Declaration from the Responsible Party

#### RECEIVED

Letter Report Abandon/Decommission Five Wells 2440 East Eleventh Street Oakland CA Alameda County Case No. RO0000029 Geotracker Global ID T0600100858

Prepared by Streamborn, Dated 31 August 2012

#### 5:14 pm, Sep 17, 2012

Alameda County Environmental Health

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

Jeffrey Eandi 1000 Calcot Place Oakland CA 94606

Signed 4	MMA	
Dated	9/10/12	-



31 August 2012

Project No. P279

#### Jeffrey Eandi 1000 Calcot Place Oakland CA 94606

#### Letter Report <u>Abandon/Decommission Five Wells</u> <u>2440 East Eleventh Street</u> <u>Oakland CA</u> <u>Alameda County Case No. RO0000029</u> <u>Geotracker Global ID T0600100858</u>

Dear Mr. Eandi (ecopy):

This report documents the abandonment/decommissioning of all of the existing monitoring wells (MW1, MW2, MW3, MW4, and MW5) located at/near 2440 East Eleventh Street, Oakland CA. We abandoned/decommissioned the wells pursuant to a mandate from the Alameda County Health Care Services Agency (letter dated 21 February 2012).

The results of our work are summarized in the following:

- Table 1 provides a chronology of environmental activities.
- Table 2 provides a bibliography.
- Table 3 provides a hydrogeologic summary.
- Table 4 summarizes groundwater level and gradient information since 1995.
- Table 5 summarizes well purging and sampling information since 2001.
- Table 6 summarizes groundwater analytical data from monitoring wells since 1995
- Table 7 summarizes soilgas analytical data.
- Table 8 summarizes the procedures to abandon/decommission the wells.
- Table 9 summarizes the (pre-abandon) well completion information.
- Figure 1 provides a location map.
- Figure 2 provides a vicinity map.
- Figure 3 presents a site map.
- Figure 4 shows the well locations.
- Attachment 1 contains the Alameda County mandate to abandon/decommission the wells.

- Attachment 2 contains the Alameda County Permit to abandon/decommission the wells.
- Attachment 3 contains the City of Oakland Excavation and Obstruction Permits.
- Attachment 4 contains the boring logs and well completion schematics for the wells that were abandoned/decommissioned.
- Attachment 5 contains the well abandonment/decommissioning field logs.
- Attachment 6 contains the DWR-188 forms.
- Attachment 7 contains a request to rescind the previous encroachment permit issued by the City of Oakland.
- Attachment 8 presents photographs of the well abandonment/decommissioning and repaying.

#### WELL ABANDONMENT/DECOMMISSIONING

All (five) monitoring wells at the site were abandoned/decommissioned/destroyed (MW1, MW2, MW3, MW4, and MW5). The monitoring wells were 2-inch diameter SCH40 PVC, completed to depths of  $\pm 17$ -20 feet. Each well had a wellhead vault,  $\pm 12$ -inches in diameter by  $\pm 9$  inches deep. Four of the wells (MW2, MW3, MW4, and MW5) were located in parking spaces within the asphalt concrete roadway; one of the wells (MW1) was located in the (Portland Cement) concrete sidewalk.

Prior to performing fieldwork, the following activities were conducted:

- A permit was obtained from Alameda County for the well abandonment/decommissioning.
- An excavation permit was obtained from the City of Oakland.
- An obstruction permit was obtained from the City of Oakland.
- The well locations were marked in the field and 811/Underground Service Alert was notified to clear the work areas for buried utilities.

The wells were abandoned by the following procedures:

- The depth to groundwater and total depth were measured in each well.
- The well casings were filled with neat cement grout. The grout was placed from bottom to top using a tremie pipe.
- The upper five feet of each well was overdrilled using an auger with outside diameter equal to or greater than the auger diameter that was previously used to install the well.
- The pavement or sidewalk was restored around each well.



Vicky Hamlin of the Alameda County Public Works Agency inspected the grouting. The City of Oakland was notified of the fieldwork and an inspection was requested; however, no City personnel were observed onsite during the fieldwork.

Cascade Drilling performed the grouting work 24 July 2012. Dryco Construction performed the repaving work on 20-22 August 2012.

#### **DISPOSAL OF WASTES**

The abandonment/decommissioning work generated (1) wellhead vault debris, well casing debris, and grout debris; all of which were disposed of as municipal refuse, (2) pavement debris and excavated aggregate base/soil, and (3) soil cuttings from overdrilling.

The pavement debris and excavated aggregate base/soil originated within two feet of the ground surface and we did not believe these wastes were contaminated or would be classified as hazardous materials; these wastes were either (1) disposed of by the repaving contractor as municipal refuse or (2) recycled by the repaving contractor as construction debris.

The soil cuttings originated within five feet of the ground surface and we believed it unlikely this soil was contaminated or would be classified as a hazardous material. We screened the soil in the field using an organic vapor meter (photoionization device, calibrated to 100 ppm v/v isobutylene) and did not measure organic vapors exceeding 1 ppm (background). We examined the soil in the field and did not observe evidence of contamination, such as chemical staining or chemical odor. Accordingly, this soil was either (1) disposed of by the repaving contractor as municipal refuse or (2) recycled by the repaving contractor as construction debris.

There was one partially-filled 55-gallon drum of waste soil remaining at the property. This drum contained about 15 gallons (2 cubic feet) of soil that had been generated during the soilgas investigation (fieldwork performed 8 August 2011). The soil had been generated by drilling borings to a depth of approximately 6 feet. We believed it unlikely this soil was contaminated or would be classified as a hazardous material. We screened the soil in the field using an organic vapor meter (photoionization device, calibrated to 100 ppm v/v isobutylene) and did not measure organic vapors exceeding 1 ppm (background). We examined the soil in the field and did not observe evidence of contamination, such as chemical staining or chemical odor. Accordingly, this soil was either (1) disposed of by the repaving contractor as municipal refuse or (2) recycled by the repaving contractor as construction debris.

There were no drums of wastewater remaining at the site; Streamborn had previously disposed of the wastewater.

Upon completion of our fieldwork on 22 August 2012, no wells remain at the site and no wastes remain at the site.



Please contact us with any questions or comments.

Sincerely,

**STREAMBORN** 

ough to lover

Douglas W. Lovell, PE Geoenvironmental Engineer



Attachments

cc: Jerry Wickham, Alameda County Health Care Services Agency, Alameda CA (ecopy) Vicky Hamlin/Alameda County Public Works Agency, Hayward CA (ecopy)

This report was uploaded to the Alameda County Server

This report was uploaded to Geotracker (www.geotracker.swrcb.ca.gov)

The original DWR-188 forms were submitted to Vicky Hamlin/Alameda County Public Works Agency, Hayward CA



### Table 1 (Page 1 of 3) Environmental Chronology 2440 East Eleventh Street Oakland CA

Date	Performed By	Event
Unknown	Unknown	• 1,000-gallon underground leaded gasoline tank was installed.
15 August 1991	Eandi Metal Works	• The 1,000-gallon tank was emptied of product. Use of the tank was discontinued.
11 May 1992	Unknown	• The 1,000-gallon tank was removed and soil and groundwater contamination was discovered.
10 July 1995	AGI Technologies	• Five soil borings were drilled. Soil samples were collected and analyzed for TPH-gasoline, BTEX, MtBE, and total metals.
		• Three of the borings were completed as monitoring wells (MW1, MW2, and MW3). The other two borings (E1 and E2) were grouted.
		• Water levels were measured in wells MW1, MW2, and MW3.
		• Wells MW1, MW2, and MW3 were developed and groundwater samples were collected. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
		• An elevation survey was conducted for wells MW1, MW2, and MW3.
17 July 1995	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
20 October 1995	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and total lead.
25 January 1996	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
25 April 1996	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
11 - 12 June 2001	Kleinfelder	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and total lead.
5 February 2002	Kleinfelder	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
9 June 2004	Streamborn	• Using a backhoe, the excavation for the former tank was partially re-excavated.
		• Soil samples were collected from the base (7.5-8 feet below ground surface) and each of the four sidewalls (5-5.5 feet below ground surface) by exposing native soil and driving a brass liner into the exposed soil.
		• Soil samples were analyzed for TPH-diesel/kerosene/stoddard solvent, TPH-gasoline, BTEX, fuel oxygenates, and total lead.
12 August 2004	Streamborn	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• Seven geoprobe borings (B1-B7) were drilled to depths between 20 and 32 feet. Soil samples were collected continuously in the borings.
		• Two soil samples were retained from each of the borings for chemical analysis. One soil sample approximately coincided with the depth of groundwater observed during drilling and the other soil sample coincided with the bottom of the boring. Soil samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• Temporary casings were installed in the borings and water levels allowed to stabilize for at least one hour. Water levels were measured.
		• Purged groundwater samples were collected from the temporary casings. Samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• The temporary casings were removed from the borings and the borings were grouted.
17-23 September 2004	Streamborn	• Using a backhoe, the excavation for the former tank was completely re-excavated. The excavated soil was air-dried and replaced in the excavation using ±2-foot lifts. Each lift was compacted using a whacker. 6 inches of imported Class II aggregate base was placed as the final lift of soil.
		<ul> <li>The pavement and sidewalk were repaved with reinforced concrete. The concrete thickness was 8 inches. The reinforcement was #5 rebar on 12-inch centers.</li> </ul>
2 March 2005	Streamborn	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and fuel oxygenates.



#### Table 1 (Page 2 of 3)

#### **Environmental Chronology**

#### 2440 East Eleventh Street Oakland CA

Date	Performed By	Event
28 September 2006	Streamborn	• Two direct push borings were drilled to 17 feet. Soil samples were collected continuously during drilling and selected samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, total lead, and lead scavengers (1,2-dichloroethane and ethylene dibromide).
		• Each boring was subsequently overdrilled using a hollow-stem auger and completed as a two-inch diameter, 17-foot deep monitoring well (MW4 and MW5).
		• The elevations of wells MW4 and MW5 were surveyed.
2 October 2006	Streamborn	• Wells MW4 and MW5 were developed.
		• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260), total lead, and lead scavengers (1,2-dichloroethane and ethylene dibromide).
20 March 2007	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
10 September	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
2007		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
10 March 2008	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
8 September 2008	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
3 March 2009	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
28 August 2009	Streamborn	• Virgil Chavez Land Surveying (Vallejo CA) surveyed wells MW1 through MW5 to the NAD83 horizontal datum and the NAVD88 vertical datum.
1 September 2009	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
8 March 2010	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
10 September	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, and MW5.
2010		• Groundwater samples were collected from wells MW1, MW2, MW3, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).



## Table 1 (Page 3 of 3)

#### Environmental Chronology 2440 East Eleventh Street Oakland CA

Date	Performed By	Event
8 September 2011	Streamborn	<ul> <li>Soilgas samples were collected at three locations as detailed below.</li> <li>Three borings (SG1 through SG3) were drilled to depths of approximately 6.5 feet near 2440 East Eleventh Street. The borings were drilled using hand-auger equipment. The boreholes were approximately 3 inches in diameter.</li> </ul>
		• Soilgas implants were installed in each borehole at a depth of approximately 5.75 feet. The implants were surrounded by sand, from a depth of approximately 5.0 to 6.5 feet. Teflon tubing (3/16" ID, 1/4" OD) connected the implants to the ground surface. Above the sandpack interval, the boreholes were backfilled with dry bentonite and hydrated bentonite. After constructing the temporary soilgas sampling points, the points were allowed to equilibrate for at least two hours prior to collecting soilgas samples.
		• A soilgas purge test was conducted in SG1 to determine the purge volume appropriate for sampling. The results of the purge test indicated that approximately 1 sandpack volume (sandpack volume = volume of the voids in the interval of the sandpack) should be purged prior to sampling. This corresponded to a purge time of approximately 2 minutes and 6 seconds at the purge flowrate = 0.167 liters/minute. The purge rate was controlled using a flow restrictor.
		• Soilgas samples were collected from SG1 through SG3. The samples were collected after purging 1 sandpack volume. The samples were collected using 1.4-liter summa canisters at a restricted flowrate = 0.167 liters/minute. Curtis & Tompkins (Berkeley CA) analyzed the soilgas samples for volatile organic compounds (EPA Method Modified TO-15), TPH-gasoline (C6-C12, gasoline range organics, EPA Method TO-3), and inert gasses (helium, carbon monoxide, carbon dioxide, oxygen, and methane, ASTM D1946).
		• During soilgas sampling, a shroud was placed on the ground surface over each borehole. A tracer gas (helium) was introduced inside the shroud and maintained at a concentration of approximately 20-25%. The tracer gas was introduced inside the shroud to check for leaks and to determine whether soilgas samples contained atmospheric air (for example, due to short-circuiting or leakage through the borehole or along the outside of the implant tubing). A leak check was performed prior to purging and sampling (no leaks were discovered). A very low concentration of the tracer gas was measured in the soilgas sample for SG2; the other samples were nondetect for the tracer gas.
		• The implant tubing was pulled. The sandpack and bentonite were removed using a hand-auger. The boreholes were then backfilled to the ground surface with neat cement grout and concrete.
24 July 2012	Streamborn	<ul> <li>Wells MW1, MW2, MW3, MW4, and MW5 were abandoned/decommissioned by grouting (neat cement grout).</li> <li>Vicky Hamlin/Alameda County Public Works Agency-Water Resources Division inspected the work.</li> </ul>
20-22 August 2012	Streamborn	<ul> <li>The wellhead vaults for wells MW1, MW2, MW3, MW4, and MW5 were removed.</li> <li>Wells MW1, MW2, MW3, MW4, and MW5 were overdrilled to a depth of approximately 5 feet and the overdrilled boreholes were backfilled with neat cement grout. The pavement/sidewalk was sawcut and removed. The underlying aggregate base/soil was excavated.</li> </ul>
		• The areas overlying wells MW2, MW3, MW4, and MW5 were repaved with approximately 9 inches of imported and compacted aggregate base and approximately 9 inches of hot mix asphalt concrete.
		• The area overlying well MW1 was repaved with approximately 6 inches of imported and compacted aggregate base and approximately 6 inches of reinforced (Portland Cement) concrete.

#### General Notes

- (a) TPH = total petroleum hydrocarbons.
- (b) BTEX = benzene, toluene, xylenes, and total xylenes.
- (c) MtBE = methyl tert-butyl ether.



#### Table 2 (Page 1 of 2) Bibliography 2440 East Eleventh Street Oakland CA

ACHCSA (2002). *Notice of Violation, Property at 976 23<sup>rd</sup> Avenue, Oakland CA*. Correspondence to Jeffrey M. Eandi, Eandi Metal Works, Oakland CA. Correspondence from Amir K. Gholami, Alameda County Health Care Services Agency, Alameda CA. 30 May 2002.

ACHCSA (2003). *Fuel Leak Case* # *RO0000029* – 976 23<sup>rd</sup> Avenue, Oakland, CA 94606. Correspondence from Amir K. Gholami, Alameda County Health Care Services Agency, Alameda CA. Correspondence to Eandi Metal Works, Oakland CA. 11 December 2003.

ACHCSA (2005). *Fuel Leak Case* # *RO0000029* – 976 23<sup>rd</sup> Avenue, Oakland, CA 94606. Email from Amir K. Gholami, Alameda County Health Care Services Agency, Alameda CA. Email to Streamborn, Berkeley CA. 9 May 2005.

ACHCSA (2006a). *Fuel Leak Case No. RO0000029, Eandi Metal Works, 2440 East Eleventh Street, Oakland, CA.* Correspondence from Jerry Wickham, Alameda County Health Care Services Agency, Alameda CA. Correspondence to Jeffrey Eandi, Eandi Metal Works, Oakland CA. 23 May 2006.

ACHCSA (2006b). *Fuel Leak Case No. RO0000029, Eandi Metal Works, 2440 East Eleventh Street, Oakland, CA.* Correspondence from Jerry Wickham, Alameda County Health Care Services Agency, Alameda CA. Correspondence to Jeffrey Eandi, Eandi Metal Works, Oakland CA. 25 July 2006.

ACHCSA (2010a). Email correspondence from Jerry Wickham, Alameda County Health Care Services Agency, Alameda CA. Correspondence to Streamborn, Berkeley CA. 21 June 2010.

ACHCSA (2010b). Conditional Work Plan Approval for Fuel Leak Case No. RO0000029 and Geotracker Global ID T0600100858, Eandi Metal Works, 2440 East Eleventh Street, Oakland CA 94606. Correspondence from Alameda County Health Care Services Agency, Alameda CA. Correspondence to Eandi Metal Works, Oakland CA. 11 October 2010

AGI Technologies (1995). *Monitoring Well Installations and Quarterly Groundwater Monitoring, Eandi Metal Works, Oakland, California.* Prepared for Eandi Metal Works, Oakland CA. Prepared by AGI Technologies, Bellevue WA. 25 September 1995.

AGI Technologies (1996). *Quarterly Groundwater Monitoring, Third Event January 1996, Eandi Metal Works, Oakland California.* Prepared for Eandi Metal Works, Oakland CA. Prepared by AGI Technologies, Bellevue WA. 22 May 1996.

Cedegren, Harry R. (1967). Seepage, Drainage, & Flow Nets, 2<sup>nd</sup> Edition. Wiley & Sons, New York NY. 1967.

Kleinfelder (2001). *Monitoring Well Sampling Results for MW-1, MW-2, and MW-3 at the Eandi Facility, Oakland, California.* Prepared for Jeff Eandi, Oakland CA. Prepared by Kleinfelder, Oakland CA. 14 June 2001.

Kleinfelder (2002). *Monitoring Well Sampling Results for MW-1, MW-2, and MW-3 at the Eandi Metal Works Facility, Oakland, California.* Prepared for Jeff Eandi, Oakland CA. Prepared by Kleinfelder, Oakland CA. 15 March 2002.

RWQCB (1996). Memorandum, To: San Francisco Bay Area Agencies Overseeing UST cleanup, Supplemental Instruction to State Water Board, December 8, 1995, Interim Guidance on Required Cleanup at Low Risk Fuel Sites. Prepared by San Francisco Bay Regional Water Quality Control Board, Oakland CA. 5 January 1996.

RWQCB (2008). Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final -November 2007, Revised May 2008). Prepared by San Francisco Bay Regional Water Quality Control Board, Oakland CA. 27 May 2008. www.waterboards.ca.gov/sanfranciscobay/esl.shtml

Streamborn (2002). *Workplan, Soil and Groundwater Sampling, 2440 East Eleventh Street, Oakland CA*. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 28 June 2002.

Streamborn (2003). *Revised Workplan, Soil and Groundwater Sampling, 2440 East Eleventh Street, Oakland CA*. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 12 February 2003.

Streamborn (2004). Letter Report, Sample and Backfill Former Tank Excavation, 2440 East Eleventh Street, Oakland CA. Prepared

for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 15 December 2004.

Streamborn (2005a). Letter Report (Revised 25 March 2005), Groundwater Investigation Conducted 12 August 2004, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. 11 February 2005 (Revised 25 March 2005).

Streamborn (2005b). *Letter Report, Groundwater Monitoring Conducted 2 March 2005, 2440 East Eleventh Street, Oakland CA, RO No. 29.* Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. 25 March 2005.

Streamborn (2006a). *Letter Report, Site Conceptual Model, 2440 East Eleventh Street, Oakland CA, Alameda County RO No. 29.* Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 26 April 2006.

Streamborn (2006b). *Workplan, Installation and Sampling of Groundwater Monitoring Wells, 2440 East Eleventh Street, Oakland CA, RO No. 29.* Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 20 June 2006.

Streamborn (2006c). Letter Report, Installation of Additional Groundwater Monitoring Wells Conducted 28 September 2006 and Groundwater Monitoring Conducted 2 October 2006, 2440 East Eleventh Street, Oakland CA. RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. Project No. P279. 1 December 2006.



#### Table 2 (Page 2 of 2) Bibliography 2440 East Eleventh Street Oakland CA

Streamborn (2007a). Letter Report, Groundwater Monitoring Conducted 20 March 2007, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 10 April 2007.

Streamborn (2007b). Letter Report, Groundwater Monitoring Conducted 10 September 2007, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 12 October 2007.

Streamborn (2008a). Letter Report, Groundwater Monitoring Conducted 10 March 2008, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 23 April 2008.

Streamborn (2008b). Letter Report, Groundwater Monitoring Conducted 8 September 2008, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 14 November 2008.

Streamborn (2009a). Letter Report, Groundwater Monitoring Conducted 3 March 2009, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 20 March 2009.

Streamborn (2009b). Letter Report, Groundwater Monitoring Conducted 1 September 2009, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 30 September 2009.

Streamborn (2010a). Letter Report, Groundwater Monitoring Conducted 8 March 2010, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 20 April 2010.

Streamborn (2010b). *Workplan to Conduct Soilgas Investigation, 2440 East Eleventh Street, Oakland CA, RO No. 29.* Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 27 September 2010.

