aqua science engineers inc.

October 4, 2005

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

SUBJECT: MONITORING WELL MW-5 REPLACEMENT
Albany Hill Mini Mart
800 San Pablo Avenue
Albany, California

Dear Mr. Wickham:

As previously reported, monitoring well MW-5 was destroyed during a sewer replacement project in San Pablo Avenue. California Trenchless, Inc. contracted Heilshorn Environmental Engineering (HE2) at the request of the City of Albany to replace this well.

Ms. Elyse Heilshorn of HE2 contacted Aqua Science Engineers for information on MW-5, such as the boring log, well construction details and analytical results. I stated that I wanted to be present during the well installation to verify that the well was installed properly. I arrived on-site at the scheduled time and the hollow-stem augers were already nearing the total depth of the well. However, the location of this well was not in the same location of monitoring well MW-5. Instead this boring was in the San Pablo Avenue right-of-way near the southern property line of the gas station. ASE pointed this out to Ms. Heilshorn who contacted Mr. Greg Jacobs of Jacobs Engineers who had told Ms. Heilshorn the location to install the well. Mr. Jacobs came to the site and insisted that they did destroy a well at this location (although ASE has no knowledge of a well in this location). While discussing the location of MW-5, several employees of the auto repair facility next to the MW-5 location confirmed the presence and location of monitoring well MW-5. Mr. Jacobs then agreed to install another replacement well near the location of MW-5. Two monitoring wells were installed this day, the replacement for MW-5, which is named MW-5R, and a new well named MW-10. HE2's report of the project is attached.

208 W. El Pintado, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

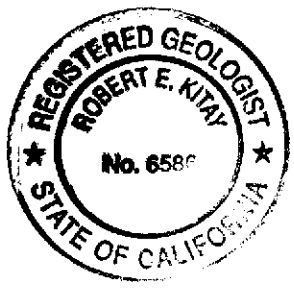
During my discussions with Mr. Jacobs, I asked about how the wells were destroyed. He told me that the casing was pulled out and then the hole was filled with compacted rock. The new sewer line was then built directly over the old well location. In addition, Mr. Jacobs also told me that three underground storage tanks (USTs) were located while installing the sewer line near the site. Two USTs were located adjacent to the gas station in the street. These USTs were left in place. One other UST, filled with cement, was located just south of the gas station. This UST was removed.

If you would like further information on these USTs or the well destruction, you may wish to contact Mr. Jacobs directly at (925) 254-9525 (office) or (510) 918-2322 (cell). The address for Jacobs Engineers is 370 Village Square, Orinda, CA 94563.

Should you have any questions, please feel free to call me at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



Robert E. Kitay, RG, REA
Senior Geologist

cc: Joginder Sikand, 1300 Ptarmingan Drive #1, Walnut Creek, CA 94595

Heilshorn Environmental Engineering

September 15, 2005

Mr. Michael Jardin
California Trenchless Inc.
2283 Dunn Rd.
Hayward CA 94545

SUBJECT: Groundwater Monitoring Well Installation Report
REGARDING: Hill Gas Site, 800 San Pablo Avenue Albany CA 94706

Dear Mr. Jardin:

Heilshorn Environmental Engineering (HE2) installed two groundwater monitoring wells at the Hill Gas site in Albany, California on September 6, 2005. A brief report describing the work is included with this letter.

California Trenchless Inc. (CTI) contracted HE2 to install one replacement groundwater monitoring well at the Hill Gas site. Figure 1 is a section of a topographic map showing the sit location. CTI was to install the replacement well at the request of the City of Albany. The City of Albany was represented by Mr. Greg Jacobs of Jacobs Engineering.

The property is owned by Sikand & Sikand Inc. Mrs. Sikand provided HE2 with the name and telephone number of their environmental consultant, Robert Kitay of Aqua Science. Mr. Jacobs, Mr. Kitay and the Alameda County inspector stated that they might come to the site during the fieldwork.

Mr. Kitay and Mr. Jacobs were at the site on the morning of September 6 while HE2 and Clear Heart Drillers were installing the replacement well. Mr. Kitay and the owner of the adjacent auto repair shop indicated that a well was destroyed in an additional location besides the location indicated to HE2 by Mr. Jacobs. Mr. Jacobs and Mr. Kitay agreed that another well should be installed. HE2 and the driller obtained verbal approval to install the additional well from CTI, the Clear Heart office and Alameda County.

HE2 installed two groundwater monitoring wells in the sidewalk, near the curb along San Pablo Avenue with the above listed approvals. The well installed as MW-5R is about 58' feet south of the Hill Gas property line. A well installed as MW-10 is in the tree "box" opening in the sidewalk about 12 feet north of the Hill Gas property line. Figure 2 shows the existing and new well locations.

