ConocoPhillips
76 Broadway
Sacramento, California 95818

August 24, 2007

Ms. Donna Drogos
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Re: Monitoring Well Abandonment and Replacement Report
76 Station no. 5760
376 Lewelling Boulevard
San Lorenzo, CA

Dear Ms. Drogos,

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (916) 558-7612.

Sincerely,

Bill Borgh

Bill Borgh
Site Manager – Risk Management and Remediation

Attachment

August 27, 2007

Ms. Donna Drogos
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RE: Monitoring Well Abandonment and Replacement Report
76 Station No. 5760
376 Lewelling Boulevard
San Lorenzo, California

DELTA

Dear Ms. Drogos:

On behalf of Conoco Phillips Company (COP), Delta Consultants (Delta), has prepared this *Monitoring Well Abandonment and Replacement Report* for the removal and replacement of two monitoring wells at the site located at 376 Lewelling Boulevard, San Lorenzo, California (Figure 1).

Groundwater monitoring wells U-1 and U-3 were used for groundwater monitoring at the site. In addition, these two wells were previously used for remediation at the site. Analytical data from quarterly groundwater samples collected from these two monitoring wells indicated that they were consistently impacted by petroleum hydrocarbons. It is suspected that this hydrocarbon impact may be originating from fuel spills at the surface. Therefore, Delta proposed the removal and replacement of the two monitoring wells in a work plan submitted to the Alameda County Health Agency (ACHA) dated December 14, 2007. The monitoring well locations are shown on Figure 2. No correspondence was received from the ACHA concerning the work plan submitted by Delta on behalf of COP. Therefore, on February 13, 2007 Delta submitted a letter to the ACHA indicating COP's intention to proceed with the proposed work. A copy of the letter is presented as Attachment A.

SITE DESCRIPTION

The site is located at the southeast corner of the intersection of Lewelling Boulevard and Usher Street in San Lorenzo California. The site is currently an active service station with two dispenser islands, one underground waste-oil tank, two underground gasoline storage tanks (USTs), and a station building with two mechanic's bays.

3164 GOLD CAMP DRIVE SUITE 200 RANCHO CORDOVA, CALIFORNIA 95670 USA
PHONE 916.638.2085 / 800.477.7411 FAX 916.638.8385 WWW.DELTAENV.COM

PREVIOUS ASSESSMENT

The underground storage tanks (USTs) were removed and replaced in November 1987. At that time monitoring well U-1 was installed in response to the contamination observed during the UST replacement. Information on the installation of well U-1 is documented in a report *Well Installation* prepared by Woodward-Clyde Consultants dated March 25, 1988. Three additional monitoring wells (U-2, U-3, and U-4) were installed in August 1990 by GeoStrategies Inc. (GSI). The installation of these monitoring wells is documented in a report *Monitoring Well Installation Report* prepared by GSI dated November 16, 1990.

In March 1992 GSI installed four off-site monitoring wells (U-5 through U-8) to further delineate the hydrocarbon impact to the groundwater down-gradient of the site. The installation of these monitoring wells is documented in a report *Well Installation Report* prepared by GSI dated June 15, 1992.

An additional off-site monitoring well, U-9, was installed by GSI in May 1993. The installation of this monitoring well is documented in a report *Well Installation Report* prepared by GSI dated August 9, 1993

In September 1993, twelve borings were advanced as part of a property divestment program. Due to hydrocarbon impacted soils being encountered, three of the borings were converted to vapor extraction wells.

In March 1994, the delineation of hydrocarbon-impacted soils was completed with the advancement of two additional soil borings.

Between August 8 and 13, 1994, a soil vapor extraction (SVE) feasibility test was conducted by Pacific Environmental Group (PEG). The results of the test indicated SVE to be an applicable technology for removal of petroleum hydrocarbons from soil and groundwater beneath the site.

In September 1995 a combination SVE and groundwater treatment (GWT) system was constructed at the site. Start-up activities for the GWT system began on October 3, 1995. SVE system start-up and continuous GWT operation began in mid-October 1995. The system continued to operate until February 1997 when it was shut down due to diminishing incremental benefit.

SENSITIVE RECEPTORS

A sensitive receptor survey was completed in August 2006. No wells were identified within 1,000 feet of the site.

