STEVE'S EXXON
(Pleasanton F.D. is L/A)

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April 24, 1997

SAMPLING PLAN FOR
WASTE OIL UST CLOSURE/
PRODUCT LINE/DISPENSER
REPLACEMENT
(Pleas. Fire Dept. Lead)

Ms. Chris Boykin
Pleasanton Fire Department
4444 Railroad Avenue
Post Office Box 520
Pleasanton, California 94566-0802

Subject: *Work Plan for On-Site Assessment*
Exxon Service Station No. 7-3399
2991 Hopyard Road
Pleasanton, California
Delta Project No. D094-836

Dear Ms. Boykin:

Delta Environmental Consultants, Inc. (Delta), has been authorized by Exxon Company, U.S.A. (Exxon), to conduct soil sampling at Exxon Service Station No. 7-3399 located at 2991 Hopyard Road, Pleasanton, California. The location of the site is shown in Figure 1 and site features are illustrated in Figure 2. **The soil sampling is intended to assess the possible presence of hydrocarbons in soil in the vicinity of the used oil underground storage tank (UST) product dispensers and associated piping.** This work plan proposes collecting soil samples for chemical analyses from beneath each product dispenser, collecting two soil samples from native soil beneath the UST, and beneath approximately every 20 linear feet of associated piping. Soil samples will be screened in the field for petroleum hydrocarbons prior to laboratory submittal and recorded in the field notes. Following receipt of the laboratory analytical results, Delta will prepare a report summarizing our findings.

Proposed Work

The following work is proposed to assess the possible presence of hydrocarbons in soil near the UST, product lines, and dispensers:

- Prepare a site specific Health and Safety Plan to be utilized by Delta personnel.
- Collect soil samples from native soil approximately two feet beneath each dispenser. The methods used to collect the samples are outlined in the Field Methods section in Enclosure A.
- Screen the soil samples in the field using a photoionization detector (PID) or similar device for hydrocarbon vapors.
- Submit soil samples for chemical analysis of total purgeable petroleum hydrocarbons (TPPH) as gasoline and total extractable petroleum hydrocarbons (TEPH) as diesel using DHS LUFT Method, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method

8020. Samples will be submitted to Sequoia Analytical (Sequoia) laboratory under chain-of-custody protocol.

- **Observe the removal of one 1,000 gallon used oil UST.** The location of the UST is shown on Figure 2. Exxon will select a subcontractor to remove the used oil tank and product lines at a later date.

- Following removal of the tank, collect two soil samples from approximately two feet below the base of the tank in native soil from each end of the 1,000 gallon tank. All soil samples will be submitted to Sequoia for analysis of TPPH as gasoline and TEPH as diesel (DHS LUFT Method), BTEX (EPA Method 8020), oil and grease (EPA Method 418.1), and chlorinated hydrocarbons (EPA Method 8010).

- **Collect and screen soil samples in the field, beneath the dispensers, approximately every 20 linear feet of product piping, and at joints or bends in the lines.** It is estimated that approximately 8 to 12 soil samples will be collected beneath the product lines and 6 samples collected beneath the dispensers. Additional soil samples may be collected at the request of the Pleasanton Fire Department representative on-site. Soil samples will be collected at a maximum depth of two feet into native soil. All soil samples will be submitted for analyses of TPPH as gasoline, TEPH as diesel, and BTEX using the previously mentioned methods.

- **If residual petroleum hydrocarbons are reported in the vicinity of the former dispenser islands, associated piping, or used oil tank area, impacted soil will be addressed by either excavation or a remediation system scheduled to be installed after product lines and dispensers are upgraded.**

- Place all soil on-site and cover with plastic at the end of each day. Soil will be screened in the field with a PID or similar device and segregated based on field readings. The soil removed from around the used oil tank will be separated from the soil generated from the product lines and dispensers.

- Collect four soil samples from approximately every 100 cubic yards of soil from the used oil tank stockpiled soil and have the laboratory composite them into one for analyses.

