CORRECTIVE ACTION PLAN

HARD-RDA HOLLAND PARK PROPERTY

16301 East 14th Street
San Leandro (Ashland District), California

PREPARED FOR:

Hayward Area Recreation and Park District
1099 E Street
Hayward, CA 94541

PREPARED BY:

Amicus – Strategic Environmental Consulting
580 Second Street
Suite 260
Oakland, CA 94607

SUBMITTED TO:

Alameda County Department of Environmental Health
1311 Harbor Bay Parkway
Alameda, CA 94502-6577
Attn: Mr. Jerry Wickham

May 28, 2009

TABLE OF CONTENTS

TABLE OF CONTENTS, CONTINUED

FIGURES

ATTACHMENTS

1. INTRODUCTION

This report presents a plan for the mitigation of historic use-related environmental conditions at the former Holland Oil Company bulk fuel storage and distribution facility located at 16301 East 14th Street, San Leandro (Ashland District), California (Figure 1). This property was acquired in 2008 by the Hayward Area Recreation and Park District (HARD) and the Alameda County Redevelopment Agency (RDA) for redevelopment as a recreational and community services neighborhood amenity. This Corrective Action Plan (CAP) follows a series of environmental assessments, with the most recent final environmental evaluation conducted by Ninyo & Moore in December 2008.

The form and schedule for CAP submittal is described in a January 22, 2009 letter from the Alameda County Environmental Health Department (ACEHD). This letter is provided for reference in Attachment A.

An earlier version of this CAP was published on March 6, 2009. After their review, the ACEHD requested the following:

1. A soil vapor survey on the adjoining school property (site of a planned new gymnasium).
2. The addition of a shallow soil grading plan.

These items are provided in this final CAP.

1.1. Purpose

The purpose of this report is the examination of site history and current condition in terms of its suitability for redevelopment as a park and community service center. In areas of the site where historic use-related contaminants are present in concentrations conflicting with the contemplated re-use, this report examines the nature and extent of these contaminants, and evaluates alternatives available for their removal or neutralization. The report concludes with a selection of the appropriate alternative and description of methods, endpoints and schedule.

1.2. Background

The last comprehensive property use was as a bulk fuel storage and distribution business. Historic reports indicate this use commenced around 1960 and continued through the middle 1980s. Historic research indicates the property and surrounding land was in cultivation as an orchard prior to being redeveloped in the 1960s for the fuel business.

The bulk fuel storage and distribution business was located in the property interior; parcels fronting on East 14th Street were utilized until recent years as auto sales lots. Fuel operations were apparently never conducted on these frontage lots. Above-

ground and underground product storage tanks, lines, dispensers and loading racks were removed from the property in 1998.

Various investigations of site environmental quality have been commissioned over the years. The earliest assessments confirmed the presence of bulk plant-related hydrocarbons in soil and groundwater. A two-stage assessment that built on the earlier investigations was recently completed by Ninyo & Moore, an environmental consulting company retained by HARD. The results of this recent comprehensive assessment are discussed later in this report. In addition to the comprehensive study, at the request of the ACEHD a focused soil vapor quality study was conducted on the adjoining Edendale Middle School property for the purposes of confirming that Holland operation-related compounds had not affected this neighboring parcel. Results of testing confirmed that no related contaminants were present in soil vapor collected from this adjoining area (see Section 2.6.3 of this report).

The property was purchased by HARD and the RDA in 2008. The parcels acquired by HARD are to be redeveloped as a neighborhood park with a skate park, play structure, picnic area, an area for passive recreation and parking lot. The parcels acquired by the RDA are presently contemplated to be redeveloped with structures for a Teen Center with associated non-structural hardscape and landscaping. Figure 2 shows the respective parcels, numbers and boundaries. Figure 3 shows a conceptual redevelopment plan.

2. SITE CHARACTERISTICS

2.1. Setting

The project property is located on the southern side of 14th Street in unincorporated Alameda County in the Ashland District between the cities of Hayward and San Leandro. The neighborhood along 14th is predominantly commercial, with primarily single-family residential units located along the intersecting streets. The Edendale Middle School adjoins the HARD site to the north; Edendale athletic fields are to the west.

The land occupied by the site and its surroundings is relatively flat. The East Bay/Hayward Hills rise to the east approximately a mile from the property; San Francisco Bay is about four miles to the west.

2.2. Historic Use-Related Features

The project property is presently free of structures. When in operation as a bulk fuel storage facility the property contained a storage/small quantity distribution warehouse of single story steel and corrugated metal construction and a smaller similarly constructed building used for vehicle maintenance. A third structure, presumably

for the bulk plant office, was located along the northern edge of the operation adjoining the auto-sales operations along East 14th. This structure was demolished prior to the most recent work.

These buildings (excepting the presumed office structure) and the small auto sales-related buildings on the parcels adjoining the former bulk plant are visible in Figure 4. The more noteworthy aboveground bulk plant features - the aboveground storage tanks, rack and dispensers are not visible, having been removed prior to this photograph being taken. Project reports indicate that approximately 20 aboveground tanks of varying capacity were historically utilized over the course of site operations. Figure 5 shows the aboveground tanks and site buildings.

Historic reports also document the prior presence of eight underground storage tanks. Three of these tanks are reported to have once held gasoline, two diesel fuel, two kerosene, and one Stoddard (non-halogenated) solvent. All tanks were removed from the property in 1998. With the reported concurrence of the oversight agency, overburden removed to free the underground tanks was returned to the tank excavations. The remainders of the tank cavities were backfilled with imported fill material (EBS, 1998).

2.3. Sedimentology

As described in investigative reports, the surface is underlain by sediments of alluvial origin, with terrestrially-derived sand, silt and clay encountered to a depth of approximately 35 feet below grade, the maximum extent explored. These terrestrial deposits are underlain by the geologically recent fine-grained bay mud, which was deposited in and around the margins of the San Francisco Bay during historic times when the bay extended further inland than it does currently.

2.4. Hydrogeology

Unconfined groundwater is encountered in local sediments at an approximate depth of 9 feet below ground surface (bgs). Groundwater occurs in both fine- and coarse-grained sediments; no apparent lower bound to the unconfined water-bearing zone was encountered during assessment activities to the maximum depth explored. Investigative data shows that groundwater moves towards the west/southwest, with a gradient of 0.005 feet/foot (Ninyo & Moore, 2008).

2.5. Nature and Distribution of Use-Related Contaminants

Results of facility characterization have shown the project site to contain concentrations of historic use-related substances in soil and groundwater. The nature and distribution of the detected substances are consistent with site history.

2.6. Contaminant Type

As is common in similar former bulk fuel storage and dispensing facilities, contaminants measured during investigative activities consist predominantly of motor fuel hydrocarbons and heavier hydrocarbons likely associated with lubricants or heavier oils. These contaminant signatures are comprised primarily of gasoline-range and diesel-range hydrocarbons.

2.6.1. Soil

Weathered fuel hydrocarbons have been detected in soil beneath the former Holland operation in two areas of the site. The first area corresponds with the location of the former underground tanks and dispensers; the second corresponds with no obvious operational feature in a portion of the site that may have been used for vehicle parking and drum storage.

The results of analysis of soil samples collected during the most recent Ninyo & Moore assessment are presented on Figure 6. As shown, samples collected from the borings for monitoring wells B-1, MW-6 and MW-8 exhibited elevated concentrations of fuel-related compounds. These borings appear to have been located in areas near the former tanks, but not within the footprint of the tank excavations themselves. Elevated concentrations in near-surface sediments are consistent with the assumption that these areas were not excavated when the tanks were removed.

The areas formerly housing the underground tanks are expected to contain a lesser vertical column of hydrocarbon-containing sediments, as the tank-holds extended to near the surface of the water table and upon tank removal were backfilled with relatively hydrocarbon-free sediments (overburden and imported fill).

Results of analysis also showed elevated concentrations of fuel-related compounds in sediments encountered in borings B-2, B-7, SB-11 and SB-12. As shown, these borings are not located near the former fuel storage or handling area. Impact detected in these borings is generally restricted to the near-surface portion of the soil column, suggesting that contaminant introduction may have been by way of spillage from drums or vehicles stored in this area of the site.

2.6.2. Groundwater

Results of site characterization show hydrocarbons in groundwater in monitoring wells and discrete groundwater samples taken in the central portion of the site. Samples from monitoring wells MW-1, MW-4, MW-6 and MW-8 have shown persistent moderate concentrations of gasoline and diesel-range hydrocarbon compounds. Wells MW-6 and MW-8 are located in the immediate vicinity of the former underground tanks and dispensers; MW-1 and MW-4 are just downgradient of these former facility features. Samples from MW-10 and MW-11,

located on the neighboring school property downgradient of wells MW-1 and MW-4 have been free of hydrocarbon compounds and indicate that the extent of historic impact is predominantly on-property near the former tanks. The distribution of diesel-range hydrocarbons is shown on Figure 7. Tabulated historic soil and groundwater analytical results are presented in Attachment B.

2.6.3. Soil Vapor

A soil vapor survey was conducted on the RDA parcel by Ninyo & Moore during the comprehensive site assessment in 2008. No concentrations of target substances were detected above agency action levels. No soil vapor study was conducted on the HARD parcel, as levels of residual hydrocarbons in soil were sufficiently high to predict the presence of vapors without a study.

Following their review of the initial March 2008 CAP, the ACEHD requested that the quality of soil vapor beneath the adjoining school be examined so as to verify that no migration of vapor from the former bulk plant to the area beneath the proposed gymnasium was occurring.

Ninyo & Moore completed this study in May 2009. No concentrations of target substances were detected above agency action levels. A copy of the Ninyo & Moore study is presented in Attachment C.

2.7. Sensitive Receptors

Use-related hydrocarbons have been shown to be restricted to the former Holland parcel. Were they to move from the parcel they would do so in migrating groundwater, and the receptor of concern would be a water supply well.

For the purposes of conservative evaluation, the ACEHD requested that a well survey be completed. Agency records were reviewed for the purposes of locating water supply wells within a one-quarter mile radius of the study site. Records were reviewed at both the California Department of Water Resources and the Alameda County Public Works Department. Identified wells are depicted on Figure 8. As shown, two wells were located in an approximate downgradient direction within relative proximity to the site. One of these wells (the domestic) is listed in DWR and County records as being on Ashland Avenue. The address could not be mapped. Records review indicates that much of this neighborhood was at one time served by individual wells, but that these wells have since been abandoned, presumably replaced by municipal water service.

3. CORRECTIVE ACTION PLAN OBJECTIVES

The use-related environmental conditions at the subject property are not presently consistent with the contemplated redevelopment plan. The hydrocarbon content of the shallow soil on and near the parcel planned for RDA redevelopment exceeds levels

considered acceptable for unrestricted land use. As no restrictions are desired on this parcel, the objective of corrective action in this area is the removal of hydrocarbon-bearing sediments to below use-restricting thresholds.

The HARD park parcel also contains use-related hydrocarbon compounds. As this parcel is intended for redevelopment as a skate-park, parking lot and passive recreational area, the removal threshold is higher than that of the unrestricted RDA parcel. Materials at the surface and near surface would be removed; materials at greater relative depth containing residual levels of use-related compounds may safely remain in place. Corrective action objectives in this portion of the project parcel include:

1. The removal of sediments containing the highest concentrations of hydrocarbon compounds to facilitate the continued natural restoration of subsurface materials;
2. The grading and removal of near-surface sediments from the park project area corresponding to the former facility footprint in order to prevent contact with hydrocarbon-bearing material by future park workers or visitors.

While this is not a removal action governed by EPA National Contingency Plan (NCP) criteria or requirements, the NCP criteria do serve as effective categories for evaluating the objectives and benefits of the plan for corrective action. Specifically, the nine NCP criteria are as follows:

1. Overall protection of human health and the environment
2. Applicable or Relevant and Appropriate Requirements (ARARs)
3. Long-term effectiveness and permanence
4. Reduction of toxicity, mobility or volume
5. Short term effectiveness
6. Implementability
7. Cost
8. State acceptance
9. Community acceptance

4. REVIEW OF CORRECTIVE ACTION ALTERNATIVES

Site characterization efforts have shown impact on the RDA parcel to be confined to shallow subsurface sediments. Subsurface material on the HARD parcel in the vicinity of former bulk plant features contains hydrocarbon compounds to a relatively greater depth; groundwater in this area has also been shown as affected. Hydrocarbon concentrations in groundwater, decline rapidly with distance, and it appears as if groundwater plume stability has been attained (hydrocarbons in soil continue to leach to groundwater but not to a degree that facilitates the expansion of the affected area).

Given these physical site attributes and the objectives of contemplated corrective action, remedial alternatives that address hydrocarbon compounds in soil are the most appropriate alternatives for evaluation. Given the redevelopment schedule, an alternative that can satisfy corrective plan objectives by the autumn of 2009 is required.

Alternative 1 – No removal or treatment - capping.
This alternative is considered as a formality. Clearly, capping would not satisfy the RDA objective of unrestricted use, and capping would not remove the residual mass of hydrocarbon compounds that continue to affect groundwater quality beneath the HARD parcel. This alternative will be considered no further.

Alternative 2 – Soil excavation, amendment, replacement.
This alternative would conceivably satisfy the objectives of both parcels, with the likely exception of project schedule. Were this alternative implemented, soil from both sites would be excavated, temporarily piled on site, and then mixed with an amendment designed to accelerate the biologic degradation of hydrocarbons. Once mixed, the soil would be replaced in the excavation, compacted, and periodically tested to confirm the attainment of concentration-reduction objectives.

While this is an on-site carbon-sensitive alternative, the amendment option lacks absolute certainty and would clearly, even if acceptable contaminant concentration goals were eventually attained, require a greater span of time than the redevelopment project would allow. This alternative is therefore not acceptable and will be considered no further.

Alternative 3 – Grading, excavation, removal, backfilling with clean imported material.
This alternative satisfies all evaluative criteria. As follows:

1. Overall protection of human health and the environment – grading, excavation and removal from affected areas will prevent human contact or exposure (protective of human health), and facilitate the natural restoration of groundwater quality (protective of the environment).
2. Applicable or Relevant and Appropriate Requirements (ARARs) – excavation and removal will return the parcels to conditions acceptable to the applicable agencies for the contemplated future uses.

3. Long-term effectiveness and permanence – the removal action on the RDA parcel will be complete and consequently permanent; the HARD parcel removal action will completely cure the condition in the areas graded and excavated, and lead to complete restoration over time.
4. Reduction of toxicity, mobility or volume – grading, excavation and removal of affected sediments accomplishes each of these criteria.
5. Short term effectiveness – grading, excavation and removal is effective in the immediate term.
6. Implementability – grading, excavation and removal has been implemented at many similar project sites and no barriers to implementation exist at this project location.
7. Cost – as there are no other reasonable alternatives, cost is not a primary evaluative criterion. This considered, however, cost per unit excavated and removed is not anticipated to be excessive.
8. State acceptance – grading, excavation and removal is anticipated to be acceptable to state and local oversight agencies.
9. Community acceptance – the grading, excavation and removal plan will be implemented with community priorities in mind. Trucking schedules and routes will be designed such that the community is not negatively affected. Project-generated dust will be monitored and suppressed. It is anticipated that with the appropriate investment of foresight and planning the community will accept this corrective action alternative as appropriate.

Alternative 3 – grading, excavation, removal and backfilling is recommended as the preferred method of corrective action.

5. PROPOSED METHODOLOGY

Methods to be utilized during the removal of hydrocarbon-containing sediments are described below.

5.1. Planning and Permitting

The remedial contractor will secure all necessary operational and environmental permits prior to commencing work.

5.2. Shallow Soil Removal in Non-Excavation Areas

The results of the comprehensive physical site study have identified the location of the areas of highest residual hydrocarbon concentration to be in the vicinity of the former underground storage tanks/dispensers/rack (Figure 9, Area A). Site evaluation has shown an area along the eastern fence-line to also contain elevated levels of residual hydrocarbons (Area B).

Testing has shown the quality of the shallow soil outside of Areas A and B (designated Area C) varies and in places contains elevated levels of residual hydrocarbons. In order to be conservative and protective of future park users, the

shallow soil in Area C will also be removed by grading to one foot below the former operational ground surface.

The materials generated during grading of Area C will be piled separately from the soil graded from Areas A and B, on out-parcels along 14th street. Five approximately 350 cubic yard piles will be constructed, so as to increase their utility as backfill material. One four-point composite sample will be collected from each 50 cubic yards of generated materials and analyzed for concentrations of use-related compounds, including PCBs. PCB analysis is added to fill an analytical gap from prior surface testing, not due to an expectation that these compounds will be present.

If the results of laboratory analysis of profile samples show these graded materials to contain less than 100 ppm low- or medium-boiling point petroleum hydrocarbons (THPg and TPHd) and be free of actionable concentrations of PCBs they will be used as backfill for the lower portions (from the excavation bottom to no higher than one foot below original grade) of the deeper remedial excavations (Cells A1, A2, B1 and B2). Once the excavations are filled and compacted to the designated depth, surplus shallow-graded material from Area C (if there is any) would be off-hauled to an appropriate disposal facility.