Pre-Field Investigation Activities

A utility survey was conducted prior to the field investigation. Underground Services Alert (USA) was notified prior to drilling operations, and the services of a private utility locating company was utilized to reduce the risk of damage to utilities beneath the property. Additionally, the first five feet of each borehole was cleared before well destruction and replacement activities were conducted on July 18 and 19, 2007.

Delta prepared a site-specific Health and Safety Plan (HASP) in accordance with Title 8, Section 5192 of the California Code of Regulations. The HASP contains a list of emergency contacts, as well as a hospital route map to the nearest emergency facility.

A drilling permit was obtained from the Alameda County Public Works Agency (ACPWA) prior to scheduling the field work. The drilling permits are presented in Attachment B.

Monitoring Well Abandonment

On July 18 and 19, 2007, monitoring wells U-1 and U-3 were abandoned and replaced with monitoring wells U-1R and U-3R by Gregg Drilling (Gregg) under supervision of the Delta field geologist. Monitoring well U-1 was abandoned by filling the well from the bottom up with neat cement using a tremie pipe. This well was initially proposed to be abandoned by over drilling to a depth of 31 feet below the ground surface (bgs) using a limited access drill-rig (LAR) equipped with 10-inch diameter hollow-stem augers. However, upon arrival at the site a large storage container had been placed next to this well not allowing access to the well by the LAR.

Monitoring well U-3 was abandoned by over-drilling using the LAR equipped with 10-inch diameter hollow-stem augers to a depth of 26 feet bgs. This depth is one foot deeper than the original construction depth of this well. Monitoring well U-3R was subsequently constructed in this borehole.

Monitoring Well Installation

Monitoring well U-1R was constructed approximately 2 feet north of the former U-1 location. The boring was advanced to a depth of 25-feet bgs using the LAR equipped with 8-inch diameter hollow-stem augers. The boring was converted to a groundwater monitoring well by installing a 2-inch diameter schedule 40 poly-vinyl chloride (PVC) well casing with a screen interval from 10 to 25 feet bgs. The perforation size in the screen interval is 0.010-inch. A sand pack consisting of RMC Lonestar #2/12 sand was installed into the annular space and extended to approximately two feet above the top of the screen interval. A one-foot thick bentonite seal was placed on top of the sand pack. The monitoring well was surged prior to the placement of the bentonite seal to promote settling of the sand pack. The remainder of the annular space was filled with neat cement and the monitoring well fitted with a locking cap and encased in a traffic-rated protective vault placed at existing ground level. Monitoring well construction details are presented as Attachment C.

Monitoring well U-3R was constructed in the same borehole that previously contained monitoring well U-3. Subsequent to abandonment of monitoring well U-3 by over-drilling the borehole was backfilled with bentonite chips from 26- to 25-feet bgs. The boring was converted to a groundwater monitoring well by installing a 2-inch diameter schedule 40 PVC well casing with a screen interval from 10 to 25 feet bgs. The perforation size in the screen interval is 0.010-inch. A sand pack consisting of RMC Lonestar #2/12 sand was installed into the annular space and extended to approximately two feet above the top of the screen interval. A one-foot thick bentonite seal was placed on top of the sand pack. The monitoring well was surged prior to the placement of the bentonite seal to promote settling of the sand pack. The remainder of the annular space was filled with neat cement and the monitoring well fitted with a

locking cap. The monitoring well was completed using the exiting traffic-rated protective vault from monitoring well U-3.

Well Development, Monitoring, and Sampling

On July 24, 2007 Gregg, under supervision of the Delta field geologist, developed the two newly installed monitoring wells. The newly installed monitoring wells, U-1R and U-3R, were developed using a surge block followed by bailing and pumping removing approximately 20 and 22.5 gallons of groundwater, respectively.

The newly installed monitoring wells, U-1R and U-3R, will be purged and sampled during the third quarter 2007 by TRC as part of the first monitoring and sampling event following installation and development. The data will be presented in the Semi-Annual Monitoring Report prepared by TRC and the Semi-Annual Status Report prepared by Delta. Groundwater samples collected from the monitoring wells will be analyzed for TPPH, BTEX, MTBE, and ethanol by EPA Method 8260.

Wellhead Survey

A California licensed surveyor will be retained to survey the northing and easting of the new monitoring wells using Datum NGVD29 or NAD 88. The monitoring well elevations will be surveyed relative to mean sea level, with an accuracy of +/- 0.01 foot. A global positioning system (GPS) will also be used to survey in the latitude and longitude of the wells to be uploaded into the State GeoTracker database. The survey of the well locations will be to sub-meter accuracy.

