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July 7, 2011

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

Re: CITADEL Project No. 0222.1001.0
Remedial Action Plan
Former Red Star Yeast Company
1396 5th Street
Oakland, California 94607
SLIC Case Number: RO0002896
Global ID: T06019794669

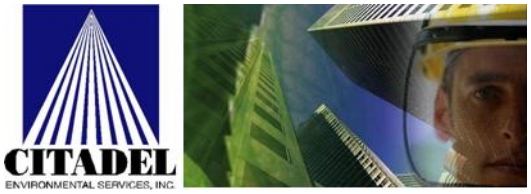
Dear Mr. Wickham:

As a legally authorized representative of Oakland Housing Investors, LP, I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

David R. Lukens
Vice President of Red Star – Michaels, LLC
Co-Administrator General Partner of
Oakland Housing Investors, L.P.

Enclosure



July 7, 2011

Mr. Harvey Fernebok
Oakland Housing Investors, LP
2010 Main Street, Suite 1250
Irvine, California 92614

Re: CITADEL Project No. 0222.1001.0
Revised Remedial Action Plan
Former Red Star Yeast Company
1396 5th Street
Oakland, California 94607
SLIC Case Number: RO0002896
Global ID: T06019794669

Dear Mr. Fernebok:

In accordance with your request and authorization, Citadel Environmental Services, Inc. (Citadel) has prepared the attached Revised Remedial Action Plan for the above-referenced property.

Should you have any questions after reviewing the findings contained in this report, please do not hesitate to contact the undersigned at your convenience at (714) 547-4301. Citadel appreciates this opportunity to be of professional service on this project.

Sincerely,
CITADEL ENVIRONMENTAL SERVICES, INC.

Allan Coffee
Director, Environmental Services

Enclosure

An Employee-Owned Company

OAKLAND HOUSING INVESTORS, LP
2010 MAIN STREET, SUITE 1250
IRVINE, CALIFORNIA 92614

CITADEL
ENVIRONMENTAL SERVICES, INC.

REVISED REMEDIAL ACTION PLAN
FORMER RED STAR YEAST COMPANY

1396 5th Street
Oakland, California 94607
SLIC Case Number: RO0002896
Global ID: T06019794669

CITADEL Project Number 0222.1001.0

July 7, 2011

400 North Tustin Avenue, Suite 340, Santa Ana, California 92705
Phone: (714) 547-4301 Fax: (714) 547-4647
www.citadelenvironmental.com

TABLE OF CONTENTS

1.0 INTRODUCTION

From January - March 2011, Citadel Environmental Services, Inc. (Citadel) conducted a Subsurface Investigation at the vacant property located at 1396 5th Street in Oakland, California. The site has a history of environmental issues related to past uses and is under the oversight of Alameda County Environmental Health (ACEH) (SLIC Case number RO0002896). The Global ID Number for the site is T06019794669.

The site occupies about 0.88 acres of vacant land in Oakland, California. The property was first provided a legal description in 1880, and from sometime before 1902 until 2006 was used for yeast manufacturing, vinegar production, and for various brewery operations. Environmental issues identified at the property include above ground and underground fuel tanks, the use of various chemicals with several documented releases, and an unauthorized release of mercury to the sewer system with apparent impacts to the subsurface soil. These issues have been mostly addressed by separate remedial actions. However, the site also has a surficial layer of artificial fill that appears to be 3-5 feet thick and extends across much of the property. Previous testing indicated the fill had elevated levels of lead in some areas, and detectable but generally low levels of mercury. Groundwater is present at about 4 feet below grade and previous sampling indicated that the groundwater beneath portions of the site was impacted with diesel and oil-range petroleum hydrocarbons.

Oakland Housing Investors, LP is proposing to construct an affordable housing project for seniors at the site. The five-story building will include four levels of apartments above the on-grade first level that includes retail and office space and lobby areas. Nearly the entire site will be covered with paved surfaces or poured concrete.

In October 2008, SCS Engineers prepared a Property Mitigation Plan (PMP) that detailed important aspects of the investigation history and property uses. The PMP also included a proposed scope of work to further investigate the property as a preliminary step towards mitigation and re-development. This plan was conditionally accepted by ACEH and is the basis for subsequent work. Primary items of concern in this investigation are providing a more detailed characterization of the artificial fill that extends across much of the site, identifying the locations of underground structures using geophysical techniques and exposing these by excavation. In addition, temporary groundwater wells were installed to provide more data on the quality of groundwater. The reader is directed to the PMP for more details on the scope of work, and background information on the site history and proposed development. This report is supplemental to the PMP.

The recent subsurface investigation was an independent assessment of the property that was intended to characterize the quality of the shallow fill soil, which was identified as a source of on-site contamination. The investigation included installation of 15 soil borings, 5 groundwater monitoring wells, and excavation of 4 pits to expose underground structures identified by a geophysical survey. The goal of this work was to provide data that could be used to make rational decisions on what work might be necessary to allow the proposed commercial / residential development to proceed. The criteria for judging the results are based on the San Francisco Environmental Screening Levels developed by the San Francisco Regional Water Quality Control Board (SFRWQCB). For heavy metal results the criteria used

were the OEHHA Soil Screening Levels (SSLs), which are human health risk based guidelines based on multiple possible exposure routes.

The results of the investigation demonstrated that the western half of the property has several areas impacted with lead, but the eastern half is apparently impacted only in a few isolated areas. After reviewing the results with ACEH, a plan was developed to remove the artificial fill from the western side of the property and from targeted areas on the eastern portion of the site. However, after review of the original RAP (dated April 4, 2011), ACEH decided that the distribution of contamination in the fill was considerably variable and the east half would need to be excavated more extensively. Accordingly, a new plan was developed to excavate more of the artificial fill and provisions were developed for field screening to segregate the material for disposal or re-use. The impacted material will be disposed appropriately and imported soil will be used to fill the site prior to construction. This Revised Remedial Action Plan details the proposed scope of work for this phase of the project.

2.0 GEOLOGY/HYDROGEOLOGY

The City of Oakland has identified three Oakland-specific soil types that can be used for determining site specific target levels. Merritt sands are primarily located in flatlands to the west of Lake Merritt. They typically consist of fine-grained silty sand with lenses of sandy clay and clay. Merritt sands typically feature low moisture content and high permeability. The second category is the sandy silts, which are found throughout Oakland and consist of unconsolidated, moderately sorted sand, silt, and clay. These are considered moderate permeability deposits. Clayey silts are found primarily along the bay and estuary and typically contain organic material, peat, and thin lenses of sand. These are typically low permeability deposits.

Based on the drilling logs, the shallow sediments consist of a mixture of silty clay, clayey silt, sandy silt, and silty sand textured material, with varying amounts of brick, glass, gravel and concrete. This material may be characterized as clayey silt in the Oakland definition (though it is apparently imported fill and not a natural sediment unit). This fill layer extends from the surface to an average depth of about 4-5 feet below grade across most of the site and is underlain mostly by silty sand deposits that are taken to represent the Merritt sand unit.

Groundwater is present at approximately 4 feet below grade and reportedly flows to the southwest. Groundwater in this area is part of the East Bay Sub Basin of the Santa Clara Valley Basin (Number 2-9.04). Existing beneficial uses include municipal, agricultural, and industrial process supply; however, it is probable that the groundwater is not suitable for these uses due to high total dissolved solid content (reportedly as high as 2,400 mg/L). The TDS levels may be naturally occurring due to the proximity to the bay.

The ACEH requested a survey of municipal wells within 2,000 feet of the property. Citadel ordered a Geo Check Report from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut to provide a portion of this information. Results from the EDR report indicate there are no municipal wells located within a one-mile radius of the site. In addition, Citadel submitted a formal request to review additional well records from the Alameda County Public Works Agency and the California Department of Water Resources. A review of the records provide by

the Alameda County Public Works Agency and the California Department of Water Resources is included as Appendix A of this document.

3.0 GEOPHYSICAL SURVEY

As indicated in the PMP and approved by ACEH, a geophysical survey was conducted across the property to identify subsurface features of concern. Possible structures of concern identified in the PMP included an abandoned water supply well, an elevator shaft, sewer lines, and possible USTs. The geophysical survey included a combination of methods including terrain conductivity, magnetometer survey, ground penetrating radar, and electromagnetic line locating. The survey was conducted by Spectrum Geophysics of Burbank, California, on January 26th and 27th, 2011.

Results of the survey identified four anomalies that warranted further investigation. Each of these areas was investigated using a backhoe to expose each anomaly. In each case, a metal structure was found, but the precise nature of each was not immediately identified. However, these areas (identified as Pits 1-4) provided targets for boring installation and soil sampling. These areas were subsequently evaluated by excavation as an attempt to determine their depth, as reported later in this document. A fifth anomaly was also identified at this time, but shallow excavation revealed no subsurface structure. Later excavation in March 2011 to 12 feet below grade (Pit 5) identified the properly abandoned water supply well.

4.0 SUBSURFACE SITE INVESTIGATION

On March 4TH and 5th, 2011, Citadel installed fifteen (15) soil borings (CB1 through CB15) to 4-6 feet below grade, using a hand auger tool. The borings were installed across the site to provide a reasonable profile of the soil conditions across the property. Some borings were targeted in areas of potential environmental concern, including the four (4) pits discussed above. During drilling of each boring, concrete, brick or other hard debris was encountered in the shallow artificial fill layer, which hindered drilling progress. In the later borings, a backhoe was used to excavate the upper couple of feet, providing better access for the hand auger tool. This significantly improved the drilling conditions, yet still allowed for representative soil sampling. In addition, soil samples were collected at 6 feet below grade in each excavated pit for laboratory analysis.

Five groundwater monitoring wells (MW1 through MW5) were also installed across the site using the hand auger tool. The wells were installed to 6.5 feet below grade and were constructed of 2-inch PVC. The wells were screened from 4 to 6.5 feet with 0.02-inch factory slotted casing. A filter pack consisting of #3 Monterey sand was installed from 3 to 6.5 feet, and the wells were sealed to the surface with Portland cement. The wells are only temporary and extend approximately one to two feet above grade for visibility. The borings and temporary wells were installed under permit with the Alameda County Public Works Agency (Permit #W2011-0057) and the surface seal was inspected in the field by and ACPWA Inspector.

Soil samples were collected at 1, 2, 3, 4, and 6 feet below grade in most borings for geologic logging and laboratory analysis. This provided a representative profile of the artificial fill layer

both in cross section and in the lateral coordinate directions. Each sample was screened in the field for volatile emissions using a photo-ionization detector (PID). The samples were collected in glass laboratory jars and sealed with Teflon tape and threaded lids. The samples were immediately placed on ice pending delivery to the California Department of Health Services (DHS) certified laboratory.

The samples were tested for carbon chain hydrocarbons corresponding to gasoline, diesel fuel, and oil weights (C5-C12, C13-C24, and C25-C40 ranges, respectively) by EPA Method 8015M and Title 22 heavy metals (CAM) by EPA Method 6010. Three select soil samples were also analyzed for volatile organic compounds (VOC) by EPA method 8260B (full scan) and for semi-volatiles (SVOC) by EPA Method 8270C. CalTech Environmental Laboratories of Paramount, California analyzed the samples.

5.0 LABORATORY ANALYSIS

Soil Sampling Results

There were no VOCs or SVOCs detected in the soil samples (CB10-3, CB12-4, and Pit 2-6) analyzed by the laboratory. The results of the carbon chain soil analysis indicated several samples had detectable levels of petroleum hydrocarbons, though most had very low or less than detectable values. The laboratory data was compared to the SFRWQCB ESL guidelines for petroleum hydrocarbons. The ESLs are screening values that are protective of groundwater, terrestrial biota, and human health concerns, and they are very conservative, especially when evaluating shallow soil (<10 feet below grade). Results indicated three soil samples had oil-range hydrocarbon concentrations in excess of the ESL (370 mg/Kg) and two samples had concentrations in excess of the diesel-range values (100 mg/Kg). The maximum concentrations were 740 mg/Kg for oil-range hydrocarbons and 160 mg/Kg for diesel-range (both in sample CB12-4). Soil sample Pit 2-6 was the only other location with oil and diesel range hydrocarbons that exceeded the ESL's. No gasoline range hydrocarbons were detected in any of the soil samples. These results are summarized in **Table 1**.

The results of the heavy metal analysis indicated detectable levels of 10 heavy metals including barium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc. As required by ACEH, the concentrations were compared to the Soil Screening Levels (SSL) for heavy metals developed by OEHHA. These are human health risk-based guidelines that are derived based on multiple routes of possible exposure for residential and industrial settings. The comparison indicated only cadmium and lead were detected in concentrations exceeding the residential SSL threshold.

Based on this analysis, the primary concerns for this site are the lead and cadmium levels. Lead was detected across the site in previous investigations and the artificial fill is documented as containing significant values of lead in spots. The highest lead concentration in this investigation was 2,400 mg/Kg, detected in sample CB9-6. The SSL for lead in a residential setting is 80 mg/Kg, and 33 samples exceeded this threshold. However, the distribution is uneven across the site and several samples had very low or less than detectable levels. In addition, the concentrations between one-foot intervals could vary

widely within a single boring. This suggests hot-spots of lead contamination that may be spatially isolated.

The results of the cadmium analysis indicated 8 samples had concentrations exceeding the residential SSL. Many of these samples also contained high levels of lead, but two locations had high levels of cadmium with no significant lead. These borings (CB3 and CB4) are both located on the east side of the site. The residential SSL for cadmium is 1.7 mg/Kg and the highest concentration detected in soil was 3.3 mg/Kg in sample CB3-2. As in the lead case, the distribution pattern was spatially isolated and highly variable between discrete vertical intervals.

Mercury was another heavy metal of potential concern at this site because of historical evidence and previous sampling results. The current results indicated mercury was detected in several samples, but none had concentrations in excess of the residential SSL. The maximum concentration detected in soil was 2.8 mg/Kg in sample CB11-2, and the residential SSL is 18 mg/Kg. The laboratory results from heavy metals are summarized in **Table 1A**.

Groundwater Sampling Results

On March 5, 2011, groundwater samples were collected from the five (5) new groundwater monitoring wells. The samples were collected 24 hours after well installation with no pre-purging before sampling. The samples were collected using disposable Teflon hand bailers and were stored in laboratory supplied containers appropriate for the specific analyses. The samples were tested for carbon chain hydrocarbons corresponding to gasoline, diesel fuel, and oil weights (C5-C12, C13-C24, and C25-C40 ranges, respectively) by EPA Method 8015M and volatile organic compounds (VOC) by EPA method 8260B (full scan). In addition, two samples, MW4 and MW5, were tested for semi-volatiles (SVOC) by EPA Method 8270C. CalTech Environmental Laboratories of Paramount, California analyzed the samples.

Results indicated one sample had detectable levels of oil-range hydrocarbons, with 2,400 µg/L. This level exceeds the ESL guideline of 210 µg/L for heavy hydrocarbons. No other petroleum hydrocarbons, VOC, or SVOC were detected by analysis. These results are summarized in **Table 2**.

Summary of Results

This investigation was supplemental to the PMP prepared for the site in 2008. The scope of work included identifying unknown subsurface structures using a geophysical survey. The structures were uncovered by excavation, and soil sampling was conducted to define limited soil contamination, mostly by lead, with Pit 2 also having moderate levels of oil-range hydrocarbons.

In addition, the artificial fill layer that covers much of the site to a depth of about 4 feet was investigated and profiled by installing 15 soil borings across the property. The fill has numerous hot spots of lead contamination and limited zones of cadmium contamination. Three zones of contamination with hydrocarbon levels that exceed ESLs were also identified within the fill. Five temporary groundwater wells were installed at the site and testing of

groundwater indicated just one sample had detectable levels of hydrocarbon, with 2,400 µg/L oil-range hydrocarbons.

6.0 REMEDIATION CONSIDERATIONS

The investigation identified at least three environmental issues which need to be resolved as the redevelopment plans are considered. The first is resolution of the subsurface metal structures identified by the geophysical survey and the excavation pilot program. Three of the pits had low but actionable levels of soil contamination in the fill material, but the primary concern is removal of the structures to enable construction and allow access to native soil in deeper intervals. One of the pits, Pit 4, requires further excavation to allow removal of the structure.

The artificial fill material requires additional consideration. Portions of the fill material contain significant concentrations of lead with apparently less significant concentrations of petroleum, and cadmium. Mercury levels were an initial concern, and though low levels of mercury were detected in some samples, none approached the SSL levels used as the required guideline. In some areas, sediments below the fill contain elevated concentrations of heavy metals (primarily lead) and petroleum concentrations. The uneven distribution of significant levels of lead makes mitigation of this issue difficult because there can be no assurance that all impacted areas were addressed. Given the sensitive nature of the proposed development, it would be advantageous to remove as much of the artificial fill as possible to resolve the issue and allow for closure. Accordingly, the revised remediation plan includes more extensive excavation across the site to remove as much of the impacted soil as is reasonably practical.

Finally, the condition of the underlying groundwater is an environmental concern. The results from groundwater sampling of monitoring wells suggest that groundwater is impacted in an isolated zone with oil-range hydrocarbons in the vicinity of MW5. Although the ESLs for soil were exceeded, the dissolved levels are relatively low. If the extent of contamination is limited and can be demonstrated to be stable over time, this case is a good candidate for closure. In addition, if the soil around MW5 was excavated to a reasonable extent, the dissolved levels could improve dramatically, and this issue may be resolved with little effort.

7.0 SUBSURFACE METAL STRUCTURES

In late March 2011, each of the four pits (Pit 1-4) was further investigated and the metal structures were removed using an excavator. Pits 1 and 2 were apparently structural pilings that extended to about 12 feet below grade. Pit 3 was identified as the elevator piston and extended to about 15 feet below grade. Pit 4 was identified as a connection to the sewer system. An additional pit, Pit 5, was excavated to 12 feet below grade near the southeast corner of the site. This excavation identified the properly abandoned water supply well.

Confirmation soil samples were collected from each Pit to gauge the quality of soil after removal of the structures. Results indicated just one excavation had actionable levels of contamination. Both samples from Pit 4 had elevated levels of lead. The highest concentration was detected in sample Pit 4-2 with 310 mg/Kg lead. This area will require additional targeted excavation for removal of the lead-impacted soil.

8.0 REMEDIAL ACTION PLAN - SOIL EXCAVATION

The results of the subsurface investigation demonstrated that the western half of the property has many areas impacted with lead, but the eastern half apparently has fewer and more isolated areas of concern. After reviewing the results with ACEH, a plan was developed to remove the artificial fill from the western side of the property and from targeted areas on the east. This plan has been modified slightly to include more extensive excavation of east side of the property and remove as much impacted fill as practical. The excavated material will be screened in the field for segregation and targeted sampling, and the impacted material will be disposed appropriately. Imported soil will be used to fill the site prior to construction. An environmental excavation contractor will be selected to conduct this phase of the work.

Removal of the soil in the western half of the property will require excavation of approximately 4,200 cubic yards of material that includes brick, wood, concrete, and glass. The excavation will proceed to about 5 feet below grade. The eastern half of the property will be excavated to a maximum depth of about 4 feet below grade and will require removal of 2,550 cubic yards of artificial fill (**Figure 4**). During excavation the material will be stockpiled and separated to the extent possible into classifications of regulated, hazardous, and non-hazardous waste. Field screening will be used to provide a preliminary segregation of impacted and reusable fill. Periodic sampling of the spoils will be used to confirm and characterize the material for profiling. In addition, an X-Ray Fluorescence (XRF) field device may be used in the field to identify areas with high levels of lead in the subsurface soil, so that the soil can be segregated and laboratory tested for waste disposal. The final criteria required for the removal, waste classification, and ultimate disposal of the export materials will be determined and approved by the receiving facility and conducted in accordance with local, state and federal regulations. Final confirmatory samples will be evaluated using the residential SSLs developed by OEHHA as required by ACEH. These steps are further described in following sections of this report.

Planning and site preparation for this phase of the project will include the following tasks:

The Owner and Contractor will determine standard operating procedures (SOP) with chain of command protocols for implementation of the soil removal action including removal of hazardous waste. The written SOP will include Names and Positions of individuals involved with soil management and their specific roles.

