

MILITARY DEPARTMENT  
OFFICE OF THE ADJUTANT GENERAL  
9800 Goethe Road – P.O. Box 269101  
Sacramento, California 95826-9101



NGCA-ARH-FE

9 July 2014

Subject: Supplemental Surface Soil Investigation

Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA. 94502-6577  
(510) 567-6700

**RECEIVED***By Alameda County Environmental Health at 11:52 am, Jul 10, 2014*

Dear Mr. Mark Detterman:

Attached are results of the supplemental surface soil investigation performed at the former San Lorenzo Armory site address located at 16501 Ashland Avenue.

A certified Environmental Testing and Consulting firm met with representatives from Headquarters California Military Department (CMD), and San Lorenzo Unified School District (SLUSD) to witness shallow soil sampling at the site.

Results obtained from analysis of the samples taken confirm that no Asbestos Containing Construction Materials (ACCM) is present at the former Armory site. Based on the attached Memorandum For Record (MFR), and certification by Mr. Krzysztof Markowski we are requesting regulatory closure from the Alameda County Environmental Health Department for this site.

Point of contact for this action is Mr. Fred Delucchi at (916) 854-3115.

A handwritten signature in black ink, appearing to read "Steven Buethe".

Steven Buethe  
Colonel, California Army National Guard  
Director, Facilities and Engineering

**Attachments**

Armory Footprint Sampling Report

Figure 1 – Site photographs

Figure 2 – Site Map and Boring/Sampling locations

MILITARY DEPARTMENT  
OFFICE OF THE ADJUTANT GENERAL  
9800 Goethe Road - P.O. Box 269101  
Sacramento, California 95826-9101



NGCA-ARH-EN

9 July 2014

Mr. Mark Detterman, PG, CEG  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

**SUBJECT: Supplemental Surface Soil Investigation, Final Report for Former San Lorenzo Armory, 16501 Ashland Avenue, San Lorenzo, California**

## 1. Introduction

This letter report was prepared in response to your request for additional asbestos soil sampling at the subject former California Army National Guard Armory site. On 6 June 2014, California Army National Guard (CA ARNG) staff along with personnel from National Analytical Laboratories (NAL) and representative from San Lorenzo Unified School District (SLUSD) conducted shallow soil sampling at the subject site. This sampling was conducted to determine if shallow soil in the footprint of the former armory building contains elevated levels of asbestos fibers. This final soil investigation effort was performed in order to satisfy Alameda County Environmental Health Department (ACEHD) request that the soil samples be analyzed using EPA Method TEM CARB 435 rather than EPA Method PLM CARB 435 Level A for 0.25% Target Analytical Sensitivity which was used in the previous investigation. The TEM CARB 435 method possesses much greater detection sensitivity.

## 2. Background

The subject armory and associated buildings were demolished in July 2012. Following demolition the physical control of the site reverted back to San Lorenzo Unified School District (SLUSD). An Environmental Condition of Property (ECOP) report was prepared by Applied Water Resources Corporation in September 2012. As part of the ECOP ten shallow soil samples were collected and analyzed for lead and asbestos. None of the soils samples contained lead at concentrations exceeding the criteria established by the California Department of Toxic Substances Control (DTSC) for schools. The analytical method PLM CARB 435 did not detect asbestos fibers. However, TEM CARB 435 Level E did detect 5 chrysotile and 2 actinolite fibers at 0.0003% above the DTSC's screening guidance for schools in one sample collected from Boring 1 (B1) location as depicted on attached Figure 2.

On 29 January 2014, California Army National Guard (CA ARNG) staff along with personnel from National Analytical Laboratories (NAL) and representative from San Lorenzo Unified School District (SLUSD) conducted shallow soil sampling at the subject site. The sampling was conducted by Mr. Anthony De Arcos from NAL and witnessed by Mr. Fred Delucchi and Mr. Krzysztof Markowski from CA ARNG. Ms. Prachi Amin who is the Construction Manager for SLUSD provided site access. This sampling was conducted to determine if shallow soil in the footprint of the former armory building contains elevated levels of asbestos fibers. The soil samples were analyzed in February 2014 and were determined to contain non-detectable levels of asbestos fibers. However, inadvertently the soil samples were tested using EPA 600/R-93/116 Method with CARB 435 Prep, Level A for 0.25% Target Analytical Sensitivity rather than Method TEM CARB 435 Level E which has 0.0005% Target Analytical Sensitivity. Due to this analytical error ACEHD has requested in a letter dated 15 May 2014 that CA ARNG retest the soil using the higher analytical sensitivity method.

