyl ether	ND	2
Bromoform	ND	1
Tetrachloroethene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

Surrogate Recovery, %	100
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LABORATORY NUMBER: 107807
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 469.006
 LOCATION: COLLEGE OF ALAMEDA

DATE SAMPLED: 06/29/92
 DATE RECEIVED: 06/29/92
 DATE EXTRACTED: 07/01/92
 DATE ANALYZED: 07/04/92
 DATE REPORTED: 07/07/92

Extractable Petroleum Hydrocarbons in Aqueous Solutions
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
107807-1	MW-1	ND	110	50
107807-3	MW-3	**	190	50

ND = Not detected at or above reporting limit.

*Reporting limit applies to all analytes.

**Quantitated as diesel.

QA/QC SUMMARY

=====
 RPD, % 3
 RECOVERY, % 95
 =====

Client: Subsurface Consultants

Laboratory Login Number: 107807

 Project Name: College of Alameda
 Project Number: 469.006

Report Date: 07 July 92

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
107807-003	MW-3	Water	29-JUN-92	29-JUN-92	30-JUN-92	ND	mg/L	5	TR	5771

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

Client: Subsurface Consultants
 Project Name: College of Alameda
 Project Number: 469.006

Laboratory Login Number: 107807
 Report Date: 07 July 92

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 5771

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	30-JUN-92

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	84%	SMWW 17:5520BF	30-JUN-92
BSD	88%	SMWW 17:5520BF	30-JUN-92

		Control Limits
Average Spike Recovery	86%	80% - 120%
Relative Percent Difference	4.8%	< 20%

CHAIN OF CUSTODY FORM

PROJECT NAME: College of Alameda
 JOB NUMBER: 469,006 LAB: Curtis Tompkins
 PROJECT CONTACT: Marianne Watada TURNAROUND: normal
 SAMPLED BY: Jose Bermudez REQUESTED BY: M. Watada

ANALYSIS REQUESTED									

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES				
		WATER	SOIL	WASTE	AIR	N	VOA	N	LITER	PINT	TUBE	HCL	H2SO4	HNO3	ICE	NONE	MONTH	DAY		YEAR	TIME		
107807-1	MW-1	X				N	VOA	N	LITER				X			X			06	29	12		
	MW-2	X				N	VOA	N	LITER				X			X							
	MW-3	X				N	VOA	N	LITER				X		X	X							

COMMENTS & NOTES:

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>[Signature]</i>	12/1/15 5:58		
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
		<i>[Signature]</i>	12/2/15 5:58

WELL DEVELOPMENT FORM

Project Name: College of Alameda Well Number: MW-3
 Project Number: 469 002 Well Casing Diameter: 2 inches
 Developed By: JR Date: 6/10/72
 TOC Elevation: 101.19 Weather: Sunny
 Depth to Casing Bottom (below TOC) 15 feet
 Depth to Groundwater (below TOC) 7.10 feet
 Feet of water in Well 1.2 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 3 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder/ Other
 Development Method Hand Pumping

FIELD MEASUREMENTS

<u>Gallons Removed</u>	<u>pH</u>	<u>Temp (°C)</u>	<u>Conductivity (micromhos/cm)</u>	<u>Comments</u>
<u>.5</u>	<u>6.71</u>	<u>19.4</u>	<u>390 X 100</u>	<u>STONES</u>
<u>1</u>	<u>6.72</u>	<u>18.9</u>	<u>430 X 100</u>	
<u>1.5</u>	<u>6.74</u>	<u>19.4</u>	<u>440 X 100</u>	
<u>Well bailed dry</u>				
<u>Total Gallons Removed</u>				<u>gallons</u>
<u>Depth to Groundwater After Development (below TOC)</u>				<u>feet</u>

WELL DEVELOPMENT FORM

Project Name: College of Palms Well Number: 3
 Project Number: 229-2010 Well Casing Diameter: 2 inches
 Developed By: J. B. Smith Date: 6/9/72
 TOC Elevation: 101.19 Weather: SUNNY
 Depth to Casing Bottom (below TOC) 15 feet
 Depth to Groundwater (below TOC) 11.79 feet
 Feet of water in Well 7.21 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) .5 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder/ Other
 Development Method Displacement

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°C)	Conductivity (micromhos/cm)	Comments
<u>.5</u>	<u>6.91</u>	<u>19.2</u>	<u>400 x 100</u>	
<u>1</u>	<u>6.91</u>	<u>19.2</u>	<u>400 x 100</u>	
<u>Well failed dry</u>				

