

SECOR
International Incorporated

ER 98-16

**PHASE I ENVIRONMENTAL SITE
ASSESSMENT AND PHASE II LIMITED
GROUNDWATER ASSESSMENT REPORT**

**Proposed City of Escondido Fire Station
2315-2319 Felicita Road
Escondido, California 92029
SECOR Job No. 80005-013-01**

Submitted by
SECOR

for
**City of Escondido Public Works Department
201 N. Broadway
Escondido, California 92025**

June 19, 1997

Prepared by:


James J. Bignell
Environmental Specialist

Reviewed by:

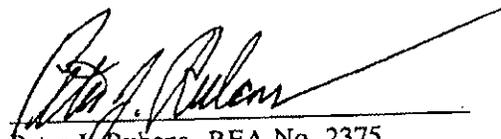

Peter J. Rubens, REA No. 2375
Senior Project Manager

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1-1
1.1 Objective	1-1
1.2 Scope of Work	1-1
2.0 ENVIRONMENTAL SETTING	2-1
2.1 Regional Physiographic Conditions	2-1
2.2 Regional Geology	2-1
2.3 Regional Hydrogeology	2-1
2.4 Local Soil And Groundwater Conditions	2-1
3.0 PROPERTY RECONNAISSANCE	3-1
3.1 Subject Property Description And Current Uses	3-1
3.2 Interior Property Observations	3-1
3.2.1 Interior Storage Areas	3-1
3.2.2 Interior Waste Disposal Areas	3-1
3.2.3 Interior Subsurface Structures	3-2
3.3 Exterior Property Observations	3-2
3.3.1 Exterior Storage Areas	3-2
3.3.2 Exterior Disposal Areas	3-2
3.3.3 Subsurface Structures	3-2
3.3.4 Underground Storage Tanks	3-2
3.3.5 Surface Water	3-2
3.4 Polychlorinated Biphenyls	3-2
3.5 Water Supply And Sewage Disposal	3-3
3.6 Adjacent Property Reconnaissance	3-3
4.0 HISTORICAL REVIEW	4-1
4.1 Aerial Photograph Review	4-1
4.2 Building Permit Record Review	4-1
4.3 Sanborn Fire Insurance Map Review	4-1
4.4 City Directory Review	4-1
4.5 Ownership Record Review	4-2
5.0 REGULATORY AGENCY LIST REVIEW	5-1
5.1 National Priority List (NPL)	5-1
5.2 RCRA-Treatment, Storage And Disposal Facilities List (RCRIS-TS)	5-2
5.3 EPA Review List (CERCLIS)	5-2
5.4 No Further Remedial Action Planned Report (NFRAP)	5-2
5.5 Leaking Underground Storage Tank List (LUST/LRST)	5-2
5.6 Solid Waste Landfills (SWLF/SWF)	5-3
5.7 Properties With Hazardous Waste (HWS)	5-3
5.8 Underground Storage Tank List (UST/RST)	5-3
5.9 Emergency Response Notification System (ERNS)	5-3
5.10 Large And Small Quantity Generators (GNRTR)	5-3

TABLE OF CONTENTS (continued)

6.0 REGULATORY AGENCY FILE REVIEW 6-1

 6.1 RWQCB File Review 6-1

 6.2 Fire Department File Review 6-1

7.0 RADON RISK DATA EVALUATION 7-1

8.0 LIMITED GROUNDWATER SAMPLING 8-1

 8.1 Limited Geophysical Survey 8-1

 8.2 Groundwater Sampling Activities 8-1

 8.3 Analytical Methods 8-1

 8.4 Summary of Laboratory Analytical Results 8-1

9.0 CONCLUSIONS AND RECOMMENDATIONS 9-1

 9.1 Phase I 9-1

 9.2 Phase II 9-1

10 LIMITATIONS 10-1

11.0 REFERENCES 11-1

TABLES

Table 1 Summary of Beneficial Water Uses

LIST OF FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Plan/Adjacent Property Map

LIST OF APPENDICES

- Appendix A Scope of Services for Phase I Environmental Assessment
- Appendix B Photographs of Site
- Appendix C Environmental Risk Information & Imaging Services Report
- Appendix D Chatham Brothers Barrel Yard Information
- Appendix E Laboratory Analytical Report and Chain-of-Custody Documentation

1.0 INTRODUCTION

This report presents the results of the Phase I Environmental Site Assessment (ESA) and Phase II Limited Site Assessment (LSA) of the Proposed City of Escondido Fire Station located at 2315-2319 Felicita Road, Escondido, California (the subject property), performed by SECOR International Incorporated (SECOR). This ESA and LSA was performed at the request of The City of Escondido Public Works Department (COE)

The Phase I ESA was completed by Mr. James J. Bignell and reviewed by Mr. Peter J. Rubens. Both are experienced professionals in the field of Phase I ESAs and related environmental investigations. The Phase II LSA was completed by Mr. Peter J. Rubens.

