

**DRAFT  
ENVIRONMENTAL IMPACT REPORT**

**RANCHO SANTA FE ROUNDABOUTS PROJECT  
State Clearinghouse # 2007101081**

**Appendices I-L**

**Lead Agency:**

**County of San Diego  
Department of Public Works  
Environmental Services Unit  
5510 Overland Avenue, Suite 410  
Mail-Stop O-385  
San Diego, California 92123**

**December 2012**



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**County of San Diego  
Department of Public Works**

**December 2012**



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**Appendix I**  
**Phase I Environmental Site Assessment**







**Phase I Environmental Site Assessment**

**Rancho Santa Fe Roundabouts Project**

**Rancho Santa Fe, California**

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## EXECUTIVE SUMMARY

RORE, Inc. (RORE), under subcontract for EDAW, Inc., and on behalf of Technology Associates (TAIC), conducted a Phase I Environmental Site Assessment (ESA) as part of the Rancho Santa Fe Roundabouts (RSFR) Project for the County of San Diego. The County proposes to construct three roundabouts at intersections within the Paseo Delicias corridor, northeast of the unincorporated community of Rancho Santa Fe in northwest San Diego County (Figure 1). The project areas consist of sections of 40 San Diego County Assessor's Parcels that cover approximately 27.6 acres spread out over three intersections. The San Diego County Assessor's Parcel Numbers and parcel characteristics for the subject properties are included in Table 1.

This Phase I ESA completed for the subject properties documents the assessment procedures, findings, and recommendations for the site. The Phase I ESA included a visual site inspection (VSI) of the subject properties on December 1, 2006; interviews with persons knowledgeable about the subject properties, along with a review of government agency records and historical uses of the subject properties were completed at a later date.

RORE reviewed historical aerial photographs, historical city directories, and historical topographic maps to obtain historical information on the subject properties. The historical topographic maps reviewed include those from 1901 to 1996 and aerial photographs from 1939 to 2002. Historical records reviewed did not identify uses associated with the storage, transfer, or disposal of hazardous materials and/or landfill sites on the subject properties.

A regulatory agency environmental records review was conducted and did not identify any records that posed an environmental concern for the subject properties.

The subject properties were found to be developed land with residential and commercial use at the time of the VSI. Subject property descriptions, boundaries, and locations are shown in Figure 2. Historical records reviewed did not indicate property development or uses different than current use. No hazardous materials use, generation, storage (other than small quantity household type use), or disposal was identified on the subject properties.

No recognized environmental conditions were identified associated with the subject properties.

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Appendix C	Historical Aerial Photographs of Subject Properties
Appendix D	Historical Topographic Maps of Subject Properties
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## ACRONYMS AND ABBREVIATIONS

AIRS	Aerometric Information Retrieval System
APN	Assessor's Parcel Number
AST	aboveground storage tank
AWP	Annual Workplan
BCRLF	Brownfields Cleanup Revolving Loan Fund
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CAWRCB	California Water Resource Control Board
CHMIRS	California Hazardous Material Incident Report System
DEH	Department of Environmental Health
DHS	Department of Health Services
DOT	Department of Transportation
DTSC	Department of Toxic Substance Control
EDR	Environmental Data Resources, Inc.
EMI	Emissions Inventory
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-know Act
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FFIS	Federal Facilities Information System
FID	Facility Inventory Database
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINDS	Facility Index System
FTTS	FIFRA/TSCA Tracking System
FUDS	Formerly Used Department of Defense Sites
FURS	Federal Underground Injection Control
HMIRS	Hazardous Materials Information Reporting Systems
HMMD	Hazardous Materials Management Division
ICIS	Integrated Compliance Information System
LUST	Leaking Underground Storage Tank
LBP	Lead Based Paint
mg/L	milligrams per liter
MLTS	Material Licensing Traffic System
MSDS	Material Safety Data Sheets
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
NFA	no further action

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NFRAP	No Further Remedial Action Planned
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPL	National Priorities List
NRC	National Response Center
ODI	Open Dump Inventory
PADS	PCB Activity Database System
PCE	Perchloroethylene
PCS	Permit Compliance System
RAATS	RCRA Administration Action Tracking System
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RSPA	Research and Special Programs Administration
SAM	Site Assessment Manual
SIC	Standard Industrial Classification
SLIC	Spills, Leaks, Investigations, and Cleanups
SMBRP	Site Mitigation and Brownfields Reuse Program
SSTS	Section Seven Tracking System
SWEEPS	Statewide Environmental Evaluation and Planning System
SWF/LF	Solid Waste Facility/Landfill
TBD	Targeted Brownfields Assessments
TRI	Toxic Release Inventory
TRIS	Toxic Release Inventory System
TSCA	Toxic Substance Control Act
TSD	Treatment, Storage, and Disposal
UMTRA	Uranium Mill Tailings Sites
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
USGS	US Geological Survey
VCP	Voluntary Cleanup Program
VSI	Visual Site Inspection
WIP	Well Investigation Program
WMUDS	Waste Management Unit Database System





## 1.0 INTRODUCTION AND PURPOSE

RORE, Inc. (RORE), under subcontract for EDAW, Inc., and on behalf of Technology Associates (TAIC), conducted a Phase I Environmental Site Assessment (ESA) as part of the County of San Diego's Rancho Santa Fe Roundabouts Project. The draft report of this assessment was prepared by SOTA Environmental Technology, Inc., which merged with RORE Inc. on July 1, 2007. The Rancho Santa Fe Roundabouts Project area (hereinafter referred as "subject properties") are located northeast of the unincorporated community of Rancho Santa Fe approximately five miles east on Interstate 5 in northwestern San Diego County. The subject properties consist of sections from 40 County of San Diego Assessor's Parcels located on the north and south of the Paseo Delicias corridor at three intersections spanning approximately 1.5 miles. The San Diego County Assessor's Parcel Numbers and parcel characteristics of the subject properties are listed in Table 1. The County proposes to widen and construct roundabouts at the three intersections consisting of the following subject properties: 1) Paseo Delicias/Villa de la Valle/La Fremontia, 2) Paseo Delicias/El Montevideo/La Valle Plateada, and 3) Paseo Delicias/El Camino Del Norte/Del Dios Highway. Subject properties and surrounding area identifiers are further discussed in Site and Vicinity Characteristics, Section 2.1.

The purpose of the Phase I ESA is to identify, to the extent feasible, pursuant to the processes prescribed herein, recognizable environmental conditions associated with the subject properties. This Phase I ESA study follows the Caltrans guidelines for Initial Site Assessment, United States Environmental Protection Agency (US EPA) published *All Appropriate Inquiries Report, Final Rule*, and the guidelines established in the American Society for Testing and Materials (ASTM) Standard E 1527-05: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The intent of the standard is to define good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products.

### 1.1 Limitations

During the performance of this Phase I ESA, RORE attempted to collect and review as much readily-available data as possible pertaining to the subject properties. Our assessment should not be construed as a full-scale environmental site investigation to prove that the subject properties are environmentally devoid of hazardous or toxic materials. No soil, surface water, or groundwater samples were collected or analyzed by RORE for this project. We relied largely on information and data provided to us by presumably competent third parties knowledgeable about the site and the surrounding area, and RORE's reconnaissance of the subject properties and immediately surrounding area.

Our services consist of professional opinions and recommendations made in accordance with generally-accepted hazardous material, geotechnical, and geologic engineering principles and practices. Our conclusions are based upon an evaluation of the technical information gathered, and our general observations of conditions prevalent at the subject properties at the time of this

report. RORE does not otherwise provide any implied or expressed guarantees regarding the characteristics or conditions of environmental media at the subject properties.

## **2.0 SITE DESCRIPTION**

The subject properties are located in northwest San Diego County, approximately 5 miles east of Interstate 5, on Paseo Delicias in the unincorporated community Rancho Santa Fe. A site location map is presented in Figure 1. The western boundary of the subject properties is located approximately 0.1 miles northeast of the commercial area (e.g., downtown area of Rancho Santa Fe). The subject properties are located in primarily rural residential areas.

### **2.1 Site and Vicinity Characteristics**

The subject properties are comprised of sections from 40 San Diego County Assessor's parcels located at three separate intersections along Paseo Delicias corridor. The subject site is currently a two-lane light collector road, and is comprised, west to east, of the following:

- **Paseo Delicias/Via De La Valle/La Fremontia**  
The subject properties is comprised of sections from 19 San Diego County Assessor's parcels forming an irregular shaped area totaling approximately 9.6 acres primarily comprised of single-family residential units and vacant, landscaped areas. A religious facility is located adjacent to the subject property located between the east and southeast branches of the subject property.
- **Paseo Delicias/El Montevideo/La Valle Plateada**  
The subject property consists of sections from 14 San Diego County Assessor's parcels forming an X-shaped area totaling approximately 10.8 acres primarily comprised of single-family residential and rural residential development.
- **Paseo Delicias/El Camino Del Norte/Del Dios Highway**  
The subject property consists of sections from 7 San Diego County Assessor's parcels forming a T-shaped area totaling approximately 7.1 acres primarily comprised of rural residential development and vacant undeveloped areas.

Areas encompassing the subject properties primarily consist of residential development and are further discussed in Current Adjoining Property Uses Section 2.5.

### **2.2 Descriptions of Structures, Roads, Other Improvements on the Site**

Structures and improvements located on the subject properties, at the time of the visual site inspections (VSI) were observed as the following:

- **Paseo Delicias/Via De La Valle/La Fremontia**  
The subject property is comprised of single and multi-story residential units of various building material construction (e.g. wood, stucco, brick, etc.) with asphalt shingled, cross gabled roofs. A paved parking area is located on the subject property approximately 60 feet south of La Fremontia. The parking area is

associated with a religious facility located southeast adjacent of the subject property.

- **Paseo Delicias/El Montevideo/La Valle Plateada**  
The subject property is a rural-residential area comprised of single and multi-story units of various building material construction (e.g. wood, stucco, brick, etc.). Roofing associated with the units is primarily comprised of asphalt shingled or Spanish style, cross gabled roofing. Vacant areas located at the subject property consist of fruit bearing orchards and areas under development for residential use.
- **Paseo Delicias/El Camino Del Norte/Del Dios Highway**  
The subject property is primarily rural with areas in the eastern sections of the subject property at various stages of residential development. Vacant areas of the subject property consist of fruit bearing orchards, a small pond, and grasslands. A pump station, located approximately 150 southeast of El Camino Del Norte, is located on the subject property.

### **2.3 Environmental Liens or Specialized Knowledge**

RORE reviewed environmental databases that listed environmental liens and other environmental occurrences regarding the subject properties and properties within ASTM 1527-05 radius standards. No environmental liens were recorded for the subject properties or properties within the standard search radii. The environmental database listings are included in Appendix A.

### **2.4 Current Uses of Properties**

At the time of the VSI conducted on December 1, 2006, the subject properties primary uses were for residential activities. Vacant areas on the subject properties were primarily under construction for residential use, or landscaped for common area use.

### **2.5 Current Uses of Adjoining Properties**

Properties adjacent to the subject properties, at the time of the VSI, were as follows:

- **Paseo Delicias/Via De La Valle/La Fremontia**
  - North** Adjacent properties to the north of the subject property consisted of single and multi-story residential units and undeveloped areas, landscaped for common area use.
  - South** Adjacent properties to the south of the subject property consist of single and multi-story residential units and undeveloped, landscaped areas.
  - East** Adjacent properties to the east of the subject property consist of a religious facility, residential development, and undeveloped, landscaped areas.

**West** Adjacent properties west of the subject property consist of mixed use development, primarily consisting of single-story residential and office space.

- **Paseo Delicias/El Montevideo/La Valle Plateada**

**North** Adjacent properties to the north of the subject property primarily consist of vacant areas, observed to be under development at the time of the VSI.

**South** Adjacent properties to the south of the subject property primarily consist of single and multi-story residential development.

**East** Adjacent properties to the east of the subject property consist of residential development and vacant areas consisting of fruit bearing orchards.

**West** Adjacent properties to the south of the subject property consist of residential development and vacant areas under development.

- **Paseo Delicias/El Camino Del Norte/Del Dios Highway**

**North** Adjacent properties to north of the subject property primarily consist of agricultural and rural-residential development.

**South** Adjacent properties to the south of the subject property primarily consists of vacant, undeveloped areas and rural-residential development

**East** Adjacent properties to the east of the subject property consist of rural-residential development and undeveloped areas.

**West** Adjacent Properties to the west of the subject property are comprised of rural residential development.

### 3.0 RECORDS REVIEW

A records review of standard environmental regulatory databases was conducted to identify potential sources of contamination or environmental concern and the status of relevant environmental actions taken at these sites. Subject properties' databases were reviewed separately and the associated findings were summarized in the following sub-sections. The record database search included the area of the subject properties and the area within the ASTM standard search radii from the subject properties boundary. Summaries of the regulatory database listings within the ASTM standard search radii and their potential impact to the subject properties are discussed in Sections 3.1 through 3.3. The Environmental Data Resources, Inc. (EDR) Regulatory Database Report with Radius Map and GeoCheck® is included in Appendix A.

#### 3.1 Standard Federal Environmental Record Sources

- ***NPL - National Priorities List***

The National Priorities List (NPL) is the Environmental Protection Agency's (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or exceed a predetermined hazard ranking system score, chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. EPA in order to become a NPL site. This database was last updated in August, 2006.

*No such listings were identified within a radius of one mile of the subject properties.*

- ***Proposed NPL***

Sites that are proposed to be placed on the NPL (last updated August, 2006).

*No such proposed listings were identified within a radius of one mile of the subject properties.*

- ***Delisted NPL***

The National Oil and Hazardous Substance Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR300.425.(e), of the National Contingency Plan (55 FR 8845, March 8, 1990), a site may be deleted where no further response is required if EPA determines that one of the following criteria has been met:

- EPA, in conjunction with CalEPA, has determined that responsible or other parties have implemented all appropriate required response actions.
- The EPA, in consultation with CalEPA, has determined that all appropriate Superfund-financed responses under CERCLA have been implemented and that no further response by responsible parties is appropriate.

- A Remedial Investigation/Feasibility Study has shown that the release poses no significant threat to public health or to the environment and, therefore, remedial measures are not appropriate.

This database was last updated August, 2006.

*No such listings were identified within a radius of one mile of the subject properties.*

- ***NPL Recovery***

Federal Superfund Liens database--USEPA compiled a list of Superfund lien notices. This database was last updated March, 1994.

*No such listings were identified on the subject properties.*

- ***CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System (Sites under review by U.S. EPA)***

The CERCLIS list contains sites that either are proposed to be or are on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities. This database was last updated April, 2006.

*No such listings were identified within a radius of 1/2 mile of the subject properties.*

- ***CERCLIS/NFRAP - CERCLIS No Further Remedial Action Planned***

At CERCLIS sites where no contamination was found following an initial investigation, contamination was removed quickly without the need for the site to be placed on the NPL. Or, the contamination was not serious enough to warrant Superfund action or NPL consideration. Due to EPA's Brownfields Redevelopment Program, 25,000 No Further Remedial Action Planned (NFRAP) sites have been removed from the database to lift unintended barriers in the redevelopment of these sites. The removed sites were archived as historical records. This database was last updated April, 2006.

*No such listings were identified within a 1/2 mile radius of the subject properties.*

- ***CORRACTS - RCRA Corrective Actions***

EPA maintains the database of RCRA facilities, which are undergoing "corrective action." A 'corrective action' order is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA. This database was last updated April, 2006.

*No such listings were identified within a one mile radius of the subject properties.*

- ***RCRA-TSD - Treatment, Storage & Disposal (TSD) of Hazardous Waste***

EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA facilities database is compiled by EPA facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA TSDs are facilities that treat, store, and/or dispose of hazardous waste. This database was last updated October, 2005.

*No such RCRA listings were identified within a 1/2 mile radius of the subject properties.*

- ***RCRA Generators of Hazardous Waste***

EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA facilities database is compiled by EPA facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA generators of waste are generally classified into three types of waste generators (large quantity, small quantity and conditionally-exempt small quantities). This database was last updated April, 2006.

*One RCRA Small Quantity Generator was identified within a 1/4 mile radius of the Paseo Delicias/Via De La Valle/La Fremontia subject property. RSF Flicks, located at 16921 Via De La Valle, approximately 0.2 miles south of the subject property. Further evaluation of database listings did not identify releases associated with the RCRA generator listed in the database. The site listed in the database therefore poses a low potential for impact to the subject property.*

- ***ERNS – Emergency Response Notification System***

Emergency Response Notification System (ERNS) is a database used to store information on notifications of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort between EPA Headquarters, the Department of Transportation Research and Special Programs Administration's (RSPA) John A. Volpe National Transportation Systems Center, other DOT program offices, the ten EPA Regions, and the National Response Center (NRC). EPA Headquarters manages and provides significant funding for ERNS, and RSPA provides operation and maintenance support through an interagency agreement with EPA. ERNS provides the most comprehensive data compiled on notifications of oil discharges and hazardous substance releases in the United States. This database was last updated in January, 2006.

*The ASTM search radius for ERNS includes only the target properties. No listings were identified on the subject properties.*

- ***HMIRS – Hazardous Materials Information Reporting Systems***

HMIRS is a Department of Defense (DoD) automated system that is developed and maintained by the Defense Logistics Agency. HMIRS is the central repository for Material Safety Data Sheets (MSDS) for the United States Government military services and civil agencies. It also contains value-added information input by the service/agency focal points. This value-added data include HAZCOM warning labels and transportation information. HMIRS provides this data for hazardous materials that is purchased by the Federal



Government through DoD and civil agencies. The system assists Federal Government personnel who handle, store, transport, use, or dispose of hazardous materials. This database was last updated April, 2006.

*The ASTM search radius for HMIRS includes only the target properties. No listings were identified on the subject properties.*

- **U.S. ENG CONTROLS – Engineering Controls Sites List**

U.S. ENG Controls is a list of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or to affect human health. This database was last updated March, 2006.

*No listings were identified within a ½ mile radius of the subject properties.*

- **US INST CONTROLS – Sites with Institutional Controls**

U.S. INST Controls is a list of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants that remain on-site. Deed restrictions are generally required as part of the institutional controls. This database was last updated March, 2006.

*No listings were identified within a ½mile radius of the subject properties.*

- **DOD – Department of Defense Sites**

This data set consists of federally-owned or administered lands that are administered by DoD and have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands. This database was last updated December, 2004.

*No listings were identified within a radius of one mile of the subject properties.*

- **FUDS – Formerly Used Department of Defense Sites**

The FUDS listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions. This database was last updated December, 2005.

*No listings were identified within a one mile radius of the subject properties.*

- **US BROWNFIELDS – Listing of U.S. Brownfields Sites**

EPA defines brownfields as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The listings include brownfields property addresses categorized by Cooperative Agreement Recipients and Targeted Brownfields Assessments (TBA).

EPA's TBA program is designed to help states, tribes, and municipalities, especially those without Brownfields Assessment Demonstration Pilot programs to minimize the uncertainties of contamination often associated with brownfields. Cooperative Agreement Recipients become recipients when States, political subdivisions, territories, or Indian tribes enter into a Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specific brownfields-related cleanup activities. This database was last updated April, 2006.

*No listings were identified within a 1/2 mile radius of the subject properties.*

- **CONSENT – Superfund (CERCLA) Consent Decrees**

The CONSENT database lists major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. The database is updated periodically by the United States District Courts after settlement by parties on litigation matters. This database was last updated December, 2004.

*No listings were identified within a one mile radius of the subject properties.*

- **ROD – Record of Decision**

The Record of Decision (ROD) is a primary legal document at a site, which sets forth EPA's selected remedy as well as the factors that led to its selection at a NPL (Superfund) site. The document also contains technical and health information that can aid in the cleanup. This database was last updated April, 2006.

*No listings were identified within a one mile radius of the subject properties.*

- **UMTRA – Uranium Mill Tailings Sites**

The Uranium Mill Tailings Sites (UMTRA) database is list of sites that have been known to present evidence of uranium mining and tailings. Uranium ore was mined by private companies for federal government use under national defense programs. When the mills shut down, large piles of sand-like material (mill tailings) remain after uranium has been extracted from the ore. Although the levels of human exposure to radioactive materials from the piles are low, tailings that were used as construction materials have posed potential health hazards. In 1978, 24 inactive uranium mill tailings sites in Oregon, Idaho, Wyoming, Utah, Colorado, New Mexico, Texas, North Dakota, South Dakota, Pennsylvania, and on Navajo and Hopi tribal lands were targeted for cleanup by the Department of Energy. This database was last updated November, 2005.

*No such listings were identified within a 1/2 mile radius of the subject properties.*

- **ODI – Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria. The Open Dump Inventory (ODI) database lists unpermitted dump sites that were identified in the 1980s. This database was last updated June, 1985.

*No such listings were identified within a ½ mile radius of the subject properties.*

- **TRI – Toxic Release Inventory Database**

All facilities that manufacture, process, or import toxic chemicals in quantities in excess of 25,000 pounds per year are required to register with the EPA under Section 313 of the Superfund Amendments and Reauthorization Act (SARA Title III) of 1986. Data contained in the Toxic Release Inventory System (TRIS) cover approximately 20,000 sites and 75,000 chemical releases. This database was last updated December, 2003.

*The ASTM search radius for TRIS includes only the target properties. No such listings were identified on the subject properties.*

- **TSCA – Toxic Substances Control Act**

The Toxic Substances Control Act (TSCA) database identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by manufacturing plant site. This database was last updated December, 2002.

*The ASTM search radius for TSCA includes only the target properties. No such listings were identified on the subject properties.*

- **FTTS – FIFRA/TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)/TSCA**

The FTTS database tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA, and EPCRA (Emergency Planning and Community Right-to-Know Act) on a quarterly basis. This database was last updated March, 2006.

*The ASTM search radius for FTTS includes only the target properties. No listings were identified on the subject properties.*

- **SSTS – Section 7 Tracking System**

The Section Seven Tracking System (SSTS) database lists establishments under the jurisdiction of Section 7 of the FIFRA as amended (92 stat, 829), which requires all pesticide-producing establishments to submit a report to the EPA by March 1<sup>st</sup> of each year. Each establishment must report the types and amounts of pesticides, and the active

ingredients and devices that are produced or were produced, sold, or distributed in the past year. This database was last updated December, 2003.

*The ASTM search radius for SSTS includes only the target properties. No listings were identified on the subject properties.*

- **ICIS – Integrated Compliance Information System**

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

*The ASTM search radius for ICIS includes only the target properties. No listings were identified on the subject properties.*

- **PADS – Polychlorinated Biphenyls (PCBs) Activity Database System**

The PCB Activity Database System (PADS) identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify the EPA of such activities. This database was last updated December, 2005.

*The ASTM search radius for PADS includes only the target properties. No listings were identified on the subject properties.*

- **MLTS – Material Licensing Traffic System**

The Material Licensing Traffic System (MLTS) database is comprised of sites that possess or uses radioactive materials, which are subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This quarterly updated database is maintained by the NRC. This database was last updated April, 2006.

*The ASTM search radius for MLTS includes only the target properties. No listings were identified on the subject properties.*

- **MINES – Mines Master Index File**

The MINES database contains all mine identification numbers issued for active mines and those that have been open since 1971. The data also include violation information. This database was last updated March, 2006.

*No such listings were identified within a ¼ mile radius of the subject properties.*

- **FINDS – Facility Index System/Facility Register System**

The Facility Index System (FINDS) database contains both facility information and pointers to other sources that contain more detail, including PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes),

FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS. This database was last updated May, 2006.

*The ASTM search radius for FINDS includes only the target properties. No listings were identified on the subject properties.*

- **RAATS – RCRA Administrative Action Tracking System**

The RCRA Administrative Action Tracking System (RAATS) database contains records of enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by EPA. Due to a decrease in agency resources, the database is kept for historical records. The database was last updated April, 1995.

*The ASTM search radius for RAATS includes only the target properties. No listings were identified on the subject properties.*

### 3.2 Standard State of California Environmental Record Sources

- **AWP – Annual Workplan Sites**

Formerly known as BEP, the AWP database identifies known hazardous substance sites targeted for cleanup. This database was last updated August, 2005.

*No listings were identified within a one mile radius of the subject properties.*

- **CAL-SITES – Calsites Database**

The CAL-SITES database contains potential or confirmed hazardous substance release properties where cleanup has not yet been completed. In 1996, CalEPA reevaluated the database and significantly reduced the number of sites in CAL-SITES. The database was last updated August, 2005.

*No listings were identified within a one mile radius of the subject properties.*

- **CA BOND EXP. PLAN – Bond Expenditure Plan**

The CA BOND EXP. PLAN database is a California Department of Health Services (DHS) listing of sites that were appropriated for Hazardous Substance Cleanup Bond Act funds. This database was last updated January, 1989.

*No listings were identified within a one mile radius of the subject properties.*

- **SCH – School Property Evaluation Program**

This database contains proposed and existing school sites that are being evaluated by Department of Toxic Substances Control (DTSC) for possible hazardous materials

contamination. In some cases, these properties may be listed in under the CalSites category, depending on the level of threat to public health and safety or the environment they pose. This database was last updated June, 2006.

*No listings were identified within a ½ mile radius of the subject properties.*

- ***TOXIC PITS – Toxic Pits Cleanup Act Sites***

The TOXIC PITS database lists sites suspected of containing hazardous substances where cleanup has not yet been completed. The database was last updated July, 1995.

*No listings were identified within a one mile radius of the subject properties.*

- ***STATE LANDFILL – Solid Waste Information System***

This database lists active, closed and inactive landfills. The Solid Waste Facilities/Landfill (SWF/LF) records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites. This database was last updated June, 2006.

*No listings were identified within a ½ mile radius of the subject properties.*

- ***CA WDS – Waste Discharge System***

The California Water Resources Control Board (CAWRCB) Waste Discharge System (CAWDS) database lists sites that have been issued waste discharge requirements. This database was last updated September, 2005.

*The ASTM search radius for CA WDS includes only the target properties. No listings were identified on the subject properties.*

- ***WMUDS/SWAT – Waste Management Unit Database System***

The Waste Management Unit Database System (WMUDS) database is used by the CAWRCB staff and the RWQCB for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information. This database was last updated April, 2000

*No listings were identified within a ½ mile radius of the subject properties.*

- **CORTESE – “Cortese” Hazardous Waste & Substance Site List**

The CORTESE database is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires CalEPA to develop an updated CORTESE list at least annually. DTSC is responsible for a portion of the information contained in the CORTESE List. The sites for the list are designated by the LUST database, SWF/LS database, and CAL-SITES. This database was last updated April, 2001.

*Five listings were identified in the database search within a ½ mile radius of the Paseo Delicias/Via De La Valle/La Fremontia subject property. Records identified that were listed under both CORTESE and LUST databases indicate the presence of a petroleum release site and therefore evaluated under the LUST database listings. The five listings identified were associated with LUST database listings and are discussed in the LUST section of the report. The listings do not pose a medium or high potential for impact to the subject properties.*

- **SWRCY – Recycler Database**

The SWRCY database lists recycling facilities as identified by the California Department of Conservation. This database was last updated October, 2005.

*No listings were identified within a ½ mile radius of the subject properties.*

- **LUST– Geotracker’s Leaking Underground Fuel Tank Report**

The LUST database consists of Leaking Underground Storage Tank Incident Reports as reported by state environmental regulators. LUST records contain an inventory of reported leaking underground storage tank incidents. This database was last updated July, 2006.

*Nine listings were identified within a ½ mile radius of the Paseo Delicias/Via De La Valle/La Fremontia subject property. One of the listings associated with the subject property was also identified to be located within a ½ mile radius of the Paseo Delicias/Montevidео/Valle Plateada subject property.*

*All nine LUST listings were evaluated for potential impact to the subject property. The sites were evaluated based on the type of release, if the release impacted groundwater, the chemical product released, and the distance and groundwater gradient direction to the subject site. San Diego County Department of Environmental Health (DEH) Site Assessment and Mitigation (SAM) Case Listings were also reviewed to determine status of the sites.*

*After the initial evaluation, eight of nine listings identified in the database search were found to have a “case closed” status, needing no further evaluation per DEH SAM Case listings dated December 12, 2006. The remaining listing, Rancho Santa Fe Fire District, located at 16936 El Fuego, 0.5 miles west-southwest, and groundwater down gradient of the Via De La Valle Subject Property.*

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*The listings identified in the database search were found to pose low or no potential for impact to the subject properties due to location, groundwater gradient, and/or DEH assessment status.*

- ***CA FID UST – Facility Inventory Database***

The FID contains historical listings of active and inactive UST locations from the CAWRCB. This database was last updated October, 1994.

*No listings were identified within a ¼ mile radius of the subject properties.*

- ***SLIC – Statewide Spills, Leaks, Investigations, and Cleanups (SLIC) Cases***

SLIC listings include unauthorized discharges from spills and leaks, other than from underground storage tanks (USTs) or other regulated sites as reported by CAWRCB. This database was last updated July, 2006.

*No listings were identified within a ¼ mile radius of the subject properties.*

- ***UST – Active UST Facilities Listings***

The UST database lists active USTs as reported by CAWRCB. This database was last updated July, 2006.

*One listing was identified within a ¼ mile radius of the Paseo Delicias/Via De La Valle/La Fremontia subject property. UST listings do not indicate evidence of releases therefore, are considered low potential for impact to the subject site.*

- ***HIST UST – Hazardous Substance Storage Container Database***

The HIST UST database is a historical listing of UST sites. This database was last updated, October, 1990.

*No such listings were identified within a ¼ mile radius of the subject properties.*

- ***AST – Aboveground Petroleum Storage Tank***

Aboveground Storage Tanks (ASTs) are registered with CAWRCB. This database was last updated January, 2006.

*No listings were identified within a ¼ mile radius of the subject properties.*

- ***SWEEPS UST – Statewide Environmental Evaluation and Planning System***

This underground storage tank database was updated and maintained by a company contracted by the CAWRCB. In 1980, AB2920 required the state to reevaluate the cost efficiency of the SWEEPS database. This database was last updated, June, 1994.



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*No listings were identified within a ¼ mile radius of the subject properties.*

- **CHMIRS – California Hazardous Material Incident Report System**

CHMIRS database contains information on reported hazardous material incidents (accidental releases or spills), as reported by the California Department of Emergency Services (OES). This database was last updated December, 2004.

*The ASTM search radius for CHMIRS includes only the target properties. No listings were identified on the subject properties.*

- **Notify 65 – Proposition 65 Records**

The Notify 65 database contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk. This database was last updated October, 1993.

*No such listings were identified within a one mile radius of the subject properties.*

- **DEED – Deed Restriction Listing**

The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites that were cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents active deed restrictions. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on-site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners. This database was last updated July, 2006.

*No listings were identified within a ½ mile radius of the subject properties.*

- **VCP – Voluntary Cleanup Program Properties Database**

The Voluntary Cleanup Program (VCP) database contains low threat level properties with either confirmed or unconfirmed releases and the project owners have requested that DTSC oversee the investigation and/or cleanup activities. The project owners have agreed to cover DTSC's costs. This database was last updated June, 2006.

*No listings were identified within a ½ mile radius of the subject properties.*

- **DRYCLEANERS – Cleaner Facilities**

The CLEANERS database lists dry cleaner-related facilities that have EPA ID numbers. These are facilities with certain Standard Industrial Classification (SIC) codes such as power

laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services. This database was last updated April, 2005.

*No listings were identified within a ¼ mile radius of the subject properties.*

- **WIP – Well Investigation Program Case List**

The Well Investigation Program (WIP) database lists all case listings of the Los Angeles Regional Water Quality Control Board WIP. This database was last updated April, 2006.

*No listings were identified within a ¼ mile radius of the subject properties.*

- **CDL – Clandestine Drug Labs**

The Clandestine Drug Labs (CDL) database is a listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work. This database was last updated May, 2006.

*The ASTM search radius for CDL includes only the target properties. No listings were identified on the subject properties.*

- **SAN DIEGO CO. HMMD – Hazardous Material Management Division Database**

The HMMD database includes the following: (1) HE58—a report that contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. (2) HE17—provides inspection dates, violations received by the establishment, hazardous waste generated, and the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks, in addition to the information provided under HE58. (3) Unauthorized Release List—A list that includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included). This database was last updated May, 2005.

*The ASTM search radius for SAN DIEGO COUNTY HMMD includes only the target properties. No listings were identified on the subject properties.*

- **HAZNET – Facility and Manifest Data Listings**

The data are extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. This database was last updated December, 2003.

*The ASTM search radius for HAZNET includes only the target properties. No listings were identified on the subject properties.*

- **EMI – Emissions Inventory Data Listings**

The Emissions Inventory (EMI) data lists toxicants and pollutant emissions data that are collected by the California Air Resources Board (CARB) and local air pollution agencies. This database was last updated December, 2004.

*The ASTM search radius for EMI includes only the target properties. No listings were identified on the subject properties.*

- **ENVIROSTOR – EnviroStor Database**

The ENVIROSTOR database lists DTSC Site Mitigation and Brownfields Reuse Programs (SMBRPs). The ENVIROSTOR database identifies sites that have known contamination or sites which warrant further investigation. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. ENVIROSTOR provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. This database was last updated May, 2006.

*No listings were identified within a one mile radius of the subject properties.*

### 3.3 Other Environmental Record Sources

- **INDIAN RESERV – Indian Reservations Listings**

This database identifies Indian-administered lands of the United States that have any area equal to or greater than 640 acres. This database was last updated December, 2004.

*No listings were identified within one mile of the subject properties.*

- **INDIAN LUST R9 – Leaking Indian Storage Tanks on Indian Land Database**

This database identifies LUSTs reported to the EPA on Indian land in California, Arizona, Nevada, and New Mexico. This database was last updated June, 2006.

*No listings were identified within a 1/2 mile radius of the subject properties.*

- **INDIAN UST R9 – Underground Storage Tanks on Indian Land Database**

The INDIAN UST database identifies USTs reported on tribal land. This database was last updated June, 2006.

*No listings were identified within a 1/4 mile radius of the subject properties.*

- **MANUFACTURED GAS PLANTS Listings**

The EDR Proprietary Manufactured Gas Plant database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800s to 1950s to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water; the manufacturing process produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site, which can remain or leach slowly, thereby serving as a continuous source of soil and groundwater contamination.

*No listings were identified within a one mile radius of the subject properties.*

- **GAS STATIONS**

The EDR Historical Auto Stations/EDR Historical Cleaners database is a national collection of business directories that has identified listings of potential dry cleaner and gas station/filling station/service station sites. The category search keywords that were used to identify gas stations included, but were not limited to, gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, dry cleaner, cleaners, laundry, Laundromat, cleaning/laundry, and wash & dry.

*No listings were identified within a ¼ mile radius of the subject properties.*

### **3.4 Physical Setting Sources**

As part of this Phase I ESA, the physical setting sources were reviewed, including readily-available topographic, geologic, and hydrogeologic maps, documents, and reports.

#### **3.4.1 Topography**

The subject properties lies at the margin between the Coastal Plain and the Peninsular Range regions of San Diego County on moderately sloping land at elevations between 200 and 260 feet above mean sea level. The coastal plain is characterized by stream cut marine terraces draining westward toward the Pacific Ocean. The Peninsular Range is characterized by northwest trending mountain ranges and faults. The subject site appears on the 1996 revised United States Geologic Survey (USGS) Rancho Santa Fe 7.5 minute Quadrangle California, San Diego County map (Appendix D). The subject properties are gently sloped, without any distinguishing landmarks or topographic features. Surface drainage in the vicinity of the subject properties is expected to follow the topographic gradient to the west (e.g., toward the Pacific Ocean located approximately five miles away).

### **3.4.2 Geology and Hydrology**

Geology in the Peninsular Range region of San Diego County consists of a Miocene and Mesozoic intrusive igneous rocks and Mesozoic sedimentary and volcanic rocks. The United States Department of Agriculture (USDA) Soil Conservation Service identified soils underlying the subject site as consisting of Altamont Clays (5-9% slopes) and Huerhuero Loams (2-15% slopes) (USDA, 1973). The surface soil at the subject site is underlain by Mesozoic sedimentary and volcanic rocks (DMG, 1977).

The subject properties are located in the eastern part of the San Dieguito Valley groundwater basin which underlies the Osuna Valley and the lower portion of the San Dieguito Valley. The basin is bounded on the west by the Pacific Ocean and elsewhere by the contacts with semi-permeable marine deposits of the La Jolla Group. The primary water bearing formations in this basin consist of quaternary alluvium and part of the more permeable La Jolla Group marine deposits. The basin receives recharge primarily from percolation of flow of the San Dieguito River. Additional sources of recharge are from percolation of precipitation, irrigation, and residential uses. Groundwater in the eastern part of the basin has a sodium chloride character with total dissolved solids vary around 500 mg/L (DWR, 2003). Groundwater depth in the vicinity of the subject site is anticipated at 3 to 6 feet bgs, according to the EDR report (Appendix A).

### **3.4.3 Surface Water**

The subject properties lie within the San Dieguito River Watershed. The watershed encompasses approximately 346 square miles in west central San Diego County and discharges to Pacific Ocean. The major bodies of water within the watershed include Lake Hodges, San Dieguito River, San Dieguito Reservoir, and San Dieguito Lagoon. The watershed consists largely of unincorporated areas, but also includes portions of the cities of Del Mar, Escondido, Poway, San Diego, and Solana Beach. Beneficial uses for surface waters include municipal, agricultural, and industrial supply, contact/non-contact recreation, and marine/estuarine habitats (RWQCB, 1994). The nearest surface water to the subject properties includes a small pond located northwest of the Paseo Delicias/El Camino Del Norte intersection, on the subject property.

## **3.5 Historical Use Information**

RORE reviewed historical aerial photographs, historical city directories, and historical topographic maps to obtain historical information on the subject properties. Historical topographic maps dated from 1901 to 1996 were reviewed along with aerial photographs dated from 1939 to 2002. Historical use information, including the source of the information, is provided in Table 2 and is listed by year of source for the subject and adjacent properties. Historical records did not indicate uses associated with the storage, transfer, or disposal of hazardous materials on the subject properties.

### 3.5.1 Summary of Historical Use

- **Paseo Delicias/Via De La Valle/La Fremontia**

Aerial photographs dated from 1939 to 1947 show the subject property as a primarily undeveloped area, with areas south and west of the subject property shown to be agriculturally developed for use as orchards. Development, on/or adjacent to the subject property is not shown until 1953. Aerial photographs of the same period show residential development west of the subject property, south of Paseo Delicias. Between photographs dated 1963 and 1974 the subject property and adjacent properties are shown as fully developed residential areas (e.g. landscaped areas, adjacent housing, etc.). Aerial photographs dated between 1989 and 2002 show the primary use of the subject property to be similar or the same to its current use.

- **Paseo Delicias/El Montevideo/La Valle Plateada**

Aerial photographs dated from 1939 to 1953 show the subject property as a primarily undeveloped area, with encompassing adjacent areas agriculturally developed for use as orchards. Residential development was not identified until 1963. Aerial photographs of the same period showed the presence of structures south and east of the subject property, west of La Valle Plateada. Aerial photographs dated between 1989 and 2002 show the primary use of the subject property to be similar or the same as its current use.

- **Paseo Delicias/El Camino Del Norte/Del Dios Highway**

Aerial photographs reviewed dated between 1939 and 1953 show the subject property as a primarily undeveloped area. Aerial photographs of the same period show adjacent properties to the south and east of the subject property to be agriculturally developed. Adjacent areas west of the subject property were shown as undeveloped, vacant areas. Residential development was not identified in the vicinity of the subject property until 1963. Aerial photographs dated between 1963 and 1974 show an increase in residential development generally associated with areas northwest of the subject property adjacent to El Camino Del Norte. Aerial photographs dated between 1989 and 2002 show the primary use of the subject property to be similar or the same as its current use.

## **4.0 SITE RECONNAISSANCE**

On December 1, 2006 RORE personnel conducted a VSI of the subject properties and surrounding areas to identify existing or potential environmental conditions. The subject properties are comprised of sections from 40 San Diego County Assessors parcels located at three separate intersections along Paseo Delicias corridor. Development observed on the subject properties primarily consists of fully developed residential properties and undeveloped parcels along the Paseo Delicias corridor.

Exterior areas of the subject properties, where accessible, were inspected. The interiors of the residential units and commercial buildings associated with the subject properties were not inspected. No recognizable environmental conditions were identified during the VSI of the subject properties.

The perimeter of the subject properties was inspected for indications of run-on of hazardous or unknown substances to the subject properties. RORE personnel did not identify any apparent indications of run-on of hazardous or unknown substances to the subject properties from adjacent properties during the VSI.

The remnants of a burn site were identified on the Villa De La Valle subject property, approximately 150 feet north of the east entrance of La Fremontia on APN # 266-241-4100. The area of the burn site consisted of an approximately 450 square foot darkened area of distressed vegetation and burnt organic debris. RORE personnel did not identify hazardous materials or causes associated with the site. Photographs of the site are shown in Visual Site Inspection Photograph Log, Appendix B.

### **4.1 Hazardous Substances Associated with Identified Uses**

The subject properties, where developed, are primarily used for residential and commercial activities. It is presumed that typical household cleaning supplies stored in small containers, currently and have been stored historically in the residential units at the subject properties. No other hazardous substances were observed during the VSI at other areas of the subject properties. The subject properties and adjoining area have historically (since 1930's) been used for agricultural purposes. Therefore it is possible that there are some residual pesticides and/or herbicides, which are compounds of concern, present in the soil.

### **4.2 Hazardous Substance Containers**

Hazardous substance containers (e.g., steel drums, storage tanks, poly storage containers or other vessels identified with the use of hazardous substance storage) were not observed during the VSI of the subject properties.

### **4.3 Storage Tanks**

During the VSI, RORE personnel searched for indications of USTs or ASTs by looking for tanks, stand pipes, breather pipe covers over underground pipes, and fuel dispensers. No such

indications of existing or former USTs or ASTs were identified at the subject properties during the VSI.

The environmental database search identified an UST located approximately 1/4 mile southwest of the Paseo Delicias/Via De La Valle/La Fremontia subject property. The site does not pose a potential to impact the subject property and is not associated with the release of hazardous materials due to groundwater gradient and associated direction to the property and is further discussed in Standard State of California Environmental Record Sources Section 3.1.

#### **4.4 Indications of PCBs**

Transformers, electrical equipment, fluorescent light ballasts, and hydraulic equipment sometimes contain polychlorinated biphenyls (PCBs). Overhead power lines were observed intersecting the subject properties associated with El Montevideo, and El Camino Del Norte. Transformers were also observed at all subject properties. The transformer exterior appeared to be weathered, but no indications of leaking were observed on the transformer body or on the ground beneath the transformer. No PCB wastes were observed during the site reconnaissance.

#### **4.5 Indications of Lead-based Paint**

Along the roadway of the subject properties, a yellow paint striping was identified, which may contain Lead-based Paint (LBP). If used yellow paint striping or yellow thermoplastic paint strip or pavement marking is found to contain hazardous concentrations of lead then the LBP should be removed. During the removal activities, the LBP shall be contained and collected immediately so that it is not emitted into ambient air and properly disposed at a Class I Landfill facility (Joe Kloth 2008).

Subsequently, an interview with Mr. Karel Shaffer, a traffic engineer at San Diego County Department of Public Works was conducted by RORE to identify the lead content in the paint that had been used for marking roadways on the subject area. Based on the results of the interview, County of San Diego has been responsible for the maintenance and painting of the road and pavement. LBP had been used for marking roadways on the subject area prior to 1999. The use of LBP for road striping operations has ceased and the road had been resurfaced with fabric and asphalt concrete in 1999 and repainted every one to two years depending on how well the paint is maintained. Currently the road is remarked using a lead free paint per Caltrans specifications Section 84-3.02 of the 2006 Caltrans Standard Specifications.

#### **4.6 Indications of Solid Waste Disposal**

During the VSI, RORE looked for evidence of or the indication of the potential existence of improper storage or disposal of solid waste at the subject properties. No such indications of improper storage or disposal of waste were observed during the VSI.

#### **4.7 Water Wells**

RORE personnel did not identify the presence of water wells on the subject properties.



#### **4.8 Septic Tanks**

RORE personnel did not observe leach lines, septic tanks, riser pipes or other components that would indicate the presence of septic systems on the subject properties. The subject properties are located within the unincorporated community of Rancho Santa Fe and are connected to the Rancho Santa Fe Community Services District sewage system. Waste associated is then transferred to the Rancho Santa Fe Water Reclamation Facility, located approximately 1.6 miles south of the Paseo Delicias subject properties.

#### **4.9 Dry Wells**

A dry well is defined as a bored, drilled, or driven shaft or hole whose depth is greater than its width. A dry well is designed specifically for the alleviation of flooding and the disposal of storm water. No drywells were observed on the subject properties during the VSI.

## **5.0 INTERVIEWS**

On July 15, 2008 RORE personnel submitted a questionnaire to Mr. Karel Shaffer, a traffic engineer at San Diego County Department of Public Works Traffic Engineering Division, to determine the presence or previous use of LBP in the roadway of the subject properties. Mr. Shaffer stated that the use of LBP ceased in the end of 1998 and since then, the road had been resurfaced in 1999 and restriped. As part of resurfacing operations the top layer of asphalt was removed, along with it any paint striping, and a fresh layer was placed. Mr. Shaffer further stated that re-striping is conducted in the area approximately ever one to two years dependent on paint condition. The questionnaire is shown in Appendix E.

## **6.0 FINDINGS AND CONCLUSIONS**

The subject properties were found to be developed land with residential and commercial use at the time of the VSI. Historical records reviewed did not indicate property development or uses that would cause a concern of environmental impairment. No hazardous materials use, generation, storage (other than small quantity household type use), or disposal was identified on the subject properties.



No recognized environmental conditions were identified associated with the subject properties.

## 7.0 REFERENCES

- American Society for Testing and Materials, 2005, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation: E 1527-05.
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- Joe Kloth, 2008. Memorandum of Hazardous Waste Evaluation of the Proposed Rancho Santa Fe Roundabout Project, Paseo Delicias Corridor, Rancho Santa Fe, California. California Business Transportation and Housing Agency. June.

## 8.0 SIGNATURE PAGE

I certify that the work performed and the report prepared herein was conducted to the professional standards required as a California Registered Professional Engineer (Civil #36331) and a California Registered Environmental Assessor with the California EPA (#01046).

  
Dakshana Murthy, Ph.D., 

## **9.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS PARTICIPATING IN PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**Mr. Erico Romero** is RORE's Senior Engineering Technician. His project experience includes Phase I and Phase II Environmental Site Assessments, CERCLA/RCRA field investigations, and RCRA Visual Site Inspections. Mr. Romero has completed the OSHA 40-Hour Health and Safety Training for Hazardous Waste Workers.

**Dr. Dakshana Murthy** is a registered Professional Civil Engineer in the states of California and Arizona (registration #36331 and #29090) and a Registered Environmental Assessor with the California EPA (registration #01046). Dr. Murthy has completed the OSHA 40-Hour Health and Safety Training for Hazardous Waste Workers.

TABLE I  
SUBJECT PROPERTY CHARACTERISTICS

APN	ASSOCIATED SUBJECT PROPERTY	PARCEL CHARACTERISTICS	
266-241-0900	<b>Pase Delicias/Via De La Valle/La Frementia</b>	Fully developed, single story, residential property	
266-241-0800		Fully developed, single story, residential property	
266-241-0700		Fully developed, single story, residential property	
266-241-0600		Fully developed, single story, residential property	
266-321-1700		Fully Developed, Single Story, Religious Complex and Parking Area (The Village Community Church)	
266-321-1300		Fully developed, single story, residential property	
266-310-5300		Vacant, Undeveloped Area	
266-310-5400		Vacant, Undeveloped Area	
266-292-6800		Fully developed, single story, residential property	
266-292-6700		Fully developed, single story, residential property	
266-292-3600		Fully developed, single story, residential property	
266-292-3700		Fully developed, single story, residential property	
266-292-3500		Fully developed, single story, residential property	
266-292-6601-8		Fully developed, multi-unit, residential property	
266-241-2800		Fully developed, single story, residential property	
266-241-2000		Fully developed, single story, residential property	
266-241-3800		Fully developed, single story, residential property	
266-241-3700		Fully developed, single story, residential property	
266-241-4100		Vacant, Undeveloped Area	
265-214-0600		<b>Paseo Delicias/El Montevideo/ Villa Plateada</b>	Vacant, Undeveloped, Area
267-010-0100	Fully developed, single story, residential property, with Orchard Areas Located Along Paseo Delicias		
267-010-0200	Fully developed, single story, residential property		
266-340-2500	Fully developed, single story, residential property		
266-340-2400	Fully developed, single story, residential property		
266-340-1000	Fully developed, multi-story, residential property		
266-340-5400	Fully developed, single story, residential property		
266-340-5300	Fully developed, single story, residential property		
265-213-1100	Vacant, Undeveloped, Area		
265-213-2200	Vacant, Undeveloped, Area		
265-213-0800	Vacant, Undeveloped, Area		
265-213-0200	Fully developed, single story, residential property		
3+6-213-0600	Fully developed, multi-story residential property		
265-231-1300	<b>Paseo Delicias/El Montevideo/Del Dios Highway</b>		Del Dios Ranch Complex, Orchards, Equestrian Activity Areas, Pond, and Residential Area
267-031-0200			Vacant, Undeveloped Area
267-031-1100		Vacant, Undeveloped Area	
265-220-2500		Graded Area, Under Construction	
265-220-2400		Fully developed, multi-story residential property	
265-231-0600		Fully developed, multi-story residential property	





TABLE 2-1  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
EL MONTEVIDEO AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1901	Subject Site is Shown as Undeveloped Area	N: Adjacent Property Shown as Undeveloped Area E: Adjacent Property is Shown as Undeveloped Area S: Adjacent Property is Shown as Undeveloped Area W: Adjacent Property is Shown as Undeveloped Area	USGS 1930 15' Escondido Quadrangle Topographic Map
1939	Subject Site is Shown as X-shaped Area Located at Intersection of Paseo Delicias/Montevideo/Villa Plateada.	N: Adjacent Property is Shown as Agriculturally Developed Area (Orchard) with Undeveloped Area Directly Adjacent to the Subject Property. Mimulus is Shown Northwest of Subject Property. E: Adjacent Property is Shown as Agriculturally Developed Area (Orchard). S: One Structure Shown Adjacent To Subject Property. South of Structures is shown as Orchards. W: Adjacent Property is Shown as Undeveloped Vacant Areas with Moderate Vegetation.	Fairchild Aerial Photograph Scale 1" = 555'
1947	Same As 1939 Aerial Photo	N: Same as 1939 Aerial Photo E: Same as 1939 Aerial Photo S: Area Directly Adjacent to the Subject Property is Shown as Orchards. South of Subject Property is Shown as Undeveloped Area Cleared of Trees W: Same as 1939 Aerial Photo	Jack Amman Aerial Photograph. Scale: 1"=655'
1947	Subject Site is Shown as X-shaped Area Located at Intersection of Paseo Delicias/Montevideo/Villa Plateada.	N: Adjacent Property is Shown as Orchard E: Adjacent Property is Shown as Orchard S: One Structure Shown Adjacent To Subject Property. South of Structures is shown as Orchards. W: Same as 1901 Topo	USGS 1947 15' Escondido Quadrangle Topographic Map
1949	Same as 1947 Topo	N: Adjacent Property is Shown as Undeveloped Area. Mimulus is Shown Northwest of Subject Property E: Adjacent Property is Shown as Undeveloped Area S: Two Structures Shown South of Subject Property. W: Adjacent Property is Shown as Undeveloped Area	USGS 1949 7.5' Rancho Santa Fe Quadrangle Topographic Map
1953	Same as 1947 Aerial Photo	N: Same as 1947 Aerial Photo E: Same as 1947 Aerial Photo S: Same as 1947 Aerial Photo W: Same as 1947 Aerial Photo	Park Aerial Photograph. Scale: 1"=555'

TABLE 2-1  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
EL MONTEVIDEO AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1963	Subject Site is Shown as X-shaped Area Located at Intersection of Paseo Delicias/Montevideo/Villa Plateada. Area is Shown as Graded Areas	N: Adjacent Property is Shown as Graded Area. Orchard Has Been Removed. E: Adjacent Property is Shown as Graded Area. Two Structures Shown Adjacent to Subject Property. S: Adjacent Property is Shown as Graded Area. Residential Development is Shown Approximately 500' South of Subject Property. W: Same as 1953 Aerial Photo.	Cartwright Aerial Photograph. Scale: 1"=555'
1968	Subject Site is Shown as X-shaped Area Located at Intersection of Paseo Delicias/Montevideo/Villa Plateada. Paseo Delicias is Marked	N: Same as 1949 Topo E: Three Structures Shown East of Subject Property S: Five Structures Shown South of Subject Property W: One Structure Shown South of Montevideo	USGS 1968 7.5' Rancho Santa Fe Quadrangle Topographic Map
1974	Same as 1963 Aerial Photo	N: Same as 1963 Aerial Photo E: Same as 1963 Aerial Photo S: Same as 1963 Aerial Photo W: Residential Development Shown Adjacent to Subject Property.	AMI Aerial Photograph. Scale: 1"=600'
1983	Same as 1968 Topo	N: Same as 1968 Topo E: Same as 1968 Topo S: Same as 1968 Topo W: Three Structure Shown South of Mimulus	USGS 1983 7.5' Rancho Santa Fe Quadrangle Topographic Map
1989	Same as 1974 Aerial Photo	N: Same as 1974 Aerial Photo E: Residential Development is Shown Adjacent To Subject Property. Agricultural Development (Orchards) Shown Approximately 500' West of Subject Property. S: Residential Development Shown South of Subject Property. W: Residential Development Shown Adjacent to Subject Property.	USGS Aerial Photograph. Scale: 1"=666'
1994	Same as 1989 Aerial Photo	N: Same as 1989 Aerial Photo E: Area Shown as Fully Developed Rural Residential Area S: Area Shown As Fully Developed Rural Residential Area W: Area Shown as Fully Developed Rural Residential Area	USGS Aerial Photograph. Scale: 1"=666'
1996	Same as 1983 Topo	N: Same as 1983 Topo E: Same as 1983 Topo S: Seven Structures Shown South of Subject Property W: Adjacent Property Shown as Fully Developed Area. No Structures Shown	USGS 1996 7.5' Rancho Santa Fe Quadrangle Topographic Map

TABLE 2-1  
 HISTORICAL USE SUMMARY  
 RANCHO SANTA FE ROUNDABOUTS PROJECT  
 EL MONTEVIDEO AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
2002	Same as 1994 Aerial Photo	N: Same as 1994 Aerial Photo E: Same as 1994 Aerial Photo S: Same as 1994 Aerial Photo W: Same as 1994 Aerial Photo	USGS Aerial Photograph. Scale: 1"=666'

USGS - United States Geological Survey

The aerial photographs did not reveal evidence of: 1) excavations activities of unknown type, 2) dumping or disposing waste materials, 3) significant storage activities involving drums, tanks, or pipelines, or 4) staining associated with industrial activities or activities of unknown origin or type at the subject site.

TABLE 2-2  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
VIA DE LA VALLE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1901	Subject Site is Shown as Undeveloped Area. Villa De La Valle is Shown	N: Adjacent Property Shown as Undeveloped Area E: Adjacent Property is Shown as Undeveloped Area S: Adjacent Property is Shown as Undeveloped Area W: Adjacent Property is Shown as Undeveloped Area	USGS 1930 15' Escondido Quadrangle Topographic Map
1939	Subject Site is Shown as Undeveloped Areas and Orchards Located at Intersection of Paseo Delicias/Via De La Valle/La Fremontia. Graded Area Shown South of Paseo Delicias, West of Via De La Valle.	N: Adjacent Property is Shown as Vacant, Undeveloped Area, La Fremontia, El Romero, and Villa Plateada are Shown  E: Adjacent Property is Shown as Agriculturally Developed Area (Orchard). S: Small Graded Area Shown Southwest of Subject Property. Adjacent Areas Shown as Vacant, Undeveloped Area. W: Grades Areas Shown South of Paseo Delicias, Adjacent Area is Shown Primarily as Undeveloped and Vacant.	Fairchild Aerial Photograph Scale 1" = 555'
1947	Same as 1939 Aerial Photo	N: Adjacent Property is Shown as Vacant, Undeveloped Area, One Structure is Shown on La Valle Plateada. E: Same as 1939 Aerial Photo S: Same as 1939 Aerial Photo W: Former Graded Area is Shown as Vacant, Undeveloped Area. One Structure is Shown Southwest of El Romero.	Jack Amman Aerial Photograph. Scale: 1"=655'
1947	Subject Site is Shown as Undeveloped Area. La Fremontia is Shown.	N: Adjacent Property is Shown as Undeveloped Area. E: Adjacent Property is Shown as Undeveloped Area. Orchards are Marked Southeast of Subject Property. S: Adjacent Areas Shown as Undeveloped with Portions Marked as Orchards. W: Adjacent Property is Shown as Undeveloped Area	USGS 1947 15' Escondido Quadrangle Topographic Map
1949	Subject Site is Shown as Undeveloped Area. One Structure is Shown Located at Southwest Corner of La Fremontia	N: Same as 1947 Topo E: Adjacent Property is Shown as Undeveloped Area S: Adjacent Property is Shown as Undeveloped Area W: Adjacent Property is Shown as Undeveloped Area. One Structure Shown Southwest of La Fremontia.	USGS 1949 7.5' Rancho Santa Fe Quadrangle Topographic Map
1953	Two Structures Shown on La Fremontia. Large Portions of Subject Property Shown as Undeveloped.	N: Same as 1947 Aerial Photo E: Portions of Orchard Located South of Paseo Delicias are Shown as Cleared Areas. S: Graded Area Shown East of Via Del La Valle. Large Portions of Adjacent Areas Shown as Undeveloped. W: Residential Development Shown on Former Graded Area Southwest of El Romero.	Park Aerial Photograph. Scale: 1"=555'

TABLE 2-2  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
VIA DE LA VALLE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1963	Subject Site is Shown as Residentially Developed Area. 15 Residences Shown on North Portion of Subject Property. South Portion of Subject Property is Shown as Graded Areas under Development.	N: Residential Development Shown on La Fremontia, La Villa Plateada, and El Romero E: Residential Development is Shown East of Las Colinas, Graded Areas Under Development Shown South of Paseo Delicias. S: Adjacent Property is Shown as Graded Area. Residential Development is Shown Approximately 500' South of Subject Property. W: Area is Shown as Residentially Developed Area	Cartwright Aerial Photograph. Scale: 1"=555'
1968	Subject Site is Shown as Developed Area. Nine Structures are Shown on Northern Portion of Subject Property.	N: Three Structures Shown on Northern Portion of La Fremontia. North of La Fremontia is Shown as Undeveloped Area. E: One Large Structure is Shown South of Paseo Delicias. One Structure is Shown on East Portion of La Valle Plateada S: Adjacent Area is Shown as Undeveloped Five Structures Shown west of Via De La Valle. W: Three Structures Shown Southwest of El Romero.	USGS 1968 7.5' Rancho Santa Fe Quadrangle Topographic Map
1974	Subject Site is Shown as Fully Developed Residential Area.	N: Same as 1963 Aerial Photo E: Area is Shown as Developed Area. One Structure is Shown at Current Religious Facility Location. S: Residential Development is Shown on East Portion of La Valle Plateada W: Residential Development and Graded Areas Shown South of Paseo Delicias.	AMI Aerial Photograph. Scale: 1"=600'
1983	Same as 1968 Topo	N: Same as 1968 Topo E: Same as 1968 Topo S: Same as 1968 Topo W: Two Large Structures and One Small Structure Shown Southwest of El Romero	USGS 1983 7.5' Rancho Santa Fe Quadrangle Topographic Map
1989	Same as 1974 Aerial Photo	N: Same as 1974 Aerial Photo E: Same as 1974 Photo. S: Same As 1974 Photo W: Graded Areas Now Shown as Fully Developed Residential Areas.	USGS Aerial Photograph. Scale: 1"=666'
1994	Same as 1989 Aerial Photo	N: Same as 1989 Aerial Photo E: Same as 1989 Aerial Photo S: Same as 1989 Aerial Photo W: Parking Area is Clearly Shown Northeast of Via De La Valle, Three Structures Shown at Religious Facility Site	USGS Aerial Photograph. Scale: 1"=666'

TABLE 2-2  
 HISTORICAL USE SUMMARY  
 RANCHO SANTA FE ROUNDABOUTS PROJECT  
 VIA DE LA VALLE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
<b>1996</b>	Subject Site is Shown as Fully Developed Area.	N: Adjacent Properties Are Shown As Fully Developed. E: One Large Structure is Shown South of Paseo Delicias at Current Religious Facility Location. S: Adjacent Properties Are Shown as Fully Developed W: Adjacent Properties Are Shown as Fully Developed	USGS 1996 7.5' Rancho Santa Fe Quadrangle Topographic Map
<b>2002</b>	Same as 1994 Aerial Photo	N: Same as 1994 Aerial Photo E: Same as 1994 Aerial Photo S: Same as 1994 Aerial Photo W: Same as 1994 Aerial Photo	USGS Aerial Photograph. Scale: 1"=666'

USGS - United States Geological Survey

The aerial photographs did not reveal evidence of: 1) excavations activities of unknown type, 2) dumping or disposing waste materials, 3) significant storage activities involving drums, tanks, or pipelines, or 4) staining associated with industrial activities

TABLE 2-3  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
EI CAMINO DEL NORTE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1901	Subject Site is Shown as Undeveloped Area	N: Adjacent Property Shown as Undeveloped Area E: Adjacent Property is Shown as Undeveloped Area S: Adjacent Property is Shown as Undeveloped Area W: Adjacent Property is Shown as Undeveloped Area	USGS 1930 15' Escondido Quadrangle Topographic Map
1939	Paseo Delicias, At Subject Site, is Shown as a Divided, Two-lane Road Connecting El Camino and Del Dios Highway	N: Adjacent Property, West OF El Camino Del Norte, is Shown as Agriculturally Developed Area (Orchard). East of El Camino Del Norte is Shown as Undeveloped, Vacant Area. E: Adjacent Property is Shown as Agriculturally Developed Area (Orchard). S: Adjacent Property is Shown as Agriculturally Developed Area (Orchard) W: South of Paseo Delicias is Shown as Agriculturally Developed. North of Paseo Delicias is Shown as Undeveloped, Vacant Area.	Fairchild Aerial Photograph Scale 1" = 555'
1947	Same As 1939 Aerial Photo	N: Same as 1939 Aerial Photo E: Same as 1939 Aerial Photo S: Same as 1939 Aerial Photo W: Same as 1939 Aerial Photo	Jack Amman Aerial Photograph. Scale: 1"=655'
1947	Subject Site is Shown at Intersection of El Camino Del Norte and Paseo Delicias	N: Adjacent Property East of El Camino Del Norte is Shown as Orchard. E: Adjacent Property is Shown as Orchard S: Adjacent Property is Shown as Orchard W: Portions South of Subject Property Shown as Orchard. Northwest of Subject Property is Shown as Undeveloped.	USGS 1947 15' Escondido Quadrangle Topographic Map
1949	Same as 1947 Topo	N: Adjacent Property is Shown as Undeveloped E: Adjacent Property is Shown as Undeveloped Area. An Abandoned Stone Quarry is Shown Approximately 6.8 Miles East of the Subject Property. S: Adjacent Property is Shown as Undeveloped Area. W: Adjacent Property is Shown as Undeveloped Area	USGS 1949 7.5' Rancho Santa Fe Quadrangle Topographic Map
1953	Same as 1947 Aerial Photo	N: Section of Orchard North of Paseo Delicias is Shown as Cleared Area E: Same as 1947 Aerial Photo S: Section of Orchard South of Paseo Delicias is Shown as Cleared Area. W: Same as 1947 Aerial Photo	Park Aerial Photograph. Scale: 1"=555'

TABLE 2-3  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
EI CAMINO DEL NORTE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1963	A Connecting Road is Shown at Southwest Portion of the Subject Site Intersecting Paseo Delicias.	N: Residential Development is Shown West of El Camino Del Norte. Areas East of El Camino Del Norte Shown as Cleared Areas. E: Same as 1953 Aerial Photo S: Connecting Road is Shown Southwest of Subject Property. Areas Southwest of the Subject Property are Shown as Undeveloped Areas. Areas Southeast of the Subject Property Shown as Orchards. W: Same as 1953 Aerial Photo.	Cartwright Aerial Photograph. Scale: 1"=555'
1968	Same as 1949 Topo. El Camino Del Norte is Marked as Paseo Delicias	N: One Structure is Shown West of El Camino Del Norte E: Same as 1949 Topo. Quarry is Not Marked S: Portions south east of Subject Property Marked as Orchards. Southwest of Subject Property Shown as Undeveloped Areas W: Same as 1949 Topo	USGS 1968 7.5' Rancho Santa Fe Quadrangle Topographic Map
1974	Paseo Delicias, At Subject Site is Shown as Undivided Road Connecting El Camino Del Norte and Del Dios Highway. Connecting Road is Shown.	N: Residential Development Shown West of El Camino Del Norte. East of El Camino Del Norte Shown as Orchards. Section North of Subject Property Adjacent to El Camino Del Norte on West Site Shown as Cleared Areas. E: One Structure Shown Northeast of Subject Property S: Connecting Road Shown Southwest of Subject Property. Adjacent Areas Shown as Vacant and Undeveloped. W: Same as 1963 Aerial.	AMI Aerial Photograph. Scale: 1"=600'
1983	Same as 1968 Topo	N: Five Structures Shown West of El Camino Del Norte. East of El Camino Del Norte Same as 1968 Topo E: Same as 1968 Topo S: Same as 1968 Topo W: Same as 1968 Topo	USGS 1983 7.5' Rancho Santa Fe Quadrangle Topographic Map
1989	Connecting Road, At Intersection is Shown as Graded Area.	N: Pond Shown Northeast Adjacent to the Subject Property. E: Same as 1974 Aerial Photo S: Same as 1974 Aerial Photo W: Residential Development Shown Adjacent to Subject Property, North of Paseo Delicias.	USGS Aerial Photograph. Scale: 1"=666'
1994	Pump Station is Shown at Former Graded Area Located South of Intersection.	N: Same as 1989 Aerial Photo E: Same as 1989 Aerial Photo S: Same as 1989 Aerial Photo W: Same as 1989 Aerial Photo	USGS Aerial Photograph. Scale: 1"=666'

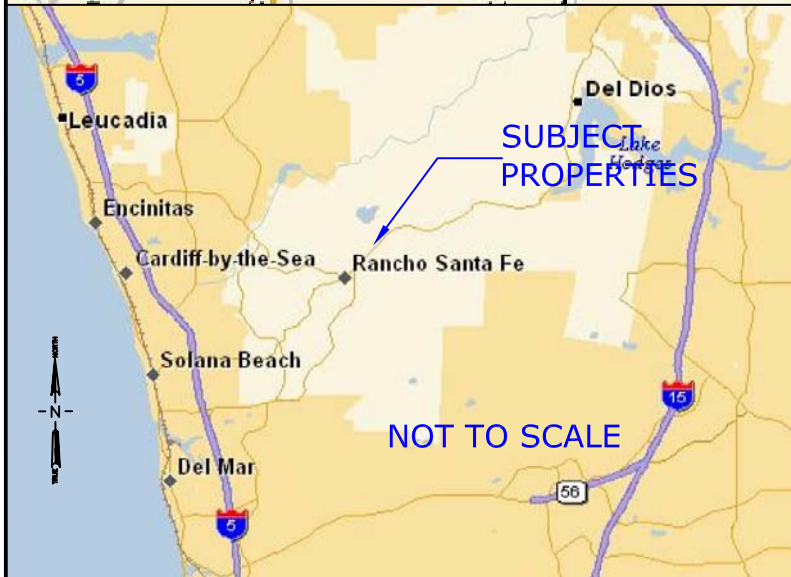
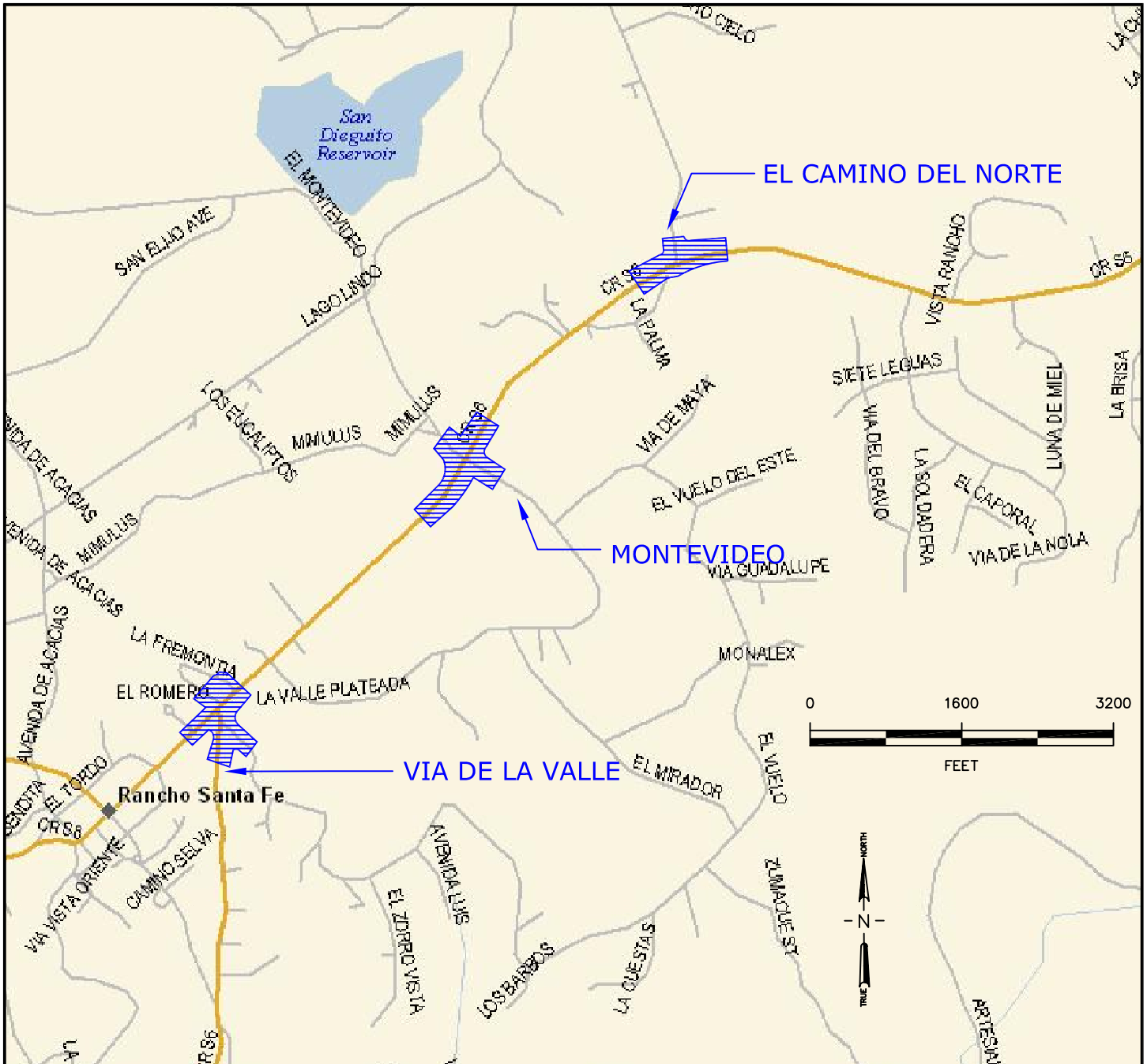


TABLE 2-3  
HISTORICAL USE SUMMARY  
RANCHO SANTA FE ROUNDABOUTS PROJECT  
EI CAMINO DEL NORTE AREA

Years	Subject Site Use	Adjacent Property Use	Information Source
1996	Same as 1983 Topo	N: Same as 1983 Topo E: One Structure Shown East of Subject Property. S: Adjacent Property Shown as Undeveloped Area W: Same as 1983 Topo	USGS 1996 7.5' Rancho Santa Fe Quadrangle Topographic Map
2002	Same as 1994 Aerial Photo	N: Same as 1994 Aerial Photo E: Same as 1994 Aerial Photo S: Same as 1994 Aerial Photo W: Same as 1994 Aerial Photo	USGS Aerial Photograph. Scale: 1"=666'

USGS - United States Geological Survey

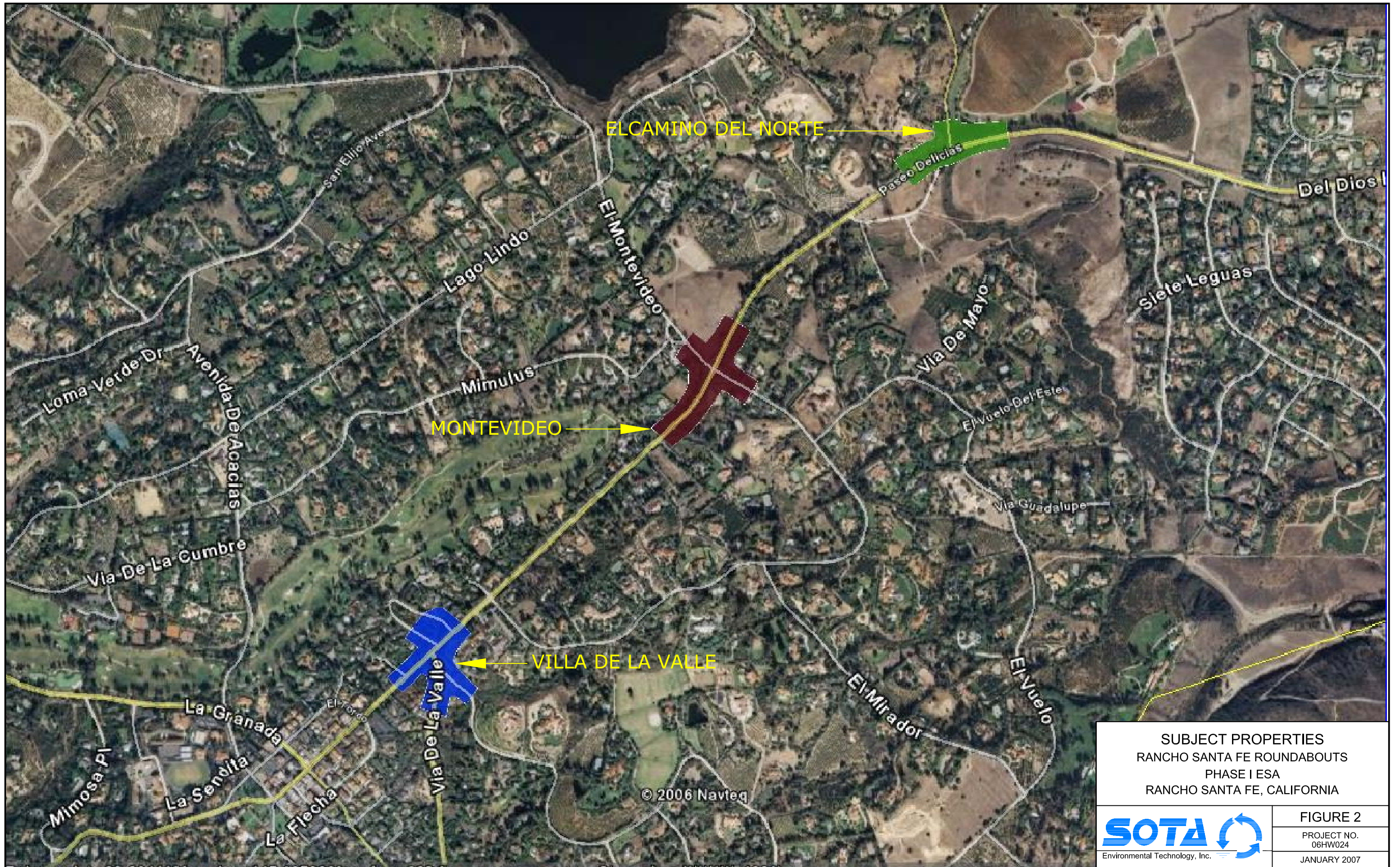
The aerial photographs did not reveal evidence of: 1) excavations activities of unknown type, 2) dumping or disposing waste materials, 3) significant storage activities involving drums, tanks, or pipelines, or 4) staining associated with industrial activities




**SITE VICINITY MAP**  
**RANCHO SANTA FE ROUNDABOUTS**  
**PHASE I ESA**  
**RANCHO SANTA FE, CALIFORNIA**

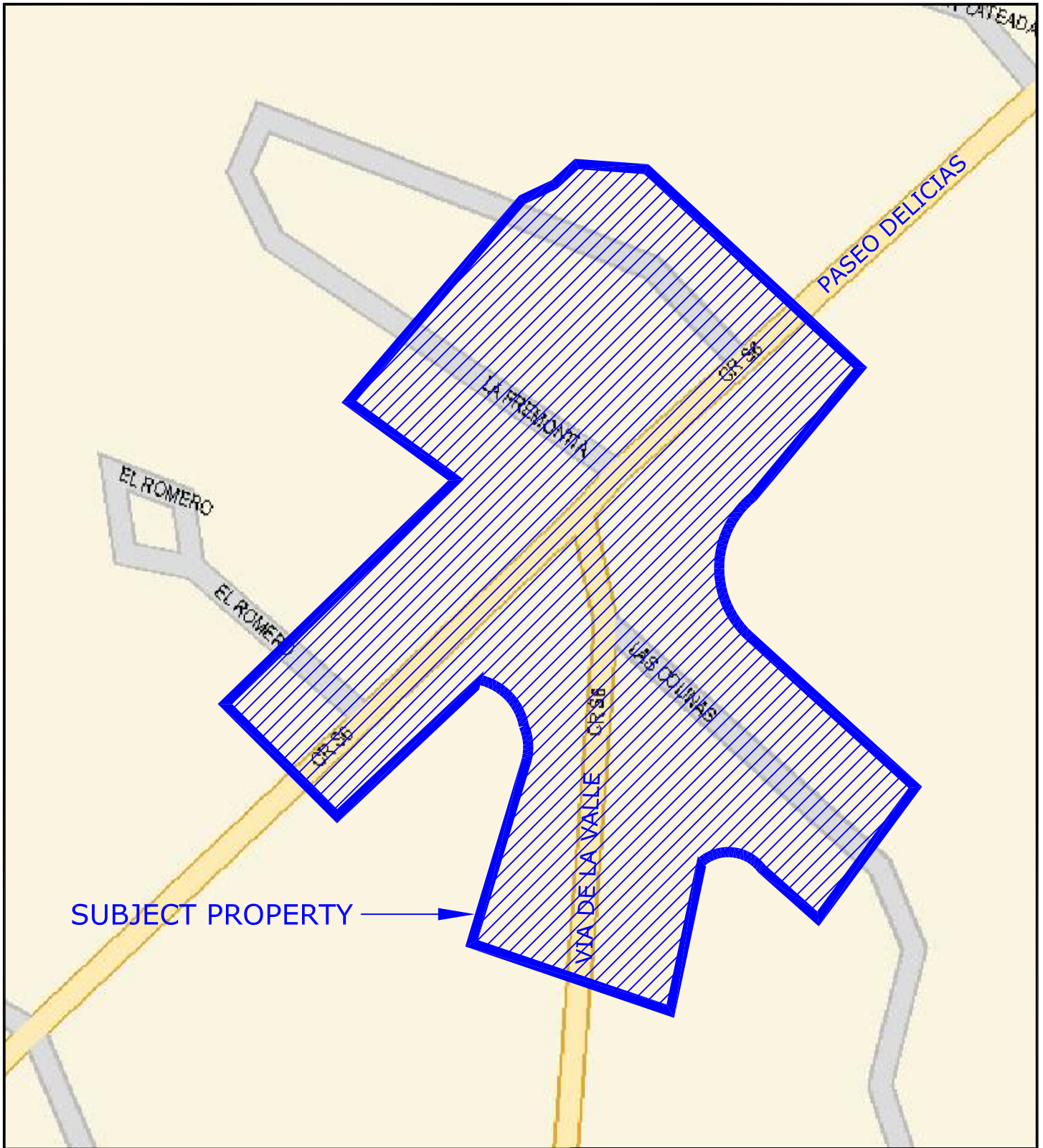
**SOTA**  
 Environmental Technology, Inc.

<b>FIGURE 1</b>
PROJECT NO. 06HW024
JANUARY 2007

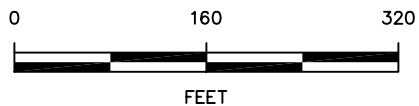


**SUBJECT PROPERTIES**  
**RANCHO SANTA FE ROUNDABOUTS**  
 PHASE I ESA  
 RANCHO SANTA FE, CALIFORNIA

	<b>FIGURE 2</b>
	PROJECT NO. 06HW024
	JANUARY 2007



SUBJECT PROPERTY →



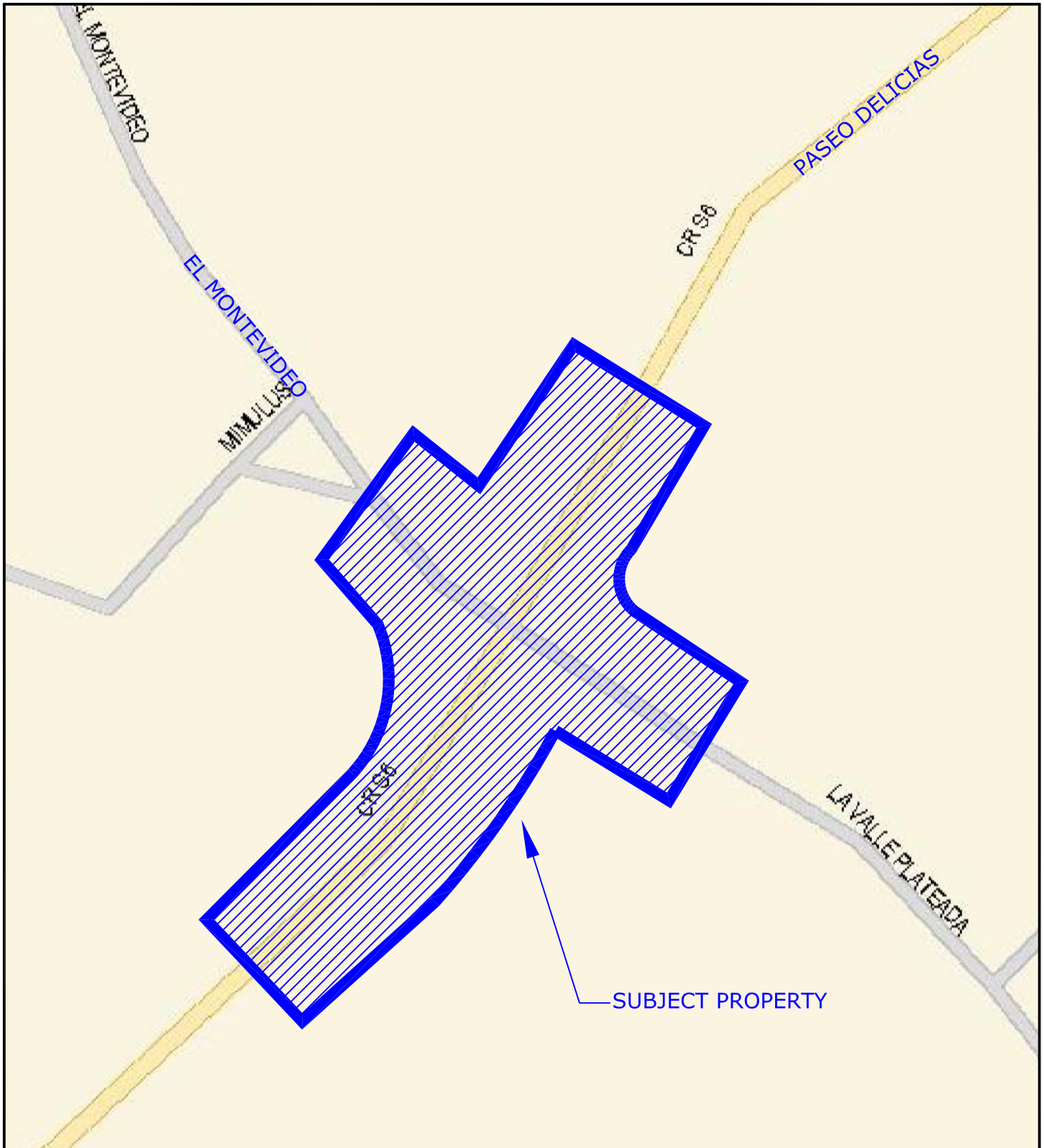
VIA DE LA VALLE  
 RANCHO SANTA FE ROUNDABOUTS  
 PHASE I ESA  
 RANCHO SANTA FE CALIFORNIA



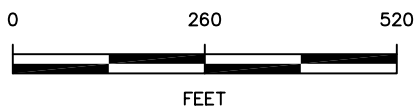
FIGURE 3A

PROJECT NO.  
 06HW024

JANUARY 2007



SUBJECT PROPERTY



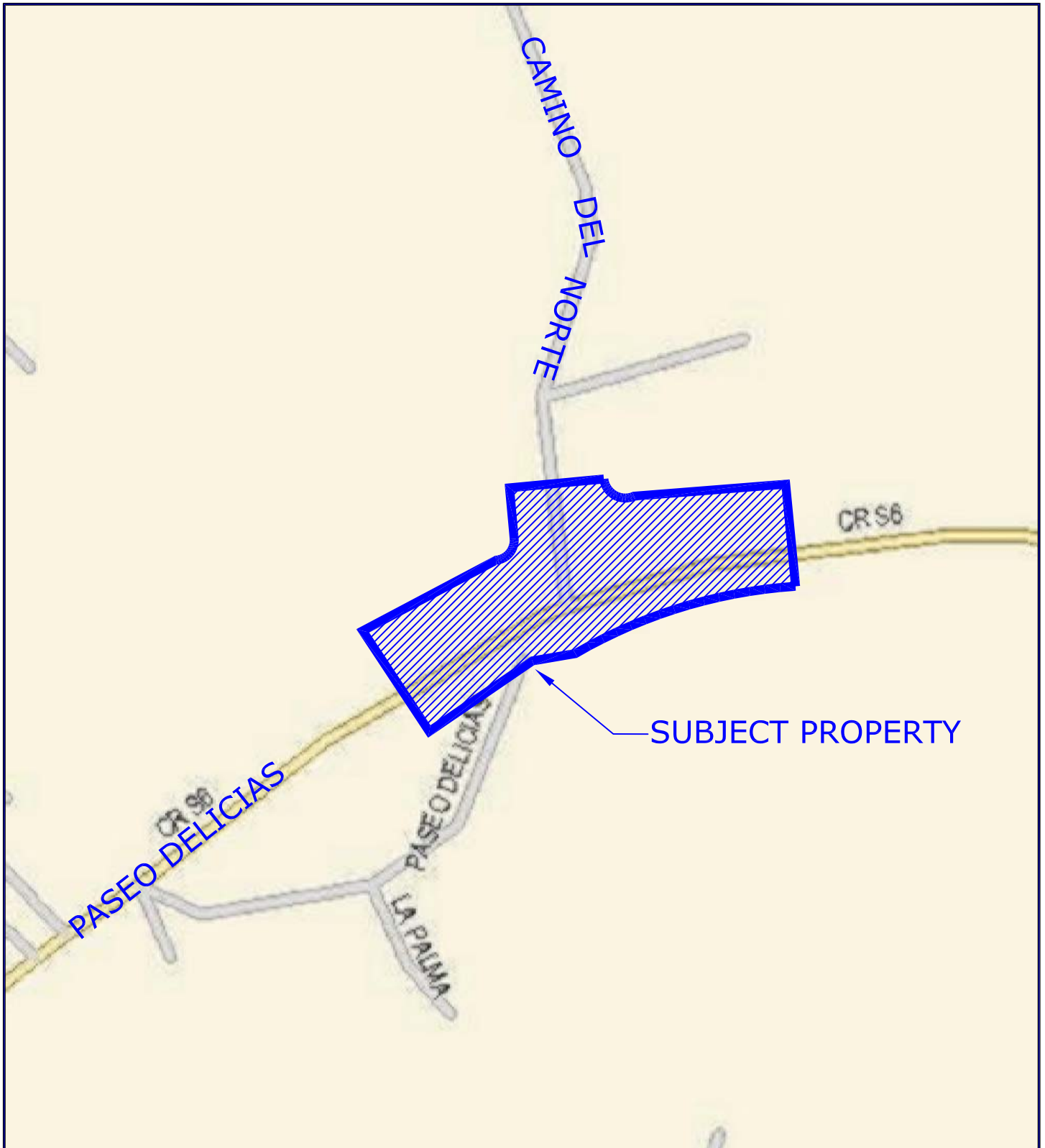
EL MONTEVIDEO  
 RANCHO SANTA FE ROUNDABOUTS  
 PHASE I ESA  
 RANCHO SANTA FE CALIFORNIA



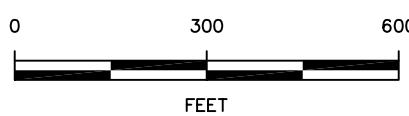
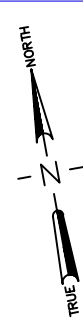
FIGURE 3B

PROJECT NO.  
 06HW024

JANUARY 2007



SUBJECT PROPERTY



CAMINO DEL NORTE  
 RANCHO SANTA FE ROUNDABOUTS  
 PHASE I ESA  
 RANCHO SANTA FE CALIFORNIA



FIGURE 3C

PROJECT NO.  
 06HW024

JANUARY 2007



**EDR**® Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**Villa De La Valle  
Villa De La Valle and Paseo Delicias  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804495.2s**

**November 27, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

VILLA DE LA VALLE AND PASEO DELICIAS  
RANCHO SANTA FE, CA 92067

#### COORDINATES

Latitude (North): 33.023100 - 33° 1' 23.2"  
Longitude (West): 117.199100 - 117° 11' 56.8"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 481405.3  
UTM Y (Meters): 3653674.2  
Elevation: 254 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 33117-A2 RANCHO SANTA FE, CA  
Most Recent Revision: 1983

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### FEDERAL RECORDS

**NPL**..... National Priority List  
**Proposed NPL**..... Proposed National Priority List Sites  
**Delisted NPL**..... National Priority List Deletions  
**NPL RECOVERY**..... Federal Superfund Liens  
**CERCLIS**..... Comprehensive Environmental Response, Compensation, and Liability Information System  
**CERC-NFRAP**..... CERCLIS No Further Remedial Action Planned  
**CORRACTS**..... Corrective Action Report  
**RCRA-TSDF**..... Resource Conservation and Recovery Act Information  
**RCRA-LQG**..... Resource Conservation and Recovery Act Information

## EXECUTIVE SUMMARY

<b>ERNS</b>	Emergency Response Notification System
<b>HMIRS</b>	Hazardous Materials Information Reporting System
<b>US ENG CONTROLS</b>	Engineering Controls Sites List
<b>US INST CONTROL</b>	Sites with Institutional Controls
<b>DOD</b>	Department of Defense Sites
<b>FUDS</b>	Formerly Used Defense Sites
<b>US BROWNFIELDS</b>	A Listing of Brownfields Sites
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>ROD</b>	Records Of Decision
<b>UMTRA</b>	Uranium Mill Tailings Sites
<b>ODI</b>	Open Dump Inventory
<b>TRIS</b>	Toxic Chemical Release Inventory System
<b>TSCA</b>	Toxic Substances Control Act
<b>FTTS</b>	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b>	Section 7 Tracking Systems
<b>ICIS</b>	Integrated Compliance Information System
<b>PADS</b>	PCB Activity Database System
<b>MLTS</b>	Material Licensing Tracking System
<b>MINES</b>	Mines Master Index File
<b>FINDS</b>	Facility Index System/Facility Registry System
<b>RAATS</b>	RCRA Administrative Action Tracking System

### STATE AND LOCAL RECORDS

<b>HIST Cal-Sites</b>	Historical Calsites Database
<b>CA BOND EXP. PLAN</b>	Bond Expenditure Plan
<b>SCH</b>	School Property Evaluation Program
<b>Toxic Pits</b>	Toxic Pits Cleanup Act Sites
<b>SWF/LF</b>	Solid Waste Information System
<b>CA WDS</b>	Waste Discharge System
<b>WMUDS/SWAT</b>	Waste Management Unit Database
<b>SWRCY</b>	Recycler Database
<b>CA FID UST</b>	Facility Inventory Database
<b>SLIC</b>	Statewide SLIC Cases
<b>HIST UST</b>	Hazardous Substance Storage Container Database
<b>AST</b>	Aboveground Petroleum Storage Tank Facilities
<b>SWEEPS UST</b>	SWEEPS UST Listing
<b>CHMIRS</b>	California Hazardous Material Incident Report System
<b>Notify 65</b>	Proposition 65 Records
<b>DEED</b>	Deed Restriction Listing
<b>VCP</b>	Voluntary Cleanup Program Properties
<b>CLEANERS</b>	Cleaner Facilities
<b>WIP</b>	Well Investigation Program Case List
<b>CDL</b>	Clandestine Drug Labs
<b>San Diego Co. HMMD</b>	Hazardous Materials Management Division Database
<b>RESPONSE</b>	State Response Sites
<b>HAZNET</b>	Facility and Manifest Data
<b>EMI</b>	Emissions Inventory Data
<b>ENVIROSTOR</b>	EnviroStor Database

### TRIBAL RECORDS

<b>INDIAN RESERV</b>	Indian Reservations
<b>INDIAN LUST</b>	Leaking Underground Storage Tanks on Indian Land

# EXECUTIVE SUMMARY

**INDIAN UST**..... Underground Storage Tanks on Indian Land

## EDR PROPRIETARY RECORDS

**Manufactured Gas Plants**... EDR Proprietary Manufactured Gas Plants

**EDR Historical Auto Stations**EDR Proprietary Historic Gas Stations

**EDR Historical Cleaners**..... EDR Proprietary Historic Dry Cleaners

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## FEDERAL RECORDS

**RCRAInfo:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act ( RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store , treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/13/2006 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b><i>RSF FLICKS</i></b>	<b><i>16921 VIA DE SANTA FE</i></b>	<b><i>1/8 - 1/4SSW 4</i></b>		<b><i>19</i></b>

## STATE AND LOCAL RECORDS

**CORTESE:** This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5

## EXECUTIVE SUMMARY

Cortese sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>MOBIL SERVICE STATION</b>	<b>6089 LA FLECHA</b>	<b>1/8 - 1/4 SW</b>	<b>A3</b>	<b>19</b>
DUTTON TRUST	6051 EL TORDO	1/4 - 1/2 SW	B5	21
<b>JACK BACA RESIDENCE</b>	<b>6110 MIMULUS</b>	<b>1/4 - 1/2 NW</b>	<b>7</b>	<b>25</b>
<b>RANCHO SANTA FE FIRE DEPT</b>	<b>16936 EL FUEGO</b>	<b>1/4 - 1/2 WSW</b>	<b>C9</b>	<b>34</b>
<b>SANTA FE IRRIGATION DISTRICT</b>	<b>5920 LINEA DEL CIELO</b>	<b>1/4 - 1/2 SW</b>	<b>10</b>	<b>38</b>

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 10/11/2006 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>BINGHAM TRUST PROPERTY</b>	<b>6427 LA VALLE PLATEADA</b>	<b>0 - 1/8 E</b>	<b>1</b>	<b>6</b>
Facility Status: Case Closed				

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO SANTA FE MOBIL</b>	<b>6089 LA FLECHA</b>	<b>1/8 - 1/4 SW</b>	<b>A2</b>	<b>9</b>
<b>MOBIL SERVICE STATION</b>	<b>6089 LA FLECHA</b>	<b>1/8 - 1/4 SW</b>	<b>A3</b>	<b>19</b>
<b>DUTTON TRUST</b>	<b>6051 EL TORDO</b>	<b>1/4 - 1/2 SW</b>	<b>B6</b>	<b>21</b>
Facility Status: Case Closed				
Facility Status: Case Closed				
<b>JACK BACA RESIDENCE</b>	<b>6110 MIMULUS</b>	<b>1/4 - 1/2 NW</b>	<b>7</b>	<b>25</b>
Facility Status: Case Closed				
<b>RANCHO SANTA FE FIRE DIST</b>	<b>16936 EL FUEGO ST</b>	<b>1/4 - 1/2 WSW</b>	<b>C8</b>	<b>29</b>
Facility Status: Remedial action (cleanup) Underway				
Facility Status: Case Closed				
<b>RANCHO SANTA FE FIRE DEPT</b>	<b>16936 EL FUEGO</b>	<b>1/4 - 1/2 WSW</b>	<b>C9</b>	<b>34</b>
<b>SANTA FE IRRIGATION DISTRICT</b>	<b>5920 LINEA DEL CIELO</b>	<b>1/4 - 1/2 SW</b>	<b>10</b>	<b>38</b>
Facility Status: Case Closed				
<b>ROBERT C. GUNNESS (HOME)</b>	<b>16721 LA GRACIA</b>	<b>1/4 - 1/2 SSW</b>	<b>11</b>	<b>45</b>
Facility Status: Case Closed				

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 10/11/2006 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

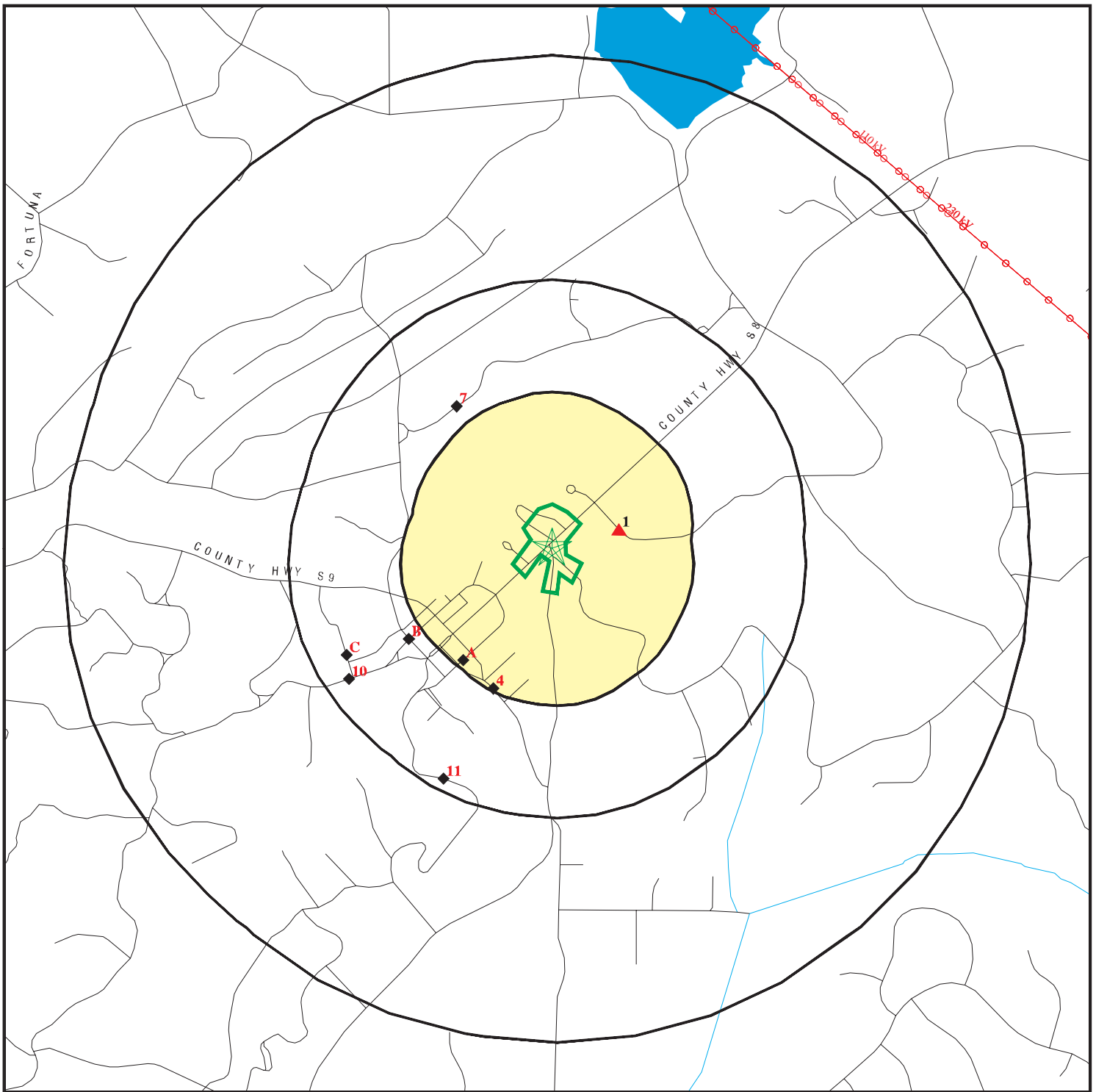
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO SANTA FE MOBIL</b>	<b>6089 LA FLECHA</b>	<b>1/8 - 1/4 SW</b>	<b>A2</b>	<b>9</b>

## EXECUTIVE SUMMARY


Due to poor or inadequate address information, the following sites were not mapped:


<u>Site Name</u>	<u>Database(s)</u>
DEL DIOS RANCH	San Diego Co. HMMD, SWEEPS UST
KENALBEE FARM	San Diego Co. HMMD, SWEEPS UST
WHISPERING PALMS COUNTRY CLUB	SWEEPS UST
JAMES BASHER RANCH	HIST UST
14878 VEA LA VALLE	HIST UST
RANCHO SANTA FE MIDDLE SCHOOL	ERNS
	SCH, ENVIROSTOR

