

Appendix H Phase I Environmental Site Assessment

Appendices

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Orange County
Museum of Art
850 San Clemente Drive
Newport Beach, California
92660



November 10, 2015

TRC Project No: 241004-0000-0000

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EXECUTIVE SUMMARY

Subject to the qualifications and limitations stated in Section 1 of this report, TRC Solutions, Inc. (TRC) was retained by Related Companies of California, LLC (Related) (also known as “Client” or “User”) to perform a Phase I Environmental Site Assessment (ESA) of the Orange County Museum of Art Site located at 850 San Clemente Drive in Newport Beach, Orange County, California (herein referred to as the “Site”). TRC’s assessment was conducted in connection with the Client’s planned acquisition of the Site. The Phase I ESA described in this report was performed in accordance with the scope and limitations of the American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13). Limiting conditions and/or deviations from the ASTM E 1527-13 standard are described in Sections 1.3 and 7.6 of this report.

According to Mr. Steven S. Oh, Vice President of Related California, the Phase 1 ESA is intended to evaluate potential environmental conditions or issues in support of due diligence related to the possible acquisition and future development of the Site.

Historically, the site was undeveloped and unoccupied until construction of the existing Site improvements in 1977. Since construction of the existing building, the Site has been used as an art museum. The Orange County Museum of Art property is currently improved with a single-story museum building that was originally constructed in 1977. The existing Site improvements encompass approximately 23,000 square feet and include the approximately 21,000 square foot building constructed in 1977 and an approximately 2,000 square foot addition to the building that was completed in 1996. The existing site improvements are located on a single Assessor’s parcel (APN 442-261-05) that encompasses approximately two acres of land. The site is located in the City of Newport Beach and is generally bordered by commercial and public facilities. Aerial photographs reviewed for the period between 1938 and 1972 indicate that the Site was undeveloped and ungraded during this time. Based on historical records reviewed as a component of this investigation, the Site remained undeveloped until construction of the existing building in 1977. At the time of the site visit, development and construction of a 600-unit apartment complex was observed on the property immediately adjacent to and north of the Site.

As per the California Water Resources Control Board Geotracker website, there are three adjacent properties located within approximately 1,000 feet of the Site that were the subject of environmental assessment and/or remedial action in response to releases of petroleum hydrocarbons or other hazardous materials. Each of these sites has been assessed and/or remediated to the satisfaction of the applicable regulatory authority. No Further Action certifications have been issued to these three adjacent properties.

As per the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources Well Finder website, there are no documented oil exploration or production wells located on the Site. The nearest oil exploration well was drilled approximately 0.5 miles north of the Site. This well is identified as a “dry hole” and was plugged and abandoned in accordance with applicable regulations that existed at the time of abandonment.

Based on the research and review completed as a component of this Phase I ESA, including but not limited to, our visual observation of the Site; review of historical information, environmental databases, and information provided by the User; interviews with current Site representative(s); and TRC's professional judgment, no evidence of *recognized environmental conditions* (RECs) associated with the Site, as defined by the ASTM E 1527-13 standard, were identified. It is TRC's opinion that it is unlikely that the subject property has been impacted by historical releases of petroleum hydrocarbons or hazardous substances, including those that may represent a vapor encroachment condition, from offsite properties or historical site activities.

Non-ASTM Findings

This assessment included a qualitative review of certain items that are outside the scope of the ASTM E 1527-13 standard. Qualitative assessment of non-ASTM items is limited to the following:

Asbestos – Based on the original date of building construction (1977) asbestos-containing building materials may be present in certain building materials. Observed suspect ACMs included dry wall and joint compound and the building roofing material. Suspect ACM, where potentially present, was observed in good condition. Asbestos may also be present in latent or hidden building elements that are not visible during a routine inspection. Examples of latent or hidden building elements that may also contain asbestos include transite piping and thermal insulation associated with structural support members. While it appears that asbestos abatement activities were performed in conjunction with the 1996 building expansion, it is not known whether asbestos-containing building materials remain within the structure. A definitive determination as to the possible presence of asbestos in building materials can only be made through representative sampling and analysis of suspect building materials. Prior to demolition or significant remodeling, completion of a pre-demolition asbestos survey is required.

Lead-Based Paint - Lead was a major ingredient in paint pigment prior to and through the 1940s. While other pigments have been used since the 1950s, the use of lead in paint continued until the mid 1970s. In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials, which are lead-containing. Based on the original date of construction, lead-based paint might have been applied to the interior or exterior building surfaces. Sampling for lead-based paint was not a part of the scope of services for this report. Where painted surfaces were present, the paint was observed in good condition. TRC recommends that lead-based paint sampling be performed as a component of a future pre-demolition asbestos and hazardous materials building survey.

Polychlorinated Biphenyls - Polychlorinated biphenyls (PCBs) are industrial chemicals widely used for their heat transfer properties. These substances were used in electrical transformers, hydraulic fluids and electrical equipment such as fluorescent light ballasts. PCBs are stable compounds that persist in the environment after a spill or improper disposal. Since 1978, the use of PCBs has been prohibited in most products. Fluorescent light ballasts manufactured since that time must state that they contain no PCBs. TRC recommends that a comprehensive hazardous materials building survey be performed on conjunction with the pre-demolition asbestos survey. This survey would also include an assessment and quantification of mercury-containing thermostats and fluorescent light tubes, suspect PCB containing lighting ballast, radioactive smoke detectors, and tritium-based exit signs.

This Executive Summary is part of this complete report; any findings, opinions or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for all supporting information related to findings, opinions and conclusions.

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1.0 INTRODUCTION

TRC Solutions, Inc. (TRC) prepared this Phase I Environmental Site Assessment (ESA) for The Related Companies of California, LLC (Related) (hereinafter “Client” or “User”).

This report was prepared for and may be relied upon by Client for the purposes set forth herein. It may not be relied on by any party other than the Client and reliance may not be assigned without the express approval of TRC. Authorization for third party reliance on this report will be considered by TRC if requested by the Client. TRC reserves the right to deny reliance on this report by third parties.

1.1 Purpose and Scope of Services

The following Phase I ESA was performed for the property located at 850 San Clemente Drive, Newport Beach, Orange County, California (hereinafter the “Site”). A Site vicinity map is included as **Figure 1**. This Phase I ESA has been prepared by TRC in accordance with the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13) and is intended for the sole use of the Client as documented in the Environmental Services Agreement, No. 122750.72-140-000, dated June 24, 2015.

The purpose of this assessment is to identify *Recognized Environmental Conditions* (RECs) at the Site, as defined by the ASTM E 1527-13 standard. The completion of this Phase I ESA report may be used to satisfy one of the requirements for the User to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitations pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting *all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice* as defined by 42 U.S.C. §9601(35)(B) of CERCLA.

TRC understands that this assessment is not funded with a federal grant awarded under the United States Environmental Protection Agency (U.S. EPA) Brownfields Assessment and Characterization program.

The Scope of Services for this Phase I ESA included the following tasks:

- Site and vicinity reconnaissance;
- Site and vicinity description and physical setting;
- Historical source review and description of historical Site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to obtain by the User; and
- Preparation of a report summarizing findings, opinions and conclusions.

Pursuant to the ASTM E 1527-13 standard, recommendations to conduct Phase II sampling or other assessment activities are not required to be included in this report. TRC can provide such recommendations upon request.

1.2 Additional Services

Items outside the scope of the ASTM E 1527-13 standard include, but are not limited to, the following:

- Asbestos-containing building materials
- Radon
- Lead-based paint
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historic resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment
- Biological agents
- Mold

With the exception of a qualitative review of the potential presence of asbestos-containing building materials, radon, and lead-based paint, this assessment did not include any additional services that are outside the scope of the ASTM E 1527-13 standard (i.e., Non-ASTM Standard services).

1.3 Deviations to ASTM E 1527-13 Standard

No significant deviations or deletions to the ASTM standard were made during completion of this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The Site is improved with an approximately 23,000 square foot, single-story building located at 850 San Clemente Drive in Newport Beach, Orange County, California. The Site is located in an area that is developed primarily commercial use. The Site is comprised of a single parcel (Assessor's Parcel Number [APN] 442-261-05) that encompasses a total of approximately 2.0 acres of land. A Site vicinity map is included as **Figure 1**.