HE2 PO Box 20546 El Sobrante CA 94820 ph 510-222-7968 fax 510-222-7442 eheilshhe2@earthlink.net

Alameda County required HE2 to resubmit the permit application and submit the additional $300 fee for the second well. HE2 has emailed and mailed this required items to Alameda County. A copy of the transmittal letter to Alameda County Public Works Agency is included with this letter.

Please call (510-222-7968) fax (510-222-7442) or email me (eheilshhe2@earthlink.net) if you have any questions or concerns regarding the information in this letter or the attached report. Thank you for selecting Heilshorn Environmental Engineering to provide services to your organization. I look forward to working with you again in the future.

Sincerely,

Elyse D. Heilshorn, P.E.
Consulting Engineer

cc: Greg Jacobs, Jacobs Engineers
Robert Kitay Aqua Science

Attachments:
Report of Fieldwork
Figures 1 and 2
Letter to Alameda County Public Works

Heilshorn Environmental Engineering

September 13, 2005

Alameda County Public Works Agency - Water Resources
Attn: James Yoo
399 Elmhurst St.
Hayward, CA 94544-1395

SUBJECT: (Revised) Well Installation Permit - Confirmation ID Number 1126630977398
REGARDING: Hill Gas Site, 800 San Pablo Avenue Albany CA 94706

Dear Mr.Yoo:

Enclosed please find the site map and a check for $300 to cover the additional well installed at the above site. The permit application was submitted online. The work was completed on September 6, 2005 with verbal approval from your agency. The work was done and the initial well fee paid under permit number W-2005-0835, application Id Number 11249928734 81.

Please call (510-222-7968) fax (510-222-7442), cell (510-703-5407) or email me (eheilshhe2@earthlink.net) if you have any questions or concerns regarding the permit application.

Sincerely,

E Heilshorn

Elyse D. Heilshorn, P.E.
Consulting Engineer

cc: Greg Jacobs, Jacobs Engineers
Michael Jardin, CTI

REPORT OF MONITORING WELL INSTALLATION
HILL GAS SITE
800 SAN PABLO AVENUE
ALBANY CA 94706

1.0 PURPOSE

The City of Albany instructed California Trenchless Inc. (CTI) to replace a monitoring well destroyed during installation of a new sewer line along the west side of San Pablo Avenue, south of Washington Street in Albany, California. CTI contracted Heilshorn Environmental Engineering (HE2) to install the replacement well. The well would be part of an ongoing groundwater monitoring program for the Hill Gas site, 800 San Pablo Avenue, Albany California. Figure 1 is a project location map.

2.0 PROJECT MODIFICATIONS

HE2 and Clear Heart Drilling installed two groundwater monitoring wells on September 6, 2005. Two wells were installed following discussions between representatives for the City of Albany (Greg Jacobs) and the property owner representative (Robert Kitay of Aqua Science). Verbal approval for installation of the second groundwater monitoring well was obtained from Clear Heart Drilling, Alameda County Pubic Works Agency and CTI in addition to the property owner's representative and the City of Albany. Figure 2 is a site map showing the locations of the new and existing wells for the Hill Gas site.

3.0 DESCRIPTION OF FIELDWORK

The well boreholes were drilled using hollow stem augers. Clear Heart Drilling used a Model 94DR-10k2 drill rig and 8-inch diameter augers. The well farther north along San Pablo Avenue, closer to Washington Street, was labeled MW-10. The well farther south along San Pablo Avenue was labeled MW-5R as shown on Figure 2.

Soil or groundwater samples were not collected, as the project purpose was to install wells replacing those destroyed during construction. Aqua Science provides environmental monitoring and consulting services for Hill Gas.

Boring logs were prepared to record the general soil types encountered during drilling and to diagram the well construction. The boring log soil types are based on visual evaluation of the auger cuttings only. Discreet undisturbed soil samples were not collected for evaluation. Attachment A includes copies of the borings logs.

4.0 WELL CONSTRUCTION

The two replacement wells were constructed using 2-inch diameter plastic casing in 8-inch diameter boreholes. Well MW-10 was constructed to a total depth of 25 feet below ground surface (bgs). Well MW-5R was constructed to a total depth of 20 feet bgs. Attachment A contains boring logs that include a diagram of the well construction. Slotted pipe well screen with 0.010 slot size was used in both wells. The screen in both wells extended from 7 feet bgs to the bottom of the hole. Solid casing was used from 7 feet bgs to a few inches below the ground surface. All joints were screw type joints: bottom cap to screen and screen to casing. No glues or primers were used. The well cap is a locked plug.

The well filter and seals were constructed as follows. The annular space between the well screen and the borehole wall was filled with clean sand from the bottom of the hole to 5.5 feet bgs, or 1.5 feet above the top of the well screen.

