Conor Pacific EFW

# Facsimile


**To:** Ms. Eva Chu, Alameda County Environmental Health Services

**Phone:** Business (510) 567-6762

Fax (510) 337-9335

**Re:** Revised Workplan

**From:** Mark Smolley

**Phone:** Bus (650) 386-3828

Fax (650) 386-3815


**Date:** April 12, 2001

**Proj. No.:** BNC104

**Number of pages including cover sheet:**

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**Remarks:** ☐ Urgent ☐ Please review ☐ Reply ASAP ☐ Please Comment

Eva – The attached revised workplan reflects what we have discussed. Please review this draft and let me know if you have comments before I send it out as a final copy. - Mark

→ Approve proposed SB locations
→ Correct typo/misprint on page 2
→ send to John Clarke - Atty for BofA

April 12, 2001
Project No. BNC102

Mr. Balaji Angle
Angle Enterprises
5131 Shattuck Avenue
Oakland, California 94609

Re: Revised Workplan Addendum for Additional Downgradient Investigation, B&C Gas Mini Mart, 2008 First Street, Livermore, California

Dear Mr. Angle:

Conor Pacific has prepared the following Revised Workplan Addendum for additional downgradient investigation for the B&C Gas Mini Mart (B&C) at 2008 First Street, Livermore, California (Figure 1). Based on the results of previous investigations conducted in 1999 and on subsequent quarterly groundwater monitoring results, the Alameda County Environmental Health Services (ACEHS) requested that additional monitoring wells be installed.[1]

Conor Pacific prepared a previous workplan that described the installation of additional permanent groundwater monitoring wells.[2] However, due to access considerations temporary well casings that will allow one-time groundwater sampling, are now proposed in this revised workplan. The purpose of this scope of work is to delineate the plume in the area north of wells MW-8 and MW-13. A 1998 Investigation Workplan[1] described the background information for the site. This information is not represented in this Addendum since this information has not changed.

## SCOPE OF WORK

The purpose of this scope of work is to delineate the plume by collecting grab groundwater samples from soil borings. Figure 2 shows recent analytical results for the groundwater monitoring wells or grab groundwater samples collected near the downgradient edge of the plume.

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[1] Alameda County Environmental Health Services. Re: Additional Groundwater Monitoring Wells at 2008 1st Street, September 11, 2000.

[2] Conor Pacific, *Workplan Addendum for Additional Downgradient Investigation*, B&C Gas Mini Mart, 2008 First Street, Livermore, California.

Figure 2 indicates that the edge of the plume is located near the Bank of America property. For that reason, up to three borings will be located on the Bank of America property as shown on Figure 2. The scope of work is divided into several tasks:

1. Pre-field access negotiations, scheduling, and permitting.
2. Installation of up to three soil borings at the northern boundary of the plume in the upper aquifer.
3. Groundwater sampling and analysis.
4. Reporting of field work and analytical results.

**Task 1 - Pre-Field Access Negotiations, Scheduling, and Permitting**

All of the borings proposed in this workplan would be located on the Bank of America property. After obtaining access from the Bank of America, the borings will be permitted with Zone 7 of the Alameda County Water District. Underground utilities will be cleared for well installations by contacting the Underground Service Alert (USA) and contracting a private utility locator.

**Task 2 – Drilling of Soil Borings**

The borings will be drilled by using direct-push methods, which utilize a 2 ½-inch-diameter drive-casing that is pushed into the ground. After the drive-casing is pushed to the desired depth, temporary well casing is placed in the boring and the drive casing is removed. Water is allowed to accumulate in the temporary well casing and a bailer is used to collect groundwater samples. The temporary casings will be installed to depths of 55 feet below ground surface.

Conor Pacific successfully used this technique in 1997 to collect groundwater samples from borings 97-1 through 97-5 as shown on Figure 2. We anticipate that the drilling of the three borings can probably be completed in one day. However, during the previous investigation conducted in 1997, some of the temporary well casings did not fill with water until the following day after they were placed in the ground. We propose limiting the actual installation of the temporary wells to one day of field activity, regardless of whether we can install 2 or 3 of the wells. If the temporary wells do not recharge with groundwater during the initial day of drilling, the temporary wells will be left in place overnight. After groundwater samples are collected from the wells, the temporary casings will be removed and the borings will be backfilled with a bentonite-cement slurry.

Soil samples will be collected while drilling below a depth of 25 feet, where first groundwater may be encountered. Soils will be logged by a Conor Pacific staff scientist according to the Unified Soil Classification System (USCS) under the supervision of a California Registered Geologist.

**Task 3 – Groundwater Sampling and Analysis.**

Groundwater samples will be obtained from each of the temporary casings installed in this investigation by using a bailer that will be steam-cleaned prior to use. All purge water will be contained, removed from the Bank of America site, and will be properly disposed of consistent with analytical results. All groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline, methyl tertiary-butyl ether (MTBE), and benzene, toluene, ethylbenzene, and xylenes (collectively known as BTEX) by a state-certified laboratory.