Streamborn (2010c). Letter Report, Groundwater Monitoring Conducted 10 September 2010, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 5 October 2010.

Streamborn (2011). Letter Report, Soilgas Monitoring Conducted 8 August 2011, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 9 September 2011.

Streamborn (2012). Letter Report, Abandon/Decommission Five Wells, 2440 East Eleventh Street, Oakland CA, Alameda County Case No. RO0000029, Geotracker Global ID T0600100858. Prepared for Jeffrey Eandi, Oakland CA. Prepared by Streamborn, Berkeley CA, Project No. P279. 31 August 2012.



#### Hydrogeologic Summary 2440 East Eleventh Street Oakland CA

#### Subsurface lithology in the immediate vicinity of the contaminant source and plume

- The subsurface lithology has been observed in conventional borings along with borings to install monitoring wells.
- The maximum depth explored has been approximately 20 feet. Significant/regional water bearing zones (aquifers) likely occur at significantly greater depth.
- The observed subsurface soils have typically been fine-grained. Observed fine-grained soils have included lean clay, fat clay, silt, sandy silt, silt with sand, fat clay with sand, fat clay with gravel, sandy fat clay, sandy fat clay with gravel, sandy lean clay, lean clay with sand, and lean clay with gravel.

Coarse-grained lenses occur within the overall fine-grained matrix. Observed coarsegrained soils (lenses) have included sandy gravel, gravelly sand, clayey sand, clayey sand with gravel, clayey gravel with sand, silty sand with gravel, well-graded sand with silt and gravel, well-graded sand with clay and gravel, poorly-graded sand with clay, and well-graded gravel with clay and sand.

• In the immediate vicinity of the former tank, within the limits of the tank excavation, fill materials, consisting of coarse-grained soils (sand and gravel), were observed near ground surface.

## Depth to groundwater and groundwater gradient in the immediate vicinity of the contaminant source and plume

- The depth to groundwater has typically been measured between  $\pm 8$  to  $\pm 12$  feet below ground surface.
- The groundwater gradient has typically been directed to the southwest (toward the Oakland-Alameda Estuary). The gradient direction has been measured between N 114° W and N 128° W (average N 120° W). The magnitude has typically varied between 0.01 and 0.03 (average 0.02).

#### Groundwater advection velocity (very approximate)

• The characteristic soil type within the groundwater lenses has consisted of a mixture of sand and gravel with minor amounts of silt or clay. This soil type may be expected to have a permeability of approximately 0.0005 centimeters per second (1.4 feet per day) (Cedegren 1967). Using the average measured groundwater gradient of 0.02 and assuming an effective porosity of 0.3, the average advection velocity through the coarse-grained lenses may be calculated as:

 $V_{ave} = (k) (i) / (n_e) = (1.4 \text{ feet per day}) (0.02) / (0.3) = 0.09 \text{ feet per day} (34 \text{ feet per year})$ 



#### **Groundwater Level and Gradient Information Since 1995**

#### 2440 East Eleventh Street Oakland CA

Location	MV	W1	MV	W2	MV	W3	M١	W4	MV	W5			
Ground Surface Elevation	24.	.51	24.	.21	23.	06	23.	12	22.	.59			
Casing Diameter (inches)	1	2	2	2	2		2		2	2			
Surveyed Latitude and Longitude (NAD83)	37.78 -122.23		37.7800499 -122.2358522		37.7800410 -122.2361722		37.7799066 -122.2361136		37.780 -122.23		Groundwater Gradient		
Measuring Point (NAVD88)	TOC N Side Elev = 24.14		TOC N Side Elev = 23.92		TOC N Side Elev = 22.69		TOC N Side Elev = 22.45		TOC I Elev =				
	Depth	Elev	Depth	Elev	Depth	Elev	Depth	Elev	Depth	Elev			
Intercepted Interval	9 to 20	4.5 to 15.5	9 to 20	4.2 to 15.2	9 to 20	3.1 to 14.1	6 to 17	6.1 to 17.1	6 to 17	5.6 to 16.6	Direction	Magnitude	
14 July 1995	9.72	14.42	10.74	13.18	10.95	11.74							
17 July 1995	11.11	13.03	10.93	12.99	11.04	11.65							
20 October 1995	11.96	12.18	11.92	12.00	12.11	10.58							
25 January 1996	8.14	16.00	8.23	15.69	8.83	13.86							
11-12 June 2001	10.35	13.79	11.50	12.42	11.08	11.61							
5 February 2002	11.00	13.14	11.10	12.82	11.30	11.39							
12 August 2004	10.95	13.19	11.17	12.75	11.77	10.92					N 115° W	0.02	
2 March 2005	8.25	15.89	8.44	15.48	9.36	13.33					N 120° W	0.03	
2 October 2006	11.08	13.06	11.15	12.77	11.79	10.90	11.48	10.97	11.28	10.66	N 126° W	0.02	
20 March 2007	10.96	13.18	10.78	13.14	10.91	11.78	10.57	11.88	10.41	11.53	N 127° W	0.01	
10 September 2007	11.24	12.90	11.54	12.38	12.20	10.49	11.91	10.54	11.68	10.26	N 128° W	0.02	
10 March 2008	10.74	13.40	10.89	13.03	10.60	12.09	10.28	12.17	10.16	11.78	N 114° W	0.01	
8 September 2008	11.73	12.41	11.42	12.50	12.09	10.60	11.77	10.68	11.57	10.37	N 124° W	0.01	
3 March 2009	8.31	15.83	8.22	15.70	9.30	13.39	8.98	13.47	8.93	13.01	N 117° W	0.02	
1 September 2009	10.99	13.15	11.29	12.63	11.97	10.72	11.68	10.77	11.45	10.49	N 114° W	0.02	
8 March 2010	9.00	15.14	8.98	14.94	9.84	12.85	9.48	12.97	9.43	12.51	N 116° W	0.02	
10 September 2010	11.26	12.88	11.20	12.72	11.82	10.87			11.46	10.48			
8 August 2011	11.00	13.14											
24 July 2012	11.19	12.95	11.24	12.68	11.83	10.86	11.51	10.94	11.31	10.63			
Total Depth (Last Measurement)	19.87		19.89		19.67		17.35		17.31		N 120° W	0.02	

#### General Notes

(a) Elevations are cited in units of feet, relative to the NAVD88 datum (NOT Mean Sea Level).

(b) TOC = top of PVC casing. N = north. Measuring points were the top of the PVC casing, north side.

(c) The intercepted intervals correspond to the sand pack interval. The depths of the intercepted intervals were measured relative to ground surface.

(d) On 28 August 2009, Virgil Chavez Land Surveying (Vallejo CA) surveyed wells MW1 through MW5. Horizontal coordinates were surveyed relative to the NAD83 datum. Elevations were surveyed relative to the NAVD88 datum. According to Virgil Chavez Land Surveying, subtract 2.726 feet from the NAVD88 elevations to convert to NGVD29 (Mean Sea Level) datum. Previous surveys had been conducted by HTT Engineering (Oakland CA) and Streamborn; however, the data in this table are based solely on the survey by Virgil Chavez Land Surveying.



#### Well Purging and Sampling Information Since 2001

#### 2440 East Eleventh Street Oakland CA

Well No.	Sample Date	Sample Type	Purge Method	Purge Duration (minutes)	Approximate Volume Purged (gallons)	Volume Purged (static water casing volumes)	Purged Dry?	Dissolved Oxygen (mg/L)	рН	Specific Conductance (µS/cm)	Temp (°C)	ORP (mV)	Turbidity/ Color
MW1	11 Jun 01	Grab	SPP	NM	20	NC	no	NM	6.8	310	21.4	NM	NM
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	290	18.8	NM	NM
	12 Aug 04	Grab	SPP	4	5	±3	no	1.1	7.0	230	18.8	-130	Clear/none
	2 Mar 05	Grab	SPP	7	6	±3	no	2.2	6.9	230	17.1	-160	Clear/none
	2 Oct 06	Grab	SPP	7	5	$\pm 3$	no	1.0	6.6	380	17.7	-130	Translucent/gray
	20 Mar 07	Grab	SPP	25	5	±3	no	0.8	6.8	410	16.1	-130	Clear/none
	10 Sep 07	Grab	SPP	8	5	±3	no	0.9	6.7	480	18.0	-100	Clear/none
	10 Mar 08	Grab	SPP	11	5	±3	no	0.7	6.9	410	16.6	-110	Clear/none
	8 Sep 08	Grab	SPP	6	4	±3	no	1.0	6.9	530	18.4	-80	Clear/none
	3 Mar 09	Grab	SPP	11	6	±3	no	0.8	6.8	480	15.8	-60	Clear/none
	1 Sep 09	Grab	SPP	15	5	±3	no	0.8	6.8	500	19.2	-80	Clear/none
	8 Mar 10	Grab	SPP	23	7	±4	no	0.7	6.8	450	17.4	-90	Clear/none
	10 Sep 10	Grab	SPP	16	4	±3	no	0.7	6.7	580	18.1	-60	Clear/none
MW2	12 Jun 01	Grab	SPP	NM	15	NC	no	NM	7.1	430	17.2	NM	NM
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	400	16.8	NM	NM
	12 Aug 04	Grab	SPP	4	5	±3	no	2.0	6.8	510	18.9	-170	Turbid/gray
	2 Mar 05	Grab	SPP	7	6	±3	no	2.2	6.7	490	17.7	-220	Clear/none
	2 Oct 06	Grab	SPP	7	5	$\pm 3$	no	1.0	6.7	490	18.0	-110	Clear/none
	20 Mar 07	Grab	SPP	20	5	±3	no	1.0	6.9	490	16.7	-170	Clear/none
	10 Sep 07	Grab	SPP	7	4	±3	no	0.7	6.8	560	19.6	-110	Clear/none
	10 Mar 08	Grab	SPP	11	5	±3	no	0.9	7.1	520	17.1	-90	Clear/none
	8 Sep 08	Grab	SPP	7	5	±3	no	1.5	7.5	670	19.0	-50	Clear/none
	3 Mar 09	Grab	SPP	11	6	±3	no	0.9	6.9	690	15.9	-50	Clear/none
	1 Sep 09	Grab	SPP	14	5	±3	no	0.7	6.9	670	21.1	-60	Translucent/gray
	8 Mar 10	Grab	SPP	24	7	±4	no	0.8	6.8	630	17.4	-70	Clear/none
	10 Sep 10	Grab	SPP	12	4	±3	no	0.7	6.8	690	19.2	-80	Clear/none
MW3	12 Jun 01	Grab	SPP	NM	12	NC	no	NM	7.4	440	17.2	NM	NM
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	410	17.8	NM	NM
	12 Aug 04	Grab	SPP	8	4	±3	no	1.7	6.6	440	19.0	-150	Clear/none
	2 Mar 05	Grab	SPP	6	5	±3	no	2.3	6.8	500	18.1	-200	Clear/none
	2 Oct 06	Grab	SPP	6	4	±3	no	1.0	6.8	490	18.8	-60	Clear/none
	20 Mar 07	Grab	SPP	25	4	±3	no	1.6	6.7	540	16.8	-60	Clear/none
	10 Sep 07	Grab	SPP	7	4	±3	no	0.9	6.7	530	18.8	-120	Clear/none
	10 Mar 08	Grab	SPP	10	5	±3	no	0.7	7.1	510	17.5	-100	Clear/none
	8 Sep 08	Grab	SPP	6	4	±3	no	1.0	7.0	600	19.3	-50	Clear/none
	3 Mar 09	Grab	SPP	7	5	±3	no	0.9	6.8	620	16.7	-50	Clear/none
	1 Sep 09	Grab	SPP	12	4	±3	no	0.8	6.8	570	19.6	-60	Clear/none
	8 Mar 10	Grab	SPP	15	5	±3	no	0.7	6.8	540	16.9	-70	Clear/none
	10 Sep 10	Grab	SPP	7	4	±3	no	0.6	6.8	550	19.5	-80	Clear/none
MW4	2 Oct 06	Grab	SPP	24	14	±16	no	4.6	7.1	630	18.5	180	Translucent/brown
	20 Mar 07	Grab	SPP	15	3	±3	no	1.2	6.5	470	15.7	170	Clear/none
	10 Sep 07	Grab	SPP	7	3	±3	no	1.4	6.4	490	18.1	120	Translucent/gray
	10 Mar 08	Grab	SPP	9	4	±3	no	1.4	6.6	480	15.9	120	Clear/none
	8 Sep 08	Grab	SPP	4	3	±3	no	1.3	6.6	560	18.1	140	Clear/none
	3 Mar 09	Grab	SPP	7	4	±3	no	2.0	6.6	590	15.8	280	Clear/none
	1 Sep 09	Grab	SPP	9	3	±3	no	0.9	6.6	530	18.3	130	Clear/none
	8 Mar 10	Grab	SPP	10	4	±3	no	1.1	6.6	460	16.0	170	Clear/none
MW5	2 Oct 06	Grab	SPP	35	22	±24	no	3.4	7.0	600	19.1	30	Translucent/brown
	20 Mar 07	Grab	SPP	23	3	±3	no	0.9	6.9	580	16.6	-70	Clear/none
	10 Sep 07	Grab	SPP	7	3	±3	no	0.8	6.8	630	19.5	-90	Clear/none
	10 Mar 08	Grab	SPP	11	4	±3	no	1.0	7.1	570	16.6	-100	Clear/none
	8 Sep 08	Grab	SPP	4	3	±3	no	1.0	7.1	730	20.4	-80	Clear/none
	3 Mar 09	Grab	SPP	8	4	±3	no	0.8	6.9	670	16.1	-80	Clear/none
	1 Sep 09	Grab	SPP	9	3	±3	no	0.9	6.8	660	19.9	-70	Clear/none
	8 Mar 10	Grab	SPP	8	4	±3	no	0.7	6.9	570	15.9	-90	Clear/none
	10 Sep 10	Grab	SPP	8	3	$\pm 3$	no	0.6	6.9	630	19.4	-100	Clear/none

#### General Notes

- (a) NM = not measured.
- (b) NC = not calculated.
- (c) ORP = oxidation-reduction potential.
- (d) SPP = submersible purge pump.
- (d) Measurements cited in this table correspond to the end of purging (time of sampling).



# Table 6 (Page 1 of 2)Groundwater Analytical Data from Monitoring Wells2440 East Eleventh StreetOakland CA

Location	Sample Date	Sample Type	Total Lead (µg/L)	TPH- Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	1,2- Dichloro- ethane (μg/L)	Ethylene Dibromide (µg/L)	MtBE (µg/L)	Other Fuel Oxygenate (EPA Method 8260) (µg/L)
MW1	17 Jul 1995	Grab	<40	22,000	390	2,000	800	5,300			<125	
	20 Oct 1995	Grab	<40	14,000	270	540	360	1,800				
	25 Jan 1996	Grab	<40	16,000	740	1,300	490	2,700			<500	
	25 Apr 1996	Grab	<40	4,600	180	450	190	1,000			<250	
	11 Jun 2001	Grab	14	7,100	14	35	240	720				
	5 Feb 2002	Grab	3.7	9,300	6.3	11	230	560			< 0.70	
	12 Aug 2004	Grab	<5.0	2,900	9.1	6.0	130	160			0.72	<0.50 to <50
	2 Mar 2005	Grab		950	1.9	0.60	19	4.0			0.80	<0.50 to <50
	2 Oct 2006	Grab	<100	830	4.1	0.80	44	7.8	< 0.50	< 0.50	< 0.50	<0.50 to <100
	20 Mar 2007	Grab		470	2.1	< 0.50	8.5	1.8	< 0.50		0.63	<0.50 to <100
	10 Sep 2007	Grab		3,400	18	6.4	170	43	< 0.50		1.1	<0.50 to <100
	10 Mar 2008	Grab		950	2.9	0.66	19	1.9	< 0.50		0.72	<0.50 to <100
	8 Sep 2008	Grab		3,600	14	6.5	200	19	< 0.50		0.62	<0.50 to <100
	3 Mar 2009	Grab		1,600	5.2	2.1	68	9.7			0.56	<0.50 to <5.0
	1 Sep 2009	Grab		1,700	7.0	2.2	64	4.2			< 0.50	<0.50 to <5.0
	8 Mar 2010	Grab		400	1.0	< 0.50	17	1.2			< 0.50	<0.50 to <4.0
	10 Sep 2010	Grab		350	4.6	0.76	12	1.0			< 0.50	<0.50 to <4.0
MW2	17 Jul 1995	Grab	56.4	21,000	370	1,700	930	5,100			<125	<0.50 to <5.0
	20 Oct 1995	Grab	<40	730	18	27	26	7.9				
	25 Jan 1996	Grab	<40	14,000	74	660	1,000	2,600			670	
	25 Apr 1996	Grab	<40	13,000	370	440	1,000	2,900			<500	
	12 Jun 2001	Grab	7.7	3,200	11	6.2	170	270				
	5 Feb 2002	Grab	3.5	2,900	7.6	3.8	220	160			< 0.70	
	12 Aug 2004	Grab	<5.0	3,100	2.6	1.8	< 0.50	13			< 0.50	<0.50 to <5.0
	2 Mar 2005	Grab		3,700	<5.0	<2.5	340	22			<2.5	<2.5 to <25
	2 Oct 2006	Grab	<100	7,200	<2.5	3.0	380	30	<2.5	<2.5	<2.5	<2.5 to <500
	20 Mar 2007	Grab		7,000	<5.0	<5.0	370	34	<5.0		<5.0	<5.0 to <1,000
	10 Sep 2007	Grab		9,300	<2.5	3.8	530	38	<2.5		<2.5	<2.5 to <500
	10 Mar 2008	Grab		6,500	<2.5	<2.5	200	13	<2.5		<2.5	<2.5 to <500
	8 Sep 2008	Grab		7,300	<2.5	<2.5	290	12	<2.5		<2.5	<2.5 to <500
	3 Mar 2009	Grab		3,700	< 0.50	1.1	< 0.50	4.7			< 0.50	<0.50 to <5.0
	1 Sep 2009	Grab		5,100	1.4	1.8	140	9.2			<1.0	<1.0 to <10
	8 Mar 2010	Grab		2,400	1.7	2.3	100	7.7			<1.0	<1.0 to <8.0
	10 Sep 2010	Grab		3,000	1.7	2.1	160	10			<1.0	<1.0 to <8.0
MW3	17 Jul 1995	Grab	153	8,400	1,200	150	1,000	1,700			<125	
	20 Oct 1995	Grab	<40	5,800	600	590	43	340				
	25 Jan 1996	Grab	<40	10,000	1,200	290	870	1,300			<250	
	25 Apr 1996	Grab	<40	8,900	830	140	1,000	1,000			400	
	12 Jun 2001	Grab	7.4	1,800	37	4.5	98	19				
	5 Feb 2002	Grab	4.4	1,100	32	2.1	76	9.5			< 0.50	
	12 Aug 2004	Grab	<50	1,100	4.5	< 0.50	6.0	1.8			1.4	<0.50 to <5.0
	2 Mar 2005	Grab		3,000	27	3.0	76	22			<2.5	<2.5 to <25
	2 Oct 2006	Grab	<100	1,500	6.6	< 0.50	5.0	2.5	< 0.50	< 0.50	< 0.50	<0.50 to <100
	20 Mar 2007	Grab		2,200	15	1.6	14	12	< 0.50		0.52	<0.50 to <100
	10 Sep 2007	Grab		1,000	4.2	< 0.50	<0.50	0.82	<0.50		0.53	<0.50 to <100
	10 Mar 2008	Grab		4,000	13	1.1	7.0	7.4	< 0.50		< 0.50	TAME = 0.53 Others <0.50 to <100
	8 Sep 2008	Grab		1,100	9.7	0.75	7.7	5.9	< 0.50		0.59	<0.50 to <100
	3 Mar 2009	Grab		2,100	14	1.6	16	14			< 0.50	<0.50 to <100
	1 Sep 2009	Grab		1,400	4.7	< 0.50	0.52	1.7			< 0.50	<0.50 to <5.0
	8 Mar 2010	Grab		2,500	13	1.1	6.8	1.7			< 0.50	<0.50 to <5.0
	10 Sep 2010	Grab		640	1.9	< 0.50	< 0.50	<1.0			< 0.50	<0.50 to <4.0
MW4	2 Oct 2006	Grab	<100	<50	< 0.50	< 0.50	0.96	<0.50	< 0.50	< 0.5	< 0.5	<0.50 to <100
	20 Mar 2007	Grab	100	<50	<0.50	< 0.50	< 0.50	<0.50	<0.50	0.0	<0.5	<0.50 to <100
	10 Sep 2007	Grab		<50	< 0.50	< 0.50	< 0.50	<0.50	<0.50		<0.5	<0.50 to <100
	10 Sep 2007	Grab		<50	< 0.50	< 0.50	< 0.50	<0.50	<0.50		< 0.5	<0.50 to <100
	8 Sep 2008	Grab		<50	<0.50	< 0.50	< 0.50	<0.50	<0.50		< 0.5	<0.50 to <100
	3 Mar 2009	Grab		<50	< 0.50	< 0.50	< 0.50	<1.0	0.00		< 0.5	<0.50 to <5.0
	1 Sep 2009	Grab		<50	<0.50	< 0.50	< 0.50	<1.0			< 0.5	<0.50 to <5.0
	8 Mar 2010	Grab		<50	< 0.50	< 0.50	< 0.50	<1.0			< 0.50	<0.50 to <4.0



