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By dehloptoxic at 1:05 pm, Nov 22, 2006

November 20, 2006 Project SJ52-51H-1.2006 SAP #: 135785

Mr. Jerry Wickham Environmental Health Services – Environmental Protection Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577



Re: Well Installation Report Shell Service Station 5251 Hopyard Road Pleasanton, California

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared this report documenting the installation of the off-site groundwater monitoring Well S-9, at the above-referenced site. Well S-9 was installed in order to monitor the extent of methyl tert-butyl ether (MTBE) to the east of the site. The Alameda County Health Care Services Agency (ACHCSA) approved installation of off-site Well S-9 in a letter to Shell dated June, 14 2006.

## Background

In August 2005, borings CPT-2 and CPT-3 were advanced offsite and collected ground water samples from 40 and 80 foot zones, but were unable to collect groundwater samples from the 25 foot zone. No analytes were detected from offsite groundwater collected from CPT borings. On February 22, 2006, two geoprobe borings (GP-6 and GP-7) were advanced north of the site to collect groundwater samples from the 25 foot level. See Figure 1 for boring locations. A grab water sample was collected at 22 feet in GP-6 and at 26 feet in GP-7. Samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (BTEX compounds), methyl tert-butyl ether (MTBE) and tertiary butyl alcohol (TBA). The groundwater sample from GP-6 contained TPH-G at a concentration of 78 ug/l and MTBE at a concentration of 73 ug/l. No other analytes were detected in GP-6 and no analytes were detected in the sample from GP-7. In the Site Conceptual Model submitted to ACHCSA in March 2006, Delta proposed to install one additional off site monitoring well (S-9) to monitor MTBE concentrations in groundwater east of the site.



# **Description of Installation**

## Groundwater Monitoring Well S-9

Delta installed one additional off site monitoring well east of the site. Well S-9 was constructed to monitor the groundwater encountered within the shallow zone. Delta cleared Well S-9 location by air-knife to a depth of approximately 7-feet below grade (bg). The boring for the well was drilled by Gregg Drilling using hollow-stem augers. A 2-inch PVC well with a 10 foot screened interval from 10 to 20 feet below bg was installed. Static water in the well was at a depth of 7.7 feet. Soil samples were collected from the boring for the new well in brass liners at five foot intervals to the total depth of the boring. Soil types were logged by a Delta field geologist and included in this report (Boring Log S-9). Soil was analyzed in the field with a photo-ionization detector (PID), and readings from the soil were recorded on the field logs. None of the soil samples had elevated PID readings (>30 parts per million by volume). As a result no samples were retained for laboratory analysis.

Well S-9 will be developed by Blaine on November 22, 2006. Well S-9 will also be sampled on November 27, 2006. This data will be added to the quarterly groundwater monitoring report next quarter(4Q06).

#### 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 site, please contact Lee Dooley of Delta at (408) 826-1880, or Mr. Denis Brown (Shell project manager) at (707) 865-0251.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

ONAL

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Staff Scientist

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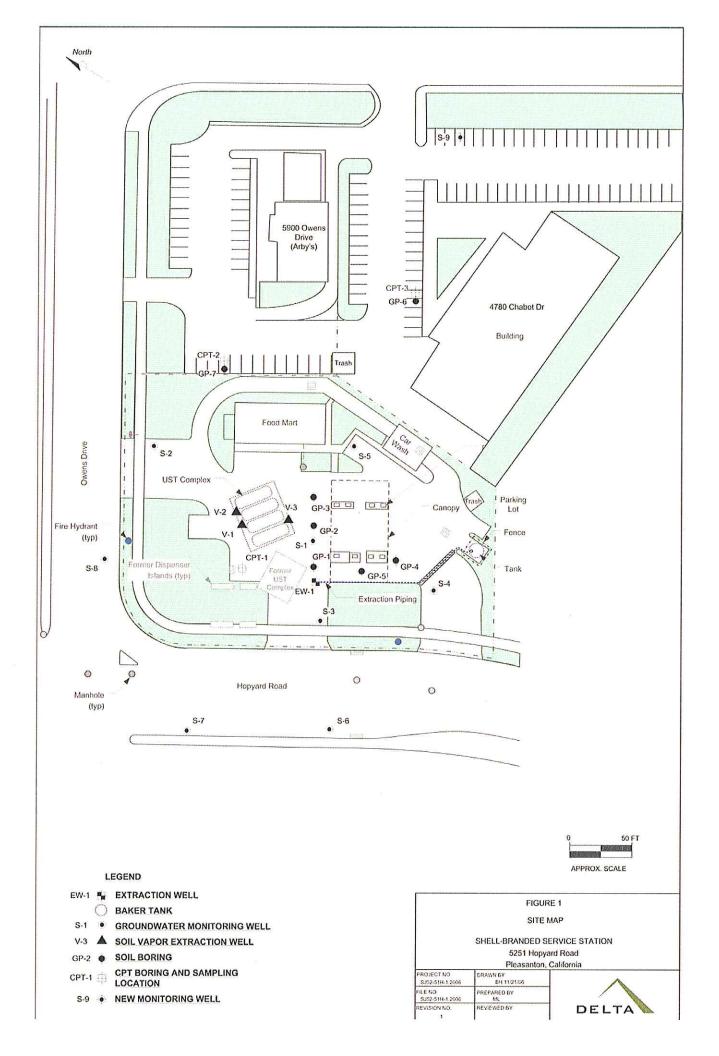
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# Attachments:

Figure 1 – Site Map Attachment A – Boring Log

ce: Denis Brown, Shell Oil Products US, Monte Rio Matt Katen, Zone 7 Water District



# **BORING LOG**

# **BORING LOG** Boring No. Client Shell Oil Products US DELTA Project Number XInogen ... SJ52-51H-1 S-9 Address: Drilling Date(s): 11/10/06 Boring diameter (in.): 8 Caing Material: Sch 40 PVC 4780 Chabot Drilling Company: Gregg Sampling Method: HA / SS Screen Interval: 10 to 20 feet bgs Pleasanton, California Drilling Method: AK / HSA Well Depth (ft.): 20 Screen slot size: 0.010 inch Boring Depth (ft): 20 Logged By: Andrew Persio Casing Diameter (in.): 2 Sand Pack: 2/12 PID Reading (ppm) Depth (ft.) Sampled Interval Depth (ft.) Soil/Rock Visual Description AF: ~3 inches thick. CL: Gravelly LEAN CLAY with sand, light brown, 15-25% fine to 100% medium sand, 20-30% gravel up to 0.5 inches in diameter, low to medium plasticity. LEAN CLAY, dark brown, medium stuff, low to medium plasticity. 100% (as above, 5-15% fine sand) 0.1 100% 0.1 LEAN CLAY with sand, medium brown, 15-25% fine sand, medium stuff, medium to high plasticity, moist. 10 10 100% 0.1 LEAN CLAY, dark brown, 5-15% fine sand, trace gravels up to 0.5 inches in diameter, stiff, medium plasticity, moist. 15 - 15 100% (as above, medium brown to gray, less than 10% fine sand, no gravels, moist) 20 20 Bottom of boring/well = 20 feet bgs. Note: sampled to 20 feet bgs. Page 1 of 1