**Task 4 - Reporting of Field Work and Analytical Results.**

The data collected during this investigation will be evaluated and a report will be prepared presenting the results of the investigation. The report will include a description of the field methods, an evaluation of the subsurface conditions and analytical results, maps illustrating the plume conditions, boring logs, and copies of laboratory analytical reports. Recommendations for continued monitoring of the wells, or additional characterization for corrective action will be included in the report.

**SCHEDULE AND COST ESTIMATE**

We are prepared to begin work immediately following approval from the State of California Underground Storage Tank Cleanup Fund. We estimate that the finalization of access and encroachment, and clearance of boring locations will take up to four weeks. Drilling and installing the temporary well casings will start immediately following underground utility clearance and is anticipated to take 1 to 2 days. Groundwater sampling will be performed as soon as water recharges the temporary well casings. Laboratory analyses will be performed on a standard turn-around time of two to three weeks. The report preparation is anticipated to be complete three weeks after receiving the analytical results.

A detailed cost estimate spreadsheet is attached. Conor Pacific will not exceed the cost estimate without prior authorization. All charges will be provided on a time-and-expense basis in accordance with our terms and conditions.

If you are in agreement with the scope of work, estimated costs, and schedule outlined in this proposal, please sign and return the attached work authorization form. We look forward to helping you with this project. Please feel free to call me if you have any questions.

Please call if you have any questions about this workplan.

Sincerely,
Conor Pacific

Mark Smolley, R.G. 4650
Senior Geologist

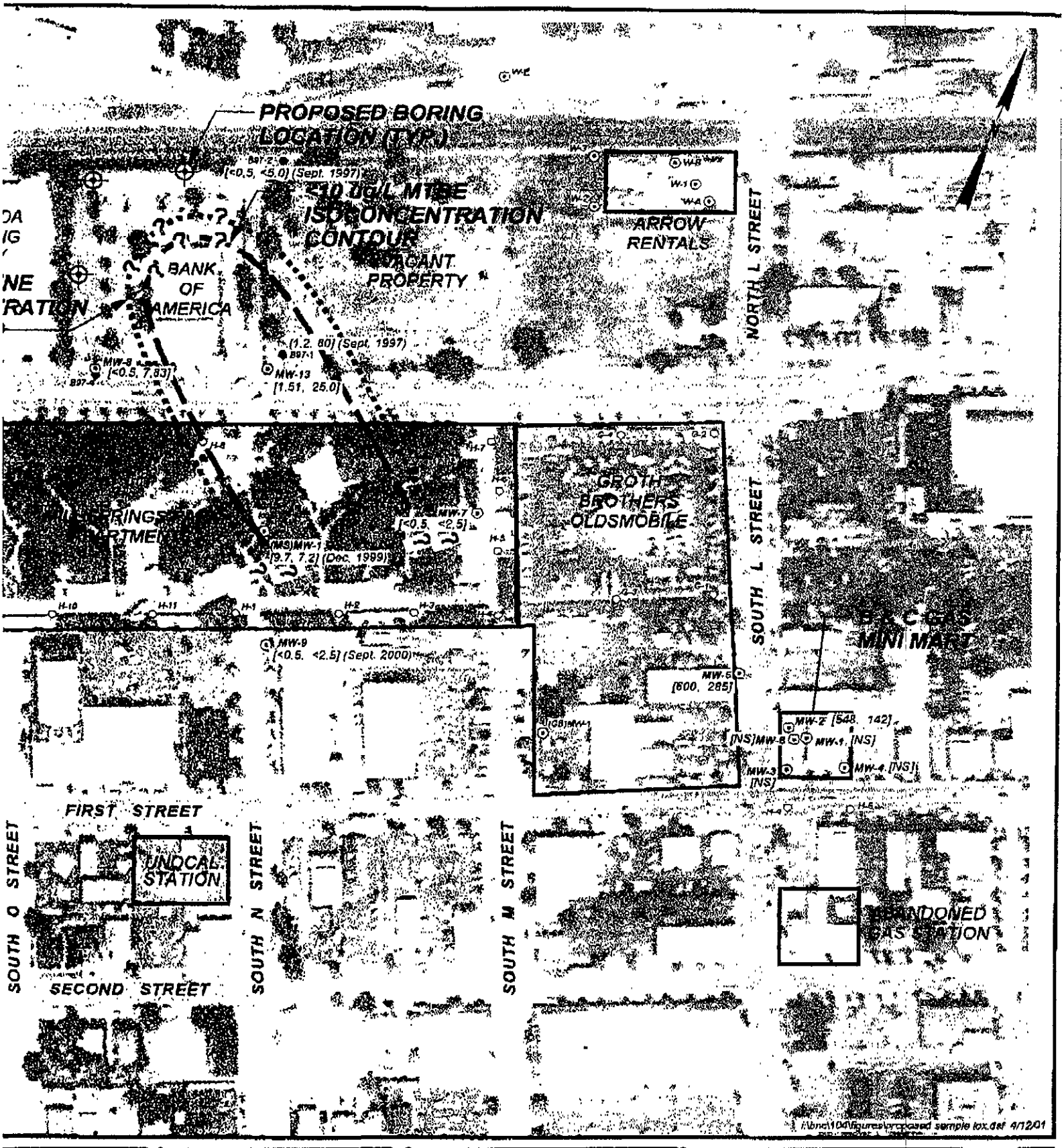
Figures
Figure 1 - Site Location
Figure 2 - Site Vicinity and Proposed Well Locations

