



August 6, 2009

Ms. Cory Vincent
Santa Rosa Fire Department
2373 Circadian Way
Santa Rosa, CA 95407

**RE: SOIL AND GROUNDWATER MANAGEMENT PLAN
SONOMA-MARIN AREA RAIL TRANSIT PROPERTIES
2 FOURTH STREET AND 34 SIXTH STREET
SANTA ROSA, CALIFORNIA
EBA Project No. 08-1528**

Dear Ms. Vincent:

Please find enclosed a *Soil and Groundwater Management Plan* (Plan) for the Sonoma-Marin Area Rail Transit properties located in Santa Rosa, California. This *Soil and Groundwater Management Plan* was prepared in response to a request by the Santa Rosa Fire Department and the North Coast Regional Water Quality Control Board for the proposed redevelopment of the project site in response to findings and recommendations from environmental characterization work that has been completed to date. Please note that this Plan does not address, or include provisions for, the removal of an underground storage tank or soil impacts located in the vicinity of former soil boring SB-1. Specific documents addressing these items will be submitted under separate covers.

If you have any questions regarding this report, please contact me at (707) 544-0784.

Sincerely,
EBA ENGINEERING

Paul Nelson, P.G.
Project Geologist

Attach: Soil and Groundwater Management Plan

cc: Ms. Joan Fleck, North Coast Regional Water Quality Control Board, 5550 Skyline Boulevard, Suite A, Santa Rosa, CA 95403

John Stewart, The John Stewart Company, 1388 Sutter Street, 11th Floor, San Francisco, CA. 94109

Jack Gardner, The John Stewart Company, 1388 Sutter Street, 11th Floor, San Francisco, CA. 94109

Richard Devine, Devine & Gong, Inc., 100 Bush Street, Suite 600, San Francisco, CA. 94104

John Nemeth, Rail Planning Manager, Sonoma-Marín Area Rail Transit District (SMART). 750 Lindaro Street, Suite 200, San Rafael, CA. 94901

Michael Dieden, Creative Housing Associates, 8758 Venice Boulevard, Suite 101 Los Angeles, CA. 90034

John Clawson, Equity Community Builders, P.O. Box 29585, San Francisco, CA. 94129-0585

Mark Hale, Carlile Macy, 15 3rd Street, Santa Rosa, CA. 95401

Dexter Dawes, 350 Santa Rita Avenue, Palo Alto, CA. 94301

Frank Kasimov, City of Santa Rosa, Economic Development and Housing, P.O. Box 1806, Santa Rosa, CA. 95402

Prepared for

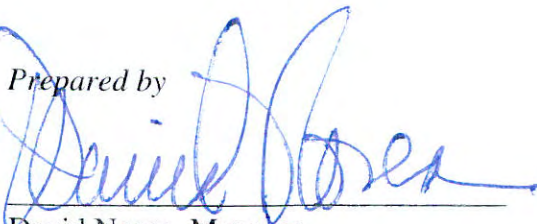
Railroad Square Associates LLC
c/o Mr. John Stewart
1388 Sutter Street, 11th Floor
San Francisco, CA. 94109

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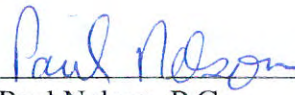
EBA Project No. 08-1528

Prepared by



David Noren, Manager
Environmental Services

Reviewed by

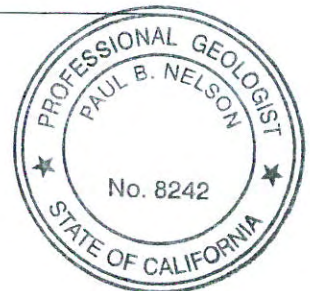


Paul Nelson, P.G.
Project Geologist

Supervised by



Mike Delmanowski, P.G., C.E.G., C.Hg.
Senior Hydrogeologist



EBA ENGINEERING



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1.0 INTRODUCTION

EBA Engineering (EBA) was retained by Railroad Square Associates LLC (Client) to prepare a Soil and Groundwater Management Plan (Plan) for the proposed redevelopment of the Sonoma-Marin Area Rail Transit (SMART) properties located at 2 Fourth Street and 34 Sixth Street in Santa Rosa, California (Figure 1, Appendix A), hereinafter referred to as the “project site”. The submission and implementation of this Plan is required by the Santa Rosa Fire Department (SRFD) and the North Coast Regional Water Quality Control Board (NCRWQCB) as part of the approval of the proposed development of the project site. Specific areas of concern summarized in this Plan were identified by previous investigations performed by others and in findings and recommendations detailed in the *Phase I Environmental Site Assessment* (EBA, 2008a) and *Report of Findings* (EBA, 2008b) prepared by EBA.

1.1 Purpose

The purpose of this Plan is to establish methodologies that will be used for proper handling, characterization, and disposal of soil and groundwater generated at the project site as part of, and during, the proposed construction activities and development of the properties.

2.0 BACKGROUND

2.1 Project Site Description and History

The seven-acre project site consists of two contiguous parcels of land identified as Sonoma County Assessor Parcel Numbers (APN) 010-171-004 (2 Fourth Street) and 010-166-003 (34 Sixth Street). The project site currently consists of a former railroad yard located in a historic district of downtown Santa Rosa. The project site properties are bounded on the south by Third Street, on the west by former commercial properties identified herein as the 3 West Third Street and 60 West Sixth Street Warehouses, on the north by West Sixth Street, and on the east by the main line railroad track right-of-way and commercial properties, including Aroma Roasters and Hotel La Rose. Santa Rosa Creek is located approximately 160 feet west of the western project site boundary, on the west side of the adjacent commercial properties. Please refer to Figure 2, Appendix A for an illustration of the general features for both the project site and adjacent properties.

Research indicates the project site was used as a railroad freight depot and maintenance/fueling yard from the late 1800’s up until the 1960’s. Historically, site structures at the project site included the main line track system that occupied the eastern side of the project site property, several associated railroad spurs and siding that traversed the central and western portions of the project site, a turntable, several warehouses, and freight houses. Multiple aboveground storage tanks (ASTs) and underground storage tanks (USTs) used for fuel and water storage were located throughout the property. Additionally, Sanborn Fire Insurance maps dating from 1885 indicate the Santa Rosa Woolen Mills was present on the northwestern portion of the project property until 1906 when it was destroyed in the 1906 earthquake. The Santa Rosa Woolen Mills was a large complex of buildings that included large ASTs and USTs.

Presently, the northern portion of the project site contains rough access ways, fencing, and waste lumber. The existing Northwestern Pacific Railroad line right-of-way and associated tracks trend along the eastern boundary of the project site. The southern portion of the project site has several north-south trending railroad tracks, which disperse throughout the property as spur and main line tracks. Existing utilities include a sanitary sewer line, which trends axially northward from Third Street to Sixth Street and is fed by tie-ins from both Fourth and Fifth Streets. Both Fourth and Fifth Streets also have storm drains, which extend across the project site and terminate at Santa Rosa Creek to the west.