Prior to initiating the assessment, SECOR reviewed information about the subject property with City of Escondido personnel. The City of Escondido provided information concerning the Chatham Brothers Barrel Yard (Chatham) site, but had no specialized knowledge or experience pertaining to the environmental condition of the subject property.

1.1 OBJECTIVE

The objective of this ESA was to perform appropriate inquiry into the past ownership and uses of the subject property consistent with good commercial or customary practice as outlined by the American Society of Testing and Materials (ASTM) in Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-97. The purpose of this assessment was to identify, to the extent feasible, recognized environmental conditions on the subject property or within the study area defined by the ASTM standard, that potentially have and/or may cause an adverse environmental impact to the subject property.

The objective of the Phase II LSA was to determine if the release from the Chatham site has impacted the existing monitoring and water well, and to perform a limited geophysical survey and assess the potential presence of an abandoned underground storage tank (UST) on the subject property.

1.2 SCOPE OF WORK

The ESA was performed in accordance with the scope of work provided to COE in SECOR's proposal dated May 15, 1997, and the Purchase Order issued by COE on May 28, 1997. This scope consisted of a visual reconnaissance of the subject property, interviews, review of Chatham material provided by to SECOR by COE, review of a current Environmental Risk Information & Imaging Services Report (ERIS), and a review of the practically reviewable pertinent records of local, state, and federal agencies. The scope of services did not include an assessment for overall environmental regulatory compliance.

The Phase II LSA consisted of performing a limited geophysical survey to assess the potential presence of USTs, and obtain water samples from the existing monitoring well (MW-49) and water well.

2.0 ENVIRONMENTAL SETTING

2.1 REGIONAL PHYSIOGRAPHIC CONDITIONS

The U.S. Geological Survey (USGS) 7.5-minute topographic map of the Escondido Quadrangle was reviewed to identify any physical features in the vicinity of the subject property. The topographic base map reviewed for this assessment was printed in 1967 and photo-revised in 1975. The subject property is located in the City of Escondido, approximately 290 feet above mean sea level (MSL). The nearest surface water body is Lake Hodges located approximately $\frac{3}{4}$ -miles south of the subject property. Based on the USGS topographic map, regional surface runoff appears to flow to the south into Lake Hodges.

2.2 REGIONAL GEOLOGY

The subject property lies within the Peninsular Range Geologic Province, east of the coastal plain. This region is underlain by undifferentiated granitic rocks of the Southern California Batholith. Overlying the igneous rocks is a mantle of decomposed granite, or grus, which is covered by alluvium consisting of poorly consolidated Quaternary alluvial deposits of silt, sand, and gravels derived from bedrock sources that lie in or near the area. These deposits are interfingering with Holocene slopewash that commonly mantles the lower valley slopes throughout much of the region. The slopewash deposits are also poorly consolidated, with surficial materials derived predominately from the nearby outcroppings of Cretaceous granitics and Jurassic Santiago Peak volcanics (Kennedy and Peterson, 1975).

2.3 REGIONAL HYDROGEOLOGY

The subject property is located within the Hodges Hydrologic Area of the San Dieguito Hydrologic Unit. There is an existing beneficial industrial use for groundwater in this area. Existing beneficial and potential uses of inland surface water for the Hodges Hydrologic Area are listed as municipal, industrial, agricultural, recreational, and wildlife habitat by the California Regional Water Quality Control Board (CRWQCB, 1994, Table 1).

Beneficial uses are defined as "the uses of water necessary for the survival or well being of man, plants, or wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals of mankind" (RWQCB, 1994, "Water Quality Control Plan", page 2-1).

