



MAR 1995

**GROUNDWATER WELL  
MONITORING REPORT**

**For Dolsby Incorporated  
124 Hegenburger Loop  
Oakland, California**

Prepared For:

Mr. Verly Dolsby  
Dolsby Inc.  
124 Hegenburger Loop  
Oakland, CA 94621

Prepared by:

Sequoia Environmental Consulting Services

Sequoia Project Code DOBY-01  
March 21, 1995

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## 1.0 INTRODUCTION

Mr. Verly Dolsby contracted Sequoia Environmental Consulting Services to; 1). review reports on previous environmental activities performed at the subject site and 2). perform the monitoring and sampling of three groundwater monitoring wells (MW-1, MW-3 and MW-3). The monitoring wells are located at the subject site, 124 Hegenburger Loop in Oakland, California, (see Figure 1). The purpose of the groundwater monitoring is to determine the quality of groundwater since the last monitoring of the wells when chrome plating activities were abandonment at the subject site in 1988. The monitoring activity is in response to the directives issued by the Alameda County Department of Environmental Health towards site clean-up and eventual site closure.

## 2.0 SITE BACKGROUND

The subject property lies in a light commercial/residential area of the city of Oakland (see Figure 1). It is situated at approximately 200 feet north of the San Leandro Creek, which empties into the San Leandro Bay. There is a single story commercial building on the subject property. Inside the building are three below ground surface containment pits used for plating activities. The containment pits have concrete walls and bottoms. However, concrete bottom of the largest pit was removed when leakage was observed. The largest pit measures approximately 6 feet deep, 15 feet wide and 50 feet long. No business activities are being performed at the subject site. Previous business activity at the subject property was chrome plating.

Previous environmental work performed at the subject site included the subsurface investigation by International Technology Environmental Services (ITES) and preliminary site assessment by Roy F. Weston, Inc., (WESTON).

During the subsurface investigation ITES drilled 24 soil borings and completed three of the borings as monitoring wells. Soil and groundwater samples were collected during the investigation. The samples were analyzed for chromium using EPA 6010. Laboratory results showed that the soil samples collected from the northeast section of the largest plating pit had detectable levels of chromium and the groundwater samples were non-detect. See Appendix A for ITES sampling locations.

The U.S. Environmental Protection Agency (EPA), Region IX Site Evaluation Section (SES), under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) contracted WESTON to conduct a Preliminary Assessment (PA) of Dolsby Hard Chrome. The purpose of the PA was to determine; 1) the presence or absence of site characteristics that

may pose threat to public health or the environment and 2) if further investigation under CERCLA/SARA is warranted. During the preliminary assessment, WESTON used the Hazardous Ranking System (HRS) outlined in CERCLA and SARA to accurately assess the relative degree of risk posed to human health and the environment by the hazardous waste at the subject site. The PA will also determine subject site's eligibility for the National Priorities List (NPL). Four exposure pathways, representing means by which hazardous substances may pose a threat to human health or the environment were identified. The pathways are three migration pathways (groundwater, surface water and air) and one exposure pathway (soil).

The conclusions of the preliminary assessment are listed below.

There is an observed release of soluble trivalent and hexavalent chromium via the groundwater pathway based on analytical groundwater results.

The surface water pathway was evaluated based upon the potential for release of hazardous materials. However, the contamination source is entirely covered by a metal and cinderblock building and completely protected from surface runoff.

There is an observed release of soluble trivalent and hexavalent chromium via the soil exposure pathway. However, the threat is minimal due to restricted access to the site.

The air pathway was not evaluated because no odors or visible evidence was detected during the site assessment.

There is a relatively low target population for all four pathways

On the basis of no immediate danger to humans and the environment, the case file was deferred to the local agency.