Disposal of Drill Cuttings and Wastewater

Drill cuttings and wastewater generated during well abandonment, installation, and development activities was placed into labeled 55-gallon Department of Transportation (DOT) approved steel drums and stored on the service station property. Samples of the drill cuttings and generated wastewater were collected, properly labeled and placed on ice pending submittal to a California-certified laboratory where they were analyzed for by TPPH, BTEX, and MTBE by EPA Method 8260B and total lead by EPA Method 6010B. A chain-of-custody accompanied the samples during transportation to the BC Laboratories in Bakersfield, California, a California-certified laboratory. The drummed drill cuttings and wastewater are currently being profiled. Subsequent to waste profiling activities the waste will be transported and disposed of at a COP approved facility.

Recommendation

Delta recommends that these two monitoring wells be purged and sampled on a quarterly basis for a minimum of one year to determine if the petroleum hydrocarbon impact to the groundwater in the vicinity of the two monitoring wells, U-1R and U-3R, is stable or declining.

REMARKS/SIGNATURES

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with

currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report will be performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no expressed or implied warranty as to the contents of this report.

If you have any questions regarding this project, please contact me at (916) 503-1261 or Mr. William Borgh of ConocoPhillips at 916-558-7612.

Sincerely,

DELTA CONSULTANTS, INC.

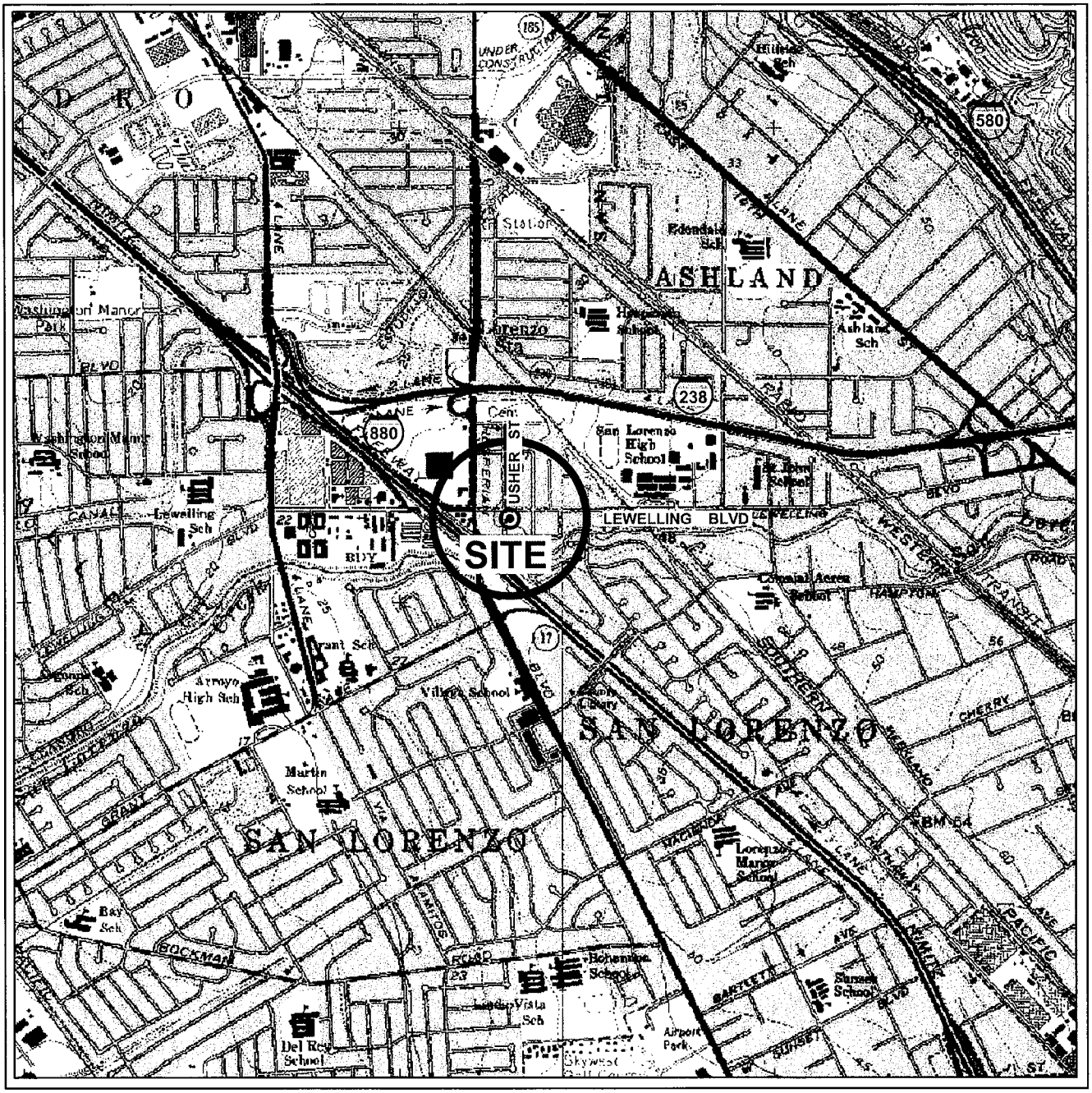
Dennis S. Dettloff, P.G.
Senior Project Manger
California Registered Professional Geologist No. 7480