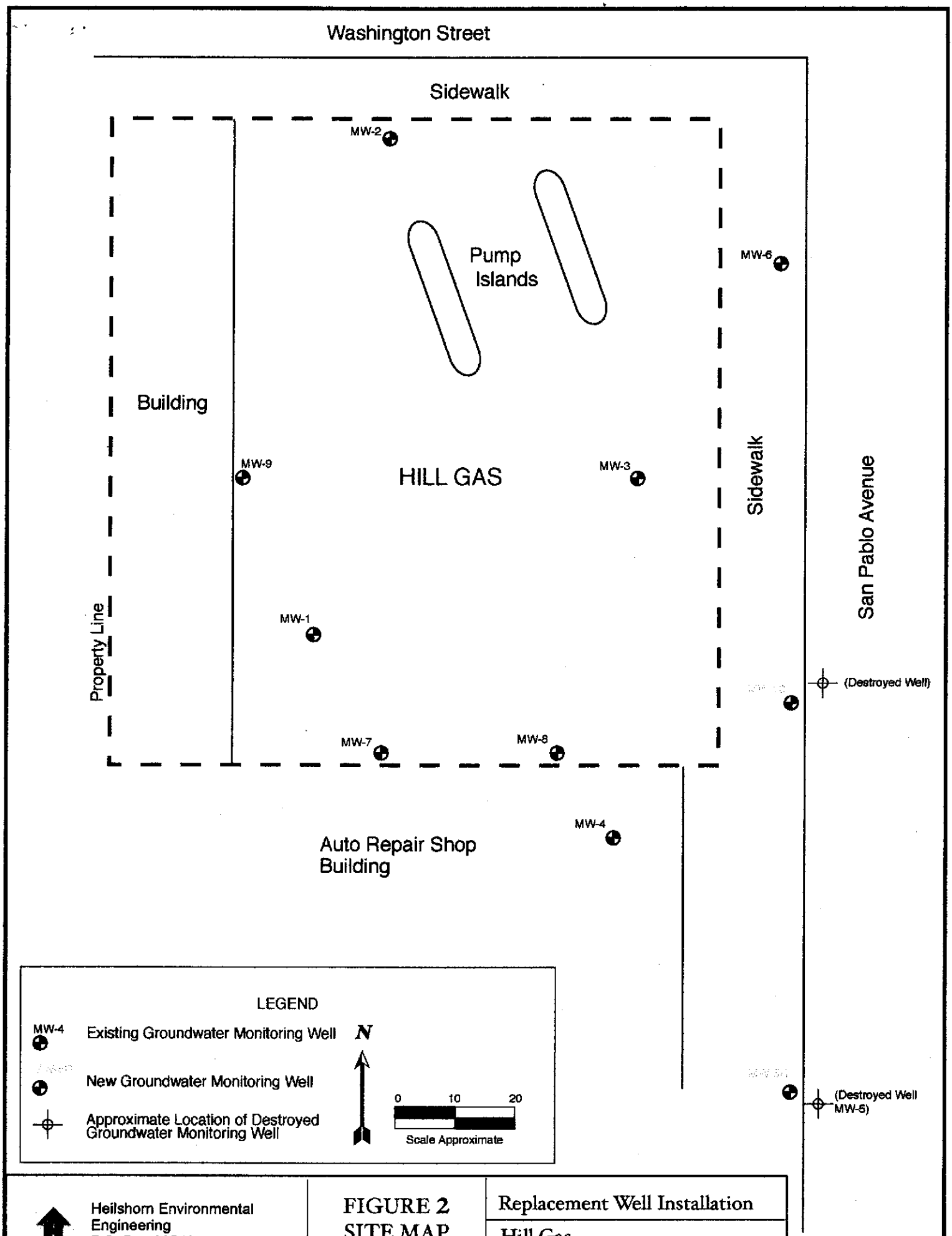
Bentonite seals were place above the sand. Dry bentonite chips were poured into the annular space and hydrated with clean water. One foot of dry bentonite chips was placed into well MW-10. One-half foot of dry bentonite chips was poured into MW-5R at the recommendation of the property owner's consultant. Both depths provide sufficient seal to prevent the cement grout seal from leaking into the well filter sand below.

A cement grout seal was placed from above the bentonite seal to a few inches below the top of the well casing. The cement grout mix consists of one bag of cement to 5 gallons of water. The mix was poured into the annular space. A round steel wellhead box was set in the cement grout so it is at or slightly above the ground or sidewalk surface.

5.0 SUMMARY AND CONCLUSION

Two groundwater monitoring wells were installed on September 6, 2005, for the Hill Gas Site, per instructions from the City of Albany. Well installation and construction followed standard environmental protocol and the requirements of Alameda County. Wastes generated were handled per common environmental protocol and consistent with regulatory guidelines. Well development and monitoring will be performed by the property owner's consultant.