#### **Other Activities Performed At the Subject Site**

Other activities performed at the subject site was by the property owner, Mr. Dolsby. Mr. Dolsby has finally stopped all plating activities. Most of the chrome plating equipment at the subject site has been disassembled and sold to other businesses. To clean-up the soil impacted with soluble chromium, Mr. Dolsby performed excavation of the contaminated sections of the largest plating pit. The excavation was as a result of the plating mixture leaking through the concrete bottom and into the subsurface. The excavated soils were hauled to an appropriate disposal site. For more than one year, Mr. Dolsby has been chemically treating the dissolved chromium in the largest plating pit. The treatment process involved the addition of liquid sodium bisulfite to the water in

the pit. The sodium bisulfite reacts with toxic hexavalent chromium (Cr 1V) to produce non-toxic trivalent chromium (Cr 111). During the remedial activities, Mr. Dolsby observed that the groundwater in the pit was influenced by the tidal cycles of the San Francisco Bay. The groundwater samples collected during the remedial activities were sent to state-certified Precision Analytical Laboratory in Richmond. The laboratory results showed that the samples contained detectable levels of chromium. Laboratory results of the last reported sampling activities, of December 19 to 23, 1994, showed that the water samples contained detectable levels of total chromium and were non-detect for hexavalent chromium.

### **3.0 GEOLOGY/HYDROGEOLOGY**

Oakland is located in the San Francisco Bay Region of the Coast Ranges Geomorphic Province of California. The area is underlain by a thick sequence of unconsolidated Pleistocene deposits that included Older Alluvium. The Older Alluvium consists of poorly consolidated to unconsolidated clay, silt, sand and gravel.

The major groundwater producing area is called the East Bay Plain. The subject site area is located in the San Leandro Alluvial Cone Subarea of the East Bay Plain. Groundwater in the Alluvial Cone occurs in aquifers consisting of discontinuous layers and lenses of sand and gravel. The aquifers may be confined or unconfined. Potable water to Oakland is from surface intakes in the Pardee Reservoir located in the Sierra Nevada Foothills.

The nearest surface water to the subject property is the San Leandro Creek, which empties in to the San Leandro Bay. The surface water in the subject site area is classified as coastal tidal water. The water is subject to high dilution factor and is not likely to constitute any hazard to the sensitive environments. The depth to groundwater fluctuates from approximately 5 feet to 7 feet below ground surface and it is subject to tidal influences of the San Francisco Bay. The assumed groundwater flow direction is northwest. Surface elevation at the subject property area is approximately 20 feet above Mean Sea Level.

### **4.0 GROUNDWATER MONITORING PROCEDURE**

Three monitoring wells (MW-1, MW-2 and MW-3) are located on the subject site. The wells are constructed of 2-inches diameter PVC casings. On March 3, 1994, Sequoia Environmental personnel gauged the wells. The wells were gauged with an interphase probe (IP) to determine the depth to groundwater and any possible free product. The depths to groundwater were 5.20 feet, 6.00 feet and 5.38 feet below ground surface for MW-1, MW-2 and MW-3 respectively. Free product was not detected. Prior to gauging the well, the IP was washed in non-

phosphate solution and double rinsed in water and distilled water. After gauging, the well was purged with an electric pump fitted with a disposable plastic hose. The pump has a capacity of 2 to 3-gallons per minute. During purging, the well water was periodically measured with pH, conductivity, temperature and turbidity meters. The well water was also observed for any physical characteristics. The well water was clear and had no odor. The wells were purged dry.

The monitoring wells were allowed to recharge to approximately 90% of their initial volumes. Prior to collecting groundwater samples, the wells were gauged with an IP to determine the depth to ground water and the level of recharge. The depths to groundwater were 4.90 feet, 5.90 feet and 5.24 feet for MW-1, MW-2 and MW-3 respectively. The depths to bottom of the wells were also determined to be 15.00 feet below ground surface. The groundwater samples were collected with disposable bailers and put into plastic jars.

To evaluate the effect of past treatment activities performed, groundwater samples from different locations of the largest plating pit were collected and composited as one sample (VS).

All the samples were placed on ice while awaiting transportation to state-certified American Environmental Network (AEN) of Pleasant Hill, California.

## **5.0 LABORATORY ANALYSES AND RESULTS**

The groundwater samples were analyzed for pH, total chrome and dissolved chrome by AEN using appropriate EPA methods. Laboratory results are listed below.

