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9:52 am, Aug 08, 2007

Alameda County
Environmental Health



Shell Oil Products US

August 3, 2007

Re: **Work Plan Addendum for Additional Soil and Groundwater Investigation
Shell Service Station
31235 Mission Blvd.
Hayward, California**

Dear Mr. Berkins:

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

Sincerely,
Shell Oil Products US

A handwritten signature in cursive script that reads "Carol Campagna".

Carol Campagna
Project Manager

August 3, 2007
Project SJ312-351-X
SAP# 135356
ACWD Site #758

Mr. Tom Berkins
Groundwater Resources Engineer
Alameda County Water District
43885 South Grimmer Blvd.
Fremont, California 94538

**Re: Work Plan Addendum for Additional
Soil and Groundwater Investigation
Shell-branded Service Station
31235 Mission Boulevard
Hayward, California**



Dear Mr. Berkins,

Delta Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared this addendum to the Work Plan for an Additional Soil and Groundwater Investigation dated July 6, 2007 for the above-referenced site. The Addendum was requested by the Alameda County Water District (ACWD) in an e-mail correspondence dated July 19, 2007.

WORK PLAN ADDENDUM

Delta proposes to install two additional groundwater monitoring wells, MW-9 and MW-10, at the locations shown on Figure 1. The purpose of these wells is to define and monitor the down gradient extent of the MTBE/TBA plume in the shallowest saturated zone. Delta also proposes the installation of one additional well, shown as MW-11 on Figure 1, to monitor the vertical extent of the MTBE/TBA plume.

Revised Well Construction Details

Shallow off-site monitoring wells MW-9 and MW-10 will be drilled using 10-inch diameter hollow-stem augers and will be constructed using 4-inch diameter polyvinylchloride (PVC) casing to a depth of approximately 25 feet below grade (bg). The wells will be screened in the 15 to 25 feet bg interval using 0.010-inch well screen.

A 14-inch diameter boring will be drilled to a depth of approximately 34 feet at the location of MW-11 for the installation of a steel conductor casing. The boring log for CPT-1 shows a low-permeability layer of clayey silt and silty clay beginning at approximately 30 feet bg. The layer appears to be approximately five to six feet thick. The conductor casing will be used to

a member of:



isolate the shallow water-bearing zone from the deeper water-bearing zones encountered at approximately 43 feet and 59 feet bg. The conductor casing will be installed with a minimum of 2-inches of annular space between the casing and the outer diameter of the borehole.

After the casing is set, it will be sealed in place by the injection of cement grout between the casing and the boring wall. After allowing the grout to set for 24 hours, the casing will be bailed or pumped dry to remove contaminated water accumulated from the shallow water-bearing zone. The casing will then be rinsed at least twice by filling the casing with clean water and then removing it. A sample of water from the final rinse will be collected and analyzed on a 24-hour basis prior to proceeding with the second phase of well installation. The sample will be analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and xylenes (BTEX), methyl tert-butyl alcohol (MTBE), and tert-butanol (TBA). The boring will proceed beyond the 34-foot depth only if all analytes in the rinse sample are below their respective environmental screening levels (ESLs). If not, another two rinse cycles will be performed and the rinse water re-tested.

After the conductor casing is installed and grouted, Delta will wait a minimum of 72-hours before advancing the boring for MW-11 to the total depth of 65 feet. The boring will be advanced using a 10-inch diameter hollow-stem auger. The monitoring well will be constructed with 4-inch diameter PVC casing and screened from approximately 55 to 65 feet bg using 0.010-inch slotted well screen.

Soil Analytical Testing Criteria

Soil samples will be collected at 5-foot intervals for borings MW-9 and MW-10, and continuously cored for MW-11. A photo-ionization detector (PID) will be used to measure soil hydrocarbon concentrations at 5-foot intervals. Soil samples with a PID reading greater than 10 parts per million (ppm) and samples collected at the soil-groundwater interface will be analyzed for the presence of petroleum hydrocarbons and fuel oxygenates. Additional soil samples will be collected for analysis based upon field observations (i.e. staining and odors).

Schedule

Delta will request access from adjacent property owners following acceptance of this work plan by the ACWD. Delta will commence field activities within 30 days of receipt of off-site property access agreements.

REMARKS

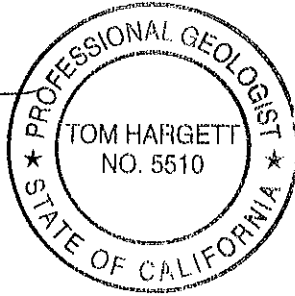
The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract 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, please call Tom Hargett at (408) 826-1868.