# OVERVIEW MAP - 1804495.2s



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Landfill Sites


 Dept. Defense Sites



 Indian Reservations BIA

 Power transmission lines

 Oil & Gas pipelines

 Areas of Concern

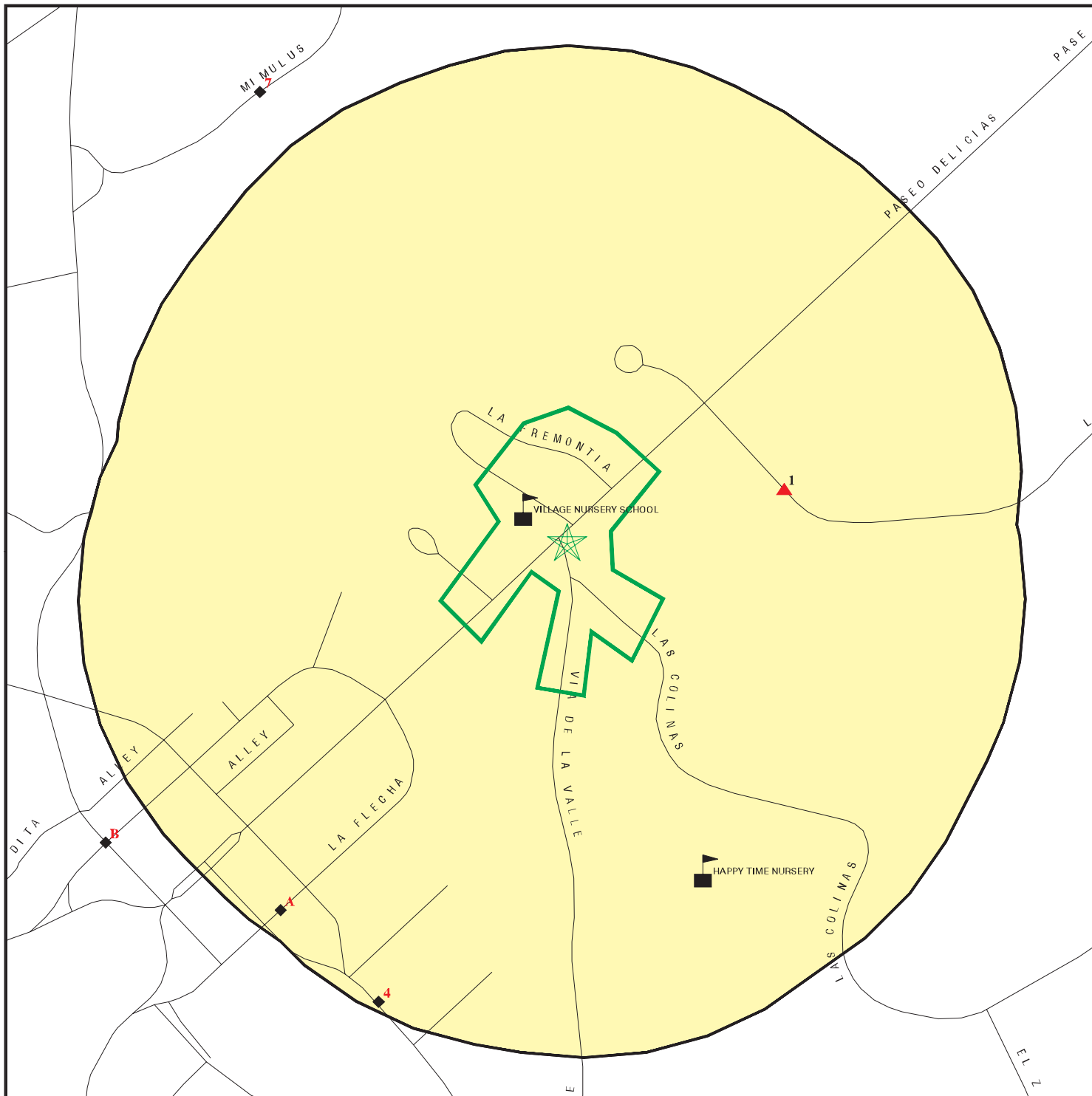



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

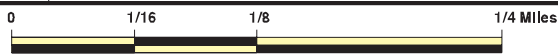
SITE NAME: Villa De La Valle  
 ADDRESS: Villa De La Valle and Paseo Delicias  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0231 / 117.1991


CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804495.2s  
 DATE: November 27, 2006 8:21 pm

# DETAIL MAP - 1804495.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Areas of Concern
-  Oil & Gas pipelines



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Villa De La Valle  
 ADDRESS: Villa De La Valle and Paseo Delicias  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0231 / 117.1991

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804495.2s  
 DATE: November 27, 2006 8:22 pm

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	1	NR	NR	NR	1
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
Hist Cal-Sites		1.000	0	0	0	0	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
Cortese		0.500	0	1	4	NR	NR	5
SWRCY		0.500	0	0	0	NR	NR	0
LUST		0.500	1	2	6	NR	NR	9
CA FID UST		0.250	0	0	NR	NR	NR	0
SLIC		0.500	0	0	0	NR	NR	0
UST		0.250	0	1	NR	NR	NR	1
HIST UST		0.250	0	0	NR	NR	NR	0



## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
Notify 65		1.000	0	0	0	0	NR	0
DEED		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP		NR	NR	NR	NR	NR	0
RESPONSE		1.000	0	0	0	0	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENVIROSTOR		1.000	0	0	0	0	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**1**  
**East**  
**< 1/8**  
**461 ft.**

**BINGHAM TRUST PROPERTY**  
**6427 LA VALLE PLATEADA**  
**RANCHO SANTE FE, CA 92067**

**LUST** **S103472106**  
**San Diego Co. HMMD** **N/A**

**Relative:**  
**Higher**

LUST:

**Actual:**  
**283 ft.**

Region: STATE  
 Case Type: Soil only  
 Cross Street: Not reported  
 Enf Type: Not reported  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Global Id: T0607302542  
 Stop Date: 1998-12-01 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: Not reported  
 Monitoring: Not reported  
 Close Date: 1999-09-03 00:00:00  
 Discover Date: 1998-12-01 00:00:00  
 Enforcement Dt: Not reported  
 Release Date: 1998-12-01 00:00:00  
 Review Date: Not reported  
 Enter Date: Not reported  
 MTBE Date: Not reported  
 GW Qualifier: Not reported  
 Soil Qualifier: Not reported  
 Max MTBE GW ppb: Not reported  
 Max MTBE Soil ppb: Not reported  
 County: 37  
 Org Name: Not reported  
 Reg Board: San Diego Region  
 Status: Case Closed  
 Chemical: Diesel  
 Contact Person: Not reported  
 Responsible Party: CYNTHIA WAGNER  
 RP Address: P O BOX 926  
 Interim: Not reported  
 Oversight Prgm: LUST  
 MTBE Class: \*  
 MTBE Conc: 0  
 MTBE Fuel: 0  
 MTBE Tested: Not Required to be Tested.  
 Staff: UNA  
 Staff Initials: DL  
 Lead Agency: Local Agency  
 Local Agency: 37000L  
 Hydr Basin #: 905.11  
 Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
 Priority: 8  
 Cleanup Fund Id: Not reported  
 Work Suspended: Not reported  
 Local Case #: H38193-001

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

Case Number: 9UT3778  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

**LUST:**

Case Number: 9UT3778  
Local Agency: 37000  
Substance: 12034  
Qty Leaked: 0  
Date Found: 12/01/1998  
How Found: Tank Closure  
Date Stopped: 12/01/1998  
How Stopped: Close Tank  
Source: Unknown  
Cause: Unknown  
Lead Agency: Local Agency  
Case Type: Soil only  
Status: Case Closed  
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site  
Confirm Date: 12/04/1998  
Submit Workplan: 12/10/98  
Prelim Assess: / /  
Desc Pollution: Not reported  
Remed Plan: / /  
Remed Action: Not reported  
Began Monitor: Not reported  
Enforce Type: Not reported  
Enforce Date: Not reported  
Closed Date: 9/3/99  
Pilot Program: LOP  
Local Case: H38193-001  
Basin Number: 905.10  
Gwater Depth: >10'  
Beneficial Use: MUNBU  
NPDES Number: Not reported  
priority: 3  
File Disp: Administratively opened on database, however no file physically exists  
Release Date: 12/01/1998  
Interim Remedial Actions: Not reported  
Cleanup and Abatement order Number: Not reported  
Waste Discharge Requirement Number: Not reported

**San Diego Co. HMMMD:**

Facility ID: 138193  
Inactive Indicator: Active  
Business Code: 6HK20  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

2nd Name: Not reported  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: San Diego  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: Not reported  
Reinspection Date: Not reported  
Inspector Name: Not reported  
Violation Notice Issued: Not reported  
Facility Contact: CYNTHIA WAGNER  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: UNION BANK TR  
Property Address: C/O PDS SERVICES INC  
Property City,St,Zip: 76094  
Tank Owner: Not reported  
Tank Address: Not reported  
Tank City,St,Zip: Not reported  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone: Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number: Not reported  
Chemical Name: Not reported  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: Not reported  
2nd Hazard Category: Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number: T001  
Tank ID Number: at4229  
Waste or Product: Not reported  
Tank Contents: DIESEL

**HMMD VIOLATIONS:**

Inspection Date: Not reported  
Waste Code: Not reported  
Type of Violation: Not reported  
Occurrences: Not reported  
Item Number: Not reported  
Violation Desc: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
 Waste Item #: Not reported  
 Waste Code: Not reported  
 Waste Name: Not reported  
 Qnty at Inspection: Not reported  
 Quantity String: Not reported  
 Annual Qty: Not reported  
 Annual Qty String: Not reported  
 Measurement Unit: Not reported  
 Treatment Method: Not reported  
 Storage Method: Not reported  
 Haz Waste Hauler: Not reported  
 Waste Desc: Not reported  
 Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**A2**  
**SW**  
**1/8-1/4**  
**1222 ft.**

**RANCHO SANTA FE MOBIL**  
**6089 LA FLECHA**  
**RANCHO SANTA FE, CA 92067**

**LUST** **U003789427**  
**UST** **N/A**  
**San Diego Co. HMMD**

**Site 1 of 2 in cluster A**

**Relative:**  
**Lower**

**LUST:**

**Actual:**  
**235 ft.**

Region: STATE  
 Case Type: Drinking Water Aquifer affected  
 Cross Street: Not reported  
 Enf Type: NOR  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: NPP  
 Leak Cause: Other Cause  
 Leak Source: Piping  
 Global Id: T0607300193  
 Stop Date: 1989-03-23 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: Not reported  
 Monitoring: Not reported  
 Close Date: Not reported  
 Discover Date: 1989-03-23 00:00:00  
 Enforcement Dt: Not reported  
 Release Date: 1989-03-23 00:00:00  
 Review Date: Not reported  
 Enter Date: Not reported  
 MTBE Date: Not reported  
 GW Qualifier: Not reported  
 Soil Qualifier: Not reported  
 Max MTBE GW ppb: Not reported  
 Max MTBE Soil ppb: Not reported  
 County: 37

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**RANCHO SANTA FE MOBIL (Continued)**

**U003789427**

Org Name: Not reported  
Reg Board: San Diego Region  
Status: Not reported  
Chemical: Gasoline  
Contact Person: Not reported  
Responsible Party: TONY RABABY  
RP Address: PO BOX 1462  
Interim: Not reported  
Oversight Prgm: LUST  
MTBE Class: \*  
MTBE Conc: 0  
MTBE Fuel: 1  
MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected  
Staff: UNA  
Staff Initials: DL  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: 905.11  
Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
Priority: 1  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H13190-001  
Case Number: 9UT1336  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

UST:  
Region: STATE  
Local Agency: 37000  
Facility ID: H13190

San Diego Co. HMD:  
Facility ID: 113190  
Inactive Indicator: Active  
Business Code: 6HK29  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: P O BOX 1462  
Mailing City,St,Zip: RANCHO SANTA FE, CA 92067  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: Rancho Santa Fe  
Census Tract Number: 171  
EPA ID: CAD981396781  
Gas Station: Not reported  
Inspection Date: 04/26/04

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

RANCHO SANTA FE MOBIL (Continued)

EDR ID Number  
EPA ID Number

Database(s)

U003789427

Reinspection Date: Not reported  
Inspector Name: ASEIGEL  
Violation Notice Issued: Not reported  
Facility Contact: BRENT RABABY  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: RABABY TRUST 03-25-82  
Property Address: C/O TONY RADABY  
Property City,St,Zip: 92067  
Tank Owner: TONY RABABY  
Tank Address: 1462 E LA FLECHA  
Tank City,St,Zip: Rancho Santa Fe, CA 92067  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: 04/26/05  
Facility Phone: 858-756-2929

HMMD DISCLOSURE INVENTORY:

Item Number: MI92  
Chemical Name: MIDGRADE UNLEADED UNDERGROUND TANK 113190 T007  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: Not reported

Item Number: PR93  
Chemical Name: PREMIUM UNLEADED UNDERGROUND TANK 113190 T008  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: Not reported

Item Number: RE91  
Chemical Name: REGULAR UNLEADED UNDERGROUND TANK 113190 T006  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: Not reported

HMMD UNDERGROUND TANKS:

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**RANCHO SANTA FE MOBIL (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

**U003789427**

Tank Number: T001  
Tank ID Number: 1  
Waste or Product: Not reported  
Tank Contents: REGULAR UNLEADED

Tank Number: T002  
Tank ID Number: 2  
Waste or Product: Not reported  
Tank Contents: DIESEL

Tank Number: T003  
Tank ID Number: 3  
Waste or Product: Not reported  
Tank Contents: REGULAR UNLEADED

Tank Number: T004  
Tank ID Number: 4  
Waste or Product: Not reported  
Tank Contents: Not reported

Tank Number: T005  
Tank ID Number: 5  
Waste or Product: Not reported  
Tank Contents: LEADED

Tank Number: T006  
Tank ID Number: NT1455 RT2  
Waste or Product: Not reported  
Tank Contents: REGULAR UNLEADED

Tank Number: T007  
Tank ID Number: NT1455 RT2  
Waste or Product: Not reported  
Tank Contents: MIDGRADE UNLEADED

Tank Number: T008  
Tank ID Number: NT1455 RT2  
Waste or Product: Not reported  
Tank Contents: PREMIUM UNLEADED

Tank Number: T009  
Tank ID Number: NT1455  
Waste or Product: Not reported  
Tank Contents: Not reported

**HMMD VIOLATIONS:**

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HV0401  
Occurrences: Not reported  
Item Number: 8038  
Violation Desc: TRAINING RECORDS UNAVAILABLE

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3013  
Occurrences: Not reported



Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

RANCHO SANTA FE MOBIL (Continued)

EDR ID Number  
EPA ID Number

Database(s)

U003789427

Item Number: 8039  
Violation Desc: NO FINANCIAL RESPOSIBILITY DOC

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3001  
Occurrences: Not reported  
Item Number: 8040  
Violation Desc: UST RECORDS NOT MAINTAINED ONSITE

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3003  
Occurrences: Not reported  
Item Number: 8041  
Violation Desc: MONITORING SYTEM NOT TESTED ANNUALLY

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3026  
Occurrences: Not reported  
Item Number: 8042  
Violation Desc: MONITORING SYSTEM NOT FUNCTIONAL

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3027  
Occurrences: Not reported  
Item Number: 8043  
Violation Desc: UST MONITORING PROCEDURE NOT IMPLEMENTED

Inspection Date: 07/24/97  
Waste Code: Not reported  
Type of Violation: 6HX3028  
Occurrences: Not reported  
Item Number: 8044  
Violation Desc: UST RESPONSE PLAN NOT AVAILABLE

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HV0401  
Occurrences: Not reported  
Item Number: 8141  
Violation Desc: TRAINING RECORDS UNAVAILABLE

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HX3013  
Occurrences: Not reported  
Item Number: 8142  
Violation Desc: NO FINANCIAL RESPOSIBILITY DOC

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HX3003  
Occurrences: Not reported  
Item Number: 8143

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

RANCHO SANTA FE MOBIL (Continued)

EDR ID Number  
EPA ID Number

Database(s)

U003789427

Violation Desc: MONITORING SYTEM NOT TESTED ANNUALLY

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HX3026  
Occurrences: Not reported  
Item Number: 8144  
Violation Desc: MONITORING SYSTEM NOT FUNCTIONAL

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HX3027  
Occurrences: Not reported  
Item Number: 8145  
Violation Desc: UST MONITORING PROCEDURE NOT IMPLEMENTED

Inspection Date: 09/30/98  
Waste Code: Not reported  
Type of Violation: 6HX3028  
Occurrences: Not reported  
Item Number: 8146  
Violation Desc: UST RESPONSE PLAN NOT AVAILABLE

Inspection Date: 05/24/01  
Waste Code: Not reported  
Type of Violation: 6HV0401  
Occurrences: Not reported  
Item Number: 6040  
Violation Desc: TRAINING RECORDS UNAVAILABLE

Inspection Date: 05/24/01  
Waste Code: Not reported  
Type of Violation: 6HV1096  
Occurrences: Not reported  
Item Number: 6041  
Violation Desc: NO EMPLOYEE TRAINING RECORDS

Inspection Date: 05/24/01  
Waste Code: Not reported  
Type of Violation: 6HX3013  
Occurrences: Not reported  
Item Number: 6042  
Violation Desc: NO FINANCIAL RESPOSIBILITY DOC

Inspection Date: 05/24/01  
Waste Code: Not reported  
Type of Violation: 6HX3027  
Occurrences: Not reported  
Item Number: 6043  
Violation Desc: UST MONITORING PROCEDURE NOT IMPLEMENTED

Inspection Date: 05/24/01  
Waste Code: Not reported  
Type of Violation: 6HX3028  
Occurrences: Not reported  
Item Number: 6044  
Violation Desc: UST RESPONSE PLAN NOT AVAILABLE

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**RANCHO SANTA FE MOBIL (Continued)**

**U003789427**

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3258  
Occurrences: Not reported  
Item Number: 3579  
Violation Desc: SENSORS NOT PLACED AT LOW POINT/ADEQU

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3258  
Occurrences: Not reported  
Item Number: 3580  
Violation Desc: SENSORS NOT PLACED AT LOW POINT/ADEQU

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3258  
Occurrences: Not reported  
Item Number: 3581  
Violation Desc: SENSORS NOT PLACED AT LOW POINT/ADEQU

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3405  
Occurrences: Not reported  
Item Number: 3582  
Violation Desc: LLD DOESN'T DETECT 3.0 GPH OR EQUIVA

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3405  
Occurrences: Not reported  
Item Number: 3583  
Violation Desc: LLD DOESN'T DETECT 3.0 GPH OR EQUIVA

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3405  
Occurrences: Not reported  
Item Number: 3584  
Violation Desc: LLD DOESN'T DETECT 3.0 GPH OR EQUIVA

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3407  
Occurrences: Not reported  
Item Number: 3585  
Violation Desc: PIPE INT. TEST DOESN'T DETECT.1 GPH @150

Inspection Date: 10/17/02  
Waste Code: Not reported  
Type of Violation: 6HV3407  
Occurrences: Not reported  
Item Number: 3586  
Violation Desc: PIPE INT. TEST DOESN'T DETECT.1 GPH @150

Inspection Date: 10/17/02

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**RANCHO SANTA FE MOBIL (Continued)**

**U003789427**

Waste Code:	Not reported
Type of Violation:	6HV3407
Occurrences:	Not reported
Item Number:	3587
Violation Desc:	PIPE INT. TEST DOESN'T DETECT.1 GPH @150
Inspection Date:	10/17/02
Waste Code:	Not reported
Type of Violation:	6HV0135
Occurrences:	Not reported
Item Number:	3588
Violation Desc:	MANIFESTS/RECEIPTS NO ONSITE
Inspection Date:	10/17/02
Waste Code:	Not reported
Type of Violation:	6HV0201
Occurrences:	Not reported
Item Number:	3589
Violation Desc:	WASTE CONTAINER NOT CLOSED
Inspection Date:	04/26/04
Waste Code:	Not reported
Type of Violation:	6HV3114
Occurrences:	Not reported
Item Number:	1050
Violation Desc:	2NDRY CONT TEST NOT DONE/SENT TO CUPA
Inspection Date:	04/26/04
Waste Code:	Not reported
Type of Violation:	6HV3258
Occurrences:	Not reported
Item Number:	1051
Violation Desc:	SENSORS NOT PLACED AT LOW POINT/ADEQU
Inspection Date:	04/26/04
Waste Code:	Not reported
Type of Violation:	6HV3258
Occurrences:	Not reported
Item Number:	1052
Violation Desc:	SENSORS NOT PLACED AT LOW POINT/ADEQU
Inspection Date:	04/26/04
Waste Code:	Not reported
Type of Violation:	6HV3258
Occurrences:	Not reported
Item Number:	1053
Violation Desc:	SENSORS NOT PLACED AT LOW POINT/ADEQU
Inspection Date:	04/26/04
Waste Code:	Not reported
Type of Violation:	6HV3264
Occurrences:	Not reported
Item Number:	1054
Violation Desc:	SPILL CONT. NOT TESTED ANNUALLY
Inspection Date:	04/26/04
Waste Code:	Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**RANCHO SANTA FE MOBIL (Continued)**

**U003789427**

Type of Violation: 6HV3264  
Occurrences: Not reported  
Item Number: 1055  
Violation Desc: SPILL CONT. NOT TESTED ANNUALLY

Inspection Date: 04/26/04  
Waste Code: Not reported  
Type of Violation: 6HV3264  
Occurrences: Not reported  
Item Number: 1056  
Violation Desc: SPILL CONT. NOT TESTED ANNUALLY

Inspection Date: 04/26/04  
Waste Code: Not reported  
Type of Violation: 6HV3264  
Occurrences: Not reported  
Item Number: 1057  
Violation Desc: SPILL CONT. NOT TESTED ANNUALLY

Inspection Date: 04/26/04  
Waste Code: Not reported  
Type of Violation: 6HV0201  
Occurrences: Not reported  
Item Number: 1058  
Violation Desc: WASTE CONTAINER NOT CLOSED

Inspection Date: 04/26/04  
Waste Code: Not reported  
Type of Violation: 6HV0211  
Occurrences: Not reported  
Item Number: 1059  
Violation Desc: INCOMPATIBLES IN SAME CONTAINER

**HMMD WASTE STREAMS:**

Inspection Date: 04/26/04  
Waste Item #: 213  
Waste Code: 213  
Waste Name: HYDROCARBON SOLVENTS  
Qty at Inspection: 10  
Quantity String: 10  
Annual Qty: 60  
Annual Qty String: 60  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: PROCESSING EQUIPMENT  
Haz Waste Hauler: 1406 SAFETY-KLEEN  
Waste Desc: SOLVENT SAFETY KLEEN  
Carcinogen: No

Inspection Date: 04/26/04  
Waste Item #: 221  
Waste Code: 221  
Waste Name: WASTE OIL & MIXED OI  
Qty at Inspection: 500  
Quantity String: 500  
Annual Qty: 1000  
Annual Qty String: 1000

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**RANCHO SANTA FE MOBIL (Continued)**

**U003789427**

Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: UNGD TNK  
Haz Waste Hauler: 9997 UNREGISTERED HAZ WST  
Waste Desc: WASTE OIL  
Carcinogen: No

Inspection Date: 04/26/04  
Waste Item #: 342  
Waste Code: 342  
Waste Name: ORGANIC LIQUIDS W/ME  
Qty at Inspection: 165  
Quantity String: 165  
Annual Qty: 165  
Annual Qty String: 165  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: METAL DRUM  
Haz Waste Hauler: 3674 INTERFLUID RECYCLING  
Waste Desc: ANTIFREEZE  
Carcinogen: No

Inspection Date: 04/26/04  
Waste Item #: 352  
Waste Code: 352  
Waste Name: ORGANIC SOLIDS (OTHE  
Qty at Inspection: 5  
Quantity String: 5  
Annual Qty: 5  
Annual Qty String: 5  
Measurement Unit: LBS  
Treatment Method: 001 RECYCLE  
Storage Method: CAN  
Haz Waste Hauler: 1406 SAFETY-KLEEN SYSTEMS  
Waste Desc: USED GASOLINE FILTERS  
Carcinogen: No

Inspection Date: 04/26/04  
Waste Item #: 888  
Waste Code: 888  
Waste Name: USED OIL FILTERS  
Qty at Inspection: 55  
Quantity String: 55  
Annual Qty: 110  
Annual Qty String: 110  
Measurement Unit: GAL  
Treatment Method: 888 FILTERS/METAL RE  
Storage Method: METAL DRUM  
Haz Waste Hauler: 9997 UNREGISTERED HAZ WST  
Waste Desc: OIL FILTERS  
Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A3**      **MOBIL SERVICE STATION**  
**SW**      **6089 LA FLECHA**  
**1/8-1/4**    **RANCHO SANTA FE, CA 92067**  
**1222 ft.**

**LUST**    **S102433757**  
**Cortese**    **N/A**

**Site 2 of 2 in cluster A**

**Relative:**  
**Lower**

**LUST:**

**Actual:**  
**235 ft.**

Case Number: 9UT1336  
 Local Agency: 37000  
 Substance: 8006619  
 Qty Leaked: 0  
 Date Found: 03/23/1989  
 How Found: Not reported  
 Date Stopped: 03/23/1989  
 How Stopped: Not reported  
 Source: Not reported  
 Cause: Not reported  
 Lead Agency: Local Agency  
 Case Type: Drinking Water Aquifer affected  
 Status: Remedial action (cleanup) Underway  
 Abate Method: Not reported  
 Confirm Date: 03/23/1989  
 Submit Workplan: Not reported  
 Prelim Assess: 05/15/1989  
 Desc Pollution: Not reported  
 Remed Plan: / /  
 Remed Action: 3/5/90  
 Began Monitor: Not reported  
 Enforce Type: SEL  
 Enforce Date: 3/23/89  
 Closed Date: Not reported  
 Pilot Program: LOP  
 Local Case: H13190-001  
 Basin Number: 905.11  
 Gwater Depth: Not reported  
 Beneficial Use: MUN  
 NPDES Number: Not reported  
 priority: LOP/HIGH - ADMINISTRATIVE (CLOSURE/SB2004/ENFORCEMENT)  
 File Dispn: Not reported  
 Release Date: 05/15/1989  
 Interim Remedial Actions: No  
 Cleanup and Abatement order Number: Not reported  
 Waste Discharge Requirement Number: Not reported

**Cortese:**

Region: CORTESE  
 Facility Addr2: 6089 LA FLECHA

**4**      **RSF FLICKS**  
**SSW**    **16921 VIA DE SANTA FE**  
**1/8-1/4**    **RANCHO SANTA FE, CA 92067**  
**1282 ft.**

**RCRA-SQG**    **1000686497**  
**FINDS**      **CAD983638172**  
**HAZNET**

**Relative:**  
**Lower**

**Actual:**  
**214 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**RSF FLICKS (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

**1000686497**

RCRAInfo:

Owner: GARY OR JANE BUCKLAND  
(619) 756-4530

EPA ID: CAD983638172

Contact: GARY BUCKLAND  
(619) 756-1052

Classification: Small Quantity Generator  
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid: CAD983638172  
Contact: MIKE BAYKAL  
Telephone: 8587561052  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 5005  
Mailing City,St,Zip: RANCHO SANTA FE, CA 920670277  
Gen County: San Diego  
TSD EPA ID: CAD981402522  
TSD County: Kern  
Waste Category: Photochemicals/photoprocessing waste  
Disposal Method: Recycler  
Tons: .0080  
Facility County: San Diego

Gepaid: CAD983638172  
Contact: MIKE BAYKAL  
Telephone: 8587561052  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 5005  
Mailing City,St,Zip: RANCHO SANTA FE, CA 920670277  
Gen County: San Diego  
TSD EPA ID: CAD981402522  
TSD County: Kern  
Waste Category: Photochemicals/photoprocessing waste  
Disposal Method: Recycler  
Tons: .0060  
Facility County: San Diego



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

EDR ID Number  
 EPA ID Number

**B5**      **DUTTON TRUST**  
**SW**      **6051 EL TORDO**  
**1/4-1/2**      **SAN DEIGO, CA 92067**  
**1505 ft.**

**Cortese**      **S104755793**  
                          **N/A**

**Relative:**      **Site 1 of 2 in cluster B**  
**Lower**      Cortese:  
                          Region:      CORTESE  
**Actual:**      Facility Addr2:      Not reported  
**236 ft.**

**B6**      **DUTTON TRUST**  
**SW**      **6051 EL TORDO**  
**1/4-1/2**      **SAN DIEGO, CA 92067**  
**1505 ft.**

**LUST**      **S102590536**  
**San Diego Co. HMMD**      **N/A**

**Relative:**      **Site 2 of 2 in cluster B**  
**Lower**      LUST:  
                          Region:      STATE  
**Actual:**      Case Type:      Drinking Water Aquifer affected  
**236 ft.**      Cross Street:      Not reported  
                          Enf Type:      NOR  
                          Funding:      Not reported  
                          How Discovered:      Not reported  
                          How Stopped:      Other Means  
                          Leak Cause:      Spill  
                          Leak Source:      Tank  
                          Global Id:      T0607399173  
                          Stop Date:      1997-02-20 00:00:00  
                          Confirm Leak:      Not reported  
                          Workplan:      Not reported  
                          Prelim Assess:      Not reported  
                          Pollution Char:      Not reported  
                          Remed Plan:      Not reported  
                          Remed Action:      Not reported  
                          Monitoring:      Not reported  
                          Close Date:      2006-05-01 00:00:00  
                          Discover Date:      1997-02-20 00:00:00  
                          Enforcement Dt:      Not reported  
                          Release Date:      1997-02-20 00:00:00  
                          Review Date:      Not reported  
                          Enter Date:      Not reported  
                          MTBE Date:      Not reported  
                          GW Qualifier:      Not reported  
                          Soil Qualifier:      Not reported  
                          Max MTBE GW ppb:      Not reported  
                          Max MTBE Soil ppb:      Not reported  
                          County:      37  
                          Org Name:      Not reported  
                          Reg Board:      San Diego Region  
                          Status:      Case Closed  
                          Chemical:      Unleaded Gasoline  
                          Contact Person:      Not reported  
                          Responsible Party:      Santa Fe National Bank  
                          RP Address:      P O BOX 365  
                          Interim:      Not reported  
                          Oversight Prgm:      LUST  
                          MTBE Class:      \*  
                          MTBE Conc:      0  
                          MTBE Fuel:      1  
                          MTBE Tested:      MTBE Detected. Site tested for MTBE and MTBE detected

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**DUTTON TRUST (Continued)**

**S102590536**

Staff: SJP  
Staff Initials: JS  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: 905.11  
Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
Priority: 8  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H36819-002  
Case Number: 9UT3420  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

Region: STATE  
Case Type: Soil only  
Cross Street: Not reported  
Enf Type: Not reported  
Funding: Not reported  
How Discovered: Not reported  
How Stopped: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Global Id: T0608111870  
Stop Date: Not reported  
Confirm Leak: Not reported  
Workplan: Not reported  
Prelim Assess: Not reported  
Pollution Char: Not reported  
Remed Plan: Not reported  
Remed Action: Not reported  
Monitoring: Not reported  
Close Date: 1997-03-24 00:00:00  
Discover Date: Not reported  
Enforcement Dt: Not reported  
Release Date: 1997-02-24 00:00:00  
Review Date: Not reported  
Enter Date: Not reported  
MTBE Date: Not reported  
GW Qualifier: Not reported  
Soil Qualifier: Not reported  
Max MTBE GW ppb: Not reported  
Max MTBE Soil ppb: Not reported  
County: 37  
Org Name: Not reported  
Reg Board: San Diego Region  
Status: Case Closed  
Chemical: Gasoline  
Contact Person: Not reported  
Responsible Party: STEPHEN DUNN

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**DUTTON TRUST (Continued)**

**S102590536**

RP Address: 4600 MADISON #725  
Interim: Not reported  
Oversight Prgm: LOCNL  
MTBE Class: \*  
MTBE Conc: 0  
MTBE Fuel: 1  
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.  
Staff: UNA  
Staff Initials: JS  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: 905.11  
Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
Priority: 7  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H36819-001  
Case Number: Not reported  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name:Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

**LUST:**

Case Number: 9UT3420  
Local Agency: 37000  
Substance: 12031  
Qty Leaked: 0  
Date Found: 03/03/1997  
How Found: Not reported  
Date Stopped: / /  
How Stopped: Not reported  
Source: Not reported  
Cause: Not reported  
Lead Agency: Local Agency  
Case Type: Soil only  
Status: Preliminary site assessment underway  
Abate Method: Not reported  
Confirm Date: / /  
Submit Workplan: Not reported  
Prelim Assess: 03/13/1997  
Desc Pollution: Not reported  
Remed Plan: / /  
Remed Action: Not reported  
Began Monitor: Not reported  
Enforce Type: Not reported  
Enforce Date: Not reported  
Closed Date: Not reported  
Pilot Program: LOP  
Local Case: H36819-002  
Basin Number: 905.11  
Gwater Depth: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**DUTTON TRUST (Continued)**

**S102590536**

Beneficial Use: MUN  
NPDES Number: Not reported  
priority: Not reported  
File Dispn: Administratively opened on database, however no file physically exists  
Release Date: 03/03/1997  
Interim Remedial Actions: Not reported  
Cleanup and Abatement order Number: Not reported  
Waste Discharge Requirement Number: Not reported

**San Diego Co. HMMD:**

Facility ID: 136819  
Inactive Indicator: Active  
Business Code: Not reported  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: 4600 MADISON #725  
Mailing City,St,Zip: KANSAS CITY, MO 64112  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: Not reported  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: Not reported  
Reinspection Date: Not reported  
Inspector Name: Not reported  
Violation Notice Issued: Not reported  
Facility Contact: FRAN CLEVE  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: RANCHO SANTA FE NATIONAL BANK  
Property Address: 38325 HIGHWAY 190  
Property City,St,Zip: 93265  
Tank Owner: Not reported  
Tank Address: Not reported  
Tank City,St,Zip: Not reported  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone: Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number: Not reported  
Chemical Name: Not reported  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: Not reported  
2nd Hazard Category: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**DUTTON TRUST (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**S102590536**

**HMMD UNDERGROUND TANKS:**

Tank Number: Not reported  
 Tank ID Number: Not reported  
 Waste or Product: Not reported  
 Tank Contents: Not reported

**HMMD VIOLATIONS:**

Inspection Date: Not reported  
 Waste Code: Not reported  
 Type of Violation: Not reported  
 Occurrences: Not reported  
 Item Number: Not reported  
 Violation Desc: Not reported

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
 Waste Item #: Not reported  
 Waste Code: Not reported  
 Waste Name: Not reported  
 Qnty at Inspection: Not reported  
 Quantity String: Not reported  
 Annual Qty: Not reported  
 Annual Qty String: Not reported  
 Measurement Unit: Not reported  
 Treatment Method: Not reported  
 Storage Method: Not reported  
 Haz Waste Hauler: Not reported  
 Waste Desc: Not reported  
 Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**7 JACK BACA RESIDENCE**  
**NW 6110 MIMULUS**  
**1/4-1/2 RANCHO SANTA FE, CA 92067**  
**1543 ft.**

**LUST S103891803**  
**Cortese N/A**  
**San Diego Co. HMMD**

**Relative:**  
**Lower**

**LUST:**

**Actual:**  
**248 ft.**

Region: STATE  
 Case Type: Soil only  
 Cross Street: Not reported  
 Enf Type: NOR  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Global Id: T0607302661  
 Stop Date: 1998-09-09 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**JACK BACA RESIDENCE (Continued)**

**S103891803**

Remed Action: Not reported  
Monitoring: Not reported  
Close Date: 1999-08-05 00:00:00  
Discover Date: 1998-09-09 00:00:00  
Enforcement Dt: Not reported  
Release Date: 1998-09-09 00:00:00  
Review Date: Not reported  
Enter Date: Not reported  
MTBE Date: Not reported  
GW Qualifier: Not reported  
Soil Qualifier: Not reported  
Max MTBE GW ppb: Not reported  
Max MTBE Soil ppb: Not reported  
County: 37  
Org Name: Not reported  
Reg Board: San Diego Region  
Status: Case Closed  
Chemical: Transmission Fluid  
Contact Person: Not reported  
Responsible Party: RICHARD TIBBITS  
RP Address: P O BOX 704  
Interim: Not reported  
Oversight Prgm: LUST  
MTBE Class: \*  
MTBE Conc: 0  
MTBE Fuel: 0  
MTBE Tested: Not Required to be Tested.  
Staff: UNA  
Staff Initials: EP  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: 905.11  
Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
Priority: 7  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H37898-001  
Case Number: 9UT3901  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

**LUST:**

Case Number: 9UT3901  
Local Agency: 37000  
Substance: 12034  
Qty Leaked: 0  
Date Found: 10/09/1998  
How Found: Tank Closure  
Date Stopped: 10/09/1998  
How Stopped: Close Tank

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**JACK BACA RESIDENCE (Continued)**

**S103891803**

Source: Tank  
Cause: Corrosion  
Lead Agency: Local Agency  
Case Type: Soil only  
Status: Case Closed  
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site  
Confirm Date: 10/26/1998  
Submit Workplan: 5/13/99  
Prelim Assess: / /  
Desc Pollution: Not reported  
Remed Plan: / /  
Remed Action: Not reported  
Began Monitor: Not reported  
Enforce Type: Not reported  
Enforce Date: Not reported  
Closed Date: 8/5/99  
Pilot Program: LOP  
Local Case: H37898-001  
Basin Number: 905.11  
Gwater Depth: Not reported  
Beneficial Use: MUNBU  
NPDES Number: Not reported  
priority: 3  
File Disp: Administratively opened on database, however no file physically exists  
Release Date: 10/12/1998  
Interim Remedial Actions: Not reported  
Cleanup and Abatement order Number: Not reported  
Waste Discharge Requirement Number: Not reported

Cortese:  
Region: CORTESE  
Facility Addr2: 6110 MIMULUS

San Diego Co. HMMMD:  
Facility ID: 137898  
Inactive Indicator: Active  
Business Code: 6HK20  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: San Diego  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: Not reported  
Reinspection Date: Not reported  
Inspector Name: Not reported  
Violation Notice Issued: Not reported  
Facility Contact: Not reported  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**JACK BACA RESIDENCE (Continued)**

**S103891803**

Last Delinquent Letter:            Not reported  
Delinquent Comment:            Not reported  
Last Letter Type:                Not reported  
Property Owner:                 HUMMEL JOHN&DAWN  
Property Address:                49 B ROUTE 114  
Property City,St,Zip:            11937  
Tank Owner:                      Not reported  
Tank Address:                    Not reported  
Tank City,St,Zip:                Not reported  
Business Plan Acceptance Date:   Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone:                 Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number:                    Not reported  
Chemical Name:                 Not reported  
Case Number:                    Not reported  
Quantity Stored At One Time:   Not reported  
Quantity Stored at One Time:   Not reported  
Annual Quantity String:        Not reported  
Annual Quantity String:        Not reported  
Measurement Units:            Not reported  
Carcinogen:                    No  
1st Hazard Category:            Not reported  
2nd Hazard Category:            Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number:                 T001  
Tank ID Number:               AT4181  
Waste or Product:            Not reported  
Tank Contents:                DIESEL

**HMMD VIOLATIONS:**

Inspection Date:               Not reported  
Waste Code:                    Not reported  
Type of Violation:            Not reported  
Occurrences:                  Not reported  
Item Number:                  Not reported  
Violation Desc:                Not reported

**HMMD WASTE STREAMS:**

Inspection Date:               Not reported  
Waste Item #:                  Not reported  
Waste Code:                    Not reported  
Waste Name:                    Not reported  
Qnty at Inspection:            Not reported  
Quantity String:               Not reported  
Annual Qty:                    Not reported  
Annual Qty String:            Not reported  
Measurement Unit:            Not reported  
Treatment Method:            Not reported  
Storage Method:               Not reported  
Haz Waste Hauler:            Not reported  
Waste Desc:                    Not reported  
Carcinogen:                    No



Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**JACK BACA RESIDENCE (Continued)**

**S103891803**

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**C8**  
**WSW**  
**1/4-1/2**  
**2224 ft.**

**RANCHO SANTA FE FIRE DIST**  
**16936 EL FUEGO ST**  
**RANCHO SANTA FE, CA 92067**

**LUST**  
**San Diego Co. HMMD**

**S104746180**  
**N/A**

**Site 1 of 2 in cluster C**

**Relative:**  
**Lower**

**LUST:**

**Actual:**  
**239 ft.**

Region: STATE  
 Case Type: Drinking Water Aquifer affected  
 Cross Street: Not reported  
 Enf Type: NOR  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Repair Tank  
 Leak Cause: Structure Failure  
 Leak Source: Tank  
 Global Id: T0607301750  
 Stop Date: 1995-01-20 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: 1998-02-02 00:00:00  
 Monitoring: Not reported  
 Close Date: Not reported  
 Discover Date: 1995-01-20 00:00:00  
 Enforcement Dt: Not reported  
 Release Date: 1995-01-20 00:00:00  
 Review Date: Not reported  
 Enter Date: Not reported  
 MTBE Date: Not reported  
 GW Qualifier: Not reported  
 Soil Qualifier: Not reported  
 Max MTBE GW ppb: Not reported  
 Max MTBE Soil ppb: Not reported  
 County: 37  
 Org Name: Not reported  
 Reg Board: San Diego Region  
 Status: Remedial action (cleanup) Underway  
 Chemical: Unleaded Gasoline  
 Contact Person: Not reported  
 Responsible Party: NICK PAVONE  
 RP Address: P O BOX 410  
 Interim: Not reported  
 Oversight Prgm: LUST  
 MTBE Class: \*  
 MTBE Conc: 0  
 MTBE Fuel: 1  
 MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected  
 Staff: UNA  
 Staff Initials: DM  
 Lead Agency: Local Agency  
 Local Agency: 37000L  
 Hydr Basin #: 905.11

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

RANCHO SANTA FE FIRE DIST (Continued)

S104746180

Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
Priority: 4  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H05401-002  
Case Number: 9UT2983  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

Region: STATE  
Case Type: Undefined  
Cross Street: Not reported  
Enf Type: Not reported  
Funding: Not reported  
How Discovered: Not reported  
How Stopped: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Global Id: T0608154653  
Stop Date: Not reported  
Confirm Leak: Not reported  
Workplan: Not reported  
Prelim Assess: Not reported  
Pollution Char: Not reported  
Remed Plan: Not reported  
Remed Action: Not reported  
Monitoring: Not reported  
Close Date: 1990-08-24 00:00:00  
Discover Date: 1989-05-15 00:00:00  
Enforcement Dt: Not reported  
Release Date: 1989-05-19 00:00:00  
Review Date: Not reported  
Enter Date: Not reported  
MTBE Date: Not reported  
GW Qualifier: Not reported  
Soil Qualifier: Not reported  
Max MTBE GW ppb: Not reported  
Max MTBE Soil ppb: Not reported  
County: 37  
Org Name: Not reported  
Reg Board: San Diego Region  
Status: Case Closed  
Chemical: Diesel  
Contact Person: Not reported  
Responsible Party: CHIEF NEVILLE/DAN CAREY  
RP Address: PO BOX 410  
Interim: Not reported  
Oversight Prgm: LOCNL  
MTBE Class: \*  
MTBE Conc: 0

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**RANCHO SANTA FE FIRE DIST (Continued)**

**S104746180**

MTBE Fuel: 0  
 MTBE Tested: Not Required to be Tested.  
 Staff: UNA  
 Staff Initials: MV  
 Lead Agency: Local Agency  
 Local Agency: 37000L  
 Hydr Basin #: 905.11  
 Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
 Priority: FAILED PRECISION TEST  
 Cleanup Fund Id: Not reported  
 Work Suspended: Not reported  
 Local Case #: H05401-001  
 Case Number: Not reported  
 Qty Leaked: Not reported  
 Abate Method: Not reported  
 Operator: Not reported  
 Water System Name: Not reported  
 Well Name: Not reported  
 Distance To Lust: 0  
 Waste Discharge Global ID: Not reported  
 Waste Disch Assigned Name: Not reported  
 Summary: Not reported

**San Diego Co. HMMMD:**

Facility ID: 105401  
 Inactive Indicator: Active  
 Business Code: Not reported  
 SIC: Not reported  
 Permit Expiration: Not reported  
 Owner: Not reported  
 2nd Name: Not reported  
 Mailing Address: P O BOX 410  
 Mailing City,St,Zip: RANCHO SANTA FE, CA 92067  
 Map Code/Business Plan on File: Not reported  
 Corporate Code: Not reported  
 Fire Dept District: Rancho Santa Fe  
 Census Tract Number: 171  
 EPA ID: Not reported  
 Gas Station: Not reported  
 Inspection Date: 10/06/93  
 Reinspection Date: Not reported  
 Inspector Name: LEGACY  
 Violation Notice Issued: Not reported  
 Facility Contact: DALLAS E NEVILLE  
 Delinquent Flag: Not Delinquent  
 Last Update: 05/10/05  
 Last Delinquent Letter: Not reported  
 Delinquent Comment: Not reported  
 Last Letter Type: Not reported  
 Property Owner: RANCHO SANTA FE FIRE PROTECTIO  
 Property Address: PUBLIC AGENCY  
 Property City,St,Zip: 00000  
 Tank Owner: RANCHO SANTA FE FIRE PROTECTIO  
 Tank Address: 16936 E EL FUEGO ST  
 Tank City,St,Zip: Rancho Santa Fe, CA 92067  
 Business Plan Acceptance Date: Not reported  
 Reinspection Date Y2K Compatible: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**RANCHO SANTA FE FIRE DIST (Continued)**

**S104746180**

Facility Phone: 858-756-5971

**HMMD DISCLOSURE INVENTORY:**

Item Number: Not reported  
Chemical Name: Not reported  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: Not reported  
2nd Hazard Category: Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number: T001  
Tank ID Number: 1  
Waste or Product: Not reported  
Tank Contents: DIESEL

Tank Number: T002  
Tank ID Number: 2  
Waste or Product: Not reported  
Tank Contents: REGULAR UNLEADED

**HMMD VIOLATIONS:**

Inspection Date: 07/15/91  
Waste Code: Not reported  
Type of Violation: 6HX0010  
Occurrences: Not reported  
Item Number: 7930  
Violation Desc: BUS. PLAN NOT COMPLETE/CURRENT/ON SITE

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
Waste Item #: Not reported  
Waste Code: Not reported  
Waste Name: Not reported  
Qty at Inspection: Not reported  
Quantity String: Not reported  
Annual Qty: Not reported  
Annual Qty String: Not reported  
Measurement Unit: Not reported  
Treatment Method: Not reported  
Storage Method: Not reported  
Haz Waste Hauler: Not reported  
Waste Desc: Not reported  
Carcinogen: No

Facility ID: 204754  
Inactive Indicator: Active  
Business Code: Not reported  
SIC: Not reported  
Permit Expiration: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**RANCHO SANTA FE FIRE DIST (Continued)**

**S104746180**

Owner: Not reported  
2nd Name: Not reported  
Mailing Address: P.O BOX 410  
Mailing City,St,Zip: RANCHO SANTA FE, CA 92067  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: Rancho Santa Fe  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: 02/15/05  
Reinspection Date: Not reported  
Inspector Name: MCHAIRS  
Violation Notice Issued: Not reported  
Facility Contact: DONALD BUTZ  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: RANCHO SANTA FE FIRE PROTECTIO  
Property Address: PUBLIC AGENCY  
Property City,St,Zip: 00000  
Tank Owner: Not reported  
Tank Address: Not reported  
Tank City,St,Zip: Not reported  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: 02/15/07  
Facility Phone: 858-756-6011

**HMMD DISCLOSURE INVENTORY:**

Item Number: 0090  
Chemical Name: 00430 TEXACO LOW SULFUR CARB DIESEL 2 DIESEL FUEL 2  
Case Number: 68814-87-9  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number: T001  
Tank ID Number: 1  
Waste or Product: Not reported  
Tank Contents: DIESEL  
  
Tank Number: T002  
Tank ID Number: 2  
Waste or Product: Not reported  
Tank Contents: REGULAR UNLEADED

**HMMD VIOLATIONS:**

Inspection Date: 02/15/05  
Waste Code: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**RANCHO SANTA FE FIRE DIST (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**S104746180**

Type of Violation: 6HV0131  
 Occurrences: Not reported  
 Item Number: 8060  
 Violation Desc: UFPF NOT OBTAINED for HAZWASTE

Inspection Date: 02/15/05  
 Waste Code: Not reported  
 Type of Violation: 6HV1002  
 Occurrences: Not reported  
 Item Number: 8061  
 Violation Desc: HMBP NOT ESTABLISHED/IMPLEMENTED.

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
 Waste Item #: Not reported  
 Waste Code: Not reported  
 Waste Name: Not reported  
 Qnty at Inspection: Not reported  
 Quantity String: Not reported  
 Annual Qty: Not reported  
 Annual Qty String: Not reported  
 Measurement Unit: Not reported  
 Treatment Method: Not reported  
 Storage Method: Not reported  
 Haz Waste Hauler: Not reported  
 Waste Desc: Not reported  
 Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**C9** RANCHO SANTA FE FIRE DEPT  
**WSW** 16936 EL FUEGO  
**1/4-1/2** RANCHO SANTA FE, CA 92067  
**2224 ft.**

**HAZNET** S100727015  
**LUST** N/A  
**Cortese**  
**San Diego Co. HMMD**

**Relative:**  
**Lower**

**Site 2 of 2 in cluster C**

HAZNET:  
 Gepaid: CAL000028937  
 Contact: NICK PAVONE  
 Telephone: 8587565971  
 Facility Addr2: Not reported  
 Mailing Name: Not reported  
 Mailing Address: PO BOX 410  
 Mailing City, St, Zip: RANCHO SANTA FE, CA 920670000  
 Gen County: San Diego  
 TSD EPA ID: CAD008252405  
 TSD County: San Diego  
 Waste Category: Waste oil and mixed oil  
 Disposal Method: Recycler  
 Tons: 0.22  
 Facility County: San Diego

**Actual:**  
**239 ft.**

Gepaid: CAL000028937  
 Contact: RANCHO SANTA FE FIRE  
 Telephone: 0000000000

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**RANCHO SANTA FE FIRE DEPT (Continued)**

**S100727015**

Facility Addr2:        Not reported  
Mailing Name:        Not reported  
Mailing Address:     PO BOX 410  
Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
Gen County:         San Diego  
TSD EPA ID:         AZC950823111  
TSD County:         99  
Waste Category:     Asbestos-containing waste  
Disposal Method:    Disposal, Land Fill  
Tons:                 1.0113  
Facility County:     San Diego

Gepaid:                CAC000724992  
Contact:              RANCHO SANTA FE FIRE DEPT  
Telephone:            0000000000  
Facility Addr2:       Not reported  
Mailing Name:        Not reported  
Mailing Address:     P O BOX 410  
Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
Gen County:         San Diego  
TSD EPA ID:         CAD028409019  
TSD County:         Los Angeles  
Waste Category:     Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)  
Disposal Method:    Treatment, Tank  
Tons:                 .2085  
Facility County:     San Diego

Gepaid:                CAC000724992  
Contact:              RANCHO SANTA FE FIRE DEPT  
Telephone:            0000000000  
Facility Addr2:       Not reported  
Mailing Name:        Not reported  
Mailing Address:     P O BOX 410  
Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
Gen County:         San Diego  
TSD EPA ID:         CAD028409019  
TSD County:         Los Angeles  
Waste Category:     Unspecified oil-containing waste  
Disposal Method:    Treatment, Tank  
Tons:                 11.1130  
Facility County:     San Diego

[Click this hyperlink](#) while viewing on your computer to access  
-1 additional CA\_HAZNET: record(s) in the EDR Site Report.

**LUST:**

Case Number:        9UT2983  
Local Agency:        37000  
Substance:           8006619  
Qty Leaked:         0  
Date Found:         01/20/1995  
How Found:          Tank Closure  
Date Stopped:       01/20/1995  
How Stopped:        Close Tank  
Source:              Unknown  
Cause:                Unknown  
Lead Agency:        Local Agency

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**RANCHO SANTA FE FIRE DEPT (Continued)**

**S100727015**

Case Type: Drinking Water Aquifer affected  
Status: Preliminary site assessment underway  
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site  
Confirm Date: / /  
Submit Workplan: Not reported  
Prelim Assess: 02/22/1995  
Desc Pollution: Not reported  
Remed Plan: / /  
Remed Action: Not reported  
Began Monitor: Not reported  
Enforce Type: Not reported  
Enforce Date: Not reported  
Closed Date: Not reported  
Pilot Program: LOP  
Local Case: H05401-002  
Basin Number: 905.11  
Gwater Depth: Not reported  
Beneficial Use: MUN  
NPDES Number: Not reported  
priority: 2  
File Dispn: Not reported  
Release Date: 01/20/1995  
Interim Remedial Actions: Yes  
Cleanup and Abatement order Number: Not reported  
Waste Discharge Requirement Number: Not reported

Cortese:  
Region: CORTESE  
Facility Addr2: 16936 EL FUEGO

San Diego Co. HMMD:  
Facility ID: 204753  
Inactive Indicator: Active  
Business Code: 6HK18  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: Not reported  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: Not reported  
Reinspection Date: Not reported  
Inspector Name: Not reported  
Violation Notice Issued: Not reported  
Facility Contact: Not reported  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported



Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**RANCHO SANTA FE FIRE DEPT (Continued)**

**S100727015**

Property Owner:                    Not reported  
Property Address:                  Not reported  
Property City,St,Zip:              Not reported  
Tank Owner:                        Not reported  
Tank Address:                      Not reported  
Tank City,St,Zip:                  Not reported  
Business Plan Acceptance Date:   Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone:                    Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number:                      Not reported  
Chemical Name:                    Not reported  
Case Number:                      Not reported  
Quantity Stored At One Time:    Not reported  
Quantity Stored at One Time:    Not reported  
Annual Quantity String:          Not reported  
Annual Quantity String:          Not reported  
Measurement Units:               Not reported  
Carcinogen:                        No  
1st Hazard Category:              Not reported  
2nd Hazard Category:              Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number:                      Not reported  
Tank ID Number:                   Not reported  
Waste or Product:                 Not reported  
Tank Contents:                    Not reported

**HMMD VIOLATIONS:**

Inspection Date:                  Not reported  
Waste Code:                       Not reported  
Type of Violation:                Not reported  
Occurrences:                       Not reported  
Item Number:                       Not reported  
Violation Desc:                    Not reported

**HMMD WASTE STREAMS:**

Inspection Date:                  Not reported  
Waste Item #:                      Not reported  
Waste Code:                       Not reported  
Waste Name:                       Not reported  
Qty at Inspection:                Not reported  
Quantity String:                  Not reported  
Annual Qty:                        Not reported  
Annual Qty String:                Not reported  
Measurement Unit:                Not reported  
Treatment Method:                Not reported  
Storage Method:                  Not reported  
Haz Waste Hauler:                Not reported  
Waste Desc:                       Not reported  
Carcinogen:                        No

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**RANCHO SANTA FE FIRE DEPT (Continued)**

EDR ID Number  
 EPA ID Number

**S100727015**

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**10  
 SW  
 1/4-1/2  
 2351 ft.**

**SANTA FE IRRIGATION DISTRICT  
 5920 LINEA DEL CIELO  
 RANCHO SANTA FE, CA 92067**

**HAZNET  
 LUST  
 Cortese  
 San Diego Co. HMMD  
 SWEEPS UST**

**S100731703  
 N/A**

**Relative:  
 Lower**

HAZNET:  
 Gepaid: CAC000955528  
 Contact: SANTA FE IRRIGATION DIST  
 Telephone: 0000000000  
 Facility Addr2: Not reported  
 Mailing Name: Not reported  
 Mailing Address: P O BOX 409  
 Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
 Gen County: San Diego  
 TSD EPA ID: IRC957100891  
 TSD County: 99  
 Waste Category: Asbestos-containing waste  
 Disposal Method: Disposal, Land Fill  
 Tons: .0842  
 Facility County: San Diego

**Actual:  
 241 ft.**

LUST:  
 Region: STATE  
 Case Type: Soil only  
 Cross Street: Not reported  
 Enf Type: NOR  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Close Tank  
 Leak Cause: Structure Failure  
 Leak Source: Tank  
 Global Id: T0607301136  
 Stop Date: 1992-10-13 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: Not reported  
 Monitoring: Not reported  
 Close Date: 2004-02-13 00:00:00  
 Discover Date: 1992-10-13 00:00:00  
 Enforcement Dt: Not reported  
 Release Date: 1992-10-13 00:00:00  
 Review Date: Not reported  
 Enter Date: Not reported  
 MTBE Date: Not reported  
 GW Qualifier: Not reported  
 Soil Qualifier: Not reported  
 Max MTBE GW ppb: Not reported  
 Max MTBE Soil ppb: Not reported  
 County: 37  
 Org Name: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**SANTA FE IRRIGATION DISTRICT (Continued)**

**S100731703**

Reg Board: San Diego Region  
Status: Case Closed  
Chemical: Gasoline  
Contact Person: Not reported  
Responsible Party: Not reported  
RP Address: Not reported  
Interim: Not reported  
Oversight Prgm: LUST  
MTBE Class: \*  
MTBE Conc: 0  
MTBE Fuel: 1  
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.  
Staff: UNA  
Staff Initials: DM  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: 904.61  
Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,COLD,WILD  
Priority: 8  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H20755-001  
Case Number: 9UT2369  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

**LUST:**

Case Number: 9UT2369  
Local Agency: 37000  
Substance: 8006619  
Qty Leaked: Not reported  
Date Found: 10/13/1992  
How Found: Tank Closure  
Date Stopped: 10/13/1992  
How Stopped: Close Tank  
Source: Tank  
Cause: Corrosion  
Lead Agency: Local Agency  
Case Type: Soil only  
Status: Case Closed  
Abate Method: No Action Taken - no action has as yet been taken at the site  
Confirm Date: 10/21/1992  
Submit Workplan: Not reported  
Prelim Assess: 10/13/1992  
Desc Pollution: Not reported  
Remed Plan: / /  
Remed Action: Not reported  
Began Monitor: Not reported  
Enforce Type: Not reported  
Enforce Date: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**SANTA FE IRRIGATION DISTRICT (Continued)**

**S100731703**

Closed Date: 10/13/92  
Pilot Program: LOP  
Local Case: H20755-001  
Basin Number: 904.61  
Gwater Depth: Not reported  
Beneficial Use: Not reported  
NPDES Number: Not reported  
priority: LOP/MODERATE - POTENTIAL HEALTH/SAFETY/ENVIRONMENTAL IMPACT  
File Dispn: File discarded, case closed  
Release Date: 10/21/1992  
Interim Remedial Actions: Yes  
Cleanup and Abatement order Number: Not reported  
Waste Discharge Requirement Number: Not reported

Cortese:

Region: CORTESE  
Facility Addr2: Not reported

San Diego Co. HMD:

Facility ID: 120755  
Inactive Indicator: Active  
Business Code: 6HK52  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: P O BOX 409  
Mailing City,St,Zip: RANCHO SANTA FE, CA 92067  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: Rancho Santa Fe  
Census Tract Number: 171  
EPA ID: CAL000004041  
Gas Station: Not reported  
Inspection Date: 12/10/04  
Reinspection Date: Not reported  
Inspector Name: MCHAIRS  
Violation Notice Issued: Not reported  
Facility Contact: CHRIS DVORAK  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: PACIFIC BELL  
Property Address: CALIFORNIA STATE ASS  
Property City,St,Zip: 00000  
Tank Owner: SANTA FE IRRIGATION DISTRICT  
Tank Address: P O BOX 409  
Tank City,St,Zip: Rancho Santa Fe, CA 92067  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: 06/10/06  
Facility Phone: 858-756-2424

HMD DISCLOSURE INVENTORY:

Item Number: AC28  
Chemical Name: ACETYLENE GAS ACETYLENE GAS

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

SANTA FE IRRIGATION DISTRICT (Continued)

EDR ID Number  
EPA ID Number

Database(s)

Site

S100731703

Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: Not reported

Item Number: AR27  
Chemical Name: ARGON GAS ARGON GAS  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: PRESSURE RELEASE  
2nd Hazard Category: Not reported

Item Number: CA26  
Chemical Name: CARBON DIOXIDE GAS CARBON DIOXIDE/ ARGON MIX  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: PRESSURE RELEASE  
2nd Hazard Category: Not reported

Item Number: GA92  
Chemical Name: GASOLINE: REPORTABLE (10,000 PDS) (500G DIESEL TANK)  
Case Number: 8006-61-9  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: FIRE  
2nd Hazard Category: ACUTE

Item Number: OX21  
Chemical Name: OXYGEN GAS OXYGEN GAS  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: PRESSURE RELEASE  
2nd Hazard Category: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANTA FE IRRIGATION DISTRICT (Continued)**

**S100731703**

**HMMD UNDERGROUND TANKS:**

Tank Number: T001  
Tank ID Number: 2  
Waste or Product: Not reported  
Tank Contents: PREMIUM UNLEADED

Tank Number: T002  
Tank ID Number: 1  
Waste or Product: Not reported  
Tank Contents: PREMIUM UNLEADED

**HMMD VIOLATIONS:**

Inspection Date: 02/16/99  
Waste Code: Not reported  
Type of Violation: 6HV0401  
Occurrences: Not reported  
Item Number: 1632  
Violation Desc: TRAINING RECORDS UNAVAILABLE

Inspection Date: 11/20/01  
Waste Code: Not reported  
Type of Violation: 6HV1009  
Occurrences: Not reported  
Item Number: 1515  
Violation Desc: HMBP: INADEQUATE SITE MAP

Inspection Date: 12/10/04  
Waste Code: Not reported  
Type of Violation: 6HV0202  
Occurrences: Not reported  
Item Number: 7012  
Violation Desc: WASTE CONTAINER W/O LABELS

Inspection Date: 12/10/04  
Waste Code: Not reported  
Type of Violation: 6HV0402  
Occurrences: Not reported  
Item Number: 7013  
Violation Desc: TRAINING PROGRAM NOT ADEQUATE

**HMMD WASTE STREAMS:**

Inspection Date: 12/10/04  
Waste Item #: 213  
Waste Code: 213  
Waste Name: HYDROCARBON SOLVENTS  
Qty at Inspection: 14  
Quantity String: 14  
Annual Qty: 50  
Annual Qty String: 50  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: PROCESSING EQUIPMENT  
Haz Waste Hauler: 1406 SAFETY-KLEEN  
Waste Desc: PARTS CLEANER (2)  
Carcinogen: No

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**SANTA FE IRRIGATION DISTRICT (Continued)**

**S100731703**

Inspection Date: 12/10/04  
Waste Item #: 221  
Waste Code: 221  
Waste Name: WASTE OIL & MIXED OI  
Qty at Inspection: 100  
Quantity String: 100  
Annual Qty: 200  
Annual Qty String: 200  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: ABVG TNK  
Haz Waste Hauler: 0015 ASBURY ENVIR. SERVIC  
Waste Desc: WASTE OIL  
Carcinogen: No

Inspection Date: 12/10/04  
Waste Item #: 342  
Waste Code: 342  
Waste Name: ORGANIC LIQUIDS W/ME  
Qty at Inspection: 36  
Quantity String: 36  
Annual Qty: 50  
Annual Qty String: 50  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: METAL DRUM  
Haz Waste Hauler: 1406 SAFETY-KLEEN  
Waste Desc: ETHYLENE GYCOL  
Carcinogen: No

Inspection Date: 12/10/04  
Waste Item #: 461  
Waste Code: 461  
Waste Name: PAINT SLUDGE  
Qty at Inspection: 50  
Quantity String: 50  
Annual Qty: 50  
Annual Qty String: 50  
Measurement Unit: GAL  
Treatment Method: 001 RECYCLE  
Storage Method: METAL DRUM  
Haz Waste Hauler: 0015 ASBURY ENVIRONMENTAL  
Waste Desc: WASTE PAINT  
Carcinogen: No

Inspection Date: 12/10/04  
Waste Item #: 888  
Waste Code: 888  
Waste Name: USED OIL FILTERS  
Qty at Inspection: 200  
Quantity String: 200  
Annual Qty: 200  
Annual Qty String: 200  
Measurement Unit: LBS  
Treatment Method: 888 FILTERS/METAL RE  
Storage Method: METAL DRUM  
Haz Waste Hauler: 0015 ASBURY ENVIR. SERVIC

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**SANTA FE IRRIGATION DISTRICT (Continued)**

**S100731703**

Waste Desc: OIL FILTERS  
Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**SWEEPS UST:**

Status: A  
Comp Number: 6562  
Number: 9  
Board Of Equalization: 44-001027  
Ref Date: Not reported  
Act Date: 06-26-92  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: Not reported  
Swrcb Tank Id: 37-000-006562-000001  
Actv Date: Not reported  
Capacity: 2000  
Tank Use: M.V. FUEL  
Stg: P  
Content: OTHER  
Number Of Tanks: 1

Status: A  
Comp Number: 20755  
Number: 9  
Board Of Equalization: 44-023312  
Ref Date: Not reported  
Act Date: 06-26-92  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: Not reported  
Swrcb Tank Id: 37-000-020755-000001  
Actv Date: Not reported  
Capacity: 550  
Tank Use: M.V. FUEL  
Stg: P  
Content: LEADED  
Number Of Tanks: 2

Status: A  
Comp Number: 20755  
Number: 9  
Board Of Equalization: 44-023312  
Ref Date: Not reported  
Act Date: 06-26-92  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: Not reported  
Swrcb Tank Id: 37-000-020755-000002  
Actv Date: Not reported  
Capacity: 550  
Tank Use: M.V. FUEL  
Stg: P  
Content: LEADED



Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**SANTA FE IRRIGATION DISTRICT (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

Number Of Tanks: Not reported

**S100731703**

**11**  
**SSW**  
**1/4-1/2**  
**2495 ft.**

**ROBERT C. GUNNESS (HOME)**  
**16721 LA GRACIA**  
**RANCHO SANTA FE, CA 92067**

**HAZNET**  
**LUST**  
**San Diego Co. HMMD**

**S103984939**  
**N/A**

**Relative:**  
**Lower**

**HAZNET:**

Gepaid: CAC001377208  
 Contact: ROBERT GUNNESS  
 Telephone: 6197563577  
 Facility Addr2: Not reported  
 Mailing Name: Not reported  
 Mailing Address: PO BOX 538  
 Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
 Gen County: San Diego  
 TSD EPA ID: CAT080025711  
 TSD County: San Bernardino  
 Waste Category: Aqueous solution with less than 10% total organic residues  
 Disposal Method: Not reported  
 Tons: 1.6680  
 Facility County: San Diego

**Actual:**  
**190 ft.**

Gepaid: CAC001377208  
 Contact: ROBERT GUNNESS  
 Telephone: 6197563577  
 Facility Addr2: Not reported  
 Mailing Name: Not reported  
 Mailing Address: PO BOX 538  
 Mailing City,St,Zip: RANCHO SANTA FE, CA 920670000  
 Gen County: San Diego  
 TSD EPA ID: CAT080013352  
 TSD County: Los Angeles  
 Waste Category: Aqueous solution with less than 10% total organic residues  
 Disposal Method: Recycler  
 Tons: 1.6680  
 Facility County: San Diego

**LUST:**

Region: STATE  
 Case Type: Soil only  
 Cross Street: Not reported  
 Enf Type: Not reported  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Global Id: T0608163570  
 Stop Date: Not reported  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: Not reported  
 Monitoring: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**ROBERT C. GUNNESS (HOME) (Continued)**

**S103984939**

Close Date: 1998-12-31 00:00:00  
Discover Date: Not reported  
Enforcement Dt: Not reported  
Release Date: 1998-10-20 00:00:00  
Review Date: Not reported  
Enter Date: Not reported  
MTBE Date: Not reported  
GW Qualifier: Not reported  
Soil Qualifier: Not reported  
Max MTBE GW ppb: Not reported  
Max MTBE Soil ppb: Not reported  
County: 37  
Org Name: Not reported  
Reg Board: San Diego Region  
Status: Case Closed  
Chemical: 9  
Contact Person: Not reported  
Responsible Party: ROBERT GUNNESS  
RP Address: 807 MORNINGSIDE DR  
Interim: Not reported  
Oversight Prgm: LUST  
MTBE Class: \*  
MTBE Conc: 0  
MTBE Fuel: 0  
MTBE Tested: Not Required to be Tested.  
Staff: UNA  
Staff Initials: JS  
Lead Agency: Local Agency  
Local Agency: 37000L  
Hydr Basin #: Not reported  
Beneficial: Not reported  
Priority: 7  
Cleanup Fund Id: Not reported  
Work Suspended: Not reported  
Local Case #: H37893-001  
Case Number: Not reported  
Qty Leaked: Not reported  
Abate Method: Not reported  
Operator: Not reported  
Water System Name: Not reported  
Well Name: Not reported  
Distance To Lust: 0  
Waste Discharge Global ID: Not reported  
Waste Disch Assigned Name: Not reported  
Summary: Not reported

**San Diego Co. HMMD:**

Facility ID: 137893  
Inactive Indicator: Active  
Business Code: 6HK20  
SIC: Not reported  
Permit Expiration: Not reported  
Owner: Not reported  
2nd Name: Not reported  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Map Code/Business Plan on File: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**ROBERT C. GUNNESS (HOME) (Continued)**

**S103984939**

Corporate Code:                    Not reported  
Fire Dept District:                San Diego  
Census Tract Number:             171  
EPA ID:                                Not reported  
Gas Station:                         Not reported  
Inspection Date:                    Not reported  
Reinspection Date:                 Not reported  
Inspector Name:                     Not reported  
Violation Notice Issued:         Not reported  
Facility Contact:                  Not reported  
Delinquent Flag:                    Not Delinquent  
Last Update:                         05/10/05  
Last Delinquent Letter:          Not reported  
Delinquent Comment:              Not reported  
Last Letter Type:                  Not reported  
Property Owner:                    MILLER SUSAN B  
Property Address:                  P O BOX 366  
Property City,St,Zip:             92067  
Tank Owner:                         Not reported  
Tank Address:                        Not reported  
Tank City,St,Zip:                  Not reported  
Business Plan Acceptance Date:  Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone:                     Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number:                        Not reported  
Chemical Name:                     Not reported  
Case Number:                        Not reported  
Quantity Stored At One Time:     Not reported  
Quantity Stored at One Time:     Not reported  
Annual Quantity String:            Not reported  
Annual Quantity String:            Not reported  
Measurement Units:                Not reported  
Carcinogen:                         No  
1st Hazard Category:                Not reported  
2nd Hazard Category:                Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number:                        Not reported  
Tank ID Number:                     Not reported  
Waste or Product:                  Not reported  
Tank Contents:                        Not reported

**HMMD VIOLATIONS:**

Inspection Date:                    Not reported  
Waste Code:                         Not reported  
Type of Violation:                  Not reported  
Occurrences:                         Not reported  
Item Number:                        Not reported  
Violation Desc:                      Not reported

**HMMD WASTE STREAMS:**

Inspection Date:                    Not reported  
Waste Item #:                        Not reported  
Waste Code:                         Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**ROBERT C. GUNNESS (HOME) (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

**S103984939**

Waste Name: Not reported  
Qty at Inspection: Not reported  
Quantity String: Not reported  
Annual Qty: Not reported  
Annual Qty String: Not reported  
Measurement Unit: Not reported  
Treatment Method: Not reported  
Storage Method: Not reported  
Haz Waste Hauler: Not reported  
Waste Desc: Not reported  
Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RANCHO SANTA FE	S106062714	DEL DIOS RANCH	7202 DEL DIOS HWY	92067	San Diego Co. HMMMD, SWEEPS UST
RANCHO SANTA FE	S106153068	RANCHO SANTA FE MIDDLE SCHOOL	EL ESCONDIDO DEL DIOS HIGHWAY	92067	SCH, ENVIROSTOR
RANCHO SANTA FE	U001572163	JAMES BASHER	LA VALLE PLATEADA	92067	HIST UST
RANCHO SANTA FE	92262174	14878 VEA LA VALLE	14878 VEA LA VALLE	92067	ERNS
RANCHO SANTA FE	S104749570	KENALBEE FARM	16232 VIA DELA VALLE	92067	San Diego Co. HMMMD, SWEEPS UST
RANCHO SANTA FE	S106934438	WHISPERING PALMS COUNTRY CLUB	VIA DE SANTA FE (END	92067	SWEEPS UST
RANCHO SANTA FE	U001604623	RANCH	VIA DE LA VALLE	92067	HIST UST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **FEDERAL RECORDS**

### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### **Proposed NPL: Proposed National Priority List Sites**

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NPL RECOVERY:** Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 11/17/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## **CERCLIS:** Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/09/2006	Source: EPA
Date Data Arrived at EDR: 09/21/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/21/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/10/2006	Source: EPA
Date Data Arrived at EDR: 10/25/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Quarterly

## **RCRA:** Resource Conservation and Recovery Act Information

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: 800-424-9346
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 11/22/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **ERNS:** Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 10/24/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Annually

### **HMIRS:** Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 08/01/2006	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 10/18/2006	Telephone: 202-366-4555
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

### **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

### **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**DOD:** Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

**FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Varies

**US BROWNFIELDS:** A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients--States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/10/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/13/2006	Telephone: 202-566-2777
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Semi-Annually

**CONSENT:** Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

**ROD:** Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/10/2006	Source: EPA
Date Data Arrived at EDR: 07/21/2006	Telephone: 703-416-0223
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 47	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Varies

## **ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **TRIS:** Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 09/22/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Annually

## **TSCA:** Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Every 4 Years

## **FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 10/19/2006	Source: EPA
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SSTS:** Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 11/07/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Quarterly

## **PADS:** PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/07/2006	Source: EPA
Date Data Arrived at EDR: 08/09/2006	Telephone: 202-566-0500
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 11/10/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **MLTS:** Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/10/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/20/2006	Telephone: 301-415-7169
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 09/27/2006	Telephone: 303-231-5959
Date Made Active in Reports: 11/27/2006	Last EDR Contact: 09/27/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Semi-Annually

## **FINDS:** Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/21/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 09/06/2006  
Number of Days to Update: 43

Source: EPA  
Telephone: N/A  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

## **RAATS:** RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003  
Date Data Arrived at EDR: 06/17/2005  
Date Made Active in Reports: 08/04/2005  
Number of Days to Update: 48

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Biennially

## **STATE AND LOCAL RECORDS**

### **HIST CAL-SITES:** Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: No Update Planned

### **CA BOND EXP. PLAN:** Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SCH:** School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/29/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 36

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **TOXIC PITS:** Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: No Update Planned

## **SWF/LF (SWIS):** Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/13/2006  
Date Data Arrived at EDR: 09/13/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 22

Source: Integrated Waste Management Board  
Telephone: 916-341-6320  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

## **CA WDS:** Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 09/20/2006  
Date Data Arrived at EDR: 09/21/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 34

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 09/21/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Quarterly

## **WMUDS/SWAT:** Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## **CORTESE:** "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 05/29/2001  
Date Made Active in Reports: 07/26/2001  
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: No Update Planned

## **SWRCY:** Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 10/10/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **LUST:** Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/11/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5752
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## **LUST REG 5:** Leaking Underground Storage Tank Database

Date of Government Version: 07/01/2006	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/26/2006	Telephone: 916-464-3291
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 10/25/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## **LUST REG 6V:** Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-346-7491
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: No Update Planned

## **LUST REG 8:** Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 951-782-4130
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 11/07/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Varies

## **LUST REG 9:** Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-467-2980
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 10/17/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## **LUST REG 7:** Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-346-7491
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 11/16/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## **LUST REG 6L:** Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 916-542-5424
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: No Update Planned

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 10/11/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: State Water Resources Control Board  
Telephone: 916-341-5752  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 2:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## **SLIC REG 3:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 4:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Varies

## **SLIC REG 5:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6V:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6L:** SLIC Sites

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **SLIC REG 7:** SLIC List

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 8:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 04/06/2006	Source: California Region Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 04/06/2006	Telephone: 951-782-3298
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **SLIC REG 9:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 08/30/2006	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 08/31/2006	Telephone: 858-467-2980
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 11/27/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/26/2007
	Data Release Frequency: Annually

## **UST:** Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 10/11/2006	Source: SWRCB
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5851
Date Made Active in Reports: 11/13/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## **HIST UST:** Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **AST:** Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 01/30/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/30/2006	Telephone: 916-341-5712
Date Made Active in Reports: 02/17/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

## **SWEEPS UST:** SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **CHMIRS:** California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004	Source: Office of Emergency Services
Date Data Arrived at EDR: 11/30/2005	Telephone: 916-845-8400
Date Made Active in Reports: 01/19/2006	Last EDR Contact: 11/20/2006
Number of Days to Update: 50	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NOTIFY 65:** Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 10/16/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## **DEED:** Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 10/04/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/05/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **VCP:** Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 04/18/2005	Telephone: 916-327-4498
Date Made Active in Reports: 05/06/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

## **WIP:** Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/25/2006	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/26/2006	Telephone: 213-576-6726
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **CDL:** Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 05/17/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/17/2006	Telephone: 916-255-6504
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

## **RESPONSE:** State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **HAZNET:** Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2003	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/11/2005	Telephone: 916-255-1136
Date Made Active in Reports: 10/31/2005	Last EDR Contact: 11/20/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2004	Source: California Air Resources Board
Date Data Arrived at EDR: 04/14/2006	Telephone: 916-322-2990
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/20/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Varies

## **ENVIROSTOR:** EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## TRIBAL RECORDS

### **INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 202-208-3710
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

### **INDIAN LUST R1:** Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/07/2006	Source: EPA Region 1
Date Data Arrived at EDR: 09/08/2006	Telephone: 617-918-1313
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R10:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/06/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3372
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R8:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6271
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R7:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R6:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005	Source: EPA Region 6
Date Data Arrived at EDR: 01/21/2005	Telephone: 214-665-6597
Date Made Active in Reports: 02/28/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-8677
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R4:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-9424
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R9:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 9
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3368
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R7:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R8:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6137
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R5:** Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R10:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R1:** Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/07/2006  
Date Data Arrived at EDR: 09/08/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 61

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## **INDIAN UST R6:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Semi-Annually

## **EDR PROPRIETARY RECORDS**

### **Manufactured Gas Plants:** EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **EDR Historical Auto Stations:** EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### **EDR Historical Cleaners:** EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/10/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 14

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Date of Government Version: 10/26/2006  
Date Data Arrived at EDR: 10/27/2006  
Date Made Active in Reports: 11/13/2006  
Number of Days to Update: 17

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

### CONTRA COSTA COUNTY:

#### Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: Semi-Annually

### FRESNO COUNTY:

#### CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2006  
Date Data Arrived at EDR: 07/12/2006  
Date Made Active in Reports: 07/27/2006  
Number of Days to Update: 15

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/05/2007  
Data Release Frequency: Semi-Annually

### KERN COUNTY:

#### Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 13

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### LOS ANGELES COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 07/07/1999  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 05/31/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 30

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 11/15/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Date of Government Version: 03/01/2006  
Date Data Arrived at EDR: 04/06/2006  
Date Made Active in Reports: 05/11/2006  
Number of Days to Update: 35

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/05/2006  
Date Data Arrived at EDR: 02/16/2006  
Date Made Active in Reports: 03/13/2006  
Number of Days to Update: 25

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Date of Government Version: 09/11/2006  
Date Data Arrived at EDR: 09/22/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 45

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/2003  
Date Data Arrived at EDR: 10/23/2003  
Date Made Active in Reports: 11/26/2003  
Number of Days to Update: 34

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 11/21/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/17/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 32

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 20

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Semi-Annually

## NAPA COUNTY:

### Sites With Reported Contamination

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 16

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Semi-Annually

### Closed and Operating Underground Storage Tank Sites

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 28

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Annually

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/18/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 37

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/30/2006  
Date Data Arrived at EDR: 08/31/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 35

Source: Placer County Health and Human Services  
Telephone: 530-889-7312  
Last EDR Contact: 08/14/2006  
Next Scheduled EDR Contact: 12/19/2006  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/08/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 16

Source: Department of Public Health  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/08/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 41

Source: Health Services Agency  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Contaminated Sites

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/18/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 48

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

### ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/26/2006  
Date Data Arrived at EDR: 10/17/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 8

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005  
Date Data Arrived at EDR: 05/18/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 29

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2005  
Date Data Arrived at EDR: 12/29/2005  
Date Made Active in Reports: 01/19/2006  
Number of Days to Update: 21

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 07/25/2006	Source: Environmental Health Department
Date Data Arrived at EDR: 08/10/2006	Telephone: N/A
Date Made Active in Reports: 09/18/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 39	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 08/25/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 08/25/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Annually

### Fuel Leak List

Date of Government Version: 10/10/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 10/11/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## SANTA CLARA COUNTY:

### HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005	Source: Santa Clara Valley Water District
Date Data Arrived at EDR: 03/30/2005	Telephone: 408-265-2600
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/25/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: No Update Planned

### LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 09/29/2006	Source: Department of Environmental Health
Date Data Arrived at EDR: 10/02/2006	Telephone: 408-918-3417
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/25/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Varies

### Hazardous Material Facilities

Date of Government Version: 09/07/2006	Source: City of San Jose Fire Department
Date Data Arrived at EDR: 09/08/2006	Telephone: 408-277-4659
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Annually

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tanks

Date of Government Version: 07/05/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 30

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## Underground Storage Tanks

Date of Government Version: 07/03/2006  
Date Data Arrived at EDR: 07/26/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 29

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Leaking Underground Storage Tank Sites

Date of Government Version: 07/24/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 30

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Date of Government Version: 12/31/0005  
Date Data Arrived at EDR: 01/05/2006  
Date Made Active in Reports: 01/31/2006  
Number of Days to Update: 26

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 10/27/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 09/26/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 29

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 09/22/2006	Telephone: 805-654-2813
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/13/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Quarterly

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 07/27/2006	Telephone: 805-654-2813
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 07/19/2006	Source: Yolo County Department of Health
Date Data Arrived at EDR: 08/01/2006	Telephone: 530-666-8646
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### **CT MANIFEST:** Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/17/2006	Telephone: 860-424-3375
Date Made Active in Reports: 04/07/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Annually

### **NJ MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/01/2006	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/06/2006	Telephone: N/A
Date Made Active in Reports: 08/01/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

### **NY MANIFEST:** Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/16/2006  
Number of Days to Update: 47

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Annually

## **PA MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 06/06/2006  
Number of Days to Update: 81

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Annually

## **RI MANIFEST:** Manifest information

Hazardous waste manifest information

Date of Government Version: 09/30/2005  
Date Data Arrived at EDR: 05/09/2006  
Date Made Active in Reports: 05/24/2006  
Number of Days to Update: 15

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Annually

## **WI MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 05/02/2006  
Number of Days to Update: 46

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

## **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## **AHA Hospitals:**

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## **Nursing Homes**

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

## **Daycare Centers: Licensed Facilities**

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

VILLA DE LA VALLE  
VILLA DE LA VALLE AND PASEO DELICIAS  
RANCHO SANTA FE, CA 92067

### **TARGET PROPERTY COORDINATES**

Latitude (North):	33.02310 - 33° 1' 23.2"
Longitude (West):	117.1991 - 117° 11' 56.7"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	481405.3
UTM Y (Meters):	3653674.2
Elevation:	254 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	33117-A2 RANCHO SANTA FE, CA
Most Recent Revision:	1983

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

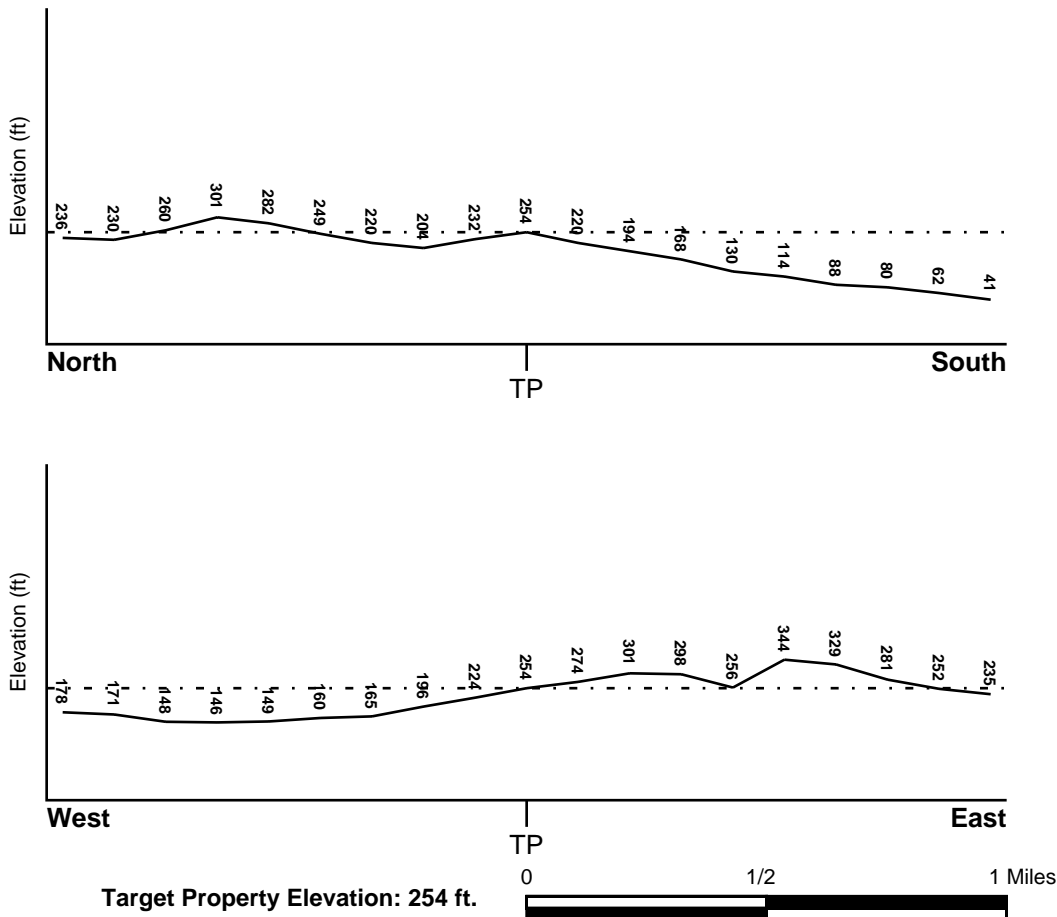
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
SAN DIEGO, CA	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
RANCHO SANTA FE	Not Available

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Tertiary  
Series: Eocene  
Code: Te *(decoded above as Era, System & Series)*

### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ANTIOCH

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained. Soils have a layer of low hydraulic conductivity, wet state high in the profile. Depth to water table is 3 to 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	19 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10
2	19 inches	60 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 5.60
3	60 inches	81 inches	stratified	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loamy fine sand  
fine sandy loam  
clay loam  
loamy sand  
clay  
cobble - loam  
sandy loam

Surficial Soil Types: loamy fine sand  
fine sandy loam  
clay loam  
loamy sand  
clay  
cobble - loam  
sandy loam

Shallow Soil Types: loamy fine sand  
silty clay  
very cobble - clay

Deeper Soil Types: weathered bedrock  
unweathered bedrock  
cobble - loam  
indurated

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

very fine sandy loam

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

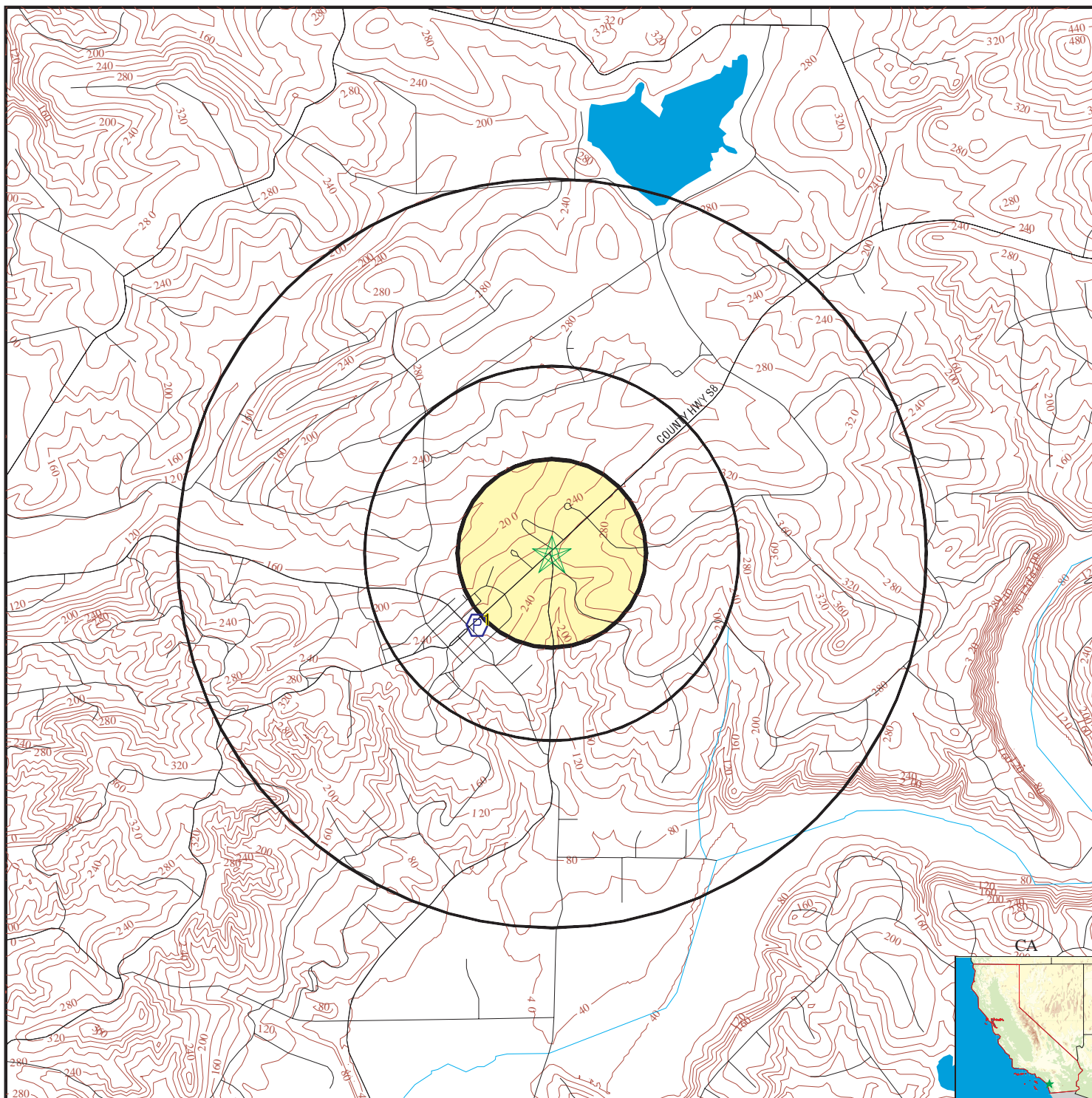
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CA3301683	1/4 - 1/2 Mile SW

Note: PWS System location is not always the same as well location.