2.2 Previous Investigation and Remediation Activities

Environmental investigation and remediation efforts have been conducted at the project site from the late 1980's up until the present. Previous efforts have included the removal of USTs, soil and groundwater sampling, and remedial excavations. A substantial amount of this work is summarized in the March 2008 *Phase I Environmental Site Assessment* (EBA, 2008a). A brief summary of previous investigation and remediation efforts is provided below:

- Extensive investigative activities were performed in the northwest area of the project site at the historic location of the Santa Rosa Woolen Mills facility, which operated in this area from the late 1800's until it was destroyed by fire in the 1906 earthquake. After this time, the area was utilized by the railroad for various uses including fuel storage and fueling operations. Soil samples collected in 2002 as part of an investigation of structures within this area indicated significant concentrations of petroleum hydrocarbons present in soil and groundwater in the area of the fueling structures, the area of the former AST, and the location of a former UST. Impacts to soil were identified as being primarily heavy range petroleum hydrocarbons.
- In September 2001, five on-site and off-site groundwater monitoring wells were installed to characterize impacts to groundwater at the project site. A majority of the monitoring wells were installed in the area of the aforementioned Santa Rosa Woolen Mills facility in the northwest portion of the project site. An upgradient, single-screen monitoring well (SRMW-08) was installed on the eastern portion of the property in the vicinity of the main line railroad tracks.
- From June to November 2002, additional characterization activities were performed in the northwestern area and a fenced enclosure at the project site property. Soil samples collected from these areas indicated significant concentrations of diesel and motor oil in soil. Proposed remedial options included excavation and removal of accessible impacted soil.
- In October and November, 2003, approximately 6,500 cubic yards of impacted soil were removed from several areas of the project site. The most significant remediation efforts targeted the northwestern portion of the project site where several areas were excavated to remove impacted soil. Source removal activities began in the area of a former wooden UST that is indicated on historic Sanborn maps for the Santa Rosa Woolen Mills

facility. During the excavation activities, remnants of the former UST were found and removed, whereupon the excavation was advanced to a total depth of approximately 18 feet below ground surface (BGS). A significant amount of free-phase petroleum hydrocarbon product was encountered on the groundwater surface during the excavation activities. The product and water were subsequently pumped, treated and disposed of to the sanitary sewer. The excavation in this area, which resulted in the removal of approximately 700 cubic yards of impacted materials, proceeded to within 20 feet of the existing Sixth Street Warehouse and was subsequently terminated due to concerns of structure stability. Confirmation soil samples indicated that impacted materials containing significant concentrations of diesel and motor oil remained in place in the excavation sidewalls and groundwater in this area.

- Excavation activities in the northwestern portion of the property also included the removal of a fuel pipeline. The associated trench was enlarged as it encountered impacted materials in an area designated as the main pit excavation area. A total of approximately 3,500 cubic yards of impacted materials were removed from this area. The excavation pit extended to depths below first encountered groundwater, which was encountered at approximately 19 feet BGS. The maximum depth attained by the excavation was approximately 22 feet BGS. Impacted groundwater encountered within the excavation pit, which included free-phase petroleum hydrocarbon product, was subsequently removed using pumps, treated, and disposed of to the sanitary sewer.
- Additional excavation was also performed on the south side of the aforementioned product line trench in the northwestern area. Approximately 325 cubic yards of impacted soil was removed from this area.
- Approximately 270 cubic yards of impacted soil was excavated and removed in the southwestern side of the project site identified as the “southern warehouse area”.
- Quarterly groundwater monitoring performed in the northwestern portion of the project site property and west into the neighboring property parcel indicated low levels of petroleum hydrocarbons in a monitoring well identified as SRMW-13 located in the northwest corner of the property. In addition, the fuel oxygenate methyl tert-butyl ether (MtBE) was detected in SRMW-8 located on the northeast side of the property. The remaining monitoring wells appear to have been relatively free of impacts during the time monitored.

Please refer to the Source Area Removal Report prepared by Kennedy/Jenks Consultants dated January 29, 2004 (Kennedy/Jenks Consultants, 2004) for details regarding the excavation activities mentioned above. A Kennedy/Jenks Consultants map is included for reference in Appendix C of this Plan which depicts the reported locations of the excavated areas.

2008 Site Investigation

In August and September, 2008, additional site investigation activities were performed by EBA throughout the project site. The work was performed to supplement the findings from previous

work at the project site performed by others, as well as to further assess areas of concern that were identified during previous site investigations. A summary of the work performed is as follows:

- A geophysical survey of the entire property was conducted by Norcal Geophysical Consultants, Inc. of Cotati, California by traversing the project site on a 5-foot by 10-foot grid using a magnetometer (MAG) and electromagnetic terrain conductivity meter (EM) to define localized magnetic and conductivity variations (anomalies) that might be caused by metallic and non-metallic subsurface sources. Based on these results, ground penetrating radar (GPR) was locally used to further define the nature of possible sources in terms of approximate dimensions and depth. Additionally, electromagnetic line locating methods (EMLL) were used to locate utilities and for correlation with the MAG, EM, and GPR results. The locations of all suspected subsurface features were documented on a scaled site plan.
- Suspect areas and anomalies identified by the geophysical survey, as well as concrete structures located in the west-central portion of the project site and in the fenced enclosure, were evaluated using an excavator. On September 29 and October 1, 2008, EBA supervised John's Excavating of Santa Rosa, California in the exploration activities. In each case, the scope of work associated with this task was limited to diagnosing the respective features by excavating the area in question, then integrating subsequent sampling and testing services if deemed warranted. Following each exploration, the excavation was backfilled to ground surface using the excavation spoils. Please note that this work was investigative in nature and no remedial activities were conducted.
- On September 16 through 25 and October 15, 2008, EBA supervised Clear Heart Drilling of Santa Rosa, California in soil boring advancement at the project site. A total of 75 soil borings were drilled at various locations across the project site that targeted specific depths for the purpose of collecting soil and/or groundwater samples for chemical analysis. Findings from this work identified several areas of the project site as having impacts from a range of contaminants including but not limited to petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and various metals. The contaminants are present in both soil and groundwater and vary in concentration and geographic location within the project site property. In general, the constituent concentrations detected in groundwater were low. Similarly, the constituent concentrations detected in soil were low to moderate and were primarily limited to the shallow soil.
- On October 6 and 7, 2008, EBA supervised Gregg Drilling and Testing Inc. (Gregg) of Martinez, California in the advancement of ten cone penetration test (CPT) soil borings and the collection of deep groundwater grab samples using Hydropunch® sampling techniques.

The 2008 investigation identified an existing UST and deep soil impacts (SB-1 area) in the form of heavy range petroleum hydrocarbons. It should be noted that this Plan is a general site document and does not address removal of the UST or excavation of impacted soil in the vicinity

of SB-1. For specific information regarding the Phase II findings summarized above, please refer to the *Report of Findings* (EBA, 2008b). A site map (Figure 2, Appendix A) and tabulated analytical results (Tables 1 through 6, Appendix B) are included in this Plan which illustrate the locations of specific areas investigated at the project site and present analytical results, respectively.

3.0 HYDROGEOLOGY

3.1 Regional Geology

The project site is centrally located within the Santa Rosa Plain, which is part of the Coast Range Geomorphic Province of northern California. The Coast Range Geomorphic Province is generally characterized as a series of northwest trending elongated ridges and valleys that are a result of folding and faulting. The Santa Rosa Plain, in turn, consists of alluvial fan deposits of Pleistocene and Holocene age. The alluvial fan deposits form a nearly continuous blanket over the Santa Rosa Plain and consist of poorly sorted coarse sand and gravel, moderately sorted fine sand and silt, and silty clay. The region of the project site has been mapped as having basement materials that underlie the alluvial fan deposits. The basement materials consist of marine sedimentary rocks of the Miocene Age Wilson Grove Formation. Portions of the Wilson Grove Formation are overlain in places by younger continental sedimentary rocks of the Pliocene-Pleistocene Age Glen Ellen Formation (Cardwell, 1958).

3.2 Project Site Geology and Hydrogeology

The geology of the project site is generally characterized by shallow (one to two feet BGS) rocky fill underlain by various lithologies including sandy silt and clayey sediments that contain varying amounts of angular to sub-rounded gravel. These finer-grained sediments extend to approximately 20 feet BGS, and are underlain by a laterally continuous coarser grained unit, defined in general as sand by CPT borings, which extends to at least 25 feet BGS, the maximum depth explored.

The hydrogeology of the project site is likely controlled by aggradational packages of sediments separated by clayey layers. At a depth of approximately 13 to 15 feet BGS, is a thin, laterally extensive sandy unit which overlays a similarly laterally extensive clayey bed. The underlying clay likely acts as a confining layer that may inhibit the vertical migration of fluids.