2.2 Site Improvements

Current on-site improvements are listed in the following table. A Site plan is included as **Figure 2**.

Table 2.1 - Site Improvements

Site Feature	Description
Buildings (stories)	One building, one story
Construction date(s)	Approximately 21,000 square foot single story building originally constructed in 1977, with a 2,000 square foot addition constructed in 1996

Table 2.1 - Site Improvements

Site Feature	Description
Exterior areas	Parking lot and patio
On-site roads/rail lines	None
Potable water supply	City of Newport Beach
Sewage disposal system(s)	City of Newport Beach
Heating/Cooling system fuel source(s)	Electric
Back-up fuel source(s)	None
Electricity supplier(s)	PG&E
Storm water system	None

2.3 Current and Historical Site Use

2.3.1 Current Site Use(s)

The single-story, approximately 23,000 square foot concrete building has been used as an art museum and gallery since its original construction in 1977. Asphalt-paved parking areas are located to the east and south of the existing structure. The building is surrounded by pedestrian walkways and landscaped areas.

2.3.2 Previous Owner and Operator Information

Based on information provided by the User (Section 3), the historical record review (Section 4), and/or interviews conducted during this Phase I (Section 6), historical Site ownership and operator information is provided in the tables below.

Table 2.2 - Previous Owner and Operator Information

APN	Site Owner	From	To
442-261-05	Orange County Museum of Art	2002	Present
	Newport Harbor Art Museum	1977	2002
	The Irvine Company	Unknown	1977

According to the EDR Environmental Liensearch report (Appendix A), the title is vested in Newport Harbor Art Museum, a non-profit corporation. Title was received from The Irvine Company in a Corporation Grant Deed dated February 21, 1977.

2.4 Physical Setting

According to the United States Geological Survey (USGS) topographic map, 1955 – *Target Property Quad: Newport Beach (Figure 1)*, the Site is located on a dissected terrace within the northwest portion of the San Joaquin Hills. The Site is located approximately 0.5 miles east of the Upper Newport Bay. The west and southwestern portions of the Site are situated on a sloping face of the terrace, while the north and east sections of the Site appear to be situated on

a relatively even cut of the terrace. The Site topographic elevation ranges from approximately 173 to 185 feet above mean sea level (MSL) and local topography slopes toward the west and north. Based on local topography and historical environmental reports provided to TRC, as applicable, the presumed direction of shallow ground water flow would be toward the west to northwest. Given the significant difference in local topography, a subsurface investigation would be required to more definitively establish the actual ground water flow direction.

The database radius report supplied by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut was reviewed to obtain information regarding the dominant soil composition in the Site vicinity. There were two dominant soils identified by EDR. This information is summarized below:

Hydric Status:	Soil does not meet the requirements for a hydric soil.
Soil Surface Texture:	Loamy sand
Soil Component Name:	MARINA
Deeper Soil Types:	Loamy sand and sand.

Hydric Status:	Soil does not meet the requirements for a hydric soil.
Soil Surface Texture:	Sandy loam
Soil Component Name:	MYFORD
Deeper Soil Types:	Sandy loam, sandy clay, and sandy clay loam.

According to EDR, the Site is not located in a Federal Emergency Management Agency (FEMA) flood zone. Please refer to the Geotcheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in the Site vicinity.

3.0 USER PROVIDED INFORMATION

According to the ASTM E 1527-13 standard, certain tasks that may help identify the presence of RECs associated with the Site are generally conducted by the Phase I ESA User. These tasks include: providing, or authorizing the *environmental professional* to obtain, recorded land title records for environmental liens or activity and land use limitations (AULs); providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); providing commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to RECs in connection with the *property*; and informing the *environmental professional* if, as believed by the User, the purchase price of the *property* is lower than the fair market value due to contamination. A list of requested information was included in TRC's proposal and the Client's contract agreement (see Section 1.1). Information provided by the User pursuant to that request is listed in Section 8.0. A copy of the completed User questionnaire is included in **Appendix B**.

3.1 Title & Judicial Records for Environmental Liens or Activity and Use Limitations

A review of environmental liens and activity and use limitations that relate to environmental impairments was performed as a component of this investigation. No environmental liens or activity or use limitations that relate to environmental impairments were found for the property.

3.2 Specialized Knowledge

The User was not aware of specialized knowledge related to RECs at the Site.

3.3 Property Value Reduction Issues

The User was not aware of property valuation reduction issues regarding the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

TRC was supplied with commonly known and/or reasonably ascertainable information regarding the site by the onsite representative (Mr. Albert Lopez, OCMA Director of Operations).

3.5 Reason for Conducting Phase I

It is TRC's understanding that the User requires a Phase I in support of due diligence related to the possible acquisition and future development of the Site.

4.0 RECORDS REVIEW

4.1 Historical Use Information

Information regarding Site and vicinity historical use was obtained from various publicly available and practically reviewable sources including:

- Aerial photographs (scale: 1" = 500') dated 1938, 1947, 1952, 1963, 1972, 1977, 1985, 1989, 1990, 1994, 2005, 2009, 2009, 2010, 2012;
- Topographic maps dated 1901, 1902, 1935, 1942, 1948, 1949, 1951, 1965, 1972, and 1981;
- City directories dated 1970, 1980, 1986, 1991, 1995, 2002, 2003, 2008, and 2013;
- Local municipal records;
- An environmental database report; and
- Interviews with Site representative(s) and regulatory agency official(s), as necessary.

Historical use information regarding the Site and surrounding properties was obtained from EDR. Historical research documentation is included in **Appendix C**.

Historical Sanborn® Fire Insurance Maps (Sanborn Maps) were originally produced for assessing fire insurance liability in urban areas in the United States. The maps provide detailed information (i.e., building construction, facility occupants, storage tank locations, and hazardous material storage areas), which can be used as a resource to document land use and structural change over time. Research concerning the availability of Sanborn Maps in the vicinity of the Site was conducted by EDR. However, EDR did not identify any Sanborn maps depicting the Site or surrounding area. The absence of maps for a specific area may signify the area was not significantly developed at the time at which the maps were published.

4.1.1 Site History

Operational History

Table 4.1 - Site History

Year	Site History
1977 to Present	Art Museum and Gallery
Prior to 1938-1977	The subject property exists as vacant, undeveloped land.

With the exception of grading that occurred during the initial site development activities in 1977, it does not appear that topographic contours in the Site area have significantly changed during the time period reviewed.

4.1.2 Adjoining Property History

Table 4.2 – Adjoining Property History

Direction	
North	From at least 1938 to 1972, the north adjacent property appeared to be vacant land. By 1972, San Joaquin Hills Road had been constructed to the north of the subject property. By 1977, multiple mid-sized structures were constructed. By 1985, the north adjacent property appeared to have been developed. As of the date of the site reconnaissance, the buildings associated with the property immediately north had been demolished and site grading was underway.
East	From at least 1938 to 1977, the east adjacent property appeared to be vacant land. By 1985, multiple mid-sized structures were constructed, by this time the east adjacent property appeared to be constructed into the current configuration.
South	From at least 1938 to 1963, the south adjacent property appeared to be vacant land. By 1972, a large commercial structure located at 700 Newport Center Drive had been constructed across San Clemente Drive to the south. By 2005, four buildings associated with The Colony apartment complex located at 5100 Colony Plaza had been constructed.
West	From at least 1938 to 1972, the adjacent property to the west appeared to be vacant land. By 2005, the west adjacent property appeared to be constructed into the current configuration with one medium sized structure on the remaining vacant property.

4.1.3 Surrounding Property History

Table 4.3 – Surrounding Property History

Direction	Surrounding Property History
North	Nearby and surrounding properties generally appear to be vacant open land from 1938 to 1963. By 1972, the surrounding roads have been paved and improved consistent with their current configuration.
East	Nearby and surrounding properties generally appear to be vacant open land from 1938 to 1963. By 1972, the surrounding roads have been paved and improved consistent with their current configuration. Development and construction of high rise buildings is evident along San Joaquin Hills Road between Santa Cruz Drive and Santa Rosa Drive.
South	Nearby and surrounding properties generally appear to be vacant open land from 1938 to 1963. By 1972, the surrounding roads have been paved and improved consistent with their current configuration and the Newport Center retail shopping development has been constructed.
West	Nearby and surrounding properties generally appear to be vacant open land from 1938 to 1952. By 1963, Jamboree Road is evident to the west and the Newport Beach Country Club golf course has been developed.