Contractor will provide a site-specific storm water management plan, as required in the Project Manual and according to local requirements for construction projects. The storm water management plan will be submitted along with the Site Operations Plan.

Contractor will prepare a Storm Water Pollution Prevention Plan (SWPPP) and maintain conditions specified in that plan to control surface water runoff. Contractor shall supply, install, and maintain all erosion control items including silt fences, straw wattle, sand bags, drain inlet filters, etc. Contractor shall provide all necessary SWPPP reports and monitoring before, during, and after each rain event during the rough grading scope of work.

Contractor will provide a site-specific remediation contingency plan, including a Spill Control and Countermeasures Plan in accordance with 40 CFR 264, subtitle D.

Contractor will obtain a Grading Permit.

Contractor will prepare a Traffic Control Plan and maintain Traffic Control as appropriate and as required by City and/or County.

Contractor will prepare logistical plans for truck traffic into and out of the site, including but not limited to:

- Stabilize and widen existing access for construction traffic.
- Construct on-site roads as necessary.
- Identify underground and overhead utilities and obstacles.
- Construct temporary facilities for personnel, decontamination facilities, and parking.
- Construct a truck loading area according to requirements.

The excavation location and position will be delineated with stakes and then the excavation positions will be recorded on a site map as measured from GPS coordinates, permanent site features such as property boundaries or other permanent markers. A licensed surveyor should be assigned for this task.

Contractor will notify USA Dig Alert at least 48 hours prior to excavation, as required by law. The General Contractor will procure the services of subcontractors for site utility clearance in excavation areas, soil excavation, soil transportation, and soil disposal. Contractor must confirm that utilities located in the area of the proposed excavation have been properly decommissioned.

Contractor will identify the location and alignment of underground and overhead utilities and obstacles. The Contractor will review applicable as-built drawings to identify the location of potential subsurface utilities and/or obstructions in the subject area. The Contractor will arrange for decommissioning of utilities identified in the area of the proposed excavations.

The Owner will obtain an EPA identification number for profiling of excavated soil for off-site disposal.

The Contractor will schedule trucks to remove soil and associated bulk materials from the site and transport to disposal facility(s). Contractor will arrange delivery of the soil at the disposal facilities.

The Contractor will make appropriate regulatory notifications including Cal-OSHA and Air Quality notifications, if required.

The Contractor shall obtain a current Cal/OSHA Excavation permit, if required, and a copy of this permit and a copy of the letter notifying Cal/OSHA that the permit will be used at the job site are to be given to the Site Manager prior to excavating deeper than five (5) feet below existing grade.

The Contractor is responsible for preparation of a Health and Safety Plan and enforcing the Health and Safety Plan for site development activities.

The Contractor will remove trees, debris and any other obstructions in excavation areas prior to soil removal work.

The Contractor will clear a path to allow soil transport trucks to be loaded at each area of excavation. Stabilize and widen existing access for construction traffic.

The Contractor will construct temporary facilities for personnel, decontamination facilities, parking, and truck loading area as necessary for the project.

The Contractor will provide fencing around the excavation areas for Site security, which is of the utmost importance to protect the public, secure equipment and materials left on site, eliminate the chance of spreading contamination, and assure worker safety.

The Contractor will delineate and divide the work area into an exclusion zone, a contamination reduction zone, and a support zone. The exclusion zone will be maintained around the work area by placing signs, barricades, and/or yellow tape as necessary. The size and the shape of the exclusion zone will be determined by the site conditions; it will be large enough to include the potentially hazardous zones around the site.

The Contractor will place yellow caution barricade tape around the excavation areas any time the work area is left unattended and until the excavation is backfilled to its original ground surface level. Equipment and materials will be stored inside the barricaded area to secure them after hours. Flammable liquid will be stored in approved designated locations only under the direction of the Site Manager.

Excavation Plan

Prior to initiation of excavation, the temporary groundwater wells (MW1-MW5) will be properly abandoned under permit with the Alameda County Public Works Agency. The strategy for artificial fill removal will be to initiate excavation on the eastern side of the property to about 2-4 feet bgs. The general excavation will proceed gradually to the west, where the fill is deeper (extending to about 5 feet bgs), with available open or cleared areas used for soil stockpiling. Targeted areas including borings CB1-CB4, Pit 4, and MW5, will be excavated deeper as necessary to mitigate the contamination identified in each zone. Otherwise, the impacted areas identified in subsurface investigation will be removed by the shallow excavation plan. Independent confirmation sampling in the targeted areas will be conducted to verify the removal of contaminants. **Figure 4** shows the fill excavation plan with the targeted lead and cadmium impacted zones identified.

Impacted material will be removed from the site regularly to expedite the procedure, so frequent laboratory analysis will be required of the excavation spoils for verification and profiling. Soil screening will be conducted throughout the excavation program to segregate the excavated material between fill appropriate for re-use or disposal. The screening will be conducted with an X-Ray Fluorescence (XRF) field device, which allows preliminary but representative analysis of heavy metal content prior to laboratory analysis. The field screening will provide a preliminary basis for segregation, which will be confirmed by soil sampling and laboratory analysis. The final laboratory results will be used to direct the fate of the excavated soil for either re-use or disposal. The waste stockpiles will be managed on-site in accordance with applicable regulatory requirements including, daily inspection and maintenance of stockpile cover

including monitoring for VOCs with a PID and dust suppression. Reusable fill will be stockpiled for later use.

Prior to contaminated soils being disposed off site, a hazardous waste determination for those soils must be made. The hazardous waste determination for metals contamination in soil should be evaluated using the following criteria:

A. The TTLC criteria (Total Threshold Limit Concentration; State standard: Title 22 CCR, Section 66261.24)

B. For any material in which the metal concentrations are greater than the listed TTLC values, the materials will be considered a hazardous waste upon removal and must be disposed of accordingly.

C. Ten times the STLC criteria (Soluble Threshold Limit Concentration; State standard: Title 22 CCR, Section 66261.24). For any material where the TTLC results are greater than ten times the listed STLC values but less than the listed TTLC values, the sample should be re-analyzed by the Waste Extraction Test procedure. If the resulting STLC value exceeds Table II of 66261.24, the materials will be considered a hazardous waste upon removal and must be disposed of accordingly.

D. Twenty times the TCLP criteria (Toxic Characteristic Leachate Procedure; Federal Standard 40 CFR 261.24 and 22 CCR 66261.24). For any material where the metal concentrations are greater than twenty times the TCLP listed values but less than the TTLC listed values, the sample should be re-analyzed by the TCLP procedure. If the resulting TCLP value exceeds Table I of 66261.24, the materials will be considered a hazardous waste upon removal and must be disposed of accordingly.

Work for excavation and loading will be performed only within hours set forth by the local jurisdiction. This includes moving equipment to and from job site, repairs to equipment, and delivering of parts, supplies and fuel. The proposed working hours are from 7:00 am to 6:00 pm, hauling hours from 8:00 am to 4:00 pm, Monday through Saturday. The contractor will follow the city approved haul route. Ingress and egress shall be per approved haul route. Contractor may utilize double bottom dumps, end dumps, super 10 wheeler, and 10 wheeler trucks as necessary to complete this scope of work.

Confirmation Soil Sampling

During excavation of the targeted zones for deeper excavation, confirmation soil samples will be collected from the base, and from at least 2 sidewalls depending on the size of the final excavation. In non-targeted areas where general removal of the fill is being conducted, the base of the excavated zone will be sampled using a grid sampling pattern representing every 50 feet in both lateral directions. The residential SSLs developed by OEHHA will be utilized as remediation goals for heavy metals, with the small zones of hydrocarbon contamination compared to the ESL guidelines.

Confirmation soil samples will be collected by an on-site geologist using glass laboratory jars. The jars will be packed tightly with soil and sealed with threaded lids. The samples will be placed on ice and delivered to a DHS-certified laboratory for analysis of lead, mercury, and cadmium. Samples collected in areas targeted for hydrocarbon contamination will be collected in brass rings, sealed with Teflon tape and plastic end caps, and stored on ice, prior to delivery to the laboratory. The samples will be analyzed using the same methodology as the samples collected during the subsurface investigation.

Health and Safety

Contractor will develop a site-specific Health and Safety Plan (HASP) for work conducted at the site as required pursuant to the regulations in *29 Code of Federal Regulations (CFR) Part 1910.120 and California Code of Regulations (CCR), Title 8, Section 5192.* The HASP will be prepared for the work described in this RAP. The HASP will include material safety data sheets (MSDSs) or similar information for site-specific compounds (petroleum hydrocarbons, heavy metals) and details regarding physical and chemical hazards that could be encountered at the site. The HASP will also include a map showing directions between the site and the local hospital or emergency center.

Contractor staff will be provided a copy of the HASP. Contractor and subcontracted personnel involved with the proposed field work will review proper health and safety practices presented in the HASP prior to initiating field work and on a daily basis in the morning before field work begins.

The site development requires that approximately 4,400 cubic yards of soil be excavated and exported from the site. The soil has been profiled for general waste characteristics. The environmental manager will monitor the excavation as conducted by the Contractor and direct the excavation, characterization, loading for off-site disposal of excavated materials.

The Contractor's hazmat certified operator will excavate soil at the direction of the Owner's environmental manager.

All workers, visitors and all other people at this site must abide by the rules and procedures presented in the Site-Specific HASP.

The Contractor is responsible for the Health & Safety of their employees and their subcontractors. The Contractor and their subcontractors are responsible for preparation and enforcement of a Health & Safety Plan for all activities associated with their work at this site.

Prior to excavation, Contractor will verify the appropriate underground utility locating parties have completed the location and depths of underground utilities within the excavation limits and peripheral area. Excavation will not commence until all underground utilities have been identified and field located / staked. Due to the depth of the excavation, sloping and shoring requirements will be enacted per OSHA 29CFR1926.651. Temporary and permanent shoring is not planned for this site. No

person is allowed to enter an excavation at depth of 4-5 feet without proper sidewall slopes or shoring.

Excavated soil shall be loaded into appropriately licensed dump trucks for off-site disposal. Commonly utilized excavation methods and equipment shall be utilized for excavation of soil for removal. The equipment to be used for contaminated soil movement will be dedicated to contaminated soil movement until all identified contaminated soil has been dealt with appropriately.

Equipment needs for the other project operations will be performed by other equipment to minimize a potential spread of contamination. When the designated source areas have been remediated, all contaminated equipment will be decontaminated over visqueen and the contaminated debris and visqueen placed into the last truck heading for the appropriate disposal site. Clean material or geofabric will be placed on the ground surface at the source areas to provide an additional clean barrier to keep the tracks clean. This engineering control is to prevent spread of COC's and reduce equipment contamination. Best Management Practices for dust control measures will be followed for soil excavation and truck loading activities. Excavation and soil loading will be stopped when wind gusts exceed 25 miles per hour.

The contractor will use a water truck to lightly spray work areas as necessary to control fugitive dust and the Owner's environmental manager will monitor the work zone using a handheld photo ionization detector (PID) and stationary, strategically positioned (upwind and downwind) digital aerosol dust monitors that record the concentration of airborne dust at various locations around the excavation and soil loading areas.

SPECIAL NOTIFICATIONS: All construction activities located within 1,000 feet of sensitive receptors (defined as schools, playgrounds, daycares, and hospitals) shall notify each of these sites in writing at least 30 days before construction activities begin.

Demolition and/or excess construction materials will be separated on-site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site. Materials with recycled content will be used in project construction.

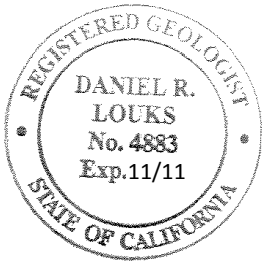
9.0 LIMITATIONS

The information and opinions rendered in this report are exclusively for use by the Client. Citadel Environmental Services, Inc. will not distribute this report without the Client's written consent, except as may be required by law or court order. The recommendations expressed in this report took into consideration the purpose and scope of this limited assignment. We accept responsibility for the competent performance of our duties in executing the assignment and preparing this report in accordance with the normal standards of our profession, but disclaim any responsibility for consequential damages resulting from inaccuracies in information provided by the Client, federal, state, county, or local regulatory agencies, etc.

10.0 SIGNATURE & PROFESSIONAL CERTIFICATION

I certify that this document has been prepared under my direction and/or supervision, and to the best of my knowledge and belief, the information submitted is accurate and complete.

CITADEL ENVIRONMENTAL SERVICES, INC.



Dan Louks
California Professional Geologist #4883

Table 1
Summary of Soil Sampling Results (mg/Kg)

Sample ID	VOC	SVOC	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
CB1-1	---	---	ND	ND	47
CB1-2	---	---	ND	ND	ND
CB1-3	---	---	ND	ND	44
CB1-4	---	---	ND	ND	52
CB2-1	---	---	ND	ND	ND
CB2-2	---	---	ND	ND	ND
CB2-3	---	---	ND	ND	ND
CB2-4	---	---	ND	ND	ND
CB3-1	---	---	ND	ND	ND
CB3-2	---	---	ND	ND	33
CB3-3	---	---	ND	ND	ND
CB3-4	---	---	ND	ND	37
CB4-1	---	---	ND	ND	ND
CB4-2	---	---	ND	ND	38
CB4-3	---	---	ND	ND	ND
CB4-4	---	---	ND	ND	ND
CB5-1	---	---	ND	ND	ND
CB5-2	---	---	ND	ND	ND
CB5-3	---	---	ND	ND	ND
CB5-4	---	---	ND	ND	ND
CB6-1	---	---	ND	ND	ND
CB6-2	---	---	ND	ND	51
CB6-3	---	---	ND	ND	ND
CB6-4	---	---	ND	ND	ND
CB7-1	---	---	ND	ND	ND
CB7-2	---	---	ND	ND	ND
CB7-3	---	---	ND	ND	ND
CB7-4	---	---	ND	ND	ND
CB8-1	---	---	ND	ND	ND
CB8-2	---	---	ND	ND	ND
CB8-3	---	---	ND	ND	ND
CB8-4	---	---	ND	ND	ND
CB8-6	---	---	ND	ND	ND
ESL	***---***	***---***	***100***	***100***	***370***

Table 1 - continued
Summary of Soil Sampling Results (mg/Kg)

Sample ID	VOC	SVOC	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
CB9-1	---	---	ND	ND	ND
CB9-2	---	---	ND	ND	ND
CB9-3	---	---	ND	ND	ND
CB9-4	---	---	ND	82	190
CB9-6	---	---	ND	37	96
CB10-1	---	---	ND	17	58
CB10-2	---	---	ND	ND	ND
CB10-3	ND	ND	ND	**200**	**470**
CB10-4	---	---	ND	12	54
CB10-6	---	---	ND	ND	ND
CB11-1	---	---	ND	ND	57
CB11-2	---	---	ND	62	140
CB11-3	---	---	ND	ND	69
CB11-4	---	---	ND	ND	ND
CB11-6	---	---	ND	ND	ND
CB12-1	---	---	ND	ND	58
CB12-2	---	---	ND	48	290
CB12-3	---	---	ND	96	**460**
CB12-4	ND	ND	ND	**160**	**740**
CB12-6	---	---	ND	ND	88
CB13-1	---	---	ND	ND	68
CB13-2	---	---	ND	ND	ND
CB13-3	---	---	ND	ND	ND
CB13-4	---	---	ND	ND	ND
CB14-1	---	---	ND	17	ND
CB14-2	---	---	ND	58	ND
CB14-3	---	---	ND	ND	ND
CB14-4	---	---	ND	ND	ND
CB15-1	---	---	ND	ND	ND
CB15-2	---	---	ND	ND	66
CB15-3	---	---	ND	ND	87
CB15-4	---	---	ND	ND	ND
ESL	***---***	***---***	***100***	***100***	***370***

Table 1 - continued
Summary of Soil Sampling Results (mg/Kg)

Sample ID	VOC	SVOC	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
MW1-6	---	---	ND	ND	ND
MW2-6	---	---	ND	ND	ND
MW3-6	---	---	ND	ND	130
MW4-6	---	---	ND	ND	ND
MW5-6	---	---	ND	ND	ND
Pit 1-6	---	---	ND	ND	ND
Pit 2-6	ND	ND	ND	**140**	**440**
Pit 3-6	---	---	ND	ND	73
Pit 4-6	---	---	ND	ND	ND
ESL	***---***	***---***	***100***	***100***	***370***

Notes: VOC - volatile organic compounds analyzed by EPA Method 8260B. SVOC -semi volatile organic compounds analyzed by EPA Method 8270C. Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B1 - Residential Use. .

Table 1A: Summary of Heavy Metal Results (mg/Kg)

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
CB1-1	150	1.2	42	13	51	28	0.081	49	43	78
CB1-2	180	1.2	53	18	61	33	0.095	58	68	100
CB1-3	330	1.5	68	20	80	**94**	0.19	69	66	150
CB1-4	310	1.3	50	64	120	47	0.083	60	47	120
CB2-1	120	1.2	50	15	48	**740**	0.75	97	40	54
CB2-2	190	1.4	78	23	62	19	0.091	79	60	84
CB2-3	120	ND	40	11	48	ND	ND	50	37	57
CB2-4	180	1.3	41	9.8	56	**110**	0.074	50	74	120
CB3-1	320	1.4	52	16	76	49	0.052	61	62	140
CB3-2	340	**3.3**	42	15	58	39	0.061	96	47	87
CB3-3	160	ND	43	10	45	41	0.063	45	44	66
CB3-4	160	ND	80	11	44	8.7	0.059	76	75	65
CB4-1	170	**1.9**	41	14	55	11	0.077	50	44	70
CB4-2	230	ND	62	17	58	56	0.11	130	100	75
CB4-3	140	ND	48	12	52	12	0.053	45	50	67
CB4-4	160	ND	46	11	53	40	0.064	46	56	84
CB5-1	260	ND	22	15	64	23	0.066	35	60	100
CB5-2	180	1.5	38	12	54	3.6	ND	46	42	57
CB5-3	120	ND	50	10	45	ND	ND	40	44	30
CB5-4	120	ND	37	9.7	45	ND	ND	37	43	44
CB6-1	300	1.5	30	20	77	56	0.078	44	74	120
CB6-2	170	1.5	41	15	65	13	0.058	63	42	75
CB6-3	160	ND	43	10	44	ND	ND	36	47	38
CB6-4	140	ND	52	10	47	ND	ND	48	47	32
CB7-1	140	1.4	41	16	65	ND	0.064	69	33	59
CB7-2	180	1.6	37	13	60	2.4	0.089	54	39	60
CB7-3	89	ND	47	10	41	ND	ND	36	47	20
CB7-4	190	ND	54	16	62	ND	ND	62	50	59
CB8-1	170	**1.7**	54	16	66	35	0.12	63	53	91
CB8-2	550	1.4	20	8.4	87	**98**	0.36	32	44	82
CB8-3	460	ND	25	11	81	**830**	0.87	32	41	380
CB8-4	810	ND	16	7.4	96	**170**	0.34	20	45	110
CB8-6	400	**1.7**	43	7.6	120	**530**	0.62	33	51	150
CB9-1	180	1.6	41	15	70	46	0.093	55	45	98
CB9-2	290	1.4	66	18	120	**180**	0.29	110	120	160
CB9-3	320	1.5	51	20	300	**590**	1.1	180	240	270
CB9-4	1,100	1.4	20	15	96	**160**	0.49	32	110	68
CB9-6	430	ND	42	10	63	**2,400**	0.80	31	72	98
Res. SSL	*5,200*	*1.7*	*100,000*	*660*	*3,000*	*80*	*18*	*1,600*	*530*	*23,000*
Ind. SSL	*63,000*	*7.5*	*100,000*	*3,200*	*38,000*	*320*	*180*	*16,000*	*6,700*	*100,000*

Table 1A – continued: Summary of Heavy Metal Results (mg/Kg)