## **STATE DATABASE WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

# PHYSICAL SETTING SOURCE MAP - 1804495.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Villa De La Valle  
 ADDRESS: Villa De La Valle and Paseo Delicias  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0231 / 117.1991

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804495.2s  
 DATE: November 27, 2006 8:23 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

<b>1</b>		
<b>SW</b>	<b>FRDS PWS</b>	<b>CA3301683</b>
<b>1/4 - 1/2 Mile</b>		
<b>Lower</b>		

PWS ID: CA3301683      PWS Status: Active  
 Date Initiated: 7706      Date Deactivated: Not Reported  
 PWS Name: CARRIAGE PLACE TRAVEL  
 CARRIAGE PLACE TRAVEL  
 77500 INTERSTATE  
 INDIO, CA 92201

Addressee / Facility: System Owner/Responsible Party  
 CARRIAGE PLACE TRAVEL  
 PO DRAWER 7  
 RANCHO SANTA FE, CA 92067

Facility Latitude: 33 01 13      Facility Longitude: 117 12 06  
 City Served: Not Reported  
 Treatment Class: Untreated      Population: 00000465

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

**ENFORCEMENT INFORMATION:**

System Name: THOUSAND TRAILS - PALM SPRINGS PRVE  
 Violation Type: Monitoring, Routine Major (TCR)  
 Contaminant: COLIFORM (TCR)  
 Compliance Period: 10/1/2000 0:00:00 - 12/31/2000 0:00:00  
 Violation ID: 0000002  
 Enforcement Date: 1/12/2001 0:00:00      Enf. Action: State Compliance Achieved

System Name: THOUSAND TRAILS - PALM SPRINGS PRVE  
 Violation Type: Monitoring, Routine Major (TCR)  
 Contaminant: COLIFORM (TCR)  
 Compliance Period: 7/1/2001 0:00:00 - 9/30/2001 0:00:00  
 Violation ID: 0200001  
 Enforcement Date: 10/17/2001 0:00:00      Enf. Action: State Admin Penalty Assessed

**CONTACT INFORMATION:**

Name: THOUSAND TRAILS - PALM SPRINGS PRVE      Violation: 125  
 Contact: Gary Root      Phone: 9093585316  
 Address: P.O. Box 7600  
 Address 2: 4065 County Circle Dr.  
 Riverside, CA 92513



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
92067	4	0	0.00

Federal EPA Radon Zone for SAN DIEGO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### **PWS:** Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF:** Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells:** USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### **California Drinking Water Quality Database**

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### **California Oil and Gas Well Locations**

Source: Department of Conservation

Telephone: 916-323-1779

### RADON

#### **State Database: CA Radon**

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### **Area Radon Information**

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

**California Earthquake Fault Lines:** The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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**EDR**® Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**Montevideo  
Paseo Delicias and Montevideo  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804497.2s**

**November 28, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

PASEO DELICIAS AND MONTEVIDEO  
RANCHO SANTA FE, CA 92067

#### COORDINATES

Latitude (North): 33.030200 - 33° 1' 48.7"  
Longitude (West): 117.191000 - 117° 11' 27.6"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 482163.2  
UTM Y (Meters): 3654460.0  
Elevation: 284 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 33117-A2 RANCHO SANTA FE, CA  
Most Recent Revision: 1983

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### FEDERAL RECORDS

**NPL**..... National Priority List  
**Proposed NPL**..... Proposed National Priority List Sites  
**Delisted NPL**..... National Priority List Deletions  
**NPL RECOVERY**..... Federal Superfund Liens  
**CERCLIS**..... Comprehensive Environmental Response, Compensation, and Liability Information System  
**CERC-NFRAP**..... CERCLIS No Further Remedial Action Planned  
**CORRACTS**..... Corrective Action Report  
**RCRA-TSDF**..... Resource Conservation and Recovery Act Information  
**RCRA-LQG**..... Resource Conservation and Recovery Act Information

## EXECUTIVE SUMMARY

<b>RCRA-SQG</b>	Resource Conservation and Recovery Act Information
<b>ERNS</b>	Emergency Response Notification System
<b>HMIRS</b>	Hazardous Materials Information Reporting System
<b>US ENG CONTROLS</b>	Engineering Controls Sites List
<b>US INST CONTROL</b>	Sites with Institutional Controls
<b>DOD</b>	Department of Defense Sites
<b>FUDS</b>	Formerly Used Defense Sites
<b>US BROWNFIELDS</b>	A Listing of Brownfields Sites
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>ROD</b>	Records Of Decision
<b>UMTRA</b>	Uranium Mill Tailings Sites
<b>ODI</b>	Open Dump Inventory
<b>TRIS</b>	Toxic Chemical Release Inventory System
<b>TSCA</b>	Toxic Substances Control Act
<b>FTTS</b>	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b>	Section 7 Tracking Systems
<b>ICIS</b>	Integrated Compliance Information System
<b>PADS</b>	PCB Activity Database System
<b>MLTS</b>	Material Licensing Tracking System
<b>MINES</b>	Mines Master Index File
<b>FINDS</b>	Facility Index System/Facility Registry System
<b>RAATS</b>	RCRA Administrative Action Tracking System

### STATE AND LOCAL RECORDS

<b>HIST Cal-Sites</b>	Historical Calsites Database
<b>CA BOND EXP. PLAN</b>	Bond Expenditure Plan
<b>SCH</b>	School Property Evaluation Program
<b>Toxic Pits</b>	Toxic Pits Cleanup Act Sites
<b>SWF/LF</b>	Solid Waste Information System
<b>CA WDS</b>	Waste Discharge System
<b>WMUDS/SWAT</b>	Waste Management Unit Database
<b>Cortese</b>	"Cortese" Hazardous Waste & Substances Sites List
<b>SWRCY</b>	Recycler Database
<b>CA FID UST</b>	Facility Inventory Database
<b>SLIC</b>	Statewide SLIC Cases
<b>UST</b>	Active UST Facilities
<b>HIST UST</b>	Hazardous Substance Storage Container Database
<b>AST</b>	Aboveground Petroleum Storage Tank Facilities
<b>SWEEPS UST</b>	SWEEPS UST Listing
<b>CHMIRS</b>	California Hazardous Material Incident Report System
<b>Notify 65</b>	Proposition 65 Records
<b>DEED</b>	Deed Restriction Listing
<b>VCP</b>	Voluntary Cleanup Program Properties
<b>CLEANERS</b>	Cleaner Facilities
<b>WIP</b>	Well Investigation Program Case List
<b>CDL</b>	Clandestine Drug Labs
<b>San Diego Co. HMMD</b>	Hazardous Materials Management Division Database
<b>RESPONSE</b>	State Response Sites
<b>HAZNET</b>	Facility and Manifest Data
<b>EMI</b>	Emissions Inventory Data
<b>ENVIROSTOR</b>	EnviroStor Database

### TRIBAL RECORDS

<b>INDIAN RESERV</b>	Indian Reservations
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## EXECUTIVE SUMMARY

**INDIAN LUST**..... Leaking Underground Storage Tanks on Indian Land  
**INDIAN UST**..... Underground Storage Tanks on Indian Land

### EDR PROPRIETARY RECORDS

**Manufactured Gas Plants**... EDR Proprietary Manufactured Gas Plants  
**EDR Historical Auto Stations**EDR Proprietary Historic Gas Stations  
**EDR Historical Cleaners**..... EDR Proprietary Historic Dry Cleaners

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STATE AND LOCAL RECORDS

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 10/11/2006 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

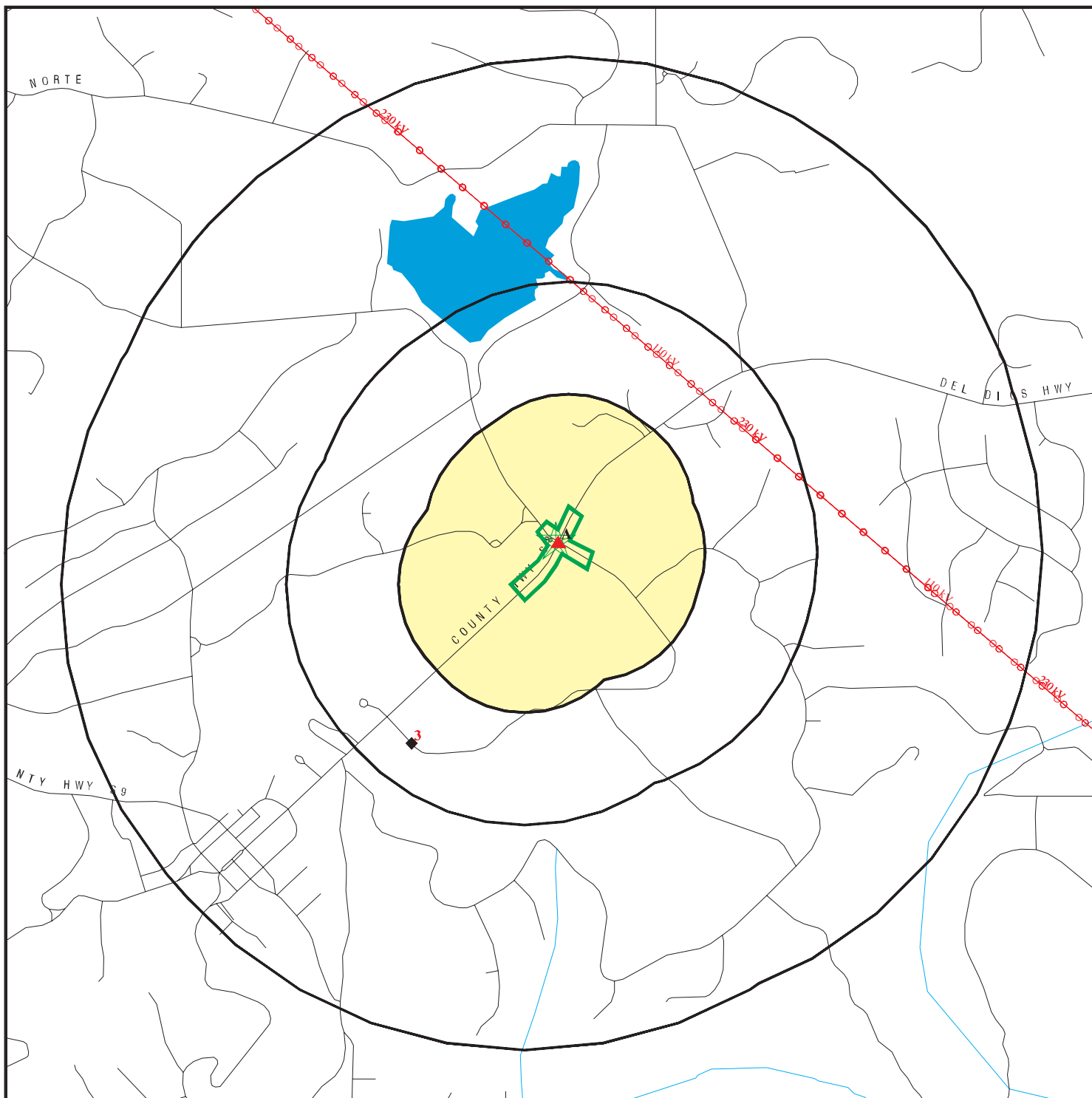
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b><i>BINGHAM TRUST PROPERTY</i></b> Facility Status: Case Closed	<b><i>6427 LA VALLE PLATEADA</i></b>	<b><i>1/4 - 1/2 SW</i></b>	<b><i>3</i></b>	<b><i>9</i></b>



## EXECUTIVE SUMMARY





Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
DEL DIOS RANCH	San Diego Co. HMMD, SWEEPS UST
KENALBEE FARM	San Diego Co. HMMD, SWEEPS UST
COUNTY OF SD-SANTA FE VALLEY PROPERTY JAMES BASHER RANCH	LUST HIST UST HIST UST
RANCHO SANTA FE MIDDLE SCHOOL	SCH, ENVIROSTOR

# OVERVIEW MAP - 1804497.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Oil & Gas pipelines
-  Areas of Concern

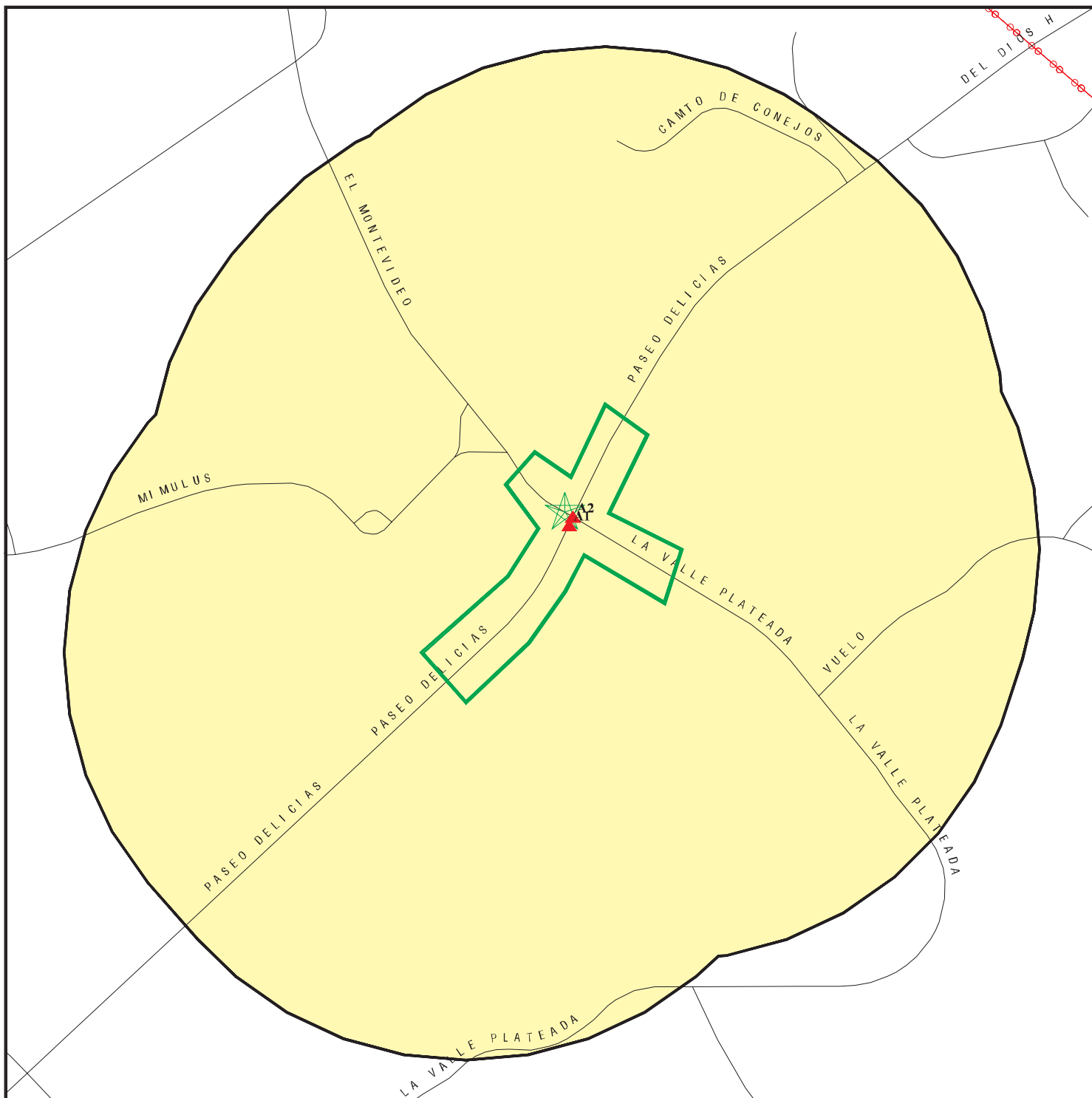









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

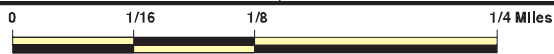
SITE NAME: Montevideo  
 ADDRESS: Paseo Delicias and Montevideo  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0302 / 117.1910

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804497.2s  
 DATE: November 28, 2006 9:40 am

# DETAIL MAP - 1804497.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Power transmission lines
-  Oil & Gas pipelines
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Montevideo  
 ADDRESS: Paseo Delicias and Montevideo  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0302 / 117.1910

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804497.2s  
 DATE: November 28, 2006 9:41 am

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
Hist Cal-Sites		1.000	0	0	0	0	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
Cortese		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	1	NR	NR	1
CA FID UST		0.250	0	0	NR	NR	NR	0
SLIC		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
Notify 65		1.000	0	0	0	0	NR	0
DEED		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP		NR	NR	NR	NR	NR	0
RESPONSE		1.000	0	0	0	0	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENVIROSTOR		1.000	0	0	0	0	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1** **DEL DIOS PUMP STATION** **San Diego Co. HMMD** **S104752384**  
**6895 PASEO DELICIAS**  
**< 1/8** **RANCHO SANTA FE, CA 92067** **N/A**  
**1 ft.**

**Relative:**  
**Higher**

**Site 1 of 2 in cluster A**

San Diego Co. HMMD:

**Actual:**  
**285 ft.**

Facility ID:	129958
Inactive Indicator:	Active
Business Code:	6HK18
SIC:	Not reported
Permit Expiration:	Not reported
Owner:	Not reported
2nd Name:	DUDEZ AND ASSOC.
Mailing Address:	605 THIRD ST
Mailing City,St,Zip:	ENCINITAS, CA 92024
Map Code/Business Plan on File:	Not reported
Corporate Code:	Not reported
Fire Dept District:	Not reported
Census Tract Number:	Not reported
EPA ID:	Not reported
Gas Station:	Not reported
Inspection Date:	07/30/92
Reinspection Date:	Not reported
Inspector Name:	LEGACY
Violation Notice Issued:	Not reported
Facility Contact:	EDDY EDROZO
Delinquent Flag:	Not Delinquent
Last Update:	05/10/05
Last Delinquent Letter:	Not reported
Delinquent Comment:	Not reported
Last Letter Type:	Not reported
Property Owner:	Not reported
Property Address:	Not reported
Property City,St,Zip:	Not reported
Tank Owner:	Not reported
Tank Address:	Not reported
Tank City,St,Zip:	Not reported
Business Plan Acceptance Date:	Not reported
Reinspection Date Y2K Compatible:	Not reported
Facility Phone:	858-756-4909

**HMMD DISCLOSURE INVENTORY:**

Item Number:	Not reported
Chemical Name:	Not reported
Case Number:	Not reported
Quantity Stored At One Time:	Not reported
Quantity Stored at One Time:	Not reported
Annual Quantity String:	Not reported
Annual Quantity String:	Not reported
Measurement Units:	Not reported
Carcinogen:	No
1st Hazard Category:	Not reported
2nd Hazard Category:	Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number:	Not reported
Tank ID Number:	Not reported
Waste or Product:	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**DEL DIOS PUMP STATION (Continued)**

**S104752384**

Tank Contents: Not reported

**HMMD VIOLATIONS:**

Inspection Date: Not reported  
 Waste Code: Not reported  
 Type of Violation: Not reported  
 Occurrences: Not reported  
 Item Number: Not reported  
 Violation Desc: Not reported

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
 Waste Item #: Not reported  
 Waste Code: Not reported  
 Waste Name: Not reported  
 Qnty at Inspection: Not reported  
 Quantity String: Not reported  
 Annual Qty: Not reported  
 Annual Qty String: Not reported  
 Measurement Unit: Not reported  
 Treatment Method: Not reported  
 Storage Method: Not reported  
 Haz Waste Hauler: Not reported  
 Waste Desc: Not reported  
 Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

**A2**

**CHMIRS S100279465  
 N/A**

**< 1/8  
 1 ft.**

**PASEO DELICIAS W/EL MONTEVIDEO  
 UNINC, CA**

**Site 2 of 2 in cluster A**

**Relative:  
 Higher**

**CHMIRS:**

**Actual:  
 285 ft.**

OES Incident Number: 8910078  
 OES notification: Not reported  
 OES Date: Not reported  
 OES Time: Not reported  
 Incident Date: 01-FEB-89  
**Date Completed: 01-FEB-89**  
 Property Use: 962  
 Agency Id Number: 66040  
 Agency Incident Number: 99999  
 Time Notified: 925  
 Time Completed: 1025  
 Surrounding Area: Not reported  
 Estimated Temperature: Not reported  
 Property Management: Not reported  
 Special Studies 1: Not reported  
 Special Studies 2: Not reported  
 Special Studies 3: Not reported  
 Special Studies 4: Not reported  
 Special Studies 5: Not reported  
 Special Studies 6: Not reported



Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

(Continued)

S100279465

More Than Two Substances Involved?: N  
Resp Agency Personel # Of Decontaminated: 0  
Responding Agency Personel # Of Injuries: 0  
Responding Agency Personel # Of Fatalities:0  
Others Number Of Decontaminated: 0  
Others Number Of Injuries: 0  
Others Number Of Fatalities: 0  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA/DOT/PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: L. ACEVEDO #8721  
Report Date: 15-MAR-89  
Comments: Not reported  
Facility Telephone: 916 445-1865  
Waterway Involved: Not reported  
Waterway: Not reported  
Spill Site: Not reported  
Cleanup By: Not reported  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Not reported  
Other: Not reported  
Date/Time: Not reported  
Year: 88-92  
Agency: Not reported  
Incident Date: Not reported  
Admin Agency: Not reported  
Amount: Not reported  
Contained: Not reported  
Site Type: Not reported  
E Date: 03-MAY-90  
Substance: Not reported  
Quantity Released: Not reported  
BBLS: Not reported  
Cups: Not reported  
CUFT: Not reported  
Gallons: Not reported  
Grams: Not reported  
Pounds: Not reported  
Liters: Not reported  
Ounces: Not reported  
Pints: Not reported  
Quarts: Not reported  
Sheen: Not reported  
Tons: Not reported  
Unknown: Not reported  
Description: Not reported  
Evacuations: Not reported  
Number of Injuries: Not reported  
Number of Fatalities: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**3**  
**SW**  
**1/4-1/2**  
**2142 ft.**

**BINGHAM TRUST PROPERTY**  
**6427 LA VALLE PLATEADA**  
**RANCHO SANTE FE, CA 92067**

**LUST** **S103472106**  
**San Diego Co. HMMD** **N/A**

**Relative:**  
**Lower**

LUST:

**Actual:**  
**283 ft.**

Region: STATE  
 Case Type: Soil only  
 Cross Street: Not reported  
 Enf Type: Not reported  
 Funding: Not reported  
 How Discovered: Not reported  
 How Stopped: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Global Id: T0607302542  
 Stop Date: 1998-12-01 00:00:00  
 Confirm Leak: Not reported  
 Workplan: Not reported  
 Prelim Assess: Not reported  
 Pollution Char: Not reported  
 Remed Plan: Not reported  
 Remed Action: Not reported  
 Monitoring: Not reported  
 Close Date: 1999-09-03 00:00:00  
 Discover Date: 1998-12-01 00:00:00  
 Enforcement Dt: Not reported  
 Release Date: 1998-12-01 00:00:00  
 Review Date: Not reported  
 Enter Date: Not reported  
 MTBE Date: Not reported  
 GW Qualifier: Not reported  
 Soil Qualifier: Not reported  
 Max MTBE GW ppb: Not reported  
 Max MTBE Soil ppb: Not reported  
 County: 37  
 Org Name: Not reported  
 Reg Board: San Diego Region  
 Status: Case Closed  
 Chemical: Diesel  
 Contact Person: Not reported  
 Responsible Party: CYNTHIA WAGNER  
 RP Address: P O BOX 926  
 Interim: Not reported  
 Oversight Prgm: LUST  
 MTBE Class: \*  
 MTBE Conc: 0  
 MTBE Fuel: 0  
 MTBE Tested: Not Required to be Tested.  
 Staff: UNA  
 Staff Initials: DL  
 Lead Agency: Local Agency  
 Local Agency: 37000L  
 Hydr Basin #: 905.11  
 Beneficial: MUN,AGR,IND,REC-1,REC-2,WARM,WILD  
 Priority: 8  
 Cleanup Fund Id: Not reported  
 Work Suspended: Not reported  
 Local Case #: H38193-001

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

Case Number: 9UT3778  
 Qty Leaked: Not reported  
 Abate Method: Not reported  
 Operator: Not reported  
 Water System Name: Not reported  
 Well Name: Not reported  
 Distance To Lust: 0  
 Waste Discharge Global ID: Not reported  
 Waste Disch Assigned Name: Not reported  
 Summary: Not reported

**LUST:**

Case Number: 9UT3778  
 Local Agency: 37000  
 Substance: 12034  
 Qty Leaked: 0  
 Date Found: 12/01/1998  
 How Found: Tank Closure  
 Date Stopped: 12/01/1998  
 How Stopped: Close Tank  
 Source: Unknown  
 Cause: Unknown  
 Lead Agency: Local Agency  
 Case Type: Soil only  
 Status: Case Closed  
 Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site  
 Confirm Date: 12/04/1998  
 Submit Workplan: 12/10/98  
 Prelim Assess: / /  
 Desc Pollution: Not reported  
 Remed Plan: / /  
 Remed Action: Not reported  
 Began Monitor: Not reported  
 Enforce Type: Not reported  
 Enforce Date: Not reported  
 Closed Date: 9/3/99  
 Pilot Program: LOP  
 Local Case: H38193-001  
 Basin Number: 905.10  
 Gwater Depth: >10'  
 Beneficial Use: MUNBU  
 NPDES Number: Not reported  
 priority: 3  
 File Disp: Administratively opened on database, however no file physically exists  
 Release Date: 12/01/1998  
 Interim Remedial Actions: Not reported  
 Cleanup and Abatement order Number: Not reported  
 Waste Discharge Requirement Number: Not reported

**San Diego Co. HMMMD:**

Facility ID: 138193  
 Inactive Indicator: Active  
 Business Code: 6HK20  
 SIC: Not reported  
 Permit Expiration: Not reported  
 Owner: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

2nd Name: Not reported  
Mailing Address: Not reported  
Mailing City,St,Zip: Not reported  
Map Code/Business Plan on File: Not reported  
Corporate Code: Not reported  
Fire Dept District: San Diego  
Census Tract Number: 171  
EPA ID: Not reported  
Gas Station: Not reported  
Inspection Date: Not reported  
Reinspection Date: Not reported  
Inspector Name: Not reported  
Violation Notice Issued: Not reported  
Facility Contact: CYNTHIA WAGNER  
Delinquent Flag: Not Delinquent  
Last Update: 05/10/05  
Last Delinquent Letter: Not reported  
Delinquent Comment: Not reported  
Last Letter Type: Not reported  
Property Owner: UNION BANK TR  
Property Address: C/O PDS SERVICES INC  
Property City,St,Zip: 76094  
Tank Owner: Not reported  
Tank Address: Not reported  
Tank City,St,Zip: Not reported  
Business Plan Acceptance Date: Not reported  
Reinspection Date Y2K Compatible: Not reported  
Facility Phone: Not reported

**HMMD DISCLOSURE INVENTORY:**

Item Number: Not reported  
Chemical Name: Not reported  
Case Number: Not reported  
Quantity Stored At One Time: Not reported  
Quantity Stored at One Time: Not reported  
Annual Quantity String: Not reported  
Annual Quantity String: Not reported  
Measurement Units: Not reported  
Carcinogen: No  
1st Hazard Category: Not reported  
2nd Hazard Category: Not reported

**HMMD UNDERGROUND TANKS:**

Tank Number: T001  
Tank ID Number: at4229  
Waste or Product: Not reported  
Tank Contents: DIESEL

**HMMD VIOLATIONS:**

Inspection Date: Not reported  
Waste Code: Not reported  
Type of Violation: Not reported  
Occurrences: Not reported  
Item Number: Not reported  
Violation Desc: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BINGHAM TRUST PROPERTY (Continued)**

**S103472106**

**HMMD WASTE STREAMS:**

Inspection Date: Not reported  
Waste Item #: Not reported  
Waste Code: Not reported  
Waste Name: Not reported  
Qty at Inspection: Not reported  
Quantity String: Not reported  
Annual Qty: Not reported  
Annual Qty String: Not reported  
Measurement Unit: Not reported  
Treatment Method: Not reported  
Storage Method: Not reported  
Haz Waste Hauler: Not reported  
Waste Desc: Not reported  
Carcinogen: No

[Click this hyperlink](#) while viewing on your computer to access additional CA\_HMMD: detail in the EDR Site Report.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RANCHO SANTA FE	S106062714	DEL DIOS RANCH	7202 DEL DIOS HWY	92067	San Diego Co. HMMD, SWEEPS UST
RANCHO SANTA FE	S106153068	RANCHO SANTA FE MIDDLE SCHOOL	EL ESCONDIDO DEL DIOS HIGHWAY	92067	SCH, ENVIROSTOR
RANCHO SANTA FE	S106716142	COUNTY OF SD-SANTA FE VALLEY PROPERTY	NONE DEL DIOS HY / LH DAM	92067	LUST
RANCHO SANTA FE	U001572163	JAMES BASHER	LA VALLE PLATEADA	92067	HIST UST
RANCHO SANTA FE	S104749570	KENALBEE FARM	16232 VIA DELA VALLE	92067	San Diego Co. HMMD, SWEEPS UST
RANCHO SANTA FE	U001604623	RANCH	VIA DE LA VALLE	92067	HIST UST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **FEDERAL RECORDS**

### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### **Proposed NPL: Proposed National Priority List Sites**

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NPL RECOVERY:** Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 11/17/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## **CERCLIS:** Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/09/2006	Source: EPA
Date Data Arrived at EDR: 09/21/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/21/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/10/2006	Source: EPA
Date Data Arrived at EDR: 10/25/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Quarterly

## **RCRA:** Resource Conservation and Recovery Act Information



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: 800-424-9346
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 11/22/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **ERNS:** Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 10/24/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Annually

### **HMIRS:** Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 08/01/2006	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 10/18/2006	Telephone: 202-366-4555
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

### **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

### **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **DOD:** Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

## **FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Varies

## **US BROWNFIELDS:** A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients--States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/10/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/13/2006	Telephone: 202-566-2777
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Semi-Annually

## **CONSENT:** Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

## **ROD:** Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/10/2006	Source: EPA
Date Data Arrived at EDR: 07/21/2006	Telephone: 703-416-0223
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 47	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Varies

## **ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **TRIS:** Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 09/22/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Annually

## **TSCA:** Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Every 4 Years

## **FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 10/19/2006	Source: EPA
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SSTS:** Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 11/07/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Quarterly

## **PADS:** PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/07/2006	Source: EPA
Date Data Arrived at EDR: 08/09/2006	Telephone: 202-566-0500
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 11/10/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **MLTS:** Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/10/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/20/2006	Telephone: 301-415-7169
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 09/27/2006	Telephone: 303-231-5959
Date Made Active in Reports: 11/27/2006	Last EDR Contact: 09/27/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Semi-Annually

## **FINDS:** Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/21/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 09/06/2006  
Number of Days to Update: 43

Source: EPA  
Telephone: N/A  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

## **RAATS:** RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003  
Date Data Arrived at EDR: 06/17/2005  
Date Made Active in Reports: 08/04/2005  
Number of Days to Update: 48

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Biennially

## **STATE AND LOCAL RECORDS**

### **HIST CAL-SITES:** Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: No Update Planned

### **CA BOND EXP. PLAN:** Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SCH:** School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/29/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 36

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **TOXIC PITS:** Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: No Update Planned

## **SWF/LF (SWIS):** Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/13/2006  
Date Data Arrived at EDR: 09/13/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 22

Source: Integrated Waste Management Board  
Telephone: 916-341-6320  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

## **CA WDS:** Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 09/20/2006  
Date Data Arrived at EDR: 09/21/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 34

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 09/21/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Quarterly

## **WMUDS/SWAT:** Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## **CORTESE:** "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 05/29/2001  
Date Made Active in Reports: 07/26/2001  
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: No Update Planned

## **SWRCY:** Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 10/10/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/11/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5752
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 09/30/2006	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 10/25/2006	Telephone: 916-464-3291
Date Made Active in Reports: 11/28/2006	Last EDR Contact: 10/25/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-346-7491
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 951-782-4130
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 11/07/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Varies

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-467-2980
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 10/17/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-346-7491
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 11/16/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 916-542-5424
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: No Update Planned

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 10/11/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: State Water Resources Control Board  
Telephone: 916-341-5752  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 2:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## **SLIC REG 3:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 4:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Varies

## **SLIC REG 5:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6V:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6L:** SLIC Sites

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **SLIC REG 7:** SLIC List

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 8:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 04/06/2006	Source: California Region Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 04/06/2006	Telephone: 951-782-3298
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **SLIC REG 9:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 08/30/2006	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 08/31/2006	Telephone: 858-467-2980
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 11/27/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/26/2007
	Data Release Frequency: Annually

## **UST:** Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 10/11/2006	Source: SWRCB
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5851
Date Made Active in Reports: 11/13/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## **HIST UST:** Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **AST:** Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 01/30/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/30/2006	Telephone: 916-341-5712
Date Made Active in Reports: 02/17/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

## **SWEEPS UST:** SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **CHMIRS:** California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004	Source: Office of Emergency Services
Date Data Arrived at EDR: 11/30/2005	Telephone: 916-845-8400
Date Made Active in Reports: 01/19/2006	Last EDR Contact: 11/20/2006
Number of Days to Update: 50	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NOTIFY 65:** Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 10/16/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## **DEED:** Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 10/04/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/05/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **VCP:** Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 04/18/2005	Telephone: 916-327-4498
Date Made Active in Reports: 05/06/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

## **WIP:** Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/25/2006	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 10/31/2006	Telephone: 213-576-6726
Date Made Active in Reports: 11/28/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **CDL:** Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 05/17/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/17/2006	Telephone: 916-255-6504
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

## **RESPONSE:** State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **HAZNET:** Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2003	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/11/2005	Telephone: 916-255-1136
Date Made Active in Reports: 10/31/2005	Last EDR Contact: 11/20/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2004	Source: California Air Resources Board
Date Data Arrived at EDR: 04/14/2006	Telephone: 916-322-2990
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/20/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Varies

## **ENVIROSTOR:** EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## TRIBAL RECORDS

### **INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 202-208-3710
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

### **INDIAN LUST R1:** Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/07/2006	Source: EPA Region 1
Date Data Arrived at EDR: 09/08/2006	Telephone: 617-918-1313
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R10:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/06/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3372
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R8:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6271
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R7:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R6:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005	Source: EPA Region 6
Date Data Arrived at EDR: 01/21/2005	Telephone: 214-665-6597
Date Made Active in Reports: 02/28/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-8677
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R4:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-9424
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R9:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 9
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3368
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R7:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R8:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6137
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R5:** Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R10:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R1:** Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/07/2006  
Date Data Arrived at EDR: 09/08/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 61

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## **INDIAN UST R6:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Semi-Annually

## **EDR PROPRIETARY RECORDS**

### **Manufactured Gas Plants:** EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **EDR Historical Auto Stations:** EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### **EDR Historical Cleaners:** EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COUNTY RECORDS

### **ALAMEDA COUNTY:**

#### **Contaminated Sites**

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/26/2006  
Date Data Arrived at EDR: 10/27/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 32

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

#### **Underground Tanks**

Date of Government Version: 10/26/2006  
Date Data Arrived at EDR: 10/27/2006  
Date Made Active in Reports: 11/13/2006  
Number of Days to Update: 17

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

### **CONTRA COSTA COUNTY:**

#### **Site List**

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: Semi-Annually

### **FRESNO COUNTY:**

#### **CUPA Resources List**

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2006  
Date Data Arrived at EDR: 07/12/2006  
Date Made Active in Reports: 07/27/2006  
Number of Days to Update: 15

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/05/2007  
Data Release Frequency: Semi-Annually

### **KERN COUNTY:**

#### **Underground Storage Tank Sites & Tank Listing**

Kern County Sites and Tanks Listing.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 13

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### **LOS ANGELES COUNTY:**



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 07/07/1999  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/31/2006  
Date Data Arrived at EDR: 10/30/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 29

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 11/15/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Date of Government Version: 03/01/2006  
Date Data Arrived at EDR: 04/06/2006  
Date Made Active in Reports: 05/11/2006  
Number of Days to Update: 35

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/05/2006  
Date Data Arrived at EDR: 02/16/2006  
Date Made Active in Reports: 03/13/2006  
Number of Days to Update: 25

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Date of Government Version: 09/11/2006  
Date Data Arrived at EDR: 09/22/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 45

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/2003  
Date Data Arrived at EDR: 10/23/2003  
Date Made Active in Reports: 11/26/2003  
Number of Days to Update: 34

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 11/21/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/17/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 32

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 20

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Semi-Annually

## NAPA COUNTY:

### Sites With Reported Contamination

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 16

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Semi-Annually

### Closed and Operating Underground Storage Tank Sites

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 28

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Annually

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/18/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 37

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/30/2006  
Date Data Arrived at EDR: 08/31/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 35

Source: Placer County Health and Human Services  
Telephone: 530-889-7312  
Last EDR Contact: 08/14/2006  
Next Scheduled EDR Contact: 12/19/2006  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/09/2006  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 18

Source: Department of Public Health  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/08/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 41

Source: Health Services Agency  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Contaminated Sites

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/18/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 48

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

### ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/26/2006  
Date Data Arrived at EDR: 10/17/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 8

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005  
Date Data Arrived at EDR: 05/18/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 29

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2005  
Date Data Arrived at EDR: 12/29/2005  
Date Made Active in Reports: 01/19/2006  
Number of Days to Update: 21

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 07/25/2006	Source: Environmental Health Department
Date Data Arrived at EDR: 08/10/2006	Telephone: N/A
Date Made Active in Reports: 09/18/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 39	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 08/25/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 08/25/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Annually

### Fuel Leak List

Date of Government Version: 10/10/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 10/11/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## SANTA CLARA COUNTY:

### HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005	Source: Santa Clara Valley Water District
Date Data Arrived at EDR: 03/30/2005	Telephone: 408-265-2600
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/25/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: No Update Planned

### LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 09/29/2006	Source: Department of Environmental Health
Date Data Arrived at EDR: 10/02/2006	Telephone: 408-918-3417
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/25/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Varies

### Hazardous Material Facilities

Date of Government Version: 09/07/2006	Source: City of San Jose Fire Department
Date Data Arrived at EDR: 09/08/2006	Telephone: 408-277-4659
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Annually

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tanks

Date of Government Version: 07/05/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 30

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## Underground Storage Tanks

Date of Government Version: 07/03/2006  
Date Data Arrived at EDR: 07/26/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 29

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Leaking Underground Storage Tank Sites

Date of Government Version: 10/23/2006  
Date Data Arrived at EDR: 10/24/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 35

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Date of Government Version: 12/31/0005  
Date Data Arrived at EDR: 01/05/2006  
Date Made Active in Reports: 01/31/2006  
Number of Days to Update: 26

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 10/27/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 09/26/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 29

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 09/22/2006	Telephone: 805-654-2813
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/13/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Quarterly

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 07/27/2006	Telephone: 805-654-2813
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 07/19/2006	Source: Yolo County Department of Health
Date Data Arrived at EDR: 08/01/2006	Telephone: 530-666-8646
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### **CT MANIFEST:** Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/17/2006	Telephone: 860-424-3375
Date Made Active in Reports: 04/07/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Annually

### **NJ MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/01/2006	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/06/2006	Telephone: N/A
Date Made Active in Reports: 08/01/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

### **NY MANIFEST:** Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/16/2006  
Number of Days to Update: 47

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Annually

## **PA MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 06/06/2006  
Number of Days to Update: 81

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Annually

## **RI MANIFEST:** Manifest information

Hazardous waste manifest information

Date of Government Version: 09/30/2005  
Date Data Arrived at EDR: 05/09/2006  
Date Made Active in Reports: 05/24/2006  
Number of Days to Update: 15

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Annually

## **WI MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 05/02/2006  
Number of Days to Update: 46

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

## **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## **AHA Hospitals:**

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## **Nursing Homes**

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

## **Daycare Centers: Licensed Facilities**

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

MONTEVIDEO  
PASEO DELICIAS AND MONTEVIDEO  
RANCHO SANTA FE, CA 92067

### TARGET PROPERTY COORDINATES

Latitude (North):	33.03020 - 33° 1' 48.7"
Longitude (West):	117.191 - 117° 11' 27.6"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	482163.2
UTM Y (Meters):	3654460.0
Elevation:	284 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	33117-A2 RANCHO SANTA FE, CA
Most Recent Revision:	1983

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

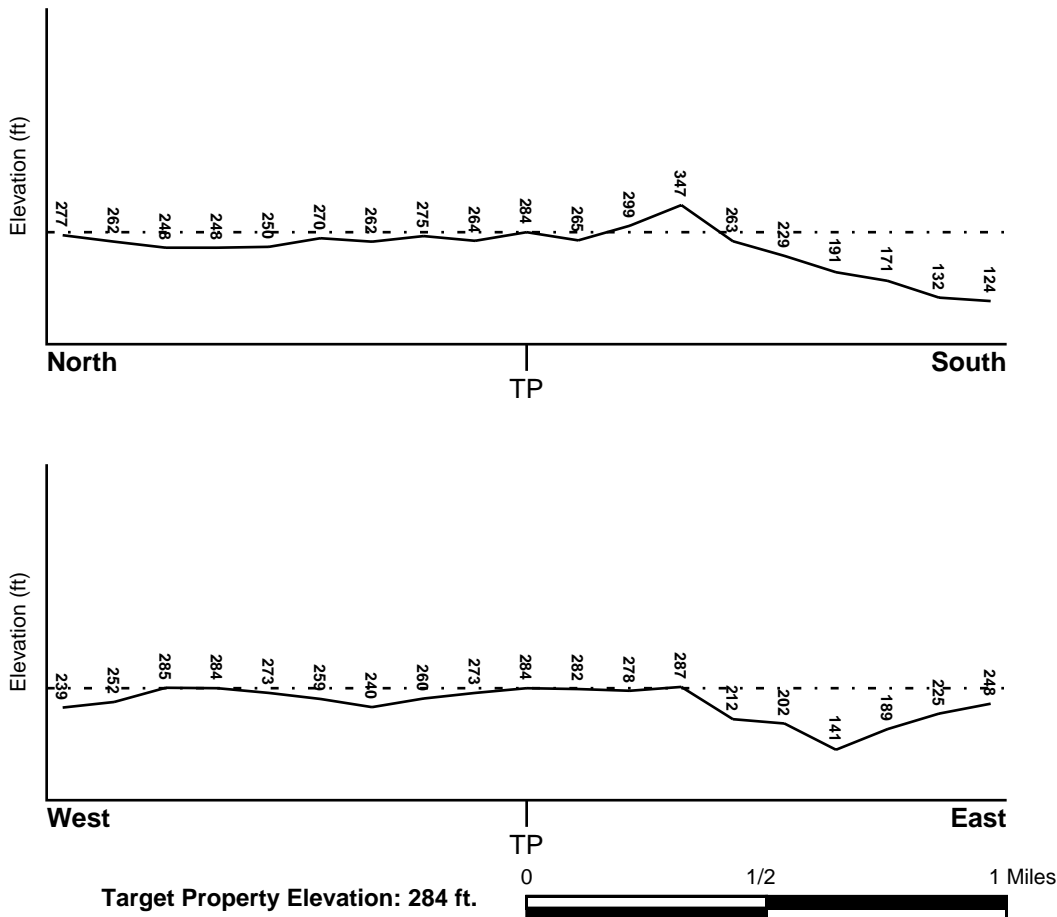
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
SAN DIEGO, CA	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
RANCHO SANTA FE	Not Available

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Tertiary  
Series: Eocene  
Code: Te *(decoded above as Era, System & Series)*

### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ANTIOCH

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained. Soils have a layer of low hydraulic conductivity, wet state high in the profile. Depth to water table is 3 to 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	19 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10
2	19 inches	60 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 5.60
3	60 inches	81 inches	stratified	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loamy fine sand  
fine sandy loam  
clay loam  
loamy sand  
clay  
cobble - loam  
sandy loam

Surficial Soil Types: loamy fine sand  
fine sandy loam  
clay loam  
loamy sand  
clay  
cobble - loam  
sandy loam

Shallow Soil Types: loamy fine sand  
silty clay  
very cobble - clay

Deeper Soil Types: weathered bedrock  
unweathered bedrock  
cobble - loam  
indurated

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

very fine sandy loam

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

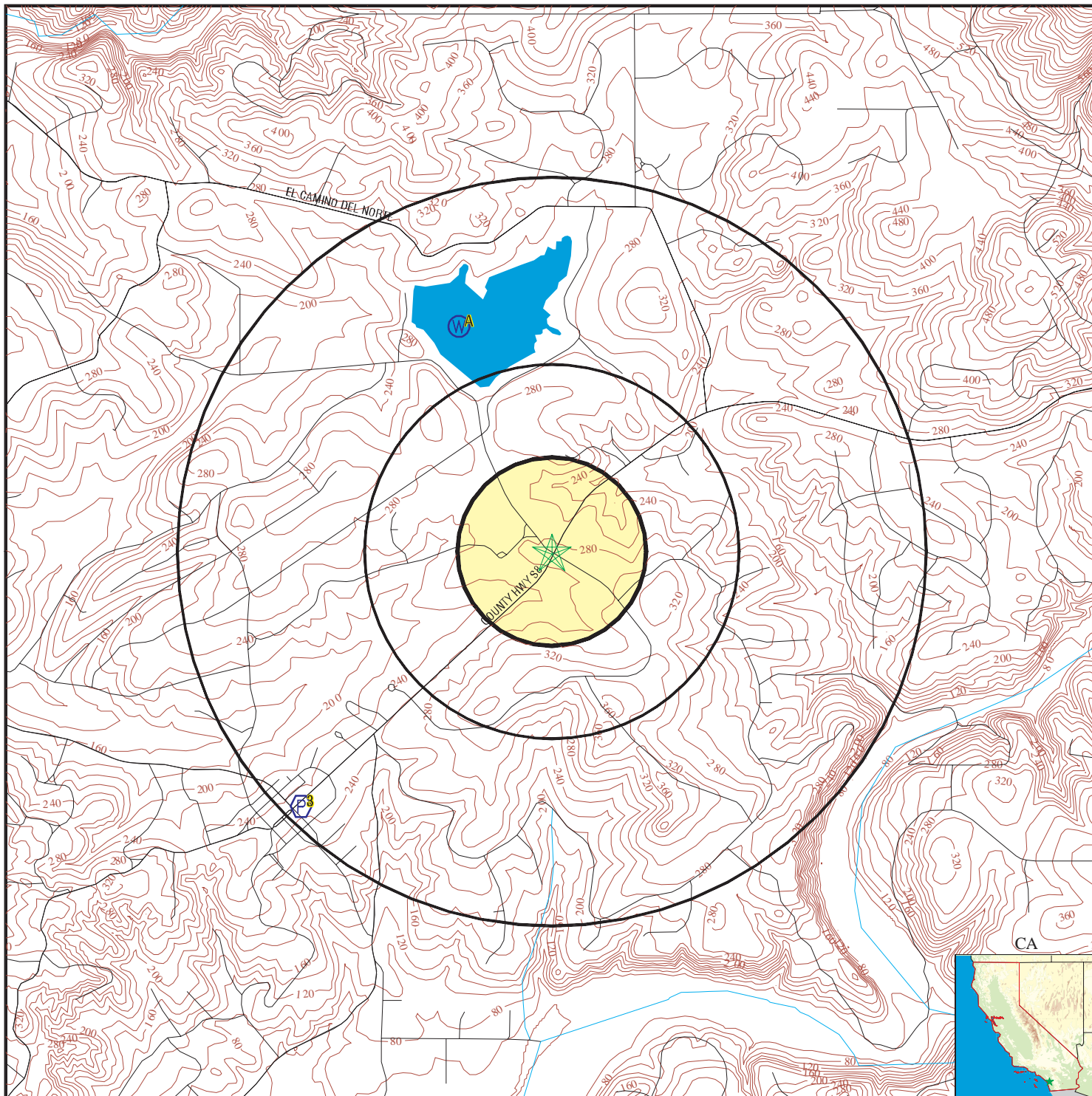
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
3	CA3301683	1/2 - 1 Mile SW

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

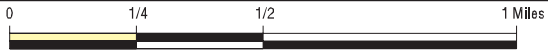
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	23689	1/2 - 1 Mile NNW
A2	23688	1/2 - 1 Mile NNW

# PHYSICAL SETTING SOURCE MAP - 1804497.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



<p><b>SITE NAME:</b> Montevideo  <b>ADDRESS:</b> Paseo Delicias and Montevideo                  Rancho Santa Fe CA 92067  <b>LAT/LONG:</b> 33.0302 / 117.1910</p>	<p><b>CLIENT:</b> Sota Environmental Technology  <b>CONTACT:</b> Eric Romero  <b>INQUIRY #:</b> 1804497.2s  <b>DATE:</b> November 28, 2006 9:41 am</p>
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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

<b>A1</b>		
<b>NNW</b>		
<b>1/2 - 1 Mile</b>		
<b>Lower</b>	<b>CA WELLS</b>	<b>23689</b>

**Water System Information:**

Prime Station Code:	N37/021-SUTORES	User ID:	WAT
FRDS Number:	3710023003	County:	San Diego
District Number:	14	Station Type:	RES/MUN/INTAKE
Water Type:	Surface Water	Well Status:	Active Treated
Source Lat/Long:	330220.0 1171140.0	Precision:	100 Feet (one Second)
Source Name:	605 REGULATING RESERVOIR - TREATED		
System Number:	3710023		
System Name:	Santa Fe I.D.		
Organization That Operates System:	P.O. Box 409 Rancho Santa Fe, CA 92067		
Pop Served:	25000	Connections:	6225
Area Served:	SANTA FE VICINITY		
Sample Collected:	06/03/2002 00:00:00	Findings:	2.4 UG/L
Chemical:	TERT-BUTYL ALCOHOL		
Sample Collected:	06/03/2002 00:00:00	Findings:	36.9 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/19/2002 00:00:00	Findings:	1210 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/19/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/19/2002 00:00:00	Findings:	156 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/19/2002 00:00:00	Findings:	190 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	1.23 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	5.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/19/2002 00:00:00	Findings:	369 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/19/2002 00:00:00	Findings:	72 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	5.9 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/19/2002 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/19/2002 00:00:00	Findings:	780 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/19/2002 00:00:00	Findings:	.69
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/19/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	08/07/2002 00:00:00	Findings:	37 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/09/2002 00:00:00	Findings:	140 UG/L
Chemical:	BORON		
Sample Collected:	09/09/2002 00:00:00	Findings:	5 UG/L
Chemical:	VANADIUM		
Sample Collected:	09/09/2002 00:00:00	Findings:	17 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	4.9 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	17 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	8.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	47.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/18/2002 00:00:00	Findings:	1000 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/18/2002 00:00:00	Findings:	126 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	153 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	853 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/18/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	12/18/2002 00:00:00	Findings:	116 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	141 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	.916 MG/L
Chemical:	CARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/18/2002 00:00:00	Findings:	2.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	250 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	59 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	25 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	90 MG/L
Chemical:	SODIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	4.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	92 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/18/2002 00:00:00	Findings:	7.4 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	8.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	550 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/18/2002 00:00:00	Findings:	.47
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2820 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/18/2002 00:00:00	Findings:	23.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/18/2002 00:00:00	Findings:	.09 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.5 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1260 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/19/2003 00:00:00	Findings:	142 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/19/2003 00:00:00	Findings:	173 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	.448 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	385 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/19/2003 00:00:00	Findings:	77 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	6.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	190 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/19/2003 00:00:00	Findings:	26 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	12 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	30 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	11 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	815 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/19/2003 00:00:00	Findings:	.28
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/19/2003 00:00:00	Findings:	.007 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	2.552 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	03/19/2003 00:00:00	Findings:	8690 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	10 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	79 UG/L
Chemical:	TOTAL TRIHALOMETHANES		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	.18 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.6 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	6.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	757 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/18/2003 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	06/18/2003 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/18/2003 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	.508 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	215 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/18/2003 00:00:00	Findings:	50 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	68 MG/L
Chemical:	SODIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	3.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	75 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/18/2003 00:00:00	Findings:	11 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	1.9 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	10 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	5.2 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	460 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/18/2003 00:00:00	Findings:	.15
Chemical:	LANGELIER INDEX @ 60 C		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/18/2003 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	3930 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	6.4 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	28.1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/18/2003 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	3.2 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	2.6 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/16/2003 00:00:00	Findings:	770 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	09/16/2003 00:00:00	Findings:	105 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	128 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	1.32 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	225 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	52 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	72 MG/L
Chemical:	SODIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	3.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	73 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/16/2003 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/16/2003 00:00:00	Findings:	.58
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/16/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/16/2003 00:00:00	Findings:	1620 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/17/2003 00:00:00	Findings:	8.8 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	1.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	6.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	6.4 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	5.1 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/17/2003 00:00:00	Findings:	23.1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/17/2003 00:00:00	Findings:	2.2 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/17/2003 00:00:00	Findings:	2.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/02/2003 00:00:00	Findings:	2.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/08/2004 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	2.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	9.3 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	8.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/14/2004 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2004 00:00:00	Findings:	.059
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/14/2004 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	4710 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.072 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	09/28/2004 00:00:00	Findings:	15 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	7.7 UG/L
Chemical:	BROMOFORM (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/28/2004 00:00:00	Findings:	20 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	6.4 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	5 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	49 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/28/2004 00:00:00	Findings:	6.3 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	2.4 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	14 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	12/14/2004 00:00:00	Findings:	945 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/14/2004 00:00:00	Findings:	112 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	136 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	.702 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	283 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	30 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	100 MG/L
Chemical:	SODIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	5.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/14/2004 00:00:00	Findings:	630 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/14/2004 00:00:00	Findings:	.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/14/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/14/2004 00:00:00	Findings:	3420 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	420 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	12/14/2004 00:00:00	Findings:	5.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/21/2004 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	6.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	5.8 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	39 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/21/2004 00:00:00	Findings:	3.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	3.4 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	13 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	03/22/2005 00:00:00	Findings:	785 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2005 00:00:00	Findings:	111 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	135 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	.349 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	221 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	49 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	24 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	76 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	5.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	98 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.18 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	30 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/21/2005 00:00:00	Findings:	49 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/13/2005 00:00:00	Findings:	2.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	15 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	15 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	14 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	57 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/13/2005 00:00:00	Findings:	4 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	6.6 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.1 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	26 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	02/23/2006 00:00:00	Findings:	.568 MG/L
Chemical:	CHLORITE		
Sample Collected:	02/23/2006 00:00:00	Findings:	260 UG/L
Chemical:	CHLORATE		
Sample Collected:	03/14/2006 00:00:00	Findings:	1140 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	03/14/2006 00:00:00	Findings:	162 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/14/2006 00:00:00	Findings:	200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	3.3 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	330 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/14/2006 00:00:00	Findings:	67 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	39 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	5.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/14/2006 00:00:00	Findings:	31 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	5.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	24 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	17 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	682 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/14/2006 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/14/2006 00:00:00	Findings:	15 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	77 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/14/2006 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.5 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	2.3 UG/L
Chemical:	MONOCHLOROACETIC ACID (MCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	33 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	03/15/2006 00:00:00	Findings:	.593 MG/L
Chemical:	CHLORITE		
Sample Collected:	03/15/2006 00:00:00	Findings:	260 UG/L
Chemical:	CHLORATE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/03/2006 00:00:00	Findings:	.014 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	04/11/2006 00:00:00	Findings:	.013 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	06/19/2002 00:00:00	Findings:	3800 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.21 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/31/2002 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	3.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	7.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	38.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08/07/2002 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	3.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	13 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	6.8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.25 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	4.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	279 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	59 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	32 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	100 MG/L
Chemical:	SODIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/18/2002 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	5.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	6.2 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	610 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/18/2002 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	2430 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	6.2 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/18/2002 00:00:00	Findings:	38.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/18/2002 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	4.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/18/2002 00:00:00	Findings:	3.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	10/09/2002 00:00:00	Findings:	8.8 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	5.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	3.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	28.3 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/02/2002 00:00:00	Findings:	15.2 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	8.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	21.5 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/02/2002 00:00:00	Findings:	5.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	50.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/02/2003 00:00:00	Findings:	16 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	4.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	16 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	7.5 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	43.9 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/16/2003 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	2.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	6.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	5.1 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/16/2003 00:00:00	Findings:	33.4 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/16/2003 00:00:00	Findings:	2.1 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/16/2003 00:00:00	Findings:	4.1 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/17/2003 00:00:00	Findings:	940 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	12/17/2003 00:00:00	Findings:	119 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	145 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	1.49 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	271 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/17/2003 00:00:00	Findings:	27 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	89 MG/L
Chemical:	SODIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	91 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/17/2003 00:00:00	Findings:	590 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/17/2003 00:00:00	Findings:	.72
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/17/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	1830 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.052 MG/L
Chemical:	BROMIDE		
Sample Collected:	01/05/2004 00:00:00	Findings:	3.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/02/2004 00:00:00	Findings:	3.21 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/23/2004 00:00:00	Findings:	754 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/23/2004 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	03/23/2004 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	.806 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	218 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	74 MG/L
Chemical:	SODIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	3.6 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/23/2004 00:00:00	Findings:	79 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/23/2004 00:00:00	Findings:	480 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/23/2004 00:00:00	Findings:	.36
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/23/2004 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	2.464 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/23/2004 00:00:00	Findings:	2480 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.074 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	560 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/23/2004 00:00:00	Findings:	12 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.3 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	8.1 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	9.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	6 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/23/2004 00:00:00	Findings:	31 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/23/2004 00:00:00	Findings:	2.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/03/2004 00:00:00	Findings:	3.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/17/1999 00:00:00	Findings:	905 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/17/1999 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/17/1999 00:00:00	Findings:	42 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/17/1999 00:00:00	Findings:	51 MG/L
Chemical:	BICARBONATE ALKALINITY		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/17/1999 00:00:00	Findings:	.26 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	301 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	69 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	31 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	93 MG/L
Chemical:	SODIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	4.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/17/1999 00:00:00	Findings:	600 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/17/1999 00:00:00	Findings:	.014 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	1.3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/28/1999 00:00:00	Findings:	76 UG/L
Chemical:	ALUMINUM		
Sample Collected:	05/26/1999 00:00:00	Findings:	75 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	850 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/23/1999 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	06/23/1999 00:00:00	Findings:	128 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	156 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/08/2004 00:00:00	Findings:	33 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/15/2004 00:00:00	Findings:	110 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	130 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	797 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/15/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	06/15/2004 00:00:00	Findings:	134 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	.692 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	232 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	75 MG/L
Chemical:	SODIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	4.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	82 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/15/2004 00:00:00	Findings:	540 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/15/2004 00:00:00	Findings:	.32
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/15/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	3370 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.076 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/22/2004 00:00:00	Findings:	11 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	2.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	9.1 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	5.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	5.6 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	06/22/2004 00:00:00	Findings:	28 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/22/2004 00:00:00	Findings:	3 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/22/2004 00:00:00	Findings:	2.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	06/22/2004 00:00:00	Findings:	12 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	09/14/2004 00:00:00	Findings:	765 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2004 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2004 00:00:00	Findings:	97.2 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	118 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	.384 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	225 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	70 MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	89 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	22 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	.8 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	9.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	20 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2005 00:00:00	Findings:	- .02
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2005 00:00:00	Findings:	.007 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	3.5 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	6780 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	20 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	53 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/22/2005 00:00:00	Findings:	.098 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	4.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	13 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	790 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/22/2005 00:00:00	Findings:	1.4 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	39 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	05/17/2005 00:00:00	Findings:	5.03 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/17/2005 00:00:00	Findings:	50 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	21 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	93 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	39 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	170 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/17/2005 00:00:00	Findings:	3.5 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	95 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	140 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	05/23/2005 00:00:00	Findings:	3.59 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/23/2005 00:00:00	Findings:	44 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	05/23/2005 00:00:00	Findings:	24 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	44 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	26 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	110 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/23/2005 00:00:00	Findings:	5.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	35 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	67 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	06/14/2005 00:00:00	Findings:	961 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/14/2005 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	06/14/2005 00:00:00	Findings:	119 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	145 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	.472 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	295 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	67 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	31 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	99 MG/L
Chemical:	SODIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	5.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/14/2005 00:00:00	Findings:	630 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/14/2005 00:00:00	Findings:	.24
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/14/2005 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/14/2005 00:00:00	Findings:	9490 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.088 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	12.14
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	06/21/2005 00:00:00	Findings:	20 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	1.3 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	17 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/23/1999 00:00:00	Findings:	.64 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	272 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	60 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	30 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	88 MG/L
Chemical:	SODIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	3.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	104 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/23/1999 00:00:00	Findings:	105 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	530 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/23/1999 00:00:00	Findings:	.3
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/23/1999 00:00:00	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	4.9 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/28/1999 00:00:00	Findings:	21 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/28/1999 00:00:00	Findings:	3.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/28/1999 00:00:00	Findings:	19 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/28/1999 00:00:00	Findings:	18 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	29 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	15 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	27 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	20 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	74 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/07/2005 00:00:00	Findings:	4.7 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	12 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	37 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	09/13/2005 00:00:00	Findings:	778 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/13/2005 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/13/2005 00:00:00	Findings:	106 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	129 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/13/2005 00:00:00	Findings:	230 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	82 MG/L
Chemical:	SODIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	84 MG/L
Chemical:	CHLORIDE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/13/2005 00:00:00	Findings:	.17 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/13/2005 00:00:00	Findings:	510 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/13/2005 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/13/2005 00:00:00	Findings:	.046 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	12.4
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1070 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2005 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2005 00:00:00	Findings:	161 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2005 00:00:00	Findings:	195 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	3.18 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	314 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2005 00:00:00	Findings:	68 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	35 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	5.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	130 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2005 00:00:00	Findings:	674 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2005 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	12/13/2005 00:00:00	Findings:	25 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/28/1999 00:00:00	Findings:	61.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/22/1999 00:00:00	Findings:	950 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/22/1999 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	09/22/1999 00:00:00	Findings:	123 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	150 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	.615 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	256 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	51.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	30.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	96.3 MG/L
Chemical:	SODIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	111 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/22/1999 00:00:00	Findings:	57 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	590 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/22/1999 00:00:00	Findings:	.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/22/1999 00:00:00	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	4.75 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.1 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	1190 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/15/1999 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/15/1999 00:00:00	Findings:	151 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/15/1999 00:00:00	Findings:	184 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	.95 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	300 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	52.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	40.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	124 MG/L
Chemical:	SODIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	162 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/15/1999 00:00:00	Findings:	710 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/15/1999 00:00:00	Findings:	.44
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/15/1999 00:00:00	Findings:	.014 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	4.63 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.17 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	1030 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2000 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2000 00:00:00	Findings:	151 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	184 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	.754 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	296 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	55.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	38.3 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2000 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	162 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2000 00:00:00	Findings:	620 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2000 00:00:00	Findings:	.37
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	5.83 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	05/24/2000 00:00:00	Findings:	56 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/21/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/21/2000 00:00:00	Findings:	132 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	161 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	1.05 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	281 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	35 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	4.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	142 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/21/2000 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	620 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/21/2000 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/21/2000 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	3.22 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.15 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/24/2000 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/28/2001 00:00:00	Findings:	2.508 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/28/2001 00:00:00	Findings:	6940 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	270 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	570 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06/18/2001 00:00:00	Findings:	.94 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/20/2001 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/20/2001 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	06/20/2001 00:00:00	Findings:	143 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/20/2001 00:00:00	Findings:	174 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	.898 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	323 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/20/2001 00:00:00	Findings:	62 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/20/2001 00:00:00	Findings:	41 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	159 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/20/2001 00:00:00	Findings:	.074 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/20/2001 00:00:00	Findings:	720 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/20/2001 00:00:00	Findings:	.49
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/20/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	4380 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/30/2001 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	13 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	7.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	37 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/26/2000 00:00:00	Findings:	70 UG/L
Chemical:	ALUMINUM		
Sample Collected:	08/16/2000 00:00:00	Findings:	81 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	745 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2000 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/20/2000 00:00:00	Findings:	1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	224 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	21 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	72 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	62 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/30/2001 00:00:00	Findings:	36.2 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/19/2001 00:00:00	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/26/2001 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2001 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2001 00:00:00	Findings:	133 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	162 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	.664 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	301 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	38 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	140 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/26/2001 00:00:00	Findings:	670 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/26/2001 00:00:00	Findings:	.33
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/26/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	5140 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.12 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/03/2001 00:00:00	Findings:	3.5 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.4 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/12/2001 00:00:00	Findings:	850 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/20/2000 00:00:00	Findings:	125 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	460 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2000 00:00:00	Findings:	.29
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.045 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	1080 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2000 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2000 00:00:00	Findings:	158 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	193 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	.397 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	315 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	57 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2000 00:00:00	Findings:	42 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	5.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	153 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2000 00:00:00	Findings:	58 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	680 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2000 00:00:00	Findings:	.096
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2000 00:00:00	Findings:	.005 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	12200 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	.2 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/12/2001 00:00:00	Findings:	7.38 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.35 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/28/2001 00:00:00	Findings:	1300 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/28/2001 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/28/2001 00:00:00	Findings:	180 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/28/2001 00:00:00	Findings:	219 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	.898 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	375 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/28/2001 00:00:00	Findings:	63 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	53 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/28/2001 00:00:00	Findings:	6.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	230 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/28/2001 00:00:00	Findings:	2.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/28/2001 00:00:00	Findings:	850 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/28/2001 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/28/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	12/12/2001 00:00:00	Findings:	120 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	146 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.19 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	253 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	62 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	24 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	82 MG/L
Chemical:	SODIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	4.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	83 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/12/2001 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	3.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	12 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	7.5 UG/L
Chemical:	CHLOROFORM (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/12/2001 00:00:00	Findings:	550 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/12/2001 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/12/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	2320 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	37.2 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/12/2001 00:00:00	Findings:	.066 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2002 00:00:00	Findings:	140 UG/L
Chemical:	BORON		
Sample Collected:	03/19/2002 00:00:00	Findings:	3.8 UG/L
Chemical:	VANADIUM		
Sample Collected:	03/19/2002 00:00:00	Findings:	21 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	7.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	22 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	9.8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	60.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/27/2002 00:00:00	Findings:	1200 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/27/2002 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	03/27/2002 00:00:00	Findings:	153 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	186 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	.606 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	5.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/27/2002 00:00:00	Findings:	371 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	73 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/27/2002 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	180 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/27/2002 00:00:00	Findings:	780 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/27/2002 00:00:00	Findings:	.39
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/27/2002 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	7420 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/03/2002 00:00:00	Findings:	150 UG/L
Chemical:	BORON		
Sample Collected:	06/03/2002 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	1 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	06/03/2002 00:00:00	Findings:	3.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	6.5 UG/L
Chemical:	CHLOROFORM (THM)		

**A2  
NNW  
1/2 - 1 Mile  
Lower**

**CA WELLS 23688**

**Water System Information:**

Prime Station Code:	N37/021-SDGUITO	User ID:	WAT
FRDS Number:	3710023002	County:	San Diego
District Number:	14	Station Type:	LAKE/AMBNT
Water Type:	Surface Water	Well Status:	Active Raw
Source Lat/Long:	330220.0 1171140.0	Precision:	100 Feet (one Second)
Source Name:	SAN DIEGUITO RESERVOIR		
System Number:	3710023		
System Name:	Santa Fe I.D.		
Organization That Operates System:	P.O. Box 409 Rancho Santa Fe, CA 92067		
Pop Served:	25000	Connections:	6225
Area Served:	SANTA FE VICINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/19/2002 00:00:00	Findings:	1770 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/19/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/19/2002 00:00:00	Findings:	226 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/19/2002 00:00:00	Findings:	275 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	1.79 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	13.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/19/2002 00:00:00	Findings:	529 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/19/2002 00:00:00	Findings:	85 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	77 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	200 MG/L
Chemical:	SODIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.32 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/19/2002 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/19/2002 00:00:00	Findings:	110 UG/L
Chemical:	BARIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	250 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/19/2002 00:00:00	Findings:	100 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	1130 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/19/2002 00:00:00	Findings:	.92
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/19/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	5500 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.7 MG/L
Chemical:	BROMIDE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/09/2002 00:00:00	Findings:	18.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1910 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	09/18/2002 00:00:00	Findings:	221 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	268 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	3.48 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	17 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	552 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	81 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	85 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	220 MG/L
Chemical:	SODIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.34 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/18/2002 00:00:00	Findings:	2.6 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/18/2002 00:00:00	Findings:	150 UG/L
Chemical:	BARIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	580 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/18/2002 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	.065 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1180 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/18/2002 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/18/2002 00:00:00	Findings:	2690 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.73 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	10/09/2002 00:00:00	Findings:	18.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/02/2002 00:00:00	Findings:	19 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1990 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/18/2002 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	12/18/2002 00:00:00	Findings:	238 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	289 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.36 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	15.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	529 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	85 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	77 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	350 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/18/2002 00:00:00	Findings:	140 UG/L
Chemical:	BARIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	320 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/18/2002 00:00:00	Findings:	87 UG/L
Chemical:	ZINC		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/18/2002 00:00:00	Findings:	69 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	.058 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/18/2002 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.244 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2002 00:00:00	Findings:	4590 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	2 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1780 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	03/19/2003 00:00:00	Findings:	193 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/19/2003 00:00:00	Findings:	235 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.92 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	554 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	03/19/2003 00:00:00	Findings:	100 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	74 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	310 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/19/2003 00:00:00	Findings:	3.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/19/2003 00:00:00	Findings:	130 UG/L
Chemical:	BARIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	130 UG/L
Chemical:	IRON		
Sample Collected:	03/19/2003 00:00:00	Findings:	430 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/19/2003 00:00:00	Findings:	260 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1200 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/19/2003 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/19/2003 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	3.652 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/19/2003 00:00:00	Findings:	3730 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.66 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	05/05/2003 00:00:00	Findings:	10.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/02/2003 00:00:00	Findings:	10.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/18/2003 00:00:00	Findings:	1780 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/18/2003 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	06/18/2003 00:00:00	Findings:	182 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/18/2003 00:00:00	Findings:	221 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	2.87 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	495 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/18/2003 00:00:00	Findings:	96 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	62 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/18/2003 00:00:00	Findings:	6.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/18/2003 00:00:00	Findings:	160 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/18/2003 00:00:00	Findings:	75 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	1180 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/18/2003 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/18/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	2220 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.57 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/14/2003 00:00:00	Findings:	10.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08/04/2003 00:00:00	Findings:	8.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/16/2003 00:00:00	Findings:	1840 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	09/16/2003 00:00:00	Findings:	191 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	231 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	3.77 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	629 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	120 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	80 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.2 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/16/2003 00:00:00	Findings:	260 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/16/2003 00:00:00	Findings:	2.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/16/2003 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/16/2003 00:00:00	Findings:	84 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	1260 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/16/2003 00:00:00	Findings:	1.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/16/2003 00:00:00	Findings:	.04 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	1840 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.59 MG/L
Chemical:	BROMIDE		
Sample Collected:	10/06/2003 00:00:00	Findings:	9.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/04/2003 00:00:00	Findings:	8.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/02/2003 00:00:00	Findings:	7.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/17/2003 00:00:00	Findings:	1900 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	12/17/2003 00:00:00	Findings:	184 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	223 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	2.89 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	.113 MG/L
Chemical:	AMMONIA (NH <sub>3</sub> -N)		
Sample Collected:	12/17/2003 00:00:00	Findings:	.011 UG/L
Chemical:	PHOSPHATE (AS PO <sub>4</sub> )		
Sample Collected:	12/17/2003 00:00:00	Findings:	579 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/17/2003 00:00:00	Findings:	74 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	270 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/17/2003 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 UG/L
Chemical:	BARIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	120 UG/L
Chemical:	IRON		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/17/2003 00:00:00	Findings:	79 UG/L
Chemical:	ZINC		
Sample Collected:	12/17/2003 00:00:00	Findings:	230 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	.072 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/17/2003 00:00:00	Findings:	1230 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/17/2003 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/17/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	2240 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	01/05/2004 00:00:00	Findings:	11.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/02/2004 00:00:00	Findings:	7.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/01/2004 00:00:00	Findings:	8.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/23/2004 00:00:00	Findings:	1750 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/23/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/23/2004 00:00:00	Findings:	170 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/23/2004 00:00:00	Findings:	207 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.07 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	502 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	92 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	66 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	7.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	280 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/23/2004 00:00:00	Findings:	3.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/23/2004 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/23/2004 00:00:00	Findings:	66 UG/L
Chemical:	ZINC		
Sample Collected:	03/23/2004 00:00:00	Findings:	1140 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/23/2004 00:00:00	Findings:	.74
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/23/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	5210 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.69 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/05/2004 00:00:00	Findings:	9.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/03/2004 00:00:00	Findings:	8.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/07/2004 00:00:00	Findings:	8.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/17/1999 00:00:00	Findings:	1020 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/17/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/17/1999 00:00:00	Findings:	201 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	244 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	2.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	327 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	65 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	40 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	108 MG/L
Chemical:	SODIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/17/1999 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/17/1999 00:00:00	Findings:	140 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	600 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/17/1999 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/17/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	1670 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/15/2004 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/15/2004 00:00:00	Findings:	194 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	2 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	479 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	88 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	63 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/15/2004 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	7.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	260 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/15/2004 00:00:00	Findings:	5.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/15/2004 00:00:00	Findings:	84 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/15/2004 00:00:00	Findings:	110 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	1150 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/15/2004 00:00:00	Findings:	.99
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/15/2004 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	2450 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.67 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	160 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07/12/2004 00:00:00	Findings:	7.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/14/2004 00:00:00	Findings:	1640 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2004 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2004 00:00:00	Findings:	146 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	178 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	1.46 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	471 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	88 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/14/2004 00:00:00	Findings:	61 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	7.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/14/2004 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/14/2004 00:00:00	Findings:	72 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	1110 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2004 00:00:00	Findings:	.85
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/14/2004 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	2830 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.61 MG/L
Chemical:	BROMIDE		
Sample Collected:	10/04/2004 00:00:00	Findings:	8.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/01/2004 00:00:00	Findings:	9.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/06/2004 00:00:00	Findings:	7.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/14/2004 00:00:00	Findings:	1480 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/14/2004 00:00:00	Findings:	154 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	187 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	.965 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	445 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/14/2004 00:00:00	Findings:	86 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/14/2004 00:00:00	Findings:	2.8 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/17/1999 00:00:00	Findings:	3.1 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	1090 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/23/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/23/1999 00:00:00	Findings:	199 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	242 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	2.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	44 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	119 MG/L
Chemical:	SODIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	164 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/23/1999 00:00:00	Findings:	3 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/23/1999 00:00:00	Findings:	145 UG/L
Chemical:	MANGANESE		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/23/1999 00:00:00	Findings:	160 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	.07 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/23/1999 00:00:00	Findings:	650 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/23/1999 00:00:00	Findings:	.9
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/23/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	57 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/14/2004 00:00:00	Findings:	54 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	1070 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/14/2004 00:00:00	Findings:	.66
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/14/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	4710 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.75 MG/L
Chemical:	BROMIDE		
Sample Collected:	01/10/2005 00:00:00	Findings:	14.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/07/2005 00:00:00	Findings:	11.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/07/2005 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/22/2005 00:00:00	Findings:	1470 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2005 00:00:00	Findings:	169 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	206 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	.845 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	421 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	83 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	52 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	230 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	2.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/22/2005 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.08 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/22/2005 00:00:00	Findings:	930 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2005 00:00:00	Findings:	.59
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2005 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	6530 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.62 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/04/2005 00:00:00	Findings:	11.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/02/2005 00:00:00	Findings:	9.73 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/06/2005 00:00:00	Findings:	10.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/14/2005 00:00:00	Findings:	1300 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/14/2005 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/14/2005 00:00:00	Findings:	171 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/14/2005 00:00:00	Findings:	208 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	1.35 MG/L
Chemical:	CARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/14/2005 00:00:00	Findings:	394 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	82 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	7.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	180 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/14/2005 00:00:00	Findings:	170 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.055 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/14/2005 00:00:00	Findings:	860 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/14/2005 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/14/2005 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	6820 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.44 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	12.69
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	09/22/1999 00:00:00	Findings:	1190 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/22/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	09/22/1999 00:00:00	Findings:	177 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	215 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.21 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	303 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	45.8 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/22/1999 00:00:00	Findings:	45.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	126 MG/L
Chemical:	SODIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	5.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	178 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/22/1999 00:00:00	Findings:	350 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/22/1999 00:00:00	Findings:	100 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	.069 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/22/1999 00:00:00	Findings:	700 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/22/1999 00:00:00	Findings:	.7
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/22/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.71 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	1210 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/15/1999 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/15/1999 00:00:00	Findings:	188 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	228 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	3.72 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	52.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	46.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	128 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/15/1999 00:00:00	Findings:	5.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	184 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/15/1999 00:00:00	Findings:	2.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/15/1999 00:00:00	Findings:	120 UG/L
Chemical:	IRON		
Sample Collected:	12/15/1999 00:00:00	Findings:	24 UG/L
Chemical:	LEAD		
Sample Collected:	12/15/1999 00:00:00	Findings:	215 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/15/1999 00:00:00	Findings:	170 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	.051 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/15/1999 00:00:00	Findings:	720 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/15/1999 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/15/1999 00:00:00	Findings:	.043 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	1.82 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	1140 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2000 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2000 00:00:00	Findings:	192 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	233 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	3.8 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	333 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	56 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2000 00:00:00	Findings:	5.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	199 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2000 00:00:00	Findings:	105 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/22/2000 00:00:00	Findings:	210 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/22/2000 00:00:00	Findings:	680 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2000 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2000 00:00:00	Findings:	.04 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	1.86 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	1240 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/21/2000 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/21/2000 00:00:00	Findings:	181 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	220 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	2.27 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	48 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	5.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	206 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/21/2000 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/21/2000 00:00:00	Findings:	130 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/21/2000 00:00:00	Findings:	210 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/21/2000 00:00:00	Findings:	750 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/21/2000 00:00:00	Findings:	.8
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/21/2000 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	2.78 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	07/12/2005 00:00:00	Findings:	9.63 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08/01/2005 00:00:00	Findings:	9.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/13/2005 00:00:00	Findings:	1250 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/13/2005 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/13/2005 00:00:00	Findings:	194 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/13/2005 00:00:00	Findings:	398 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	82 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	170 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/13/2005 00:00:00	Findings:	2.9 UG/L
Chemical:	ARSENIC		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/13/2005 00:00:00	Findings:	370 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.065 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/13/2005 00:00:00	Findings:	840 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/13/2005 00:00:00	Findings:	.94
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/13/2005 00:00:00	Findings:	3070 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.4 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	12.84
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	09/19/2005 00:00:00	Findings:	10.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10/03/2005 00:00:00	Findings:	11 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/14/2005 00:00:00	Findings:	11.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/05/2005 00:00:00	Findings:	10.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/06/2005 00:00:00	Findings:	1.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/06/2005 00:00:00	Findings:	6.4 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/06/2005 00:00:00	Findings:	1.7 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/06/2005 00:00:00	Findings:	4.5 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	12/06/2005 00:00:00	Findings:	3.02 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2005 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2005 00:00:00	Findings:	195 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	12/13/2005 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	3.85 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	427 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2005 00:00:00	Findings:	87 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	51 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	150 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	7.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	200 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2005 00:00:00	Findings:	480 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/13/2005 00:00:00	Findings:	844 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.3
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2005 00:00:00	Findings:	.5 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	13.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	01/30/2006 00:00:00	Findings:	9.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/13/2006 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/06/2006 00:00:00	Findings:	10 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/06/2006 00:00:00	Findings:	390 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/14/2006 00:00:00	Findings:	1350 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/14/2006 00:00:00	Findings:	203 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/14/2006 00:00:00	Findings:	250 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	400 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	03/14/2006 00:00:00	Findings:	78 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/14/2006 00:00:00	Findings:	49 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	200 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/14/2006 00:00:00	Findings:	2.8 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/14/2006 00:00:00	Findings:	260 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.051 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/14/2006 00:00:00	Findings:	850 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/14/2006 00:00:00	Findings:	1.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/14/2006 00:00:00	Findings:	.5 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	04/03/2006 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	04/03/2006 00:00:00	Findings:	230 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2000 00:00:00	Findings:	1310 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2000 00:00:00	Findings:	200 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	243 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	337 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	51 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/20/2000 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	202 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/20/2000 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/20/2000 00:00:00	Findings:	700 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2000 00:00:00	Findings:	400 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	790 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2000 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	6 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	1410 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2000 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2000 00:00:00	Findings:	204 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	248 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	1.28 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	391 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	60 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	6.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	215 MG/L
Chemical:	CHLORIDE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2000 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2000 00:00:00	Findings:	4.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/13/2000 00:00:00	Findings:	200 UG/L
Chemical:	IRON		
Sample Collected:	12/13/2000 00:00:00	Findings:	570 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/13/2000 00:00:00	Findings:	380 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	.058 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/13/2000 00:00:00	Findings:	840 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2000 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	2.244 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/13/2000 00:00:00	Findings:	6240 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	510 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/12/2001 00:00:00	Findings:	5.73 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.76 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/12/2001 00:00:00	Findings:	9.31 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.64 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/28/2001 00:00:00	Findings:	1340 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/28/2001 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	03/28/2001 00:00:00	Findings:	194 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/28/2001 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	1.53 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	390 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/28/2001 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	160 MG/L
Chemical:	SODIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	6.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	220 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/28/2001 00:00:00	Findings:	3.6 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/28/2001 00:00:00	Findings:	96 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/28/2001 00:00:00	Findings:	120 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	.06 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/28/2001 00:00:00	Findings:	860 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/28/2001 00:00:00	Findings:	.73
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/28/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	4720 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2001 00:00:00	Findings:	5.23 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	06/18/2001 00:00:00	Findings:	2.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/18/2001 00:00:00	Findings:	9.99 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	06/18/2001 00:00:00	Findings:	2.33 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/20/2001 00:00:00	Findings:	1320 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/20/2001 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/20/2001 00:00:00	Findings:	182 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/20/2001 00:00:00	Findings:	221 MG/L
Chemical:	BICARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/20/2001 00:00:00	Findings:	2.28 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	382 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/20/2001 00:00:00	Findings:	61 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	150 MG/L
Chemical:	SODIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	6.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	234 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/20/2001 00:00:00	Findings:	2.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/20/2001 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/20/2001 00:00:00	Findings:	130 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	.097 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/20/2001 00:00:00	Findings:	880 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/20/2001 00:00:00	Findings:	.88
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/20/2001 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	2790 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/19/2001 00:00:00	Findings:	5.4 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	09/19/2001 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/19/2001 00:00:00	Findings:	7.2 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	09/19/2001 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	09/19/2001 00:00:00	Findings:	.196 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	09/26/2001 00:00:00	Findings:	1470 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/26/2001 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2001 00:00:00	Findings:	189 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	230 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	1.88 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	409 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	60 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	63 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	6.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	240 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/26/2001 00:00:00	Findings:	320 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/26/2001 00:00:00	Findings:	69 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	.059 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/26/2001 00:00:00	Findings:	940 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/2001 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/26/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	3650 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	1.8 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/03/2001 00:00:00	Findings:	4.3 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.7 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/12/2001 00:00:00	Findings:	1600 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/12/2001 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	12/12/2001 00:00:00	Findings:	207 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	252 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.64 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	444 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	69 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	66 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	6.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	240 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/12/2001 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/12/2001 00:00:00	Findings:	260 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/12/2001 00:00:00	Findings:	320 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	.062 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/12/2001 00:00:00	Findings:	970 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/12/2001 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/12/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	5040 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	03/27/2002 00:00:00	Findings:	1630 US
Chemical:	SPECIFIC CONDUCTANCE		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/27/2002 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/27/2002 00:00:00	Findings:	210 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	256 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	1.32 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	11.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/27/2002 00:00:00	Findings:	503 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	83 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	72 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	7.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/27/2002 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/27/2002 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/27/2002 00:00:00	Findings:	110 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	.063 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/27/2002 00:00:00	Findings:	1080 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/27/2002 00:00:00	Findings:	.78
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/27/2002 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	6450 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	1.6 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	04/29/2002 00:00:00	Findings:	630 MG/L
Chemical:	BROMIDE		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**3**  
**SW**  
**1/2 - 1 Mile**  
**Lower**      **FRDS PWS**      **CA3301683**

PWS ID: CA3301683      PWS Status: Active  
 Date Initiated: 7706      Date Deactivated: Not Reported  
 PWS Name: CARRIAGE PLACE TRAVEL  
 CARRIAGE PLACE TRAVEL  
 77500 INTERSTATE  
 INDIO, CA 92201

Addressee / Facility: System Owner/Responsible Party  
 CARRIAGE PLACE TRAVEL  
 PO DRAWER 7  
 RANCHO SANTA FE, CA 92067

Facility Latitude: 33 01 13      Facility Longitude: 117 12 06  
 City Served: Not Reported  
 Treatment Class: Untreated      Population: 00000465

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

**ENFORCEMENT INFORMATION:**

System Name: THOUSAND TRAILS - PALM SPRINGS PRVE  
 Violation Type: Monitoring, Routine Major (TCR)  
 Contaminant: COLIFORM (TCR)  
 Compliance Period: 10/1/2000 0:00:00 - 12/31/2000 0:00:00  
 Violation ID: 0000002  
 Enforcement Date: 1/12/2001 0:00:00      Enf. Action: State Compliance Achieved

System Name: THOUSAND TRAILS - PALM SPRINGS PRVE  
 Violation Type: Monitoring, Routine Major (TCR)  
 Contaminant: COLIFORM (TCR)  
 Compliance Period: 7/1/2001 0:00:00 - 9/30/2001 0:00:00  
 Violation ID: 0200001  
 Enforcement Date: 10/17/2001 0:00:00      Enf. Action: State Admin Penalty Assessed

**CONTACT INFORMATION:**

Name: THOUSAND TRAILS - PALM SPRINGS PRVE      Violation: 125  
 Contact: Gary Root      Phone: 9093585316  
 Address: P.O. Box 7600  
 Address 2: 4065 County Circle Dr.  
 Riverside, CA 92513

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
92067	4	0	0.00

Federal EPA Radon Zone for SAN DIEGO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### **PWS:** Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF:** Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells:** USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### **California Drinking Water Quality Database**

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### **California Oil and Gas Well Locations**

Source: Department of Conservation

Telephone: 916-323-1779

### RADON

#### **State Database: CA Radon**

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### **Area Radon Information**

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

**California Earthquake Fault Lines:** The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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**EDR**® Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**El Camino Del Norte  
Paseo Delicias/El Camino Del Norte  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804503.2s**

**November 28, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

PASEO DELICIAS/EL CAMINO DEL NORTE  
RANCHO SANTA FE, CA 92067

#### COORDINATES

Latitude (North): 33.035900 - 33° 2' 9.2"  
Longitude (West): 117.183600 - 117° 11' 1.0"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 482855.4  
UTM Y (Meters): 3655090.5  
Elevation: 191 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 33117-A2 RANCHO SANTA FE, CA  
Most Recent Revision: 1983

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### FEDERAL RECORDS

**NPL**..... National Priority List  
**Proposed NPL**..... Proposed National Priority List Sites  
**Delisted NPL**..... National Priority List Deletions  
**NPL RECOVERY**..... Federal Superfund Liens  
**CERCLIS**..... Comprehensive Environmental Response, Compensation, and Liability Information System  
**CERC-NFRAP**..... CERCLIS No Further Remedial Action Planned  
**CORRACTS**..... Corrective Action Report  
**RCRA-TSDF**..... Resource Conservation and Recovery Act Information  
**RCRA-LQG**..... Resource Conservation and Recovery Act Information

## EXECUTIVE SUMMARY

<b>RCRA-SQG</b>	Resource Conservation and Recovery Act Information
<b>ERNS</b>	Emergency Response Notification System
<b>HMIRS</b>	Hazardous Materials Information Reporting System
<b>US ENG CONTROLS</b>	Engineering Controls Sites List
<b>US INST CONTROL</b>	Sites with Institutional Controls
<b>DOD</b>	Department of Defense Sites
<b>FUDS</b>	Formerly Used Defense Sites
<b>US BROWNFIELDS</b>	A Listing of Brownfields Sites
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>ROD</b>	Records Of Decision
<b>UMTRA</b>	Uranium Mill Tailings Sites
<b>ODI</b>	Open Dump Inventory
<b>TRIS</b>	Toxic Chemical Release Inventory System
<b>TSCA</b>	Toxic Substances Control Act
<b>FTTS</b>	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b>	Section 7 Tracking Systems
<b>ICIS</b>	Integrated Compliance Information System
<b>PADS</b>	PCB Activity Database System
<b>MLTS</b>	Material Licensing Tracking System
<b>MINES</b>	Mines Master Index File
<b>FINDS</b>	Facility Index System/Facility Registry System
<b>RAATS</b>	RCRA Administrative Action Tracking System

### STATE AND LOCAL RECORDS

<b>HIST Cal-Sites</b>	Historical Calsites Database
<b>CA BOND EXP. PLAN</b>	Bond Expenditure Plan
<b>SCH</b>	School Property Evaluation Program
<b>Toxic Pits</b>	Toxic Pits Cleanup Act Sites
<b>SWF/LF</b>	Solid Waste Information System
<b>CA WDS</b>	Waste Discharge System
<b>WMUDS/SWAT</b>	Waste Management Unit Database
<b>Cortese</b>	"Cortese" Hazardous Waste & Substances Sites List
<b>SWRCY</b>	Recycler Database
<b>LUST</b>	Geotracker's Leaking Underground Fuel Tank Report
<b>CA FID UST</b>	Facility Inventory Database
<b>SLIC</b>	Statewide SLIC Cases
<b>UST</b>	Active UST Facilities
<b>HIST UST</b>	Hazardous Substance Storage Container Database
<b>AST</b>	Aboveground Petroleum Storage Tank Facilities
<b>SWEEPS UST</b>	SWEEPS UST Listing
<b>CHMIRS</b>	California Hazardous Material Incident Report System
<b>Notify 65</b>	Proposition 65 Records
<b>DEED</b>	Deed Restriction Listing
<b>VCP</b>	Voluntary Cleanup Program Properties
<b>CLEANERS</b>	Cleaner Facilities
<b>WIP</b>	Well Investigation Program Case List
<b>CDL</b>	Clandestine Drug Labs
<b>San Diego Co. HMMD</b>	Hazardous Materials Management Division Database
<b>RESPONSE</b>	State Response Sites
<b>HAZNET</b>	Facility and Manifest Data
<b>EMI</b>	Emissions Inventory Data
<b>ENVIROSTOR</b>	EnviroStor Database

### TRIBAL RECORDS

<b>INDIAN RESERV</b>	Indian Reservations
----------------------	---------------------

## EXECUTIVE SUMMARY

**INDIAN LUST**..... Leaking Underground Storage Tanks on Indian Land  
**INDIAN UST**..... Underground Storage Tanks on Indian Land

### EDR PROPRIETARY RECORDS

**Manufactured Gas Plants**... EDR Proprietary Manufactured Gas Plants  
**EDR Historical Auto Stations**EDR Proprietary Historic Gas Stations  
**EDR Historical Cleaners**..... EDR Proprietary Historic Dry Cleaners

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

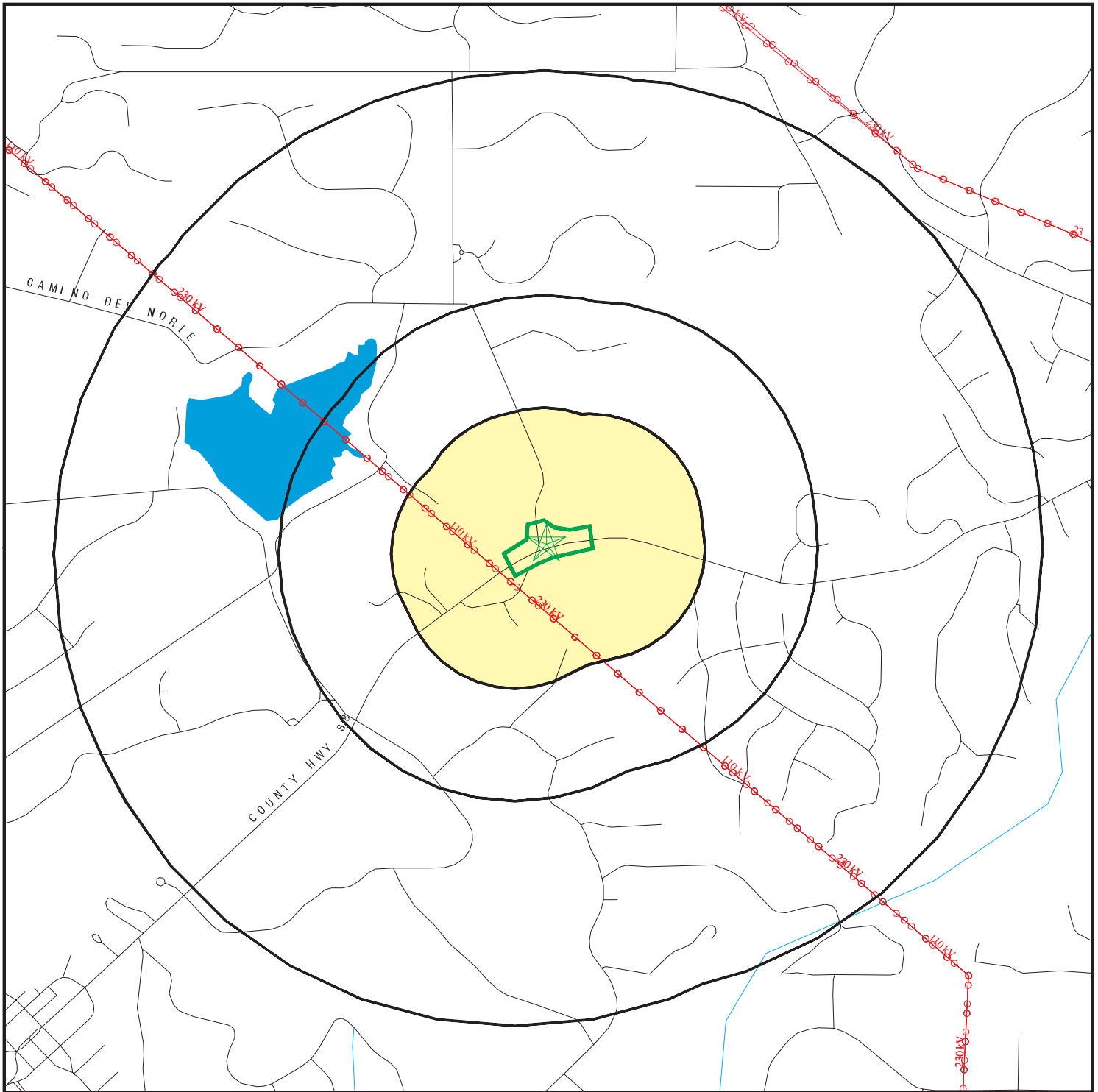
Unmappable (orphan) sites are not considered in the foregoing analysis.


## EXECUTIVE SUMMARY


Due to poor or inadequate address information, the following sites were not mapped:


<u>Site Name</u>	<u>Database(s)</u>
COAST SAND COMPANY INC	SWEEPS UST
FAIRBANKS RANCH ASSOCIATION	SWEEPS UST
DEL DIOS RANCH	San Diego Co. HMMD, SWEEPS UST
KENALBEE FARM	San Diego Co. HMMD, SWEEPS UST
WHISPERING PALMS COUNTRY CLUB	SWEEPS UST
SDCTY-WATER, LAKE HODGES	SWEEPS UST
CHEMPRON INC	CERC-NFRAP
WILLIAM P. CULVER CO	LUST
COUNTY OF SD-SANTA FE VALLEY PROPERTY	LUST
WILLIAM P. CULVER & CO. RANCH	LUST, San Diego Co. HMMD
DEL MAR COUNTRY CLUB	HIST UST
DEL MAR COUNTRY CLUB	HAZNET
	HAZNET, San Diego Co.
	HMMD
CAMINO REAL AND LINEA DEL CIELO	ERNS
DEL DIOS HIGHWAY	ERNS
IN FRONT OF 16728 GRIA DEL SUR	ERNS
RANCHO SANTA FE MIDDLE SCHOOL	SCH, ENVIROSTOR

# OVERVIEW MAP - 1804503.2s



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Landfill Sites


 Dept. Defense Sites



 Indian Reservations BIA

 Power transmission lines

 Oil & Gas pipelines

 Areas of Concern

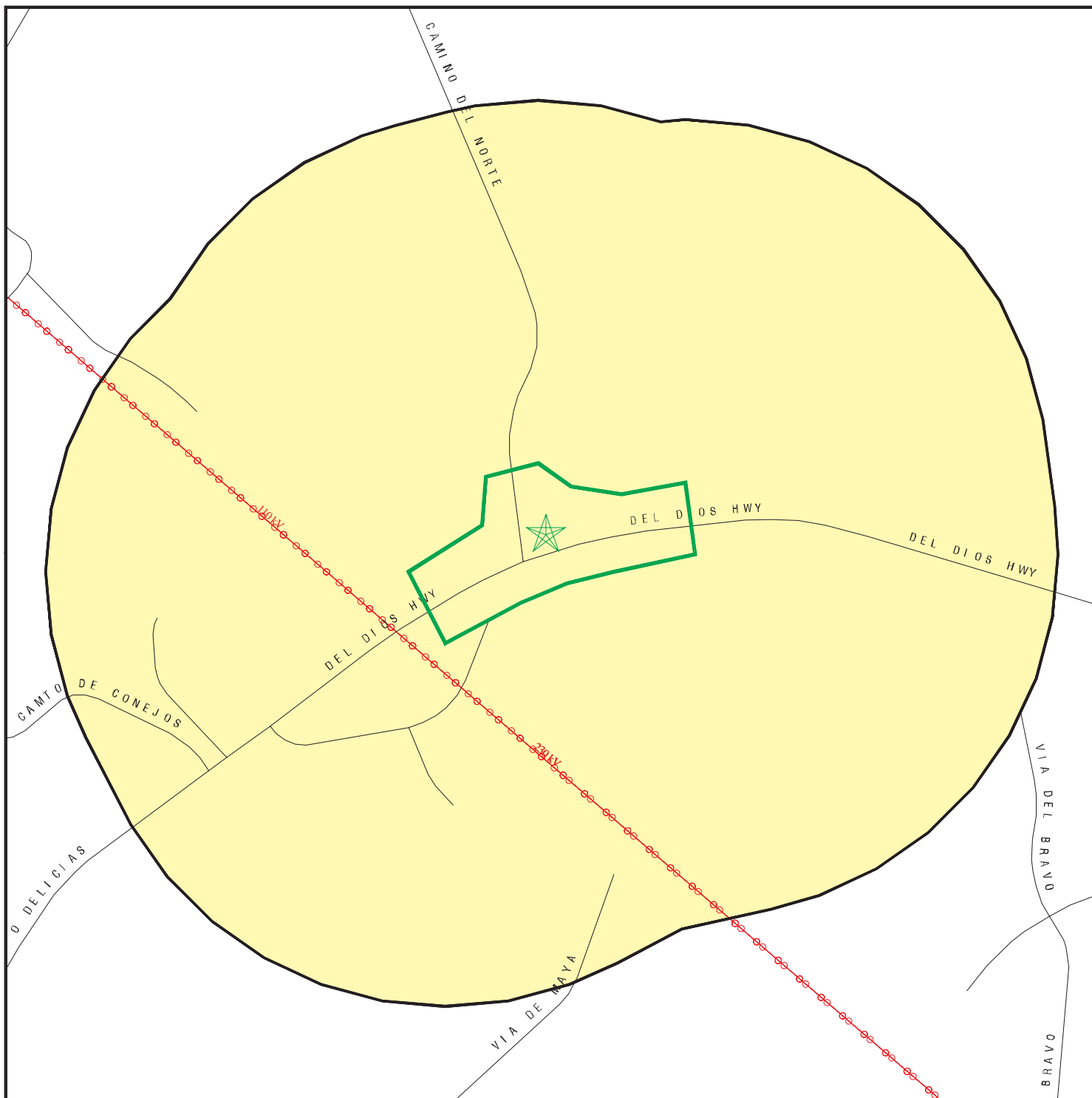







This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

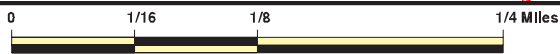
SITE NAME: El Camino Del Norte  
 ADDRESS: Paseo Delicias/El Camino Del Norte  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0359 / 117.1836

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804503.2s  
 DATE: November 28, 2006 9:41 am

# DETAIL MAP - 1804503.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Power transmission lines
-  Oil & Gas pipelines
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: El Camino Del Norte  
 ADDRESS: Paseo Delicias/El Camino Del Norte  
 Rancho Santa Fe CA 92067  
 LAT/LONG: 33.0359 / 117.1836

CLIENT: Sota Environmental Technology  
 CONTACT: Eric Romero  
 INQUIRY #: 1804503.2s  
 DATE: November 28, 2006 9:41 am

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
Hist Cal-Sites		1.000	0	0	0	0	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
Cortese		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
CA FID UST		0.250	0	0	NR	NR	NR	0
SLIC		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
Notify 65		1.000	0	0	0	0	NR	0
DEED		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP		NR	NR	NR	NR	NR	0
RESPONSE		1.000	0	0	0	0	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENVIROSTOR		1.000	0	0	0	0	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database



Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

NO SITES FOUND

## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RANCHO SANTA FE	S106924767	COAST SAND COMPANY INC	CALZADA DEL BOSQUE	92067	SWEEPS UST
RANCHO SANTA FE	92284927	CAMINO REAL AND LINEA DEL CIELO	CAMINO REAL AND LINEA DEL CIELO	92067	ERNS
RANCHO SANTA FE	S106926025	FAIRBANKS RANCH ASSOCIATION	16567 CIRCA DEL NORTE B	92067	SWEEPS UST
RANCHO SANTA FE	S106090001	DEL MAR COUNTRY CLUB	6001 CLUB HOUSE DR	92067	HAZNET
RANCHO SANTA FE	S103666652	DEL MAR COUNTRY CLUB	6074 CLUB HOUSE DR	92067	HAZNET, San Diego Co. HMMMD
RANCHO SANTA FE	2001556242	DEL DIOS HIGHWAY	DEL DIOS HIGHWAY		ERNS
RANCHO SANTA FE	S106062714	DEL DIOS RANCH	7202 DEL DIOS HWY	92067	San Diego Co. HMMMD, SWEEPS UST
RANCHO SANTA FE	S106153068	RANCHO SANTA FE MIDDLE SCHOOL	EL ESCONDIDO DEL DIOS HIGHWAY	92067	SCH, ENVIROSTOR
RANCHO SANTA FE	94400829	IN FRONT OF 16728 GRIA DEL SUR	IN FRONT OF 16728 GRIA DEL SUR	92067	ERNS
RANCHO SANTA FE	S104494698	WILLIAM P. CULVER CO	LOT 17 RANCHO RECANTO	92067	LUST
RANCHO SANTA FE	S106716142	COUNTY OF SD-SANTA FE VALLEY PROPERTY	NONE DEL DIOS HY / LH DAM	92067	LUST
RANCHO SANTA FE	S106065731	WILLIAM P. CULVER & CO.	RANCHO RECANTO		LUST, San Diego Co. HMMMD
RANCHO SANTA FE	S104749570	KENALBEE FARM	16232 VIA DELA VALLE	92067	San Diego Co. HMMMD, SWEEPS UST
RANCHO SANTA FE	S106934438	WHISPERING PALMS COUNTRY CLUB	VIA DE SANTA FE (END	92067	SWEEPS UST
RANCHO SANTA FE	U001604623	RANCH	VIA DE LA VALLE	92067	HIST UST
SAN DIEGO	1003878707	CHEMPRON INC	NE1/4 OF SW1/4 SEC 22 T14S R3E	92127	CERC-NFRAP
SAN DIEGO	S106931989	SDCTY-WATER, LAKE HODGES	VIA RANCHO PY	92127	SWEEPS UST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **FEDERAL RECORDS**

### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### **Proposed NPL: Proposed National Priority List Sites**

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 11/01/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NPL RECOVERY:** Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 11/17/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## **CERCLIS:** Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/09/2006	Source: EPA
Date Data Arrived at EDR: 09/21/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/21/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/10/2006	Source: EPA
Date Data Arrived at EDR: 10/25/2006	Telephone: 703-603-8960
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Quarterly

## **RCRA:** Resource Conservation and Recovery Act Information

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: 800-424-9346
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 11/22/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **ERNS:** Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 10/24/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Annually

## **HMIRS:** Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 08/01/2006	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 10/18/2006	Telephone: 202-366-4555
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

## **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 09/07/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **DOD:** Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

## **FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Varies

## **US BROWNFIELDS:** A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients--States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/10/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/13/2006	Telephone: 202-566-2777
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Semi-Annually

## **CONSENT:** Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

## **ROD:** Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/10/2006	Source: EPA
Date Data Arrived at EDR: 07/21/2006	Telephone: 703-416-0223
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 47	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Varies

## **ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **TRIS:** Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 09/22/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Annually

## **TSCA:** Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 10/18/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Every 4 Years

## **FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

## **FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 10/19/2006	Source: EPA
Date Data Arrived at EDR: 10/27/2006	Telephone: 202-566-1667
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 09/18/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/18/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SSTS:** Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 11/07/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Quarterly

## **PADS:** PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/07/2006	Source: EPA
Date Data Arrived at EDR: 08/09/2006	Telephone: 202-566-0500
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 11/10/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **MLTS:** Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/10/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/20/2006	Telephone: 301-415-7169
Date Made Active in Reports: 09/06/2006	Last EDR Contact: 10/02/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 09/27/2006	Telephone: 303-231-5959
Date Made Active in Reports: 11/27/2006	Last EDR Contact: 09/27/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Semi-Annually

## **FINDS:** Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/21/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 09/06/2006  
Number of Days to Update: 43

Source: EPA  
Telephone: N/A  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

## **RAATS:** RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003  
Date Data Arrived at EDR: 06/17/2005  
Date Made Active in Reports: 08/04/2005  
Number of Days to Update: 48

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Biennially

## **STATE AND LOCAL RECORDS**

### **HIST CAL-SITES:** Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: No Update Planned

### **CA BOND EXP. PLAN:** Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SCH:** School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/29/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 36

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **TOXIC PITS:** Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: No Update Planned

## **SWF/LF (SWIS):** Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/13/2006  
Date Data Arrived at EDR: 09/13/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 22

Source: Integrated Waste Management Board  
Telephone: 916-341-6320  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

## **CA WDS:** Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 09/20/2006  
Date Data Arrived at EDR: 09/21/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 34

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 09/21/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Quarterly

## **WMUDS/SWAT:** Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## **CORTESE:** "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 05/29/2001  
Date Made Active in Reports: 07/26/2001  
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: No Update Planned

## **SWRCY:** Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 10/10/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/11/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5752
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 09/30/2006	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 10/25/2006	Telephone: 916-464-3291
Date Made Active in Reports: 11/28/2006	Last EDR Contact: 10/25/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Quarterly

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-346-7491
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 951-782-4130
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 11/07/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Varies

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-467-2980
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 10/17/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-346-7491
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 11/16/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 916-542-5424
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: No Update Planned

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 10/11/2006  
Date Data Arrived at EDR: 10/12/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 13

Source: State Water Resources Control Board  
Telephone: 916-341-5752  
Last EDR Contact: 10/12/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 2:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 10/09/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Quarterly

## **SLIC REG 3:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 4:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Varies

## **SLIC REG 5:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6V:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 10/02/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## **SLIC REG 6L:** SLIC Sites

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: No Update Planned

## **SLIC REG 7:** SLIC List

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **SLIC REG 8:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 04/06/2006	Source: California Region Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 04/06/2006	Telephone: 951-782-3298
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **SLIC REG 9:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 08/30/2006	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 08/31/2006	Telephone: 858-467-2980
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 11/27/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/26/2007
	Data Release Frequency: Annually

## **UST:** Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 10/11/2006	Source: SWRCB
Date Data Arrived at EDR: 10/12/2006	Telephone: 916-341-5851
Date Made Active in Reports: 11/13/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## **HIST UST:** Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **AST:** Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 01/30/2006	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/30/2006	Telephone: 916-341-5712
Date Made Active in Reports: 02/17/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/29/2007
	Data Release Frequency: Quarterly

## **SWEEPS UST:** SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **CHMIRS:** California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004	Source: Office of Emergency Services
Date Data Arrived at EDR: 11/30/2005	Telephone: 916-845-8400
Date Made Active in Reports: 01/19/2006	Last EDR Contact: 11/20/2006
Number of Days to Update: 50	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NOTIFY 65:** Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 10/16/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: No Update Planned

## **DEED:** Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 10/04/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/05/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/05/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Semi-Annually

## **VCP:** Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 04/18/2005	Telephone: 916-327-4498
Date Made Active in Reports: 05/06/2005	Last EDR Contact: 10/02/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

## **WIP:** Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/25/2006	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 10/31/2006	Telephone: 213-576-6726
Date Made Active in Reports: 11/28/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **CDL:** Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 05/17/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/17/2006	Telephone: 916-255-6504
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 10/23/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/22/2007
	Data Release Frequency: Varies

## **RESPONSE:** State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly

## **HAZNET:** Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2003	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/11/2005	Telephone: 916-255-1136
Date Made Active in Reports: 10/31/2005	Last EDR Contact: 11/20/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

## **EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2004	Source: California Air Resources Board
Date Data Arrived at EDR: 04/14/2006	Telephone: 916-322-2990
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 10/20/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Varies

## **ENVIROSTOR:** EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/29/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2006	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 08/30/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/27/2006
	Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## TRIBAL RECORDS

### **INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 202-208-3710
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 11/10/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

### **INDIAN LUST R1:** Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/07/2006	Source: EPA Region 1
Date Data Arrived at EDR: 09/08/2006	Telephone: 617-918-1313
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R10:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/06/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3372
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R8:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6271
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

### **INDIAN LUST R7:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

### **INDIAN LUST R6:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005	Source: EPA Region 6
Date Data Arrived at EDR: 01/21/2005	Telephone: 214-665-6597
Date Made Active in Reports: 02/28/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-8677
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R4:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/24/2006	Source: EPA Region 4
Date Data Arrived at EDR: 09/11/2006	Telephone: 404-562-9424
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Semi-Annually

## **INDIAN UST R9:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 9
Date Data Arrived at EDR: 10/04/2006	Telephone: 415-972-3368
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R7:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R8:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/30/2006	Source: EPA Region 8
Date Data Arrived at EDR: 09/06/2006	Telephone: 303-312-6137
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R5:** Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 11/17/2006
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Varies

## **INDIAN UST R10:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/11/2006	Source: EPA Region 10
Date Data Arrived at EDR: 09/11/2006	Telephone: 206-553-2857
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 11/17/2006
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/19/2007
	Data Release Frequency: Quarterly

## **INDIAN UST R1:** Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/07/2006  
Date Data Arrived at EDR: 09/08/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 61

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## **INDIAN UST R6:** Underground Storage Tanks on Indian Land

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 71

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Semi-Annually

## **EDR PROPRIETARY RECORDS**

### **Manufactured Gas Plants:** EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **EDR Historical Auto Stations:** EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### **EDR Historical Cleaners:** EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COUNTY RECORDS

### **ALAMEDA COUNTY:**

#### **Contaminated Sites**

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/26/2006  
Date Data Arrived at EDR: 10/27/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 32

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

#### **Underground Tanks**

Date of Government Version: 10/26/2006  
Date Data Arrived at EDR: 10/27/2006  
Date Made Active in Reports: 11/13/2006  
Number of Days to Update: 17

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Semi-Annually

### **CONTRA COSTA COUNTY:**

#### **Site List**

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/26/2007  
Data Release Frequency: Semi-Annually

### **FRESNO COUNTY:**

#### **CUPA Resources List**

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2006  
Date Data Arrived at EDR: 07/12/2006  
Date Made Active in Reports: 07/27/2006  
Number of Days to Update: 15

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/05/2007  
Data Release Frequency: Semi-Annually

### **KERN COUNTY:**

#### **Underground Storage Tank Sites & Tank Listing**

Kern County Sites and Tanks Listing.