Historical groundwater monitoring has indicated the predominant groundwater flow direction to be approximately west-southwest across the project site, towards Santa Rosa Creek. As a result, the eastern portion of the project site is upgradient relative to the western portion.

4.0 SITE OVERVIEW

4.1 General Site Conditions

Soil and groundwater at the project site is potentially impacted by low levels of contaminants that may include, but may not be limited to, petroleum hydrocarbons, PAHs, VOCs and metals. The presence of these contaminants has been identified through active site investigation activities. Please refer to Figure 2, Appendix A for a site map showing the soil boring and sampling locations from the August and September, 2008 project site investigation activities. Tables 1 through 6 (Appendix B), in turn, presents the corresponding tabulated soil and groundwater sample analytical results. The site activities that have the potential of producing soil requiring characterization and/or disposal include the following:

- Site grading and soil conditioning;
- Installation and/or replacement of utilities;
- Installation of building foundations and footings;
- Grading and/or construction of roads;
- Removal of existing railroad track spurs; and
- Demolition activities.

The site activities that also have the potential of producing groundwater requiring characterization and/or disposal include the following:

- Excavation dewatering;
- Replacement and/or upgrading of the stormwater conveyance system;
- Installation or replacement of sewer and water lines/laterals;
- Excavation of building foundations or related components (i.e., piers); and
- Other subsurface activities.

Soil stockpiles will be covered with plastic sheeting to minimize exposure. Provisions will also be employed as needed to control the discharge of soil sediments to storm drains or other drainage features.

Groundwater will be containerized in a portable AST(s) to minimize exposure. Provisions will also be employed as needed to control the discharge of groundwater to storm drains or other drainage features.

4.2 Known Impacted Areas

The following subsections address areas of the project site that have been identified during past investigations to contain environmental concerns requiring specific attention during development activities. The areas in question are depicted on Figure 2, Appendix A and summarized as follows:

- Railroad ties to be removed during the project site development;
- The “fenced enclosure” where limited excavation of petroleum hydrocarbon impacted soil related to a former AST was removed; and, petroleum hydrocarbon impacted soil that was discovered beneath a concrete slab during the 2008 investigation activities;
- The “southern warehouse” area that is located near the southeast corner of the former 60 West Sixth Street warehouse (Plant 5); and
- The SRB-20 area located near the eastern wall of the former 3 West Third Street warehouse.

4.2.1 Railroad Tie Overview and Removal

As previously discussed, several abandoned railroad spur tracks are present within the project site properties (see Figure 2, Appendix A). Railroad ties associated with these tracks consist of creosote treated wood. Creosote is a coal tar derivative that contains significant amounts of PAHs. Railroad ties removed from the project site require handling and disposal protocols. In California, railroad ties require Class II disposal as demolition debris. In addition, there is concern of impacts to the underlying track ballast from railroad ties and spillage that occurred over time.

Railroad ties that are removed will be stockpiled on the site pending disposal. No characterization of the railroad ties is required for disposal and they can be transported under manifest for disposal.

Track ballast may be removed following the removal of the railroad ties. The ballast materials are typically composed of rock and will be sampled (if possible) and handled in accordance with the provisions for soil as discussed in Section 5.0.

4.2.2 Fenced Enclosure Area

As mentioned in Subsection 2.2, an AST was removed from the “fenced enclosure” area and petroleum hydrocarbon impacted soil was excavated. However, the excavation was halted by the presence of a power pole and impacted material was subsequently left in place. Additionally, material from beneath the former concrete slab was identified as being impacted by petroleum hydrocarbon constituents. The implementation of this Plan will include the removal of residual impacted soil from both of these locations during project site development activities and following the demolition of the power pole.

4.2.3 Southern Warehouse Area

Petroleum hydrocarbon impacted material was apparently left in place within the “southern warehouse” area during the 2003 excavation activities. This area will be addressed as part of the Plan implementation.

4.2.4 SRB-20 Area

Historical soil sample results from soil boring SRB-20 (Geomatrix, 2000) indicate concentrations of heavy range petroleum hydrocarbons are present at this location. The SRB-20 soil sample was a four-point composite and it appears that the impacts are shallow (i.e., less than six feet BGS). This area will be addressed as part of the Plan implementation.

4.3 Contingency Areas

Given the historical uses of the project site as a light industrial/railroad yard, previously unknown areas with soil and/or groundwater impacts may be discovered during development activities. If such conditions are discovered, the contractor or subcontractor will immediately notify the job superintendent and cease construction activities at the subject locale. Regulatory notifications and response actions will be performed on an as-needed basis by designated responsible site personnel.

5.0 SOIL MANAGEMENT

The in-place soil at the project site, because of the known or potential for residual contaminants to be present, is required by applicable regulatory agencies, including the SRFD and the NCRWQCB, to be characterized for disposal or reuse purposes. Therefore, in-place native soil that is excavated as part of the proposed development will be segregated at the time of removal, sampled for constituents of concern, and managed accordingly. Upon disturbance, the materials will be stockpiled and characterized prior to reuse or disposal. Soil that is demonstrated by sampling and analysis to contain constituents of concern at concentrations acceptable by the regulatory agencies could potentially be reused on-site during project site construction activities. Conversely, soil that is demonstrated by sampling and analysis to contain constituent concentrations above limits deemed acceptable by the regulatory agencies will be transported off-site for disposal at a licensed solid waste disposal facility.

5.1 Soil Sampling Protocol

Soil that is excavated as part of the site improvements will be stockpiled pending analysis and characterization. Efforts will be made to minimize mixing soils from different areas of the project site. Upon excavation, the soil will be temporarily stockpiled on-site in a designated area. Soil samples will be collected from the stockpiled materials by qualified personnel. Stockpiles that are approximately 100 cubic yards or less will be sampled at a frequency of one discrete soil sample per 25 cubic yards of stockpiled soil. Soil stockpiles that are of quantities greater than approximately 100 cubic yards will be sampled at a frequency of one discrete

sample per 50 cubic yards.

Confirmation soil samples will be collected following the removal of the impacted soil in the four areas presented in Subsection 4.2. Soil samples will be collected every 200 square feet of excavation bottom and sidewall or a minimum of one soil sample per location. Laboratory testing of the confirmation soil samples will be in accordance with Subsection 5.2.

Soil samples retained for chemical analysis will be collected in 2-inch diameter by 6-inch long brass or stainless steel tubes. In addition, soil samples targeted for VOC analysis will be collected using Encore[®] sampling containers in accordance with Environmental Protection Agency (EPA) Method 5035. Collected soil samples will be sealed, capped, labeled, and placed under refrigerated conditions pending transport under chain-of-custody (COC) procedures to a California State-certified laboratory for chemical analysis. COC documentation will be maintained for all samples. Field mapping on scaled site maps of the disturbed areas producing the soil, location of the designated soil stockpile area, and field observations of the soil (i.e., staining, odors, and other pertinent physical descriptions) at the time of sampling will be recorded on daily work record sheets. The soil stockpile(s) will be covered with plastic sheeting and left undisturbed pending receipt of laboratory analytical results.

5.2 Laboratory Testing

Soil samples retained for laboratory testing will be analyzed for the expected contaminants present in the stockpiled soil based on the existing data set produced from the various site characterization activities conducted to date. At a minimum, each soil sample will be analyzed for the following:

- Total Petroleum Hydrocarbons as diesel range organics (DRO) and TPH as heavy range organics (HRO) using EPA Method 8015 DRO.
- California Assessment Manual (CAM) metals including cadmium, chromium, lead, nickel and zinc using EPA Method 6020.

Additional analytical testing may also include the following:

- VOCs by EPA Method 8260B.
- PAHs by EPA Method 8270SIM.

Additional analysis of soil may be performed based on regulatory agency and/or solid waste disposal facility requirements.