4.2 Database Report & Environmental Record Review

A database search report that identifies properties listed on state and federal databases within the ASTM-required radii of the Site was obtained from EDR and is included in **Appendix A**. The environmental database report identified thirty-seven (37) mapped properties/listings. There were no orphan property listings identified in the EDR report. The Site was identified in the database search report under the HAZNET listing for transport of hazardous wastes between 1996 and 2000.

4.2.1 Subject Site

Site information included in the database search report is summarized in the following table:

Site Facility Name(s) and/or Listed Address(es)	Orange County Museum of Art
EDR Map No(s).	A1, A2
Database(s)	HAZNET
Description/ID No(s).	S112843688, S112891352

Database Review Summary

The Haznet listing indicated that approximately 8.8 tons of asbestos-containing waste materials were transferred offsite in 1996. Since this period coincides with the time of the building renovation, it is presumed that the asbestos-containing wastes were generated during the abatement and renovation process. The Haznet listing indicated that unspecified organic liquid mixtures and waste laboratory chemicals were transferred offsite in 2000. These listings appear to relate to one-time cleanup operations and are not considered to represent an environmental concern.

4.2.2 Adjoining & Surrounding Property Record Review

TRC evaluated the following factors to determine whether additional environmental records should be reviewed with respect to the potential for contaminant migration from the adjoining and surrounding properties:

- (1) Whether the property is up-gradient or down-gradient of the Site vis-à-vis **ground water migration** based on the local topography, and the assumed ground water depth and ground water flow direction;
- (2) Whether the property is up-gradient or down-gradient of the Site vis-à-vis **vapor migration** based on readily available information pursuant to the ASTM E 1527-13 standard including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, storm sewers, and significant natural conduits such as Karst terrain (vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);
- (3) Property case status (i.e., whether the local Department of Toxic Substances Control or Regional Water Quality Control Board issued has issued a No Further Action letter);
- (4) Type of database and whether the presence of contamination is known; and
- (5) The distance between the listed property and the Site.

Based on this evaluation, TRC limited the review of additional environmental records to the adjoining and surrounding properties listed in Sections 4.2.2.1 and 4.2.2.2, respectively. The potential for contaminant migration from other properties identified by the database search is considered low in consideration of the distance, depth to groundwater, and groundwater flow direction.

4.2.2.1 Adjoining Properties

Adjoining properties include those that share a common boundary with the Site or that are separated from the site by a street or road. A summary of the listings for adjoining properties that are identified in the database search report is summarized below:

Facility Name(s) and/or Listed Address(es)	Pacific Mutual, XEROX, 700 Newport Center Drive
EDR Map No(s).	C10, C11, C12
Database(s)	CA HIST CORTESE, CA LUST, RCRA-SQG, CA UST, CA EMI, FINDS
Description/ID No(s)	S103980664, CAD981974686, 1000857484, CAD983669219
Database Review Summary	In 1990, the site experienced a diesel fuel leak to the soil and the case was subsequently closed with no further action required. The site maintains an underground storage tank. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Pacific Financial, Pacific Mutual, Plaza, 800 Newport Center Drive
EDR Map No(s).	F22, F23
Database(s)	CA HIST CORTESE, CA LUST, CA UST
Description/ID No(s)	S102434888, U003783735
Database Review Summary	The site experienced an incident in 1988 when unleaded gasoline leaked into soil, the case was closed in 1990 with no further action required. The site is listed that it has a UST but no additional data is provided. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Based on the details provided by EDR for the above-referenced properties and in consideration of the nature and regulatory status of these listings, these properties do not represent an environmental concern to the subject property. It should be noted that due to the small quantities of the releases and the completion of cleanup actions, no subsequent file review of these reported releases was conducted.

4.2.2.2 Surrounding Properties

Surrounding property information included in the database search report is summarized in the following tables:

Facility Name(s) and/or Listed Address(es)	Pantera Auto Detail, 3337 Colony Plaza
EDR Map No(s).	3
Database(s)	EDR US Hist Auto Stat

Description/ID No(s)	1015433008
Database Review Summary	EDR Exclusive Historical Automotive Stations, these are classified as “High Risk Historical Records” by EDR. These locations and operations typically create environmental concerns by may not show up in current government record searches. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	City of Newport Beach Fire Station, 868 Santa Barbara Drive
EDR Map No(s).	B4, B5, B6
Database(s)	CA FID UST, SWEEPS UST, CA HIST UST, CA UST
Description/ID No(s)	S101631430, U001577423, U003879432
Database Review Summary	The site maintains four (4) tanks that contain motor vehicle fuel and petroleum products. The site is located approximately 500 feet west-northwest of the subject property at a lower topographic elevation. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Newport Beach Police Department, 870 Santa Barbara Drive
EDR Map No(s).	B7, B8, B9
Database(s)	CA UST, CA HIST UST, CA HIST CORTESE, CA LUST, CA CHMIRS, CA EMI
Description/ID No(s)	U003783928, U001577421, S100279962
Database Review Summary	During replacement of the site’s gasoline UST system dispensers in 2002, a release of gasoline to soil was discovered. Subsequent environmental assessment activities documented impacts to soil and groundwater. The extent of impact to soil and groundwater was determined to be limited to the immediate vicinity of the former UST piping system. On October 28, 2004, the Orange County Health Care Agency issued a Remedial Action Completion Certification (RACC) for the site. Based on the lower topographic elevation of this site relative to the subject property and in consideration of the RACC, the release from this site is not considered to represent a recognized environmental concern.

Facility Name(s) and/or Listed Address(es)	Sterling Motors LTD, Land Rover Newport Beach, 1540 Jamboree Road
EDR Map No(s).	D13, D14

Database(s)	CA SWEEPS UST, RCRA-SQG, FINDS, CA HIST CORTESE, CA LUST, CA FID UST, CA UST, CA HIST UST
Description/ID No(s)	U003805033, 1000364520, CAD981967441
Database Review Summary	The site generates ignitable waste (Waste Code D001). The site experienced incidents in 1998 and 2002 when a tank leaked product, both incidents are reported as “Case Closed,” no further action is required. The site has two (2) active USTs. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Chevron, Terrible Herbst Chevron, Chevron #9-3042, 93042, Chevron Station No. 93042, 1550 Jamboree Road
EDR Map No(s).	E15, E16, E17, E18, E19, E20
Database(s)	CA HIST CORTESE, CA FID UST, EDR US Hist Auto Stat, CA LUST, CA HAZNET, CA UST, CA SWEEPS UST, CA HIST UST, RCRA NonGen/NLR, FINDS, CA HAZNET
Description/ID No(s)	U001742677, 1015246656, S104575469, U003432864, U001577426, 1005904331, CAR 000121400
Database Review Summary	The site experienced a gasoline leak incident in 1985 and remediation continued through to 2005 when it was closed out, no further action is required. The Haznet listing indicated that approximately 3.5 tons of materials were transferred offsite between 2003 and 2013. No onsite treatment or recovery was performed. The site maintains five (5) USTs that contain motor vehicle fuel. Based on these details, this listing is not considered to represent an environmental concern to the subject property. Additional details regarding this facility are provided in Section 4.4.1.

Facility Name(s) and/or Listed Address(es)	Four Seasons Hotel, 690 Newport Center Drive
EDR Map No(s).	C21
Database(s)	RCRA-SQG, FINDS, CA HIST CORTESE, CA LUST, CA FID UST, CA UST, CA SWEEPS UST
Description/ID No(s)	100351769, CAD981635782
Database Review Summary	In 1997, the site experienced a release of petroleum from a 1,000-gallon diesel UST associated with the emergency generator. Subsequent environmental assessment and monitoring activities included the installation of six groundwater monitoring wells in and around the service entrance along Santa Cruz Drive. On January 28, 2015, the Orange County Health Care Agency issued a Remedial Action Completion Certification for the site. Given the nature of the reported release, distance between the release and the target property, and regulatory status of this case, the release from this site would not be considered a Recognized Environmental Condition. Additional details regarding this case are provided in Section 4.4.2.