## Table 6 (Page 2 of 2)Groundwater Analytical Data from Monitoring Wells2440 East Eleventh Street

#### **Oakland** CA

Location	Sample Date	Sample Type	Total Lead (µg/L)	TPH- Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	1,2- Dichloro- ethane (µg/L)	Ethylene Dibromide (µg/L)	MtBE (µg/L)	Other Fuel Oxygenates (EPA Method 8260) (µg/L)
MW5	2 Oct 2006	Grab	<100	3,000	20	0.97	69	130	< 0.50	< 0.50	2.6	<0.50 to <100
	20 Mar 2007	Grab		2,800	13	1.5	27	35	< 0.50		1.6	<0.50 to <100
	10 Sep 2007	Grab		1,900	11	0.78	10	9.2	< 0.50		2.5	<0.50 to <100
	10 Mar 2008	Grab		4,900	7.8	1.4	13	12	< 0.50		1.2	<0.50 to <100
	8 Sep 2008	Grab		2,300	9.7	0.75	7.7	5.9	< 0.50		2.3	<0.50 to <100
	3 Mar 2009	Grab		2,600	11	4	60	30			<2.5	<2.5 to <25
	1 Sep 2009	Grab		1,800	5.5	0.68	5.5	2.5			0.98	<0.50 to <5.0
	8 Mar 2010	Grab		2,100	6.0	1.8	14	9.4			< 0.50	<0.50 to <4.0
	10 Sep 2010	Grab		1,800	5.7	0.65	3.6	2.3			< 0.50	<0.50 to <4.0
	1				1		1					
	ntal Screening Level Contaminant Levels ( ia)		15		1.0	150	300	1,750	0.5	0.050		
Based Drink	ntal Screening Level king Water Equivale s, 10-6 Excess Cance ater criteria)	nt for			0.35		3.2		0.38	0.0097		
Office of Er Assessment	ntal Screening Level nvironmental Health (OEHHA), Public H sking water criteria)	Hazard	2.0		0.15	150	300	1,800	0.4			
	ntal Screening Level hold (drinking water		50,000	100	170	40	30	20	700	50,000		
Volatilizatio	ntal Screening Level on from Groundwate Vapor Intrusion, Re	r and		Measure Soilgas	540	380,000	170,000	160,000	200	150		
Volatilizatio	ntal Screening Level on from Groundwate Vapor Intrusion, Co	r and		Measure Soilgas	1,800	530,000	170,000	160,000	690	510		
Contaminat	ntal Screening Level ion Ceiling Value for er (nuisance odors, et	r	50,000	5,000	20,000	400	300	5,300	50,000	50,000		
	ntal Screening Level ter - Chronic Habitat		2.5	210	46	130	43	100	2,000	1,400		
Environmental Screening Level - Estuarine Surface Water - Bioaccumulation/Human Consumption					71	200,000	29,000		99			

#### General Notes

(a) TPH = total petroleum hydrocarbons. MtBE = methyl tert-butyl ether. TAME = tert-amyl methyl ether.

(b) Samples were collected using a Teflon bailer fitted with a bottom-emptying device.

(c) Environmental Screening Levels from: Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final - November 2007, Revised May 2008). Prepared by San Francisco Bay Regional Water Quality Control Board, Oakland CA. 27 May 2008. www.waterboards.ca.gov/sanfranciscobay/esl.shtml



Location	Sample Date	Sample Interval (feet)	Purge Flowrate (liter/min)	Purge Volume (liter)	Number of Standard Purge Volumes (sandpack volumes)	Sample Flowrate (liter/min)	Sample Volume (liter)	Approximate Depth to Groundwater (feet)	TPH- gasoline (gasoline range organics, C6-C12) (ppb v/v)	Benzene (µg/m <sup>3</sup> )	Toluene (μg/m <sup>3</sup> )	Ethyl- benzene (µg/m <sup>3</sup> )	Total Xylenes (µg/m <sup>3</sup> )	Other Volatile Organic Compounds (µg/m <sup>3</sup> )	Helium (ppm v/v)	Ratio of Helium in Sample to Helium in Shroud (%)	Carbon Monoxide (ppm v/v)	Carbon Dioxide (ppm v/v)	Oxygen (ppm v/v)	Methane (ppm v/v)
SG1	8 Aug 2011	5.0-6.5	0.167	.668	1.1	0.167	1.4	11.0	20 (1)	<2.8	<3.4	<3.9	<3.9	Propylene = 2.8 Acetone = 20 2-Buranone = 6.0 Others <1.5 to 9.5	<1,800	<1	<1,800	26,000	170,000	<1,800
SG2	8 Aug 2011	5.0-6.5	0.167	.668	1.1	0.167	1.4	11.0	47 <sup>(1)</sup>	<3.3	<3.8	<4.4	5.6	Propylene = 9.9 Acetone = 28 Carbon Disulfide = 15 n-Hexane = 16 2-Butanone = 9 Cyclohexane = 4.6 n-Heptane = 4.5 Tetrachloroethene = 120 Others <1.8 to 11	9,900	4.4	<2,000	59,000	120,000	<2,000
SG3	8 Aug 2011	5.0-6.5	0.167	.668	1.1	0.167	1.4	11.0	55	<3.3	<3.9	<4.5	<4.5	Freon 12 = 9.3 $Trichlorofluoromethane = 61$ $Acetone = 26$ $2-Butanone = 7.1$ $Tetrachloroethene = 60$ $1,2,4-Trimethylbenzene = 9.9$ $Benzyl chloride = 6.5$ $1,2,4-Trichlorobenzene = 38$ $Hexachlorobutadiene = 24$ $Others < 1.8 to 11$	<2,100	<1	<2,100	110,000	62,000	<2,100

Environmental Screening Level - Shallow Soilgas (vapor intrusion), Residential Exposure	,720 <sup>(2)</sup>	84	63,000	980	21,000			
California Human Health Screening Level (CHHSL) - Shallow Soilgas (vapor intrusion), Residential Land Use		36.2	135,000		315,000			

General Notes

(a) TPH-gasoline was analyzed by Method TO-3. Volatile organic compounds were analyzed by Method TO-15. Fixed gasses (helium, carbon monoxide, carbon dioxide, oxygen, methane) were analyzed by ASTM D-1946.

(b) The ratio of helium in the sample to helium in the shroud assumes the concentration inside the shroud = 22.5% (225,000 ppm v/v). The shroud concentration was maintained between 20% and 25% during purging and sampling.

(c) California Human Health Screening Levels (CHHSL) from: Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties. Prepared by California Environmental Protection Agency. November 2004, revised January 2005.

(d) Environmental Screening Levels (ESL) from: Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final - November 2007, Revised May 2008). Prepared by San Francisco Bay Regional Water Quality Control Board, Oakland CA. November 2007, revised 27 May 2008. (www.waterboards.ca.gov/sanfranciscobay/esl.shtml)

#### Footnote

(1) The analytical result was below the method-specific reporting limit; accordingly, the analytical result should be considered an estimate.

(2) The environmental screening level was cited in  $\mu g/m^3$ . This was converted to ppb v/v assuming gasoline could be represented by the compound decane ( $C_{10}H_{22}$ ) (molecular weight = 142.29).

#### Table 7

#### Analytical Results from Soilgas Sampling 2440 East Eleventh Street Oakland CA

iary 2005.





#### Procedures to Abandon/Decommission the Wells

#### 2440 East Eleventh Street Oakland CA

Five wells to be abandoned/decommissioned (MW1, MW2, MW3, MW4, and MW5). The wells are 2-inch diameter SCH40 PVC, completed to depths of  $\pm 17-20$  feet. Each well has a wellhead vault,  $\pm 12$ -inches in diameter by  $\pm 9$  inches deep. Four of the wells (MW2, MW3, MW4, and MW5) are located in parking spaces in the asphalt concrete roadway; one of the wells (MW1) is located in the (Portland Cement) concrete sidewalk. The pavement section for the roadway is  $\pm 9$  inches of asphalt concrete, underlain by  $\pm 9$  inches of aggregate base. The sidewalk section is  $\pm 4$  inches of (Portland Cement) concrete, underlain by  $\pm 6$  inches of aggregate base.

The abandonment/decommissioning will consist of the following:

- Obtain Well Abandon/Decommission Permit from the Alameda County Public Works Agency-Water Resources Division.
- Obtain Excavation Permit and an Obstruction Permit from the City of Oakland Public Works Department.
- Approximately 7 working days prior to fieldwork, the work locations will be marked in the field and cleared for buried utilities according to 811/USA procedures.
- Approximately 72 hours before start of fieldwork, "No Parking" signs will be posted for the parking spaces that will be obstructed.
- Each well in the roadway (MW2, MW3, MW4, and MW5) will be abandoned/decommissioned by:
  - Backfilling the well casing with grout. A tremie pipe will be used to place the grout. Grout = neat cement grout (one sack/94 pounds of Type 1/II cement, ±6.5 gallons water).
  - Breaking out and removing the wellhead vault.
  - Overdrilling the upper ±5 feet of each well using augers with a diameter equal to or larger than that used to originally install each well (augers at least 8.25 inches in diameter). Backfilling the newly-created borehole with neat cement grout (one sack/94 pounds of Type 1/II cement, ±6.5 gallons water).
  - Sawcutting and removing a ±24-inch by ±24-inch section of asphalt concrete pavement around each well. Noting the thickness of the existing asphalt concrete pavement.
  - Excavating to the bottom of the existing aggregate base or to a depth of 18 inches, whichever is greater. Noting the thickness of the existing aggregate base.
  - Placing and compacting new/imported Class II aggregate base to match the existing thickness or 9 inches, whichever is greater.
  - Applying a tack coat on the pavement sawcut and the aggregate base.
  - Repaving with hot mix asphalt concrete to match the existing thickness or 9 inches, whichever is greater. Place the hot mix asphalt concrete in two layers. Compact the first layer using a "jumping jack". Compact the second (top) layer using a "vibroplate" and vibrating drum roller. Dressing the finished seam between the existing and new pavement with a tack coat and sand.
- The well in the sidewalk (MW1) will be abandoned/decommissioned by:
  - Backfilling the well casing with grout. A tremie pipe will be used to place the grout. Grout = neat cement grout (one sack/94 pounds of Type 1/II cement, 6.5 gallons water).
  - Breaking out and removing the wellhead vault.
  - Overdrilling the upper ±5 feet of each well using augers with a diameter equal to or larger than that used to originally install each well (augers at least 8.25 inches in diameter). Backfilling the newly-created borehole with neat cement grout (one sack/94 pounds of Type 1/II cement, ±6.5 gallons water).
  - Sawcutting and removing the "flag" of concrete sidewalk surrounding the well (±36-inch by ±36-inch section of concrete sidewalk). Noting the thickness of the existing concrete sidewalk.
  - Excavating to the bottom of the existing aggregate base or to a depth of 10 inches, whichever is greater. Noteing the thickness of the existing aggregate base.
  - Placing and compacting new/imported Class II aggregate base to match the existing thickness or 6 inches, whichever is greater.
  - Dowling into the sidewalls of the existing concrete sidewalk on  $\pm 12$ -inch centers (#4 dowels and epoxy anchoring). Placing #4 rebar on  $\pm 12$ -inch centers,  $\pm 2$  inches from the top of the aggregate base. Repaying with (Portland Cement) concrete to match the existing thickness or 4 inches, whichever is greater.
- Disposing of the wellhead vault debris as municipal refuse. Disposing of the drilling cuttings (soil) and repaving debris as municipal refuse or recycling as construction debris.



Well Identification	Original Boring Diameter (inches)	Well Casing Diameter (inches)	Grout Seal Depth (feet from ground surface)	Bentonite Seal Depth (feet from ground surface)	Total Depth as Originally Drilled (feet from ground surface)	Total Depth and Date of Last Measurement (feet from Measuring Point)	Sandpack Interval (feet from ground surface)	Screened Interval (feet from ground surface)	Depth to Water and Date of Last Measurement (feet from Measuring Point)	Ground Surfa Elevation (NAVD88) (feet)
MW1	Not documented, likely ±8	2	0-7.5	7.5-8.5	21.5	19.8 (10 Sep 2010)	8.5-21.5	10.0-20.0	11.26 (10 Sep 2010)	24.51
MW2	Not documented, likely ±8	2	0-7.5	7.5-8.5	21.5	19.8 (10 Sep 2010)	8.5-21.5	10.0-20.0	11.20 (10 Sep 2010)	24.21
MW3	Not documented, likely ±8	2	0-7.5	7.5-8.5	21.5	19.6 (10 Sep 2010)	8.5-21.5	10.0-20.0	11.82 (10 Sep 2010)	23.06
MW4	8.25	2	0-5.0	5.0-6.0	17.0	17.3 (8 Mar 2012)	6.0-17.0	7.0-17.0	9.48 (8 Mar 2010)	23.12
MW5	8.25	2	0-5.0	5.0-6.0	17.0	17.2 (10 Sep 2010)	6.0-17.0	7.0-17.0	11.46 (10 Sep 2010)	22.59

#### General Notes

(a) Measuring Point = top of PVC well casing, north side.

(b) Ground surface = ground/pavement/sidewalk surface.

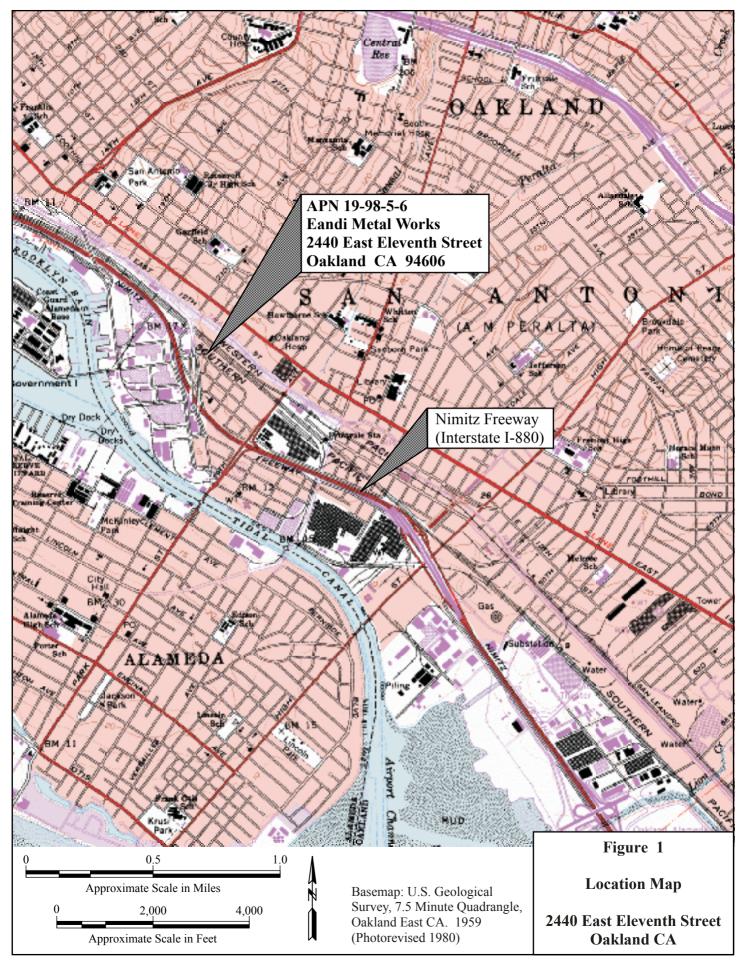
(c) All well casings were SCH 40 PVC.

#### Table 9

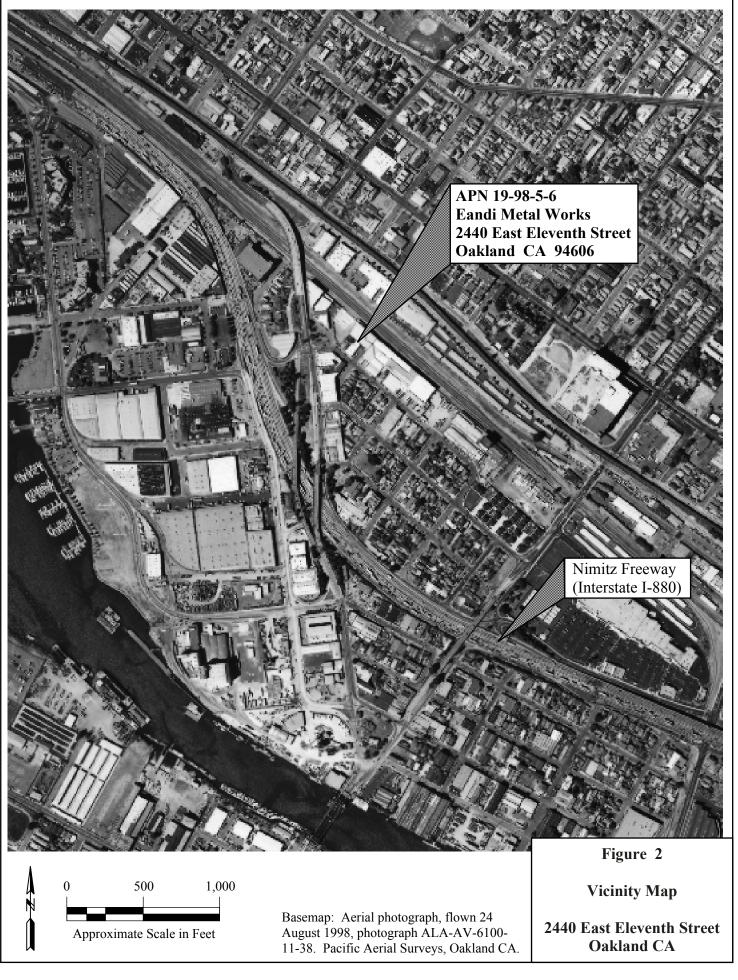
#### Well Completion Information 2440 East Eleventh Street Oakland CA

#### Surface Measuring Surveyed Surveyed Point Elevation tion Longitude (NAD83) Latitude D88) (NAVD88) (NAD83) (feet) 122.2358181 21.14 37.7801530 122.2358522 23.92 37.7800499 122.2361722 )6 22.69 37.7800410 122.2361136 12 22.45 37.7799066 59 21.94 37.7800613 122.2363355