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
CB10-1	360	ND	35	17	73	25	0.064	48	84	100
CB10-2	290	ND	31	16	90	**110**	0.084	43	69	160
CB10-3	860	**1.8**	27	15	98	**95**	0.24	40	110	83
CB10-4	350	ND	50	18	55	20	0.21	44	77	26
CB10-6	120	ND	36	8.0	42	12	0.074	25	39	38
CB11-1	320	**2.0**	47	16	140	**300**	1.3	57	68	300
CB11-2	500	**2.6**	51	13	360	**710**	2.8	59	74	530
CB11-3	180	ND	46	8.8	51	**120**	0.75	31	48	82
CB11-4	100	ND	42	8.0	39	**110**	0.37	29	42	27
CB11-6	200	ND	46	8.4	81	**150**	0.52	33	47	76
CB12-1	280	1.5	28	17	75	54	0.074	39	70	140
CB12-2	200	ND	49	10	120	**120**	0.44	41	50	110
CB12-3	170	ND	42	11	81	**96**	0.17	54	59	99
CB12-4	520	ND	33	12	110	**180**	0.29	54	67	210
CB12-6	890	1.4	81	12	79	25	0.097	17	98	31
CB13-1	220	ND	57	14	77	34	0.083	55	51	99
CB13-2	190	ND	41	13	67	42	0.066	51	48	96
CB13-3	220	ND	31	15	68	40	0.079	42	57	99
CB13-4	110	ND	48	7.3	43	53	0.057	28	43	120
CB14-1	200	**1.7**	49	11	69	**340**	0.39	40	50	140
CB14-2	280	ND	49	12	75	**190**	0.16	40	53	120
CB14-3	300	ND	24	9.2	83	**270**	0.23	26	72	86
CB14-4	100	ND	34	7.1	44	**84**	0.073	25	39	37
CB15-1	220	ND	40	12	86	**830**	1.7	47	55	230
CB15-2	170	ND	49	14	87	**140**	0.12	49	58	170
CB15-3	130	ND	44	11	140	28	0.089	38	81	62
CB15-4	600	ND	39	9.7	60	61	0.082	35	59	100
MW1-6	84	ND	55	11	40	ND	0.053	51	52	34
MW2-6	90	ND	39	8.5	41	ND	ND	30	39	24
MW3-6	120	ND	36	7.0	41	53	0.066	25	36	41
MW4-6	140	ND	22	7.7	52	**260**	0.25	24	34	78
MW5-6	25	ND	ND	ND	13	ND	ND	ND	ND	12
Pit 1-6	77	ND	40	6.6	37	ND	0.069	24	39	21
Pit 2-6	710	ND	18	18	100	**130**	0.13	34	110	44
Pit 3-6	280	ND	36	9.9	130	**300**	0.22	37	47	160
Pit 4-6	190	ND	54	7.3	53	**650**	0.38	28	44	130
Res. SSL	*5,200*	*1.7*	*100,000*	*660*	*3,000*	*80*	*18*	*1,600*	*530*	*23,000*
Ind. SSL	*63,000*	*7.5*	*100,000*	*3,200*	*38,000*	*320*	*180*	*16,000*	*6,700*	*100,000*

Table 1A – continued: Summary of Heavy Metal Results (mg/Kg)

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
Post Metal Structure Removal										
Pit 1-1	110	ND	40	3.2	18	26	0.056	22	35	30
Pit 1-2	95	ND	ND	ND	6.6	ND	ND	7.4	13	3.0
Pit 2-1	80	ND	25	1.7	26	72	0.066	30	34	51
Pit 2-2	22	ND	3.3	ND	7.3	2.6	ND	19	33	4.4
Pit 3-1	65	ND	22	ND	21	22	0.059	19	35	15
Pit 3-2	25	ND	9.8	ND	13	8.9	ND	17	27	12
Pit 4-1	360	ND	16	5.3	54	**140**	0.098	18	67	73
Pit 4-2	170	ND	37	3.7	31	**310**	0.082	24	38	86
Pit 5-1	91	ND	77	4.7	17	9.3	0.052	56	41	39
Res. SSL	*5,200*	*1.7*	*100,000*	*660*	*3,000*	*80*	*18*	*1,600*	*530*	*23,000*
Ind. SSL	*63,000*	*7.5*	*100,000*	*3,200*	*38,000*	*320*	*180*	*16,000*	*6,700*	*100,000*

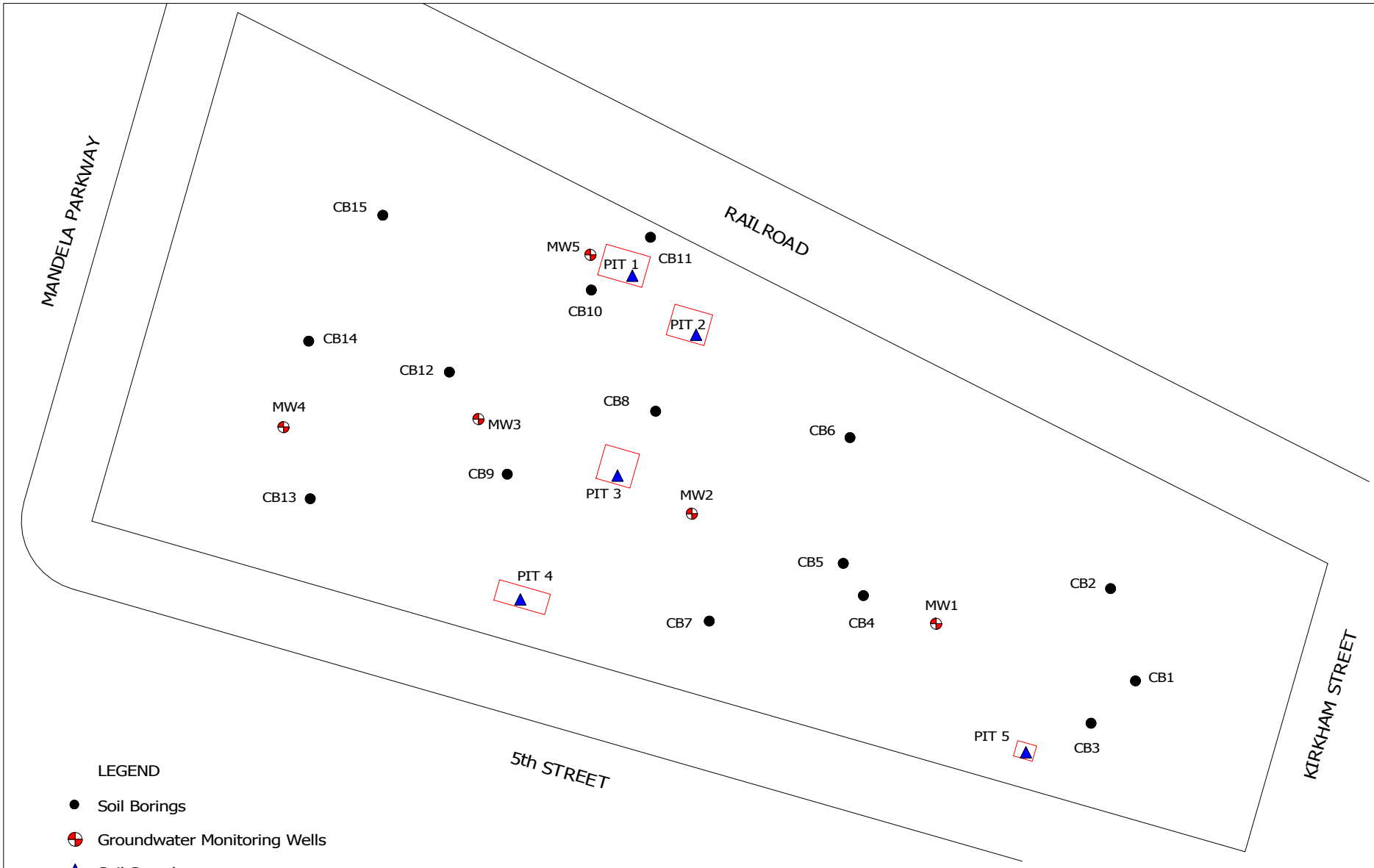
Notes: Soil Screening Levels (SSLs) developed by OEHHA as health risk based guideline values based on total exposure to contaminated soil including inhalation, ingestion and dermal absorption in both residential and Industrial settings. Please refer to lab report for complete results.

TABLE 2
Summary of Groundwater Sampling Results (µg/L)

Sample ID	VOC	SVOC	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
Sampled March 5, 2011					
MW1	ND	---	ND	ND	ND
MW2	ND	---	ND	ND	ND
MW3	ND	---	ND	ND	ND
MW4	ND	ND	ND	ND	ND
MW5	ND	ND	ND	ND	2,400
ESL	***--***	***--***	***210***	***210***	***210***

Notes: Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values when groundwater is not a potential drinking water source (Table F-1b).

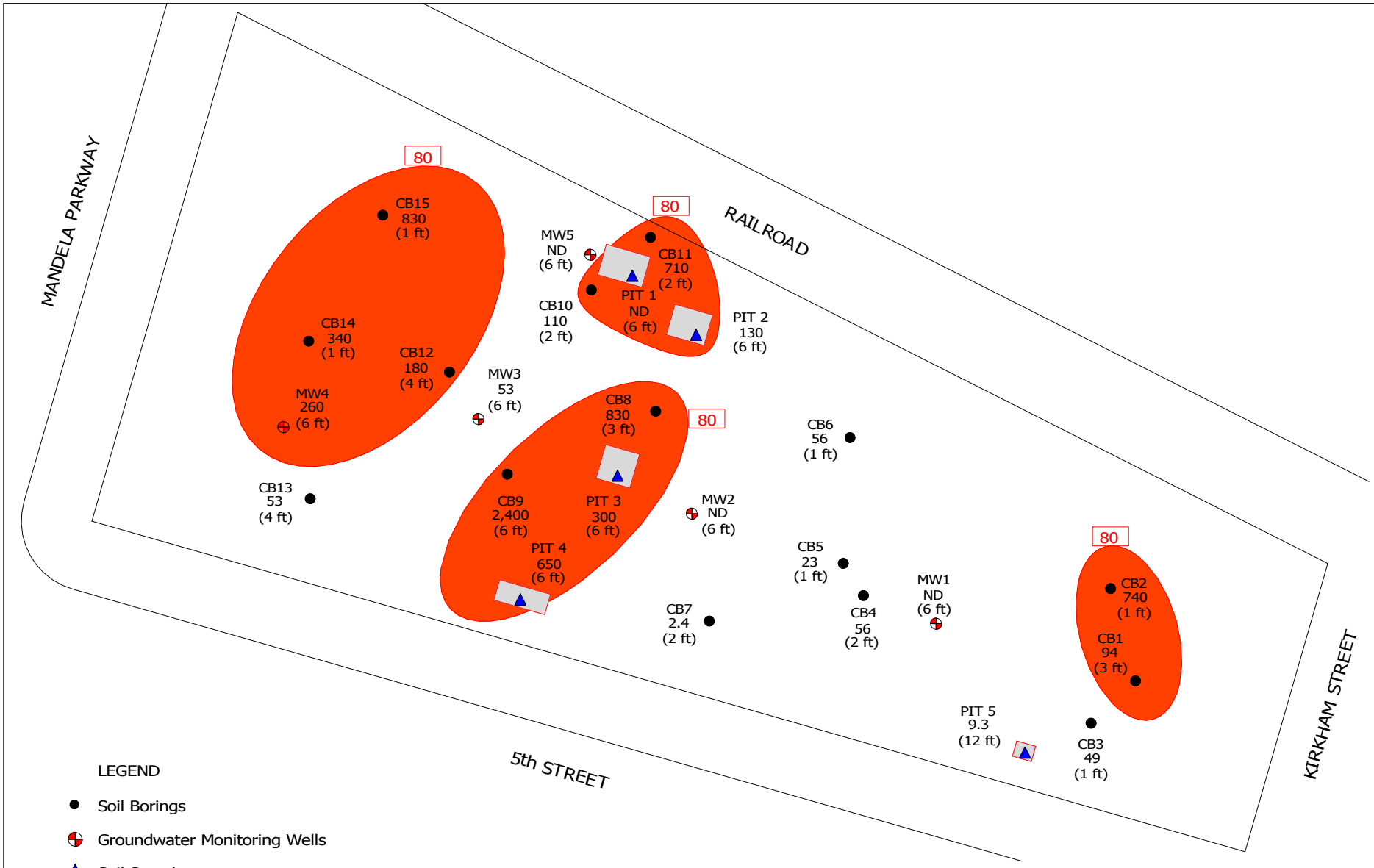
FIGURES



SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

CITADEL
ENVIRONMENTAL SERVICES, INC.

FIGURE 1
GENERAL SITE PLAN
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California



SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

CITADEL
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FIGURE 2A
DISTRIBUTION OF LEAD IN SOIL
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

Maximum Lead Concentrations Shown in mg/Kg (Depth of Sample).

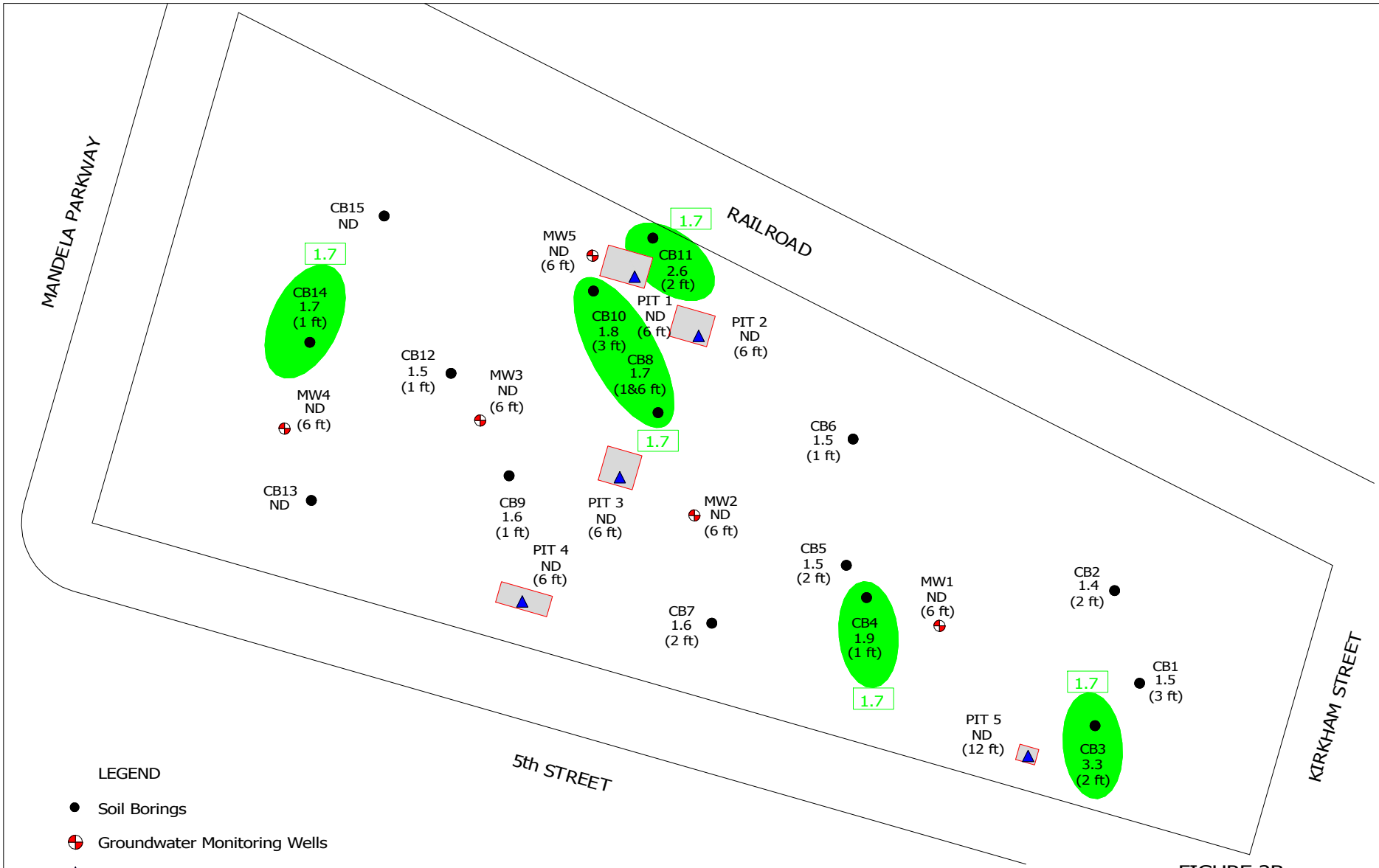

FIGURE 2B
DISTRIBUTION OF CADMIUM IN SOIL
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

Maximum Cadmium Concentrations Shown in mg/Kg (Depth of Sample).

SCALE	APPROXIMATE SCALE IN FEET 0 40 80	NORTH
DRAWN BY	J. NICOLICH	3/7/11
CHECKED BY	D. LOUKS	3/9/11
REVISED BY		

CITADEL
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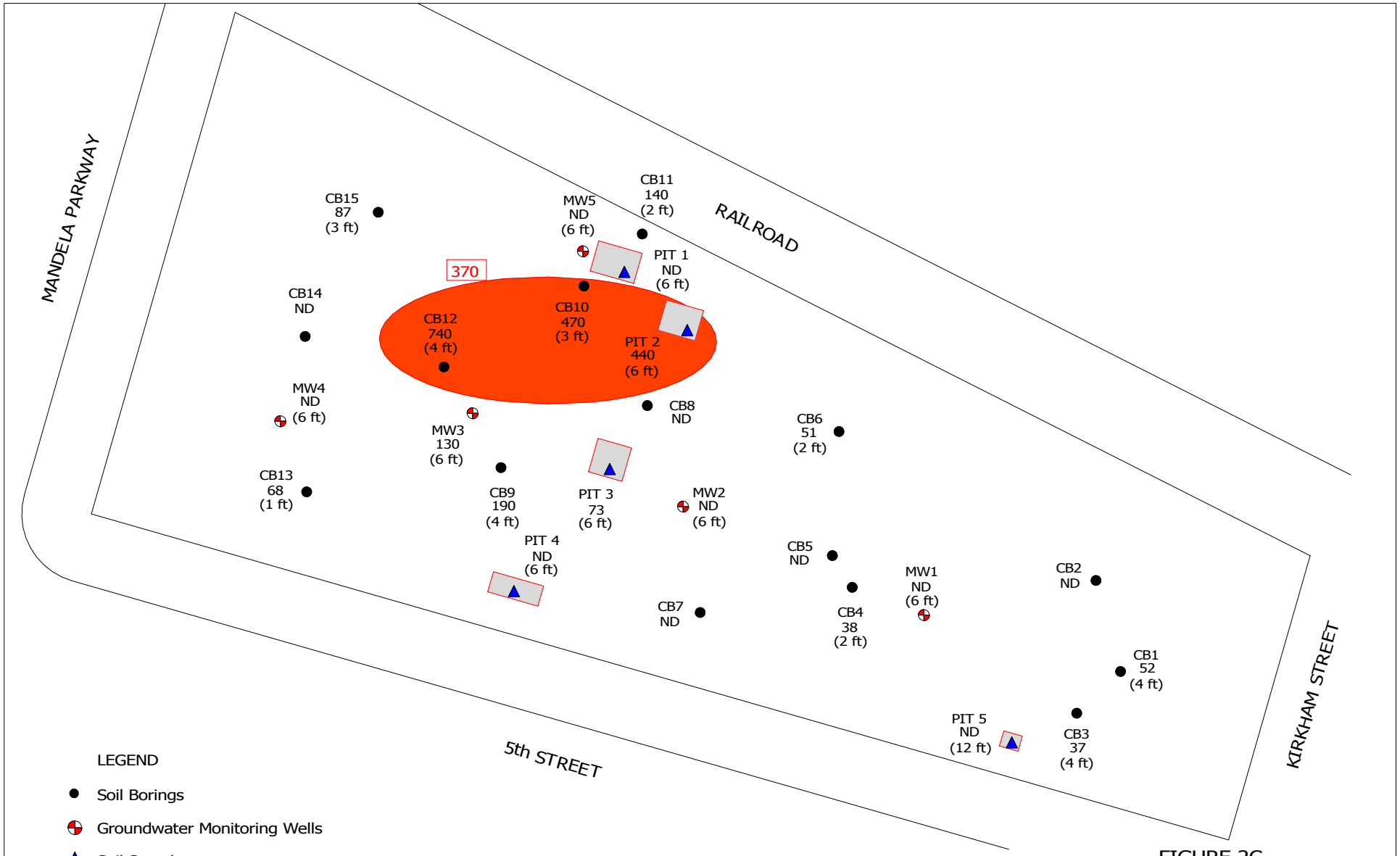

FIGURE 2C
DISTRIBUTION OF OIL-HC IN SOIL
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

Maximum Oil-Range Hydrocarbon Concentrations Shown in mg/Kg (Depth of Sample).

SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

CITADEL
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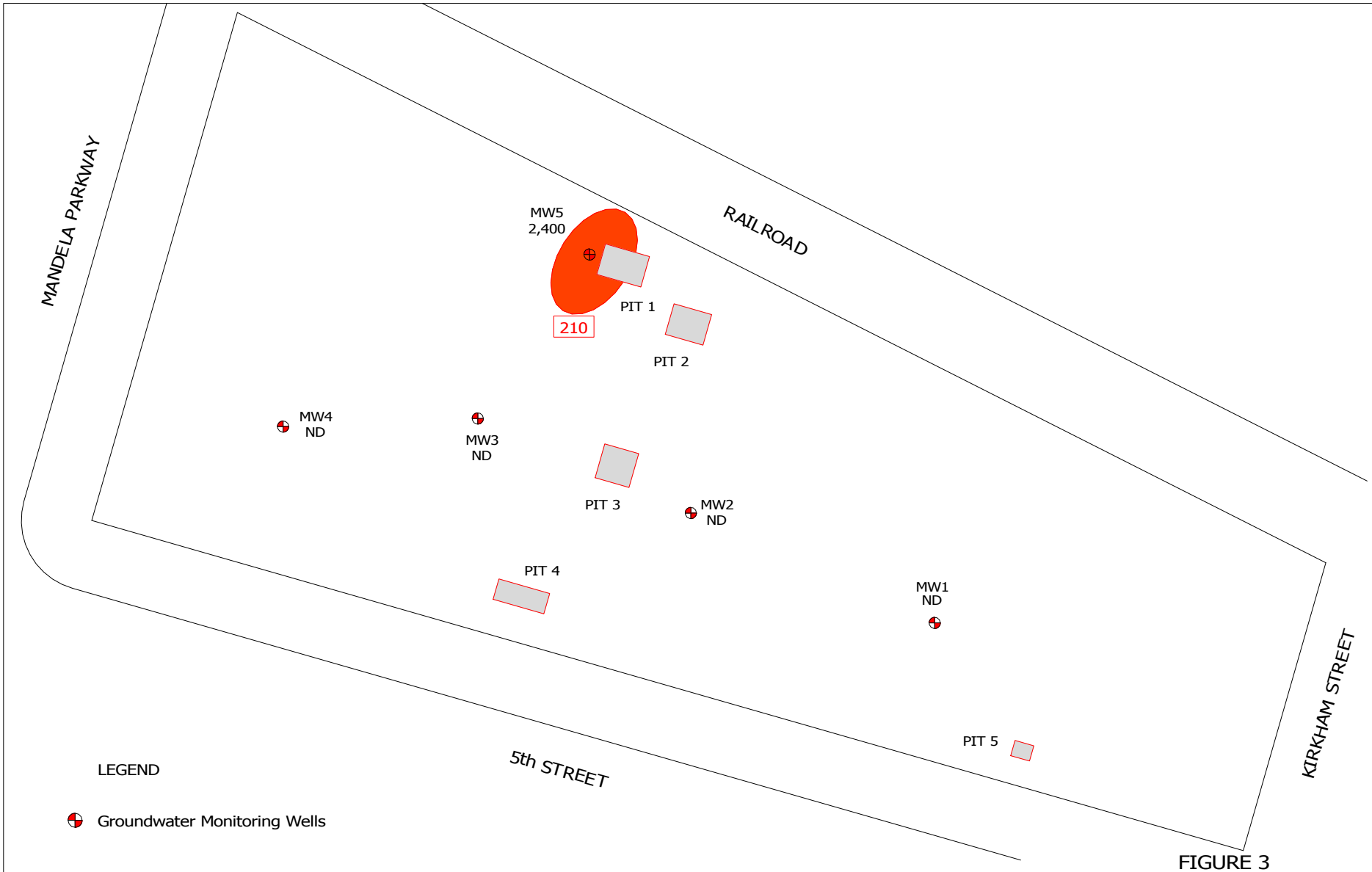
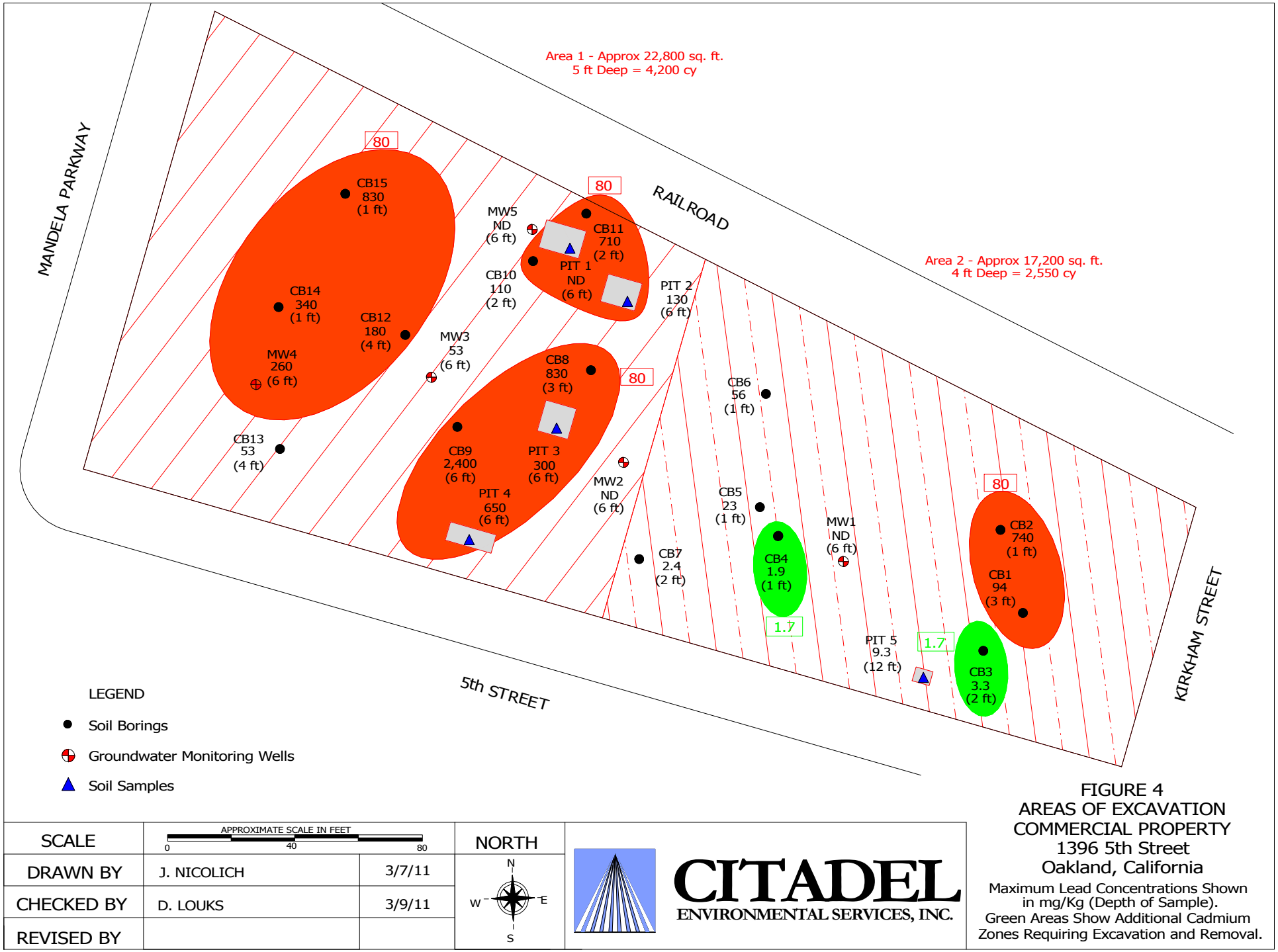


SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

CITADEL
ENVIRONMENTAL SERVICES, INC.

FIGURE 3
DISTRIBUTION OF OIL-HC
IN GROUNDWATER
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

Dissolved Oil-Range Hydrocarbon Concentrations Shown in ug/L.



SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

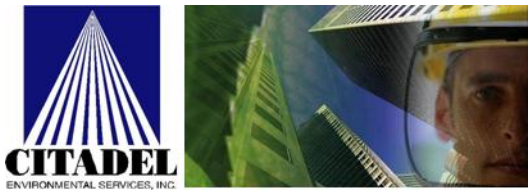
CITADEL
ENVIRONMENTAL SERVICES, INC.

FIGURE 4
AREAS OF EXCAVATION
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

Maximum Lead Concentrations Shown in mg/Kg (Depth of Sample).
Green Areas Show Additional Cadmium Zones Requiring Excavation and Removal.

APPENDIX A

Water Supply Well Survey Letter



July 7, 2011

Mr. Harvey Fernebok
Oakland Housing Investors, LP
2010 Main Street, Suite 1250
Irvine, California 92614

Re: **CITADEL Project No. 0222.1001.0**
Water Supply Well Survey
Former Red Star Yeast Company
1396 5th Street
Oakland, California 94607
SLIC Case Number: RO0002896
Global ID: T06019794669

Dear Mr. Fernebok:

In accordance with your request and authorization, and at the request of the Alameda County Environmental Health Department (ACED), Citadel Environmental Services, Inc. (Citadel) has prepared the attached water well survey information.

Citadel obtained records from the State of California Department of Water Resources and the Alameda County Public Works agency to compile the well survey information. Attached is a table of all known wells within a 2,000-foot radius of the site property, with all available data collected from the above agencies and a street map depicting the reported well locations. Overall, the wells identified in the general site vicinity primarily include monitoring wells or other environmental investigation-related wells. Available well completion reports and boring logs are included for the identified down-gradient wells, located to the southwest of the site. The down-gradient wells, which represent potential receptors, were reported to consist of monitoring or investigation-related wells in the vicinity of a facility currently under United States Environmental Protection Agency oversight, and are not identified as a source of drinking water.

The agency searches also identified industrial water wells formerly located on-site and/or adjacent to the site. The well records are not all clearly dated and do not provide all specifics, however, it is known from previous documents reported to, and by, the ACEH that one (1) of the on-site wells, a 400-foot water well installed in 1969, was permanently closed under permit with Alameda County. The additional two (2) well records are for wells drilled to a total depth of 350 feet and owned by Red Star Yeast Company. The drill date for one of the wells is identified as January 1958, and the drill date of the second well is not provided. The exact location of the wells is not identified and

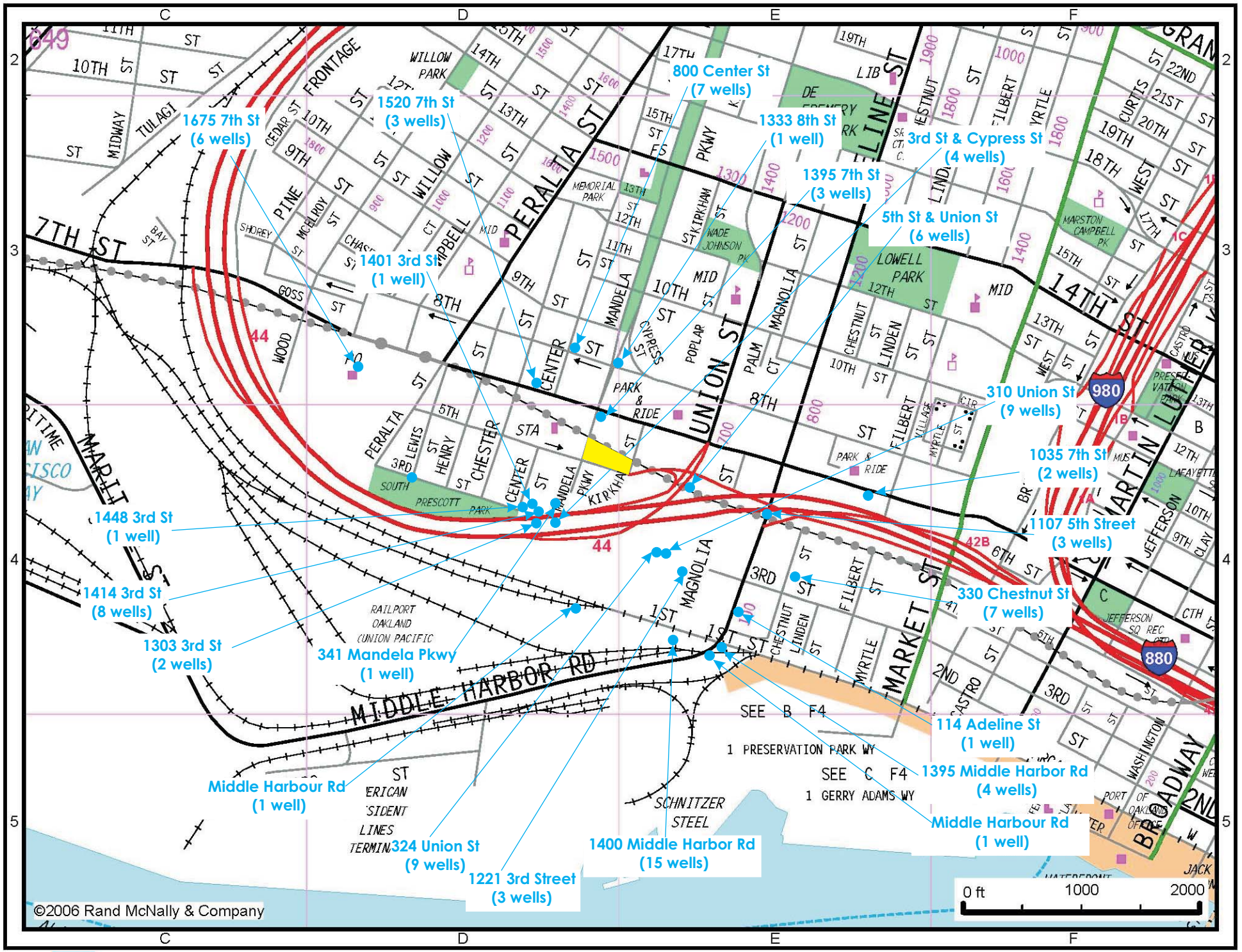
subsurface investigations and a geophysical survey of the property have not identified the presence of these wells.

Should you have any questions after reviewing the attached documents, please do not hesitate to contact the undersigned at your convenience at (714) 547-4301.

Sincerely,
CITADEL ENVIRONMENTAL SERVICES, INC.

Allan Coffee
Director, Environmental Services

Enclosures



CITADEL ENVIRONMENTAL SERVICES, INC.

= 1395 5th Street property

Water Supply Well Survey
1395 5th Street
Oakland, California

Permit	Tr	Section	Address	City	Owner	Update	Xcoord	Ycoord	Tsrqq	Drilldate	Elevation	Totaldepth	Waterdept	Diameter	Use
	1S/4W	33A15	1675 7th St	Oakland	USPS -GMF/VMF	8/19/1997	122299301	37806652	1S/4W 33A	Sep-93	10	21	10	4	MON
	1S/4W	33A16	1675 7th St	Oakland	USPS -GMF/VMF	8/19/1997	122299301	37806652	1S/4W 33A	Sep-93	9	21	10	4	MON
	1S/4W	33A17	1675 7th St	Oakland	USPS -GMF/VMF	8/19/1997	122299301	37806652	1S/4W 33A	Sep-93	10	21	10	4	MON
	1S/4W	33A18	1675 7th St	Oakland	USPS -GMF/VMF	8/19/1997	122299301	37806652	1S/4W 33A	Sep-93	10	21	9	4	MON
	1S/4W	33A19	1675 7th St	Oakland	USPS -GMF/VMF	8/19/1997	122299301	37806652	1S/4W 33A	Sep-93	9	21	10	4	MON
W02-0848	1S/4W	33A	1675 7th St	Oakland	USPS -GMF/VMF	10/6/2010			1S/4W 33A	Aug-02		20		2	MON
95401	1S/4W	34C 4	1333 8th St	Oakland	Armored Transport Incorpo	2/4/1998	122291410	37806310	1S/4W 34C	Jul-95	0	17	12	2	MON
	1S/4W	34C 2	1395 7TH ST	Oakland	CHEVRON USA	6/18/1985	122290625	37805981	1S/4W 34C	Apr-85	0	25	9	8	MON
	1S/4W	34C 3	1395 7TH ST	Oakland	CHEVRON USA	6/18/1985	122290625	37805981	1S/4W 34C	Apr-85	0	25	9	8	MON
	1S/4W	34C 1	1395 7TH ST	Oakland	CHEVRON USA	6/18/1985	122290625	37805981	1S/4W 34C	Apr-85	0	25	8	8	MON
96621	1S/4W	34D 8	800 Center St	Oakland	Chevron	7/30/1998	122293544	37806793	1S/4W 34D	Dec-96	0	20	7	2	MON
96621	1S/4W	34D 9	800 Center St	Oakland	Chevron	7/30/1998	122293544	37806793	1S/4W 34D	Dec-96	0	20	7	2	MON
96621	1S/4W	34D10	800 Center St	Oakland	Chevron	7/30/1998	122293544	37806793	1S/4W 34D	Dec-96	0	20	10	2	MON
95664	1S/4W	34D 4	800 Center St	Oakland	Chevron USA	3/12/1998	122293544	37806793	1S/4W 34D	Oct-95	16	15	10	2	MON
95664	1S/4W	34D 5	800 Center St	Oakland	Chevron USA	3/12/1998	122293544	37806793	1S/4W 34D	Oct-95	16	15	10	2	MON
95664	1S/4W	34D 6	800 Center St	Oakland	Chevron USA	3/12/1998	122293544	37806793	1S/4W 34D	Oct-95	16	15	10	2	MON
95664	1S/4W	34D 7	800 Center St	Oakland	Chevron USA	3/12/1998	122293544	37806793	1S/4W 34D	Oct-95	15	15	10	2	MON
	1S/4W	34D 1	1520 7th St.	Oakland	E & G Construction MW-1	7/15/1993	122295721	37806086	1S/4W 34D	Jan-93	0	29	9	4	MON
	1S/4W	34D 2	1520 7th St.	Oakland	E & G Construction MW-2	7/15/1993	122295721	37806086	1S/4W 34D	Jan-93	0	19	9	4	MON
	1S/4W	34D 3	1520 7th St.	Oakland	E & G Construction MW-3	7/15/1993	122295721	37806086	1S/4W 34D	Jan-93	0	19	9	4	MON
97068	1S/4W	34E 8	1414 3rd St	Oakland	DC Metals	1/8/1998	122294154	37802894	1S/4W 34E	Jan-97	0	20	0	2	MON
97068	1S/4W	34E 9	1414 3rd St	Oakland	DC Metals	1/8/1998	122294154	37802894	1S/4W 34E	Jan-97	0	20	5	2	MON
97068	1S/4W	3.40E+11	1414 3rd St	Oakland	DC Metals	1/8/1998	122294154	37802894	1S/4W 34E	Jan-97	0	20	0	2	MON
97068	1S/4W	3.40E+12	1414 3rd St	Oakland	DC Metals	1/8/1998	122294154	37802894	1S/4W 34E	Jan-97	0	20	0	2	MON
97068	1S/4W	3.40E+13	1414 3rd St	Oakland	DC Metals	1/8/1998	122294154	37802894	1S/4W 34E	Jan-97	0	20	0	2	MON
	1S/4W	33E	1448 3rd St	Oakland	US EPA RMW-07-35	9/8/2005			1S/4W 34E	Sep-05	10	35	5	2	MON
	1S/4W	33E	341 Mandela Pkwy	Oakland	US EPA RMW-11-35	9/21/2005			1S/4W 34E	Sep-05	8	35	5	2	MON
	1S/4W	33E	1414 3rd St	Oakland	US EPA RMW-12-32	9/21/2005			1S/4W 34E	Sep-05	9	32	5	2	MON
	1S/4W	33E	1414 3rd St	Oakland	US EPA RMW-12-51	9/15/2005			1S/4W 34E	Sep-05	9	53	5	2	MON
	1S/4W	33E	1303 3rd St	Oakland	US EPA RMW-13-35	9/13/2005			1S/4W 34E	Sep-05	10	35	12	2	MON
	1S/4W	33E	1303 3rd St	Oakland	US EPA RMW-14-50	9/9/2005			1S/4W 34E	Sep-05	10	50	5	2	MON
	1S/4W	34E 5	1401 Third St.	Oakland	S. Pacific Transp. Co.	7/27/1993	122293920	37802671	1S/4W 34E	Sep-92	0	75	51	0	DES
	1S/4W	34E 1	Cypress & 3rd Streets	Oakland	Southern Pacific Trans Co	3/12/1991	122293700	37802700	1S/4W 34E	Oct-90	0	29	10	4	TES
	1S/4W	34E 2	Cypress & 3rd Streets	Oakland	Southern Pacific Trans Co	3/12/1991	122293700	37802700	1S/4W 34E	Oct-90	0	22	4	4	TES
	1S/4W	34E 3	Cypress & 3rd Streets	Oakland	Southern Pacific Trans Co	3/12/1991	122293700	37802700	1S/4W 34E	Nov-90	0	22	12	4	TES
	1S/4W	34E 4	Cypress & 3rd Streets	Oakland	Southern Pacific Trans Co	3/12/1991	122293700	37802700	1S/4W 34E	Oct-90	0	22	7	4	TES
97283	1S/4W	34E 7	1414 3rd St	Oakland	US Environmental Protecti	9/19/1997	122294153	37802902	1S/4W 34E	May-97	0	20	0	2	MON
	1S/4W	34F13	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	6	5	2	MON
	1S/4W	34F14	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	6	4	2	MON
	1S/4W	34F15	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	8	4	2	MON
	1S/4W	34F16	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	8	4	2	MON
	1S/4W	34F17	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	8	4	2	MON
	1S/4W	34F18	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	8	4	2	MON
	1S/4W	34F19	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	18	13	2	MON
	1S/4W	34F20	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	15	13	2	MON
	1S/4W	34F21	310 Union St	Oakland	Burke Company-McShane & F	9/17/1997	122290315	37802345	1S/4W 34F	Dec-93	0	15	12	2	MON
	1S/4W	34F	Union St. && 5th St.	Oakland	CALTRANS CDF	6/24/1993	122289465	37803237	1S/4W 34F	Jun-92	0	8	0	0	BOR
	1S/4W	34F 6	Union St. && 5th St.	Oakland	CALTRANS CDF/W-2	6/24/1993	122289465	37803237	1S/4W 34F	Jun-92	0	20	6	2	MON
	1S/4W	34F 7	Union St. && 5th St.	Oakland	CALTRANS CDF/W-3	6/24/1993	122289465	37803237	1S/4W 34F	Jun-92	0	20	8	0	MON
	1S/4W	34F	5th St. && Union St.	Oakland	CALTRANS CTF	6/24/1993	122290671	37803664	1S/4W 34F	Jun-92	0	9	4	0	BOR
	1S/4W	34F	5th St. && Kirkham St.	Oakland	CALTRANS JA	6/24/1993	122290960	37804232	1S/4W 34F	Jun-92	0	4	0	0	GEO
	1S/4W	34F 5	Union St. & 5th St.	Oakland	CALTRANS CDF/W-1	8/3/1993	122289490	37803238	1S/4W 34F	Jul-92	0	19	6	2	MON
	1S/4W	34F	5th St. && Union St.	Oakland	CALTRANS/ WPR	6/24/1993	122290442	37803500	1S/4W 34F	Jun-92	0	8	4	0	BOR