cc: Mr. William Borgh, ConocoPhillips (electronic copy only)

Figures:
- Figure 1 – Site Location Map
- Figure 2 – Site Plan

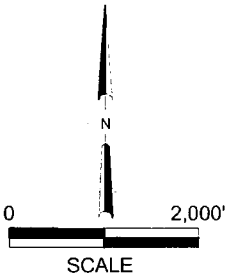
Attachments:
- Attachment A – COP's Letter of Intent
- Attachment B – ACPWA Permits
- Attachment C – Well Construction Details

Figures



GENERAL NOTES:
BASE MAP FROM 3-D TOPO QUADS
SAN LEANDRO AND HAYWARD, CA. QUADRANGLE
1967

QUADRANGLE LOCATION



SCALE

FIGURE 1

SITE LOCATION MAP
76 SERVICE STATION NO. 5760
376 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. C105760		DRAWN BY K. MARTIN	DELTA
FILE NO. 1202-SLM		PREPARED BY D. DETTLOFF	
DATE 12 DEC 06	REV. 0	REVIEWED BY	

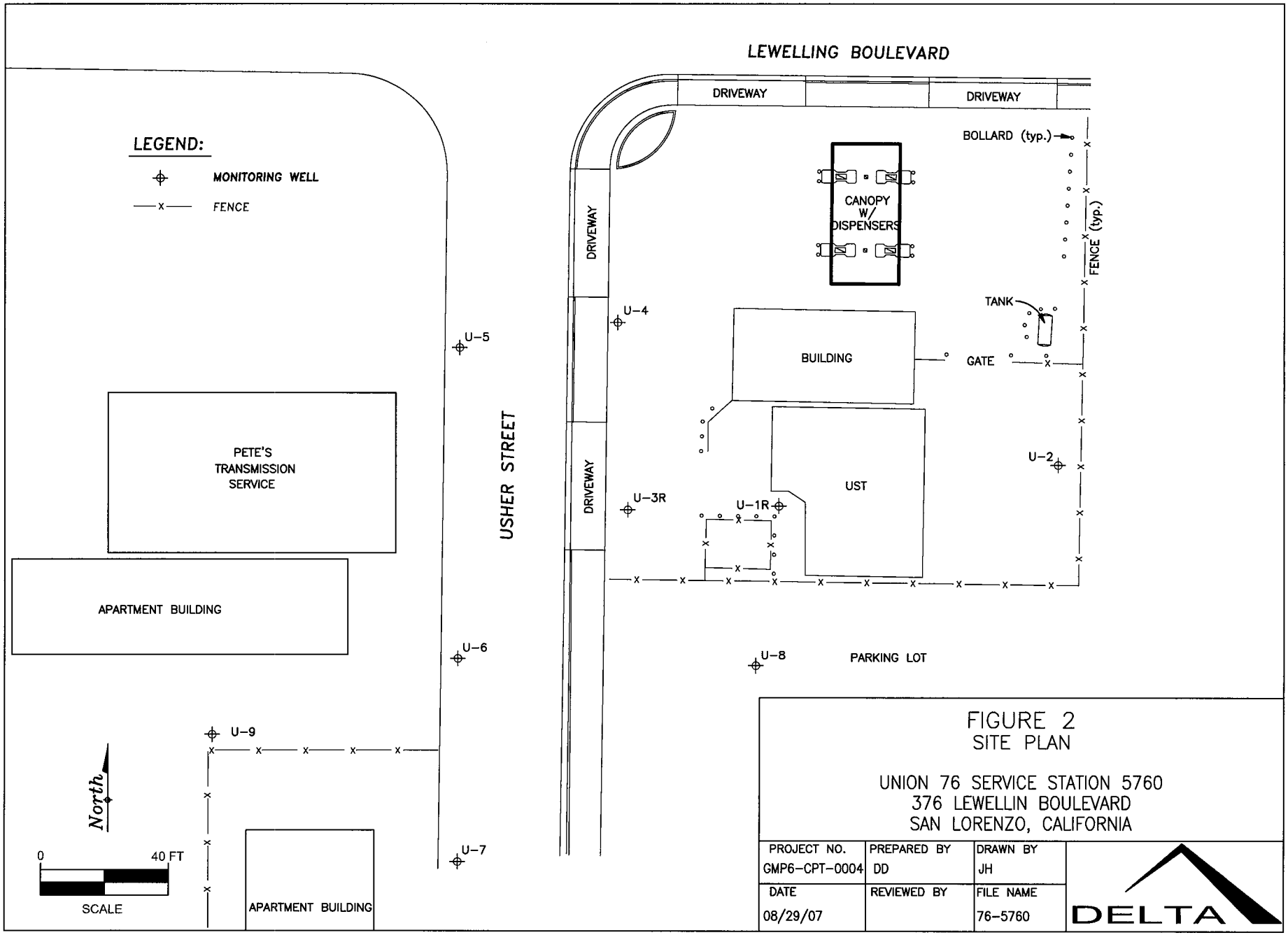


FIGURE 2
SITE PLAN

UNION 76 SERVICE STATION 5760
376 LEWELLIN BOULEVARD
SAN LORENZO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
GMP6-CPT-0004	DD	JH
DATE	REVIEWED BY	FILE NAME
08/29/07		76-5760

DELTA

Attachment A

COP's Letter of Intent

February 13, 2007

Mr. Donald Hwang
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RE: Work Plan - Monitoring Well Abandonment and Replacement
76 Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

DELTA

Dear, Mr. Hwang:

On December 14, 2006 Delta Environmental Consultants on behalf of ConocoPhillips submitted a workplan to your office for the abandonment and replacement of two monitoring wells, U-1 and U-3. As of today it has been more than sixty days since the workplan was submitted to your office. Therefore, this letter is being submitted to your office informing you of our intent to proceed with the work stipulate in the above referenced workplan.