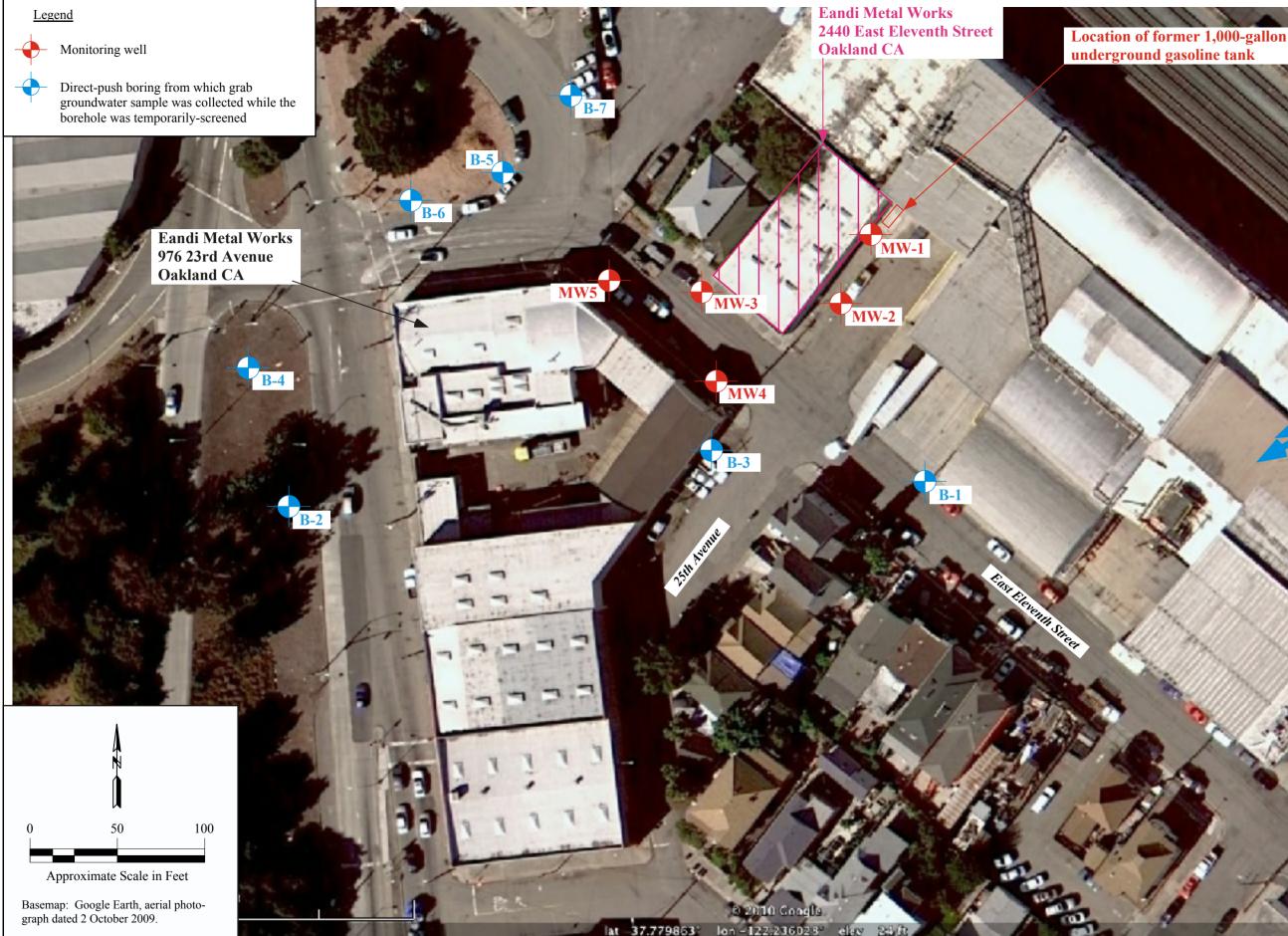












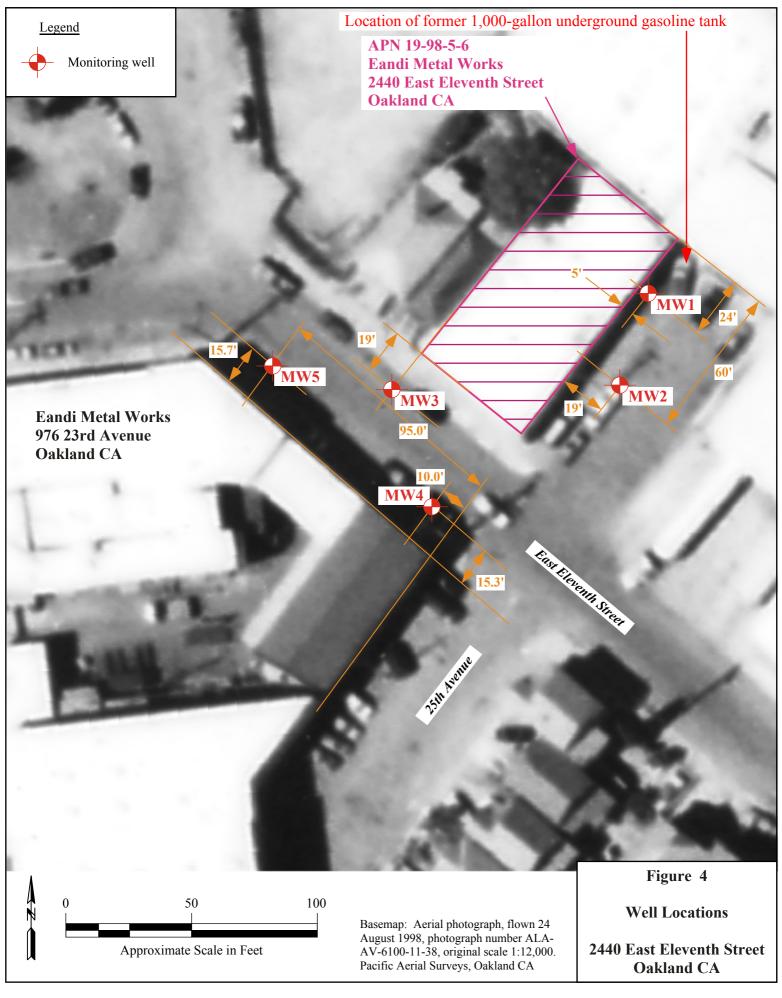
Small arrows indicate the range in groundwater gradient direction since 2004. Large arrow indicates the average ground-water gradient direction since 2004.

Figure 3

Site Plan

2440 East Eleventh Street **Oakland CA** 





<u>Streamborn</u>

## **ATTACHMENT 1**

Alameda County Mandate to Abandon/Decommission the Wells



#### ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

ALEX BRISCOE, Director



ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

February 21, 2012

Mr. Jeffrey Eandi Eandi Metal Works 976 Twenty Third Avenue Oakland, CA 94606 (Sent via E-mail to: <u>mail@eandimetals.com</u>)

Subject: Well Decommissioning for Fuel Leak Case No. RO0000029 and GeoTracker Global ID T0600100858, Eandi Metal Works, 2440 East Eleventh Street, Oakland, CA 94606

Dear Mr. Eandi:

Alameda County Environmental Health (ACEH) have reviewed the fuel leak case file and case closure summary for the above-referenced site and concur that no further action related to the underground storage tank fuel release is required at this time. No comments were received on the proposed case closure during a public comment period conducted between December 30, 2011 and February 10, 2012. Prior to issuance of remedial action completion certification and case closure, we request that the monitoring wells at the site be properly decommissioned, should the monitoring wells have no further use at the site. Please decommission the monitoring wells and provide documentation of the well decommissioning to this office no later than May 21, 2012. Remedial action completion certification will be issued following receipt of the documentation.

Well destruction permits may be obtained from the Alameda County Public Works Agency (<u>http://www.acgov.org/pwa/wells/index.shtml</u>). If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

#### TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

• May 21, 2012 – Well Decommissioning Report

Mr. Jeffrey Eandi RO0000029 February 21, 2012, Page 2

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

Attachments: Responsible Party(ies) Legal Requirements/Obligations Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 2032 (Sent via E-mail to: <u>Igriffin@oaklandnet.com</u>)

Kevin Wildenberg, Streamborn, P.O. Box 8330, Berkeley, CA 94707-8330 (Sent via E-mail to: <u>kevin@streamborn.com</u>)

Douglas Lovell, Streamborn, P.O. Box 8330, Berkeley, CA 94707-8330 (Sent via E-mail to: <u>doug@streamborn.com</u>

Donna Drogos, ACEH (Sent via E-mail to: <u>donna.drogos@acgov.org</u>) Jerry Wickham, ACEH (Sent via E-mail to: <u>jerry.wickham@acgov.org</u>)

GeoTracker, File

## **ATTACHMENT 2**

Alameda County Permit to Abandon/Decommission the Wells



PUBLIC	399 Elmhurst Street Hayward, CA 94544-13 Telephone: (510)670-6633 Fax:(5					
Application Approved	l on: 07/11/2012 By jamesy	Permit Numbers: W2012-04 Permits Valid from 07/24/2				
Application Id:	1341939151055	City of Project Site:Oakland				
Site Location: Project Start Date: Assigned Inspector:	2440 E. 11th St, Oakland, CA 07/24/2012 Contact Vicky Hamlin at (510) 670-5443 or vicky	Completion Date:07/24/2012 or vickyh@acpwa.org				
Applicant:	Streamborn - Doug W Lovell	<b>Phone:</b> 510-5	28-4234			
Property Owner:	PO Box 8330, Berkeley, CA 94707 Jeffrey E Eandi	<b>Phone:</b> 510-531-0778				
Client:	1000 Calcot PI., Oakland, CA 94606 ** same as Property Owner **					
	Receipt Number: WR2012-0219	Total Due: Total Amount Paid:	\$1985.00 \$1985.00			

eceipt Number: WR2012-0219	Total Amount Paid:	\$1985.00
Payer Name : Streamborn		PAID IN FULL

#### **Works Requesting Permits:**

Well Destruction-Monitoring - 5 Wells Driller: Cascade Drilling - Lic #: 938110 - Method: other

#### Specifications

Per	mit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2 049	012- 97	07/11/2012	10/22/2012	MW1	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 049	012- 98	07/11/2012	10/22/2012	MW2	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 049	012- )9	07/11/2012	10/22/2012	MW3	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 050	012- )0	07/11/2012	10/22/2012	MW4	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0702	e048222
W2 050	012- )1	07/11/2012	10/22/2012	MW5	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0703	e048223

#### **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

#### Work Total: \$1985.00

mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

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 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.

7. Remove the Christy box or similar structure. Destroy wells MW-1, Mw-2, MW-3, MW-4 and Mw-5 by overdrilling/saw cutting the upper 5ft. above & Tremie Grout with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.

8. 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.

Public

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

#### Application Approved on: 07/11/2012 By jamesy

Permit Numbers: W2012-0497 to W2012-0501 Permits Valid from 08/20/2012 to 08/20/2012

Work Total: \$1985.00

Application Id: Site Location: Project Start Date: Assigned Inspector: Extension Start Date: Extension Count:		City of Project Site:Oakland Completion Date:07/24/2012 6443 or vickyh@acpwa.org Extension End Date: 08/20/2012 Extended By: vickyh1
Applicant:	Streamborn - Doug W Lovell	<b>Phone</b> : 510-528-4234
Property Owner:	PO Box 8330, Berkeley, CA 94707 Jeffrey E Eandi 1000 Calcot Pl., Oakland, CA 9460	<b>Phone:</b> 510-531-0778
Client:	** same as Property Owner **	

Total Due:	\$1985.00
Receipt Number: WR2012-0219 Total Amount Paid:         Payer Name : Streamborn Paid By: CHECK	\$1985.00 AID IN FULL

#### **Works Requesting Permits:**

Well Destruction-Monitoring - 5 Wells Driller: Cascade Drilling - Lic #: 938110 - Method: other

#### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2012- 0497	07/11/2012	10/22/2012	MW1	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2012- 0498	07/11/2012	10/22/2012	MW2	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2012- 0499	07/11/2012	10/22/2012	MW3	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2012- 0500	07/11/2012	10/22/2012	MW4	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0702	e048222
W2012- 0501	07/11/2012	10/22/2012	MW5	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0703	e048223

#### **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. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

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 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.

7. Remove the Christy box or similar structure. Destroy wells MW-1, Mw-2, MW-3, MW-4 and Mw-5 by overdrilling/saw cutting the upper 5ft. above & Tremie Grout with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.

8. 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.

#### Subject: Alameda County Well Permit WCR Notice

#### Date: Tuesday, 24 July 2012 3:07:12 PM Pacific Daylight Time

#### From: vickyh@acpwa.org

#### To: information@streamborn.com

Application Id: 1341939151055 Application submitted on: 07/10/2012 Project Site City/Location: Oakland / 2440 E. 11th St, Oakland, CA Project Start Date: 07/24/2012 Completion Date: 07/24/2012

State Well Completion Reports(WCR) due:

Permit #	Inspection Completion Date	WCR Due Date
W2012-0497	07/24/2012	09/22/2012
W2012-0498	07/24/2012	09/22/2012
W2012-0499	07/24/2012	09/22/2012
W2012-0500	07/24/2012	09/22/2012
W2012-0501	07/24/2012	09/22/2012

Important instructions for completing the WCR: <u>Click Here</u> Submit WCRs to your assigned inspector: Vicky Hamlin Water Resources Section - WCR-Form Alameda County Public Works Agency 399 Elmhurst Street Hayward, CA 94544

If you have any questions, please contact your inspector Vicky Hamlin at vickyh@acpwa.org or (510) 670-5443

Thank you, Public Works Agency-Water Resources website: www.acgov.org/pwa/wells/, email: wells@acpwa.org

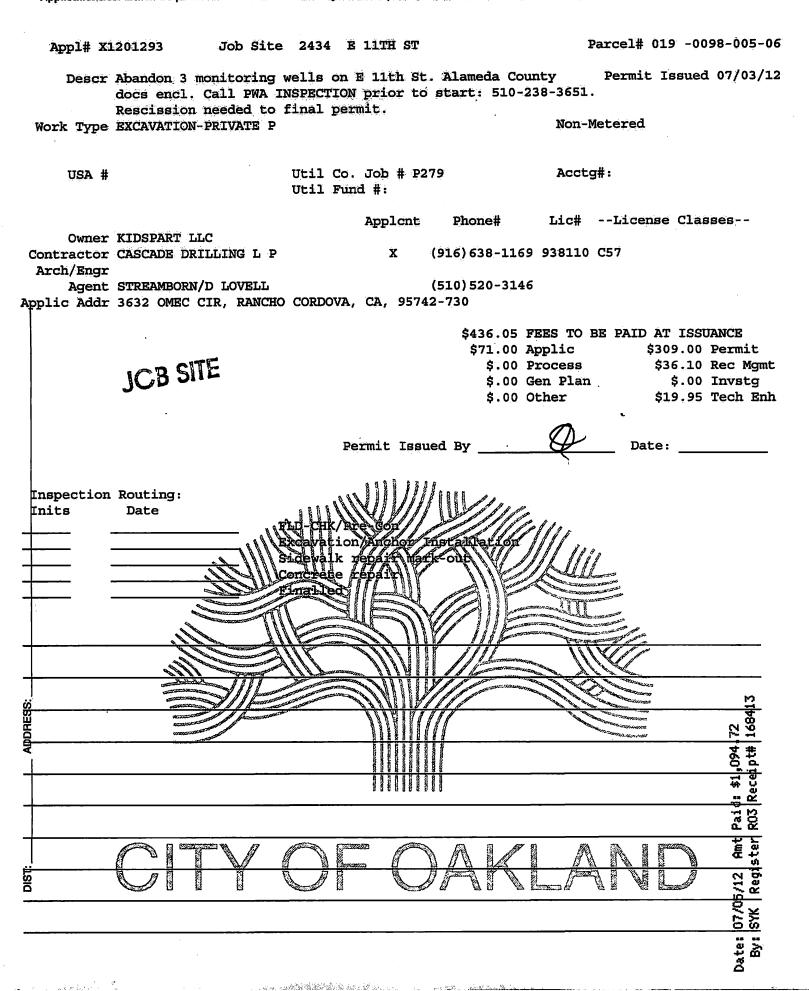
## **ATTACHMENT 3**

City of Oakland Excavation and Obstruction Permits



CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.



CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1201293 Parcel #: 019 -0098-005-06 Page 2 of 2 Project Address: 2434 E 11TH ST Licensed Contractors' Declaration I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. Construction Lending Agency Declaration I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency. Lender Address Workers' Compensation Declaration I hereby affirm under penalty of perjury one of the following declarations: I have and will maintain a certificate of consent to self-insure for workers' [] compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. [] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. POLICY NO CARRIER: [ ] I certify that in the performance of the for/which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code / I shall forth the Labor Code / I shall forthwith comply with those provisions WARNING: FAILURE TO SECURE WORKERS COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND COVERAGE IS UNLAWFUL, AND SHALL DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE. INTEREST, AND ATTORNEY'S FEES 3707 OF THE LAHOR CODE, INTE Hazardous Materials Declaration I hereby affirm that the intended occupancy [ | WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions were made available for the Health & Safety Code, as well as filing instructions, were made available to you.) I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinanges and state laws releting to building construction, and hereby authorize representatives of this city to enser upon the above-mentioned property for inspection./I am fully authorized by the owner and to perform the work authorized by this permit.

PRINT NAME

**NDDRESS** 

DIST

and all addition of

Date

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263 Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final. Appl# X1201294 Job Site 2434 E 11TH ST Parcel# 019 -0098-005-06 Descr Abandon 2 monitoring wells on 25th Ave. Alameda County Permit Issued 07/03/12 docs encl. Call PWA INSPECTION prior to start: 510-238-3651 floor Rescission needed to final permit. Work Type EXCAVATION-PRIVATE P Non-Metered USA # Util Co. Job # P279 Acctg#: Util Fund #: Applcnt Phone# Lic# --License Classes--**Owner KIDSPART LLC** Contractor CASCADE DRILLING L P х (916)638-1169 938110 C57 Arch/Engr Agent STREAMBORN/D LOVELL (510) 520 - 3146Applic Addr 3632 OMEC CIR, RANCHO CORDOVA, CA, 95742-730 \$436.05 FEES TO BE PAID AT ISSUANCE \$71.00 Applic \$309.00 Permit \$.00 Process \$36.10 Rec Mgmt **JOB SITE** \$.00 Gen Plan \$.00 Invstg \$.00 Other \$19.95 Tech Enh Permit Issued By Date: Inspection Routing: Inits Date pt# 1684 Recei \*\* Pai RO3 Amt

an said the state of the said of the

ster

Regt

Date: 07/05/12 By: SYK Reg

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1201294 Parcel #: 019 -0098-005-06 Page 2 of 2 Project Address: 2434 E 11TH ST Licensed Contractors' Declaration I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect. Construction Lending Agency Declaration I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency. Lender Address Workers' Compensation Declaration I hereby affirm under penalty of perjury one of the following declarations: I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. [] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. POLICY NO. CARRIER: [ ] I certify that in the performance of the rk for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code / I shall forthwith comply with those provisions WARNING: FAILURE TO SECURE WORKERS! COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTUES AND VAVAL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR COPE, INTEREST, AND ATTORNEY'S FEES Hazardous Materials Declaration I hereby affirm that the intended occupancy [ [ WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, 6 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.) I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authomize representatives of this city to enter upon the above-mentioned property for inspection /I am fully authorized by the owner and to perform the authorized by this permit.

PRINT NAME

ADDRESS

<u>D</u>SJ

South March Martin Carlo Ca

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263 Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final. App1# OB120590 Job Site 2434 E 11TH ST Parcel# 019 -0098-005-06 Reserve for construction vehicle(s) on 25th Ave.; Permit Issued 07/03/12 Post 72 hours prior. No impact on traffic lane; Block sidewalk allowed. One space NO FEE, Ref X1201294. Display on Dashboard Nbr of days: 1 Linear feet: 25 Effective: 07/24/12 Expiration: 07/24/12 SHORT TERM NON-METERED Applcnt Phone# Lic# --License Classes--Owner KIDSPART LLC Contractor CASCADE DRILLING L P х (916)638-1169 938110 C57 Arch/Engr Agent STREAMBORN/D LOVELL (510) 520 - 3146Applic Addr 3632 OMEC CIR, RANCHO CORDOVA, CA, 95742-730 \$101.56 FEES TO BE PAID AT FILING S.00 FEES TO BE PAID AT ISSUANCE \$71.00 Applic \$17.50 Permit \$8.41 Rec Mgmt \$.00 Process \$.00 Gen Plan \$.00 Invstg \$.00 Other \$4.65 Tech Enh **Display on Dashboard** JOB SITE **Negaliv Parked** Vehicle ТО teć / 621 33. £8) \_ A Ca nt arranges towing. DWC Ca Call 10-232 TCP needs to be approved Transportation henever deviated RO3 Receipt# 168413 from the previously ADDRESS Amt Paid: \$1,094.72 Applicant: Issued by: Register Date: 07/05/12 By: SYK Regis DIST

14 Monthly States, Sugar, Section of

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

App1# OB120589 Job Site 2434 E 11TH ST Parcel# 019 -0098-005-06 Reserve for construction vehicle(s) on E 11th St. Permit Issued 07/03/12 Post 72 hours prior. No impact on traffic lane or sidewalk allowed. One space NO FEE, Ref X1201293. **Display on Dashboard** Linear feet: Nbr of days: 1 50 Effective: 07/24/12 Expiration: 07/24/12 SHORT TERM NON-METERED Lic# --License Classes--Applcnt Phone# **Owner KIDSPART LLC** Contractor CASCADE DRILLING L P Х (916)638-1169 938110 C57 Arch/Engr Agent STREAMBORN/D LOVELL (510) 520 - 3146Applic Addr 3632 OMEC CIR, RANCHO CORDOVA, CA, 95742-730 \$.00 FEES TO BE PAID AT ISSUANCE \$121.06 FEES TO BE PAID AT FILING \$71.00 Applic \$34.50 Permit \$.00 Process \$10.02 Rec Mgmt \$.00 Gen Plan \$.00 Invstg \$.00 Other \$5.54 Tech Enh **Display on Dashboard** JOB SITE **Hegally Parked** Vehicle 0 cketed Cal 7/3333. nt arranges towing. 2 Towed Car Call 510-238 henever deviated TCP needs to be approved sportation days RO3 Receipt# 168413 from the previously apr ADDRESS Amt Paid: \$1,094.72 Applicant: Issued by: Register Date: 07/05/12 เร SYK <u>ج</u>

in hill blandeder in red

CITY OF OAKLAND Community & Economic Development Agency 250 Frank H. Ogawa Pl, Oakland CA, 94612 Phone: (510)238-4774 FAX: (510)238-2263