Water Supply Well Survey
1395 5th Street
Oakland, California

Permit	Tr	Section	Address	City	Owner	Update	Xcoord	Ycoord	Tsrqq	Drilldate	Elevation	Totaldepth	Waterdept	Diameter	Use
	1S/4W	34F 1	533 KIRKHAM	Oakland	GOEBEL BREWING	12/13/1984	122290625	37802676	1S/4W 34F	/33	0	270	89	0	ABN
	1S/4W	34F 4	1384 5TH ST	Oakland	RED STAR YEAST	12/12/1984	122290625	37802676	1S/4W 34F	Aug-69	10	400	0	12	IND+
	1S/4W	34F 2	1384 5 ST	Oakland	RED STAR YEAST CO.	12/12/1984	122290625	37802676	1S/4W 34F	Nov-46	10	350	43	12	IND
	1S/4W	34F 8	5th St && Union St	Oakland	Union Pacific Railroad	7/30/1997	122290457	37803493	1S/4W 34F	Mar-95	0	13	2	2	MON
	1S/4W	34F 9	5th St && Union St	Oakland	Union Pacific Railroad	7/30/1997	122290457	37803493	1S/4W 34F	Mar-95	0	13	2	2	MON
	1S/4W	34F10	5th St && Union St	Oakland	Union Pacific Railroad	7/30/1997	122290457	37803493	1S/4W 34F	Mar-95	0	13	2	2	MON
	1S/4W	34F11	5th St && Union St	Oakland	Union Pacific Railroad	7/30/1997	122290457	37803493	1S/4W 34F	Mar-95	0	12	2	2	MON
	1S/4W	34F12	5th St && Union St	Oakland	Union Pacific Railroad	7/30/1997	122290457	37803493	1S/4W 34F	Mar-95	0	12	3	2	MON
	1S/4W	34F22	324 Union St	Oakland	Warehouse Investments	9/17/1997	122290295	37802420	1S/4W 34F	Feb-95	0	17	10	2	PIE
	1S/4W	34F23	324 Union St	Oakland	Warehouse Investments	9/17/1997	122290295	37802420	1S/4W 34F	Feb-95	0	20	11	2	MON
	1S/4W	34F24	324 Union St	Oakland	Warehouse Investments	9/17/1997	122290295	37802420	1S/4W 34F	Feb-95	0	20	8	2	MON
	1S/4W	34F 3	MIDDLE HARBOR RD	Oakland	WPRR	12/12/1984	122311450	37807600	1S/4W 34F	?	0	0	82	0	IND
95331	1S/4W	34F25	1221 3rd St	Oakland		7/21/1998	122289795	37801883	1S/4W 34F	June-95	0	20	8	0	MON
95331	1S/4W	34F26	1221 3rd St	Oakland		7/21/1998	122289795	37801883	1S/4W 34F	June-95	0	18	8	0	MON
95331	1S/4W	34F27	1221 3rd St	Oakland		7/21/1998	122289795	37801883	1S/4W 34F	June-95	0	18	6	0	MON
	1S/4W	34G12	330 Chestnut St	Oakland	ARAMARK Uniform Services,	9/11/1997	122287042	37801711	1S/4W 34G	May-95	0	17	13	2	MON
	1S/4W	34G13	330 Chestnut St	Oakland	ARAMARK Uniform Services,	9/11/1997	122287042	37801711	1S/4W 34G	May-95	0	15	10	2	MON
	1S/4W	34G 4	330 CHESNUT ST	Oakland	ARATEX SERVICES	1/24/1990	122286180	37802676	1S/4W 34G	Jun-89	10	25	8	2	MON
	1S/4W	34G 5	330 CHESNUT ST	Oakland	ARATEX SERVICES	1/24/1990	122286180	37802676	1S/4W 34G	Jun-89	10	27	8	2	MON
	1S/4W	34G 6	330 CHESNUT ST	Oakland	ARATEX SERVICES	1/24/1990	122286180	37802676	1S/4W 34G	Jun-89	10	24	8	2	MON
	1S/4W	34G 7	330 CHESNUT ST	Oakland	ARATEX SERVICES	1/24/1990	122286180	37802676	1S/4W 34G	Jun-89	10	27	8	2	MON
	1S/4W	34G	330 Chestnut St.	Oakland	Aratex Services, Inc.	3/12/1991	122287059	37801711	1S/4W 34G	Sep-90	0	23	9	2	MON
	1S/4W	34G 3	1035 7TH STREET	Oakland	DALZELL CORP.	6/28/1989	122284921	37803630	1S/4W 34G	Aug-88	0	35	14	2	MON
	1S/4W	34G	1035 7TH ST.	Oakland	DALZELL CORPORATION	6/28/1989	122284921	37803630	1S/4W 34G	Aug-88	0	35	18	8	BOR
	1S/4W	34G 9	1107 5th St	Oakland	Rino Pacific	8/22/1997	122287004	37802772	1S/4W 34G	Oct-96	0	20	10	2	MON
	1S/4W	34G10	1107 5th St	Oakland	Rino Pacific	8/22/1997	122287004	37802772	1S/4W 34G	Oct-96	0	13	8	2	MON
	1S/4W	34G11	1107 5th St	Oakland	Rino Pacific	8/22/1997	122287004	37802772	1S/4W 34G	Oct-96	0	17	12	2	MON
	1S/4W	34G 1	1125 7 ST	Oakland	WICK GLOVE CO.	12/10/1984	122286180	37802676	1S/4W 34G	/06	0	12	2	0	ABN
	1S/4W	34L 1	ADELINE ST(ALBINE BRID(	Oakland	CITY OF OAKLAND	12/12/1984	122290625	37799206	1S/4W 34L	?	0	0	0	0	GEO*
	1S/4W	34L 7	114 Adeline St.	Oakland	Nor-Cal Metal Fab. MW-1	7/23/1993	122288969	37800508	1S/4W 34L	Nov-92	0	17	5	2	MON
	1S/4W	34L 4	1395 Middle Harbor Rd.	Oakland	Port of Oakland MW-1	7/15/1993	122289754	37799760	1S/4W 34L	Jan-93	0	10	6	2	MON
	1S/4W	34L 5	1395 Middle Harbor Rd.	Oakland	Port of Oakland MW-2	7/15/1993	122289754	37799760	1S/4W 34L	Jan-93	0	10	7	2	MON
	1S/4W	34L 6	1395 Middle Harbor Rd.	Oakland	Port of Oakland MW-3	7/15/1993	122289754	37799760	1S/4W 34L	Jan-93	0	10	6	2	MON
	1S/4W	34L 3	1395 Middle Harbor Rd.	Oakland	Port of Oakland MW-APL	7/1/1993	122289777	37799749	1S/4W 34L	Sep-92	0	36	8	2	MON
	1S/4W	34L 8	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-1	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	25	7	2	MON
	1S/4W	34L12	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-15	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	8	0	2	MON
	1S/4W	34L11	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-16	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	8	3	2	MON
	1S/4W	34L 9	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-17	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	8	0	2	MON
	1S/4W	34L10	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-18	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	9	7	2	MON
	1S/4W	34L15	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-2	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	25	6	2	MON
	1S/4W	34L14	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-3	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	25	12	2	MON
	1S/4W	34L13	1400 Middle Harbor Rd.	Oakland	S. Pacific Trans. B-4	7/26/1993	122291602	37799446	1S/4W 34L	Nov-92	0	25	10	2	MON
	1S/4W	34L 8	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-1	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	25	0	2	ABN
	1S/4W	34L12	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-15	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	8	0	2	ABN
	1S/4W	34L 9	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-17	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	8	0	2	ABN
	1S/4W	34L10	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-18	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	9	0	2	ABN
	1S/4W	34L15	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-2	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	25	0	2	ABN
	1S/4W	34L14	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-3	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	25	0	2	ABN
	1S/4W	34L13	Middle Harbor Rd.	Oakland	S.Pacific Trans. B-4	8/5/1993	122291608	37799442	1S/4W 34L	Sep-92	0	25	0	2	ABN
	1S/4W	34L 2	Middle Harbour Road	Oakland	S.Pacific Transportation	7/31/1990	122290625	37799206	1S/4W 34L	Apr-90	3	9	0	2	MON
	1S/4W	34M 1	Middle Harbour Road	Oakland	S.Pacific Transportation	7/31/1990	122295216	37799206	1S/4W 34M	Apr-90	4	21	10	2	MON

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

09x9983

SHEET 1 of 2	PROJECT NUMBER: 175868.FL02	BORING NUMBER: RMW-07-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		HOLE DEPTH (ft): 35.0	DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	NORTHING (CCS NAD 83 Z 3): 2,119,746.02	EASTING (CCS NAD 83 Z 3): 6,042,933.47	DATE STARTED: 09/07/2005 12:10	DATE COMPLETED: 09/08/2005 13:30
DRILLING METHOD: Rotosonic		DRILLING EQUIPMENT: Limited Access Rig, 8" outer casing, 6" sample core casing		WATER LEVEL: 4.88 ft bgs on 10/07/2005
LOCATION: 1448 3rd St., Oakland, CA		LOGGED BY: M. Cavaliere	SAMPLE NAME:	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
	X	0.6		0.0			**CONCRETE**	
		3.9		0.0		SM	**FILL - SILTY SAND (SM)** - dk yellowish brn (10YR4/4) mottled with black, dry to moist, f-m sand with 10% clay, brick fragments and oyster shells, no odor	
5				0.0		SC	**CLAYEY SAND (SC)** - grayish green (5G5/2), moist to wet, cohesive, fine sand, no odor	
		2.5		0.0			**CONCRETE** - solid concrete, old building foundation?	
10		3		0.0			**SILTY SAND (SM)** - mottled greenish gray (5G6/1) with yellowish brn (10Y2.5/6) moderately oxidized, moist, cohesive, 60% f sand, 40% silt, no odor	Grout
15		5		0.0		SM	- wet to saturated, less silt ~70% f sand, 30% silt, loose	
20		5		0.0				
25		5		0.0			- saturated, 75% f sand, 25% silt, no odor	Seal
30		5		0.0		SP	**SAND (SP)** - dk yellowish brn (10YR4/4), saturated, 80% f sand, 20% silt, no odor - less oxidized	Pack
35		5		0.0			- dk yellowish brn (10YR4/6) oxidized, saturated, 90% f sand, 10% clay, no odor	

CH2MHILL

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SHEET 2 of 2	PROJECT NUMBER: 175868.FL02	BORING NUMBER: RMW-07-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 35.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,746.02	**EASTING (CCS NAD 83 Z 3):** 6,042,933.47	**DATE STARTED:** 09/07/2005 12:10	**DATE COMPLETED:** 09/08/2005 13:30
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8" outer casing, 6" sample core casing		**WATER LEVEL:** 4.88 ft bgs on 10/07/2005
LOCATION: 1448 3rd St., Oakland, CA		**LOGGED BY:** M. Cavaliere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
							Total Depth = 35 ft bgs	

ABBREVIATIONS

brn = brown
lt = light
dk = dark
vf = very fine-grained
f = fine-grained
m = medium-grained
c = coarse-grained
ang = angular
subang = subangular
subrnd = subrounded
rnd = rounded

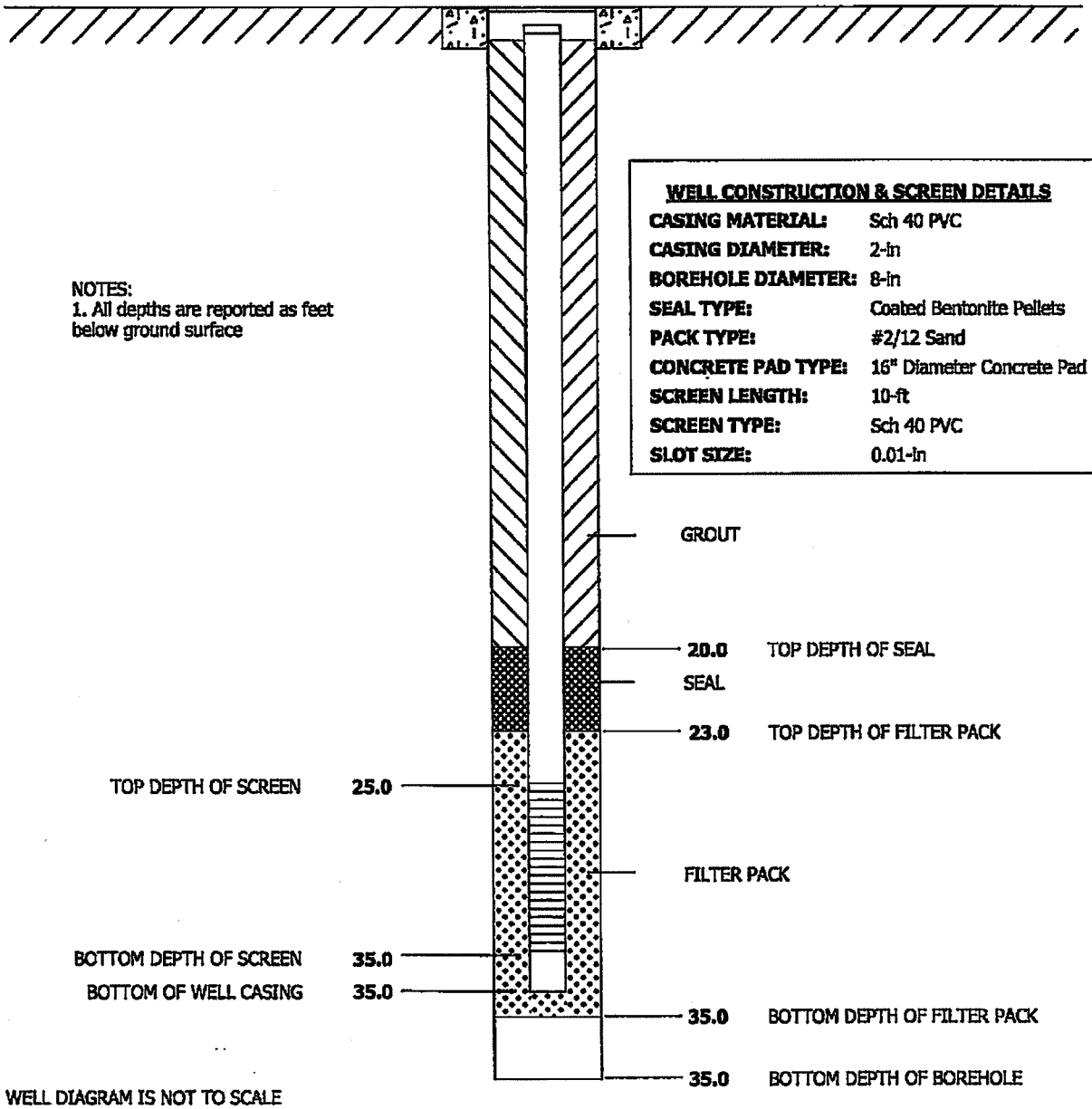
CH2MHILL

09279983

WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FL02	**PROJECT:** AMCO Superfund	**WELL NO:** *RMW-07-35*
LOCATION: 1448 3rd St., Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/07/2005 12:10	
DRILLING METHOD: Rotosonic	**DRILLING END:** 09/08/2005 13:30	
LOGGER: M. Cavaliere	**WELL COMPLETION DATE:** 09/07/2005	
GROUND SURFACE ELEVATION (NAVD 88): 10.42	**GENERAL REMARKS:** —	

LOCKING FLUSH COMPLETION



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WELL COMPLETION REPORT
(WELL LOGS)