5.3 Regulatory Agency Notification

Results of the soil sampling will be presented to the SRFD and NCRWQCB prior to either reuse or disposal. No actions regarding soil reuse or off-haul will be initiated until agency approval has been obtained

6.0 GROUNDWATER MANAGEMENT

Groundwater at the project site has been demonstrated to be impacted with low levels of petroleum hydrocarbons and VOCs. Discharge of groundwater to surface waters, storm drains and/or the sanitary sewer without permit and authorization is therefore prohibited. In the event that groundwater is encountered during construction activities, it will be pumped and containerized in a portable AST pending characterization and disposal.

6.1 Groundwater Sampling Protocol

Containerized groundwater will be sampled by qualified personnel with a sampling frequency of one grab sample per container of groundwater. Water will be obtained by using a bailer or dipper and transferred directly to laboratory-supplied containers. Following collection, the containers will be sealed, labeled, and placed under refrigerated conditions pending transport under COC procedures to a California State-certified laboratory for chemical analysis.

6.2 Laboratory Testing

Groundwater samples collected for chemical analysis will be analyzed for petroleum hydrocarbons including DRO and HRO using EPA Method 8015C, for VOCs using EPA Method 8260B. Additional analysis may be required by applicable agencies for disposal of the water.

6.3 Water Reuse and Regulatory Notification

Results of the water sampling will be presented to the SRFD and NCRWQCB prior to either reuse or disposal. No actions regarding the water will be employed until agency approval has been obtained. Discharge of the water to the sanitary sewer will be performed with permits and approval from the City of Santa Rosa Industrial Waste Department. Please note that there is a discharge prohibition of tetrachloroethene to the sanitary sewer and therefore treatment of the containerized water may be required prior to disposal.

Groundwater that is demonstrated by sampling and analysis to not contain constituents above regulated concentrations may be considered for reuse on the project site for dust control and/or soil conditioning.

7.0 CONTRACTOR AND SITE WORKER NOTIFICATION

Site briefings will be performed for each contractor and/or subcontractor at the project site to familiarize them with the nature of the contaminants expected to be present in on-site soil and groundwater, procedures for working with potentially impacted media, and applicable health and safety requirements. Such briefings will be initiated by responsible site personnel as part of normal safety briefings and include all site workers. Documentation of the attendance of the briefing will be kept as part of the project documentation. Notification procedures and contact numbers will be included for designated responsible personnel that oversee and/or manage work that has a reasonable potential to encounter such materials.

8.0 SITE HEALTH AND SAFETY PLANS

All contractors and subcontractors that engage in applicable work at the project site property will be required to prepare a site-specific Health and Safety (H&S) Plan for their personnel as it relates to the proposed scope of work and types of contaminants known to be present at the project site property. It will be the responsibility of each contractor and subcontractor to enforce their H&S Plans to ensure the safety of their site workers and management personnel.

9.0 LIMITATIONS

Local, state, and federal environmental regulations and property conditions can vary significantly over time. Consequently, the conclusions and recommendations presented as a result of this Plan apply strictly to the environmental regulations and Property conditions existing at the time EBA prepared this Plan. EBA assumes that the data obtained and the inferences made during this investigation are reasonable and representative of the Property.

EBA makes no warranty, expressed or implied, except that our services have been performed in accordance with generally accepted existing environmental engineering, health and safety principles, and applicable regulations at the time and location of this Plan. EBA has analyzed the available information using currently applicable engineering techniques.

Please be advised that the soil and groundwater management practices presented herein are based on a limited number of data points and, in part, on data made available to EBA by others, and includes professional interpretations based on limited research and data. Based on these circumstances, the decision to conduct additional investigative work to substantiate the findings and conclusions presented herein is the sole responsibility of the Client. This Plan does not include detailed engineered drawings that depict utility, road and building locations and/or depths of excavations. It is EBA's understanding that these drawings will be provided prior to breaking ground at the project site. This Plan has been prepared solely for the Client and any reliance on this report by third parties shall be at such party's sole risk.

10.0 CLOSING

This Plan will be implemented during construction activities upon approval of the SRFD and concurrence by the NCRWQCB.

11.0 REFERENCES

Cardwell, G.T., 1958, Geology and Ground Water in the Santa Rosa and Petaluma Valley Areas Sonoma County California, Geological Survey Water-Supply Paper 1427.

EBA Engineering, March 2008a, Phase I Environmental Site Assessment, SMART Railroad Property, Santa Rosa, California. EBA Engineering, Santa Rosa, California.

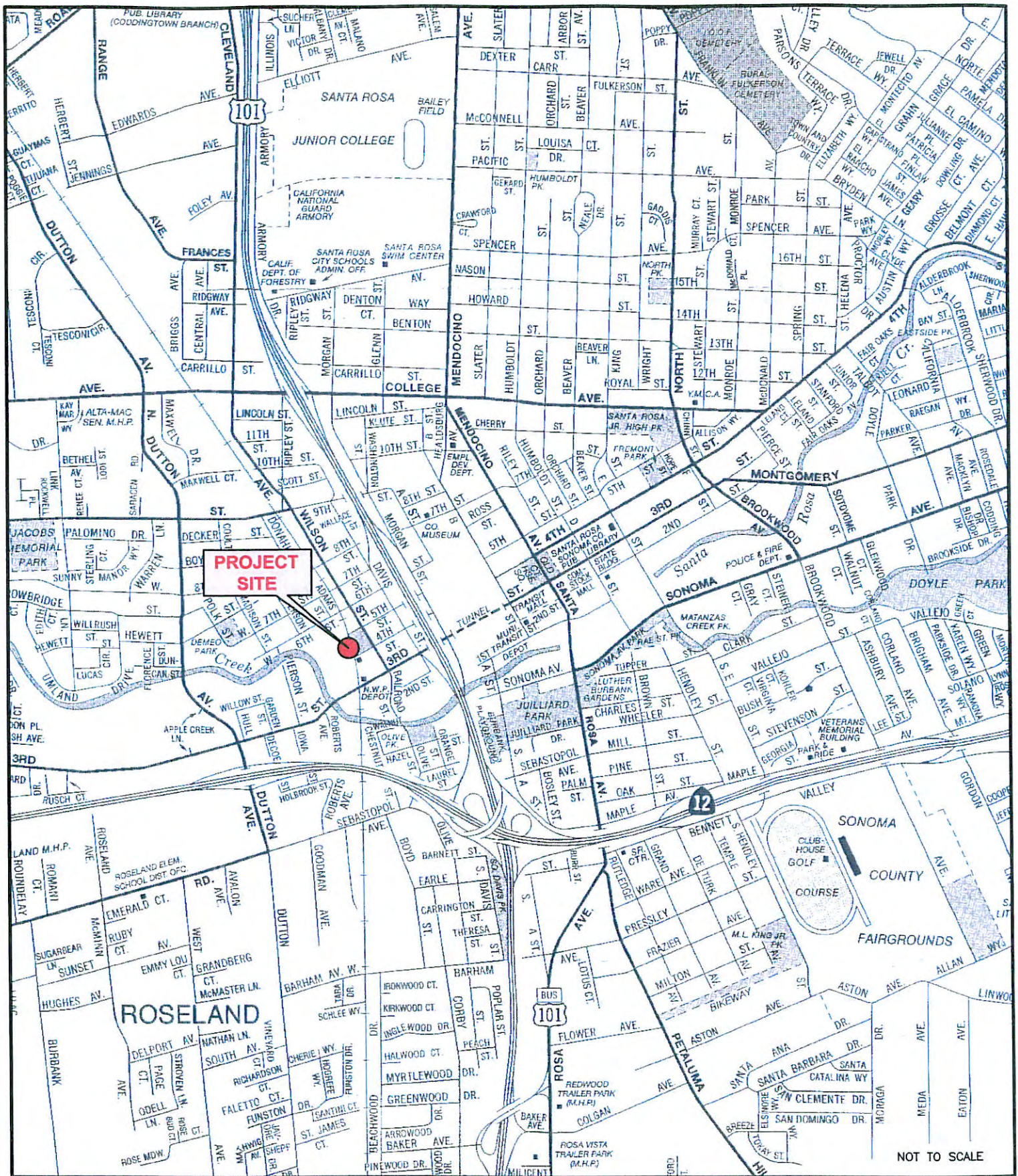
EBA Engineering, November 2008b, Report of Findings, Sonoma-Marin Area Rail Transit Property, Santa Rosa, California. EBA Engineering, Santa Rosa, California.