### **MW-1**

The laboratory results for monitoring well, MW-1 showed that pH was 6.9  
Total chrome was 0.03 ppm.  
Dissolved chrome was non-detect. ✓

### **MW-2**

The laboratory results for monitoring well, MW-2 showed that pH was 6.8  
Total chrome was 0.03 ppm.  
Dissolved chrome was 0.01 ppm.

### **MW-3**

The laboratory results for monitoring, MW-3 showed that pH was 6.9.  
Total chrome was 0.01 ppm.

Dissolved chrome was non-detect.

### **Plating Pit (VS)**

The laboratory results for plating pit sample, VS showed that pH was 3.6.  
Total chromium was 1.3 ppm.  
Dissolved chromium was 0.62.

The detection limit for the total chrome and dissolved chrome was 0.01 ppm.  
Detailed laboratory results and chain of custody are contained Appendix B.

## **6.0 GROUNDWATER FLOW DIRECTION**

The groundwater flow movement was determined using the method contained in the United States Geological Survey Water-Supply Paper 2220, 1991. The method is listed below (see Figure 2).

1. Identify the well that has the intermediate water level.
2. Calculate the position between the well having the highest head and the well having the lowest head at which the head is the same as that in the intermediate well.
3. Draw a straight line between the intermediate well and the point identified in step 2 as being between the well head. This line represents a segment of the water-level contour along which the total head is the same as that in the intermediate well.
4. Draw a line perpendicular to the water-level contour and through either the well with the highest head or the well with the lowest head. This line is parallels the direction of groundwater movement. The groundwater flow direction is northwest.

## **7.0 CONCLUSIONS**

Current field observations and analytical results show that the initial detectable levels of chromium have reduced. The analytical results also showed that the groundwater samples from MW-1, MW-2 and MW-3 were neutral (pH 6.8 to 6.9) and the dissolved chromium in the largest plating pit has not migrated beyond the containment. The acidity of the water in the largest pit (pH 3.6) is due to the treatment process.

## 8.0 RECOMMENDATIONS

To effectively reduce the level of chromium in the soil at the northeast corner of the largest plating pit and any other part of the pit to an acceptable level, Sequoia Environmental makes the following recommendations.

The chromium impacted soil should be excavated and haul to an appropriate disposal site. During excavation, the soil will be tested for the presence or absence of chromium above background levels. The resulting pit should be backfilled with clean fill.

The groundwater from the largest plating pit may be pumped into a chamber and treated to reduce the level of chromium to an acceptable level. With appropriate permit, the treated water may be discharged into the storm drain. The groundwater at the subject site area is classified as coastal tidal water.

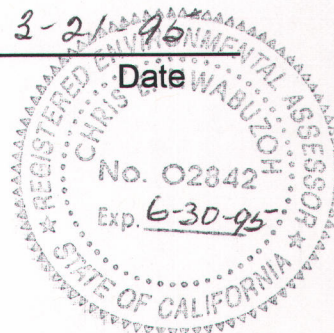
Confirmatory soil and groundwater samples will be collected at the end of the clean-up process. At the completion of the laboratory analyses, a final site closure report will be compiled for the Division of Hazardous Materials of the Alameda County Environmental Health Agency. The report will contain all field activities performed, observation and laboratory results.

