



76 Broadway
Sacramento, California 95818

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11:23 am, Apr 07, 2009

Alameda County
Environmental Health

April 6, 2009

Barbara Jakub
Alameda County Health Agency
1131 Harbor Bay parkway, Suite250
Alameda, California 94502-577

Re: ***Additional Site Assessment Work Plan***
76 Service Station # 1028 RO # 02967
5300 Broadway
Oakland, CA

Dear Ms. Jakub,

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 call me at (916) 558-7666.

Sincerely,

A handwritten signature in black ink, appearing to read 'Terry L. Grayson', written over a large, loopy flourish.

Terry L. Grayson
Site Manager
Risk Management & Remediation

April 3, 2009

Ms. Barbara J. Jakub, PG

Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**RE: Soil and Water Investigation
Work Plan Addendum
Fuel Leak Case No. R000002967
Geotracker Global ID T0619732490
Unocal#1028 / ConocoPhillips # 251028
5300 Broadway
Oakland, CA 94618**



Dear Ms. Jakub:

On behalf of Conoco Phillips Company (COP), Delta Consultants (Delta), has prepared this *Soil and Water Investigation Work Plan Addendum* ("Work Plan Addendum") as directed by the Alameda County Environmental Health (ACEH) in the letter dated March 6, 2009.

A site description, previous environmental compliance activities at the subject site, geology and hydrogeology, a water well survey, a discussion on preferential pathways, drilling and sampling procedures, analyses, QA/QC, permitting, disposal of drill cuttings and wastewater have already been presented in the October 30, 2008 *Additional Site Assessment Work Plan* ("2008 Work Plan") and are not repeated in this Work Plan Addendum.

This Work Plan Addendum responds to the technical comments regarding: 1. Vertical Extent of Contamination, 2. Soil Sampling, 3. Groundwater and Soil Analysis, and 4. Preferential Pathway Survey addressed in the March 6, 2009 ACEH's letter.

a member of:



ACEH's letter requested that "a brief work plan addendum" be submitted to address the technical comments below:

- 1. "Vertical Extent of Contamination. Your work plan does not include evaluation of the vertical extent of contamination at the site as requested in the ACEH letter dated June 26, 2008 but suggests that this will be defined in the second phase of the work. Following the Expedited Site Assessment Process, ACEH recommends that the vertical extent of contamination be assessed along with the lateral extent of contamination. Please update your work plan to assess this data gap."**

To evaluate of the vertical extent of contamination at the site, as requested by ACEH, three (3) deep soil borings designated DSB-1, DSB-2, and DSB-3 are proposed to be drilled to approximately fifty (50) ft bgs using rotary drilling at those locations shown on Figure 1, attached. The three deep soil borings are proposed to be located in the close proximity of ATC-2, ATC-2, and ATC-4 where higher levels of contaminants have been detected in 2007 in soil/groundwater (near the "source"). Because refusal was encountered during previous drilling (geoprobe) activities, all three deep soil borings will be advanced using a truck mounted drill-rig equipped with 8-inch diameter hollow stem augers.

- 2. "Soil Sampling - In addition to your proposed sampling at five foot intervals, at the capillary fringe and areas with high PID readings, ACEH also requests that you collect continuous soil samples for lithologic logging and submit soil samples for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils, leaving a soil source that would otherwise go undetected if not sampled."**

In addition to the proposed sampling (October 30, 2008 Work Plan) at five foot intervals, at the capillary fringe and areas with high PID readings, as requested by ACEH, soil samples will be collected continuously for lithologic logging and soil samples will be also submitted for analysis from the saturated zone to define the vertical extent of soil contamination since fluctuations in groundwater levels can submerge contaminated soils. It should be noted that the sampling and analyses interval will be also applied to the deep soil borings (DSB-1, DSB-2, and DSB-3) mentioned above.

- 3. "Groundwater and Soil Analysis - In addition to your proposed analyses, please ensure that samples are analyzed for ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), tert butyl alcohol (TBA), ethylene dibromide (EDB), ethylene dichloride (EDC) and ethanol by EPA Method 8260. Also, please add the depth to water on your groundwater analytical table."**

As requested by ACEH, in addition to the analyses proposed in the 2008 Work Plan, all soil and groundwater samples submitted for analysis will be also analyzed for ETBE, DIPE, TAME, TBA, EDB, and EDC by EPA Method 8260 and the depth to water will be added to the groundwater analytical table.

- 4. "Preferential Pathway Survey - The results of the utility survey indicate that utilities can be a preferential pathway for contaminants at the site. If your borings results indicate that contamination is present along the Broadway Terrace side of the site (proposed borings B1, B6 and/or B7), please include your proposal to investigate potential migration along the utilities in the report requested below."**

As noted by ACEH, if contamination is detected in B1, B6, and B7, potential migration of contaminants exist along the preferential pathways created by the existing utilities; therefore, based on this first phase results, conclusions, and recommendations, and if warranted, additional soil/groundwater sampling will be proposed along these preferential pathways.

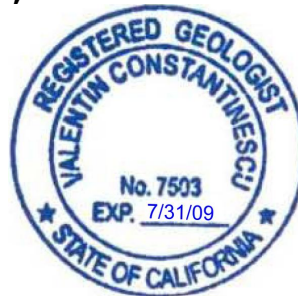
REMARKS/SIGNATURES

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

If you have any questions regarding this project, please contact me at (916) 503-1265 or Mr. Terry Grayson of ConocoPhillips at (916) 558-7666.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.