2.4 LOCAL SOIL AND GROUNDWATER CONDITIONS

The soils found in the Escondido area are mapped as moderately permeable, recent alluvium derived from surrounding granitic highlands. Based on groundwater gauging data collected north of the subject property, depth to groundwater beneath the subject property is reported to range between approximately 16 and 19 feet below ground surface (bgs). Based on review of an RWQCB map showing groundwater basins and sensitive aquifer boundaries in San Diego County, the subject property is not located within a sensitive aquifer area, and would be classified as a low risk groundwater case.

3.0 PROPERTY RECONNAISSANCE

SECOR performed a reconnaissance of the subject property on May 21, 1997. Information regarding the subject property and access to the property was provided by the City of Escondido. Weather conditions during the reconnaissance were sunny and the temperature was approximately 70°F. No weather-related restrictions were encountered.

The subject property is located at 2315-2319 Felicita Road, west of Interstate 15 in South Escondido, California. The location of the subject property is presented in Figure 1.

The purpose of the reconnaissance was to identify recognized current conditions and land uses that may suggest potential environmental impacts to the subject property. Such conditions, to the extent visible and accessible, include storage, disposal and treatment of solid and/or hazardous waste, storage tanks and other chemical containers, odors, pools of liquid, staining, drains, sumps, pits, ponds, lagoons, septic systems, wells, unusual soil disturbance, stressed vegetation, and electrical transformers. Photographs collected during the reconnaissance are included in Appendix B.

3.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USES

The subject property consists of approximately 7.32 acres of land comprised of Assessor Parcel Numbers 238-101-12, 17, & 18, occupied by three residences and various out-buildings. A Site Plan/Adjacent Property Map is presented in Figure 2.

The subject property is currently occupied by a residence, a duplex, a garage, and a pumphouse/wellhouse. The structures are located on the southeastern portions of the subject property (Photographs 1 and 2). The residence is vacant. There are currently tenants in the duplex. Access to the property is via a driveway from Felicita Road on the south. The remainder of the subject property is vacant land (Photograph 3).

Mr. Don Capps, owner of the subject property, was present at the time of SECOR's reconnaissance. Mr. Capps stated that he has owned the subject property for 28 years. According to Mr. Capps, there are two septic tanks, an 80 foot inactive water well, and a recently installed monitoring well (Photographs 4 and 5). It is SECOR's understanding this monitoring well was installed as part of the Chatham Brothers off-site investigation. He also stated that the on-site structures were built in the 1920's.

3.2 INTERIOR PROPERTY OBSERVATIONS

The interior of the residence is constructed of wood frame and plaster. The floors are carpeted or vinyl floors. The ceilings are plaster. SECOR was unable to inspect the interior of the duplex, however, Mr. Capps stated it was of similar construction to the residence. SECOR did not observe any storage, use or generation of hazardous materials during the property reconnaissance.

3.2.1 Interior Storage Areas

Interior storage areas consisted of those typical of residential uses.

3.2.2 Interior Waste Disposal Areas

Interior waste disposal areas were limited to those typical of residential uses. No evidence of improper storage or disposal of hazardous waste was observed during the site reconnaissance.

3.2.3 Interior Subsurface Structures

The pumphouse contained a 4-foot well. Mr. Capps stated that the well was approximately 80 feet deep and that the well was currently not in use. No other interior discharge facilities (drains, trenches, USTs, sumps, etc.) were observed on the interior of the buildings.

3.3 EXTERIOR PROPERTY OBSERVATIONS

The exterior of the subject property is comprised of the previously described buildings. Small trees and landscaping areas are located around the structures.

3.3.1 Exterior Storage Areas

A garage is located to the north of the residence. The garage is currently vacant. The pumphouse/wellhouse contains tools and miscellaneous supplies. No other exterior storage areas were observed on the subject property.

3.3.2 Exterior Disposal Areas

No exterior disposal areas were observed on the subject property.

3.3.3 Subsurface Structures

As previously discussed, there are two septic tanks, one water well, and a monitoring well (Photograph 6) located on the subject property. The location of these structures is presented on Figure 2. No other evidence of water wells, septic tanks or floor drains was observed on the subject property.

3.3.4 Underground Storage Tanks

No evidence (fill pipes, vent pipes, dispensers, surface patches) which would indicate the presence of USTs was observed during the reconnaissance of the subject property.

3.3.5 Surface Water

No surface water was observed on the subject property. No stained or stressed vegetation was observed in areas of possible runoff. No off-property sources of surface contamination of the subject property was observed. Surface runoff from the subject property discharges into a storm drain located at the southwestern corner of the subject property (Photograph 7).