Appendices
Appendix A – Cost Estimate Spreadsheet

cc: Ms. Eva Chu, ACEHS (without Appendix A)
Mr. Matt Katen, Alameda County Zone 7 (without Appendix A)
RWQCB, USTCF

# APPENDIX A

## COST ESTIMATE SPREADSHEET

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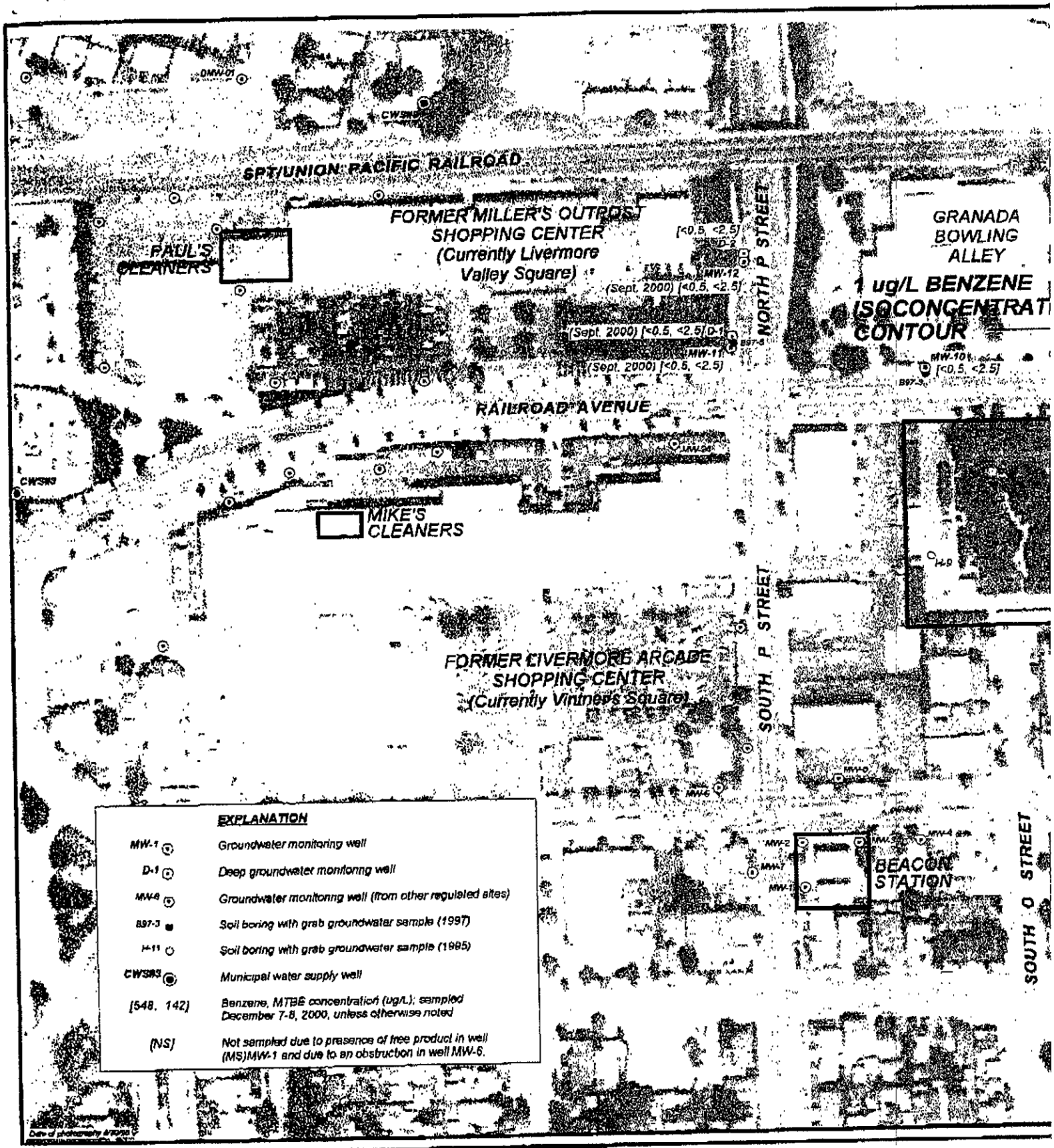
|---|---|---|
| GROUNDWATER MONITORING<br>B & C GAS MINI MART<br>LIVERMORE, CALIFORNIA | | FIGURE<br>2 |
| SITE VICINITY AND PROPOSED SAMPLING LOCATIONS | | PROJECT NO.<br>BNC104 |

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SCALE: 0 200 400 FEET (APPROXIMATE)