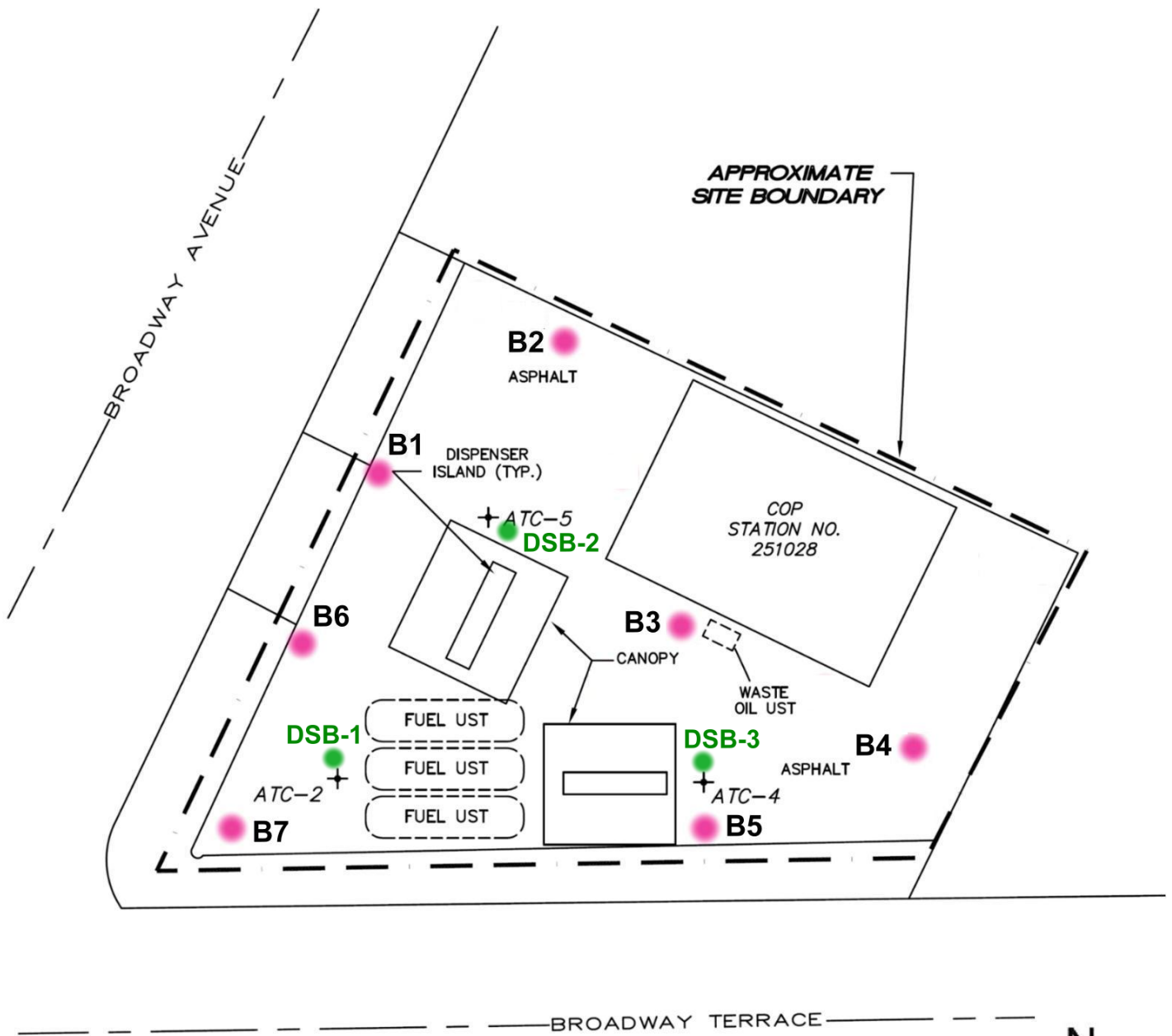


Valentin Constantinescu, P.G., R.E.A.
Senior Project Manager
California-Registered Professional Geologist No. 7503

Figures:

Figure 1 – Site Map – Proposed Soil Boring Locations

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy only)

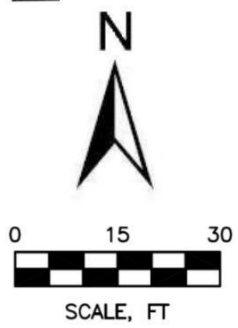


LEGEND

ATC-2
+ SOIL BORING LOCATION (ATC, 2007) AND DESIGNATION

B1 ● PROPOSED SOIL BORING LOCATION AND DESIGNATION

DSB-1 ● PROPOSED DEEP SOIL BORING LOCATION AND DESIGNATION



NOTE: LOCATIONS AND SCALE ARE APPROXIMATE

FIGURE 1
PROPOSED SOIL BORING LOCATIONS
CONOCOPHILLIPS SITE NO. 251028
5300 BROADWAY
OAKLAND, CALIFORNIA

PROJECT NO. 251028	DRAWN BY V.C.
FILE NO. 4979	PREPARED BY V.C.
REVISION NO. 1	REVIEWED BY K.T.



NOTE: BASE MAP ATC ASSOCIATES, INC. - 2007