Facility Name(s) and/or Listed Address(es)	R&M Pacific Oro Inc, Texaco Service Station, Shell Oil, Fashion Island Services Inc, 1600 Jamboree Road
EDR Map No(s).	G24, G25, G26, G27, G28, G29, G30
Database(s)	CA FID UST, CA SWEEPS UST, CA LUST, CA HIST CORTESE, CA LUST, CA UST, RCRA-SQG, FINDS, EDR US Hist Auto Stat
Description/ID No(s)	S101589039, S105850481, S103633685, U004061471, U004200593, 101525308
Database Review Summary	The site experienced incidents in 1990 and 2003, these incidents were closed out with no further action required in 1997 and 2004 respectively. This facility is located at the northeast corner of Jamboree Road and San Joaquin Hills road, downgradient of the Site. Based on the location of this facility and the regulatory closure issued on August 12, 2014, releases from this facility are not considered to represent an environmental concern to the subject property. Additional details regarding this facility are provided in Section 4.4.3.

Facility Name(s) and/or Listed Address(es)	Asphalto Waste Water Sump, 840 Newport Center Drive
EDR Map No(s).	31
Database(s)	CA HIST UST, CA WMUDS/SWAT
Description/ID No(s)	U001577428
Database Review Summary	The site has nineteen (19) tanks. The site is a WMUDS/SWAT complexity Category C, the facility treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation. It is considered a minor threat to water quality. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Big Canyon Country Club, 1850 Jamboree Road
EDR Map No(s).	H32, H33
Database(s)	CA HIST CORTESE, CA FID UST, CA LUST, CA UST, CA SWEEPS UST
Description/ID No(s)	1000106106
Database Review Summary	The site experienced an incident in 1986 when a gas tank leaked, after remediation efforts the case was closed in 2001 with no further action required. The site has three (3) active motor vehicle fuel tanks. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Newport Center Cleaners, 521 Newport Center Drive
EDR Map No(s).	34
Database(s)	RCRA NonGen/NLR, FINDS, CA SLIC, CA DRYCLEANERS, CA HAZNET
Description/ID No(s)	1000348926, CAD982051161
Database Review Summary	The site experienced a release of Tetrachloroethylene (PCE) to the soil, it was cleaned and the case closed with no further action required in 1997. Based on these details, this listing is not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Loral Aerospace Corporation, Ford Aerospce Corp Aeronutronic, 1000 Ford Road
EDR Map No(s).	I35, I37
Database(s)	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-SQG, PADS, NY MANIFEST, 2020 COR ACTION, US FIN ASSUR, CA SLIC, CA EMI, CA ENVIROSTOR, CA HWP
Description/ID No(s)	1000474495, CAD041330077
Database Review Summary	The site is approximately 1 mile away from the target property and at a higher elevation. The site was engaged in the treatment, storage, or disposal of hazardous waste. The site required multiple corrective actions from 1991 to 2001, including groundwater extraction and treatment. The site has potentially affected groundwater and soil due to volatile organic compound contaminants. Cleanup status is currently open and undergoing verification monitoring as of 2011. Relatively low concentrations of chlorinated hydrocarbons have been detected in the groundwater monitoring wells associated with this site. Given the groundwater flow direction and the distance from the subject property, releases associated with this facility are not considered to represent an environmental concern to the subject property.

Facility Name(s) and/or Listed Address(es)	Mr. Best Cleaners, 2039 East Coast Highway
EDR Map No(s).	36
Database(s)	CA VCP, CA ENVIROSTOR
Description/ID No(s)	S117534664
Database Review Summary	The property was the subject of a voluntary cleanup program. Given the location of this property relative to the Site, this listing is not considered to represent an environmental concern to the subject property.

Based on the nature of the above-listing(s), the distance between the listed facilities and the Site, regulatory status, and geological and hydrogeologic conditions, the database listings do not represent an environmental concern to the subject property.

4.3 Previous Reports

No previous environmental assessment or investigation reports were provided to TRC as a component of this investigation. The following geotechnical report was identified in the City of Newport Beach Building Department Records:

- Report of Geotechnical Consultation, Proposed Irvine Pavilion Addition, 850 San Clemente Drive, Newport Beach, California. Prepared by Law/Crandall. June 18, 1996.

The geotechnical evaluation performed by Law/Crandall included foundation design information for the proposed Irvine Pavilion Addition to the OCMA building. This evaluation supplemented the previous geotechnical investigation for the OCMA building construction that was detailed in a report dated September 21, 1976. During the original geotechnical investigation, three soil borings (Borings 6, 7, and 8) were advanced within the proposed museum site to depths ranging from approximately 15 to 25 feet below grade (fbg). Soil encountered during drilling reportedly consisted of silty and clayey sand within the first ten feet of ground surface and fine-grained sand to the maximum depth of investigation (25 fbg). Groundwater was not encountered during the geotechnical investigation. A copy of the geotechnical investigation report is provided in Appendix E (City of Newport Beach Building and Safety Department Records).

4.4 Other Environmental Record Sources

Per the ASTM standard, local or additional state records were reviewed to enhance and supplement the ASTM-required federal and state records reviewed and discussed earlier in this report. These additional records include state agency lists of: waste disposal facilities; brownfield properties; hazardous waste/contaminated facilities; registered storage tanks; records of emergency release reports; and records of contaminated public wells. Local sources that were contacted to obtain this information include:

- California Department of Toxic Substances Control (DTSC) website (<http://www.envirostor.dtsc.ca.gov/public/>);
- State Water Resources Control Board's GeoTracker website (<http://geotracker.waterboards.ca.gov/>); The GeoTracker website identified three (3) former cleanup sites, located within approximately 1,000 feet of the Site. Additional details regarding these sites are provided in Section 4.4.1 through 4.4.3.
- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources Well Finder (DOGGR) website (<http://www.conservation.ca.gov/dog/Pages/WellFinder.aspx>):
- California Department of Toxic Substances Control (DTSC) Orange County Certified Unified Program Agency (CUPA) – According to the DTSC, the Orange County Health

care Agency, Department of Environmental Health (CUPA) currently oversees hazardous materials waste/handling for properties in Orange County. The ENVIROSTOR DTSC website shows no open cleanup sites in the vicinity of the Site.

- The County of Orange Health Care Agency, Department of Environmental Health (CUPA), stated via email that the facility is not in the Hazardous Materials Business Program (HMBP).
- As per the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder website, there are no documented oil exploration or production wells located on the Site. The nearest oil exploration well (Morton and Sons Well 55-1) is located approximately 0.5 miles north of the Site. The exploration well was originally drilled between 1946 and 1947 to a total depth of approximately 9,427 feet below grade. This well is identified as a “dry hole” and was plugged and abandoned in accordance with applicable regulations that existed at the time of abandonment. Additional details regarding this exploration well are provided in Appendix E.

4.4.1 Chevron – 1550 Jamboree Road

In 1985, Chevron installed observation monitoring wells in the vicinity of the facility’s USTs. Subsequent monitoring of these wells identified the presence of gasoline contamination in groundwater. Over the years, additional assessment included drilling of soil borings, collection and analysis of soil samples, and installation and monitoring of onsite and offsite groundwater monitoring wells. Based on historical monitoring activities, groundwater has been observed at depths ranging from approximately 6 to 16 fbg. The local groundwater flow direction has been oriented toward the west.

Remedial efforts included manual recovery of free product, excavation of hydrocarbon affected soil and recovery and treatment of hydrocarbon-affected vapor and groundwater. OCHCA issued a Remedial Action Completion Certification dated April 5, 2005. However, impacted soil and groundwater exists beneath the facility and offsite to the west. This site is located hydrogeologically downgradient of the subject property. Based on this information and the regulatory closure status of the Chevron service station, this release is not considered to represent a threat to the subject property. Details regarding the environmental assessment and closure status of this case are provided in Appendix E.