In the event park development plans call for the lowering of areas of the site to depths greater than one foot the consequent grading will be conducted simultaneous with remedial grading. Generated materials will be managed in a manner similar to that described above. All grading shall be monitored and profile samples collected by a trained environmental professional.

5.3. Excavation and Backfilling Plan

The excavations shall be completed following site grading. Remedial cells in Area A (see Figure 9 and 10) will be excavated first, with excavated materials stockpiled near Area B. Excavation B will then be completed and materials piled with Area A-generated sediments.

The cells in Area A will be extended to 10 feet below ground surface, approximately one foot into water-saturated sediments. The lateral dimensions of these excavations have been determined by the results of site investigations and are designed to facilitate the removal of hydrocarbon-bearing sediments from areas of the site not previously excavated. The cells in Area B will be initially be excavated to six feet below grade, with final excavation dimensions to be determined by confirmation samples (Figure 11).

Monitoring wells MW-6 and MW-8 are present within proposed cell boundaries in Area A. These wells will be completely removed by excavation equipment.

5.4. Profiling of Excavated Materials

Excavated materials shall be profiled by the remedial contractor or an oversight consultant in accordance with local landfill acceptance criteria. Composite profiling samples shall be analyzed by the project lab on an expedited schedule (preferably overnight) so as to facilitate as short a stockpile residence period as possible.

5.5. Stockpile Weatherization and Security

Excavation activities will take place in late summer, in the California dry season. Given this, and the fact that the site is secured by a locked fence, no special measures will be taken to weatherize or secure the piles. They will remain on site uncovered for as short a period as possible following their generation until removal (less than one week per pile).

5.6. Excavation Confirmation Sampling

The portion of the RDA parcel containing elevated concentrations of fuel hydrocarbons is that which overlaps a portion of the yard for the former bulk plant. This yard was used for storage of vehicles and drums; no record has been identified showing any larger storage tank was ever present in this area.

Based on site characterization efforts, shallow materials in the RDA parcel subsurface in places contain elevated concentrations of diesel-range petroleum hydrocarbons. The applicable regulatory guidelines are the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL). From the ESL look-up tables, a value of 83 mg/kg for both gasoline and diesel (middle distillate) petroleum hydrocarbons is appropriate as a remedial endpoint for unrestricted future property use. This ESL value corresponds to a residential, beneficial drinking water resource scenario (the most conservative comparative scenario utilized in the ESL tables). Given the nature and distribution of hydrocarbons beneath this parcel, this ESL scenario is most appropriate.

The excavations in Area B shall first be extended to its predetermined initial extent, laterally as shown on Figure 11 and to an initial depth of six feet below ground surface. This initial footprint is based on the results of site characterization efforts. Sidewall samples will be collected at a depth of three feet from ground surface. In areas where obvious impact is observed the affected materials will be removed prior to sampling. One sample shall be taken from each of the excavation sidewalls. Given the dimensions of the excavations, one bottom sample will be adequate for the establishment of conditions at depth.

Confirmation samples shall be taken from the sidewalls and bottom of the excavation on the RDA parcel (Cells B1 and B2) to confirm the removal of all soil containing hydrocarbons in excess of applicable criteria. Confirmation samples will be analyzed for concentrations of TPHg and TPHd.

The Area B excavations will be enlarged and resampled in the event a confirmation sample exhibits concentrations of gasoline or diesel-range hydrocarbons in excess of the 83 mg/kg target concentration and the ACEHD requires excavation enlargement. It is anticipated the agency will be asked to judge the excavation complete if concentrations in confirmation samples are reasonably near remedial targets.

Cells A1 and A2 will be excavated as shown on Figure 10, to a depth of 10 feet below ground surface. Due to the lateral dimensions of each excavated area, a single sample from each respective sidewall will be sufficient for the purposes of characterization. Sidewall samples will be collected at a depth of five feet below ground surface. A floor sample shall be collected from center of each excavation. As the objective is to remove hydrocarbon-bearing sediments from areas defined by prior sampling, the excavations will not be enlarged based on the results of confirmation sampling. If, however, obvious significant contamination is observed in an area bordering the planned excavations, it will be removed.

5.7. Air Monitoring

Ambient air in the vicinity of the excavated areas will be monitored for concentrations of hydrocarbon vapors during site work. Monitors will utilize a hand-held instrument (photo-ionization detector or equivalent). While the nature of the hydrocarbon contamination is such that the exceedance of action levels is not anticipated, the remedial contractor shall describe the criteria for action in their Site Specific Health and Safety Plan and be prepared to modify excavation plans in the event of a significant vapor event.

5.8. Dust Suppression

In the event that unusually dry conditions prevail at the time of excavation and dust suppression measures are deemed prudent, the site surface will be watered so as to minimize dust generation.

5.9. Storm Water Management

As the excavation will take place during the California dry season, storm water mitigation measures are not expected to be necessary. Should schedules change, the remediation contractor shall take appropriate storm water management measures.

5.10. Truck Routes

The remediation contractor shall select a route for trucks that minimizes travel through residential neighborhoods. Hauling during rush hours (7-9AM and 4-6PM) shall be minimized to the extent practicable.

5.11. Backfill

The remedial cells A1, A2, B1, and B2 will be filled with clean graded material to one foot below original grade, level with the overall graded surface. The upper four

feet of each excavation will be compacted in two 2-foot lifts using excavation equipment.

The larger graded area will be brought back to original grade (or higher) with import and compacted as necessary at the time the park features are constructed several months following the completion of remedial action. The surfaces (roads and parking lots) will also be finished during park construction; immediately following backfilling the graded area and the excavated/filled cells will remain unsurfaced.

6. POST-EXCAVATION MONITORING

The study area peripheral wells (MW-10, 11 and 12) were installed and initially sampled during the fourth quarter of 2008. Conventional practice involves the quarterly sampling of monitoring wells for four consecutive events, over the course of a complete hydrologic season, in order to gather data representative of the subsurface during times of differing seasonal water table elevations. The third quarter 2009 monitoring event shall be the fourth consecutive monitoring episode for these relatively new peripheral wells. Interior wells have been sampled for a longer duration (though somewhat sporadically).

The results of monitoring events to date indicate the extent of hydrocarbon-bearing groundwater to be contained predominantly on the HARD property. Had significant contaminant migration occurred it would already be evidenced in samples in peripheral downgradient wells. It is implausible to suspect that such migration remains a possibility. As such, it is recommended that the monitoring wells associated with this environmental project be sampled one time following the described removal action. This sampling will be for the purposes of completing the evaluative hydrologic cycle, not for the purposes of confirming the effectiveness of the sediment removal. The effectiveness of the removal can be predicted using existing information, no additional monitoring is necessary.

7. CLOSURE

This concludes the Corrective Action Plan for the redevelopment project at the subject HARD – RDA Holland Park Property.

8. REFERENCES

Ninyo & Moore, Site Assessment Report, December 2008

Environmental Bio-Systems, Workplan: Demolition and Removal of USTs and AGTs, August 1998

Many historic assessment and facility-related documents can be located in the Alameda County database, at:

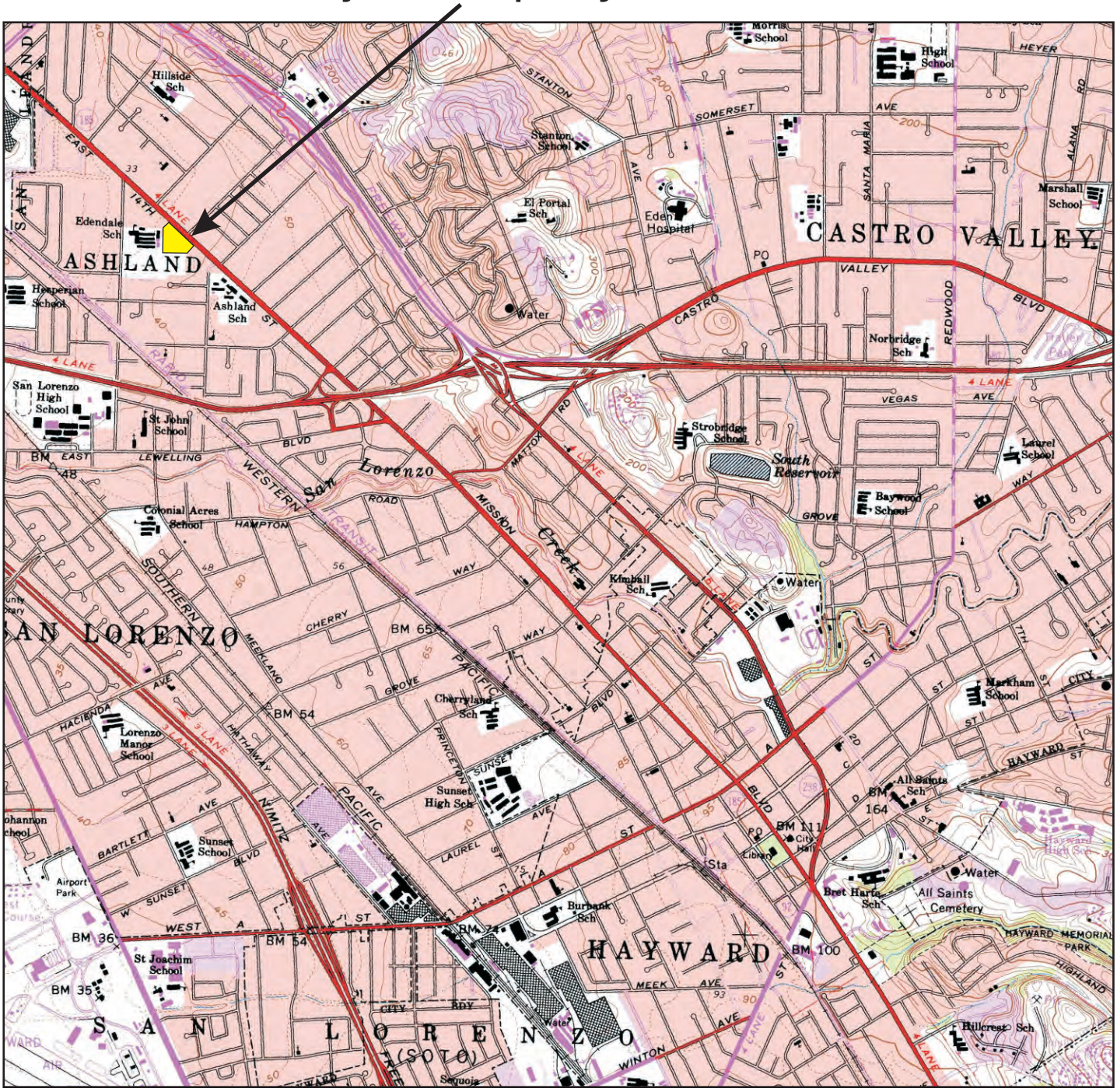
http://ehgis.acgov.org/dehpublic/dehpublic.jsp

9. PREPARED BY

This Corrective Action Plan has been prepared by:

Markus B. Niebanck, PG No. 5607
Principal

Figures



Base map from USGS Hayward Topographic Quadrangle Map

Figure 1: Property Location Map

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro, CA

May 28, 2009

amicus - STRATEGIC ENVIRONMENTAL CONSULTING

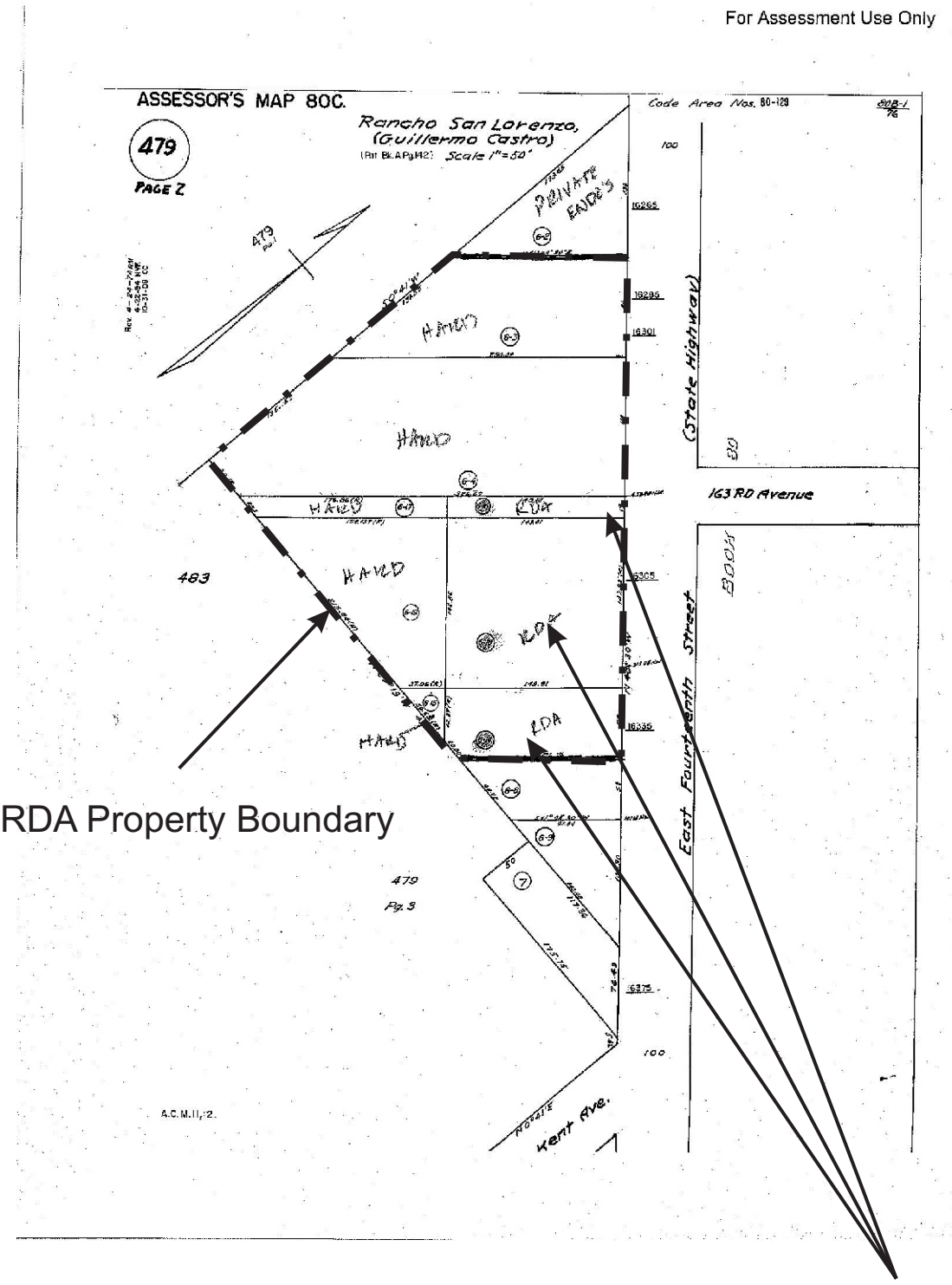
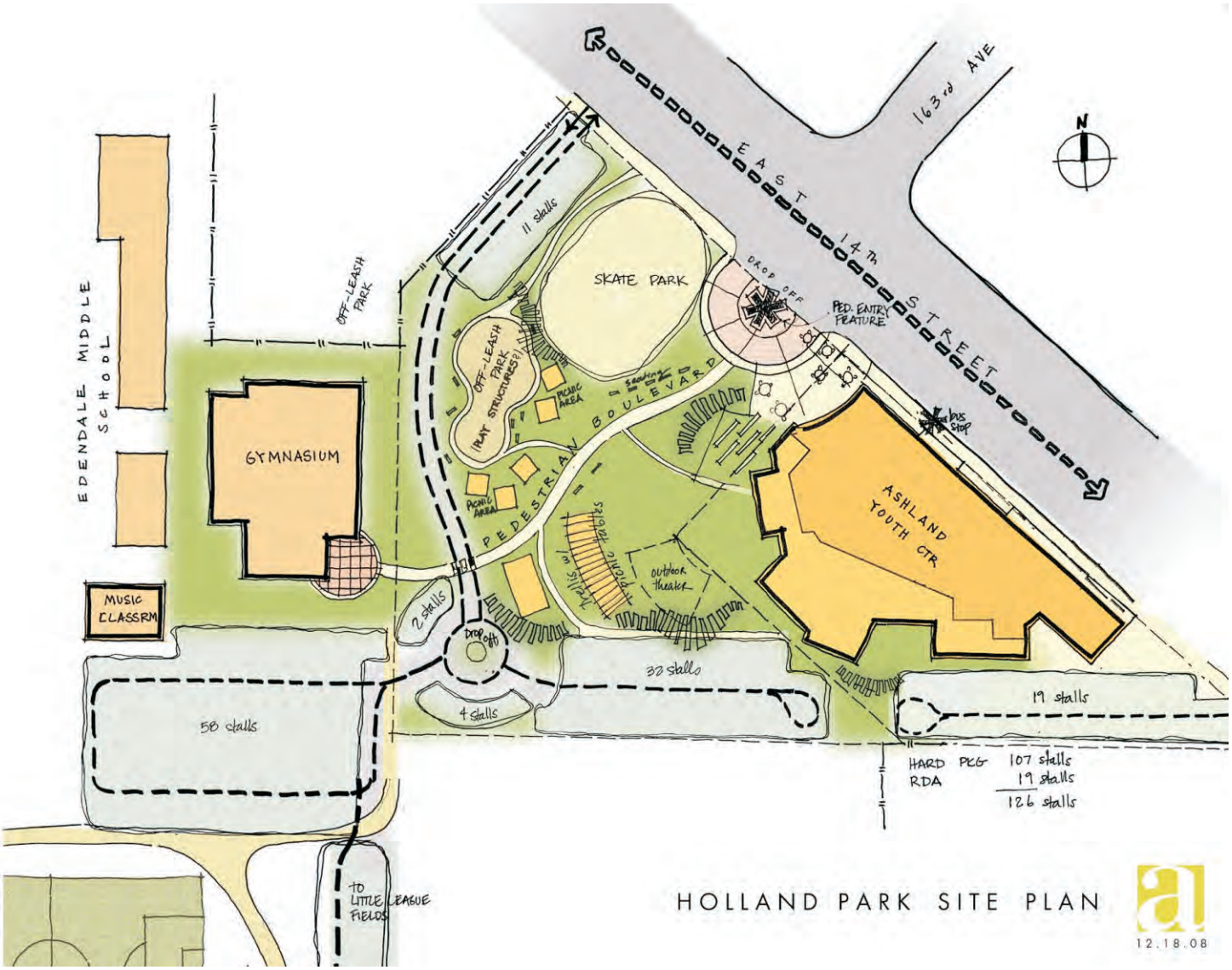