3.4 POLYCHLORINATED BIPHENYLS

Three pole-mounted electrical transformers, owned by SDG&E were observed along the southern boundary of the subject property (Photograph 8). According to SDG&E personnel, PCB transformers have never been specified for their distribution systems and related service. In addition, over the past few years, SDG&E's testing and sampling program supports the fact that it is very unlikely that their distribution transformers are PCB contaminated. This includes the equipment at the subject property. No potential spills or leaks were observed in connection with these units.

*Could would be relocated
SD & Power
FILES STATION
SECOR*

3.5 WATER SUPPLY AND SEWAGE DISPOSAL

Water supply to the subject property is provided by the City of Escondido. Sewage disposal was provided by two septic tanks located on the subject property.

3.6 ADJACENT PROPERTY RECONNAISSANCE

The subject property bordered on the north, south, and west by residential properties. A commercial building is under construction to the east of the subject property. An adjacent property map is presented as Figure 2.

4.0 HISTORICAL REVIEW

Based on a review of historical record photographs, it appears that the subject property was vacant land until the residence was constructed in the 1920's.

4.1 AERIAL PHOTOGRAPH REVIEW

Aerial photographs were reviewed at the San Diego County Operations Center on May 14, 1997. The general type of activity on a property and land use changes can often be discerned from the type and layout of structures visible in the photograph; however, specific elements of a site's operation cannot normally be determined from the photographs.

Using the reviewed photographic records, *SECOR* was able to form the following inferences of the subject property and surrounding areas:

The 1953 (14M-78) aerial photograph shows the subject property with three structures. The adjacent surrounding properties are vacant land.

The 1966 (1-264) aerial photograph shows the subject property as it appears today. Interstate 15 to the northeast is not yet present.

The 1973 (#22-22) and 1978 (210-258) aerial photographs show the subject property as it appeared in the 1953 and 1966 photographs. The properties to the south and west are residential.

The 1989 (1-163) aerial photograph depicted the subject and surrounding properties as they appeared during the subject property reconnaissance. Interstate 15 is present to the northeast.

4.2 BUILDING PERMIT RECORD REVIEW

Files were reviewed at the City of Escondido Building Department. There were no records of permits for the subject property addresses. City of Escondido building permit records date only as far back as the 1950's.

4.3 SANBORN FIRE INSURANCE MAP REVIEW

SECOR reviews Sanborn Fire Insurance land use maps in order to evaluate prior land uses at the subject property. Sanborn Maps typically exist for cities with populations of 2,000 or more, the coverage beginning in 1867 and continuing until the present. The availability of Sanborn coverage is dependent on the location of the subject property. No Sanborn Fire Insurance maps were available for the subject property.

4.4 CITY DIRECTORY REVIEW

Review of available Haines and Polks Directories did not reveal any historical uses for the subject property other than the current residential use.

4.5 OWNERSHIP RECORD REVIEW

According to records reviewed at the San Diego County Assessor's office, Assessor's Parcel Numbers 238-107-12, 17, and 18 (the subject property), is owned by S.L.C. Company. *SECOR* was not provided a title report of chain-of-title for the subject property.

5.0 REGULATORY AGENCY LIST REVIEW

SECOR contracted with ERIIS to review data bases maintained by various federal and state environmental agencies. The purpose of the review was to identify reported listings for the subject property or other properties in the vicinity. Data bases reviewed included federal and state lists of known or suspected contaminated sites, known handlers or generators of hazardous waste, known waste disposal facilities, and permitted underground storage tanks. The data bases that were researched are described below.

- Environmental Protection Agency (EPA): National Priorities List (NPL), Sites designated for Superfund clean-up by the EPA, February 1, 1997;
- EPA: Resource Conservation and Recovery Act (RCRIS-TS): Facilities treat, store, and/or dispose of hazardous waste, May 10, 1996;
- EPA: Comprehensive Environmental Response, Cleanup and Liability Information System (CERCLIS): Sites under review by the EPA, February 1, 1997;
- EPA: No Further Remedial Action Planned (NFRAP): Sites which have been removed from the CERCLIS database and require no further consideration, February 1, 1997;
- State: Leaking Underground Storage Tanks (LUST/LRST): Sites with leaking underground storage tanks, April 1, 1997;
- State: Solid Waste Landfills (SWLF/SWF): Sites permitted as solid waste landfills, incinerators, or transfer stations, February 11, 1997;
- State: Properties With Hazardous Waste (HWS): Sites on State index of properties with hazardous waste, April 13, 1996;
- State: Underground Storage Tanks (USTs/RSTs): Sites with registered underground or aboveground storage tanks, March 17, 1994;
- EPA: Emergency Response Notification System (ERNS): Sites with previous hazardous materials spills, March 20, 1997;
- EPA: Large or Small Generators (GNRTR): Sites that generate large or small quantities of hazardous waste, October 1, 1996; and