If you have any questions concerning this submittal don't hesitate to contact me at (916) 503-1261.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Dennis S. Dettloff, P.G.
Senior Project Manger
California Registered Professional Geologist No. 7480

cc: Ms. Shelby Lathrop – ConocoPhillips (electronic copy only)

Attachment B

ACPWA Permits

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 05/22/2007 By jamesy

Permit Numbers: W2007-0634 to W2007-0635
Permits Valid from 06/20/2007 to 06/25/2007

Application Id:	1179786354509	**City of Project Site:** San Lorenzo
Site Location:	376 Lewelling Blvd, San Lorenzo, CA 94541	
Project Start Date:	06/20/2007	**Completion Date:** 06/25/2007
Applicant:	Delta Consultants - Dennis Dettloff 3164 Gold Camp Dr #200, Rancho Cordova, CA 95670	**Phone:** 916-503-1261
Property Owner:	Ramesh Sood 376 Lewelling Bl., San Lorenzo, CA 94541	**Phone:** 510-481-9260
Client:	** same as Property Owner **	

	Total Due:	$600.00
Receipt Number: WR2007-0225	**Total Amount Paid:**	$600.00
Payer Name : Delta	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 2 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: drill **Work Total: $600.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2007-0634	05/22/2007	09/18/2007	U-1-UR-1	11.00 in.	2.00 in.	4.00 ft	31.00 ft
W2007-0635	05/22/2007	09/18/2007	U-2-UR-2	11.00 in.	2.00 in.	4.00 ft	26.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the

Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Drill out & Replace with New Well