Figure 2: Parcel Map

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro
May 28, 2009



Draft Park Plan by: AEDIS Architecture and Planning

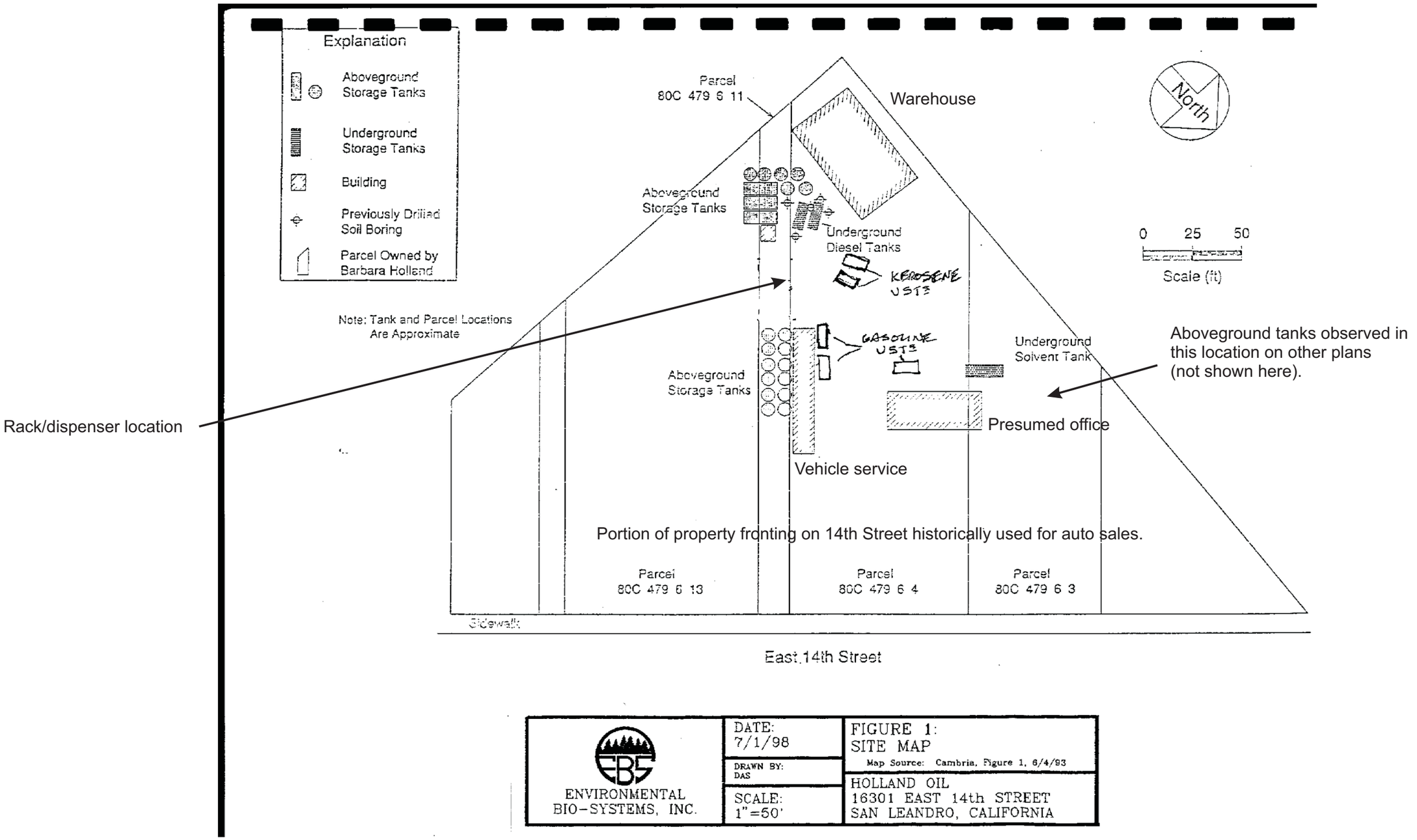
Figure 3: Draft Park Redevelopment Plan

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

amicus - STRATEGIC ENVIRONMENTAL CONSULTING

Figure 4: Aerial View of Project Property and Vicinity

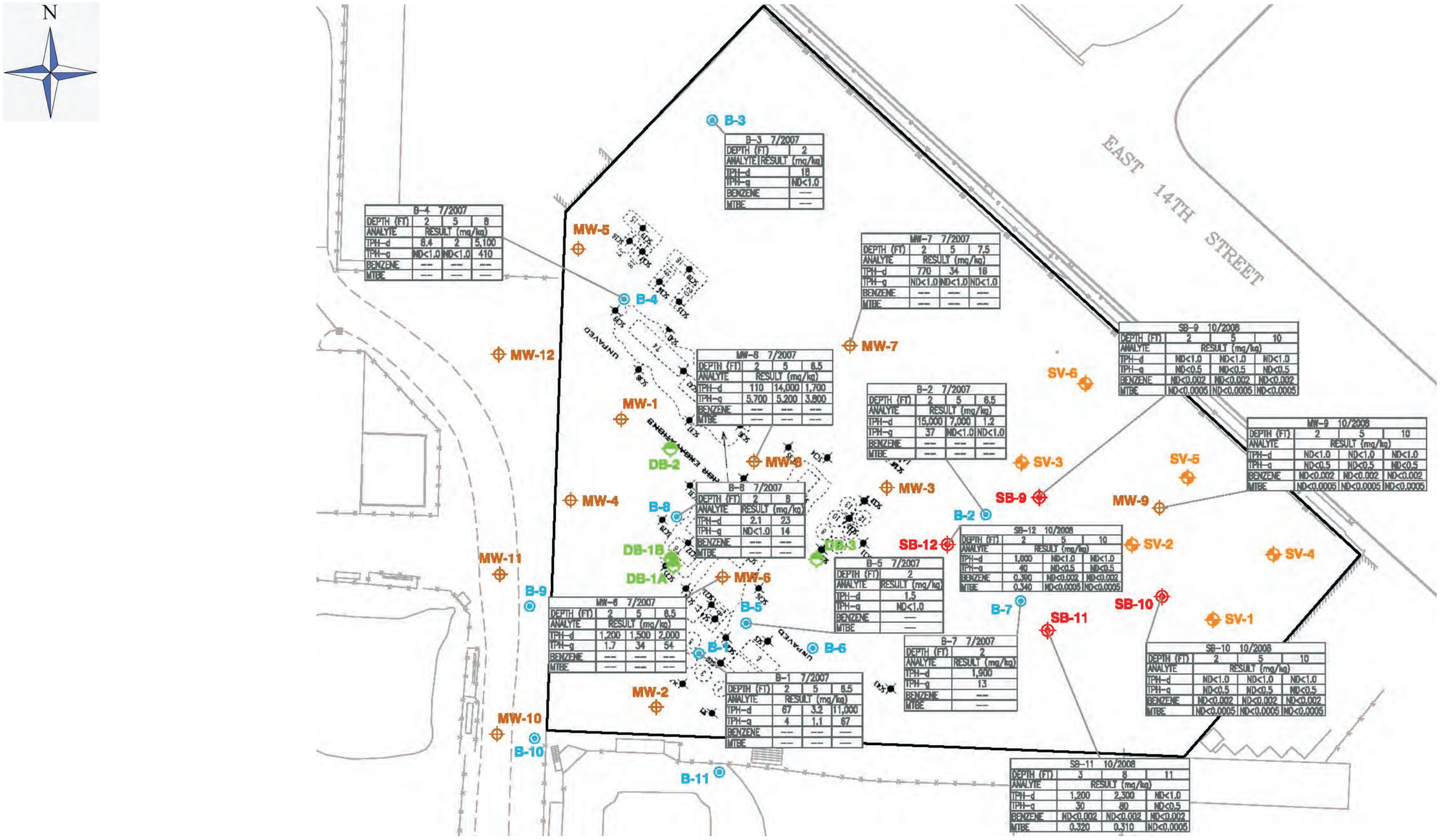


From: Environmental Bio-Systems August 10, 1998 Workplan for Tank Removal

Figure 5: Historic Features Site Plan

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009



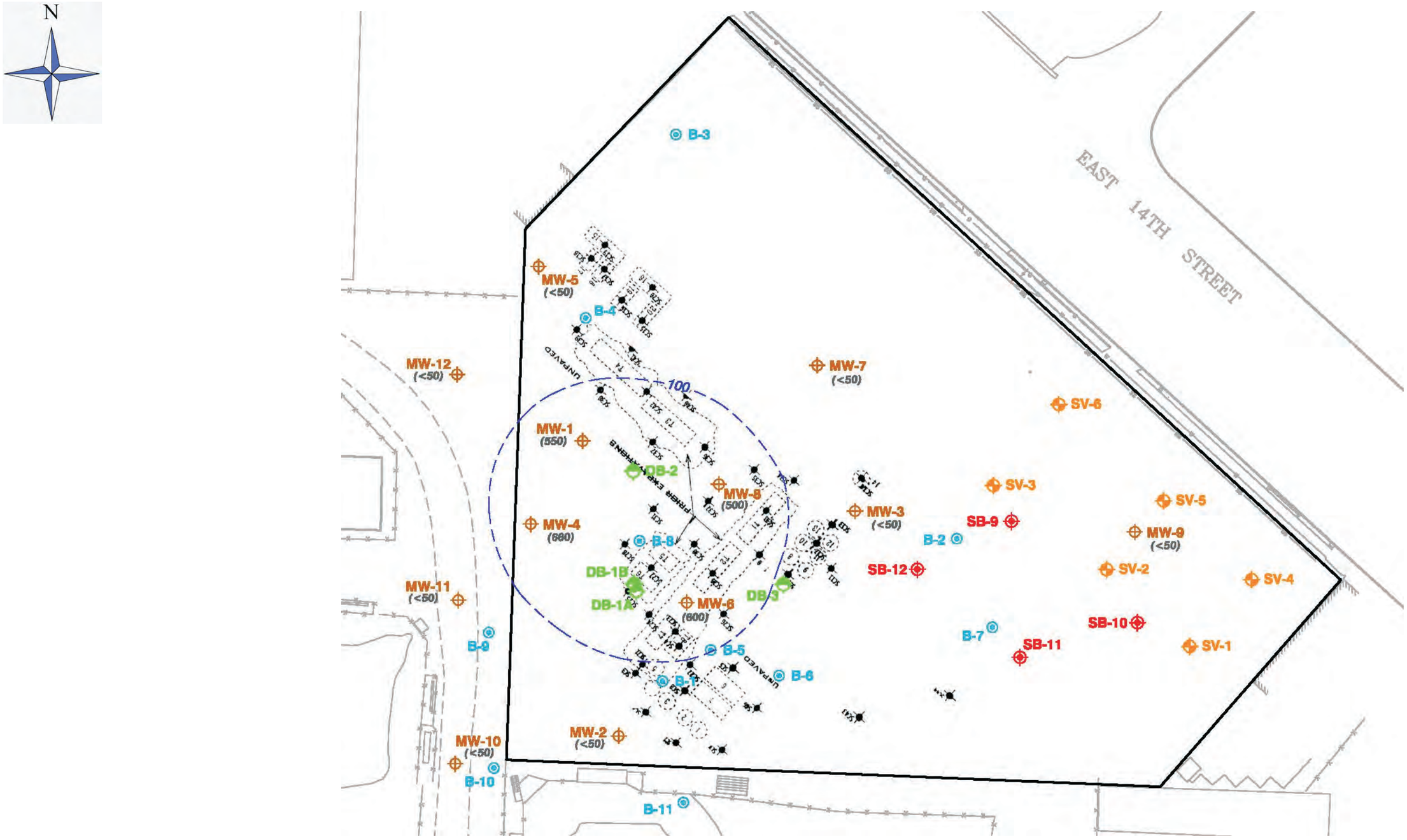
From: Ninyo & Moore Site Assessment Report, December 2008

Figure 6: Hydrocarbons in Soil

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

amicus - STRATEGIC ENVIRONMENTAL CONSULTING



From: Ninyo & Moore Site Assessment Report, December 2008

Approximate Scale (Feet)

0 50 100

Figure 7: Diesel-Range Organics in Groundwater

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

amicus - STRATEGIC ENVIRONMENTAL CONSULTING

Base map from USGS Hayward Topographic Quadrangle Map

Well Type

Irrigation Domestic Domestic (precise location uncertain)