## 9.0 PROFESSIONAL SIGNATURE

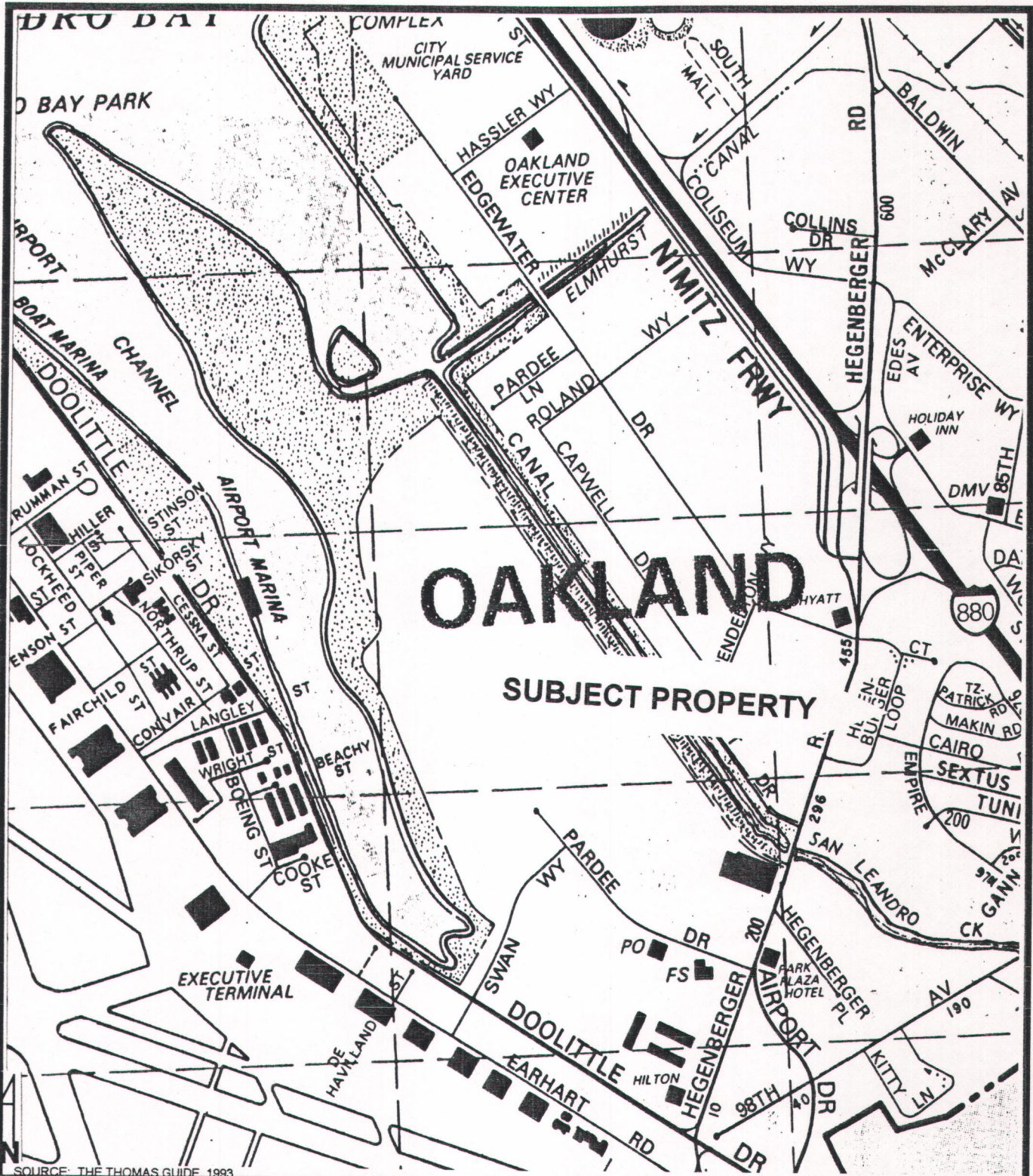
The following professional hereby declares that this report accurately represents a summary of the past environmental activities performed at the subject site and the monitoring of groundwater wells located at 124 Hegenburger Loop in Oakland, California, completed by Sequoia Environmental Consulting Services on March 21, 1995.

*Chris Wabuzoh*

Chris 'Wabuzoh  
Senior Geologist  
Registered Environmental Assessor (CA #02842)







