Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

3164 Gold Camp Drive • Suite 200
Rancho Cordova, California 95670 USA

916.638.2085 800.477.7411
Fax 916.638.8385

RECEIVED
By lopprojectop at 2:20 pm, May 03, 2006

April 28, 2006

Mr. Amir Gholami
Alameda County
Department of Environmental Health
1131 Harbor Bay Park Way
Alameda, CA 94502

Subject: **Well Destruction Report**
Case Number 3580
Former RPMS (E-Z Serve) Location 100877
525 West A Street
Hayward, California
Delta Project No. RPMS0877

Dear Mr. Gholami:

Delta Environmental Consultants, Inc, (Delta) has been authorized by Restructure Petroleum Marketing Services of California (RPMS) to destroy one monitoring well at the property located at 525 West A St Hayward, California.

The location of the Site is shown on Figure 1 and the site features are shown on Figure 2. Delta proposed the scope of work in our *Workplan for the Replacement and Installation of Monitoring Wells* dated March 17, 2006. During field activities one monitoring well (MW-2) was destroyed.

Site Background

The site is currently vacant. There are no underground storage tanks (USTs) or dispensers currently on-site; however, the canopy and remnant concrete islands are still present.

In November 1986, Converse Environmental Consultants of California (CECC) conducted an initial phase of assessment as a result of a suspected fuel system leak. The assessment consisted of the installation of three groundwater monitor wells (MW-1 through MW-3), each to total a depth of 30 feet below ground surface (bgs).

In June 1987, CECC conducted another phase of assessment, which included the installation of three additional groundwater monitor wells (MW-4 through MW-6).

On June 15, 1990, the original USTs were removed. The former UST system consisted of four 10,000-gallon gasoline USTs, and three fuel dispenser islands. The 10,000-gallon USTs were located in the northwestern portion of the property. The fuel dispenser islands were located in the center of the site. The

original wells named MW-2 through MW-6 were destroyed during UST removal activities in June 1990. Hereafter, MW-1 is designated as MW-1A. Based on field observations and analytical results, the USTs were suspected to be the source of the release.

In January 1992, Associated Soil Analysis, Inc. (ASA) performed a third site investigation. During this investigation six groundwater monitor wells (MW-1 through MW-6) were installed on-site. All the wells were installed to a total depth of 30 feet bgs, and had a screened interval from approximately 15 to 30 bgs. The soil samples submitted for laboratory analysis indicated low levels or levels below the laboratory reporting limit of fuel hydrocarbons. Details of this assessment were presented in the ASA *Site Assessment Report*, dated May 2, 1992.

In June 1993, ASA installed four groundwater monitor wells (MW-7 through MW-10). The total depth of each well is 30 feet bgs and the wells are screened from 10 to 30 feet bgs. Analytical results of soil samples obtained from well boring MW-7 at an approximate depth of 15 feet bgs, and from well borings MW-9 and MW-10 at approximate depths of 10 and 15 feet bgs indicated the presence of low levels of fuel hydrocarbon constituents. Petroleum hydrocarbon constituents were not detected above laboratory reporting limits in the remaining soil samples submitted for analytical testing. Details of this assessment were presented in the ASA *Site Assessment Study for Petroleum Constituents in Soil and Groundwater*, dated July 20, 1993.

In February 1995, Brown and Caldwell (BC) installed four groundwater monitoring wells (MW-11 through MW-14). Also, prior to well installation activities, seventeen hydro-punch borings were advanced within the rights-of-way of West A Avenue, Victory Drive, Garden Street, and Lupine Street in an effort to locate the best position of wells MW-11 through MW-14. Monitoring well MW-11 was installed to a total depth of 25 feet bgs and was screened from approximately 5 to 25 feet bgs. Monitoring wells MW-12 through MW-14 were each installed to a total depth of approximately 30 feet bgs and screened from approximately 10 to 30 bgs. Low levels of petroleum hydrocarbons were detected in the soil samples obtained during drilling of well borings MW-11 through MW-14. Details of this assessment were presented in the BC *Draft Step 5, Phase II Site Investigation Report*, dated March 1, 1995.

On June 20, 2002, ATC oversaw the installation of three vapor extraction/air sparge remediation wells (VEAS-1 through VEAS-3). The wells were installed to 30 feet bgs and screened from 5 to 15 feet bgs. On June 24, 2002, ATC oversaw the installation of one groundwater extraction well (EX-1) to a depth of 35 feet bgs. The extraction well is screened from 10 to 25 feet bgs. Fifteen of the twenty-four soil samples submitted for laboratory analysis reported concentrations of petroleum hydrocarbon constituents above their respective laboratory equipment practical quantization limits. Details of this assessment were presented in ATC's *Remediation Well Installation Report*, dated August 14, 2002.

Delta has been performing quarterly groundwater monitoring since October 2004.