4.4.2 Four Seasons – 690 Newport Center Drive

A release of petroleum hydrocarbons (diesel fuel) from a 1,000-gallon diesel UST associated with the emergency generator was reported for the Four Seasons property in July of 1997. Subsequent environmental assessment and monitoring activities included the installation of six groundwater monitoring wells (MW-1 through MW-6). The Four Seasons monitoring wells were located approximately 600 feet east and hydrogeologically upgradient of the OCMA property. Groundwater has historically been encountered at depths ranging from approximately 30 to 35 feet below grade (elevations of approximately 163 to 168 feet above mean sea level). The reported historical groundwater flow direction is toward the west to northwest (i.e., toward the OCMA property). Separate phase petroleum hydrocarbons have been detected in four groundwater monitoring wells associated with the site (MW-1, MW-3, MW-4, and MW-5).

Remediation activities performed at the site include free product recovery between July 1998 and February 2012. The monitoring well located nearest to OCMA (MW-6) was installed approximately 500 feet east of the OCMA eastern property boundary (within Santa Cruz Drive near the entrance to the Four Seasons). This monitoring well has not contained measurable concentration of petroleum hydrocarbons or VOCs since at least 2009. However, a heavy sheen of petroleum hydrocarbons was detected in the next closest monitoring well to OCMA (MW-5) on February 20, 2012.

On January 28, 2015, the Orange County Health Care Agency issued a Remedial Action Completion Certification for this site. Given the nature of the reported release (i.e., diesel fuel) and distance between the release and the subject property, the release from the Four Seasons property is not considered to represent a Recognized Environmental Condition. However, it should be noted that if construction dewatering is required to accommodate the proposed development on the subject property, the dewatering activities could alter local groundwater flow and ultimately induce migration of residual petroleum hydrocarbons in groundwater toward the subject property. Details regarding the environmental assessment and closure status of this case are provided in Appendix E.

4.4.3 Shell Oil – 1600 Jamboree Road

The Shell service station is located on the northeast corner of Jamboree Road and San Joaquin Hills Road. In June 2003, soil contamination was encountered during sampling associated with dispenser upgrade activities. Between December 2003 and May 2011, ten soil borings and ten groundwater monitoring wells were installed at the site. Impacted soil was encountered above and below the groundwater. Groundwater monitoring and sampling activities performed at the site revealed that groundwater was present at depths ranging from approximately 6 to 11 fbg (groundwater elevations ranging from approximately 104 to 112 feet above mean sea level). The groundwater flow direction was generally determined to be oriented toward the north.

Remediation activities performed at the site included soil excavation. The OCHCA issued a Remedial Action Completion Certification on August 12, 2014. This site is located hydrogeologically downgradient of the subject property. Based on this information and the regulatory closure status of the Shell service station, this release is not considered to represent a threat to the subject property. Details regarding the environmental assessment and closure status of this case are provided in Appendix E.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Mr. Dan Lachman, Senior Scientist of TRC, conducted a Site reconnaissance on and around the Site on August 20, 2015, for the purpose of identifying potential RECs, and was accompanied by a representative of OCMA who provided access to the property and answered questions during the reconnaissance. Photographs taken during the reconnaissance are provided in **Appendix D**. A Site plan is included as **Figure 2**.

During the Site reconnaissance, minor areas of landscaping, including trees and grass, were observed around the perimeter of the building. No observations that would be considered

limiting conditions that would impact the results of this Phase I ESA were recorded during the site reconnaissance.

5.2 Interior and Exterior Site Observations

Unless otherwise noted, the items listed in the table below appeared in good condition with no visual evidence of staining, deterioration or a discharge of hazardous materials; and there are no records of a release in these areas. Items where further description is warranted are discussed in the section(s) following the table.

Table 5.1 – Interior and Exterior Site Observations

Item	Present (Current/Historic/No)	Description
Hazardous material storage or handling areas	Yes	Hazardous materials stored onsite include small (i.e., < 5-gallon) containers of paints and minor quantities of stains, thinners, and typical janitorial cleaning compounds.
Aboveground storage tanks (ASTs) and associated piping	No	
Underground storage tanks (USTs) and associated piping	No	
Drums & containers (≥5 gallons)	Yes	Acrylic water-based paint
Odors	No	
Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)	No	
Polychlorinated Biphenyls (PCBs) / Transformers	No	
Stains or corrosion	No	
Drains & sumps	Yes	Water drains on roof which flow to ground
Pits, ponds & lagoons	No	
Stressed vegetation	No	
Historic fill or any other fill material	No	
Wastewater (including storm water or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)	No	

Table 5.1 – Interior and Exterior Site Observations

Item	Present (Current/Historic/No)	Description
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)	No	
Septic systems or cesspools	No	
Sediment Material	No	

5.2.1 Hazardous Substances

Hazardous substances and wastes observed stored at the site include latex paints, stains, thinners, and typical janitorial cleaning compounds. Hazardous wastes stored at the site include spent lead-acid batteries.

5.2.2 Underground Storage Tanks

No evidence of underground storage tanks (USTs) was observed at the Site.

5.2.3 Aboveground Storage Tanks

No evidence of aboveground storage tanks (ASTs) was observed at the Site.

5.3 Adjoining and Surrounding Properties Reconnaissance

5.3.1 Adjoining Properties

During the Site reconnaissance, TRC viewed the adjoining properties from the Site and publicly accessible areas (e.g., public roadways, etc.). The Site shares a loading bay with the OCMA Office building located to the west of the property.

Table 5.2 – Adjoining Properties Reconnaissance

Direction from Site	Current Land Use Description
North	On-going construction of a 600-unit apartment complex
East	Irvine Company/Pimco overflow parking lot
South	Pacific Life/Mutual office building and The Colony luxury apartments (southwest)
West	856 San Clemente Drive, OCMA administration offices and vault

5.3.2 Surrounding Properties

Surrounding properties generally include developed lands, office buildings, and residential buildings.

6.0 INTERVIEWS

The following persons were interviewed to obtain historically and/or environmentally-pertinent information regarding RECs associated with the Site. Interview documentation is included in **Appendix E**.

- Mr. Albert Lopez – Director of Operations and *Key Site Manager* (as defined by the ASTM standard and identified by the User).

The information provided by Mr. Todd Smith is discussed and referenced in the text or provided below. Other references and sources of information are included in **Appendix E**.

According to Mr. Albert Lopez, the parcel is approximately 2 acres. Site water for landscape irrigation and potable use is provided by the City of Newport Beach.

7.0 FINDINGS, OPINIONS AND CONCLUSIONS

Potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs) and *de minimis* conditions, pursuant to the ASTM E 1527-13 standard.

RECs are defined as the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (1) due to any *release* to the environment; (2) under conditions indicative of a *release* to the *environment*; or (3) under conditions that pose a *material threat* of a future *release* to the *environment*.

CRECs are defined as a REC resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

HRECs are defined as a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

De minimis conditions are defined as a condition that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis conditions* are neither RECs nor CRECs.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 of the property located at 850 San Clemente Drive in Newport Beach, Orange County, California (APN 442-261-05). Deviations from this standard are described in Sections 1.3 and 7.6 of this report. The Site, known as Orange County Museum of Art, consists of an approximately 2-acre parcel and is improved with an approximately 23,000 square foot, single-story structure. Historically, the site was undeveloped and unoccupied until construction of the existing Site improvements in 1977. Since construction of the existing building, the Site has been used as an art museum.

7.1 RECs and CRECs

This assessment has revealed no evidence of RECs (including CRECs) in connection with the Site. It is TRC's opinion that it is unlikely that the subject property has been impacted by historical releases of petroleum hydrocarbons or hazardous substances, including those that may represent a vapor encroachment condition, from offsite properties or historical site activities.

7.2 HRECs

This assessment has revealed no evidence of HRECs in connection with the Site.

7.3 *De Minimis* Conditions

This assessment has revealed no evidence of *de minimis* conditions in connection with the site.