SOURCE: THE THOMAS GUIDE 1993

**FIGURE 1**

**MAP TYPE:** SITE MAP

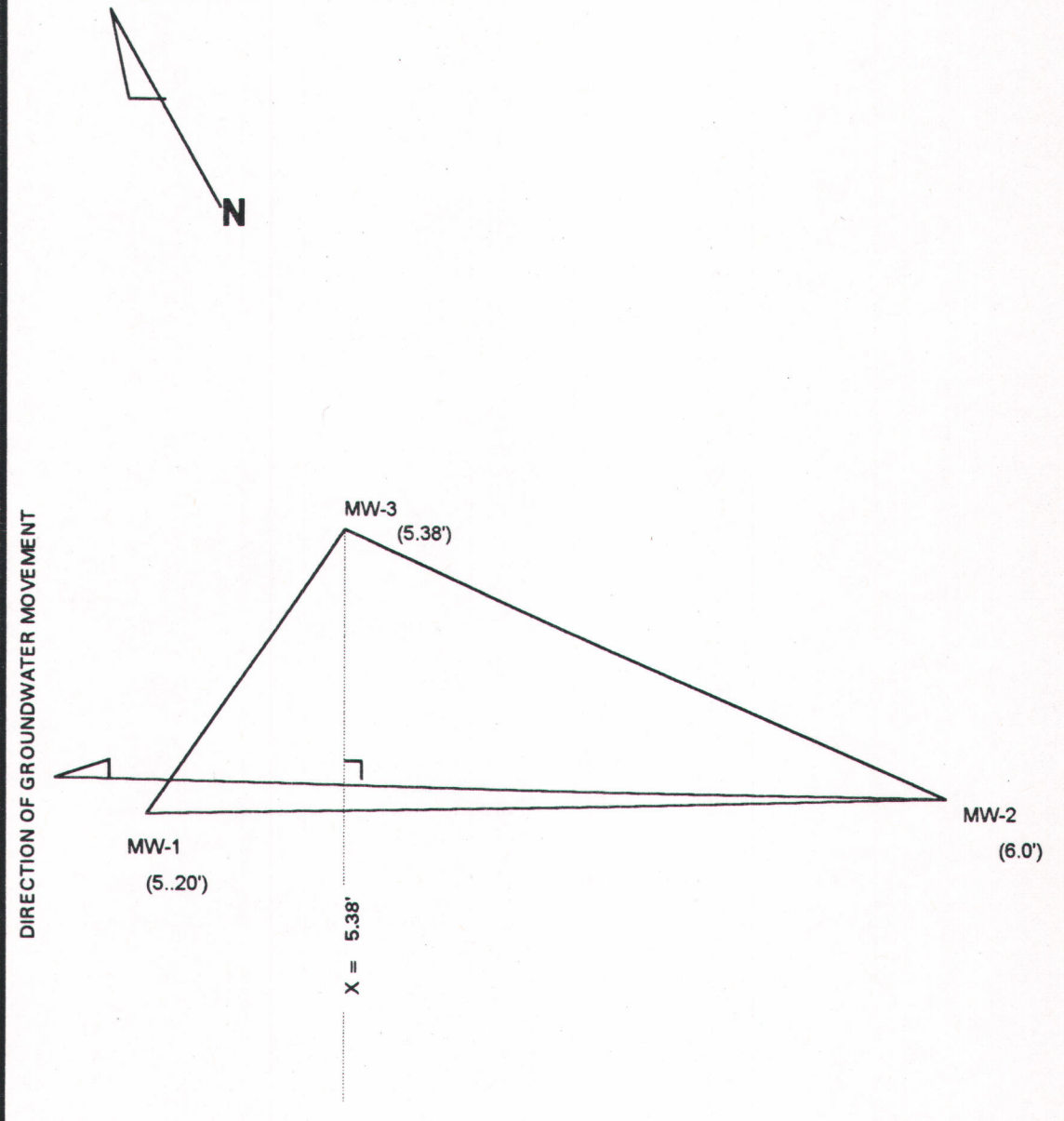
**SITE ADDRESS:** DOLSBY INC., 124 HEGENBURGER LOOP, OAKLAND, CALIFORNIA

**DATE:** MARCH 21, 1995

**PROJECT CODE:** SE-043/DOBY-01

**SCALE:** 1' : 2,200'

**SEQUOIA ENVIRONMENTAL CONSULTING SERVICES** (510) 614-1900  
SAN LEANDRO, CA



**FIGURE 2**

**MAP TYPE:** SITE PLAN (DIRECTION OF GROUNDWATER MOVEMENT)

**SITE ADDRESS:** DOLSBY INC., 124 HEGENBURGER LOOP, OAKLAND, CALIFORNIA

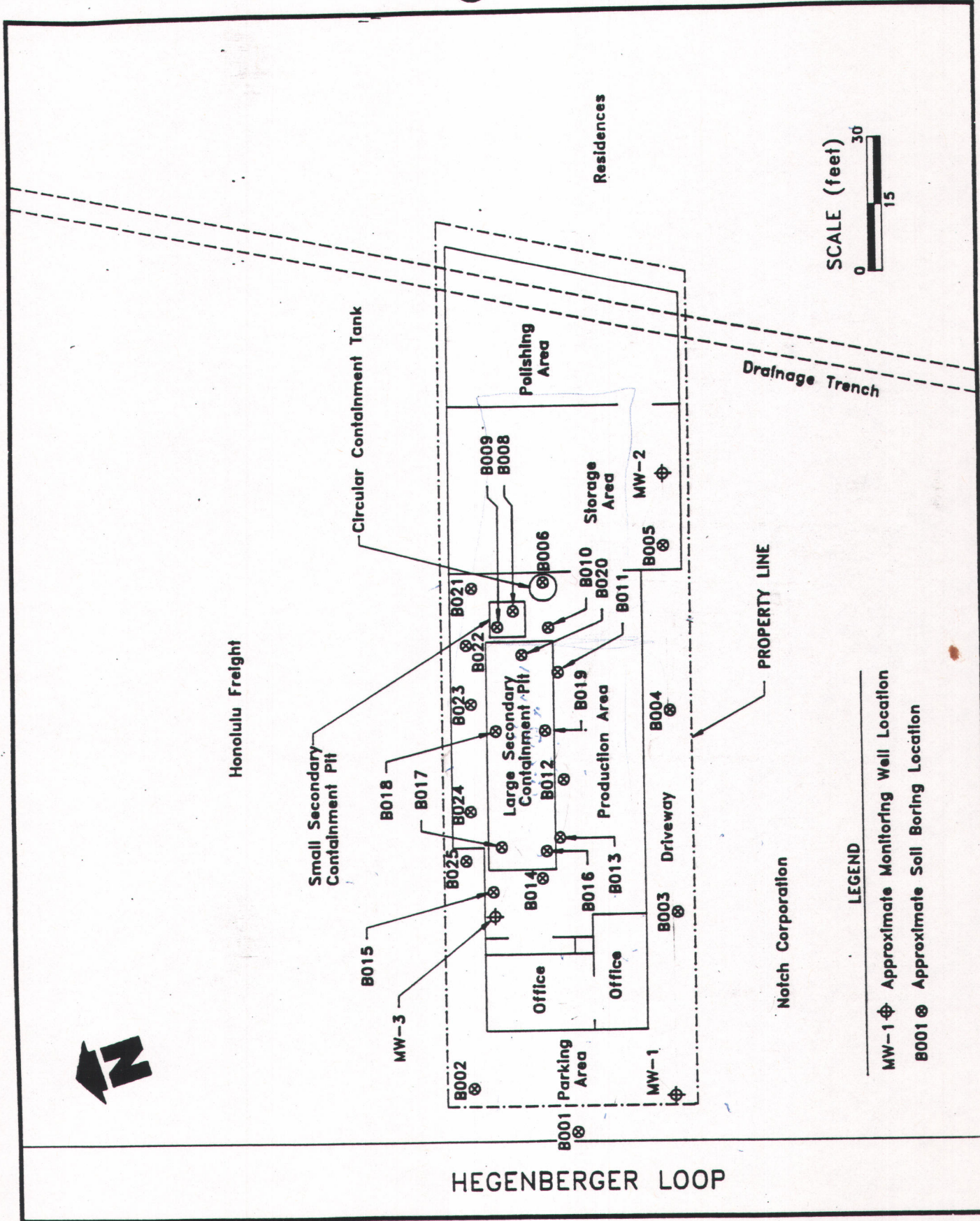
**DATE:** MARCH 21, 1995

**PROJECT CODE:** SE-043/DOBY-01

**SCALE:** 1' : 30'

**SEQUOIA ENVIRONMENTAL CONSULTING SERVICES**

(510) 614 - 1900  
SAN LEANDRO, CA



ITES SAMPLING LOCATIONS  
DOLSBY HARD CHROME, OAKLAND, CALIFORNIA  
FIGURE 3

## SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-1  
AEN LAB NO: 9503059-01A  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	03/02/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	ND	0.01	mg/L	03/07/95