The complete data base listings prepared by ERIIS and a map showing the location of listed sites relative to the subject property are presented in Appendix C. The subject property was not included on any of these lists. The results of these reviews are summarized and discussed below.

5.1 NATIONAL PRIORITY LIST (NPL)

The National Priorities List (NPL) is a list of contaminated sites which have been assigned for cleanup under the Federal EPA Superfund program. Review of the NPL list identified no facilities within a 1-mile radius of the subject property.

5.2 RCRA-TREATMENT, STORAGE AND DISPOSAL FACILITIES LIST (RCRIS-TS)

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. This list identifies facilities that treat, store, or dispose of hazardous waste. No facilities were identified within a 1-mile radius of the subject property.

5.3 EPA REVIEW LIST (CERCLIS)

The Comprehensive Environmental Response, Cleanup, and Liability Information System (CERCLIS) List is a historical data base list of contaminated sites which the EPA has or will evaluate to determine whether a particular site merits placement on the NPL. The review of the EPA CERCLIS list identified one facility within ½-mile radius of the subject property:

- 2257 Bernardo Avenue - Chatham Brothers Barrel Yard
0.222 miles northwest and topographically upgradient from the subject property.

According to the site activity update issued in December of 1995 by the California EPA Department of Toxic Substances (DTSC), the Chatham site was operated as a solvent recycling and oil storage facility for approximately 35 years. Operations at the site ceased in 1981. The San Diego County Health Department and the California State Regional Water Quality Control Board (CSRWQCB) began investigation of the contamination at the site in 1982. DTSC continued this investigation and listed the site on the California Bond Expenditure Plan in 1985.

The most recent data confirm the presence of chemicals in the soil and groundwater. Based on the recent data, the plume or groundwater contamination was found to extend to approximately 4,400 feet southeast of the Chatham site. Semi-volatile organic compounds (SVOC's) in low concentrations were detected in off-site monitoring wells as far south as Hamilton Lane, and metals such as lead and nickel were detected at concentrations above background levels. The volatile organic compounds (VOC's) plume is projected onto the southwestern portion of the subject property. A copy of the site activity update is provided in Appendix D.

A file review was requested from the County SAM on June 2, 1997. SAM files were not available for review at the time this report was completed. If requested, SECOR will provide an addendum letter to this report after review of the SAM files.

5.4 NO FURTHER REMEDIAL ACTION PLANNED REPORT (NFRAP)

The No Further Remedial Action Planned Report contains sites which have been removed from the CERCLIS database because no contamination was found, contamination was removed quickly without needing to be placed on the NPL, or contamination was not serious enough to require Federal Superfund Action or NPL consideration. No facilities were identified within ½-mile of the subject property.

5.5 LEAKING UNDERGROUND STORAGE TANK LIST (LUST/LRST)

The Cal-EPA Leaking Underground Storage Tank (LUST) List is a list of facilities which are known to have had a release of petroleum hydrocarbons to soil and/or groundwater. No facilities were identified within ½-mile of the subject property.

5.6 SOLID WASTE LANDFILLS (SWLF/SWF)

The Solid Waste Information System (SWIS) List is a list of active and inactive landfills, incinerators and transfer stations. The SWIS lists indicated no sites within a ½-mile radius of the subject property.

5.7 PROPERTIES WITH HAZARDOUS WASTE (HWS)

The CAL-EPA Office of Hazardous Materials, maintains an inventory of properties with hazardous waste. Two facilities identified are identified on this list within a 1-mile radius of the subject property and are listed below:

- 2257 Bernardo Avenue - Chatham Brothers Barrel Yard
0.222 miles northwest and topographically upgradient from the subject property.
- 615 West Citracado Parkway - Data Product Corp.
0.579 miles northeast and topographically crossgradient from the subject property.

Based on distance and topographical location, Data Products is not expected to impact the subject property. The Chatham Brothers Barrel Yard was discussed in Section 5.3.