Heilshorn Environmental Engineering P.O. Box 20546 El Sobrante CA 94820 510.222.7968 fax 510.222.7442	FIGURE I SITE LOCATION MAP Date 9/15/05 Revision 0	Replacement Well Installation Hill Gas Site 800 San Pablo Avenue Albany CA 94706



Heilshorn Environmental Engineering
P.O. Box 20546
El Sobrante CA 94820
510.222.7968 fax 510.222.7442

FIGURE 2
SITE MAP

Date 9/13/05
Revision 0

Replacement Well Installation

Hill Gas
800 San Pablo Avenue
Albany CA 94706

ATTACHMENT A
BORING LOGS

BOREHOLE LITHOLOGIC LOG

Based on field visual-manual procedure

(Based on observation of auger cuttings only)

Date 09/06/05

BOREHOLE ID: MW-5R

Sheet 1 of 1

Project: Albany Well / Hill Gas / CTI

Client: CTI / Albany

Address 800 San Pablo Ave.
Albany CA 94706

Logged By: EDH

Drilling Co. Clear Heart Drilling

Driller Chris Herrell

Drill Rig Model 94 DR 10K2

Drill Method Hollow Stem Auger

Borehole diameter 8"

Sample diameter NA

Depth (ft bgs)	USCS Symbol	Field Description	Sample ID	Blow Count	Well Detail	Remarks
0-3		Concrete				Steel well box
						Locking well plug
3	MH CH	Dark gray brown silty clay with some sand, moist, plastic, mod. soft				Cement grout seal 0-5'
						Bentonite seal 5.0-5.5'
						Well casing-solid 7' to surface
7	MH CH	Green gray silty clay with some sand, moist, plastic, mod. stiff				Sand filter 5.5' to BOH
						Well screen - 0.010 slot 7' to BOH
10	MH CH	Green gray silty clay with more sand, moist, plastic, stiff				
12				▽ 1		1 First water encountered at about 12'
15	ML	Greenish gray brown sandy silt with clay moist stiff				
				▽ 2		2 Water level about 18 ' bgs at well construction
20		Bottom of Hole				

HE2 P.O. Box 20546 El Sobrante, CA 94820-0546 ph 510.222.7968 fax 510.222.7442 eheilshhe2@earthlink.net

BOREHOLE LITHOLOGIC LOG
Based on field visual-manual procedure

(Based on observation of auger cuttings only)

Date 09/06/05

BOREHOLE ID: MW-10

Sheet 1 of 1

Project: Albany Well / Hill Gas / CTI

Client: CTI / Albany

Address 800 San Pablo Ave.
Albany CA 94706

Logged By: EDH

Drilling Co. Clear Heart Drilling

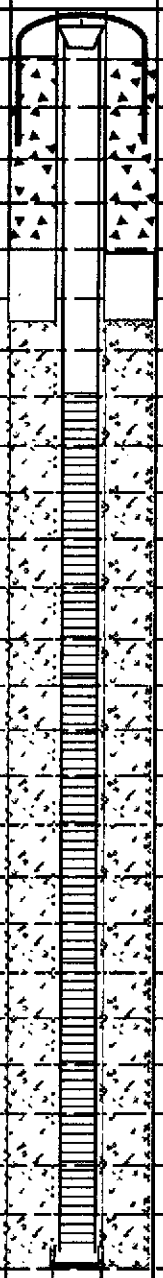
Driller Chris Herrell

Drill Rig Model 94 DR 10K2

Drill Method Hollow Stem Auger

Borehole diameter 8"

Sample diameter NA

Depth (ft bgs)	USCS Symbol	Field Description	Sample ID	Blow Count	Well Detail	Remarks
0-1		Fill				Steel well box
1	MH CH	Greenish gray brown silty clay with some sand, moist, plastic, stiff				Locking well plug
						0-5' bgs hand augered
3-3.5	SW	Fine grained pale tan sand stringer				
						Cement grout seal 0-3'
5	MH CH	Gray brown silty clay with some sand, moist, plastic, mod. soft				Bentonite seal 3-5.5'
						Well casing-solid 7' to surface
7						
						Well screen - 0.010 slot 7' to BOH
10	MH CH	Green gray silty clay with some sand, moist, plastic, mod. stiff				
13	MH CH	Gray brown Silty clay with some sand and gravel,		▽		First water encountered at about 13'
15	MH CH	Green staining and petroleum odor				
						Sand filter 5.5' to BOH
18	MH CH	Yellow brown clayey silt with sand, moist less plastic				
25		Bottom of Hole				

HE2 P.O. Box 20546 El Sobrante, CA 94820-0546 ph 510.222.7968 fax 510.222.7442 eheilshhe2@earthlink.net