Geomatrix Consultants, Inc., June 2000, Soil and Groundwater Investigation and Recommendation for Closure, Santa Rosa Station/Third Street Option Property, Santa Rosa, California. Geomatrix, Oakland, California.

Kennedy/Jenks Consultants. January 29, 2004, Source Area Removal Report – Santa Rosa Station, Santa Rosa, California. Kennedy/Jenks Consultants, Sacramento, California.

APPENDIX A

FIGURES



VICINITY MAP SMART PROPERTY 2 FOURTH AND 34 SIXTH STREETS SANTA ROSA, CALIFORNIA

FIGURE

1

08-1528



APPENDIX B

TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
TPH-d, TPH-mo, and TPH-g
SMART Property, Santa Rosa, California

Sample ID	Date Sampled	TPH-d (mg/kg)	TPH-mo (mg/kg)	TPH-g (mg/kg)
SB-1A@2'	9/16/2008	385 ^{AC}	360	NA
SB-1A@5.5'	9/16/2008	2,160	1,060	NA
SB-1A@7.5'	9/16/2008	4,410	2,170	NA
SB-1A@12'	9/16/2008	1,880	1,010	NA
SB-1A@15'	9/16/2008	<10.0	<10.0	NA
SB-1B@5'	9/23/2008	<10.0	<10.0	NA
SB-1B@10'	9/23/2008	<10.0	<10.0	NA
SB-1C@8'	9/24/2008	2,960 ^{AC}	3,170	NA
SB-1C@15'	9/24/2008	41.8	21.0	NA
SB-1D@15'	9/24/2008	<10.0	<10.0	NA
SB-1E@5'	9/24/2008	99.3 ^{AC}	304	NA
SB-1E@14'	9/24/2008	32.9	31	NA
SB-1F@5'	9/24/2008	<10.0	<10.0	NA
SB-1F@14'	9/24/2008	<10.0	<10.0	NA
SB-2A@2'	9/17/2008	1,460 ^{AC}	2,460	NA
SB-2A@5'	9/17/2008	<10.0	<10.0	NA
SB-3A@2'	9/17/2008	<10.0	43.8	NA
SB-3A@5'	9/17/2008	<10.0	<10.0	NA
SB-4A@2'	9/18/2008	20.4	<10.0	NA
SB-4A@5'	9/18/2008	<10.0	<10.0	NA
SB-5A@2'	9/18/2008	<10.0	<10.0	NA
SB-5A@6'	9/18/2008	<10.0	<10.0	NA
SB-6A@2'	9/19/2008	<10.0	<10.0	NA
SB-6A@5'	9/19/2008	<10.0	<10.0	NA
SB-7A@2'	9/22/2008	<10.0	<10.0	NA
SB-7A@5'	9/22/2008	<10.0	<10.0	NA
SB-8A@2'	9/22/2008	<10.0	<10.0	NA
SB-8A@5'	9/22/2008	<10.0	<10.0	NA
SB-9A@2'	9/23/2008	<10.0	<10.0	NA
SB-9A@5'	9/23/2008	<10.0	<10.0	NA
SB-11@9.5'	9/24/2008	<10.0	<10.0	NA
SB-11@15.5'	9/24/2008	<10.0	<10.0	NA
SB-12@8'	9/24/2008	<10.0	<10.0	<1.00
SB-13@9'	9/24/2008	<10.0	<10.0	<1.00
SB-14@11'	9/24/2008	<10.0	<10.0	<1.00
SB-18@2'	9/16/2008	<10.0	<10.0	NA
SB-18@5'	9/16/2008	<10.0	<10.0	NA
SB-19@2'	9/16/2008	<10.0	<10.0	NA
SB-19@6'	9/16/2008	<10.0	<10.0	NA
SB-20@2'	9/16/2008	<10.0	<10.0	NA
SB-20@5'	9/16/2008	<10.0	<10.0	NA
SB-21@2'	9/16/2008	570 ^{AC}	1,110	NA
SB-21@5'	9/16/2008	<10.0	<10.0	NA
SB-22@2'	9/16/2008	<10.0	<10.0	NA
SB-22@5'	9/16/2008	<10.0	<10.0	NA
SB-23@3'	9/16/2008	<10.0	<10.0	NA
SB-23@5'	9/16/2008	<10.0	<10.0	NA
SB-24@2'	9/16/2008	546 ^{AC}	3,240	NA
SB-24@5'	9/16/2008	56.2 ^{AC}	79.2	NA
SB-25@2'	9/16/2008	238	228	NA
SB-25@5'	9/16/2008	<10.0	<10.0	NA
SB-26@2'	9/17/2008	<10.0	48.3	NA
SB-26@5.5'	9/17/2008	52.2 ^{AC}	84.1	NA
SB-27@2'	9/17/2008	98.3 ^{AC}	283	NA
SB-27@5.5'	9/17/2008	32.4	24.0	NA
SB-28@2'	9/17/2008	936 ^{AC}	1,780	NA
SB-28@5'	9/17/2008	<10.0	<10.0	NA
SB-29@2'	9/17/2008	2,340 ^{AC}	3,570	NA
SB-29@5'	9/17/2008	<10.0	<10.0	NA
SB-30@2'	9/17/2008	1,150	621	NA
SB-30@4'	9/17/2008	474	280	NA
SB-30@7'	9/17/2008	<10.0	<10.0	NA
SB-30A@5'	9/24/2008	<10.0	<10.0	NA
SB-30B@5'	9/24/2008	<10.0	<10.0	NA
SB-31@2'	9/17/2008	318 ^{AS}	715	NA
SB-31@5'	9/17/2008	<10.0	<10.0	NA
SB-32@2'	9/17/2008	<10.0	<10.0	NA
SB-32@5'	9/17/2008	<10.0	<10.0	NA
SB-33@2'	9/18/2008	<10.0	<10.0	NA
SB-33@5'	9/18/2008	50.2 ^{AC}	138	NA

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
TPH-d, TPH-mo, and TPH-g
SMART Property, Santa Rosa, California