- The used oil stockpiled soil will be sampled for TPPH as gasoline and TEPH as diesel (DHS LUFT Method), oil and grease (EPA Method 5520), volatile organics (EPA Method 8240), semi-volatile organics (EPA Method 8270), and CAM 17 metals for disposal purposes. If the analytical results for the metals are greater than 10 times the established soluble threshold limit concentration levels for each metal, the samples will be re-analyzed using the waste extraction test. If the TPPH as gasoline results are greater than 1,000 parts per million or if the oil and grease results are greater than 3,000 parts per million by volume, the samples will be run for reactivity, corrosivity, and ignitability.

- Collect four soil samples per approximately every 100 cubic yards of soil from the dispenser and product line stockpiled soil and have the laboratory composite them into one sample for analysis of TPPH as gasoline, TEPH as diesel, BTEX, and total lead (EPA Method 6010) using the previously described methods. If the stockpiled soil meets the requirements, the soil will be disposed of at the BFI Landfill facility in Livermore, California.

- Interpret the site geology, field, and laboratory data, and prepare a report summarizing Delta's findings, interpretations, and conclusions.

Field work proposed will be performed as outlined in Enclosure A. This work will be performed in accordance with sampling protocol that meets the approval of the City of Pleasanton Fire Department and the reporting guidelines of the California Tri-Regional Water Quality Control Board.

Remarks/Signatures

The interpretations contained in this report represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in the accordance with currently accepted hydrogeological and engineering practices at this time and location. Other than this, no warranty is implied or intended.

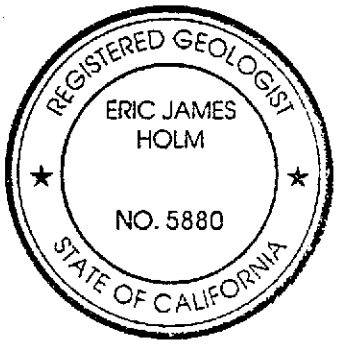
If you have any questions regarding this work plan, please contact Keoni Almeida at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