5.8 UNDERGROUND STORAGE TANK LIST (UST/RST)

The California State Regional Water Quality Control Board (CRWQCB) maintains an inventory of registered underground storage tanks. No sites were identified within a ¼-mile radius of the subject property.

5.9 EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)

The Emergency Response Notification System (ERNS) is a national database system that collects information on reported releases of oil and hazardous substances. This database includes information reported to the EPA, the U.S. Coast Guard, the National Response Center and the Department of Transportation. No facilities were identified on the ERNS List within ½-mile of the subject property.

5.10 LARGE AND SMALL QUANTITY GENERATORS (GNRTR)

The EPA's RCRA Large and Small Quantity Generator List identifies and tracks hazardous waste from the point of generation to the point of disposal. This list includes large and small quantity generators of hazardous wastes. One site was identified within a ¼-mile radius of the subject property:

- 2257 Bernardo Avenue - Chatham Brothers Barrel Yard
0.222 miles northwest and topographically upgradient from the subject property.

The Chatham Brothers Barrel Yard was discussed in Section 5.3.

6.0 REGULATORY AGENCY FILE REVIEW

Information sources provided by the County of San Diego Site Assessment and Mitigation Division (SAM) and reviewed during the preparation of this ESA, include HE17 Listings dated March 13, 1996, HE48 Listings dated March 5, 1996. These listings were reviewed to obtain information regarding the potential presence (permitted) of hazardous materials (stored, used and/or violations) on the subject property and adjacent properties.

- The HE17 listings contain violations discovered by SAM personnel during on-site inspections. A review of the HE17 listings was conducted by *SECOR* personnel on May 25, 1997. There were no violations listed for the subject or adjacent properties.
- A review of the HE48 listings was conducted by *SECOR* personnel on May 25, 1997. These listings contain facilities with hazardous waste permits. Neither the subject property or any of the adjacent properties possess a permit for hazardous waste or USTs from the San Diego County Department of Health Services.

The SAM "Unauthorized Release Card File" (Site Assessment and Mitigation File), dated January 26, 1996, was reviewed to assess if unauthorized releases of potentially hazardous materials had occurred on the subject or adjacent properties. No listings were found for the subject or adjacent properties.

6.1 RWQCB FILE REVIEW

No files were available at the RWQCB regional office in San Diego concerning the subject or adjacent properties. The RWQCB files currently contain only those unauthorized release cases affecting ground or surface water.

6.2 FIRE DEPARTMENT FILE REVIEW

SECOR requested files from the Escondido Fire Department. No files available for the subject or adjacent property addresses.

8.0 LIMITED GROUNDWATER SAMPLING

On June 4, 1997, *SECOR* conducted limited groundwater sampling on the subject property. The purpose of the limited sampling activities was to assess the potential presence/absence of petroleum and halogenated hydrocarbons from two specific locations on the subject property (Figure 2). A summary of the sampling activities and the analytical results is presented below.

8.1 LIMITED GEOPHYSICAL SURVEY

A limited geophysical survey was performed on June 4 and 5, 1997, by Subsurface Alert, Inc. The purpose of this survey was to identify potential anomalous areas in the subsurface soils on the geophysical characteristics of the soils. The survey was conducted utilizing magnetic and electromagnetic instrumentation. The field reconnaissance around the existing structures consisted of walking out a two meter grid across the area to be surveyed and obtaining terrain conductivity values in millimhos per meter (mmho/m) at each two meter grid point.

The geophysical survey was performed at the request of the City of Escondido to determine the potential absence/presence of USTs on the subject property. No subsurface anomalous areas indicative of USTs were discovered during the geophysical survey.

8.2 GROUNDWATER SAMPLING ACTIVITIES

On June 4, 1997, a *SECOR* project manager supervised the collection of groundwater samples for laboratory analysis. After locating the monitoring well and water well, a *SECOR* representative collected groundwater samples for chemical analysis using acrylic bailers.

After collecting the groundwater sample, it was immediately transferred to 40-milliliter glass VOAs. The groundwater samples were labeled and placed in an ice cooled storage chest until pick-up the following day by Pacific Treatment Analytical Services (PTAS), utilizing standard laboratory protocol.

8.3 ANALYTICAL METHODS

The groundwater samples were analyzed for total petroleum hydrocarbon as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and halogenated volatile hydrocarbons (HVO) by Modified EPA Method 8015, EPA Method 8020, and EPA Method 8260, respectively.