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SHEET 1 of 2	PROJECT NUMBER: 175868.FI.02	BORING NUMBER: RMW-11-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 35.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 8.5 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,928.89	**EASTING (CCS NAD 83 Z 3):** 6,043,326.95	**DATE STARTED:** 09/20/2005 12:06	**DATE COMPLETED:** 09/21/2005 16:40
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**WATER LEVEL:** 5.95 ft bgs on 10/07/2005
LOCATION: Northbound bike lane on Mandella Pkwy between 3rd and 5th St. Oakland, CA M. Cavallere		**LOGGED BY:**	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	WELL CONSTRUCTION DIAGRAM
							ASPHALT	
		5		0.0		GP	**GRAVELLY FILL (GP)** - roadbase, ang gravel with sand and silt	
5						GM	**GRAVEL (GM)** - vc ang gravel to cobbles (1-4), zones of silt and sand, metal slag, moist to wet, no odor	
		5		0.0		ML	**FILL - GRAVELLY SANDY SILT (ML)** - wet to saturated, 35% submd gravel (1-3), no odor	
10						SM	**SILTY SAND (SM)** - very dark grayish brn (10YR3/2), saturated, loose, 55% sand, 45% silt, no odor, likely top of native material - layers of clayey silt, some are rich in organic material	Grout
		5		0.0		OL	**ORGANIC CLAYEY SILT (OL)** - grayish brn (10YR5/2), rich in organic material, med stiff, low plasticity, mild sulfur odor, wet	
15						OL/PT	**ORGANIC SILT / PEAT (OL/PT)** - dk. yellowish brn (10YR3/4) to black (10YR2/1), cohesive and soft, moist to wet, strong sulfur odor - black silt, virtually no organic debris	
		5		0.0		SM	**SILTY SAND (SM)** - dk greenish gray (5FY4/1), wet, 60% f sand, 40% silt, no odor - dk yellowish brn (10YR4/4), wet to saturated, 75% sand, 25% silt, no odor	Seal
20								
		5		0.0				
25								
		5		0.0			- loose	Pack
30								
		5		0.0		SM/SP	**SILTY SAND (SM/SP)** - grayish brn (10YR4/3), saturated, loose,	
35								

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SHEET 2 of 2	PROJECT NUMBER: 175868.FI.02	BORING NUMBER: RMW-11-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 35.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 8.5 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,928.89	**EASTING (CCS NAD 83 Z 3):** 6,043,326.95	**DATE STARTED:** 09/20/2005 12:06	**DATE COMPLETED:** 09/21/2005 16:40
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**WATER LEVEL:** 5.95 ft bgs on 10/07/2005
LOCATION: Northbound bike lane on Mandella Pkwy between 3rd and 5th St. Oakland, CA		**LOGGED BY:** M. Cavallere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
							85% f sand, 15% silt,no odor *Total Depth = 35 ft bgs*	

ABBREVIATIONS

brn = brown
lt = light
dk = dark
vf = very fine-grained
f = fine-grained
m = medium-grained
c = coarse-grained
ang = angular
subang = subangular
subrnd = subrounded
rnd = rounded

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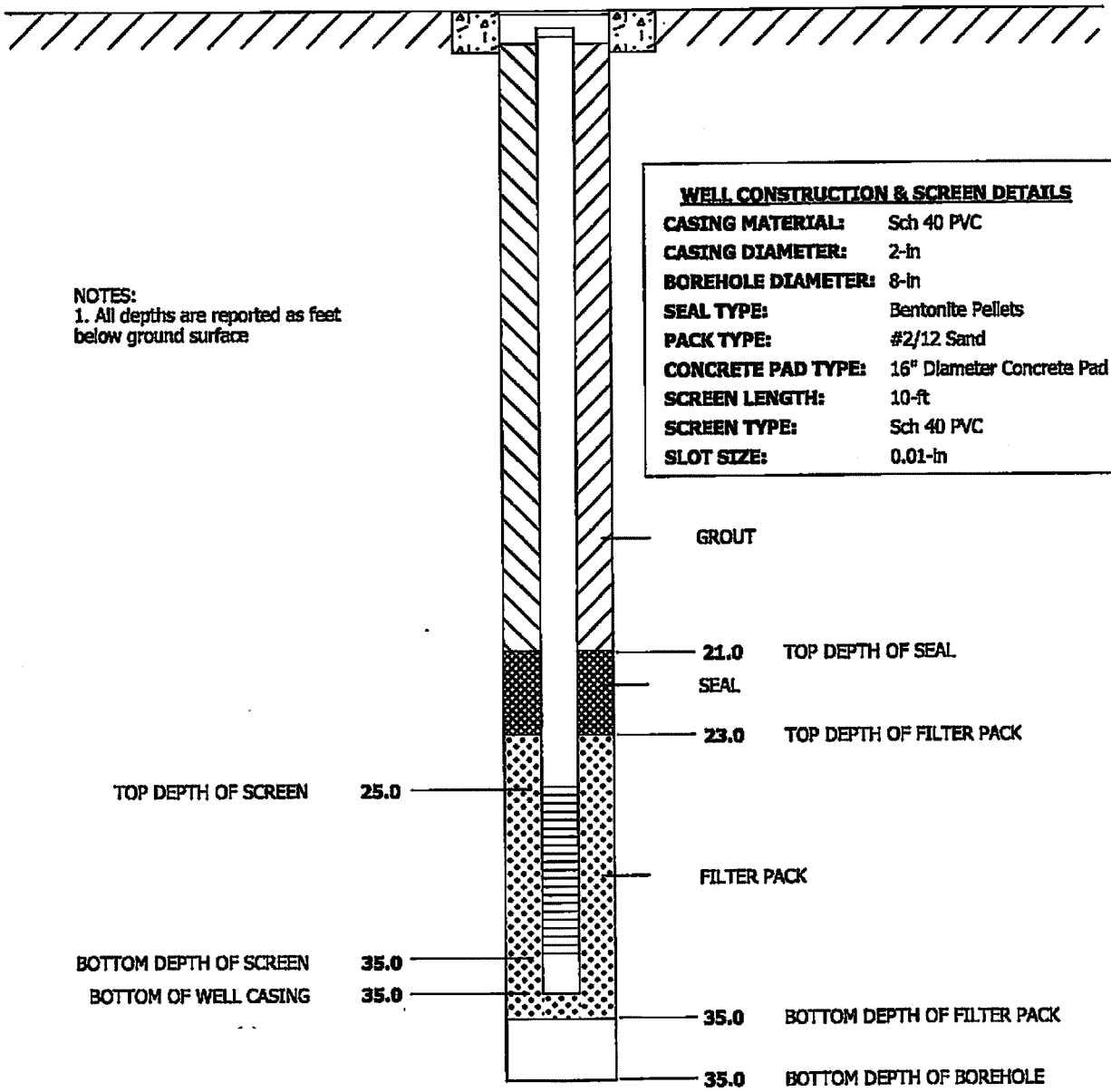
WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FL02	**PROJECT:** AMCO Superfund	**WELL NO:** *RMW-11-35*
LOCATION: Northbound bike lane on Mandella Pkwy between 3rd and 5th St., Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/20/2005 12:06	
DRILLING METHOD: Rotosonic	**DRILLING END:** 09/21/2005 16:40	
LOGGER: M. Cavallere	**WELL COMPLETION DATE:** 09/20/2005	
GROUND SURFACE ELEVATION (NAVD 88): 8.52	**GENERAL REMARKS:** —	

LOCKING FLUSH COMPLETION



WELL CONSTRUCTION & SCREEN DETAILS

CASING MATERIAL:	Sch 40 PVC
CASING DIAMETER:	2-in
BOREHOLE DIAMETER:	8-in
SEAL TYPE:	Bentonite Pellets
PACK TYPE:	#2/12 Sand
CONCRETE PAD TYPE:	16" Diameter Concrete Pad
SCREEN LENGTH:	10-ft
SCREEN TYPE:	Sch 40 PVC
SLOT SIZE:	0.01-in

NOTES:
1. All depths are reported as feet below ground surface

WELL DIAGRAM IS NOT TO SCALE

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WELL COMPLETION REPORT
(WELL LOGS)

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09/4980

SHEET 1 of 2	PROJECT NUMBER: 175868.FI.02	BORING NUMBER: RMW-12-32

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 32.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 9.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,625.72	**EASTING (CCS NAD 83 Z 3):** 6,043,111.43	**DATE STARTED:** 09/21/2005 12:43	**DATE COMPLETED:** 09/21/2005 16:40
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8" outer casing, 6" sample core casing		**WATER LEVEL:** 3.99 ft bgs on 10/11/2005
LOCATION: 3rd St. gutter in front of 1414 3rd St., Oakland, CA		**LOGGED BY:** W. Frohlich / well construction M. Cavallere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE INTERVAL	SAMPLE RECOVERY (ft)	SAMPLE SPT RESULTS	SAMPLE PID (PPM)	SAMPLE SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	WELL CONSTRUCTION DIAGRAM
							CONCRETE	
5		5		1.4		SM	**FILL - SILTY SAND (SM)** - dk reddish brn (5YR3/2), some black, wet, little to no clay	
10		5		3.2 24.9		SM	**SILTY SAND WITH CLAY AND GRAVEL (SM)** - greyish green (5GY45/1) with black staining in veins, wet to saturated, slightly plastic, vf-f sand - no more black veins, slightly more plastic	Grout
15		5		22.7 1.4				
20		5		0.0 0.0		SP	**SAND (SP)** - greyish green (5GY4/1), saturated, loose, no plasticity, poorly graded f sand, no fines	
25		0 2					- dk greenish grey (5BG4/1)	Seal
30		5		0.0			- f sand with 20% m sand	Pack
		5		0.0			- mottled dk greenish grey (5G4/1) and dk bluish grey (5B4/1), unconsolidated, f-m sand	
							Total Depth = 32 ft bgs	

ABBREVIATIONS

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SHEET 2 of 2	PROJECT NUMBER: 175868.FL.02	BORING NUMBER: RMW-12-32

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 32.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 9.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,625.72	**EASTING (CCS NAD 83 Z 3):** 6,043,111.43	**DATE STARTED:** 09/21/2005 12:43	**DATE COMPLETED:** 09/21/2005 16:40
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8" outer casing, 6" sample core casing		**WATER LEVEL:** 3.99 ft bgs on 10/11/2005
LOCATION: 3rd St. gutter in front of 1414 3rd St., Oakland, CA		**LOGGED BY:** W. Frohlich / well construction M. Cavallere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
							brn = brown *lt = light* *dk = dark* *vf = very fine-grained* *f = fine-grained* *m = medium-grained* *c = coarse-grained* *ang = angular* *subang = subangular* *subrnd = subrounded* *rnd = rounded*	

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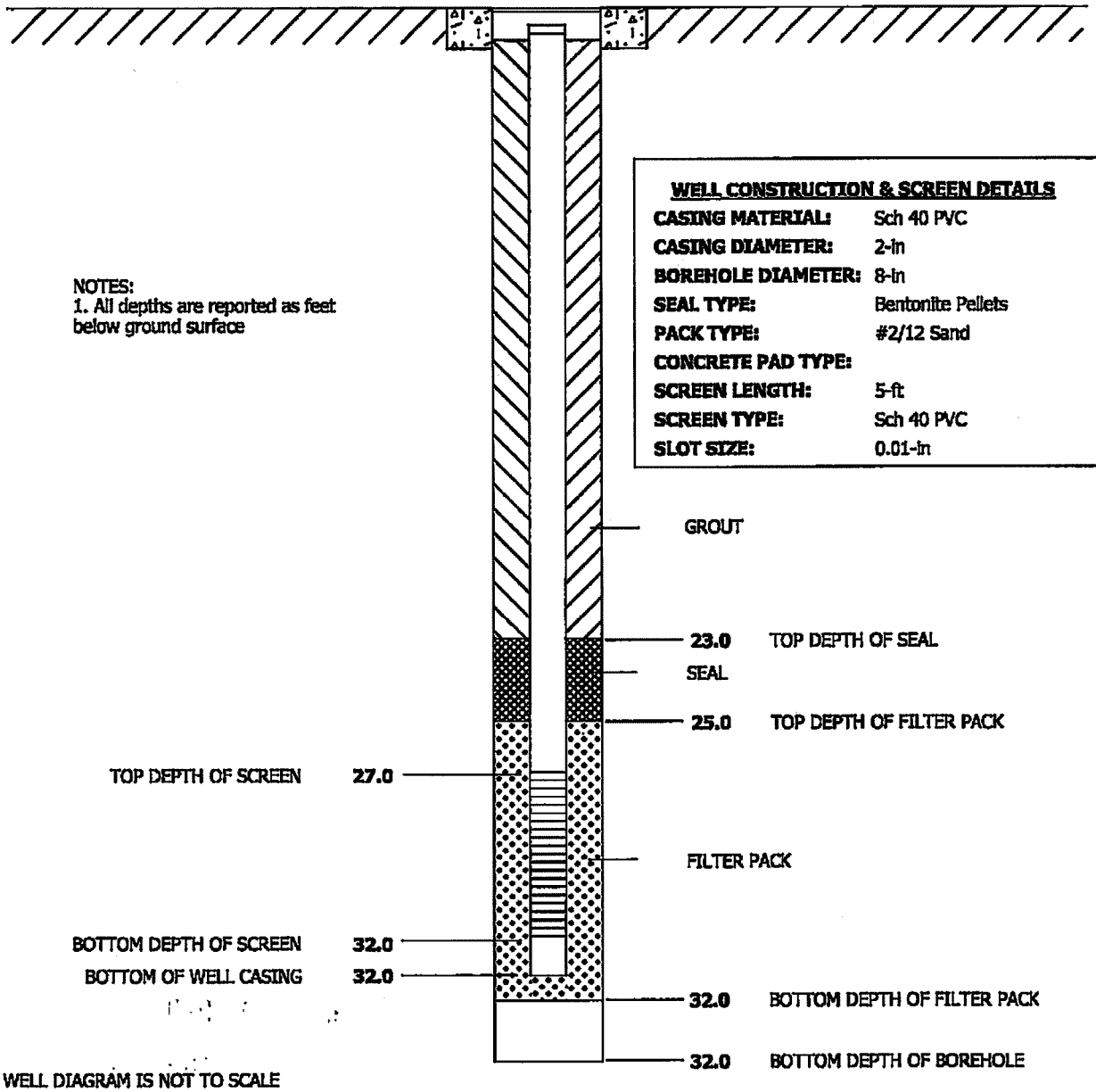
WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FI.02	**PROJECT:** AMCO Superfund	**WELL NO:** *RMW-12-32*
LOCATION: 3rd St. gutter in front of 1414 3rd St., Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/21/2005 12:43	
DRILLING METHOD: Rotosonic	**DRILLING END:** 09/21/2005 16:40	
LOGGER: M. Cavallere	**WELL COMPLETION DATE:** 09/21/2005	
GROUND SURFACE ELEVATION (NAVD 88): 9.44	**GENERAL REMARKS:** ---	

LOCKING FLUSH COMPLETION



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WELL COMPLETION REPORT
(WELL LOGS)

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09/9979

SHEET 1 of 2	PROJECT NUMBER: 175868.FL.02	BORING NUMBER: RMW-12-51

SOIL BORING LOG

PROJECT NAME: AMCO Superfund	HOLE DEPTH (ft): 53.0	DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 9.3 ft. MSL	NORTHING (CCS NAD 83 Z 3): 2,119,628.72	EASTING (CCS NAD 83 Z 3): 6,043,101.57	DATE STARTED: 09/15/2005 13:00	DATE COMPLETED: 09/19/2005 18:00
DRILLING METHOD: Rotosonic	DRILLING EQUIPMENT: Limited Access Rig, 8" outer casing, 6" sample core casing		WATER LEVEL: 3.85 ft bgs on 10/11/2005
LOCATION: 1414 3rd St., Oakland, CA	LOGGED BY: W. Frohlich	SAMPLE NAME:	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	WELL CONSTRUCTION DIAGRAM
							CONCRETE	
5		5		1.4		SM	FILL - SILTY SAND (SM) - dk reddish brn (5YR3/2), some black, wet, little to no clay	
10		5		3.2 24.9		SM	SILTY SAND WITH CLAY AND GRAVEL (SM) - greyish green (5GY45/1) with black staining in veins, wet to saturated, slightly plastic, vf-f sand - no more black veins, slightly more plastic	
15		5		22.7				
20		5		1.4 0.0 0.0		SP	SAND (SP) - greyish green (5GY4/1), saturated, loose, no plasticity, poorly graded f sand, no fines	Grout
25		0 2		0.0			- dk greenish grey (5BG4/1)	
30		5		0.0 0.0			- f sand with 20% m sand	
35		5		0.2 0.4			- mottled dk greenish grey (5G4/1) and dk bluish grey (5B4/1), unconsolidated, f-m sand	

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09-9979

SHEET 2 of 2

PROJECT NUMBER: 175868.FI.02

BORING NUMBER: RMW-12-51

SOIL BORING LOG

PROJECT NAME: AMCO Superfund	**HOLE DEPTH (ft):** 53.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 9.3 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,628.72	**EASTING (CCS NAD 83 Z 3):** 6,043,101.57	**DATE STARTED:** 09/15/2005 13:00	**DATE COMPLETED:** 09/19/2005 18:00
DRILLING METHOD: Rotosonic	**DRILLING EQUIPMENT:** Limited Access Rig, 8" outer casing, 6" sample core casing		**WATER LEVEL:** 3.85 ft bgs on 10/11/2005
LOCATION: 1414 3rd St., Oakland, CA	**LOGGED BY:** W. Frohlich	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
40		5		8.4 10.8		SP	**SAND (SP)** - greyish green (5GY4/1), saturated, loose, no plasticity, poorly graded f sand, no fines - dk yellowish brn (10YR4/4), dense, f-m sand - looser with some iron staining	Grout Seal
45		5		0.0 0.0				Pack
50		5		0.0 0.0				
		3		0.0				
							Total Depth = 53 ft bgs	

ABBREVIATIONS

brn = brown
lt = light
dk = dark
vf = very fine-grained
f = fine-grained
m = medium-grained
c = coarse-grained
ang = angular
subang = subangular
subrnd = subrounded
rnd = rounded

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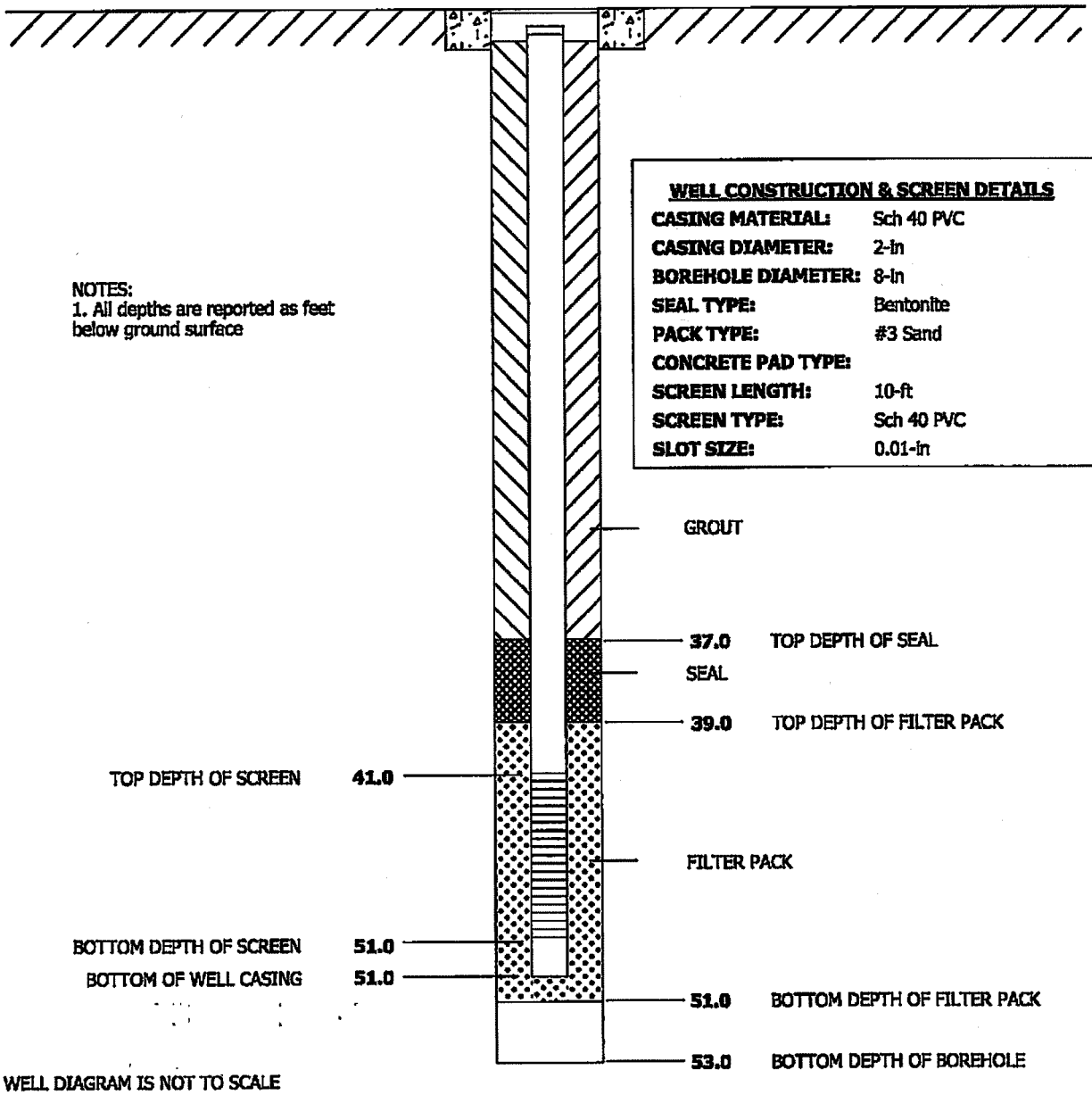
WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FI.02	**PROJECT:** AMCO Superfund	**WELL NO:** ***RMW-12-51***
LOCATION: 1414 3rd St., Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/15/2005 13:00	
DRILLING METHOD: Rotosonic	**DRILLING END:** 09/19/2005 18:00	
LOGGER: W. Frohlich	**WELL COMPLETION DATE:** 09/15/2005	
GROUND SURFACE ELEVATION (NAVD 88): 9.27	**GENERAL REMARKS:** ---	