Sincerely,
Delta Consultants, Inc.

Sean Gehlke for
Sean Gehlke
Staff Geologist

Tom Hargett
Tom Hargett, PG 5510
Project Manager

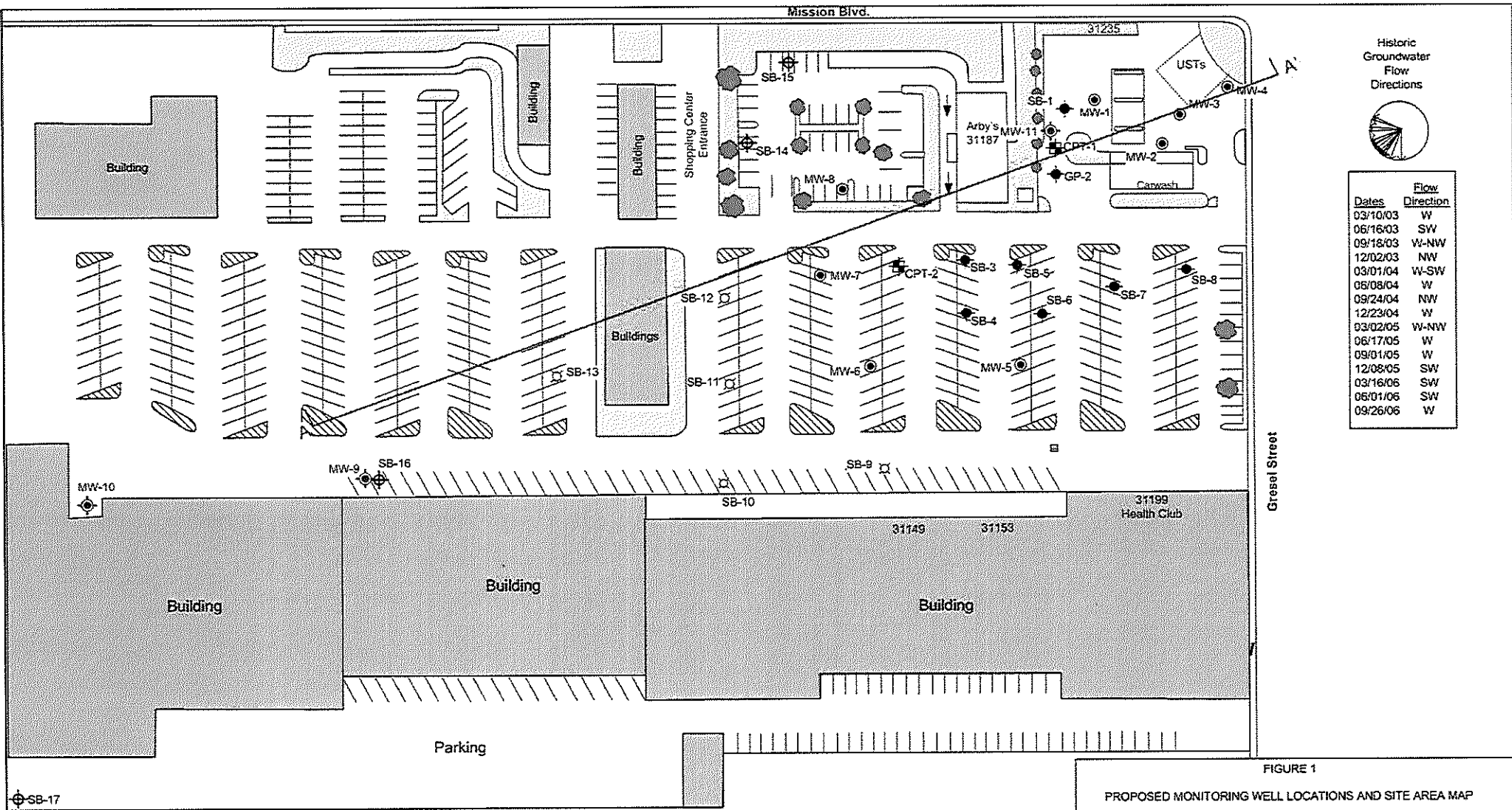


- Attachment A- Proposed Boring Locations and Site Map
- Attachment B- July 19, 2007 Email requesting addendum to work plan
- Attachment C- Schematic diagram of proposed conductor casing for MW-11

cc: Carol Campagna, Shell Oil Products US, Carson
Danny Galang, Hayward Fire Department
Howard Pearlman, Bartko, Zankel, Tarrant & Miller, San Francisco
Allen and Nelson Hutchinson, Property Owner, Hayward