### 3. Field Activities and Analytical Results

On 6 June 2014, California Army National Guard (CA ARNG) staff along with personnel from National Analytical Laboratories (NAL) and representative from San Lorenzo Unified School District (SLUSD) once again conducted shallow soil sampling at the subject site. The sampling was conducted by Mr. Anthony De Arcos from NAL and witnessed by Mr. Fred Delucchi and Mr. Krzysztof Markowski from CA ARNG. Mr. Paul Dixon who is the Facilities and Operation Director for SLUSD provided site access and also witnessed the field work. To address ACEHD request for additional soil testing for asbestos fibers the CA ARNG used similar procedures as performed during the previous January 2014 site visit. One, center soil sample in the approximate location of B1 and four other samples, one in each main geographic direction 6 feet away from the center sample and 6 inches below ground surface (bgs) were collected. Soil samples were collected using a steel trowel and placed in a plastic zip-lock bag, individually labeled, and transported to a California State-certified laboratory under a chain-of-custody documentation. NAL representative collected a total of five (5) shallow soil samples as documented on photos in attached Figure 1. All five samples were analyzed utilizing the California Air Resource Board PLM (CARB) Method 435, Level B for 0.1% Target Analytical Sensitivity. No asbestos fibers were detected at that Target Analytical Sensitivity Level in any of the five soil samples. Additionally, two samples (Center and North) were analyzed using TEM CARB 435 Level E for 0.0005% Target Analytical Sensitivity. No asbestos fibers were detected in the Center sample. However, the North sample contained 1 chrysotile fiber (<0.0005) which is below the DTSC screening level for schools set at 0.001%. Figure 2 shows a map of sampling locations. Also attached is a report from NAL which includes copies of lab reports.

### 4. Recommendations

Based on the soil sampling results presented in this report CA ARNG recommends that Alameda County Environmental Health Department issue a No Further Action (NFA) regulatory closure for the subject site.

### 5. Certification

The Point of Contact for the subject Final Soil Sampling Report is the undersigned at (916) 369-4327.

“ I certify under penalty of perjury, I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.”



K. Markowski

Krzysztof Markowski, P.G. 8281  
Engineering Geologist  
California Military Department

NGCA-ARH-EN

SUBJECT: Supplemental Surface Soil Investigation, Work Plan Addendum, Former San Lorenzo Armory, 16501 Ashland Avenue, San Lorenzo, California

*Asbestos Building  
Inspection Report For:*

*Former California National  
Guard Armory Footprint- Area B1*

*16501 Ashland Avenue  
San Lorenzo, CA*

*Presented To:*

*Fred Delucchi  
A CIV NG CAARNG (US)*

*California National Guard  
P.O. Box 269101  
Sacramento, CA 95825*

*By:*

*Anthony M. De Arcos  
Certified Asbestos Consultant*

*National Analytical Laboratories, Inc.  
2201 Francisco Dr. Ste.140-261  
El Dorado Hills, CA 95762  
(916) 361-0555 Fax: (916) 361-0540  
E-Mail: [NAL1@NAL1.com](mailto:NAL1@NAL1.com) Web Page: [www.NAL1.com](http://www.NAL1.com)*



June 19, 2014  
Revised July 8, 2014

Fred Delucchi, A CIV NG CAARNG (US)  
California National Guard  
P.O. Box 269101  
Sacramento, CA 95825

RE: Asbestos Inspection – Former California National Guard Armory Footprint-16501 Ashland Avenue

Dear Mr. Delucchi,

This report is in regards to the asbestos soil inspection completed at the former California National Guard Armory Footprint, Area B1, located at 16501 Ashland Avenue, in San Lorenzo, California. Of the five (5) suspected asbestos containing soil samples collected none (0) were found to contain asbestos containing construction materials (ACCM). Anthony M. De Arcos, Certified Asbestos Consultant and Registered Environmental Property Assessor conducted the inspection. The following is a report of our findings.

The second site visit and asbestos inspection was completed on June 19, 2014. The inspection was completed utilizing the California Air Resource Board (CARB) Method 435, 5 PLM Analysis of Bulk samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling). Level B for 0.1% Target Analytical Sensitivity and 2 PLM Analysis of Bulk samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling). Level E for 0.0005% Target Analytical Sensitivity.