Figure 8: Water Well Location Map

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

amicus - STRATEGIC ENVIRONMENTAL CONSULTING

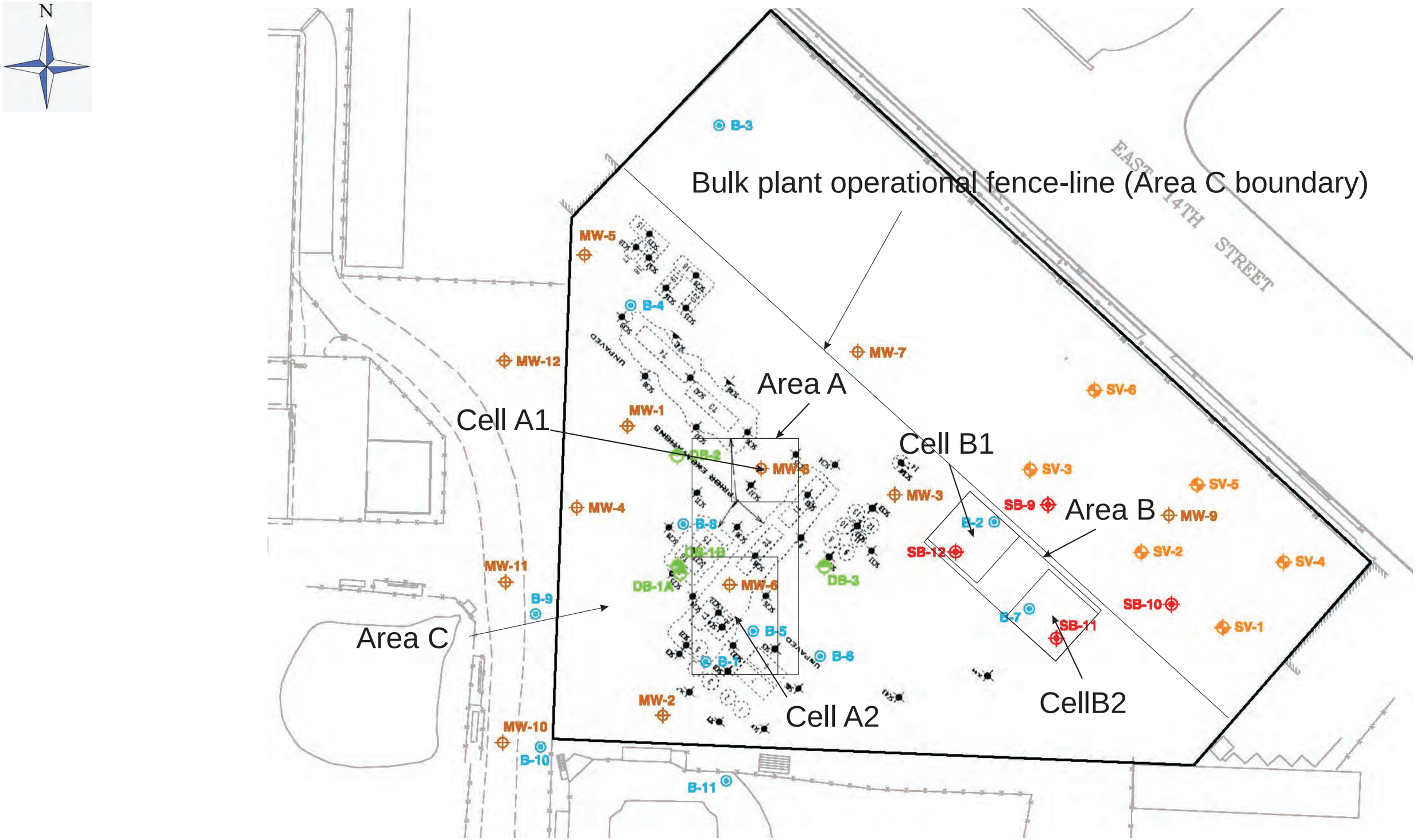


Figure 9: Remedial Excavation and Grading Plan

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

N

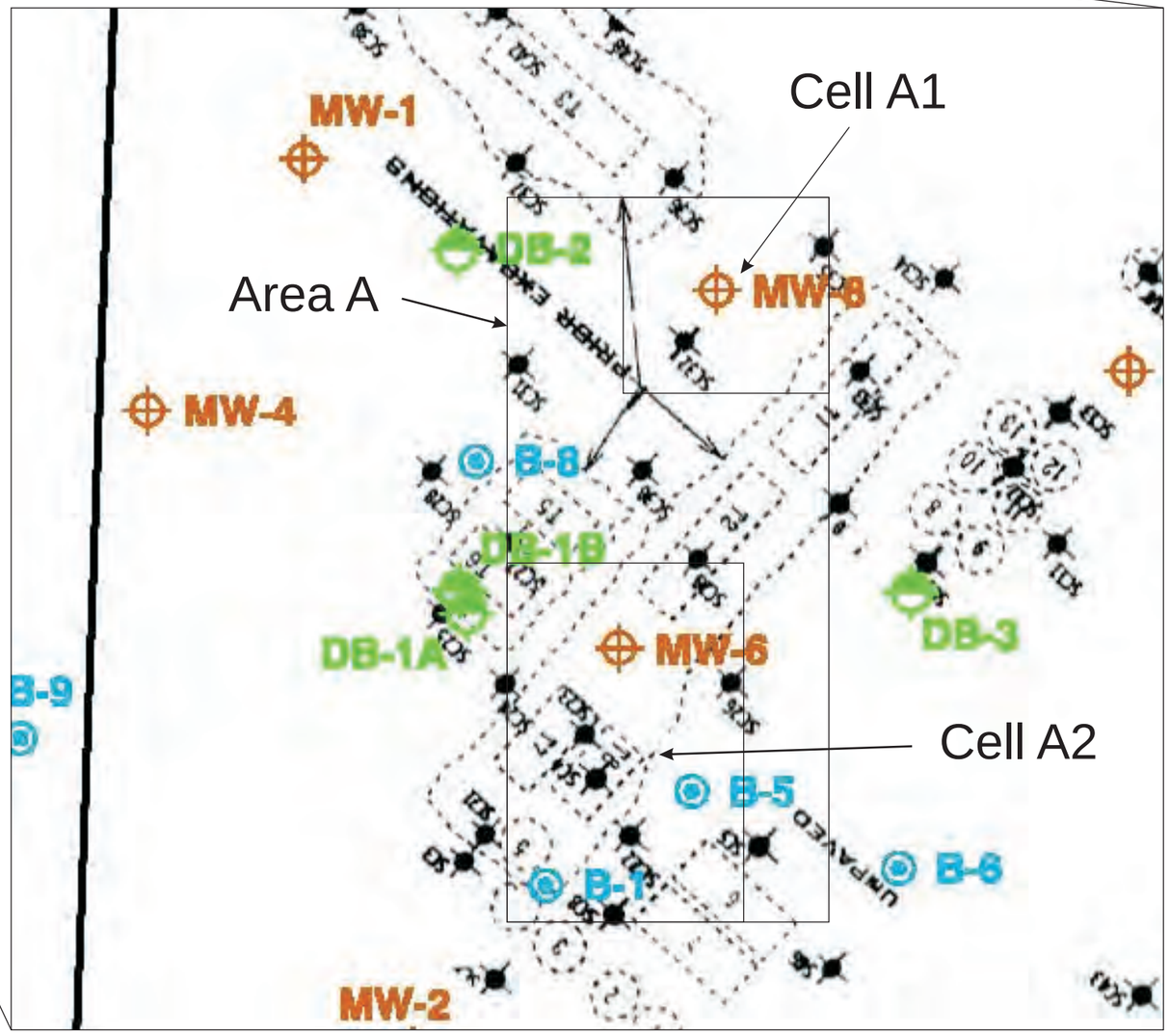


Figure 10: Area A Excavation Detail

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro
May 28, 2009

Approximate Scale (Feet)

0 50 100

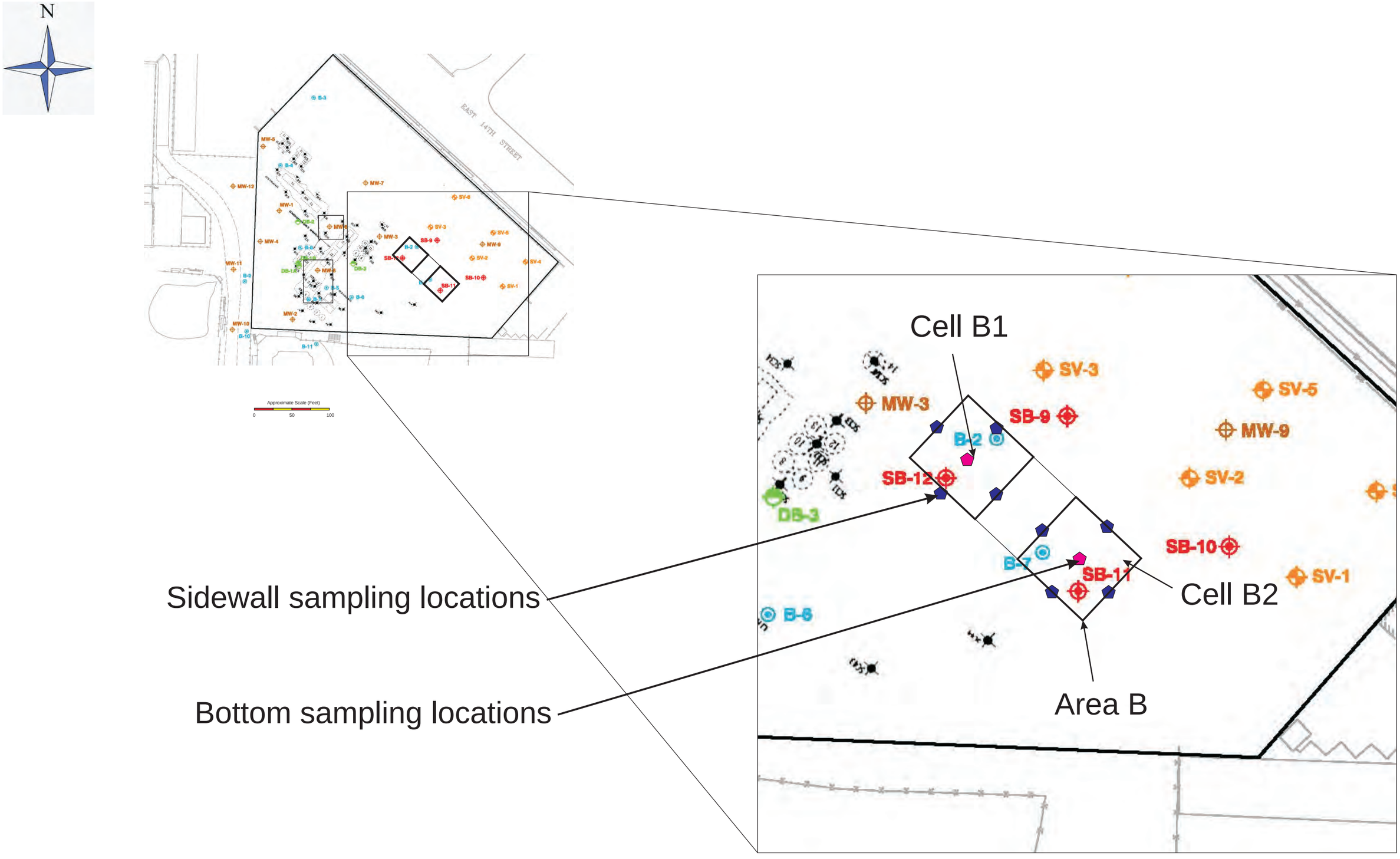


Figure 11: Area B Excavation Detail

HARD-RDA Holland Park Property
16301 East 14th Street, San Leandro

May 28, 2009

Attachment A

Alameda County Environmental Health January 22, 2009 Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-93

January 22, 2009

Ms. Ann Marie Holland Tiers
Estate of Jack Holland
1498 Hamrick Lane
Hayward, CA 94544

Ms. Barbara Holland
P.O. Box 5
Kentfield, CA 94914

Mr. Lawrence Lepore
Hayward Area Recreation and Park District
1099 E Street
Hayward, CA 94541

Subject: Fuel Leak Case No. RO0000212 and Geotracker Global ID T0600100709, Holland Oil, 16301 East 14th Street, San Leandro, CA 94580

Dear Ms. Tiers, Ms. Holland, and Mr. Lepore:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site including the recently submitted document entitled, "*Site Assessment Report, Holland Oil Property, 16301 East 14th Street, San Leandro, California 94580,*" dated December 11, 2008 (Report). The Report presents the results of soil, groundwater, and soil vapor sampling conducted in September and October of 2008. Soil sampling results from the eastern portion of the site confirm the presence of elevated concentrations of petroleum hydrocarbons (TPH) as diesel and kerosene in shallow soil in the area of previous soil borings B-2 and B-7. Groundwater sampling conducted in September and October 2008 provides additional data to define the extent of dissolved phase hydrocarbons. We concur with the recommendation in the Report to conduct two additional quarterly groundwater sampling events to confirm the extent of dissolved phase hydrocarbons.

The Report indicates that recommendations for appropriate remedial action will be presented with the Second Quarter 2009 Groundwater Monitoring Report. We request that you prepare a Draft Corrective Action Plan that proposes cleanup goals and evaluates potential remedial methods (see technical comment 1). We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

TECHNICAL COMMENTS

1. **Draft Corrective Action Plan.** We request that you prepare a Draft Corrective Action Plan (Draft CAP) that meets the provisions of section 2725 of the UST regulations (CCR, Title 23, Chapter 16, section 2600, et seq.) and includes the following minimum information:

    - Proposed cleanup goals and the basis for cleanup goals.
    - Summary of site characterization data.
    - Receptor information including likely future land use scenarios, adjacent land use and sensitive receptors, and potential groundwater receptors (see technical comment 2 regarding well survey).

- Evaluation of remedial alternatives including discussion of feasibility and limitations for each remedial alternative.
- Detailed description of proposed remediation including confirmation sampling and monitoring during implementation.
- Post-remediation monitoring.
- Schedule for implementation of cleanup.

Please provide the future development plans for the site to help in evaluation of the receptor information and proposed cleanup goals. Public participation is a requirement for the Corrective Action Plan process. Therefore, we request that you submit a Draft CAP for ACEH review. Upon ACEH approval of a Draft CAP, ACEH will notify potentially affected members of the public who live or own property in the surrounding area of the proposed remediation described in the Draft CAP. Public comments on the proposed remediation will be accepted for a 30-day period.

2. **Detailed Well Survey.** In order to identify potential receptors for the fuel hydrocarbon plume from your site, we request that you locate all water supply wells within a radius of 2,000 feet of the subject site. We recommend that you obtain well information from both Alameda County Public Works Agency and the State of California Department of Water Resources, at a minimum. Submittal of maps showing the location of all wells identified in your study, and the use of tables to report the data collected as part of your survey are required. Please provide a table that includes the well designation, location, total depth, diameter, screen interval, date of well installation, current status, historic use, and owner of the wells. In addition, please provide well logs and completion records for wells downgradient from the site that are potential receptors. Please present your results in the Draft CAP requested below.

3. **Groundwater Monitoring.** Quarterly groundwater monitoring is to be implemented for the existing monitoring wells at the site. The groundwater samples are to be analyzed for TPH as gasoline and TPH as diesel using EPA Method 8015 and VOCs using EPA Method 8260. Please include results from the quarterly groundwater sampling in the reports requested below

TECHNICAL REPORT REQUEST

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

- **March 30, 2009** – Draft Corrective Action Plan
- **April 17, 2009** – First Quarter 2009 Groundwater Monitoring Report
- **July 17, 2009** – Second Quarter 2009 Groundwater Monitoring Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "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." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

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

Sincerely,

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

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Hazardous Materials Unit, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612

Markus Niebanck, Amicus, 580 Second Street, Suite 260, Oakland, CA 94607

Cem Atabek, Ninyo & Moore, 1956 Webster Street, Suite 400, Oakland, CA 94612

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Attachment B

Ninyo & Moore December 2008 Site Assessment Tables

TABLE 1. SOIL ANALYTICAL DATA - TPH, BTEX & MTBE - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Sample I.D.	Date	Depth (ft bgs)	TPH-d	Kerosene	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
			← Analytical Results (mg/kg) →							
B-1-S-2.0	7/2/2007	2.0	67	15	4	--	--	--		--
B-1-S-5.0	7/2/2007	5.0	3.2	3.3	1.1	--	--	--		--
B-1-S-6.5	7/2/2007	6.5	11,000	5,900	67	--	--	--		--
B-2-S-2.0	7/2/2007	2.0	15,000	4,600	37	--	--	--		--
B-2-S-5.0	7/2/2007	5.0	7,000	2,000	ND<1.0	--	--	--		--
B-2-S-6.5	7/2/2007	6.5	1.2	ND<1.0	ND<1.0	--	--	--		--
B-3-S-2.0	7/2/2007	2.0	18	ND<2.0	ND<1.0	--	--	--		--
B-4-S-2.0	7/2/2007	2.0	8.4	1.9	ND<1.0	--	--	--		--
B-4-S-5.0	7/2/2007	5.0	2	1.2	ND<1.0	--	--	--		--
B-4-S-8.0	7/2/2007	8.0	5,100	5,600	410	--	--	--		--
B-5-S-2.0	7/2/2007	2.0	1.5	ND<1.0	ND<1.0	--	--	--		--
B-7-S-2.0	7/2/2007	2.0	1,900	380	13	--	--	--		--
B-8-S-2.0	7/2/2007	2.0	2.1	1.2	ND<1.0	--	--	--		--
B-8-S-8.0	7/2/2007	8.0	23	14	14	--	--	--		--
MW-6-S-2.0	7/2/2007	2.0	1,200	760	1.7	--	--	--		--
MW-6-S-5.0	7/2/2007	5.0	1,500	850	34	--	--	--		--
MW-6-S-6.5	7/2/2007	6.5	2,000	1,300	54	--	--	--		--
MW-7-S-2.0	7/2/2007	2.0	770	74	ND<1.0	--	--	--		--
MW-7-S-5.0	7/2/2007	5.0	34	ND<5.0	ND<1.0	--	--	--		--
MW-7-S-7.5	7/2/2007	7.5	16	ND<2.0	ND<1.0	--	--	--		--
MW-8-S-2.0	7/2/2007	2.0	110	140	5,700	--	--	--		--
MW-8-S-5.0	7/2/2007	5.0	14,000	16,000	5,200	--	--	--		--
MW-8-S-6.5	7/2/2007	6.5	1,700	1,600	3,800	--	--	--		--

TABLE 1. SOIL ANALYTICAL DATA - TPH, BTEX & MTBE - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Sample I.D.	Date	Depth (ft bgs)	TPH-d	Kerosene	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
			← Analytical Results (mg/kg) →							
MW-9-2	10/1/2008	2.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
MW-9-5	10/1/2008	5.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
MW-9-10	10/1/2008	10.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-9-2	10/2/2008	2.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-9-5	10/2/2008	5.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-9-10	10/2/2008	10.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-10-2	10/2/2008	2.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-10-5	10/2/2008	5.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-10-10	10/2/2008	10.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-11-3	10/2/2008	3.0	1,200	--	30	ND<0.002	ND<0.002	ND<0.002	ND<0.004	0.320
SB-11-8	10/2/2008	8.0	2,300	--	80	ND<0.002	ND<0.002	ND<0.002	ND<0.004	0.310
SB-11-11	10/2/2008	11.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-12-2	10/2/2008	2.0	1,000	--	40	0.390	6.800	3.200	26.800	0.340
SB-12-5	10/2/2008	5.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005
SB-12-10	10/2/2008	10.0	ND<1.0	--	ND<0.5	ND<0.002	ND<0.002	ND<0.002	ND<0.004	ND<0.0005

Notes and Abbreviations:
ft bgs = feet below ground surface
TPH-d = total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B
kerosene analyzed by EPA Method 8015B
TPH-g = total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015B
BTEX = benzene, toluene, ethylbenzene, xylenes analyzed by EPA Method 8260B
MTBE = methyl tert butyl ether analyzed by EPA Method 8260B
mg/kg = miligrams per kilogram
-- = not analyzed, not available, not applicaple
ND< X = not detected, below laboratory reporting limit of X