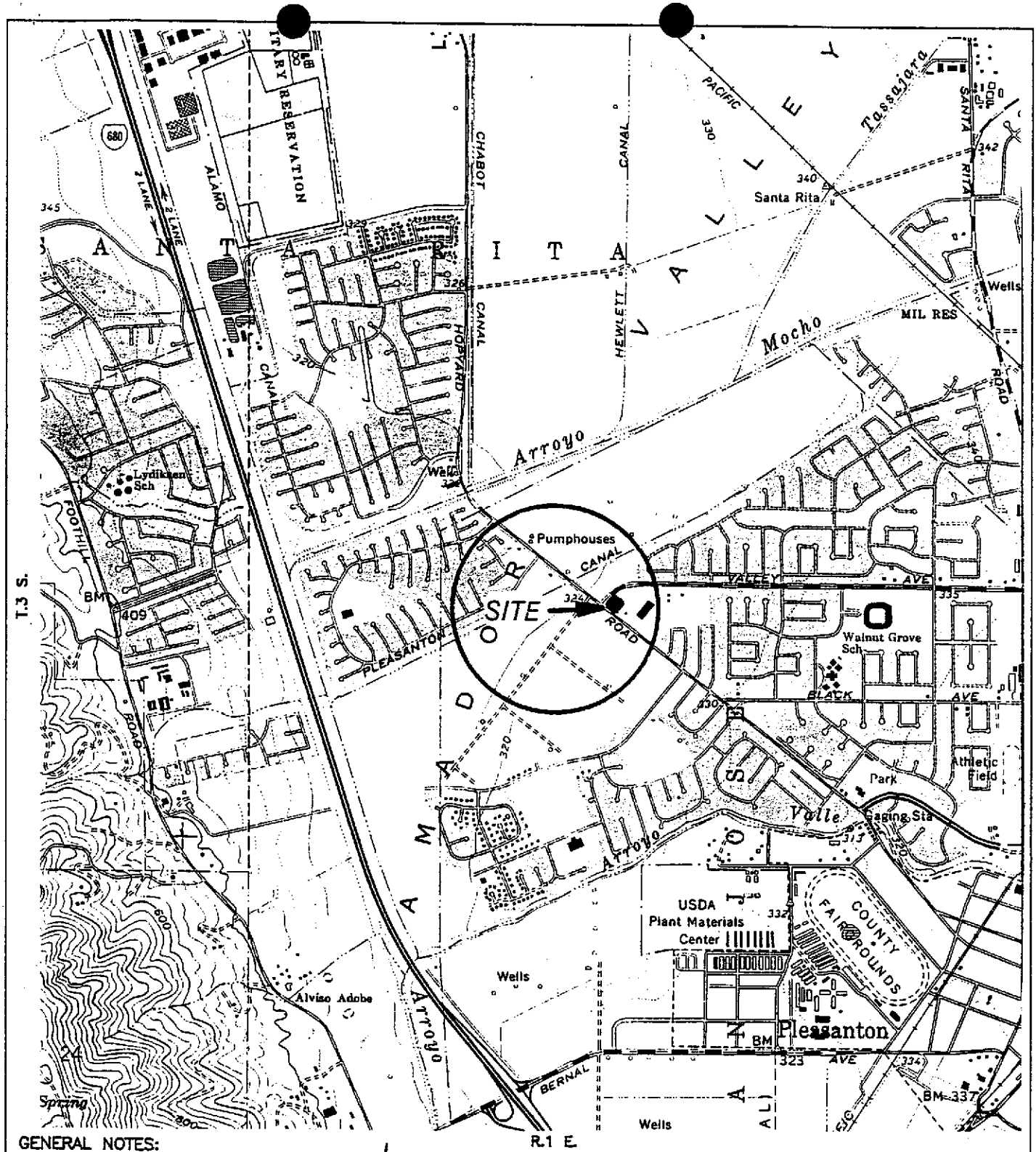
Charles Keoni Almeida
Project Manager

Eric J. Holm, R.G.
California Registered Geologist No. 5880



CKA (LRP007.836)
Enclosure

cc: Mr. Brad Anderson, Exxon Company, U.S.A.
Ms. Marla Guensler, Exxon Company, U.S.A.
Mr. Scott Seery, Alameda County
Mr. David Lum, California Regional Water Quality Control Board, San Francisco Bay Region



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
DUBLIN, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1980