7.4 Data Gaps

TRC has made an appropriate inquiry into the commonly known and reasonably ascertainable resources concerning the historical ownership and use of the Site back to the first development per 40 CFR Part 312.24 (*Reviews of Historical Sources of Information*). No significant data gaps that would be considered to impact the identification of an REC were encountered during the completion of the evaluation.

7.5 Non-ASTM Findings

This assessment included a qualitative review of certain items that are outside the scope of the ASTM E 1527-13 standard. Qualitative assessment of non-ASTM items is limited to the following:

Radon Gas – Radon is an odorless, radioactive gas that occurs naturally in soil, rock and building materials and results from the natural radioactive decay of radium and uranium. In outdoor air, concentrations of radon are generally diluted to concentrations that do not pose a significant threat to human health. In enclosed spaces such as homes or offices, and basements, radon may accumulate to concentrations that may pose a human health risk. The concentration of radon indoor air is influenced by factors related to the building construction, ventilation system and concentration of radon in the underlying soil and rock.

The EPA has designated three zones of classification indicating the predicted average indoor screening level of radon per county. Orange County is classified in Zone 3, which indicates a

predicted radon level below 2 picoCuries per liter of air (pCi/L). The EPA “Action Level” is 4 pCi/L.

Radon testing was performed at 30 sites within the zip code of the property. Radon was detected at these sites at an average concentration of 0.763 pCi/L. Based on this information, radon gas is not considered to warrant additional investigation or analysis.

Asbestos – Asbestos is a naturally occurring fibrous mineral that was extensively used in the past for its insulation qualities. Asbestos fibers can be found in thermal insulation, fireproofing material, vinyl floor tiles, mastic, wallboard, ceiling tiles and numerous other materials. After asbestos was determined to be carcinogenic, its use was severely restricted in the late 1970's. Building materials are classified as Asbestos Containing Material (ACM) if they contain greater than 1% asbestos. Such material is considered a hazardous material and must be properly disposed when removed.

Based on the original date of building construction (1977) asbestos-containing building materials may be present in certain building materials. Observed suspect Acmes included dry wall and joint compound and the building roofing material. Suspect ACM, where potentially present, was observed in good condition. Asbestos may also be present in latent or hidden building elements that are not visible during a routine inspection. Examples of latent or hidden building elements that may also contain asbestos include transite piping and thermal insulation associated with structural support members. While it appears that asbestos abatement activities were performed in conjunction with the 1996 building expansion, it is not known whether asbestos-containing building materials remain. A definitive determination as to the possible presence of asbestos in building materials can only be made through representative sampling and analysis of suspect building materials. Prior to demolition or significant remodeling, completion of a pre-demolition asbestos survey is required.

Lead-Based Paint - Lead was a major ingredient in paint pigment prior to and through the 1940s. While other pigments have been used since the 1950s, the use of lead in paint continued until the mid 1970s. In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials, which are lead-containing. Based on the original date of construction, lead-based paint might have been applied to the interior or exterior building surfaces. Sampling for lead-based paint was not a part of the scope of services for this report. Where painted surfaces were present, the paint was observed in good condition. TRC recommends that lead-based paint sampling be performed as a component of a future pre-demolition asbestos and hazardous materials building survey.

Polychlorinated Biphenyls - Polychlorinated biphenyls (PCBs) are industrial chemicals widely used for their heat transfer properties. These substances were used in electrical transformers, hydraulic fluids and electrical equipment such as fluorescent light ballasts. PCBs are stable compounds that persist in the environment after a spill or improper disposal. Since 1978, the use of PCBs has been prohibited in most products. Fluorescent light ballasts manufactured since that time must state that they contain no PCBs. TRC recommends that a comprehensive hazardous materials building survey be performed on conjunction with the pre-demolition asbestos survey. This survey would also include an assessment and quantification of mercury-containing thermostats and fluorescent light tubes, suspect PCB containing lighting ballast, radioactive smoke detectors, and tritium-based exit signs.

7.6 Limiting Conditions and Deviations

7.6.1 Accuracy and Completeness

The ASTM E 1527-13 standard recognizes inherent limitations for Phase I ESAs that apply to this report, including:

- Uncertainty Not Eliminated – No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Data gaps identified during this Phase I ESA are listed in Section 7.4.
- Not Exhaustive – A Phase I ESA is not an exhaustive investigation.
- Past Uses of the Property – A review of standard historical sources at intervals less than five years is not required.

The Client is advised that the Phase I ESA conducted at the Site is a limited inquiry into a property's environmental status, cannot wholly eliminate uncertainty, and is not an exhaustive assessment to discover every potential source of environmental liability at the Site. Therefore, TRC does not make a statement i) of warranty or guarantee, express or implied for any specific use; ii) that the Site is free of RECs or environmental impairment; iii) that the Site is “clean”; or iv) that impairments, if any, are limited to those that were discovered while TRC was performing the Phase I ESA. This limiting statement is not meant to compromise the findings of this report; rather, it is meant as a statement of limitations within the ASTM standard and intended scope of this assessment. Specific limiting conditions identified during the Site reconnaissance are described in Section 5.1. Subsurface conditions may differ from the conditions implied by surface observations, and can be evaluated more thoroughly through intrusive techniques that are beyond the scope of this assessment. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes.

This report presents TRC's site reconnaissance observations, findings, and conclusions as they existed at the time of the Site reconnaissance. TRC makes no representation or warranty that the past or current operations at the property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. TRC makes no guarantees as to the accuracy or completeness of information obtained from others during the course of this Phase I ESA report. It is possible that information exists beyond the scope of this assessment, or that information was not provided to TRC. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. TRC is under no obligation to update this report to reflect such subsequent information. The findings presented in this report are based upon reasonably ascertainable information and observed Site conditions at the time of the assessment.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not assessed. Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were not fully disclosed to TRC during the assessment.

An independent data research company provided the government agency database referenced in this report. Information regarding surrounding area properties was requested for approximate minimum search distances and was assumed to be correct and complete unless obviously contradicted by TRC's observations or other credible referenced sources reviewed during the assessment.

TRC is not a professional title insurance or land surveyor firm and makes no guarantee, explicit or implied, that any land title records acquired or reviewed, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

7.6.2 Warranties and Representations

This report does not warrant against: (1) operations or conditions which were not evident from visual observations or historical information provided; (2) conditions which could only be determined by physical sampling or other intrusive investigation techniques; (3) locations other than the client-provided addresses and/or legal parcel description; or (4) information regarding off-site location(s) (with possible impact to the Site) not published in publicly available records.

7.6.3 Continued Validity/User Reliance

This report is presumed to be valid, in accordance with, and subject to, the limitations specified in the ASTM E 1527-13 standard, for a period of 180 days from completion, or until the Client obtains specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Client is notified by TRC that it has obtained specific information that may materially alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is presumed valid if completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction.

7.6.4 Significant Assumptions

During this Phase I ESA, TRC relied on database information; interviews with Site representatives, regulatory officials, and other individuals having knowledge of Site operations; and information provided by the User as requested in our authorized Scope of Work. TRC has assumed that the information provided is true and accurate. Reliance on electronic database search reports is subject to the limitations set forth in those reports. TRC did not independently verify the information provided. TRC found no reason to question the validity of the information received unless explicitly noted elsewhere in this report. If other information is discovered and/or if previous reports exist that were not provided to TRC, our conclusions may not be valid.