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

10. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 08/23/2007 By jamesy

Permit Numbers: W2007-0932
Permits Valid from 07/18/2007 to 07/19/2007

Application Id:	1187650627308	**City of Project Site:** San Lorenzo
Site Location:	376 Lewelling Blvd, San Lorenzo, CA 94541	
Project Start Date:	07/18/2007	**Completion Date:** 07/19/2007
Applicant:	Delta Consultants - Dennis Dettloff 3164 Gold Camp Dr #200, Rancho Cordova, CA 95670	**Phone:** 916-503-1261
Property Owner:	Ramesh Sood 376 Lewelling Blvd., San Lorenzo, CA 94541	**Phone:** 510-481-9260
Client:	** same as Property Owner **	

	Total Due:	$300.00
Receipt Number: WR2007-0378	**Total Amount Paid:**	$300.00
Payer Name : Delta	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 1 Wells
Driller: Gregg - Lic #: 485165 - Method: auger

Work Total: $300.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2007-0932	08/23/2007	10/16/2007	U-1	10.00 in.	4.00 in.	5.50 ft	30.50 ft			

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

Alameda County Public Works Agency - Water Resources Well Permit

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

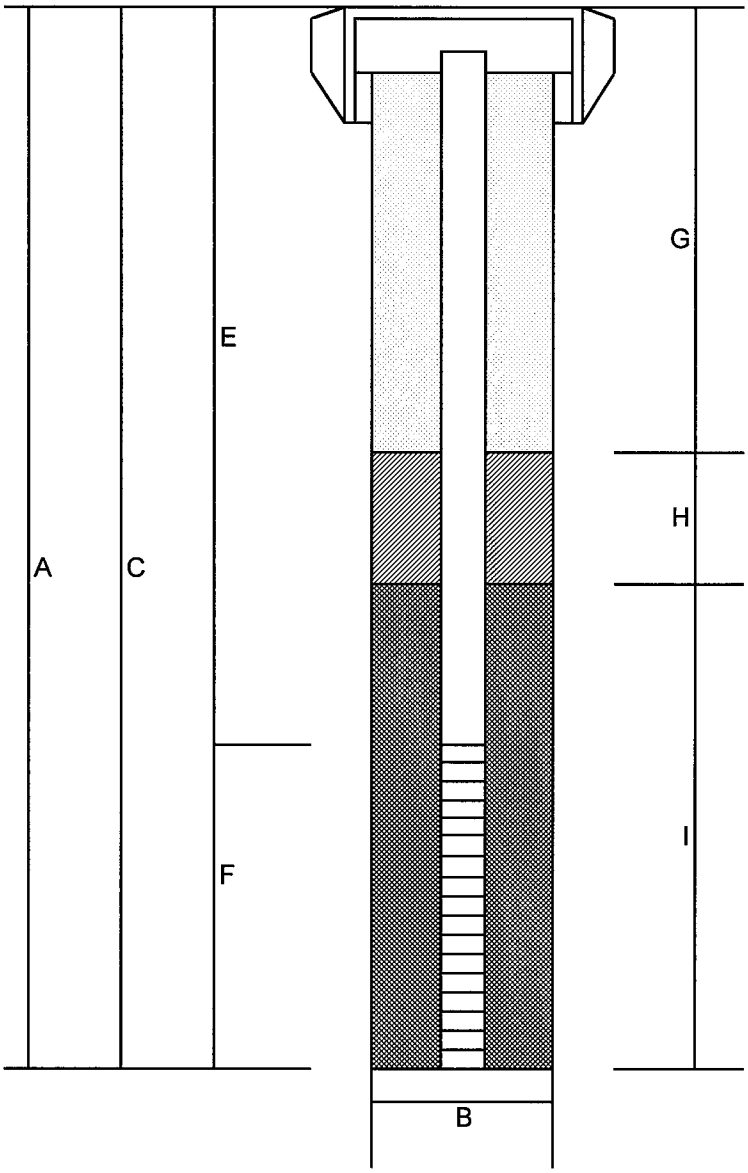
After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

8. Work Completed on 7/18/07-7/19/07

Attachment C

Well Construction Details



A: Total Depth: 25' bgs

B: Boring Diameter: 8-inch
Drilling Method: Hollow Stem Auger

C: Casing Length: 25'
Material: Schedule 40 PVC

D: Casing Diameter: 2"