Date of Government Version: 09/05/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 13

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### **LOS ANGELES COUNTY:**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 07/07/1999  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/31/2006  
Date Data Arrived at EDR: 10/30/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 29

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 11/15/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Date of Government Version: 03/01/2006  
Date Data Arrived at EDR: 04/06/2006  
Date Made Active in Reports: 05/11/2006  
Number of Days to Update: 35

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/05/2006  
Date Data Arrived at EDR: 02/16/2006  
Date Made Active in Reports: 03/13/2006  
Number of Days to Update: 25

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Date of Government Version: 09/11/2006  
Date Data Arrived at EDR: 09/22/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 45

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 11/27/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/2003  
Date Data Arrived at EDR: 10/23/2003  
Date Made Active in Reports: 11/26/2003  
Number of Days to Update: 34

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 11/21/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/15/2006  
Date Data Arrived at EDR: 08/17/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 32

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 11/13/2006  
Next Scheduled EDR Contact: 02/12/2007  
Data Release Frequency: Semi-Annually

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/29/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 20

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 10/30/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Semi-Annually

## NAPA COUNTY:

### Sites With Reported Contamination

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 16

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Semi-Annually

### Closed and Operating Underground Storage Tank Sites

Date of Government Version: 10/09/2006  
Date Data Arrived at EDR: 10/09/2006  
Date Made Active in Reports: 11/06/2006  
Number of Days to Update: 28

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/25/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Annually

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/18/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 37

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 09/06/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/30/2006  
Date Data Arrived at EDR: 08/31/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 35

Source: Placer County Health and Human Services  
Telephone: 530-889-7312  
Last EDR Contact: 08/14/2006  
Next Scheduled EDR Contact: 12/19/2006  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/09/2006  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 18

Source: Department of Public Health  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Date of Government Version: 08/08/2006  
Date Data Arrived at EDR: 08/08/2006  
Date Made Active in Reports: 09/18/2006  
Number of Days to Update: 41

Source: Health Services Agency  
Telephone: 951-358-5055  
Last EDR Contact: 10/16/2006  
Next Scheduled EDR Contact: 01/15/2007  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Contaminated Sites

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/18/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 48

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

### ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2006  
Date Data Arrived at EDR: 08/25/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 41

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 11/17/2006  
Next Scheduled EDR Contact: 01/29/2007  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/26/2006  
Date Data Arrived at EDR: 10/17/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 8

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 09/05/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005  
Date Data Arrived at EDR: 05/18/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 29

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 10/20/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2005  
Date Data Arrived at EDR: 12/29/2005  
Date Made Active in Reports: 01/19/2006  
Number of Days to Update: 21

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 11/20/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Varies

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 35

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Date of Government Version: 09/18/2006  
Date Data Arrived at EDR: 09/20/2006  
Date Made Active in Reports: 10/20/2006  
Number of Days to Update: 30

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/04/2006  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 07/25/2006	Source: Environmental Health Department
Date Data Arrived at EDR: 08/10/2006	Telephone: N/A
Date Made Active in Reports: 09/18/2006	Last EDR Contact: 10/30/2006
Number of Days to Update: 39	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 08/25/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 08/25/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Annually

### Fuel Leak List

Date of Government Version: 10/10/2006	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 10/11/2006	Telephone: 650-363-1921
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 10/09/2006
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Semi-Annually

## SANTA CLARA COUNTY:

### HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005	Source: Santa Clara Valley Water District
Date Data Arrived at EDR: 03/30/2005	Telephone: 408-265-2600
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/25/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: No Update Planned

### LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 09/29/2006	Source: Department of Environmental Health
Date Data Arrived at EDR: 10/02/2006	Telephone: 408-918-3417
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/25/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 12/25/2006
	Data Release Frequency: Varies

### Hazardous Material Facilities

Date of Government Version: 09/07/2006	Source: City of San Jose Fire Department
Date Data Arrived at EDR: 09/08/2006	Telephone: 408-277-4659
Date Made Active in Reports: 10/05/2006	Last EDR Contact: 09/05/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/04/2006
	Data Release Frequency: Annually

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tanks

Date of Government Version: 07/05/2006  
Date Data Arrived at EDR: 07/25/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 30

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## Underground Storage Tanks

Date of Government Version: 07/03/2006  
Date Data Arrived at EDR: 07/26/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 29

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 10/18/2006  
Next Scheduled EDR Contact: 12/25/2006  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Leaking Underground Storage Tank Sites

Date of Government Version: 10/23/2006  
Date Data Arrived at EDR: 10/24/2006  
Date Made Active in Reports: 11/28/2006  
Number of Days to Update: 35

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Date of Government Version: 12/31/0005  
Date Data Arrived at EDR: 01/05/2006  
Date Made Active in Reports: 01/31/2006  
Number of Days to Update: 26

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 10/27/2006  
Next Scheduled EDR Contact: 01/01/2007  
Data Release Frequency: Semi-Annually

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/28/2006  
Date Data Arrived at EDR: 09/26/2006  
Date Made Active in Reports: 10/25/2006  
Number of Days to Update: 29

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/13/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 09/05/2006  
Date Made Active in Reports: 10/05/2006  
Number of Days to Update: 30

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/16/2006  
Next Scheduled EDR Contact: 02/19/2007  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 09/22/2006	Telephone: 805-654-2813
Date Made Active in Reports: 10/25/2006	Last EDR Contact: 09/13/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Quarterly

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/28/2006	Source: Environmental Health Division
Date Data Arrived at EDR: 07/27/2006	Telephone: 805-654-2813
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 10/12/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/08/2007
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 07/19/2006	Source: Yolo County Department of Health
Date Data Arrived at EDR: 08/01/2006	Telephone: 530-666-8646
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 01/15/2007
	Data Release Frequency: Annually

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### **CT MANIFEST:** Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/17/2006	Telephone: 860-424-3375
Date Made Active in Reports: 04/07/2006	Last EDR Contact: 09/11/2006
Number of Days to Update: 49	Next Scheduled EDR Contact: 12/11/2006
	Data Release Frequency: Annually

### **NJ MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/01/2006	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/06/2006	Telephone: N/A
Date Made Active in Reports: 08/01/2006	Last EDR Contact: 11/13/2006
Number of Days to Update: 26	Next Scheduled EDR Contact: 01/01/2007
	Data Release Frequency: Annually

### **NY MANIFEST:** Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2006  
Date Data Arrived at EDR: 08/30/2006  
Date Made Active in Reports: 10/16/2006  
Number of Days to Update: 47

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 08/30/2006  
Next Scheduled EDR Contact: 11/27/2006  
Data Release Frequency: Annually

## **PA MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 06/06/2006  
Number of Days to Update: 81

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 09/11/2006  
Next Scheduled EDR Contact: 12/11/2006  
Data Release Frequency: Annually

## **RI MANIFEST:** Manifest information

Hazardous waste manifest information

Date of Government Version: 09/30/2005  
Date Data Arrived at EDR: 05/09/2006  
Date Made Active in Reports: 05/24/2006  
Number of Days to Update: 15

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 09/18/2006  
Next Scheduled EDR Contact: 12/18/2006  
Data Release Frequency: Annually

## **WI MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 05/02/2006  
Number of Days to Update: 46

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/08/2007  
Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

## **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## **AHA Hospitals:**

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## **Nursing Homes**

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

## **Daycare Centers: Licensed Facilities**

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

EL CAMINO DEL NORTE  
PASEO DELICIAS/EL CAMINO DEL NORTE  
RANCHO SANTA FE, CA 92067

### **TARGET PROPERTY COORDINATES**

Latitude (North):	33.03590 - 33° 2' 9.2"
Longitude (West):	117.1836 - 117° 11' 1.0"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	482855.4
UTM Y (Meters):	3655090.5
Elevation:	191 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	33117-A2 RANCHO SANTA FE, CA
Most Recent Revision:	1983

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

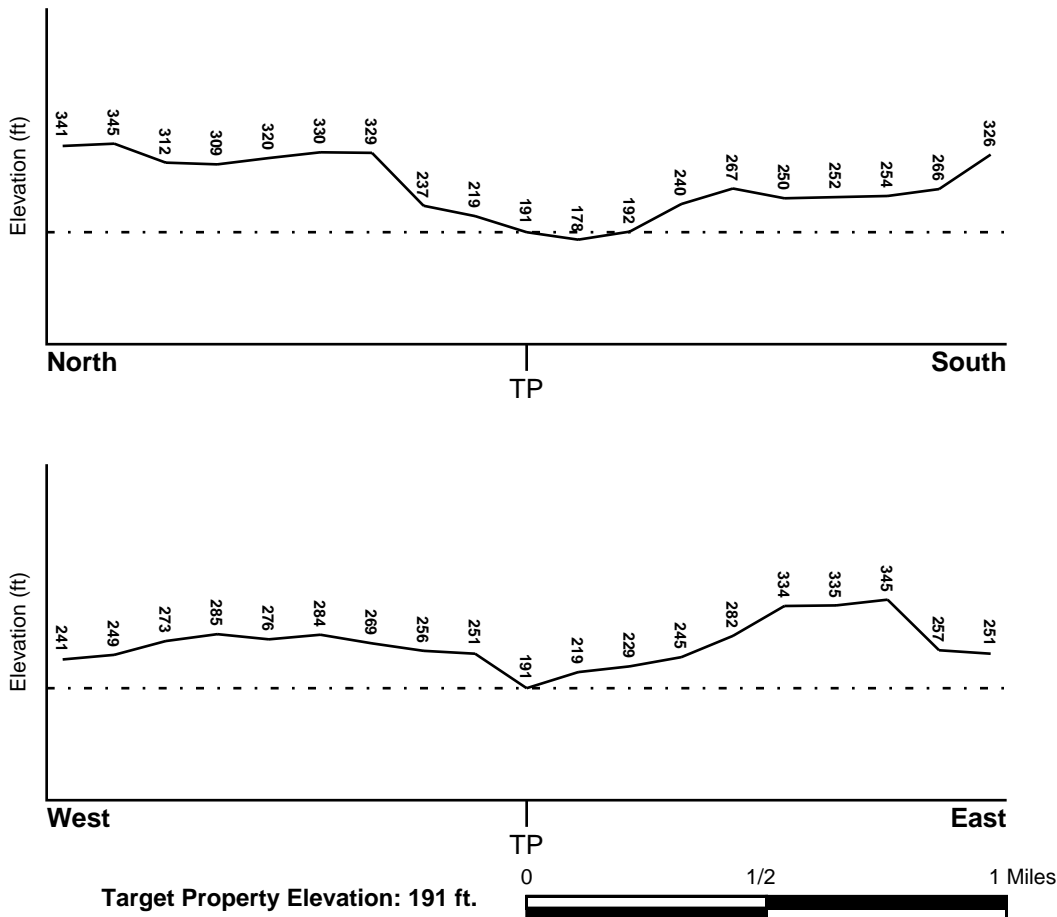
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
SAN DIEGO, CA	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
RANCHO SANTA FE	Not Available

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Mesozoic  
System: Lower Jurassic and Upper Triassic  
Series: Lower Mesozoic  
Code: IMze (*decoded above as Era, System & Series*)

#### GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: EXCHEQUER

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat excessive. Soils have high hydraulic conductivity and low water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 4 inches

Depth to Bedrock Max: > 20 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	10 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 6.50 Min: 5.60
2	10 inches	14 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam  
unweathered bedrock  
very fine sandy loam  
sandy loam

Surficial Soil Types: fine sandy loam  
unweathered bedrock  
very fine sandy loam  
sandy loam

Shallow Soil Types: gravelly - sandy loam  
clay  
fine sandy loam  
gravelly - loam

Deeper Soil Types: gravelly - sandy loam

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

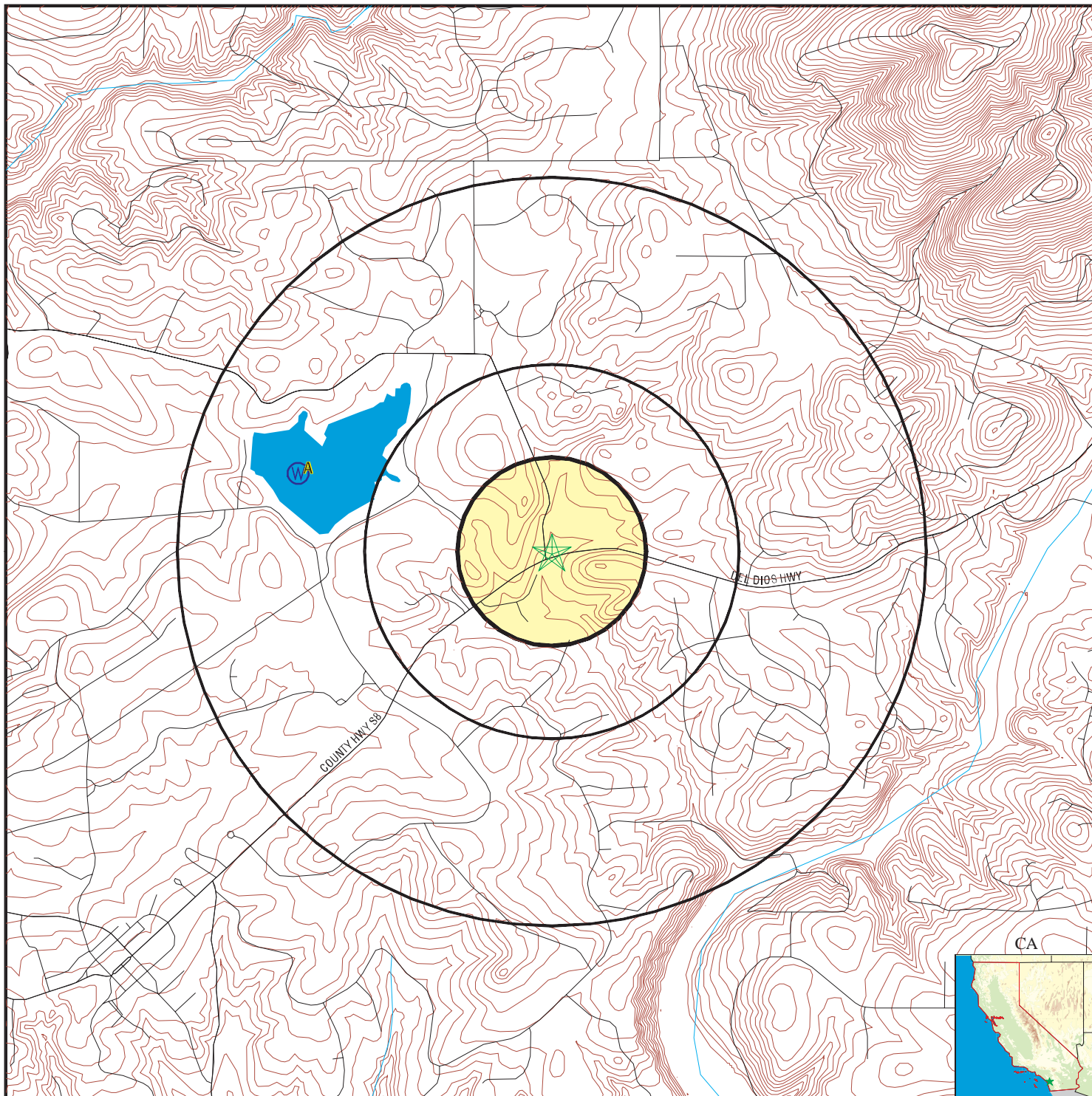
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	23689	1/2 - 1 Mile WNW
A2	23688	1/2 - 1 Mile WNW

# PHYSICAL SETTING SOURCE MAP - 1804503.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



<p><b>SITE NAME:</b> El Camino Del Norte  <b>ADDRESS:</b> Paseo Delicias/El Camino Del Norte                  Rancho Santa Fe CA 92067  <b>LAT/LONG:</b> 33.0359 / 117.1836</p>	<p><b>CLIENT:</b> Sota Environmental Technology  <b>CONTACT:</b> Eric Romero  <b>INQUIRY #:</b> 1804503.2s  <b>DATE:</b> November 28, 2006 9:41 am</p>
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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**A1**  
**WNW**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      23689**

**Water System Information:**

Prime Station Code:	N37/021-SUTORES	User ID:	WAT
FRDS Number:	3710023003	County:	San Diego
District Number:	14	Station Type:	RES/MUN/INTAKE
Water Type:	Surface Water	Well Status:	Active Treated
Source Lat/Long:	330220.0 1171140.0	Precision:	100 Feet (one Second)
Source Name:	605 REGULATING RESERVOIR - TREATED		
System Number:	3710023		
System Name:	Santa Fe I.D.		
Organization That Operates System:	P.O. Box 409 Rancho Santa Fe, CA 92067		
Pop Served:	25000	Connections:	6225
Area Served:	SANTA FE VICINITY		
Sample Collected:	06/03/2002 00:00:00	Findings:	2.4 UG/L
Chemical:	TERT-BUTYL ALCOHOL		
Sample Collected:	06/03/2002 00:00:00	Findings:	36.9 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/19/2002 00:00:00	Findings:	1210 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/19/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/19/2002 00:00:00	Findings:	156 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/19/2002 00:00:00	Findings:	190 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	1.23 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	5.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/19/2002 00:00:00	Findings:	369 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/19/2002 00:00:00	Findings:	72 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	5.9 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/19/2002 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/19/2002 00:00:00	Findings:	780 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/19/2002 00:00:00	Findings:	.69
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/19/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	08/07/2002 00:00:00	Findings:	37 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/09/2002 00:00:00	Findings:	140 UG/L
Chemical:	BORON		
Sample Collected:	09/09/2002 00:00:00	Findings:	5 UG/L
Chemical:	VANADIUM		
Sample Collected:	09/09/2002 00:00:00	Findings:	17 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	4.9 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	17 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	8.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/09/2002 00:00:00	Findings:	47.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/18/2002 00:00:00	Findings:	1000 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/18/2002 00:00:00	Findings:	126 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	153 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	853 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/18/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	12/18/2002 00:00:00	Findings:	116 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	141 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	.916 MG/L
Chemical:	CARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/18/2002 00:00:00	Findings:	2.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	250 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	59 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	25 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	90 MG/L
Chemical:	SODIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	4.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	92 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/18/2002 00:00:00	Findings:	7.4 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	8.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/18/2002 00:00:00	Findings:	550 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/18/2002 00:00:00	Findings:	.47
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2820 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/18/2002 00:00:00	Findings:	23.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/18/2002 00:00:00	Findings:	.09 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.5 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1260 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/19/2003 00:00:00	Findings:	142 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/19/2003 00:00:00	Findings:	173 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	.448 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	385 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/19/2003 00:00:00	Findings:	77 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	6.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	190 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/19/2003 00:00:00	Findings:	26 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	12 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	30 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	11 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/19/2003 00:00:00	Findings:	815 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/19/2003 00:00:00	Findings:	.28
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/19/2003 00:00:00	Findings:	.007 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	2.552 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	03/19/2003 00:00:00	Findings:	8690 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	10 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	79 UG/L
Chemical:	TOTAL TRIHALOMETHANES		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	.18 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.6 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	6.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	757 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/18/2003 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	06/18/2003 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/18/2003 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	.508 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	215 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/18/2003 00:00:00	Findings:	50 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	68 MG/L
Chemical:	SODIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	3.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	75 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/18/2003 00:00:00	Findings:	11 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	1.9 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	10 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	5.2 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/18/2003 00:00:00	Findings:	460 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/18/2003 00:00:00	Findings:	.15
Chemical:	LANGELIER INDEX @ 60 C		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/18/2003 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	3930 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	6.4 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	28.1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/18/2003 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	3.2 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	06/18/2003 00:00:00	Findings:	2.6 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/16/2003 00:00:00	Findings:	770 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	09/16/2003 00:00:00	Findings:	105 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	128 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	1.32 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	225 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	52 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	72 MG/L
Chemical:	SODIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	3.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	73 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/16/2003 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/16/2003 00:00:00	Findings:	.58
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/16/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/16/2003 00:00:00	Findings:	1620 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/17/2003 00:00:00	Findings:	8.8 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	1.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	6.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	6.4 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/17/2003 00:00:00	Findings:	5.1 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/17/2003 00:00:00	Findings:	23.1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/17/2003 00:00:00	Findings:	2.2 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/17/2003 00:00:00	Findings:	2.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/02/2003 00:00:00	Findings:	2.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/08/2004 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	2.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	9.3 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/08/2004 00:00:00	Findings:	8.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/14/2004 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2004 00:00:00	Findings:	.059
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/14/2004 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	4710 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.072 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	09/28/2004 00:00:00	Findings:	15 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	7.7 UG/L
Chemical:	BROMOFORM (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/28/2004 00:00:00	Findings:	20 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	6.4 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/28/2004 00:00:00	Findings:	5 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	49 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/28/2004 00:00:00	Findings:	6.3 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	2.4 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/28/2004 00:00:00	Findings:	14 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	12/14/2004 00:00:00	Findings:	945 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/14/2004 00:00:00	Findings:	112 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	136 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	.702 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	283 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	30 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	100 MG/L
Chemical:	SODIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	5.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/14/2004 00:00:00	Findings:	630 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/14/2004 00:00:00	Findings:	.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/14/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/14/2004 00:00:00	Findings:	3420 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	420 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	12/14/2004 00:00:00	Findings:	5.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/21/2004 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	6.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/21/2004 00:00:00	Findings:	5.8 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	39 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/21/2004 00:00:00	Findings:	3.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	3.4 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/21/2004 00:00:00	Findings:	13 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	03/22/2005 00:00:00	Findings:	785 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2005 00:00:00	Findings:	111 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	135 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	.349 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	221 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	49 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	24 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	76 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	5.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	98 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.18 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	30 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/21/2005 00:00:00	Findings:	49 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/13/2005 00:00:00	Findings:	2.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	15 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	15 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/13/2005 00:00:00	Findings:	14 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	57 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/13/2005 00:00:00	Findings:	4 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	6.6 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.1 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	12/13/2005 00:00:00	Findings:	26 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	02/23/2006 00:00:00	Findings:	.568 MG/L
Chemical:	CHLORITE		
Sample Collected:	02/23/2006 00:00:00	Findings:	260 UG/L
Chemical:	CHLORATE		
Sample Collected:	03/14/2006 00:00:00	Findings:	1140 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	03/14/2006 00:00:00	Findings:	162 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/14/2006 00:00:00	Findings:	200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	3.3 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	330 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/14/2006 00:00:00	Findings:	67 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	39 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	5.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/14/2006 00:00:00	Findings:	31 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	5.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	24 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	17 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/14/2006 00:00:00	Findings:	682 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/14/2006 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/14/2006 00:00:00	Findings:	15 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	77 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/14/2006 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.5 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	2.3 UG/L
Chemical:	MONOCHLOROACETIC ACID (MCAA)		
Sample Collected:	03/14/2006 00:00:00	Findings:	33 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	03/15/2006 00:00:00	Findings:	.593 MG/L
Chemical:	CHLORITE		
Sample Collected:	03/15/2006 00:00:00	Findings:	260 UG/L
Chemical:	CHLORATE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/03/2006 00:00:00	Findings:	.014 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	04/11/2006 00:00:00	Findings:	.013 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	06/19/2002 00:00:00	Findings:	3800 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.21 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/31/2002 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	3.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	7.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/31/2002 00:00:00	Findings:	38.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08/07/2002 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	3.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	13 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	08/07/2002 00:00:00	Findings:	6.8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.25 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	4.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	279 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	59 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	32 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	100 MG/L
Chemical:	SODIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/18/2002 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	5.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	6.2 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/18/2002 00:00:00	Findings:	610 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/18/2002 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	2430 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	6.2 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/18/2002 00:00:00	Findings:	38.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/18/2002 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	4.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/18/2002 00:00:00	Findings:	3.3 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	10/09/2002 00:00:00	Findings:	8.8 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	5.2 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	3.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/09/2002 00:00:00	Findings:	28.3 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/02/2002 00:00:00	Findings:	15.2 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	8.1 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	21.5 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/02/2002 00:00:00	Findings:	5.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/02/2002 00:00:00	Findings:	50.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/02/2003 00:00:00	Findings:	16 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	4.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	16 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	7.5 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/02/2003 00:00:00	Findings:	43.9 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/16/2003 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	2.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	6.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/16/2003 00:00:00	Findings:	5.1 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	12/16/2003 00:00:00	Findings:	33.4 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/16/2003 00:00:00	Findings:	2.1 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	12/16/2003 00:00:00	Findings:	4.1 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	12/17/2003 00:00:00	Findings:	940 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	12/17/2003 00:00:00	Findings:	119 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	145 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	1.49 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	271 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/17/2003 00:00:00	Findings:	27 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	89 MG/L
Chemical:	SODIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	91 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/17/2003 00:00:00	Findings:	590 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/17/2003 00:00:00	Findings:	.72
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/17/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	1830 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.052 MG/L
Chemical:	BROMIDE		
Sample Collected:	01/05/2004 00:00:00	Findings:	3.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/02/2004 00:00:00	Findings:	3.21 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/23/2004 00:00:00	Findings:	754 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/23/2004 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	03/23/2004 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	.806 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	218 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	74 MG/L
Chemical:	SODIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	3.6 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/23/2004 00:00:00	Findings:	79 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/23/2004 00:00:00	Findings:	480 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/23/2004 00:00:00	Findings:	.36
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/23/2004 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	2.464 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/23/2004 00:00:00	Findings:	2480 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.074 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	560 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/23/2004 00:00:00	Findings:	12 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.3 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	8.1 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	9.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/23/2004 00:00:00	Findings:	6 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/23/2004 00:00:00	Findings:	31 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/23/2004 00:00:00	Findings:	2.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/03/2004 00:00:00	Findings:	3.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/17/1999 00:00:00	Findings:	905 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/17/1999 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/17/1999 00:00:00	Findings:	42 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/17/1999 00:00:00	Findings:	51 MG/L
Chemical:	BICARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/17/1999 00:00:00	Findings:	.26 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	301 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	69 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	31 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	93 MG/L
Chemical:	SODIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	4.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/17/1999 00:00:00	Findings:	600 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/17/1999 00:00:00	Findings:	.014 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	1.3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/28/1999 00:00:00	Findings:	76 UG/L
Chemical:	ALUMINUM		
Sample Collected:	05/26/1999 00:00:00	Findings:	75 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	850 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/23/1999 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	06/23/1999 00:00:00	Findings:	128 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	156 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/08/2004 00:00:00	Findings:	33 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/15/2004 00:00:00	Findings:	110 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	130 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	797 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/15/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	06/15/2004 00:00:00	Findings:	134 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	.692 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	232 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	75 MG/L
Chemical:	SODIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	4.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	82 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/15/2004 00:00:00	Findings:	540 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/15/2004 00:00:00	Findings:	.32
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/15/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	3370 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.076 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/22/2004 00:00:00	Findings:	11 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	2.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	9.1 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	5.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/22/2004 00:00:00	Findings:	5.6 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	06/22/2004 00:00:00	Findings:	28 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/22/2004 00:00:00	Findings:	3 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/22/2004 00:00:00	Findings:	2.9 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	06/22/2004 00:00:00	Findings:	12 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	09/14/2004 00:00:00	Findings:	765 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2004 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2004 00:00:00	Findings:	97.2 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	118 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	.384 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	225 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	70 MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	89 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	22 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	.8 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	9.8 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	20 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/22/2005 00:00:00	Findings:	500 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2005 00:00:00	Findings:	- .02
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2005 00:00:00	Findings:	.007 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	3.5 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	6780 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	20 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	53 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/22/2005 00:00:00	Findings:	.098 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	4.9 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	13 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	790 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/22/2005 00:00:00	Findings:	1.4 UG/L
Chemical:	MONOBROMOACETIC ACID (MBAA)		
Sample Collected:	03/22/2005 00:00:00	Findings:	39 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	05/17/2005 00:00:00	Findings:	5.03 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/17/2005 00:00:00	Findings:	50 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	21 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	93 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/17/2005 00:00:00	Findings:	39 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	170 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/17/2005 00:00:00	Findings:	3.5 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	95 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/17/2005 00:00:00	Findings:	140 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	05/23/2005 00:00:00	Findings:	3.59 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/23/2005 00:00:00	Findings:	44 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	05/23/2005 00:00:00	Findings:	24 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	44 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/23/2005 00:00:00	Findings:	26 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	110 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/23/2005 00:00:00	Findings:	5.8 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	35 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	05/23/2005 00:00:00	Findings:	67 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	06/14/2005 00:00:00	Findings:	961 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/14/2005 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	06/14/2005 00:00:00	Findings:	119 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	145 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	.472 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	295 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	67 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	31 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	99 MG/L
Chemical:	SODIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	5.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/14/2005 00:00:00	Findings:	630 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/14/2005 00:00:00	Findings:	.24
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/14/2005 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/14/2005 00:00:00	Findings:	9490 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.088 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	12.14
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	06/21/2005 00:00:00	Findings:	20 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	1.3 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	11 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/21/2005 00:00:00	Findings:	17 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/23/1999 00:00:00	Findings:	.64 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	272 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	60 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	30 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	88 MG/L
Chemical:	SODIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	3.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	104 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/23/1999 00:00:00	Findings:	105 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	530 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/23/1999 00:00:00	Findings:	.3
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/23/1999 00:00:00	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	4.9 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.11 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/28/1999 00:00:00	Findings:	21 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/28/1999 00:00:00	Findings:	3.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/28/1999 00:00:00	Findings:	19 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/28/1999 00:00:00	Findings:	18 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	29 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	15 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	27 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/07/2005 00:00:00	Findings:	20 UG/L
Chemical:	DICHLOROACETIC ACID (DCAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	74 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/07/2005 00:00:00	Findings:	4.7 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	12 UG/L
Chemical:	TRICHLOROACETIC ACID (TCAA)		
Sample Collected:	09/07/2005 00:00:00	Findings:	37 UG/L
Chemical:	HALOACETIC ACIDS (5) (HAA5)		
Sample Collected:	09/13/2005 00:00:00	Findings:	778 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/13/2005 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/13/2005 00:00:00	Findings:	106 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	129 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/13/2005 00:00:00	Findings:	230 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	82 MG/L
Chemical:	SODIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	84 MG/L
Chemical:	CHLORIDE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/13/2005 00:00:00	Findings:	.17 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/13/2005 00:00:00	Findings:	510 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/13/2005 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/13/2005 00:00:00	Findings:	.046 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	12.4
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1070 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2005 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2005 00:00:00	Findings:	161 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2005 00:00:00	Findings:	195 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	3.18 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	314 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2005 00:00:00	Findings:	68 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	35 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	5.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	130 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2005 00:00:00	Findings:	674 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2005 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	12/13/2005 00:00:00	Findings:	25 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/28/1999 00:00:00	Findings:	61.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/22/1999 00:00:00	Findings:	950 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/22/1999 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	09/22/1999 00:00:00	Findings:	123 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	150 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	.615 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	256 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	51.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	30.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	96.3 MG/L
Chemical:	SODIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	111 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/22/1999 00:00:00	Findings:	57 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	590 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/22/1999 00:00:00	Findings:	.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/22/1999 00:00:00	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	4.75 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.1 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	1190 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/15/1999 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/15/1999 00:00:00	Findings:	151 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/15/1999 00:00:00	Findings:	184 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	.95 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	300 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	52.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	40.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	124 MG/L
Chemical:	SODIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	162 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/15/1999 00:00:00	Findings:	710 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/15/1999 00:00:00	Findings:	.44
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/15/1999 00:00:00	Findings:	.014 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	4.63 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.17 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	1030 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2000 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2000 00:00:00	Findings:	151 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	184 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	.754 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	296 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	55.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	38.3 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2000 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	162 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2000 00:00:00	Findings:	620 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2000 00:00:00	Findings:	.37
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	5.83 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	05/24/2000 00:00:00	Findings:	56 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/21/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/21/2000 00:00:00	Findings:	132 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	161 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	1.05 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	281 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	35 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	4.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	142 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/21/2000 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	620 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/21/2000 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/21/2000 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	3.22 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.15 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/24/2000 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/28/2001 00:00:00	Findings:	2.508 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/28/2001 00:00:00	Findings:	6940 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	270 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	570 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06/18/2001 00:00:00	Findings:	.94 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/20/2001 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/20/2001 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	06/20/2001 00:00:00	Findings:	143 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/20/2001 00:00:00	Findings:	174 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	.898 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	323 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/20/2001 00:00:00	Findings:	62 MG/L
Chemical:	CALCIUM		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/20/2001 00:00:00	Findings:	41 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	159 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/20/2001 00:00:00	Findings:	.074 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/20/2001 00:00:00	Findings:	720 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/20/2001 00:00:00	Findings:	.49
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/20/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	4380 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.19 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/30/2001 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	13 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/30/2001 00:00:00	Findings:	7.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/24/2000 00:00:00	Findings:	37 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/26/2000 00:00:00	Findings:	70 UG/L
Chemical:	ALUMINUM		
Sample Collected:	08/16/2000 00:00:00	Findings:	81 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	745 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2000 00:00:00	Findings:	102 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	124 MG/L
Chemical:	BICARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/20/2000 00:00:00	Findings:	1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	224 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/20/2000 00:00:00	Findings:	55 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	21 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	72 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	62 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/30/2001 00:00:00	Findings:	36.2 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/19/2001 00:00:00	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/26/2001 00:00:00	Findings:	1050 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2001 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2001 00:00:00	Findings:	133 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	162 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	.664 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	301 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	38 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	110 MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	140 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/26/2001 00:00:00	Findings:	670 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/26/2001 00:00:00	Findings:	.33
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/26/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	5140 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.12 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/03/2001 00:00:00	Findings:	3.5 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.4 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/12/2001 00:00:00	Findings:	850 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/20/2000 00:00:00	Findings:	125 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	460 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2000 00:00:00	Findings:	.29
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.045 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	1080 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2000 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2000 00:00:00	Findings:	158 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	193 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	.397 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	315 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	57 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2000 00:00:00	Findings:	42 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	5.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	153 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2000 00:00:00	Findings:	58 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	680 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2000 00:00:00	Findings:	.096
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2000 00:00:00	Findings:	.005 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	12200 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	.2 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/12/2001 00:00:00	Findings:	7.38 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.35 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/28/2001 00:00:00	Findings:	1300 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/28/2001 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/28/2001 00:00:00	Findings:	180 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/28/2001 00:00:00	Findings:	219 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	.898 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	375 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/28/2001 00:00:00	Findings:	63 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	53 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/28/2001 00:00:00	Findings:	6.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	230 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/28/2001 00:00:00	Findings:	2.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/28/2001 00:00:00	Findings:	850 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/28/2001 00:00:00	Findings:	.5
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/28/2001 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	12/12/2001 00:00:00	Findings:	120 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	12/12/2001 00:00:00	Findings:	146 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.19 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	253 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	12/12/2001 00:00:00	Findings:	62 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	24 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	82 MG/L
Chemical:	SODIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	4.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	83 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/12/2001 00:00:00	Findings:	14 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	3.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	12 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	12/12/2001 00:00:00	Findings:	7.5 UG/L
Chemical:	CHLOROFORM (THM)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/12/2001 00:00:00	Findings:	550 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/12/2001 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/12/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	2320 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	37.2 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12/12/2001 00:00:00	Findings:	.066 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2002 00:00:00	Findings:	140 UG/L
Chemical:	BORON		
Sample Collected:	03/19/2002 00:00:00	Findings:	3.8 UG/L
Chemical:	VANADIUM		
Sample Collected:	03/19/2002 00:00:00	Findings:	21 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	7.7 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	22 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	9.8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/19/2002 00:00:00	Findings:	60.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/27/2002 00:00:00	Findings:	1200 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/27/2002 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	03/27/2002 00:00:00	Findings:	153 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	186 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	.606 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	5.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/27/2002 00:00:00	Findings:	371 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	73 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/27/2002 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	180 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/27/2002 00:00:00	Findings:	780 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/27/2002 00:00:00	Findings:	.39
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/27/2002 00:00:00	Findings:	.009 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	7420 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/03/2002 00:00:00	Findings:	150 UG/L
Chemical:	BORON		
Sample Collected:	06/03/2002 00:00:00	Findings:	13 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	1 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	06/03/2002 00:00:00	Findings:	3.4 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	14 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/03/2002 00:00:00	Findings:	6.5 UG/L
Chemical:	CHLOROFORM (THM)		

**A2  
WNW  
1/2 - 1 Mile  
Higher**

**CA WELLS 23688**

**Water System Information:**

Prime Station Code:	N37/021-SDGUITO	User ID:	WAT
FRDS Number:	3710023002	County:	San Diego
District Number:	14	Station Type:	LAKE/AMBNT
Water Type:	Surface Water	Well Status:	Active Raw
Source Lat/Long:	330220.0 1171140.0	Precision:	100 Feet (one Second)
Source Name:	SAN DIEGUITO RESERVOIR		
System Number:	3710023		
System Name:	Santa Fe I.D.		
Organization That Operates System:	P.O. Box 409 Rancho Santa Fe, CA 92067		
Pop Served:	25000	Connections:	6225
Area Served:	SANTA FE VICINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/19/2002 00:00:00	Findings:	1770 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/19/2002 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/19/2002 00:00:00	Findings:	226 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/19/2002 00:00:00	Findings:	275 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	1.79 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	13.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/19/2002 00:00:00	Findings:	529 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/19/2002 00:00:00	Findings:	85 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	77 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	200 MG/L
Chemical:	SODIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.32 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/19/2002 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/19/2002 00:00:00	Findings:	110 UG/L
Chemical:	BARIUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	250 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/19/2002 00:00:00	Findings:	100 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/19/2002 00:00:00	Findings:	1130 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/19/2002 00:00:00	Findings:	.92
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/19/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/19/2002 00:00:00	Findings:	5500 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/19/2002 00:00:00	Findings:	.7 MG/L
Chemical:	BROMIDE		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/09/2002 00:00:00	Findings:	18.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1910 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	09/18/2002 00:00:00	Findings:	221 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	268 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	3.48 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/18/2002 00:00:00	Findings:	17 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/18/2002 00:00:00	Findings:	552 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/18/2002 00:00:00	Findings:	81 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	85 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	220 MG/L
Chemical:	SODIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	8.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.34 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/18/2002 00:00:00	Findings:	2.6 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/18/2002 00:00:00	Findings:	150 UG/L
Chemical:	BARIUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	580 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/18/2002 00:00:00	Findings:	66 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/18/2002 00:00:00	Findings:	.065 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/18/2002 00:00:00	Findings:	1180 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/18/2002 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/18/2002 00:00:00	Findings:	2690 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	.73 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/18/2002 00:00:00	Findings:	1.3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	10/09/2002 00:00:00	Findings:	18.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/02/2002 00:00:00	Findings:	19 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1990 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/18/2002 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	12/18/2002 00:00:00	Findings:	238 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	289 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.36 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	15.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2002 00:00:00	Findings:	529 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/18/2002 00:00:00	Findings:	85 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	77 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	350 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/18/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/18/2002 00:00:00	Findings:	140 UG/L
Chemical:	BARIUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	320 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/18/2002 00:00:00	Findings:	87 UG/L
Chemical:	ZINC		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/18/2002 00:00:00	Findings:	69 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/18/2002 00:00:00	Findings:	.058 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/18/2002 00:00:00	Findings:	1280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/18/2002 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/18/2002 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/18/2002 00:00:00	Findings:	2.244 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2002 00:00:00	Findings:	4590 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/18/2002 00:00:00	Findings:	2 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1780 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	03/19/2003 00:00:00	Findings:	193 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/19/2003 00:00:00	Findings:	235 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.92 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	554 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	03/19/2003 00:00:00	Findings:	100 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	74 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	8.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	310 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/19/2003 00:00:00	Findings:	3.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/19/2003 00:00:00	Findings:	130 UG/L
Chemical:	BARIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/19/2003 00:00:00	Findings:	130 UG/L
Chemical:	IRON		
Sample Collected:	03/19/2003 00:00:00	Findings:	430 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/19/2003 00:00:00	Findings:	260 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/19/2003 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/19/2003 00:00:00	Findings:	1200 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/19/2003 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/19/2003 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/19/2003 00:00:00	Findings:	3.652 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/19/2003 00:00:00	Findings:	3730 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	.66 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/19/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	05/05/2003 00:00:00	Findings:	10.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/02/2003 00:00:00	Findings:	10.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/18/2003 00:00:00	Findings:	1780 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/18/2003 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	06/18/2003 00:00:00	Findings:	182 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06/18/2003 00:00:00	Findings:	221 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	2.87 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	495 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06/18/2003 00:00:00	Findings:	96 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	62 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/18/2003 00:00:00	Findings:	6.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/18/2003 00:00:00	Findings:	160 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/18/2003 00:00:00	Findings:	75 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/18/2003 00:00:00	Findings:	1180 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/18/2003 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/18/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/18/2003 00:00:00	Findings:	2220 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2003 00:00:00	Findings:	.57 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/14/2003 00:00:00	Findings:	10.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08/04/2003 00:00:00	Findings:	8.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/16/2003 00:00:00	Findings:	1840 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	09/16/2003 00:00:00	Findings:	191 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	231 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	3.77 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	629 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/16/2003 00:00:00	Findings:	120 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	80 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	8.2 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/16/2003 00:00:00	Findings:	260 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/16/2003 00:00:00	Findings:	2.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/16/2003 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/16/2003 00:00:00	Findings:	84 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/16/2003 00:00:00	Findings:	1260 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/16/2003 00:00:00	Findings:	1.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/16/2003 00:00:00	Findings:	.04 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/16/2003 00:00:00	Findings:	1840 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/16/2003 00:00:00	Findings:	.59 MG/L
Chemical:	BROMIDE		
Sample Collected:	10/06/2003 00:00:00	Findings:	9.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/04/2003 00:00:00	Findings:	8.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/02/2003 00:00:00	Findings:	7.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/17/2003 00:00:00	Findings:	1900 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	12/17/2003 00:00:00	Findings:	184 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	223 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	2.89 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	.113 MG/L
Chemical:	AMMONIA (NH <sub>3</sub> -N)		
Sample Collected:	12/17/2003 00:00:00	Findings:	.011 UG/L
Chemical:	PHOSPHATE (AS PO <sub>4</sub> )		
Sample Collected:	12/17/2003 00:00:00	Findings:	579 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/17/2003 00:00:00	Findings:	74 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	270 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/17/2003 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/17/2003 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 UG/L
Chemical:	BARIUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	120 UG/L
Chemical:	IRON		
Sample Collected:	12/17/2003 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/17/2003 00:00:00	Findings:	79 UG/L
Chemical:	ZINC		
Sample Collected:	12/17/2003 00:00:00	Findings:	230 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/17/2003 00:00:00	Findings:	.072 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/17/2003 00:00:00	Findings:	1230 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/17/2003 00:00:00	Findings:	1.2
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/17/2003 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/17/2003 00:00:00	Findings:	2240 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	01/05/2004 00:00:00	Findings:	11.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/02/2004 00:00:00	Findings:	7.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/01/2004 00:00:00	Findings:	8.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/23/2004 00:00:00	Findings:	1750 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/23/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/23/2004 00:00:00	Findings:	170 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/23/2004 00:00:00	Findings:	207 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	1.07 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	502 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/23/2004 00:00:00	Findings:	92 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	66 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	7.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/23/2004 00:00:00	Findings:	280 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/23/2004 00:00:00	Findings:	3.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/23/2004 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/23/2004 00:00:00	Findings:	66 UG/L
Chemical:	ZINC		
Sample Collected:	03/23/2004 00:00:00	Findings:	1140 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/23/2004 00:00:00	Findings:	.74
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/23/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/23/2004 00:00:00	Findings:	5210 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/23/2004 00:00:00	Findings:	.69 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/05/2004 00:00:00	Findings:	9.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/03/2004 00:00:00	Findings:	8.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/07/2004 00:00:00	Findings:	8.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/17/1999 00:00:00	Findings:	1020 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/17/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/17/1999 00:00:00	Findings:	201 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	244 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	2.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/17/1999 00:00:00	Findings:	327 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/17/1999 00:00:00	Findings:	65 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	40 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	108 MG/L
Chemical:	SODIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	160 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/17/1999 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/17/1999 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/17/1999 00:00:00	Findings:	140 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/17/1999 00:00:00	Findings:	600 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/17/1999 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/17/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	1670 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/15/2004 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/15/2004 00:00:00	Findings:	194 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	2 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	479 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	88 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	63 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/15/2004 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	7.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	260 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/15/2004 00:00:00	Findings:	5.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/15/2004 00:00:00	Findings:	84 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/15/2004 00:00:00	Findings:	110 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/15/2004 00:00:00	Findings:	1150 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/15/2004 00:00:00	Findings:	.99
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/15/2004 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/15/2004 00:00:00	Findings:	2450 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	.67 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/15/2004 00:00:00	Findings:	160 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/15/2004 00:00:00	Findings:	200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07/12/2004 00:00:00	Findings:	7.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/14/2004 00:00:00	Findings:	1640 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2004 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2004 00:00:00	Findings:	146 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	178 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	1.46 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	471 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/14/2004 00:00:00	Findings:	88 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/14/2004 00:00:00	Findings:	61 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	7.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/14/2004 00:00:00	Findings:	3.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/14/2004 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/14/2004 00:00:00	Findings:	72 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/14/2004 00:00:00	Findings:	1110 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2004 00:00:00	Findings:	.85
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/14/2004 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/14/2004 00:00:00	Findings:	2830 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/14/2004 00:00:00	Findings:	.61 MG/L
Chemical:	BROMIDE		
Sample Collected:	10/04/2004 00:00:00	Findings:	8.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/01/2004 00:00:00	Findings:	9.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/06/2004 00:00:00	Findings:	7.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/14/2004 00:00:00	Findings:	1480 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/14/2004 00:00:00	Findings:	154 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/14/2004 00:00:00	Findings:	187 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	.965 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	445 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/14/2004 00:00:00	Findings:	86 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	180 MG/L
Chemical:	SODIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	7.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	250 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/14/2004 00:00:00	Findings:	2.8 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/17/1999 00:00:00	Findings:	3.1 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	1090 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/23/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/23/1999 00:00:00	Findings:	199 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	242 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	2.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/23/1999 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	44 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	119 MG/L
Chemical:	SODIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	4.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	164 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/23/1999 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/23/1999 00:00:00	Findings:	3 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/23/1999 00:00:00	Findings:	145 UG/L
Chemical:	MANGANESE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/23/1999 00:00:00	Findings:	160 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/23/1999 00:00:00	Findings:	.07 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/23/1999 00:00:00	Findings:	650 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/23/1999 00:00:00	Findings:	.9
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/23/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/23/1999 00:00:00	Findings:	3 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	57 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/14/2004 00:00:00	Findings:	54 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/14/2004 00:00:00	Findings:	1070 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/14/2004 00:00:00	Findings:	.66
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/14/2004 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/14/2004 00:00:00	Findings:	4710 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/14/2004 00:00:00	Findings:	.75 MG/L
Chemical:	BROMIDE		
Sample Collected:	01/10/2005 00:00:00	Findings:	14.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/07/2005 00:00:00	Findings:	11.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/07/2005 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/22/2005 00:00:00	Findings:	1470 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2005 00:00:00	Findings:	169 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2005 00:00:00	Findings:	206 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	.845 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	421 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2005 00:00:00	Findings:	83 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	52 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	7.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2005 00:00:00	Findings:	230 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2005 00:00:00	Findings:	2.7 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/22/2005 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.08 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/22/2005 00:00:00	Findings:	930 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2005 00:00:00	Findings:	.59
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2005 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2005 00:00:00	Findings:	6530 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2005 00:00:00	Findings:	.62 MG/L
Chemical:	BROMIDE		
Sample Collected:	04/04/2005 00:00:00	Findings:	11.6 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05/02/2005 00:00:00	Findings:	9.73 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/06/2005 00:00:00	Findings:	10.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	06/14/2005 00:00:00	Findings:	1300 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/14/2005 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	06/14/2005 00:00:00	Findings:	171 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	208 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	1.35 MG/L
Chemical:	CARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/14/2005 00:00:00	Findings:	394 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/14/2005 00:00:00	Findings:	82 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	46 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	7.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/14/2005 00:00:00	Findings:	180 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/14/2005 00:00:00	Findings:	170 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.055 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/14/2005 00:00:00	Findings:	860 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/14/2005 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/14/2005 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/14/2005 00:00:00	Findings:	6820 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	.44 MG/L
Chemical:	BROMIDE		
Sample Collected:	06/14/2005 00:00:00	Findings:	12.69
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	09/22/1999 00:00:00	Findings:	1190 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/22/1999 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	09/22/1999 00:00:00	Findings:	177 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	215 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.21 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	303 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/22/1999 00:00:00	Findings:	45.8 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/22/1999 00:00:00	Findings:	45.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	126 MG/L
Chemical:	SODIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	5.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	178 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/22/1999 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/22/1999 00:00:00	Findings:	350 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/22/1999 00:00:00	Findings:	100 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/22/1999 00:00:00	Findings:	.069 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/22/1999 00:00:00	Findings:	700 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/22/1999 00:00:00	Findings:	.7
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/22/1999 00:00:00	Findings:	.027 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/22/1999 00:00:00	Findings:	2.71 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	1210 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/15/1999 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/15/1999 00:00:00	Findings:	188 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	228 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	3.72 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/15/1999 00:00:00	Findings:	52.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	46.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	128 MG/L
Chemical:	SODIUM		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/15/1999 00:00:00	Findings:	5.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	184 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/15/1999 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/15/1999 00:00:00	Findings:	2.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/15/1999 00:00:00	Findings:	120 UG/L
Chemical:	IRON		
Sample Collected:	12/15/1999 00:00:00	Findings:	24 UG/L
Chemical:	LEAD		
Sample Collected:	12/15/1999 00:00:00	Findings:	215 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/15/1999 00:00:00	Findings:	170 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/15/1999 00:00:00	Findings:	.051 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/15/1999 00:00:00	Findings:	720 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/15/1999 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/15/1999 00:00:00	Findings:	.043 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/15/1999 00:00:00	Findings:	1.82 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	1140 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/2000 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/2000 00:00:00	Findings:	192 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	233 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	3.8 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	333 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/22/2000 00:00:00	Findings:	56 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	130 MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/22/2000 00:00:00	Findings:	5.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	199 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/2000 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/2000 00:00:00	Findings:	105 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/22/2000 00:00:00	Findings:	210 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/22/2000 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/22/2000 00:00:00	Findings:	680 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/2000 00:00:00	Findings:	1.1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/22/2000 00:00:00	Findings:	.04 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/22/2000 00:00:00	Findings:	1.86 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	1240 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/21/2000 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/21/2000 00:00:00	Findings:	181 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	220 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	2.27 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	325 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/21/2000 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	48 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	5.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	206 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/21/2000 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/21/2000 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/21/2000 00:00:00	Findings:	130 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/21/2000 00:00:00	Findings:	210 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2000 00:00:00	Findings:	.068 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/21/2000 00:00:00	Findings:	750 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/21/2000 00:00:00	Findings:	.8
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/21/2000 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/21/2000 00:00:00	Findings:	2.78 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	07/12/2005 00:00:00	Findings:	9.63 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08/01/2005 00:00:00	Findings:	9.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09/13/2005 00:00:00	Findings:	1250 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/13/2005 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/13/2005 00:00:00	Findings:	194 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/13/2005 00:00:00	Findings:	398 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/13/2005 00:00:00	Findings:	82 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	120 MG/L
Chemical:	SODIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/13/2005 00:00:00	Findings:	170 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/13/2005 00:00:00	Findings:	2.9 UG/L
Chemical:	ARSENIC		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/13/2005 00:00:00	Findings:	370 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.065 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/13/2005 00:00:00	Findings:	840 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/13/2005 00:00:00	Findings:	.94
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/13/2005 00:00:00	Findings:	3070 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	.4 MG/L
Chemical:	BROMIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	12.84
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	09/19/2005 00:00:00	Findings:	10.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10/03/2005 00:00:00	Findings:	11 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/14/2005 00:00:00	Findings:	11.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/05/2005 00:00:00	Findings:	10.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/06/2005 00:00:00	Findings:	1.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/06/2005 00:00:00	Findings:	6.4 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/06/2005 00:00:00	Findings:	1.7 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/06/2005 00:00:00	Findings:	4.5 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	12/06/2005 00:00:00	Findings:	3.02 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	12/13/2005 00:00:00	Findings:	1390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2005 00:00:00	Findings:	8.4
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2005 00:00:00	Findings:	195 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	12/13/2005 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	3.85 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2005 00:00:00	Findings:	427 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2005 00:00:00	Findings:	87 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	51 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	150 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	7.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2005 00:00:00	Findings:	200 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2005 00:00:00	Findings:	480 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/13/2005 00:00:00	Findings:	844 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2005 00:00:00	Findings:	1.3
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2005 00:00:00	Findings:	.5 MG/L
Chemical:	BROMIDE		
Sample Collected:	12/13/2005 00:00:00	Findings:	13.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	01/30/2006 00:00:00	Findings:	9.8 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/13/2006 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/06/2006 00:00:00	Findings:	10 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/06/2006 00:00:00	Findings:	390 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/14/2006 00:00:00	Findings:	1350 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/14/2006 00:00:00	Findings:	8.6
Chemical:	PH, LABORATORY		
Sample Collected:	03/14/2006 00:00:00	Findings:	203 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/14/2006 00:00:00	Findings:	250 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.5 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/14/2006 00:00:00	Findings:	400 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	03/14/2006 00:00:00	Findings:	78 MG/L
Chemical:	CALCIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/14/2006 00:00:00	Findings:	49 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	6.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/14/2006 00:00:00	Findings:	200 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/14/2006 00:00:00	Findings:	2.8 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/14/2006 00:00:00	Findings:	260 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/14/2006 00:00:00	Findings:	.051 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/14/2006 00:00:00	Findings:	850 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/14/2006 00:00:00	Findings:	1.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/14/2006 00:00:00	Findings:	.5 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/14/2006 00:00:00	Findings:	13
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	04/03/2006 00:00:00	Findings:	12 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	04/03/2006 00:00:00	Findings:	230 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2000 00:00:00	Findings:	1310 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2000 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2000 00:00:00	Findings:	200 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	09/20/2000 00:00:00	Findings:	243 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	337 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	09/20/2000 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	51 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/20/2000 00:00:00	Findings:	140 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	202 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/20/2000 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/20/2000 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	09/20/2000 00:00:00	Findings:	700 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2000 00:00:00	Findings:	400 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/20/2000 00:00:00	Findings:	790 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2000 00:00:00	Findings:	1
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/20/2000 00:00:00	Findings:	6 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	1410 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/13/2000 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	12/13/2000 00:00:00	Findings:	204 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	248 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	1.28 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	391 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/13/2000 00:00:00	Findings:	58 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	60 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	6.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	215 MG/L
Chemical:	CHLORIDE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/13/2000 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/13/2000 00:00:00	Findings:	4.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/13/2000 00:00:00	Findings:	200 UG/L
Chemical:	IRON		
Sample Collected:	12/13/2000 00:00:00	Findings:	570 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/13/2000 00:00:00	Findings:	380 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/13/2000 00:00:00	Findings:	.058 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/13/2000 00:00:00	Findings:	840 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/13/2000 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/13/2000 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/13/2000 00:00:00	Findings:	2.244 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/13/2000 00:00:00	Findings:	6240 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/13/2000 00:00:00	Findings:	510 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/12/2001 00:00:00	Findings:	5.73 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.76 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/12/2001 00:00:00	Findings:	9.31 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	03/12/2001 00:00:00	Findings:	2.64 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/28/2001 00:00:00	Findings:	1340 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/28/2001 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	03/28/2001 00:00:00	Findings:	194 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/28/2001 00:00:00	Findings:	236 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	1.53 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	390 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/28/2001 00:00:00	Findings:	64 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	160 MG/L
Chemical:	SODIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	6.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	220 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/28/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/28/2001 00:00:00	Findings:	3.6 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/28/2001 00:00:00	Findings:	96 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/28/2001 00:00:00	Findings:	120 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/28/2001 00:00:00	Findings:	.06 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/28/2001 00:00:00	Findings:	860 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/28/2001 00:00:00	Findings:	.73
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/28/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/28/2001 00:00:00	Findings:	4720 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	06/18/2001 00:00:00	Findings:	5.23 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	06/18/2001 00:00:00	Findings:	2.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/18/2001 00:00:00	Findings:	9.99 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	06/18/2001 00:00:00	Findings:	2.33 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/20/2001 00:00:00	Findings:	1320 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/20/2001 00:00:00	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	06/20/2001 00:00:00	Findings:	182 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/20/2001 00:00:00	Findings:	221 MG/L
Chemical:	BICARBONATE ALKALINITY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06/20/2001 00:00:00	Findings:	2.28 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	382 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	06/20/2001 00:00:00	Findings:	61 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	56 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	150 MG/L
Chemical:	SODIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	6.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	234 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/20/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/20/2001 00:00:00	Findings:	2.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/20/2001 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/20/2001 00:00:00	Findings:	130 UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/20/2001 00:00:00	Findings:	.097 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	06/20/2001 00:00:00	Findings:	880 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/20/2001 00:00:00	Findings:	.88
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/20/2001 00:00:00	Findings:	.03 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/20/2001 00:00:00	Findings:	2790 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/19/2001 00:00:00	Findings:	5.4 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	09/19/2001 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/19/2001 00:00:00	Findings:	7.2 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	09/19/2001 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	09/19/2001 00:00:00	Findings:	.196 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	09/26/2001 00:00:00	Findings:	1470 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/26/2001 00:00:00	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2001 00:00:00	Findings:	189 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	230 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	1.88 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	409 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	09/26/2001 00:00:00	Findings:	60 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	63 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	6.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	240 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/26/2001 00:00:00	Findings:	320 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/26/2001 00:00:00	Findings:	69 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/26/2001 00:00:00	Findings:	.059 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	09/26/2001 00:00:00	Findings:	940 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/2001 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/26/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	09/26/2001 00:00:00	Findings:	3650 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	09/26/2001 00:00:00	Findings:	1.8 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/03/2001 00:00:00	Findings:	4.3 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/03/2001 00:00:00	Findings:	1.7 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/12/2001 00:00:00	Findings:	1600 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/12/2001 00:00:00	Findings:	8
Chemical:	PH, LABORATORY		
Sample Collected:	12/12/2001 00:00:00	Findings:	207 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	252 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.64 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	444 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	12/12/2001 00:00:00	Findings:	69 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	66 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	170 MG/L
Chemical:	SODIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	6.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	240 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/12/2001 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/12/2001 00:00:00	Findings:	260 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/12/2001 00:00:00	Findings:	320 UG/L
Chemical:	ALUMINUM		
Sample Collected:	12/12/2001 00:00:00	Findings:	.062 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	12/12/2001 00:00:00	Findings:	970 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/12/2001 00:00:00	Findings:	.79
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/12/2001 00:00:00	Findings:	.02 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	12/12/2001 00:00:00	Findings:	5040 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	12/12/2001 00:00:00	Findings:	1.1 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	03/27/2002 00:00:00	Findings:	1630 US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/27/2002 00:00:00	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03/27/2002 00:00:00	Findings:	210 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	256 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	1.32 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	11.7 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/27/2002 00:00:00	Findings:	503 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/27/2002 00:00:00	Findings:	83 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	72 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	190 MG/L
Chemical:	SODIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	7.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	290 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/27/2002 00:00:00	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/27/2002 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/27/2002 00:00:00	Findings:	110 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/27/2002 00:00:00	Findings:	.063 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/27/2002 00:00:00	Findings:	1080 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/27/2002 00:00:00	Findings:	.78
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/27/2002 00:00:00	Findings:	.01 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	03/27/2002 00:00:00	Findings:	6450 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/27/2002 00:00:00	Findings:	1.6 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	04/29/2002 00:00:00	Findings:	630 MG/L
Chemical:	BROMIDE		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
92067	4	0	0.00

Federal EPA Radon Zone for SAN DIEGO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

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### Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### **PWS:** Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF:** Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells:** USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### **California Drinking Water Quality Database**

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### **California Oil and Gas Well Locations**

Source: Department of Conservation

Telephone: 916-323-1779

### RADON

#### **State Database: CA Radon**

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### **Area Radon Information**

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

**California Earthquake Fault Lines:** The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 01 Date: 12/1/06

Description: Facing West at Paseo Delicias on Subject Property

Comments:



---

Photo Number: 02 Date: 12/1/06

Description: Facing South at Via De La Valle on Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 03 Date: 12/1/06

Description: Storm Drain Northwest of Paseo Delicias/Via La Valle Intersection

Comments: No Petroleum Staining or Sheen Observed



---

Photo Number: 04 Date: 12/1/06

Description: Vacant, Landscaped Area on Southern Portion of Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 05

Date: 12/1/06

Description: Utility Access Vault at Northeast of Paseo Delicias Valli De La Vall Intersection on Subject Property

Comments:



Photo Number: 06

Date: 12/1/06

Description: Facing South at Las Colinas Branch of Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 07

Date: 12/1/06

Description: Paved Parking Area Southeast of Paseo delicias Via De La Valle Intersection on Subject Property

Comments:



---

Photo Number: 08

Date: 12/1/06

Description: Storm Run-off Culvert on Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** Villa De La Valle Area

---

**Photo Number:** 09

**Date:** 12/1/06

**Description:** Facing North on La Fremontia On Subject Property

**Comments:**



---

**Photo Number:** 10

**Date:** 12/1/06

**Description:** Single Story Residence Located on Northwest Boundary of Subject Property

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 11

Date: 12/1/06

Description: Soil Staining Associated with Burn Site Observed in Undeveloped Section of La Fremontia on Subject Property

Comments:



---

Photo Number: 12

Date: 12/1/06

Description: Burn Site Area in Undeveloped Section of La Fremontia on Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** Villa De La Valle Area/El Montevideo Area

---

**Photo Number:** 13 **Date:** 12/1/06

**Description:** Facing North at Western Boundary of Paseo Delicia Subject Property

**Comments:**



---

**Photo Number:** 14 **Date:** 12/1/06

**Description:** Adjacent Undeveloped Area Northeast of Subject Property at El Montevideo Area

**Comments:**





# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Montevideo Area

---

**Photo Number:** 15

**Date:** 12/1/06

**Description:** Facing North at Northern Boundary of Subject Property

**Comments:**



---

**Photo Number:** 16

**Date:** 12/1/06

**Description:** Residential Development Adjacent to Subject Property at Mimulus

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Montevideo Area

---

**Photo Number:** 17 **Date:** 12/1/06

**Description:** Overhead Power lines Observed on Subject Propert at El Montevideo

**Comments:** No Overhead Transformers Observed



---

**Photo Number:** 18 **Date:** 12/1/06

**Description:** Transformer Observed on Subject Property at Mimulus and Montevideo

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Montevideo Area

---

Photo Number: 19 Date: 12/1/06

Description: Facing South onto Subject Propert from Northern Boundary

Comments:



---

Photo Number: 20 Date: 12/1/06

Description: Intersection of El Montevideo and Paseo Delicias on Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Montevideo Area

---

Photo Number: 21 Date: 12/1/06

Description: Facing South at Paseo Delicias El Valle Plateada Intersection

Comments:



---

Photo Number: 22 Date: 12/1/06

Description: Facing West Onto Subject Property at Intersection of Paseo Delicias and El Montevideo

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Montevideo Area

---

Photo Number: 23

Date: 12/1/06

Description: Facing North onto Subject Property at Intersection of Paseo Delicias and El Montevideo

Comments:



---

Photo Number: 24

Date: 12/1/06

Description: Facing East onto Subject Property at Intersection of Paseo Delicias and El Montevideo

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Montevideo Area

---

Photo Number: 25

Date: 12/1/06

Description: Man-Hole Cover Marked "Bell System" Observed on Subject Property West of Paseo Delicias/El Montevideo Intersection

Comments:



Photo Number: 26

Date: 12/1/06

Description: Telephone Access Panel Observed On subject Property West of Paseo Delicias/El Montevideo Intersection

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Montevideo Area/El Camino Del Norte Area

---

**Photo Number:** 27

**Date:** 12/1/06

**Description:** Facing West at Western Boundary of Subject Property

**Comments:**



---

**Photo Number:** 28

**Date:** 12/1/06

**Description:** Small Pond on Subject Property Northwest of Intersection of El Camino Del Norte and Paseo Delicias

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Camino Del Norte Area

---

**Photo Number:** 29

**Date:** 12/1/06

**Description:** Facing North onto Subject Property At Intersection of Paseo Delicias and El Camino Del Norte

**Comments:**



**Photo Number:** 30

**Date:** 12/1/06

**Description:** Facing South onto Subject Property at Northern Boundary of Subject Property

**Comments:**





# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Camino Del Norte Area

---

**Photo Number:** 31

**Date:** 12/1/06

**Description:** Drainage Culvert Located Northwest of Intersection of Paseo Delicias and El Caminoe Del Norte

**Comments:**



---

**Photo Number:** 32

**Date:** 12/1/06

**Description:** Facing East onto Subject Property from Western Boundary of Subject Property

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Camino Del Norte Area

---

**Photo Number:** 33 **Date:** 12/1/06

**Description:** Vacant Area South of Paseo Delicias on Subect Property

**Comments:**



---

**Photo Number:** 34 **Date:** 12/1/06

**Description:** Pump Station Located South of Paseo Delicias/El Caminoe Del Norte Intersection on the Subject Property

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Camino Del Norte Area

---

Photo Number: 35

Date: 12/1/06

Description: Transformer in Fenced Area Adjacent To Pump Station on Subject Property

Comments:



Photo Number: 36

Date: 12/1/06

Description: Drainage Culvert East of Paseo Delicias/El Camino Del Norte Intersection on The Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: El Camino Del Norte Area

---

Photo Number: 37

Date: 12/1/06

Description: Sewer Vault Access Located East of Intersection on The Subject Property

Comments:



Photo Number: 38

Date: 12/1/06

Description: Drainage Culvert North of Paseo Delicias East of Intersection on Subject Property

Comments:



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

**Address:** El Camino Del Norte Area

---

**Photo Number:** 39

**Date:** 12/1/06

**Description:** Undeveloped Area Adjacent to Subject Property South of Paseo Delicias

**Comments:**



---

**Photo Number:** 40

**Date:** 12/1/06

**Description:** Agriculturally Developed Area Adjacent to the Subject Property North of Paseo Delicias

**Comments:**



# RANCHO SANTA FE ROUNDABOUTS PROJECT

## PHASE I ENVIRONMENTAL SITE ASSESSMENT PHOTOGRAPH LOG

Address: Villa De La Valle Area

---

Photo Number: 41

Date: 12/1/06

Description: Transformer Observed on Villa De La Valle Subject Property

Comments:



Photo Number: 42

Date: 12/1/06

Description: Small Transformer Observed on Villa De La Valle Subject Property

Comments:





**EDR**® Environmental  
Data Resources Inc

# **The EDR Aerial Photo Decade Package**

**Villa De La Valle  
Villa De La Valle and Paseo Delicias  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804495.5**

**November 28, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

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**Date EDR Searched Historical Sources:**

Aerial Photography November 28, 2006

**Target Property:**

Villa De La Valle and Paseo Delicias

Rancho Santa Fe, CA 92067

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1939	Aerial Photograph. Scale: 1"=555'	Flight Year: 1939	Fairchild
1947	Aerial Photograph. Scale: 1"=655'	Flight Year: 1947 Best Copy Available from original source	Jack Ammann
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Park
1963	Aerial Photograph. Scale: 1"=555'	Flight Year: 1963	Cartwright
1974	Aerial Photograph. Scale: 1"=600'	Flight Year: 1974	AMI
1989	Aerial Photograph. Scale: 1"=666'	Flight Year: 1989	USGS
1994	Aerial Photograph. Scale: 1"=666'	Flight Year: 1994	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS



**INQUIRY #:** 1804495.5

**YEAR:** 1939

| = 555'





**INQUIRY #:** 1804495.5

**YEAR:** 1947

| = 655'





**INQUIRY #:** 1804495.5

**YEAR:** 1953

| = 555'





INQUIRY #: 1804495.5

YEAR: 1963

| = 555'





**INQUIRY #:** 1804495.5

**YEAR:** 1974

| = 600'





**INQUIRY #:** 1804495.5

**YEAR:** 1989

| = 666'





**INQUIRY #:** 1804495.5

**YEAR:** 1994

| = 666'







**INQUIRY #:** 1804495.5

**YEAR:** 2002

| = 666'





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Data Resources Inc

# **The EDR Aerial Photo Decade Package**

**Montevideo  
Paseo Delicias and Montevideo  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804497.5**

**November 28, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
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**Date EDR Searched Historical Sources:**

Aerial Photography November 28, 2006

**Target Property:**

Paseo Delicias and Montevideo

Rancho Santa Fe, CA 92067

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1939	Aerial Photograph. Scale: 1"=555'	Flight Year: 1939	Fairchild
1947	Aerial Photograph. Scale: 1"=655'	Flight Year: 1947	Jack Ammann
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Park
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2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS



**INQUIRY #:** 1804497.5

**YEAR:** 1939

| = 555'





**INQUIRY #:** 1804497.5

**YEAR:** 1947

| = 655'





**INQUIRY #:** 1804497.5

**YEAR:** 1953

| = 555'





**INQUIRY #:** 1804497.5

**YEAR:** 1963

| = 555'







**INQUIRY #:** 1804497.5

**YEAR:** 1974

| = 600'





**INQUIRY #:** 1804497.5

**YEAR:** 1989

| = 666'



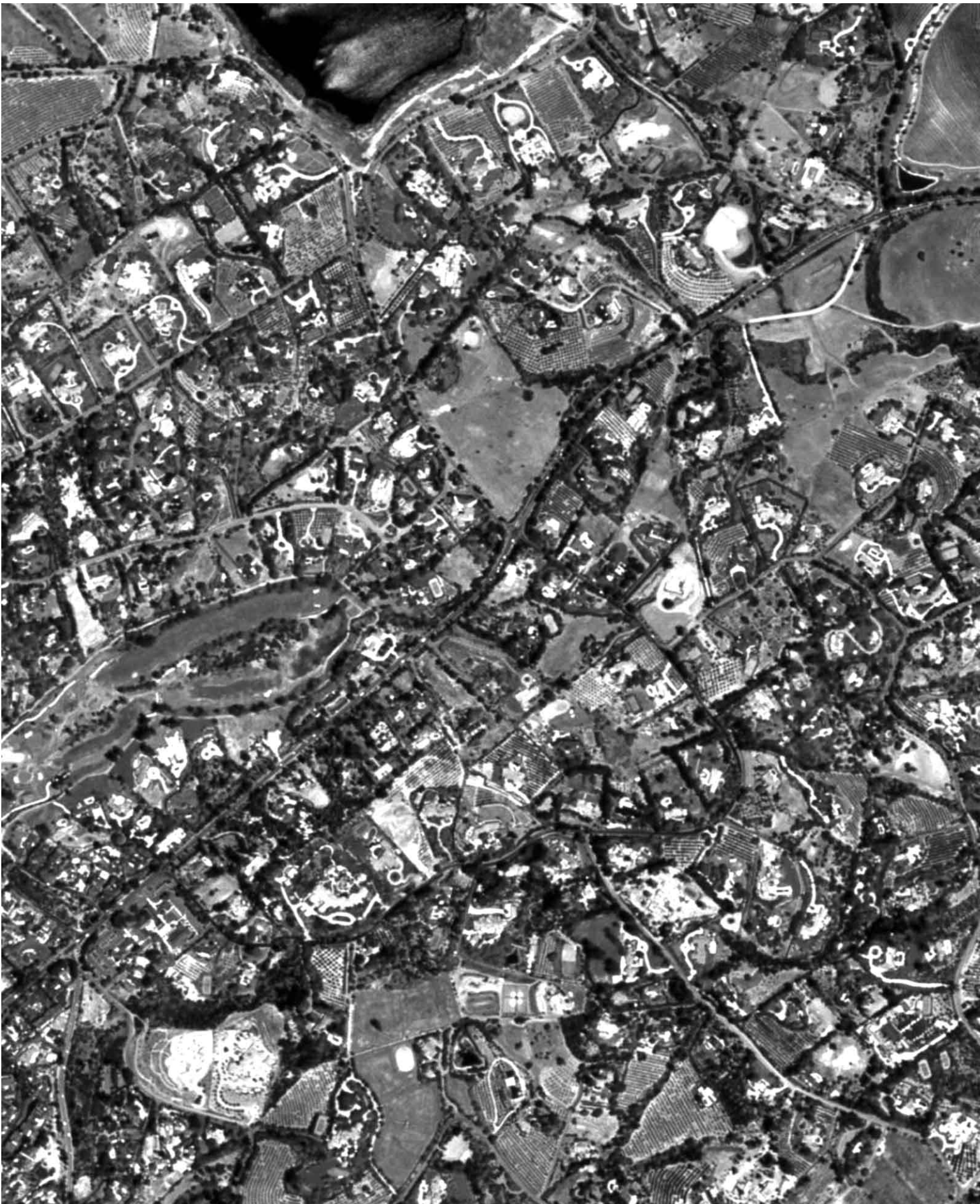


**INQUIRY #:** 1804497.5

**YEAR:** 1994

| = 666'





**INQUIRY #:** 1804497.5

**YEAR:** 2002

| = 666'





**EDR**® Environmental  
Data Resources Inc

## **The EDR Aerial Photo Decade Package**

**El Camino Del Norte  
Paseo Delicias/El Camino Del Norte  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804503.5**

**November 28, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

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Fax: 1-800-231-6802  
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**Date EDR Searched Historical Sources:**

Aerial Photography November 28, 2006

**Target Property:**

Paseo Delicias/El Camino Del Norte

Rancho Santa Fe, CA 92067

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1939	Aerial Photograph. Scale: 1"=555'	Flight Year: 1939	Fairchild
1947	Aerial Photograph. Scale: 1"=655'	Flight Year: 1947	Jack Ammann
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Park
1963	Aerial Photograph. Scale: 1"=555'	Flight Year: 1963	Cartwright
1974	Aerial Photograph. Scale: 1"=600'	Flight Year: 1974	AMI
1989	Aerial Photograph. Scale: 1"=666'	Flight Year: 1989	USGS
1994	Aerial Photograph. Scale: 1"=666'	Flight Year: 1994	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS



**INQUIRY #:** 1804503.5

**YEAR:** 1939

| = 555'







**INQUIRY #:** 1804503.5

**YEAR:** 1947

| = 655'





**INQUIRY #:** 1804503.5

**YEAR:** 1953

| = 555'





**INQUIRY #:** 1804503.5

**YEAR:** 1963

| = 555'





**INQUIRY #:** 1804503.5

**YEAR:** 1974

| = 600'





**INQUIRY #:** 1804503.5

**YEAR:** 1989

| = 666'





INQUIRY #: 1804503.5

YEAR: 1994

| = 666'





**INQUIRY #:** 1804503.5

**YEAR:** 2002

| = 666'



# **EDR Historical Topographic Map Report**

**Villa De La Valle  
Villa De La Valle and Paseo Delicias  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804495.4**

**November 28, 2006**



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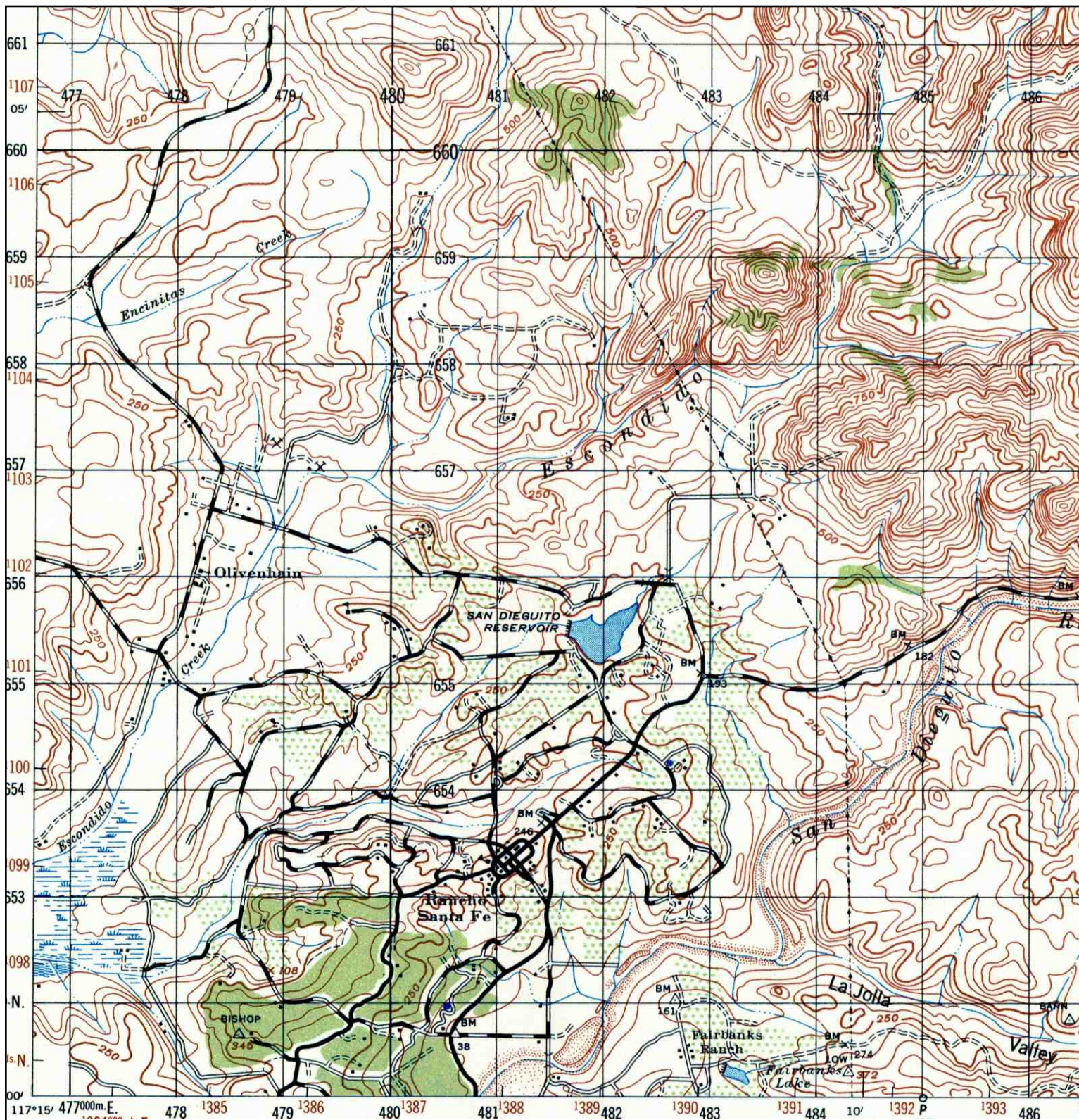
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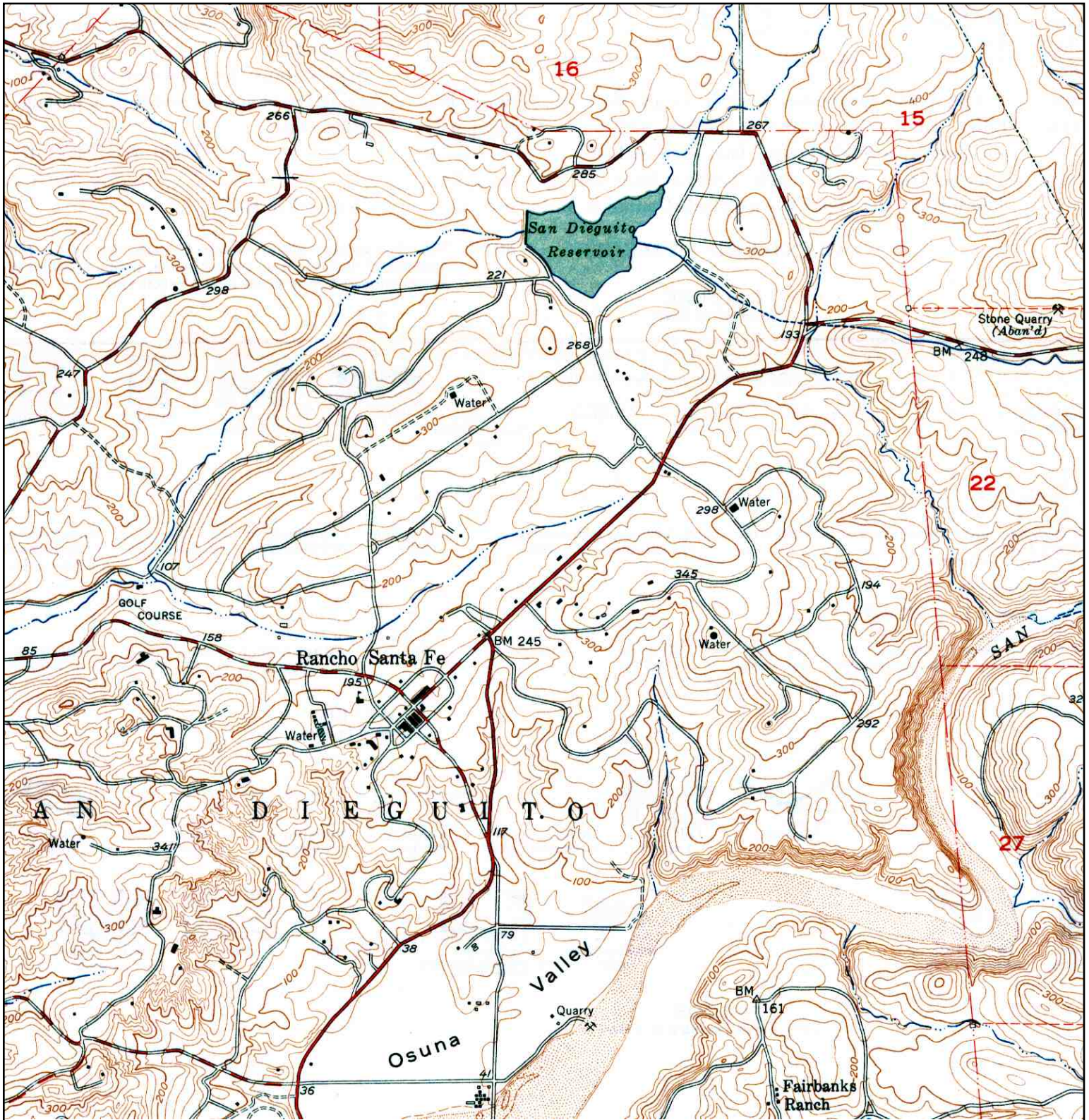
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	SERIES: 15 SCALE: 1:62500		

# Historical Topographic Map



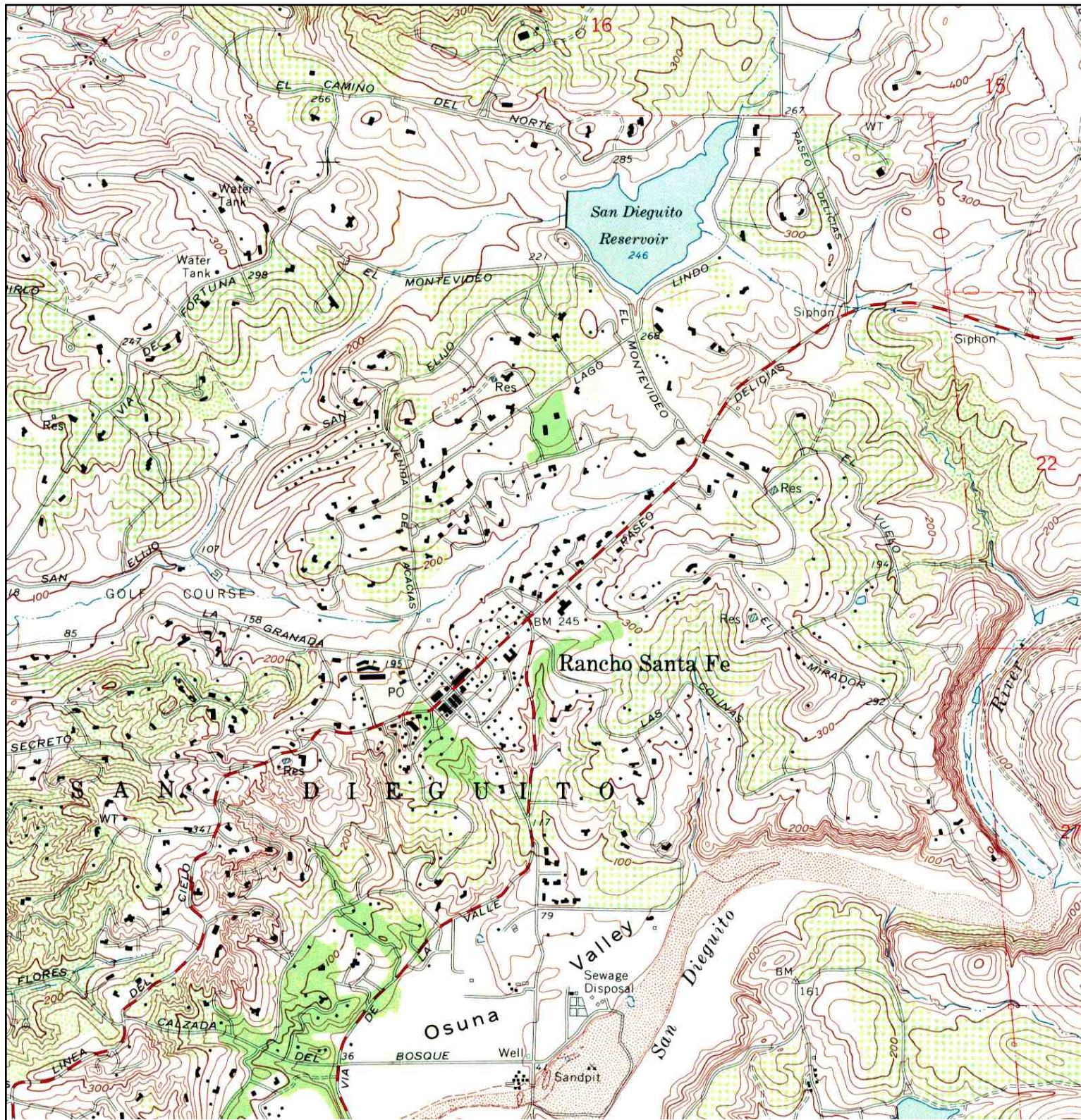
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	NAME: ESCONDIDO	ADDRESS:	Villa De La Valle and Paseo Delicias	CONTACT:	Eric Romero
	MAP YEAR: 1947		Rancho Santa Fe, CA 92067	INQUIRY#:	1804495.4
	SERIES: 15	LAT/LONG:	33.0231 / 117.1991	RESEARCH DATE:	11/28/2006
	SCALE: 1:50000				


# Historical Topographic Map



<b>N</b> ↑	TARGET QUAD	SITE NAME: Villa De La Valle	CLIENT: Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS: Villa De La Valle and Paseo Delicias	CONTACT: Eric Romero
	MAP YEAR: 1949	Rancho Santa Fe, CA 92067	INQUIRY#: 1804495.4
	SERIES: 7.5	LAT/LONG: 33.0231 / 117.1991	RESEARCH DATE: 11/28/2006
	SCALE: 1:24000		


# Historical Topographic Map



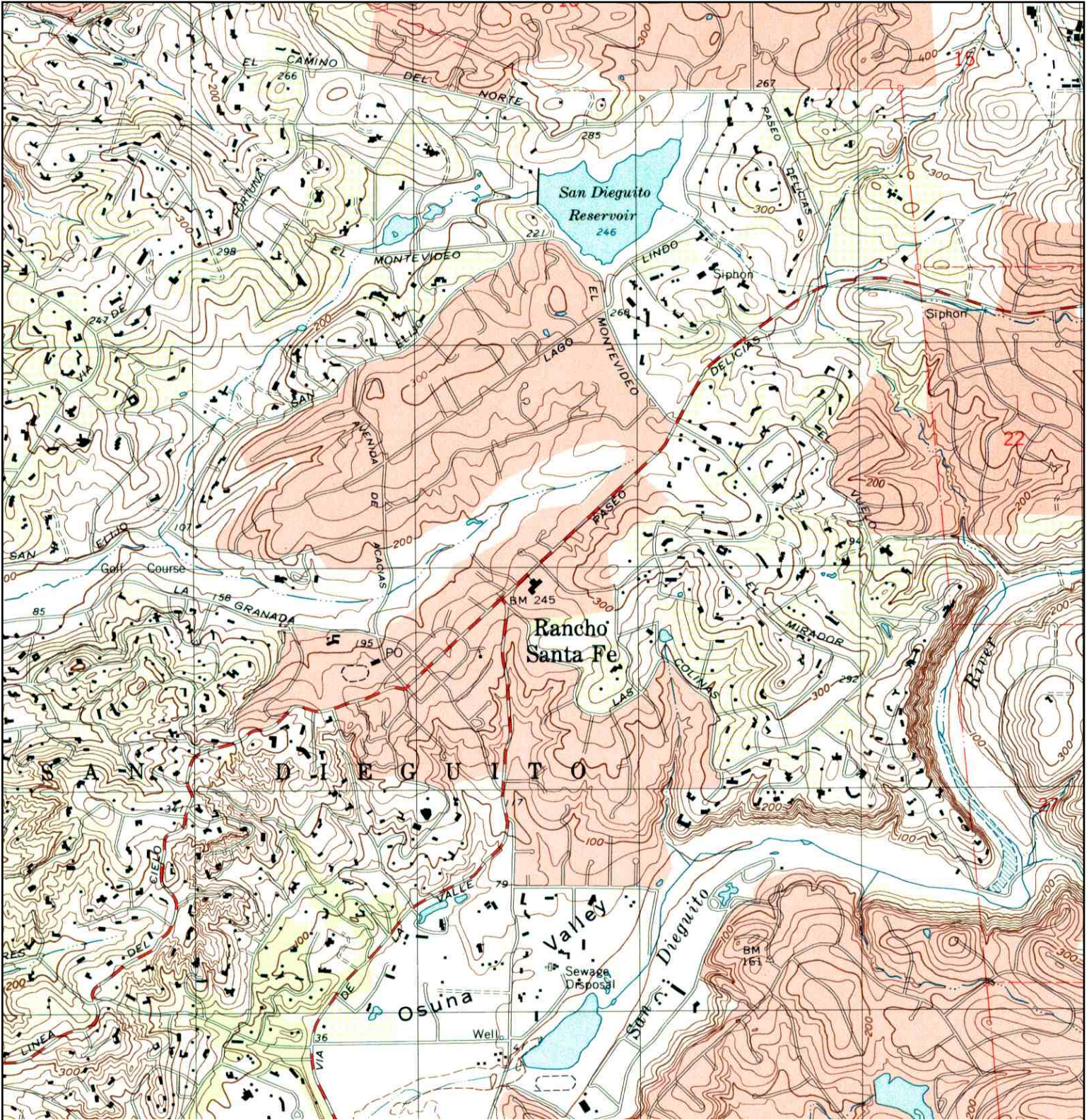
<p>N</p> 	<p>TARGET QUAD</p> <p>NAME: RANCHO SANTA FE</p> <p>MAP YEAR: 1968</p>	<p>SITE NAME: Villa De La Valle</p> <p>ADDRESS: Villa De La Valle and Paseo Delicias</p> <p>Rancho Santa Fe, CA 92067</p>	<p>CLIENT: Sota Environmental Technology</p>
	<p>SERIES: 7.5</p> <p>SCALE: 1:24000</p>	<p>LAT/LONG: 33.0231 / 117.1991</p>	<p>CONTACT: Eric Romero</p> <p>INQUIRY#: 1804495.4</p> <p>RESEARCH DATE: 11/28/2006</p>


# Historical Topographic Map



	TARGET QUAD	SITE NAME:	CLIENT:
	NAME: RANCHO SANTA FE	Villa De La Valle	Sota Environmental Technology
	MAP YEAR: 1983	ADDRESS: Villa De La Valle and Paseo Delicias	CONTACT: Eric Romero
	PHOTOREVISED FROM: 1968	Rancho Santa Fe, CA 92067	INQUIRY#: 1804495.4
	SERIES: 7.5	LAT/LONG: 33.0231 / 117.1991	RESEARCH DATE: 11/28/2006
	SCALE: 1:24000		

# Historical Topographic Map



	TARGET QUAD	SITE NAME: Villa De La Valle	CLIENT: Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS: Villa De La Valle and Paseo Delicias	CONTACT: Eric Romero
	MAP YEAR: 1996	Rancho Santa Fe, CA 92067	INQUIRY#: 1804495.4
	SERIES: 7.5	LAT/LONG: 33.0231 / 117.1991	RESEARCH DATE: 11/28/2006
	SCALE: 1:24000		



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# **EDR Historical Topographic Map Report**

**Montevideo  
Paseo Delicias and Montevideo  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804497.4**

**November 28, 2006**

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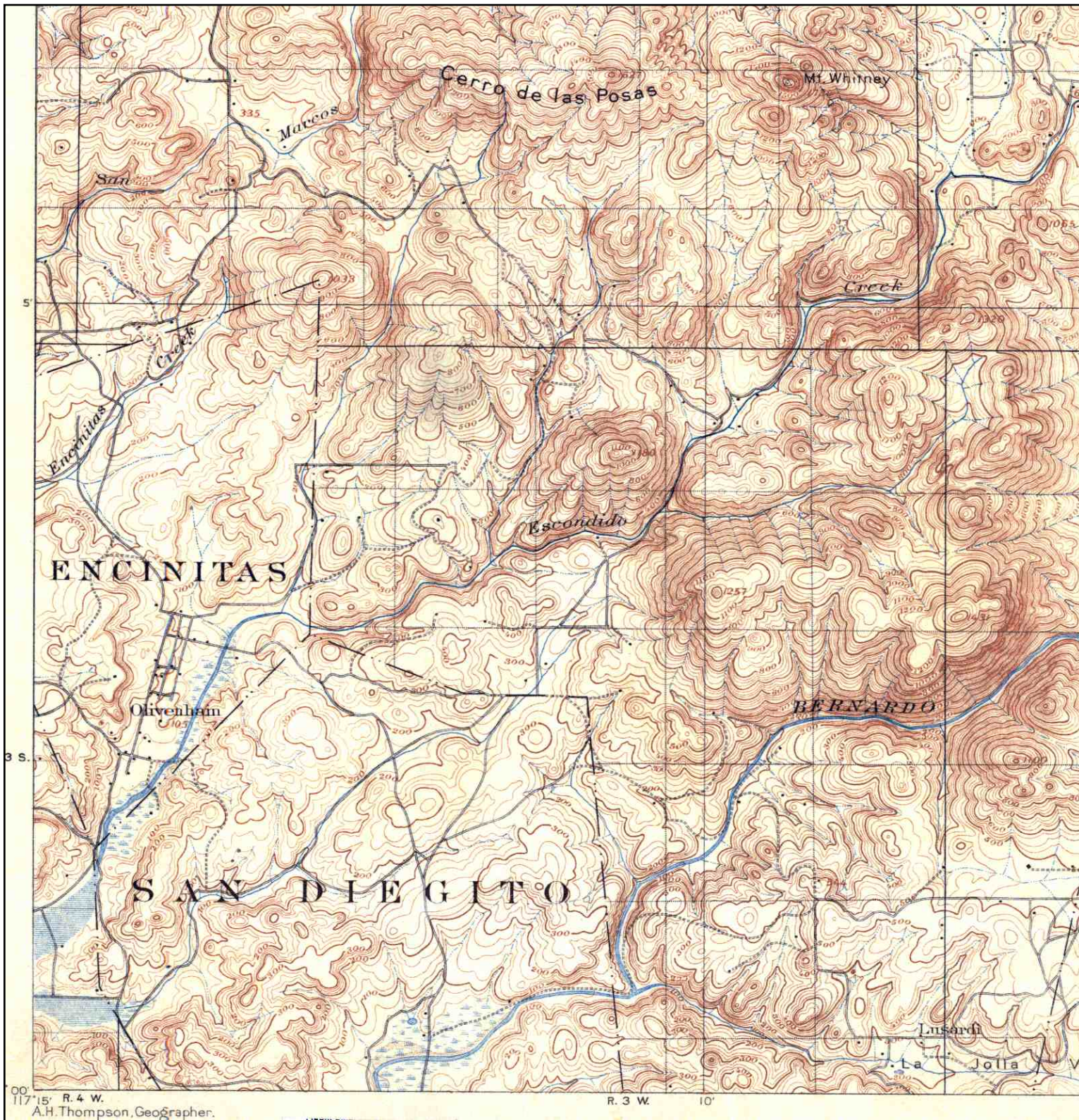
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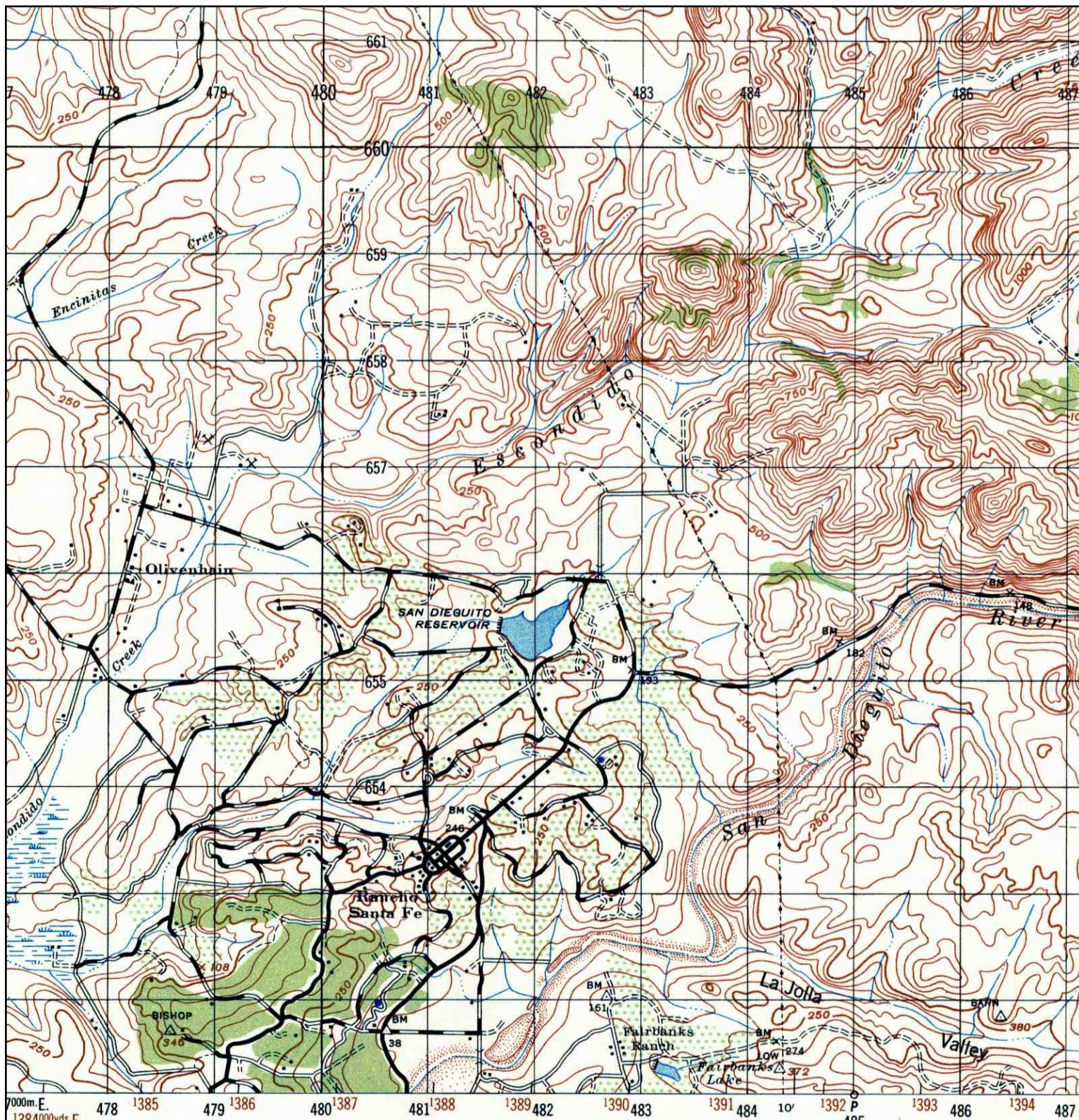
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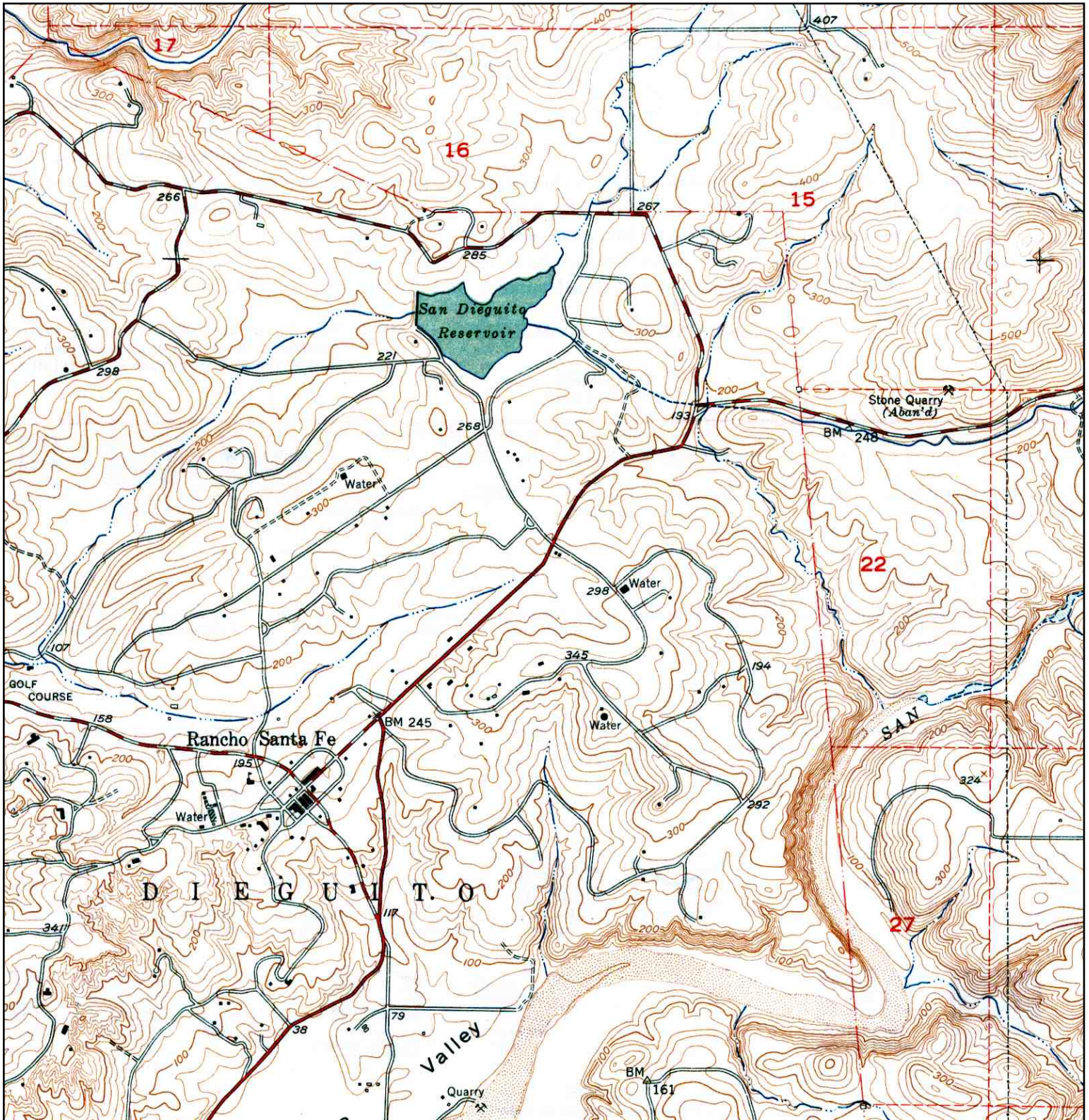
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	SERIES: 15 SCALE: 1:62500		


# Historical Topographic Map



<p>N</p> 	<p>TARGET QUAD NAME: ESCONDIDO MAP YEAR: 1947</p>	<p>SITE NAME: Montevideo ADDRESS: Paseo Delicias and Montevideo Rancho Santa Fe, CA 92067 LAT/LONG: 33.0302 / 117.191</p>	<p>CLIENT: Sota Environmental Technology CONTACT: Eric Romero INQUIRY#: 1804497.4 RESEARCH DATE: 11/28/2006</p>
	<p>SERIES: 15 SCALE: 1:50000</p>		


# Historical Topographic Map



	TARGET QUAD	SITE NAME: Montevideo	CLIENT: Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS: Paseo Delicias and Montevideo	CONTACT: Eric Romero
	MAP YEAR: 1949	Rancho Santa Fe, CA 92067	INQUIRY#: 1804497.4
	SERIES: 7.5	LAT/LONG: 33.0302 / 117.191	RESEARCH DATE: 11/28/2006
	SCALE: 1:24000		


# Historical Topographic Map



	TARGET QUAD	SITE NAME:	Montevideo	CLIENT:	Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS:	Paseo Delicias and Montevideo	CONTACT:	Eric Romero
	MAP YEAR: 1968	LAT/LONG:	33.0302 / 117.191	INQUIRY#:	1804497.4
	SERIES: 7.5			RESEARCH DATE:	11/28/2006
	SCALE: 1:24000				

# Historical Topographic Map



	TARGET QUAD	SITE NAME:	Montevideo	CLIENT:	Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS:	Paseo Delicias and MonteVIDEO	CONTACT:	Eric Romero
	MAP YEAR: 1983		Rancho Santa Fe, CA 92067	INQUIRY#:	1804497.4
	PHOTOREVISED FROM: 1968	LAT/LONG:	33.0302 / 117.191	RESEARCH DATE:	11/28/2006
	SERIES: 7.5				
	SCALE: 1:24000				



# **EDR Historical Topographic Map Report**

**El Camino Del Norte  
Paseo Delicias/El Camino Del Norte  
Rancho Santa Fe, CA 92067**

**Inquiry Number: 1804503.4**

**November 28, 2006**



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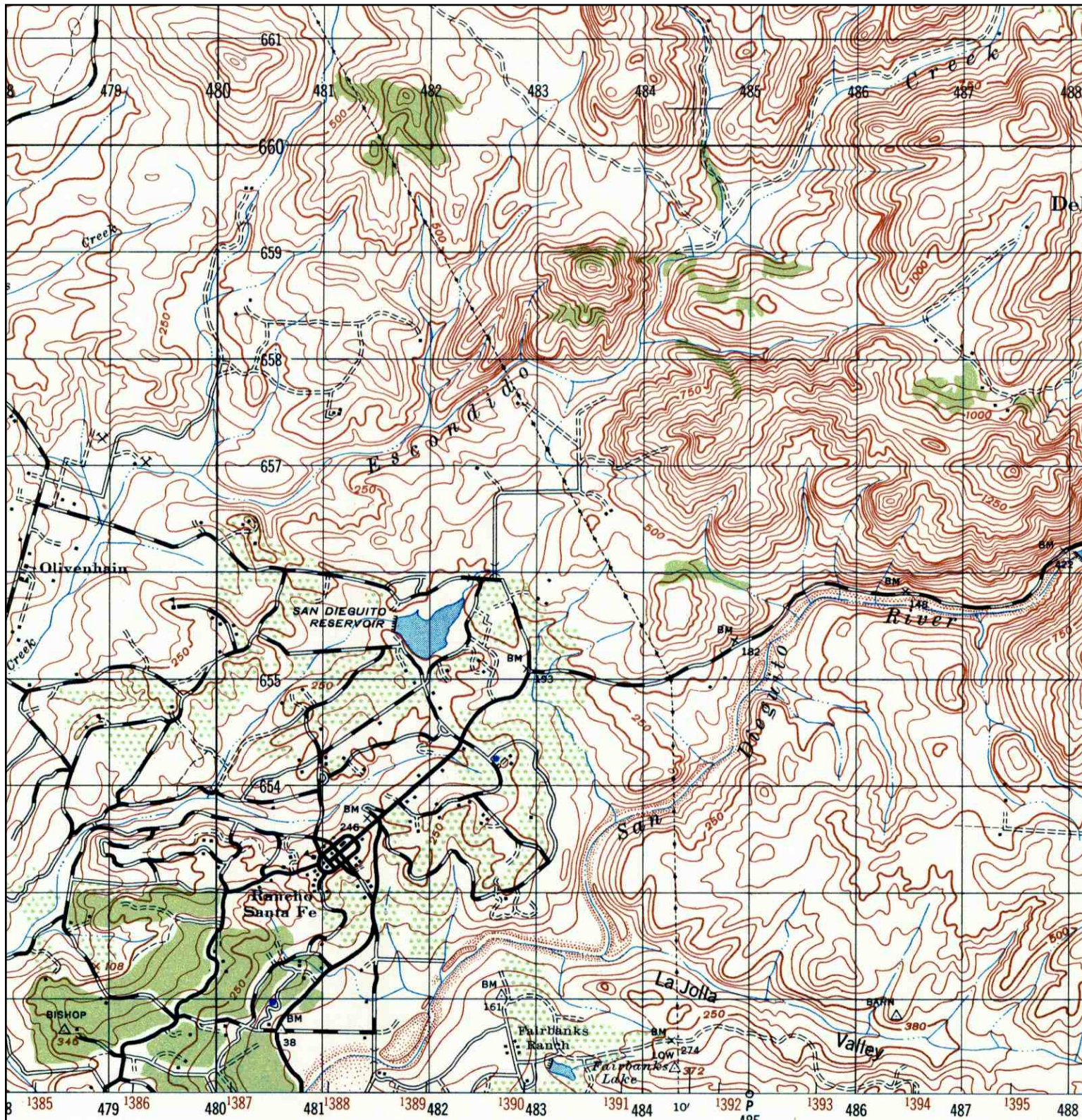
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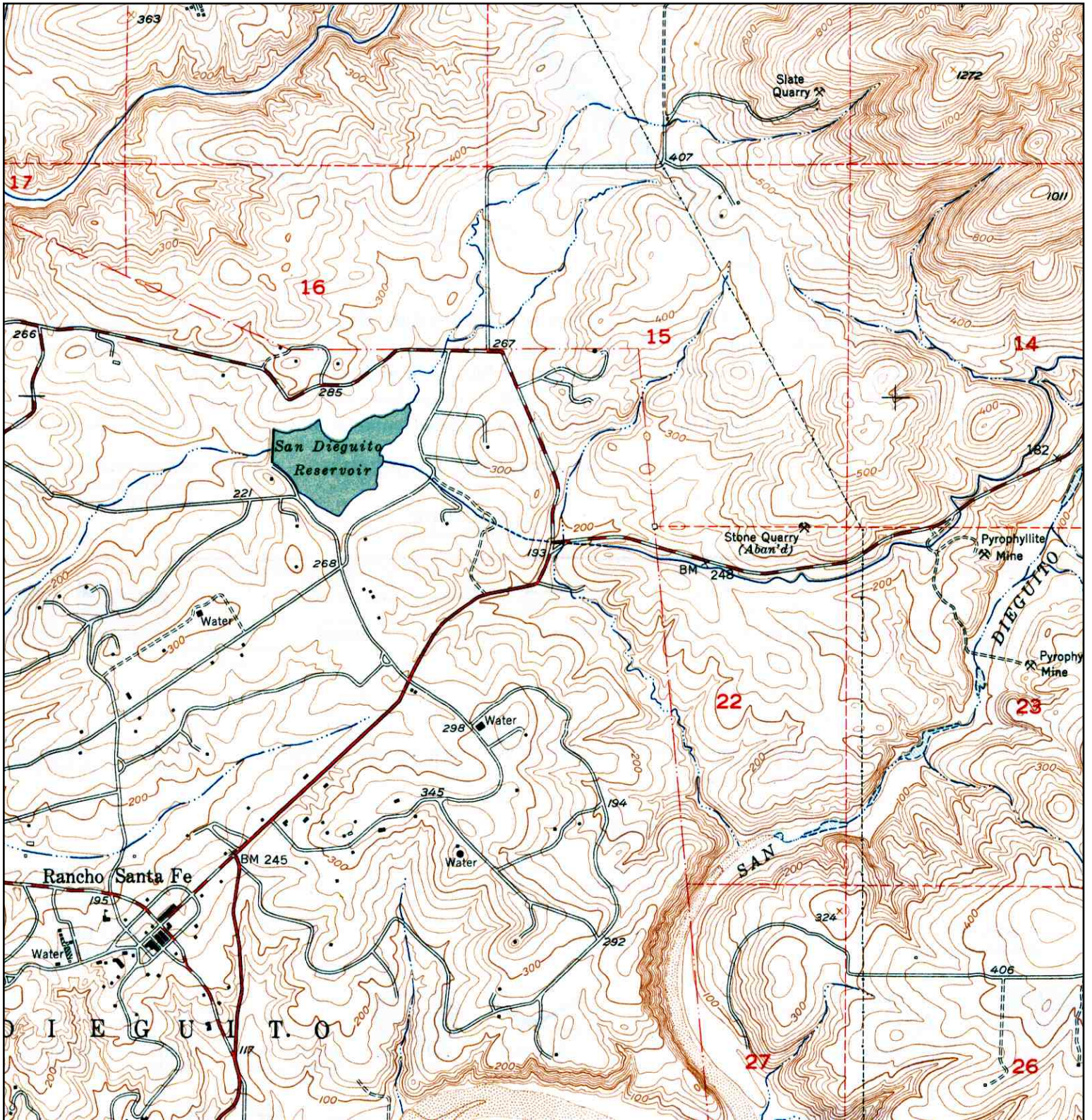
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	<p>SERIES: 15 SCALE: 1:62500</p>	<p>LAT/LONG: 33.0359 / 117.1836</p>	


# Historical Topographic Map



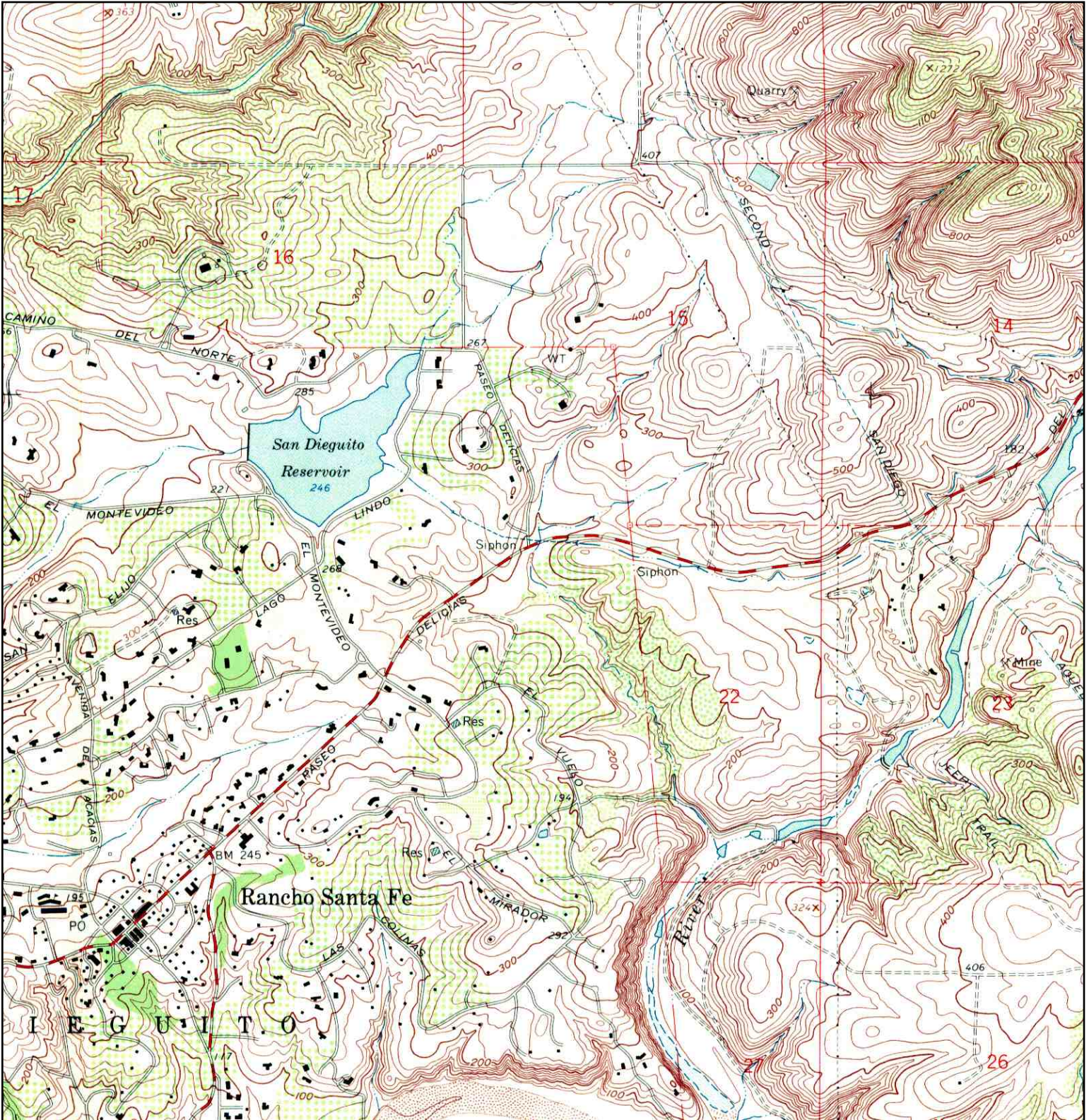
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	SERIES: 15	LAT/LONG: 33.0359 / 117.1836	RESEARCH DATE: 11/28/2006
	SCALE: 1:50000		

# Historical Topographic Map



<p>N</p> 	<p>TARGET QUAD</p> <p>NAME: RANCHO SANTA FE</p> <p>MAP YEAR: 1949</p>	<p>SITE NAME: El Camino Del Norte</p> <p>ADDRESS: Paseo Delicias/El Camino Del Norte</p> <p>Rancho Santa Fe, CA 92067</p>	<p>CLIENT: Sota Environmental Technology</p> <p>CONTACT: Eric Romero</p> <p>INQUIRY#: 1804503.4</p> <p>RESEARCH DATE: 11/28/2006</p>
	<p>SERIES: 7.5</p> <p>SCALE: 1:24000</p>	<p>LAT/LONG: 33.0359 / 117.1836</p>	

# Historical Topographic Map



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	<p>SERIES: 7.5 SCALE: 1:24000</p>	<p>Rancho Santa Fe, CA 92067 LAT/LONG: 33.0359 / 117.1836</p>	<p>CONTACT: Eric Romero INQUIRY#: 1804503.4 RESEARCH DATE: 11/28/2006</p>


# Historical Topographic Map



N ↑	TARGET QUAD	SITE NAME:	CLIENT:
	NAME: RANCHO SANTA FE	ADDRESS: Paseo Delicias/El Camino Del Norte	Sota Environmental Technology
	MAP YEAR: 1983	Rancho Santa Fe, CA 92067	CONTACT: Eric Romero
	PHOTOREVISED FROM: 1968	LAT/LONG: 33.0359 / 117.1836	INQUIRY#: 1804503.4
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	SCALE: 1:24000		

# Historical Topographic Map



	TARGET QUAD	SITE NAME: El Camino Del Norte	CLIENT: Sota Environmental Technology
	NAME: RANCHO SANTA FE	ADDRESS: Paseo Delicias/El Camino Del Norte	CONTACT: Eric Romero
	MAP YEAR: 1996	Rancho Santa Fe, CA 92067	INQUIRY#: 1804503.4
	SERIES: 7.5	LAT/LONG: 33.0359 / 117.1836	RESEARCH DATE: 11/28/2006
	SCALE: 1:24000		

**Erico Romero**

---

**From:** Luetzgerodt, Molly [Molly.Luetzgerodt@sdcounty.ca.gov]  
**Sent:** Tuesday, July 15, 2008 1:19 PM  
**To:** eromero@roreinc.com  
**Cc:** patchison@taic.net; cschaefer@taic.net; Weidlich, Stephen  
**Subject:** FW: Rancho Santa Fe Roundabouts

Mr. Romero,

The answers to your questions regarding the LBP for RSF Roundabouts are included below. In the future, you can request the information through DPW Environmental Services Unit. We can then pass it on to DPW Traffic so they are informed about the source of the questions and the purpose, etc.