Sample ID	Date Sampled	TPH-d (mg/kg)	TPH-mo (mg/kg)	TPH-g (mg/kg)
SB-34@2'	9/18/2008	32.3 ^{AN}	<10.0	NA
SB-34@7'	9/18/2008	<10.0	<10.0	NA
SB-35@2'	9/18/2008	<10.0	<10.0	NA
SB-35@5'	9/18/2008	<10.0	<10.0	NA
SB-36@2'	9/18/2008	<10.0	<10.0	NA
SB-36@5'	9/18/2008	<10.0	<10.0	NA
SB-37@2'	9/18/2008	<10.0	<10.0	NA
SB-37@5'	9/18/2008	<10.0	<10.0	NA
SB-38@2'	9/18/2008	<10.0	<10.0	NA
SB-38@5'	9/18/2008	<10.0	<10.0	NA
SB-39@2'	9/18/2008	<10.0	<10.0	NA
SB-39@5'	9/18/2008	<10.0	<10.0	NA
SB-40@2'	9/19/2008	<10.0	<10.0	NA
SB-40@5'	9/19/2008	<10.0	<10.0	NA
SB-41@2'	9/19/2008	<10.0	<10.0	NA
SB-41@5'	9/19/2008	<10.0	<10.0	NA
SB-42@2'	9/19/2008	<10.0	<10.0	NA
SB-42@5'	9/19/2008	<10.0	<10.0	NA
SB-43@2'	9/19/2008	15.9	<10.0	NA
SB-43@5'	9/19/2008	<10.0	<10.0	NA
SB-44@2'	9/19/2008	<10.0	<10.0	NA
SB-44@5'	9/19/2008	<10.0	46.0	NA
SB-45@2'	9/19/2008	<10.0	<10.0	NA
SB-45@5'	9/19/2008	<10.0	<10.0	NA
SB-45B@5'	9/23/2008	<10.0	<10.0	NA
SB-46@2'	9/19/2008	<10.0	<10.0	NA
SB-46@5'	9/19/2008	<10.0	<10.0	NA
SB-47@2'	9/22/2008	<10.0	<10.0	NA
SB-47@5'	9/22/2008	<10.0	<10.0	NA
SB-48@2'	9/22/2008	44.2	<10.0	NA
SB-48@6'	9/22/2008	<10.0	<10.0	NA
SB-49@2'	9/22/2008	<10.0	<10.0	NA
SB-49@5'	9/22/2008	<10.0	<10.0	NA
SB-50@2'	9/22/2008	<10.0	<10.0	NA
SB-50@5'	9/22/2008	<10.0	<10.0	NA
SB-51@2'	9/22/2008	<10.0	<10.0	NA
SB-51@5'	9/22/2008	<10.0	<10.0	NA
SB-52@2'	9/22/2008	<10.0	<10.0	NA
SB-52@5'	9/22/2008	<10.0	<10.0	NA
SB-53@2'	9/22/2008	<10.0	<10.0	NA
SB-53@5'	9/22/2008	<10.0	<10.0	NA
SB-54@2'	9/23/2008	<10.0	<10.0	NA
SB-54@5'	9/23/2008	<10.0	<10.0	NA
SB-55@2'	9/23/2008	<10.0	<10.0	NA
SB-55@5'	9/23/2008	<10.0	<10.0	NA
SB-56@2'	9/23/2008	<10.0	38.9	NA
SB-56@5'	9/23/2008	52.7 ^{AC}	126	NA
SB-57@2'	9/23/2008	<10.0	<10.0	NA
SB-57@5'	9/23/2008	<10.0	<10.0	NA
SB-58@2'	9/23/2008	<10.0	<10.0	NA
SB-58@5'	9/23/2008	<10.0	<10.0	NA
SB-59@2'	9/23/2008	2,270 ^{AC}	3,550	NA
SB-59@5'	9/23/2008	<10.0	36.5	NA
SB-60@2'	9/23/2008	<10.0	<10.0	NA
SB-60@5'	9/23/2008	<10.0	<10.0	NA
SB-61@2'	9/23/2008	<10.0	<10.0	NA
SB-61@5'	9/23/2008	<10.0	<10.0	NA
S-N-GATE@2'	9/29/2008	2,530 ^{AC}	3,400	NA
S-N-GATE@3'	9/29/2008	<10.0	<10.0	NA
S-FE@1'	9/29/2008	615 ^{AK, AC}	1,060	402

EBA = EBA Engineering.
NA = Not Analyzed.
TPH-g = Total Petroleum Hydrocarbons as gasoline.
TPH-d = Total Petroleum Hydrocarbons as diesel.
TPH-mo = Total Petroleum Hydrocarbons as motor oil.
mg/kg = Milligrams per Kilogram.
AC = Heavier hydrocarbons contributing to diesel range quantitation.
AK = Lighter hydrocarbon than diesel.
AN = Unknown hydrocarbon with several peaks.

TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
POLYCYCLIC AROMATIC HYDROCARBONS
SMART Property, Santa Rosa, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo (A) Anthracene	Benzo (B) Fluoranthene	Benzo (K) Fluoranthene	Benzo (A) Pyrene	Benzo (G,H,I) Perylene	Chrysene	Dibenzo (A,H) Anthracene	Fluoranthene	Indeno (1,2,3-CD) Pyrene	Naphthalene	Phenanthrene	Pyrene
µg/kg																
SB-1A@7.5'	9/16/2008	212	102	<5.00	131	<5.00	<5.00	43.2	70.7	69.2	<20.0	32.6	85.3	28.1	82.3	139
SB-5A@2'	9/18/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-8A@2'	9/22/2008	<2.50	<2.50	3.33	8.39	4.89	4.58	11.5	<10.0	9.81	<10.0	14.2	<2.50	<10.0	5.04	17.0
SB-8A@5'	9/22/2008	<2.50	<2.50	<2.50	3.99	<2.50	<2.50	3.26	<10.0	2.94	<10.0	3.25	<2.50	<10.0	<2.50	3.55
SB-11@9.5'	9/24/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-11@15.5'	9/24/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-18@2'	9/16/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-25@2'	9/16/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-28@2'	9/17/2008	<2.50	<2.50	<2.50	34.6	<2.50	<2.50	360	670	79.4	<100	<25.0	<25.0	<100	27.6	<25.0
SB-28@5'	9/17/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-34@2'	9/18/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-45@2'	9/19/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-47@2'	9/22/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-56@2'	9/23/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50
SB-60@2'	9/23/2008	<2.50	<2.50	<2.50	4.42	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	3.54	<2.50	<10.0	<2.50	4.77
SB-61@2'	9/23/2008	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<10.0	<2.50	<10.0	<2.50	<2.50	<10.0	<2.50	<2.50

EBA = EBA Engineering.

µg/kg = micrograms per kilogram.

TABLE 3
SOIL SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
CAM 17 Metals
SMART Property, Santa Rosa, California

Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Beryllium (Be)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Silver (Ag)	Thallium (Tl)	Vanadium (V)	Zinc (Zn)
mg/kg																		
SB-5A@a2'	9/18/2008	<2.50	3.76	172	<2.50	<2.50	61.1	16.6	26.1	21.1	<0.100	<2.50	73.8	<2.50	<2.50	<2.50	59.0	46.6
SB-8A@a2'	9/22/2008	<2.50	4.92	216	<2.50	<2.50	107	23.2	33.1	8.02	<0.100	<2.50	169	<2.50	<2.50	<2.50	64.8	63.8
SB-11@9.5'	9/25/2008	<2.50	2.69	191	<2.50	<2.50	119	16.9	22.6	6.82	<0.100	<2.50	141	<2.50	<2.50	<2.50	44.4	48.8
SB-11@15.5'	9/25/2008	<2.50	<2.50	161	<2.50	<2.50	83.7	10.7	23.4	6.82	<0.100	<2.50	117	<2.50	<2.50	<2.50	38.5	47.1
SB-18@a2'	9/16/2008	<2.50	2.92	128	<2.50	<2.50	78.3	13.1	22.2	7.35	<0.100	<2.50	89.8	<2.50	<2.50	<2.50	43.2	46.0
SB-18@a5'	9/16/2008	<2.50	5.25	185	<2.50	<2.50	98.2	17.9	24.5	5.60	<0.100	<2.50	135	<2.50	<2.50	<2.50	58.8	49.8
SB-25@a2'	9/16/2008	<2.50	<2.50	71.5	<2.50	<2.50	30.5	9.88	33.9	20.6	<0.100	<2.50	54.3	<2.50	<2.50	<2.50	35.7	48.4
SB-28@a2'	9/17/2008	<2.50	2.72	34.4	<2.50	<2.50	28.7	7.43	13.9	12.4	<0.100	<2.50	61.9	<2.50	<2.50	<2.50	24.5	26.4
SB-34@a2'	9/18/2008	<2.50	2.84	170	<2.50	<2.50	63.7	14.0	23.6	6.58	<0.100	<2.50	79.1	<2.50	<2.50	<2.50	47.7	43.7
SB-45@a2'	9/19/2008	<2.50	3.56	157	<2.50	<2.50	64.3	15.5	24.0	8.35	<0.100	<2.50	84.5	<2.50	<2.50	<2.50	47.1	44.7
SB-47@a2'	9/22/2008	<2.50	3.94	168	<2.50	<2.50	62.8	18.0	22.5	5.98	<0.100	<2.50	91.2	<2.50	<2.50	<2.50	46.5	49.6
SB-56@a2'	9/23/2008	<2.50	5.20	124	<2.50	<2.50	110	23.0	30.5	7.44	<0.100	<2.50	165	<2.50	<2.50	<2.50	64.3	61.2
SB-60@a2'	9/23/2008	<2.50	5.03	147	<2.50	<2.50	79.1	18.9	48.2	86.0	0.255	<2.50	118	<2.50	<2.50	<2.50	54.3	49.1
SB-61@a2'	9/23/2008	<2.50	4.95	209	<2.50	<2.50	107	22.6	31.8	8.53	<0.100	<2.50	154	<2.50	<2.50	<2.50	64.0	64.2

EBA = EBA Engineering.

mg/kg = milligrams per kilogram.