TABLE 2. SOIL ANALYTICAL DATA - VOCs - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Sample ID	Date	Depth (ft bgs)	Acetone	2-Butanone	Carbon disulfide	Isopropyl-benzene	n-Propyl-benzene	tert-Butyl-benzene	n-Butyl-benzene	Naphthalene	Other VOCs
			Analytical Results (mg/kg)								
MW-9-2	10/1/2008	2.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
MW-9-5	10/1/2008	5.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
MW-9-10	10/1/2008	10.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-9-2	10/2/2008	2.0	0.340	0.070	0.0045	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-9-5	10/2/2008	5.0	0.050	0.0071	0.0029	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-9-10	10/2/2008	10.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-10-2	10/2/2008	2.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-10-5	10/2/2008	5.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-10-10	10/2/2008	10.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-11-3	10/2/2008	3.0	1.200	2.600	ND<.200	0.400	1.100	0.200	2.100	2.700	sec-Butylbenzene (1.700)
SB-11-8	10/2/2008	8.0	0.460	2.100	ND<.200	1.100	4.400	0.780	26.000	15.000	sec-Butylbenzene (10.000)
SB-11-11	10/2/2008	11.0	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-12-2	10/2/2008	2.0	1.300	2.600	ND<.200	0.990	2.300	ND<.200	1.900	4.000	1,3,5-Trimethylbenzene (7.000) 4-Isopropyltoluene (1.300) 1,2,4-Trimethylbenzene (1.600)
SB-12-5	10/2/2008	5.0	0.050	0.010	0.0069	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND
SB-12-10	10/2/2008	10.0	0.0053	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND<.002	ND

Notes and Abbreviations:
ft bgs = feet below ground surface
VOCs analyzed using EPA Method 8260 B
mg/kg = miligrams per kilogram
ND< X = not detected, below laboratory reporting limit of X
ND = not detected

TABLE 3. GROUNDWATER ANALYTICAL DATA - TPH & VOCs - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Boring/Well ID (toc elev)	Sample Date	Sample Collection Depth (ft bgs)	Depth to Groundwater (ft btoc/ ft bgs)	Groundwater Elevation (ft msl)	TPH-d	Kerosene	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	1,4-Dichloro-benzene	Chloro-benzene	Isopropyl-benzene	n-Butyl-benzene	n-Propyl-benzene	sec-Butyl-benzene	tert-Butyl-benzene	Other VOCs
					Analytical Results (µg/L)															
Monitoring Well Groundwater Samples																				
MW-1	7/10/2007	Shallow WBZ	8.22	28.37	1,100	800	1,700	3	ND<0.5	1.3	ND<1.5	ND<0.5	0.51	0.84	51	27.0	130	25	1.9	ND
36.59	10/13/2008	Shallow WBZ	8.73	27.86	550	--	440	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	20	5.5	30	ND<1.0	ND<1.0	ND
MW-2	7/9/2007	Shallow WBZ	8.41	28.92	210	94	93	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<0.5	0.68	ND<0.5	0.6	0.52	ND<0.5	ND
37.33	10/13/2008	Shallow WBZ	9.04	28.29	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
MW-3	7/10/2007	Shallow WBZ	8.11	29.27	62	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
37.38	10/13/2008	Shallow WBZ	8.77	28.61	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
MW-4	7/10/2007	Shallow WBZ	8.38	28.39	710	400	670	3.7	ND<0.5	ND<0.5	ND<1.5	13	0.51	1.7	20	7.9	42	12	1.2	1,2-Dichlorobenzene (0.51)
36.77	10/13/2008	Shallow WBZ	8.89	27.88	660	--	470	2.9	ND<1.0	ND<1.0	ND<1.0	1.9	ND<1.0	1.7	10	5.3	30	ND<1.0	ND<1.0	Carbon disulfide (2) Naphthalene (1.4)
MW-5	7/10/2007	Shallow WBZ	8.21	28.03	380	170	170	ND<0.5	ND<0.5	ND<0.5	ND<1.5	6.9	ND<0.5	ND<0.5	1.8	ND<0.5	2.3	0.94	0.51	ND
36.24	10/13/2008	Shallow WBZ	8.66	27.58	ND<50	--	70	ND<1.0	ND<1.0	ND<1.0	ND<1.0	20	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	Acetone (4.9)
MW-6	7/9/2007	Shallow WBZ	8.25	28.9	1,500	910	780	11	0.64	0.71	2.4	ND<0.5	9.1	2.1	20	5.4	32	7	0.57	1,2-Dichlorobenzene (0.58); 1,3-Dichlorobenzene (3.1); 2-Chlorotoluene (1.6)
37.15	10/13/2008	Shallow WBZ	8.85	28.30	600	--	470	7	ND<1.0	ND<1.0	1.1	ND<0.5	6.3	1.6	10	2.8	20	ND<1.0	ND<1.0	1,3-Dichlorobenzene (2)
MW-7	7/10/2007	Shallow WBZ	8.24	28.58	510	91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	0.94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
36.82	10/13/2008	Shallow WBZ	8.75	28.07	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
MW-8	7/9/2007	Shallow WBZ	8.16	28.65	790	500	2,100	110	6.8	76	215	ND<0.5	ND<0.5	3.8	12	7.2	30	2.5	0.59	1,2,4-Trimethylbenzene (82); 1,3,5-Trimethylbenzen (30); 4-Isopropyltoluene (3.5)
36.81	10/14/2008	Shallow WBZ	8.69	28.12	500	--	390	50	1.4	10	23.2	ND<0.5	ND<1.0	2.6	3.3	ND<1.0	8.6	ND<1.0	ND<1.0	Naphthalene (4.9)
MW-9	10/14/2008	Shallow WBZ	8.11	29.11	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
37.22																				
MW-10	10/14/2008	Shallow WBZ	8.77	28.02	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
36.79																				
MW-11	10/14/2008	Shallow WBZ	8.35	27.85	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	Acetone (10) Carbon disulfide (2.4)
36.2																				
MW-12	10/14/2008	Shallow WBZ	8.51	27.55	ND<50	--	110	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
36.06																				
2008 Discrete Groundwater Samples																				
DB-1B	10/1/2008	34-37	9.05	--	ND<50	--	120	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	cis-1,2-Dichloroethene (1.9)
DB-2	10/1/2008	34-37	9.12	--	ND<50	--	60	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
DB-3	10/1/2008	34-37	9.80	--	ND<50	--	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	Acetone (6.0) Carbon disulfide (1.1)
2007 Grab Groundwater Samples																				
B-9-GW	8/10/2007	Shallow WBZ	7.85	--	ND<50	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	Chloromethane (0.67)
B-10-GW	8/10/2007	Shallow WBZ	7.85	--	ND<50	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
B-11-GW	8/10/2007	Shallow WBZ	7.40	--	740	270	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND

TABLE 3. GROUNDWATER ANALYTICAL DATA - TPH & VOCs - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Boring/Well ID (toc elev)	Sample Date	Sample Collection Depth (ft bgs)	Depth to Groundwater (ft btoc/ ft bgs)	Groundwater Elevation (ft msl)	TPH-d	Kerosene	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	1,4-Dichloro-benzene	Chloro-benzene	Isopropyl-benzene	n-Butyl-benzene	n-Propyl-benzene	sec-Butyl-benzene	tert-Butyl-benzene	Other VOCs
					Analytical Results (µg/L)															

Notes and Abbreviations:
TPH = total petroleum hydrocarbons analyzed by EPA Method 8015B
VOCs = volatile organic compounds analyzed by EPA Method 8260B
toc elev = top of casing elevation in feet above mean sea level
ft btoc= feet below top of casing
ft bgs= feet below ground surface
ft msl = feet above mean sea level
TPH-d = total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B
Kerosene analyzed by EPA Method 8015B
TPH-g = total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015B
BTEX = benzene, toluene, ethylbenzene, xylenes analyzed by EPA Method 8260B
MTBE = methyl tert butyl ether analyzed by EPA Method 8260B
µg/L = micrograms per liter
WBZ = water bearing zone
-- = not analyzed, not available, not applicaple
ND< X = not detected, below laboratory reporting limit of X

TABLE 4. GROUNDWATER ANALYTICAL DATA - PAHs - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

Monitoring Well ID (toc elev)	Sample I.D.	Sample Date	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft msl)	Acenaphthene	Flourene	Naphthalene	Phenanthrene	Other PAHs
					← Analytical Results (µg/L) →				
Monitoring Well Groundwater Samples									
MW-1 *36.59*	MW-1-GW	7/10/2007	8.22	28.37	0.52	0.63	ND<0.2	ND<0.2	ND
MW-2 *37.33*	MW-2-GW	7/9/2007	8.41	28.92	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
MW-3 *37.38*	MW-3-GW	7/10/2007	8.11	29.27	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
MW-4 *36.77*	MW-4-GW	7/10/2007	8.38	28.39	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
MW-5 *36.24*	MW-5-GW	7/10/2007	8.21	28.03	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
MW-6 *37.15*	MW-6-GW	7/9/2007	8.25	28.90	0.37	1.1	ND<0.2	1.1	ND
MW-7 *36.82*	MW-7-GW	7/10/2007	8.24	28.58	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
MW-8 *36.81*	MW-8-GW	7/9/2007	8.16	28.65	ND<0.2	0.29	40	0.32	ND

Notes and Abbreviations:
PAHs = polycyclic aromatic hydrocarbons analyzed by EPA Method 8270C-SIM
ft btoc= feet below top of casing
ft msl = feet above mean sea level
µg/L = micrograms per liter
-- = not analyzed, not available, not applicaple
ND< X = not detected, below laboratory reporting limit of X

TABLE 5. SOIL VAPOR ANALYTICAL DATA - VOCs - Former Holland Oil Facility, 16301 East 14th Street, San Leandro, California

	Sample ID					
	SV-1	**SV-2**	**SV-3**	**SV-4**	**SV-5**	**SV-6**
Analyte	← **Analytical Results (µg/m³)** →					
1,1 - Dichloroethene	ND<2.0	ND<2.0	ND<40	ND<2.0	ND<2.0	ND<10
1,1,1,2-Tetrachloroethane	ND<3.4	ND<3.4	ND<34	ND<3.4	ND<3.4	ND<170
1,1,1-Trichloroethane	ND<2.7	ND<2.7	ND<41	ND<2.7	ND<2.7	ND<14
1,1,2,2-Tetrachloroethane	ND<3.4	ND<3.4	ND<52	ND<3.4	ND<3.4	ND<170
1,1,2-Trichloroethane	ND<2.7	ND<2.7	ND<52	ND<2.7	ND<2.7	ND<14
1,1-Dichloroethane	ND<2.0	ND<2.0	ND<34	ND<2.0	ND<2.0	ND<10
1,1-Difluoroethane	ND<27	ND<27	ND<1400	ND<27	ND<27	ND<140
1,2,4-Trichlorobenzene	ND<3.6	ND<3.6	ND<25	ND<3.6	ND<3.6	ND<180
1,2,4-Trimethylbenzene	ND<2.5	ND<2.5	ND<44	ND<2.5	ND<2.5	ND<120
1,2-Dibromoethane(Ethylene dibromide)	ND<3.8	ND<3.8	ND<54	ND<3.8	ND<3.8	ND<19
1,2-Dichlorobenzene	ND<3.0	ND<3.0	ND<30	ND<3.0	ND<3.0	ND<150
1,2-Dichloroethane	ND<2.0	ND<2.0	ND<32	ND<2.0	ND<2.0	ND<10
1,2-Dichloropropane	ND<2.3	ND<2.3	ND<51	ND<2.3	ND<2.3	ND<12
1,3,5-Trimethylbenzene	ND<2.5	ND<2.5	ND<34	ND<2.5	ND<2.5	ND<120
1,3-Butadiene	ND<4.4	ND<4.4	ND<30	ND<4.4	ND<4.4	ND<22
1,3-Dichlorobenzene	ND<3.0	ND<3.0	ND<18	ND<3.0	ND<3.0	ND<150
1,4-Dichlorobenzene	ND<3.0	ND<3.0	ND<33	ND<3.0	ND<3.0	ND<150
1,4-Dioxane	ND<1.8	ND<1.8	ND<25	ND<1.8	ND<1.8	ND<9
2-Butanone (MEK)	**13**	**11**	ND<22	**4.3**	**6.2**	ND<7.4
2-Hexanone	ND<2.0	ND<2.0	ND<43	ND<2.0	ND<2.0	ND<10
4-Ethyl Toluene	ND<2.5	ND<2.5	ND<37	ND<2.5	ND<2.5	ND<120
4-Methyl-2-Pentanone (MIBK)	ND<2.0	ND<2.0	ND<33	ND<2.0	ND<2.0	ND<10
Acetone	**59**	**95**	**610**	**86**	**54**	**460**
Benzene	**2**	ND<1.6	ND<45	ND<1.6	ND<1.6	ND<8
Bromodichloromethane	ND<3.4	ND<3.4	ND<44	ND<3.4	ND<3.4	ND<17
Bromoform	ND<5.2	ND<5.2	ND<88	ND<5.2	ND<5.2	ND<260
Bromomethane	ND<1.9	ND<1.9	ND<39	ND<1.9	ND<1.9	ND<9.7
Carbon Disulfide	ND<1.6	**4.60**	ND<25	ND<1.6	ND<1.6	ND<7.8
Carbon Tetrachloride	ND<3.2	ND<3.2	ND<47	ND<3.2	ND<3.2	ND<16
Chlorobenzene	ND<2.3	ND<2.3	ND<21	ND<2.3	ND<2.3	ND<120
Chloroethane	ND<1.3	ND<1.3	ND<20	ND<1.3	ND<1.3	ND<6.6
Chloroform	ND<2.4	ND<2.4	ND<98	ND<2.4	ND<2.4	ND<12
Chloromethane	ND<1.0	ND<1.0	ND<36	ND<1.0	ND<1.0	ND<5.2
cis-1,2-dichloroethene	ND<2.0	ND<2.0	ND<28	ND<2.0	ND<2.0	ND<9.9
cis-1,3-Dichloropropene	ND<2.3	ND<2.3	ND<18	ND<2.3	ND<2.3	ND<11
Dibromochloromethane	ND<4.3	ND<4.3	ND<47	ND<4.3	ND<4.3	ND<21
Dichlorodifluoromethane	ND<2.5	ND<2.5	ND<37	ND<2.5	ND<2.5	ND<12
Diisopropyl ether (DIPE)	ND<2.1	ND<2.1	ND<33	ND<2.1	ND<2.1	ND<10
Ethyl Acetate	ND<1.8	ND<1.8	ND<21	ND<1.8	ND<1.8	ND<9
Ethyl Benzene	ND<2.2	ND<2.2	ND<16	ND<2.2	ND<2.2	ND<110
Ethyl tert-butyl ether (ETBE)	ND<2.1	ND<2.1	ND<33	ND<2.1	ND<2.1	ND<10
Freon 113	ND<3.8	ND<3.8	ND<46	ND<3.8	ND<3.8	ND<19
Hexachlorobutadiene	ND<5.3	ND<5.3	ND<91	ND<5.3	ND<5.3	ND<270
Hexane	ND<14	ND<14	ND<90	ND<14	ND<14	ND<70
Isopropanol*	**27**	ND<16	ND<82	ND<16	ND<16	ND<82
m,p-Xylene	**11**	**17**	ND<25	<2.0	**11**	ND<100
Methylene Chloride	ND<3.6	ND<3.6	ND<34	ND<3.6	ND<3.6	ND<18
MTBE	ND<1.8	ND<1.8	ND<25	ND<1.8	ND<1.8	**50**
Naphthalene	ND<2.6	ND<2.6	ND<130	ND<2.6	ND<2.6	ND<130
o-xylene	ND<2.2	ND<2.2	ND<31	ND<2.2	ND<2.2	ND<110
Styrene	ND<2.1	ND<2.1	ND<32	ND<2.1	ND<2.1	ND<110
t-Butyl alcohol (t-Butanol)	ND<6.1	ND<6.1	ND<24	ND<6.1	ND<6.1	ND<30
tert-Amyl methyl ether (TAME)	ND<2.1	ND<2.1	ND<33	ND<2.1	ND<2.1	ND<10
Tetrachloroethene (PCE)	ND<3.4	ND<3.4	ND<64	ND<3.4	ND<3.4	ND<17
Toluene	**15**	**16**	ND<26	**3.2**	**19**	ND<9.4
trans-1,2-Dichloroethene	ND<2.0	ND<2.0	ND<28	ND<2.0	ND<2.0	ND<9.9
Trichloroethene	ND<2.7	ND<2.7	ND<26	ND<2.7	ND<2.7	ND<13
Trichlorofluoromethane	ND<2.5	ND<2.5	ND<35	ND<2.5	ND<2.5	ND<12
Vinyl Acetate	ND<1.8	ND<1.8	ND<32	ND<1.8	ND<1.8	ND<8.8
Vinyl Chloride	ND<1.3	ND<1.3	ND<12	ND<1.3	ND<1.3	ND<6.4

Notes:
ND< X = not detected, below laboratory reporting limit of X
µg/m³ = micrograms per cubic meter
Soil gas samples analyzed using US EPA Method TO-15
* indicates Isopropanol was used as a leak detection compound.
Bold indicates analysis above laboratory reporting limits

Attachment C

Edendale School Soil Vapor Survey

SOIL VAPOR SAMPLING REPORT
FORMER HOLLAND OIL PROPERTY
16301 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PREPARED FOR:
Mr. Lawrence Lepore
Hayward Area Recreation Department
1099 E Street
Hayward, California 94541

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

May 1, 2009
Project No. 401314004

May 1, 2009
Project No. 401314004

Mr. Lawrence Lepore
Hayward Area Recreation Department
1099 E Street
Hayward, California 94541

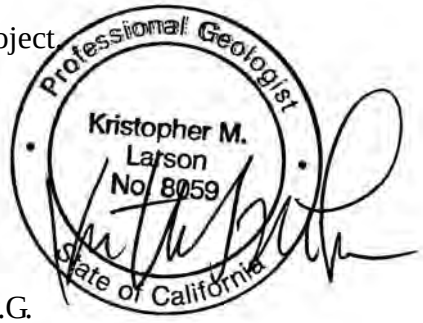
Subject: Soil Vapor Sampling Report
Former Holland Oil Property
16301 East 14th Street, San Leandro, California

Dear Mr. Lepore:

Enclosed please find the Soil Vapor Sampling Report for the former Holland Oil property located at 16301 East 14th Street in San Leandro, California. This report documents the recent soil vapor sampling activities, the analytical results, and our conclusions and recommendations.