*During the site investigation and based on the sample results collected from the specific areas listed therein where the work is to be conducted at the site, has been deemed free of ACCM.*

*The previous sampling conducted at the site utilized the following CARB) Method 435 methodology, PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity. Because the initial testing method only targeted the analytical sensitivity of 0.25%, Alameda County requested the additional sampling utilizing the more stringent Level B analytical sensitivity of 0.1% methodology. Although the Level A methodology was found to be none detected; by utilizing the Level B method, verification was completed and the area has been deemed clear of asbestos containing materials.*

*Again Alameda County requested samples be analyzed using a more stringent Level, so we used sensitivity level of .0005% CARB 435 Level E and on July 8, 2014 and again the samples came back <.0005% for asbestos containing materials. Based on all this findings the work area has been deemed free of ACCM.*

EMSL Analytical, Inc. (EMSL) in San Leandro, California analyzed the bulk suspect asbestos containing samples utilizing PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep, Level B for 0.1% Target Analytical Sensitivity. National Voluntary Laboratory

Accreditation Program (NVLAP) Certification #10148-3 and California Environmental Laboratory Accreditation Program (CAELAP) Certification #1620, certifies EMSL.

The soil inspection and analytical results indicate that no ACCM is present in the footprint B1 area, where previous and the current sampling was conducted. Therefore if any work is to be conducted at the site, there will be no health or safety concerns, in regards to the exposure to airborne asbestos fibers as these work tasks are being conducted at the site.

The location and results from this sampling are as follows: CARB 435 Level B

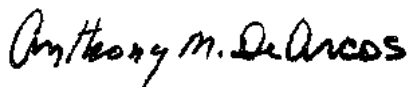
Sample ID#	Material	Location	Results
1650-1	6 inches deep Soil Clearance	SE Graded Area, -90 ft. East From Street Curb, East to West, 17 ft., South To North Center Hole	None Detected
1650-2	6 inches deep Soil Clearance	6ft. North of Center Hole	None Detected
1650-3	6 inches deep Soil Clearance	6 ft. East of Center Hole,	None Detected
1650-4	6 inches deep Soil Clearance	6ft. South of Center Hole	None Detected
1650-5	6 inches deep Soil Clearance	6ft. West of Center Hole	None Detected

The location and results from this sampling are as follows: CARB 435 Level E

Sample ID#	Material	Location	Results
1650-1	6 inches deep Soil Clearance	Area B1 - Center	None Detected
1650-2	6 inches deep Soil Clearance	Area B1- North of Center	None Detected

If you have any questions regarding this report or if we can be of further assistance, please contact our office.

Reviewed and submitted by:



Anthony M. De Arcos  
 Certified Asbestos Consultant  
 DOSH #92-0261



breathe easy..



**EMSL Analytical, Inc.**

2235 Polvorosa Ave., Suite 230, San Leandro, CA 94577  
Phone: (510) 895-3675 Fax: (510) 895-3680  
Email: [SanLeandroLab@emsl.com](mailto:SanLeandroLab@emsl.com)

Attn: *Anthony DeArcos*  
National Analytical Laboratories  
2201 Francisco Dr.  
El Dorado Hills Ca. 95762  
Phone: (916) 225-8669  
Fax: (916) 361-0540

Customer ID: NAL51  
Customer PO: Unavailable  
Received: 6/9/14 9:00 AM  
EMSL Order: 091409032  
Analysis Date: 7/2/2014

Project: **Armory Footprint: Area B1, 5 Holes 16501 Ashland Ave. San Lorenzo Ca.**

Report Date: 7/7/2014

**TEM CARB 435 Level: E (0.0005%)**

*Asbestos Analysis via Modified EPA 600/R-93/ 116 method Utilizing Analytical Electron Microscopy  
(Section 2.5.5.2) with CARB 435 Prep (Milling) in Soil*

<i>Client Sample ID</i>	<i>Location</i>	<i>Mineral Type(s)</i>	<i># of Structures Detected</i>	<i>Analytical Sensitivity %</i>	<i>Asbestos Weight %</i>	<i>Comments</i>
<b>EMSL Sample ID</b>						
1650-1	Area B1, Center	No Asbestos Detected		0.0005	< 0.0005	
<b>0914090320001</b>						
1650-2	Area B1, North Of Center	Chrysotile	1	0.0005	< 0.0005	
<b>0914090320002</b>						

**K. DUNBAR**

Analyst

Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL is not responsible for sample collection activities or analytical method limitations. Interpretation and use of results are the responsibility of the client



**NAL LOG-IN RECORD**

**Login # 34121**

Ph: 916.361.0555 Fx: 916.361.0540

**National Analytical Laboratories, Inc.**

**Job Site/Job #:**

Client#-Lot# 170 / 238  
 California National Guard  
 Phone Number  
 FAX Number Fred Delucchi  
 Contact Fred Delucchi  
 E-Mail Address