Thanks,

***Molly Luetzgerodt***  
***Environmental Planner***  
*County of San Diego*  
*DPW Environmental Services*  
*5469 Kearny Villa Road, Suite 305*  
*San Diego, CA 92123*  
*Ph: 858-874-4042*  
*Fax: 858-874-4043*

---

**From:** Quinn, Julia  
**Sent:** Tuesday, July 15, 2008 8:23 AM  
**To:** Luetzgerodt, Molly  
**Subject:** FW: Rancho Santa Fe Roundabouts

---

**From:** Shaffer, Karel V  
**Sent:** Tuesday, July 15, 2008 8:19 AM  
**To:** Quinn, Julia  
**Cc:** Goralka, Robert J  
**Subject:** RE: Rancho Santa Fe Roundabouts

Julia,

Below are the answers to Mr. Romero's questions:

1. **1947 USGS Topographic Maps show the roundabout area as a paved, light duty road, approximately when was the last year that LBP was used for road striping in the area of the proposed roundabout locations?**

Answer: Approximately 1998.

2. **What type of paint is currently used for road marking?**

Answer: Lead-free Waterbourne Traffic Line paint per the most current Caltrans Standard Specifications ( currently Section 84-3.02 of the 2006 Caltrans Standard Specifications).

3. **Approximately when was resurfacing, or surface removal last conducted on the roadway**



**so as to remove the top layer of asphalt and with it any potential for the presence of LBP?**

Answer: Del Dios Highway from Paseo Delicias/El Camino del Norte to Date Lane was last resurfaced February, 1999 with fabric and 1.5” thick of Asphalt Concrete. Paseo Delicias from La Flecha/El Tordo to Del Dios Hy/El Camino Del Norte was last resurfaced January, 2006 with 1.5” thick of Rubberized Asphalt Concrete.

**4. To the best of your knowledge, how frequently repainting conducted in the area?**

Answer: Once about every 1 year to 2 years depending on how well the paint is holding up.

If you have any questions, please contact me (contact info below). Thank you!

***Karel v. Shaffer, MSCE, PE, TE, PTOE***

Civil Engineer

County of San Diego

Department of Public Works

Traffic Engineering Section

5469 Kearny Villa Rd, #201

San Diego, CA 92123-1159

(858) 874-4024 [office]

FAX (858) 874-4028

[Karel.Shaffer@sdcounty.ca.gov](mailto:Karel.Shaffer@sdcounty.ca.gov)

*Kids... the Environment... Safe and Livable Communities*

---

**From:** Erico Romero [mailto:eromero@roreinc.com]

**Sent:** Monday, July 14, 2008 10:02 AM

**To:** Shaffer, Karel V

**Cc:** 'Yu Zeng'

**Subject:** Rancho Santa Fe Roundabouts

Good Morning Karel,

It seems like we are playing a serious game of phone tag. I just have a few questions, regarding the roundabouts, e.g. maintenance, etc. to finalize the Phase I Assessment. If you could answer the questions below to the best of your knowledge, it would be greatly appreciated:

3. 1947 USGS Topographic Maps show the roundabout area as a paved, light duty road, approximately when was the last year that LBP was used for road striping in the area of the proposed roundabout locations?
4. What type of paint is currently used for road marking?
5. Approximately when was resurfacing, or surface removal last conducted on the roadway so as to remove the top layer of asphalt and with it any potential for the presence of LBP?

6. To the best of your knowledge, how frequently repainting conducted in the area?

Thank you again for your time in helping us develop a better idea regarding this issue. If you have any questions or comments, please feel free to call or email.

Erico Romero  
Site Superintendent  
RORE, Inc.  
p. 858-404-7393 ext. 20  
f. 858-404-7395  
c. 619-862-4549  
eromero@roreinc.com

**Appendix J**  
**Water Quality Technical Study**



# **WATER QUALITY TECHNICAL STUDY**

For The:

## **Rancho Santa Fe Roundabouts Project**

Prepared For:  
County of San Diego  
DPW - Environmental Services Unit  
5469 Kearny Villa Road, Suite 305  
San Diego, CA 92123-1152

Prepared By:  
Nolte Associates, Inc.  
Jennifer M. Peterson, P.E., CFM



MARCH 31, 2008



**WATER QUALITY TECHNICAL REPORT FOR RANCHO SANTA FE  
ROUNDABOUTS**

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- Figure 2 San Diego County Watershed Map**
- Figure 3 FEMA Flood Insurance Rate Map**

## **1.0 Introduction**

### **1.1 Project Description**

The County of San Diego Department of Public Works (County DPW) proposes to construct traffic roundabouts at the following three intersections along Paseo Delicias in the unincorporated community of Rancho Santa Fe in northwest San Diego County (see Figure 1):

- Paseo Delicias/El Camino del Norte/Del Dios Highway (El Camino del Norte)
- Paseo Delicias/El Montevideo/La Valle Plateada (El Montevideo/La Valle Plateada)
- Paseo Delicias/Via de la Valle/La Fremontia (Via de la Valle/La Fremontia)

Paseo Delicias is a two-lane road between Via de la Valle and El Camino del Norte that provides a link between Interstate 15 (I-15) along Via Rancho Parkway and Del Dios Highway to Interstate 5 (I-5). Vehicles tend to travel rapidly on this stretch of road, as it is one of the few roads in this area that connects I-15 to I-5. Two of the three intersections along Paseo Delicias (El Montevideo/La Valle Plateada and Via de la Valle/La Fremontia) are all-way stop sign controlled and drivers must wait in significantly long queues at each of these controlled intersections. The third intersection (El Camino del Norte) is stop controlled only on El Camino del Norte. To avoid long waits, some motorists divert onto other narrow residential roadways, creating potential traffic conflicts and delays to residents accessing their driveways.

The objective of the proposed project is to construct roundabouts along Paseo Delicias to ease existing traffic congestion at three intersections primarily caused by through traffic traveling eastbound and westbound during the morning and evening peak commuter periods. At the request of the community, a roundabout feasibility study was completed in 2004, which determined that roundabouts at the three subject intersections would improve Level of Service (LOS) for these intersections during peak hours.

The San Dieguito Community Plan, which includes Rancho Santa Fe, contains a goal that “urban-type street improvements such as gutters, curbs, sidewalks and extensive street lighting should not be installed.” This goal is consistent with the Rancho Santa Fe community’s protective covenant (the Covenant) to preserve the community’s rural character and to limit streets to two lanes.

### **1.2 Project Approach**

This report addresses the hydrology and water quality impacts that the proposed Paseo Delicias Roundabouts will have on receiving waters (San Dieguito River and San Elijo Lagoon). This report provides data and analysis in support of the Environmental Document for the proposed project prepared pursuant to the California Environmental Quality Act (CEQA). This water quality technical study addresses the following issues:

- Summary of Affected Environment
- Summary of Laws and Regulations pertaining to Water Quality



- Water Quality Impacts from Proposed Project
- Mitigation Measures to protect Water Quality

### **1.3 Topography and Land Use**

The main roadway (Paseo Delicias/Del Dios Highway) is bordered by several residences. There is also a church that operates a pre-school within the project limits. There is a golf course that runs parallel to Paseo Delicias behind some of the residences. The general project area is heavily vegetated with several lush trees, shrubs, grass fields, and orchards. Stormwater runoff is conveyed via natural channels (instead of piped underground). There are currently no sidewalks along Paseo Delicias. However, there are some existing dirt trails for equestrian use at some of the intersections.

### **1.4 Existing Hydrology**

The project area is located on the ridgeline (divide) of two watersheds: San Dieguito Watershed and Carlsbad Watershed. Paseo Delicias/Del Dio Highway is the high point along the divide. All drainage east of the Montevideo intersection flows towards the San Dieguito River. All drainage west of the Montevideo intersection flows towards a tributary (La Orilla) to the San Elijo Lagoon. The San Dieguito River is located to the south of Paseo Delicias and La Orilla Tributary is located on the golf course to the north. Stormwater runoff from the south half of the roadway will be conveyed towards the San Dieguito River. Stormwater Runoff from the north half of the roadway from the El Montevideo intersection and west, including the new cul de sac on La Fremontia, will be conveyed towards La Orilla Tributary. Both San Dieguito River and San Elijo Lagoon eventually discharge into the Pacific Ocean, approximately six miles downstream.

All stormwater from Paseo Delicias is conveyed in shallow swales located along the roadway. There are several culverts at the intersections and drainage divide used to convey water under the roads. There is an existing detention pond that is most likely used for sedimentation purposes since it is downstream of a large agricultural area that is frequently irrigated. The proposed roadway improvements will not impact the pond. The pond discharges to a culvert that runs under the roadway to a tributary of San Dieguito Creek.

There will be a moderate increase in runoff volume due to the increase in impervious surfaces resulting from the roadway improvements. This project will increase the impervious area by approximately 20%. Improvements to the existing drainage system, including additional drainpipe and velocity controls at outlets (such as riprap) will need to be installed to offset the impacts from the increased runoff. The capacity of the existing culverts and swales will be evaluated during the design development process to assess whether or not they are adequate or need to be resized. In addition, there may be requirements for hydromodification (runoff reduction) which would require providing some type of detention system for the roadway improvements. There is further discussion of this in Section 2.3 Regional and Local Permit Requirements section of this report.

## **2.0 Applicable Laws and Regulations**

### **2.1 Federal Requirements**

The federal Clean Water Act (CWA) is the principal statute governing water quality. The CWA established the basic framework for regulating discharges of pollutants into the nation's waters, a permit system known as the National Pollutant Discharge Elimination System (NPDES). The NPDES program requires permits for the discharge of pollutants from any point source (including storm water discharges) into "waters of the United States." As defined in the CWA, "waters of the United States" applies only to surface waters, rivers, lakes, estuaries, coastal waters, and wetlands. The authority to implement the NPDES program is generally delegated to individual States; the State Water Resources Control Board (SWRCB or State Board) administers NPDES permits in California. Originally the NPDES program focused on reducing pollutants from discharges from industrial process wastewater and municipal sewage treatment plants. In 1987 the CWA was further amended to require the U.S. Environmental Protection Agency (EPA) to establish requirements for regulating storm water discharges through use of NPDES storm water permits. In 1990, the CWA was amended to require the regulation of discharges from Municipal Separate Storm Sewer Systems (MS4s) into existing waterways. MS4 systems are now required to obtain an NPDES permit and local jurisdictions are also required to adopt programs that control discharges from new and redevelopment areas. In addition, Section 303(d) of the Clean Water Act requires the State to develop a list of "impaired" water bodies that may require additional protection (beyond traditional short term and long term controls) to ensure established water quality standards are achieved and maintained. For these water bodies, the State is required to develop appropriate total maximum daily loads (TMDLs). TMDLs are the sum of the individual pollutant load allocations for point sources, nonpoint sources and natural background conditions, with an appropriate margin of safety, for a designated water body.

## **2.2 State Requirements**

The state Porter-Cologne Water Quality Control Act (California Water Code, Division 7) requires that any person proposing to discharge wastes that could affect the quality of "waters of the state" file a Report of Waste Discharge to the appropriate Regional Water Quality Control Board (RWQCB). In March 2003, the State Board began requiring NPDES permit compliance for discharges from construction activities that disturb 1 or more acres of soil. Within the proposed project area, permits that govern and restrict the amount of pollutants that can be discharged into ground or surface waters are issued by the San Diego Regional Water Quality Control Board. Because the project footprint is greater than 1 acre, this project will be subject to the State Permit Requirements.

## **2.3 Regional and Local Requirements**

NPDES permits for construction activities and the MS4 (Municipal Stormwater System) are enforced at the regional level by the Regional Water Quality Control Boards (RWQCBs). Permits relevant to the proposed project include:

- Statewide Construction Activity General Permit Order No 99-08-DWQ (NPDES Permit No. CAS000002) and,
- The San Diego County MS4 Permit Order No. 2007-0001 (NPDES Permit No. CAS0108758).

Construction General Permit Order 99-08-DWQ

Prior to starting any construction, it is anticipated that the County of San Diego will file a Notice of Intent (NOI) to comply with the Construction Activity General Permit. The County will also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) which will include information on Best Management Practices to be used during the construction. The Statewide Construction Activity General Permit is scheduled to be renewed in Fall of 2008. The only new permit requirement that would affect the design would pertain to hydromodification and the requirement to maintain the pre-development runoff volumes. We recommend that the General Permit be re-evaluated during the design stage.

San Diego County MS4 Permit Order No. 2007-0001

This project increases the impervious area by more than 5000 square feet and therefore will be classified by San Diego County as a priority project and subject to San Diego County's Municipal Permit. In order to comply with the Municipal Permit, the County will need to prepare a Storm Water Management Plan (SWMP) that explains BMPs that will be implemented to control pollutants post-construction. The Storm Water Management Plan is typically prepared during the design phase and approved prior to obtaining a grading permit.

The San Diego County Municipal Permit was revised on January 24, 2007 and the County of San Diego is required to comply with the new permit beginning on March 24, 2008. Two of the items that may affect the roundabouts project include (1) new requirements on LID (Low Impact Development) and (2) Hydromodification. All priority projects will require LID, or draining to pervious areas, to be implemented on the site. This may include use of natural swales for drainage (versus conveying stormwater underground in pipes). This should be considered in the design development phase. Hydromodification refers to a change in flows due to urbanization which will result in downstream erosion of streams and habitat. The County is required to develop a Hydromodification Plan that will most likely apply to priority projects that disturb 1 acre of previously undeveloped land. This plan will go into effect March 24, 2009. The Roundabouts project will require hydromodification analysis. Hydromodification can be analyzed during the design development phase. However, it should be recognized early in the planning process that additional area may be required for detention storage. Detention can be utilized above ground or underground and can also be used in conjunction with other LID methods.

### **3.0 Water Quality Environment**

According to the Regional Water Quality Control Board's (RWQCB) San Diego Hydrologic Basin Planning Area Map, The Rancho Santa Fe Roundabouts project is located within two hydrologic subareas, the Rancho Santa Fe HSA (5.11) and the La Jolla HAS (5.12). Both are located within the Solana Beach Hydrologic Area of the San Dieguito Hydrologic Unit.

#### **3.1 Beneficial Uses**

The San Diego Basin Plan designates existing, potential, and intermittent beneficial uses for all water bodies within the region, including inland surface waters. The beneficial uses for both the Carlsbad and San Dieguito Hydrologic Units are included in Tables 1, 2 and 3 below. These tables have been extracted from the Water Quality Control Plan for the San Diego Basin. Beneficial Use descriptions are listed below.

**MUN – Municipal and Domestic Supply:** Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

**AGR – Agricultural Supply:** Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

**IND – Industrial Services Supply:** Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

**REC1 – Contact Recreation:** Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.

**REC2 – Non-Contact Recreation:** Includes the uses of water for recreational involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

**WARM – Warm Freshwater Habitat:** Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

**WILD – Wildlife Habitat:** Includes uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife, (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

**BIOL – Preservation of Biological Habitats of Special Significance:** Includes uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

**EST – Estuarine Habitat:** Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

**RARE – Rare, Threatened, or Endangered Species:** Includes uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

**MAR – Marine Habitat:** Includes uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

**COLD – Cold Freshwater Habitat:** Includes use of water that supports cold freshwater ecosystems including, but not limited designation support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

**MIGR – Migration of Aquatic Organisms:** Includes uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.

**SPWN - Spawning, Reproduction, and/or Early Development (SPWN):** Includes uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish. This use is applicable only for the protection of anadromous fish.

**3.1.1 Inland Surface Waters**

Inland Surface waters have the following beneficial uses as shown in Table 1.

**Table 1: Beneficial Uses for Inland Surface Waters**

Hydrologic Unit Number	Mun	Agr	Ind	Proc	Grw	Frsh	Pow	Rec1	Rec2	Biol	Warm	Cold	Wild	Rare	Spwn
5.11 (San Dieguito River)	*	0	0					X	X		X	X	X		X

X Existing Beneficial Use

0 Potential Beneficial Use

\* Excepted by the Regional Board from Municipal Use Designation under terms and conditions of State Board Resolution No. 88-63, Sources of Drinking Water Policy.

**3.1.2 Coastal Waters**

Coastal waters have the following beneficial uses as shown in Table 2.

**Table 2: Beneficial Uses of Coastal Waters**

Hydrologic Unit Number	Ind	Nav	Rec1	Rec2	Comm	Biol	Est	Wild	Rare	Mar	Aqua	Migr	Spwn	Warm	Shell
5.11 (San Dieguito Lagoon)			X	X		X	X	X	X	X		X	X		
4.61 (San Elijo Lagoon)			X	X		X	X	X	X	X		X	X		

X = Existing Beneficial Use

**3.1.3 Groundwater**

Groundwater beneficial uses include agricultural, municipal, and industrial. Table 3 below is referenced from the San Diego Basin Plan.

**Table 3: Beneficial Uses for Groundwater (Sweetwater Hydrologic Unit – La Nacion)**

Hydrologic Unit Number	Mun	Agr	Ind
5.10 (Solana Beach)	X	X	X
4.60 (San Elijo)	0	X	X

X Existing Beneficial Use

0 Potential Beneficial Use

**3.1.3 Floodplains**

The Federal Emergency Management Agency (FEMA) prepares floodplain maps for planning level uses to determine if your project is located in or near a floodplain. The nearest water bodies are La

Orilla Tributary to the north and San Dieguito River to the south. According to FEMA’s Flood Insurance Rate Map for this project area (FIRM No. 06073C1917F), the project area is not located within a floodplain area. See Figure 2 in the Appendix for further details.

**3.2 Water Quality Objectives**

Water Quality Objectives have been established for all water of the San Diego Region in an effort to protect the beneficial uses of each water body. The Water Quality Objectives for surface waters and groundwater within the hydrologic unit are listed in the San Diego Basin Plan and are shown below in Tables 3 and 4.

**Table 3: Water Quality Objectives for Inland Surface Waters**

Inland Surface Waters		Constituent (mg/L* or as noted)													
Hydrologic Area	Unit No.	TDS	Cl	SO <sub>4</sub>	%Na	N&P	Fe	Mn	MBAS	B	ODOR	Turb NTU	Color Units	F	
Escondido Creek (Carlsbad Hydrologic Unit)	4.60	500	250	250	60	(a)	0.3	0.05	0.5	0.75	None	20	20	1.0	
Solana Beach (San Dieguito Hydrologic Unit)	5.10	500	250	250	60	(a)	0.3	0.05	0.5	0.75	None	20	20	1.0	

\*Concentrations for constituents shall not be exceeded more than 10% of the time during any one year period.

- (a) Concentrations of nitrogen and phosphorus by themselves or in combination with other nutrients shall be maintained at levels below those which stimulate algae and emergent plant growth. The threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for Nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used

**Table 4: Water Quality Objectives for Groundwaters**

Groundwater		Constituent (mg/L* or as noted)													
Hydrologic Area	Unit No.	TDS	Cl	SO <sub>4</sub>	%Na	NO <sub>3</sub>	Fe	Mn	MBA S	B	ODO R	Turb NTU	Color Units	F	
Escondido Creek (Carlsbad Hydrologic Unit)	4.60	750	300	300	60	10	0.3	0.05	0.5	0.75	None	5	15	1.0	

Solana Beach (San Dieguito Hydrologic Unit)	5.10	1500	500	500	60	45	0.85	0.15	0.5	0.75	None	5	15	1.0
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**3.3 Existing Water Quality**

**3.3.1 Downstream Receiving Waters and Impaired Water Bodies**

Under existing conditions, all drainage east of the Montevideo intersection flows towards the San Dieguito River. All drainage west of the Montevideo intersection flows towards La Orilla Tributary into the San Elijo Lagoon. The San Dieguito River is located to the south of Paseo Delicias and La Orilla Tributary is located on the golf course to the north. Both San Dieguito River and San Elijo Lagoon eventually discharge into the Pacific Ocean, approximately six miles downstream. According to the EPA’s 303(d)The San Elijo Lagoon is listed as an impaired water body for bacteria, eutrophy, and sedimentation. The Pacific Shoreline is listed as an impaired water body at the San Elijo Lagoon outlet and at the mouth of the San Dieguito Lagoon for bacteria. Best management practices (BMPs) will be implemented during construction and after project completion to protect the existing water quality of all downstream receiving waters, especially those that are impaired. BMPs are discussed in greater detail in Section 5 of this report.

**3.3.2 Water Quality Within Carlsbad and San Dieguito Watersheds**

The project lies within two watersheds: The Carlsbad Watershed and The San Dieguito Watershed.

The Carlsbad Hydrologic Unit (HU) is approximately 210 square miles in area extending from the headwaters above Lake Wohlford in the east to the Pacific Ocean in the west, and from Vista and Oceanside in the north to Solana Beach, Escondido, and the community of Rancho Santa Fe to the south. There are numerous important surface hydrologic features within the Carlsbad HU including four unique coastal lagoons, three major creeks, and two large water storage reservoirs. The Carlsbad HU contains four major, roughly parallel hydrologic areas with San Elijo being the southernmost area. Approximately 48% of the Carlsbad HU is urbanized. The dominant land uses in the watershed are residential (29%), commercial/ industrial (6%), freeways and roads (12%), agriculture (12%), and vacant/ undeveloped (32%).

The Agua Hedionda, Buena Vista, and San Elijo lagoons are experiencing impairments to beneficial uses due to excessive coliform bacteria and sediment loading from upstream sources. These coastal lagoons represent critical regional resources that provide freshwater and estuarine habitats for numerous plant and animal species.

The San Dieguito Hydrologic Unit (HU) is approximately 346 square miles in area and located in west-central San Diego County. The watershed includes portions of the cities of Del Mar, Escondido, Poway, San Diego, and Solana Beach, and unincorporated San Diego County. In terms of land area, the majority of the watershed (79.8%) is within the unincorporated jurisdiction. The San Dieguito River watershed is presently divided into vacant/ undeveloped (54%), parks/ open

space (29 %), and urban (18%) land uses. Nearly half of the vacant land area is open to future development, most of which is zoned for residential usage. The watershed extends through a diverse array of habitats from its eastern headwaters in the Volcan Mountains to the outlet at the San Dieguito Lagoon and the Pacific Ocean. The San Dieguito Lagoon is an important natural area within the watershed that sustains a number of threatened and endangered species. The Pacific Ocean at the mouth of the San Dieguito River is listed as a 303(d)-impaired water body for elevated coliform bacteria. The San Dieguito Lagoon is especially sensitive to the effects of pollutants and oxygen depletion due to restricted or intermittent tidal flushing.

#### 4.0 Water Quality Impacts

##### 4.1 Existing and Post-Construction Drainage

The project site is a roadway that is located on the center of a drainage divide between two watersheds, both eventually discharging to the Pacific Ocean. Based on the “Plans for Construction of the Roundabouts” prepared for the County by David Evans and Associates, the drainage patterns will essentially remain the same post-construction. Stormwater runoff from the roadway will continue to be conveyed by shallow swales along either side of the road and by culverts at the intersections. The biggest impact will be from the amount of increased flow due to the large increase in the amount of impervious area. These flows should be mitigated by providing detention on site. This can either be done by oversizing the conveyance swales and controlling the outlets or by providing underground storage of stormwater runoff prior to discharging to downstream receiving waters.

##### 4.1 Pollutants of Concern

This project proposes new impervious area for the roadway and roundabout areas. Table 5 below lists the potential pollutants they may be generated by the project and includes sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, and oil & grease.

**Table 5. Anticipated and Potential Pollutants Generated by Land Use Type**

Project Elements	General Pollutant Categories								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Streets, Highways and Freeways	X	P <sup>(1)</sup>	X	X <sup>(4)</sup>	X	P <sup>(5)</sup>	X		
X = anticipated P = potential (1) A potential pollutant if landscaping exists on-site. (4) Including petroleum hydrocarbons. (5) Including solvents.									

Sediment is an anticipated pollutant during the grading of new roadway areas, installation of the retaining wall and from any landscaping activities that may take place during construction. Oil and



grease and heavy metals (from vehicles and heavy machinery) from the roadway are also anticipated pollutants. Nutrients and pesticides could be a potential pollutant from landscaping material that may be applied (center landscape areas of roundabouts, adjacent swales if vegetative, etc.). Trash and debris from littering from workers and from passing vehicles could occur. Additionally, bacteria and viruses could be a potential pollutant from any animals that are in the area, especially horses that travel within this area.

**5.0 Mitigation Measures to Protect Water Quality**

The proposed roadway (roundabouts) have the potential to introduce pollutants into the existing drainage system. Mitigation measures will need to be implemented both during and post-construction. These measures are described in detail below.

**5.1 Temporary Measures (During Construction)**

Under the Statewide General Construction NPDES Permit the County must submit an NOI to the State Water Regional Control Board (SWRCB) prior to commencement of construction activities. In addition, an SWPPP must be prepared and implemented at the project site, and revised as necessary as administrative or physical conditions change. The SWPPP will include BMPs that address source reduction and provide measures and controls necessary to mitigate potential pollutant sources. The SWPPP will be available to the public under Section 308(b) of the CWA and will be made available to SWRCB upon request. The BMPs selected are those that will be implemented during construction of the project. The applicant is responsible for the placement and maintenance of the BMPs selected.

Recommended BMPs for the construction phase, based on the *“Plans for Construction of Roundabouts at El Montevideo, Via de La Valle, and El Camino del Norte”* by David Evans and Associates, include:

- √ Silt Fence
- √ Fiber Rolls
- √ Street Sweeping and Vacuuming
- √ Material Delivery and Storage
- √ Stockpile Management
- √ Solid Waste Management
- √ Stabilized Construction Entrance/Exit
- √ Hydroseeding and/or soil binders (BFM)
- √ Velocity Dissipation Devices
- √ Check Dams
- √ Gravel Bag Berm
- √ Sanitary/Septic Waste Management
- √ Material Delivery and Storage
- √ Spill Prevention and Control
- √ Concrete Waste Management
- √ Water Conservation Practices
- √ Paving and Grinding Operations

Some of the above BMPs are structural items that must be implemented prior to construction. Some of the BMPs apply to housekeeping methods that will apply during construction. All of the BMPs above have been referenced from the CASQA (California Stormwater Quality Association) Construction BMP Handbook (January 2003).

**5.2 Long-Term Measures (Post-Construction)**

There are several BMPs that can be incorporated during the design phase of the project to ensure long term protection of water quality within this area. According to the "Plans for Construction of Roundabouts at El Montevideo, Via de La Valle, and El Camino del Norte" prepared by David Evans and Associates, some of the site and source control BMPs that have been/can be incorporated into the design include:

- Designing the project to minimize impervious areas. Retaining walls have been included in the design to minimize grading impacts and soil disturbance to adjacent areas. Pavers are being utilized in the center of the roundabouts and will promote infiltration of stormwater.
- Minimizing directly connected impervious areas. Where possible, drain roadway to pervious areas.
- Protecting Slopes and Channels. Stormwater runoff should be conveyed safely from the tops of slopes. Riprap should be provided at the outlets as necessary to prevent erosion downstream.
- Efficient Irrigation Systems shall be installed in any landscaped areas that require regular irrigation. This may include installed rain shutoff devices on irrigation systems or flow reducers or shutoff valves to conserve water use.

In addition to the site and source control BMPs, treatment control BMPs shall be incorporated into the final design concept to effectively capture and treat potential pollutants from the project prior to discharging off-site. Treatment control BMPs that are appropriate for this site and relatively small drainage areas include: bioswales, infiltration trenches, drainage inserts, and hydrodynamic separator systems (such as a CDS unit). Drainage inserts and Hydrodynamic Separator Systems are not recommended for this project since most of the runoff is being conveyed above ground and there are no underground pipes. The County of San Diego SUSMP Manual provides a table for various treatment control BMPs and rates their effectiveness. The effectiveness of each of the BMPs is shown in Table 6 below.

**Table 6: Treatment Control BMPs from County of San Diego SUSMP Manual**

Pollutant of Concern	Treatment Control BMP Categories						
	Bioswales	Detention Basins	Infiltration Basins	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems <sup>(3)</sup>
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	M	L	M	L
Trash & Debris	L	H	U	H	M	H	M

Pollutant of Concern	Treatment Control BMP Categories						
	Bioswales	Detention Basins	Infiltration Basins	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems <sup>(3)</sup>
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	H	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	L	L	U	L

(3) Also known as hydrodynamic devices and baffle boxes.

L: Low removal efficiency);                    H: High removal efficiency):  
M: Medium removal efficiency):            U: Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), *Guide for BMP Selection in Urban Developed Areas* (2001), and *Caltrans New Technology Report* (2001).

### 6.0 Operations and Maintenance Program

The biofilters and infiltration basins will require an operations and maintenance program to ensure that they are functioning effectively and providing long-term water quality protection. The tables below identify some routine maintenance and inspections requirements and have been adapted from the San Diego County’s SUSMP Manual (Appendix H). The long-term maintenance will be the responsibility of the Owner, the County of San Diego.

<b>Biofilters and Infiltration Basins</b>					
Preventative Maintenance and Routine Inspection					
Routine Action	Maintenance Indicator	Field Measurement	Measurement Frequency	Maintenance Activity	
Basin side slopes planted for erosion protection	Avg. vegetation height greater than 12-inches, emergence of trees or vegetation.	Visual observation	Once during wet season. Once during dry season.	Cut vegetation to an avg. height of 6 inches and remove any trimmings.	
Inspect for standing water	Standing Water for more than 72 hours	Visual observation	Annually, 72 hours after a rain event greater than 0.75 inches	Drain Facility	
Slope Stability	Evidence of Erosion	Visual Observation	October of each year (prior to rainy season)	Reseed, revegetate barren spots prior to wet season	
Inspection for trash and debris and sediment accumulation	-Unsightly buildup of trash and debris -Change in channel invert	-Visual -Measure sediment depth	Visually after all storms with greater than 0.5 inches of recorded rainfall.	-Picking up litter, debris -Sediment removal	

	greater than 1 foot				
Inspect for burrows	Borrows, holes, mounds	Visual Observation	Annually and after vegetation trimming	Where burrows cause seepage, erosion and leakage, backfill firmly	

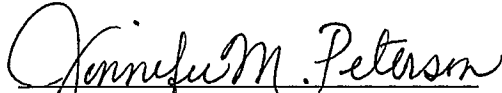
**7.0 Summary and Conclusions**

There are no significant water quality impacts from the proposed roundabouts project based on the *“Plans for Construction of Roundabouts at El Montevideo, Via de La Valle, and El Camino del Norte”* prepared by David Evans and Associates. The proposed development has the potential to introduce pollutants into the San Dieguito River and the San Elijo Lagoon. However, implementation of the proper BMPs (both during and post-construction) as mentioned in this report will significantly reduce the impacts to both of these downstream receiving waters.

With these BMPs in place, the proposed development will meet the water quality standards by limiting possible storm water impacts to the Maximum Extent Practicable. The San Dieguito River and the San Elijo Lagoon will retain the beneficial uses currently identified in the Water Quality Control Plan for the San Diego Basin.

### 8.0 Report Preparation

This Water Quality Technical Study has been prepared by:

  
Jennifer M. Peterson, RCE 67821  
Engineering Manager

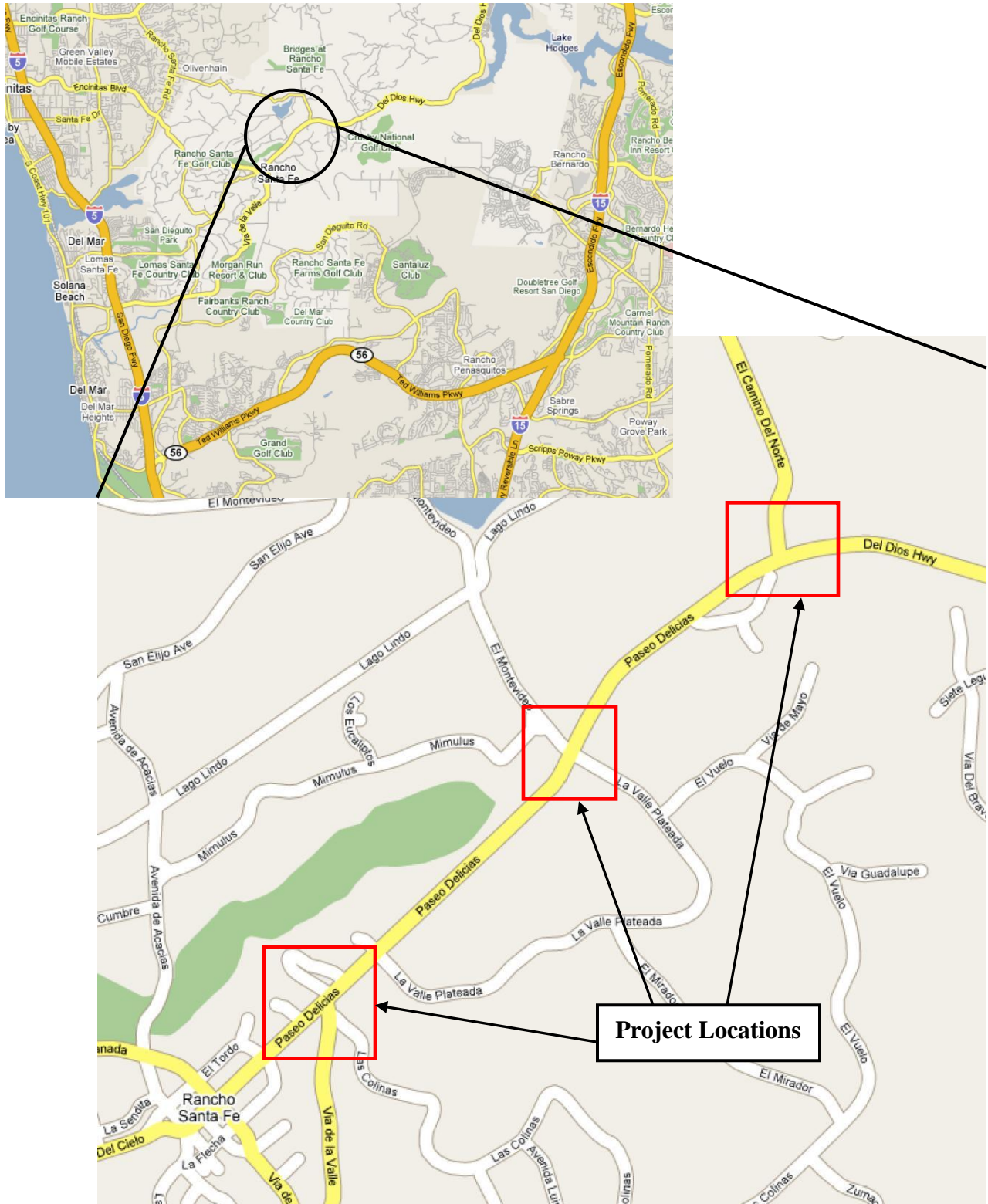
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Date

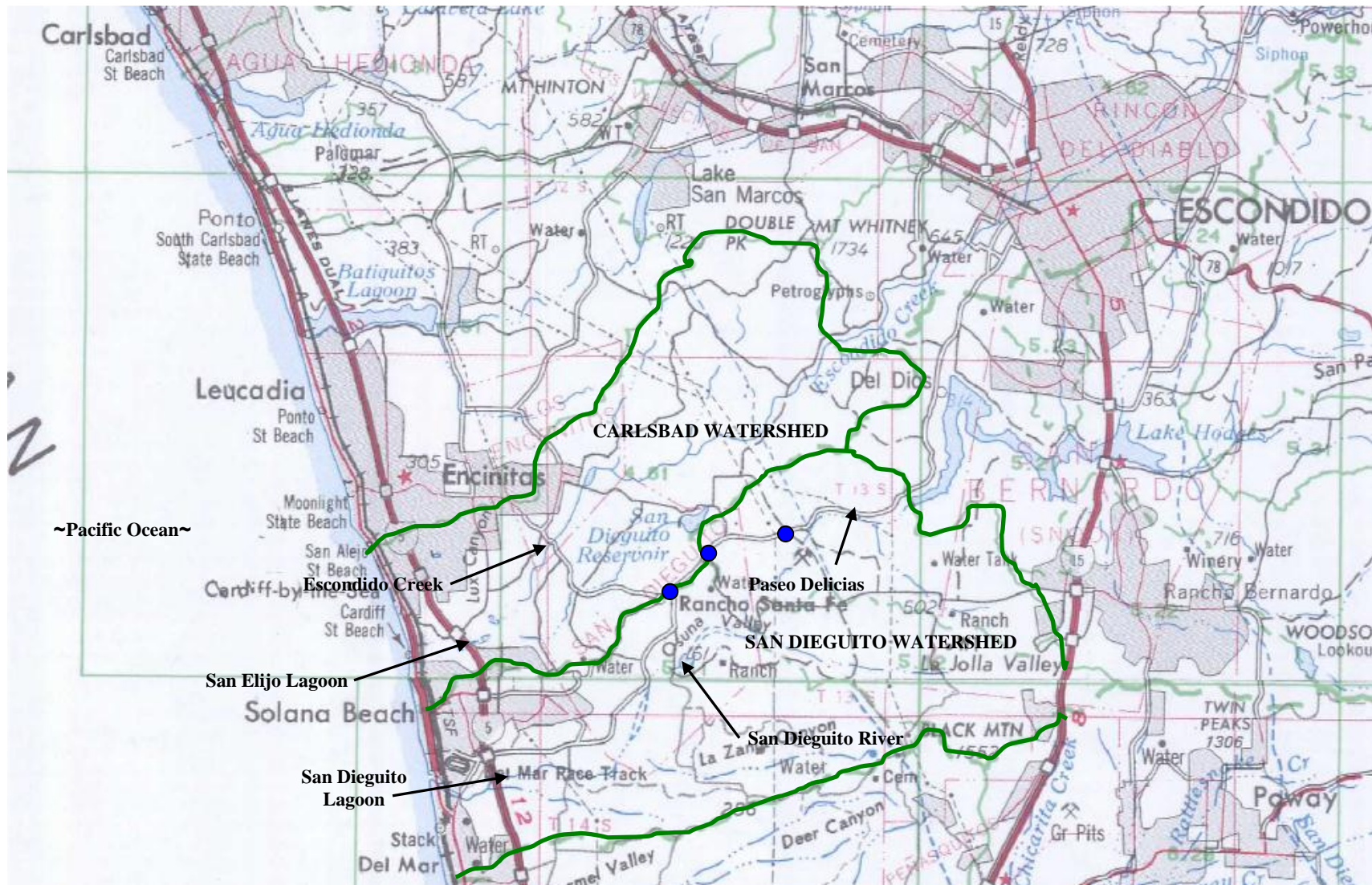


**REFERENCES:**

- (1) California Stormwater Quality Association (CASQA), Construction BMP Handbook, January 2003.
- (2) State Water Resources Control Board, Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity, August 19, 1999.
- (3) California Regional Water Quality Control Board, San Diego Region Order No. R9-2007-0001, Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s)
- (4) Water Quality Control Plan for the San Diego Basin (9), adopted by the California Regional Water Quality Control Board San Diego Region on September 8, 1994, and approved by the State Water Resources Control Board on December 13, 1994.
- (5) County of San Diego Standard Urban Stormwater Management Plan for Land Development and Public Improvement Projects , February 2003.
- (6) Project Clean Water website ([www.projectcleanwater.org](http://www.projectcleanwater.org))

Figure 1: Project Location Map





**Figure 2: San Diego County Watershed Map**

**Legend:**

- Project Locations (Intersections)
- Hydrologic Subarea Boundaries

**Source: Regional Water Quality Control Board – San Diego Region (9) San Diego Hydrologic Basin Planning Area Map**







**Appendix K1  
Noise Impact Analysis**



**FINAL**

**NOISE IMPACT ANALYSIS**  
**RANCHO SANTA FE ROUNDABOUTS PROJECT**

*Prepared for:*

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August 2008



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# CHAPTER 1

## SUMMARY

### 1.1 PURPOSE OF NOISE REPORT

The County of San Diego Department of Public Works (DPW) proposes to construct traffic roundabouts at the following three intersections along Paseo Delicias in the unincorporated community of Rancho Santa Fe in northwest San Diego County (see Figures 1 and 2):

- Paseo Delicias/El Camino del Norte/Del Dios Highway (El Camino del Norte)
- Paseo Delicias/El Montevideo/La Valle Plateada (El Montevideo/La Valle Plateada)
- Paseo Delicias/Via de la Valle/La Fremontia (Via de la Valle/La Fremontia)

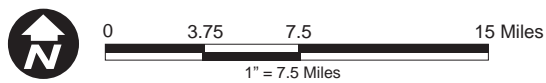
The purpose of this noise study is to identify where noise impacts currently, or could potentially, occur in the vicinity of the proposed project area and determine whether noise abatement is feasible, if necessary. This study identifies the sensitive noise receptors in the vicinity of the proposed project area, describes the noise levels and noise sources that occur currently in this area, and describes the noise levels predicted to occur upon implementation of the proposed improvements at these three intersections. The study also addresses potential construction-related noise impacts.

### 1.2 PROJECT DESCRIPTION

Paseo Delicias is a two-lane road between Via de la Valle and El Camino del Norte that provides a link between Interstate 15 (I-15) along Via Rancho Parkway and Del Dios Highway to Interstate 5 (I-5). Vehicles tend to travel rapidly on this stretch of road, as it is one of the few roads in this area that connects I-15 to I-5. Two of the three intersections along Paseo Delicias (El Montevideo/La Valle Plateada and Via de la Valle/La Fremontia) are stop sign controlled on all legs of the intersections and drivers must wait in significantly long queues at each of these controlled intersections. The third intersection (El Camino del Norte) is stop controlled only on El Camino del Norte. To avoid long waits, some motorists divert onto other narrow residential roadways, creating potential traffic conflicts and delays to residents accessing their driveways.



**Figure 1**  
**Regional Location Map**





**Figure 2**  
**Site Vicinity Map**

---

The objective of the proposed project is to construct roundabouts along Paseo Delicias to ease existing traffic congestion at three intersections primarily caused by through traffic traveling eastbound and westbound during the morning and evening peak commuter periods. At the request of the community, a roundabout feasibility study was completed in 2004, which determined that roundabouts at the three subject intersections would improve Level of Service (LOS) for these intersections during peak hours.

The roundabouts would be built according to Federal Highway Administration (FHWA) guidelines for design of rural roundabouts, which are consistent with for the existing roadway conditions on Paseo Delicias in terms of lane width, speed limit, and to allow their use by large trucks. Traffic operations at each of the three intersections would be similar with installation of the proposed roundabouts. Traffic entering each roundabout would not be stop controlled at any of the intersecting street segments. Vehicles approaching each roundabout would yield the right-of-way to vehicles already within the roundabout and would merge into the counter-clockwise flow of a single lane of traffic. Through traffic on Paseo Delicias would complete a one-half circle on the roundabout and continue in a westbound or eastbound direction. Vehicles turning onto intersecting streets would complete a one-quarter or three-quarter circle on the roundabout and exit onto any of the intersecting street segments.

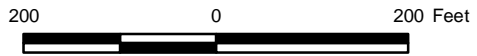
Combination pedestrian/equestrian crossings would be delineated by crosswalk markings in the pavement. Push-button-activated crossings with in-pavement lighting and flashing warning signs would be located approximately 200 feet from the crossing and would simultaneously illuminate at each segment of the intersection. The push-button controls would be placed at an appropriate height for an equestrian rider to activate the crossing signals. A safety island would also be installed to enable pedestrians to pause between the lanes of traffic. Figures 3 through 5 illustrate the proposed roundabout designs at each of the following intersections.

### **1.2.1 El Camino del Norte Intersection**

The El Camino del Norte roundabout would have three intersecting street segments (see Figure 3). The intersection would need to be widened on the northwest and northeast corners to accommodate the roundabout. Retaining walls would be constructed on the north and south sides of Paseo Delicias and Del Dios Highway. Existing drainage system improvements would be extended within the areas of new pavement for the roundabout. As shown in Figure 3, the existing equestrian trail would be re-routed along the shoulders of Paseo Delicias to access the proposed crosswalk to be located just west of the roundabout.



Source: AirPhotoUSA Jan 2006; SanGIS 2006; TAIC 2008

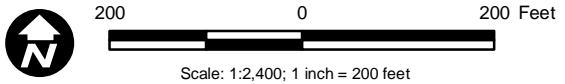


Scale: 1:2,400; 1 inch = 200 feet

**Figure 3**  
**El Camino del Norte Intersection**



Source: AirPhotoUSA Jan 2006; SanGIS 2006; TAIC 2008



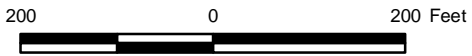
**Figure 4**  
**El Montevideo/La Valle Plateada Intersection**

Rancho Santa Fe Roundabouts Noise Impact Analysis  
Path: P:\2007\07080002 RSF Traffic Circles\SGIS\MXD\AIR\_NOISE\em\_2008\_elmontevideo.mxd, 03/18/08, Lee J





Source: AirPhotoUSA Jan 2006; SanGIS 2006; TAIC 2008



Scale: 1:2,400; 1 inch = 200 feet

**Figure 5**  
**Via de la Valle/La Fremontia Intersection**

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### **1.2.2 El Montevideo/La Valle Plateada Intersection**

The El Montevideo/La Valle Plateada roundabout would have four intersecting street segments (see Figure 4). To accommodate the roundabout, the intersection would need to be widened and shifted slightly in an easterly direction. No widening would be required at the southwest side of the intersection. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

### **1.2.3 Via de la Valle/La Fremontia Intersection**

The Via de la Valle/La Fremontia roundabout would have three intersecting street segments and would include the closure of the western La Fremontia intersection (see Figure 5). La Fremontia would become a cul-de-sac and an earthen berm would be constructed between the cul-de-sac and the roundabout. The southwest and southeast corners at the intersection of Paseo Delicias/Via de la Valle would need to be widened to accommodate the roundabout and for the realigned equestrian trail that would follow along the southeast side of the intersection as shown in Figure 5. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

South of the proposed roundabout, the intersection of Las Colinas with Via de la Valle would be realigned to the south to intersect Via de la Valle at a right angle. This realignment is to allow continuous traffic flow through the three street segments in the roundabout and to allow full access to Las Colinas from Via de la Valle. Transition lanes to facilitate right turns into and out of Las Colinas and a left turn pocket into Las Colinas would also be constructed. Two private driveways on Las Colinas would be lengthened to connect with the realigned roadway. West of the roundabout, the eastern access to a circular driveway at a private residence on the southerly side of Paseo Delicias would be closed. Ingress and egress to the private residence would be maintained via the western side of the circular driveway. The roundabout would require a retaining wall on the southeast side of the intersection. Existing drainage system improvements would be extended within the areas of new pavement for the roundabout. The Village Community Presbyterian Church at the southeast corner of the intersection is proposing a redevelopment of the church property that would include a reconfigured parking lot. The proposed church improvements would not conflict with the planned roundabouts and additional parking would be provided in the church's improvements. New landscaping would also be installed as shown in Figure 5.

---

#### **1.2.4 Traffic Signalization**

An alternative to the proposed roundabout would be to install traffic signals at each intersection. No other alterations to the existing intersection configurations or roadway alignments would occur under this alternative.

#### **1.2.5 No Build Alternative**

The No Build alternative would result in no changes to the existing intersections.

### **1.3 LAND USE AND TERRAIN**

The project area is located in the unincorporated community of Rancho Santa Fe in North San Diego County. The community of Rancho Santa Fe is located inland and is characterized by a rural appearance, with winding roads, mature trees and vegetation, and secluded estate residential style subdivisions, interspersed with open spaces and recreational areas such as golf courses, playing fields, and hiking and equestrian riding trails.

According to the San Diego County General Plan, residential lots, which range in density from 1 dwelling unit per acre (du/acre) to 7.3 du/acre, surround the current Via de la Valle/La Fremontia intersection (postmile 6.2). The Village Community Presbyterian Church is located on the southeast corner of Paseo Delicias and Las Colinas. The church provides day care nursery facilities for children 2 to 5 years old. The area surrounding El Montevideo and La Valle Plateada (postmile 6.9) is Estate Residential, which allows 1 du/2, 4 acres. There is some open space at this location but residential housing occupies most of the area. There are no other sensitive receptors located at this intersection.

According to the San Diego County General Plan, the area surrounding Del Dios Highway and El Camino Del Norte intersection (postmile 7.5) is designated Estate Residential, allowing 1 du/2, 4 acres. Open space and agricultural fields largely dominate the surrounding area with residential housing scattered throughout. The nearest property is located approximately 600 feet northwest of the intersection.

### **1.4 EXISTING NOISE LEVELS**

Noise sensitive land uses (receptors) in the project area are residential and include both single-family and multifamily residences as well as the Village Church at the intersection of Via de la

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Valle and Paseo Delicias. The noise receptors are listed in Tables 1 and 2, which also summarize existing measured noise levels and predicted existing and future peak hour noise levels. The receptor locations are shown in Figures 6 and 7, in Chapter 2 of this report. A 24-hour noise measurement was conducted between 3:00 p.m., June 11, 2007, and 3:00 p.m., June 12, 2007, to determine the loudest period. The 24-hour measurement indicated that the noisiest hours in the project area occur between 11:00 a.m. and 2:00 p.m. Short-term peak noise levels were measured at residences and other points of interest within the project area on December 5, 2006, and June 11, 2007. Short-term noise level measurements taken outside the loudest period were adjusted to reflect the loudest period.

Existing noisiest hour noise levels, both measured and modeled, are shown in Tables 1 and 2. As shown in the tables, there are no existing traffic noise impacts. At each receptor, traffic noise levels do not approach or exceed the Noise Abatement Criteria (NAC). See Section 2.4.1 for a more detailed explanation.

## **1.5 FUTURE PREDICTED NOISE LEVELS**

Noise levels were predicted for the noisiest hour for future (2030) No Build condition and for the Roundabouts and the Traffic Signals Alternatives using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) (FHWA 2004). The noise relationships developed from the existing conditions were used to analyze the 2030 No Build alternative and the 2030 planned roadway geometry. The primary change in the site geometry would be the construction of the roundabouts at the three intersections. Future predicted noise levels for each alternative are shown in Tables 1 and 2.

## **1.6 TRAFFIC NOISE IMPACTS**

### **No Build Alternative**

As shown in Table 1, no traffic noise impacts are predicted, i.e., noise levels during the noisiest hour would not approach or exceed the FHWA noise abatement criteria (NAC) of 67 decibels (dBA), at any receptors. The FHWA NAC and related information on impact criteria is presented in Section 2.4.

**Table 1. Summary of Results for the Proposed Roundabouts**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Proposed Roundabouts (with K-Factors)		Noise Level with Edge of Shoulder Wall (L <sub>eq</sub> dBA)					
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA) K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement							
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)	
South	1	(B) 67	Village Church, 6225 Paseo Delicias	55	60	0	No	61	No	62	No	No Impact					
North	2	(B) 67	1630 El Romero	57	59	0	No	60	No	62	No						
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	66	No						
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	68	No						
North	5	(B) 67	6195 Paseo Delicias	57	63	0	No	64	No	65	No						
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	65	No						
South	7	(B) 67	6151 Paseo Delicias	--	51	0	No	52	No	53	No						
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No						
East	9	(B) 67	6155 Paseo Delicias	--	55	0	No	56	No	57	No						
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	51	No						
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No						
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	53	No						
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No						
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No						
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No						
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No						
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	62	No						
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	58	No						
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	54	No						
North	20	(B) 67	6427 Paseo Delicias	--	50	0	No	51	No	51	No						
North	21	(B) 67	6472 Paseo Delicias	--	56	0	No	57	No	58	No						
North	22	(B) 67	6440 Paseo Delicias	--	52	0	No	53	No	54	No						
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	52	No						
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	49	No						
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	60	No						
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	54	No						
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	59	No						
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	49	No						
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	57	No						
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	52	No						
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	61	No						
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	53	No						
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	57	No						
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	53	No						
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No						
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	48	No						
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No						
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	55	No						

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

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**Table 2. Summary of Results for the Signalization Alternative**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Signals Alternative (With K-factors)								
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA)* K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement		Abatement (L <sub>eq</sub> dBA)						
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)		
South	1	(B) 67	Village Church, 6225 Paseo Delicias	54	60	0	No	61	No	63	No	No Impact						
North	2	(B) 67	1630 El Romero	56	59	0	No	60	No	62	No							
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	68	No							
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	69	No							
North	5	(B) 67	6195 Paseo Delicias	57	63	0	No	64	No	65	No							
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	66	No							
South	7	(B) 67	6151 Paseo Delicias	--	51	0	No	52	No	53	No							
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No							
East	9	(D)-	6155 Paseo Delicias	--	55	0	No	56	No	57	No							
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	52	No							
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No							
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	56	No							
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No							
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No							
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No							
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No							
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	63	No							
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	59	No							
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	55	No							
North	20	(B) 67	6427 Paseo Delicias	--	50	0	No	51	No	52	No							
North	21	(B) 67	6472 Paseo Delicias	--	56	0	No	57	No	59	No							
North	22	(B) 67	6440 Paseo Delicias	--	52	0	No	53	No	55	No							
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	53	No							
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	50	No							
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	61	No							
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	55	No							
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	60	No							
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	50	No							
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	59	No							
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	53	No							
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	62	No							
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	55	No							
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	58	No							
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	54	No							
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No							
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	49	No							
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No							
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	56	No							

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

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## **Roundabouts**

As shown in Table 1, no traffic noise impacts are predicted, i.e., noise levels during the noisiest hour would not approach or exceed the FHWA noise abatement criteria of 67 decibels (dBA), at any receptors, nor would noise increases equal or exceed the 12 dBA threshold for a substantial noise increase.

## **Signals**

As shown in Table 1, no traffic noise impacts are predicted, i.e., noise levels during the noisiest hour would not approach or exceed the FHWA noise abatement criteria of 67 decibels (dBA), at any receptors, nor would noise increases equal or exceed the 12 dBA threshold for a substantial noise increase.

### **1.7 NOISE ABATEMENT**

Noise abatement must be considered where traffic noise impacts are identified. Noise abatement is considered at areas of frequent human use where reduced noise levels would be of benefit. Noise abatement is considered for feasibility and reasonableness. For abatement to be feasible, a noise reduction of 5 dBA must be achieved. Feasibility is generally evaluated by first considering the use of sound walls at the edge of the roadway shoulder or at the edge of the right-of-way. Where a wall on public property would not be feasible (i.e., result in at least 5 dBA noise reduction) a wall on private property was modeled. However, no noise impacts were identified, thus, consideration of abatement is neither necessary nor recommended.

### **1.8 AREAS WHERE ABATEMENT WOULD NOT BE FEASIBLE**

No noise impacts were identified, thus the feasibility of noise abatement was not evaluated.

### **1.9 CONSTRUCTION NOISE**

Construction noise for the proposed project is anticipated to be typical of that for road construction. Some pavement breaking may take place near sensitive receptors. During the daytime, construction equipment noise would likely be heard at local residences above the normal traffic noise, but the noise level limits of the local noise ordinances would not be exceeded. Measures to minimize the impact are included in Chapter 2 of this report.

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## **CHAPTER 2**

### **NOISE IMPACT TECHNICAL REPORT**

#### **2.1 PURPOSE OF STUDY**

The County DPW is proposing to improve three intersections on County Highway S6 (Paseo Delicias) through the construction of three roundabouts. The project will reconfigure existing intersections at Del Dios Highway and El Camino Del Norte; El Montevideo and La Valle Plateada; and Via de la Valle and La Fremontia. Figure 1 depicts the project area in a regional context and Figure 2 depicts the project location.

The purpose of this noise study was to: identify existing traffic noise impacts, potential future impacts, where impacts may occur, and determine if noise abatement would be feasible. This study identifies the sensitive noise receptors in the vicinity of the project, describes current traffic noise, and describes the noise forecast to occur upon implementation of the planned roadway improvements. Noise levels are forecast at the existing residences and other land uses along the Paseo Delicias, Via de la Valle, and El Camino del Norte alignments. The study also addresses potential construction noise impacts.

#### **2.2 PROJECT DESCRIPTION**

The County of San Diego Department of Public Works (DPW) proposes to construct traffic roundabouts at the following three intersections along Paseo Delicias in the unincorporated community of Rancho Santa Fe in northwest San Diego County:

- Paseo Delicias/El Camino del Norte/Del Dios Highway (El Camino del Norte)
- Paseo Delicias/El Montevideo/La Valle Plateada (El Montevideo/La Valle Plateada)
- Paseo Delicias/Via de la Valle/La Fremontia (Via de la Valle/La Fremontia)

##### **2.2.1 El Camino del Norte Intersection**

The El Camino del Norte roundabout would have three intersecting street segments (see Figure 3). The intersection would need to be widened on the northwest and northeast corners to accommodate the roundabout. Retaining walls would be constructed on the north and south

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sides of Paseo Delicias and Del Dios Highway. Existing drainage system improvements would be extended within the areas of new pavement for the roundabout. As shown in Figure 3, the existing equestrian trail would be re-routed along the shoulders of Paseo Delicias to access the proposed crosswalk to be located just west of the roundabout.

### **2.2.2 El Montevideo/La Valle Plateada Intersection**

The El Montevideo/La Valle Plateada roundabout would have four intersecting street segments (see Figure 4). To accommodate the roundabout, the intersection would need to be widened and shifted slightly in an easterly direction. No widening would be required at the southwest side of the intersection. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

### **2.2.3 Via de la Valle/La Fremontia Intersection**

The Via de la Valle/La Fremontia roundabout would have three intersecting street segments and would include the closure of the western La Fremontia intersection (see Figure 5). La Fremontia would become a cul-de-sac and an earthen berm would be constructed between the cul-de-sac and the roundabout. The southwest and southeast corners at the intersection of Paseo Delicias/Via de la Valle would need to be widened to accommodate the roundabout and for the realigned equestrian trail that would follow along the southeast side of the intersection as shown in Figure 5. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

South of the proposed roundabout, the intersection of Las Colinas with Via de la Valle would be realigned to the south to intersect Via de la Valle at a right angle. Transition lanes to facilitate right turns into and out of Las Colinas and a left turn pocket into Las Colinas would also be constructed. Two private driveways on Las Colinas would be lengthened to connect with the realigned roadway.

### **2.2.4 Traffic Signalization**

An alternative to the proposed roundabouts would be to install traffic signals at each intersection. No other alterations to the existing intersection configurations or roadway alignments would occur under this alternative.

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### **2.2.5 No Build Alternative**

The No Build alternative would result in no changes to the existing intersections.

## **2.3 FUNDAMENTALS OF TRAFFIC NOISE**

*Sound* is a vibratory disturbance created by a moving or vibrating source, in the pressure and density of a gaseous, liquid medium or in the elastic strain of a solid, which is capable of being detected by the hearing organs. *Noise* is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment (Department 1998).

### **2.3.1 Decibels and Frequency**

In its most basic form, a continuous sound can be described by its *frequency* or *wavelength* (pitch) and its *amplitude* (loudness). For a given single pitch of sound, the sound pressure waves are characterized by a sinusoidal periodic (recurring with regular intervals) wave. The number of times per second that the wave passes from a period of compression through a period of rarefaction and starts another period of compression is referred to as the *frequency* of the wave. Frequency is expressed in *cycles per second*, or *hertz (Hz)*. One Hz equals one cycle per second. High frequencies are sometimes more conveniently expressed in units of *kilohertz (kHz)* or thousands of hertz. The extreme range of frequencies that can be heard by the healthiest human ears spans from 16 to 20 Hz on the low end to about 20,000 Hz (or 20 kHz) on the high end. Frequencies are heard as the pitch or tone of sound. High-pitched sounds produce high frequencies; low-pitched sounds produce low frequencies.

The pressure of sound waves continuously changes with time or distance, and within certain ranges. The ranges of these pressure fluctuations (actually deviations from the ambient air pressure) are called the *amplitude* of the pressure waves. Whereas the frequency of the sound waves is responsible for the pitch or tone of a sound, the amplitude determines the loudness of the sound, thus the loudness of sound increases and decreases with the amplitude. Sound pressures can be measured in units of microNewtons per square meter ( $\text{mN/m}^2$ ) called microPascals (mPa). The pressure of a very loud sound may be 200,000,000 mPa, or 10,000,000 times the pressure of the weakest audible sound (20 mPa). Expressing sound levels in terms of mPa would be very cumbersome, because of this wide range. For this reason, *sound pressure levels* are described in units called the decibel (dB).

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Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

### **2.3.2 Noise Source Characteristics**

The principal noise sources of interest in this study are vehicles on the study area roadways. The emission level is defined as the speed-dependent energy-averaged A-weighted maximum pass-by noise level generated by a defined vehicle type (Department 1998). A-weighting is described in detail in Section 2.3.4. The FHWA TNM noise model groups vehicles into three types: automobiles, medium trucks, and heavy trucks. Heavy trucks are vehicles with three or more axles designed for the transportation of cargo. Noise emission levels are dependent on vehicle type; engine size; speed; number of wheels and axles; type of tires; and pavement type, age, texture, and condition.

### **2.3.3 Noise Propagation**

From the source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on the following important factors:

- geometric spreading from point and line sources;
- ground absorption;
- atmospheric effects and refraction; and
- shielding by natural and man-made features, noise barriers, diffraction, and reflection.

#### **Geometric Spreading**

Sound from a localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates or drops off at a rate of 6 dBA for each doubling of the distance (6 dBA/DD). This decrease, due to the geometric spreading of the energy over an ever-increasing area, is referred to as the *inverse square law*. Sound from construction equipment can often be considered as a point source.

Highway traffic noise is not a single, stationary point source of sound. The movement of the vehicles makes the source of the sound appear to emanate from a line (line source) rather than a

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point when viewed over some time interval. This results in cylindrical spreading rather than the spherical spreading of a point source. Since the change in surface area of a cylinder only increases by two times for each doubling of the radius instead of the four times associated with spheres, the change in sound level is 3 dBA per doubling of distance for noise from line sources.

### **Ground Absorption**

The noise path between the highway and the observer is very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation due to geometric spreading. Attenuation has been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only, and for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. The sum of the geometric spreading attenuation and the excess ground attenuation (if any) is referred to as the *attenuation rate*, or *drop-off rate*. The amount of excess ground attenuation depends on the height of the noise path and the characteristics of the intervening ground or site. In practice, this excess ground attenuation may vary from 0 to 10 dBA or more per doubling of distance. For the sake of simplicity, two site types are currently used in traffic noise models:

- Hard sites are those with a reflective surface between the source and the receiver, such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for these sites, and the change in noise levels with distance (drop-off rate) is simply the geometric spreading of the line source, or 3 dBA/DD for a line source and 6 dBA/DD for a point source.
- Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. An excess ground attenuation value of 1.5 dBA/DD is normally assumed. When added to the geometric spreading, it results in an overall drop-off rate of 4.5 dBA/DD for a line source and 7.5 dBA/DD for a point source.

### **Atmospheric Effects and Refraction**

Research by the Department and others has shown that atmospheric conditions can have a profound effect on noise levels within 200 feet from a highway. Wind has shown to be the single most important meteorological factor within approximately 500 feet, while vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have substantial effects.

## Shielding by Natural and Man-Made Features, Noise Barriers, Diffraction, and Reflection

A large object in the path between a noise source and a receiver can substantially attenuate noise levels at that receiver location. The amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, as well as man-made features such as buildings and walls, can substantially alter noise levels. Walls are often specifically used to reduce noise levels.

### 2.3.4 Perception at the Receiver, A-Weighting, and Noise Descriptors

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the “A-weighted” noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are written as dB(A) or dBA. Table 3 shows the relationship of various noise levels to commonly experienced noise events.

**Table 3. Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300 meters (1,000 feet)	--110--	Rock Band
Gas Lawn Mower at 1 meter (3 feet)	--100--	
Diesel Truck at 15 meters (50 feet), at 80 km/hr (50 mph)	--90--	Food Blender at 1 meter (3 feet) Garbage Disposal at 1 meter (3 feet)
Noisy Urban Area, Daytime		
Gas Lawn Mower at 30 meters (100 feet)	--80--	Vacuum Cleaner at 3 meters (10 feet)
Commercial Area		
Heavy Traffic at 90 meters (300 feet)	--70--	Normal Speech at 1 meter (3 feet) Large Business Office
Quiet Urban Daytime	--60--	Dishwasher in Next Room Theater, Large Conference Room (Background)
Quiet Urban Nighttime	--50--	Library
Quiet Suburban Nighttime	--40--	Bedroom at Night, Concert Hall (Background)
	--30--	Broadcast/Recording Studio
Quiet Rural Nighttime	--20--	Lowest Threshold of Human Hearing
	--10--	
Lowest Threshold of Human Hearing	--0--	

Source: Department 1998



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Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud (Department 1998). The “trained” as opposed to “average” ear can detect changes of 2 dBA in normal environmental noise.

Average noise levels over a period of minutes or hours are usually expressed as dBA  $L_{eq}$ , or the equivalent noise level for that period. The period average may be specified;  $L_{eq(3)}$  would be a 3-hour average; when no period is specified, a 1-hour average is assumed. The 1-hour average  $L_{eq}$  is used in the FHWA noise abatement criteria.

### **2.3.5 Decibel Scale**

The decibel scale is described in Sections 2.3.1 and 2.3.4.

## **2.4 FEDERAL AND STATE POLICIES AND PROCEDURES**

### **2.4.1 Federal Highway Administration**

Federal highway noise evaluation and abatement policies are contained in the U.S. Code of Federal Regulations, 23 CFR Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (CFR 1982). As defined in 23 CFR 772, Section 772.5(g), traffic noise impacts occur when the predicted traffic noise levels approach or exceed the NAC, as shown in Table 4, or when predicted traffic noise levels substantially exceed the existing noise levels. The numerical criteria used in California to define “approach the NAC” and “substantially exceed the NAC” are stated in Section 2.4.2.

If a traffic noise impact is identified, abatement measures must be considered. In determining and abating traffic noise impacts, primary consideration is given to exterior areas. Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit. The FHWA criteria also state that where there are no exterior activities to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion shall be used as a basis of noise impacts.

**Table 4. FHWA Noise Abatement Criteria**

Activity Category	Hourly A-Weighted Sound Level <sup>(1)</sup> (dBA)		Description of Activity Categories
	L <sub>eq</sub> (h)	L <sub>10</sub> (h)	
A	57 (Exterior)	60 (Exterior)	Lands of which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	--	Undeveloped lands.
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: CFR 1982

<sup>(1)</sup> Either L<sub>10</sub>(h) or L<sub>eq</sub>(h) (but not both) may be used on a project.

#### **2.4.2 California Department of Transportation**

This study was prepared in accordance with the California Department of Transportation (Department) *Traffic Noise Analysis Protocol* (the Protocol) (Department 2006), and *Technical Noise Supplement* (TeNS) (Department 1998). The Protocol contains Department noise policies, which fulfill the highway noise analysis and abatement/mitigation requirements stemming from state and federal environmental statutes, including 23 CFR Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (CFR 1982), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA). TeNS is a supplement to the Protocol and contains Department noise analysis procedures and practices.

According to the Department, a traffic noise impact will occur "... when predicted noise levels associated with a project approach within 1 dBA or exceed ..." the NAC (Department 1998). For example, for exterior noise at residences and recreation areas, the NAC is 67 dBA L<sub>eq</sub>. Therefore, an impact would occur when traffic noise is 66 dBA L<sub>eq</sub> or greater. A noise increase is substantial "... when the predicted noise levels associated with the project exceed existing noise levels by 12 dBA, L<sub>eq</sub>(h) ..." (Department 1998).

#### **2.4.3 National Environmental Policy Act**

NEPA is a federal statute that requires federal agencies to take environmental consequences into account when they make certain decisions. Under NEPA, impacts and measures to mitigate

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adverse impacts must be identified, including the identification of impacts for which no or only partial mitigation is possible. The FHWA regulations described in Section 2.4.1 constitute the Federal Noise Standard. Projects complying with this standard are also in compliance with the requirements stemming from NEPA.

#### **2.4.4 California Environmental Quality Act**

CEQA is a state statute that requires state, local, and other agencies subject to the jurisdiction of California to evaluate the environmental implications of their actions. The main objectives of CEQA are to disclose to decision makers and the public the significant environmental effects of proposed activities and to require agencies to avoid or reduce the environmental effects by implementing feasible alternatives or mitigation measures.

Under CEQA, a substantial noise increase may result in a significant adverse environmental effect and, if so, must be mitigated or identified as a noise impact for which it is likely that no, or only partial, abatement measures are available. Specific economic, social, environmental, legal, and technological conditions may make additional noise attenuation measures infeasible.

#### **2.4.5 Traffic Noise Analysis Protocol and Technical Noise Supplement**

The Protocol (Department 2006) contains Department noise policies that fulfill the highway noise analysis and abatement/mitigation requirements stemming from the following state and federal environmental statutes:

- NEPA
- CEQA
- 23 CFR Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*
- California Streets and Highways Code, Section 216

TeNS is a supplement to the Protocol and contains Department noise analysis procedures, practices, and other useful technical noise background information.

#### **2.4.6 San Diego County General Plan Noise Element**

According to Policy 4b, Exception (c)(i), when a County road construction project is federally funded the County requires traffic noise impacts to be assessed using FHWA noise standards.

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## **2.5 STUDY METHODS AND PROCEDURES**

### **2.5.1 Selection of Receivers and Measurement Sites**

Noise sensitive receptors are generally humans associated with activities or land uses that may cause them to be subject to the stress of substantial interference from noise. Land uses often associated with sensitive receptors include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, and libraries. Recreation areas are also classified as noise sensitive land uses by the FHWA.

Sensitive receptors in the project area are principally single-family and multifamily residences. Single-family residences in the project area are located north and south of Paseo Delicias/Del Dio Highway and west and east of Via de la Valle and El Camino del Norte (Figures 6 and 7). Multifamily residences in the project area are located south of Paseo Delicias and east of Via de la Valle. These multifamily residences front Paseo Delicias. The residences in these buildings have common areas located centrally within the developments that serve as the primary exterior recreational use area.

Single-family residences are located north and south of Paseo Delicias/Del Dios Highway and along the east and west sides of Via de la Valle and El Camino del Norte. All of the single-family residences are located on individual lots and do not have any common or individual walls or barriers shielding them from local roads. Noise impacts are generally assessed at outdoor recreational areas, such as swimming pools or tennis courts, where known, or in the backyard of the single family residences. Due to the unique layouts of each residence, single family receptors generally represent a single residence. The receptor locations are shown in Figures 6 and 7.

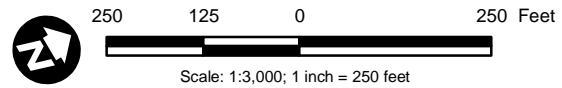
Preliminary selection of receptor points for modeling and measurement was made by EDAW staff based on aerial photos of the project area and an initial field visit. Receptor locations were then refined based on the results of subsequent field visits, maps, and photographic data, where areas of frequent human use associated with the residences were identified. Additional measurement/model points were selected to provide general information relative to the distribution of traffic noise.

### **2.5.2 Field Measurement Procedures**



A 24-hour noise measurement was conducted between June 11, 2007, and June 12, 2007, to determine the loudest hour or period. Short-term, 10- to 20-minute, noise measurements were



Source: AirPhotoUSA 2006; SanGIS 2006; EDAW 2006; TAIC 2008



**Legend**

-  Study Points
-  Roundabout Design

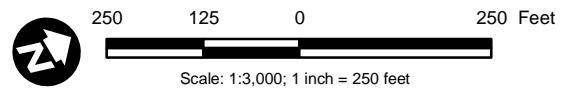
**Figure 6**  
Noise Receptor Locations - West

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
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Source: AirPhotoUSA, 2006; SanGIS 2007; EDAW 2006; TAIC 2008



**Legend**

-  Study Points
-  Roundabout Design

**Figure 7**  
Noise Receptor Locations - East

Rancho Santa Fe Roundabouts Noise Impact Analysis

Path: P:\2007\07080002 RSF Traffic Circles\SGIS\MXD\AIR\_NOISE\noise\_receptor\_locations\_EAST.mxd, 03/20/08, LeeJ

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conducted on December 5, 2007, and June 11, 2007, to measure existing traffic noise levels and record general traffic characteristics at selected receptor points. These measurement intervals were sufficient to characterize the hourly traffic noise levels. Short-term noise level measurements taken outside the loudest period were adjusted up or down to reflect the loudest period. Detailed measurement data, including noise levels, traffic observations, weather conditions, and comments about measurement locations and non-traffic noise, are included in Appendix A. The results of the measurements are discussed in Section 2.6.

### **Instrumentation and Setup**

Two sound level meters were used to measure existing noise in the project vicinity. A Larson-Davis Laboratories Model 820 (LD820) Type 2 sound level meter was used, with the following parameters:

Filter:	A-weighted
Response:	Fast
Time History Period:	1 minute

A Larson-Davis Laboratories Model 824 (LD824) Type 1 sound level meter was also used, with the following parameters:

Filter:	A-weighted
Response:	Slow
Time History Period:	1 minute

Meter calibration was checked before and after use. The two meters were also tested with side-by-side measurements to determine differences in instrument sensitivity. The LD820 measurement was 0.3 dBA lower than the LD824 measurement. This is considered an acceptable difference.

### **Meteorology**

Atmospheric conditions can cause noise levels to fluctuate by 10 dBA or more at locations distant from a roadway. The fluctuations are generally less at closer distances. Wind and vertical temperature structures cause the greatest meteorological effects on noise levels and propagation. A vertical gradient of temperature or wind velocity produces a vertical gradient of sound velocity, which causes sound waves to refract, or bend either upwards or downwards. Wind and temperature measurements were made at the time of existing noise measurements.

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## **Data Reduction**

Noise level data were captured in the sound level meters, and then electronically transferred to a desktop computer using the Larson-Davis UTIL and the LD824 Utility programs. Average noise levels for each measurement were calculated summing the time-energy products for each interval of measurement.

### **2.5.3 Traffic Noise Prediction**

The FHWA TNM was used to predict existing and future traffic noise levels at specific receptor locations. Inputs to the FHWA TNM model include the three-dimensional coordinates of the roadways, noise receptors, and topographic or planned barriers that would affect noise propagation; vehicle volumes and speeds, by type of vehicle; absorption (drop-off) factors; and adjustment factors. The model outputs are noise levels at the selected receptor points. Receptors at exterior locations and ground floor windows are modeled 5 feet above the pad elevation.

### **2.5.4 Traffic Parameters**

Existing traffic volumes on all study area roadways were taken from the project traffic report, *Preliminary Traffic Report Rancho Santa Fe Roundabouts* (LLG 2007). Existing speeds were developed from site visits and driving the alignment. Vehicle mixes for Paseo Delicias, Via de la Valle, and El Camino del Norte were developed from manual field traffic counts. Field counts conducted in conjunction with noise measurements taken December 5, 2007, and June 11, 2007, were used to develop the vehicle mix on local roadways.

Future traffic speeds and vehicle mixes on affected roadways were assumed to be the same as those used in the existing conditions. Future (2030) traffic volumes were obtained from the project traffic report. The information provided by the project traffic engineer indicated that during peak commute periods Paseo Delicias/Del Dios Highway and Via de la Valle would operate at or above capacity. As over capacity would result in substantial slowing, noise levels during these periods would not represent the noisiest hour. Thus, the use of the traffic volumes presented in the project traffic report and the posted speed limit in TNM represents a conservative estimate of future noise levels. Table 5 shows the existing traffic volumes used in the model. All other traffic parameters used are included in Appendix B.

**Table 5. Existing Peak Hour Traffic Volumes Used in TNM**

Roadway Segment	Volume by Direction		
	Automobiles	Medium Trucks	Heavy Trucks
<b>Del Dios Highway/Paseo Delicias</b>			
La Granda to Via de la Valle	343	10	5
Via de la Valle to El Montevideo	1,051	31	16
El Montevideo to El Camino Del Norte	1,065	32	16
East of El Camino Del Norte	1,631	49	24
<b>Via de la Valle</b>			
South of Paseo Delicias	839	25	13
<b>El Camino Del Norte</b>			
North of Paseo Delicias	1,016	30	15

Source: LLG 2007

## 2.6 EXISTING NOISE ENVIRONMENT

### 2.6.1 Noise Sensitive Land Uses

The noise receptors analyzed in this study are located along both sides of Paseo Delicias, Via de la Valle, and El Camino del Norte within the project corridor, as shown in Figures 6 and 7. Most noise sensitive land uses in the project area are residential, both single-family and multifamily. This analysis includes 38 receptor points that represent 30 single-family residences, 2 multifamily buildings with 15 dwelling units, and a church.

Sensitive receptors are limited to the multifamily and single-family residences, and the church. The multifamily units in this analysis are all located in the apartment complexes south of Paseo Delicias and east of Via de la Valle. These complexes provide residents with common areas that include pools, tot-lots, and picnic/barbeque areas. Receptor 8 represents the common area nearest the project, which represents the primary exterior use area within the apartments. While balconies were observed during site visits, impacts are assessed at the common recreation area as these represent the exterior use area with frequent human occupation. During site visits, the common areas were visited and people were observed using the picnic areas, pools, and other recreational facilities.

The single-family residences are located north and south of Paseo Delicias and east and west of Via de la Valle and El Camino del Norte. None of these residences are shielded by noise barriers. The Village Church is represented by receptor 1. There are no dedicated exterior use areas at the church.

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## 2.6.2 Measured Existing Noise Levels

EDAW conducted site visits and noise measurements between December 5, 2006, and June 12, 2007. A complete listing of the measurement data and results is included in Appendix A.

### Noise Measurements

Site visit was made June 11, 2007, to conduct a 24-hour noise level measurement to determine the loudest hour. The measurement was conducted between 3:00 p.m. on June 11, 2007, and 3:00 p.m. on June 12, 2007. The sound level meter (SLM) was placed 5 feet above the roadway grade adjacent to Paseo Delicias south of the El Camino del Norte intersection. The SLM was located 85 feet from the centerline of Paseo Delicias. A summary of the 24-hour measurement is provided in Table 6.

**Table 6. Summary of 24-Hour Noise Level Measurement**

Date	Time	L <sub>eq</sub>	Date	Time	L <sub>eq</sub>
6/12/07	12:00 a.m.	49	6/12/07	12:00 p.m.	60
6/12/07	1:00 a.m.	46	6/12/07	1:00 p.m.	61
6/12/07	2:00 a.m.	44	6/12/07	2:00 p.m.	62
6/12/07	3:00 a.m.	46	6/11/07	3:00 p.m.	62
6/12/07	4:00 a.m.	51	6/11/07	4:00 p.m.	61
6/12/07	5:00 a.m.	60	6/11/07	5:00 p.m.	61
6/12/07	6:00 a.m.	61	6/11/07	6:00 p.m.	61
6/12/07	7:00 a.m.	60	6/11/07	7:00 p.m.	59
6/12/07	8:00 a.m.	62	6/11/07	8:00 p.m.	59
6/12/07	9:00 a.m.	61	6/11/07	9:00 p.m.	56
6/12/07	10:00 a.m.	61	6/11/07	10:00 p.m.	54
6/12/07	11:00 a.m.	61	6/11/07	11:00 p.m.	53

Data compiled by EDAW 2007.

Short-term noise levels were measured at selected sensitive receptors and other points of interest within the project area during field visits on December 5, 2006, and June 11, 2007. Measurements were taken between the hours of 1:00 p.m. and 4:30 p.m. on December 5, 2006 and 2:00 p.m. and 4:30 p.m. on June 11, 2007. The measurement locations are shown in Figures 6 and 7. Photographs of the meter setups and locations are shown in Appendix A. Weather conditions were clear and warm, 67°F to 73°F, with a slight breeze, less than 2 miles per hour,

while measurements were being taken. All short-term noise measurements were taken outside the loudest hour and were adjusted up 1 dBA to reflect the loudest hour. Adjustments to short-term noise levels are presented in Appendix C.

Observation of traffic volumes and speeds during the December 5, 2006, and June 11, 2007, measurement periods confirms that the noisiest hour, i.e., the greatest volumes at full speed, occurs during the morning 8:00 AM and afternoon period between 2:00 and 3:00 PM. The results of the measurements are shown in Table 7 for those receptors listed in the last column as Measured.

**Table 7. Existing Noise Levels**

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development	Number of Units Represented	Noise Abatement Category and Criterion	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
1	Village Church, 6225 Paseo Delicias	Via de la Valle/ La Fremontia	Church	1	(B) 67	60(55)	Modeled (Measured)
2	1630 El Romero	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	59(57)	Modeled (Measured)
3	Northeast corner of La Fremontia and Paseo Delicias	El Montevideo/ La Valle Plateada	Open Space	1	(D) -	65(59)	Modeled (Measured)
4	Northeast corner of El Montevideo and Paseo Delicias	El Montevideo/ La Valle Plateada	Open Space	1	(D) -	67(61)	Modeled (Measured)
5	6195 Paseo Delicias	El Camino del Norte	Single-family Residential	1	(B) 67	63(57)	Modeled (Measured)
6	Southwest corner of El Camino del Norte and Del Dios Highway	Via de la Valle/ La Fremontia	Single-family Residential	1	(D) -	63(59)	Measured
7	6151 Paseo Delicias	Via de la Valle/ La Fremontia	Multifamily Residential	8	(B) 67	51	Modeled
8	6133 El Romero	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	54	Modeled
9	6155 Paseo Delicias	Via de la Valle/ La Fremontia	Multifamily Residential	7	(B) 67	55	Modeled
10	6130 El Romero	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	50	Modeled
11	6221 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	63	Modeled
12	6224 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	54	Modeled
13	6252 La Fremontia	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	54	Modeled

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development	Number of Units Represented	Noise Abatement Category and Criterion	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
14	6264 La Fremontia	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	58	Modeled
15	6325 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	60	Modeled
16	6225 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	63	Modeled
17	6332 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	61	Modeled
18	6344 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	57	Modeled
19	6336 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	53	Modeled
20	6427 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential	1	(B) 67	50	Modeled
21	6472 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	56	Modeled
22	6440 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	52	Modeled
23	6505 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	50	Modeled
24	6513 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	48	Modeled
25	6512 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	58	Modeled
26	6550 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	52	Modeled
27	6580 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	58	Modeled
28	6575 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	48	Modeled
29	6795 El Montevideo	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	56	Modeled
30	7052 La Valle Plateada	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	51	Modeled

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development	Number of Units Represented	Noise Abatement Category and Criterion	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
31	7057 La Valle Plateada	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	59	Modeled
32	6693 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	52	Modeled
33	6715 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	56	Modeled
34	6788 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	51	Modeled
35	6745 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential	1	(B) 67	62	Modeled
36	6787 Paseo Delicias	El Camino del Norte	Single-family Residential	1	(B) 67	46	Modeled
37	6794 Paseo Delicias	El Camino del Norte	Single-family Residential	1	(B) 67	48	Modeled
38	6840 Paseo Delicias	El Camino del Norte	Single-family Residential	1	(B) 67	54	Modeled

<sup>1</sup> Measurement I.D. is keyed to measurement locations shown in Figures 6 and 7.  
Data compiled by EDAW 2007.

The dominant noise source in the project area is traffic noise from Paseo Delicias/Del Dios Highway. Local roadways, such as Via de la Valle and El Camino del Norte, had limited traffic and had a minor effect on ambient noise levels in the project area.

Because traffic on local roadways is a continuous noise source, background noise (i.e., noise without the traffic on local roadways) is not easily measured. However, the background noise level may be estimated at less than 50 dBA L<sub>eq</sub>, based on the L<sub>90</sub> measurements (which represent the noise level exceeded 90 percent of the time during the measurement).

### **2.6.3 Modeled Existing Noise Levels and Calibration**

Noise levels were modeled at all receptor points, including at measurement points, using FHWA TNM and various input parameters, as described in Section 2.5. Modeled noise levels were compared with adjusted measured traffic noise levels at common points, and calibration factors were derived to apply to individual receptors as appropriate.

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The purpose of model calibration is to “fine-tune” the prediction model to actual site conditions that are not adequately accounted for by the model. Calibration is performed by algebraically adding a constant, or K-factor, to the noise level calculated in FHWA TNM. The magnitude of K-factors is initially determined by the difference between measured and modeled noise levels at specific points. Calibration factors may be positive or negative. Additional factors may be applied based upon the experience and judgment of the noise engineer performing the analysis. TENs Section N-5400, Calibrating the Prediction Model, provides guidance on the application of calibrations. Subsection N-5420 states “highway reconstruction projects which significantly alter alignments and profiles of an existing highway are also poor candidates for model calibration.”

K-factors were developed and are presented in Tables 1 and 2 and included in Appendix C; however, these were not applied to modeled results as the model results generally agreed with the measured levels. The few differences that did occur could be accounted for by differences in traffic volumes or speeds as well as additional shrubbery and vegetation. Existing noise levels at modeled receptors are shown in Table 7. A sampling of model input and output data is included in Appendix D. Calibration factors were not used for any receptors.

#### **2.6.4 Existing Noise Impacts**

Based on the information presented in Table 7, there are no existing traffic noise impacts, i.e., noise levels do not approach or exceed the NAC, at any receptors. The highest existing noisiest hour noise level at a sensitive receptor is 63 dBA  $L_{eq}$ , calculated at receptors 5, 11, and 16.

### **2.7 FUTURE NOISE ENVIRONMENT, IMPACTS, AND CONSIDERED ABATEMENT/MITIGATION**

#### **2.7.1 Predicted Noise Levels – Site Geometry and Traffic**

Noise levels were modeled for three future conditions: No Build 2030, with roundabouts 2030 or with traffic signals 2030. The Roundabouts alternative is the preferred Build Alternative. Existing and future traffic volumes on all study area roadways were taken from the project traffic report (LLG 2007).

Future traffic speeds and vehicle mixes on affected roadways were assumed to be the same as those used in the existing conditions. The information provided by the project traffic report indicates that during peak commute periods Paseo Delicias and other project affected roads would operate at or above capacity, which would result in slower traffic during peak periods.



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Thus, the use of the traffic volumes presented in the project traffic report and the posted speed limit in TNM represents a conservative estimate of future noise levels. The traffic parameters used for the modeling are discussed in detail in Section 2.5.4 and included in Appendix B. Model input and output data are included in Appendices E and F. Appendix E shows modeling of the No Build 2030 condition and Appendix F includes the model input and output sheets for both future Build Alternative conditions.

### **2.7.2 Traffic Noise Impacts**

The increase in traffic noise levels from the existing condition to the 2030 No Build conditions would range from 0 to 3 dBA  $L_{eq}$ . These increases in noise levels under the No Build Alternative would be caused by forecast increased traffic volumes that would occur between the present time and 2030. Under either the Roundabouts or Signals Alternatives, noise level changes would range from -1 to 3 dBA. As with the No Build Alternative, increases in noise levels would be caused by increases in traffic. Unlike the No Build Alternative, the Roundabouts Alternative would also change noise levels due to the realignment and the movement of traffic closer to some sensitive receptors in the vicinity of the intersections. Traffic noise level decreases would be the result of redirection of traffic flows under each of the build alternatives. All predicted noise increases under all alternatives are less than the 12 dBA threshold for a substantial noise level increase.

Predicted noise levels for the three future conditions are shown in Table 8. No traffic noise impacts are predicted under the No Build Alternative or either the Roundabouts or Signals Alternatives, i.e., noise levels at all location would not approach or exceed the NAC for the particular land use. Under the Roundabouts Alternative, noise levels would increase between 1 and 2 dBA  $L_{eq}$  at all locations except at receptor locations 2 and 15 where noise levels are predicted to increase by 3 dBA  $L_{eq}$ . The highest noisiest hour noise level is forecast to be 65 dBA  $L_{eq}$ , at receptors 5 and 16. All predicted noise increases are less than the 12 dBA threshold for a substantial noise increase.

Under the Signals Alternative noise levels are predicted to increase between 2 and 3 dBA  $L_{eq}$  at all locations except receptor 11, where the increase would be 1 dBA. All predicted noise increases are less than the 12 dBA threshold for a substantial noise level increase. The highest noisiest hour noise level is forecast to be 65 dBA at receptors 5 and 16.

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### **2.7.3 Noise Abatement**

Noise abatement must be considered where traffic noise impacts are identified. According to FHWA-Department criteria, noise abatement must be considered at impacted receptors where there is an exposed area of frequent human use, such as a yard, patio, or deck, and a lowered noise level would be of benefit. No noise impacts have been identified for any future condition.

### **2.7.4 Feasibility of Noise Abatement**

Feasibility is an engineering consideration. For abatement to be feasible, a noise reduction of 5 dBA must be achieved. As stated, no noise abatement is required.

### **2.7.5 Reasonable Noise Abatement**

The overall reasonableness of noise abatement is considered using the following factors:

- noise level changes
- absolute noise levels
- date of development along the highway
- noise abatement benefits
- life cycle of abatement measures
- abatement costs
- environmental impacts of abatement construction
- public input
- views/opinion of impacted residents
- social, economic, environmental, legal, and technological factors

## **2.8 CONSTRUCTION NOISE**

### **2.8.1 Applicable Standards**

#### **California Department of Transportation**

23 CFR 772 requires that construction noise be evaluated for all Type I and Type II projects. To perform an assessment of construction noise, land uses or activities that may be affected by noise from construction of the project should be identified. 23 CFR 772 does not specify specific

**Table 8. Predicted Traffic Noise Impacts**

Receptor I.D.	Location or Address	Type of Development	Number of Units Represented	NAC	Existing Noise Level, dBA L <sub>eq</sub>	Predicted 2030 No Build Noise Level dBA L <sub>eq</sub>	Roundabouts			Signals		
							Predicted Build Noise Level dBA L <sub>eq</sub>	Increase, Build less Existing, dBA	Impact Type	Predicted Build Noise Level dBA L <sub>eq</sub>	Increase, Build less Existing, dBA	Impact Type
1	Village Church, 6225 Paseo Delicias	Church	1	(B) 67	60	61	62	2	None	63	3	None
2	1630 El Romero	Single-family Residential	1	(B) 67	59	60	62	3	None	62	3	None
3	Northeast corner of La Fremontia and Paseo Delicias (APN 2662414100)	Open Space	1	(D) -	65	66	66	1	None	68	3	None
4	Northeast corner of El Montevideo and Paseo Delicias	Open Space	1	(D) -	67	68	68	1	None	69	2	None
5	6195 Paseo Delicias	Single-family Residential	1	(B) 67	63	64	65	2	None	65	2	None
6	Southwest corner of El Camino del Norte and Del Dios Highway	Open Space	1	(D) -	63	64	65	2	None	66	3	None
7	6151 Paseo Delicias	Multifamily Residential	8	(B) 67	51	52	53	2	None	53	2	None
8	6133 El Romero	Single-family Residential	1	(B) 67	54	55	56	2	None	56	2	None
9	6155 Paseo Delicias	Multifamily Residential	7	(B) 67	55	56	57	2	None	57	2	None
10	6130 El Romero	Single-family Residential	1	(B) 67	50	51	51	1	None	52	2	None
11	6221 Paseo Delicias	Single-family Residential	1	(B) 67	63	63	64	1	None	64	1	None
12	6224 Paseo Delicias	Single-family Residential	1	(B) 67	54	55	53	-1	None	56	2	None
13	6252 La Fremontia	Single-family Residential	1	(B) 67	54	55	56	2	None	56	2	None
14	6264 La Fremontia	Single-family Residential	1	(B) 67	58	59	60	2	None	60	2	None
15	6325 La Valle Plateada	Single-family Residential	1	(B) 67	60	61	63	3	None	63	3	None
16	6225 Paseo Delicias	Single-family Residential	1	(B) 67	63	64	65	2	None	65	2	None
17	6332 La Valle Plateada	Single-family Residential	1	(B) 67	61	62	62	1	None	63	2	None
18	6344 La Valle Plateada	Single-family Residential	1	(B) 67	57	58	58	1	None	59	2	None
19	6336 Paseo Delicias	Single-family Residential	1	(B) 67	53	54	54	1	None	55	2	None
20	6427 Paseo Delicias	Single-family Residential	1	(B) 67	50	51	51	1	None	52	2	None
21	6472 Paseo Delicias	Single-family Residential	1	(B) 67	56	57	58	2	None	59	3	None
22	6440 Paseo Delicias	Single-family Residential	1	(B) 67	52	53	54	2	None	55	3	None
23	6505 Paseo Delicias	Single-family Residential	1	(B) 67	50	51	52	2	None	53	3	None
24	6513 Paseo Delicias	Single-family Residential	1	(B) 67	48	49	49	1	None	50	2	None
25	6512 Paseo Delicias	Single-family Residential	1	(B) 67	58	59	60	2	None	61	3	None
26	6550 Paseo Delicias	Single-family Residential	1	(B) 67	52	53	54	2	None	55	3	None
27	6580 Paseo Delicias	Single-family Residential	1	(B) 67	58	59	59	1	None	60	2	None
28	6575 Paseo Delicias	Single-family Residential	1	(B) 67	48	49	49	1	None	50	2	None
29	6795 El Montevideo	Single-family Residential	1	(B) 67	56	57	57	1	None	59	3	None
30	7052 La Valle Plateada	Single-family Residential	1	(B) 67	51	52	52	1	None	53	2	None
31	7057 La Valle Plateada	Single-family Residential	1	(B) 67	59	60	61	2	None	62	3	None
32	6693 Paseo Delicias	Single-family Residential	1	(B) 67	52	53	53	1	None	55	3	None
33	6715 Paseo Delicias	Single-family Residential	1	(B) 67	56	57	57	1	None	58	2	None
34	6788 Paseo Delicias	Single-family Residential	1	(B) 67	51	52	53	2	None	54	3	None
35	6745 Paseo Delicias	Single-family Residential	1	(B) 67	62	63	64	2	None	64	2	None
36	6787 Paseo Delicias	Single-family Residential	1	(B) 67	46	47	48	2	None	49	3	None
37	6794 Paseo Delicias	Single-family Residential	1	(B) 67	48	48	50	2	None	50	2	None
38	6840 Paseo Delicias	Single-family Residential	1	(B) 67	54	55	55	1	None	56	2	None

Note: NA – Not Applicable; NAC - Noise Abatement Criterion; NFU - No area of frequent human use, and no impact is assessed.  
Source: FHWA 2004

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methods or abatement criteria for evaluating construction noise. However, a reasonable analysis method ... should be used to determine whether construction would result in adverse construction noise impacts on land uses or activities in the project area.

The Department includes, as part of the standard specifications for construction contracts, requirements relative to the allowable noise emission of equipment used on the project. The Department's Standard Specification 7-1.1011 Sound Control Requirements, states the following:

The contractor shall comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.

### **County of San Diego**

Section 36.410 is the County ordinance controlling construction noise. Section 36.410 states "except for emergency work,

- A) It shall be unlawful for any person to operate construction equipment between the hours of 7 p.m. of any day and 7 a.m. of the following day.
- B) It shall also be unlawful for any person to operate construction equipment on Sundays, and days appointed by the President, Governor, or the Board of Supervisors for a public fast, Thanksgiving, or holiday, but a person may operate construction equipment on the above-specified days between the hours of 10 a.m. and 5 p.m. at his residence or for the purpose of constructing a residence for himself, provided that the average sound level does not exceed 75 decibels during the period of operation and that the operation of construction equipment is not carried out for profit or livelihood.
- C) It shall also be unlawful to operate any construction equipment so as to cause at or beyond the property line of any property upon which a legal dwelling unit is located an average sound level greater than 75 decibels between the hours of 7 a.m. and 7 p.m."

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Section 36.410 (B) is related to individuals working on private property and does not apply to the proposed project. County staff interprets Section 36.410 (C) to require that average hourly noise level from construction work does not exceed 75 decibels (A) at the project's property lines.

## **2.8.2 Impacts**

Construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, removal of existing pavement during realignment of roadway segments, loading, unloading, and placing materials and paving. Diesel engine-driven trucks would bring materials to the site and remove the spoils from curb demolition and pavement removal. Additional noise would be made by pavement breakers for removal of street pavement.

Under load conditions, diesel engine noise levels may reach as high as 85 to 90 dBA  $L_{max}$  at a distance of 50 feet from the equipment. Construction equipment noise is considered a "point source," and is attenuated over distance at a rate of 6 dBA for each doubling of distance. Thus, a noise level of 85 dBA at 50 feet would be 79 dBA at 100 feet and 73 dBA at 200 feet from the source.

During excavating, grading, and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for nonequipment tasks, such as measurement. Although peak noise levels may be 85 to 90 dBA at a distance of 50 feet during most construction activities, hourly average noise levels 50 feet from the center of the construction activity would be anticipated to be 65 to 75 dBA  $L_{eq}$ . Some peak noise levels during pavement breaking would generate noise levels on the order of 90 dBA, but these would be short term and could be scheduled to occur during the daytime to avoid potential disturbances at nearby residences. Residences nearest the affected intersections would be approximately 80 feet from the center of proposed construction activities. At this distance average hourly noise levels would be below 75 dBA  $L_{eq}$ . Therefore, no adverse construction-related noise impact would occur with construction of the proposed project.

To summarize, daytime construction noise would be heard at nearby sensitive receptors and may cause occasional speech disruption, principally during times of pavement breaking. While the activities may be annoying, they would not be significant because the higher noise levels would be temporary and intermittent and the average noise levels would be less than the noise ordinance limits. Measures to minimize construction noise impacts are discussed in the next section.

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### **2.8.3 Construction Noise Abatement**

The following measures are recommended to avoid or minimize construction noise impacts:

- As required by the Department's Standard Specification 7-1.1011, each internal combustion engine shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.
- Work in staging areas that generates loud noises, such as equipment maintenance, shall not occur during the hours prohibited for construction work.
- If traffic control and construction signs that require power for lighting or flashing are located near residences, the source of power will be batteries, solar cells, or another quiet source. Gas- or diesel-fueled internal combustion engines will not be used.

### **2.8.4 Conclusions**

The County of San Diego (County) Department of Public Works (DPW) is proposing to improve three intersections on County Highway S6 (Paseo Delicias) through the construction of three traffic circles or roundabouts. The project will reconfigure existing intersections at Del Dios Highway and El Camino Del Norte; El Montevideo and La Valle Plateada; and Via de la Valle and La Fremontia. As shown in Table 1, under the No Build Alternative, no traffic noise impacts are predicted at any receptors. Additionally, under either the Roundabouts or Traffic Signals Alternatives no traffic noise impacts are predicted at any receptors, nor would noise increases equal or exceed the 12 dBA threshold for a substantial noise increase. As no noise impacts were identified, noise abatement is not required and was not evaluated.

Construction noise for the proposed project is anticipated to be typical of that for road construction. During the daytime, construction equipment noise would likely be heard at local residences above the normal traffic noise, but the noise level limits of the local noise ordinances would not be exceeded.

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## **CHAPTER 3**

### **REFERENCES**

California Department of Transportation (Department)

1998 Technical Noise Supplement. October.

2006 Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Barrier Retrofit Projects, August 14.

Code of Federal Regulations (CFR)

1982 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise.

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2004 Traffic Noise Model, Version 2.5, 2004

Linscott Law and Greenspan (LLG)

2007 Preliminary Traffic Report, Rancho Santa Fe Roundabouts, San Diego California, May 25.

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## **CHAPTER 4**

### **LIST OF PREPARERS**

Personnel responsible for preparation of this Noise Impact Analysis include the following:

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## **APPENDIX A**

### **NOISE MEASUREMENTS**

*This appendix includes the Field Measurements Summary Log. Field notes, marked drawings, and original photo images are on file at EDAW, Inc., San Diego.*



Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 1**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 5-Dec-06 13:02:04  
 Elapsed Time: 15:32.1

	A Weight	C Weight	Flat
Leq:	54.3 dBA	70.6 dBC	71.3 dBF
SEL:	84.0 dBA	100.3 dBC	101.0 dBF
Peak:	83.6 dBA	92.8 dBC	93.5 dBF
	12/5/2006 13:16	12/5/2006 13:13	12/5/2006 13:13
Lmax (slow):	71.0 dBA	84.4 dBC	84.9 dBF
	12/5/2006 13:16	12/5/2006 13:12	12/5/2006 13:12
Lmin (slow):	44.6 dBA	58.1 dBC	59.2 dBF
	12/5/2006 13:04	12/5/2006 13:07	12/5/2006 13:07
Lmax (fast):	75.0 dBA	86.2 dBC	86.7 dBF
	12/5/2006 13:16	12/5/2006 13:12	12/5/2006 13:12
Lmin (fast):	43.8 dBA	56.6 dBC	57.6 dBF
	12/5/2006 13:04	12/5/2006 13:07	12/5/2006 13:07
Lmax (impulse):	76.5 dBA	87.0 dBC	87.5 dBF
	12/5/2006 13:16	12/5/2006 13:13	12/5/2006 13:13
Lmin (impulse):	44.3 dBA	58.9 dBC	60.3 dBF
	12/5/2006 13:04	12/5/2006 13:07	12/5/2006 13:07

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 1**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	5-Dec-06	13:02:04	01:00.0	51.5	69.3	46.5	58.3
2	5-Dec-06	13:03:04	01:00.0	53.6	71.4	45.7	62.7
3	5-Dec-06	13:04:04	01:00.0	49.2	67	44.6	52.6
4	5-Dec-06	13:05:04	01:00.0	54.5	72.3	47.6	62.2
5	5-Dec-06	13:06:04	01:00.0	56	73.8	48.8	64.5
6	5-Dec-06	13:07:04	01:00.0	51.1	68.9	45.3	57
7	5-Dec-06	13:08:04	01:00.0	51	68.8	45.3	56
8	5-Dec-06	13:09:04	01:00.0	55	72.8	50.4	59.5
9	5-Dec-06	13:10:04	01:00.0	52	69.8	46.1	57.5
10	5-Dec-06	13:11:04	01:00.0	52.3	70.1	48.4	56.4
11	5-Dec-06	13:12:04	01:00.0	53.9	71.6	47.8	61.8
12	5-Dec-06	13:13:04	01:00.0	56.1	73.9	47.6	63.3
13	5-Dec-06	13:14:04	01:00.0	56	73.7	47.5	61.8
14	5-Dec-06	13:15:04	01:00.0	53.6	71.4	48.8	63.3
15	5-Dec-06	13:16:04	01:00.0	58	75.8	45.7	71
16	5-Dec-06	13:17:04	00:32.1	57	72.1	52.7	60



Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 2**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 5-Dec-06 13:38:25  
 Elapsed Time: 15:04.5

	A Weight	C Weight	Flat
Leq:	55.5 dBA	71.5 dBC	72.4 dBF
SEL:	85.0 dBA	101.1 dBC	102.0 dBF
Peak:	88.3 dBA	94.9 dBC	95.9 dBF
	12/5/2006 13:49	12/5/2006 13:39	12/5/2006 13:39
Lmax (slow):	71.0 dBA	87.2 dBC	87.8 dBF
	12/5/2006 13:43	12/5/2006 13:39	12/5/2006 13:39
Lmin (slow):	41.5 dBA	57.5 dBC	58.9 dBF
	12/5/2006 13:38	12/5/2006 13:41	12/5/2006 13:41
Lmax (fast):	74.3 dBA	89.5 dBC	90.1 dBF
	12/5/2006 13:49	12/5/2006 13:39	12/5/2006 13:39
Lmin (fast):	40.7 dBA	56.1 dBC	57.1 dBF
	12/5/2006 13:38	12/5/2006 13:41	12/5/2006 13:41
Lmax (impulse):	76.9 dBA	90.3 dBC	91.0 dBF
	12/5/2006 13:49	12/5/2006 13:39	12/5/2006 13:39
Lmin (impulse):	41.6 dBA	58.4 dBC	59.7 dBF
	12/5/2006 13:41	12/5/2006 13:41	12/5/2006 13:41

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 2**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	5-Dec-06	13:38:25	01:00.0	55.5	73.3	41.5	67
2	5-Dec-06	13:39:25	01:00.0	57	74.8	49.4	63.7
3	5-Dec-06	13:40:25	01:00.0	54	71.8	44.3	59.4
4	5-Dec-06	13:41:25	01:00.0	50.9	68.7	41.6	59.8
5	5-Dec-06	13:42:25	01:00.0	59.9	77.7	45.1	71
6	5-Dec-06	13:43:25	01:00.0	49.8	67.5	42.3	58.7
7	5-Dec-06	13:44:25	01:00.0	53.6	71.3	45.9	63.1
8	5-Dec-06	13:45:25	01:00.0	53.8	71.6	48.2	58.4
9	5-Dec-06	13:46:25	01:00.0	50	67.7	42.8	58
10	5-Dec-06	13:47:25	01:00.0	55	72.8	49.3	60.8
11	5-Dec-06	13:48:25	01:00.0	55	72.8	48.2	60.1
12	5-Dec-06	13:49:25	01:00.0	59.9	77.7	53.7	69.8
13	5-Dec-06	13:50:25	00:24.4	58.8	72.7	53.6	63.1
14	5-Dec-06	13:51:28	01:00.0	53.2	71	44.5	59.4
15	5-Dec-06	13:52:28	01:00.0	52	69.8	45.8	61.1
16	5-Dec-06	13:53:28	00:40.1	53.9	70	48.5	61.5

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 3**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 5-Dec-06 16:40:07  
 Elapsed Time: 15:03.3

	A Weight	C Weight	Flat
Leq:	58.9 dBA	72.5 dBC	73.1 dBF
SEL:	88.5 dBA	102.1 dBC	102.6 dBF
Peak:	84.3 dBA	92.1 dBC	92.4 dBF
	12/5/2006 16:46	12/5/2006 16:43	12/5/2006 16:43
Lmax (slow):	71.1 dBA	85.3 dBC	85.7 dBF
	12/5/2006 16:46	12/5/2006 16:40	12/5/2006 16:40
Lmin (slow):	47.8 dBA	59.9 dBC	60.8 dBF
	12/5/2006 16:49	12/5/2006 16:49	12/5/2006 16:49
Lmax (fast):	71.8 dBA	87.0 dBC	87.5 dBF
	12/5/2006 16:46	12/5/2006 16:40	12/5/2006 16:40
Lmin (fast):	46.9 dBA	58.3 dBC	59.5 dBF
	12/5/2006 16:49	12/5/2006 16:49	12/5/2006 16:49
Lmax (impulse):	72.3 dBA	87.4 dBC	87.8 dBF
	12/5/2006 16:46	12/5/2006 16:40	12/5/2006 16:40
Lmin (impulse):	47.2 dBA	60.8 dBC	61.9 dBF
	12/5/2006 16:49	12/5/2006 16:49	12/5/2006 16:49

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 3**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	5-Dec-06	16:40:07	01:00.0	56.7	74.4	48.7	63.9
2	5-Dec-06	16:41:07	01:00.0	58.1	75.9	52.8	64.7
3	5-Dec-06	16:42:07	01:00.0	56.1	73.9	51.4	60.5
4	5-Dec-06	16:43:07	01:00.0	62.6	80.3	52.5	66.8
5	5-Dec-06	16:44:07	01:00.0	57	74.8	52.8	62.3
6	5-Dec-06	16:45:07	01:00.0	56.6	74.4	50.2	63.5
7	5-Dec-06	16:46:07	01:00.0	63.3	81.1	55	71.1
8	5-Dec-06	16:47:07	01:00.0	57.4	75.2	53.6	62.5
9	5-Dec-06	16:48:07	01:00.0	59.6	77.4	52.3	66.6
10	5-Dec-06	16:49:07	01:00.0	58.5	76.3	47.8	67.1
11	5-Dec-06	16:50:07	01:00.0	56	73.7	50.2	63.1
12	5-Dec-06	16:51:07	01:00.0	57.4	75.2	52.2	62.2
13	5-Dec-06	16:52:07	01:00.0	57.8	75.6	52.1	65.4
14	5-Dec-06	16:53:07	01:00.0	58.2	75.9	51	63.8
15	5-Dec-06	16:54:07	01:00.0	59.5	77.3	53.2	66.7
16	5-Dec-06	16:55:07	00:03.4	55.2	60.5	54.9	55.8

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 4**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 5-Dec-06 14:41:32  
 Elapsed Time: 15:07.8

	A Weight	C Weight	Flat
Leq:	60.9 dBA	75.0 dBC	75.5 dBF
SEL:	90.5 dBA	104.6 dBC	105.1 dBF
Peak:	83.7 dBA	97.8 dBC	98.4 dBF
	12/5/2006 14:42	12/5/2006 14:49	12/5/2006 14:49
Lmax (slow):	74.7 dBA	90.5 dBC	90.7 dBF
	12/5/2006 14:49	12/5/2006 14:49	12/5/2006 14:49
Lmin (slow):	49.9 dBA	62.0 dBC	63.9 dBF
	12/5/2006 14:45	12/5/2006 14:45	12/5/2006 14:45
Lmax (fast):	76.4 dBA	92.3 dBC	92.4 dBF
	12/5/2006 14:49	12/5/2006 14:49	12/5/2006 14:49
Lmin (fast):	49.0 dBA	60.2 dBC	61.9 dBF
	12/5/2006 14:45	12/5/2006 14:45	12/5/2006 14:45
Lmax (impulse):	76.8 dBA	92.8 dBC	92.9 dBF
	12/5/2006 14:49	12/5/2006 14:49	12/5/2006 14:49
Lmin (impulse):	49.3 dBA	62.5 dBC	64.4 dBF
	12/5/2006 14:45	12/5/2006 14:45	12/5/2006 14:45

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 4**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	5-Dec-06	14:41:32	01:00.0	61.3	79.1	55.1	67.1
2	5-Dec-06	14:42:32	01:00.0	61.7	79.4	54.5	65.8
3	5-Dec-06	14:43:32	01:00.0	58.8	76.5	54.4	64.2
4	5-Dec-06	14:44:32	01:00.0	57.1	74.9	52.5	61.3
5	5-Dec-06	14:45:32	01:00.0	59.7	77.4	49.9	66
6	5-Dec-06	14:46:32	01:00.0	60.2	78	54.4	65.5
7	5-Dec-06	14:47:32	01:00.0	62.9	80.7	56.7	68.8
8	5-Dec-06	14:48:32	01:00.0	58.8	76.5	54.5	62.1
9	5-Dec-06	14:49:32	01:00.0	64.3	82.1	55.5	74.7
10	5-Dec-06	14:50:32	01:00.0	62.9	80.7	52.4	71.3
11	5-Dec-06	14:51:32	01:00.0	59.8	77.6	55.5	64.9
12	5-Dec-06	14:52:32	01:00.0	58.3	76.1	52.9	66.3
13	5-Dec-06	14:53:32	01:00.0	58.9	76.6	53.2	67.3
14	5-Dec-06	14:54:32	01:00.0	61.5	79.3	53.3	69.1
15	5-Dec-06	14:55:32	01:00.0	59.6	77.4	55.6	64.4
16	5-Dec-06	14:56:32	00:07.9	64.6	73.5	59.1	68.3

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 5**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 11-Jun-07 15:22:23  
 Elapsed Time: 15:11.6

	A Weight	C Weight	Flat
Leq:	56.7 dBA	73.4 dBC	74.1 dBF
SEL:	86.3 dBA	103.0 dBC	103.8 dBF
Peak:	86.7 dBA	94.3 dBC	95.1 dBF
	6/11/2007 15:36	6/11/2007 15:36	6/11/2007 15:36
Lmax (slow):	72.6 dBA	84.5 dBC	85.1 dBF
	6/11/2007 15:36	6/11/2007 15:28	6/11/2007 15:28
Lmin (slow):	44.7 dBA	63.7 dBC	65.2 dBF
	6/11/2007 15:22	6/11/2007 15:35	6/11/2007 15:35
Lmax (fast):	73.8 dBA	86.6 dBC	87.1 dBF
	12/5/2006 15:36	12/5/2006 15:30	12/5/2006 15:28
Lmin (fast):	43.7 dBA	61.8 dBC	63.0 dBF
	6/11/2007 15:22	6/11/2007 15:29	6/11/2007 15:29
Lmax (impulse):	74.7 dBA	87.9 dBC	88.0 dBF
	6/11/2007 15:30	6/11/2007 15:30	6/11/2007 15:30
Lmin (impulse):	44.6 dBA	64.4 dBC	66.3 dBF
	6/11/2007 15:22	6/11/2007 15:35	6/11/2007 15:35

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 5**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	11-Jun-07	15:22:23	01:00.0	51.2	68.9	44.7	58.5
2	11-Jun-07	15:23:23	01:00.0	54.3	72.1	47.9	61
3	11-Jun-07	15:24:23	01:00.0	56.7	74.5	48.4	67.7
4	11-Jun-07	15:25:23	01:00.0	50.9	68.7	46.9	54
5	11-Jun-07	15:26:23	01:00.0	55.6	73.3	51.2	61.8
6	11-Jun-07	15:27:23	01:00.0	57.4	75.2	53	61.2
7	11-Jun-07	15:28:23	01:00.0	55.1	72.9	49.9	61.3
8	11-Jun-07	15:29:23	01:00.0	58.1	75.9	48.7	70.1
9	11-Jun-07	15:30:23	01:00.0	57.8	75.6	53.3	61.5
10	11-Jun-07	15:31:23	01:00.0	58.5	76.3	48.9	66.2
11	11-Jun-07	15:32:23	01:00.0	53.9	71.6	49.3	58.4
12	11-Jun-07	15:33:23	01:00.0	57.6	75.4	50.6	66.6
13	11-Jun-07	15:34:23	01:00.0	52	69.8	46.9	56.2
14	11-Jun-07	15:35:23	01:00.0	54	71.8	47.6	60.1
15	11-Jun-07	15:36:23	01:00.0	61.8	79.6	50.8	72.6
16	11-Jun-07	15:37:23	00:11.6	59	69.7	49.9	63.2



Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 6**  
 Note 1:  
 Note 2:

Overall Any Data

Start Time: 11-Jun-07 16:10:26  
 Elapsed Time: 15:03.6

	A Weight	C Weight	Flat
Leq:	58.7 dBA	70.6 dBC	71.2 dBF
SEL:	88.3 dBA	100.1 dBC	100.7 dBF
Peak:	83.0 dBA	94.1 dBC	94.9 dBF
	6/11/2007 16:12	6/11/2007 16:23	6/11/2007 16:23
Lmax (slow):	68.6 dBA	86.2 dBC	86.6 dBF
	12/5/2006 16:16	12/5/2006 16:23	12/5/2006 16:23
Lmin (slow):	47.7 dBA	61.1 dBC	62.1 dBF
	6/11/2007 16:10	6/11/2007 16:18	6/11/2007 16:18
Lmax (fast):	72.2 dBA	88.9 dBC	89.3 dBF
	6/11/2007 16:12	6/11/2007 16:23	6/11/2007 16:23
Lmin (fast):	47.0 dBA	59.6 dBC	60.7 dBF
	6/11/2007 16:10	6/11/2007 16:18	6/11/2007 16:18
Lmax (impulse):	73.4 dBA	89.5 dBC	90.0 dBF
	6/11/2007 16:12	6/11/2007 16:23	6/11/2007 16:23
Lmin (impulse):	47.4 dBA	61.3 dBC	62.3 dBF
	6/11/2007 16:10	6/11/2007 16:20	6/11/2007 16:20

Model Number: 824  
 Serial Number: A3007  
 Firmware Rev: 4.261  
 Software Version: 3.12  
 Name: Enter Company Name  
 Descr1: Enter Address Line 1  
 Descr2: Enter Address Line 2  
 Setup: SLM&RTA.ssa  
 Setup Descr: 1 M - 1 S me Analyzcr  
 Location: **MS 6**  
 Note 1:  
 Note 2:

Weighting: A  
 Peak Weighting: Flat  
 Detector: Slow  
 RTA Detector: Fast

Rec #	Date	Time	Duration	Leq	SEL	LMin	LMax
1	11-Jun-07	16:10:26	01:00.0	56.1	73.9	47.7	61.1
2	11-Jun-07	16:11:26	01:00.0	57.2	75	51	64.7
3	11-Jun-07	16:12:26	01:00.0	57.8	75.6	49.2	66.9
4	11-Jun-07	16:13:26	01:00.0	57.8	75.6	52.3	62.5
5	11-Jun-07	16:14:26	01:00.0	57.4	75.2	52.2	61.9
6	11-Jun-07	16:15:26	01:00.0	60.1	77.9	53.2	64.7
7	11-Jun-07	16:16:26	01:00.0	61.5	79.3	53.3	68.6
8	11-Jun-07	16:17:26	01:00.0	58.7	76.5	54.5	65.3
9	11-Jun-07	16:18:26	01:00.0	59.2	77	51.6	63.5
10	11-Jun-07	16:19:26	01:00.0	59.7	77.4	56	63.2
11	11-Jun-07	16:20:26	01:00.0	59	76.8	53.7	64
12	11-Jun-07	16:21:26	01:00.0	59	76.8	49.5	67
13	11-Jun-07	16:22:26	01:00.0	57.1	74.9	51.3	60.5
14	11-Jun-07	16:23:26	01:00.0	58.9	76.6	53	67.3
15	11-Jun-07	16:24:26	01:00.0	58.1	75.9	52.1	66.3
16	11-Jun-07	16:25:26	00:03.6	56	61.6	55	57.2

## 24-Hour Measurement

Meas Site	Over Number	Date	Time	Duration	Leq			
0	0	11Jun 07	15:00:00	900	61.8	1513561	1.36E+09	
0	0	11Jun 07	15:15:00	900	61.9	1548817	1.39E+09	
0	0	11Jun 07	15:30:00	900	61.8	1513561	1.36E+09	
0	0	11Jun 07	15:45:00	900	61.8	1513561	1.36E+09	
			sum	3600			5.48E+09	
			min/ave	60.00	<b>62</b>	1522375		
0	0	11Jun 07	16:00:00	900	61.2	1318257	1.19E+09	
0	0	11Jun 07	16:15:00	900	61.5	1412538	1.27E+09	
0	0	11Jun 07	16:30:00	900	60.9	1230269	1.11E+09	
0	0	11Jun 07	16:45:00	900	61.7	1479108	1.33E+09	
			sum	3600			4.90E+09	
			min/ave	60.00	<b>61</b>	1360043		
0	0	11Jun 07	17:00:00	900	61.3	1348963	1.21E+09	
0	0	11Jun 07	17:15:00	900	61.2	1318257	1.19E+09	
0	0	11Jun 07	17:30:00	900	61.7	1479108	1.33E+09	
0	0	11Jun 07	17:45:00	900	60.6	1148154	1.03E+09	
			sum	3600			4.77E+09	
			min/ave	60.00	<b>61</b>	1323620		
0	0	11Jun 07	18:00:00	900	61.1	1288250	1.16E+09	
0	0	11Jun 07	18:15:00	900	60.3	1071519	9.64E+08	
0	0	11Jun 07	18:30:00	900	61	1258925	1.13E+09	
0	0	11Jun 07	18:45:00	900	59.4	870963.6	7.84E+08	
			sum	3600			4.04E+09	
			min/ave	60.00	<b>61</b>	1122414		
0	0	11Jun 07	19:00:00	900	60.3	1071519	9.64E+08	
0	0	11Jun 07	19:15:00	900	58.7	741310.2	6.67E+08	
0	0	11Jun 07	19:30:00	900	58	630957.3	5.68E+08	
0	0	11Jun 07	19:45:00	900	59	794328.2	7.15E+08	
			sum	3600			2.91E+09	
			min/ave	60.00	<b>59</b>	809528.8		

0	0	11Jun 07	20:00:00	900	58.7	741310.2	6.67E+08
0	0	11Jun 07	20:15:00	900	57.9	616595	5.55E+08
0	0	11Jun 07	20:30:00	900	59.5	891250.9	8.02E+08
0	0	11Jun 07	20:45:00	900	58.1	645654.2	5.81E+08
			sum	3600			2.61E+09
			min/ave	60.00	<b>59</b>	723702.6	
0	0	11Jun 07	21:00:00	900	56.3	426579.5	3.84E+08
0	0	11Jun 07	21:15:00	900	56.7	467735.1	4.21E+08
0	0	11Jun 07	21:30:00	900	56.3	426579.5	3.84E+08
0	0	11Jun 07	21:45:00	900	54.3	269153.5	2.42E+08
			sum	3600			1.43E+09
			min/ave	60.00	<b>56</b>	397511.9	
0	0	11Jun 07	22:00:00	900	53.8	239883.3	2.16E+08
0	0	11Jun 07	22:15:00	900	55.1	323593.7	2.91E+08
0	0	11Jun 07	22:30:00	900	54.5	281838.3	2.54E+08
0	0	11Jun 07	22:45:00	900	54.5	281838.3	2.54E+08
			sum	3600			1.01E+09
			min/ave	60.00	<b>54</b>	281788.4	
0	0	11Jun 07	23:00:00	900	53.1	204173.8	1.84E+08
0	0	11Jun 07	23:15:00	900	52.3	169824.4	1.53E+08
0	0	11Jun 07	23:30:00	900	53.8	239883.3	2.16E+08
0	0	11Jun 07	23:45:00	900	51.9	154881.7	1.39E+08
			sum	3600			6.92E+08
			min/ave	60.00	<b>53</b>	192190.8	
0	0	12Jun 07	0:00:00	900	49.1	81283.05	7.32E+07
0	0	12Jun 07	0:15:00	900	48.5	70794.58	6.37E+07
0	0	12Jun 07	0:30:00	900	46.4	43651.58	3.93E+07
0	0	12Jun 07	0:45:00	900	50.3	107151.9	9.64E+07
			sum	3600			2.73E+08
			min/ave	60.00	<b>49</b>	75720.29	

0	0	12Jun 07	1:00:00	900	48.4	69183.1	6.23E+07
0	0	12Jun 07	1:15:00	900	48	63095.73	5.68E+07
0	0	12Jun 07	1:30:00	900	42.3	16982.44	1.53E+07
0	0	12Jun 07	1:45:00	900	43.2	20892.96	1.88E+07
			sum	3600			1.53E+08
			min/ave	60.00	<b>46</b>	42538.56	
0	0	12Jun 07	2:00:00	900	48.3	67608.3	6.08E+07
0	0	12Jun 07	2:15:00	900	42.9	19498.45	1.75E+07
0	0	12Jun 07	2:30:00	900	38.1	6456.542	5.81E+06
0	0	12Jun 07	2:45:00	900	42.5	17782.79	1.60E+07
			sum	3600			1.00E+08
			min/ave	60.00	<b>44</b>	27836.52	
0	0	12Jun 07	3:00:00	900	44.3	26915.35	2.42E+07
0	0	12Jun 07	3:15:00	900	49.3	85113.8	7.66E+07
0	0	12Jun 07	3:30:00	900	38	6309.573	5.68E+06
0	0	12Jun 07	3:45:00	900	46.7	46773.51	4.21E+07
			sum	3600			1.49E+08
			min/ave	60.00	<b>46</b>	41278.06	
0	0	12Jun 07	4:00:00	900	46.5	44668.36	4.02E+07
0	0	12Jun 07	4:15:00	900	47.6	57543.99	5.18E+07
0	0	12Jun 07	4:30:00	900	53.6	229086.8	2.06E+08
0	0	12Jun 07	4:45:00	900	53.6	229086.8	2.06E+08
			sum	3600			5.04E+08
			min/ave	60.00	<b>51</b>	140096.5	
0	0	12Jun 07	5:00:00	900	56.4	436515.8	3.93E+08
0	0	12Jun 07	5:15:00	900	59.6	912010.8	8.21E+08
0	0	12Jun 07	5:30:00	900	59.5	891250.9	8.02E+08
0	0	12Jun 07	5:45:00	900	61.6	1445440	1.30E+09
			sum	3600			3.32E+09
			min/ave	60.00	<b>60</b>	921304.3	

0	0	12Jun 07	6:00:00	900	62.1	1621810	1.46E+09
0	0	12Jun 07	6:15:00	900	61.5	1412538	1.27E+09
0	0	12Jun 07	6:30:00	900	61.1	1288250	1.16E+09
0	0	12Jun 07	6:45:00	900	60.7	1174898	1.06E+09
			sum	3600			4.95E+09
			min/ave	60.00	<b>61</b>	1374374	
0	0	12Jun 07	7:00:00	900	60.3	1071519	9.64E+08
0	0	12Jun 07	7:15:00	900	59.1	812830.5	7.32E+08
0	0	12Jun 07	7:30:00	900	60	1000000	9.00E+08
0	0	12Jun 07	7:45:00	900	61.2	1318257	1.19E+09
			sum	3600			3.78E+09
			min/ave	60.00	<b>60</b>	1050652	
0	0	12Jun 07	8:00:00	900	62.9	1949845	1.75E+09
0	0	12Jun 07	8:15:00	900	63.9	2454709	2.21E+09
0	0	12Jun 07	8:30:00	900	61	1258925	1.13E+09
0	0	12Jun 07	8:45:00	900	60.2	1047129	9.42E+08
			sum	3600			6.04E+09
			min/ave	60.00	<b>62</b>	1677652	
0	0	12Jun 07	9:00:00	900	62.3	1698244	1.53E+09
0	0	12Jun 07	9:15:00	900	61.4	1380384	1.24E+09
0	0	12Jun 07	9:30:00	900	61.6	1445440	1.30E+09
0	0	12Jun 07	9:45:00	900	60.4	1096478	9.87E+08
			sum	3600			5.06E+09
			min/ave	60.00	<b>61</b>	1405136	
0	0	12Jun 07	10:00:00	900	62.1	1621810	1.46E+09
0	0	12Jun 07	10:15:00	900	59.9	977237.2	8.80E+08
0	0	12Jun 07	10:30:00	900	59.5	891250.9	8.02E+08
0	0	12Jun 07	10:45:00	900	60.2	1047129	9.42E+08
			sum	3600			4.08E+09
			min/ave	60.00	<b>61</b>	1134357	

0	0	12Jun 07	11:00:00	900	60.8	1202264	1.08E+09
0	0	12Jun 07	11:15:00	900	60.6	1148154	1.03E+09
0	0	12Jun 07	11:30:00	900	60.9	1230269	1.11E+09
0	0	12Jun 07	11:45:00	900	60.7	1174898	1.06E+09
			sum	3600			4.28E+09
			min/ave	60.00	<b>61</b>	1188896	
0	0	12Jun 07	12:00:00	900	59.2	831763.8	7.49E+08
0	0	12Jun 07	12:15:00	900	61.2	1318257	1.19E+09
0	0	12Jun 07	12:30:00	900	59.3	851138	7.66E+08
0	0	12Jun 07	12:45:00	900	60.3	1071519	9.64E+08
			sum	3600			3.67E+09
			min/ave	60.00	<b>60</b>	1018169	
0	0	12Jun 07	13:00:00	900	59.6	912010.8	8.21E+08
0	0	12Jun 07	13:15:00	900	60.1	1023293	9.21E+08
0	0	12Jun 07	13:30:00	900	61.5	1412538	1.27E+09
0	0	12Jun 07	13:45:00	900	61.2	1318257	1.19E+09
			sum	3600			4.20E+09
			min/ave	60.00	<b>61</b>	1166525	
0	0	12Jun 07	14:00:00	900	60.3	1071519	9.64E+08
0	0	12Jun 07	14:15:00	900	63.4	2187762	1.97E+09
0	0	12Jun 07	14:30:00	900	61.6	1445440	1.30E+09
0	0	12Jun 07	14:45:00	900	60.6	1148154	1.03E+09
			sum	3600			5.27E+09
			min/ave	60.00	<b>62</b>	1463219	
0	0	12Jun 07	15:00:00	900	61.6	1445440	1.30E+09
0	0	12Jun 07	15:15:00	900	62.4	1737801	1.56E+09
0	0	12Jun 07	15:30:00	35.8	59.5	891250.9	3.19E+07
			sum	1835.8			2.90E+09
			min/ave	30.60	<b>62</b>	1577962	





## **APPENDIX B**

### **TRAFFIC DATA USED IN NOISE MODELING**



Existing

Roadway Segment	Volume by Direction			
	Automobiles	Medium Trucks	Heavy Trucks	Total
<b>Del Dios Highway/Paseo Delicias</b>				
La Granda to Via de la Valle	343	10	5	358
Via de la Valle to El Montevideo	1,051	31	16	1,098
El Montevedio to El Camino Del Norte	1,065	32	16	1,113
East of El Camino Del Norte	1,631	49	24	1,704
<b>Via de la Valle</b>				
South of Paseo Delicias	839	25	13	877
<b>El Camino Del Norte</b>				
North of Paseo Delicias	1,016	30	15	1,062
<b>La Valle Plateada</b>				
South of Paseo Delicias	148	4	2	155

Existing With Project

Roadway Segment	Volume by Direction			
	Automobiles	Medium Trucks	Heavy Trucks	Total
<b>Del Dios Highway/Paseo Delicias</b>				
La Granda to Via de la Valle	502	15	7	524
Via de la Valle to El Montevideo	1,427	43	21	1,491
El Montevedio to El Camino Del Norte	1,406	42	21	1,469
East of El Camino Del Norte	1,633	49	24	1,706
<b>Via de la Valle</b>				
South of Paseo Delicias	1,047	31	16	1,094
<b>El Camino Del Norte</b>				
North of Paseo Delicias	412	12	6	430
<b>La Valle Plateada</b>				
South of Paseo Delicias	129	4	2	135

2030 Without Project

Roadway Segment	Volume by Direction			
	Automobiles	Medium Trucks	Heavy Trucks	Total
<b>Del Dios Highway/Paseo Delicias</b>				
La Granda to Via de la Valle	440	13	7	460
Via de la Valle to El Montevideo	1,330	40	20	1,390
El Montevedio to El Camino Del Norte	1,340	40	20	1,400
East of El Camino Del Norte	2,182	65	33	2,280
<b>Via de la Valle</b>				
South of Paseo Delicias	1,024	31	15	1,070
<b>El Camino Del Norte</b>				
North of Paseo Delicias	1,091	33	16	1,140
<b>La Valle Plateada</b>				
South of Paseo Delicias	191	6	3	200

2030 With Project

Roadway Segment	Volume by Direction			
	Automobiles	Medium Trucks	Heavy Trucks	Total
<b>Del Dios Highway/Paseo Delicias</b>				
La Granda to Via de la Valle	651	19	10	680
Via de la Valle to El Montevideo	1,809	54	27	1,890
El Montevedio to El Camino Del Norte	1,838	55	27	1,920
East of El Camino Del Norte	2,211	66	33	2,310
<b>Via de la Valle</b>				
South of Paseo Delicias	1,302	39	19	1,360
<b>El Camino Del Norte</b>				
North of Paseo Delicias	670	20	10	700
<b>La Valle Plateada</b>				
South of Paseo Delicias	172	5	3	180

Roadway Segment	Volume by Direction				Vehicle Mix		
	Automobiles	Medium Trucks	Heavy Trucks	Total	Automobiles	Medium Trucks	Heavy Trucks
Via De La Valle & Paseo Delicias (westbound)	108	3	1	112	96.4%	2.7%	0.9%
Via De La Valle & Paseo Delicias (eastbound)	152	6	2	160	95.0%	3.8%	1.3%
<b>Via De La Valle &amp; Paseo Delicias</b>	<b>260</b>	<b>9</b>	<b>3</b>	<b>272</b>	<b>95.6%</b>	<b>3.3%</b>	<b>1.1%</b>
Paseo Delicias & El Romero (westbound)	45	0	1	46	97.8%	0.0%	2.2%
Paseo Delicias & El Romero (eastbound)	68	1	2	71	95.8%	1.4%	2.8%
<b>Paseo Delicias &amp; El Romero</b>	<b>113</b>	<b>1</b>	<b>3</b>	<b>117</b>	<b>96.6%</b>	<b>0.9%</b>	<b>2.6%</b>
Paseo Delicias & La Fremontia (westbound)	94	3	0	97	96.9%	3.1%	0.0%
Paseo Delicias & La Fremontia (eastbound)	204	4	2	210	97.1%	1.9%	1.0%
<b>Paseo Delicias &amp; La Fremontia</b>	<b>298</b>	<b>7</b>	<b>2</b>	<b>307</b>	<b>97.1%</b>	<b>2.3%</b>	<b>0.7%</b>
Paseo Delicias & Montevideo (westbound)	107	6	1	114	93.9%	5.3%	0.9%
Paseo Delicias & Montevideo (eastbound)	167	9	2	178	93.8%	5.1%	1.1%
<b>Paseo Delicias &amp; Montevideo</b>	<b>274</b>	<b>15</b>	<b>3</b>	<b>292</b>	<b>93.8%</b>	<b>5.1%</b>	<b>1.0%</b>
Paseo Delicias west of Montevideo (westbound)	96	1	0	97	99.0%	1.0%	0.0%
Paseo Delicias west of Montevideo (eastbound)	117	5	11	133	88.0%	3.8%	8.3%
<b>Paseo Delicias west of Montevideo</b>	<b>213</b>	<b>6</b>	<b>11</b>	<b>230</b>	<b>92.6%</b>	<b>2.6%</b>	<b>4.8%</b>
Escondido Del Dios HWY & El Camino Del Norte (westbound)	107	3	0	110	97.3%	2.7%	0.0%
Escondido Del Dios HWY & El Camino Del Norte (eastbound)	276	5	1	282	97.9%	1.8%	0.4%
<b>Escondido Del Dios HWY &amp; El Camino Del Norte</b>	<b>383</b>	<b>8</b>	<b>1</b>	<b>392</b>	<b>97.7%</b>	<b>2.0%</b>	<b>0.3%</b>
Average	1541	46	23	1610	95.7%	2.9%	1.4%

Relative Increase

Roadway and Segment	ADT		Change in Traffic Volumes	Change in Noise Levels <sup>1</sup>	ADT		Change in Traffic Volumes	Change in Noise Levels <sup>1</sup>
	Existing	Existing with Imp			2030 NP	2030 WP		
<b>Del Dios Highway/Paseo Delicias</b>								
La Granda to Via de la Valle	7,310	8,660	18%	0.7	10,900	13,200	21%	0.8
Via de la Valle to El Montevideo	14,650	15,620	7%	0.3	20,100	21,700	8%	0.3
El Montevedio to El Camino Del Norte	17,440	18,460	6%	0.2	22,900	24,500	7%	0.3
East of El Camino Del Norte	20,870	21,760	4%	0.2	25,000	26,300	5%	0.2
<b>Via de la Valle</b>								
South of Paseo Delicias	11,740	12,380	5%	0.2	15,400	16,500	7%	0.3
<b>Lago Linda</b>								
South of El Camino Del Norte	3,000	2,280	-24%	-1.2	4,600	3,800	-17%	-0.8
<b>La Valle Plateada</b>								
South of Paseo Delicias	2,370	1,730	-27%	-1.4	4,200	2,700	-36%	-1.9

<sup>1</sup> Changes in future noise levels assume no change in vehicle mix.

## **APPENDIX C**

### **NOISE LEVEL ADJUSTMENTS AND K-FACTORS**





<b>Location</b>	<b>Measured Leq</b>	<b>Difference to Loudest</b>	<b>Adjustment</b>
MS1	54	-1	1
MS2	56	-1	1
MS3	59	0	0
MS4	61	0	0
MS5	57	0	0
MS6	59	0	0

No K-factors were applied



## **APPENDIX D**

### **SAMPLES OF FHWA TNM INPUT AND OUTPUT DATA FOR EXISTING CONDITIONS**



**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007											
Maddux, B		TNM 2.5											
		Calculated with TNM 2.5											
<b>RESULTS: SOUND LEVELS</b>													
<b>PROJECT/CONTRACT:</b>		Rancho Santa Fe Roundabouts											
<b>RUN:</b>		Existing											
<b>BARRIER DESIGN:</b>		INPUT HEIGHTS											
<b>ATMOSPHERICS:</b>		68 deg F, 50% RH											
<b>Receiver</b>													
<b>Name</b>	<b>No.</b>	<b>#DUs</b>	<b>Existing</b>	<b>No Barrier</b>	<b>Increase over existing</b>			<b>Type</b>	<b>With Barrier</b>	<b>Noise Reduction</b>			
			<b>LAeq1h</b>	<b>LAeq1h</b>	<b>Calculated</b>	<b>Crit'n</b>	<b>Calculated</b>	<b>Crit'n</b>	<b>Impact</b>	<b>LAeq1h</b>	<b>Calculated</b>	<b>Goal</b>	<b>Calculated</b>
								<b>Sub'l Inc</b>					<b>minus</b>
													<b>Goal</b>
			<b>dBA</b>	<b>dBA</b>	<b>dBA</b>	<b>dB</b>	<b>dB</b>			<b>dBA</b>	<b>dB</b>	<b>dB</b>	<b>dB</b>
MS 1	1	1	0.0	60.4	66	60.4	12	----		60.4	0.0	5	-5.0
MS 2	2	1	0.0	59.2	66	59.2	12	----		59.2	0.0	5	-5.0
MS 3	3	1	0.0	65.2	66	65.2	12	----		65.2	0.0	5	-5.0
MS 4	4	1	0.0	66.6	66	66.6	12	Snd Lvl		66.6	0.0	5	-5.0
MS 5	5	1	0.0	62.9	66	62.9	12	----		62.9	0.0	5	-5.0
MS 6	6	1	0.0	63.2	66	63.2	12	----		63.2	0.0	5	-5.0
Rec1	8	1	0.0	51.0	66	51.0	12	----		51.0	0.0	5	-5.0
Rec2	9	1	0.0	53.6	66	53.6	12	----		53.6	0.0	5	-5.0
Rec3	10	1	0.0	55.2	66	55.2	12	----		55.2	0.0	5	-5.0
Rec4	11	1	0.0	49.6	66	49.6	12	----		49.6	0.0	5	-5.0
Rec5	12	1	0.0	62.5	66	62.5	12	----		62.5	0.0	5	-5.0
Rec6	13	1	0.0	53.5	66	53.5	12	----		53.5	0.0	5	-5.0
Rec7	15	1	0.0	53.7	66	53.7	12	----		53.7	0.0	5	-5.0
Rec8	16	1	0.0	58.0	66	58.0	12	----		58.0	0.0	5	-5.0
Rec9	17	1	0.0	60.4	66	60.4	12	----		60.4	0.0	5	-5.0
Rec10	18	1	0.0	63.1	66	63.1	12	----		63.1	0.0	5	-5.0
Rec11	19	1	0.0	60.6	66	60.6	12	----		60.6	0.0	5	-5.0
Rec12	20	1	0.0	56.7	66	56.7	12	----		56.7	0.0	5	-5.0
Rec13	21	1	0.0	52.9	66	52.9	12	----		52.9	0.0	5	-5.0
Rec14	22	1	0.0	49.5	66	49.5	12	----		49.5	0.0	5	-5.0
Rec15	23	1	0.0	56.3	66	56.3	12	----		56.3	0.0	5	-5.0
Rec16	25	1	0.0	52.2	66	52.2	12	----		52.2	0.0	5	-5.0
Rec17	26	1	0.0	50.4	66	50.4	12	----		50.4	0.0	5	-5.0
Rec18	27	1	0.0	48.0	66	48.0	12	----		48.0	0.0	5	-5.0

**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

Rec19	28	1	0.0	58.3	66	58.3	12	----	58.3	0.0	5	-5.0
Rec20	29	1	0.0	52.3	66	52.3	12	----	52.3	0.0	5	-5.0
Rec21	30	1	0.0	57.8	66	57.8	12	----	57.8	0.0	5	-5.0
Rec22	31	1	0.0	47.7	66	47.7	12	----	47.7	0.0	5	-5.0
Rec23	32	1	0.0	56.4	66	56.4	12	----	56.4	0.0	5	-5.0
Rec24	33	1	0.0	50.8	66	50.8	12	----	50.8	0.0	5	-5.0
Rec25	34	1	0.0	59.2	66	59.2	12	----	59.2	0.0	5	-5.0
Rec26	36	1	0.0	52.2	66	52.2	12	----	52.2	0.0	5	-5.0
Rec27	37	1	0.0	55.7	66	55.7	12	----	55.7	0.0	5	-5.0
Rec28	39	1	0.0	51.1	66	51.1	12	----	51.1	0.0	5	-5.0
Rec29	40	1	0.0	61.8	66	61.8	12	----	61.8	0.0	5	-5.0
Rec30	41	1	0.0	46.2	66	46.2	12	----	46.2	0.0	5	-5.0
Rec31	42	1	0.0	47.6	66	47.6	12	----	47.6	0.0	5	-5.0
Rec32	43	1	0.0	53.6	66	53.6	12	----	53.6	0.0	5	-5.0
Rec33	45	1	0.0	57.3	66	57.3	12	----	57.3	0.0	5	-5.0
Receiver50	50	1	0.0	67.6	66	67.6	12	Snd Lvl	67.6	0.0	5	-5.0
Receiver51	51	1	0.0	62.0	66	62.0	12	----	62.0	0.0	5	-5.0
Receiver53	53	1	0.0	62.0	66	62.0	12	----	62.0	0.0	5	-5.0
<b>Dwelling Units</b>		<b># DUs</b>	<b>Noise Reduction</b>									
			<b>Min</b>	<b>Avg</b>	<b>Max</b>							
			<b>dB</b>	<b>dB</b>	<b>dB</b>							
All Selected		42	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: ROADWAYS

Rancho Santa Fe Roundabouts

EDAW, Inc. Maddux, B		13 June 2007 TNM 2.5									
INPUT: ROADWAYS		Rancho Santa Fe Roundabouts					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		Existing									
RUN:											
Roadway Name	Width	Points Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Paseo Delicias s/o Via de la Valle	30.0	point2	2	6,269,581.0	1,952,308.0	274.00				Average	
		point3	3	6,270,718.5	1,953,348.9	252.00					
Via de la Valle	31.0	point43	43	6,270,804.5	1,951,410.6	151.00				Average	
		point44	44	6,270,768.0	1,951,917.5	179.00				Average	
		point45	45	6,270,768.0	1,952,134.8	188.00				Average	
		point46	46	6,270,688.5	1,952,551.0	214.00				Average	
		point47	47	6,270,768.0	1,953,083.1	243.00				Average	
		point48	48	6,270,768.0	1,953,195.4	255.00				Average	
		point49	49	6,270,753.5	1,953,329.4	252.00				Average	
		point50	50	6,270,735.5	1,953,361.9	252.00				Average	
Paseo Delicias-Via de la Valle to El Mont	30.0	point51	51	6,270,718.5	1,953,348.9	252.00	Stop	0.00	100	Average	
		point4	4	6,271,260.5	1,953,848.0	263.00				Average	
		point5	5	6,273,013.0	1,955,453.8	270.00				Average	
		point6	6	6,273,068.5	1,955,519.1	272.00				Average	
		point7	7	6,273,171.0	1,955,652.5	276.00				Average	
		point8	8	6,273,270.0	1,955,853.8	285.00				Average	
		point9	9	6,273,301.0	1,955,932.2	285.00				Average	
Paseo Delicias-Montevideo to Norte	30.0	point52	52	6,273,301.0	1,955,932.2	285.00	Stop	0.00	100	Average	
		point10	10	6,273,411.0	1,956,148.2	269.00				Average	
		point11	11	6,273,676.0	1,956,587.4	242.00				Average	
		point12	12	6,273,748.0	1,956,688.1	240.00				Average	
		point13	13	6,273,849.0	1,956,783.2	230.00				Average	
		point14	14	6,273,973.0	1,956,877.8	223.00				Average	
		point15	15	6,275,126.5	1,957,696.5	221.00				Average	
		point16	16	6,275,269.5	1,957,777.9	212.00				Average	

**INPUT: ROADWAYS**

**Rancho Santa Fe Roundabouts**

		point17	17	6,275,444.5	1,957,865.5	189.00					
Paseo Delicias-w/o Norte	30.0	point53	53	6,275,444.5	1,957,865.5	189.00					Average
		point18	18	6,275,506.5	1,957,885.8	189.00					Average
		point19	19	6,275,749.5	1,957,949.6	199.00					Average
		point20	20	6,275,912.5	1,957,976.9	202.00					Average
		point21	21	6,276,279.0	1,958,014.4	215.00					Average
		point22	22	6,276,390.0	1,958,015.1	217.00					Average
		point23	23	6,276,473.5	1,958,009.1	219.00					Average
		point24	24	6,276,592.5	1,957,986.2	230.00					Average
		point25	25	6,277,018.5	1,957,855.8	235.00					
Camino del Norte	26.0	point42	42	6,275,456.0	1,957,886.0	189.00	Stop	0.00	100		Average
		point39	39	6,275,415.0	1,958,298.4	211.00					Average
		point38	38	6,275,425.0	1,958,376.2	212.00					Average
		point37	37	6,275,439.0	1,958,439.9	213.00					Average
		point36	36	6,275,503.0	1,958,589.9	224.00					Average
		point35	35	6,275,521.5	1,958,644.9	225.00					Average
		point32	32	6,275,523.5	1,958,714.8	227.00					Average
		point31	31	6,275,511.0	1,958,782.4	230.00					Average
		point30	30	6,275,467.5	1,958,919.2	237.00					Average
		point54	54	6,274,969.5	1,960,128.6	296.00					Average
		point29	29	6,274,711.5	1,960,742.8	280.00					Average
		point28	28	6,274,658.5	1,960,762.1	279.00					Average
		point27	27	6,274,605.5	1,960,781.4	275.00					Average
		point26	26	6,273,466.0	1,960,795.9	256.00					



**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.				13 June 2007									
Maddux, B				TNM 2.5									
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:		Rancho Santa Fe Roundabouts											
RUN:		Existing											
<b>Roadway</b>		<b>Points</b>											
<b>Name</b>		<b>Name</b>	<b>No.</b>	<b>Segment</b>									
				<b>Autos</b>		<b>MTrucks</b>		<b>HTrucks</b>		<b>Buses</b>		<b>Motorcycles</b>	
				<b>V</b>	<b>S</b>	<b>V</b>	<b>S</b>	<b>V</b>	<b>S</b>	<b>V</b>	<b>S</b>	<b>V</b>	<b>S</b>
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Paseo Delicias s/o Via de la Valle		point2	2	343	25	10	25	5	25	0	0	0	0
		point3	3										
Via de la Valle		point43	43	839	45	25	45	13	45	0	0	0	0
		point44	44	839	45	25	45	13	45	0	0	0	0
		point45	45	839	45	25	45	13	45	0	0	0	0
		point46	46	839	45	25	45	13	45	0	0	0	0
		point47	47	839	45	25	45	13	45	0	0	0	0
		point48	48	839	45	25	45	13	45	0	0	0	0
		point49	49	839	45	25	45	13	45	0	0	0	0
		point50	50										
Paseo Delicias-Via de la Valle to El Mont		point51	51	1051	45	31	45	16	45	0	0	0	0
		point4	4	1051	45	31	45	16	45	0	0	0	0
		point5	5	1051	45	31	45	16	45	0	0	0	0
		point6	6	1051	45	31	45	16	45	0	0	0	0
		point7	7	1051	45	31	45	16	45	0	0	0	0
		point8	8	1051	45	31	45	16	45	0	0	0	0
		point9	9										
Paseo Delicias-Montevideo to Norte		point52	52	1065	40	32	40	16	40	0	0	0	0
		point10	10	1065	40	32	40	16	40	0	0	0	0
		point11	11	1065	40	32	40	16	40	0	0	0	0
		point12	12	1065	40	32	40	16	40	0	0	0	0
		point13	13	1065	40	32	40	16	40	0	0	0	0
		point14	14	1065	40	32	40	16	40	0	0	0	0

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

	point15	15	1065	40	32	40	16	40	0	0	0	0
	point16	16	1065	40	32	40	16	40	0	0	0	0
	point17	17										
Paseo Delicias-w/o Norte	point53	53	1631	45	49	45	24	45	0	0	0	0
	point18	18	1631	45	49	45	24	45	0	0	0	0
	point19	19	1631	45	49	45	24	45	0	0	0	0
	point20	20	1631	45	49	45	24	45	0	0	0	0
	point21	21	1631	45	49	45	24	45	0	0	0	0
	point22	22	1631	45	49	45	24	45	0	0	0	0
	point23	23	1631	45	49	45	24	45	0	0	0	0
	point24	24	1631	45	49	45	24	45	0	0	0	0
	point25	25										
Camino del Norte	point42	42	1016	30	30	30	15	30	0	0	0	0
	point39	39	1016	30	30	30	15	30	0	0	0	0
	point38	38	1016	30	30	30	15	30	0	0	0	0
	point37	37	1016	30	30	30	15	30	0	0	0	0
	point36	36	1016	30	30	30	15	30	0	0	0	0
	point35	35	1016	30	30	30	15	30	0	0	0	0
	point32	32	1016	30	30	30	15	30	0	0	0	0
	point31	31	1016	30	30	30	15	30	0	0	0	0
	point30	30	1016	30	30	30	15	30	0	0	0	0
	point54	54	1016	30	30	30	15	30	0	0	0	0
	point29	29	1016	30	30	30	15	30	0	0	0	0
	point28	28	1016	30	30	30	15	30	0	0	0	0
	point27	27	1016	30	30	30	15	30	0	0	0	0
	point26	26										

**INPUT: RECEIVERS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.							13 June 2007				
Maddux, B							TNM 2.5				
<b>INPUT: RECEIVERS</b>											
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>									
<b>RUN:</b>		<b>Existing</b>									
<b>Receiver</b>											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
MS 1	1	1	6,270,938.0	1,953,330.0	263.00	5.00	0.00	66	12.0	5.0	Y
MS 2	2	1	6,270,452.5	1,953,160.0	252.00	5.00	0.00	66	12.0	5.0	Y
MS 3	3	1	6,270,762.5	1,953,523.0	248.00	5.00	0.00	66	12.0	5.0	Y
MS 4	4	1	6,273,255.0	1,956,015.0	277.00	5.00	0.00	66	12.0	5.0	Y
MS 5	5	1	6,273,050.5	1,955,645.0	265.00	5.00	0.00	66	12.0	5.0	Y
MS 6	6	1	6,275,262.5	1,957,705.0	203.00	5.00	0.00	66	12.0	5.0	Y
Rec1	8	1	6,270,388.0	1,952,828.2	250.00	5.00	0.00	66	12.0	5.0	Y
Rec2	9	1	6,270,304.5	1,953,105.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec3	10	1	6,270,531.0	1,952,988.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec4	11	1	6,270,443.5	1,953,327.4	245.00	5.00	0.00	66	12.0	5.0	Y
Rec5	12	1	6,270,694.5	1,953,140.1	250.00	5.00	0.00	66	12.0	5.0	Y
Rec6	13	1	6,270,587.0	1,953,400.6	245.00	5.00	0.00	66	12.0	5.0	Y
Rec7	15	1	6,270,900.5	1,953,790.0	245.00	5.00	0.00	66	12.0	5.0	Y
Rec8	16	1	6,270,947.0	1,953,722.5	257.00	5.00	0.00	66	12.0	5.0	Y
Rec9	17	1	6,271,054.5	1,953,849.9	257.00	5.00	0.00	66	12.0	5.0	Y
Rec10	18	1	6,271,215.5	1,953,616.6	267.00	5.00	0.00	66	12.0	5.0	Y
Rec11	19	1	6,271,351.5	1,954,068.5	256.00	5.00	0.00	66	12.0	5.0	Y
Rec12	20	1	6,271,500.0	1,953,828.9	272.00	5.00	0.00	66	12.0	5.0	Y
Rec13	21	1	6,271,365.5	1,954,196.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec14	22	1	6,271,998.5	1,954,187.4	269.00	5.00	0.00	66	12.0	5.0	Y
Rec15	23	1	6,271,831.0	1,954,584.4	254.00	5.00	0.00	66	12.0	5.0	Y
Rec16	25	1	6,272,214.5	1,954,914.8	254.00	5.00	0.00	66	12.0	5.0	Y

**INPUT: RECEIVERS****Rancho Santa Fe Roundabouts**

Rec17	26	1	6,272,635.5	1,954,788.2	257.00	5.00	0.00	66	12.0	5.0	Y
Rec18	27	1	6,272,779.0	1,954,865.4	273.00	5.00	0.00	66	12.0	5.0	Y
Rec19	28	1	6,272,359.5	1,955,068.8	268.00	5.00	0.00	66	12.0	5.0	Y
Rec20	29	1	6,272,444.5	1,955,233.8	254.00	5.00	0.00	66	12.0	5.0	Y
Rec21	30	1	6,272,851.5	1,955,539.0	252.00	5.00	0.00	66	12.0	5.0	Y
Rec22	31	1	6,273,419.5	1,955,308.9	265.00	5.00	0.00	66	12.0	5.0	Y
Rec23	32	1	6,273,061.5	1,955,912.8	270.00	5.00	0.00	66	12.0	5.0	Y
Rec24	33	1	6,273,339.5	1,955,703.5	284.00	5.00	0.00	66	12.0	5.0	Y
Rec25	34	1	6,273,512.5	1,955,972.2	284.00	5.00	0.00	66	12.0	5.0	Y
Rec26	36	1	6,273,770.0	1,956,144.8	282.00	5.00	0.00	66	12.0	5.0	Y
Rec27	37	1	6,273,858.5	1,956,478.0	269.00	5.00	0.00	66	12.0	5.0	Y
Rec28	39	1	6,273,847.5	1,957,265.5	265.00	5.00	0.00	66	12.0	5.0	Y
Rec29	40	1	6,273,999.5	1,956,780.2	261.00	5.00	0.00	66	12.0	5.0	Y
Rec30	41	1	6,274,365.0	1,956,627.1	234.00	5.00	0.00	66	12.0	5.0	Y
Rec31	42	1	6,274,519.0	1,957,807.4	225.00	5.00	0.00	66	12.0	5.0	Y
Rec32	43	1	6,274,868.0	1,957,876.9	260.00	5.00	0.00	66	12.0	5.0	Y
Rec33	45	1	6,275,035.0	1,957,861.1	241.00	5.00	0.00	66	12.0	5.0	Y
Receiver50	50	1	6,275,458.0	1,957,800.0	189.00	5.00	0.00	66	12.0	5.0	Y
Receiver51	51	1	6,274,027.0	1,960,722.8	275.00	5.00	0.00	66	12.0	5.0	Y
Receiver53	53	1	6,270,814.0	1,952,632.2	214.00	5.00	0.00	66	12.0	5.0	Y



INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point36	36	6,271,017.5	1,953,694.9	257.00	14.00	0.00	0	0		
									point37	37	6,270,988.0	1,953,724.4	257.00	14.00					
Barrier9	W	0.00	99.99	0.00			0.00		point38	38	6,271,049.0	1,953,872.5	257.00	14.00	0.00	0	0		
									point39	39	6,271,074.0	1,953,919.0	257.00	14.00	0.00	0	0		
									point40	40	6,271,158.0	1,953,868.5	257.00	14.00	0.00	0	0		
									point41	41	6,271,120.5	1,953,819.4	257.00	14.00					
Barrier10	W	0.00	99.99	0.00			0.00		point42	42	6,271,483.0	1,953,778.1	272.00	14.00	0.00	0	0		
									point43	43	6,271,432.5	1,953,837.2	272.00	14.00	0.00	0	0		
									point44	44	6,271,483.0	1,953,886.9	272.00	14.00					
Barrier11	W	0.00	99.99	0.00			0.00		point45	45	6,271,258.0	1,953,997.0	256.00	14.00	0.00	0	0		
									point46	46	6,271,284.0	1,953,964.9	256.00	14.00	0.00	0	0		
									point47	47	6,271,324.0	1,954,006.6	256.00	14.00	0.00	0	0		
									point48	48	6,271,338.5	1,953,992.2	256.00	14.00	0.00	0	0		
									point49	49	6,271,366.5	1,954,019.6	256.00	14.00	0.00	0	0		
									point50	50	6,271,324.5	1,954,068.4	256.00	14.00					
Barrier12	W	0.00	99.99	0.00			0.00		point51	51	6,271,344.0	1,954,184.6	250.00	14.00	0.00	0	0		
									point52	52	6,271,352.0	1,954,154.6	250.00	14.00	0.00	0	0		
									point53	53	6,271,472.5	1,954,186.0	250.00	14.00	0.00	0	0		
									point54	54	6,271,466.0	1,954,218.6	250.00	14.00					
Barrier13	W	0.00	99.99	0.00			0.00		point55	55	6,271,955.0	1,954,157.8	269.00	14.00	0.00	0	0		
									point56	56	6,271,921.5	1,954,194.2	269.00	14.00	0.00	0	0		
									point57	57	6,271,946.0	1,954,219.5	269.00	14.00	0.00	0	0		
									point58	58	6,271,953.5	1,954,212.1	269.00	14.00	0.00	0	0		
									point59	59	6,271,967.5	1,954,227.8	269.00	14.00	0.00	0	0		
									point60	60	6,271,967.0	1,954,249.5	269.00	14.00	0.00	0	0		
									point61	61	6,272,017.5	1,954,250.8	269.00	14.00	0.00	0	0		
									point63	63	6,272,020.5	1,954,222.5	269.00	14.00					
Barrier14	W	0.00	99.99	0.00			0.00		point64	64	6,271,756.0	1,954,534.2	254.00	14.00	0.00	0	0		
									point65	65	6,271,781.0	1,954,503.0	254.00	14.00	0.00	0	0		
									point66	66	6,271,813.5	1,954,536.5	254.00	14.00	0.00	0	0		
									point67	67	6,271,793.0	1,954,561.8	254.00	14.00					
Barrier15	W	0.00	99.99	0.00			0.00		point68	68	6,271,839.0	1,954,540.9	254.00	14.00	0.00	0	0		
									point69	69	6,271,857.5	1,954,520.4	254.00	14.00	0.00	0	0		
									point70	70	6,271,882.5	1,954,546.9	254.00	14.00	0.00	0	0		
									point71	71	6,271,864.0	1,954,564.8	254.00	14.00					
Barrier16	W	0.00	99.99	0.00			0.00		point72	72	6,271,872.5	1,954,607.5	254.00	14.00	0.00	0	0		
									point73	73	6,271,931.0	1,954,582.8	254.00	14.00	0.00	0	0		
									point74	74	6,271,940.5	1,954,602.8	254.00	14.00	0.00	0	0		
									point75	75	6,271,939.5	1,954,652.1	254.00	14.00	0.00	0	0		
									point76	76	6,271,950.0	1,954,666.2	254.00	14.00	0.00	0	0		
									point77	77	6,271,931.0	1,954,688.5	254.00	14.00					
Barrier17	W	0.00	99.99	0.00			0.00		point78	78	6,272,186.5	1,954,853.0	268.00	14.00	0.00	0	0		
									point79	79	6,272,210.0	1,954,829.5	268.00	14.00	0.00	0	0		
									point80	80	6,272,298.0	1,954,901.1	268.00	14.00	0.00	0	0		
									point81	81	6,272,290.0	1,954,931.6	268.00	14.00					
Barrier18	W	0.00	99.99	0.00			0.00		point82	82	6,272,375.5	1,954,994.5	268.00	14.00	0.00	0	0		
									point83	83	6,272,371.0	1,954,971.0	268.00	14.00	0.00	0	0		
									point84	84	6,272,397.0	1,954,964.0	268.00	14.00	0.00	0	0		
									point85	85	6,272,404.0	1,955,000.4	268.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point86	86	6,272,435.5	1,955,038.0	268.00	14.00	0.00	0	0		
									point87	87	6,272,467.5	1,955,038.0	268.00	14.00	0.00	0	0		
									point88	88	6,272,466.0	1,955,069.6	268.00	14.00					
Barrier19	W	0.00	99.99	0.00				0.00	point89	89	6,272,437.0	1,955,176.6	254.00	14.00	0.00	0	0		
									point90	90	6,272,486.0	1,955,153.1	254.00	14.00	0.00	0	0		
									point91	91	6,272,541.5	1,955,256.5	254.00	14.00	0.00	0	0		
									point92	92	6,272,478.0	1,955,287.0	254.00	14.00					
Barrier20	W	0.00	99.99	0.00				0.00	point93	93	6,272,595.5	1,954,786.0	275.00	14.00	0.00	0	0		
									point94	94	6,272,569.5	1,954,821.2	275.00	14.00	0.00	0	0		
									point95	95	6,272,588.5	1,954,840.0	275.00	14.00	0.00	0	0		
									point96	96	6,272,595.5	1,954,829.5	275.00	14.00	0.00	0	0		
									point97	97	6,272,641.0	1,954,864.8	275.00	14.00	0.00	0	0		
									point98	98	6,272,662.5	1,954,838.9	275.00	14.00					
Barrier21	W	0.00	99.99	0.00				0.00	point99	99	6,272,733.5	1,954,833.6	273.00	14.00	0.00	0	0		
									point100	100	6,272,681.5	1,954,882.9	273.00	14.00	0.00	0	0		
									point101	101	6,272,745.0	1,954,951.0	273.00	14.00	0.00	0	0		
									point102	102	6,272,800.5	1,954,902.9	273.00	14.00					
Barrier22	W	0.00	99.99	0.00				0.00	point103	103	6,273,393.5	1,955,191.9	265.00	14.00	0.00	0	0		
									point104	104	6,273,332.5	1,955,231.8	265.00	14.00	0.00	0	0		
									point105	105	6,273,337.0	1,955,317.5	265.00	14.00	0.00	0	0		
									point106	106	6,273,351.5	1,955,314.0	265.00	14.00	0.00	0	0		
									point107	107	6,273,355.0	1,955,348.1	265.00	14.00	0.00	0	0		
									point108	108	6,273,389.0	1,955,345.8	265.00	14.00					
Barrier23	W	0.00	99.99	0.00				0.00	point109	109	6,273,346.0	1,955,638.2	284.00	14.00	0.00	0	0		
									point110	110	6,273,288.0	1,955,682.4	284.00	14.00	0.00	0	0		
									point111	111	6,273,263.0	1,955,689.0	284.00	14.00	0.00	0	0		
									point112	112	6,273,271.0	1,955,710.1	284.00	14.00	0.00	0	0		
									point113	113	6,273,290.0	1,955,705.2	284.00	14.00	0.00	0	0		
									point114	114	6,273,297.5	1,955,717.0	284.00	14.00	0.00	0	0		
									point115	115	6,273,287.5	1,955,724.5	284.00	14.00	0.00	0	0		
									point116	116	6,273,305.0	1,955,751.2	284.00	14.00	0.00	0	0		
									point117	117	6,273,318.0	1,955,744.8	284.00	14.00	0.00	0	0		
									point119	119	6,273,326.5	1,955,756.1	284.00	14.00	0.00	0	0		
									point120	120	6,273,350.5	1,955,739.2	284.00	14.00	0.00	0	0		
									point121	121	6,273,363.0	1,955,760.0	284.00	14.00	0.00	0	0		
									point122	122	6,273,403.0	1,955,736.9	284.00	14.00					
Barrier25	W	0.00	99.99	0.00				0.00	point126	126	6,273,055.5	1,955,839.8	270.00	14.00	0.00	0	0		
									point127	127	6,273,077.5	1,955,817.5	270.00	14.00	0.00	0	0		
									point128	128	6,273,092.0	1,955,831.4	270.00	14.00	0.00	0	0		
									point129	129	6,273,117.5	1,955,803.6	270.00	14.00	0.00	0	0		
									point130	130	6,273,147.5	1,955,830.8	270.00	14.00	0.00	0	0		
									point131	131	6,273,124.5	1,955,858.1	270.00	14.00	0.00	0	0		
									point132	132	6,273,139.5	1,955,872.9	270.00	14.00	0.00	0	0		
									point133	133	6,273,119.5	1,955,898.1	270.00	14.00					
Barrier26	W	0.00	99.99	0.00				0.00	point134	134	6,273,540.0	1,955,874.0	284.00	14.00	0.00	0	0		
									point135	135	6,273,508.0	1,955,875.9	284.00	14.00	0.00	0	0		
									point136	136	6,273,509.0	1,955,902.0	284.00	14.00	0.00	0	0		
									point137	137	6,273,465.5	1,955,928.2	284.00	14.00	0.00	0	0		
									point138	138	6,273,433.5	1,955,912.8	284.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point139	139	6,273,419.0	1,955,939.9	284.00	14.00	0.00	0	0			
									point140	140	6,273,451.0	1,955,955.4	284.00	14.00	0.00	0	0			
									point141	141	6,273,445.0	1,955,967.9	284.00	14.00	0.00	0	0			
									point143	143	6,273,463.5	1,955,977.6	284.00	14.00						
Barrier27	W	0.00	99.99	0.00			0.00		point144	144	6,273,821.5	1,956,166.0	282.00	14.00	0.00	0	0			
									point145	145	6,273,821.5	1,956,218.4	282.00	14.00	0.00	0	0			
									point146	146	6,273,754.5	1,956,221.2	282.00	14.00	0.00	0	0			
									point147	147	6,273,706.0	1,956,249.4	282.00	14.00	0.00	0	0			
									point148	148	6,273,685.0	1,956,214.5	282.00	14.00						
Barrier28	W	0.00	99.99	0.00			0.00		point149	149	6,273,751.5	1,956,487.6	269.00	14.00	0.00	0	0			
									point150	150	6,273,742.0	1,956,447.9	269.00	14.00	0.00	0	0			
									point151	151	6,273,816.5	1,956,433.4	269.00	14.00	0.00	0	0			
									point152	152	6,273,808.0	1,956,392.8	269.00	14.00	0.00	0	0			
									point153	153	6,273,877.5	1,956,366.5	269.00	14.00						
Barrier29	W	0.00	99.99	0.00			0.00		point154	154	6,274,322.5	1,956,673.6	234.00	14.00	0.00	0	0			
									point155	155	6,274,303.0	1,956,711.4	234.00	14.00	0.00	0	0			
									point156	156	6,274,332.0	1,956,727.9	234.00	14.00	0.00	0	0			
									point157	157	6,274,356.0	1,956,690.1	234.00	14.00	0.00	0	0			
									point158	158	6,274,380.5	1,956,702.8	234.00	14.00	0.00	0	0			
									point159	159	6,274,396.0	1,956,673.6	234.00	14.00	0.00	0	0			
									point160	160	6,274,447.5	1,956,703.6	234.00	14.00	0.00	0	0			
									point161	161	6,274,464.5	1,956,679.5	234.00	14.00						
Barrier30	W	0.00	99.99	0.00			0.00		point162	162	6,274,467.0	1,957,812.8	225.00	14.00	0.00	0	0			
									point163	163	6,274,440.5	1,957,760.0	225.00	14.00	0.00	0	0			
									point164	164	6,274,472.5	1,957,734.5	225.00	14.00	0.00	0	0			
									point165	165	6,274,436.5	1,957,672.5	225.00	14.00	0.00	0	0			
									point166	166	6,274,491.0	1,957,641.5	225.00	14.00	0.00	0	0			
									point167	167	6,274,547.0	1,957,755.4	225.00	14.00						
Barrier31	W	0.00	99.99	0.00			0.00		point168	168	6,274,821.5	1,957,857.2	260.00	14.00	0.00	0	0			
									point170	170	6,274,813.5	1,957,835.4	260.00	14.00	0.00	0	0			
									point171	171	6,274,834.5	1,957,825.9	260.00	14.00	0.00	0	0			
									point172	172	6,274,963.5	1,957,779.2	260.00	14.00	0.00	0	0			
									point173	173	6,274,973.5	1,957,811.9	260.00	14.00						
Barrier32	W	0.00	99.99	0.00			0.00		point174	174	6,275,031.5	1,957,833.2	241.00	14.00	0.00	0	0			
									point175	175	6,275,031.5	1,957,801.9	241.00	14.00	0.00	0	0			
									point176	176	6,275,099.0	1,957,806.6	241.00	14.00	0.00	0	0			
									point177	177	6,275,096.5	1,957,842.4	241.00	14.00						



**INPUT: TERRAIN LINES**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007		
Maddux, B		TNM 2.5		
<b>INPUT: TERRAIN LINES</b>				
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>		
<b>RUN:</b>		<b>Existing</b>		
<b>Terrain Line</b>	<b>Points</b>			
<b>Name</b>	<b>No.</b>	<b>Coordinates (ground)</b>		
		<b>X</b>	<b>Y</b>	<b>Z</b>
		ft	ft	ft
Terrain Line1	1	6,270,981.0	1,953,516.2	260.00
	2	6,270,827.0	1,953,379.1	260.00
	3	6,270,824.5	1,953,345.4	260.00
	4	6,270,827.0	1,953,323.8	260.00
	5	6,270,843.5	1,953,299.8	260.00
	6	6,270,916.0	1,953,217.9	260.00
Terrain Line2	7	6,273,954.0	1,956,760.1	261.00
	8	6,274,007.0	1,956,800.2	261.00
	9	6,274,036.0	1,956,763.2	261.00
Terrain Line3	10	6,270,715.0	1,953,284.1	250.00
	11	6,270,720.5	1,953,248.9	250.00
	12	6,270,725.5	1,953,167.4	250.00
	13	6,270,722.5	1,953,130.2	250.00
	14	6,270,730.0	1,953,084.9	250.00
	15	6,270,709.5	1,952,980.1	250.00



## **APPENDIX E**

### **SAMPLES OF FHWA TNM INPUT AND OUTPUT DATA FOR 2030 NO BUILD CONDITIONS**



**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007											
Maddux, B		TNM 2.5											
		Calculated with TNM 2.5											
<b>RESULTS: SOUND LEVELS</b>													
<b>PROJECT/CONTRACT:</b>		Rancho Santa Fe Roundabouts											
<b>RUN:</b>		2030 No Build											
<b>BARRIER DESIGN:</b>		INPUT HEIGHTS											
<b>ATMOSPHERICS:</b>		68 deg F, 50% RH											
<b>Receiver</b>													
<b>Name</b>	<b>No.</b>	<b>#DUs</b>	<b>Existing</b>	<b>No Barrier</b>			<b>Increase over existing</b>			<b>With Barrier</b>			
			<b>LAeq1h</b>	<b>LAeq1h</b>			<b>Calculated</b>		<b>Type</b>	<b>Calculated</b>		<b>Noise Reduction</b>	
				<b>Calculated</b>	<b>Crit'n</b>		<b>Calculated</b>	<b>Crit'n</b>	<b>Impact</b>	<b>LAeq1h</b>	<b>Calculated</b>	<b>Goal</b>	<b>Calculated</b>
								<b>Sub'l Inc</b>					<b>minus</b>
													<b>Goal</b>
			<b>dBA</b>	<b>dBA</b>	<b>dBA</b>		<b>dB</b>	<b>dB</b>		<b>dBA</b>	<b>dB</b>	<b>dB</b>	<b>dB</b>
MS 1	1	1	0.0	61.4	66		61.4	12	----	61.4	0.0	5	-5.0
MS 2	2	1	0.0	60.3	66		60.3	12	----	60.3	0.0	5	-5.0
MS 3	3	1	0.0	66.2	66		66.2	12	Snd Lvl	66.2	0.0	5	-5.0
MS 4	4	1	0.0	67.6	66		67.6	12	Snd Lvl	67.6	0.0	5	-5.0
MS 5	5	1	0.0	64.0	66		64.0	12	----	64.0	0.0	5	-5.0
MS 6	6	1	0.0	64.2	66		64.2	12	----	64.2	0.0	5	-5.0
Rec1	8	1	0.0	51.9	66		51.9	12	----	51.9	0.0	5	-5.0
Rec2	9	1	0.0	54.7	66		54.7	12	----	54.7	0.0	5	-5.0
Rec3	10	1	0.0	56.0	66		56.0	12	----	56.0	0.0	5	-5.0
Rec4	11	1	0.0	50.6	66		50.6	12	----	50.6	0.0	5	-5.0
Rec5	12	1	0.0	63.4	66		63.4	12	----	63.4	0.0	5	-5.0
Rec6	13	1	0.0	54.5	66		54.5	12	----	54.5	0.0	5	-5.0
Rec7	15	1	0.0	54.7	66		54.7	12	----	54.7	0.0	5	-5.0
Rec8	16	1	0.0	59.0	66		59.0	12	----	59.0	0.0	5	-5.0
Rec9	17	1	0.0	61.4	66		61.4	12	----	61.4	0.0	5	-5.0
Rec10	18	1	0.0	64.1	66		64.1	12	----	64.1	0.0	5	-5.0
Rec11	19	1	0.0	61.6	66		61.6	12	----	61.6	0.0	5	-5.0
Rec12	20	1	0.0	57.7	66		57.7	12	----	57.7	0.0	5	-5.0
Rec13	21	1	0.0	53.9	66		53.9	12	----	53.9	0.0	5	-5.0
Rec14	22	1	0.0	50.5	66		50.5	12	----	50.5	0.0	5	-5.0
Rec15	23	1	0.0	57.3	66		57.3	12	----	57.3	0.0	5	-5.0
Rec16	25	1	0.0	53.2	66		53.2	12	----	53.2	0.0	5	-5.0
Rec17	26	1	0.0	51.4	66		51.4	12	----	51.4	0.0	5	-5.0
Rec18	27	1	0.0	49.0	66		49.0	12	----	49.0	0.0	5	-5.0

**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

Rec19	28	1	0.0	59.3	66	59.3	12	----	59.3	0.0	5	-5.0
Rec20	29	1	0.0	53.4	66	53.4	12	----	53.4	0.0	5	-5.0
Rec21	30	1	0.0	58.8	66	58.8	12	----	58.8	0.0	5	-5.0
Rec22	31	1	0.0	48.7	66	48.7	12	----	48.7	0.0	5	-5.0
Rec23	32	1	0.0	57.4	66	57.4	12	----	57.4	0.0	5	-5.0
Rec24	33	1	0.0	51.8	66	51.8	12	----	51.8	0.0	5	-5.0
Rec25	34	1	0.0	60.2	66	60.2	12	----	60.2	0.0	5	-5.0
Rec26	36	1	0.0	53.2	66	53.2	12	----	53.2	0.0	5	-5.0
Rec27	37	1	0.0	56.7	66	56.7	12	----	56.7	0.0	5	-5.0
Rec28	39	1	0.0	52.0	66	52.0	12	----	52.0	0.0	5	-5.0
Rec29	40	1	0.0	62.8	66	62.8	12	----	62.8	0.0	5	-5.0
Rec30	41	1	0.0	47.2	66	47.2	12	----	47.2	0.0	5	-5.0
Rec31	42	1	0.0	48.4	66	48.4	12	----	48.4	0.0	5	-5.0
Rec32	43	1	0.0	54.6	66	54.6	12	----	54.6	0.0	5	-5.0
Rec33	45	1	0.0	58.3	66	58.3	12	----	58.3	0.0	5	-5.0
<b>Dwelling Units</b>		<b># DUs</b>	<b>Noise Reduction</b>									
			<b>Min</b>	<b>Avg</b>	<b>Max</b>							
			<b>dB</b>	<b>dB</b>	<b>dB</b>							
All Selected		39	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: ROADWAYS

Rancho Santa Fe Roundabouts

EDAW, Inc. Maddux, B		13 June 2007 TNM 2.5									
INPUT: ROADWAYS		Rancho Santa Fe Roundabouts					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		Rancho Santa Fe Roundabouts									
RUN:		2030 No Build									
Roadway Name	Width	Points Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Paseo Delicias s/o Via de la Valle	30.0	point2	2	6,269,581.0	1,952,308.0	274.00				Average	
		point3	3	6,270,718.5	1,953,348.9	252.00					
Via de la Valle	31.0	point43	43	6,270,804.5	1,951,410.6	151.00				Average	
		point44	44	6,270,768.0	1,951,917.5	179.00				Average	
		point45	45	6,270,768.0	1,952,134.8	188.00				Average	
		point46	46	6,270,688.5	1,952,551.0	214.00				Average	
		point47	47	6,270,768.0	1,953,083.1	243.00				Average	
		point48	48	6,270,768.0	1,953,195.4	255.00				Average	
		point49	49	6,270,753.5	1,953,329.4	252.00				Average	
		point50	50	6,270,735.5	1,953,361.9	252.00					
Paseo Delicias-Via de la Valle to El Mont	30.0	point51	51	6,270,718.5	1,953,348.9	252.00	Stop	0.00	100	Average	
		point4	4	6,271,260.5	1,953,848.0	263.00				Average	
		point5	5	6,273,013.0	1,955,453.8	270.00				Average	
		point6	6	6,273,068.5	1,955,519.1	272.00				Average	
		point7	7	6,273,171.0	1,955,652.5	276.00				Average	
		point8	8	6,273,270.0	1,955,853.8	285.00				Average	
		point9	9	6,273,301.0	1,955,932.2	285.00					
Paseo Delicias-Montevideo to Norte	30.0	point52	52	6,273,301.0	1,955,932.2	285.00	Stop	0.00	100	Average	
		point10	10	6,273,411.0	1,956,148.2	269.00				Average	
		point11	11	6,273,676.0	1,956,587.4	242.00				Average	
		point12	12	6,273,748.0	1,956,688.1	240.00				Average	
		point13	13	6,273,849.0	1,956,783.2	230.00				Average	
		point14	14	6,273,973.0	1,956,877.8	223.00				Average	
		point15	15	6,275,126.5	1,957,696.5	221.00				Average	
		point16	16	6,275,269.5	1,957,777.9	212.00				Average	

**INPUT: ROADWAYS**

**Rancho Santa Fe Roundabouts**

		point17	17	6,275,444.5	1,957,865.5	189.00					
Paseo Delicias-w/o Norte	30.0	point53	53	6,275,444.5	1,957,865.5	189.00					Average
		point18	18	6,275,506.5	1,957,885.8	189.00					Average
		point19	19	6,275,749.5	1,957,949.6	199.00					Average
		point20	20	6,275,912.5	1,957,976.9	202.00					Average
		point21	21	6,276,279.0	1,958,014.4	215.00					Average
		point22	22	6,276,390.0	1,958,015.1	217.00					Average
		point23	23	6,276,473.5	1,958,009.1	219.00					Average
		point24	24	6,276,592.5	1,957,986.2	230.00					Average
		point25	25	6,277,018.5	1,957,855.8	235.00					
Camino del Norte	26.0	point42	42	6,275,456.0	1,957,886.0	189.00	Stop	0.00	100		Average
		point39	39	6,275,415.0	1,958,298.4	211.00					Average
		point38	38	6,275,425.0	1,958,376.2	212.00					Average
		point37	37	6,275,439.0	1,958,439.9	213.00					Average
		point36	36	6,275,503.0	1,958,589.9	224.00					Average
		point35	35	6,275,521.5	1,958,644.9	225.00					Average
		point32	32	6,275,523.5	1,958,714.8	227.00					Average
		point31	31	6,275,511.0	1,958,782.4	230.00					Average
		point30	30	6,275,467.5	1,958,919.2	237.00					Average
		point54	54	6,274,969.5	1,960,128.6	296.00					Average
		point29	29	6,274,711.5	1,960,742.8	280.00					Average
		point28	28	6,274,658.5	1,960,762.1	279.00					Average
		point27	27	6,274,605.5	1,960,781.4	275.00					Average
		point26	26	6,273,466.0	1,960,795.9	256.00					



**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007										
Maddux, B		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		Rancho Santa Fe Roundabouts										
RUN:		2030 No Build										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Paseo Delicias s/o Via de la Valle	point2	2	440	25	13	25	7	25	0	0	0	0
	point3	3										
Via de la Valle	point43	43	1024	45	31	45	15	45	0	0	0	0
	point44	44	1024	45	31	45	15	45	0	0	0	0
	point45	45	1024	45	31	45	15	45	0	0	0	0
	point46	46	1024	45	31	45	15	45	0	0	0	0
	point47	47	1024	45	31	45	15	45	0	0	0	0
	point48	48	1024	45	31	45	15	45	0	0	0	0
	point49	49	1024	45	31	45	15	45	0	0	0	0
	point50	50										
Paseo Delicias-Via de la Valle to El Mont	point51	51	1330	45	40	45	20	45	0	0	0	0
	point4	4	1330	45	40	45	20	45	0	0	0	0
	point5	5	1330	45	40	45	20	45	0	0	0	0
	point6	6	1330	45	40	45	20	45	0	0	0	0
	point7	7	1330	45	40	45	20	45	0	0	0	0
	point8	8	1330	45	40	45	20	45	0	0	0	0
	point9	9										
Paseo Delicias-Montevideo to Norte	point52	52	1340	40	40	40	20	40	0	0	0	0
	point10	10	1340	40	40	40	20	40	0	0	0	0
	point11	11	1340	40	40	40	20	40	0	0	0	0
	point12	12	1340	40	40	40	20	40	0	0	0	0
	point13	13	1340	40	40	40	20	40	0	0	0	0
	point14	14	1340	40	40	40	20	40	0	0	0	0

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

	point15	15	1340	40	40	40	20	40	0	0	0	0
	point16	16	1340	40	40	40	20	40	0	0	0	0
	point17	17										
Paseo Delicias-w/o Norte	point53	53	2182	45	65	45	33	45	0	0	0	0
	point18	18	2182	45	65	45	33	45	0	0	0	0
	point19	19	2182	45	65	45	33	45	0	0	0	0
	point20	20	2182	45	65	45	33	45	0	0	0	0
	point21	21	2182	45	65	45	33	45	0	0	0	0
	point22	22	2182	45	65	45	33	45	0	0	0	0
	point23	23	2182	45	65	45	33	45	0	0	0	0
	point24	24	2182	45	65	45	33	45	0	0	0	0
	point25	25										
Camino del Norte	point42	42	1091	30	33	30	16	30	0	0	0	0
	point39	39	1091	30	33	30	16	30	0	0	0	0
	point38	38	1091	30	33	30	16	30	0	0	0	0
	point37	37	1091	30	33	30	16	30	0	0	0	0
	point36	36	1091	30	33	30	16	30	0	0	0	0
	point35	35	1091	30	33	30	16	30	0	0	0	0
	point32	32	1091	30	33	30	16	30	0	0	0	0
	point31	31	1091	30	33	30	16	30	0	0	0	0
	point30	30	1091	30	33	30	16	30	0	0	0	0
	point54	54	1091	30	33	30	16	30	0	0	0	0
	point29	29	1091	30	33	30	16	30	0	0	0	0
	point28	28	1091	30	33	30	16	30	0	0	0	0
	point27	27	1091	30	33	30	16	30	0	0	0	0
	point26	26										

**INPUT: RECEIVERS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.							13 June 2007				
Maddux, B							TNM 2.5				
<b>INPUT: RECEIVERS</b>											
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>									
<b>RUN:</b>		<b>2030 No Build</b>									
<b>Receiver</b>											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
MS 1	1	1	6,270,938.0	1,953,330.0	263.00	5.00	0.00	66	12.0	5.0	Y
MS 2	2	1	6,270,452.5	1,953,160.0	252.00	5.00	0.00	66	12.0	5.0	Y
MS 3	3	1	6,270,762.5	1,953,523.0	248.00	5.00	0.00	66	12.0	5.0	Y
MS 4	4	1	6,273,255.0	1,956,015.0	277.00	5.00	0.00	66	12.0	5.0	Y
MS 5	5	1	6,273,050.5	1,955,645.0	265.00	5.00	0.00	66	12.0	5.0	Y
MS 6	6	1	6,275,262.5	1,957,705.0	203.00	5.00	0.00	66	12.0	5.0	Y
Rec1	8	1	6,270,388.0	1,952,828.2	250.00	5.00	0.00	66	12.0	5.0	Y
Rec2	9	1	6,270,304.5	1,953,105.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec3	10	1	6,270,531.0	1,952,988.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec4	11	1	6,270,443.5	1,953,327.4	245.00	5.00	0.00	66	12.0	5.0	Y
Rec5	12	1	6,270,694.5	1,953,140.1	250.00	5.00	0.00	66	12.0	5.0	Y
Rec6	13	1	6,270,587.0	1,953,400.6	245.00	5.00	0.00	66	12.0	5.0	Y
Rec7	15	1	6,270,900.5	1,953,790.0	245.00	5.00	0.00	66	12.0	5.0	Y
Rec8	16	1	6,270,947.0	1,953,722.5	257.00	5.00	0.00	66	12.0	5.0	Y
Rec9	17	1	6,271,054.5	1,953,849.9	257.00	5.00	0.00	66	12.0	5.0	Y
Rec10	18	1	6,271,215.5	1,953,616.6	267.00	5.00	0.00	66	12.0	5.0	Y
Rec11	19	1	6,271,351.5	1,954,068.5	256.00	5.00	0.00	66	12.0	5.0	Y
Rec12	20	1	6,271,500.0	1,953,828.9	272.00	5.00	0.00	66	12.0	5.0	Y
Rec13	21	1	6,271,365.5	1,954,196.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec14	22	1	6,271,998.5	1,954,187.4	269.00	5.00	0.00	66	12.0	5.0	Y
Rec15	23	1	6,271,831.0	1,954,584.4	254.00	5.00	0.00	66	12.0	5.0	Y
Rec16	25	1	6,272,214.5	1,954,914.8	254.00	5.00	0.00	66	12.0	5.0	Y

**INPUT: RECEIVERS****Rancho Santa Fe Roundabouts**

Rec17	26	1	6,272,635.5	1,954,788.2	257.00	5.00	0.00	66	12.0	5.0	Y
Rec18	27	1	6,272,779.0	1,954,865.4	273.00	5.00	0.00	66	12.0	5.0	Y
Rec19	28	1	6,272,359.5	1,955,068.8	268.00	5.00	0.00	66	12.0	5.0	Y
Rec20	29	1	6,272,444.5	1,955,233.8	254.00	5.00	0.00	66	12.0	5.0	Y
Rec21	30	1	6,272,851.5	1,955,539.0	252.00	5.00	0.00	66	12.0	5.0	Y
Rec22	31	1	6,273,419.5	1,955,308.9	265.00	5.00	0.00	66	12.0	5.0	Y
Rec23	32	1	6,273,061.5	1,955,912.8	270.00	5.00	0.00	66	12.0	5.0	Y
Rec24	33	1	6,273,339.5	1,955,703.5	284.00	5.00	0.00	66	12.0	5.0	Y
Rec25	34	1	6,273,512.5	1,955,972.2	284.00	5.00	0.00	66	12.0	5.0	Y
Rec26	36	1	6,273,770.0	1,956,144.8	282.00	5.00	0.00	66	12.0	5.0	Y
Rec27	37	1	6,273,858.5	1,956,478.0	269.00	5.00	0.00	66	12.0	5.0	Y
Rec28	39	1	6,273,847.5	1,957,265.5	265.00	5.00	0.00	66	12.0	5.0	Y
Rec29	40	1	6,273,999.5	1,956,780.2	261.00	5.00	0.00	66	12.0	5.0	Y
Rec30	41	1	6,274,365.0	1,956,627.1	234.00	5.00	0.00	66	12.0	5.0	Y
Rec31	42	1	6,274,519.0	1,957,807.4	225.00	5.00	0.00	66	12.0	5.0	Y
Rec32	43	1	6,274,868.0	1,957,876.9	260.00	5.00	0.00	66	12.0	5.0	Y
Rec33	45	1	6,275,035.0	1,957,861.1	241.00	5.00	0.00	66	12.0	5.0	Y



INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point36	36	6,271,017.5	1,953,694.9	257.00	14.00	0.00	0	0		
									point37	37	6,270,988.0	1,953,724.4	257.00	14.00					
Barrier9	W	0.00	99.99	0.00			0.00		point38	38	6,271,049.0	1,953,872.5	257.00	14.00	0.00	0	0		
									point39	39	6,271,074.0	1,953,919.0	257.00	14.00	0.00	0	0		
									point40	40	6,271,158.0	1,953,868.5	257.00	14.00	0.00	0	0		
									point41	41	6,271,120.5	1,953,819.4	257.00	14.00					
Barrier10	W	0.00	99.99	0.00			0.00		point42	42	6,271,483.0	1,953,778.1	272.00	14.00	0.00	0	0		
									point43	43	6,271,432.5	1,953,837.2	272.00	14.00	0.00	0	0		
									point44	44	6,271,483.0	1,953,886.9	272.00	14.00					
Barrier11	W	0.00	99.99	0.00			0.00		point45	45	6,271,258.0	1,953,997.0	256.00	14.00	0.00	0	0		
									point46	46	6,271,284.0	1,953,964.9	256.00	14.00	0.00	0	0		
									point47	47	6,271,324.0	1,954,006.6	256.00	14.00	0.00	0	0		
									point48	48	6,271,338.5	1,953,992.2	256.00	14.00	0.00	0	0		
									point49	49	6,271,366.5	1,954,019.6	256.00	14.00	0.00	0	0		
									point50	50	6,271,324.5	1,954,068.4	256.00	14.00					
Barrier12	W	0.00	99.99	0.00			0.00		point51	51	6,271,344.0	1,954,184.6	250.00	14.00	0.00	0	0		
									point52	52	6,271,352.0	1,954,154.6	250.00	14.00	0.00	0	0		
									point53	53	6,271,472.5	1,954,186.0	250.00	14.00	0.00	0	0		
									point54	54	6,271,466.0	1,954,218.6	250.00	14.00					
Barrier13	W	0.00	99.99	0.00			0.00		point55	55	6,271,955.0	1,954,157.8	269.00	14.00	0.00	0	0		
									point56	56	6,271,921.5	1,954,194.2	269.00	14.00	0.00	0	0		
									point57	57	6,271,946.0	1,954,219.5	269.00	14.00	0.00	0	0		
									point58	58	6,271,953.5	1,954,212.1	269.00	14.00	0.00	0	0		
									point59	59	6,271,967.5	1,954,227.8	269.00	14.00	0.00	0	0		
									point60	60	6,271,967.0	1,954,249.5	269.00	14.00	0.00	0	0		
									point61	61	6,272,017.5	1,954,250.8	269.00	14.00	0.00	0	0		
									point63	63	6,272,020.5	1,954,222.5	269.00	14.00					
Barrier14	W	0.00	99.99	0.00			0.00		point64	64	6,271,756.0	1,954,534.2	254.00	14.00	0.00	0	0		
									point65	65	6,271,781.0	1,954,503.0	254.00	14.00	0.00	0	0		
									point66	66	6,271,813.5	1,954,536.5	254.00	14.00	0.00	0	0		
									point67	67	6,271,793.0	1,954,561.8	254.00	14.00					
Barrier15	W	0.00	99.99	0.00			0.00		point68	68	6,271,839.0	1,954,540.9	254.00	14.00	0.00	0	0		
									point69	69	6,271,857.5	1,954,520.4	254.00	14.00	0.00	0	0		
									point70	70	6,271,882.5	1,954,546.9	254.00	14.00	0.00	0	0		
									point71	71	6,271,864.0	1,954,564.8	254.00	14.00					
Barrier16	W	0.00	99.99	0.00			0.00		point72	72	6,271,872.5	1,954,607.5	254.00	14.00	0.00	0	0		
									point73	73	6,271,931.0	1,954,582.8	254.00	14.00	0.00	0	0		
									point74	74	6,271,940.5	1,954,602.8	254.00	14.00	0.00	0	0		
									point75	75	6,271,939.5	1,954,652.1	254.00	14.00	0.00	0	0		
									point76	76	6,271,950.0	1,954,666.2	254.00	14.00	0.00	0	0		
									point77	77	6,271,931.0	1,954,688.5	254.00	14.00					
Barrier17	W	0.00	99.99	0.00			0.00		point78	78	6,272,186.5	1,954,853.0	268.00	14.00	0.00	0	0		
									point79	79	6,272,210.0	1,954,829.5	268.00	14.00	0.00	0	0		
									point80	80	6,272,298.0	1,954,901.1	268.00	14.00	0.00	0	0		
									point81	81	6,272,290.0	1,954,931.6	268.00	14.00					
Barrier18	W	0.00	99.99	0.00			0.00		point82	82	6,272,375.5	1,954,994.5	268.00	14.00	0.00	0	0		
									point83	83	6,272,371.0	1,954,971.0	268.00	14.00	0.00	0	0		
									point84	84	6,272,397.0	1,954,964.0	268.00	14.00	0.00	0	0		
									point85	85	6,272,404.0	1,955,000.4	268.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point86	86	6,272,435.5	1,955,038.0	268.00	14.00	0.00	0	0			
									point87	87	6,272,467.5	1,955,038.0	268.00	14.00	0.00	0	0			
									point88	88	6,272,466.0	1,955,069.6	268.00	14.00						
Barrier19	W	0.00	99.99	0.00			0.00		point89	89	6,272,437.0	1,955,176.6	254.00	14.00	0.00	0	0			
									point90	90	6,272,486.0	1,955,153.1	254.00	14.00	0.00	0	0			
									point91	91	6,272,541.5	1,955,256.5	254.00	14.00	0.00	0	0			
									point92	92	6,272,478.0	1,955,287.0	254.00	14.00						
Barrier20	W	0.00	99.99	0.00			0.00		point93	93	6,272,595.5	1,954,786.0	275.00	14.00	0.00	0	0			
									point94	94	6,272,569.5	1,954,821.2	275.00	14.00	0.00	0	0			
									point95	95	6,272,588.5	1,954,840.0	275.00	14.00	0.00	0	0			
									point96	96	6,272,595.5	1,954,829.5	275.00	14.00	0.00	0	0			
									point97	97	6,272,641.0	1,954,864.8	275.00	14.00	0.00	0	0			
									point98	98	6,272,662.5	1,954,838.9	275.00	14.00						
Barrier21	W	0.00	99.99	0.00			0.00		point99	99	6,272,733.5	1,954,833.6	273.00	14.00	0.00	0	0			
									point100	100	6,272,681.5	1,954,882.9	273.00	14.00	0.00	0	0			
									point101	101	6,272,745.0	1,954,951.0	273.00	14.00	0.00	0	0			
									point102	102	6,272,800.5	1,954,902.9	273.00	14.00						
Barrier22	W	0.00	99.99	0.00			0.00		point103	103	6,273,393.5	1,955,191.9	265.00	14.00	0.00	0	0			
									point104	104	6,273,332.5	1,955,231.8	265.00	14.00	0.00	0	0			
									point105	105	6,273,337.0	1,955,317.5	265.00	14.00	0.00	0	0			
									point106	106	6,273,351.5	1,955,314.0	265.00	14.00	0.00	0	0			
									point107	107	6,273,355.0	1,955,348.1	265.00	14.00	0.00	0	0			
									point108	108	6,273,389.0	1,955,345.8	265.00	14.00						
Barrier23	W	0.00	99.99	0.00			0.00		point109	109	6,273,346.0	1,955,638.2	284.00	14.00	0.00	0	0			
									point110	110	6,273,288.0	1,955,682.4	284.00	14.00	0.00	0	0			
									point111	111	6,273,263.0	1,955,689.0	284.00	14.00	0.00	0	0			
									point112	112	6,273,271.0	1,955,710.1	284.00	14.00	0.00	0	0			
									point113	113	6,273,290.0	1,955,705.2	284.00	14.00	0.00	0	0			
									point114	114	6,273,297.5	1,955,717.0	284.00	14.00	0.00	0	0			
									point115	115	6,273,287.5	1,955,724.5	284.00	14.00	0.00	0	0			
									point116	116	6,273,305.0	1,955,751.2	284.00	14.00	0.00	0	0			
									point117	117	6,273,318.0	1,955,744.8	284.00	14.00	0.00	0	0			
									point119	119	6,273,326.5	1,955,756.1	284.00	14.00	0.00	0	0			
									point120	120	6,273,350.5	1,955,739.2	284.00	14.00	0.00	0	0			
									point121	121	6,273,363.0	1,955,760.0	284.00	14.00	0.00	0	0			
									point122	122	6,273,403.0	1,955,736.9	284.00	14.00						
Barrier25	W	0.00	99.99	0.00			0.00		point126	126	6,273,055.5	1,955,839.8	270.00	14.00	0.00	0	0			
									point127	127	6,273,077.5	1,955,817.5	270.00	14.00	0.00	0	0			
									point128	128	6,273,092.0	1,955,831.4	270.00	14.00	0.00	0	0			
									point129	129	6,273,117.5	1,955,803.6	270.00	14.00	0.00	0	0			
									point130	130	6,273,147.5	1,955,830.8	270.00	14.00	0.00	0	0			
									point131	131	6,273,124.5	1,955,858.1	270.00	14.00	0.00	0	0			
									point132	132	6,273,139.5	1,955,872.9	270.00	14.00	0.00	0	0			
									point133	133	6,273,119.5	1,955,898.1	270.00	14.00						
Barrier26	W	0.00	99.99	0.00			0.00		point134	134	6,273,540.0	1,955,874.0	284.00	14.00	0.00	0	0			
									point135	135	6,273,508.0	1,955,875.9	284.00	14.00	0.00	0	0			
									point136	136	6,273,509.0	1,955,902.0	284.00	14.00	0.00	0	0			
									point137	137	6,273,465.5	1,955,928.2	284.00	14.00	0.00	0	0			
									point138	138	6,273,433.5	1,955,912.8	284.00	14.00	0.00	0	0			

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point139	139	6,273,419.0	1,955,939.9	284.00	14.00	0.00	0	0			
									point140	140	6,273,451.0	1,955,955.4	284.00	14.00	0.00	0	0			
									point141	141	6,273,445.0	1,955,967.9	284.00	14.00	0.00	0	0			
									point143	143	6,273,463.5	1,955,977.6	284.00	14.00						
Barrier27	W	0.00	99.99	0.00			0.00		point144	144	6,273,821.5	1,956,166.0	282.00	14.00	0.00	0	0			
									point145	145	6,273,821.5	1,956,218.4	282.00	14.00	0.00	0	0			
									point146	146	6,273,754.5	1,956,221.2	282.00	14.00	0.00	0	0			
									point147	147	6,273,706.0	1,956,249.4	282.00	14.00	0.00	0	0			
									point148	148	6,273,685.0	1,956,214.5	282.00	14.00						
Barrier28	W	0.00	99.99	0.00			0.00		point149	149	6,273,751.5	1,956,487.6	269.00	14.00	0.00	0	0			
									point150	150	6,273,742.0	1,956,447.9	269.00	14.00	0.00	0	0			
									point151	151	6,273,816.5	1,956,433.4	269.00	14.00	0.00	0	0			
									point152	152	6,273,808.0	1,956,392.8	269.00	14.00	0.00	0	0			
									point153	153	6,273,877.5	1,956,366.5	269.00	14.00						
Barrier29	W	0.00	99.99	0.00			0.00		point154	154	6,274,322.5	1,956,673.6	234.00	14.00	0.00	0	0			
									point155	155	6,274,303.0	1,956,711.4	234.00	14.00	0.00	0	0			
									point156	156	6,274,332.0	1,956,727.9	234.00	14.00	0.00	0	0			
									point157	157	6,274,356.0	1,956,690.1	234.00	14.00	0.00	0	0			
									point158	158	6,274,380.5	1,956,702.8	234.00	14.00	0.00	0	0			
									point159	159	6,274,396.0	1,956,673.6	234.00	14.00	0.00	0	0			
									point160	160	6,274,447.5	1,956,703.6	234.00	14.00	0.00	0	0			
									point161	161	6,274,464.5	1,956,679.5	234.00	14.00						
Barrier30	W	0.00	99.99	0.00			0.00		point162	162	6,274,467.0	1,957,812.8	225.00	14.00	0.00	0	0			
									point163	163	6,274,440.5	1,957,760.0	225.00	14.00	0.00	0	0			
									point164	164	6,274,472.5	1,957,734.5	225.00	14.00	0.00	0	0			
									point165	165	6,274,436.5	1,957,672.5	225.00	14.00	0.00	0	0			
									point166	166	6,274,491.0	1,957,641.5	225.00	14.00	0.00	0	0			
									point167	167	6,274,547.0	1,957,755.4	225.00	14.00						
Barrier31	W	0.00	99.99	0.00			0.00		point168	168	6,274,821.5	1,957,857.2	260.00	14.00	0.00	0	0			
									point170	170	6,274,813.5	1,957,835.4	260.00	14.00	0.00	0	0			
									point171	171	6,274,834.5	1,957,825.9	260.00	14.00	0.00	0	0			
									point172	172	6,274,963.5	1,957,779.2	260.00	14.00	0.00	0	0			
									point173	173	6,274,973.5	1,957,811.9	260.00	14.00						
Barrier32	W	0.00	99.99	0.00			0.00		point174	174	6,275,031.5	1,957,833.2	241.00	14.00	0.00	0	0			
									point175	175	6,275,031.5	1,957,801.9	241.00	14.00	0.00	0	0			
									point176	176	6,275,099.0	1,957,806.6	241.00	14.00	0.00	0	0			
									point177	177	6,275,096.5	1,957,842.4	241.00	14.00						



**INPUT: TERRAIN LINES**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007		
Maddux, B		TNM 2.5		
<b>INPUT: TERRAIN LINES</b>				
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>		
<b>RUN:</b>		<b>2030 No Build</b>		
<b>Terrain Line</b>	<b>Points</b>			
<b>Name</b>	<b>No.</b>	<b>Coordinates (ground)</b>		
		<b>X</b>	<b>Y</b>	<b>Z</b>
		ft	ft	ft
Terrain Line1	1	6,270,981.0	1,953,516.2	260.00
	2	6,270,827.0	1,953,379.1	260.00
	3	6,270,824.5	1,953,345.4	260.00
	4	6,270,827.0	1,953,323.8	260.00
	5	6,270,843.5	1,953,299.8	260.00
	6	6,270,916.0	1,953,217.9	260.00
Terrain Line2	7	6,270,715.0	1,953,284.1	250.00
	8	6,270,720.5	1,953,248.9	250.00
	9	6,270,725.5	1,953,167.4	250.00
	10	6,270,722.5	1,953,130.2	250.00
	11	6,270,730.0	1,953,084.9	250.00
	12	6,270,709.5	1,952,980.1	250.00
Terrain Line3	13	6,273,954.0	1,956,760.1	261.00
	14	6,274,007.0	1,956,800.2	261.00
	15	6,274,036.0	1,956,763.2	261.00



## **APPENDIX F**

### **SAMPLES OF FHWA TNM INPUT AND OUTPUT DATA FOR 2030 BUILD ALTERNATIVES**



**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007												
Maddux, B		TNM 2.5												
		Calculated with TNM 2.5												
<b>RESULTS: SOUND LEVELS</b>														
<b>PROJECT/CONTRACT:</b>		Rancho Santa Fe Roundabouts												
<b>RUN:</b>		2030 with Roundabouts												
<b>BARRIER DESIGN:</b>		INPUT HEIGHTS												
<b>ATMOSPHERICS:</b>		68 deg F, 50% RH												
<b>Receiver</b>														
<b>Name</b>	<b>No.</b>	<b>#DUs</b>	<b>Existing</b>	<b>No Barrier</b>			<b>Increase over existing</b>			<b>Type</b>	<b>With Barrier</b>			
			<b>LAeq1h</b>	<b>LAeq1h</b>			<b>Calculated</b>		<b>Crit'n</b>	<b>Impact</b>	<b>Calculated</b>		<b>Noise Reduction</b>	
				<b>Calculated</b>	<b>Crit'n</b>		<b>Calculated</b>	<b>Crit'n</b>			<b>LAeq1h</b>	<b>Calculated</b>	<b>Goal</b>	
								<b>Sub'l Inc</b>					<b>Calculated</b>	
													<b>minus</b>	
													<b>Goal</b>	
			<b>dBA</b>	<b>dBA</b>	<b>dBA</b>		<b>dB</b>	<b>dB</b>			<b>dBA</b>	<b>dB</b>	<b>dB</b>	<b>dBA</b>
MS 1	1	1	0.0	61.7	66		61.7	12	----		61.7	0.0	5	-5.0
MS 2	2	1	0.0	61.7	66		61.7	12	----		61.7	0.0	5	-5.0
MS 3	3	1	0.0	65.8	66		65.8	12	----		65.8	0.0	5	-5.0
MS 4	4	1	0.0	67.6	66		67.6	12	Snd Lvl		67.6	0.0	5	-5.0
MS 5	5	1	0.0	64.9	66		64.9	12	----		64.9	0.0	5	-5.0
MS 6	6	1	0.0	65.4	66		65.4	12	----		65.4	0.0	5	-5.0
Rec1	8	1	0.0	53.0	66		53.0	12	----		53.0	0.0	5	-5.0
Rec2	9	1	0.0	55.7	66		55.7	12	----		55.7	0.0	5	-5.0
Rec3	10	1	0.0	57.0	66		57.0	12	----		57.0	0.0	5	-5.0
Rec4	11	1	0.0	50.6	66		50.6	12	----		50.6	0.0	5	-5.0
Rec5	12	1	0.0	64.3	66		64.3	12	----		64.3	0.0	5	-5.0
Rec6	13	1	0.0	52.9	66		52.9	12	----		52.9	0.0	5	-5.0
Rec7	15	1	0.0	55.6	66		55.6	12	----		55.6	0.0	5	-5.0
Rec8	16	1	0.0	60.1	66		60.1	12	----		60.1	0.0	5	-5.0
Rec9	17	1	0.0	63.0	66		63.0	12	----		63.0	0.0	5	-5.0
Rec10	18	1	0.0	65.4	66		65.4	12	----		65.4	0.0	5	-5.0
Rec11	19	1	0.0	61.8	66		61.8	12	----		61.8	0.0	5	-5.0
Rec12	20	1	0.0	57.9	66		57.9	12	----		57.9	0.0	5	-5.0
Rec13	21	1	0.0	54.2	66		54.2	12	----		54.2	0.0	5	-5.0
Rec14	22	1	0.0	50.9	66		50.9	12	----		50.9	0.0	5	-5.0
Rec15	23	1	0.0	57.6	66		57.6	12	----		57.6	0.0	5	-5.0
Rec16	25	1	0.0	53.5	66		53.5	12	----		53.5	0.0	5	-5.0
Rec17	26	1	0.0	51.7	66		51.7	12	----		51.7	0.0	5	-5.0
Rec18	27	1	0.0	49.3	66		49.3	12	----		49.3	0.0	5	-5.0

**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

Rec19	28	1	0.0	59.6	66	59.6	12	----	59.6	0.0	5	-5.0
Rec20	29	1	0.0	53.7	66	53.7	12	----	53.7	0.0	5	-5.0
Rec21	30	1	0.0	59.4	66	59.4	12	----	59.4	0.0	5	-5.0
Rec22	31	1	0.0	49.4	66	49.4	12	----	49.4	0.0	5	-5.0
Rec23	32	1	0.0	57.4	66	57.4	12	----	57.4	0.0	5	-5.0
Rec24	33	1	0.0	52.3	66	52.3	12	----	52.3	0.0	5	-5.0
Rec25	34	1	0.0	60.7	66	60.7	12	----	60.7	0.0	5	-5.0
Rec26	36	1	0.0	53.1	66	53.1	12	----	53.1	0.0	5	-5.0
Rec27	37	1	0.0	57.4	66	57.4	12	----	57.4	0.0	5	-5.0
Rec28	39	1	0.0	53.1	66	53.1	12	----	53.1	0.0	5	-5.0
Rec29	40	1	0.0	64.1	66	64.1	12	----	64.1	0.0	5	-5.0
Rec30	41	1	0.0	48.3	66	48.3	12	----	48.3	0.0	5	-5.0
Rec31	42	1	0.0	49.9	66	49.9	12	----	49.9	0.0	5	-5.0
Rec32	43	1	0.0	55.4	66	55.4	12	----	55.4	0.0	5	-5.0
Rec33	45	1	0.0	59.3	66	59.3	12	----	59.3	0.0	5	-5.0
<b>Dwelling Units</b>		<b># DUs</b>	<b>Noise Reduction</b>									
			<b>Min</b>	<b>Avg</b>	<b>Max</b>							
			<b>dB</b>	<b>dB</b>	<b>dB</b>							
All Selected		39	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: ROADWAYS

Rancho Santa Fe Roundabouts

EDAW, Inc. Maddux, B				13 June 2007 TNM 2.5							
INPUT: ROADWAYS				Rancho Santa Fe Roundabouts			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:				Rancho Santa Fe Roundabouts							
RUN:				2030 with Roundabouts							
Roadway Name	Width	Points Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Paseo Delicias s/o Via de la Valle	30.0	point2	2	6,269,581.0	1,952,308.0	274.00				Average	
		point3	3	6,270,718.5	1,953,348.9	252.00					
Via de la Valle	31.0	point43	43	6,270,804.5	1,951,410.6	151.00				Average	
		point44	44	6,270,768.0	1,951,917.5	179.00				Average	
		point45	45	6,270,768.0	1,952,134.8	188.00				Average	
		point46	46	6,270,688.5	1,952,551.0	214.00				Average	
		point47	47	6,270,768.0	1,953,083.1	243.00				Average	
		point48	48	6,270,768.0	1,953,195.4	255.00				Average	
		point49	49	6,270,753.5	1,953,329.4	252.00				Average	
		point50	50	6,270,735.5	1,953,361.9	252.00				Average	
Paseo Delicias-Via de la Valle to El Mont	30.0	point51	51	6,270,718.5	1,953,348.9	252.00	Signal	25.00	100	Average	
		point4	4	6,271,260.5	1,953,848.0	263.00				Average	
		point5	5	6,273,013.0	1,955,453.8	270.00				Average	
		point6	6	6,273,068.5	1,955,519.1	272.00				Average	
		point7	7	6,273,171.0	1,955,652.5	276.00				Average	
		point8	8	6,273,270.0	1,955,853.8	285.00				Average	
		point9	9	6,273,301.0	1,955,932.2	285.00				Average	
Paseo Delicias-Montevideo to Norte	30.0	point52	52	6,273,301.0	1,955,932.2	285.00	Signal	25.00	100	Average	
		point10	10	6,273,411.0	1,956,148.2	269.00				Average	
		point11	11	6,273,676.0	1,956,587.4	242.00				Average	
		point12	12	6,273,748.0	1,956,688.1	240.00				Average	
		point13	13	6,273,849.0	1,956,783.2	230.00				Average	
		point14	14	6,273,973.0	1,956,877.8	223.00				Average	
		point15	15	6,275,126.5	1,957,696.5	221.00				Average	
		point16	16	6,275,269.5	1,957,777.9	212.00				Average	

**INPUT: ROADWAYS**

**Rancho Santa Fe Roundabouts**

		point17	17	6,275,444.5	1,957,865.5	189.00					
Paseo Delicias-w/o Norte	30.0	point53	53	6,275,444.5	1,957,865.5	189.00	Signal	25.00	100	Average	
		point18	18	6,275,506.5	1,957,885.8	189.00				Average	
		point19	19	6,275,749.5	1,957,949.6	199.00				Average	
		point20	20	6,275,912.5	1,957,976.9	202.00				Average	
		point21	21	6,276,279.0	1,958,014.4	215.00				Average	
		point22	22	6,276,390.0	1,958,015.1	217.00				Average	
		point23	23	6,276,473.5	1,958,009.1	219.00				Average	
		point24	24	6,276,592.5	1,957,986.2	230.00				Average	
		point25	25	6,277,018.5	1,957,855.8	235.00					
Camino del Norte	26.0	point42	42	6,275,456.0	1,957,886.0	189.00	Stop	0.00	100	Average	
		point39	39	6,275,415.0	1,958,298.4	211.00				Average	
		point38	38	6,275,425.0	1,958,376.2	212.00				Average	
		point37	37	6,275,439.0	1,958,439.9	213.00				Average	
		point36	36	6,275,503.0	1,958,589.9	224.00				Average	
		point35	35	6,275,521.5	1,958,644.9	225.00				Average	
		point32	32	6,275,523.5	1,958,714.8	227.00				Average	
		point31	31	6,275,511.0	1,958,782.4	230.00				Average	
		point30	30	6,275,467.5	1,958,919.2	237.00				Average	
		point54	54	6,274,969.5	1,960,128.6	296.00				Average	
		point29	29	6,274,711.5	1,960,742.8	280.00				Average	
		point28	28	6,274,658.5	1,960,762.1	279.00				Average	
		point27	27	6,274,605.5	1,960,781.4	275.00				Average	
		point26	26	6,273,466.0	1,960,795.9	256.00					
Paseo Delicias-Via de la Valle to El Mont::point51 Flow con											
Paseo Delicias-Via de la Valle to El Mont::point4 a 25 mph											
Paseo Delicias-Montevideo to Norte::point52 Flow control fo											
Paseo Delicias-Montevideo to Norte::point10 a 25 mph contro											
Paseo Delicias-w/o Norte::point53 Flow control for roundabo											
Paseo Delicias-w/o Norte::point18 a 25 mph control speed											



**INPUT: RECEIVERS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.							13 June 2007				
Maddux, B							TNM 2.5				
<b>INPUT: RECEIVERS</b>											
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>									
<b>RUN:</b>		<b>2030 with Roundabouts</b>									
<b>Receiver</b>											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
MS 1	1	1	6,270,938.0	1,953,330.0	263.00	5.00	0.00	66	12.0	5.0	Y
MS 2	2	1	6,270,452.5	1,953,160.0	252.00	5.00	0.00	66	12.0	5.0	Y
MS 3	3	1	6,270,762.5	1,953,523.0	248.00	5.00	0.00	66	12.0	5.0	Y
MS 4	4	1	6,273,255.0	1,956,015.0	277.00	5.00	0.00	66	12.0	5.0	Y
MS 5	5	1	6,273,050.5	1,955,645.0	265.00	5.00	0.00	66	12.0	5.0	Y
MS 6	6	1	6,275,262.5	1,957,705.0	203.00	5.00	0.00	66	12.0	5.0	Y
Rec1	8	1	6,270,388.0	1,952,828.2	250.00	5.00	0.00	66	12.0	5.0	Y
Rec2	9	1	6,270,304.5	1,953,105.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec3	10	1	6,270,531.0	1,952,988.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec4	11	1	6,270,443.5	1,953,327.4	245.00	5.00	0.00	66	12.0	5.0	Y
Rec5	12	1	6,270,694.5	1,953,140.1	250.00	5.00	0.00	66	12.0	5.0	Y
Rec6	13	1	6,270,587.0	1,953,400.6	245.00	5.00	0.00	66	12.0	5.0	Y
Rec7	15	1	6,270,900.5	1,953,790.0	245.00	5.00	0.00	66	12.0	5.0	Y
Rec8	16	1	6,270,947.0	1,953,722.5	257.00	5.00	0.00	66	12.0	5.0	Y
Rec9	17	1	6,271,054.5	1,953,849.9	257.00	5.00	0.00	66	12.0	5.0	Y
Rec10	18	1	6,271,215.5	1,953,616.6	267.00	5.00	0.00	66	12.0	5.0	Y
Rec11	19	1	6,271,351.5	1,954,068.5	256.00	5.00	0.00	66	12.0	5.0	Y
Rec12	20	1	6,271,500.0	1,953,828.9	272.00	5.00	0.00	66	12.0	5.0	Y
Rec13	21	1	6,271,365.5	1,954,196.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec14	22	1	6,271,998.5	1,954,187.4	269.00	5.00	0.00	66	12.0	5.0	Y
Rec15	23	1	6,271,831.0	1,954,584.4	254.00	5.00	0.00	66	12.0	5.0	Y
Rec16	25	1	6,272,214.5	1,954,914.8	254.00	5.00	0.00	66	12.0	5.0	Y

**INPUT: RECEIVERS****Rancho Santa Fe Roundabouts**

Rec17	26	1	6,272,635.5	1,954,788.2	257.00	5.00	0.00	66	12.0	5.0	Y
Rec18	27	1	6,272,779.0	1,954,865.4	273.00	5.00	0.00	66	12.0	5.0	Y
Rec19	28	1	6,272,359.5	1,955,068.8	268.00	5.00	0.00	66	12.0	5.0	Y
Rec20	29	1	6,272,444.5	1,955,233.8	254.00	5.00	0.00	66	12.0	5.0	Y
Rec21	30	1	6,272,851.5	1,955,539.0	252.00	5.00	0.00	66	12.0	5.0	Y
Rec22	31	1	6,273,419.5	1,955,308.9	265.00	5.00	0.00	66	12.0	5.0	Y
Rec23	32	1	6,273,061.5	1,955,912.8	270.00	5.00	0.00	66	12.0	5.0	Y
Rec24	33	1	6,273,339.5	1,955,703.5	284.00	5.00	0.00	66	12.0	5.0	Y
Rec25	34	1	6,273,512.5	1,955,972.2	284.00	5.00	0.00	66	12.0	5.0	Y
Rec26	36	1	6,273,770.0	1,956,144.8	282.00	5.00	0.00	66	12.0	5.0	Y
Rec27	37	1	6,273,858.5	1,956,478.0	269.00	5.00	0.00	66	12.0	5.0	Y
Rec28	39	1	6,273,847.5	1,957,265.5	265.00	5.00	0.00	66	12.0	5.0	Y
Rec29	40	1	6,273,999.5	1,956,780.2	261.00	5.00	0.00	66	12.0	5.0	Y
Rec30	41	1	6,274,365.0	1,956,627.1	234.00	5.00	0.00	66	12.0	5.0	Y
Rec31	42	1	6,274,519.0	1,957,807.4	225.00	5.00	0.00	66	12.0	5.0	Y
Rec32	43	1	6,274,868.0	1,957,876.9	260.00	5.00	0.00	66	12.0	5.0	Y
Rec33	45	1	6,275,035.0	1,957,861.1	241.00	5.00	0.00	66	12.0	5.0	Y



INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point36	36	6,271,017.5	1,953,694.9	257.00	14.00	0.00	0	0		
									point37	37	6,270,988.0	1,953,724.4	257.00	14.00					
Barrier9	W	0.00	99.99	0.00			0.00		point38	38	6,271,049.0	1,953,872.5	257.00	14.00	0.00	0	0		
									point39	39	6,271,074.0	1,953,919.0	257.00	14.00	0.00	0	0		
									point40	40	6,271,158.0	1,953,868.5	257.00	14.00	0.00	0	0		
									point41	41	6,271,120.5	1,953,819.4	257.00	14.00					
Barrier10	W	0.00	99.99	0.00			0.00		point42	42	6,271,483.0	1,953,778.1	272.00	14.00	0.00	0	0		
									point43	43	6,271,432.5	1,953,837.2	272.00	14.00	0.00	0	0		
									point44	44	6,271,483.0	1,953,886.9	272.00	14.00					
Barrier11	W	0.00	99.99	0.00			0.00		point45	45	6,271,258.0	1,953,997.0	256.00	14.00	0.00	0	0		
									point46	46	6,271,284.0	1,953,964.9	256.00	14.00	0.00	0	0		
									point47	47	6,271,324.0	1,954,006.6	256.00	14.00	0.00	0	0		
									point48	48	6,271,338.5	1,953,992.2	256.00	14.00	0.00	0	0		
									point49	49	6,271,366.5	1,954,019.6	256.00	14.00	0.00	0	0		
									point50	50	6,271,324.5	1,954,068.4	256.00	14.00					
Barrier12	W	0.00	99.99	0.00			0.00		point51	51	6,271,344.0	1,954,184.6	250.00	14.00	0.00	0	0		
									point52	52	6,271,352.0	1,954,154.6	250.00	14.00	0.00	0	0		
									point53	53	6,271,472.5	1,954,186.0	250.00	14.00	0.00	0	0		
									point54	54	6,271,466.0	1,954,218.6	250.00	14.00					
Barrier13	W	0.00	99.99	0.00			0.00		point55	55	6,271,955.0	1,954,157.8	269.00	14.00	0.00	0	0		
									point56	56	6,271,921.5	1,954,194.2	269.00	14.00	0.00	0	0		
									point57	57	6,271,946.0	1,954,219.5	269.00	14.00	0.00	0	0		
									point58	58	6,271,953.5	1,954,212.1	269.00	14.00	0.00	0	0		
									point59	59	6,271,967.5	1,954,227.8	269.00	14.00	0.00	0	0		
									point60	60	6,271,967.0	1,954,249.5	269.00	14.00	0.00	0	0		
									point61	61	6,272,017.5	1,954,250.8	269.00	14.00	0.00	0	0		
									point63	63	6,272,020.5	1,954,222.5	269.00	14.00					
Barrier14	W	0.00	99.99	0.00			0.00		point64	64	6,271,756.0	1,954,534.2	254.00	14.00	0.00	0	0		
									point65	65	6,271,781.0	1,954,503.0	254.00	14.00	0.00	0	0		
									point66	66	6,271,813.5	1,954,536.5	254.00	14.00	0.00	0	0		
									point67	67	6,271,793.0	1,954,561.8	254.00	14.00					
Barrier15	W	0.00	99.99	0.00			0.00		point68	68	6,271,839.0	1,954,540.9	254.00	14.00	0.00	0	0		
									point69	69	6,271,857.5	1,954,520.4	254.00	14.00	0.00	0	0		
									point70	70	6,271,882.5	1,954,546.9	254.00	14.00	0.00	0	0		
									point71	71	6,271,864.0	1,954,564.8	254.00	14.00					
Barrier16	W	0.00	99.99	0.00			0.00		point72	72	6,271,872.5	1,954,607.5	254.00	14.00	0.00	0	0		
									point73	73	6,271,931.0	1,954,582.8	254.00	14.00	0.00	0	0		
									point74	74	6,271,940.5	1,954,602.8	254.00	14.00	0.00	0	0		
									point75	75	6,271,939.5	1,954,652.1	254.00	14.00	0.00	0	0		
									point76	76	6,271,950.0	1,954,666.2	254.00	14.00	0.00	0	0		
									point77	77	6,271,931.0	1,954,688.5	254.00	14.00					
Barrier17	W	0.00	99.99	0.00			0.00		point78	78	6,272,186.5	1,954,853.0	268.00	14.00	0.00	0	0		
									point79	79	6,272,210.0	1,954,829.5	268.00	14.00	0.00	0	0		
									point80	80	6,272,298.0	1,954,901.1	268.00	14.00	0.00	0	0		
									point81	81	6,272,290.0	1,954,931.6	268.00	14.00					
Barrier18	W	0.00	99.99	0.00			0.00		point82	82	6,272,375.5	1,954,994.5	268.00	14.00	0.00	0	0		
									point83	83	6,272,371.0	1,954,971.0	268.00	14.00	0.00	0	0		
									point84	84	6,272,397.0	1,954,964.0	268.00	14.00	0.00	0	0		
									point85	85	6,272,404.0	1,955,000.4	268.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point86	86	6,272,435.5	1,955,038.0	268.00	14.00	0.00	0	0		
									point87	87	6,272,467.5	1,955,038.0	268.00	14.00	0.00	0	0		
Barrier19	W	0.00	99.99	0.00			0.00		point88	88	6,272,466.0	1,955,069.6	268.00	14.00					
									point89	89	6,272,437.0	1,955,176.6	254.00	14.00	0.00	0	0		
									point90	90	6,272,486.0	1,955,153.1	254.00	14.00	0.00	0	0		
									point91	91	6,272,541.5	1,955,256.5	254.00	14.00	0.00	0	0		
									point92	92	6,272,478.0	1,955,287.0	254.00	14.00					
Barrier20	W	0.00	99.99	0.00			0.00		point93	93	6,272,595.5	1,954,786.0	275.00	14.00	0.00	0	0		
									point94	94	6,272,569.5	1,954,821.2	275.00	14.00	0.00	0	0		
									point95	95	6,272,588.5	1,954,840.0	275.00	14.00	0.00	0	0		
									point96	96	6,272,595.5	1,954,829.5	275.00	14.00	0.00	0	0		
									point97	97	6,272,641.0	1,954,864.8	275.00	14.00	0.00	0	0		
									point98	98	6,272,662.5	1,954,838.9	275.00	14.00					
Barrier21	W	0.00	99.99	0.00			0.00		point99	99	6,272,733.5	1,954,833.6	273.00	14.00	0.00	0	0		
									point100	100	6,272,681.5	1,954,882.9	273.00	14.00	0.00	0	0		
									point101	101	6,272,745.0	1,954,951.0	273.00	14.00	0.00	0	0		
									point102	102	6,272,800.5	1,954,902.9	273.00	14.00					
Barrier22	W	0.00	99.99	0.00			0.00		point103	103	6,273,393.5	1,955,191.9	265.00	14.00	0.00	0	0		
									point104	104	6,273,332.5	1,955,231.8	265.00	14.00	0.00	0	0		
									point105	105	6,273,337.0	1,955,317.5	265.00	14.00	0.00	0	0		
									point106	106	6,273,351.5	1,955,314.0	265.00	14.00	0.00	0	0		
									point107	107	6,273,355.0	1,955,348.1	265.00	14.00	0.00	0	0		
									point108	108	6,273,389.0	1,955,345.8	265.00	14.00					
Barrier23	W	0.00	99.99	0.00			0.00		point109	109	6,273,346.0	1,955,638.2	284.00	14.00	0.00	0	0		
									point110	110	6,273,288.0	1,955,682.4	284.00	14.00	0.00	0	0		
									point111	111	6,273,263.0	1,955,689.0	284.00	14.00	0.00	0	0		
									point112	112	6,273,271.0	1,955,710.1	284.00	14.00	0.00	0	0		
									point113	113	6,273,290.0	1,955,705.2	284.00	14.00	0.00	0	0		
									point114	114	6,273,297.5	1,955,717.0	284.00	14.00	0.00	0	0		
									point115	115	6,273,287.5	1,955,724.5	284.00	14.00	0.00	0	0		
									point116	116	6,273,305.0	1,955,751.2	284.00	14.00	0.00	0	0		
									point117	117	6,273,318.0	1,955,744.8	284.00	14.00	0.00	0	0		
									point119	119	6,273,326.5	1,955,756.1	284.00	14.00	0.00	0	0		
									point120	120	6,273,350.5	1,955,739.2	284.00	14.00	0.00	0	0		
									point121	121	6,273,363.0	1,955,760.0	284.00	14.00	0.00	0	0		
									point122	122	6,273,403.0	1,955,736.9	284.00	14.00					
Barrier25	W	0.00	99.99	0.00			0.00		point126	126	6,273,055.5	1,955,839.8	270.00	14.00	0.00	0	0		
									point127	127	6,273,077.5	1,955,817.5	270.00	14.00	0.00	0	0		
									point128	128	6,273,092.0	1,955,831.4	270.00	14.00	0.00	0	0		
									point129	129	6,273,117.5	1,955,803.6	270.00	14.00	0.00	0	0		
									point130	130	6,273,147.5	1,955,830.8	270.00	14.00	0.00	0	0		
									point131	131	6,273,124.5	1,955,858.1	270.00	14.00	0.00	0	0		
									point132	132	6,273,139.5	1,955,872.9	270.00	14.00	0.00	0	0		
									point133	133	6,273,119.5	1,955,898.1	270.00	14.00					
Barrier26	W	0.00	99.99	0.00			0.00		point134	134	6,273,540.0	1,955,874.0	284.00	14.00	0.00	0	0		
									point135	135	6,273,508.0	1,955,875.9	284.00	14.00	0.00	0	0		
									point136	136	6,273,509.0	1,955,902.0	284.00	14.00	0.00	0	0		
									point137	137	6,273,465.5	1,955,928.2	284.00	14.00	0.00	0	0		
									point138	138	6,273,433.5	1,955,912.8	284.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point139	139	6,273,419.0	1,955,939.9	284.00	14.00	0.00	0	0			
									point140	140	6,273,451.0	1,955,955.4	284.00	14.00	0.00	0	0			
									point141	141	6,273,445.0	1,955,967.9	284.00	14.00	0.00	0	0			
									point143	143	6,273,463.5	1,955,977.6	284.00	14.00						
Barrier27	W	0.00	99.99	0.00			0.00		point144	144	6,273,821.5	1,956,166.0	282.00	14.00	0.00	0	0			
									point145	145	6,273,821.5	1,956,218.4	282.00	14.00	0.00	0	0			
									point146	146	6,273,754.5	1,956,221.2	282.00	14.00	0.00	0	0			
									point147	147	6,273,706.0	1,956,249.4	282.00	14.00	0.00	0	0			
									point148	148	6,273,685.0	1,956,214.5	282.00	14.00						
Barrier28	W	0.00	99.99	0.00			0.00		point149	149	6,273,751.5	1,956,487.6	269.00	14.00	0.00	0	0			
									point150	150	6,273,742.0	1,956,447.9	269.00	14.00	0.00	0	0			
									point151	151	6,273,816.5	1,956,433.4	269.00	14.00	0.00	0	0			
									point152	152	6,273,808.0	1,956,392.8	269.00	14.00	0.00	0	0			
									point153	153	6,273,877.5	1,956,366.5	269.00	14.00						
Barrier29	W	0.00	99.99	0.00			0.00		point154	154	6,274,322.5	1,956,673.6	234.00	14.00	0.00	0	0			
									point155	155	6,274,303.0	1,956,711.4	234.00	14.00	0.00	0	0			
									point156	156	6,274,332.0	1,956,727.9	234.00	14.00	0.00	0	0			
									point157	157	6,274,356.0	1,956,690.1	234.00	14.00	0.00	0	0			
									point158	158	6,274,380.5	1,956,702.8	234.00	14.00	0.00	0	0			
									point159	159	6,274,396.0	1,956,673.6	234.00	14.00	0.00	0	0			
									point160	160	6,274,447.5	1,956,703.6	234.00	14.00	0.00	0	0			
									point161	161	6,274,464.5	1,956,679.5	234.00	14.00						
Barrier30	W	0.00	99.99	0.00			0.00		point162	162	6,274,467.0	1,957,812.8	225.00	14.00	0.00	0	0			
									point163	163	6,274,440.5	1,957,760.0	225.00	14.00	0.00	0	0			
									point164	164	6,274,472.5	1,957,734.5	225.00	14.00	0.00	0	0			
									point165	165	6,274,436.5	1,957,672.5	225.00	14.00	0.00	0	0			
									point166	166	6,274,491.0	1,957,641.5	225.00	14.00	0.00	0	0			
									point167	167	6,274,547.0	1,957,755.4	225.00	14.00						
Barrier31	W	0.00	99.99	0.00			0.00		point168	168	6,274,821.5	1,957,857.2	260.00	14.00	0.00	0	0			
									point170	170	6,274,813.5	1,957,835.4	260.00	14.00	0.00	0	0			
									point171	171	6,274,834.5	1,957,825.9	260.00	14.00	0.00	0	0			
									point172	172	6,274,963.5	1,957,779.2	260.00	14.00	0.00	0	0			
									point173	173	6,274,973.5	1,957,811.9	260.00	14.00						
Barrier32	W	0.00	99.99	0.00			0.00		point174	174	6,275,031.5	1,957,833.2	241.00	14.00	0.00	0	0			
									point175	175	6,275,031.5	1,957,801.9	241.00	14.00	0.00	0	0			
									point176	176	6,275,099.0	1,957,806.6	241.00	14.00	0.00	0	0			
									point177	177	6,275,096.5	1,957,842.4	241.00	14.00						

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007										
Maddux, B		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		Rancho Santa Fe Roundabouts										
RUN:		2030 with Roundabouts										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos									
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Paseo Delicias s/o Via de la Valle	point2	2	651	25	19	25	10	25	0	0	0	0
	point3	3										
Via de la Valle	point43	43	1302	45	39	45	19	45	0	0	0	0
	point44	44	1302	45	39	45	19	45	0	0	0	0
	point45	45	1302	45	39	45	19	45	0	0	0	0
	point46	46	1302	45	39	45	19	45	0	0	0	0
	point47	47	1302	45	39	45	19	45	0	0	0	0
	point48	48	1302	45	39	45	19	45	0	0	0	0
	point49	49	1302	45	39	45	19	45	0	0	0	0
	point50	50										
Paseo Delicias-Via de la Valle to El Mont	point51	51	1809	45	54	45	27	45	0	0	0	0
	point4	4	1809	45	54	45	27	45	0	0	0	0
	point5	5	1809	45	54	45	27	45	0	0	0	0
	point6	6	1809	45	54	45	27	45	0	0	0	0
	point7	7	1809	45	54	45	27	45	0	0	0	0
	point8	8	1809	45	54	45	27	45	0	0	0	0
	point9	9										
Paseo Delicias-Montevideo to Norte	point52	52	1838	40	55	40	27	40	0	0	0	0
	point10	10	1838	40	55	40	27	40	0	0	0	0
	point11	11	1838	40	55	40	27	40	0	0	0	0
	point12	12	1838	40	55	40	27	40	0	0	0	0
	point13	13	1838	40	55	40	27	40	0	0	0	0
	point14	14	1838	40	55	40	27	40	0	0	0	0

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

	point15	15	1838	40	55	40	27	40	0	0	0	0
	point16	16	1838	40	55	40	27	40	0	0	0	0
	point17	17										
Paseo Delicias-w/o Norte	point53	53	2211	45	66	45	33	45	0	0	0	0
	point18	18	2211	45	66	45	33	45	0	0	0	0
	point19	19	2211	45	66	45	33	45	0	0	0	0
	point20	20	2211	45	66	45	33	45	0	0	0	0
	point21	21	2211	45	66	45	33	45	0	0	0	0
	point22	22	2211	45	66	45	33	45	0	0	0	0
	point23	23	2211	45	66	45	33	45	0	0	0	0
	point24	24	2211	45	66	45	33	45	0	0	0	0
	point25	25										
Camino del Norte	point42	42	670	30	250	30	10	30	0	0	0	0
	point39	39	670	30	250	30	10	30	0	0	0	0
	point38	38	670	30	250	30	10	30	0	0	0	0
	point37	37	670	30	250	30	10	30	0	0	0	0
	point36	36	670	30	250	30	10	30	0	0	0	0
	point35	35	670	30	250	30	10	30	0	0	0	0
	point32	32	670	30	250	30	10	30	0	0	0	0
	point31	31	670	30	250	30	10	30	0	0	0	0
	point30	30	670	30	250	30	10	30	0	0	0	0
	point54	54	670	30	250	30	10	30	0	0	0	0
	point29	29	670	30	250	30	10	30	0	0	0	0
	point28	28	670	30	250	30	10	30	0	0	0	0
	point27	27	670	30	250	30	10	30	0	0	0	0
	point26	26										



**INPUT: TERRAIN LINES**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007		
Maddux, B		TNM 2.5		
<b>INPUT: TERRAIN LINES</b>				
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>		
<b>RUN:</b>		<b>2030 with Roundabouts</b>		
<b>Terrain Line</b>	<b>Points</b>			
<b>Name</b>	<b>No.</b>	<b>Coordinates (ground)</b>		
		<b>X</b>	<b>Y</b>	<b>Z</b>
		ft	ft	ft
Terrain Line1	1	6,270,981.0	1,953,516.2	260.00
	2	6,270,827.0	1,953,379.1	260.00
	3	6,270,824.5	1,953,345.4	260.00
	4	6,270,827.0	1,953,323.8	260.00
	5	6,270,843.5	1,953,299.8	260.00
	6	6,270,916.0	1,953,217.9	260.00
Terrain Line2	7	6,273,954.0	1,956,760.1	261.00
	8	6,274,007.0	1,956,800.2	261.00
	9	6,274,036.0	1,956,763.2	261.00
Terrain Line3	10	6,270,715.0	1,953,284.1	250.00
	11	6,270,720.5	1,953,248.9	250.00
	12	6,270,725.5	1,953,167.4	250.00
	13	6,270,722.5	1,953,130.2	250.00
	14	6,270,730.0	1,953,084.9	250.00
	15	6,270,709.5	1,952,980.1	250.00

**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007										
Maddux, B		TNM 2.5										
		Calculated with TNM 2.5										
<b>RESULTS: SOUND LEVELS</b>												
<b>PROJECT/CONTRACT:</b>		Rancho Santa Fe Roundabouts										
<b>RUN:</b>		2030 with Signals										
<b>BARRIER DESIGN:</b>		INPUT HEIGHTS										
<b>ATMOSPHERICS:</b>		68 deg F, 50% RH										
<b>Receiver</b>												
<b>Name</b>	<b>No.</b>	<b>#DUs</b>	<b>Existing</b>	<b>No Barrier</b>			<b>With Barrier</b>					
			<b>LAeq1h</b>	<b>LAeq1h</b>		<b>Increase over existing</b>		<b>Type</b>	<b>Calculated</b>	<b>Noise Reduction</b>		
				<b>Calculated</b>	<b>Crit'n</b>	<b>Calculated</b>	<b>Crit'n</b>	<b>Impact</b>	<b>LAeq1h</b>	<b>Calculated</b>	<b>Goal</b>	<b>Calculated</b>
							<b>Sub'l Inc</b>					<b>minus</b>
												<b>Goal</b>
			<b>dBA</b>	<b>dBA</b>	<b>dBA</b>	<b>dB</b>	<b>dB</b>		<b>dBA</b>	<b>dB</b>	<b>dB</b>	<b>dB</b>
MS 1	1	1	0.0	62.6	66	62.6	12	----	62.6	0.0	5	-5.0
MS 2	2	1	0.0	61.9	66	61.9	12	----	61.9	0.0	5	-5.0
MS 3	3	1	0.0	67.5	66	67.5	12	Snd Lvl	67.5	0.0	5	-5.0
MS 4	4	1	0.0	69.0	66	69.0	12	Snd Lvl	69.0	0.0	5	-5.0
MS 5	5	1	0.0	65.3	66	65.3	12	----	65.3	0.0	5	-5.0
MS 6	6	1	0.0	65.9	66	65.9	12	----	65.9	0.0	5	-5.0
Rec1	8	1	0.0	53.1	66	53.1	12	----	53.1	0.0	5	-5.0
Rec2	9	1	0.0	56.2	66	56.2	12	----	56.2	0.0	5	-5.0
Rec3	10	1	0.0	57.1	66	57.1	12	----	57.1	0.0	5	-5.0
Rec4	11	1	0.0	52.0	66	52.0	12	----	52.0	0.0	5	-5.0
Rec5	12	1	0.0	64.4	66	64.4	12	----	64.4	0.0	5	-5.0
Rec6	13	1	0.0	55.8	66	55.8	12	----	55.8	0.0	5	-5.0
Rec7	15	1	0.0	56.0	66	56.0	12	----	56.0	0.0	5	-5.0
Rec8	16	1	0.0	60.3	66	60.3	12	----	60.3	0.0	5	-5.0
Rec9	17	1	0.0	62.7	66	62.7	12	----	62.7	0.0	5	-5.0
Rec10	18	1	0.0	65.4	66	65.4	12	----	65.4	0.0	5	-5.0
Rec11	19	1	0.0	63.0	66	63.0	12	----	63.0	0.0	5	-5.0
Rec12	20	1	0.0	59.0	66	59.0	12	----	59.0	0.0	5	-5.0
Rec13	21	1	0.0	55.2	66	55.2	12	----	55.2	0.0	5	-5.0
Rec14	22	1	0.0	51.9	66	51.9	12	----	51.9	0.0	5	-5.0
Rec15	23	1	0.0	58.7	66	58.7	12	----	58.7	0.0	5	-5.0
Rec16	25	1	0.0	54.6	66	54.6	12	----	54.6	0.0	5	-5.0
Rec17	26	1	0.0	52.7	66	52.7	12	----	52.7	0.0	5	-5.0
Rec18	27	1	0.0	50.3	66	50.3	12	----	50.3	0.0	5	-5.0

**RESULTS: SOUND LEVELS**

**Rancho Santa Fe Roundabouts**

Rec19	28	1	0.0	60.7	66	60.7	12	----	60.7	0.0	5	-5.0
Rec20	29	1	0.0	54.7	66	54.7	12	----	54.7	0.0	5	-5.0
Rec21	30	1	0.0	60.1	66	60.1	12	----	60.1	0.0	5	-5.0
Rec22	31	1	0.0	50.0	66	50.0	12	----	50.0	0.0	5	-5.0
Rec23	32	1	0.0	58.7	66	58.7	12	----	58.7	0.0	5	-5.0
Rec24	33	1	0.0	53.2	66	53.2	12	----	53.2	0.0	5	-5.0
Rec25	34	1	0.0	61.5	66	61.5	12	----	61.5	0.0	5	-5.0
Rec26	36	1	0.0	54.6	66	54.6	12	----	54.6	0.0	5	-5.0
Rec27	37	1	0.0	58.0	66	58.0	12	----	58.0	0.0	5	-5.0
Rec28	39	1	0.0	53.5	66	53.5	12	----	53.5	0.0	5	-5.0
Rec29	40	1	0.0	64.1	66	64.1	12	----	64.1	0.0	5	-5.0
Rec30	41	1	0.0	48.7	66	48.7	12	----	48.7	0.0	5	-5.0
Rec31	42	1	0.0	50.0	66	50.0	12	----	50.0	0.0	5	-5.0
Rec32	43	1	0.0	56.1	66	56.1	12	----	56.1	0.0	5	-5.0
Rec33	45	1	0.0	60.1	66	60.1	12	----	60.1	0.0	5	-5.0
<b>Dwelling Units</b>		<b># DUs</b>	<b>Noise Reduction</b>									
			<b>Min</b>	<b>Avg</b>	<b>Max</b>							
			<b>dB</b>	<b>dB</b>	<b>dB</b>							
All Selected		39	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: ROADWAYS

Rancho Santa Fe Roundabouts

EDAW, Inc. Maddux, B		13 June 2007 TNM 2.5									
INPUT: ROADWAYS		Rancho Santa Fe Roundabouts					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		2030 with Signals									
RUN:											
Roadway Name	Width	Points Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Paseo Delicias s/o Via de la Valle	30.0	point2	2	6,269,581.0	1,952,308.0	274.00				Average	
		point3	3	6,270,718.5	1,953,348.9	252.00					
Via de la Valle	31.0	point43	43	6,270,804.5	1,951,410.6	151.00				Average	
		point44	44	6,270,768.0	1,951,917.5	179.00				Average	
		point45	45	6,270,768.0	1,952,134.8	188.00				Average	
		point46	46	6,270,688.5	1,952,551.0	214.00				Average	
		point47	47	6,270,768.0	1,953,083.1	243.00				Average	
		point48	48	6,270,768.0	1,953,195.4	255.00				Average	
		point49	49	6,270,753.5	1,953,329.4	252.00				Average	
		point50	50	6,270,735.5	1,953,361.9	252.00				Average	
Paseo Delicias-Via de la Valle to El Mont	30.0	point51	51	6,270,718.5	1,953,348.9	252.00	Signal	0.00	100	Average	
		point4	4	6,271,260.5	1,953,848.0	263.00				Average	
		point5	5	6,273,013.0	1,955,453.8	270.00				Average	
		point6	6	6,273,068.5	1,955,519.1	272.00				Average	
		point7	7	6,273,171.0	1,955,652.5	276.00				Average	
		point8	8	6,273,270.0	1,955,853.8	285.00				Average	
		point9	9	6,273,301.0	1,955,932.2	285.00				Average	
Paseo Delicias-Montevideo to Norte	30.0	point52	52	6,273,301.0	1,955,932.2	285.00	Signal	0.00	100	Average	
		point10	10	6,273,411.0	1,956,148.2	269.00				Average	
		point11	11	6,273,676.0	1,956,587.4	242.00				Average	
		point12	12	6,273,748.0	1,956,688.1	240.00				Average	
		point13	13	6,273,849.0	1,956,783.2	230.00				Average	
		point14	14	6,273,973.0	1,956,877.8	223.00				Average	
		point15	15	6,275,126.5	1,957,696.5	221.00				Average	
		point16	16	6,275,269.5	1,957,777.9	212.00				Average	

**INPUT: ROADWAYS**

**Rancho Santa Fe Roundabouts**

		point17	17	6,275,444.5	1,957,865.5	189.00				
Paseo Delicias-w/o Norte	30.0	point53	53	6,275,444.5	1,957,865.5	189.00	Signal	0.00	100	Average
		point18	18	6,275,506.5	1,957,885.8	189.00				Average
		point19	19	6,275,749.5	1,957,949.6	199.00				Average
		point20	20	6,275,912.5	1,957,976.9	202.00				Average
		point21	21	6,276,279.0	1,958,014.4	215.00				Average
		point22	22	6,276,390.0	1,958,015.1	217.00				Average
		point23	23	6,276,473.5	1,958,009.1	219.00				Average
		point24	24	6,276,592.5	1,957,986.2	230.00				Average
		point25	25	6,277,018.5	1,957,855.8	235.00				
Camino del Norte	26.0	point42	42	6,275,456.0	1,957,886.0	189.00	Stop	0.00	100	Average
		point39	39	6,275,415.0	1,958,298.4	211.00				Average
		point38	38	6,275,425.0	1,958,376.2	212.00				Average
		point37	37	6,275,439.0	1,958,439.9	213.00				Average
		point36	36	6,275,503.0	1,958,589.9	224.00				Average
		point35	35	6,275,521.5	1,958,644.9	225.00				Average
		point32	32	6,275,523.5	1,958,714.8	227.00				Average
		point31	31	6,275,511.0	1,958,782.4	230.00				Average
		point30	30	6,275,467.5	1,958,919.2	237.00				Average
		point54	54	6,274,969.5	1,960,128.6	296.00				Average
		point29	29	6,274,711.5	1,960,742.8	280.00				Average
		point28	28	6,274,658.5	1,960,762.1	279.00				Average
		point27	27	6,274,605.5	1,960,781.4	275.00				Average
		point26	26	6,273,466.0	1,960,795.9	256.00				
Paseo Delicias-Via de la Valle to El Mont::point51 Flow con										
Paseo Delicias-Via de la Valle to El Mont::point4 a 25 mph										
Paseo Delicias-Montevideo to Norte::point52 Flow control fo										
Paseo Delicias-Montevideo to Norte::point10 a 25 mph contro										
Paseo Delicias-w/o Norte::point53 Flow control for roundabo										
Paseo Delicias-w/o Norte::point18 a 25 mph control speed										

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007										
Maddux, B		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		Rancho Santa Fe Roundabouts										
RUN:		2030 with Signals										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Paseo Delicias s/o Via de la Valle	point2	2	651	25	19	25	10	25	0	0	0	0
	point3	3										
Via de la Valle	point43	43	1302	45	39	45	19	45	0	0	0	0
	point44	44	1302	45	39	45	19	45	0	0	0	0
	point45	45	1302	45	39	45	19	45	0	0	0	0
	point46	46	1302	45	39	45	19	45	0	0	0	0
	point47	47	1302	45	39	45	19	45	0	0	0	0
	point48	48	1302	45	39	45	19	45	0	0	0	0
	point49	49	1302	45	39	45	19	45	0	0	0	0
	point50	50										
Paseo Delicias-Via de la Valle to El Mont	point51	51	1809	45	54	45	27	45	0	0	0	0
	point4	4	1809	45	54	45	27	45	0	0	0	0
	point5	5	1809	45	54	45	27	45	0	0	0	0
	point6	6	1809	45	54	45	27	45	0	0	0	0
	point7	7	1809	45	54	45	27	45	0	0	0	0
	point8	8	1809	45	54	45	27	45	0	0	0	0
	point9	9										
Paseo Delicias-Montevideo to Norte	point52	52	1838	40	55	40	27	40	0	0	0	0
	point10	10	1838	40	55	40	27	40	0	0	0	0
	point11	11	1838	40	55	40	27	40	0	0	0	0
	point12	12	1838	40	55	40	27	40	0	0	0	0
	point13	13	1838	40	55	40	27	40	0	0	0	0
	point14	14	1838	40	55	40	27	40	0	0	0	0

**INPUT: TRAFFIC FOR LAeq1h Volumes**

**Rancho Santa Fe Roundabouts**

	point15	15	1838	40	55	40	27	40	0	0	0	0
	point16	16	1838	40	55	40	27	40	0	0	0	0
	point17	17										
Paseo Delicias-w/o Norte	point53	53	2211	45	66	45	33	45	0	0	0	0
	point18	18	2211	45	66	45	33	45	0	0	0	0
	point19	19	2211	45	66	45	33	45	0	0	0	0
	point20	20	2211	45	66	45	33	45	0	0	0	0
	point21	21	2211	45	66	45	33	45	0	0	0	0
	point22	22	2211	45	66	45	33	45	0	0	0	0
	point23	23	2211	45	66	45	33	45	0	0	0	0
	point24	24	2211	45	66	45	33	45	0	0	0	0
	point25	25										
Camino del Norte	point42	42	670	30	250	30	10	30	0	0	0	0
	point39	39	670	30	250	30	10	30	0	0	0	0
	point38	38	670	30	250	30	10	30	0	0	0	0
	point37	37	670	30	250	30	10	30	0	0	0	0
	point36	36	670	30	250	30	10	30	0	0	0	0
	point35	35	670	30	250	30	10	30	0	0	0	0
	point32	32	670	30	250	30	10	30	0	0	0	0
	point31	31	670	30	250	30	10	30	0	0	0	0
	point30	30	670	30	250	30	10	30	0	0	0	0
	point54	54	670	30	250	30	10	30	0	0	0	0
	point29	29	670	30	250	30	10	30	0	0	0	0
	point28	28	670	30	250	30	10	30	0	0	0	0
	point27	27	670	30	250	30	10	30	0	0	0	0
	point26	26										

**INPUT: RECEIVERS**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.							13 June 2007				
Maddux, B							TNM 2.5				
<b>INPUT: RECEIVERS</b>											
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>									
<b>RUN:</b>		<b>2030 with Signals</b>									
<b>Receiver</b>											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
MS 1	1	1	6,270,938.0	1,953,330.0	263.00	5.00	0.00	66	12.0	5.0	Y
MS 2	2	1	6,270,452.5	1,953,160.0	252.00	5.00	0.00	66	12.0	5.0	Y
MS 3	3	1	6,270,762.5	1,953,523.0	248.00	5.00	0.00	66	12.0	5.0	Y
MS 4	4	1	6,273,255.0	1,956,015.0	277.00	5.00	0.00	66	12.0	5.0	Y
MS 5	5	1	6,273,050.5	1,955,645.0	265.00	5.00	0.00	66	12.0	5.0	Y
MS 6	6	1	6,275,262.5	1,957,705.0	203.00	5.00	0.00	66	12.0	5.0	Y
Rec1	8	1	6,270,388.0	1,952,828.2	250.00	5.00	0.00	66	12.0	5.0	Y
Rec2	9	1	6,270,304.5	1,953,105.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec3	10	1	6,270,531.0	1,952,988.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec4	11	1	6,270,443.5	1,953,327.4	245.00	5.00	0.00	66	12.0	5.0	Y
Rec5	12	1	6,270,694.5	1,953,140.1	250.00	5.00	0.00	66	12.0	5.0	Y
Rec6	13	1	6,270,587.0	1,953,400.6	245.00	5.00	0.00	66	12.0	5.0	Y
Rec7	15	1	6,270,900.5	1,953,790.0	245.00	5.00	0.00	66	12.0	5.0	Y
Rec8	16	1	6,270,947.0	1,953,722.5	257.00	5.00	0.00	66	12.0	5.0	Y
Rec9	17	1	6,271,054.5	1,953,849.9	257.00	5.00	0.00	66	12.0	5.0	Y
Rec10	18	1	6,271,215.5	1,953,616.6	267.00	5.00	0.00	66	12.0	5.0	Y
Rec11	19	1	6,271,351.5	1,954,068.5	256.00	5.00	0.00	66	12.0	5.0	Y
Rec12	20	1	6,271,500.0	1,953,828.9	272.00	5.00	0.00	66	12.0	5.0	Y
Rec13	21	1	6,271,365.5	1,954,196.9	250.00	5.00	0.00	66	12.0	5.0	Y
Rec14	22	1	6,271,998.5	1,954,187.4	269.00	5.00	0.00	66	12.0	5.0	Y
Rec15	23	1	6,271,831.0	1,954,584.4	254.00	5.00	0.00	66	12.0	5.0	Y
Rec16	25	1	6,272,214.5	1,954,914.8	254.00	5.00	0.00	66	12.0	5.0	Y



**INPUT: RECEIVERS****Rancho Santa Fe Roundabouts**

Rec17	26	1	6,272,635.5	1,954,788.2	257.00	5.00	0.00	66	12.0	5.0	Y
Rec18	27	1	6,272,779.0	1,954,865.4	273.00	5.00	0.00	66	12.0	5.0	Y
Rec19	28	1	6,272,359.5	1,955,068.8	268.00	5.00	0.00	66	12.0	5.0	Y
Rec20	29	1	6,272,444.5	1,955,233.8	254.00	5.00	0.00	66	12.0	5.0	Y
Rec21	30	1	6,272,851.5	1,955,539.0	252.00	5.00	0.00	66	12.0	5.0	Y
Rec22	31	1	6,273,419.5	1,955,308.9	265.00	5.00	0.00	66	12.0	5.0	Y
Rec23	32	1	6,273,061.5	1,955,912.8	270.00	5.00	0.00	66	12.0	5.0	Y
Rec24	33	1	6,273,339.5	1,955,703.5	284.00	5.00	0.00	66	12.0	5.0	Y
Rec25	34	1	6,273,512.5	1,955,972.2	284.00	5.00	0.00	66	12.0	5.0	Y
Rec26	36	1	6,273,770.0	1,956,144.8	282.00	5.00	0.00	66	12.0	5.0	Y
Rec27	37	1	6,273,858.5	1,956,478.0	269.00	5.00	0.00	66	12.0	5.0	Y
Rec28	39	1	6,273,847.5	1,957,265.5	265.00	5.00	0.00	66	12.0	5.0	Y
Rec29	40	1	6,273,999.5	1,956,780.2	261.00	5.00	0.00	66	12.0	5.0	Y
Rec30	41	1	6,274,365.0	1,956,627.1	234.00	5.00	0.00	66	12.0	5.0	Y
Rec31	42	1	6,274,519.0	1,957,807.4	225.00	5.00	0.00	66	12.0	5.0	Y
Rec32	43	1	6,274,868.0	1,957,876.9	260.00	5.00	0.00	66	12.0	5.0	Y
Rec33	45	1	6,275,035.0	1,957,861.1	241.00	5.00	0.00	66	12.0	5.0	Y



INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point36	36	6,271,017.5	1,953,694.9	257.00	14.00	0.00	0	0		
									point37	37	6,270,988.0	1,953,724.4	257.00	14.00					
Barrier9	W	0.00	99.99	0.00			0.00		point38	38	6,271,049.0	1,953,872.5	257.00	14.00	0.00	0	0		
									point39	39	6,271,074.0	1,953,919.0	257.00	14.00	0.00	0	0		
									point40	40	6,271,158.0	1,953,868.5	257.00	14.00	0.00	0	0		
									point41	41	6,271,120.5	1,953,819.4	257.00	14.00					
Barrier10	W	0.00	99.99	0.00			0.00		point42	42	6,271,483.0	1,953,778.1	272.00	14.00	0.00	0	0		
									point43	43	6,271,432.5	1,953,837.2	272.00	14.00	0.00	0	0		
									point44	44	6,271,483.0	1,953,886.9	272.00	14.00					
Barrier11	W	0.00	99.99	0.00			0.00		point45	45	6,271,258.0	1,953,997.0	256.00	14.00	0.00	0	0		
									point46	46	6,271,284.0	1,953,964.9	256.00	14.00	0.00	0	0		
									point47	47	6,271,324.0	1,954,006.6	256.00	14.00	0.00	0	0		
									point48	48	6,271,338.5	1,953,992.2	256.00	14.00	0.00	0	0		
									point49	49	6,271,366.5	1,954,019.6	256.00	14.00	0.00	0	0		
									point50	50	6,271,324.5	1,954,068.4	256.00	14.00					
Barrier12	W	0.00	99.99	0.00			0.00		point51	51	6,271,344.0	1,954,184.6	250.00	14.00	0.00	0	0		
									point52	52	6,271,352.0	1,954,154.6	250.00	14.00	0.00	0	0		
									point53	53	6,271,472.5	1,954,186.0	250.00	14.00	0.00	0	0		
									point54	54	6,271,466.0	1,954,218.6	250.00	14.00					
Barrier13	W	0.00	99.99	0.00			0.00		point55	55	6,271,955.0	1,954,157.8	269.00	14.00	0.00	0	0		
									point56	56	6,271,921.5	1,954,194.2	269.00	14.00	0.00	0	0		
									point57	57	6,271,946.0	1,954,219.5	269.00	14.00	0.00	0	0		
									point58	58	6,271,953.5	1,954,212.1	269.00	14.00	0.00	0	0		
									point59	59	6,271,967.5	1,954,227.8	269.00	14.00	0.00	0	0		
									point60	60	6,271,967.0	1,954,249.5	269.00	14.00	0.00	0	0		
									point61	61	6,272,017.5	1,954,250.8	269.00	14.00	0.00	0	0		
									point63	63	6,272,020.5	1,954,222.5	269.00	14.00					
Barrier14	W	0.00	99.99	0.00			0.00		point64	64	6,271,756.0	1,954,534.2	254.00	14.00	0.00	0	0		
									point65	65	6,271,781.0	1,954,503.0	254.00	14.00	0.00	0	0		
									point66	66	6,271,813.5	1,954,536.5	254.00	14.00	0.00	0	0		
									point67	67	6,271,793.0	1,954,561.8	254.00	14.00					
Barrier15	W	0.00	99.99	0.00			0.00		point68	68	6,271,839.0	1,954,540.9	254.00	14.00	0.00	0	0		
									point69	69	6,271,857.5	1,954,520.4	254.00	14.00	0.00	0	0		
									point70	70	6,271,882.5	1,954,546.9	254.00	14.00	0.00	0	0		
									point71	71	6,271,864.0	1,954,564.8	254.00	14.00					
Barrier16	W	0.00	99.99	0.00			0.00		point72	72	6,271,872.5	1,954,607.5	254.00	14.00	0.00	0	0		
									point73	73	6,271,931.0	1,954,582.8	254.00	14.00	0.00	0	0		
									point74	74	6,271,940.5	1,954,602.8	254.00	14.00	0.00	0	0		
									point75	75	6,271,939.5	1,954,652.1	254.00	14.00	0.00	0	0		
									point76	76	6,271,950.0	1,954,666.2	254.00	14.00	0.00	0	0		
									point77	77	6,271,931.0	1,954,688.5	254.00	14.00					
Barrier17	W	0.00	99.99	0.00			0.00		point78	78	6,272,186.5	1,954,853.0	268.00	14.00	0.00	0	0		
									point79	79	6,272,210.0	1,954,829.5	268.00	14.00	0.00	0	0		
									point80	80	6,272,298.0	1,954,901.1	268.00	14.00	0.00	0	0		
									point81	81	6,272,290.0	1,954,931.6	268.00	14.00					
Barrier18	W	0.00	99.99	0.00			0.00		point82	82	6,272,375.5	1,954,994.5	268.00	14.00	0.00	0	0		
									point83	83	6,272,371.0	1,954,971.0	268.00	14.00	0.00	0	0		
									point84	84	6,272,397.0	1,954,964.0	268.00	14.00	0.00	0	0		
									point85	85	6,272,404.0	1,955,000.4	268.00	14.00	0.00	0	0		

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point86	86	6,272,435.5	1,955,038.0	268.00	14.00	0.00	0	0			
									point87	87	6,272,467.5	1,955,038.0	268.00	14.00	0.00	0	0			
									point88	88	6,272,466.0	1,955,069.6	268.00	14.00						
Barrier19	W	0.00	99.99	0.00			0.00		point89	89	6,272,437.0	1,955,176.6	254.00	14.00	0.00	0	0			
									point90	90	6,272,486.0	1,955,153.1	254.00	14.00	0.00	0	0			
									point91	91	6,272,541.5	1,955,256.5	254.00	14.00	0.00	0	0			
									point92	92	6,272,478.0	1,955,287.0	254.00	14.00						
Barrier20	W	0.00	99.99	0.00			0.00		point93	93	6,272,595.5	1,954,786.0	275.00	14.00	0.00	0	0			
									point94	94	6,272,569.5	1,954,821.2	275.00	14.00	0.00	0	0			
									point95	95	6,272,588.5	1,954,840.0	275.00	14.00	0.00	0	0			
									point96	96	6,272,595.5	1,954,829.5	275.00	14.00	0.00	0	0			
									point97	97	6,272,641.0	1,954,864.8	275.00	14.00	0.00	0	0			
									point98	98	6,272,662.5	1,954,838.9	275.00	14.00						
Barrier21	W	0.00	99.99	0.00			0.00		point99	99	6,272,733.5	1,954,833.6	273.00	14.00	0.00	0	0			
									point100	100	6,272,681.5	1,954,882.9	273.00	14.00	0.00	0	0			
									point101	101	6,272,745.0	1,954,951.0	273.00	14.00	0.00	0	0			
									point102	102	6,272,800.5	1,954,902.9	273.00	14.00						
Barrier22	W	0.00	99.99	0.00			0.00		point103	103	6,273,393.5	1,955,191.9	265.00	14.00	0.00	0	0			
									point104	104	6,273,332.5	1,955,231.8	265.00	14.00	0.00	0	0			
									point105	105	6,273,337.0	1,955,317.5	265.00	14.00	0.00	0	0			
									point106	106	6,273,351.5	1,955,314.0	265.00	14.00	0.00	0	0			
									point107	107	6,273,355.0	1,955,348.1	265.00	14.00	0.00	0	0			
									point108	108	6,273,389.0	1,955,345.8	265.00	14.00						
Barrier23	W	0.00	99.99	0.00			0.00		point109	109	6,273,346.0	1,955,638.2	284.00	14.00	0.00	0	0			
									point110	110	6,273,288.0	1,955,682.4	284.00	14.00	0.00	0	0			
									point111	111	6,273,263.0	1,955,689.0	284.00	14.00	0.00	0	0			
									point112	112	6,273,271.0	1,955,710.1	284.00	14.00	0.00	0	0			
									point113	113	6,273,290.0	1,955,705.2	284.00	14.00	0.00	0	0			
									point114	114	6,273,297.5	1,955,717.0	284.00	14.00	0.00	0	0			
									point115	115	6,273,287.5	1,955,724.5	284.00	14.00	0.00	0	0			
									point116	116	6,273,305.0	1,955,751.2	284.00	14.00	0.00	0	0			
									point117	117	6,273,318.0	1,955,744.8	284.00	14.00	0.00	0	0			
									point119	119	6,273,326.5	1,955,756.1	284.00	14.00	0.00	0	0			
									point120	120	6,273,350.5	1,955,739.2	284.00	14.00	0.00	0	0			
									point121	121	6,273,363.0	1,955,760.0	284.00	14.00	0.00	0	0			
									point122	122	6,273,403.0	1,955,736.9	284.00	14.00						
Barrier25	W	0.00	99.99	0.00			0.00		point126	126	6,273,055.5	1,955,839.8	270.00	14.00	0.00	0	0			
									point127	127	6,273,077.5	1,955,817.5	270.00	14.00	0.00	0	0			
									point128	128	6,273,092.0	1,955,831.4	270.00	14.00	0.00	0	0			
									point129	129	6,273,117.5	1,955,803.6	270.00	14.00	0.00	0	0			
									point130	130	6,273,147.5	1,955,830.8	270.00	14.00	0.00	0	0			
									point131	131	6,273,124.5	1,955,858.1	270.00	14.00	0.00	0	0			
									point132	132	6,273,139.5	1,955,872.9	270.00	14.00	0.00	0	0			
									point133	133	6,273,119.5	1,955,898.1	270.00	14.00						
Barrier26	W	0.00	99.99	0.00			0.00		point134	134	6,273,540.0	1,955,874.0	284.00	14.00	0.00	0	0			
									point135	135	6,273,508.0	1,955,875.9	284.00	14.00	0.00	0	0			
									point136	136	6,273,509.0	1,955,902.0	284.00	14.00	0.00	0	0			
									point137	137	6,273,465.5	1,955,928.2	284.00	14.00	0.00	0	0			
									point138	138	6,273,433.5	1,955,912.8	284.00	14.00	0.00	0	0			

INPUT: BARRIERS

Rancho Santa Fe Roundabouts

									point139	139	6,273,419.0	1,955,939.9	284.00	14.00	0.00	0	0			
									point140	140	6,273,451.0	1,955,955.4	284.00	14.00	0.00	0	0			
									point141	141	6,273,445.0	1,955,967.9	284.00	14.00	0.00	0	0			
									point143	143	6,273,463.5	1,955,977.6	284.00	14.00						
Barrier27	W	0.00	99.99	0.00			0.00		point144	144	6,273,821.5	1,956,166.0	282.00	14.00	0.00	0	0			
									point145	145	6,273,821.5	1,956,218.4	282.00	14.00	0.00	0	0			
									point146	146	6,273,754.5	1,956,221.2	282.00	14.00	0.00	0	0			
									point147	147	6,273,706.0	1,956,249.4	282.00	14.00	0.00	0	0			
									point148	148	6,273,685.0	1,956,214.5	282.00	14.00						
Barrier28	W	0.00	99.99	0.00			0.00		point149	149	6,273,751.5	1,956,487.6	269.00	14.00	0.00	0	0			
									point150	150	6,273,742.0	1,956,447.9	269.00	14.00	0.00	0	0			
									point151	151	6,273,816.5	1,956,433.4	269.00	14.00	0.00	0	0			
									point152	152	6,273,808.0	1,956,392.8	269.00	14.00	0.00	0	0			
									point153	153	6,273,877.5	1,956,366.5	269.00	14.00						
Barrier29	W	0.00	99.99	0.00			0.00		point154	154	6,274,322.5	1,956,673.6	234.00	14.00	0.00	0	0			
									point155	155	6,274,303.0	1,956,711.4	234.00	14.00	0.00	0	0			
									point156	156	6,274,332.0	1,956,727.9	234.00	14.00	0.00	0	0			
									point157	157	6,274,356.0	1,956,690.1	234.00	14.00	0.00	0	0			
									point158	158	6,274,380.5	1,956,702.8	234.00	14.00	0.00	0	0			
									point159	159	6,274,396.0	1,956,673.6	234.00	14.00	0.00	0	0			
									point160	160	6,274,447.5	1,956,703.6	234.00	14.00	0.00	0	0			
									point161	161	6,274,464.5	1,956,679.5	234.00	14.00						
Barrier30	W	0.00	99.99	0.00			0.00		point162	162	6,274,467.0	1,957,812.8	225.00	14.00	0.00	0	0			
									point163	163	6,274,440.5	1,957,760.0	225.00	14.00	0.00	0	0			
									point164	164	6,274,472.5	1,957,734.5	225.00	14.00	0.00	0	0			
									point165	165	6,274,436.5	1,957,672.5	225.00	14.00	0.00	0	0			
									point166	166	6,274,491.0	1,957,641.5	225.00	14.00	0.00	0	0			
									point167	167	6,274,547.0	1,957,755.4	225.00	14.00						
Barrier31	W	0.00	99.99	0.00			0.00		point168	168	6,274,821.5	1,957,857.2	260.00	14.00	0.00	0	0			
									point170	170	6,274,813.5	1,957,835.4	260.00	14.00	0.00	0	0			
									point171	171	6,274,834.5	1,957,825.9	260.00	14.00	0.00	0	0			
									point172	172	6,274,963.5	1,957,779.2	260.00	14.00	0.00	0	0			
									point173	173	6,274,973.5	1,957,811.9	260.00	14.00						
Barrier32	W	0.00	99.99	0.00			0.00		point174	174	6,275,031.5	1,957,833.2	241.00	14.00	0.00	0	0			
									point175	175	6,275,031.5	1,957,801.9	241.00	14.00	0.00	0	0			
									point176	176	6,275,099.0	1,957,806.6	241.00	14.00	0.00	0	0			
									point177	177	6,275,096.5	1,957,842.4	241.00	14.00						

**INPUT: TERRAIN LINES**

**Rancho Santa Fe Roundabouts**

EDAW, Inc.		13 June 2007		
Maddux, B		TNM 2.5		
<b>INPUT: TERRAIN LINES</b>				
<b>PROJECT/CONTRACT:</b>		<b>Rancho Santa Fe Roundabouts</b>		
<b>RUN:</b>		<b>2030 with Signals</b>		
<b>Terrain Line</b>	<b>Points</b>			
<b>Name</b>	<b>No.</b>	<b>Coordinates (ground)</b>		
		<b>X</b>	<b>Y</b>	<b>Z</b>
		ft	ft	ft
Terrain Line1	1	6,270,981.0	1,953,516.2	260.00
	2	6,270,827.0	1,953,379.1	260.00
	3	6,270,824.5	1,953,345.4	260.00
	4	6,270,827.0	1,953,323.8	260.00
	5	6,270,843.5	1,953,299.8	260.00
	6	6,270,916.0	1,953,217.9	260.00
Terrain Line2	7	6,273,954.0	1,956,760.1	261.00
	8	6,274,007.0	1,956,800.2	261.00
	9	6,274,036.0	1,956,763.2	261.00
Terrain Line3	10	6,270,715.0	1,953,284.1	250.00
	11	6,270,720.5	1,953,248.9	250.00
	12	6,270,725.5	1,953,167.4	250.00
	13	6,270,722.5	1,953,130.2	250.00
	14	6,270,730.0	1,953,084.9	250.00
	15	6,270,709.5	1,952,980.1	250.00

**Appendix K2**  
**Addendum to Noise Impact Analysis**





**MEMORANDUM**

**ADDENDUM TO  
NOISE IMPACT ANALYSIS  
RANCHO SANTA FE ROUNDABOUTS PROJECT**

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September 2012



# MEMORANDUM

## Introduction

This memorandum is an addendum to the *Final Noise Impact Analysis, Rancho Santa Fe Roundabouts Project* (Noise Report) dated August 2008 and prepared by EDAW, Inc. (now AECOM, Inc.). Disparities were noted between certain location descriptions in Table 8, and receptor locations in Figures 6 and 7 in the Noise Report. This addendum has been prepared to identify the source of the discrepancies, rectify these discrepancies, and make the necessary corrections to the Noise Report tables and figures.

Due to the Federal Highway Administration (FHWA) funding associated with the proposed project, the Noise Report relies on the 2006 California Department of Transportation (Caltrans) *Traffic Noise Analysis Protocol* (Protocol) to identify potential noise impacts. Similarly this Addendum also relies on the Protocol.

## Approach/Methodology

The following initial approach was taken to identify the source of the discrepancies:

- Check all 38 receptor locations for the correct “type of development” in Table 8 based on current Google Earth aerial maps and zoning maps; revise Table 8 accordingly, in tracked changes.
- Check and update “location or address” descriptions of all 38 receptor locations in Table 8 to match the locations shown in Figures 6 and 7 based on current Google Earth aerial maps; revise Table 8 and Figures 6 and 7, accordingly in tracked changes.
- Identify why noise levels for receptors 29 and 30 appear relatively low based on their locations in Figures 6 and 7.

Through the process of verifying the correct “type of development” in Table 8, the Protocol was reviewed to ensure that the changes are consistent with the applicable requirements. Through this review, it was determined that the “type of development” column in Table 8 should be labeled “description of land use activity” to be consistent with the Protocol. This resulted in the need to implement a supplemental approach to:

- Investigate the current land use activity at each receptor.

- Update the descriptions of land use activities.
- Verify and update the activity category and the applicable NAC noise level for each of these receptors as needed.

## Analysis

To match the correct noise measurements to the corresponding locations, the Noise Report model data was used to re-plot the modeled X/Y/Z coordinates in Figures 6 and 7, and then the figures were cross-referenced to the location descriptions in Table 8. The re-plotting effort revealed that the locations of receptors 3 through 38 in Figures 6 and 7 did not match their descriptions in Table 8. Specifically, the source of the discrepancy was that receptor 3, which was used to take the noise measurements at the northeast corner of La Fremontia and Paseo Delicias, was not identified as a noise measurement location in Figure 6; instead, the label #3 was used to mark the location of receptor 4 in Figure 7. This had a ripple effect for the remaining sequence of labeled receptor locations 4 through 38 in Figures 6 and 7. The corrective action for this discrepancy was to add the correct label #3 for receptor 3, change label #3 to #4, change label #4 to #5, and so on, up through label #38 in Figures 6 and 7. During these efforts, it was also determined that several street address numbers in Table 8 were incorrect, as revealed by comparison on Google Earth. To illustrate all of these corrections, ~~strikeout~~ correction versions of Figures 6 and 7, and Table 8 are provided as an attachment, as well as their final revised (clean) versions. Tables 1, 2, and 7 of the Noise Report were also revised with the same corrections as shown on the revised Table 8; the ~~strikeout~~ correction versions of Tables 1, 2, and 7 are also provided as attachment, as well as their final revised (clean) versions.

The revisions to Figures 6 and 7 resulted in relocation of the labels for receptors 29 and 30 as described above. On the revised Figure 6 (~~strikeout~~ version), receptor 30 moves from the south side of Paseo Delicias to slightly further away on the north side, and approximately the same distance away from La Valle Plateada, as previously shown in Figure 7 of the Noise Report. Receptor 29 moves from the east side of La Valle Plateada to the west side, approximately the same distance away from La Valle Plateada and Paseo Delicias. The modeled noise levels are a function of the distance from the roadway noise source and any intervening topography or structures. The intervening topography accounts for what appears to be relatively low noise levels for receptors 29 and 30 (56 and 51 dBA  $L_{eq}$ , respectively). Since the noise level for each receptor listed in Table 8 of the Noise Report correctly corresponds to the numbered receptors that were based on the X/Y/Z modeling coordinates, the corrections to Table 8 and to Figures 6 and 7 do not change the analysis or conclusions of the Noise Report.

For consistency with the Protocol, the “type of development” column in Table 8 was re-labeled “description of land use activity.” This subsequently required verification of land use activities at all 38 receptor locations based on Table 1 from the Protocol: Activity Categories and Noise Abatement Criteria (23 CFR 772), also shown as Table 4 from the Noise Report.

**FHWA Noise Abatement Criteria  
(Table 4 from the Noise Report)**

Activity Category	Hourly A-Weighted Sound Level <sup>(1)</sup> (dBA)		Description of Activity Categories
	L <sub>eq</sub> (h)	L <sub>10</sub> (h)	
A	57 (Exterior)	60 (Exterior)	Lands of which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	--	Undeveloped lands.
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: CFR 1982

<sup>(1)</sup> Either L<sub>10</sub>(h) or L<sub>eq</sub>(h) (but not both) may be used on a project.

In the Noise Study, three receptors, numbers 3, 4, and 6, were incorrectly labeled as “open space.” All three of these locations are vacant and undeveloped; however, receptors 4 and 6 are zoned residential. To determine the appropriate description for the land use activity, the Protocol was consulted. According to the Protocol:

“If undeveloped lands are *planned, designed, and programmed* before the *date of public knowledge*, noise abatement must be considered as part of the transportation project. The date of public knowledge is the date of approval of the final NEPA environmental documentation for that transportation project. The date of approval is the date that the Categorical Exclusion, Finding of No Significant Impact, or Record of Decision under NEPA; or the Notice of Determination or Notice of Completion under CEQA is signed.”

“Land development is considered to be planned, designed, and programmed when the development has received all final discretionary approvals from the local agency with jurisdiction. This is generally the date that the building permit or vesting tentative map is issued.”

“Undeveloped land adjacent to highway right-of-way that is planned, designed, and programmed after the date of public knowledge of the transportation project is an Activity Category D land use. Noise abatement is not considered for Activity Category D land uses.”

Based on the Protocol, the correct land use activity for receptors 3, 4, and 6 is “undeveloped lands” because development has not been *planned, designed, and programmed* for receptors 3, 4, and 6, and it would be speculative at this time to apply a type of developed land use activity. The correct land use activity for receptor 1 is “church,” so no edits were needed. The correct land use activity for the remainder of the receptors is “residences” and the edits have been made accordingly.

The land use activity and associated activity category are then used to determine whether a noise impact would occur based on the applicable Noise Abatement Criteria (NAC) noise level for each receptor. “Undeveloped lands” is Activity Category D; there is no NAC assigned for Activity Category D land uses, as indicated in Table 4 from the Noise Report, and noise abatement is not considered. “Church” and “residence” land use activities qualify as Activity Category B with a NAC noise level of 67 dBA  $L_{eq}$ . These corrections did not result in identification of a noise impact, and therefore, no noise abatement is considered.

## **Summary and Conclusion**

The main source of the discrepancy in the Noise Report was the missing receptor 3 location in Figure 6. This caused a ripple effect for the labeled locations for the receptor labels #3 through #38 in Figures 6 and 7. Figures 6 and 7 aid the reader in locating the modeled data in Table 8; as such, the incorrect numbering affects only Figures 6 and 7, not the model results in Table 8 or the analysis conclusion of the Noise Report.

Additionally, some errors in address numbers were corrected. Also after reviewing the Protocol, it was determined that the “type of development” column in Table 8 was incorrectly labeled, and should be labeled “description of land use activity” to be consistent; this was also corrected. In correcting the land use activities, the NAC noise level and activity category were also updated accordingly for each receptor as needed. Corresponding edits were also made to Tables 1, 2, and 7. All edited figures and tables are included as attachments in both clean and strikeout versions.

The noise levels for the three potential future conditions (i.e., Predicted Year 2030 Traffic, Current Traffic with Roundabouts, and Current Traffic with Signals), presented in the Noise Report and shown in Table 8, remain unchanged. That is, the corrections of the discrepancies do not affect the conclusion of the Noise Report. As stated in the Noise Report, all predicted noise

increases for the three future conditions are less than the 12 dBA threshold for a substantial noise increase, and the project would not result in the exposure of any existing or planned future noise sensitive land use to exterior traffic noise of 66 dBA  $L_{eq}$  or greater.

#### ATTACHMENTS

Revised Table 1 - Summary of Results for the Proposed Roundabouts (strikeout changes)

Revised Table 1 - Summary of Results for the Proposed Roundabouts (clean version)

Revised Table 2 - Summary of Results for the Signalization Alternative (strikeout changes)

Revised Table 2 - Summary of Results for the Signalization Alternative (clean version)

Revised Table 8 – Predicted Traffic Noise Impacts (strikeout changes)

Revised Table 8 – Predicted Traffic Noise Impacts (clean version)

Revised Figure 6 – Noise Receptor Locations – West (strikeout changes)

Revised Figure 6 – Noise Receptor Locations – West (clean version)

Revised Figure 7 – Noise Receptor Locations – East (strikeout changes)

Revised Figure 7 – Noise Receptor Locations – East (clean version)





**Revised Table 1. Summary of Results for the Proposed Roundabouts**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Proposed Roundabouts (with K-Factors)		Noise Level with Edge of Shoulder Wall (L <sub>eq</sub> dBA)						
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA) K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement		1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)		
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?							
South	1	(B) 67	Village Church, 6225 Paseo Delicias	55	60	0	No	61	No	62	No	No Impact						
North	2	(B) 67	<del>1630 El Romero</del> 6130 El Romero	57	59	0	No	60	No	62	No							
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	66	No							
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	68	No							
North	5	(B) 67	<del>6195-6590</del> Paseo Delicias	57	63	0	No	64	No	65	No							
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	65	No							
South	7	(B) 67	6151 Paseo Delicias	--	51	0	No	52	No	53	No							
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No							
East	9	(B) 67	6155 Paseo Delicias	--	55	0	No	56	No	57	No							
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	51	No							
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No							
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	53	No							
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No							
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No							
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No							
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No							
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	62	No							
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	58	No							
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	54	No							
North	20	(B) 67	<del>6427</del> 6385 Paseo Delicias	--	50	0	No	51	No	51	No							
North	21	(B) 67	<del>6472</del> 6418 Paseo Delicias	--	56	0	No	57	No	58	No							
North	22	(B) 67	<del>6449</del> 6472 Paseo Delicias	--	52	0	No	53	No	54	No							
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	52	No							
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	49	No							
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	60	No							
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	54	No							
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	59	No							
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	49	No							
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	57	No							
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	52	No							
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	61	No							
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	53	No							
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	57	No							
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	53	No							
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No							
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	48	No							
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No							
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	55	No							

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

**Revised Table 1. Summary of Results for the Proposed Roundabouts**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Proposed Roundabouts (with K-Factors)		Noise Level with Edge of Shoulder Wall (L <sub>eq</sub> dBA)					
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA) K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement		1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)	
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?						
South	1	(B) 67	Village Church, 6225 Paseo Delicias	55	60	0	No	61	No	62	No	No Impact					
North	2	(B) 67	6130 El Romero	57	59	0	No	60	No	62	No						
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	66	No						
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	68	No						
North	5	(B) 67	6590 Paseo Delicias	57	63	0	No	64	No	65	No						
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	65	No						
South	7	(B) 67	6151 Paseo Delicias	--	51	0	No	52	No	53	No						
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No						
East	9	(B) 67	6155 Paseo Delicias	--	55	0	No	56	No	57	No						
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	51	No						
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No						
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	53	No						
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No						
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No						
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No						
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No						
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	62	No						
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	58	No						
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	54	No						
North	20	(B) 67	6385 Paseo Delicias	--	50	0	No	51	No	51	No						
North	21	(B) 67	6418 Paseo Delicias	--	56	0	No	57	No	58	No						
North	22	(B) 67	6472 Paseo Delicias	--	52	0	No	53	No	54	No						
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	52	No						
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	49	No						
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	60	No						
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	54	No						
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	59	No						
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	49	No						
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	57	No						
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	52	No						
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	61	No						
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	53	No						
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	57	No						
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	53	No						
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No						
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	48	No						
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No						
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	55	No						

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

**Revised Table 2. Summary of Results for the Signalization Alternative**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Signals Alternative (With K-factors)								
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA)* K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement		Abatement (L <sub>eq</sub> dBA)						
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)		
South	1	(B) 67	Village Church, 6225 Paseo Delicias	54	60	0	No	61	No	63	No	No Impact						
North	2	(B) 67	<del>1630 El Romero</del> 6130 El Romero	56	59	0	No	60	No	62	No							
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	68	No							
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	69	No							
North	5	(B) 67	6195 Paseo Delicias	57	63	0	No	64	No	65	No							
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	66	No							
South	7	(B) 67	<del>6151</del> 6590 Paseo Delicias	--	51	0	No	52	No	53	No							
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No							
East	9	(D)-	6155 Paseo Delicias	--	55	0	No	56	No	57	No							
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	52	No							
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No							
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	56	No							
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No							
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No							
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No							
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No							
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	63	No							
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	59	No							
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	55	No							
North	20	(B) 67	<del>6427</del> 6385 Paseo Delicias	--	50	0	No	51	No	52	No							
North	21	(B) 67	<del>6472</del> 6418 Paseo Delicias	--	56	0	No	57	No	59	No							
North	22	(B) 67	<del>6440</del> 6472 Paseo Delicias	--	52	0	No	53	No	55	No							
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	53	No							
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	50	No							
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	61	No							
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	55	No							
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	60	No							
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	50	No							
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	59	No							
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	53	No							
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	62	No							
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	55	No							
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	58	No							
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	54	No							
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No							
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	49	No							
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No							
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	56	No							

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

**Revised Table 2. Summary of Results for the Signalization Alternative**

Roadway Side	Site ID	NAC dBA, L <sub>eq</sub>	Site Address	Existing Conditions				2030 without Project		Signals Alternative (With K-factors)								
				Measured Noisiest Hour	L <sub>eq</sub> (dBA) Existing Noisiest Hour Modeled	L <sub>eq</sub> (dBA)* K-Factor (dBA)	Existing Noise Level Approaches or Exceeds NAC?	L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	No Abatement		Abatement (L <sub>eq</sub> dBA)						
										L <sub>eq</sub> (dBA) Noise Levels Modeled	Noise Level Approaches or Exceeds NAC?	1.8 m (6 ft)	2.4 m (8 ft)	3.1 m (10 ft)	3.7 m (12 ft)	4.3 m (14 ft)		
South	1	(B) 67	Village Church, 6225 Paseo Delicias	54	60	0	No	61	No	63	No	No Impact						
North	2	(B) 67	6130 El Romero	56	59	0	No	60	No	62	No							
North	3	(D) -	Northeast corner of La Fremontia and Paseo Delicias	59	65	0	No	66	No	68	No							
North	4	(D) -	Northeast corner of El Montevideo and Paseo Delicias	61	67	0	No	68	No	69	No							
North	5	(B) 67	6195 Paseo Delicias	57	63	0	No	64	No	65	No							
South	6	(D) -	Southwest corner of El Camino del Norte and Del Dios Highway	59	63	0	No	64	No	66	No							
South	7	(B) 67	6590 Paseo Delicias	--	51	0	No	52	No	53	No							
South	8	(B) 67	6133 El Romero	--	54	0	No	55	No	56	No							
East	9	(D)-	6155 Paseo Delicias	--	55	0	No	56	No	57	No							
South	10	(B) 67	6130 El Romero	--	50	0	No	51	No	52	No							
North	11	(B) 67	6221 Paseo Delicias	--	63	0	No	63	No	64	No							
South	12	(B) 67	6224 Paseo Delicias	--	54	0	No	55	No	56	No							
North	13	(B) 67	6252 La Fremontia	--	54	0	No	55	No	56	No							
South	14	(B) 67	6264 La Fremontia	--	58	0	No	59	No	60	No							
North	15	(B) 67	6325 La Valle Plateada	--	60	0	No	61	No	63	No							
North	16	(B) 67	6225 Paseo Delicias	--	63	0	No	64	No	65	No							
North	17	(B) 67	6332 La Valle Plateada	--	61	0	No	62	No	63	No							
South	18	(B) 67	6344 La Valle Plateada	--	57	0	No	58	No	59	No							
South	19	(B) 67	6336 Paseo Delicias	--	53	0	No	54	No	55	No							
North	20	(B) 67	6385 Paseo Delicias	--	50	0	No	51	No	52	No							
North	21	(B) 67	6418 Paseo Delicias	--	56	0	No	57	No	59	No							
North	22	(B) 67	6472 Paseo Delicias	--	52	0	No	53	No	55	No							
South	23	(B) 67	6505 Paseo Delicias	--	50	0	No	51	No	53	No							
North	24	(B) 67	6513 Paseo Delicias	--	48	0	No	49	No	50	No							
North	25	(B) 67	6512 Paseo Delicias	--	58	0	No	59	No	61	No							
South	26	(B) 67	6550 Paseo Delicias	--	52	0	No	53	No	55	No							
South	27	(B) 67	6580 Paseo Delicias	--	58	0	No	59	No	60	No							
North	28	(B) 67	6575 Paseo Delicias	--	48	0	No	49	No	50	No							
North	29	(B) 67	6795 El Montevideo	--	56	0	No	57	No	59	No							
North	30	(B) 67	7052 La Valle Plateada	--	51	0	No	52	No	53	No							
South	31	(B) 67	7057 La Valle Plateada	--	59	0	No	60	No	62	No							
South	32	(B) 67	6693 Paseo Delicias	--	52	0	No	53	No	55	No							
North	33	(B) 67	6715 Paseo Delicias	--	56	0	No	57	No	58	No							
South	34	(B) 67	6788 Paseo Delicias	--	51	0	No	52	No	54	No							
South	35	(B) 67	6745 Paseo Delicias	--	62	0	No	63	No	64	No							
South	36	(B) 67	6787 Paseo Delicias	--	46	0	No	47	No	49	No							
North	37	(B) 67	6794 Paseo Delicias	--	48	0	No	48	No	50	No							
South	38	(B) 67	6840 Paseo Delicias	--	54	0	No	55	No	56	No							

Note: NAC = Noise Abatement Criteria. -- = No Measurement.  
Source: FHWA 2004

**Revised Table 7. Existing Noise Levels**

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development Description of Land Use Activity	Number of Units Represented	Noise Abatement NAC (Activity Category) and Criterion Noise level	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
1	Village Church, 6225 Paseo Delicias	Via de la Valle/ La Fremontia	Church	1	(B) 67	60(55)	Modeled (Measured)
2	<del>1630 El Romero</del> 6130 El Romero	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	59(57)	Modeled (Measured)
3	Northeast corner of La Fremontia and Paseo Delicias	El Montevideo/ La Valle Plateada	Open Space Undeveloped Land	1	(D) -	65(59)	Modeled (Measured)
4	Northeast corner of El Montevideo and Paseo Delicias	El Montevideo/ La Valle Plateada	Open Space Undeveloped Land	1	(D) -	67(61)	Modeled (Measured)
5	<del>6195</del> 6590 Paseo Delicias	El Camino del Norte	Single family Residential Residence	1	(B) 67	63(57)	Modeled (Measured)
6	Southwest corner of El Camino del Norte and Del Dios Highway	Via de la Valle/ La Fremontia	Single family Residential Undeveloped Land	1	(D) -	63(59)	Measured
7	6151 Paseo Delicias	Via de la Valle/ La Fremontia	Multifamily Residential Residence	8	(B) 67	51	Modeled
8	6133 El Romero	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	54	Modeled
9	6155 Paseo Delicias	Via de la Valle/ La Fremontia	Multifamily Residential Residence	7	(B) 67	55	Modeled
10	<del>6130</del> 6120 El Romero	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	50	Modeled
11	6221 Paseo Delicias	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	63	Modeled
12	6224 Paseo Delicias	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	54	Modeled
13	6252 La Fremontia	Via de la Valle/ La Fremontia	Single family Residential Residence	1	(B) 67	54	Modeled

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development Description of Land Use Activity	Number of Units Represented	Noise Abatement NAC (Activity Category) and Criterion Noise level	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
14	6264 La Fremontia	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	58	Modeled
15	6325 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	60	Modeled
16	6225 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	63	Modeled
17	6332 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	61	Modeled
18	6344 La Valle Plateada	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	57	Modeled
19	6336 Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	53	Modeled
20	<del>6427</del> <u>6385</u> Paseo Delicias	Via de la Valle/ La Fremontia	Single-family Residential Residence	1	(B) 67	50	Modeled
21	<del>6472</del> <u>6418</u> Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	56	Modeled
22	<del>6440</del> <u>6472</u> Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	52	Modeled
23	6505 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	50	Modeled
24	6513 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	48	Modeled
25	6512 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	58	Modeled
26	6550 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	52	Modeled
27	6580 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	58	Modeled
28	6575 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	48	Modeled

Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Type of Development Description of Land Use Activity	Number of Units Represented	Noise Abatement NAC (Activity Category) and Criterion Noise level	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
29	6795 El Montevideo	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	56	Modeled
30	7052 La Valle Plateada	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	51	Modeled
31	7057 La Valle Plateada	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	59	Modeled
32	6693 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	52	Modeled
33	6715 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	56	Modeled
34	6788 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	51	Modeled
35	6745 Paseo Delicias	El Montevideo/ La Valle Plateada	Single-family Residential Residence	1	(B) 67	62	Modeled
36	6787 Paseo Delicias	El Camino del Norte	Single-family Residential Residence	1	(B) 67	46	Modeled
37	<del>6794</del> <u>6832</u> Paseo Delicias	El Camino del Norte	Single-family Residential Residence	1	(B) 67	48	Modeled
38	6840 Paseo Delicias	El Camino del Norte	Single-family Residential Residence	1	(B) 67	54	Modeled

<sup>1</sup> Measurement I.D. is keyed to measurement locations shown in Figures 6 and 7.  
Data compiled by EDAW 2007.

**Revised Table 7. Existing Noise Levels**

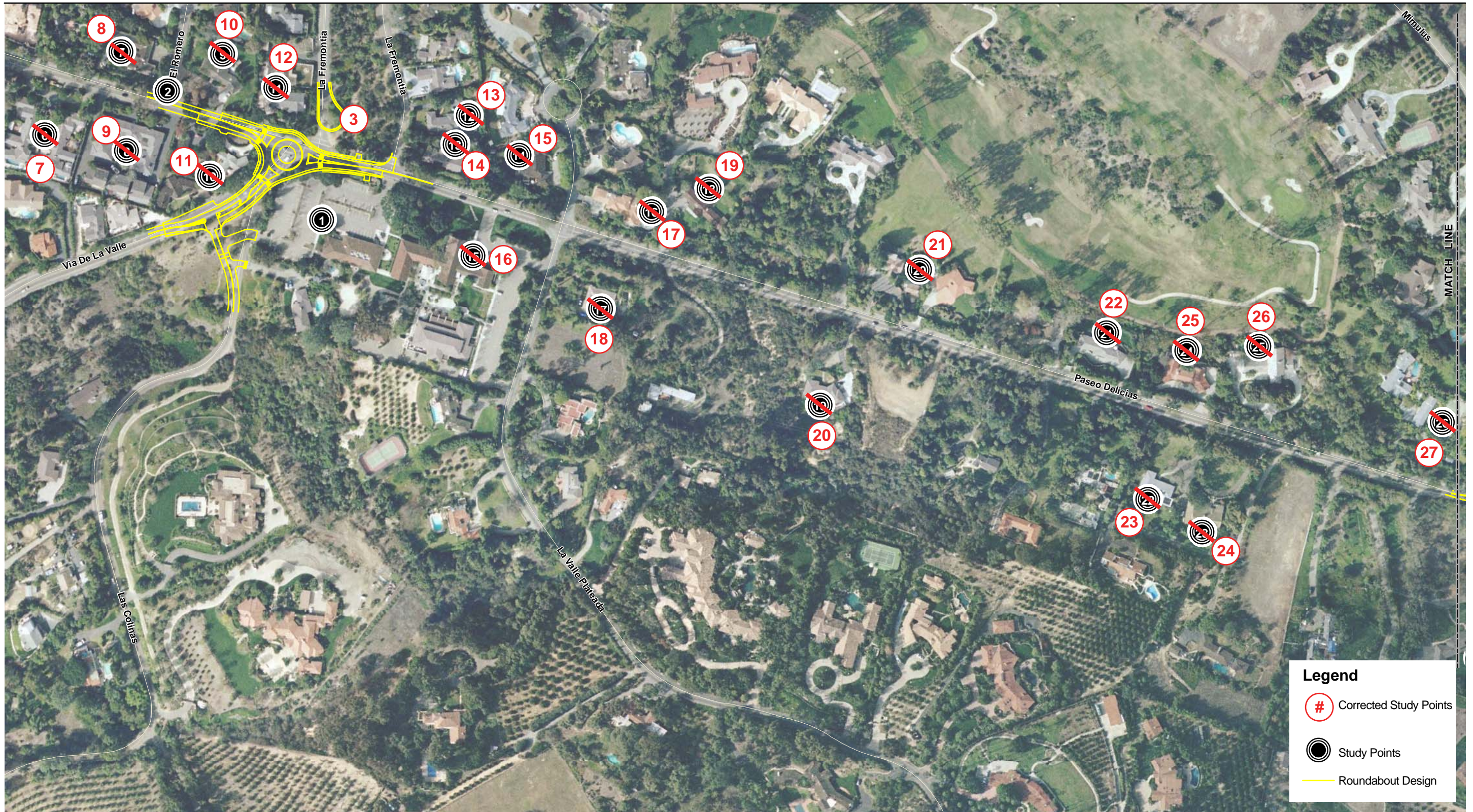
Site I.D. <sup>1</sup>	Location or Address	Nearest Intersection	Description of Land Use Activity	Number of Units Represented	NAC (Activity Category) Noise level	Existing Worst-Hour Noise Level, L <sub>eq</sub> (h), dBA	Measured or Modeled
1	Village Church, 6225 Paseo Delicias	Via de la Valle/ La Fremontia	Church	1	(B) 67	60(55)	Modeled (Measured)
2	6130 El Romero	Via de la Valle/ La Fremontia	Residence	1	(B) 67	59(57)	Modeled (Measured)
3	Northeast corner of La Fremontia and Paseo Delicias	El Montevideo/ La Valle Plateada	Undeveloped Land	1	(D) -	65(59)	Modeled (Measured)
4	Northeast corner of El Montevideo and Paseo Delicias	El Montevideo/ La Valle Plateada	Undeveloped Land	1	(D) -	67(61)	Modeled (Measured)
5	6590 Paseo Delicias	El Camino del Norte	Residence	1	(B) 67	63(57)	Modeled (Measured)
6	Southwest corner of El Camino del Norte and Del Dios Highway	Via de la Valle/ La Fremontia	Undeveloped Land	1	(D) -	63(59)	Measured
7	6151 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	8	(B) 67	51	Modeled
8	6133 El Romero	Via de la Valle/ La Fremontia	Residence	1	(B) 67	54	Modeled
9	6155 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	7	(B) 67	55	Modeled
10	6120 El Romero	Via de la Valle/ La Fremontia	Residence	1	(B) 67	50	Modeled
11	6221 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	1	(B) 67	63	Modeled
12	6224 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	1	(B) 67	54	Modeled
13	6252 La Fremontia	Via de la Valle/ La Fremontia	Residence	1	(B) 67	54	Modeled
14	6264 La Fremontia	Via de la Valle/ La Fremontia	Residence	1	(B) 67	58	Modeled
15	6325 La Valle Plateada	Via de la Valle/ La Fremontia	Residence	1	(B) 67	60	Modeled
16	6225 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	1	(B) 67	63	Modeled
17	6332 La Valle Plateada	Via de la Valle/ La Fremontia	Residence	1	(B) 67	61	Modeled
18	6344 La Valle Plateada	Via de la Valle/ La Fremontia	Residence	1	(B) 67	57	Modeled
19	6336 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	1	(B) 67	53	Modeled
20	6385 Paseo Delicias	Via de la Valle/ La Fremontia	Residence	1	(B) 67	50	Modeled



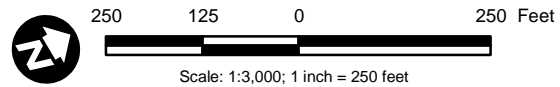
<b>Site I.D.<sup>1</sup></b>	<b>Location or Address</b>	<b>Nearest Intersection</b>	<b>Description of Land Use Activity</b>	<b>Number of Units Represented</b>	<b>NAC (Activity Category) Noise level</b>	<b>Existing Worst-Hour Noise Level, L<sub>eq</sub>(h), dBA</b>	<b>Measured or Modeled</b>
21	6418 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	56	Modeled
22	6472 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	52	Modeled
23	6505 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	50	Modeled
24	6513 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	48	Modeled
25	6512 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	58	Modeled
26	6550 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	52	Modeled
27	6580 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	58	Modeled
28	6575 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	48	Modeled
29	6795 El Montevideo	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	56	Modeled
30	7052 La Valle Plateada	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	51	Modeled
31	7057 La Valle Plateada	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	59	Modeled
32	6693 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	52	Modeled
33	6715 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	56	Modeled
34	6788 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	51	Modeled
35	6745 Paseo Delicias	El Montevideo/ La Valle Plateada	Residence	1	(B) 67	62	Modeled
36	6787 Paseo Delicias	El Camino del Norte	Residence	1	(B) 67	46	Modeled

<b>Site I.D.<sup>1</sup></b>	<b>Location or Address</b>	<b>Nearest Intersection</b>	<b>Description of Land Use Activity</b>	<b>Number of Units Represented</b>	<b>NAC (Activity Category) Noise level</b>	<b>Existing Worst-Hour Noise Level, L<sub>eq</sub>(h), dBA</b>	<b>Measured or Modeled</b>
37	6832 Paseo Delicias	El Camino del Norte	Residence	1	(B) 67	48	Modeled
38	6840 Paseo Delicias	El Camino del Norte	Residence	1	(B) 67	54	Modeled

<sup>1</sup> Measurement I.D. is keyed to measurement locations shown in Figures 6 and 7.  
Data compiled by EDAW 2007.



Source: AirPhotoUSA 2006; SanGIS 2006; EDAW 2006; TAIC 2008



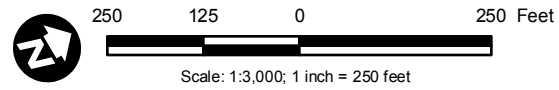
**Revised Figure 6**  
**Noise Receptor Locations - West**

Rancho Santa Fe Roundabouts Noise Impact Analysis

Path: P:\2007\07080002 RSF Traffic Circles\GIS\MXD\AIR\_NOISE\noise\_receptor\_locations\_WEST.mxd, 03/20/08, LeeJ



Source: AirPhotoUSA 2006; SanGIS 2006; EDAW 2006; TAIC 2008



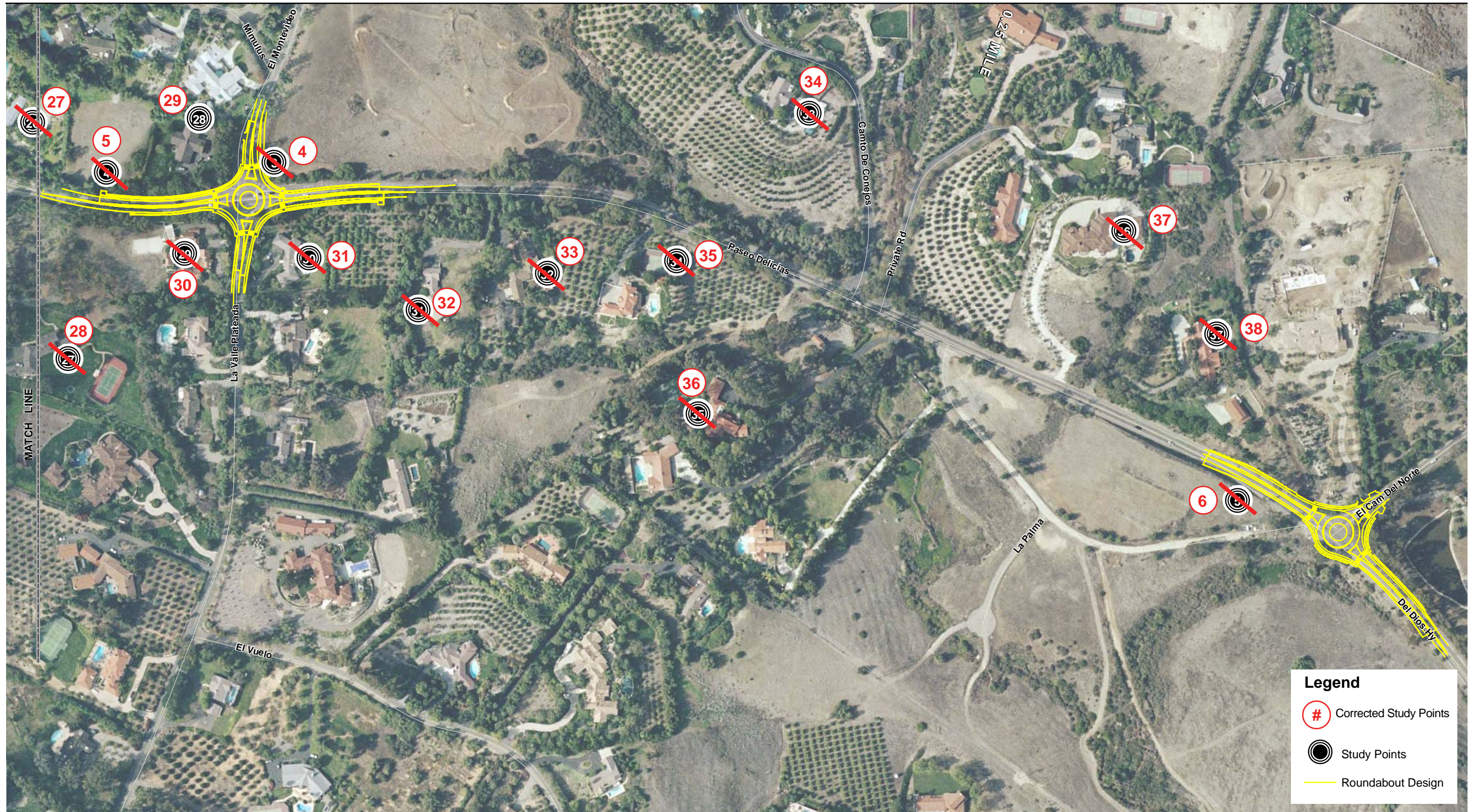
**Legend**

- Study Points
- Roundabout Design

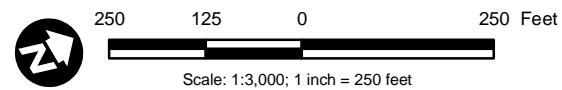
**Figure 6**  
Noise Receptor Locations - West

Rancho Santa Fe Roundabouts Noise Impact Analysis

Path: P:\2012\60274541\06GIS\6.3\_Layout\Noise\noise\_receptor\_locations\_WEST\_2012\_revised.mxd, 9/21/2012, steinb



Source: AirPhotoUSA, 2006; SanGIS 2007; EDAW 2006; TAIC 2008



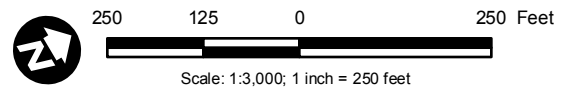
**Revised Figure 7**  
**Noise Receptor Locations - East**

Rancho Santa Fe Roundabouts Noise Impact Analysis

Path: P:\2007\07080002 RSF Traffic Circles\5GIS\MXD\AIR\_NOISE\noise\_receptor\_locatons\_EAST.mxd, 03/20/08, Lee J



Source: AirPhotoUSA, 2006; SanGIS 2007; EDAW 2006; TAIC 2008



**Figure 7**  
Noise Receptor Locations - East

Rancho Santa Fe Roundabouts Noise Impact Analysis

Path: P:\2012\60274541\06GIS\6.3\_Layout\Noise\noise\_receptor\_locations\_EAST\_2012\_revised.mxd, 9/21/2012, steinb

**Appendix L**  
**Equestrian Usage Assessment Report**





**RANCHO SANTA FE ROUNDABOUTS  
FINAL EQUESTRIAN USAGE ASSESSMENT  
SAN DIEGO, CALIFORNIA**

prepared for:

**County of San Diego  
Department of Public Works  
5469 Kearny Villa Road, Suite 305  
San Diego, California 92123**

and

**TAIC  
9089 Clairemont Mesa Blvd., Suite 200  
San Diego, California 92123**

prepared by:

**EDAW, Inc.  
1420 Kettner Blvd., Suite 500  
San Diego, California 92101**



**RANCHO SANTA FE ROUNDABOUTS  
FINAL EQUESTRIAN USAGE ASSESSMENT REPORT  
SAN DIEGO, CALIFORNIA**

*Prepared for:*

County of San Diego  
Department of Public Works  
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San Diego, California 92123

and

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Fax: (619) 233-0952

March 2008



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# **CHAPTER 1.0**

## **INTRODUCTION**

### **1.1 BACKGROUND**

In general, this Equestrian Usage Assessment (EUA) is meant to describe the existing equestrian activity within the project area as well as analyze how the proposed project will affect these activities. The data types used for this description and analysis encompass geographic information, general planning documents, related technical reports, similar environmental documents, equestrian crossing counts, and information gathered through site visits and phone interviews. This breadth of information is intended to provide decision makers the opportunity to better understand the importance of equestrian activities within the study area so that they can, in turn, better understand the potential impacts the proposed project may have on local equestrians and their horses.

The first three sections of this EUA, presented in this draft, provide a delineation of the study area carried forth for analysis (Chapter 1), a summary of existing equestrian use within the study area (Chapter 2), and an analysis of impacts (Chapter 3). The proposed project is located at three intersections and their approaching street segments along approximately 2.6 miles of Paseo Delicias between Via de la Valle and El Camino del Norte, east of Encinitas, in the unincorporated community of Rancho Santa Fe (Figure 1). This document is primarily concerned with the description of equestrian use and how the proposed project will impact the residents of Rancho Santa Fe.

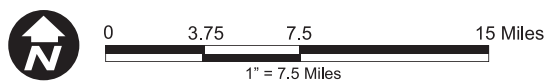
### **1.2 PROJECT OBJECTIVES**

The County of San Diego Department of Public Works (County DPW) proposes to construct traffic roundabouts at the following three intersections along Paseo Delicias in the unincorporated community of Rancho Santa Fe in northwest San Diego County:

- Paseo Delicias/El Camino del Norte/Del Dios Highway (El Camino del Norte)
- Paseo Delicias/El Montevideo/La Valle Plateada (El Montevideo)
- Paseo Delicias/Via de la Valle/La Fremontia (Via de la Valle)



**Figure 1**  
**Regional Location Map**





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Paseo Delicias is a two-lane road between Via de la Valle and El Camino del Norte that provides a link between Interstate 15 (I-15) along Via Rancho Parkway and Del Dios Highway to Interstate 5 (I-5). Vehicles tend to travel rapidly on this stretch of road, as it is one of the few roads in this area that connects I-15 to I-5. Two of the three intersections along Paseo Delicias (El Montevideo/La Valle Plateada and Via de la Valle/La Fremontia) are stop sign controlled on all legs of the intersections and drivers must wait in significantly long queues at each of these controlled intersections. The third intersection (El Camino del Norte) is stop controlled only on El Camino del Norte. To avoid long waits, some motorists divert onto other narrow residential roadways, creating potential traffic conflicts and delays to residents accessing their driveways.

The objective of the proposed project is to construct roundabouts along Paseo Delicias to ease existing traffic congestion at three intersections primarily caused by through traffic traveling east and west during the morning and evening peak commuter periods. At the request of the community, a roundabout feasibility study was completed in 2004, which determined that roundabouts at the three subject intersections would improve Level of Service (LOS) for these intersections during peak hours.

The San Dieguito Community Plan, which includes Rancho Santa Fe, contains a goal that “urban-type street improvements such as gutters, curbs, sidewalks and extensive street lighting should not be installed.” This goal is consistent with the Rancho Santa Fe community’s protective covenant (the Covenant) to preserve the community’s rural character and to limit streets to two lanes.

### **1.3 PROJECT DESCRIPTION**

The proposed project would involve the construction of roundabouts to replace existing stop sign controls at the following intersections:

- Paseo Delicias/El Camino del Norte/Del Dios Highway (El Camino del Norte)
- Paseo Delicias/El Montevideo/La Valle Plateada (El Montevideo/La Valle Plateada)
- Paseo Delicias/Via de la Valle/La Fremontia (Via de la Valle/La Fremontia)

Currently, the Via de la Valle/La Fremontia and El Montevideo/La Valle Plateada intersections are all-way stop controlled. The El Camino del Norte intersection is stop controlled on El Camino del Norte approaching Paseo Delicias/Del Dios Highway. Vehicles traveling along or accessing this roadway corridor must wait in significantly long queues during peak commute periods at each of the three controlled intersections.

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Traffic operations at each of the three intersections would be similar with installation of the proposed roundabouts. The roundabouts would be built to appropriate standards for the existing roadway conditions in terms of lane width, speed limit, and to allow their use by large trucks. Traffic entering each roundabout would not be stop controlled at any of the intersecting street segments. Vehicles approaching each roundabout would yield the right-of-way to vehicles already within the roundabout and would merge into the counter-clockwise flow of a single lane of traffic. Through traffic on Paseo Delicias would complete a one-half circle on the roundabout and continue in a westbound or eastbound direction. Vehicles turning onto intersecting streets would complete a one-quarter or three-quarter circle on the roundabout and exit onto any of the intersecting street segments.

Combination pedestrian/equestrian crossings would be delineated by crosswalk markings in the pavement. Push-button-activated crossings with in-pavement lighting and flashing warning signs would be located approximately 200 feet from the crossing and would simultaneously illuminate at each segment of the intersection. A safety island would also be installed to enable crossers to pause between the lanes of traffic.

- **El Camino del Norte Intersection**

The El Camino del Norte roundabout would have three intersecting street segments. The intersection would need to be widened on the northwest and northeast corners to accommodate the roundabout. Retaining walls would be constructed on the north and south sides of Paseo Delicias and Del Dios Highway. Existing drainage system improvements would be extended within the areas of new pavement for the roundabout. The existing equestrian trail would be re-routed along the shoulders of Paseo Delicias to access the proposed crosswalk to be located just west of the roundabout.

- **El Montevideo Intersection**

The El Montevideo roundabout would have four intersecting street segments. To accommodate the roundabout, the intersection would need to be widened and shifted slightly in an easterly direction. No widening would be required at the southwest side of the intersection. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

- **Via de la Valle Intersection**

The Via de la Valle roundabout would have three intersecting street segments and would include the closure of the western La Fremontia intersection. La Fremontia would become a cul-de-sac and an earthen berm would be constructed between the cul-de-sac

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and the roundabout. The southwest and southeast corners at the intersection of Paseo Delicias/Via de la Valle would need to be widened to accommodate the roundabout and for the realigned equestrian trail that would follow along the southeast side of the intersection. Existing bus stops on Paseo Delicias would be relocated farther to the east and west of the roundabout.

South of the proposed roundabout, the intersection of Las Colinas with Via de la Valle would be realigned to the south to intersect Via de la Valle at a right angle. This realignment is to allow continuous traffic flow through the three street segments in the roundabout and to allow full access to Las Colinas from Via de la Valle. Transition lanes to facilitate right turns into and out of Las Colinas and a left turn pocket into Las Colinas would also be constructed. Two private driveways on Las Colinas would be lengthened to connect with the realigned roadway. West of the roundabout, the eastern access to a circular driveway at a private residence on the southerly side of Paseo Delicias would be closed. Ingress and egress to the private residence would be maintained via the western side of the circular driveway. The roundabout would require a retaining wall on the southeast side of the intersection. Existing drainage system improvements would be extended within the areas of new pavement for the roundabout. The Village Community Presbyterian Church at the southeast corner of the intersection is proposing a redevelopment of the church property that would include a reconfigured parking lot. The proposed church improvements would not conflict with the planned roundabouts and additional parking would be provided in the church's improvements. New landscaping would also be installed.

Technical and environmental considerations affecting the design of the project are the following:

- To maintain the existing equestrian trail crossings at all intersections along Paseo Delicias
- To comply with goals of the San Dieguito Community Plan to avoid installation of "urban-type street improvements such as gutters, curbs, sidewalks, and extensive street lighting"
- To comply with the community plan and County Circulation Element designation of the Paseo Delicias corridor as a two-lane road
- To avoid impacting structures, landscaping, and other features associated with known historic properties in the project area
- To provide safe pedestrian crossings at each of the project intersections

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The proposed roundabouts, as well as the 100-foot buffers described below, are presented in Figure 2.

#### **1.4 STUDY AREA DELINEATION**

Delineation of the project study area represents a basic first step in the EUA process. Paralleling the guidance provided for more general community impact assessments (CIAs), the study area has been delineated to include not only the project itself, but also the area likely to experience project-related equestrian impacts, if any. In terms of the project itself, the proposed roundabouts would be constructed along an approximately 1.25-mile stretch of Paseo Delicias, located entirely within the unincorporated community of Rancho Santa Fe within San Diego County.

Beyond the physical project footprint, the larger study area is designed to encompass the trails, structures, businesses, and membership areas that may be subject to direct and indirect project effects. These attributes or features may be affected in a variety of ways:

- Trails can be affected by being removed, relocated, bisected, or made more or less accessible or safe.
- Structures include staging areas and stables that may be altered, closed, or otherwise affected by the project.
- Businesses and riding areas affected include riding clubs and open spaces that would become more or less accessible upon completion of the proposed project.

The geographic footprints of impacts vary, dependent on project phase and type of impact. Therefore, the chosen process for delineating the EUA study area involves the designation of an area of immediate impacts; a wider area of direct impacts; and a third, larger area for the analysis of indirect or cumulative impacts. This last area is considered to delineate the overall study area.

As equestrian usage is a major component of local community life, the methodology for the EUA is understandably similar to that in place for the CIA. Therefore, when estimating the immediate and direct effects of this proposed project, study areas were delineated using a set uniform distance. To this end, a 100-foot buffer zone extending around each proposed roundabout along Paseo Delicias was designated as the area of immediate impact. The area of immediate impact encompasses the area of greatest immediacy of equestrian impacts, including path realignment and physical disturbances resulting from construction activities (Figure 2). Additionally, a 0.25-mile buffer zone extending from the northernmost and southernmost proposed roundabouts around Paseo Delicias was designated the area of direct impact (Figure 3).






Source: AirPhotoUSA, Jan 2006; TAIC, 2006

1,000 500 0 1,000 Feet

Scale: 1:12,000; 1 inch = 1,000 feet

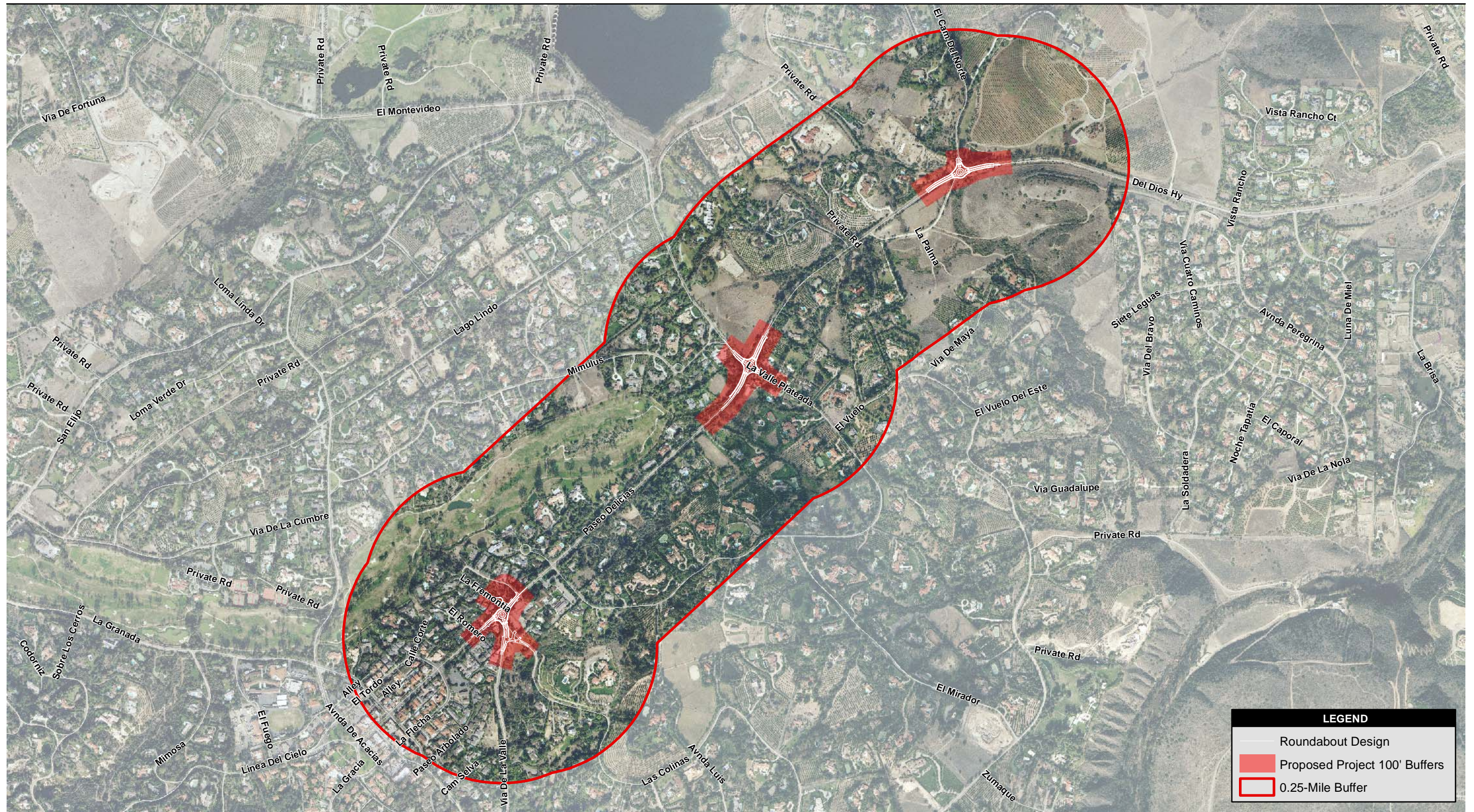
**LEGEND**

-  Roundabout Design
-  Proposed Project 100' Buffers
-  0.25 Mile Buffer

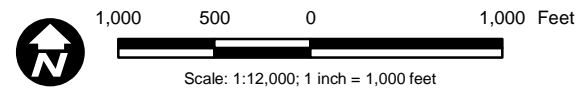
**Figure 2**  
**Proposed Project**

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Source: AirPhotoUSA, Jan 2006; SanGIS, 2006; TAIC, 2006; EDAW, 2006



**Figure 3**  
**Direct Impact Area**

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Given that indirect or cumulative impacts can occur at a distance from the proposed project and potentially occur at a community level or beyond, broader, nonuniform boundaries are also usually set for the analysis of indirect or cumulative impacts. Equestrian use throughout Rancho Santa Fe, and specifically along the trails within the immediate and direct impact areas, is limited to members of the Rancho Santa Fe Association. As described in Chapter 2, the equestrian trails in Rancho Santa Fe are a relatively closed system, open only to those homeowners within the boundaries of the Rancho Santa Fe Covenant (“Covenant”) area. Other boundaries and designations of analytic worth in the CIA and other documents, such as census block group boundaries, land use, school districts, and community facilities, are not as important in this particular EUA as all association members have the potential to be affected equally by impacts to the shared trail system, regardless of their location within the Covenant area. Therefore, the Covenant area was determined to be an appropriate study area for the analysis of potential indirect and cumulative impacts related to the proposed project. This delineation report, however, is subject to further refinement and should be considered a working document as the resource areas and potential effects are identified with more specificity as the study proceeds.

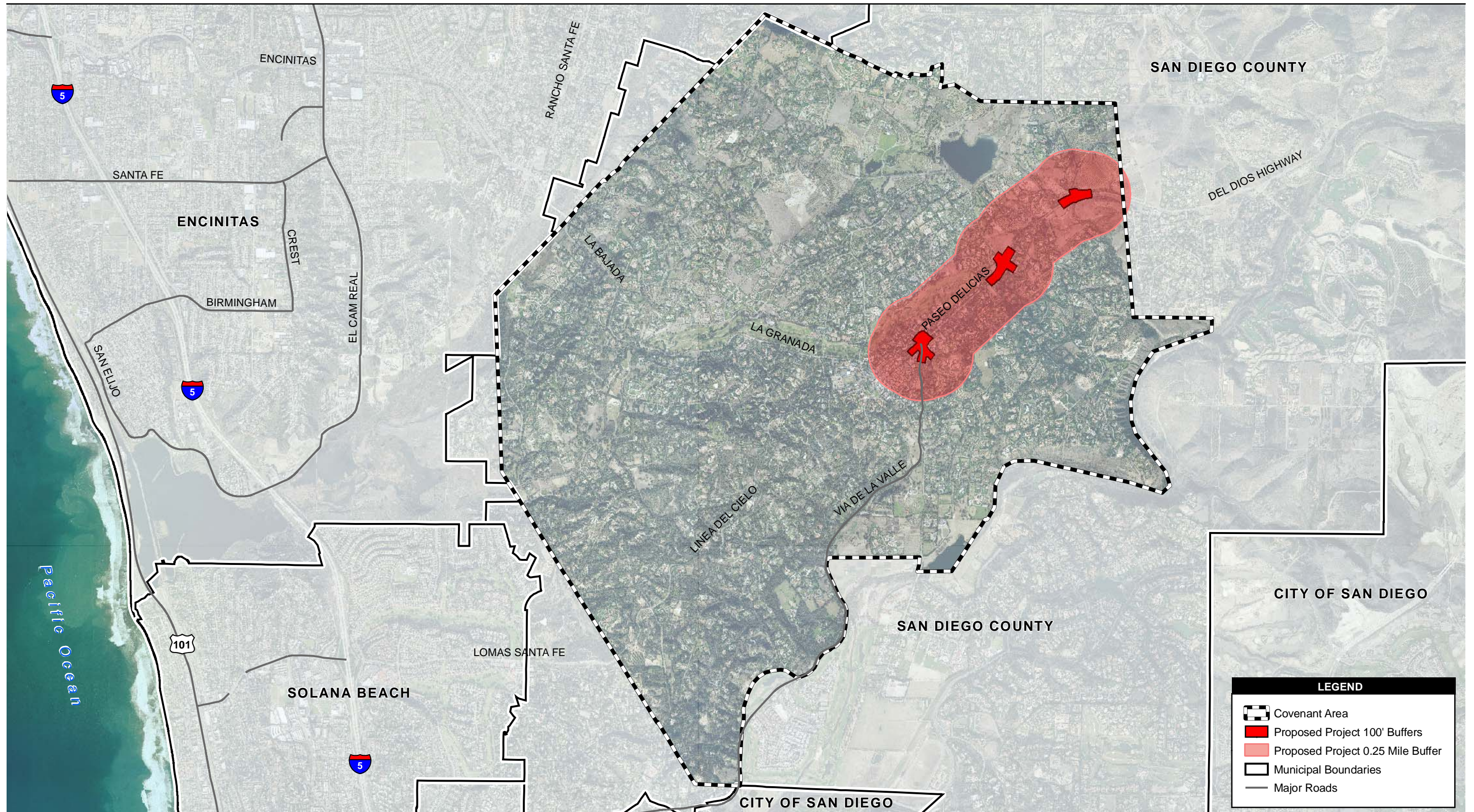
Table 1 summarizes the data types used to describe the existing equestrian usage within the study area. Figure 4 presents the Covenant area, major roads, proposed roundabouts, and associated immediate and direct impact buffers.

**Table 1**  
**Summary of Available Planning, Equestrian, GIS and Engineering Information**

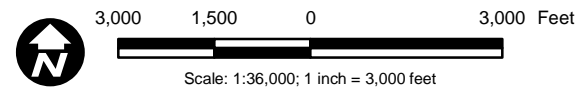
<b>County of San Diego Plan / Data Type</b>	<b>Plan / Data Type Format</b>
General Plan	Hardcopy
Community Trails Master Plan	Digital
Assessor Data	GIS
City / County Streets	GIS
<b>Community or Rancho Santa Fe Plan / Data Type</b>	<b>Plan / Data Type Format</b>
Equestrian Trails	Digital / GIS
Project Engineering Footprint Data	CAD / GIS
Initial Windshield Survey Data	Digital
EUA Photo Reconnaissance	Digital
Rancho Santa Fe Protective Covenant	Hardcopy
Rancho Santa Fe Animal Keeping Regulations	Hardcopy

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Source: AirPhotoUSA, 2006; US Census Bureau, 2000; SanGIS, 2006; TAIC, 2006; EDAW, 2006



**Figure 4**  
**Covenant Area**

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## **CHAPTER 2.0**

### **AFFECTED ENVIRONMENT**

#### **2.1 COMMUNITY BACKGROUND AND HISTORY**

The origins of contemporary Rancho Santa Fe can be traced back to Mexican land ownership patterns in the area in the early 19th century. The lands were within the traditional range of southern California Native American groups until the Spanish conquest. In 1833, the Mexican Alcalde of the Pueblo San Diego, Juan Osuna, secured portions of Rancho Santa Fe through a land grant from the Mission San Diego. Rancho San Dieguito, as this land was named, was used as grazing land for cattle and as a home for the Osuna family. In 1906, the Atchison, Topeka and Santa Fe Railway acquired the majority of Rancho San Dieguito and established a eucalyptus forest on the land in the hopes that eucalyptus would provide a fast-growing, renewable supply of wood for much-needed railroad ties. Frost, drought, and the unsuitable softness of eucalyptus resulted in the Santa Fe Land Improvement Company (a subsidiary of the railroad) abandoning their plans for a eucalyptus forest. In an attempt to recover their losses, they began planning a community of ranches with a unifying architectural style set among the newly forested land (Rancho Santa Fe Association 2007).

The Santa Fe Land Improvement Company spent 5 years, between 1921 and 1926, planning the community of Rancho Santa Fe; plotting estate divisions and planning winding, rural roadways; and settling on a Spanish Revival architectural style (Rancho Santa Fe Association 2007). In 1927, the Rancho Santa Fe Protective Covenant was adopted by community landowners, creating a document that regulated architecture and land use. This document continues to ensure the unifying style originally envisioned by the Santa Fe Land Improvement Company.

Even in 2007, the community of Rancho Santa Fe maintains a relatively rural atmosphere, despite the City of San Diego's urban and nearby suburban growth and Rancho Santa Fe's proximity to the more densely populated coastal municipalities of Encinitas and Solana Beach. Within Rancho Santa Fe, residential parcels are required to be 1 acre or more, sidewalks and streetlights are prohibited in residential areas, and residents do not receive mail delivery at their homes.

Horses are kept on local estates, and equestrian activities are relatively more prevalent in Rancho Santa Fe than in neighboring, more suburban and urban communities. The neighboring Fairbanks Ranch Country Club sits on the grounds once used for the equestrian endurance event held during the 1984 Olympics.

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This rural atmosphere has attracted a number of highly successful individuals who want a natural escape in proximity to Los Angeles and San Diego as well as the amenities these cities can provide. Notable residents of the area (although not necessarily residents of the Covenant area), past and present, include Bing Crosby, Douglas Fairbanks, Gary Bell (founder of Taco Bell), Howard Hughes, Joan Kroc (widow of McDonald's Founder Ray Kroc), and Bill Gates (San Diego Reader 2006; San Diego Online 2006; SignOnSanDiego 2006). Forbes magazine named zip code 92067, which includes Rancho Santa Fe, the second most expensive zip code in the United States in 2006, behind only Sagaponack, New York (Forbes.com 2006).

## **2.2 EQUESTRIAN ACTIVITY AS AN ICON OF RURALISM**

Equestrian activity has been prevalent throughout Rancho Santa Fe's history, starting under Spanish ownership and continuing into the early days as a planned rural-residential community. While contemporary agricultural uses and the keeping of livestock on parcels throughout Rancho Santa Fe is not the primary use of individual properties, these land uses perpetuate a rural atmosphere throughout the community. As properties and infrastructure become more urbanized in the surrounding areas, these rural activities take on additional meaning as demonstrations of community cohesion and a continuation of a rural aesthetic that honors the history of the area (of which the residents are most proud). Additionally, these land uses are suggested by the rigid specifications of the Rancho Santa Fe Protective Covenant (outlined below). Even as a hobby, equestrian use in Rancho Santa Fe can be interpreted as an important component of a rural lifestyle, the participation in which sets Rancho Santa Fe residents apart from the representatives of suburban and urban sprawl they perceive as threatening their community.

An analog to the current proposed project that demonstrates the relationship between community equestrian use and a quality of ruralism can be found in the events surrounding the State Route 125 (SR 125) South construction between Otay Mesa and Spring Valley in San Diego County. Although different in size and scope, the SR 125 project is similar to the current project in Rancho Santa Fe in that an improvement to traffic circulation was planned through a historically rural area. Written comments to the Environmental Impact Report (EIR) concerning the proposed SR 125 project decried the perceived increase in air pollution, noise, loss of wildlife, and growth (California Department of Transportation 2000). The major public display of opposition to the project by residents of Bonita, however, accentuated the rural nature of their community by using equestrian imagery on organizational documents. Residents also planned to meet State Senator Steve Peace and local television reporters on horseback during a protest. This necessitated the Bonita Golf Club to permit equestrian riding on its course, which it granted. Anthropological literature has demonstrated that potent symbols of group membership are

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regularly embraced during public meetings between disparate cultural groups (Parsons 1951; Labov 1972; Conklin 1997; Adams 1998). It can be interpreted that this display of equestrian use by the residents of Bonita is similar, in that the symbol of the horse is emblematic of a rural lifestyle that includes not only a regular and easy incorporation of equestrian activities, but also clean air, diverse area wildlife, and agreeably low noise levels.

During key person interviews for this project, interviewees have stressed that equestrian activities are an integral part of life in Rancho Santa Fe, despite the fact that a minority of Rancho Santa Fe Association members participate personally in any equestrian activity. For one interviewee, riding the trail system throughout the Covenant area is a tribute to the rural, Spanish, pre-industrial history of the area. Another believes that as long as one horse is present in Rancho Santa Fe, the area will consider itself a rural community. While more research would be needed to come to any definitive conclusion, a threat to equestrian activity in Rancho Santa Fe could be interpreted by residents as a direct affront to a defining symbol or activity emblematic of the rural atmosphere of their community.

### **2.3 ADOPTED GOALS AND POLICIES**

As suggested above, equestrian use can be interpreted by members inside and outside a community as a symbol of ruralism. Therefore, when including applicable planning documents, it is important to include discussions concerning the perpetuation of a rural aesthetic as well as concrete goals and policies regulating equestrian trails and boarding. The primary plans that include these types of information are the San Diego County General Plan, the San Dieguito Community Plan, The Rancho Santa Fe Protective Covenant, the Rancho Santa Fe Association Animal Keeping Regulations, and the Community Trails Master Plan.

#### **San Diego County General Plan**

As the Covenant area is located completely within unincorporated San Diego County, the San Diego County General Plan is considered in relation to the goals and policies designed to shape long-term development within the area (County of San Diego 2003).

The existing Land Use Element of the General Plan sets out several broad policy goals related to preserving rural character such as directing urban growth within or adjacent to existing urban areas, retaining a rural setting of the remaining areas, and phasing growth with facilities. The Land Use Element specifically sets forth the goal of “Retain[ing] the rural character of non-urban lands” (County of San Diego 2003:II-2).

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The existing Recreation Element of the General Plan sets out one main goal related to trails within the county: “Establish and protect an enjoyable, efficient, and safe network of public riding and hiking trails” (County of San Diego 1993:IV-32). The Recreation Element sets forth a number of specific objectives of particular relevance to the project:

- Interconnect parks and recreation areas and trails planned by the county and other governmental agencies.
- Provide a variety of trail experiences by locating trails through varied terrain, scenery, and points of interest.
- Locate trails on existing public domain, public easements and public rights-of-way in order to eliminate the effect on private property.
- Avoid trail location on or adjacent to agricultural land or any land that might be unduly burdened by horse riding or hiking trails.

### **San Dieguito Community Plan**

The San Dieguito Community Plan is not intended as a detailed planning document or a set of regulations, but rather a timeless statement of goals used to provide the orderly development of the San Dieguito area while maintaining the identities of the many historically established neighborhoods (County of San Diego 1998). The San Dieguito Plan outlines goals for the communities of Rancho Santa Fe, Whispering Palms, Fairbanks Ranch, Elfin Forest, Del Dios, and Mt. Israel. Of these neighborhoods, Rancho Santa Fe is located on the western edge but can be considered the cultural center for the San Dieguito Community Plan, and many of the stated goals are put forth to ensure the rural lifestyle currently in place is not threatened by the effects of urbanization. A few of these general goals are of particular relevance to the proposed project:

- Perpetuate the present state of spaciousness and rural living.
- Establish and maintain San Dieguito as an economically and socially balanced community while ensuring that development is gradual, orderly, and in harmony with the existing environment.

The section of the San Dieguito Community Plan specifically designated to discuss goals relating to land use is generally focused on providing a distribution of land uses that is compatible with the existing character of the community. These goals are largely consistent with those found in the San Diego County General Plan.



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The section of the San Dieguito Community Plan concerned with traffic and circulation outlines a number of policies in an attempt to create a transportation system that can accommodate automobile, bicycle, equestrian, and mass transit networks while minimizing any detractions to the natural beauty of the area. Specifically, road designs should reflect the unique needs of the area, with a policy that turn radii shall be large enough that equestrian rigs can be accommodated.

The section of the San Dieguito Community Plan concerned with recreation outlines goals similar to the San Diego County General Plan, in that its main goal is to “Enrich the lives of San Dieguito Residents of all age groups by establishing a well-balanced system of recreational facilities and services” (County of San Diego 1998). Among these facilities and services are included the establishment and protection of an “enjoyable, efficient and safe network of public riding and hiking trails.”

The San Dieguito Community Plan stresses that the rural, estate residential lifestyle, combined with a pleasant natural environment and an already existing trail system throughout the Covenant area, has made equestrian activities, “a conspicuous and essential part of the San Dieguito lifestyle,” which “should be a vital, permanent part of the regional recreation system” (County of San Diego 1998:80). A number of the goals listed in this section are relevant to the proposed project:

- Include public utility rights-of-way in the trail network, if appropriate.
- Align trails to link with trails systems established for adjacent jurisdictions.
- Trail alignments should emphasize public lands, dedicated open space, or floodplains.
- Trails should lead to areas that have unique scenic qualities.
- Maintain land adjacent to the trails in its natural state.
- Design and locate trails to minimize negative environmental impacts on the surrounding areas.
- Develop trails that may be safely used by hikers and riders of all ages and skills.

### **Rancho Santa Fe Protective Covenant**

Established in 1928, the Rancho Santa Fe Protective Covenant provides the regulations for all residential actions of maintenance and/or improvements. While not generally seen as a planning

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document for public works, the Protective Covenant can be interpreted to view the continuation of the rural, exclusive nature of the community of Rancho Santa Fe to be directly dependent on how individual homeowners engage with their property. The guidelines in the Protective Covenant were put forth by the original framers because, “Rancho Santa Fe is unusually attractive and valuable as a high class place of residence because of the rare quality of its landscape, trees and shrubs and the fine architecture and other improvements established by its property owners” (Rancho Santa Fe Association 1973). The contemporary relevance of this document can be inferred by its continued use as a regulatory mechanism for the community. This suggests that current homeowners feel similarly about the present-day community of Rancho Santa Fe.

The Protective Covenant briefly discusses regulations related to keeping livestock, including horses. In addition to architectural and artistic limitations placed upon equestrian-related outbuildings, the Protective Covenant states:

*The keeping of any cattle, hogs, rabbits, horses, or other animals, or poultry, on said property shall be subject to reasonable regulations to be made by the Board of Directors, determining the numbers thereof, the distance they must be maintained from dwellings and public roads, and other sanitary requirements. The nature of housing shall be under the jurisdiction of the Art Jury and subject to the provisions in the Covenant as to buildings and major and minor constructions. The setting of traps, except for gophers, squirrels, or small rodents, shall be subject to reasonable regulations to be made by the Board of Directors.*

### **Rancho Santa Fe Association Animal Keeping Regulations**

The Rancho Santa Fe Association Animal Keeping Regulations are put forth by the Association Board of Directors and limit, among other things, the minimum lot size, maximum allowance, residential requirements, and permitting. Permits must be obtained by residents before horses or bovine cattle can be kept on any lot. The minimum lot size for keeping horses or cattle is 2 gross acres, with a limitation of one animal per gross acre. Horses or cattle can only be kept on residential property for the private enjoyment of the owner; the operation of any sort of boarding operation, riding school, breeding stable, or other equestrian-related commercial endeavor is forbidden (Rancho Santa Fe Association n.d.).

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## **Community Trails Master Plan**

In 2000, San Diego County affirmed that trails and road right-of-way are a legitimate and necessary form of public recreation, and that the County should provide these areas for its citizens. The Community Trails Master Plan generally outlines the preferred ways to “maximize trail opportunities on public lands, including open space and parklands, and lands associated with habitat management and conservation plans” (County of San Diego 2005:vii). It specifically sets forth a number of specific objectives of particular relevance to the project:

- Local trails should be developed with community involvement and be formalized outside of the General Plan within an adopted Community Trails Master Plan.
- Adequate funding, management, and maintenance of trails should be established in order to provide an effective and enjoyable trail system that meets public needs and expectations.
- Trail planning efforts should include focused attention on new trail opportunities within parklands, open space preserves, and lands in the Multiple Species Conservation Program, where appropriate and consistent with habitat protection.
- Ongoing and continuing coordination among the three County departments to ensure the existing trail easements and access points are not lost through the development process.
- Management and maintenance of the regional and community trails should include active support of local jurisdictions.

The project is within the San Dieguito Community Trails and Pathways Plan Element of the Community Trails Master Plan, which generally states the same objectives and goals as the general Community Trails Master Plan and the Recreation Element of the San Dieguito Community Plan. It stresses the equestrian nature of the San Dieguito community and the need for 10 miles of community trails in 2000, and a projected need of 26 miles of trails in 2020. The trails within the Covenant area of Rancho Santa Fe are exempt from this count; however, as they are largely present on easements through private land and are not open to the general public. Regardless, the Community Trails Master Plan puts forth a number of general objectives useful for consideration when planning interfaces between trails and other projects.

## **2.4 DATA COLLECTION METHODS**

In addition to the planning documents cited above, data concerning equestrian use in the area were collected through a series of key person phone interviews and site visits. The accelerated

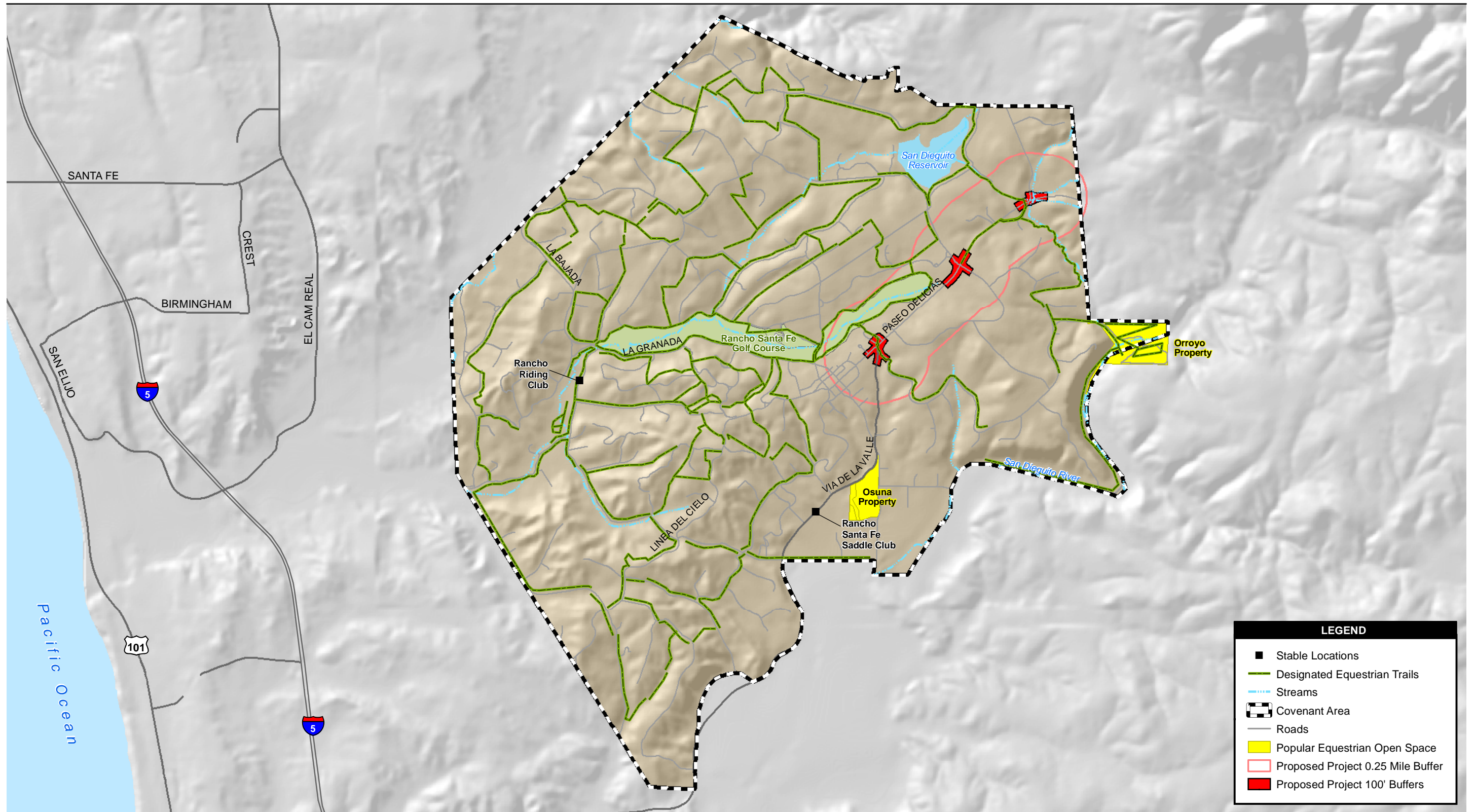
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schedule of this document, coupled with the private nature of Rancho Santa Fe residents, prevented the use of more traditional focus group interviewing, intercept interviewing, or written surveys. The phone interviews, however, were conducted with a number of equestrian professionals in the area, avid hobbyists, and Rancho Santa Fe Association representatives. Site visits included detailed counts of equestrian crossings at all three project intersections, including descriptions of duration and directionality (see Appendix A). Information submitted through the public scoping process by equestrian professionals was also incorporated into this report. This information provided a description of the existing designated (formal) and undesignated (informal) trail network, as well as a generalized description of equestrian activity throughout the Rancho Santa Fe community.

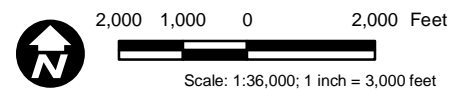
## **2.5 EXISTING TRAIL NETWORK**

A map of the existing designated trails present within the Covenant area is presented in Figure 5. The overall trail network is composed of both designated and undesignated trails, with designated trails totaling roughly 45 miles. As displayed in Figure 6, designated trails within the study area are primarily located along easements on private property, twisting along property boundaries and through undeveloped private open space. Other trails in the study area are located along public rights-of-way associated with community streets. Finally, an equestrian trail in the eastern part of the study area is partially located along Santa Fe Irrigation District property. The trails throughout the Covenant area follow this general pattern, with most running through private property (generally along parcel borders), public rights-of-way associated with community streets and roadways, and some small easements through locally owned public property. Trails are generally constructed with wood mulch or bare dirt, ranging in width from 1.5 to 5 yards.

The extent of undesignated trails is largely unknown, although the Rancho Santa Fe Association is actively recording undesignated trails and seeking easements for them in an attempt to change their designation. Through this process, the trail system grows in an organic manner over time, with little formal planning. Undesignated trails can occur along private property or down lightly used public roads. Like hikers and bicyclists, equestrian riders do not necessarily stay to designated trails at all times, cutting across friendly properties or down roads to reach different trail-heads or other points of interest as long as areas are free of traffic. As equestrian use is relatively common throughout Rancho Santa Fe, this practice is generally not viewed with disdain by residents. There are no complete data as to the location of undesignated trails at this time.



Source: SanGIS 2007; TAIC 2006; EDAW 2007; Rancho Santa Fe Association 2007

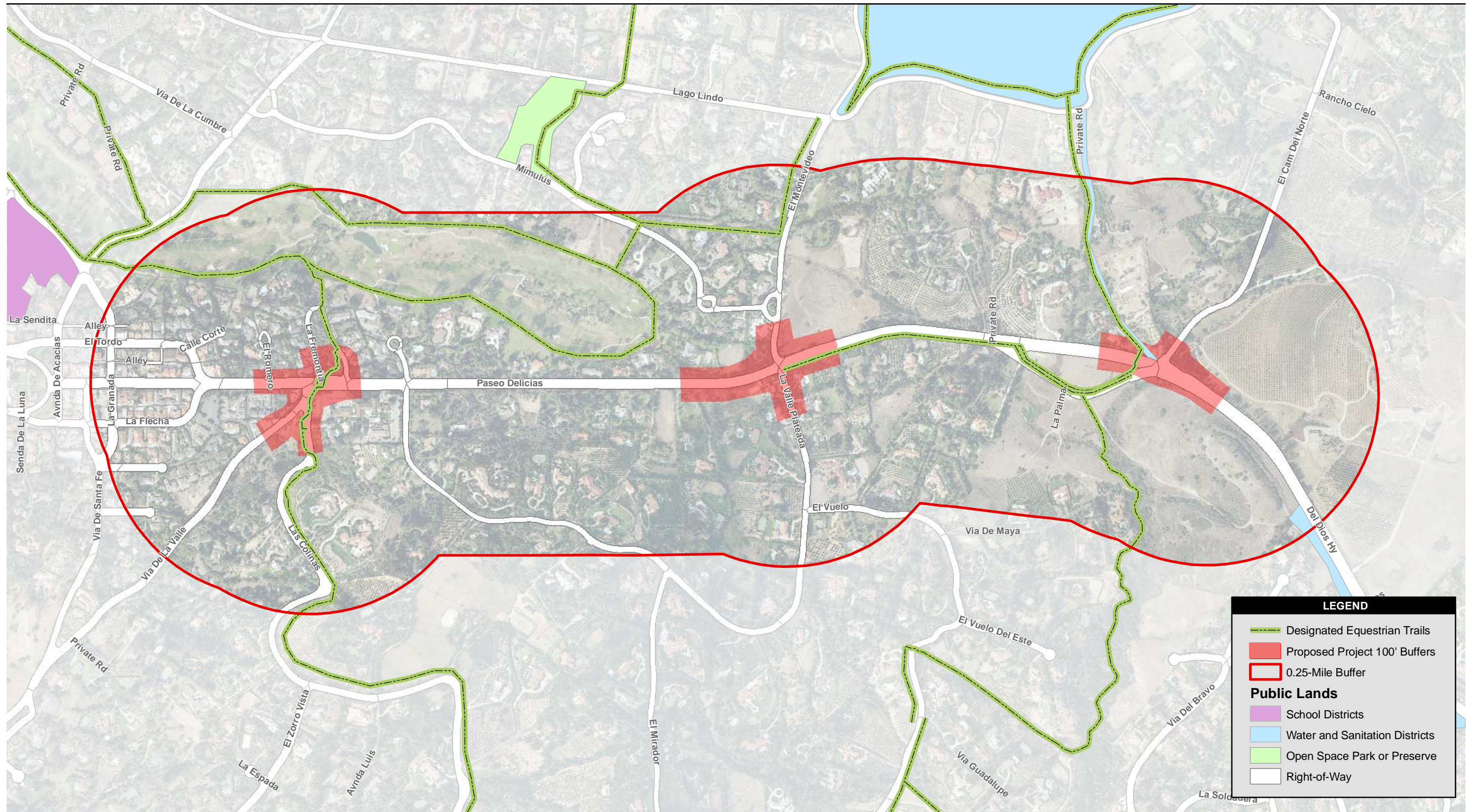


LEGEND	
■	Stable Locations
—	Designated Equestrian Trails
—	Streams
⊠	Covenant Area
—	Roads
■	Popular Equestrian Open Space
□	Proposed Project 0.25 Mile Buffer
■	Proposed Project 100' Buffers

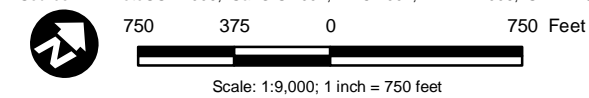
**Figure 5**  
**Study Area Equestrian Trails**

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Source: AirPhotoUSA 2006; SanGIS 2007; TAIC 2007; EDAW 2006; SANDAG 2007



**Figure 6**  
**Direct Impact Area**  
**Equestrian Trail Network Alignment**

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The trail system in Rancho Santa Fe is a relatively closed system, with limited access to surrounding communities. The trail system is limited to use by Association members, which are necessarily homeowners within the Covenant area. Thus, the only people legally permitted to use the trail system within the Covenant area are residents of Rancho Santa Fe and their invited guests. This exclusive nature has not made connection with trail systems in neighboring communities a high priority for trail planners, concentrating instead on connecting aesthetically pleasing areas with equestrian support centers and residential areas in Rancho Santa Fe.

Designated trails are generally located in the central portion of the Covenant area, just north and south of the golf course. The prevalence of trails in these areas is due largely to their long-standing residential nature and the presence of still-useful historical trails. Trails in these areas connect residential areas and the Rancho Riding Club with the loop trail around the golf course, as well as the San Dieguito Reservoir. There are fewer trails in the eastern portion of the Covenant area, largely because this area has been only recently developed. Trails in this eastern area connect residential areas with the golf course, as well as the Orroyo Property and the San Dieguito River.

There are five designated trails with stretches within the area of direct impact, with three of those trails stretching through the areas adjacent to the proposed roundabouts and through the area of immediate impact. The trails with stretches within areas of immediate impact are:

- The trail beginning at Paseo Delicias and El Camino Del Norte and running northwest to Lago Lindo.
- The trail beginning at Paseo Delicias and El Montevideo, following east Paseo Delicias on the southern side.
- The trail along Las Colinas, crossing at Paseo Delicias and Via de la Valle.

According to information from equestrian professionals (e.g., trainers, stable owners) and riders in Rancho Santa Fe, the trail system has two main crossings along Paseo Delicias. The first crossing occurs at the intersection of Paseo Delicias, El Camino Del Norte, and Del Dios Highway (Figure 7 and Page 31). Going east along the trail parallel to Paseo Delicias, an equestrian rider comes to the end of the trail on the south side of Paseo Delicias and must cross north over Paseo Delicias to a trail heading toward San Dieguito Reservoir. This trail heads uphill to the west and eventually turns northwest and downhill to the reservoir.

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The second crossing occurs at the intersection of Paseo Delicias, Via de la Valle, Las Colinas, and La Fremontia (Figure 8 and Page 35). Coming from the south going north, an equestrian rider must cross east over Via de la Valle and Las Colinas to a paved easement long the Village Church's parking lot. From there, an equestrian rider may cross north across Paseo Delicias and then east across La Fremontia. The trail continues through a lightly wooded area and then north along La Fremontia to a connection with the golf course loop trail.

Interviewees shared the possibility of a third crossing over Paseo Delicias at the intersection of Paseo Delicias and El Montevideo. This crossing is not designated, however, and is reportedly lightly used by equestrian riders in the area.

## **2.6 DESCRIPTION OF EQUESTRIAN USE**

In a recent article published by the San Diego Union-Tribune, it was estimated that there were 9.2 million horses in the United States in 2005. Of those 9.2 million, an estimated 3.9 million horses are used for recreation. It is also estimated that there are 2 million horse owners, with 46 percent of those horse owners earning between \$25,000 and \$75,000 a year (SignOnSanDiego 2007). Statistics from 1999 for the number of horses in California estimate 240,000 head, second only to Texas, which had an estimated 600,000 head (Wisconsin Agriculture Statistics Service 2007).

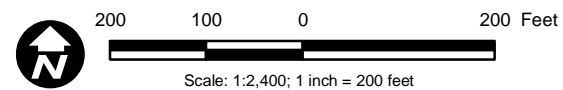
As discussed above, residential parcels over 2 acres are permitted to board horses, with one horse permitted for every gross acre of property. Figure 9 illustrates the parcels large enough to potentially support equestrian boarding throughout the Covenant area. While exact information related to equestrian permitting is private, the Association estimates 1,300 equestrian permit holders within Rancho Santa Fe, with some permit holders housing two or more horses. The vast majority of horses are boarded on private residences, but the Rancho Riding Club, the primary boarding facility within the Covenant, boards 110 head on 80 acres.

The mild weather throughout San Diego County provides the opportunity for equestrian activities to occur nearly year-round. Thus, it is not surprising that equestrian activity in Rancho Santa Fe is similar, with riders on the trail system throughout the year. There is some seasonal variation, however, according to interviewees.

There are two dominant riding styles popular among the residents of Rancho Santa Fe: English-style and Western-style. English-style riding is popular among equestrian professionals and competitive riders, as it is the standard riding style used for dressage (competitive agility), polo,



Source: SanGIS 2007; TAIC 2006; EDAW 2007; Rancho Santa Fe Association 2007



**Figure 7**  
**Equestrian Trails within Proposed**  
**El Camino Del Norte Roundabout Area**

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Equestrian trail crossing immediately west of the intersection of Paseo Delicias and El Camino Del Norte, looking north across Paseo Delicias.



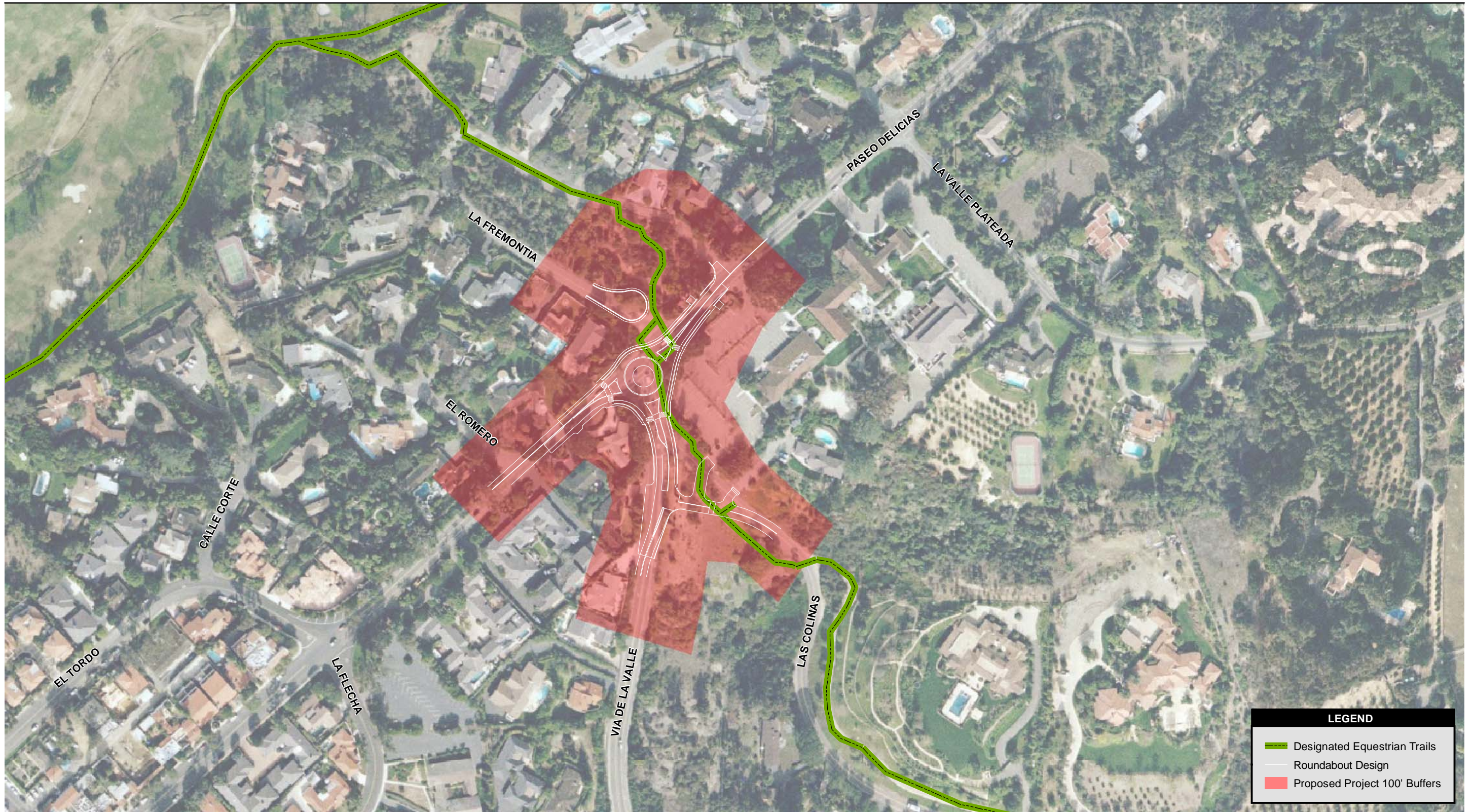
View westward down Paseo Delicias from the trail crossing at Paseo Delicias and El Camino Del Norte.



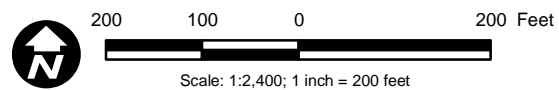
Equestrian trail crossing at Paseo Delicias and El Camino Del Norte, looking south across Paseo Delicias.

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Source: SanGIS 2007; TAIC 2006; EDAW 2007; Rancho Santa Fe Association 2007



LEGEND	
	Designated Equestrian Trails
	Roundabout Design
	Proposed Project 100' Buffers

**Figure 8**  
**Equestrian Trails within Proposed**  
**Via de la Valle Roundabout Area**

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Equestrian trail on the north side of the intersection at Paseo Delicias and Via de la Valle, looking east across La Fremontia.



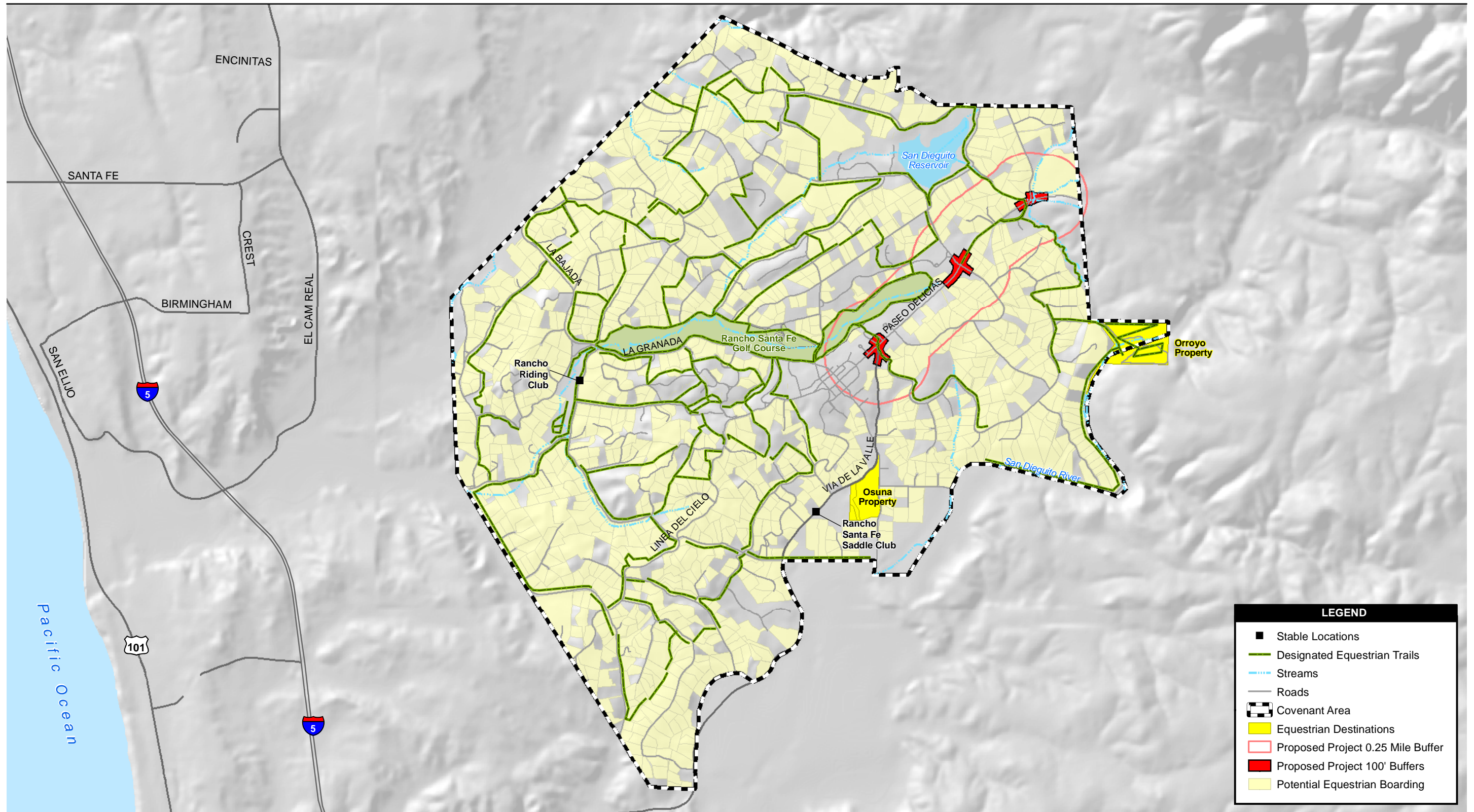
Equestrian trail crossing along the Village Church easement at Paseo Delicias and Via de la Valle, looking north to the trail along La Fremontia.



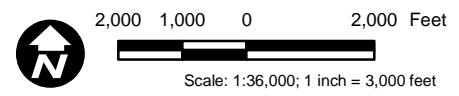
Equestrian trail crossing at Paseo Delicias and Via de la Valle, looking south across Paseo Delicias toward the Village Church easement trail.

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Source: SanGIS 2007; TAIC 2006; EDAW 2007; Rancho Santa Fe Association 2007



**Figure 9**  
**Residential Parcels with**  
**Potential Equestrian Boarding**

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and jumping events. It is demonstrated through the use of equipment inspired by European mounted military styles, the use of both hands on the reins, and posting (standing) during a trot. English-style horses also tend to be taller. Western-style is popular among hobbyists and is inspired by the cowboy culture of the pre-industrial American West. Western-style saddles are generally wider to distribute the counterbalanced weight of a roped cow. Western-style riders also use one hand on the rein, with the other placed on the “horn” (a slightly forward-facing knob on the front of the saddle). Western-style riders also sit during a trot. Riders of both styles are present on the trails within the study area, but as show season begins in the spring, through summer, and into the fall, English-style riders are more prevalent along the trails. This seasonal activity serves a role in training and in general exercise for those horses participating in shows (About.com 2007).

According to interviewees, all horses, regardless of the riding style of their owners, need to be exercised every couple of days to ease restlessness and maintain fitness. According to interviewees, horses are usually taken along the trails between one to four times a week, either by their owners or by hired grooms. Assuming that riding activity corresponds with other leisure activity in Rancho Santa Fe (specifically golf), Monday through Wednesday are the lightest days for equestrian activity, with an increased activity on Thursday and Friday. Saturday is suggested by interviewees as the busiest day on the trails, with a slight decrease on Sunday (similar to the activity seen on Friday).

Riding is most common, according to interviewees, during daylight hours starting around 9:00 a.m. Riders tend to get off the trails a few hours before sundown to wash, dry, and curry their horses before nightfall. Depending on the season, equestrian activity along the trails decreases around 5:00 p.m. in the winter and 8:00 p.m. in the summer. During the school year, activity along the trails sees a jump in the late afternoon, as the school day is over and students take to the trails for personal enjoyment or show training.

Contacts suggest that, generally, retirees, women, and children are likely to be seen along the trails during the week, with more adults during the hours of 9:00 a.m. and 3:00 p.m. As stated above, students are more likely to be along the trails in the late afternoon. Men and women, of all ages and ability levels, are likely to be present on the trails on Saturday, Sunday, and major holidays. It is common for riders to ride in pairs or in small groups of up to six or seven riders.

According to those interviewed, rides generally last anywhere between 1 and 3 hours, although some rides can last all day. As presented in Figure 5, there are a number of destinations throughout the Covenant area popular with equestrian riders connected by designated trails. These areas include:

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- Rancho Riding Club
  - Rancho Santa Fe Golf Course Trail
  - Rancho Santa Fe Saddle Club
  - San Dieguito Reservoir
  - San Dieguito River
  - Orroyo Property
  - Osuna Property

The Rancho Riding Club is located at 16924 Rambla de las Flores and is the primary boarding and exercise facility in Rancho Santa Fe. It is supported by the Association and boards 110 horses on 80 acres. The Riding Club is situated close to a number of designated trails in the western portion of the Covenant area, and it is regularly used as a staging point for individuals and groups of riders. The Saddle Club, located at 16275 Via de la Valle, also serves as a staging point for rides. The Osuna Property, which is owned by the Association, is host to a small number of stables but features scenic open space available for equestrian activity near historical landmarks of local importance.

The Rancho Santa Fe Golf Course trail, surrounding the Rancho Santa Fe Golf Course, is the primary destination for riders along equestrian trails in the study area. It is a centrally located loop trail with another trail bisecting the loop at Avenida de Acacias. This provides riders the opportunity to make the full loop (at approximately 4.5 miles), or approximately half of the loop. Interviewees suggested that a typical ride, lasting somewhere between 1 and 2 hours, would start at a residential location, complete the golf course loop trail, and return home. It was also suggested that the golf course loop trail serves well as a central location for exploration of less popular trails, providing access to the many different trails that connect to the golf course loop.

The San Dieguito Reservoir and River serve as scenic destinations for riders looking to get away from the traffic and golf activity that sometimes afflicts rides around the golf course loop. The Orroyo Property, located on the far east edge of the Covenant area, features a number of designated trails and open space for equestrian activities. Situated adjacent to the San Dieguito River, the property also features water crossings. These crossings are of particular value to competitive riders as training areas.

## **2.7 EQUESTRIAN ACTIVITY AT STUDY AREA INTERSECTIONS**

The equestrian trail crossing at Paseo Delicias and El Camino Del Norte, and the crossing at Paseo Delicias and Via de la Valle, are of substantial importance to the existing designated trail system as

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a whole. The two main trails that cross Paseo Delicias effectively connect the southeastern area of the study area with the golf course loop trail, which provides access to the rest of the Covenant trail network. These trails also provide access to the San Dieguito River and the Orroyo Property for the remaining equestrian riders not residing or boarding their horses in the southeastern portion of the Covenant area. These include boarders at the Rancho Riding Club.

To quantify the number of equestrian crossings at each intersection, two strategies were employed: phone interviews and passive observation of each intersection. Interviewees were asked to estimate the level of activity along the trails in the study area and to specifically estimate the number of crossing events at each intersection. While admitting that seasonal variation could occur, interviewees suggested that between 5 and 30 one-way crossings occur between the two official trail crossings along Paseo Delicias, with the vast majority occurring at the crossing located at the intersection of Paseo Delicias and Via de la Valle. According to interviewees, these crossings accommodate approximately 15 to 40 equestrian riders a day, combined. The frequency and type of crossings at these trails fluctuate with the same general pattern of activity described above.

Passive observation of each intersection for equestrian activity resulted in a collection of detailed counts. Researchers monitored all three project intersections for equestrian activity, noting the following variables:

- Number of Individuals Crossing
- Time of Crossing Event
- Duration of Crossing Event
- Direction of Crossing Event
- Approximate Age of Rider(s)

Counts were conducted between the hours of 8:00 a.m. and 5:00 p.m. on a Thursday (October 11, 2007), Friday (October 5, 2007), Saturday (October 20, 2007), and Sunday (October 7, 2007). Survey hours were determined based on information elicited from interviewees, who stated that riding occurred between the hours of 9:00 a.m., with riders home before dusk. Survey days were also selected based on information gathered through the phone interviews, which stated that activity was more common over the weekend, especially on days with sunny weather. The selection of a Thursday was meant to provide the opportunity to measure equestrian activity during a non-peak time of the week.

Tables 2, 3, and 4 summarize the equestrian activity present at each intersection:

**Table 2**  
**Equestrian Activity at Paseo Delicias and Via de la Valle**

	<b>Thursday (10/11/07)</b>	<b>Friday (10/5/07)</b>	<b>Saturday (10/20/07)</b>	<b>Sunday (10/7/07)</b>
Crossing Events	1	0	2	3
Total Crossing Equestrians	1	0	2	5
Average Crossing Duration	15 sec.	NA	5 sec.	7.7 sec.

**Table 3**  
**Equestrian Activity at Paseo Delicias, El Montevideo, and La Valle Plateada**

	<b>Thursday (10/11/07)</b>	<b>Friday (10/5/07)</b>	<b>Saturday (10/20/07)</b>	<b>Sunday (10/7/07)</b>
Crossing Events	0	0	0	0
Total Crossing Equestrians	0	0	0	0
Average Crossing Duration	NA	NA	NA	NA

**Table 4**  
**Equestrian Activity at Paseo Delicias, El Camino del Norte, and Del Dios Highway**

	<b>Thursday (10/11/07)</b>	<b>Friday (10/5/07)</b>	<b>Saturday (10/20/07)</b>	<b>Sunday (10/7/07)</b>
Crossing Events	0	0	0	0
Total Crossing Equestrians	0	0	0	0
Average Crossing Duration	NA	NA	NA	NA

These data suggest that the intersection at Via de la Valle is the most active for equestrian crossings. Data from that intersection also show that riders generally cross at Via de la Valle from the south, spend approximately 1 hour north of the crossing (ostensibly completing the golf course loop trail), and return to south of Paseo Delicias later in the afternoon. This pattern was seen on both Saturday and Sunday. The crossings witnessed during the survey days occurred near mid-day and into the early afternoon, with the earliest crossing occurring at 10:05 a.m. and the latest crossing occurring at 4:08 p.m., both on Sunday. Crossing durations tended to last between 5 and 9 seconds, with crossings longer when more than one horse was involved. All equestrian riders recorded during the observations were adults.

Riders attempting to cross Paseo Delicias slowly trotted along the designated trail to the crossing at the intersection. There, the rider would stop and wait for traffic at all the stop signs to halt. In some cases, the rider would nonverbally communicate with idling drivers to ensure that the he/she had the right-of-way to cross. Upon receiving this clearance, the equestrian rider would cross the street. When traveling from south to north, the crossing would occur over Paseo



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Delicias first, with a secondary crossing from the west to east across La Fremontia. When traveling from north to south, the pattern was reversed.

Though the general pattern of activity seen during the observations is similar to what was gathered during the phone interviews, one of the major differences is the level of activity. Rather than 5 to 30 crossings occurring daily, the highest number of crossings recorded for a single day was 3 (although a fourth crossing likely occurred after the survey ended at 5:00 p.m.).<sup>1</sup> Additionally, no crossings at the official trail at El Camino del Norte occurred, nor did crossings at El Montevideo. Generally, the level of equestrian activity during the observational surveys was low. It should be noted, however, that October is not considered an active time for equestrian use within the area. It is likely that the numbers gathered would be substantially higher had this survey occurred in the early spring (as the equestrian community prepares for the Del Mar National Horse Show) or during the summer months when equestrian use is generally higher overall.

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<sup>1</sup> A fourth crossing, from north to south, likely occurred by Sunday's 4:08 p.m. rider. If the pattern of this rider is similar to other riders recorded during the survey, there is a high likelihood that she spent approximately 1 hour north of Paseo Delicias (ostensibly along the golf course loop trail) before returning south sometime after 5:00 p.m.

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## **CHAPTER 3.0**

### **IMPACTS OF ALTERNATIVES**

Chapter 3.0 analyzes equestrian-related impacts associated with the implementation of the proposed project alternatives. Potential impacts discussed include temporary construction-related impacts, as well as long-term operational impacts to the equestrian activity in the surrounding community. Potential impacts are determined to be either direct or indirect, largely dependent on the distance the impacts may manifest, with direct impacts generally near construction and operation areas (and within the 100-foot and .25-mile buffer) and indirect impacts generally experienced by the entire Covenant area.

A proposed project can impact the equestrian use in an area through a number of different ways, including:

- Temporary or long-term effects to trails through their removal, relocation, or bisection, or by making existing trails less accessible or safe.
- Temporary or long-term effects to equestrian-related businesses, structures, or areas through alteration, relocation, or closure.
- Temporary or long-term effects to access to equestrian-related businesses, structures, or areas.
- Temporary or long-term effects to horses through an increase in noise, dust, or air pollution.
- Inconsistency with policies put forth in related planning documents.

Section 3.3 provides a summary table of impacts associated with the proposed project.

#### **3.1 TEMPORARY CONSTRUCTION-RELATED IMPACTS**

Construction-related impacts could include, but are not limited to, those related to trail or equestrian-related area access and safety, noise, or dust generation. The following analysis assumes that construction activities associated with the proposed project would occur using a phased approach over a period of 8 months. No further details of construction timing and duration are known at this time.

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### **3.1.1 No Build Alternative**

#### **Direct Impacts**

Under the No Build Alternative, the proposed roundabouts along Paseo Delicias would not be constructed. As such, there would be no construction activities, and therefore no potential for direct temporary impacts.

#### **Indirect Impacts**

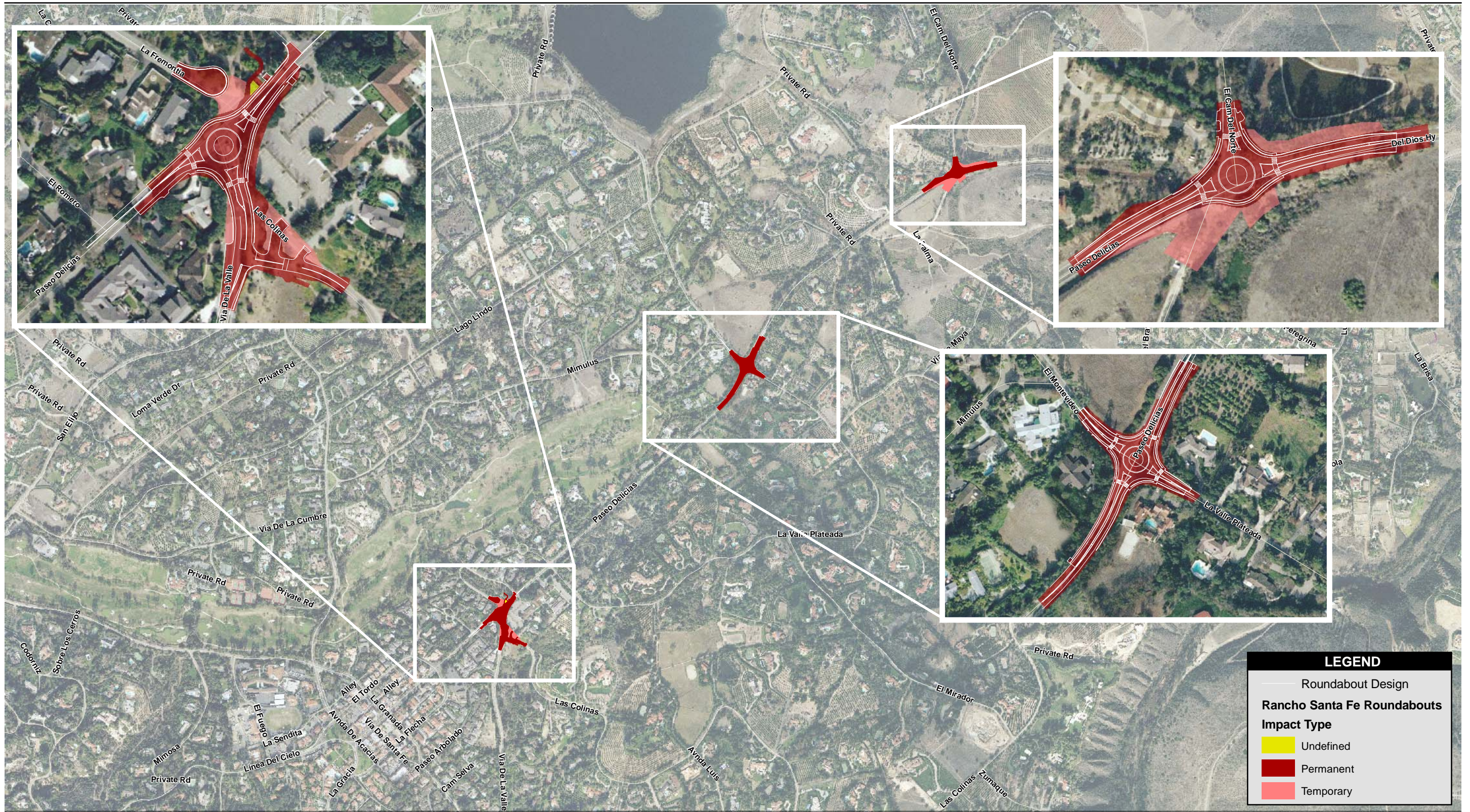
Under the No Build Alternative, the proposed roundabouts along Paseo Delicias would not be constructed. As such, there would be no construction activities, and therefore no potential for indirect temporary impacts.

### **3.1.2 Proposed Project**

#### **Direct Impacts**

The construction of the proposed project at all three intersections would necessarily entail the use of heavy machinery for the repaving, grading, and overall construction of the roundabouts. It is also assumed that construction would create unpaved, rocky ditches and trenches in different areas throughout the construction zone at different times as construction of the roundabout proceeds, based on similar projects. These unpaved, rocky areas may also have construction debris littered throughout. This disturbed area would most likely be within the area of temporary construction as seen in Figure 10. In addition to navigating a construction site littered with debris, equestrian riders would have to keep their horses calm while passing construction machinery. During construction, the equestrian trails located near the El Camino del Norte and Via de la Valle intersections would be slightly interrupted by construction activity, as the environment of the trail near these two intersections would likely become unsafe for equestrian use during the construction period. This is particularly true for those horses easily startled by loud noises and large machines. Still, the construction contractor would provide traffic control to accommodate pedestrian and equestrian crossings, and all crossings would remain operational.

The construction of the proposed project has the potential to close or alter equestrian-related businesses, structures, or areas that are within the temporary construction areas (Figure 10). While no businesses are considered to be directly affected by the construction, it is unknown what kinds of structures or areas are present on the private properties directly affected by the



Source: AirPhotoUSA, Jan 2006; TAIC, 2006  
 1,000 500 0 1,000 Feet  
 Scale: 1:12,000; 1 inch = 1,000 feet

**Figure 10**  
**Proposed Project Impact Areas**

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project construction. If structures, such as stables, or equestrian training areas are within the footprint of temporary construction areas, these areas may be forced to close or relocate temporarily. The alteration, relocation, and/or closure of these structures and areas would be considered substantial for those property owners affected, if any, and other equestrians who visit these places. However, the number of these properties is relatively small and the amount of private land within the temporary construction footprint is also limited.

In ways similar to the alteration, relocation, and/or closure of equestrian-related businesses, structures, and areas described above, the construction of the proposed project also has the potential to close or alter the access to these places temporarily through the closure of roads and driveways. While no businesses are considered to be directly affected by the construction, it is unknown what kinds of structures or areas are present on the private properties directly affected by the project construction. If structures, such as stables, or equestrian training areas are on properties that experience interruptions in access, these areas could see a decrease in use and those equestrians who visit these places would be affected. The change in access to these places would be considered substantial for those property owners affected and other equestrians who visit these places. However, the number of properties that would experience access issues is relatively small, and the closures would most likely be for 8 months.

As discussed in the Air Quality Technical Report (EDAW 2007a) and the Noise Technical Report (EDAW 2007b), adverse air quality and noise impacts would temporarily occur within the direct impact area as a result of construction activities. In addition to affecting humans, air quality and noise levels can also affect horses stabled in or riding through the immediate area. The area of direct impact includes the eastern half of the golf course loop trail, as well as frequently used connector equestrian trails in the area. Air quality and noise impacts, however, would be greatest in the immediate construction area and would most likely only affect those horses and riders in the immediate area, including those crossing at the intersections. If stables or boarding facilities occur within this area, however, horses could be exposed to adverse air quality and noise levels. It is unknown if stables are present in this area, however, and it is unlikely that any horses would be affected considering the small percentage of private land within the area of immediate impacts.

### **Indirect Impacts**

The area of analysis used in the determination of indirect impacts is the Covenant area, as the equestrian trail network is open to all Rancho Santa Fe residents equally. In terms of the construction of the proposed project indirectly affecting the trail system through relocation,

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bisection, or by making existing trails less accessible or safe, it has been discussed above that construction of the proposed project would not temporarily close the equestrian trail crossings at El Camino del Norte and Via de la Valle, as construction personnel would provide traffic control during the construction phase. With these crossings remaining open, the trail network within the Covenant area would remain complete. The main Covenant riding area surrounding the golf course, as well as the network of trails south of Paseo Delicias, will remain uninterrupted and undisturbed throughout project construction.

As described above, construction of the proposed project would entail use of heavy equipment within a small, temporary construction easement. There is a small chance that construction activity would temporarily alter, relocate, or close equestrian-related spaces within the area of direct impact. The possibility of this, however, is unlikely. As no easements are present outside of the area of direct impact, there are no foreseen alterations, relocations, or closures of equestrian-related spaces within the larger community of Rancho Santa Fe.

The proposed project is also not expected to disrupt access to equestrian-related places in the area of direct impact, nor is it expected to disrupt access for the wider Rancho Santa Fe community, as a whole. The two main trail crossings across Paseo Delicias, one at El Camino del Norte and the other at Via de la Valle, would continue to connect residential areas and the Orroyo Property with the rest of the equestrian trails in Rancho Santa Fe, which include the golf course loop trail, trails along the San Dieguito Reservoir, and trails leading to the Rancho Riding Club. Traffic control during construction activities would ensure that equestrians residing in the southeast side of Rancho Santa Fe would remain connected with the remainder of the local riding community, additionally ensuring access to major equestrian destinations.

As discussed above, the noise and air quality impacts associated with the construction of the proposed project may adversely affect horses in the direct and immediate impact area, albeit to a minor degree. For the wider equestrian community present in Rancho Santa Fe outside the area of direct impacts, the impacts are even less likely due to the highly localized nature of the noise and air quality impacts. Those horses outside of the area of immediate impacts are not likely to be substantially affected by these impacts.

### **3.2 LONG-TERM OPERATION-RELATED IMPACTS**

Operation-related impacts could include, but are not limited to, those related to trail or equestrian-related access and safety, noise, and pollution. Additionally, the analysis includes an evaluation of the proposed project's consistency with applicable planning documents.



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### **3.2.1 No Build Alternative**

#### **Direct Impacts**

Under the No Build Alternative, the proposed roundabouts along Paseo Delicias would not be constructed. As such, there would be no operation activities, and therefore no potential for direct long-term impacts.

#### **Indirect Impacts**

Under the No Build Alternative, the proposed roundabouts along Paseo Delicias would not be constructed. As such, there would be no operation activities, and therefore no potential for indirect long-term impacts.

### **3.2.2 Proposed Project**

#### **Direct Impacts**

The operation of the proposed project would create three roundabouts along Paseo Delicias in an attempt to address current design deficiencies, improve LOS, and improve air quality, as described by the above project description. A push-button-activated equestrian crossing with in-pavement lighting and warning signals located approximately 200 feet from the crossing at each segment is proposed at all three intersections. The easternmost roundabout, located at El Camino del Norte, would include the extension and incorporation of the existing trail, crossing at the proposed pedestrian crossing at the roundabout, and curving back to the west to the existing trail leading to the reservoir. This trail would remain accessible and gain a signalized crossing, which is missing under the current configuration. Traffic from all directions would be slowed by the roundabout to below speeds common under existing conditions. Additionally, the equestrian crossing signage and warning lights would provide drivers with enough warning to yield to equestrian riders, providing equestrian riders with a safer crossing over Paseo Delicias along this trail.

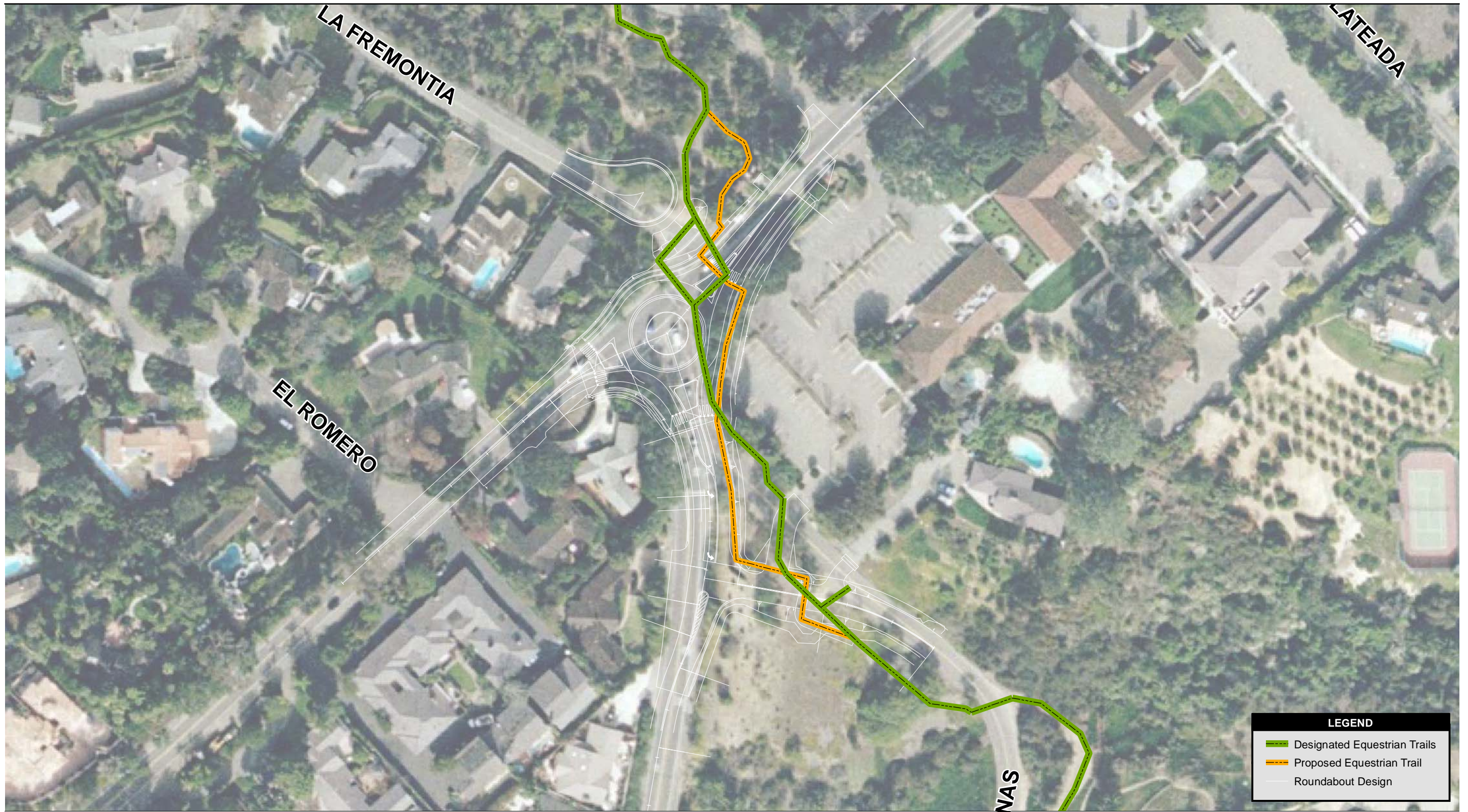
The roundabout at El Montevideo would also include a push-button-activated equestrian crossing warning with in-pavement lighting and warning signals located approximately 200 feet from the crossing along each segment. While an official equestrian crossing is not known to exist at this intersection, equestrian enthusiasts interviewed for this report suggested that this intersection experienced rare crossings by those riders traveling along area roads, rather than along official trails. Thus, those few equestrian riders who cross at this intersection would experience a crossing experience similar in safety and efficiency as experienced under existing 4-way stop conditions.

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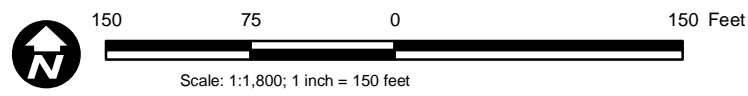
In ways similar to the roundabout at El Camino del Norte, the trail at Via de le Valle would also be realigned along the northeast boundary of the Village Church and would cross once, along the east side of the proposed roundabout at the pedestrian crossing, in contrast to crossing twice at the existing intersection (Figure 11). As discussed above, the push-button-activated equestrian crossing would include in-pavement lighting and warning signals located approximately 200 feet from the crossing along each segment. The crossing and associated warning system would be activated by a trigger mechanism able to be reached by riders on horseback. The crossing would signal drivers from all directions to stop and wait for the equestrian rider(s) to pass. The equestrian trail would continue north through the nonresidential garden space currently used for an equestrian trail and would connect with the existing trail along La Fremontia, eventually connecting to the golf course loop trail. To the south of the roundabout, the trail would continue across Las Colinas and cross at the same spot as under existing conditions. While there is a danger that people may not stop at the signaled equestrian crossing along Paseo Delicias at this intersection, the crossing does provide riders with the same general level of traffic control as is present under the existing 4-way stop. Thus, adverse impacts to the connectivity of the trail system are not likely to be substantial. In the case of the intersection at El Camino del Norte, the equestrian crossing will likely become safer, improving trail connectivity.

The operation of the proposed project has the potential to close or alter equestrian-related businesses, structures, or areas that are within the operation areas (Figure 10). While no businesses are considered to be directly affected by the operation of the proposed project, it is unknown what kinds of structures or areas are present on the private properties directly affected by takes. In the unlikely event that structures, such as stables, or equestrian training areas are within the footprint of the operation areas, these areas would be forced to alter, close, or relocate for the long term. The alteration, relocation, and/or closure of these structures and areas could be considered a substantial impact to those in the equestrian community who rely on and visit these places. However, the number of these properties is relatively small and the amount of private land within the operation footprint is also limited. Visual surveys and aerial photography suggest that no equestrian land use areas are present within the project footprint on private property. Thus, impacts associated with the alteration, relocation, and/or closure of these areas are not likely to be substantial.

In ways similar to the alteration, relocation, and/or closure of equestrian-related businesses, structures, and areas described above, the operation of the proposed project also has the potential to close or alter the access to these places for the long term through the relocation or closure of driveways directly contiguous with the roundabouts through property takes. While no businesses are considered to be directly affected by the construction, it is unknown what kinds of structures or



Source: SanGIS 2007; TAIC 2006; EDAW 2007; Rancho Santa Fe Association 2007



**Figure 11**  
**Proposed Equestrian Trail Within**  
**Via de la Valle Roundabout Area**

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areas are present on the private properties directly affected by the project's operation. If structures, such as stables, or equestrian training areas are on properties that experience long-term changes in access, these areas could experience a decrease in use and those equestrians who visit these places would be affected. A change in access to these places could be considered a substantial impact to those in the equestrian community who visit these places. However, the number of properties that would experience access issues is relatively small and driveways could most likely be realigned. Therefore, the chances of access to equestrian-related businesses, structures, or areas being interrupted as a direct result of long-term operation-related impacts are not likely to be substantial.

As discussed in the Draft Air Quality Technical Report (EDAW 2007a) and the Draft Noise Technical Report (EDAW 2007b), the operation of the proposed project would improve air quality and noise levels in the area of direct and immediate impacts due to its improvement of LOS. This improvement in air quality and noise levels would be enjoyed by both horses and riders within the area of direct impacts (which includes the eastern portion of the golf course loop trail) and those horses and riders within the area of immediate impacts. These would include horses boarding in this area as well as riders and their horses traveling through the area using the crossings at El Camino del Norte and Via de la Valle. Therefore, the direct impacts of improved air quality and noise levels associated with the operation of the proposed project are not considered adverse and may be considered beneficial.

### **Indirect Impacts**

The area of analysis used in the determination of indirect impacts is the Covenant area, as the equestrian trail network is open to all Rancho Santa Fe residents equally. In terms of the operation of the proposed project indirectly impacting the trail system through relocation, bisection, or by making existing trails less accessible or safe, it has been discussed above that operation of the proposed project would change the crossing at El Camino del Norte from what is currently experienced under existing conditions, extending and connecting the existing trail with the roundabout crossing. The crossing at Via de la Valle would also be realigned to the crossing on the east side of the roundabout. All three roundabouts would incorporate a push-button-activated equestrian crossing with in-pavement lighting and warning signals, providing a safe crossing for riders of all ages and abilities, similar to the 4-way stop experienced under existing conditions at the Via de la Valle intersection. As two of the three crossings are part of the larger Covenant-wide network, the operation of these two crossings would provide riders with the same opportunities for equestrian travel as is currently experienced under existing conditions. Therefore, the indirect operation-related impacts to the Covenant-wide trail network associated with the proposed project are not likely to be substantial.

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As described above, the proposed project would entail an enlarged right-of-way. While unlikely, there is a small chance that operation of the proposed project would alter, relocate, or close equestrian-related spaces within the area of direct impact for the long term. This possible impact is, however, not likely to be considered substantial. Moreover, no easements are present outside of the area of direct impact, and there are no foreseen alterations, relocation, or closures of equestrian-related spaces within the larger community of Rancho Santa Fe. Thus, the indirect operation-related impacts to community-wide equestrian spaces associated with the proposed project are not likely to be substantial.

The proposed project is also not expected to create any long-term impacts in regard to access to equestrian-related places in the area of direct impact. The operation of the proposed project would continue to connect areas of equestrian use in ways similar to that experienced under the existing conditions. Thus, the indirect operation-related impacts to access to equestrian-related spaces associated with the proposed project are not likely to be substantial.

As discussed above, the noise and air quality impacts associated with the operation of the proposed project around the roundabouts would improve from current conditions due to an improvement in automobile LOS. For the wider equestrian community present in Rancho Santa Fe outside the area of direct impacts, these benefits would also be experienced, albeit to a lesser degree. However, as horses from outside the area of direct impacts enter the immediate area around the roundabouts, the benefits would be more pronounced. Depending on the frequency of these visits, benefits could be lesser or greater. Therefore, the indirect impacts of long-term improvements of air quality and noise associated with the operation of the proposed project are likely beneficial.

### **Consistency with Applicable Planning Documents**

There are a number of applicable planning documents that have specific policies guiding the construction or trails in the area, as well as policies requiring that the San Dieguito and Rancho Santa Fe areas retain their rural nature. The continuation and perpetuation of equestrian trail planning and use is a major theme in these documents, as are limits to “excessive” urban lighting at intersections. Specifically, the Land Use Element of the San Diego County General Plan states that rural character should be retained on non-urban lands. Additionally, the Recreation Element states that trails should be interconnected and provide citizens with a variety of experiences. It also suggests that trails be located on existing public domain. The San Dieguito Community Plan also states that trails should lead to areas with unique scenic qualities and that trails should be developed that may be safely used by riders of all ages and skill levels. All

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circulation improvements should also incorporate rural transportation needs, such as the movement of equestrian trailers. Finally, the Community Trails Master Plan states that local trails should be developed with community involvement and that coordination among County departments should be undertaken to ensure the existing trail easements and access points are not lost through the development process. A more detailed discussion of the policies outlined in these planning documents is presented in Section 2.3.

A push-button-activated equestrian crossing with in-pavement lighting and warning signals located approximately 200 feet from the crossing at each segment is proposed at all three intersections.

As described above, the proposed project would affect the equestrian crossings at El Camino del Norte and Via de la Valle. At El Camino del Norte, the trail would be reconfigured and extended to the roundabout, and an equestrian crossing warning system would be installed. Similarly, the crossing at Via de la Valle would be realigned and an equestrian crossing warning system would be installed. A third equestrian crossing system would be installed at El Montevideo, even though no official trail crosses at that intersection. Each equestrian crossing would have a push button activated crossing with in-pavement lighting and warning signals located approximately 200 feet from the crossing along each segment. The trail system, despite its slightly changed alignment and new crossings, would continue to connect the properties in the southeastern portion of the Covenant area with the central golf course loop trail and the rest of the Rancho Santa Fe equestrian trail network, providing access to a number of scenic vistas and important equestrian training areas. This trail alignment was developed in part with input from equestrian professionals and enthusiasts in the area, as well as biological and circulation professionals. The three proposed roundabouts along Paseo Delicias would be able to accommodate equestrian trailers. The landscaping and landscape architecture of the proposed roundabouts would also reflect a rural, spacious living in harmony with the surrounding environment through the use of stonework and native plants. The lighting associated with the equestrian crossing warning system would be incorporated naturally into the design, minimizing possible visual impacts and preserving the rural nature of the community. Thus, the proposed project is considered to be consistent with applicable planning documents in regard to trail construction, trail connectivity, and overall trail recreation.

### **3.3 SUMMARY OF POTENTIAL IMPACTS**

The proposed project has the potential to result in adverse impacts to the equestrian activity in the community during the construction phase, but no lasting significant impacts during the operational

phase. Table 5 provides a summary of the potential impacts associated with both the No Build Alternative and the proposed project, which have been described in more detail above.

**Table 5  
Summary of Potential Equestrian Impacts Associated with the  
No Build Alternative and Proposed Project**

Impacts	No Build Alternative	Proposed Project
<b>Direct Temporary Construction-Related</b>		
Physical Impact to Trail; Trail Safety	Not likely to experience impacts	Impacts are likely to be mitigated by construction personnel
Physical Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Access Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Air Quality and Noise Impacts	Not likely to experience impacts	Not likely to experience impacts
<b>Indirect Temporary Construction-Related</b>		
Physical Impact to Trail; Trail Safety	Not likely to experience impacts	Impacts are likely to be mitigated by construction personnel
Physical Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Access Impact to Equestrian Areas	Not likely to experience impacts	Impacts are likely to be mitigated by construction personnel
Air Quality and Noise Impacts	Not likely to experience impacts	Not likely to experience impacts
<b>Direct Permanent Operation-Related</b>		
Physical Impact to Trail; Trail Safety	Not likely to experience impacts	Not likely to experience impacts
Physical Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Access Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Air Quality and Noise Impacts	Not likely to experience impacts	May experience beneficial impacts
<b>Indirect Permanent Operation-Related</b>		
Physical Impact to Trail; Trail Safety	Not likely to experience impacts	Not likely to experience impacts
Physical Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Access Impact to Equestrian Areas	Not likely to experience impacts	Not likely to experience impacts
Air Quality and Noise Impacts	Not likely to experience impacts	May experience beneficial impacts
<b>Consistency with Planning Documents</b>	Consistent	Consistent



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## CHAPTER 4.0

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