LOCKING FLUSH COMPLETION



WELL DIAGRAM IS NOT TO SCALE

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WELL COMPLETION REPORT
(WELL LOGS)

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0929984

SHEET 1 of 2 | **PROJECT NUMBER:** 175868.FI.02 | **BORING NUMBER:** RMW-13-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 35.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,397.02	**EASTING (CCS NAD 83 Z 3):** 6,042,992.94	**DATE STARTED:** 09/13/2005 12:20	**DATE COMPLETED:** 09/14/2005 15:50
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**WATER LEVEL:** 4.6 ft bgs on 10/07/2005
LOCATION: AMTRAK Yard - 1303 3rd St., Oakland, CA		**LOGGED BY:** M. Cavaliere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	WELL CONSTRUCTION DIAGRAM
5	X	5		0.0			ASPHALT -	
						SM	**FILL - SILTY SAND WITH CLAY AND GRAVEL (SM)** - dk yellowish brn (10YR3/4) to black (10YR2/1), contains brick fragments, metal, and other debris, dry to moist, loose, no odor	
10	X	5		0.0			- bluish gray (5B5/1), mottled with oxide, m dense, low plasticity, moist, no odor	
						OL	**ORGANIC CLAYEY SILT (OL)** - black (N2.5), organic rich, very soft, saturated, strong sulfur odor	
15	X	5		0.0		OH	**ORGANIC SILTY CLAY (OH)** - greenish gray (5GY5/1), saturated, med plasticity, organic rich with organic debris, strong sulfur odor	Grout
						OL	**ORGANIC CLAYEY SILT (OL)** - dark olive brn (2.5Y3/3), wet to saturated, low plasticity, organic rich with roots and organic debris, strong sulfur odor; 10% f sand, organic rich with little to no debris, very soft, saturated	
20	X	5		0.0			**SAND WITH SILT (SM)** - greenish gray (5GY5/1), saturated, 60% f sand, 40% silt loose, mild sulfur odor	
						SM	- little to no odor	
25	X	5		0.0			- lt olive brn (2.5Y5/6), saturated, 70% sand, 30% silt, loose	Seal
							- brnish yellow (10YR5/6) with concentrated orange zones of oxidation, saturated, no odor	
30	X	5		0.0				Pack
						SM/SP	**SILTY SAND (SM/SP)** - yellowish brn (10YR5/8), saturated, loose, 80% f sand, 20% silt, no odor	
						SP	**SAND WITH SILT (SP)** - grayish brn (10YR4/2), saturated, very loose, f sand with 10% silt, no odor	
35	X	5		0.0		SM/SP	**SILTY SAND (SM/SP)** - yellowish brn (10YR5/8), saturated, loose, 80% f sand, 20% silt, no odor	

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SHEET 2 of 2	PROJECT NUMBER: 175868.FI.02	BORING NUMBER: RMW-13-35

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 35.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,397.02	**EASTING (CCS NAD 83 Z 3):** 6,042,992.94	**DATE STARTED:** 09/13/2005 12:20	**DATE COMPLETED:** 09/14/2005 15:50
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**WATER LEVEL:** 4.6 ft bgs on 10/07/2005
LOCATION: AMTRAK Yard - 1303 3rd St., Oakland, CA		**LOGGED BY:** M. Cavallere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
							Total Depth = 35 ft bgs	

ABBREVIATIONS

brn = brown
lt = light
dk = dark
vf = very fine-grained
f = fine-grained
m = medium-grained
c = coarse-grained
ang = angular
subang = subangular
subrnd = subrounded
rnd = rounded

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WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FI.02	**PROJECT:** AMCO Superfund	**WELL NO:** ***RMW-13-35***
LOCATION: AMTRAK Yard - 1303 3rd St., Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/13/2005 12:20	
DRILLING METHOD: Rotosonic	**DRILLING END:** 09/14/2005 15:50	
LOGGER: M. Cavallere	**WELL COMPLETION DATE:** 09/13/2005	
GROUND SURFACE ELEVATION (NAVD 88): 10.38	**GENERAL REMARKS:** ---	

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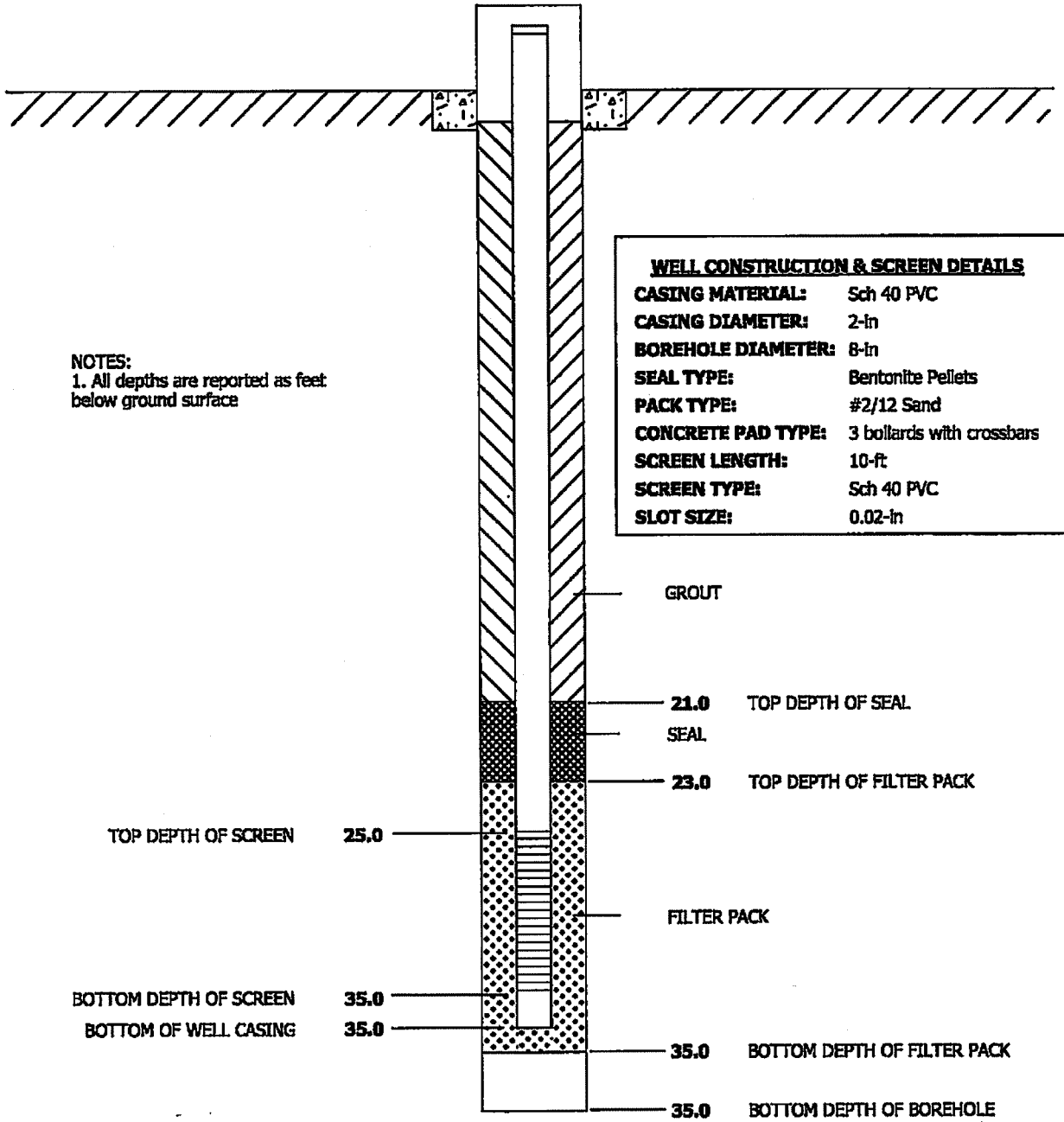

WELL CONSTRUCTION & SCREEN DETAILS

CASING MATERIAL:	Sch 40 PVC
CASING DIAMETER:	2-in
BOREHOLE DIAMETER:	8-in
SEAL TYPE:	Bentonite Pellets
PACK TYPE:	#2/12 Sand
CONCRETE PAD TYPE:	3 bollards with crossbars
SCREEN LENGTH:	10-ft
SCREEN TYPE:	Sch 40 PVC
SLOT SIZE:	0.02-in

NOTES:
1. All depths are reported as feet below ground surface

WELL DIAGRAM IS NOT TO SCALE

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WELL COMPLETION REPORT
(WELL LOGS)

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SHEET 1 of 2

PROJECT NUMBER: 175868.FI.02

BORING NUMBER: RMW-14-50

SOIL BORING LOG

PROJECT NAME: AMCO Superfund	**HOLE DEPTH (ft):** 50.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,578.17	**EASTING (CCS NAD 83 Z 3):** 6,042,842.31	**DATE STARTED:** 09/09/2005 11:27
DRILLING METHOD: Rotosonic	**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**DATE COMPLETED:** 05/01/912 16:30
LOCATION: UPRR Property - Adjacent Prescott Park / BMW-7, Oakland, CA	**LOGGED BY:** M. Cavaliere	**SAMPLE NAME:**	**WATER LEVEL:** 4.29 ft bgs on 10/07/2005

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, *SOIL STRUCTURE, MINERALOGY*)	WELL CONSTRUCTION DIAGRAM
5		5		2.2		SM	**FILL - SILTY SAND (SM)** - dk bluish grey (5B4/1), dry to moist, some root structures, loose, dry to moist, 60% f sand, 40% silt, no odor	
				8.6		SM	**SILTY SAND (SM)** - dk brn (10YR3/4), dry to moist, no root structures, 60% f sand, 40% silt, no odor - dk greyish brn (10YR3/2), no odor - v dark grey (10YR3/1), no odor	
10		5		12.2			**SILTY SAND (SM)** - greenish grey (5G5/1) mottled with oxidation light yellowish brn (2.5Y6/4), wet to saturated, finer than above, loose-cohesive, wet to saturated, 60% f sand, 40% silt, no odor	
15		5					- olive yellow (2.5Y6/8), m. dense, no odor	
20		5		0.0				Grout
25		5		0.0		SM	- oxidized zones are more orange in color, increased mottling, m. dense, no odor	
30		5		0.0			- brn (10Yr4/3), saturated, loose, 75% sand, 25% silt, no odor	
35		5		0.0			- brn (10YR4/3), saturated, no odor - density increasing	

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0929988

SHEET 2 of 2	PROJECT NUMBER: 175868.FL02	BORING NUMBER: RMW-14-50

SOIL BORING LOG

PROJECT NAME: AMCO Superfund		**HOLE DEPTH (ft):** 50.0	**DRILLING CONTRACTOR:** Boart Longyear (Shawn Martinez); Peoria, AZ	
SURFACE ELEVATION: 10.4 ft. MSL	**NORTHING (CCS NAD 83 Z 3):** 2,119,578.17	**EASTING (CCS NAD 83 Z 3):** 6,042,842.31	**DATE STARTED:** 09/09/2005 11:27	**DATE COMPLETED:** 05/01/912 16:30
DRILLING METHOD: Rotosonic		**DRILLING EQUIPMENT:** Limited Access Rig, 8 outer casing, 6 sample core casing		**WATER LEVEL:** 4.29 ft bgs on 10/07/2005
LOCATION: UPRR Property - Adjacent Prescott Park / BMW-7, Oakland, CA		**LOGGED BY:** M. Cavallere	**SAMPLE NAME:**	

DEPTH BGS (feet)	SAMPLE: INTERVAL	SAMPLE: RECOVERY (ft)	SAMPLE: SPT RESULTS	SAMPLE: PID (PPM)	SAMPLE: SOIL SAMPLE	USCS CODE	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	WELL CONSTRUCTION DIAGRAM
40		5		0.0		SM	**SILTY SAND (SM)** - greenish grey (5G5/1) mottled with oxidation light yellowish brn (2.5Y6/4), wet to saturated, finer than above, loose-cohesive, wet to saturated, 60% f sand, 40% silt, no odor	Grout / Seal
45		5		0.0			- heavily oxidized	Pack
50		5		0.0		SP	**SAND (SP)** - brn (10YR4/3) with minor oxidation, saturated, loose, 90% f sand, 10% silt, no odor	
							Total Depth = 50 ft bgs	

ABBREVIATIONS

brn = brown
lt = light
dk = dark
vf = very fine-grained
f = fine-grained
m = medium-grained
c = coarse-grained
ang = angular
subang = subangular
subrnd = subrounded
rnd = rounded

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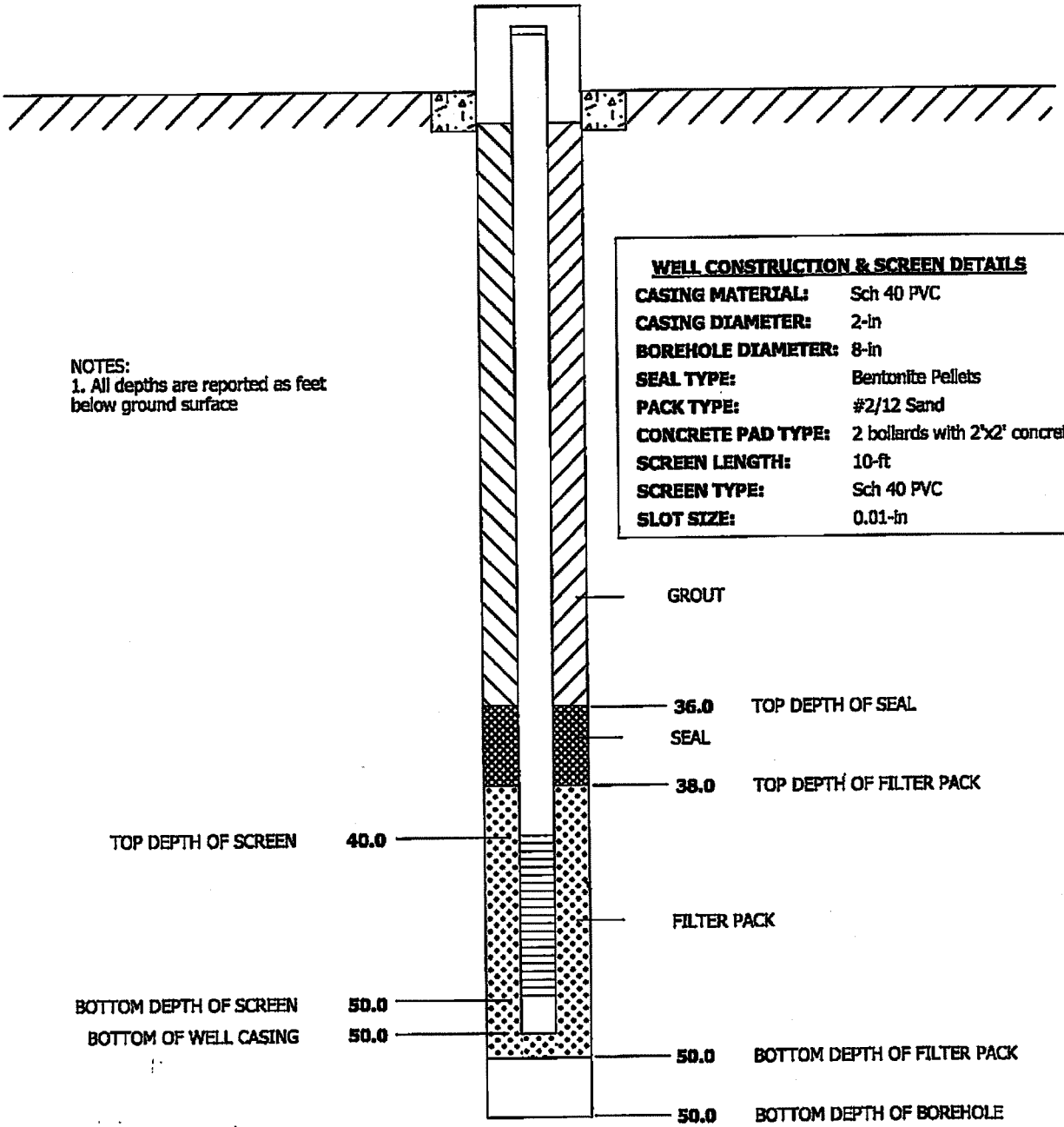
WELL COMPLETION DIAGRAM

PROJECT NO: 175868.FL02	**PROJECT:** AMCO Superfund	**WELL NO:** ***RMW-14-50***
LOCATION: UPRR Property - Adjacent Prescott Park / BMW-7, Oakland, CA		
DRILLING CONTRACTOR: Boart Longyear (Shawn Martinez); Peoria, AZ	**DRILLING START:** 09/09/2005 11:27	
DRILLING METHOD: Rotosonic	**DRILLING END:** 05/01/912 16:30	
LOGGER: M. Cavaliere	**WELL COMPLETION DATE:** 09/09/2005	
GROUND SURFACE ELEVATION (NAVD 88): 10.39	**GENERAL REMARKS:** —	

LOCKING MONUMENT COMPLETION



WELL CONSTRUCTION & SCREEN DETAILS

CASING MATERIAL:	Sch 40 PVC
CASING DIAMETER:	2-in
BOREHOLE DIAMETER:	8-in
SEAL TYPE:	Bentonite Pellets
PACK TYPE:	#2/12 Sand
CONCRETE PAD TYPE:	2 bollards with 2'x2' concrete pad
SCREEN LENGTH:	10-ft
SCREEN TYPE:	Sch 40 PVC
SLOT SIZE:	0.01-in

NOTES:
1. All depths are reported as feet below ground surface

WELL DIAGRAM IS NOT TO SCALE

CH2MHILL

1474 01-541C 01S04W34E05

Industrial Compliance
9719 Lincoln Village Drive, Suite 310 Sacramento, CA 95827 916/369-8971 FAX 916/369-8370

November 9, 1992

Mr. Wyman Hong
Alameda County Flood Control and
Water Conservation District
5997 Parkside Drive
Pleasanton, California 94588

Subject: **Well Destruction**
Southern Pacific Transportation Company Property
1401 Third Street
Oakland, California
IC Project No. 05465

Dear Mr. Hong:

On behalf of Southern Pacific Transportation Company (SPTCo), Industrial Compliance (IC) conducted destruction procedures of a well located on the SPTCo property located at 1401 Third Street, in Oakland, California (see Figure 1). IC obtained a well destruction permit from the Alameda County Flood Control and Water Conservation District (Alameda County Flood Control) dated September 4, 1992 (Permit Number 92438). On the permit, the well to be abandoned was referred to by Alameda County Flood Control as well IS/4W 34E80. To comply with Alameda County Flood Control's permit conditions, IC is submitting this letter report describing the well abandonment procedures.