ATTACHMENT A

Proposed Boring Locations and Site Map



Historic Groundwater Flow Directions

Dates	Flow Direction
03/10/03	W
06/16/03	SW
09/18/03	W-NW
12/02/03	NW
03/01/04	W-SW
06/08/04	W
09/24/04	NW
12/23/04	W
03/02/05	W-NW
06/17/05	W
09/01/05	W
12/08/05	SW
03/16/06	SW
06/01/06	SW
09/26/06	W

FIGURE 1
PROPOSED MONITORING WELL LOCATIONS AND SITE AREA MAP

SHELL BRANDED SERVICE STATION
 31235 MISSION BOULEVARD
 HAYWARD, CALIFORNIA

PROJECT NO. SJS1-235-1 2005	DRAWN BY BH 11/21/06
FILE NO. SJS1-235-1 2005	PREPARED BY AP
REVISION NO.	REVIEWED BY

- LEGEND**
- MW-11 **PROPOSED MONITORING WELL**
 - SB-16 **SOIL BORING (MAY 2006)**
 - CPT-1 **CPT BORING (FEBRUARY 2006/MARCH 2006)**
 - SB-11 **SOIL BORING (FEBRUARY 2006)**
 - SB-1 **SOIL BORING (DEC. 2003/JAN. 2004)**
 - MW-1 **EXISTING GROUNDWATER MONITORING WELL**
 - A — A' **CROSS SECTION LINE**

ATTACHMENT B

July 19, 2007 Email Requesting Addendum to Work Plan

From: Tom.Berkins@acwd.com
Sent: Thursday, July 19, 2007 11:33 AM
To: Carol Campagna; Tom Hargett
Cc: Steven.Inn@acwd.com; Felicia.Aristakumara@acwd.com; Hugh.Murphy@hayward-ca.gov
Subject: Shell Station, 31235 Mission Boulevard, Hayward - Request for Work Plan Addendum (ACWD Site #758)

Carol Campagna (Shell Oil Company) & Tom Hargett (Delta Environmental Consultants, Inc.):

The Alameda County Water District (ACWD) has reviewed Delta Environmental Consultants, Inc.'s (Delta) "Work Plan for Additional Soil and Groundwater Investigation" dated July 6, 2007, for the installation of two shallow off-site monitoring wells (MW-9 and MW-10) and one deep on-site monitoring well (MW-11) at the Shell service station located at 31235 Mission Boulevard, Hayward. ACWD concurs with the proposed scope of work (two shallow wells and one deep well); however, based on the elevated concentrations of petroleum hydrocarbons detected in shallow groundwater at the proposed deep well location, ACWD will require that the deep monitoring well be constructed with a conductor casing. Also, ACWD requests that soil samples selected for chemical analyses also be based on field observations (i.e. odors and staining) in addition to the PID measurements specified in the work plan. At a minimum, for the shallow wells, ACWD recommends that the soil sample collected from the soil/groundwater interface be selected for analyses.

Please submit a revised work plan or addendum by **August 3, 2007**, describing the procedures for installing a conductor casing for the deep well, including a well construction diagram. Once ACWD approves the work plan and you have obtained drilling permits from the Alameda County Public Works Agency, it will be necessary to contact ACWD's Permit Section at (510) 668-4460 to schedule the proposed drilling dates for this work.

If you have any questions, please call me at (510) 668-4442.