8.0 REFERENCES

Table 8.1 – Reference Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Information Updated	Reference Source
State of California Environmental Protection Agency, Department of Toxic Substances Control website	August 17, 2015	N/A	http://www.envirostor.dtsc.ca.gov/public/
The EDR Aerial Photo Decade Package	August 17, 2015	N/A	Environmental Data Resources, Inc. (EDR), Southport, Connecticut, Inquiry No. 4385033.12
The EDR-City Directory Image Report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.5
EDR Historical Topographic Map Report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.4
Certified Sanborn Map Report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.3
The EDR Radius Map Report with GeoCheck	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.2
The EDR Property Tax Map Report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.6
EDR Building Permit Report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.8
EDR Environmental Lien and AUL Search report	August 17, 2015	N/A	EDR, Southport, Connecticut, Inquiry No. 4385033.7.1
State of California, State Water Resources Control Board, GeoTracker website	August 17, 2015	N/A	http://geotracker.waterboards.ca.gov/
Division of Oil, Gas, and Geothermal Resources Well Finder	August 17, 2015	N/A	http://www.conservation.ca.gov/dog/Pages/WellFinder.aspx

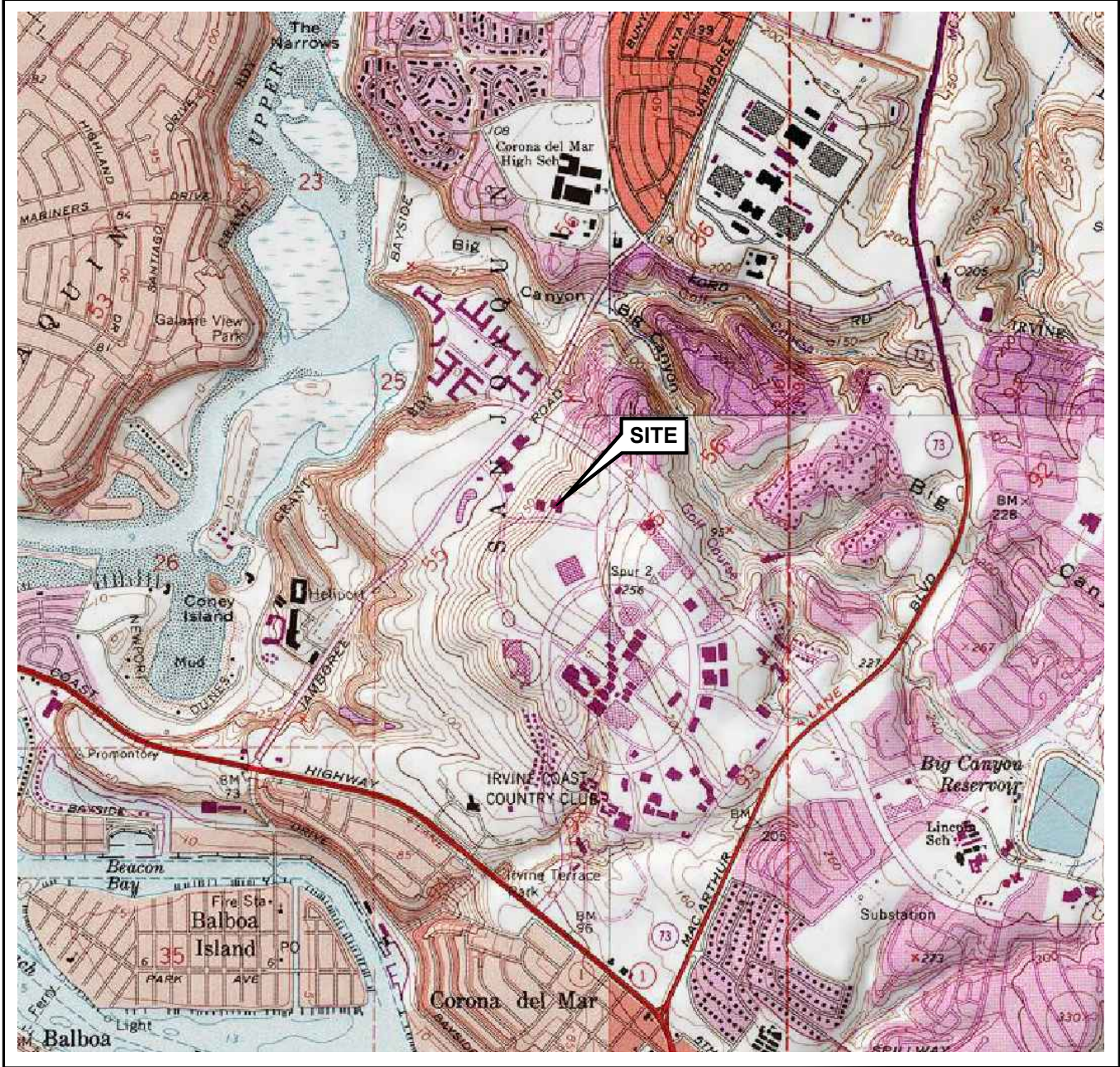
Table 8.1 – Reference Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Information Updated	Reference Source
Orange County Health Care Agency, Environmental Records (CUPA)	August 17, 2015	N/A	http://ochealthinfo.com/eh
City of Newport Beach, Building and Safety Department	August 17, 2015	N/A	http://ecms.newportbeachca.gov/

9.0 ADDITIONAL SERVICES

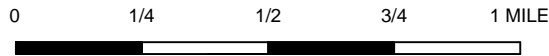
No additional services were performed during this Phase I ESA.

FIGURES



SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Newport Beach Quadrangle



SCALE 1:24,000



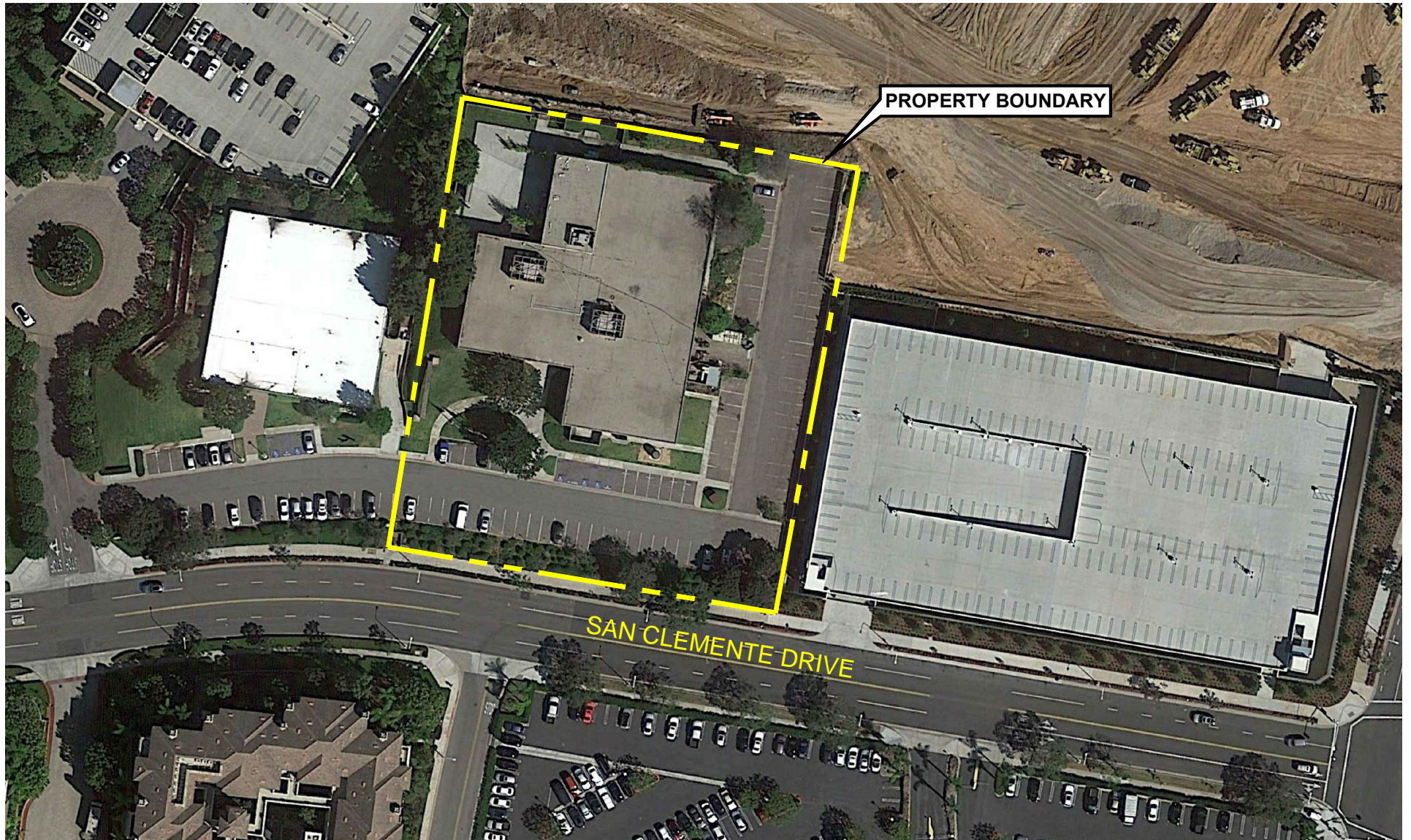
QUADRANGLE
LOCATION



ORANGE COUNTY MUSEUM OF ART
850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA

VICINITY MAP

FIGURE 1



SCALE (FEET)



NOTE:

Modified from a map provided by Google Earth Professional, dated 3/24/2015.