Thank you very much for the opportunity to assist with this important project.

Sincerely,
NINYO & MOORE



Cem R. Atabek
Staff Environmental Engineer

Kris M. Larson, P.G.
Senior Environmental Geologist

CRA/KML/dhi

Distribution: (1) Addressee
(1) Mr. Jerry Wickham, P.G.,
Hazardous Materials Specialist, Alameda County Environmental Health,
1131 Harbor Bay Parkway, Suite 250, Alameda, California 94502

TABLE OF CONTENTS

1. INTRODUCTION

On behalf of Hayward Area Recreation Department (HARD), Ninyo & Moore has prepared this Soil Vapor Sampling Report for the former Holland Oil property located at 16301 East 14th Street in unincorporated Alameda County near San Leandro, California (the "site") (Figure 1). Site assessment activities were conducted in accordance with Ninyo & Moore's Soil Vapor Sampling Workplan, dated April 9th, 2009, which was verbally approved by Alameda County Environmental Health Services (ACEH).

1.1. Background

The site is located at 16301 East 14th Street, in San Leandro.

The site was utilized as a bulk fuel storage and distribution facility from the 1960's to the mid 1980's. Eight underground storage tanks (USTs) were located on site, three of which contained gasoline, two contained diesel, two contained kerosene, and one contained stoddard solvent. The USTs were removed in 1998 and the excavated overburden soil was placed back in the UST excavation. Additionally, two former structures, a warehouse located in the southwestern section and a small garage located in the central section of the site, were reportedly used for vehicle maintenance.

A series of environmental evaluations of site soil and groundwater have been conducted on site since 1990. This testing evaluated the presence of a broad array of potential use-related chemicals; the results of testing revealed elevated concentrations of specific constituents of concern at several locations on the site. Gasoline, diesel, and kerosene-range petroleum hydrocarbons were detected, primarily in areas where former USTs (T1 through T8) were located (Figure 2). Results of the most recent episode of site characterization are reported in the Ninyo & Moore December 2008 Site Assessment Report.

2. PURPOSE

The purpose of the soil vapor sampling is to provide additional data needed to evaluate subsurface vapor characteristics in the area of a proposed gymnasium on the Edendale Middle School

property, located adjacent to the west side of the former Holland operation. Soil vapor samples were collected and analyzed for compounds relevant to the historic Holland bulk fuel storage facility.

3. SITE SETTING

3.1. Geographic Setting

The site is a pentagon-shaped property located in San Leandro, California; bordered to the south by a baseball field; to the west by Edendale Middle School; and to the northeast by East 14th Street. Commercial properties border the site to the northwest and southeast on East 14th Street.

3.2. Environmental Setting

The site is relatively flat, with a gradual downward slope toward the west. The Hayward area is situated on a broad, alluvial plain that slopes gently west from the Hayward hills to the San Francisco Bay. The alluvial plain is comprised of alluvial sediments derived from erosion of the hills to the east. The site region is located at the eastern margin of the alluvial plain and is underlain by fine-grained alluvial and tidal-bay sediments. The surface layer of fill observed throughout the site is underlain by soft bay mud of geologically recent age.

4. SOIL VAPOR SAMPLING ACTIVITIES

Soil Vapor Sampling activities consisted of pre-field preparations and field activities relating to soil vapor sampling. Ninyo & Moore conducted the field activities on April 20th, 2009. Our pre-field and field activities are discussed in the sections below.

4.1. Pre-field Preparations

Pre-field preparations were performed prior to implementation of drilling activities. Ninyo & Moore performed the following pre-field preparations:

4.1.1. Permits

Ninyo & Moore obtained a drilling permit from Alameda County Public Works Agency for soil borings. A copy of the permit is included in Appendix A.

4.1.2. Notification of Drilling Activities

Ninyo & Moore coordinated with personnel from the neighboring property, Edendale Middle School, prior to site work. Edendale School representatives were provided with a description of the field activities planned on their property.

4.1.3. Underground Services Alert

Ninyo & Moore marked proposed soil vapor boring locations with white paint and notified underground services alert (USA) to mark the locations of subsurface utilities within the vicinity of the proposed drilling locations.

4.1.4. Site Specific Health and Safety Plan (SSHSP)

Prior to field work, a SSHSP was prepared and was implemented during field activities. The SSHSP discussed the potential hazards associated with the site and project activities and the measures to be taken to protect site workers from the potential hazards. A tailgate health and safety meeting was conducted with site personnel prior to field work. All on-site personnel signed the SSHSP at the end of the tailgate meeting to acknowledge their understanding of the information contained within the SSHSP.

4.1.5. Private Utility Location

In order to minimize the chance of damaging a subsurface utility, Ninyo & Moore procured the services of Precision Locating of Brentwood, California. On April 20th, 2009, Precision performed a utility location site visit to verify utility markings made by USA and identify the locations of additional utilities that may not have been observed by USA.

4.2. Soil Vapor Sampling

On April 20th, 2009, three borings (ESSV-1 through ESSV-3) were advanced on the Edendale Middle School property in the footprint of the proposed gymnasium adjacent to the west side of the site (Figure 2). Borings were advanced to 5.5 feet bgs using a direct push drill rig. The drill rods were retracted approximately 6 inches to expose the probe tip in the sampling zone. The appropriate length of Teflon© tubing was connected to a fitting, inserted down the inside of the drill rods, and reverse threaded into the post run tubing adapter. The end of the tubing was capped using a temporary stainless steel cap.

For each soil vapor boring, two seals constructed with hydrated bentonite powder were installed to prevent ambient air from entering the boring. One seal was installed around the base of the drill rod between the drill rod and the ground surface. The purpose of this seal was to prevent ambient air from entering and traveling down the outside of the drill rod. The other seal was installed around the tubing at the top of the drill rod. The purpose of this seal was to prevent ambient air from entering the inside of the drill rod. After hydrated bentonite seals were installed, at least 30 minutes elapsed prior to sampling to allow the seal to properly set. This time also allowed restoration of subsurface equilibrium.

Prior to connecting each soil vapor sampling manifold to the respective downhole tubing, leak tests were performed on each manifold. A stainless steel cap was fitted on the downhole side of the manifold and a leak test was performed by opening the purge Summa® canister. The leak test continued for approximately 10 minutes. Vacuum pressures remained constant for each manifold for the duration of the leak test for all sampling manifolds. As a result, the manifold leak tests were successful.

Prior to sample collection, three tubing volumes (including the probe tip volume) of air were purged using the 6 liter Summa® purge canister. The purge volume was monitored by the drop in vacuum pressure. The purge begin time, initial purge canister vacuum, end time, and final vacuum were recorded on Soil Vapor Sampling Data Sheets. The combined volume of tubing and probe tip was calculated prior to field activities. The volume was calculated in milliliters (mL) and converted to inches of mercury (in. Hg) based on the size of Summa

canister used for purging. The appropriate purge volume was determined to correspond to a drop of 4.5 in. Hg.

After the appropriate volume of soil vapor had been purged, the purging canister valve was closed and the sample canister valve opened to begin sample collection. The sample beginning time, initial sample canister vacuum, end time, and final vacuum were recorded on the field forms. A leak detection compound was used to evaluate whether leaks were present in the sampling equipment which could cause the dilution of analytical samples with ambient air. Isopropyl alcohol with an active ingredient of 2-propanol was used as the leak detection compound. During sample collection, the vapor sampling fittings and tubing were surrounded by isopropyl alcohol soaked gauze. The gauze was secured to the manifold so that it was very close to but not touching the areas of potential leakage throughout the duration of sampling. Isopropyl alcohol was included in the list of analyzed compounds. The sample canister valves were closed when the gauge read approximately 4 in. Hg of remaining vacuum. Copies of the Soil Vapor Sampling Data Sheets are presented in Appendix B.

During and after soil vapor sampling, the sample canisters were kept in the shade to prevent fluctuations in temperature. The samples, accompanied by completed chain of custody documentation, were transported to the analytical laboratory.

4.3. Analytical Laboratory and Methods

Soil vapor samples were submitted to McCampbell Analytical Inc., a state certified analytical laboratory located in Pittsburg, California, for analysis of VOCs using EPA Method TO-15 and total petroleum hydrocarbons as gasoline (TPH-g) using EPA Method TO-3. A copy of the analytical report including COC documentation is presented in Appendix C.

5. SOIL VAPOR ANALYTICAL RESULTS

Soil vapor analytical results revealed no detectable concentration of constituents of concern with the exception of acetone detected at low concentrations in samples ESSV-2 and ESSV-3. Isopropyl alcohol was not detected above the laboratory reporting limit of 10 micrograms per liter

(µg/l) indicating that no significant leaks had occurred in the soil vapor sampling equipment. A summary of soil vapor analytical data is presented on Table 1. A copy of the analytical report is presented in Appendix C.

6. CONCLUSIONS AND RECOMMENDATIONS

Based on the soil vapor sampling analytical results, no potentially hazardous soil vapor conditions exist on the Edendale Middle School property in the footprint of the proposed gymnasium adjacent to the west side of the site as delineated by soil vapor borings ESSV-1 through ESSV-3.

Based on these conclusions, Ninyo & Moore recommends that no additional investigative activities be conducted in the area of the proposed gymnasium.

Ninyo & Moore

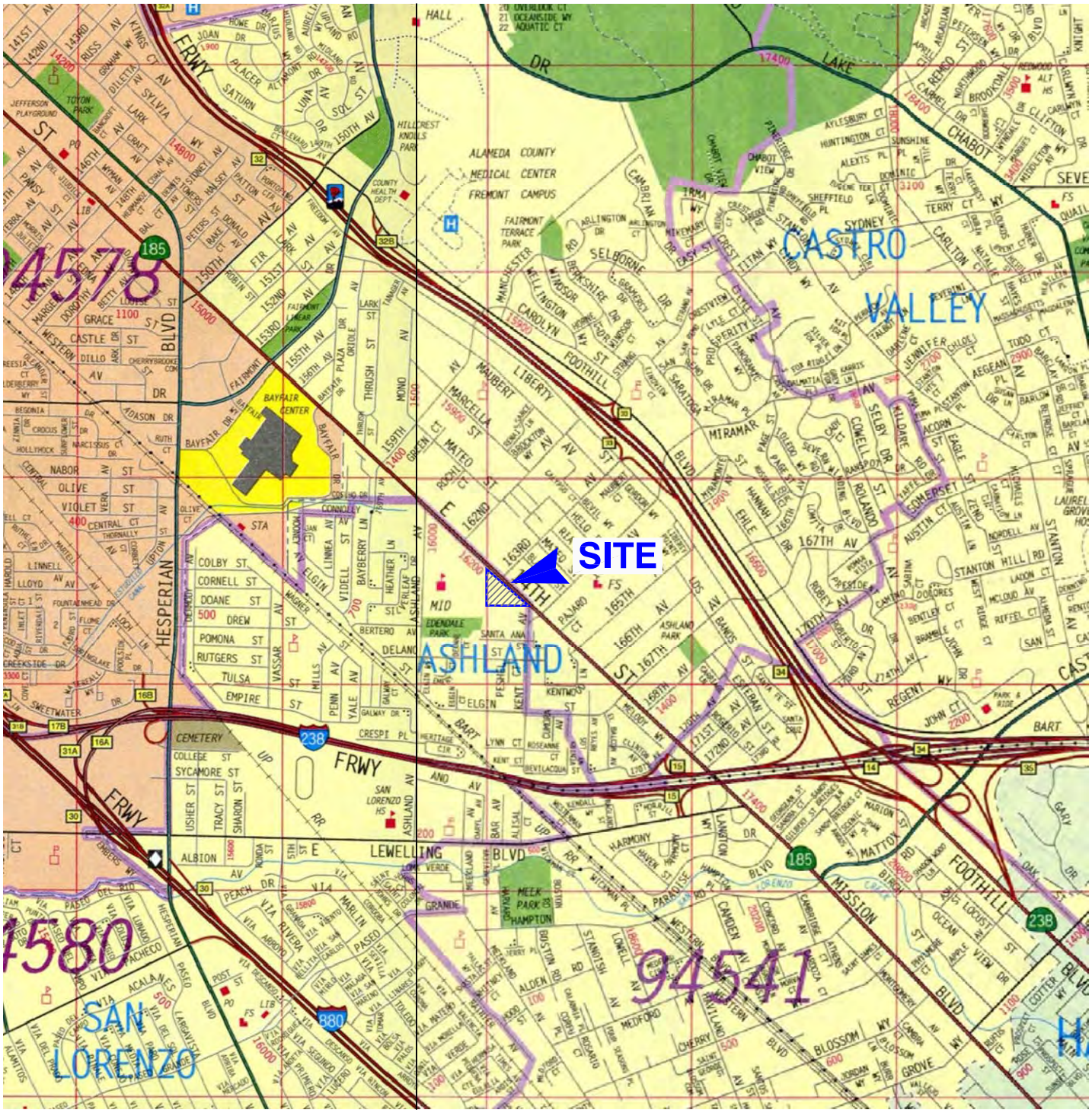
Project # 401314004

TABLE 1. SOIL VAPOR ANALYTICAL DATA - Former Holland Oil Property, 16301 East 14th Street, San Leandro, CA

Sample ID	Date	Depth (ft bgs)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TPH-g	Other VOCs	Isopropyl Alcohol *
			← µg/m³ →							µg/L
ESSV-1	4/20/2009	5.0-5.5	ND<6.5	ND<7.7	ND<8.8	ND<27	ND<7.3	ND<1,800	ND	ND<10
ESSV-2	4/20/2009	5.0-5.5	ND<6.5	ND<7.7	ND<8.8	ND<27	ND<7.3	ND<1,800	acetone (140)	ND<10
ESSV-3	4/20/2009	5.0-5.5	ND<6.5	ND<7.7	ND<8.8	ND<27	ND<7.3	ND<1,800	acetone (180)	ND<10

Notes and Abbreviations:

ft bgs = feet below ground surface
TPH-g = total petroleum hydrocarbons as gasoline
MTBE = methyl-tertiary butyl ether
VOCs = volatile organic compounds
TPH-g analyzed by EPA Method TO-3, all other compounds analyzed by EPA Method TO-15
µg/m³ = micrograms per cubic meter
µg/L = micrograms per liter
ND = not detected
ND< X = not detected above laboratory reporting limit of X
Isopropyl Alcohol* = used as the leak detection agent during vapor sample collection, measured in micrograms per liter.



REFERENCE: 2005 THOMAS GUIDE FOR ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES, STREET GUIDE AND DIRECTORY.

N

APPROXIMATE SCALE IN FEET

0 1900 3800

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION MAP	FIGURE
PROJECT NO. 401314004 / DATE 5/09	FORMER HOLLAND OIL FACILITY 16301 EAST 14th STREET SAN LEANDRO, CALIFORNIA	1

LEGEND

ESSV-3	APPROXIMATE LOCATION OF SOIL VAPOR BORING ADVANCED IN APRIL, 2009.
MW-12	APPROXIMATE LOCATION OF EXISTING GROUNDWATER MONITORING WELL
B-3	APPROXIMATE LOCATION OF EXPLORATORY BORING ADVANCED IN JULY 2007
SB-12	APPROXIMATE LOCATION OF BORING ADVANCED IN OCTOBER, 2008
DB-3	APPROXIMATE LOCATION OF DEEP BORING ADVANCED IN OCTOBER, 2008
SV-1	APPROXIMATE LOCATION OF SOIL VAPOR SAMPLE BORING ADVANCED IN OCTOBER, 2008
T1	APPROXIMATE LOCATION OF FORMER USTs
SC-1	APPROXIMATE LOCATION OF SOIL CONFIRMATION SAMPLE

FORMER ABT CONTENTS
1- waste oil/kerosene
2- waste oil/kerosene
3- waste oil/kerosene
4- waste oil/kerosene
5- waste oil/kerosene
6- waste oil/kerosene
7- waste oil/kerosene
8- virgin motor oil/automatic trans. fluid/pale stock
9- virgin motor oil/automatic trans. fluid/pale stock
10- virgin motor oil/automatic trans. fluid/pale stock
11- virgin motor oil/automatic trans. fluid/pale stock
12- virgin motor oil/automatic trans. fluid/pale stock
13- virgin motor oil/automatic trans. fluid/pale stock
14- virgin motor oil/automatic trans. fluid/pale stock
15- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene
16- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene
17- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene
18- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene
19- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene
20- waste oil/kerosene/virgin motor oil/ automatic trans. fluid/gasoline/diesel/kerosene

FORMER UST CONTENTS
T1- gasoline
T2- gasoline
T3- gasoline
T4- stoddard solvent
T5- kerosene
T6- kerosene
T7- diesel
T8- diesel

APPROXIMATE LOCATION OF PROPOSED GYMNASIUM

EAST 14TH STREET

UNPAVED

PRIVATE ENGINEERING

N

APPROXIMATE SCALE IN FEET
0 50 100

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING 2008, ENVIRONMENTAL BIO–SYSTEM, INC 2003.