#### PAYMENT RECEIPT

Application#: X1201293Payment#: 001APPLICATION FEE\$71.00EXCAVATION PERMIT\$309.00RECORDS MANAGEMENT FEE\$36.10TECHNOLOGY ENHANCEMENT FE\$19.95Subtotal:\$436.05
Application#: X1201294 Payment#: 001 APPLICATION FEE \$71.00 EXCAVATION PERMIT \$309.00 RECORDS MANAGEMENT FEE \$36.10 TECHNOLOGY ENHANCEMENT FE \$19.95 Subtotal: \$436.05
Application#: OB120589Payment#: 001APPLICATION FEE\$71.00OBSTRUCTION PERMIT\$34.50RECORDS MANAGEMENT FEE\$10.02TECHNOLOGY ENHANCEMENT FE\$5.54Subtotal:\$121.06
Application#: OB120590 Payment#: 001 APPLICATION FEE \$71.00 OBSTRUCTION PERMIT \$17.50 RECORDS MANAGEMENT FEE (\$8.41 TECHNOLOGY ENHANCEMENT FE \$4.65 Subtotal: \$101.56
Sales Tax: \$.00 ****** TOTAL PAID: \$1,094.72
Check Payment: \$1,094.72
Payor: STREAMBORN Date: 07/05/12 Time: 11:12:54 By: SYK Register RO3 Receipt# 168413 ************************************

\*\*\*\*\*

Subject: ENMI06363; 2434 E 11TH ST Date: Tuesday, 3 July 2012 12:26:02 PM Pacific Daylight Time From: Bacina, Chris To: doug@streamborn.com Doug, The existing encroachment agreement is for two monitoring wells. Not a deal breaker. Now, to remove the five wells, three on E 11<sup>th</sup> St and two on 25<sup>th</sup> Ave two excavation permits are needed. See below. The checks for the excavations were correct but not for the obstruction. See below. Applic#\* ENMI06363 Type: 1 Date Filed: 09/11/06 Disposition: I ISSUED 09/18/06 NUMBER STREET NAME SUFFIX\* SUITE ASSESSOR PARCEL# Site addr: 1) 2434 E 11TH ST 019 -0098-005-06 2) 2440 E 11TH ST Proj Descr: Install two monitoring wells within the parking lane of E 11th Street Track: Lic# Phone# Applicant **Owner: EANDI FAMILY PROPERTIES LP** ()528-4234 X Applicant Addr: 976 23RD AVENUE No Fee: City/State: OAKLAND CA Zip: 94606 Wrkrs Comp\* Other Related Applic#s: X0601048 OB060628 Applic#\* **X1201293** Type: 1 Date Filed: 07/03/12 Disposition: A APPROVED 07/03/12 NUMBER STREET NAME SUFFIX\* SUITE ASSESSOR PARCEL# Site addr: 1) 2434 E 11TH 019 -0098-005-06 ST 2) 2440 E 11TH 019 -0098-005-06 ST Proj Descr: Abandon 3 monitoring wells on E 11th St. Alameda County docs encl. Call PWA INSPECTION prior to start: 510-238-3651. Rescission needed to final permit. Insp Div: DPW-CONS Dist: Lic# Phone# Applicant Track: **Owner: KIDSPART LLC** Contractor: CASCADE DRILLING L P 938110 (916)638-1169 X Applic#\* X1201294 Type: 1 Date Filed: 07/03/12 Disposition: A APPROVED 07/0 NUMBER STREET NAME SUFFIX\* SUITE ASSESSOR PARCEL# Site addr: 1) 2434 E 11TH ST 019 -0098-005-06 2) 2440 E 11TH ST 019 -0098-005-06 Proj Descr: Abandon 2 monitoring wells on 25th Ave. Alameda County docs encl. Call PWA INSPECTION prior to start: 510-238-3651. Rescission needed to final permit. Insp Div: DPW-CONS Dist: Track: Lic# Phone# Applicant **Owner: KIDSPART LLC** Contractor: CASCADE DRILLING L P 938110 (916)638-1169 X Applic#\* OB120589 Type: 2 Date Filed: 07/03/12 Disposition: A APPROVED 07/03/12

NUMBER STREET NAME SUFFIX\* SUITE ASSESSOR PARCEL# Site addr: 1) 2434 E 11TH ST 019 -0098-005-06 ST 2) 2440 E 11TH 019 -0098-005-06 Proj Descr: Reserve for construction vehicle(s) on E 11th St. Post 72 hours prior. No impact on traffic lane or sidewalk allowed. One space NO FEE, Ref X1201293. Insp Div: ENG-SVCS Dist: 04A Track: Lic# Phone# Applicant **Owner: KIDSPART LLC** Contractor: CASCADE DRILLING L P 938110 (916)638-1169 Arch/Engr: Agent: STREAMBORN/D LOVELL (510)520-3146 Applicant Addr: 3632 OMEC Effective Date: 07/24/12 Expiration Date: 07/24/12 Nbr of Days: 1 Linear Ft: 50 PAYMENT TYPE\* ISS-1 NON-METERED/ 100% CEDA APPLIC 71.00 34.50 WRK COMMENCED PERMIT PROCESS **RECD MGMT** 10.02 **GEN PLAN TECH ENCH** 5.54 OTHER 121.06 EFFCTV 07/03/12 INIT CAB PAID TOTAL R Applic#\* OB120590 Type: 2 Date Filed: 07/03/12 Disposition: A APPROVED 07/03/12 NUMBER STREET NAME SUFFIX\* SUITE ASSESSOR PARCEL# Site addr: 1) 2434 E 11TH ST 019 -0098-005-06 ST 019 -0098-005-06 2) 2440 E 11TH Proj Descr: Reserve for construction vehicle(s) on 25th Ave.; Post 72 hours prior. No impact on traffic lane; Block sidewalk allowed. One space NO FEE, Ref X1201294. Insp Div: ENG-SVCS Dist: 04A Track: Lic# Phone# Applicant **Owner: KIDSPART LLC** 938110 (916)638-1169 Contractor: CASCADE DRILLING L P Agent: STREAMBORN/D LOVELL (510)520-3146 Applicant Addr: 3632 OMEC CIR City/State: RANCHO CORDOVA, CA Zip: 95742-7301 Wrkrs Comp\* 10/02/12 Effective Date: 07/24/12 Expiration Date: 07/24/12 Nbr of Days: 1 Linear Ft: 25 PAYMENT TYPE\* ISS-1 NON-METERED/ 100% CEDA APPLIC 71.00 PERMIT **17.50 WRK COMMENCED** PROCESS **GEN PLAN** RECD MGMT 8.41 OTHER **TECH ENCH** 4.65 TOTAL **101.56** EFFCTV 07/03/12 INIT CAB Chris Bacina City of Oakland, Department of Planning, Building & Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd floor, Oakland, CA 94612 510-238-3759 Fax: 510-238-2263 Permit Center Hours: Monday, Tuesday, Thursday, Friday: 8:00am - 4:00pm Wednesday: 9:30am - 4:00pm

Next City of Oakland Mandatory Business Shutdown: Friday, July, 13, 2012

Help make Oakland greener: turn off unnecessary lights and other office equipment when not in use.

Subject: RE: Change in Date for Well Abandonment permitted for 7/24 at 2434 E 11th St

Date: Friday, 20 July 2012 12:19:01 PM Pacific Daylight Time

**From:** Bacina, Chris

To: Karita Zimmerman

CC: Douglas W. Lovell, Campos, Rafael, Ray, Cliff

Date changed:

 Appl#: OB120589 Pmt#: 001 Disp: A 07/03/12 Type\* 2 Filed: 07/03/12

 Address: 2434 E 11TH
 ST Unit: Parcel: 019 -0098-005-06

 Descr: Reserve for construction vehicle(s) on E 11th St.

 Other Related Applic#s: X0601048 OB060628 ENMI06363 X1201294 X1201293

 OB120590

 Effective Date: 08/20/12

 Expiration Date: 08/20/12

DATE CHANGE ONLY

Nbr of Days: 1 Linear Ft: 50

Appl#: OB120590 Pmt#: 001 Disp: A 07/03/12 Type\* 2 Filed: 07/03/12

Address: 2434 E 11TH ST Unit: Parcel: 019 -0098-005-06

Descr: Reserve for construction vehicle(s) on 25th Ave.;

Other Related Applic#s: X0601048 OB060628 ENMI06363 X1201293 OB120589

X1201294

Effective Date: 08/20/12 Expiration Date: 08/20/12

#### DATE CHANGE ONLY

Nbr of Days: 1 Linear Ft: 25

Chris Bacina City of Oakland, Department of Planning, Building & Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd floor, Oakland, CA 94612 510-238-3759 Fax: 510-238-2263 Permit Center Hours: Monday, Tuesday, Thursday, Friday: 8:00am - 4:00pm Wednesday: 9:30am - 4:00pm Next City of Oakland Mandatory Business Shutdown: Friday, August, 10, 2012

P Help make Oakland greener: turn off unnecessary lights and other office equipment when not in use.



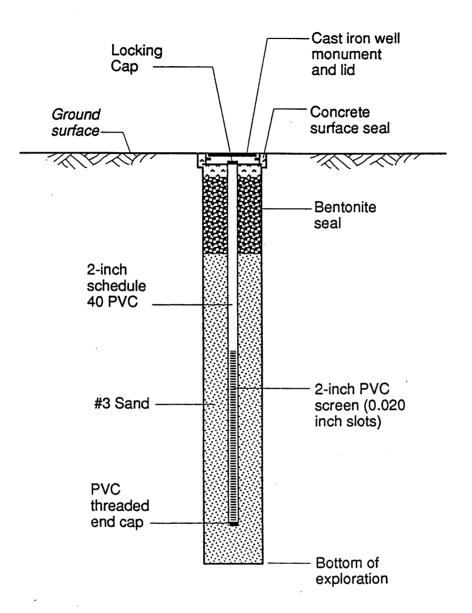
This message (including any attachments) contains business proprietary/confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message. Any disclosure, copying, or distribution of this message, or the taking of any action based on it, without the express permission of the originator, is strictly prohibited.

### **ATTACHMENT 4**

Boring Logs and Well Completion Schematics



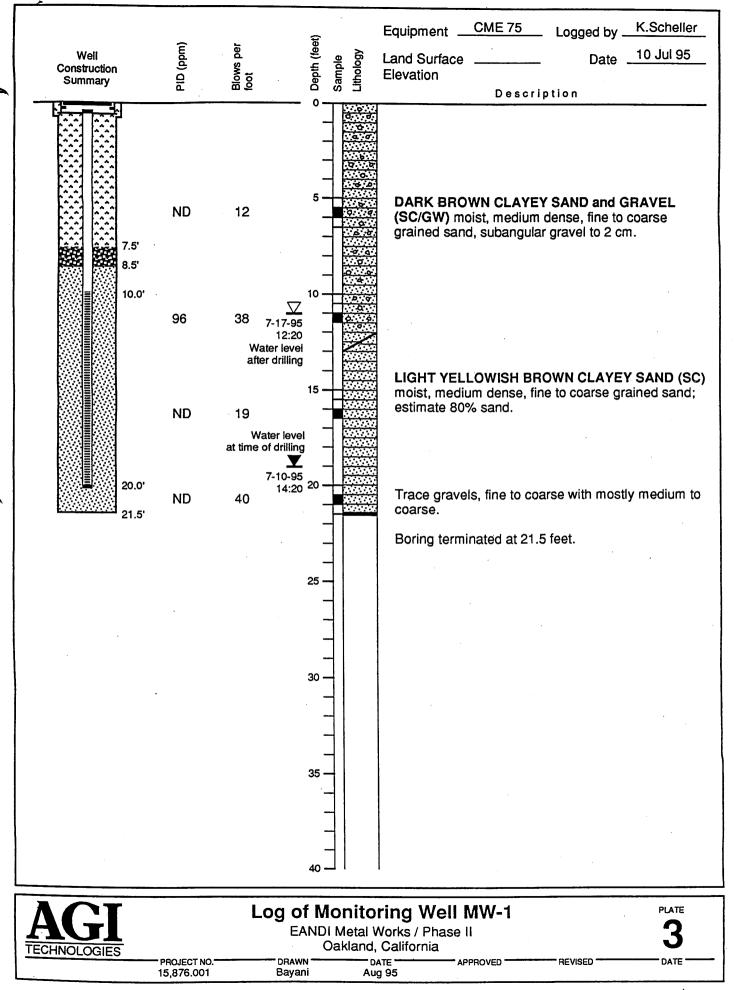
· ·	UNIFIED SOIL CLASSIFICATIONS SYSTEM							
	MAJOR DI	/ISIONS			TYPICAL NAMES			
ę	GRAVELS	Clean gravels with	GW	0.00	Well graded	gravels, gravel-sand mixtures		
COARSE GRAINED SOILS More than half is larger than No. 200 Sieve	More than half coarse fraction	little or no fines	GP		Poorly grade	d gravels, gravel-sand mixtures		
GRAINED SOILS larger than No. 200 Sie	is larger than No. 4 sieve size	Gravels with	GM		Silty Gravels, mixtures	, poorly graded gravel-sand-silt		
AINE er than		over 12% fines	GC			els, poorly graded -clay mixtures		
E GR	SANDS	Clean sands with	sw		Well graded :	sands, gravelly sands		
COARSE re than half is	More than half coarse fraction	little or no fines	SP		Poorly grade	d sands, gravelly sands		
CO/ ore tha	is smaller than No. 4 sieve size	Sands with	SM		Silty sand, po	porly graded sand-silt mixtures		
ž		over 12% fines	sc		mixtures	s, poorly graded sand-clay		
LS LS	SILTS AN	D CLAYS	ML		clayey fine sa	s and very fine sands, rock flour, silty or ands, or clayey silts with slight plasticity		
D SOII s smalle Sieve	Liquid limit k		CL		Inorganic clar gravelly clays	ys of low to medium plasticity, s, sandy clays, silty clays, lean clays		
FINE GRAINED SOILS More than half is smaller than No. 200 Sieve		- <u></u>	OL			c clays and organic silty clays of low plasticity		
E GRAI ore than h than No.	SILTS AN	D CLAYS	мн			anic silts, micaceous or diatomacious fine / or silty soils, elastic silts anic clays of high plasticity, fat clays		
NE G More t thar	Liquid limit gr	•	сн		Inorganic cla			
Ē			он		organic silts			
	HIGHLY ORGA	NIC SOILS	РТ		Peat and oth	er highly organic soils		
SAMPLE	-	CONTACT E				PHYSICAL PROPERTY TESTS		
1	sturbed"			ed Cha	-	Consol - Consolidation		
Bulk/				al Chan Change	9e	LL - Liquid Limit		
1	lecovered vered, Not Retained	1		ploration	-	PL - Plastic Limit Gs - Specific Gravity		
				pioratio	•	SA - Size Analysis		
	PER FOOT	inch dran unlage			<b>-</b> -1	TxS - Triaxial Shear		
1	is 140 pounds with 3 PT Sampler (2.0-Incl		omen	vise not	eu	TxP - Triaxial Permeability Perm - Permeability		
	hin Wall Sampler (2.8	•				Po - Porosity		
4	plit Barrel Sampler (2.0	• •				MD - Moisture/Density		
				DS - Direct Shear VS - Vane Shear				
	RE DESCRIPTION y - Considerably less		Comp - Compaction					
	st - Near optimum m		UU - Unconsolidated, Undrained					
00 · Onconsolidated, Ondra						CU - Consolidated, Undrained		
Saturated - Below water table, in capillary zone, or in perched groundwater CD - Consolidated, Drained								
λ	T	Soil Cla	assit	icatio	on/Legen	d PLATE		
H	JI				/ Phase II	1		
TECHNOL	OGIES PROJECT NO		Jaklar	d, Califo	ornia 			
	15,876.001		4	Aug 95	AFFRUV	ED DATE		

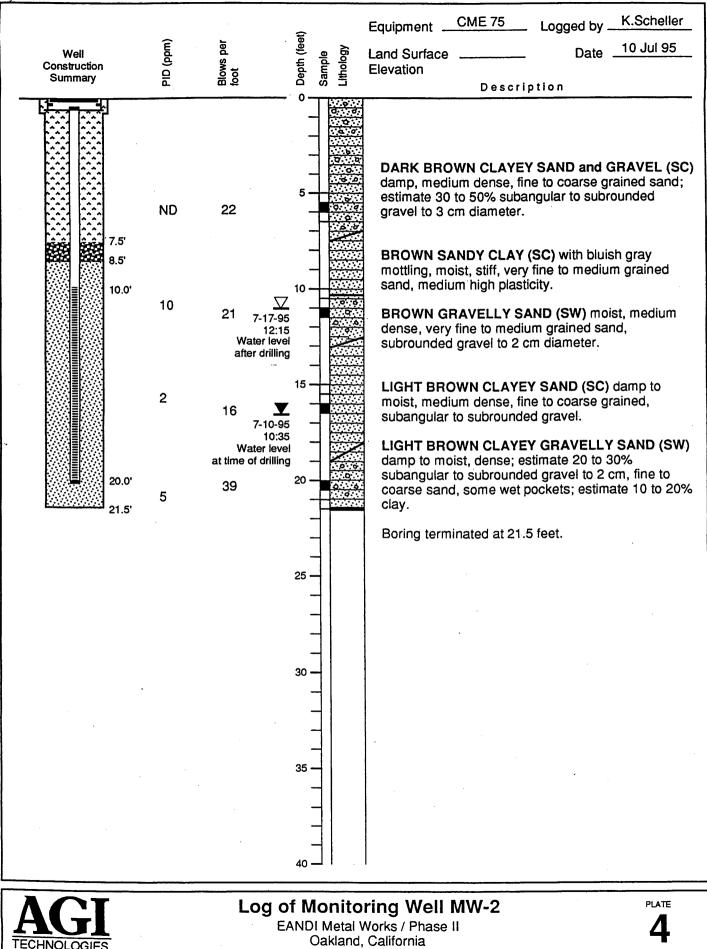


Sketch not to scale

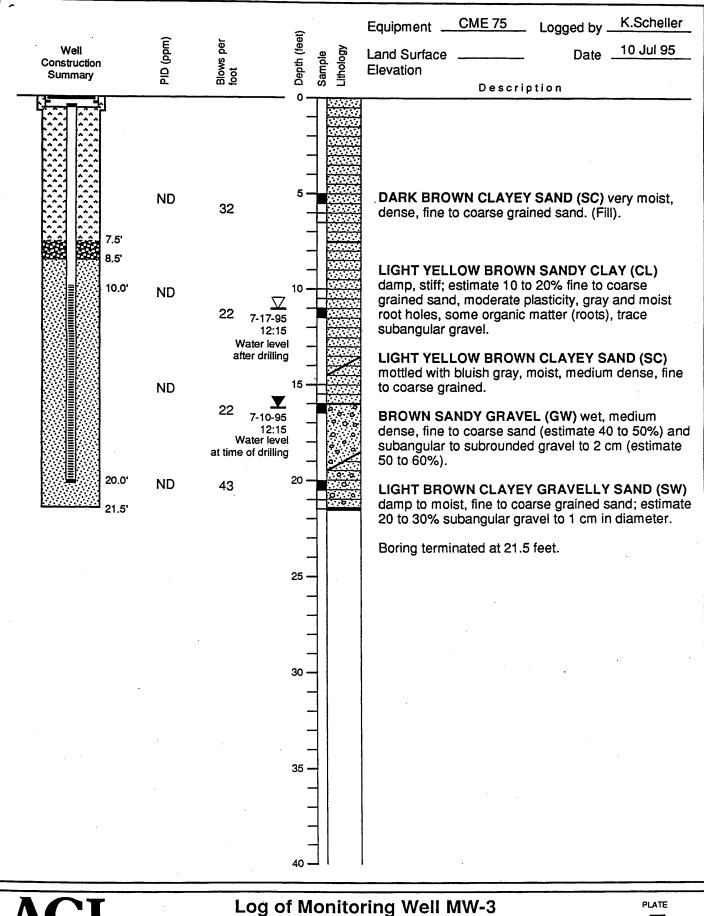
م.







LUGIES			-	
PROJEC	T NO. DRAWN	DATE	APPROVED REV	/ISED DATE
15,876.	.001 Bayani	Aug 95		



 AUTI
 EANDI Metal Works / Phase II
 5

 TECHNOLOGIES
 Oakland, California
 5

 PROJECT NO.
 DRAWN
 DATE
 APPROVED
 REVISED
 DATE

 15,876.001
 Bayani
 Aug 95
 AUg 95
 DATE
 DATE
 DATE

### **BORING LOG LEGEND AND NOTES**

### **Soil Classification**

Soils were classified in the field in approximate accordance with ASTM D 2488-00 (Standard Practice for Description and Identification of Soils, Visual-Manual Procedure). Consistency (density for coarse-grained soils and stiffness for fine-grained soils) described in approximate accordance with NAVFAC DM-7.1.