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-1  
AEN LAB NO: 9503059-01B  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	0.03 *	0.01	mg/L	03/07/95

---

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-1  
AEN LAB NO: 9503059-01C  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
pH	EPA 9040	6.9		S.U.	03/02/95

---

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-2  
 AEN LAB NO: 9503059-02A  
 AEN WORK ORDER: 9503059  
 CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
 DATE RECEIVED: 03/02/95  
 REPORT DATE: 03/20/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	03/02/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	ND	0.01	mg/L	03/07/95

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-2  
 AEN LAB NO: 9503059-02B  
 AEN WORK ORDER: 9503059  
 CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
 DATE RECEIVED: 03/02/95  
 REPORT DATE: 03/20/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	0.03 *	0.01	mg/L	03/08/95

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit



SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-2  
AEN LAB NO: 9503059-02C  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
pH	EPA 9040	6.8		S.U.	03/02/95

---

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

## SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-3  
AEN LAB NO: 9503059-03A  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	03/02/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	ND	0.01	mg/L	03/08/95

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-3  
 AEN LAB NO: 9503059-03B  
 AEN WORK ORDER: 9503059  
 CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
 DATE RECEIVED: 03/02/95  
 REPORT DATE: 03/20/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	0.01 *	0.01	mg/L	03/08/95

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: MW-3  
AEN LAB NO: 9503059-03C  
AEN WORK ORDER: 9503059  
CLIENT PROJ. ID: DOLBY-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/20/95

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
pH	EPA 9040	6.9		S.U.	03/02/95

---

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9503059

CLIENT PROJECT ID: DOLBY-01

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

## QUALITY CONTROL DATA

AEN JOB NO: 9503059  
DATE ANALYZED: 03/07/95  
MATRIX: WATER

## Method Spike Recovery Summary

Analyte	Inst./ Method	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
					Percent Recovery	RPD
Cr, Chromium	ICP/6010	0.10	95	3	87-117	7

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

\*\*\* END OF REPORT \*\*\*

Reporting Information:

1. Client: Sageator Environmental  
 Address: 1111 Piedmont Ave., Ste 8  
San Leandro, CA 94577  
 Contact: Chris Kibuzok  
 Alt. Contact: \_\_\_\_\_

American Environmental Network  
 3440 Vincent Road, Pleasant Hill, CA 94523  
 Phone (510) 930-9090  
 FAX (510) 930-0256



REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

9503059

Address Report To:

2. Same As #1

Send Invoice To:

3. Same As #1

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: BoLBY Client Project I.D. No.: BoLBY-01

Sample Team Member (s) \_\_\_\_\_

Lab Job Number: \_\_\_\_\_  
 Lab Destination: \_\_\_\_\_  
 Date Samples Shipped: \_\_\_\_\_  
 Lab Contact: \_\_\_\_\_  
 Date Results Required: Standard TAT  
 Date Report Required: \_\_\_\_\_  
 Client Phone No.: \_\_\_\_\_  
 Client FAX No.: \_\_\_\_\_

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	Received by: (Signature)	DATE	TIME	Comments / Hazards
<del>DAW-1</del>	MW-1		3-2-95	Latex		2		<u>Subside Cr.</u>			<u>01A-C</u>
<del>DAW-2</del>	MW-2		3-2-95	Latex		2		<u>Total Cr.</u>			<u>024-C</u>
<del>DAW-3</del>	MW-3		3-2-95	Latex		2		<u>PH</u>			<u>03A-C</u>
Relinquished by: <u>Chris Kibuzok</u> DATE <u>3-2-95</u> TIME <u>1705</u> Received by: _____ DATE _____ TIME _____ Relinquished by: _____ DATE _____ TIME _____ Received by: _____ DATE _____ TIME _____ Method of Shipment: _____ Received by: <u>Dave Starvington</u> DATE <u>3/2/95</u> TIME <u>1705</u>											