CAM = California Assessment Manual.

TABLE 4
SOIL SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
VOLATILE ORGANIC COMPOUNDS
SMART Property, Santa Rosa, California

Sample ID	Date	Units	PCE	Other VOCs
SB-1A@7.5'	9/16/2008	µg/kg	<200	*
SB-5A@2'	9/18/2008	µg/kg	<1.45	ND
SB-5A@6'	9/18/2008	µg/kg	<1.33	ND
SB-8A@2'	9/22/2008	µg/kg	4.55	ND
SB-8A@5'	9/22/2008	µg/kg	5.86	ND
SB-11@9.5'	9/24/2008	µg/kg	<1.37	ND
SB-12@8'	9/23/2008	µg/kg	<1.11	ND
SB-13@9'	9/23/2008	µg/kg	1.44	ND
SB-13-W@5'	10/15/2008	µg/kg	<1.35	ND
SB-14@11'	9/23/2008	µg/kg	<1.35	ND
SB-18@2'	9/16/2008	µg/kg	<1.27	ND
SB-18@5'	9/16/2008	µg/kg	<1.21	ND
SB-25@2'	9/16/2008	µg/kg	<1.27	ND
SB-28@2'	9/17/2008	µg/kg	1.87	ND
SB-28@5'	9/17/2008	µg/kg	2.58	ND
SB-28-W@10'	10/15/2008	µg/kg	4.10	ND
SB-34@2'	9/18/2008	µg/kg	<1.33	ND
SB-34@7'	9/18/2008	µg/kg	<1.31	ND
SB-45@2'	9/19/2008	µg/kg	<1.36	ND
SB-45@5'	9/19/2008	µg/kg	<1.28	ND
SB-47@2'	9/22/2008	µg/kg	<1.32	ND
SB-47@5'	9/22/2008	µg/kg	<1.33	ND
SB-56@2'	9/23/2008	µg/kg	<1.28	ND
SB-56@5'	9/23/2008	µg/kg	<1.61	ND
SB-61@2'	9/23/2008	µg/kg	6.06	ND
SB-61@5'	9/23/2008	µg/kg	2.94	ND
SB-61-W@10'	10/15/2008	µg/kg	1.69	ND
S-FE@1'	9/29/2008	µg/kg	<400	**

EBA = EBA Engineering.

PCE = Tetrachloroethene

VOCs = Volatile Organic Compounds

µg/kg = Micrograms per Kilogram.

ND = Not detected at or above the laboratory's Reporting Limit. Please refer to the Certified Analytical Reports for actual reporting limits.

* = Bromomethane (480 µg/kg).

** = m+p xylene (422 µg/kg), o-xylene (443 µg/kg), n-propylbenzene (556 µg/kg), 1,3,5-trimethylbenzene (4,200 µg/kg), 1,2,4-trimethylbenzene (12,100 µg/kg), sec-butylbenzene (1,080 µg/kg), 4-isopropyltoluene (1,680 µg/kg), n-butylbenzene (919 µg/kg). Remaining VOCs for S-FE@1' were non-detect.

TABLE 5
GROUNDWATER SAMPLE ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
TPH-g, TPH-d, and TPH-mo
SMART Property, Santa Rosa, California

Sample ID	Date Sampled	TPH-g (mg/L)	TPH-d (mg/L)	TPH-mo (mg/L)
SB-1-W	10/6/2008	1.44 ^{AS}	29.7	19.7
SB-1A-W	9/16/2008	0.124 ^{AS}	27.0	15.4
SB-1B-W	9/25/2008	<0.050	<0.500	<0.500
SB-1D-W	9/25/2008	<0.050	<0.500	<0.500
SB-2A-W	9/17/2008	<0.050	<0.500	<0.500
SB-2-W	10/6/2008	<0.050	<0.050	<0.050
SB-3A-W	9/18/2008	<0.050	<0.500	<0.500
SB-3-W	10/7/2008	<0.050	<0.050	<0.050
SB-4A-W	9/18/2008	<0.050	<0.500	<0.500
SB-4-W	10/7/2008	<0.050	<0.050	<0.050
SB-5-W	10/6/2008	<0.050	<0.050	<0.050
SB-6A-W	9/19/2008	<0.050	<0.500	<0.500
SB-6-W	10/6/2008	<0.050	<0.050	<0.050
SB-7A-W	9/22/2008	<0.050	<0.500	<0.500
SB-7-W	10/7/2008	<0.050	<0.050	<0.050
SB-8A-W	9/23/2008	<0.050	<0.500	<0.500
SB-8-W	10/7/2008	<0.050	<0.050	<0.050
SB-9-W	10/7/2008	<0.050	0.064	<0.050
SB-10-W	10/7/2008	<0.050	0.064	<0.050
SB-11-W	9/25/2008	<0.050	<0.050	<0.050
SB-13-W	10/15/2008	<0.050	0.279	0.246
SB-28-W	10/15/2008	<0.050	<0.050	<0.050
SB-55-W	10/15/2008	4.65 ^{AS}	2.64 ^{AK}	<0.050
SRMW-07	10/2/2008	<0.050	<0.050	<0.050
SRMW-08	10/2/2008	<0.050	<0.050	<0.050

EBA
= EBA Engineering.

TPH-g
= Total Petroleum Hydrocarbons as gasoline.

TPH-d
= Total Petroleum Hydrocarbons as diesel.

TPH-mo
= Total Petroleum Hydrocarbons as motor oil.

mg/L
= Milligrams per Liter.

AK
= Lighter hydrocarbon than diesel.

AS
= Heavier hydrocarbon than gasoline contributing to value.

TABLE 6
GROUNDWATER ANALYTICAL RESULTS – 2008 INVESTIGATION (EBA)
VOLATILE ORGANIC COMPOUNDS
SMART Property, Santa Rosa, California