8.4 SUMMARY OF LABORATORY ANALYTICAL RESULTS

No TPHg, BTEX, or HVO concentrations were detected above laboratory detection limits in the groundwater samples from monitoring well MW-49, and the water well.

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 PHASE I

SECOR performed a Phase I Environmental Site Assessment of the Proposed City of Escondido Fire Station site located at 2315-2319 Felicita Road, Escondido, California. The assessment consisted of a walk-through reconnaissance of the subject property on May 21, 1997, interviews, review of a current Environmental Risk Information & Imaging Services Report (ERIS), and a review of the practically reviewable pertinent records of local, state, and federal agencies.

According to historical records, the subject property has been used as residential from the 1920's until the present. No evidence of misuse, storage, or disposal of hazardous materials was observed at the time of the property reconnaissance.

According to the site activity update issued in December of 1995 by the California EPA Department of Toxic Substances (DTSC), the Chatham site was operated as a solvent recycling and oil storage facility for approximately 35 years. Operations at the site ceased in 1981. The San Diego County Health Department and the California State Regional Water Quality Control Board (CSRWQCB) began investigation of the contamination at the site in 1982. DTSC continued this investigation and listed the site on the California Bond Expenditure Plan in 1985.

The most recent data confirm the presence of chemicals in the soil and groundwater. Based on the recent data, the plume or groundwater contamination was found to extend to approximately 4,400 feet southeast of the Chatham site. Semi-volatile organic compounds (SVOC's) in low concentrations were detected in off-site monitoring wells as far south as Hamilton Lane, and metals such as lead and nickel were detected at concentrations above background levels. The volatile organic compounds (VOC's) plume is eventually projected onto the southwestern portion of the subject property. A copy of the site activity update is provided in Appendix D.

Based on an updated visit to the subject property, surrounding area reconnaissance, and review of government agency listings, *SECOR* concludes that this assessment has revealed no other evidence of recognized environmental conditions in connection with the subject property.

The results of this ESA update represent a review of current conditions, based on available information, as described above. *SECOR* has performed this Phase I ESA update in conformance with the scope and limitations of ASTM Practice E1527-97.

9.2 PHASE II

SECOR performed limited Phase II groundwater sampling and limited geophysical survey activities at the subject property. The purpose of this assessment was to assess the potential presence/absence of petroleum and halogenated volatile hydrocarbons in two specific locations on the subject property. The groundwater sampling performed on the monitoring well (MW-49) and the water well at this time has revealed no evidence that petroleum and halogenated hydrocarbons from the former Chatham Brothers Barrel Yard have impacted groundwater at these two locations.