North

CALIF

QUADRANGLE LOCATION

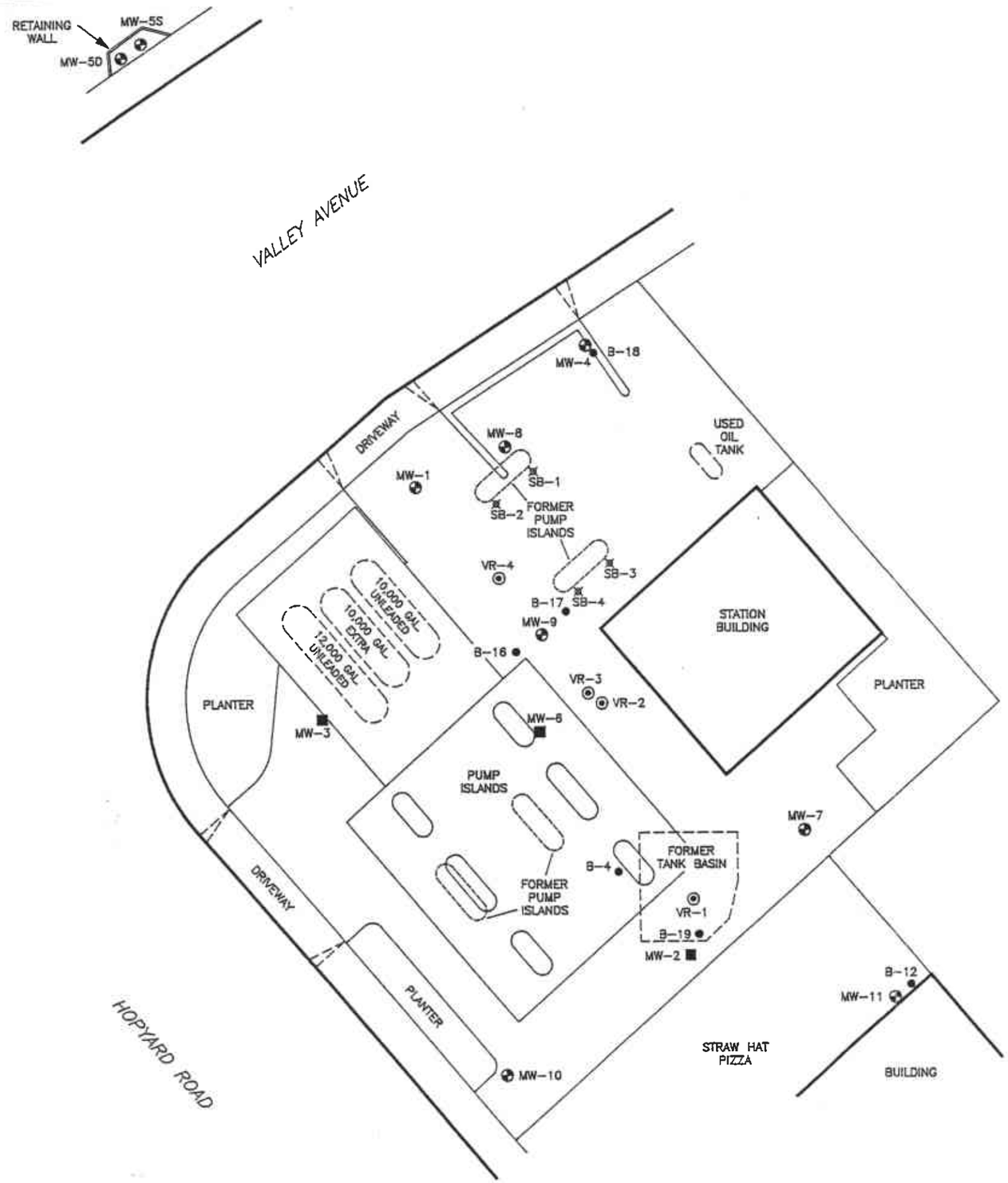
0 2000 FT

SCALE 1 : 24,000

FIGURE 1
SITE LOCATION MAP
EXXON STATION NO 7-3399
2991 HOPYARD ROAD
PLEASANTON, CA.

PROJECT NO. 0094-836	DRAWN BY I.H. 9/22/94
FILE NO. —	PREPARED BY TMG
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



North

LEGEND:

B-12	SOIL BORING LOCATION
VR-1	VAPOR EXTRACTION WELL LOCATION
MW-2	DESTROYED MONITORING WELL
MW-1	MONITORING WELL LOCATION
SB-1	SOIL BORING LOCATION

0 30 FT

SCALE

NOTE:

BASE MAP ADAPTED FROM RESNA FIGURE.SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

FIGURE 2

SITE MAP

EXXON STATION NO 7-3399

2991 HOPYARD ROAD

PLEASANTON, CA.

PROJECT NO. 0094-836	DRAWN BY M.L. 4/1/97
FILE NO. 94-836-1	PREPARED BY JWS
REVISION NO. 5	REVIEWED BY

Delta Environmental Consultants, Inc.