Site and Area Lithology

The subject site is located within the San Leandro cone, a low gradient alluvial fan, which originates at the mouth of Castro Valley and spreads westward onto the Bay Plain. This cone consists of alluvial sediments, which overlie marine clay, terrigenous sand and silt of inter-tidal provenances. Based on previous investigations, shallow soils consist of silty clay, clay, clayey silt, silty sand, and sand to a total depth of approximately 30 feet bgs (the maximum depth explored).

The Hayward Fault, the San Andreas Fault and the Calaveras Fault are the closest major faults in the vicinity of the site.

Area Hydrology and Hydrogeology

The shallowest regional aquifer in the area is the Newark Aquifer, which consists of permeable water bearing alluvial sand. The Newark Aquifer consists of series of laterally discontinuous saturated lenses of coarse to fine-grained sediments 10 to 100 feet thick at depths less than 200 feet bgs. The regional hydraulic gradient is westward, from the mouth of the Castro Valley towards the San Francisco Bay. The nearest water wells in the area indicate depths to the first water table to be 6 to 21 feet bgs.

An inventory of wells within a ½ mile radius of the site was compiled by ASA. This list was compiled from available well logs and permits at the Alameda County Flood Control and Water Conservation District, Hayward Quadrangle files. Fifteen wells are located within a ½ mile radius of the site, five of which are located within approximately 1,500 feet of the site. Ten of the wells are categorized as shallow (terminating less than 100 feet bgs) with the remaining five having greater depths. Of the ten shallow wells, five are used for water supply, three for groundwater monitoring, and two for unspecified uses.

Based on the groundwater monitoring event conducted by Delta on November 10, 2005, the groundwater flows toward the west to southwest at a gradient of approximately 0.007.

Permits

A drilling permit for the well destruction was obtained from the Alameda County Public Works Agency. A copy of the permit is located in Enclosure A.

Well Destruction

On April 6, 2006, Delta observed the over drilling of one monitoring well using a truck-mounted, hollow-stem auger drilling rig. Monitoring well MW-2 was over-drilled to a total depth of 5 feet bsg. The casing was pressure grouted with neat portland cement through a tremie hose to a depth of 3 feet bsg and the remaining 3 feet were backfilled with soil to match the surrounding area.

Investigation Derived Material

All piping and concrete slabs were temporarily stockpiled on site. Water generated by drilling activities was placed in 55 gallon drums and temporarily stored on site. The stockpile and decontamination water will be disposed of at an appropriate licensed disposal facility.

Conclusion

Delta has recently been in touch with Hydro Analysis, the consultants for the Prime Properties LUFT site located at 580 West A Street. Prime Properties has conducted its own investigations and Delta is communicating with them to acquire their findings. In light of this information, Delta has postponed the drilling of proposed off-site monitoring wells MW-2A, MW-15, and MW-16.

Remarks

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 were 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 express or implied warranty as to the contents of this report.

If you have any questions regarding this project, please contact John Smith at (916) 503-1266.

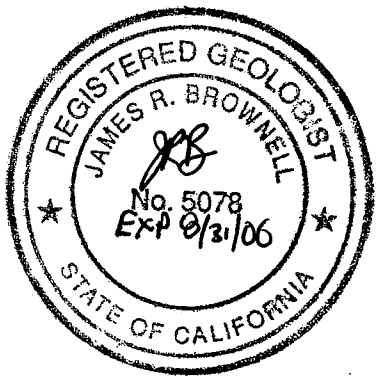
Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Deborah Shulman
Staff Geologist

John Smith
Project Manager

James R. Brownell, P.G.
California Professional Geologist No. 5078



Enclosures
cc: Jack Ceccarelli, RPMS of CA

FIGURES

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, HAYWARD QUADRANGLE, 1962

FIGURE 1

SITE LOCATION MAP

FORMER E-Z SERVE NO. 100877
525 WEST A STREET
HAYWARD, CALIFORNIA

PROJECT NO. RPMS-0877	DRAWN BY MC 11/10/04
FILE NO. EZ-100877-F1	PREPARED BY JS
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