Armory Footprint:  
 16501 Ashland Avenue  
 San Lorenzo, CA

Date 6/22/2014  
**Sampling Date:** 6/6/2014  
**Sampling Time** 10:30:00 AM  
**Type Of Work:** CARB-435 E  
**No. of Samples** 2  
**Turnaround:** 10 Days

Num.	Sample ID#	Location/Description
1	1650-1	Area B1, Center / Soil
2	1650-2	Area B1, North Of Center / Soil

CAN YOU PLEASE REDO SAMPLES 1650-1 & 2, UTILIZING THE FOLLOWING  
 METHODOLOGY:

Asbestos Analysis of Soil Samples via Modified EPA 600/R-93/116 Method  
 Utilizing Analytical Electron Microscopy (Section 2.5.5.2) with CARB 435 Prep (Milling)  
 Level E for 0.0005% Target Analytical Sensitivity

**Chain of Custody Information**

Released By Signature	Date/ Time	Received By Signature	Date/ Time	Due: 7/4/2014
	06/23/14 0800			
Released By Signature	Date/ Time	Received By Signature	Date/ Time	At: 10:30



**EMSL Analytical, Inc**

2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577

Phone/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com>[sanleandrolab@emsl.com](mailto:sanleandrolab@emsl.com)

EMSL Order: 091409032

CustomerID: NAL51

CustomerPO:

ProjectID:

Attn: **Anthony DeArcos**  
**National Analytical Laboratories (NAL)**  
**2201 Francisco Dr.**  
**Ste. 140-261**  
**El Dorado Hills, CA 95762**

Phone: (916) 361-0555  
 Fax: (916) 361-0540  
 Received: 06/09/14 9:00 AM  
 Analysis Date: 6/18/2014  
 Collected: 6/6/2014

Project: **ARMORY FOOTPRINT: AREA B1, 5 HOLES 16501 ASHLAND AVE, SAN LORENZO CA**

### Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling). Level B for 0.1% Target Analytical Sensitivity

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1650-1 <i>091409032-0001</i>	AREA B1, CENTER	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<b>None Detected</b>
1650-2 <i>091409032-0002</i>	AREA B1, NORTH OF CENTER	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<b>None Detected</b>
1650-3 <i>091409032-0003</i>	AREA B1, EAST OF CENTER	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<b>None Detected</b>
1650-4 <i>091409032-0004</i>	AREA B1, SOUTH OF CENTER	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<b>None Detected</b>
1650-5 <i>091409032-0005</i>	AREA B1, WEST OF CENTER	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<b>None Detected</b>

Analyst(s)

*Amber Albon (5)*Israel Gutierrez  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 06/18/2014 12:13:39



**NAL LOG-IN RECORD**

**Login # 34101**

Ph: 916.361.0555 Fx: 916.361.0540

**National Analytical Laboratories, Inc.**

**Job Site/Job #:**

Client#-Lot# 170 / 237  
 California National Guard  
 Phone Number 9168543435  
 FAX Number (916) 854-3514  
 Contact Geoff Nickless  
 E-Mail Address

Armory Footprint:  
 16501 Ashland Avenue  
 San Lorenzo, CA

Date 6/7/2014  
 Sampling Date: 6/6/2014  
 Sampling Time 10:30:00 AM  
 Type Of Work: PLM-BI  
 No. of Samples 5  
 Turnaround: 3-10 Days