ENCLOSURE A

Field Methods and Procedures

1.0 FIELD METHODS AND PROCEDURES

1.1 Health and Safety Plan

Field work will be performed by Delta personnel in accordance with a Health and Safety Plan developed for the site. This plan will describe the basic safety requirements for the subsurface investigation and the drilling and hand auguring of soil borings at the site. The Health and Safety Plan is applicable to personnel and subcontractors of Delta. Personnel at the site will be informed of the contents of the Health and Safety Plan prior to beginning work. A copy of the Health and Safety Plan will be kept at the work site and will be available for reference by appropriate parties during the work. The Delta geologist will act as the Site Safety Officer.

1.2 Soil Sampling and Contamination Reduction

Soil sampling will be performed under the direction of a Delta engineer. To reduce the chances of cross-contamination between samples, all sampling equipment will be either steam-cleaned or washed with a non-phosphatic detergent between each sample location. To reduce cross-contamination between samples, the sampler is washed in a soap solution and double-rinsed between each sampling event.

1.3 Soil Sample Collection

Soil sample locations will be advanced to a depth of approximately 6 inches above the sampling depth. At this depth, a hand operated impact sampler lined with a 6-inch clean brass sampling tube will be used to collect the soil sample. Samples collected beneath the former underground storage tank will be obtained by using the bucket of the on-site excavator. Samples will be collected from native material within two feet of the base of the former tank. Soil cuttings collected immediately above the soil sample will be placed into a ziplock bag and sealed for later screening with a PID. That part of the soil sample collected in the brass tube within the impact sampler will be sealed with teflon tape and plastic caps, labeled, and stored at approximately 4°C for transport to the laboratory.

1.4 Soil Sample Screening/hNu Portable Photoionization Detector Method

After the soil sample ziplock bags have been brought to ambient temperature, the headspace vapors of the soil sample in the bag will be screened with a PID equipped with a 10.2 eV lamp. The sample corner of the bag will be opened and the detector probe immediately placed within the headspace. The highest observed reading will be recorded. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations with the same precision as laboratory analyses.

1.5 Underground Storage Tank and Product Line Sampling

Soil samples will be collected following the removal of the tank, associated product lines, and dispensers. Samples will be collected approximately 2 feet below the backfill/native soil interface at each end of the tank. If ground water is encountered above the base of the tanks, soil samples will be collected from the sidewalls of the excavation immediately above ground water. Following removal of the piping, one soil sample will be collected from native soil for each approximate 20 linear feet of piping. Additional soil samples may be collected by Delta at the discretion of the Exxon or City of Pleasanton Fire Department representative.

1.6 Soil Pile Sampling

Four soil samples will be collected from each approximate 100 cubic yards of stockpiled soil, with each set of four samples to be composited in the laboratory prior to analyses. An alternate sampling plan will be implemented if requested by the City of Pleasanton Fire Department Hazardous Material representative. Soil samples will be collected in 2-inch diameter brass tubes, which will be sealed with teflon and plastic caps. The samples will be labeled and stored in an ice chest cooled to approximately 4°C for transport to the laboratory.

2.0 ANALYTICAL PROCEDURES

Selected soil samples submitted to the laboratory will be analyzed for TPPH as gasoline and TEPH as diesel using DHS LUFT Method, and BTEX using EPA Method 8020. Soil samples collected from beneath the used oil underground storage tank will be analyzed for TPPH as gasoline and TEPH as diesel (DHS LUFT Method), BTEX (EPA Method 8020), oil and grease (EPA Method 5520), and chlorinated hydrocarbons (EPA Method 8010).

3.0 QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed throughout the investigation.

3.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample will be collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no

longer than the maximum allowable holding time. Details on the procedures for collection and handling of soil samples used on this project can be found in Section 1.0 (Methods).

3.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, will be recorded on the borehole log or in the field records. Samples will be analyzed by a California-certified laboratory.

A chain-of-custody form will be used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirm that the samples were collected in the proper container, preserved correctly, and that there is an adequate volume for analysis.

If these conditions are met, the sample will be assigned a unique log number for identification throughout analysis and reporting. The log number will be recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory in the laboratory. The sample description, date received, client's name, and other relevant information will also be recorded.