Ninyo & Moore	SOIL VAPOR BORINGLOCATION MAP	FIGURE
PROJECT NO. 401314004 / DATE 5/09	FORMER HOLLAND OIL FACILITY 16301 EAST 14th STREET SAN LEANDRO, CALIFORNIA	2

APPENDIX A

DRILLING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 04/14/2009 By jamesy

Permit Numbers: W2009-0280
Permits Valid from 04/20/2009 to 04/20/2009

Application Id:	1239213503682	**City of Project Site:**	Alameda
Site Location:	16160 Ashland Avenue, San Lorenzo, CA 94580		
Project Start Date:	04/20/2009	**Completion Date:**	04/20/2009
Assigned Inspector:	Contact Ron Smalley at (510) 670-5407 or ronaldws@acpwa.org		
Applicant:	Ninyo & Moore - Cem Atabek 1956 Webster Street Suite 400, Oakland, CA 94612	**Phone:**	510-633-5640
Property Owner:	San Lorenzo Unified School District 15510 Usher Street, San Lorenzo, CA 94580	**Phone:**	--
Client:	Hayward Area Recreation Department 1099 E Street, Hayward, CA 94541	**Phone:**	--

	Total Due:	$230.00
Receipt Number: WR2009-0136	**Total Amount Paid:**	$230.00
Payer Name : Ninyo & Moore	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 3 Boreholes
Driller: Vapor Tech Services - Lic #: 916085 - Method: DP **Work Total: $230.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2009-0280	04/14/2009	07/19/2009	3	2.00 in.	5.50 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

SOIL VAPOR SAMPLING DATA SHEETS

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: ESSV-1

Project Name: Former Holland 0:1
Project No: 401314004
Site Address: 16301 E 14th St.

Date: 4/20/09
Sampler: CRA
PM: CRA

Purge Volume

Calculated Purge Volume: 4.5 in Hg

Time	Flow Rate	Volume	Comments
830 - 836	167 mL/min	5 in Hg	

Sample Collection

Flow Control Setting: 167 ml/min
Summa Canister ID: CAN6173-759
Summa Canister Size: 1 L
Analysis: TO-15 & TO-3

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
8:36	-30 in Hg	8:42	-4 in Hg	6 min

Notes:

Soil Vapor Sampling Point ID: ESSV-2

Project Name: Former Holland 0:1
Project No: 401314004
Site Address: 16301 E 14th St.

Date: 4/20/09
Sampler: CRA
PM: CRA

Purge Volume

Calculated Purge Volume: 4.5 in Hg

Time	Flow Rate	Volume	Comments
906 - 912	167 mL/min	5 in Hg	

Sample Collection

Flow Control Setting: 167 mL/min
Summa Canister ID: CAN6200-741
Summa Canister Size: 1 L
Analysis: TO-15 & TO-3

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
912	-30 in Hg	917	-4 in Hg	5 min

Notes:

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: ESSV-3

Project Name: Former Holland oil
Project No: 401314004
Site Address: 16301 E 14th St.

Date: 4/20/09
Sampler: CRA
PM: CRA

Purge Volume

Calculated Purge Volume: 4.5 in Hg

Time	Flow Rate	Volume	Comments
9:59 - 1005	167 mL/min	5 in Hg	

Sample Collection

Flow Control Setting: 167 mL/min
Summa Canister ID: CAN6171-757
Summa Canister Size: 1 L
Analysis: TO-15 & TO-3

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
1005	-30 in Hg	1010	-4 in Hg	5 min

Notes:

Soil Vapor Sampling Point ID: _____

Project Name: _____
Project No: _____
Site Address: _____

Date: _____
Sampler: _____
PM: _____

Purge Volume

Calculated Purge Volume: _____

Time	Flow Rate	Volume	Comments

Sample Collection

Flow Control Setting: _____
Summa Canister ID: _____
Summa Canister Size: _____
Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time

Notes:

APPENDIX C

LABORATORY ANALYTICAL REPORT

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore 1956 Webster St. #400 Oakland, CA 94612	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
	Client Contact: Cem Atabek	Date Reported: 04/24/09
	Client P.O.:	Date Completed: 04/24/09

WorkOrder: 0904503

April 24, 2009

Dear Cem:

Enclosed within are:

1) The results of the **3** analyzed samples from your project: **#401314004; Former Holland Oil,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0904503

McCAMPBELL ANALYTICAL INC.

1534 Willow Pass Road
Pittsburg, CA 94565-1701
www.main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Cem Atabek Bill To: Same

Company: Ninyo & Moore

E-Mail: catabek@ninyoandmoore.com

Tele: (510) 633-6146 Fax: (510) 633-5646

Project #: 401314004 Project Name: Former Holland Oil

Project Location: 16301 E 14th St San Leandro, CA

Sampler Signature:

Lab Use Only

Pressurized By	Date	Pressurization Gas	
		N2	He

Notes: please submit EDF in Geotracker Format
Field point names: ESSV-1, ESSV-2, ESSV-3
Global ID: T0600100709 Is propanol used as leak detection

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Sampler Kit SN#	Analysis Requested	Indoor Air	Soil Gas	Canister Pressure/Vacuum Initial (in Hg)	Canister Pressure/Vacuum Final (in Hg)	Receipt	Final (psi)
ESSV-1	4/20/09	8:36	CAN6173-759	MAN316-674	TO-15 & TO-3		X	-30	-4		
ESSV-2	↓	9:17	CAN6200-741	MAN316-719	↓		↓	↓	↓		
ESSV-3	↓	10:05	CAN6171-757	MAN316-765	↓		↓	↓	↓		

Relinquished By:	Date:	Time:	Received By:
Cem Atabek	4/20/09	1240	
Relinquished By:	Date:	Time:	Received By:
	4/20/09	1500	MC Vall
Relinquished By:	Date:	Time:	Received By:

Temp (°C): 19 Work Order #: 0904503

Condition: good

Custody Seals Intact?: Yes ___ No ___ None Y

Shipped Via: FP MAI courier

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0904503 **ClientCode: NMO**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Cem Atabek
Ninyo & Moore
1956 Webster St. #400
Oakland, CA 94612
(510) 633-5640 FAX (510) 633-5646

Email: catabek@ninyoandmoore.com
cc:
PO:
ProjectNo: #401314004; Former Holland Oil

Bill to:
Accounts Payable
Ninyo & Moore
1956 Webster St. #400
Oakland, CA 94612

Requested TAT: 5 days

Date Received: **04/20/2009**
Date Printed: **04/20/2009**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0904503-001	ESSV-1	Soil Vapor	4/20/2009 8:36	☐	A	A										
0904503-002	ESSV-2	Soil Vapor	4/20/2009 9:12	☐		A										
0904503-003	ESSV-3	Soil Vapor	4/20/2009 10:05	☐		A										

Test Legend:

1	PREDF REPORT	2	TO3_SOILGAS	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A contain testgroup.

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **Ninyo & Moore**

Date and Time Received: **4/20/09 5:09:03 PM**

Project Name: **#401314004; Former Holland Oil**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **0904503** Matrix Soil Vapor

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 04/22/09

Leak Check Compound*

Extraction method TO15 Analytical methods TO15 Work Order: 0904503

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Isopropyl Alcohol	DF	% SS
001A	ESSV-1	Soil Vapor	12.78	25.46	ND	1	N/A
002A	ESSV-2	Soil Vapor	13.27	26.54	ND	1	N/A
003A	ESSV-3	Soil Vapor	12.7	25.32	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	Soil Vapor	psia	psia	10	µg/L

* leak check compound is reported in µg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

The IPA reference is:

DTSC, Advisory-Active Soil Gas Investigations, January 28, 2003, page 10, section 2.4.2:

"Tracer compounds, such as ...isopropanol..., may be used as leak check compounds, if a detection limit of 10 ug/L or less can be achieved."
This implies that 10 µg/L is the cut off definition for a leak, which equals 10,000 µg/m³.
The other low IPA hits may be due to extremely small leaks or may be naturally occuring in soil gas, particularly at biologically active sites.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-001A	Initial Pressure (psia)	12.8
Client ID	ESSV-1	Final Pressure (psia)	25.5
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	7.3
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	94	%SS2:	95
%SS3:	98		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-002A	Initial Pressure (psia)	13.3
Client ID	ESSV-2	Final Pressure (psia)	26.5
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	140	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	7.3
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	103	%SS2:	102
%SS3:	107		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in µg/m³*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-003A	Initial Pressure (psia)	12.7
Client ID	ESSV-3	Final Pressure (psia)	25.3
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	180	1.0	120	Acrylonitrile	ND	1.0	4.4
tert-Amyl methyl ether (TAME)	ND	1.0	8.5	Benzene	ND	1.0	6.5
Benzyl chloride	ND	1.0	11	Bromodichloromethane	ND	1.0	14
Bromoform	ND	1.0	21	Bromomethane	ND	1.0	7.9
1,3-Butadiene	ND	1.0	4.5	2-Butanone (MEK)	ND	1.0	150
t-Butyl alcohol (TBA)	ND	1.0	62	Carbon Disulfide	ND	1.0	6.3
Carbon Tetrachloride	ND	1.0	13	Chlorobenzene	ND	1.0	9.4
Chloroethane	ND	1.0	5.4	Chloroform	ND	1.0	9.9
Chloromethane	ND	1.0	4.2	Cyclohexane	ND	1.0	180
Dibromochloromethane	ND	1.0	17	1,2-Dibromo-3-chloropropane	ND	1.0	20
1,2-Dibromoethane (EDB)	ND	1.0	16	1,2-Dichlorobenzene	ND	1.0	12
1,3-Dichlorobenzene	ND	1.0	12	1,4-Dichlorobenzene	ND	1.0	12
Dichlorodifluoromethane	ND	1.0	10	1,1-Dichloroethane	ND	1.0	8.2
1,2-Dichloroethane (1,2-DCA)	ND	1.0	8.2	1,1-Dichloroethene	ND	1.0	8.1
cis-1,2-Dichloroethene	ND	1.0	8.1	trans-1,2-Dichloroethene	ND	1.0	8.1
1,2-Dichloropropane	ND	1.0	9.4	cis-1,3-Dichloropropene	ND	1.0	9.2
trans-1,3-Dichloropropene	ND	1.0	9.2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	14
Diisopropyl ether (DIPE)	ND	1.0	8.5	1,4-Dioxane	ND	1.0	7.3
Ethanol	ND	1.0	96	Ethyl acetate	ND	1.0	7.3
Ethyl tert-butyl ether (ETBE)	ND	1.0	8.5	Ethylbenzene	ND	1.0	8.8
4-Ethyltoluene	ND	1.0	10	Freon 113	ND	1.0	16
Heptane	ND	1.0	210	Hexachlorobutadiene	ND	1.0	22
Hexane	ND	1.0	180	2-Hexanone	ND	1.0	210
4-Methyl-2-pentanone (MIBK)	ND	1.0	8.3	Methyl-t-butyl ether (MTBE)	ND	1.0	7.3
Methylene chloride	ND	1.0	7.1	Naphthalene	ND	1.0	11
Propene	ND	1.0	88	Styrene	ND	1.0	8.6
1,1,1,2-Tetrachloroethane	ND	1.0	14	1,1,2,2-Tetrachloroethane	ND	1.0	14
Tetrachloroethene	ND	1.0	14	Tetrahydrofuran	ND	1.0	6.0
Toluene	ND	1.0	7.7	1,2,4-Trichlorobenzene	ND	1.0	15
1,1,1-Trichloroethane	ND	1.0	11	1,1,2-Trichloroethane	ND	1.0	11
Trichloroethene	ND	1.0	11	Trichlorofluoromethane	ND	1.0	11
1,2,4-Trimethylbenzene	ND	1.0	10	1,3,5-Trimethylbenzene	ND	1.0	10
Vinyl Acetate	ND	1.0	180	Vinyl Chloride	ND	1.0	5.2
Xylenes	ND	1.0	27				

Surrogate Recoveries (%)

%SS1:	97	%SS2:	95
%SS3:	103		

Comments:

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in nL/L*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-001A	Initial Pressure (psia)	12.8
Client ID	ESSV-1	Final Pressure (psia)	25.5
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Acrylonitrile	ND	1.0	2.0
tert-Amyl methyl ether (TAME)	ND	1.0	2.0	Benzene	ND	1.0	2.0
Benzyl chloride	ND	1.0	2.0	Bromodichloromethane	ND	1.0	2.0
Bromoform	ND	1.0	2.0	Bromomethane	ND	1.0	2.0
1,3-Butadiene	ND	1.0	2.0	2-Butanone (MEK)	ND	1.0	50
t-Butyl alcohol (TBA)	ND	1.0	20	Carbon Disulfide	ND	1.0	2.0
Carbon Tetrachloride	ND	1.0	2.0	Chlorobenzene	ND	1.0	2.0
Chloroethane	ND	1.0	2.0	Chloroform	ND	1.0	2.0
Chloromethane	ND	1.0	2.0	Cyclohexane	ND	1.0	50
Dibromochloromethane	ND	1.0	2.0	1,2-Dibromo-3-chloropropane	ND	1.0	2.0
1,2-Dibromoethane (EDB)	ND	1.0	2.0	1,2-Dichlorobenzene	ND	1.0	2.0
1,3-Dichlorobenzene	ND	1.0	2.0	1,4-Dichlorobenzene	ND	1.0	2.0
Dichlorodifluoromethane	ND	1.0	2.0	1,1-Dichloroethane	ND	1.0	2.0
1,2-Dichloroethane (1,2-DCA)	ND	1.0	2.0	1,1-Dichloroethene	ND	1.0	2.0
cis-1,2-Dichloroethene	ND	1.0	2.0	trans-1,2-Dichloroethene	ND	1.0	2.0
1,2-Dichloropropane	ND	1.0	2.0	cis-1,3-Dichloropropene	ND	1.0	2.0
trans-1,3-Dichloropropene	ND	1.0	2.0	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	2.0
Diisopropyl ether (DIPE)	ND	1.0	2.0	1,4-Dioxane	ND	1.0	2.0
Ethanol	ND	1.0	50	Ethyl acetate	ND	1.0	2.0
Ethyl tert-butyl ether (ETBE)	ND	1.0	2.0	Ethylbenzene	ND	1.0	2.0
4-Ethyltoluene	ND	1.0	2.0	Freon 113	ND	1.0	2.0
Heptane	ND	1.0	50	Hexachlorobutadiene	ND	1.0	2.0
Hexane	ND	1.0	50	2-Hexanone	ND	1.0	50
4-Methyl-2-pentanone (MIBK)	ND	1.0	2.0	Methyl-t-butyl ether (MTBE)	ND	1.0	2.0
Methylene chloride	ND	1.0	2.0	Naphthalene	ND	1.0	2.0
Propene	ND	1.0	50	Styrene	ND	1.0	2.0
1,1,1,2-Tetrachloroethane	ND	1.0	2.0	1,1,2,2-Tetrachloroethane	ND	1.0	2.0
Tetrachloroethene	ND	1.0	2.0	Tetrahydrofuran	ND	1.0	2.0
Toluene	ND	1.0	2.0	1,2,4-Trichlorobenzene	ND	1.0	2.0
1,1,1-Trichloroethane	ND	1.0	2.0	1,1,2-Trichloroethane	ND	1.0	2.0
Trichloroethene	ND	1.0	2.0	Trichlorofluoromethane	ND	1.0	2.0
1,2,4-Trimethylbenzene	ND	1.0	2.0	1,3,5-Trimethylbenzene	ND	1.0	2.0
Vinyl Acetate	ND	1.0	50	Vinyl Chloride	ND	1.0	2.0
Xylenes	ND	1.0	6.0				

Surrogate Recoveries (%)

%SS1:	94	%SS2:	95
%SS3:	98		

Comments:

*vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in nL/L*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-002A	Initial Pressure (psia)	13.3
Client ID	ESSV-2	Final Pressure (psia)	26.5
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	58	1.0	50	Acrylonitrile	ND	1.0	2.0
tert-Amyl methyl ether (TAME)	ND	1.0	2.0	Benzene	ND	1.0	2.0
Benzyl chloride	ND	1.0	2.0	Bromodichloromethane	ND	1.0	2.0
Bromoform	ND	1.0	2.0	Bromomethane	ND	1.0	2.0
1,3-Butadiene	ND	1.0	2.0	2-Butanone (MEK)	ND	1.0	50
t-Butyl alcohol (TBA)	ND	1.0	20	Carbon Disulfide	ND	1.0	2.0
Carbon Tetrachloride	ND	1.0	2.0	Chlorobenzene	ND	1.0	2.0
Chloroethane	ND	1.0	2.0	Chloroform	ND	1.0	2.0
Chloromethane	ND	1.0	2.0	Cyclohexane	ND	1.0	50
Dibromochloromethane	ND	1.0	2.0	1,2-Dibromo-3-chloropropane	ND	1.0	2.0
1,2-Dibromoethane (EDB)	ND	1.0	2.0	1,2-Dichlorobenzene	ND	1.0	2.0
1,3-Dichlorobenzene	ND	1.0	2.0	1,4-Dichlorobenzene	ND	1.0	2.0
Dichlorodifluoromethane	ND	1.0	2.0	1,1-Dichloroethane	ND	1.0	2.0
1,2-Dichloroethane (1,2-DCA)	ND	1.0	2.0	1,1-Dichloroethene	ND	1.0	2.0
cis-1,2-Dichloroethene	ND	1.0	2.0	trans-1,2-Dichloroethene	ND	1.0	2.0
1,2-Dichloropropane	ND	1.0	2.0	cis-1,3-Dichloropropene	ND	1.0	2.0
trans-1,3-Dichloropropene	ND	1.0	2.0	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	2.0
Diisopropyl ether (DIPE)	ND	1.0	2.0	1,4-Dioxane	ND	1.0	2.0
Ethanol	ND	1.0	50	Ethyl acetate	ND	1.0	2.0
Ethyl tert-butyl ether (ETBE)	ND	1.0	2.0	Ethylbenzene	ND	1.0	2.0
4-Ethyltoluene	ND	1.0	2.0	Freon 113	ND	1.0	2.0
Heptane	ND	1.0	50	Hexachlorobutadiene	ND	1.0	2.0
Hexane	ND	1.0	50	2-Hexanone	ND	1.0	50
4-Methyl-2-pentanone (MIBK)	ND	1.0	2.0	Methyl-t-butyl ether (MTBE)	ND	1.0	2.0
Methylene chloride	ND	1.0	2.0	Naphthalene	ND	1.0	2.0
Propene	ND	1.0	50	Styrene	ND	1.0	2.0
1,1,1,2-Tetrachloroethane	ND	1.0	2.0	1,1,2,2-Tetrachloroethane	ND	1.0	2.0
Tetrachloroethene	ND	1.0	2.0	Tetrahydrofuran	ND	1.0	2.0
Toluene	ND	1.0	2.0	1,2,4-Trichlorobenzene	ND	1.0	2.0
1,1,1-Trichloroethane	ND	1.0	2.0	1,1,2-Trichloroethane	ND	1.0	2.0
Trichloroethene	ND	1.0	2.0	Trichlorofluoromethane	ND	1.0	2.0
1,2,4-Trimethylbenzene	ND	1.0	2.0	1,3,5-Trimethylbenzene	ND	1.0	2.0
Vinyl Acetate	ND	1.0	50	Vinyl Chloride	ND	1.0	2.0
Xylenes	ND	1.0	6.0				

Surrogate Recoveries (%)

%SS1:	103	%SS2:	102
%SS3:	107		

Comments:

*vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/22/09
Oakland, CA 94612	Client P.O.:	Date Analyzed 04/22/09

Volatile Organic Compounds in nL/L*

Extraction Method: TO15 Analytical Method: TO15 Work Order: 0904503

Lab ID	0904503-003A	Initial Pressure (psia)	12.7
Client ID	ESSV-3	Final Pressure (psia)	25.3
Matrix	Soil Vapor		

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	75	1.0	50	Acrylonitrile	ND	1.0	2.0
tert-Amyl methyl ether (TAME)	ND	1.0	2.0	Benzene	ND	1.0	2.0
Benzyl chloride	ND	1.0	2.0	Bromodichloromethane	ND	1.0	2.0
Bromoform	ND	1.0	2.0	Bromomethane	ND	1.0	2.0
1,3-Butadiene	ND	1.0	2.0	2-Butanone (MEK)	ND	1.0	50
t-Butyl alcohol (TBA)	ND	1.0	20	Carbon Disulfide	ND	1.0	2.0
Carbon Tetrachloride	ND	1.0	2.0	Chlorobenzene	ND	1.0	2.0
Chloroethane	ND	1.0	2.0	Chloroform	ND	1.0	2.0
Chloromethane	ND	1.0	2.0	Cyclohexane	ND	1.0	50
Dibromochloromethane	ND	1.0	2.0	1,2-Dibromo-3-chloropropane	ND	1.0	2.0
1,2-Dibromoethane (EDB)	ND	1.0	2.0	1,2-Dichlorobenzene	ND	1.0	2.0
1,3-Dichlorobenzene	ND	1.0	2.0	1,4-Dichlorobenzene	ND	1.0	2.0
Dichlorodifluoromethane	ND	1.0	2.0	1,1-Dichloroethane	ND	1.0	2.0
1,2-Dichloroethane (1,2-DCA)	ND	1.0	2.0	1,1-Dichloroethene	ND	1.0	2.0
cis-1,2-Dichloroethene	ND	1.0	2.0	trans-1,2-Dichloroethene	ND	1.0	2.0
1,2-Dichloropropane	ND	1.0	2.0	cis-1,3-Dichloropropene	ND	1.0	2.0
trans-1,3-Dichloropropene	ND	1.0	2.0	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	2.0
Diisopropyl ether (DIPE)	ND	1.0	2.0	1,4-Dioxane	ND	1.0	2.0
Ethanol	ND	1.0	50	Ethyl acetate	ND	1.0	2.0
Ethyl tert-butyl ether (ETBE)	ND	1.0	2.0	Ethylbenzene	ND	1.0	2.0
4-Ethyltoluene	ND	1.0	2.0	Freon 113	ND	1.0	2.0
Heptane	ND	1.0	50	Hexachlorobutadiene	ND	1.0	2.0
Hexane	ND	1.0	50	2-Hexanone	ND	1.0	50
4-Methyl-2-pentanone (MIBK)	ND	1.0	2.0	Methyl-t-butyl ether (MTBE)	ND	1.0	2.0
Methylene chloride	ND	1.0	2.0	Naphthalene	ND	1.0	2.0
Propene	ND	1.0	50	Styrene	ND	1.0	2.0
1,1,1,2-Tetrachloroethane	ND	1.0	2.0	1,1,2,2-Tetrachloroethane	ND	1.0	2.0
Tetrachloroethene	ND	1.0	2.0	Tetrahydrofuran	ND	1.0	2.0
Toluene	ND	1.0	2.0	1,2,4-Trichlorobenzene	ND	1.0	2.0
1,1,1-Trichloroethane	ND	1.0	2.0	1,1,2-Trichloroethane	ND	1.0	2.0
Trichloroethene	ND	1.0	2.0	Trichlorofluoromethane	ND	1.0	2.0
1,2,4-Trimethylbenzene	ND	1.0	2.0	1,3,5-Trimethylbenzene	ND	1.0	2.0
Vinyl Acetate	ND	1.0	50	Vinyl Chloride	ND	1.0	2.0
Xylenes	ND	1.0	6.0				

Surrogate Recoveries (%)

%SS1:	97	%SS2:	95
%SS3:	103		

Comments:

*vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/23/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 04/23/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline in µg/m³*

Extraction method TO3 Analytical methods TO3 Work Order: 0904503

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	TPH(g)	DF	% SS
001A	ESSV-1	Soil Vapor	12.78	25.46	ND	1	N/A
002A	ESSV-2	Soil Vapor	13.27	26.54	ND	1	N/A
003A	ESSV-3	Soil Vapor	12.7	25.32	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	Soil Vapor	psia	psia	1800	µg/m³

*soil vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Ninyo & Moore	Client Project ID: #401314004; Former Holland Oil	Date Sampled: 04/20/09
		Date Received: 04/20/09
1956 Webster St. #400	Client Contact: Cem Atabek	Date Extracted: 04/23/09
Oakland, CA 94612	Client P.O.:	Date Analyzed: 04/23/09

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline in nL/L*

Extraction method TO3 Analytical methods TO3 Work Order: 0904503

Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	TPH(g)	DF	% SS
001A	ESSV-1	Soil Vapor	12.78	25.46	ND	1	N/A
002A	ESSV-2	Soil Vapor	13.27	26.54	ND	1	N/A
003A	ESSV-3	Soil Vapor	12.7	25.32	ND	1	N/A

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	psia	psia	NA	NA
	Soil Vapor	psia	psia	500	nL/L

*soil vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor BatchID: 42807 WorkOrder: 0904503

EPA Method TO15 **Extraction TO15** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Acrylonitrile	N/A	25	N/A	N/A	N/A	98.8	96.7	2.10	N/A	N/A	70 - 130	30
tert-Amyl methyl ether (TAME)	N/A	25	N/A	N/A	N/A	107	107	0	N/A	N/A	70 - 130	30
Benzene	N/A	25	N/A	N/A	N/A	110	108	1.33	N/A	N/A	70 - 130	30
Benzyl chloride	N/A	25	N/A	N/A	N/A	103	99.9	3.26	N/A	N/A	70 - 130	30
Bromodichloromethane	N/A	25	N/A	N/A	N/A	112	112	0	N/A	N/A	70 - 130	30
Bromoform	N/A	25	N/A	N/A	N/A	105	102	2.64	N/A	N/A	70 - 130	30
Bromomethane	N/A	25	N/A	N/A	N/A	85.3	74.1	14.1	N/A	N/A	70 - 130	30
1,3-Butadiene	N/A	25	N/A	N/A	N/A	75.3	76	0.920	N/A	N/A	70 - 130	30
t-Butyl alcohol (TBA)	N/A	25	N/A	N/A	N/A	87.1	93.2	6.78	N/A	N/A	70 - 130	30
Carbon Disulfide	N/A	25	N/A	N/A	N/A	104	100	3.78	N/A	N/A	70 - 130	30
Carbon Tetrachloride	N/A	25	N/A	N/A	N/A	98.8	97.6	1.23	N/A	N/A	70 - 130	30
Chlorobenzene	N/A	25	N/A	N/A	N/A	113	112	0.589	N/A	N/A	70 - 130	30
Chloroethane	N/A	25	N/A	N/A	N/A	108	97.8	9.87	N/A	N/A	70 - 130	30
Chloroform	N/A	25	N/A	N/A	N/A	108	107	0.868	N/A	N/A	70 - 130	30
Chloromethane	N/A	25	N/A	N/A	N/A	92.5	87.3	5.86	N/A	N/A	70 - 130	30
Dibromochloromethane	N/A	25	N/A	N/A	N/A	103	101	2.33	N/A	N/A	70 - 130	30
1,2-Dibromo-3-chloropropane	N/A	25	N/A	N/A	N/A	104	96	8.10	N/A	N/A	70 - 130	30
1,2-Dibromoethane (EDB)	N/A	25	N/A	N/A	N/A	114	114	0	N/A	N/A	70 - 130	30
1,2-Dichlorobenzene	N/A	25	N/A	N/A	N/A	114	105	8.14	N/A	N/A	70 - 130	30
1,3-Dichlorobenzene	N/A	25	N/A	N/A	N/A	128	118	7.94	N/A	N/A	70 - 130	30
1,4-Dichlorobenzene	N/A	25	N/A	N/A	N/A	124	116	6.69	N/A	N/A	70 - 130	30
Dichlorodifluoromethane	N/A	25	N/A	N/A	N/A	87.8	86.8	1.21	N/A	N/A	70 - 130	30
1,1-Dichloroethane	N/A	25	N/A	N/A	N/A	107	107	0	N/A	N/A	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	N/A	25	N/A	N/A	N/A	111	107	3.66	N/A	N/A	70 - 130	30
1,1-Dichloroethene	N/A	25	N/A	N/A	N/A	107	106	1.27	N/A	N/A	70 - 130	30
cis-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	108	105	2.30	N/A	N/A	70 - 130	30
trans-1,2-Dichloroethene	N/A	25	N/A	N/A	N/A	117	112	4.68	N/A	N/A	70 - 130	30
1,2-Dichloropropane	N/A	25	N/A	N/A	N/A	97.5	97.5	0	N/A	N/A	70 - 130	30
cis-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	115	114	1.05	N/A	N/A	70 - 130	30
trans-1,3-Dichloropropene	N/A	25	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30
1,2-Dichloro-1,1,2,2-tetrafluoroetha	N/A	25	N/A	N/A	N/A	104	94.3	9.46	N/A	N/A	70 - 130	30

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor BatchID: 42807 WorkOrder: 0904503

EPA Method TO15 **Extraction TO15** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Diisopropyl ether (DIPE)	N/A	25	N/A	N/A	N/A	118	114	3.37	N/A	N/A	70 - 130	30
1,4-Dioxane	N/A	25	N/A	N/A	N/A	79.3	79.3	0	N/A	N/A	70 - 130	30
Ethyl acetate	N/A	25	N/A	N/A	N/A	113	111	1.75	N/A	N/A	70 - 130	30
Ethyl tert-butyl ether (ETBE)	N/A	25	N/A	N/A	N/A	115	113	1.88	N/A	N/A	70 - 130	30
Ethylbenzene	N/A	25	N/A	N/A	N/A	121	120	1.04	N/A	N/A	70 - 130	30
Freon 113	N/A	25	N/A	N/A	N/A	115	111	3.87	N/A	N/A	70 - 130	30
Hexachlorobutadiene	N/A	25	N/A	N/A	N/A	117	107	9.02	N/A	N/A	70 - 130	30
4-Methyl-2-pentanone (MIBK)	N/A	25	N/A	N/A	N/A	107	107	0	N/A	N/A	70 - 130	30
Methyl-t-butyl ether (MTBE)	N/A	25	N/A	N/A	N/A	115	110	4.31	N/A	N/A	70 - 130	30
Methylene chloride	N/A	25	N/A	N/A	N/A	89.9	87.9	2.22	N/A	N/A	70 - 130	30
Naphthalene	N/A	25	N/A	N/A	N/A	86.6	79	9.29	N/A	N/A	70 - 130	30
Styrene	N/A	25	N/A	N/A	N/A	91.8	88.1	4.12	N/A	N/A	70 - 130	30
1,1,1,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	127	126	1.12	N/A	N/A	70 - 130	30
1,1,2,2-Tetrachloroethane	N/A	25	N/A	N/A	N/A	111	108	2.54	N/A	N/A	70 - 130	30
Tetrachloroethene	N/A	25	N/A	N/A	N/A	127	123	3.27	N/A	N/A	70 - 130	30
Tetrahydrofuran	N/A	25	N/A	N/A	N/A	96	91.9	4.38	N/A	N/A	70 - 130	30
Toluene	N/A	25	N/A	N/A	N/A	110	109	1.01	N/A	N/A	70 - 130	30
1,2,4-Trichlorobenzene	N/A	25	N/A	N/A	N/A	77.9	71.1	9.08	N/A	N/A	70 - 130	30
1,1,1-Trichloroethane	N/A	25	N/A	N/A	N/A	108	107	1.10	N/A	N/A	70 - 130	30
1,1,2-Trichloroethane	N/A	25	N/A	N/A	N/A	108	107	0.817	N/A	N/A	70 - 130	30
Trichloroethene	N/A	25	N/A	N/A	N/A	108	106	1.83	N/A	N/A	70 - 130	30
1,2,4-Trimethylbenzene	N/A	25	N/A	N/A	N/A	110	102	7.25	N/A	N/A	70 - 130	30
1,3,5-Trimethylbenzene	N/A	25	N/A	N/A	N/A	121	113	6.59	N/A	N/A	70 - 130	30
Vinyl Chloride	N/A	25	N/A	N/A	N/A	85.7	82.2	4.25	N/A	N/A	70 - 130	30
Xylenes	N/A	75	N/A	N/A	N/A	123	121	2.31	N/A	N/A	70 - 130	30
%SS1:	N/A	500	N/A	N/A	N/A	100	100	0	N/A	N/A	70 - 130	30
%SS2:	N/A	500	N/A	N/A	N/A	98	95	2.64	N/A	N/A	70 - 130	30
%SS3:	N/A	500	N/A	N/A	N/A	99	98	0.408	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR TO15

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor BatchID: 42807 WorkOrder: 0904503

EPA Method TO15	Extraction TO15							Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD

BATCH 42807 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904503-001A	04/20/09 8:36 AM	04/22/09	04/22/09 3:30 PM	0904503-002A	04/20/09 9:12 AM	04/22/09	04/22/09 4:14 PM
0904503-003A	04/20/09 10:05 AM	04/22/09	04/22/09 5:01 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR TO3

W.O. Sample Matrix: Soil Vapor QC Matrix: Soil Vapor BatchID: 42808 WorkOrder 0904503

EPA Method TO3 **Extraction TO3** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(g)	N/A	1250	N/A	N/A	N/A	109	108	0.685	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 42808 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904503-001A	04/20/09 8:36 AM	04/23/09	04/23/09 1:40 PM	0904503-002A	04/20/09 9:12 AM	04/23/09	04/23/09 2:16 PM
0904503-003A	04/20/09 10:05 AM	04/23/09	04/23/09 2:53 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer