

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
Otay Ranch Village 13
Otay Lakes Road
Chula Vista, California**

TORC Reference Number: ORC-524-RH
C2C Project Number: 2005-033

Prepared for:

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TABLE OF CONTENTS

1.1	EXECUTIVE SUMMARY	iii
2.0	INTRODUCTION	1
2.1	Purpose.....	1
2.2	Scope of Services.....	1
2.3	Significant Assumptions	2
2.4	Limitations	2
2.5	Exceptions to ASTM Standard Practice E1527-00.....	2
2.6	Special Terms and Conditions	2
2.7	User Reliance.....	2
3.0	PROPERTY DESCRIPTION AND OVERVIEW	3
3.1	Property Location and Legal Description.....	3
3.2	Site and Vicinity General Characteristics.....	3
3.3	Current Use of the Property	4
3.4	Structures, Roads, Other Improvements and Utilities	4
3.5	Current Uses of Adjoining Sites	5
3.6	Area Reconnaissance	6
4.0	INFORMATION PROVIDED BY CLIENT.....	7
4.1	Title Records, Environmental Liens and Activity and Use Limitations.....	7
4.2	Specialized Knowledge.....	7
4.3	Valuation Reduction for Environmental Issues	7
4.4	Owner, Property Manager and Occupant Information	7
4.5	Other Information	7
5.0	RECORDS REVIEW.....	8
5.1	Standard Environmental Record Sources	8
5.2	Additional Environmental Record Sources	10
5.3	Physical Setting.....	12
5.3.1	Topographical Characteristics	12
5.3.2	Geological Setting.....	12
5.3.3	Soil Characteristics	12
5.3.4	Hydrogeological Characteristics.....	13
5.4	Historical Use of the Property	14
5.4.1	Previous Environmental Reports	14
5.4.2	Chronological Review	15
5.4.3	Historical Sources Reviewed.....	19
5.5	Historical Use of the Adjoining Sites	20
6.0	SITE RECONNAISSANCE	22
6.1	Methodology and Limiting Conditions.....	22
6.2	General Site Setting	22
6.3	Interior and Exterior Observations	22
7.0	INTERVIEWS	25
7.1	Interview with Owner	25
7.2	Interview with the Property Manager	25
7.3	Interviews with Occupants.....	25
7.4	Interviews with Local Government Officials	25

7.5	Interviews with Others	25
8.0	ADDITIONAL SERVICES	26
8.1	Asbestos	26
8.2	Lead-Based Paint	26
8.3	Radon	26
9.0	FINDINGS AND CONCLUSIONS	27
10.0	RECOMMENDATIONS	29
11.0	DEVIATIONS	30
12.0	REFERENCES	31
12.1	Published References	31
12.2	Agency Resources	31
12.3	Commercial and Private Resources	32
13.0	SIGNATURE OF ENVIRONMENTAL PROFESSIONAL	34
14.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL	35

APPENDIX A:	FIGURES
APPENDIX B:	PHOTOGRAPHS
APPENDIX C:	HISTORICAL RESEARCH DOCUMENTATION
APPENDIX D:	REGULATORY RECORDS DOCUMENTATION
APPENDIX E:	INTERVIEW DOCUMENTATION
APPENDIX F:	SAMPLING DOCUMENTATION
APPENDIX G:	PREVIOUS REPORTS
APPENDIX H:	SCOPE OF WORK

Phase I Environmental Site Assessment
Property: Otay Ranch Village 13
TORC Reference Number: ORC-524-RH
C2C Project Number: 2005-033

1.1 EXECUTIVE SUMMARY

Coast 2 Coast Environmental, Inc. has completed an environmental site assessment of Otay Ranch Village 13, Otay Lakes Road, Chula Vista, San Diego County, California. The Property consists of 1,899.4 acres of undeveloped land on the north side of Otay Lakes Road, east of the Upper Otay Reservoir and north of the Lower Otay Reservoir. Other than a wooden cattle feeding station, structures were not found on the Property.

Based upon information obtained from Coast 2 Coast's research and visual observations made during our site visit, we have reached the following conclusions:

- The Property, adjoining sites and nearby sites were not found on the Standard Environmental Record sources required to be reviewed under ASTM Standard E1527-00, including the following:
 - United States Environmental Protection Agency (U.S. EPA) National Priorities List State-equivalent priorities list
 - U.S. EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
 - State-equivalent CERCLIS
 - U.S. EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facilities (TSDF)
 - U.S. EPA RCRA-Generators
 - U.S. EPA Emergency Response Notification System (ERNS)
 - State Leaking Underground Storage Tank Program (LUST)
 - State Registered Underground Storage Tank (UST)
 - State Solid Waste Information System (SWIS)
- High voltage electrical transformers were not found on the Property.
- The laboratory reported that the building material sample collected during the limited asbestos survey of the cattle grazing shed located on the Property did not contain asbestos.
- Painted surfaces appeared to be in good condition. Evidence of chipped, cracked and peeling paint was not observed. Based on historical resources reviewed during this assessment, the cattle shed appears to have been constructed in 1989 and therefore the use of lead-based paint is unlikely.

- A review of a statewide radon study indicated that Property was not within an area where radon is likely to be found in buildings in concentrations above the U.S. Environmental Protection Agency action limit of 4.0 picocuries per liter.
- During our review of historical resources, Frank Kimball was reported to have had several mines on Rancho Janal (also known as Rancho Otay Dominguez) in the 1870s and 1880s. The east portion of this rancho included approximately 30 to 40 percent of the west side of the Property. No mention was made of the material that was being mined but it may have been for limestone which was found a few miles east on the east adjoining site, Rancho Jamul. Mr. Kimball sold Rancho Janal to the Babcocks in 1894. No other mention of mining on Rancho Janal was found and there are no mines marked on the U.S. Geological Survey topographic maps for Rancho Otay Dominguez and the Property. Based on this information, it is not likely that mining activities which may have occurred over 120 years ago are of environmental concern today.
- The following environmental concerns were observed on the Property:
 1. A 1960 aerial photograph depicted dry farming on the area where Park 1, School 1, and Neighborhoods R-13, R-14 and R-23 are currently planned. Dry farming was not observed on the 1953 or 1963 photographs. The former usage for dry farming indicates a potential concern regarding historical usage of chlorinated pesticides or herbicides on the Property. Although this concern does not rise to the level of a Recognized Environmental Condition, it is likely to result in a requirement for a Preliminary Endangerment Assessment for pesticides, herbicides and heavy metals by the State Department of Toxic Substances Control.
 2. One water well was observed approximately where the south end of Neighborhood R-2 will be located. The well was observed to be capped during the April 2005 site visit but was uncapped during the May 2006 site visit. Someone has attempted to smash in the top of the well casing to prevent animals or small children from falling into the well but it is still a physical hazard as well as potentially providing a pathway for illegal dumping and groundwater contamination.
 3. Access to the Property is not restricted by keeping the gates locked. Minor amounts of illegal dumping of construction debris, household furniture and appliances and other household waste were observed on the Property during the site reconnaissances. Although this concern does not rise to the level of a Recognized Environmental Condition, it does create the possibility that illegal disposal of hazardous materials or hazardous waste could occur fairly easily.
 4. Other Recognized Environmental Conditions or additional issues of further environmental concern were not found during this assessment.

Based upon Coast 2 Coast's review of the information presented in the report, and our resulting conclusions, we recommend the following:

- This report needs to be submitted to the Department of Toxic Substances Control (DTSC) for their review regarding the planned School 1 site. Though Coast 2 Coast anticipates that the impact to the Property from the possible past use of chlorinated pesticides or herbicides will be below a level of concern, DTSC will likely require that a Preliminary Endangerment Assessment (PEA) be conducted on the area where School 1 is to be located. DTSC has only specifically excluded sites from chlorinated pesticide sampling where farming activities ended before 1950. DTSC will also likely require sampling for heavy metals such as arsenic which may have been used in farming operations.
- The water well should be temporarily capped if there are plans to use the well when the Property is redeveloped. Otherwise, the well should be permanently filled and capped.
- Gates to the Property should be locked to minimize access. Since the United States Border Patrol frequently uses the Property, perhaps a double pad lock system or combination lock can be used on the gates.
- It is Coast 2 Coast's opinion that further environmental assessment of this Property, beyond the item listed above, is not warranted at this time.

2.0 INTRODUCTION

2.1 Purpose

Coast 2 Coast Environmental Inc. performed a Phase I Environmental Site Assessment of Otay Ranch Village 13, located north of Otay Lakes Road in Chula Vista, San Diego County, California (Property). This assessment was performed under an amended contract with Gatzke Dillon & Ballance LLP, at the direction of Mr. Mark J. Dillon, Esquire on behalf of Otay Project L.P. and therefore is subject to attorney-client privilege. Coast 2 Coast's services were authorized by Otay Project L.P. on February 21, 2005 and amended on May 10, 2005.

The assessment of this Property was performed at the direction of Gatzke Dillon & Ballance LLP in conjunction with its efforts to conduct "all appropriate inquiry (AAI) into the previous ownership and uses of the Property consistent with good commercial or customary practice." The purpose of performing AAI is to identify "recognized environmental conditions (RECs)" associated with past and/or present operations at the Property or adjoining sites which may pose liability for Otay Project L.P. By completing this step in the due diligence process, Otay Project L.P. has satisfied one of the requirements to qualify for the "innocent landowner defense" under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

2.2 Scope of Services

The assessment was performed in conformance with all of the components of the ASTM E1527-00 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The assessment included, but was not necessarily limited to, the activities listed below:

- A reconnaissance of the Property to observe and assess characteristics of potential environmental concern.
- Observation of adjoining sites and the surrounding area to observe and assess characteristics of potential environmental concern which may impact the Property.
- Interviews with current and past owners, operators and occupants of the Property for the purpose of gathering information regarding the potential for contamination at the Property.
- Review of regulatory agency files and interviews with government agency officials to identify and assess any listings of regulatory permits, registrations, enforcement actions, contaminated sites, etc. likely to affect the Property.
- Review of historical resources to identify previous uses and occupancies of the Property since the Property was first developed or 1940, whichever is earlier.
- Visual inspection or use of other documentation to render an opinion as to the existence of asbestos, lead-based paint (interior and exterior), lead in the drinking water, and the potential for radon exposure.
- Development of report to include discussion of the findings of the above tasks.

2.3 Significant Assumptions

Significant assumptions concerning the Property were not made by Coast 2 Coast during this assessment.

2.4 Limitations

The conclusions and recommendations presented in this report are based upon reasonable visual reconnaissance of the Property and research of available materials within the scope and budget of the contract. The information presented is relevant to the dates of Coast 2 Coast's Property visit and should not be relied upon to represent conditions at later dates.

The opinions expressed herein are based on information obtained during Coast 2 Coast's effort and on Coast 2 Coast's experience. If additional information becomes available, we request the opportunity to review the information and modify Coast 2 Coast's opinions, if necessary.

Coast 2 Coast's services have been provided using that degree of care and skill ordinarily exercised, under similar circumstances, by environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions presented in this report.

Coast 2 Coast Environmental, Inc. is not responsible for the conclusions, opinions, or recommendations made by others based on this information.

2.5 Exceptions to ASTM Standard Practice E1527-00

Information concerning environmental liens or activity and use limitations (AULs) on the Property and a copy of the current title search were not provided.

2.6 Special Terms and Conditions

Special terms and conditions which limited access to reasonably ascertainable information concerning the Property were not required by Gatzke Dillon & Ballance LLP.

2.7 User Reliance

This report has been prepared on behalf of, and for the exclusive use of, Gatzke Dillon & Ballance LLP and Otay Project L.P. The contents of this report may not be relied upon by any party other than the aforementioned clients, without the express written consent of Coast 2 Coast Environmental, Inc.

3.0 PROPERTY DESCRIPTION AND OVERVIEW

3.1 Property Location and Legal Description

Name/Address: Otay Ranch Village 13
Otay Lakes Road
Chula Vista, California 91914

County: San Diego

Assessor Parcel Number or Other Legal Description (Associated Acreage per San Diego County Assessor data):

595-090-03	(58.50)
598-130-01	(537.74)
598-130-03	(60.24)
598-140-01	(620.00)
647-020-08	(164.22)
647-020-09	(21.98)
647-020-12	(291.76)
647-030-05	(65.85)

(79.11 acres missing compared with total acreage.)

A summary of assessor data and parcel map for each of the above parcels is included in Appendix C. A Property Location Map (Figure 1) depicting the geographic location and topographic characteristics of the Property is located in Appendix A.

3.2 Site and Vicinity General Characteristics

Current Owner: Otay Project L.P.

Property Size: 1899.4 acres

Site Improvements: The Property is not currently improved.

Current Zoning: The Property includes two zoning codes, S87 (Limited Control) and S88 (Specific Plan). Limited Control was a code that was applied to land that was unzoned as of December 1, 1969. It is expected that land within this zone will be converted to more appropriate zoning through implementation of long-range planning programs. Uses which are permitted within Limited Control include agricultural crops or animal grazing.

The majority of the Property includes zoning outlined in the Otay Ranch Specific Plan. In general, Village 13 has been specified as a Resort Site.

3.3 Current Use of the Property

Coast 2 Coast conducted two site visits to the Property. The first visit was completed on April 11, 2005 and the second visit was completed on May 17, 2006. During both visits, the Property was observed to be undeveloped land which was not occupied for any specific purpose. The 2005 winter season was abnormally wet and the 2006 winter season was very dry. As a result, the primary difference between the 2005 and 2006 site visits was a decrease in the amount of vegetation observed on the Property during the second visit.

A Property Plan (Figure 2) depicting the general configuration of the Property as well as pertinent site observations is included in Appendix A. Photographs of the Property are included in Appendix B.

3.4 Structures, Roads, Other Improvements and Utilities

Buildings: Buildings were not observed on the Property.

Other Structures: A wooden structure associated with a former cattle feed and water station was observed approximately where Neighborhood R-10 is planned. Based on aerial photographs and a previous interview with Mr. Jerry Adams, the cattle feeding station was probably constructed in 1989.

Hardscaped Areas: Pavement was not observed on the Property.

Landscaped Areas: The Property was covered with native vegetation. The vegetation appeared to be in poor condition due to a lack of maintenance but did not appear to be damaged or stressed in a manner which could be attributable to the presence of contamination.

Water Retention Areas: Three ponds were observed on the Property. Two of the ponds were observed along an unnamed seasonal creek flowing north to south which bisects the Property at its midpoint. The area where these ponds are located is planned as part of an Open Space Preserve. The third pond, which may possibly be a vernal pool, was located approximately in the northeast corner of the future R-11 Residential Neighborhood.

Roads: There are several 4-wheel drive dirt roads which cross the Property. Otay Lakes Road borders approximately the lower two-thirds of the west boundary of the Property and the entire south boundary of the Property.

Utilities:

The Property is not currently served by water, sewer, gas or electric utilities.

Septic Systems and Wells: Septic systems were not observed on the Property.

One water well was observed approximately where the south end of Neighborhood R-2 will be located. The well was demarcated by three large surveying stakes. Based on the time it took a small rock to hit the water at the bottom of the well, it is estimated that the depth to the water in the well is 400 to 500 feet below ground surface. The well cap that was observed during the April 2005 site visit was no longer present during the May 2006 site visit. Someone had also tried to pound the well closed possibly to prevent an animal or a small person from falling into it.

Two, abandoned aboveground water tanks for water storage were observed in the area of the cattle feed and water station south of the well. The tanks held approximately 2,000 gallons of water.

3.5 Current Uses of Adjoining Sites

The present land usage of the adjoining sites was also observed to assess their potential to adversely impact the Property. These observations were made “off-site” and in most cases did not involve entering the adjoining site. The results of these observations are presented below:

North: The site adjoining the Property to the north includes five parcels which appear as a continuous stretch of undeveloped, mountainous land that is not occupied. Owners of the various parcels include the City of San Diego; United Enterprises Limited, Stephen Birch and Mary Birch Foundation; the United States Government; and Otay Land Company, LLC. Surface drainage from these parcels appears to be to the south onto the Property. Visual observations of these parcels did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

East: The site adjoining the Property to the east includes three parcels which appear as a continuous stretch of undeveloped, mountainous land that slopes to the south toward Jamul Creek and Otay Lakes Road located at the south end of the site. Owners of the various parcels include the United States Fish & Wildlife Service and the State of California. Surface drainage from these parcels appears to be primarily to the southwest onto the Property. However, Jamul Creek crosses under Otay Lakes Road adjacent to the southeast corner of the Property and does not pass through the Property. Visual observations of these parcels did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

South: The site adjoining the Property to the south includes Otay Lakes Road followed by three parcels of land. The City of San Diego owns the two largest parcels including the westernmost parcel and the middle parcel. The westernmost parcel includes the land filled with water for the Lower Otay Reservoir. There is an embankment between Otay Lakes Road and the water in the reservoir.

The middle parcel includes John Nichol's Field Airport, a dirt landing strip, which is leased by the City and primarily used by skydivers. The only business name observed on the parcel was Sky Dive San Diego, Inc. at 13531 Otay Lakes Road. Aboveground and underground storage tanks were not observed on the parcel and EDR did not report aboveground or underground storage tanks on the parcel.

The easternmost parcel located adjacent to the southeast corner of the Property is owned by the State of California and appears to be land surrounding Jamul Creek.

Surface drainage from the middle and easternmost parcels appears to be to the south toward the Lower Otay Reservoir. Visual observations of these parcels did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

West: The site adjoining the Property to the west includes two parcels owned by the City of San Diego. The more northerly parcel is undeveloped and slopes west toward the Upper Otay Reservoir. The more southerly parcel includes the Upper Otay Reservoir. Visual observations of these parcels did not indicate that current activities on these adjoining parcels had adversely affected the Property nor did they reveal current activities that appear to represent an environmental threat to the Property.

3.6 Area Reconnaissance

A vehicular reconnaissance of the surrounding area in the immediate vicinity of the Property was conducted to observe, in very general terms, the current land use of the sites in the area and to assess if this use poses an environmental threat to the Property. With the exception of the aircraft landing strip, land usage in the general vicinity of the Property includes undeveloped land similar to the Property. These uses did not appear to pose an environmental threat to the Property.

4.0 INFORMATION PROVIDED BY CLIENT

4.1 Title Records, Environmental Liens and Activity and Use Limitations

A review of reasonably ascertainable recorded land title records, environmental lien records and activity and use limitations (AULs) for the Property was not conducted by Otay Project LP or Gatzke Dillon & Ballance LLP. Coast 2 Coast reviewed reasonably accessible ownership data for the Property obtained from First American Title's FastWeb database. Copies of the data sheets are included in Appendix C. Issues of further environmental concern associated with current or past ownership of the Property were not on the data sheets.

EDR reported that the Property does not appear on the NPL Recovery database (also known as the Superfund liens database). This database tracks properties that the United States Environmental Protection Agency has filed liens against to recover remedial action costs or properties where an owner has been notified of potential liability.

EDR also reported that the Property does not appear on the State Department of Toxic Substances Control Deed Restriction Listing database. This database tracks Site Mitigation and Brownfields Reuse Program facility sites with deed restrictions and Hazardous Waste Management Program Facility Sites with deed and land use restrictions.

4.2 Specialized Knowledge

Otay Project LP was not aware of environmental liens, AULs or issues and events of further environmental concern on the Property.

4.3 Valuation Reduction for Environmental Issues

Information was not found during this assessment which indicated that the Property is valued below fair market rate due to recognized environmental conditions.

4.4 Owner, Property Manager and Occupant Information

The current owner and manager of the Property is Otay Project L.P. There are no tenants currently on the Property.

4.5 Other Information

Otay Project LP was not aware of other issues of environmental concern associated with the Property.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

Coast 2 Coast Environmental reviewed a search of environmental records conducted by Environmental Data Resources, Inc. (EDR). The first search was completed in May 2005 and a second search to update the data was completed in May 2006. Copies of EDR's reports are located in Appendix D. The following environmental regulatory databases were reviewed as specified for the Property, adjoining and nearby sites:

Database Reviewed	Responsible Agency	Search Radius (miles)
<i>Federal ASTM Standard Databases</i>		
National Priorities List (NPL), Proposed NPL, Delisted NPL, NPL Areas of Concern	U.S. Environmental Protection Agency (EPA)	1.0
Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS)	U.S. EPA	0.5
CERCLIS NFRAP (No Further Action Planned)	U.S. EPA	0.5
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	U.S. EPA	1.0
RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities List	U.S. EPA	0.5
RCRA Generators List (RCRA-SQG or RCRA-LQG)	U.S. EPA	Adjoining Sites
Emergency Response Notification System (ERNS)	U.S. EPA	Property
<i>State ASTM Standard Databases</i>		
CalSites Annual Work Plan (AWP) Sites [formerly State Bond Expenditure Plan (BEP) maintained by the Department of Health Services]	California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC)	1.0
CalSites Former Abandoned Sites Program (ASPIS)	CalEPA DTSC	0.5
California Hazardous Material Incident Report System (CHMIRS)	Office of Emergency Services	Property
Cortese List (Combined Report List for Leaking USTs, Solid Waste Landfills [SWLs], CalSites)	CalEPA and Office of Emergency Services	0.5 (LUSTs and SWLs) 1.0 (Other)

Database Reviewed	Responsible Agency	Search Radius (miles)
Leaking Underground Storage Tanks (LUST)	State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB)	0.5
Voluntary Cleanup Program (VCP) Properties	CalEPA DTSC	0.5
Toxic Pits Cleanup Act Sites	SWRCB	1.0
Notify 65 (State Proposition 65)	SWRCB	0.5 (LUST) Property (Other)
Waste Management Unit Database (WMUDS) (Combination of other databases which tracks waste.)	SWRCB	0.5 (SWLs and SWAT) Property (Other)
Solid Waste Information System (SWIS) (Active, Closed and Inactive Landfills)	State Integrated Waste Management Board (IWMB)	0.5
Recycler Facilities (SWYCR)	Department of Conservation	0.5
Active UST Facilities	SWRCB	Adjoining Sites
SWEEPS UST (Old UST database no longer updated.)	SWRCB	Adjoining Sites
Hazardous Substance Storage Container Database (Historical USTs)	SWRCB	Adjoining Sites
Facility Inventory Database (Includes USTs)	CalEPA	Adjoining Sites

The Property, adjoining sites and nearby sites were not found within the search radii for the databases reviewed.

5.2 Additional Environmental Record Sources

EDR also researched the following databases to enhance and supplement the standard database sources listed in Section 5.1.

Database Reviewed	Responsible Agency	Search Radius (miles)
<i>Federal Supplemental ASTM Standard Databases</i>		
Superfund Consent Decrees (CONSENT)	U.S. EPA	1.0
Formerly Used Defense Sites (FUDS)	U.S. Army Corps of Engineers	1.0
Records of Decision (RODS)	NTIS	1.0
Department of Defense Sites (DOD)	U.S. Geological Survey	1.0
U.S. Brownfields	U.S. EPA	1.0
Open Dump Inventory	U.S. EPA	0.5
Uranium Mill Tailings Sites	U.S. Department of Energy	0.5
Institutional Controls Sites List	U.S. EPA	0.5
Engineering Controls Sites List	U.S. EPA	0.5
Mines Master Index File (MINES)	U.S. Department of Labor, Mine Safety and Health Administration	0.25
Hazardous Materials Spill Incidents (HMIRS)	U.S. Department of Transportation (DOT)	Property
Facility Index System (FINDS)	U.S. EPA/NTIS	Property
Material Licensing Tracking System (MLTS) for Radioactive Materials	Nuclear Regulatory Commission	Property
NPL Recovery (Superfund Liens)	U.S. EPA	Property
PCB Activity Database (PADS)	U.S. EPA	Property
RCRA Administrative Action Tracking System (RAATS)	U.S. EPA	Property
Toxic Release Inventory System (TRIS)	U.S. EPA/NTIS	Property
Toxic Substances Control Act (TSCA) Chemical Substance Inventory Control List	U.S. EPA/NTIS	Property
Section 7 Tracking Systems (FSTS) for Registered Pesticide-Producing Establishments	Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)	Property
FIFRA/TSCA Tracking System (FTTS) for Administrative Cases and Pesticide Enforcement Actions and Compliance Activities Related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act)	U.S. EPA Office of Prevention, Pesticides and Toxic Substances	Property

Database Reviewed	Responsible Agency	Search Radius (miles)
<i>State Supplemental ASTM Standard Databases</i>		
Spills, Leaks, Investigations and Cleanup (SLIC) (Spills and leaks from non-UST sources or other regulation sites.)	SWRCB and RWQCB	0.5
List of Deed Restrictions (DEED)	CalEPA DTSC	0.5
Hazardous Waste Information System (HazNet) for Waste Generators	CalEPA	Adjoining Sites
Drycleaner Facilities with Waste Generator Identification Numbers	CalEPA DTSC	Adjoining Sites
No Further Action Properties (NFA)	CalEPA DTSC	Adjoining Sites
Unconfirmed Properties Referred to Another Agency (REF)	CalEPA DTSC	Adjoining Sites
School Property Evaluation Program (SCH)	CalEPA DTSC	Adjoining Sites
Properties Needing Further Evaluation (NFE)	CalEPA DTSC	Adjoining Sites
Aboveground Petroleum Storage Tanks (ASTs)	SWRCB	Adjoining Sites
Waste Discharge System (WDS)	SWRCB	Property
Clandestine Drug Labs (CDL)	DTSC	Property
Emissions Inventory Data (EMI)	California Air Resources Board	Property
County Records (if Available)	San Diego County Department of Environmental Health	Property
City Records (if Available)	Fire Department and others	Property
<i>Tribal Records</i>		
Indian Lands UST	U.S. EPA Region IX	0.25
Indian Lands LUST	U.S. EPA Region IX	0.5
Indian Reservations	U.S. Geological Survey	1.0

The Property, adjoining sites and nearby sites were not found within the search radii for the databases reviewed.

A search for County records was limited because the Property is undeveloped land without a specific street address to use as a reference point. The Property is within an unincorporated area of the County of San Diego immediately east of the City of Chula Vista. As a result, there are no city records for the Property.

5.3 Physical Setting

5.3.1 Topographical Characteristics

The Property is located in the east ½ of the northeast ¼ of Section 36 of Township 17 South, Range 1 West; nearly all of Section 31 except a small portion of the southwest ¼ and all of Section 32, Township 17 South, Range 1 East; and the eastern two-thirds of the north ½ of Section 6, the north ½ of Section 5, and approximately ½ of the northwest ¼ of Section 4, Township 18 South, Range 1 East San Bernardino baseline and meridian on the Jamul Mountains, California 7.5 minute United States Geological Survey (USGS) Topographic Map, which was reviewed for surface hydrologic and topographic characteristics.

The topography of the Property is mountainous on the north end and hilly on the south end with the regional topographic gradient tending to the south toward the Lower Otay Reservoir. Site elevation ranges from approximately 1,700 feet above mean sea level (amsl) on the north end of the Property to approximately 500 feet amsl along Otay Lakes Road. Hydraulic flow is generally in a down-gradient direction, usually toward the nearest surface water body. Surface drainage on the Property is anticipated to flow to the south-southwest via five unnamed, seasonal creeks which are located onto the Property which then drain into the Lower Otay Reservoir located adjacent to the south border of more than half of the Property. Flood plain zoning for the Property is primarily Zone X, an area of minimal flooding.

5.3.2 Geological Setting

The Property is located in the Peninsular Ranges physiographic province of southern California. According to a geologic map of the area (Tan, 2002) the site area is underlain by metavolcanic rocks and Tertiary sedimentary rocks. The metavolcanic rocks are named the Santiago Peak Volcanics, a somewhat metamorphosed sequence of Upper Jurassic volcanic and volcanoclastic rocks underlain by the Southern California Batholith, which is of mostly Cretaceous age. The Tertiary sedimentary rocks, which overlie the older Santiago Peak volcanics, are classified as Otay formation (Oligocene to Miocene) and consist of sandstone, siltstone, claystone and fanglomerate. No ultramafic or similar rocks are mapped in the Jamul Mountains quadrangle or in other nearby areas; the potential for the presence of naturally-occurring asbestos (NOA), therefore, is very low.

5.3.3 Soil Characteristics

As described by the United States Department of Agriculture (USDA) Natural Resources Conservation Service there are at least seven types of surface soil on the Property (USDA, 1973). A brief description of these soils and their permeability classification are listed below.

<u>Soil Type</u>	<u>Permeability</u>
Diablo-Olivenhain complex, 9 to 30% slopes (DoE) This soil is found on uplands and consists of deep clays derived from soft, calcareous sandstone and shale.	Slow

<p>Friant rocky fine sandy loam, 9 to 30% slopes (FxE) rapid</p> <p>This soil is found on mountainous uplands and consists of fine sandy loams that formed in material weathered from fine-grained metasedimentary rock.</p>	<p>Moderately</p>
<p>Friant rocky fine sandy loam, 30 to 70% slopes (FxG) Description same as previous soil.</p>	<p>Moderately rapid</p>
<p>Olivenhain cobbly loam, 9 to 30% slopes (OhE) This soil is found on dissected marine terraces and consists of deep cobbly loams formed in old gravel and cobbly alluvium.</p>	<p>Moderate</p>
<p>Redding cobbly loam, 9 to 30% slopes (ReE) This soil is found on dissected terraces and consists of steep gravelly loams that formed in old mixed cobbly and gravelly alluvium.</p>	<p>Moderate</p>
<p>San Miguel-Exchequer rock silt loams, 9 to 70% slopes (SnG) This soil is found in mountainous areas and consists of Deep silt loams with a clay subsoil that are derived from metavolcanic rock.</p>	<p>Slow to moderate</p>

5.3.4 Hydrogeological Characteristics

The Property is in the Savage Hydrologic Subarea of the Dulzura Hydrologic Area of the Otay Hydrologic Unit of the San Diego Hydrologic Basin (10.31). Beneficial uses of the groundwater within the Savage Subarea include agricultural, municipal and industrial. Depth to groundwater in this area is estimated to be approximately 300 feet or more below ground surface based on the estimated depth of the water well found on the Property during this assessment. Groundwater flow in the Property area is estimated to generally follow the topographic gradient which is to the south-southwest.

Potable water is not currently provided to the Property area. The Otay Water District will service the Property when development begins.

5.4 Historical Use of the Property

5.4.1 Previous Environmental Reports

Previous environmental reports for the Property were provided to Coast 2 Coast Environmental by Otay Project LP and P&D Consultants, Inc. A copy of the text and figures from each assessment are included in Appendix G. A summary of each report and its current relevance to environmental conditions at the Property is provided below:

- *Phase I Environmental Site Assessment, Parcel 99, Otay Ranch*, February 7, 2000, Snyder Consulting

The north portion of Parcel 99 was previously assessed in accordance with ASTM Standard E 1527. In terms of the current assessment, Snyder Consulting's report addressed APN 595-090-03 and approximately the north half of APN 598-130-01. The assessed area included 340 acres and covered what was formerly the northeast corner of Rancho Otay.

The primary historical resources reviewed during this assessment included aerial photographs and an interview with a former ranch overseer. Aerial photography indicated that the assessed area had been undeveloped land since prior to 1928 up through the time of Snyder Consulting's assessment. An employee of Snyder Consulting interviewed Mr. Jerry Adams, Otay Ranch ranch overseer, who grazed longhorn cattle on this portion of the Property from 1989 through 1999. He was not aware of insecticides or herbicides having been applied to the assessed area.

During the assessment, the parcel was accessed by four-wheel drive dirt trails. Snyder Consulting did not observe chemicals, hazardous materials and waste or underground and aboveground storage tanks on the parcel. The parcel was undeveloped and not occupied.

Snyder Consulting did not find recognized environmental issues and did not recommend additional assessment of the assessed area.

- *Phase I Environmental Site Assessment, Resort Site Open Space, May 29, 2003*, P&D Environmental, A Division of P&D Consultants, Inc.

This assessment was conducted in accordance with ASTM E 1527-00. The assessed area included 1,330 acres of the current Property area and covered the entire Property area that was located north of a former proposed realignment of Otay Lakes Road as shown on the Otay Ranch GDP/SRP Land Use Plan map approved by the City of Chula Vista on October 28, 1993.

The primary historical resources reviewed during this assessment included aerial photographs, a review of Snyder Consulting's assessment and an interview with Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company. Aerial photography indicated that the assessed area had been undeveloped land since prior to

1928 up through the time of P&D's assessment. The Snyder Consulting report had summarized past grazing activities on the Property and Mr. Cameron stated that The Otay Ranch Company had not allowed grazing on the Property since 1999.

During the assessment, the assessed area was accessed by four-wheel drive dirt trails. The area appeared to be undeveloped and unoccupied at the time of the assessment. During P&D's site visit, they did not find chemicals, hazardous materials and waste, underground and aboveground storage tanks, wells, septic systems, pits, ponds, lagoons or transformers on the Property.

P&D did not find recognized environmental issues and did not recommend additional assessment of the assessed area

5.4.2 Chronological Review

A search of selected and readily available historical records was performed and interviews conducted with people having knowledge of the Property's history, in an effort to find if past use of the Property or activities conducted on, or in the vicinity of the Property could have adversely impacted the Property. The historical records used in this investigation, along with Coast 2 Coast's findings, are presented below in chronological order. Attempts were made to find information on five year intervals but data gaps may exist if information was not reasonably ascertainable for each interval.

In general, the Property has been undeveloped land except for an approximately 200 acre area in the southwest corner of the Property which was cultivated for agricultural row crops in 1960.

Prior to 1900: In 1829, the west portion of the Property became part of Rancho Janal when it was granted to Jose Antonio Estudillo, brother of Maria Magdalena Estudillo, the owner of Rancho Otay. The remaining east portion of the Property was not part of a rancho, apparently because it was too mountainous to be considered valuable land at the time. However, the current "eastern nose" of the Property is defined by its border with Rancho Jamul. This nose shaped boundary was a result of Rancho Jamul obtaining ownership of Jamul Creek which is still adjacent to the southeast corner of the Property. The primary use of the ranchos was to raise cattle for the hide trade. The Estudillo's were absentee ranchers who lived in San Diego's Old Town district.

On May 4, 1846, the Estudillo family's ownership of Rancho Janal was reaffirmed by Governor Pio Pico. After California became a state, the Land Act of 1851 required the Estudillo family to prove its ownership of Rancho Janal. This process took 21 years and Jose G. Estudillo, son of Jose Antonio Estudillo, finally received a Federal Land Patent on June 13, 1872. In 1873, Victoria Dominguez, inherited both Janal and Otay Ranchos after Maria Victoria Estudillo's death. Rancho Janal has also been known as Otay Dominguez and this is how it appears on current U.S. Geological Survey topographic maps.

Sometime between 1872 and 1889, Frank Kimball appeared to have become owner of Rancho Janal and developed mines on the site. In 1889, the mines on Rancho Janal (and

presumably the entire Rancho Janal) were sold to John D. Spreckels. This is the only period where information was found during this assessment indicating that mining had occurred on the Property. The type of mining was not specified. In turn, Mr. Spreckels sold Rancho Janal to Elisha Spurr Babcock, Jr. and his wife. (Historical sources conflicted on this point. One resource states that the Kimballs sold Rancho Janal to the Babcocks in 1894 and another resource states that Mr. Spreckels bought and then sold Rancho Janal to the Babcocks in approximately 1900.)

1900 to 1920: The Babcocks appear to have continued to own Rancho Janal during this period. Mr. Babcock was known to be an avid sportsman and he built a sports lodge on the west bank of the Upper Otay Reservoir which later became the home of the Birch family and was known as Rancho del Otay. This site is still marked on current U.S. Geological Survey topographic maps.

1920: Mr. Babcock died suddenly in 1922 and his property, which presumably included the west portion of the current Property, was sold to Mr. Rube Harrison in 1923. In 1926, Rancho Janal was reportedly sold to Henry Fenton and his Western Salt Company. However, it seems likely that this includes only the portion of the ranch that was west of the Upper Otay Reservoir and not the eastern portion of the Rancho which was a part of the Property. A 1928/1929 aerial photograph depicted the Property as undeveloped land with one dirt track across the top of the Property leading down to Proctor Valley and a couple other small dirt tracks leading into the Property from Otay Lakes Road. Evidence of hazardous materials use on the Property was not found during this period.

1930: Beginning in 1936, Mr. Stephen Birch began purchasing property in and around Ranchos Otay and Janal after visiting the area in the 1920s and finding that he liked it. Though Mr. Birch had made his fortune as a mining engineer in Alaska and was chairman of Kennecott Copper Corporation, information was not found during this assessment indicating his purchase of the Property and surrounding lands was due to mining interests. Altogether Mr. Birch purchased 35,000 acres of land. His family included his wife, Mary Celine Marshall Rand, a daughter, Mary, born in 1917 and a son, Stephen, Jr., born in 1918. The family lived at Rancho del Otay and their 29,000 acre ranch originally operated under the name Otay Agricultural Corporation until being renamed United Enterprises. Upon formation of United Enterprises, Mr. Birch, Sr. named his son, Stephen, Jr., as the President and his daughter, Mary, as Vice President. The Stephen and Mary Birch Foundation was formed in 1939. A combination of Birch family members, the foundation and United Enterprises appear on various historical title documents for the Property.

The Birch's ranch was used for growing lima beans, hay and grain and cattle ranching. (The ranch's branding mark was the same used by Magdalena Estudillo.) Based on comments from Mr. Adams, a former ranch supervisor who was interviewed in January 2000 during a previous Phase I ESA, it appears that cattle ranching was likely the Birch's primary use for the Property throughout their ownership. Evidence of hazardous materials use on the Property was not found during this period.

1940: In 1940, Mr. Birch died and Miss Mary Birch inherited the ranch, United Enterprises, and Rancho del Otay. (Mr. Stephen Birch, Jr. inherited the family's New Jersey home and did not have an active role in managing the family's San Diego County holdings. He died in 1970.) A 1949 aerial photograph did not depict agricultural use or other development of the Property, though it is likely to have been used for cattle grazing during this period. A small reservoir or pond, which still currently exists, was visible in the middle of the Property approximately 2,000 feet north of Otay Lakes Road. Evidence of hazardous materials use on the Property was not found during this period.

1950: A 1953 aerial photograph did not depict significant changes to the Property compared to the 1949 photograph. Evidence of hazardous materials use on the Property was not found during this period.

1955: In 1955, Miss Mary Birch married Mr. Patrick R. Patrick and they chose to live at Rancho del Otay. The Patricks did not have children. A 1955 topographic map did not depict structures on the Property. One north-south dirt track was marked on the map which essentially bisected the Property at its midpoint. Evidence of hazardous materials use on the Property was not found during this period.

1960: A 1960 aerial photograph depicted the southwest end of the Property (where Park 1, School 1, and Neighborhoods R-13, R-14 and R-23 are currently planned) tilled for dry farming. Hay, or a grain crop such as barley, was most likely the product grown on the Property. (Lima bean production was discontinued on the Birch's ranch in 1949, after a bindweed morning glory infested the fields.) In conjunction with dry farming, it is possible, but unlikely, that chlorinated pesticides or herbicides were used on the Property. A 1963 aerial photograph again depicted the Property as undeveloped land which was probably used for cattle grazing and no longer depicted agricultural use.

1965: A 1968 aerial photograph did not depict significant changes to the Property compared with the 1963 photograph. Another pond was visible immediately north of Otay Lakes Road and south of the pond first observed in the 1949 photograph. These two ponds shared the same southerly draining seasonal creek. Evidence of hazardous materials use on the Property was not found during this period.

1970: Mr. Patrick died in 1971. A 1971 photorevised topographic map did not depict changes to the Property compared with the 1955 map. Structures were not depicted on the Property. The small reservoir observed in aerial photographs since 1949 was marked next to the dirt track about 2,000 feet north of Otay Lakes Road. A 1973 aerial photograph did not depict significant changes to the Property compared to the 1968 aerial photograph. Two small objects, possibly cars or water tanks, were visible in the area where Neighborhood R-8 is planned. Evidence of hazardous materials use on the Property was not found during this period.

1975: A 1975 photorevised topographic map depicted two small changes. A four-wheel drive "Jeep Trail" appeared along the north edge of the Property and north adjoining site and another short, 3,000-foot dirt track was marked on the southwest end of the Property,

leading from Otay Lakes Road approximately to the west edge where Neighborhood R-8 is planned. However, these trails appeared to be the same as those that had appeared on aerial photographs since 1928. A 1978 aerial photograph did not depict significant changes to the Property compared to the 1973 photograph. Two objects again appeared in the vicinity of Neighborhood R-8 and in this photograph it appeared that they could be water tanks or possibly small mobile home trailers. Evidence of hazardous materials use on the Property was not found during this period.

1980: A November 1983 aerial photograph did not depict significant changes on the Property compared to the previous photographs. The mobile homes or water tanks were not visible in this photograph. Mrs. Mary Birch Patrick died in November 1983 and she named Mrs. Rose Patek as co-executor of her estate along with Southern California First National Bank. The estate included controlling interest in United Enterprises. During the 1980s, United Enterprises worked towards preparing the original planning documents for the development of Otay Ranch. In 1984 or 1985, City National Bank replaced Southern California First National Bank as the co-executor of the estate. Evidence of hazardous materials use on the Property was not found during this period.

1985: On November 4, 1988, United Enterprises granted the Property to First American Title Insurance Company (Document #88-0567316) which in turn granted the Property to Baldwin Vista Associates L.P. on December 7, 1988 (Document #88-0629805). Baldwin Vista Associates was a company owned by James and Alfred Baldwin. A 1989 aerial photograph did not depict significant changes to the Property compared to the 1983 photograph. Mr. Adams said he began using the Property for cattle grazing in 1989. Evidence of hazardous materials use on the Property was not found during this period.

1990: In 1993, Baldwin Vista Associates, L.P. amended its partnership name to Otay Vista Associates, L.P. (Document #93-0310558) and again in 1994 to The Otay Ranch L.P. (Document #94-0522559). A 1994 aerial photograph did not depict significant changes on the Property compared to the 1989 photograph except that the cattle feeding station appeared to have been constructed. Mr. Adams said he continued to graze cattle on the Property during this period. Evidence of hazardous materials use on the Property was not found during this period.

1995: A 1996 aerial photograph and a circa 1999 aerial photograph included in the 2000 Phase I ESA did not depict significant changes on the Property compared to the previous photographs. Magnification of the cattle feeding area on the 1996 photograph, showed the cattle feeding shed and the water tanks in their approximate current locations. The Baldwin Company declared bankruptcy in July 1995 but they retained the Property as part of the bankruptcy settlement. In August 26, 1997, Otay Ranch L.P. granted the Property to South Bay Project, LLC (Document #97-0411918) which on the same day transferred the Property to Otay Project, LLC (Document #97-0411919) which was still a company controlled by the Baldwins. On July 30, 1999, Otay Project, LLC granted the Property to Otay Project, L.P., the current owner (Document #99-0527467). Evidence of hazardous materials use on the Property was not found during this period.

2000: A 2002 aerial photograph did not depict significant changes to the Property. The Property was transferred to Otay Project LP during this period. Evidence of hazardous materials use on the Property was not found during this period.

2005: A 2006 aerial photograph did not depict significant changes to the Property. Magnification of the cattle feeding area continued to show a feed station canopy and two water tanks. Evidence of hazardous materials use on the Property was not found during this period.

5.4.3 Historical Sources Reviewed

Coast 2 Coast found historical sources from the early 1800s through the present. Copies of these resources are included in Appendix C, Historical Resources, or Appendix G, Previous Reports.

Aerial Photographs: Coast 2 Coast reviewed aerial photographs for the years 1928/29, 1949, 1953, 1960, 1963, 1968, 1973, 1978, 1983 and 1989 at the Cartographic Services Section of the County of San Diego Public Works Department. 1994 and 2002 aerial photographs were obtained from Terraserver-USA.com. 1996 and 2006 aerial photographs were obtained from Terraserver.com

Building Permits: The Property is within an unincorporated area of the County of San Diego. The County of San Diego Development Services Department maintains computerized records of building permits dating back to 1987 and descriptions of purged building permits dating back to 1972. Since there has been no building activity on the Property between 1972 and the present and because there are no street addresses for the Property, building permit records were not searched.

Business and Street Directories: Due to the lack of street addresses for the Property, city directories were not researched for the Property.

Certified Unified Program Agency: The County of San Diego Department of Environmental Health Department did not have records indicating hazardous materials had been stored on the Property nor that events of environmental concern had affected the Property.

Chain-of-Title/Assessor Records: Coast 2 Coast reviewed recent assessor information for the Property available on First American Title Company's FastWeb database. Selected recent deeds were obtained from the County of San Diego Assessor and Recorder's Offices in order to confirm the names of the entities that have owned the Property since it was acquired by the Baldwins in 1988.

Historical Topographic Maps: Coast 2 Coast reviewed historical topographic maps for the years 1955, 1971 and 1975 at the County of San Diego Public Works Department Cartographic Services and the University of California San Diego Scripps Institute of Oceanography Library.

Interviews: Coast 2 Coast communicated during this project with Ms. Mary May, Planner with the Otay Ranch Company. Ms. May was not aware of issues of further environmental concern since portions of the Property were previously assessed in 2000 and 2003.

Previous Assessments: Historical resources reviewed during the previous assessments described in Section 5.4.1 were incorporated into the above chronology. In particular, the previous assessment provided access to a 1994 aerial photograph and interviews with Mr. Jerry Adams, a former ranch supervisor on the Property from 1989 to 1999, and Mr. Robert Cameron, Executive Vice President of Otay Ranch Company.

Property Tax Files: Access to property tax files for the Property was not available at the County of San Diego Tax Assessor's office.

Sanborn Maps: EDR/Sanborn reported that maps were not found in its collection for the Property.

Other Documents: A history of the Otay Valley entitled *Otay Valley* available by internet from the local history archives of the University of San Diego (<http://history.acusd.edu/gen/local/otay.html>). A history of Otay Ranch included in Chapter 3 of Part I of the Otay Ranch General Development Plan/Subregional Plan dated October 28, 1993. A history of the City of San Diego Water Department available on the Department's website at <http://www.sandiego.gov/water/gen-info/history.shtml>. Brief histories of the Upper and Lower Otay Reservoirs on the www.sdfish.com website. Information about the ownership of the Property by the Birch family and the bankruptcy of the Baldwins' development company in *Mary Birch Patrick, A Millionaire Heriess's Unrealized Visions, The Stephen and Mary Birch Foundation, Part I*, San Diego Union Tribune, March 17, 1997, Page A-1.

5.5 Historical Use of the Adjoining Sites

Specific historical research was not conducted for the adjoining sites and surrounding area. However, in the process of researching historical data for the Property, the following historical information was obtained for the adjoining sites:

North: The sites adjoining the Property are undeveloped mountainous land. Research was not found during this assessment indicating these sites had been used for any specific purpose during the last 150 years. Issues of further environmental concern associated with the past use of these adjoining sites were not found.

East: The site adjoining the Property to the northeast has been undeveloped mountainous land dating back at least 150 years. Rancho Jamul has been adjacent to the southeast corner of the Property since approximately 1830. The Rancho was not occupied immediately adjacent to the Property as the west portion of the Rancho includes mountainous land and Jamul Creek. Issues of further environmental concern associated with the past use of these adjoining sites were not found.

South: A road connecting San Diego with Jamul has existed south of the Property since at least the mid- to late-1800s. Presumably this road followed the same corridor as Otay Lakes Road which has been visible on aerial photographs and topographic maps as the south border of the Property since at least 1928/1929.

In 1896, Elisha Babcock and John Spreckels combined their water interests to form the Southern California Mountain Water Company. In 1897, this company completed construction of the Lower Otay Dam which created the reservoir adjacent to the south border of the Property. However, the dam was built without a spillway and in January 1916 floods washed away the Lower Otay Dam. The Lower Otay Reservoir was restored after the dam's reconstruction was completed in 1918. The name of the dam was changed to Savage Dam. The ownership of the reservoirs was transferred to the City of San Diego sometime after 1918. Since the transfer, the City has continued to own the land south of Otay Lakes Road.

The only other development observed south of the Property besides the reservoir is the John Nichol's Field Landing Strip, a dirt packed runway which was constructed on City-owned land sometime between 1968 and 1971. The landing strip was built south of Otay Lakes Road and north of the mouth of Jamul Creek. This site is downgradient of the Property and information was not found indicating the aboveground or underground storage tanks for fuel have been stored on the site. Issues of further environmental concern associated with the past use of these adjoining sites were not found.

West: In 1901, the Upper Otay Dam was built. The dam and its associated reservoir are still located adjacent to the upper west border of the Property. This reservoir was originally built as an emergency reserve for the Lower Otay Reservoir. However, beginning in 1959 and continuing through the present, it has been used as a fish hatchery and recreational fishing area for Florida-Strain largemouth bass. The remainder of the west adjoining site has included undeveloped mountainous land. Issues of further environmental concern associated with the past use of these adjoining sites were not found.

In addition, the surrounding area was historically undeveloped mountainous land or ranch land used for cattle grazing and agricultural production of grains, hay or lima beans. Information was not found during this assessment indicating that these past uses impacted the environmental quality of the Property.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

On April 11, 2005, Marybeth Norgren of Coast 2 Coast Environmental and Nick Larkin of P&D Consultants, Inc. conducted an environmental assessment of the Property to find if current usage or activities on the Property have created, or have the potential to create, an environmental impairment to the Property. On May 17, 2006, Marybeth Norgren of Coast 2 Coast Environmental returned to the Property to obtain an update on the Property's condition. The results of the site reconnaissance are presented below.

During this assessment, access to the Property was allowed by The Otay Ranch Company. A client representative did not accompany Coast 2 Coast during either site visit but the Property's gates were not locked during either visit. A four-wheel drive vehicle was used during each site visit.

During a site reconnaissance an emphasis is placed on viewing areas where activities likely to use and generate hazardous materials occur such as maintenance and repair areas, boiler rooms and manufacturing areas. A tour of the Property's buildings is conducted. In addition, accessible common areas and a representative sample of tenant (occupant) spaces are observed.

A typical site reconnaissance continues by touring the exterior of the Property's buildings and viewing the interior of any secondary structures such as sheds. The site reconnaissance is completed by viewing the Property from all adjacent public thoroughfares and commercial properties (where possible).

During the current assessment, the Property appeared to be completely accessible and limitations, except for natural topography, were not placed on Property access.

6.2 General Site Setting

The Property is currently undeveloped and unoccupied. Mr. Cameron previously stated in 2003 that The Otay Ranch Company has not allowed cattle grazing on the Property since 1999 and has had no tenants since that period. Tenants using or generating hazardous materials were not observed. Buildings were not observed on the Property. A description of secondary structures, Property grounds, utilities and roads is provided in Sections 3.3 and 3.4. On-site activities observed during Coast 2 Coast's assessment of the Property did not appear to represent an environmental hazard to the Property. The United States Border Patrol does access the Property to conduct surveillance operations and Coast 2 Coast encountered one officer during the 2005 site visit.

6.3 Interior and Exterior Observations

Coast 2 Coast looked for the following improvements and features on the Property and whether the use, treatment, storage, disposal or generation of hazardous substances and petroleum products had occurred on the Property.

Drains and Sumps:

Floor drains, floor sinks, trench drains, sumps and clarifiers were not observed on the Property.

Odors:

Strong, pungent or noxious odors were not detected during the assessment.

Oil and Gas Pipelines and Wells

Warning signs for oil and gas pipelines were not observed during the sitewalk. Map W1-7 prepared by the State of California Division of Oil, Gas and Geothermal Resources did not show oil wells within a one-mile radius of the Property.

Potential PCB-Containing Equipment:

Transformers and other potential PCB-containing equipment were not observed on the Property.

Stains and Corrosion:

Evidence of stains or corrosion by hazardous substances was not observed.

Stained Soil and Pavement:

Visual observations were made of the cattle grazing area and areas near the four-wheel drive roads accessed during this assessment to find discolorations or surface staining which could be indicative of contaminant discharge.

Significant soil and pavement stains were not observed on the Property.

Stored Hazardous Materials:

Hazardous materials were not observed on the Property.

Storm Drains:

Storm drains were not observed on the Property. Five unnamed seasonal creeks were observed flowing north to south across the Property.

Surface Anomalies/Depression:

Visual observations were also made to find the presence of environmentally unusual and/or suspicious conditions such as land depressions and other surface anomalies indicative of possible oil wells, waste dump sites, leach fields or other subsurface activities.

Surface anomalies and depressions were not observed on the Property.

Surface Drainage on Site:

Based upon Property surface and improvement characteristics observed during the site reconnaissance of the Property, surface drainage at the Property would flow to the south. At the time of the inspection it did appear that some areas of the Property would be subject to wetlands restrictions, but a study of those conditions is outside the scope of this assessment.

Surface Drainage Obstructions:

During the site reconnaissance it was observed that the Property is protected from surface run-off from adjoining sites by topography.

Underground and Aboveground Storage Tanks:

Two, aboveground water storage tanks (ASTs) were observed in the vicinity of the cattle grazing shed. The ASTs appeared to have a capacity of approximately 2,000 gallons.

Underground storage tanks were not observed on the Property.

Vegetation:

Visual observations were made of the vegetation on the Property in an effort to find evidence of damage that could be related to the presence of localized soil or water contamination. Vegetation on the Property consisted of undisturbed, native vegetation.

Vegetation on the Property did not appear to be damaged or stressed in a manner which could be attributable to the presence of contamination.

Waste Disposal:

Solid waste and hazardous waste disposal was not observed on the Property except for a few minor areas where illegal dumping of construction debris, household furniture and scattered trash had occurred. Since the Property's gates are not secured, it is notable that so little illegal dumping had occurred.

7.0 INTERVIEWS

7.1 Interview with Owner

Mr. Robert Cameron, Executive Vice President of The Otay Ranch Company, was previously interviewed by Ms. Norgren in 2003 about the history and environmental condition of the Property. During the current assessment, Coast 2 Coast has been in contact with Ms. Mary May, Planner with The Otay Ranch Company who is managing the preparation of the Environmental Impact Report for the development of Village 13. Ms. May was not aware of any recognized environmental conditions associated with the Property.

7.2 Interview with the Property Manager

The Otay Ranch Company is also the current Property Manager.

7.3 Interviews with Occupants

There are no tenants currently occupying the Property. The United States Border Patrol accesses the Property to conduct surveillance, but has no permanent equipment on the Property.

7.4 Interviews with Local Government Officials

Coast 2 Coast reviewed the database listings maintained by the Certified Unified Program Agency (CUPA) for the Property. The CUPA is responsible for enforcement and monitoring of various environmental programs. For the Property, the County of San Diego Department of Environmental Health is the CUPA. This agency did not have a database listing for the Property.

7.5 Interviews with Others

Other individuals with pertinent knowledge of the Property were not found during this assessment.

8.0 ADDITIONAL SERVICES

8.1 Asbestos

Sampling Protocol

Coast 2 Coast Environmental performed a limited asbestos survey of the cattle grazing shed located on the Property. Based on historical resources reviewed during this assessment, the shed was probably built in 1989. The purpose of a limited asbestos survey is to assess if a building contains significant sources of asbestos-containing materials (ACM). The survey for the Property approximately followed the current recommended U.S. EPA guidance document for surveying and abating ACM (Guidance for Controlling Asbestos-Containing Materials in Buildings, 1985 edition). The survey was conducted by a CalOSHA Certified Asbestos Consultant.

Sampling Results

One large sample of roofing material from the shed was collected. The sample was analyzed by Environmental Hazard Services, LLC (EHS), a NVLAP-accredited laboratory (Accreditation Number 101882-0) utilizing Polarized Light Microscopy (PLM) coupled with dispersion staining techniques, in accordance with U.S. EPA approved analytical methods (visual estimation). A copy of the sample log and EHS' laboratory report and chain of custody are included in Appendix F.

8.2 Lead-Based Paint

Painted building surfaces with chipped, cracked and peeling were not observed and therefore and inspection for lead-based paint was not conducted.

8.3 Radon

A state-wide radon survey conducted by the California Department of Health Services (DHS, California Statewide Radon Survey Screening Results, 1990) included San Diego County as part of Region 9. Within San Diego County, 43 homes were tested and the highest radon concentration was reported to be 2.6 picocuries/liter (pCi/L). The EPA's action level for radon is 4.0 pCi/L. Therefore, it is not anticipated that radon poses a significant environmental threat to the Property based on the California DHS radon survey.

9.0 FINDINGS AND CONCLUSIONS

Based upon Coast 2 Coast's review of the information obtained during the course of this assessment of the Property and herein presented, we have formed the following opinions:

- The Property, adjoining sites and nearby sites were not found on the Standard Environmental Record sources required to be reviewed under ASTM Standard E1527-00, including the following:

United States Environmental Protection Agency (U.S. EPA) National Priorities List
State-equivalent priorities list

U.S. EPA Comprehensive Environmental Response, Compensation and Liability
Information System (CERCLIS)

State-equivalent CERCLIS

U.S. EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage and
Disposal Facilities (TSDF)

U.S. EPA RCRA-Generators

U.S. EPA Emergency Response Notification System (ERNS)

State Leaking Underground Storage Tank Program (LUST)

State Registered Underground Storage Tank (UST)

State Solid Waste Information System (SWIS)

- High voltage electrical transformers were not found on the Property.
- The laboratory reported that the building material sample collected during the limited asbestos survey of the cattle grazing shed located on the Property did not contain asbestos.
- Painted surfaces appeared to be in good condition. Evidence of chipped, cracked and peeling paint was not observed. Based on historical resources reviewed during this assessment, the cattle shed appears to have been constructed in 1989 and therefore the use of lead-based paint is unlikely.
- A review of a statewide radon study indicated that Property was not within an area where radon is likely to be found in buildings in concentrations above the U.S. Environmental Protection Agency action limit of 4.0 picocuries per liter.
- During our review of historical resources, Frank Kimball was reported to have had several mines on Rancho Janal (also known as Rancho Otay Dominguez) in the 1870s and 1880s. The east portion of this rancho included approximately 30 to 40 percent of the west side of the Property. No mention was made of the material that was being mined but it may have been for limestone which was found a few miles east on the east adjoining site, Rancho Jamul. Mr. Kimball sold Rancho Janal to the Babcocks in 1894. No other mention of mining on Rancho Janal was found and there are no mines marked on the U.S. Geological Survey topographic maps for Rancho Otay Dominguez and the Property. Based on this information, it is not likely that mining activities which may have occurred over 120 years ago are of environmental concern today.

- The following environmental concerns were observed on the Property:
 1. A 1960 aerial photograph depicted dry farming on the area where Park 1, School 1, and Neighborhoods R-13, R-14 and R-23 are currently planned. Dry farming was not observed on the 1953 or 1963 photographs. The former usage for dry farming indicates a potential concern regarding historical usage of chlorinated pesticides or herbicides on the Property. Although this concern does not rise to the level of a Recognized Environmental Condition, it is likely to result in a requirement for a Preliminary Endangerment Assessment for pesticides, herbicides and heavy metals by the State Department of Toxic Substances Control.
 2. One water well was observed approximately where the south end of Neighborhood R-2 will be located. The well was observed to be capped during the April 2005 site visit but was uncapped during the May 2006 site visit. Someone has attempted to smash in the top of the well casing to prevent animals or small children from falling into the well but it is still a physical hazard as well as potentially providing a pathway for illegal dumping and groundwater contamination.
 3. Access to the Property is not restricted by keeping the gates locked. Minor amounts of illegal dumping of construction debris, household furniture and appliances and other household waste were observed on the Property during the site reconnaissances. Although this concern does not rise to the level of a Recognized Environmental Condition, it does create the possibility that illegal disposal of hazardous materials or hazardous waste could occur fairly easily.
 4. Other Recognized Environmental Conditions or additional issues of further environmental concern were not found during this assessment.

10.0 RECOMMENDATIONS

Based upon Coast 2 Coast's review of the information presented in the report, and our resulting conclusions, we recommend the following:

- This report needs to be submitted to the Department of Toxic Substances Control (DTSC) for their review regarding the planned School 1 site. Though Coast 2 Coast expects that the impact to the Property from the possible past use of chlorinated pesticides or herbicides is below a level of concern, DTSC will likely require that a Preliminary Endangerment Assessment (PEA) be conducted on the area where School 1 is to be located. DTSC has only specifically excluded sites from chlorinated pesticide sampling where farming activities ended before 1950. The PEA will also likely require sampling for heavy metals such as arsenic which may have been used in farming operations.
- The water well should be temporarily capped if there are plans to use the well when the Property is redeveloped. Otherwise, the well should be permanently filled and capped.
- Gates to the Property should be locked to minimize access. Since the United States Border Patrol frequently uses the Property, perhaps a double pad lock system or combination lock can be used on the gates.
- It is Coast 2 Coast's opinion that further environmental assessment of this Property, beyond the item listed above, is not warranted at this time.

11.0 DEVIATIONS

We have performed a Phase I Environmental Site Assessment of the Property at Otay Lakes Road, Chula Vista, San Diego, California in conformance with the scope and limitations of ASTM Standard E 1527-00. Exceptions to, or deletions from, the standard practice are described in Section 1.2 of this report. This assessment did not reveal evidence of recognized environmental conditions or other environmental concerns in connection with the Property except for the following:

1. A 1960 aerial photograph depicted dry farming on the area where Park 1, School 1, and Neighborhoods R-13, R-14 and R-23 are currently planned. Dry farming was not observed on the 1953 or 1963 photographs. The historical site usage for farming indicates a potential concern regarding releases of pesticides, herbicides or heavy metals.
2. One water well was observed approximately where the south end of Neighborhood R-2 will be located. The well was observed to be capped during the April 2005 site visit but was uncapped during the May 2006 site visit. Someone has attempted to smash in the top of the well casing to prevent animals or small children from falling into the well but it is still a physical hazard as well as potentially providing a pathway for illegal dumping and groundwater contamination.
3. Access to the Property is not restricted by keeping the gates locked. Minor amounts of illegal dumping of construction debris, household furniture and appliances and other household waste were observed on the Property during the site reconnaissance. Although this concern does not rise to the level of a Recognized Environmental Condition, it does create the possibility that illegal disposal of hazardous materials or hazardous waste could occur fairly easily.

12.0 REFERENCES

12.1 Published References

Federal Agencies, Departments and Offices

United States Department of Agriculture

Natural Resources Conservation Service

Soil Survey of the San Diego Area, California, Roy H. Bowman, December 1973

United States Geological Survey

Preliminary Geologic Map

Geologic Map of the Jamul Mountains 7.5' Quadrangle, San Diego County, California, S. S. Tan, 2002

Topographic Maps

Jamul Mountains, California 7.5 minute USGS Topographic Map, 1955

Jamul Mountains, California 7.5 minute USGS Topographic Map, 1955, PR 1971

Jamul Mountains, California 7.5 minute USGS Topographic Map, 1955, PR 1971 and 1975

State Agencies, Departments and Offices

Department of Conservation

Division of Oil, Gas & Geothermal Resources

Wildcat Map W1-7

State Water Resources Control Board

Regional Water Quality Control Board – San Diego Region

Water Quality Control Plan for the San Diego Basin, April 1995

University of California San Diego

Scripps Institute of Oceanography Library

Topographic Maps

12.2 Agency Resources

San Diego County Agencies, Departments and Offices

Assessor's Office

Assessor's Parcel Map

Current and Recent Ownership Records

Planning and Land Use Department

Flood Insurance Rate Map

Current Zoning Map

Otay Ranch General Development Plan/Subregional Plan, October 28, 1993
Part I, Chapter 3, History of Otay Ranch

Public Works Department
Cartographic Services
Aerial Photographs
Topographic Maps

Recorder's Office
Current and Historical Deeds

City of San Diego Agencies, Departments and Offices

Library
Haines and Polk Business/Street Directories

Water Department
History, <http://www.sandiego.gov/water/gen-info/history.shtml>

12.3 Commercial and Private Resources

Environmental Data Resources, Inc.
Regulatory Database Search
Sanborn Map Search

First American Title Company FastWeb Database
Current Property Ownership Records
Historical Property Ownership Records

San Diego Reader
Promise Breakers, Nancy Fay, August 8, 2002

San Diego Union Tribune
Judge Approves Deal Settling Debts from Sale of Otay Ranch, Lori Weisberg, April 25, 1997, Pages B-3 and 7

Mary Birch Patrick, A Millionaire Heiress's Unrealized Visions, The Stephen and Mary Birch Foundation, Part I, Joe Cantlupe, March 17, 1997, Page A-1

Otay Ranch Annexation is Near, Kathryn Balint, January 14, 1997, Page B-3 and 7

SDFish.Com
Lower Otay Lake Reservoir History, <http://www.sdfish.com/lakes/otaylower/index.html>
Upper Otay Lake Reservoir History, <http://www.sdfish.com/lakes/otayupper/index.html>

Terraserver.com

Recent Aerial Photographs

Terraserver-USA.com

Recent Aerial Photographs

University of San Diego

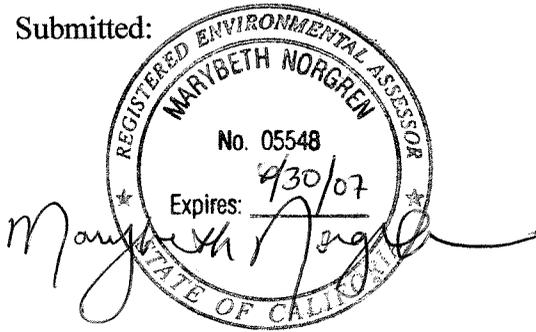
Online Local History Archives

Otay Valley, No author provided, <http://history.acusd.edu/gen/local/otay.html>

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

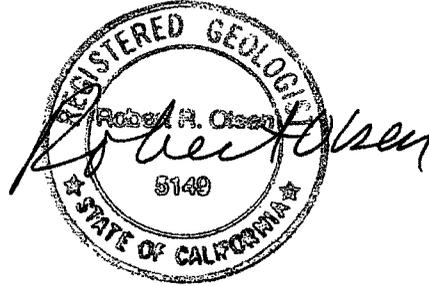
I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject Property. I have developed and performed all the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Submitted:



Marybeth Norgren, REA I #05548
Principal

Reviewed:



Robert Olsen, REA II #04502
Senior Geologist, RG #5149

14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

Marybeth Norgren

Principal

Education

B.S., Chemistry, California State University Fullerton, 1988
M.S., Environmental Management, University of San Francisco, 1999
Asbestos Fiber Counting (NIOSH 582), McCrone Research Institute
EPA/AHERA Building Inspector and Management Planner, Design for Health
EPA/AHERA Asbestos Abatement Contractor/Supervisor, Design for Health
EPA/AHERA Asbestos Abatement Project Designer, Design for Health
EPA Radon Measurement Operator, Western Regional Radon Training Center
Lead-Based Paint Inspection & Assessment, Project Monitor and Project Designer,
U C Berkeley Extension
Continuing Education for Lead-Based Paint, National Econ

Registrations

Cal/EPA Registered Environmental Assessor #5548
Cal-OSHA Certified Asbestos Consultant #92-0720
California DHS Lead-Related Construction Inspector/Assessor, Project Monitor and Project Designer, #541

Experience

Ms. Norgren has 18 years experience managing and conducting environmental site assessments (ESAs) and hazardous materials surveys on all types of properties including commercial, industrial, residential, agricultural and unimproved properties. She has utilized the ASTM 1527 standard for ESAs since its inception in the early 1990s and incorporated it into client specific standards as requested. She has managed projects involving underground storage tank removals, unauthorized releases and associated sampling. In addition, she has experience conducting all phases of asbestos and lead-based paint abatement projects including comprehensive building surveys, contract bid solicitation, contract administration, project specifications, and contract documentation. Ms. Norgren also has extensive field experience in asbestos abatement contractor supervision and industrial hygiene services.

Relevant Projects

Wells Fargo Bank/First Interstate Bank, Bank of America, Union Bank of California and Great Western Bank - Various Locations. Managed and conducted Phase I ESAs for commercial, industrial, retail and agricultural properties throughout California as well as Arizona, Nevada, Oregon, Washington, Texas and Midwest and East Coast sites. Assessment activities included property reconnaissance, agency record reviews, historical land use research, geologic conditions research, and recommendations for handling identified concerns. Property reconnaissance has included asbestos sampling, radon sampling and/or water and paint sampling for lead. Conducted Phase II ESAs including comprehensive asbestos surveys and soil and groundwater sampling.

City of Ontario Housing Agency, Ontario, CA. Currently involved in managing and conducting a multi-year contract for asbestos and lead-based paint sampling of 600 homes which are part of the Residential Sound Insulation Project to reduce air traffic noise from Ontario Airport. Other work includes conducting Phase I ESAs and demolitions surveys for asbestos and lead-based paint on properties being purchased by the City in high noise areas.

Paseo Project, San Diego State University Foundation, San Diego, CA. Prepared a Phase I Environmental Site Assessment (ESA) of five city blocks south of San Diego State University. The ESA was part of the Hazardous Materials Technical Study for the SDSU Foundation Master Plan concerning the formation of a redevelopment project area on lands adjacent to the University. The ESA included historical research dating back to the development of the area beginning in 1931 when the University moved to its current location. The report also included a review of agency files for four gas stations which were either currently or historically located on the site.

J Serra High School Expansion, San Juan Capistrano, CA. Prepared a Phase I Environmental Site Assessment Update as part of the Hazardous Materials Technical Study for an environmental impact report for the recreational facilities of the J Serra High School located on approximately 30 acres of land in San Juan Capistrano. As a private school, J Serra High School board chose not to have the project reviewed by the Department of Toxic Substances Control (DTSC), but the report was prepared in a format acceptable to DTSC. Issues associated with the project site included two adjacent and upgradient gasoline stations with active leaking underground storage tank cases and historic use of the site for agricultural orchards.

Various Residential and Commercial Developers and Land Brokers, San Diego County, CA. Managed and prepared Phase I ESAs for San Diego developers including McMillin Companies, Cornerstone Properties, Kaufman-Broad, McMahan Development Group, The Hoffman Company and Conservation Land Group. Properties assessed have included large tracts of land proposed for use as residential communities, commercial developments and mitigation bank sites.

Department of the Navy, Southwest Division, San Diego, CA. Conducted lead-based paint surveys and prepared Operations and Maintenance Programs based on survey results. Surveys included all exterior and some interior surveys on 170 buildings at two naval bases in San Diego. Conducted Pollution Prevention Assessment surveys of various naval operation shops to identify processes in each shop that use hazardous chemicals and/or generate hazardous waste. Prepared reports describing and quantifying materials used in the shops' processes.

City of Los Angeles Department of Airports, CA. Managed asbestos survey of approximately fifty buildings at Van Nuys Airport and Van Nuys California Air National Guard Facility. Based on survey results, prepared asbestos abatement specifications. Project included arranging for approval of special abatement procedures from the South Coast Air Quality Management District.

Trizec Properties, Inc., Various Locations. Performed contractor supervision and industrial hygiene services during removal of asbestos-containing fireproofing. All buildings were multi-story commercial structures and projects ranged from abating single suites to full-floor abatement. Responsible for ensuring contractor followed all government regulations and maintained proper work practices.