Textural classifications represent the opinion of the field geologist, field engineer, or field scientist regarding the nature and character of encountered materials. Proportions of textural categories (gravel, sand, silt, clay) cited on the logs should be considered approximate. Laboratory classification tests were not performed to verify the field classifications. In general, mixtures of soil types and gradual transitions between soil types may more accurately represent the subsurface materials, instead of the distinct divisions depicted on the logs. Soils were necessarily classified only at depths where samples were examined; extrapolation to other depths, as depicted on the logs, adds uncertainty.

### **Textural Classification**



Lean clay (CL)



Lean clay with sand (CL), Gravelly lean clay with sand (CL)



Poorly-graded sand with clay (SP-SC)



Clayey gravel with sand (GC)

### **Transitions or Contact Between Soil Types**

---- Approximate location of inferred or observed gradational transition or distinct contact between soil types

### Sampling



Sampling Interval (collected or attempted)

### **General Notes and References**

- (a) OVM (ppm v/v) = Measurement by field organic vapor monitor in ppm volume/volume. Measurements performed using MiniRae Classic equipped with a photoionization detector, calibrated to 100 ppm v/v isobutylene. Measurements were performed by screening the ends of the freshly cut liners. The value cited on log represents the maximum reading obtained at either end of the liner.
- (b) Depths measured from the adjacent pavement or ground surface.
- (c) Annual Book of ASTM Standards, Volume 04.08, Soil and Rock (1): D 420 D 4914. American Society of Testing and Materials, Philadelphia PA. 2003.
- (d) NAVFAC DM 7.1, Soil Mechanics, Design Manual 7.1. Department of the Navy, Naval Facilities Engineering Command, Alexandria VA. May 1982.



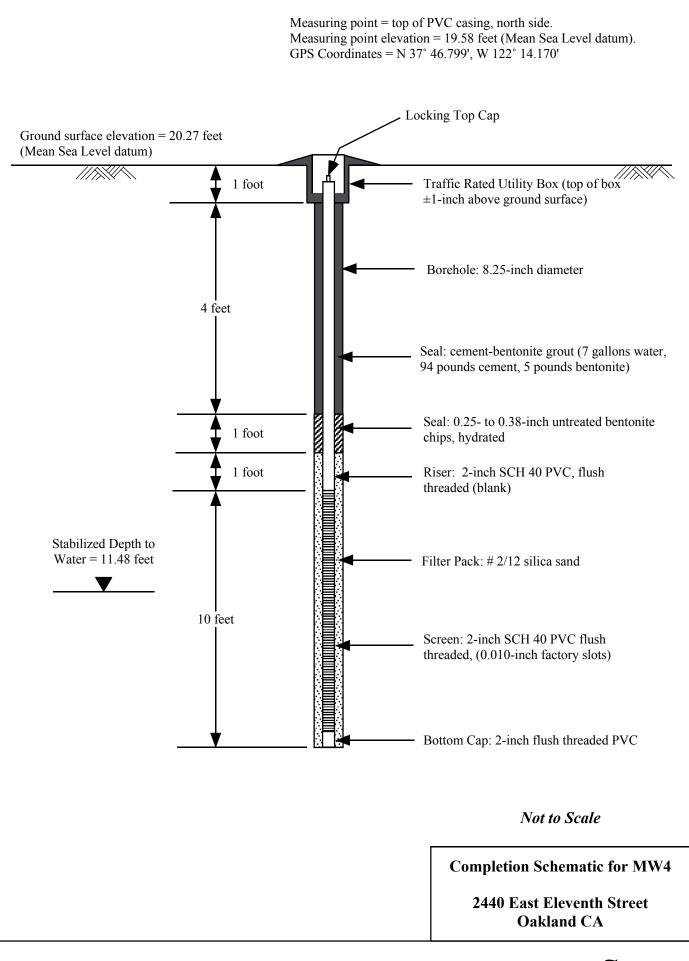
	Project	2440 Ea Oakland		th Street			Address	2440 East Eleventh Street Oakland CA
Coo	GPS rdinates	N 37° 46 W 122°					Logged By	Jeremy C. Gekov STREAMBORN (Berkeley CA)
L	ocation	In parkii	ng lane, r	ear north	east corn	er of 976	5 23 <sup>rd</sup> Avenue Project No.	P279
		Top of c	asing, no		= 19.58 (1		um). Ground Start	10:00 am, 28 Sep 2006 1:00 pm, 28 Sep 2006
			by 8.25-i				ed using 4.25- Driller Coprobe	Ernesto (driller). Precision Sampling (Richmond CA)
Sa	ampling			" ID, dire d continu		nacro-coi	re liners. Drilled Depth	17.0 feet
Con	npletion	2-inch d utility bo		SCH 40 P	VC well	with traf	fie-rated Groundwater	11.48 feet (stabilized) 15 feet (during drilling)
O Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	(v/v mqq)	_	Observations, Comments
			$\searrow$				Hand auger drilling to 5 feet. Aspl	halt with underlying aggregate base.
			$\leftrightarrow$					
_ 1.0_			$\times$					
-1.0-			$\searrow$			_ <5 _		n. Low plasticity. <10% fine-grained
			$\leftrightarrow$			-	sand. <5% gravels up to 0.125-inc	h. No staining, no odor.
2.0			$\times$					
-2.0-			$\bigtriangledown$					
			$\bigtriangleup$		- 60 -			
			$\times$					
-3.0-		- CL -	$\leftrightarrow$					
			$\nearrow$					
			$\searrow$					
-4.0-			$\leftrightarrow$					
			$\times$					
			$\bigtriangledown$					
-5.0-								
			N /			— <5 —		Moist, brown. Low plasticity. <30% dium- to coarse-grained sand. No stain-
			\ /				ing, no odor.	diame to coarse-granica sand. The stame
<u> </u>		- CL -						
		-01						
-7.0-								
- /.0	777		$ \top \nabla $			_ <5 _		by plasticity. $<5\%$ gravels up to $0.125$ -
			X		- 60 -	-	inch. <10% fine-grained sand. No	o staining, no odor.
	(//)							
-8.0-								
	///	- CL -						
	///		/					
-9.0-			/ \					
			/ \					
			/ \					
-10.0-	<u> / / /</u>						<u></u>	



### Boring MW4 (Page 2 of 2)

							(1 <b></b> )
-0.01 Depth (feet)	Graphic Log	NSCS	Sample Interval	Blows per 6 inches	Recovery (inches)	OVM (ppm v/v)	Soil Description, Observations, Comments
10.0						_ <5 _	Lean clay with sand (CL). Moist, brown. Low plasticity. <10% gravels
			A /				up to 0.5-inch. <20% fine-grained sand. No staining, no odor.
-11.0-			1\ /				
_11.0_			\ /				
			$  \rangle /$				
-12.0-			$  \setminus  $				
12.0			I V				
		- CL -	ΙX		- 60 -		
-13.0-			1 /\				
15.0			/ \				
			/ \				
-14.0-			1/ \				
11.0			{/ \				
			1/ \				
-15.0-			<u> </u>				
			$\Lambda$ /			_ <5 _	Poorly-graded sand with clay (SP-SC). Wet, brown. Medium- to coarse- grained sand. <10% gravels up to 0.125-inch. <10% fines. No staining,
			$  \setminus /  $				no odor.
-16.0-		_ SP	ΙV		- 24 -		
		_ SC _					
			$ / \rangle$				
-17.0-	******		$\langle \rangle$				
							Final drilled depth =17 feet. The boring was completed as a 2-inch diam- eter monitoring well installed to 17 feet. Refer to the monitoring well
							completion schematic.
-18.0-							
-19.0-							
-20.0-							
-21.0-							
-22.0-							
-23.0-							
-24.0-							
_25.0-	1		1	I	I	1	<b>C</b>







### Boring MW5 (Page 1 of 2)

Г

	Project	2440 Ea Oakland		nth Street			Address	2440 East Eleventh Street Oakland CA
Coo		N 37° 40 W 122°					Logged By	Jeremy C. Gekov STREAMBORN (Berkeley CA)
I	Location	In parki	ng lane, r	near north	1 corner o	of 976 23	<sup>rd</sup> Avenue Project No.	P279
Е	levation		casing, nc = 19.71 (			MSL dati		8:00 am, 28 Sep 2006 11:00 am, 28 Sep 2006
	Method and Rig		by 8.25-i				ed using 4.25- Driller C. Geoprobe	Ernesto (driller). Precision Sampling (Richmond CA)
s	ampling	60" long				nacro-co:	re liners. Drilled Depth	17.0 feet
Cor	npletion	2-inch d utility b		SCH 40 F	VC well	with traf	fic-rated Groundwater	11.28 feet (stabilized) 16 feet (during drilling)
ct)	go							
(fee	iic L		le al	s per les	very (s)	(v/v		
Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	OVM (ppm v/v)	Soil Description, C	Observations, Comments
-0.0-							Hand auger drilling to 5 feet. Asp	halt with underlying aggregate base.
			$\land$ /					
-1.0-			$\Box = I$					
1.0			$  \rangle  $			— <5 —	Lean clay with sand (CL). Moist, gravels up to 0.125-inch <10% fi	dark brown. Low plasticity. <5% ne-grained sand. No staining, no odor.
			$  \setminus  $					
-2.0-								
	[]]]		I Y I		- 60 -			
2.0			ΙΛΙ					
-3.0-		- CL -	$  \rangle \rangle$					
	[]]]		$  / \rangle$					
-4.0-			$  / \rangle$					
	[]]]							
			/ \					
-5.0-	·· <i>[··]·</i> ./·		()			_ <5 _	Lean clay (CL). Moist, dark brow	n. Low plasticity. <10% fine-grained
			N /			- <3 -	sand. No staining, no odor.	
( )			\ /					
-6.0-								
			$  \setminus  $					
-7.0-			$  \rangle  $					
		- CL -			- 60 -			
		- CL -			- 00 -			
-8.0-			/				<u> </u>	
9.0								
9.0			/ \					
			/ \					
_10.0_	///							

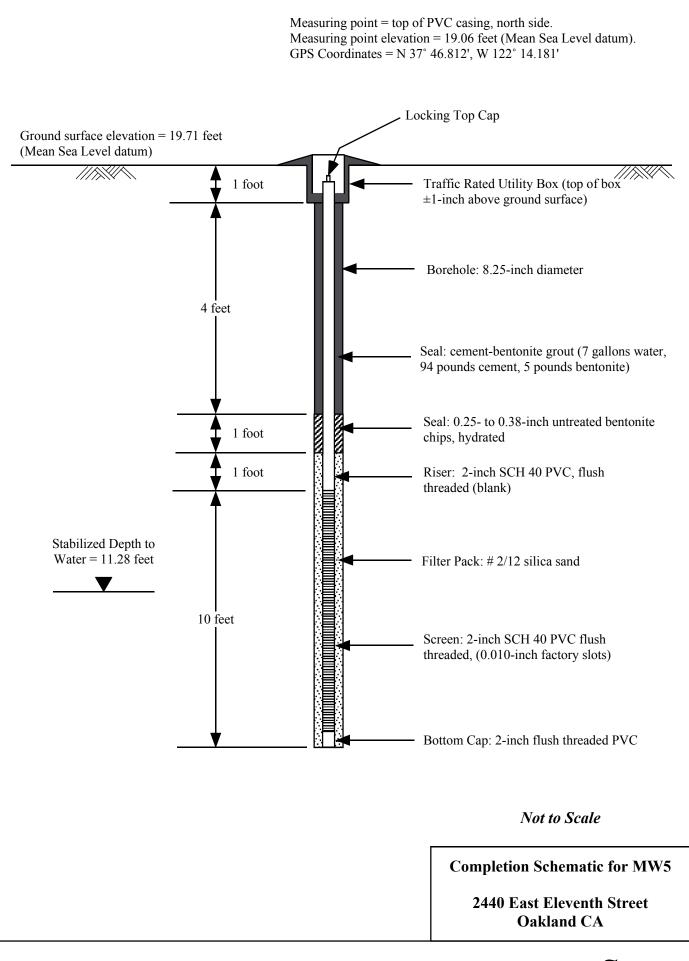


٦

### Boring MW5 (Page 2 of 2)

000 000 000         000 000         0000000 0000000         00000000 0000000         000000000 0000000         Soil Description, Observations, Comments           1100         -CL         - <td< th=""><th></th><th></th><th></th><th></th><th></th><th>-</th><th>8</th><th></th></td<>						-	8	
		Graphic Log	NSCS	Sample Interval	Blows per 6 inches	Recovery (inches)	OVM (ppm v/v)	Soil Description, Observations, Comments
Image: classical state         Classical state         Image: classical state	-10.0-	$\overline{//}$					_ <5 _	Lean clay (CL). Same as previous page. No staining, no odor.
-12.0     -60     15     Ican clay with sand (CL). Moist, known. Low plasticity. <20% fine-grained sand. No staining, petroleam odor.				A /			.5	
-12.0     -60     15     Ican clay with sand (CL). Moist, known. Low plasticity. <20% fine-grained sand. No staining, petroleam odor.			~*	1\ /				
15       Lean car with sand (L). Most, frow a Low pastedy. < 20% line-grained sand. No staining, petroleum odor.	-11.0-		– CL –	1\ /				
15       Lean car with sand (L). Most, frow a Low pastedy. < 20% line-grained sand. No staining, petroleum odor.		///		1 \ /				
15       Lean car with sand (L). Most, frow a Low pastedy. < 20% line-grained sand. No staining, petroleum odor.				$  \setminus  $				
-130       -00       10       grained sand. No staining, petroleum odor.         -130       -11       -11       -11       -11         -140       -11       -11       -11       -11       -11         -140       -11       -11       -11       -11       -11       -11         -140       -11       -11       -11       -11       -11       -11       -11         -150       -11	-12.0-			┝ ┾/━				Lean alow with sand (CL) Moist brown Law plasticity $< 20\%$ find
-130       -CL       -00				1 V			- 15 -	grained sand. No staining, <b>petroleum</b> odor.
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				1 1		- 60 -		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-13.0-		– CL –					
-13       Clayey grave with sand CoC. We prove suboration grained sand <25% fines. No stain- ing. petroleum odor.         -15.0				/ \				
-13       Clayey grave with sand CoC. We prove suboration grained sand <25% fines. No stain- ing. petroleum odor.         -15.0				1 / \				
-13       Clayey grave with sand CoC. We prove suboration grained sand <25% fines. No stain- ing. petroleum odor.         -15.0	14.0			1/ \				
	14.0	1		7 - 1			13	Clayey gravel with sand (GC). Wet, brown. Subangular gravels up to
15.0         Image performance of the second se				<u>ا</u> / ۱			15	0.25-inch. <25% fine- to medium-grained sand. <25% fines. No stain-
-GC         Same as above. No staining, to odof.           -16.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -16.0           -17.0         -17.0           -17.0         -16.0           -17.0         -17.0           -17.0         -17.0           -17.0         -17.0           -17.0         -17.0           -17.0         -17.0           -18.0         -10.0           -19.0         -10.0           -19.0         -10.0           -19.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0           -10.0         -10.0				{/ \				ing, <b>petroleum</b> odor.
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-15.0-			$ \rightarrow $				Same as above. No staining no odor
16.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       17         18.0       16       16         18.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         10.0       16       16			CC	1\ /			- <5 -	Sune as above. No stamme, no odor.
16.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       16         17.0       16       17         18.0       16       16         18.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         19.0       16       16         10.0       16       16			- 60 -	$  \setminus /$				
Final drilled depth         Final driled depth         Final driled depth	-16.0-			ΙX		16 -		
Final drilled depth         Final driled depth         Final driled depth						_		
Final drilled depth         Final driled depth         Final driled depth				$ / \rangle$				
Final drilled depth         Final driled depth         Final driled depth	17.0			/				
18.0 $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $18.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $-19.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $-19.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $11.0$ $-19.0$ $11.0$ $1$	17.0							Final drilled depth =17 feet. The boring was completed as a 2-inch
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
-19.0     -     -     -     -     -       -19.0     -     -     -     -     -       -20.0     -     -     -     -     -       -21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -23.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -								well completion schematic.
-20.0     -     -     -     -     -       -20.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     - <td>-18.0-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-18.0-							
-20.0     -     -     -     -     -       -20.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
-20.0     -     -     -     -     -       -20.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
-21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -23.0     -     -     -     -     -       -24.0     -     -     -     -     -       -24.0     -     -     -     -     -       -25.0     -     -     -     -     -	-19.0-							
-21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -23.0     -     -     -     -     -       -24.0     -     -     -     -     -       -24.0     -     -     -     -     -       -25.0     -     -     -     -     -								
-21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -23.0     -     -     -     -     -       -23.0     -     -     -     -     -       -24.0     -     -     -     -     -       -24.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
-21.0     -     -     -     -     -       -21.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -22.0     -     -     -     -     -       -23.0     -     -     -     -     -       -23.0     -     -     -     -     -       -24.0     -     -     -     -     -       -24.0     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     -       -     -     -     -     -     - <td>20.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	20.0							
-22.0     -22.0	20.0-							
-22.0     -22.0								
-22.0     -22.0	01.0							
-23.0-     -23.0-	-21.0-							
-23.0-     -23.0-								
-23.0-     -23.0-								
-24.0     -24.0     -24.0       -24.0     -25.0	-22.0-							
-24.0     -24.0     -24.0       -24.0     -25.0								
-24.0     -24.0     -24.0       -24.0     -25.0								
-24.0     -24.0     -24.0       -24.0     -25.0	-23.0-							
	24.0							
	<b>L</b> 25.0-				l	1	1	







### **ATTACHMENT 5**

Abandonment/Decommissioning Field Logs



Project Name/Number:	2440 East Eleventh St / P279	Logged By:	K. Zimmmerman				
Property Location:	2440 East Eleventh St, Oakland CA	Date:	24 July 2012				
Well Identification:	MW1	Depth to Water (ft):	1.19 (below measuring point)				
Measuring Point:	Top of PVC well casing, north side.	Total Depth (ft):	19.9 (below measuring point)				
Abandonment Methods:	Tremie grout, not pressurized.	Casing Diameter (in):	2				
Total Casing Length (ft):	19.8	Casing Material:	PVC				
Total Casing Volume (ft <sup>3</sup> ):	0.43	Casting/Ground Surf (ft):	Not applicable				
Total Sandpack Length (ft):	13.0	Borehole Diameter (in):	8.0				
Sandpack Annulus Area (ft <sup>2</sup> ):	0.33	Sandpack Voidspace (ft <sup>3</sup> ):	1.28				
Sandpack Volume (ft <sup>3</sup> ):	4.25	Grout Proportions:	94# (sack) Type I/II to ±6 gal water				
Comments:							
Under commends, describe obstruction	ons, well damage, etc. 1 $ft^3 = 7.481$ gallons = 28.3 L. Assur	me sandpack porosity = 0.3					
	vol. plus sandpack vol.): $0.43 + 1.28 = 1.71 \text{ ft}^3$ (3)		al total grout takes $5^{1/2}$ col $(0.(7\theta^{3}))$				
Theoretical grout take (casing v	701. prus sanupack vol.). $0.45 + 1.26 - 1.71$ ft (5	$\frac{1.22 + 9.36 - 12.60 \text{ gal}}{12.60 \text{ gal}}$ Actu	ai totai grout take: $200$ gai $(0.61$ it)				
Was tremie pipe used to place g	grout? <u>Yes</u> Describe tremie pipe: <u>1-incl</u>	h PVC					
Was the grout pressurized? No Pressure (psi): Hold time (minutes):							
Describe cut-off of well casing	:		· · ·				
Describe wellhead vault: $\pm 12$ -inch diameter steel with $\pm 9$ -inch long skirt Describe removal of wellhead vault: Wellhead vault was removed as part of sidewalk restoration							

Describe restoration of area: A  $\pm 20$ -inch by  $\pm 20$ -inch section of concrete sidewalk was sawcut and removed around the well, removing the wellhead vault in the process. The area was excavated to a depth of  $\pm 9$  inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of  $\pm 9$  inches. Class II aggregate base was placed and compacted to a thickness of  $\pm 6$  inches. The area was repayed with  $\pm 3$  inches of concrete to match the exiting thickness.