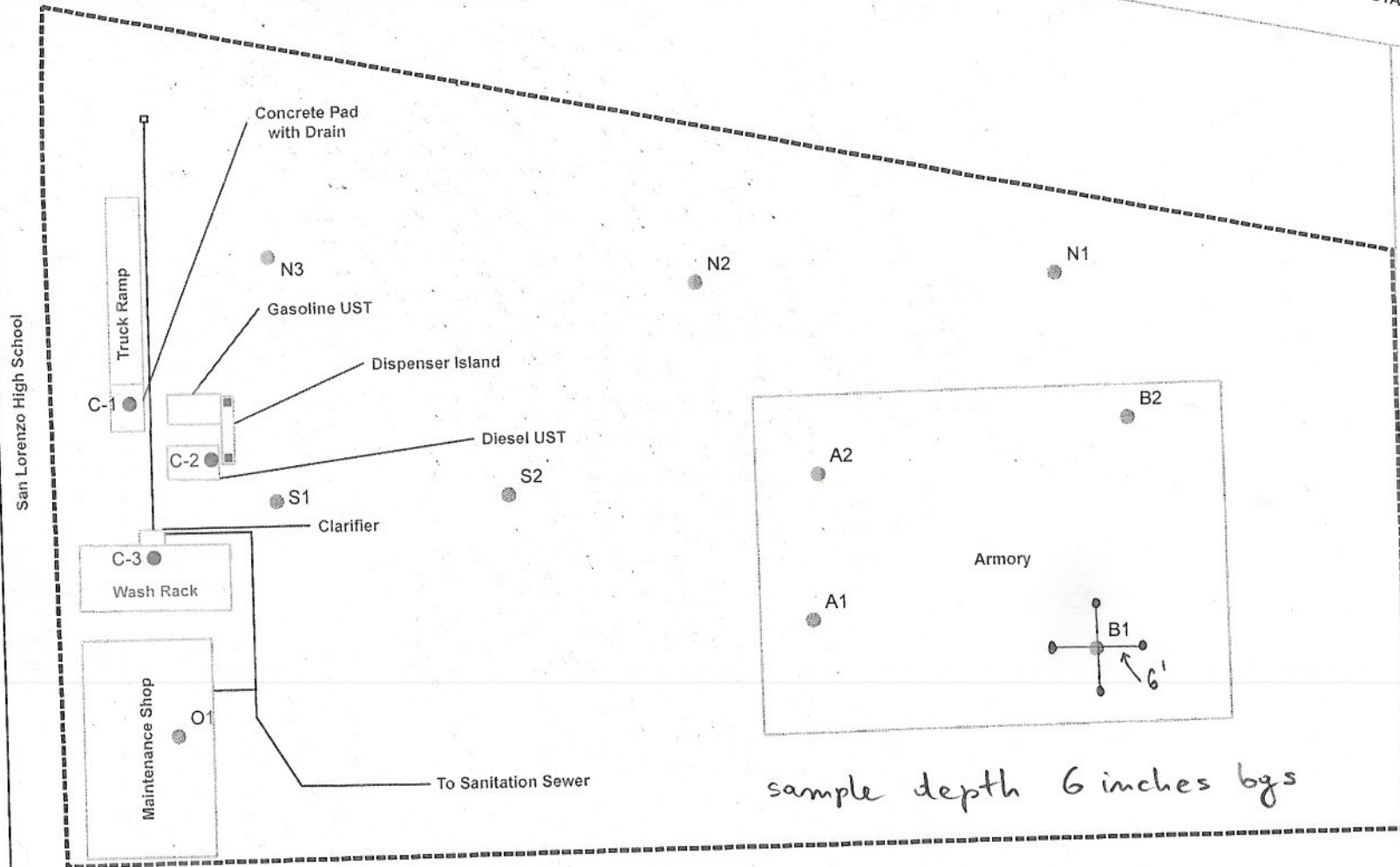
Num.	Sample ID#	Location/Description
1	1650-1	Area B1, Center, 6 inch Depth Hole / Soil Clearance
2	1650-2	Area B1, North Of Center, 6 inch Depth Hole / Soil Clearance
3	1650-3	Area B1, East Of Center, 6 inch Depth Hole / Soil Clearance
4	1650-4	Area B1, South Of Center, 6 inch Depth Hole / Soil Clearance
5	1650-5	Area B1, West Of Center, 6 inch Depth Hole / Soil Clearance

**Chain of Custody Information**

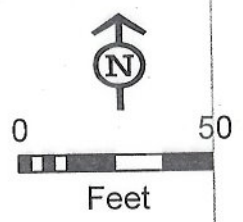
Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
	06/08/14 2 PM			6/16/2014
Released By Signature	Date/Time	Received By Signature	Date/Time	At: 10:30

Figure 1 - Site Photos





sample depth 6 inches bgs



Sources: "Underground Storage Tank Closure Report  
 California Army National Guard Armory San Lorenzo, CA",  
 American Integrated Services, Inc., September 2010

"Fuel Leak Site Case Closure for the California National  
 Guard Facility, at 16501 Ashland Ave., San Lorenzo 94580",  
 Geomatrix, October 3rd, 1997



- Asbestos and Lead Sample
- Boring
- Existing Pipeline
- Dispenser
- Former Building Location
- Storm Drain
- Property Boundary

Figure - 2  
**Site Map and Boring Locations**  
 San Lorenzo Armory  
 16501 Ashland Avenue San Lorenzo, CA