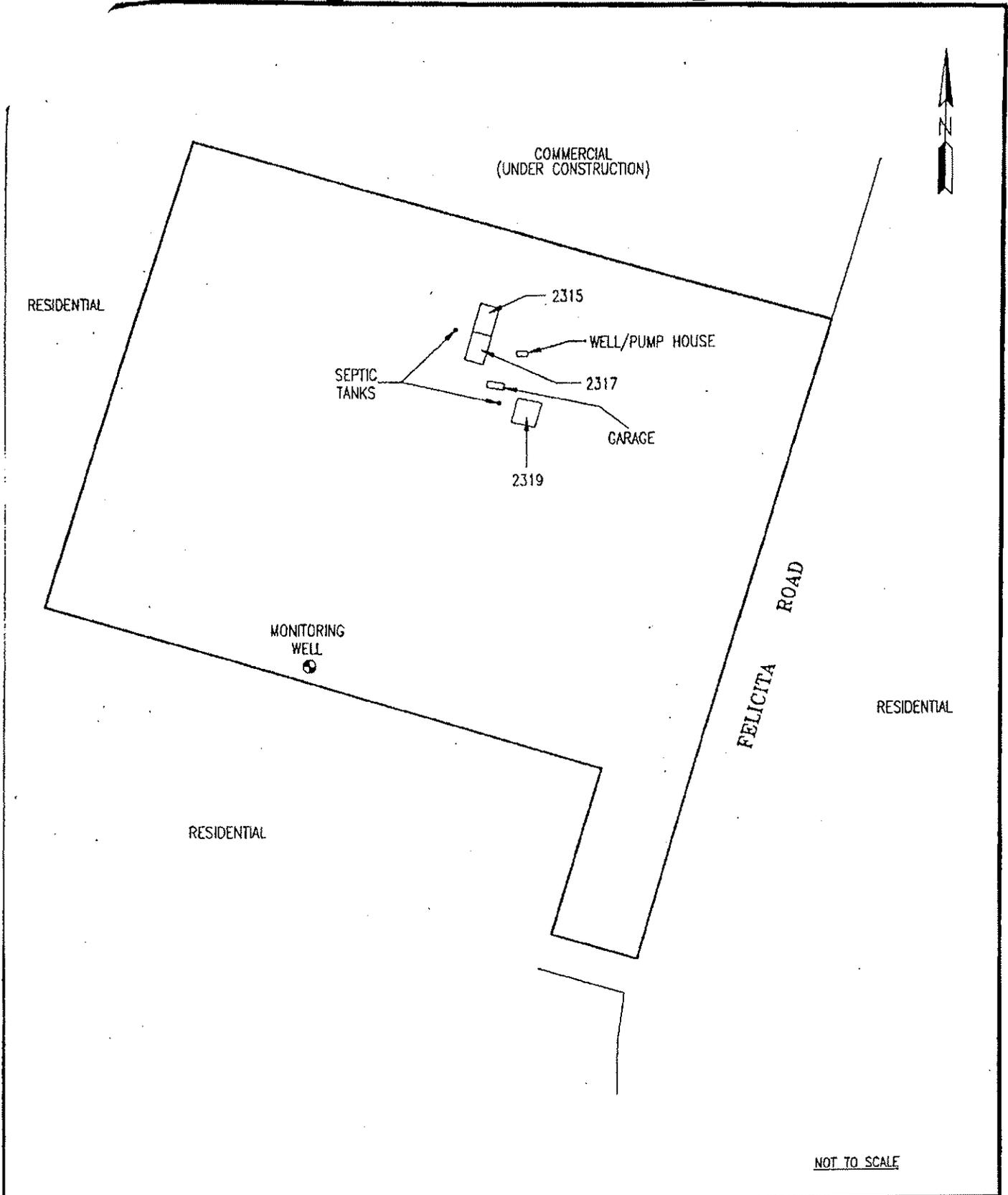
The geophysical survey was performed to identify potential anomalous areas on the subject property. No subsurface anomalous areas indicative of USTs were discovered during the survey.

SECOR recommends no further assessment activities be performed on the subject property at this time. However, *SECOR* recommends that the Chatham Brothers file in the Escondido Public Library be reviewed on a yearly basis to verify if the monitoring well (MW-49) on the subject property has been tested, and if the plume appears to have migrated onto the subject property.

10 LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations:

1. *SECOR* derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals having information about the site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the site, analysis of the data, and reevaluation of the findings, observations, and conclusions in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the scope of work. The scope of work was prescribed by ASTM Practice E 1527-94 and was agreed to by the client.
3. Because of the limitations stated above, the findings, observations, and conclusions expressed by *SECOR* in this report are not, nor should not be, considered an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state, or local law or regulation.
4. No warranty or guarantee, whether express or implied, is made with respect to the data reported of findings, observations, and conclusions that are based solely upon site conditions in existence at the time of investigation.
5. *SECOR* Phase I ESA Reports present professional opinions and findings of a scientific and technical nature. The report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations, or policies of federal, state, or local government agencies. Any use of the Phase I report constitutes acceptance of the limits of *SECOR's* liability. *SECOR's* liability extends only to its client and not to any other parties who may obtain the Phase I report.
6. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such. An evaluation of subsurface soil and groundwater conditions was not performed as part of this investigation. No sampling or chemical analyses of structural materials or other media was completed as part of this study unless explicitly stated.
7. This report is based, in part, on unverified information supplied to *SECOR* by third-party sources. While efforts have been made to substantiate this third-party information, *SECOR* cannot guarantee its completeness or accuracy.



<p>SECOR INTERNATIONAL INCORPORATED 2655 CAMINO DEL RIO N., SUITE 302 SAN DIEGO, CA. 92108</p>	<p>SITE PLAN/ADJACENT PROPERTY MAP 2315-2319 FELICITA ROAD ESCONDIDO, CA 92029</p>	<p>PROJECT No.: 80005-013-01 FIGURE: 2</p>
-------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------	-----------------------------------------------------------

80005S1.DWG