٢

Project Name/Number:	2440 East Eleventh St / P279	Logged By:	K. Zimmerman
Property Location:	2440 East Eleventh St, Oakland CA	Date:	24 July 2012
Well Identification:	MW2	Depth to Water (ft):	11.24 (below measuring point)
Measuring Point:	Top of PVC well casing, north side.	Total Depth (ft):	19.9 (below measuring point)
Abandonment Methods:	Tremie grout, not pressurized.	Casing Diameter (in):	2
Total Casing Length (ft):	19.8	Casing Material:	PVC
Total Casing Volume (ft <sup>3</sup> ):	0.43	Casting/Ground Surf (ft):	Not applicable
Total Sandpack Length (ft):	13.0	Borehole Diameter (in):	8.0
Sandpack Annulus Area (ft <sup>2</sup> ):	0.33	Sandpack Voidspace (ft <sup>3</sup> ):	1.28
Sandpack Volume (ft <sup>3</sup> ):	4.25	Grout Proportions:	94# (sack) Type I/II to ±6 gal water
Comments:			

Under commends, describe obstructions, well damage, etc. 1  $ft^3 = 7.481$  gallons = 28.3 L. Assume sandpack porosity = 0.3

Theoretical grout take (casing vol. p	olus sandpack vol.):	$0.43 + 1.28 = 1.71 \text{ ft}^3$ (	(3.22 + 9.58 = 12.80  gal)	Actual total grout take:	5.5	zal ( 0.74 f	t <sup>3</sup> )

Was tremie pipe used to place grout? Yes\_ Describe tremie pipe: <u>1-inch PVC</u>

Was the grout pressurized? <u>No</u> Pressure (psi): \_\_\_\_\_ Hold time (minutes): \_\_\_\_\_

Describe cut-off of well casing:

Describe wellhead vault:  $\pm 12$ -inch diameter steel with  $\pm 9$ -inch long skirt Describe removal of wellhead vault: Wellhead vault was removed as part of pavement restoration

Describe restoration of area: A  $\pm 20$ -inch by  $\pm 20$ -inch area of pavement was sawcut and removed around the well, removing the wellhead vault in the process. The area was excavated to a depth of  $\pm 17$  inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of  $\pm 17$  inches. Class II aggregate base was placed and compacted to a thickness of  $\pm 9$  inches. A tack coat was applied to the top of the aggregate base and the sides of the sawcut. The area was repaved with  $\pm 8$  inches of hot mix asphalt concrete.

Project Name/Number:	2440 East Eleventh St / P279	Logged By:	K. Zimmerman					
Property Location:	2440 East Eleventh St, Oakland CA	Date:	24 July 2012					
Well Identification:	MW3	Depth to Water (ft):	11.83 (below measuring point)					
Measuring Point:	Top of PVC well casing, north side.	Total Depth (ft):	19.7 (below measuring point)					
Abandonment Methods:	Tremie grout, not pressurized.	Casing Diameter (in):	2					
Total Casing Length (ft):	19.6	Casing Material:	PVC					
Total Casing Volume (ft <sup>3</sup> ):	0.43	Casting/Ground Surf (ft):	Not applicable					
Total Sandpack Length (ft):	13.0	Borehole Diameter (in):	8.0					
Sandpack Annulus Area (ft <sup>2</sup> ):	0.33	Sandpack Voidspace (ft <sup>3</sup> ):	1.28					
Sandpack Volume (ft <sup>3</sup> ):	4.25	Grout Proportions:	94# (sack) Type I/II to ±6 gal water					
Comments:	•							
Under commande describe obstructio	ns, well damage, etc. 1 $ft^3 = 7.481$ gallons = 28.3 L. Assu	ime sondnock porosity = 0.3						
Theoretical grout take (casing v	vol. plus sandpack vol.): $0.43 + 1.28 = 1.71$ ft <sup>3</sup> (2)	3.22 + 9.58 = 12.80 gal) Actu	al total grout take: $3.0$ gal $(0.6/\text{ft}^3)$					
Was tremie pipe used to place g	grout? <u>Yes</u> Describe tremie pipe: <u>1-incl</u>	h PVC						
Was the grout pressurized? No	Pressure (psi): Hold time (minu	tes):						
Describe cut-off of well casing:								
Describe wellhead vault: $\pm 12$ -inch diameter steel with $\pm 9$ -inch long skirt Describe removal of wellhead vault: Wellhead vault was removed as part of pavement restoration								
Describe restoration of area: A $\pm 20$ -inch by $\pm 20$ -inch area of pavement was sawcut and removed around the well, removing the wellhead vault in the process. The area was excavated to a depth of $\pm 17$ inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of $\pm 17$ inches. Class II aggregate base was placed and compacted to a thickness of $\pm 9$ inches. A tack coat was applied to the top of the aggregate base and								

inches. Class II aggregate base was placed and compacted to a thickness of  $\pm 9$  inches. A tack coat was applied to the top of the aggregate base and the sides of the sawcut. The area was repaved with  $\pm 8$  inches of hot mix asphalt concrete.

Project Name/Number:	2440 East Eleventh St / P279	Logged By:	K. Zimmerman					
Property Location:	2440 East Eleventh St, Oakland CA	Date:	24 July 2012					
Well Identification:	MW4	Depth to Water (ft):	11.51 (below measuring point)					
Measuring Point:	Top of PVC well casing, north side.	Total Depth (ft):	17.4 (below measuring point)					
Abandonment Methods:	Tremie grout, not pressurized.	Casing Diameter (in):	2					
Total Casing Length (ft):	17.3	Casing Material:	PVC					
Total Casing Volume (ft <sup>3</sup> ):	0.38	Casting/Ground Surf (ft):	Not applicable					
Total Sandpack Length (ft):	11.0	Borehole Diameter (in):	8.25					
Sandpack Annulus Area (ft <sup>2</sup> ):	0.35	Sandpack Voidspace (ft <sup>3</sup> ):	1.15					
Sandpack Volume (ft <sup>3</sup> ):	3.84	Grout Proportions:	94# (sack) Type I/II to ±6 gal water					
Comments:								
Under commends, describe obstructio	ns, well damage, etc. 1 $ft^3 = 7.481$ gallons = 28.3 L. Assu	me sandpack porosity = 0.3						
Theoretical grout take (casing v	vol. plus sandpack vol.): $0.38 + 1.15 = 1.53$ ft <sup>3</sup> (2)	.84 + 8.60 = 11.44 gal) Actu	al total grout take: $6.0$ gal $(0.80$ ft <sup>3</sup> )					
Was tremie pipe used to place g	grout? <u>Yes</u> Describe tremie pipe: <u>1-inc</u>	h PVC						
Was the grout pressurized? No	Pressure (psi): Hold time (minut	es):						
Describe cut-off of well casing:								
Describe wellhead vault: $\pm 12$ -inch diameter steel with $\pm 9$ -inch long skirt Describe removal of wellhead vault: Wellhead vault was removed as part of pavement restoration								
Describe restoration of area: A $\pm 20$ -inch by $\pm 20$ -inch area of pavement was sawcut and removed around the well, removing the wellhead vault in the process. The area was excavated to a depth of $\pm 17$ inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of $\pm 17$ inches. Class II aggregate base was placed and compacted to a thickness of $\pm 9$ inches. A tack coat was applied to the top of the aggregate base and the sides of the sawcut. The area was repayed with $\pm 8$ inches of hot mix asphalt concrete.								

1-

Project Name/Number:	2440 East Eleventh St / P279	Logged By:	K. Zimmerman	
Property Location:	2440 East Eleventh St, Oakland CA	Date:	24 July 2012	
Well Identification:	MW5	Depth to Water (ft):	[1.3] (below measuring point)	
Measuring Point:	Top of PVC well casing, north side.	Total Depth (ft):	17.3 (below measuring point)	
Abandonment Methods:	Tremie grout, not pressurized.	Casing Diameter (in):	2	
Total Casing Length (ft):	17.2	Casing Material:	PVC	
Total Casing Volume (ft <sup>3</sup> ):	0.38	Casting/Ground Surf (ft):	Not applicable	
Total Sandpack Length (ft):	11.0	Borehole Diameter (in):	8.25	
Sandpack Annulus Area (ft <sup>2</sup> ):	0.35	Sandpack Voidspace (ft <sup>3</sup> ):	1.15	
Sandpack Volume (ft <sup>3</sup> ):	3.84	Grout Proportions:	94# (sack) Type I/II to ±6 gal water	
Comments:				
Under commends, describe obstructions, well damage, etc. 1 $ft^3 = 7.481$ gallons = 28.3 L. Assume sandpack porosity = 0.3				
Theoretical grout take (casing vol. plus sandpack vol.): $0.38 + 1.15 = 1.53$ ft <sup>3</sup> ( $2.84 + 8.60 = 11.44$ gal) Actual total grout take: $5.5$ gal ( $0.74$ ft <sup>3</sup> )				
$\frac{1}{1001010000} \text{ grout take (busing voir plub bandpuer voir), \frac{1}{00000000000000000000000000000000000$				
Was tremie pipe used to place grout?    Yes    Describe tremie pipe:    1-inch PVC				
Was the grout pressurized? No Pressure (psi): Hold time (minutes):				
Describe cut-off of well casing:				
Describe wellhead vault: $\pm 12$ -inch diameter steel with $\pm 9$ -inch long skirt Describe removal of wellhead vault: Wellhead vault was removed as part of pavement restoration				
Describe restoration of area: A $\pm 20$ -inch by $\pm 20$ -inch area of pavement was sawcut and removed around the well, removing the wellhead vault in the process. The area was excavated to a depth of $\pm 17$ inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of $\pm 17$				

process. The area was excavated to a depth of  $\pm 17$  inches, removing the existing aggregate base. The PVC well casing was cut off at a depth of  $\pm 17$  inches. Class II aggregate base was placed and compacted to a thickness of  $\pm 9$  inches. A tack coat was applied to the top of the aggregate base and the sides of the sawcut. The area was repaved with  $\pm 8$  inches of hot mix asphalt concrete.

### ATTACHMENT 6

DWR-188s



Only the (abandonment/decommissioning) DWR-188's are included in this attachment. The package sent to the California Department of Water Resources contained:

- DWR-188
- Legend and boring log
- Completion schematic
- Site location map
- Well location map
- Table of water levels
- Table describing the abandonment/decommissioning procedures
- Table of well completion information
- Alameda County permit to abandon/decommission the wells

## STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

## STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

### ATTACHMENT 7

Request to Rescind Encroachment Permit



Note

This attachment presents an incomplete copy of the document submitted to the City of Oakland. This attachment does not contain (1) the most recent groundwater monitoring report and (2) the report documenting abandonment/decommissioning of the wells.

PTS113-ENG UPDATE/QUERY APPLICATION FEE RECORD 9/11/12 11:36:29 Next Option: 106 Appl#: ENMI06363 Pmt#: 002 Disp: I 09/18/06 Type\* 1 Filed: 09/11/06 Address: 2434 E 11TH ST Unit: Parcel: 019 -0098-005-06 Descr: Install two monitoring wells within the parking lane of Other Related Applic#s: X0601048 OB060628 X1201293 X1201294 OB120589 OB120590

## JOB SITE

PAYMENT TYPE\* RECIS RECISION TO ENCROACHMENT APPLIC 71.00 PERMIT WRK COMMENCED PROCESS 262.00 RECD MGMT 31.64 GEN PLAN TECH ENCH 17.48 OTHER 382.12 EFFCTV 09/06/12 INIT SA PAID TOTAL Rq Rcpt NSF REFUNDED AMOUNT DELNO NOTICE COMMENT: CHANGE: ADD PROCESS \$262.00 FOR RECISION. F1=Hlp F3=Ext F5=Chg F6=Add F7=Fwd F8=Bck F9=Del F11=Fnd F12=Prv F24=Com

801 RECORD CHANGED

#### CITY OF OAKLAND Community & Economic Development Agency 250 Frank H. Ogawa Pl, Oakland CA, 94612 Phone: (510)238-4774 FAX: (510)238-2263

#### PAYMENT RECEIPT

Application#: ENMI06363 Payment APPLICATION FEE PROCESS FEE RECORDS MANAGEMENT FEE ( TECHNOLOGY ENHANCEMENT FE Subtotal:	\$262.00 \$262.00 \$31.64 \$17.48 \$382.12			
Sales Tax: ****** TOTAL PAID:	\$.00 \$382.12			
Check Payment:	\$382.12			
	na perio agai nang kang perio sala kana ang na penin pula kang penin penin kang kang kang			
Payor: STREAMBORN 10560 Date: 09/11/12 Time: 11:43:26 By: SYK Register R03 Receipt# 170365 ************************************				

Date: 09/11/12 Amt Paid: \$382.12 By: SYK Register RO3 Receipt# 170365 Permit No. X0902363 Parcel #: 029 -1084-033-00 Project Address: 27 EL CARMELO CR

Licensed Contractors' Declaration

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect

Construction Lending Agency Declaration

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender\_\_\_\_\_ Address

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER: POLICY NO.

[ ] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

#### Hazardous Materials Declaration

I hereby affirm that the intended occupancy [ ] WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.



City of Oakland Department of Planning, Building & Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd floor Oakland CA 94612 31 August 2012

Project No. P279

### <u>Request to Rescind Encroachment Permit ENMI 06363</u> (and any other encroachment permits associated with monitoring wells at the subject site) 2440 East Eleventh Street Oakland CA

To whom it may concern:

The monitoring wells associated with encroachment permit ENMI06363, located in the right of way of Twenty-Fifth Avenue and East Eleventh Street, have been properly abandoned/ decommissioned. On behalf of the property owner/responsible party, Jeffrey Eandi, we request the encroachment permit be rescinded. In addition, we request that any other encroachment permits issued for (1) the 2440 East Eleventh Street site, (2) Jeffrey Eandi, or (3) Eandi Metal Works be rescinded.

Please find attached the following items:

- A check in the amount of \$382.12 for the fee associated with rescission of the encroachment permit(s).
- Alameda County mandate to abandon/destroy the wells.
- Alameda County permit to abandon/decommission the wells.
- Site map showing the former well locations.
- A copy of Encroachment Permit ENMI 06363.
- The most recent report of groundwater monitoring at the site.
- The report documenting abandonment/decommissioning of the wells.

Please contact us with any questions or comments.

Sincerely,

**STREAMBORN** 

Jongh W Coral

Douglas W. Lovell, PE Geoenvironmental Engineer

Attachments

	STREAMBORN P.O. BOX 8330 BERKELEY, CA 94707 510-528-4234	CHASE O PMorgan Chase Bank, N.A. HYD Siano Ave Barbaiy, CA BYIO WWW.CHase.com 90-7162-3222	10560 <sup>M</sup>
PAY	Three Hundred Eighty-Two and 12/100 Dollars	DATE 8/31/12	AMOUNT \$382.12
TO THE ORDER OF:	City of Oakland, Comm & Econ Dev, Permit Servic 250 Frank H. Ogawa Plaza, Second Floor Oakland, CA 94612	$\overline{1}$	
	Memo: Rescind encroachment permit for 2440 East 1	Eleventh St. P279.	
STREA	MBORN P.O. BOX 8330 BERKELEY, CA 94707		10560
	City of Oakland, Comm & Econ Dev, Permit	10560 8/31/12	\$382.12
	Rescind encroachment permit for 2440 East Elevent Account Detail:	th St. P279. 5-1000 Project Vendors, Subs, Exp	\$382.12
STRE	MBORN P.O. BOX 8330 BERKELEY, CA 94707 City of Oakland, Comm & Econ Dev, Permit	10560 8/31/12	10560 \$382.12
	Rescind encroachment permit for 2440 East Eleven Account Detail:	th St. P279. 5-1000 Project Vendors, Subs, Exp	\$382.12

A

## ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

ALEX BRISCOE, Director



ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

February 21, 2012

Mr. Jeffrey Eandi Eandi Metal Works 976 Twenty Third Avenue Oakland, CA 94606 (Sent via E-mail to: <u>mail@eandimetals.com</u>)

Subject: Well Decommissioning for Fuel Leak Case No. RO0000029 and GeoTracker Global ID T0600100858, Eandi Metal Works, 2440 East Eleventh Street, Oakland, CA 94606

Dear Mr. Eandi:

Alameda County Environmental Health (ACEH) have reviewed the fuel leak case file and case closure summary for the above-referenced site and concur that no further action related to the underground storage tank fuel release is required at this time. No comments were received on the proposed case closure during a public comment period conducted between December 30, 2011 and February 10, 2012. Prior to issuance of remedial action completion certification and case closure, we request that the monitoring wells at the site be properly decommissioned, should the monitoring wells have no further use at the site. Please decommission the monitoring wells and provide documentation of the well decommissioning to this office no later than May 21, 2012. Remedial action completion certification will be issued following receipt of the documentation.

Well destruction permits may be obtained from the Alameda County Public Works Agency (<u>http://www.acgov.org/pwa/wells/index.shtml</u>). If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

#### TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

• May 21, 2012 – Well Decommissioning Report

Mr. Jeffrey Eandi RO0000029 February 21, 2012, Page 2

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

Attachments: Responsible Party(ies) Legal Requirements/Obligations Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 2032 (Sent via E-mail to: <u>Igriffin@oaklandnet.com</u>)

Kevin Wildenberg, Streamborn, P.O. Box 8330, Berkeley, CA 94707-8330 (Sent via E-mail to: <u>kevin@streamborn.com</u>)

Douglas Lovell, Streamborn, P.O. Box 8330, Berkeley, CA 94707-8330 (Sent via E-mail to: <u>doug@streamborn.com</u>

Donna Drogos, ACEH (Sent via E-mail to: <u>donna.drogos@acgov.org</u>) Jerry Wickham, ACEH (Sent via E-mail to: <u>jerry.wickham@acgov.org</u>)

GeoTracker, File

## Alameda County Public Works Agency - Water Resources Well Permit

PUBLIC	399 Elmhurst Street Hayward, CA 94544-13 Telephone: (510)670-6633 Fax:(5			
Application Approved	l on: 07/11/2012 By jamesy	Permit Numbers: W2012-04 Permits Valid from 07/24/2		
Application Id:	1341939151055	City of Project Site:Oakla	ind	
Site Location: Project Start Date: Assigned Inspector:	2440 E. 11th St, Oakland, CA 07/24/2012 Contact Vicky Hamlin at (510) 670-5443 or vicky	Completion Date:07/24/2012 vickyh@acpwa.org		
Applicant:	Streamborn - Doug W Lovell	<b>Phone:</b> 510-5	28-4234	
Property Owner:	PO Box 8330, Berkeley, CA 94707 Jeffrey E Eandi	<b>Phone:</b> 510-5	31-0778	
1000 Calcot Pl., Oakland, CA 94606Client:** same as Property Owner **				
	Receipt Number: WR2012-0219	Total Due: Total Amount Paid:	\$1985.00 \$1985.00	

eceipt Number: WR2012-0219	Total Amount Paid:	\$1985.00
Payer Name : Streamborn		PAID IN FULL

#### **Works Requesting Permits:**

Well Destruction-Monitoring - 5 Wells Driller: Cascade Drilling - Lic #: 938110 - Method: other

#### Specifications

Per	mit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2 049	012- 97	07/11/2012	10/22/2012	MW1	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 049	012- 98	07/11/2012	10/22/2012	MW2	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 049	012- )9	07/11/2012	10/22/2012	MW3	8.00 in.	2.00 in.	7.50 ft	21.50 ft	2S/3W6P	No Records	No Records
W2 050	012- )0	07/11/2012	10/22/2012	MW4	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0702	e048222
W2 050	012- )1	07/11/2012	10/22/2012	MW5	8.25 in.	2.00 in.	5.00 ft	17.00 ft	2S/3W6P	W2006- 0703	e048223

#### **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

#### Work Total: \$1985.00

## Alameda County Public Works Agency - Water Resources Well Permit

mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

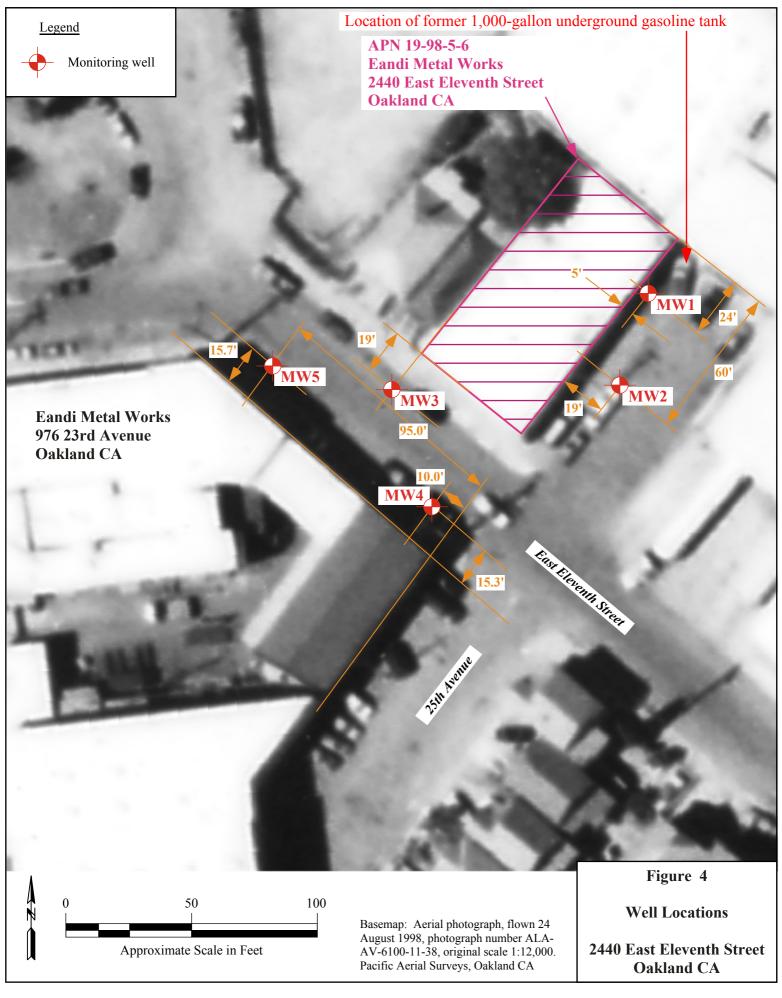
4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

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 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.