Total Gallons Removed 1 gallons
 Depth to Groundwater After Development (below TOC) _____ feet

WELL DEVELOPMENT FORM

Project Name: College of Alameda Well Number: 3
 Project Number: 469.006 Well Casing Diameter: 2 inches
 Developed By: J. Bermudez Date: 6/15/92
 TOC Elevation: 101.19 Weather: _____

Depth to Casing Bottom (below TOC) 15 feet
 Depth to Groundwater (below TOC) 12.20 feet
 Feet of Water in Well 3.7 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) .5 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder/ Other _____
 Development Method diaphragm bailer

FIELD MEASUREMENTS

<u>Gallons Removed</u>	<u>pH</u>	<u>Temp (°C)</u>	<u>Conductivity (micromhos/cm)</u>	<u>Comments</u>
<u>.5</u>	<u>6.81</u>	<u>17.9</u>	<u>320 x 100</u>	
<u>1</u>	<u>6.88</u>	<u>17.5</u>	<u>340 x 100</u>	
<u>Well bailed dry</u>				

Total Gallons Removed 1 gallons
 Depth to Groundwater After Development (below TOC) _____ feet

WELL SAMPLING FORM

Project Name: College of LAHORE Well Number: 1
 Project Number: 230.006 Well Casing Diameter: 2 inch
 Sampled By: J. BERNUNDEZ Date: 6/20/92
 TOC Elevation: 100.72 Weather: _____

Depth to Casing Bottom (below TOC) 12 feet
 Depth to Groundwater (below TOC) 5.92 feet
 Feet of Water in Well 6.08 feet
 Depth to Groundwater When 80 % Recovered 7.2 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 1 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder/ Other
 Free Product _____
 Purge Method disposable bailer

FIELD MEASUREMENTS

<u>Gallons Removed</u>	<u>pH</u>	<u>Temp (°C)</u>	<u>Conductivity (micromhos/cm)</u>	<u>Comments</u>
<u>2</u>	<u>6.53</u>	<u>19.6</u>	<u>140 x 100</u>	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Total Gallons Purged 2 gallons
 Depth to Groundwater Before Sampling (below TOC) 8.60 feet
 Sampling Method disposable bailer
 Containers Used 2 40 ml 2 liter _____ pint

WELL SAMPLING FORM

Project Name: College of ALAMEDA Well Number: 2
 Project Number: 469.006 Well Casing Diameter: 2 inch
 Sampled By: J. Bermudez Date: 6/29/92
 TOC Elevation: 99.54 Weather: _____

Depth to Casing Bottom (below TOC) 14' 5" feet
 Depth to Groundwater (below TOC) 4.40 feet
 Feet of Water in Well 10 feet
 Depth to Groundwater When 80 % Recovered 6.4 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 1.6 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder Other _____
 Free Product _____
 Purge Method disposable bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°C)	Conductivity (micromhos/cm)	Comments
<u>2</u>	<u>6.73</u>	<u>23.7</u>	<u>60 x 100</u>	_____
<u>4</u>	<u>6.77</u>	<u>23.1</u>	<u>50 x 100</u>	_____
<u>6</u>	<u>6.75</u>	<u>23.1</u>	<u>50 x 100</u>	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Total Gallons Purged 6 gallons
 Depth to Groundwater Before Sampling (below TOC) 4.71 feet
 Sampling Method disposable bailer
 Containers Used 3 _____ liter _____ pint
 40 ml

WELL SAMPLING FORM

Project Name: College of Alameda Well Number: 3
 Project Number: 468006 Well Casing Diameter: 2 inch
 Sampled By: [Signature] Date: 6/29/92
 TOC Elevation: 101.9 Weather: _____

Depth to Casing Bottom (below TOC) 14.11 feet
 Depth to Groundwater (below TOC) 10.78 feet
 Feet of Water in Well _____ feet
 Depth to Groundwater When 80 % Recovered _____ feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 17 gallons
 Depth Measurement Method Tape & Paste/ Elect. Sounder/ Other
 Free Product _____
 Purge Method disposable bailer

FIELD MEASUREMENTS

<u>Gallons Removed</u>	<u>pH</u>	<u>Temp (°C)</u>	<u>Conductivity (micromhos/cm)</u>	<u>Comments</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Total Gallons Purged _____ gallons
 Depth to Groundwater Before Sampling (below TOC) 10.78 feet
 Sampling Method disposable bailer
 Containers Used 4 3 _____
 40 ml liter pint