E: Depth to Perforations: 10'

F: Perforated Length: 15'
Perforated Size: 0.010"

G: Surface Seal: 7'
Seal Material: Neat Cement

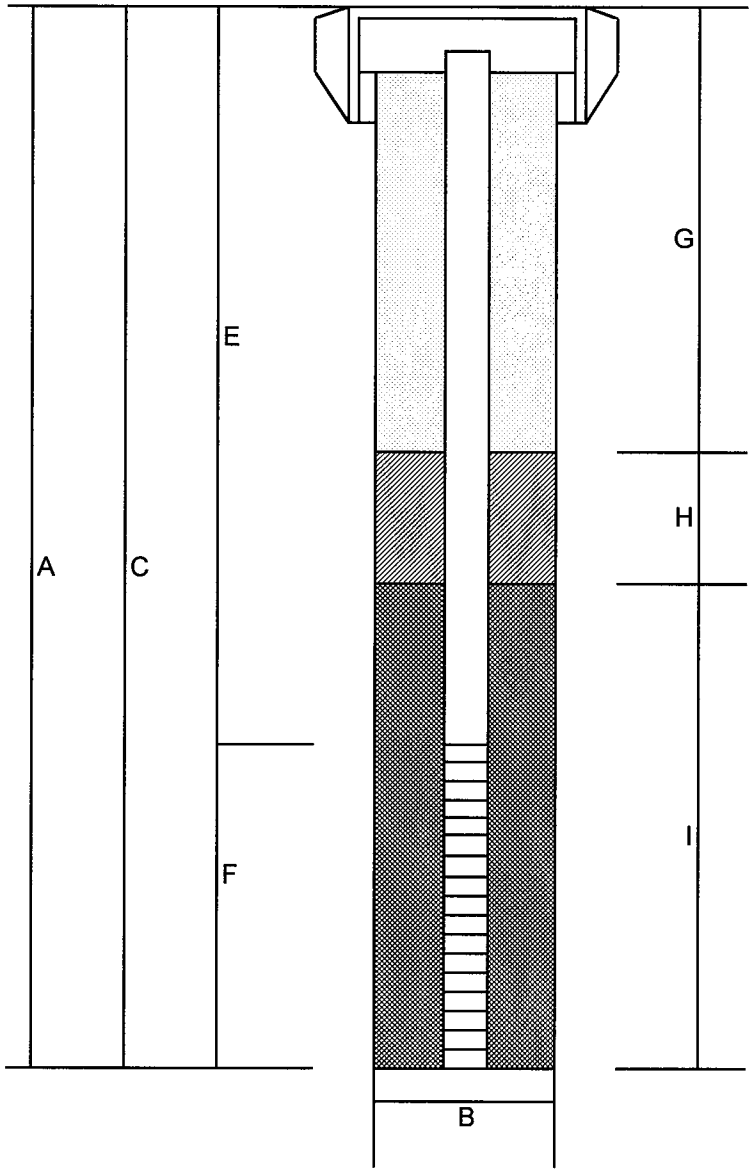
H: Seal: 1'
Seal Material: Bentonite

I: Gravel Pack: 17'
Pack Material: Monterey Sand
Size: #2/12

WELL COMPLETION DIAGRAM (U-1R)
76 Service Station No. 5760
San Lorenzo, California

PROJECT NO. C105760131	PREPARED BY TC	DRAWN BY TC
DATE 7/25/2007	REVIEWED BY	FILE NAME COP 5760

DELTA



A: Total Depth: 25' bgs

B: Boring Diameter: 10-inch
Drilling Method: Hollow Stem Auger

C: Casing Length: 25'
Material: Schedule 40 PVC

D: Casing Diameter: 2"

E: Depth to Perforations: 10'

F: Perforated Length: 15'
Perforated Size: 0.010"

G: Surface Seal: 7'
Seal Material: Neat Cement

H: Seal: 1'
Seal Material: Bentonite

I: Gravel Pack: 17'
Pack Material: Monterey Sand
Size: #2/12

WELL COMPLETION DIAGRAM (U-3R)
76 Service Station No. 5760
San Lorenzo, California

PROJECT NO. C105760131	PREPARED BY TC	DRAWN BY TC
DATE 7/25/2007	REVIEWED BY	FILE NAME COP 5760

DELTA