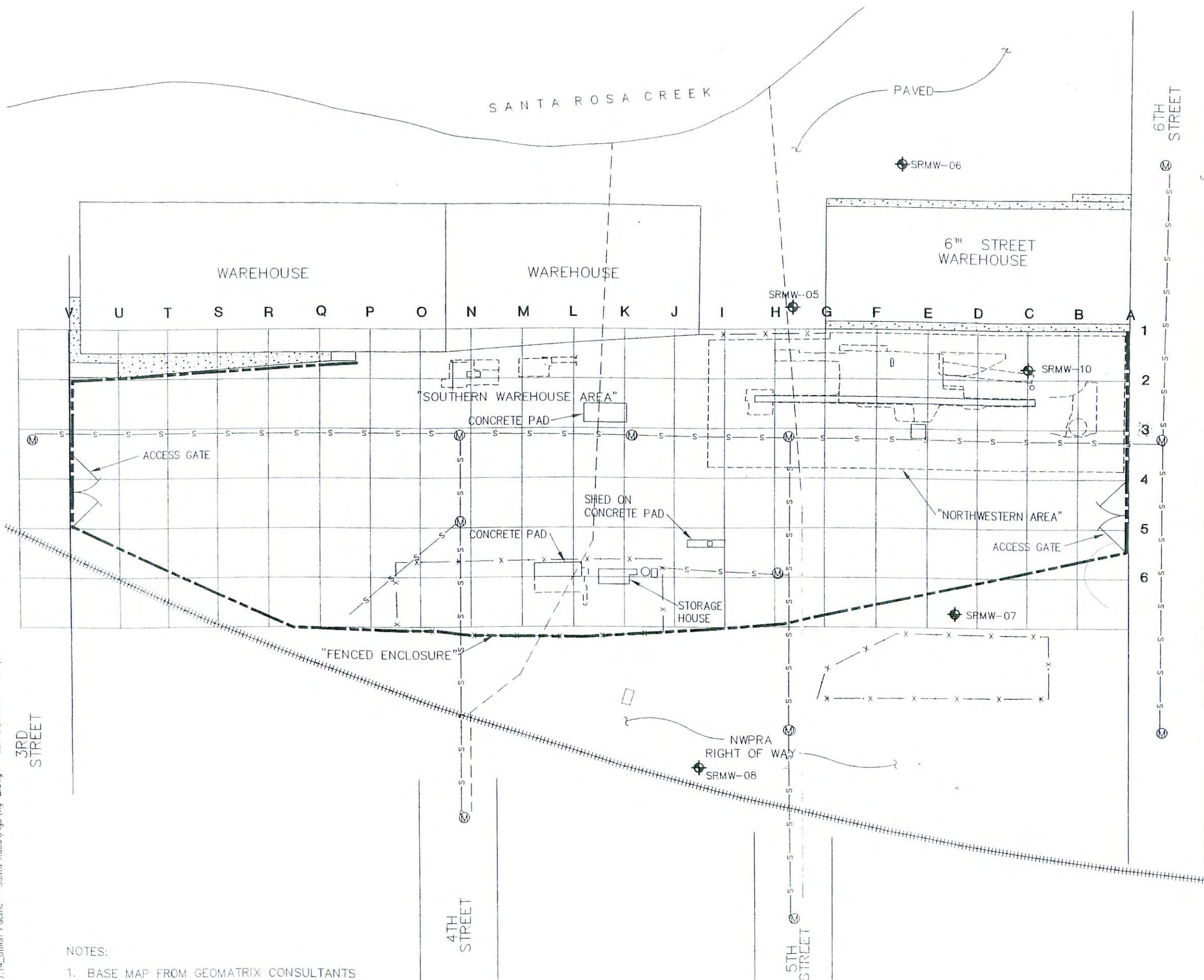
Sample ID	Water-Bearing Zone: Shallow/Deep	Date	Units	PCE	TCE	CIS-1,2-DCE	MIBE	Xylene (M+P)	N-Propylbenzene	1,2,4-Trimethylbenzene	All other VOCs
SB-1A-W	Shallow (~15' BGS)	9/16/2008	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-1B-W	Shallow (~15' BGS)	9/25/2008	µg/L	0.520	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-1D-W	Shallow (~15' BGS)	9/25/2008	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-1-W	Deep (~25' BGS)	10/6/2008	µg/L	<1.00	<1.00	1.15	1.40	<1.00	<1.00	<1.00	<RL
SB-2A-W	Shallow (~15' BGS)	9/17/2008	µg/L	1.96	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-2-W	Deep (~25' BGS)	10/6/2008	µg/L	3.06	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-3A-W	Shallow (~15' BGS)	9/18/2008	µg/L	3.03	0.750	<0.500	3.80	<0.500	<0.500	<0.500	<RL
SB-3-W	Deep (~25' BGS)	10/7/2008	µg/L	1.06	1.95	6.77	23.8	<0.500	<0.500	<0.500	<RL
SB-4A-W	Shallow (~15' BGS)	9/18/2008	µg/L	1.03	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-4-W	Deep (~25' BGS)	10/7/2008	µg/L	12.7	1.96	0.530	21.3	<0.500	<0.500	<0.500	<RL
SB-5-W	Deep (~25' BGS)	10/6/2008	µg/L	5.88	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-6A-W	Shallow (~15' BGS)	9/19/2008	µg/L	2.18	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-6-W	Deep (~25' BGS)	10/6/2008	µg/L	9.63	2.70	1.20	47.1	<0.500	<0.500	<0.500	<RL
SB-7A-W	Shallow (~15' BGS)	9/22/2008	µg/L	3.40	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-7-W	Deep (~25' BGS)	10/7/2008	µg/L	<0.500	<0.500	<0.500	2.31	<0.500	<0.500	<0.500	<RL
SB-8A-W	Shallow (~15' BGS)	9/23/2008	µg/L	1.03	0.720	<0.500	0.710	<0.500	<0.500	<0.500	<RL
SB-8-W	Deep (~25' BGS)	10/7/2008	µg/L	0.920	<0.500	<0.500	7.79	<0.500	<0.500	<0.500	<RL
SB-9-W	Deep (~25' BGS)	10/7/2008	µg/L	0.620	<0.500	<0.500	1.46	<0.500	<0.500	<0.500	<RL
SB-10-W	Deep (~25' BGS)	10/7/2008	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-11-W	Shallow (~15' BGS)	9/25/2008	µg/L	0.730	1.15	<0.500	2.73	<0.500	<0.500	<0.500	<RL
SB-13-W	Shallow (~15' BGS)	10/15/2008	µg/L	1.22	1.40	1.18	<0.500	<0.500	<0.500	<0.500	<RL
SB-28-W	Shallow (~15' BGS)	10/15/2008	µg/L	3.63	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SB-55-W	Shallow (~15' BGS)	10/15/2008	µg/L	<1.00	<1.00	<1.00	<1.00	1.14	1.27	1.13	<RL
SRMW-07	Screened across both	10/2/2008	µg/L	0.920	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<RL
SRMW-08	Screened across both	10/2/2008	µg/L	8.74	4.75	5.69	24.5	<0.500	<0.500	<0.500	<RL

EBA
PCE = EBA Engineering.
TCE = Tetrachloroethene.
CIS-1,2-DCE = Trichloroethene.
MIBE = cis-1,2-dichloroethene.
VOCs = Methyl tert-Butyl Ether.
µg/L = Volatile Organic Compounds.
BGS = Micrograms per Liter.
~ = Below Ground Surface.
RL = Approximately.
= Reporting Limit.

APPENDIX C

KENNEDY/JENKS CONSULTANTS MAP

J:\2003\032777.14_Union Pacific - Santa Rosa\Figs\fig-2.dwg Jan 22, 2004 - 4:19pm



NOTES:
1. BASE MAP FROM GEOMATRIX CONSULTANTS

LEGEND
(FOR FIGURES 4 TO 14)

A, B, C... 1, 2, 3 CONTROL GRID DESIGNATIONS

SRMW-10 MONITORING WELL LOCATION AND DESIGNATION

--- SITE CHAIN LINK FENCE BOUNDARY

RAILROAD TRACK

--- X --- CHAIN LINK FENCE

--- CITY OF SANTA ROSA STORM WATER LINE

--- S --- CITY OF SANTA ROSA SEWER LINES

MANHOLE

--- APPROXIMATE LIMITS OF EXCAVATION

SRB 82 SOIL BORING LOCATION BY OTHERS

X25 SOURCE AREA EXCAVATION SAMPLING LOCATION

X78C SOURCE AREA EXCAVATION CONFIRMATION SAMPLING LOCATION

X26 ADDITIONAL EXCAVATION CONDUCTED AFTER COLLECTION OF SAMPLE

SRB114 SOURCE AREA INVESTIGATION SOIL BORING LOCATION

APPROXIMATE DEPTH OF EXCAVATION

VI VISUAL IMPACTS DETECTED AT STATED DEPTH INTERVAL

DATA NOT AVAILABLE

PROJECT NORTH

TRUE NORTH

0 40 80
1"=80'

Kennedy/Jenks Consultants
UNION PACIFIC RAILROAD COMPANY
SANTA ROSA STATION
SOURCE AREA REMOVAL REPORT

SITE CONTROL GRID
BASE MAP
JANUARY 2004
Figure 2
K/J 032777.14