Sincerely,

Thomas J. Berkins
Groundwater Resources Engineer

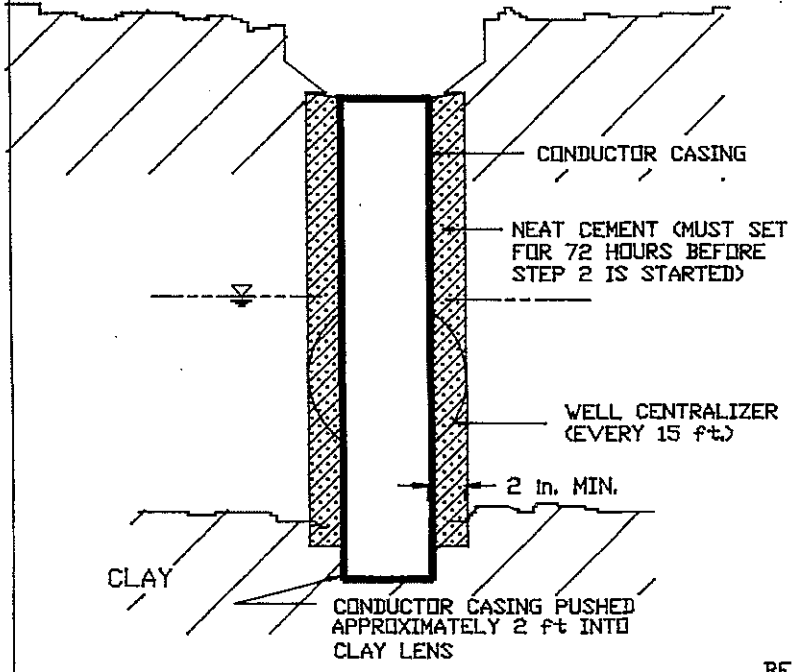
Thomas J. Berkins
Alameda County Water District
43885 South Grimmer Boulevard
Fremont, CA 94538

Phone: (510) 668-4442
Fax: (510) 651-1760
E-mail: tom.berkins@acwd.com

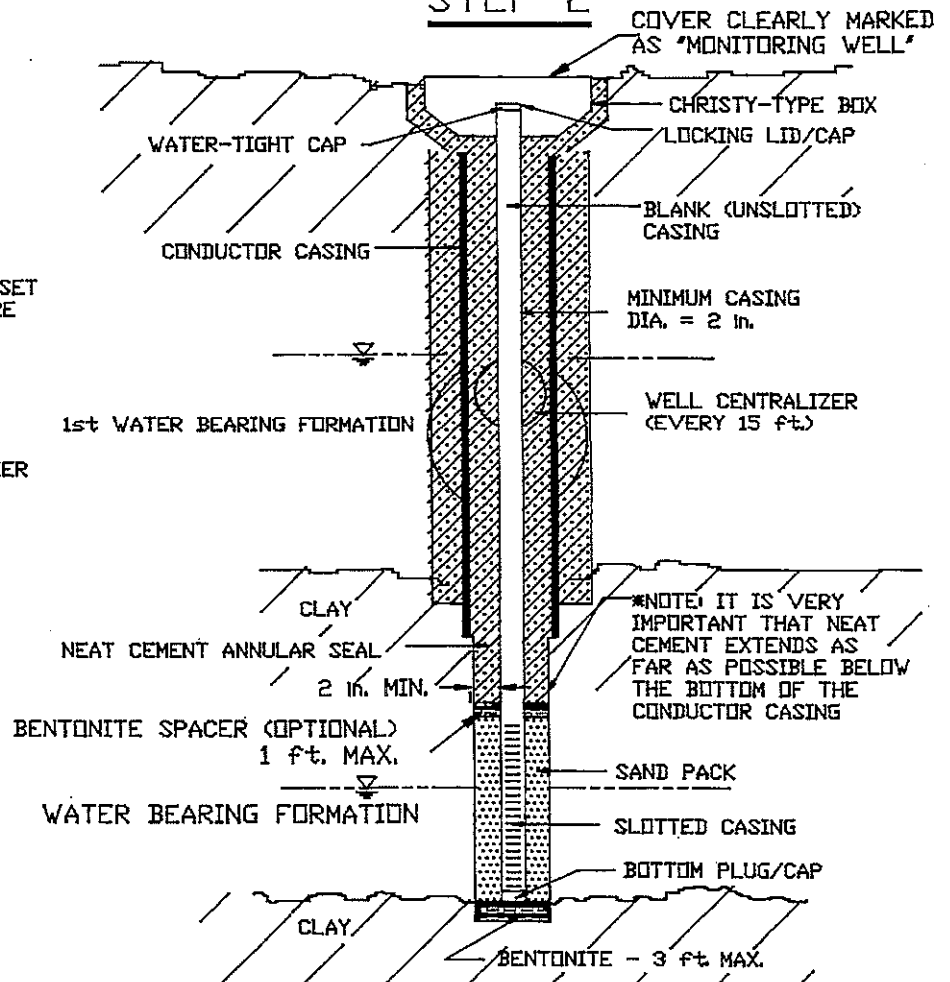
ATTACHMENT C

Schematic Diagram of Proposed Conductor Casing for MW-11

STEP 1



STEP 2



CONSTRUCTION USING CONDUCTOR CASING

NOT TO SCALE