\*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter  
 4) PVC filter, diam. \_\_\_\_\_ pore size \_\_\_\_\_ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample  
 10) Other \_\_\_\_\_ 11) Other \_\_\_\_\_



SEQUOIA ENVIRONMENTAL

SAMPLE ID: VS  
 AEN LAB NO: 9503060-01A  
 AEN WORK ORDER: 9503060  
 CLIENT PROJ. ID: VECL-01

DATE SAMPLED: 03/02/95  
 DATE RECEIVED: 03/02/95  
 REPORT DATE: 03/19/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	03/02/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	0.62 *	0.01	mg/L	03/08/95

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit



SEQUOIA ENVIRONMENTAL

SAMPLE ID: VS  
 AEN LAB NO: 9503060-01B  
 AEN WORK ORDER: 9503060  
 CLIENT PROJ. ID: VECL-01

DATE SAMPLED: 03/02/95  
 DATE RECEIVED: 03/02/95  
 REPORT DATE: 03/19/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	03/06/95
Chromium	EPA 6010	1.3 *	0.01	mg/L	03/08/95

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

SEQUOIA ENVIRONMENTAL

SAMPLE ID: VS  
AEN LAB NO: 9503060-01C  
AEN WORK ORDER: 9503060  
CLIENT PROJ. ID: VECL-01

DATE SAMPLED: 03/02/95  
DATE RECEIVED: 03/02/95  
REPORT DATE: 03/19/95

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
pH	EPA 9040	3.6		S.U.	03/08/95

---

ND = Not detected at or above the reporting limit  
\* = Value at or above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9503060

CLIENT PROJECT ID: VECL-01

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

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D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

AEN JOB NO: 9503060  
 DATE ANALYZED: 03/07/95  
 MATRIX: WATER

Method Spike Recovery Summary

Analyte	Inst./ Method	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
					Percent Recovery	RPD
Cr. Chromium	ICP/6010	0.10	95	3	87-117	7

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

\*\*\* END OF REPORT \*\*\*

1. Client: Seymour Lewiton munda  
Address: 1411 Palmdale Ave, Ste B  
San Dimas, CA 94577  
Contact: \_\_\_\_\_  
Alt. Contact: \_\_\_\_\_

American Environmental Network  
3440 Vincent Road, Pleasant Hill, CA 94523  
Phone (510) 930-9090  
FAX (510) 930-0256



Address Report To: \_\_\_\_\_  
2. Same As #1

Send Invoice To: \_\_\_\_\_  
3. Same As #1

Lab Job Number: \_\_\_\_\_  
Lab Destination: \_\_\_\_\_  
Date Samples Shipped: \_\_\_\_\_  
Lab Contact: \_\_\_\_\_  
Date Results Required: Standard 1A1  
Date Report Required: \_\_\_\_\_  
Client Phone No.: \_\_\_\_\_  
Client FAX No.: \_\_\_\_\_

Send Report To: 1 or 2 (Circle one)  
Client P. O. No.: VEED Client Project I.D. No.: VEED-01

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS			Comments / Hazards
<u>#</u>	<u>VS</u>		<u>3/2/95</u>	<u>7</u>	<u>---</u>	<u>1</u>	<u>Plast</u>	<u>Sample Cr</u>	<u>Total Cr</u>	<u>PH</u>	<u>DIA C</u>

Relinquished by: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_  
Received by: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_  
(Signature) Chris Rosales (Signature)  
3-2-95 (Signature) 1705

Relinquished by: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_  
Received by: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_  
(Signature) \_\_\_\_\_ (Signature) \_\_\_\_\_  
1705

Method of Shipment \_\_\_\_\_  
Received by: \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_  
(Signature) \_\_\_\_\_ (Signature) \_\_\_\_\_  
1705

Lab Comments \_\_\_\_\_  
Please see signature

\*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter  
4) PVC filter, diam. \_\_\_\_\_ pore size \_\_\_\_\_ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample  
10) Other \_\_\_\_\_ 11) Other \_\_\_\_\_

COPIES: WHITE - JOB FILE YELLOW - PROJECT FILE PINK - CLIENT