BACKGROUND

Before SPTCo purchased the property in 1976, the site was owned by the Occidental Chemical Company (OCC). Best Fertilizer, a subsidiary of OCC, occupied the property. An aerial photograph of the site dated 1966 indicates a large warehouse covered much of the site.

In May 1992, IC was involved with the removal of a concrete slab which apparently served as a foundation for the Best Fertilizer facility. During excavation of the slab, an 8-inch diameter well was discovered buried beneath the concrete slab. The approximate location of the well is shown on Figure 2.

Based on observations of the surface completion, the well appeared to be constructed with two concentric metal casings. The outside, 12-inch diameter casing was likely driven during well installation to keep the borehole open. The inside 8-inch casing is likely the well casing. At the surface, the annulus between the outside casing and the inside casing was filled with concrete. The total depth of the well was measured to be 75 feet below ground surface (bgs). The static water level within the well was measured to be 51.4 feet bgs.

2-8 4 01-541C 01S04W34E05

IC has checked the files of the Department of Water Resources and the Alameda County Public Works Department; neither agency has any record of this well.

WELL ABANDONMENT PROCEDURES

The well was abandoned on October 6, 1992. The well was first cleared of all bridged and poorly compacted materials by drilling through the inside steel casing with a truck-mounted drill rig utilizing mud rotary techniques. Pieces of wood, concrete, gravel, and styrofoam were retrieved from the well.

A grout cap was welded to the top of the well so that a cement/bentonite grout could be applied under pressure. The grout was prepared in a ratio of 7 gallons of water and 2 pounds of bentonite per 94-pound sack of cement. The grout mixture was pumped to the bottom of the well. The tremie line used to deliver the grout was retracted as the grout in the well rose, until the entire well was completely filled with grout. The water inside the well, which was displaced by grout, and the drilling mud was pumped into 55-gallon drums appropriate for storage and transport. The drums were labeled as to the contents, origin, and date. Upon completely filling the well with grout, a steel cap was welded to the top of the well.

IC has therefore, successfully abandoned this well and has satisfied the condition of permit.

If there are any questions, please contact Mr. Walter Floyd.

Sincerely,

Walter Floyd

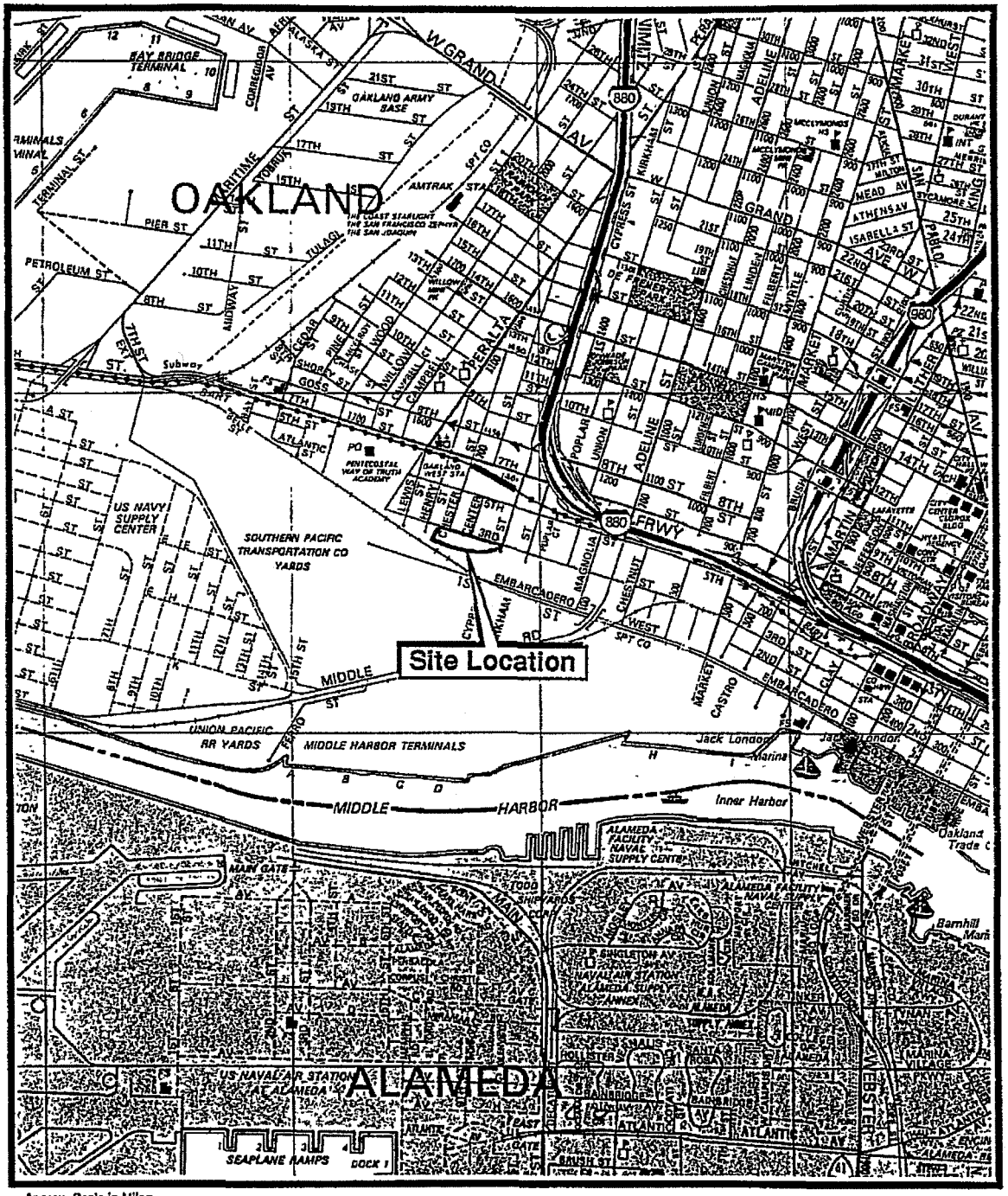
Walter Floyd
Project Geologist

Mark S. Dockum, C.E.G.
Project Manager

WF:MSD:ekw

cc: Mr. Greg Shepherd

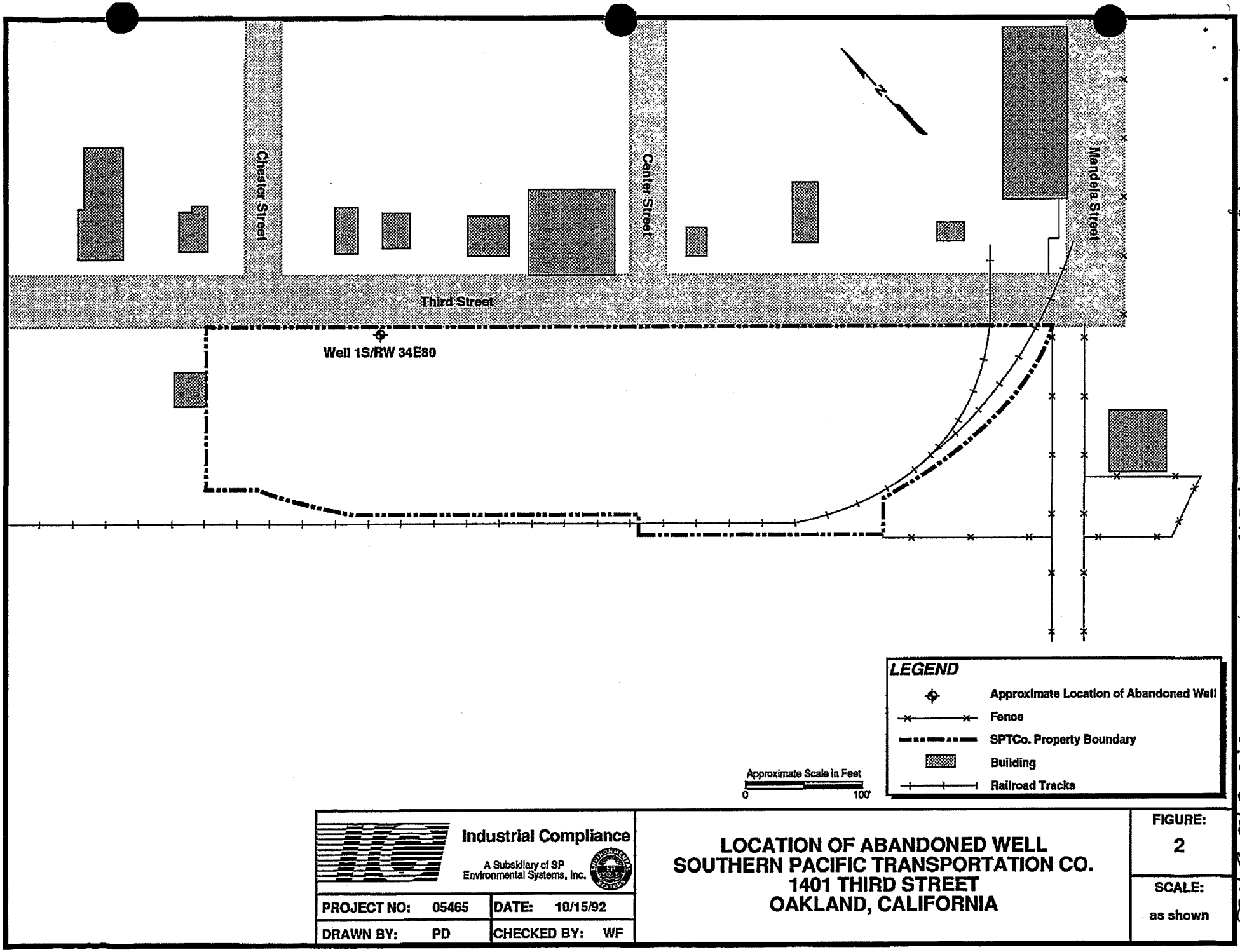
3 of 4 OL-541C 615 040 34E05



Reference:
Thomas Brothers map of California
Page 157

Industrial Compliance A Subsidiary of SP Environmental Systems, Inc.	SITE LOCATION MAP SOUTHERN PACIFIC TRANSPORTATION CO. BOBO'S JUNKYARD OAKLAND, CALIFORNIA	FIGURE: 1
PROJECT NO: 05465 DATE: 03/03/92 DRAWN BY: PD CHECKED BY: WF		SCALE: as shown

0546 5 Fig 1/disc 88/WP 0392



Industrial Compliance
A Subsidiary of SP Environmental Systems, Inc.

PROJECT NO:	05465	DATE:	10/15/92
DRAWN BY:	PD	CHECKED BY:	WF

LOCATION OF ABANDONED WELL
SOUTHERN PACIFIC TRANSPORTATION CO.
1401 THIRD STREET
OAKLAND, CALIFORNIA

FIGURE: 2

SCALE: as shown

05465 Fig 2/disk 155/Well Destruction Report 1092

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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3746 26A 1S/4W 34E1

Well Construction Log

SP ENVIRONMENTAL SYSTEMS, INC.

Boring Location ADJACENT TANK PIT #1			**Boring/Well Name** MW-1
Drilling Company HEW DRILLING			**Project Name** 5TH & KIRKHAM
Drilling Method HOLLOW STEM AUGER	**Rig Type** CME 75		**Project Number** 05032
Hole Diameter 10 **In.**	**Driller** JEFF	**Date** 10/23/90	**Logged By** W. FLOYD
Ground Elevation	**Water Elevation**		**Total Depth** 22'

Well Construction Specifics

Screen Placement	from	5	ft. to	22	ft.	Slot Size 0.020	inches	Diameter 4	inches	Completion Type:	
Blank Casing	from	0	ft. to	5	ft.	Schedule 40		Diameter 4	inches	Above Ground	
Filter Pack	from	4	ft. to	22	ft.	Size #3		Type SAND		At Grade	X
Bentonite Pellets	from	3	ft. to	4	ft.	Type VOLCLAY		Size 3/8	inches	Hydrated X yes	no
Cement/Bentonite	from	0	ft. to	3	ft.	Type PORTLAND		Percent Bentonite 3			

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
			1	BENTONITE/ CEMENT GROUT				3" ASPHALT CAP 1' OF SUBGRADE SILTY SAND: DARK GREY TO BLACK, CONTAINS ASHES, BOTTLES, BRICKS, SHOES, ETC....., NO ODORS, SOFT.	
MW-1 5'	100%	2 1 1	5	BENTONITE PELLETS		SM			
MW-1 8.5'	100%	4 8 10	8	FILTER PACK		SP		SAND: YELLOWISH BROWN, NO ODORS, PLANT REMAINS, MEDIUM TO FINE GRAINED, MEDIUM DENSE POORLY GRADED.	
			10					SATURATED AT 10', NO ODORS	
MW-1 15'	100%	4 7 8	11	SCREENED PVC					
			15						

374626 A 1S/4W 34E 1

Well Construction Log

SP ENVIRONMENTAL SYSTEMS, INC.

Well Number MW-1 | **Project Number** 05032 | **Project Name** 5TH & KIRKHAM

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
			17			SP		SAME	
			18						
			19						
MW-1 20'	100%	7 12 13	20						
			21						
			22						
			23						
			24						
			25						
			26						
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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3746268 1S/4W 34E2

SP ENVIRONMENTAL SYSTEMS, INC.

Well Construction Log

Boring Location ADJACENT TANK PIT #3			**Boring/Well Name** MW-3
Drilling Company HEW DRILLING			**Project Name** 5TH AND KIRKHAM
Drilling Method HOLLOW STEM AUGER	**Rig Type** CME 55		**Project Number** 05032
Hole Diameter In.	**Driller** ANIBAL	**Date** 11/1/90	**Logged By** W. FLOYD
Ground Elevation	**Water Elevation**		**Total Depth** 22'

Well Construction Specifics

Screen Placement	from	7	ft.	to	22	ft.	Slot Size 0.020 inches	Diameter 4 inches	Completion Type:
Blank Casing	from	0	ft.	to	7	ft.	Schedule 40	Diameter 4 inches	Above Ground ___
Filter Pack	from	6	ft.	to	22	ft.	Size #3	Type SAND	At Grade X
Bentonite Pellets	from	4.5	ft.	to	6	ft.	Type VOLCLAY	Size 3/8 inches	Hydrated X yes ___ no
Cement/Bentonite	from	0	ft.	to	4.5	ft.	Type PORTLAND	Percent Bentonite 3	

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
MW-3 SURF			1	BENTONITE/ CEMENT GROUT					
			2						
			3			SM		SILTY SAND: Dark brown to black, some plant material, very moist, no odors, loose.	
			4						
MW-3 5'	100%	1 1 3	5	BENTONITE PELLETS					
			6						
			7						
			8			SP-SC		SAND: Yellowish brown, some plant material, 10% clay, moist, medium dense, no odors.	
MW-3 8'	100%	3 6 8	9	FILTER PACK					
			10						
			11					Saturated at 11.5'	
			12						
			13	SCREENED PVC					
			14						
MW-3 15'	100%	7 8 10	15						

3746263 1S/4W 34E2

Well Construction Log

SP ENVIRONMENTAL SYSTEMS, INC.

Well Number MW-3 | **Project Number** 05032 | **Project Name** 5TH & KIRKHAM

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
MW-3 20'	100%	4 8 9	17–35			SP-SC		SAME	

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WELL COMPLETION REPORT
(WELL LOGS)

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374626C 1S/4W 34 E3

SP ENVIRONMENTAL SYSTEMS, INC.

Well Construction Log

Boring Location ADJACENT TO TANK PIT #4			**Boring/Well Name** MW-4
Drilling Company HEW DRILLING			**Project Name** 5TH & KIRKHAM
Drilling Method HOLLOW STEM AUGER	**Rig Type** CME 75		**Project Number** 05032
Hole Diameter 10 **In.**	**Driller** JEFF	**Date** 10/24/90	**Logged By** W. FLOYD
Ground Elevation	**Water Elevation**		**Total Depth** 22'

Well Construction Specifics

Screen Placement	from	7	ft.	to	22	ft.	Slot Size 0.020	inches	Diameter 4	inches	Completion Type:
Blank Casing	from	0	ft.	to	7	ft.	Schedule 40		Diameter 4	inches	Above Ground ___
Filter Pack	from	6	ft.	to	22	ft.	Size #3		Type SAND		At Grade X
Bentonite Pellets	from	5	ft.	to	6	ft.	Type VOLCLAY		Size 3/8 inches		Hydrated X yes ___ no
Cement/Bentonite	from	0	ft.	to	5	ft.	Type PORTLAND		Percent Bentonite 3		

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
			1	BENTONITE/ CEMENT GROUT		AF		4" CONCRETE CAP 1.5' OF SILTY GRAVEL SUBGRADE	
			2					SILTY SAND; DARK GREY, NO ODORS, LOOSE, MOIST.	
			3			SM			
			4						
MW4 4'	100%	1 1 3	5						0
			6	BENTONITE PELLETS		SP-SC		SAND; BROWN, MEDIUM GRAINED, PLANT REMAINS, NO ODOR, POORLY GRADED, 10% CLAY.	
			7						
			8						
MW4 8'	30%	6 8 10	9	SCREENED PVC				YELLOWISH BROWN, MEDIUM DENSE, SOME ROOT HAIRS.	
			10						
			11						
			12	FILTER PACK					
			13						
			14						
		8 7 6	15						

374626C 1S/4W 34E3

Well Construction Log

SP ENVIRONMENTAL SYSTEMS, INC.

Well Number	Project Number	Project Name
MW-4	05032	5TH & KIRKHAM

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
MW-4 20'	100%	8 8 12	17–35			SP-SC		SAME	

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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374626D 1S/4W 34E4

SP ENVIRONMENTAL SYSTEMS, INC.

Well Construction Log

Boring Location	Eastern side of property	**Boring/Well Name**	MW-6
Drilling Company	HEW Drilling	**Project Name**	5TH & KIRKHAM
Drilling Method	Hollow Stem Auger	**Rig Type**	CME 75
Hole Diameter	10" In.	**Driller**	Jeff
Date	10/23/90	**Logged By**	W. FLOYD
Ground Elevation		**Water Elevation**	
Total Depth	29'		

Well Construction Specifics

Screen Placement	from 9 ft.	to 29 ft.	Slot Size 0.020 inches		Diameter 4 inches		Completion Type:	
Blank Casing	from 0 ft.	to 9 ft.	Schedule 40		Diameter 4 inches		Above Ground ___	
Filter Pack	from 8 ft.	to 29 ft.	Size #3		Type SAND		At Grade X	
Bentonite Pellets	from 6.5 ft.	to 8 ft.	Type VOLCLAY		Size 3/8 inches	Hydrated X yes ___ no		
Cement/Bentonite	from 0 ft.	to 6.5 ft.	Type PORTLAND		Percent Bentonite 3			

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
			1			AF		4" ASPHALT CAP	
			2	BENTONITE/ CEMENT GROUT				1.5' OF SILTY GRAVEL SUBGRADE	
			3			SM		SILTY SAND; DARK GREY, NO ODORS, LOOSE	
MW-6 5'	100%	6 3 3	4						
			5						
			6						
			7	BENTONITE PELLETS		CH		BAY MUD; DARK GREY, STRONG SULFIDE ODOR, VERY SOFT, HIGHLY PLASTIC, FIBROUS PLANT REMAINS	
			8						
			9						
MW-6 10'	100%	0 0 0	10	FILTER PACK					
			11						
			12						
			13	SCREENED PVC		SP-SC		SAND; MEDIUM TO FINE GRAINED, DARK GREY, LOOSE, SOME PLANT REMAINS, POORLY GRADED, SATURATED.	
			14						
MW-6 15'	100%	1 2 1	15						

374626 D 1S/4W 34E4

Well Construction Log

SP ENVIRONMENTAL SYSTEMS, INC.

Well Number MW-6 | **Project Number** 05032 | **Project Name** 5TH & KIRKHAM

Sample Number	Recov.	Blows / 6-inches	Depth Feet	Well Detail	Lithology	USCS Log	Color	Sample Description	FID/PID (ppm)
MW-6 20'	100%	2 2 2	17–20			SP-SC		COLOR CHANGE AT 20' TO YELLOWISH BROWN.	
MW-6 25'	100%	16 21	20–29			SC		DENSER	
MW-6 30'	100%	18 26	29–35						