7. Remove the Christy box or similar structure. Destroy wells MW-1, Mw-2, MW-3, MW-4 and Mw-5 by overdrilling/saw cutting the upper 5ft. above & Tremie Grout with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.

8. 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.



<u>Streamborn</u>

CITY OF OAKLAND



250 FRANK H. OGAWA PLAZA, SUITE 2340 + OAKLAND, CALIFORNIA 94612-2031

Community and Economic Development Agency Building Services Division (510) 238-3381 FAX (510) 238-6996 TDD (510) 238-6312

September 12, 2006

Eandi Metal Works 976 – 23<sup>rd</sup> Avenue Oakland, CA 94606

# RE: MINOR ENCROACHMENT PERMIT FOR 2434 EAST 11<sup>TH</sup> STREET

Dear Sir or Madam:

Enclosed is a Minor Encroachment Permit allowing you to encroach into the public right-of-way of East 11<sup>th</sup> Street with two monitoring wells. Before the Minor Encroachment Permit will become effective, the persons having the legal authority to do so, must sign and properly notarize the document with a notary acknowledgement slip attached, and return to this office to the attention of Jing Wong for recordation.

If you have any questions, please call me at 238-6314 any workday from 8:00 AM to 4:00 PM.

Sincerely,

2120

JING WONG Assistant Engineer II

SHOEL SHOEL

recording requested by:

CITY OF OAKLAND

when recorded mail to:

City of Oakland CEDA - Building Services Dalziel Administration Building 250 Ogawa Plaza - 2nd Floor Oakland, CA 94612 Attn: City Engineer

# RECEIVED

2006 SEP 15 PM 3: 44

CITY OF OAKLAND-CEDA BS DEPT. INSP UNIT 2ND FL

AGREEMENT PERMITTING A CONDITIONAL AND REVOCABLE

## ENCROACHMENT IN THE PUBLIC RIGHT-OF-WAY

Address 2434 East 11th Street

permit no. ENMI 06363

parcel no. 019-0098-005-06

authorities Municipal Code Section 15.04.705

description Encroach into East 11th Street with two monitoring wells.

#### RECITAL

The owner subscribed below of fee simple interest in the property referenced above and described in Exhibit B attached hereto, are hereby granted, for an indeterminate period of time, the revocable permit referenced above allowing the temporary encroachment described above and delineated in Exhibit C, attached hereto, and limiting the use, exercise, and operation of the encroachment with the requirements and restrictions set forth in Exhibit A, attached hereto, and the associated permit. The owner agrees by and between themselves to be bound by the general and special conditions in Exhibit A and to comply with these conditions faithfully and fully at all times. The conditions of this agreement and associated permit shall equally bind all agents, heirs, successors, and assigns of the owner.

#### ACKNOWLEDGEMENT OF PROPERTY OWNER

(notarization of signature required)

Eandi Family Properties LP	(inclaire)
signature MM	
name JEAHLEY M. EANDI	

date	9-13-04
title	PARTNER

#### ATTACHMENTS

Exhibit A - Conditions of encroachment Exhibit B - Description of privately owned parcel Exhibit C - Limits of encroachment

CITY OF OAKLAND a municipal corporation by \_\_\_\_\_\_date \_\_\_\_\_ BAYMOND M. DERANIA DEBORAH EDGERLY Interim City Engineer City Administrator Community and Economic Development Agency

Minor Encroachment Agreement Conditions of Permit Issuance page 1 of 7 ENMI 06363

# EXHIBIT A

RECEIVED 2006 SEP 15 PH 3: 44 Conditions For An Encroachment In The Public Right-Of-Way

TY OF OSOENIT address 2434 East 11 Street

parcel no. 019-0098-005-06

permittee Eandi Family Properties LP

permit no. ENMI 06363

#### General conditions of the encroachment

- 1. This agreement may be voided and the associated permit for an encroachment may be revoked at any time and for any reason, at the sole discretion of the City Administrator or his or her designee, or the associated permit may be suspended at any time, at the sole discretion of the City Engineer, upon failure of the permittee to comply fully and continuously with each and all of the general and special conditions set forth herein and in the associated permit.
- 2. The property owner and permittee hereby disclaim any right, title, or interest in or to any portion of the public right-of-way, including the sidewalk and street, and agree that the encroachment is granted for indeterminate period of time and that the use and occupancy by the permittee of the public right-of-way is temporary and does not constitute an abandonment, whether expressed or implied, by the City of Oakland of any of its rights associated with the statutory and customary purpose and use of and operations in the public right-of-way.
- 3. The permittee agrees to indemnify and save harmless the City of Oakland, its officers, agents, employees, and volunteers, and each of them, from any suits, claims, or actions brought by any person or persons, corporations, or other entities for on account of any bodily injury, disease, or illness, including death, damage to property, real or personal, or damages of any nature, however caused, and regardless of responsibility for negligence, arising in any manner out of the construction of or installation of a private improvement itself or sustained as result of its construction or installation or resulting from the permittees' failure to maintain, repair, remove and/or reconstruct the private improvement.
- 4. The permittee shall maintain fully in force and effect at all times that the encroachment occupies the public right-of-way good and sufficient public liability insurance in a face amount not less than \$300,000.00 for each occurrence, and property damage insurance in a face amount not less than \$50,000.00 for each occurrence, both including contractual liability, insuring the City of Oakland, its officers, agents, employees, and volunteers against any and all claims arising out of the existence of the encroachment in the public right-of-way, as respects liabilities assume under this permit, and that a certificate of such insurance and subsequent notices of the renewal thereof, shall be filed with the City Engineer of the City of Oakland, and that such certificate shall state that the insurance coverage shall not be canceled or be permitted to lapse without thirty calendar (30) days written notice to the City Engineer. The permittee also agree that the City of Oakland may review the type and amount of insurance required of the permittee annually and may require the permittee to increase the amount of and/or change the type of insurance overage required.
- 5. The permittee shall be solely and fully liable and responsible for the repair, replacement, removal, reconstruction, and maintenance of any portion or all of the private improvements constructed or installed in the public right-of-way, whether by the cause, neglect, or negligence of the permittee or others and for the associated costs and expenses necessary to restore or remove the encroachment to the satisfaction of the City Engineer and shall not allow the encroachment to become a blight or a menace or a hazard to the health and safety of the general public.

Minor Encroachment Agreement Conditions of Permit Issuance

page 2 of 7 ENMI 06363

# RECEIVED

- 6. The permittee acknowledge and agree that the gnome back is out of the ordinary and does not comply with City of Oakland standard installations. The permittee further acknowledge and agree that the City of Oakland and public utility agencies will periodle adjuct onduct work in the public right-of-way, including excavation, trenching, and relocation of its facilities, all of which may damage the encroachment. Permittee further acknowledge and agree that the City and public utility agencies take no responsibility for repair or replacement of the encroachment which may be damaged by the City or its contractors or public utility agencies or their contractors. Permittee further acknowledge and agree that upon notification by and to the satisfaction of the City Engineer, permittee shall immediately repair, replace, or remove, at the sole expense of the permittee, all damages to the encroachment that are directly or indirectly attributable to work by the City or its contractors or public utility agencies or their contractors.
- 7. Permittee shall remain liable for and shall immediately reimburse the City of Oakland for all costs, fee assessments, penalties, and accruing interest associated with the City's notification and subsequent abatement action for required maintenance, repairs, or removal, whether in whole or in part, of the encroachment or of damaged City infrastructure made necessary by the failure, whether direct or indirect, of the permittees to monitor the encroachment effectively and accomplish preventative, remedial, or restorative work expeditiously. The City reserves the unqualified right to collect all monies unpaid through any combination of available statutory remedies, including recordation of Prospective Liens and Priority Liens/ Special Assessments with the Alameda County Recorder, inclusion of non-reimbursed amounts by the Alameda County Assessor with the annual assessment of the general levy, and awards of judgments by a court of competent jurisdiction.
- 8. Upon revocation of the encroachment permit, permittee shall immediately, completely, and permanently remove the encroachment from the public right-of-way and restore the public right-of-way to its original conditions existing before the construction or installation of the encroachment, to the satisfaction of the City Engineer and all at the sole expense of the permittee.
- This agreement and the associated permit for an encroachment shall become effective upon filing of this
  agreement with the Alameda County Recorder for recordation as an encumbrance of the property and its
  title.
- Special conditions of the encroachment
- That said permittee shall obtain excavation permit(s) prior to construction and separate excavation permit(s) prior to the removal of the monitoring wells.
- That said permittee shall provide to the City of Oakland an AS BUILT plan showing the actual location of the monitoring wells. And the results of all data collected from the monitoring wells.
- 12. That said permittee shall remove the monitoring wells and repair any damage to the street area in accordance with City standards two (2) years after construction or as soon as monitoring is complete.
- 13. That said permittee shall notify the Community & Economic Development Agency, Building Services Division after the monitoring wells are removed and the street area restored to initiate the procedure to rescind the minor encroachment permit.
- 14. That the monitoring well covers installed within the sidewalk area shall have a skid-proof surface.

# RECEIVED

15. That the monitoring well castings and covers shall be iron and shall meet H-20 load rating. The cover shall be secured with a minimum of two stainless steel solutions and cover shall be mounted flush with the surrounding surface. For sidewalk installations, a precast concrete utility box and non-skid cover may be needed in conjunction with the boltedicast iron cover with City approval.

INSP UNIT

- 16. That said permittee acknowledges that the City makes no representations or warranties as to the conditions beneath said encroachment. By accepting this revocable permit, permittee agrees that it will use the encroachment area at its own risk, is responsible for the proper coordination of its activities with all other permittee, underground utilities, contractors, or workmen operating, within the encroachment area and for the safety of itself and any of its personnel in connection with its entry under this revocable permit.
- That said permittee acknowledges that the City is unaware of the existence of any hazardous 17. substances beneath the encroachment area, and permittee hereby waives and fully releases and forever discharges the City and its officers, directors, employees, agents, servants, representatives, assigns and successors from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgements, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs), whether direct or indirect, known or unknown, foreseen or unforeseen, that may arise out of or in any way connected with the physical condition or required remediation of the excavation area of any law or regulation applicable thereto, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 466 et seq.), the Safe Drinking Water Act (14 U.S.C. Sections 1401, 1450), the Hazardous Waste Control Law (California Health and Safety Code Sections 25100 et seq.), the Porter-Cologne Water Ouality Control Act (California Health and Safety Code Section 13000 et seq.), the Hazardous Substance Account Act (California Health and Safety Code Sections 253000 et seq.), and the Safe Drinking Water and Toxic Enforcement Act (California Health and Safety Code Section 25249.5 et seq.).
- 18. That said permittee further acknowledges that it understands and agrees that it hereby expressly waives all rights and benefits which it now has or in the future may have, under and by virtue of the terms of California Civil Code Section 1542, which reads as follows: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."
- 19. That said permittee recognizes that by waiving the provisions of this section, permittee will not be able to make any claims for damages that may exist, and to which, if known, would materially affect its decision to agree to these encroachment terms and conditions, regardless of whether permittee's lack of knowledge is the result of ignorance, oversight, error, negligence, or any other cause.
- 20. (a) That said permittee, by the acceptance of this revocable permit, agrees and promises to indemnify, defend, and hold harmless the City of Oakland, its officers, agents, and employees, to the maximum extent permitted by law, from any and all claims, demands, liabilities damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs; collectively referred to as "claims", whether direct or indirect, known or unknown, foreseen or unforeseen, to the extent that such claims were either (1) caused by the permittee, its agents, employees, contractors or representatives, or, (2) in the case of environmental contamination, the claim is a result of

Minor Encroachment Agreement Conditions of Permit Issuance

page 4 of 7 ENMI 06363 environmental contamination that emanates or emanated from 2434 East 11th Street, Oakland, California site, or was otherwise caused by the permittee, its agents, employees, contractors or representatives.

- (b) That, if any contamination is discovered below or in the immediate vicinity of the encroachment, and the contaminants found are of the type used, housed, stored, processed or sold on or from 2434 East 11<sup>th</sup> Street, Oakland, California site, such shall amount to a rebuttable presumption that the contamination below, or in the immediate vicinity of, the encroachment was caused by the permittee, its agents, employees, contractors or representatives.
- (c) That said permittee shall comply with all applicable federal, state, county and local laws, rules, and regulations governing the installation, maintenance, operation and abatement of the encroachment.
- 21. That said Minor Encroachment Permit and Agreement shall take effect when all the conditions hereinabove set forth shall have been complied with to the satisfaction of the Director of Building Services, and shall become null and void upon the failure of the permittee to comply with all conditions.

SND ET INSE DNIL SOUR SEE 12 6H 3: PT BECEINED

Minor Encroachment Agreement Conditions of Permit Issuance

page 5 of 7 ENMI 06363

## EXHIBIT B

#### Description Of the Private Property Abutting The Encroachment

address 2434 East 11th Street

#### parcel no. 019-0098-005-06

deed no. 96322638

recorded December 19, 1996

All that certain real property situated in the City of Oakland, County of Alameda, State of California, described as follows:

Portion of Lots Numbered 12 and 13 in Block Lettered "E", as said lots and block are delineated and so designated upon that certain map entitled, "Knowles & Potter Subdivision of the Kennedy Tract, Brooklyn Township, Alameda Co. California", filed December 5, 1887 in Book 9 of Maps, at page 11, in the office of the County Recorder of Alameda County, described as follows:

Beginning at a point on the Northeastern line of East 11th Street, distant thereon North 49 degrees 03 minutes West 35 feet from the Northwestern line of 25th Avenue, as said street and avenue are shown on said map; and running thence along said line of East 11th Street North 49 degrees 03 minutes West 17 feet; thence North 39 degrees 55 minutes 30 seconds East 51 feet; thence North 37 degrees 07 minutes 30 seconds East 48.89 feet to the Northeastern line of said Lot 13; thence along the last named line and along the Northeastern line of said Lot 12 South 49 degrees 03 minutes East 17.50 feet to a point distant North 39 degrees 55 minutes 30 seconds East 51 feet; and North 37 degrees 42 minutes 30 seconds East 51 feet; and North 37 degrees 42 minutes 30 seconds East 51 feet; and North 37 degrees 42 minutes 30 seconds East 51 feet; and North 37 degrees 45 minutes 30 seconds East 51 feet; and North 37 degrees 55 minutes 30 seconds East 51 feet; and North 37 degrees 55 minutes 30 seconds East 51 feet; and North 37 degrees 55 minutes 30 seconds East 51 feet; and North 37 degrees 55 minutes 30 seconds East 51 feet; and South 37 degrees 55 minutes 30 seconds East 51 feet; and South 37 degrees 55 minutes 50 seconds East 51 feet; and South 37 degrees 55 minutes 30 seconds East 48.85 feet from the point of beginning; thence South 37 degrees 55 minutes 30 seconds West 51 feet to the point of beginning.

A.P. #19-98-5-6

CITY OF OAKLAND-CEDA 57 : E Wd SI d35 9002 RECEIVED

Minor Encroachment Agreement Conditions of Permit Issuance

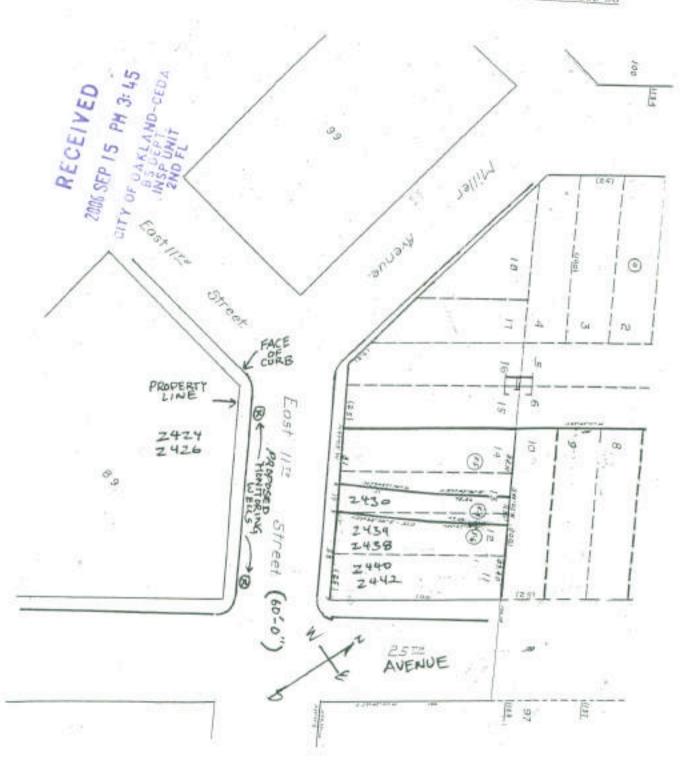
page 6 of 7 ENMI 06363

# EXHIBIT C

# Limits Of The Encroachment In The Public Right-Of-Way

address 2434 East 11th Street

parcel no. 019-0098-005-06



Minor Encroachment Agreement Conditions of Permit Issuance

page 7 of 7 ENMI 06363

## CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of <u>California</u> County of <u>Alameda</u>

On September 15, 2006 before me, Romeo B. Evangelista, Notary Public Date Name and Title of Officer (e.g., "Jame Doe, Notary Public")

personally appeared

Jeffrey M. Eandi, Name(s) of Signer(s)

i personally known to me - OR - □ proved to me on the basis of satisfactory evidence to be the



Description of Attached Document

on the basis of satisfactory evidence to be the person(a) whose name(a) is/are subscribed to the within instrument and acknowledged to me that heisher/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(a) on the instrument the person(a), or the entity upon behalf of which the person(a) acted, executed the instrument.

WITNESS my hand and official seal.

Ann B.

**OPTIONAL** 

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Title or Type of Document:		MITTING A CONDFI NCROACHMENT IN 7-WAY	
Document Date:	September 13, 2006	Number of Pages:	7
Signer(s) Other Than Named Above			
Capacity(ies) Claimed by Signer(s Signer's NameJeffrey M. Eandi	) Signer's Name	8	
<ul> <li>Individual</li> <li>Corporate Officer</li> <li>Jitle(s)</li> </ul>	□ Individual □ Corporate Title(s)		
	ieneral  Partner - Attorney- Trustee Guardian	□ Limited □ in-Fact or Conservator	General
Other Signer Representing :	Other     Signer Represe	<u> </u>	

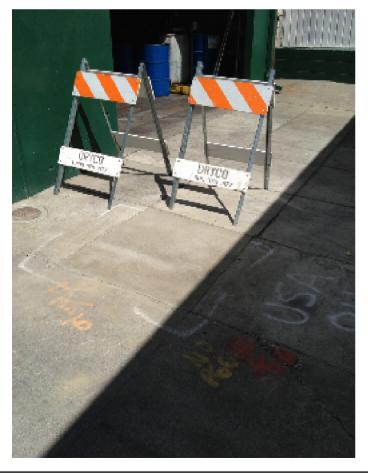
# **ATTACHMENT 8**

Photographs of Well Abandonment/Decommissioning and Repaving





20 August 2012. View of well MW1. Aggregate base has been placed and compacted. View looking northeast.



22 August 2012. View of well MW1 after repaying with reinforced (Portland Cement) concrete. View looking north.

Photos 1

2440 East Eleventh Street Oakland CA





20 August 2012. View of well MW4 during repaying. The first layer of hot mix asphalt concrete has been placed and compacted. View looking northeast.

20 August 2012. View of well MW4 after repaying. The second (final) layer of hot mix asphalt concrete has been placed and compacted. View looking southeast.

Photos 2

2440 East Eleventh Street Oakland CA





20 August 2012. View of well MW5 after grouting, overdrilling, and excavating to a depth of  $\pm 18$  inches. View looking northwest.

20 August 2012. View of MW5 after placing and compacting aggregate base but before placement of asphalt concrete. View of placing tack coat. View looking southeast.

Photos 3

2440 East Eleventh Street Oakland CA