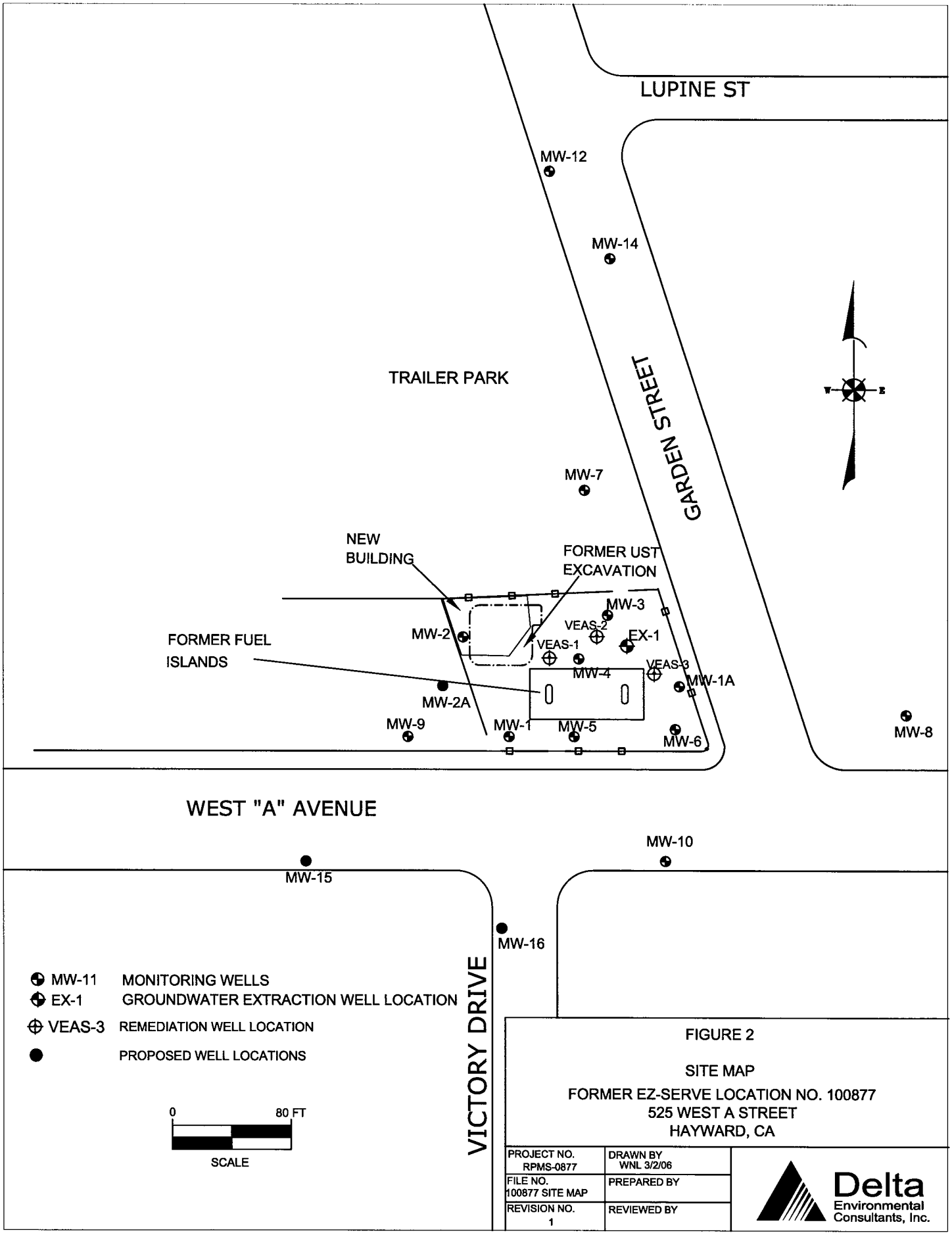


FIGURE 2

SITE MAP

FORMER EZ-SERVE LOCATION NO. 100877
525 WEST A STREET
HAYWARD, CA

PROJECT NO. RPMS-0877	DRAWN BY WNL 3/2/06
FILE NO. 100877 SITE MAP	PREPARED BY
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

ENCLOSURE A

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: 04/03/2006 By jamesy **Receipt Number: WR2006-0154**
Permits Issued: W2006-0245 **Permits Valid from 04/04/2006 to 04/07/2006**

Application Id: 1143833285138 **City of Project Site:** Hayward
Site Location: 525 West A St, Hayward, CA 94541
Project Start Date: 04/04/2006 **Completion Date:** 04/07/2006

Applicant: Delta Environmental Consultants - Deborah Shulman **Phone:** 916-503-1279
3164 Gold Camp Dr #200, Rancho Cordova, CA 95670
Property Owner: Aziz Kandahari **Phone:** 925-560-9652
5196 Grayhawk Ln., Dublin, CA 94568
Client: ** same as Property Owner **

Total Due: $300.00
Total Amount Paid: $300.00
Payer Name : James Raus Brownell Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 1 Wells
Driller: Cascade Drilling Inc. - Lic #: 717510 - 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 #
W2006-0245	04/03/2006	07/03/2006	MW2	8.00 in.	2.00 in.	14.50 ft	35.00 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. Sound the well to measure depth and to ensure no obstructions exist.

Excavate and remove existing casing 3 to 5 foot below ground surface (bgs), including vent cap and well or vault cover.

Grout neat cement with a tremie to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade.

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

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.

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. 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.

6. Applicant shall contact George Cashen for an inspection time at 510-670-6610 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.

7. 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.

Well Construction-Monitoring-Monitoring - 0 Wells

Driller: Cascade Drilling Inc. - Lic #: 717510 - Method: auger **Work Total: ** $0.00**

**** Cancelled Work. Total amount adjusted. ****

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
* Cancelled *			MW15	8.00 in.	2.00 in.	6.00 ft	30.00 ft
* Cancelled *			MW16	8.00 in.	2.00 in.	6.00 ft	30.00 ft
* Cancelled *			MW2A	8.00 in.	2.00 in.	6.00 ft	30.00 ft