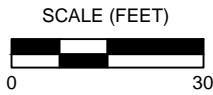
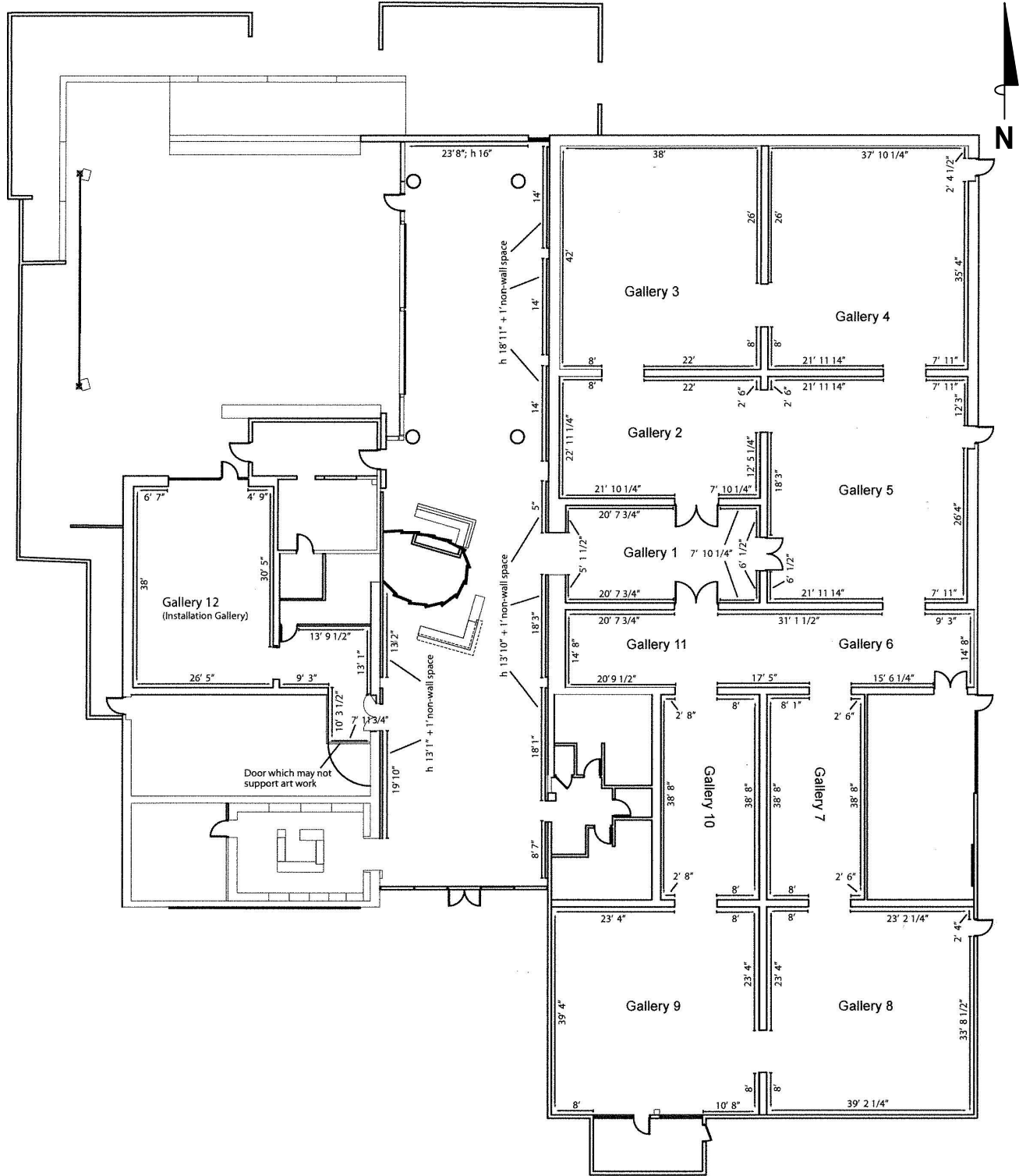


PROJECT: 241004

FACILITY:
ORANGE COUNTY MUSEUM OF ART
850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA
H-34

SITE PLAN

FIGURE 2



PROJECT: 241004
 FACILITY:
 ORANGE COUNTY MUSEUM OF ART
 850 SAN CLEMENTE DRIVE
 NEWPORT BEACH, CALIFORNIA

SITE LAYOUT

FIGURE 3

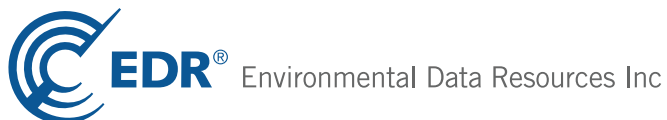
**APPENDIX A:
DATABASE RADIUS REPORT**

OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.2s
August 17, 2015

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CA 92660

COORDINATES

Latitude (North): 33.6212000 - 33° 37' 16.32"
Longitude (West): 117.8782000 - 117° 52' 41.52"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 418538.9
UTM Y (Meters): 3720309.2
Elevation: 187 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640952 NEWPORT BEACH OE S, CA
Version Date:	2012
Northeast Map:	5640942 TUSTIN, CA
Version Date:	2012
Southeast Map:	5641300 LAGUNA BEACH, CA
Version Date:	2012
Northwest Map:	5640950 NEWPORT BEACH, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120505
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CA 92660

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	ORANGE COUNTY MUSEUM	850 SAN CLEMENTE DR	CA HAZNET		TP
A2	ORANGE COUNTY MUSEUM	850 SAN CLEMENTE DR	CA HAZNET		TP
3		3337 COLONY PLZ	EDR US Hist Auto Stat	Lower	276, 0.052, WSW
B4	CITY OF NEWPORT BEAC	868 SANTA BARBARA DR	CA FID UST, CA SWEEPS UST	Lower	530, 0.100, WNW
B5	NEWPORT CENTER FIRE	868 SANTA BARBARA DR	CA HIST UST	Lower	530, 0.100, WNW
B6	CITY OF NEWPORT BEAC	868 SANTA BARBARA DR	CA UST	Lower	530, 0.100, WNW
B7	POLICE DEPARTMENT/NE	870 SANTA BARBARA DR	CA UST	Lower	534, 0.101, WNW
B8	JAMBOREE ROAD POLICE	870 SANTA BARBARA DR	CA HIST UST	Lower	534, 0.101, WNW
B9	NEWPORT BEACH POLICE	870 SANTA BARBARA	CA HIST CORTESE, CA LUST, CA CHMIRS, CA EMI	Lower	534, 0.101, WNW
C10	PACIFIC MUTUAL	700 NEWPORT CENTER	CA HIST CORTESE, CA LUST	Higher	851, 0.161, SE
C11	PACIFIC MUTUAL	700 NEWPORT CENTER D	RCRA-SQG, CA LUST, CA UST, CA EMI	Higher	851, 0.161, SE
C12	PACIFIC MUTUAL	700 NEWPORT CENTER D	RCRA-SQG, FINDS	Higher	851, 0.161, SE
D13	STERLING MOTORS LTD	1540 JAMBOREE RD	CA SWEEPS UST	Lower	857, 0.162, NW
D14	LAND ROVER NEWPORT B	1540 JAMBOREE RD	RCRA-SQG, FINDS, CA HIST CORTESE, CA LUST, CA FID...	Lower	857, 0.162, NW
E15	CHEVRON #9-3042	1550 JAMBOREE RD	CA HIST CORTESE, CA FID UST	Lower	889, 0.168, NNW
E16		1550 JAMBOREE RD	EDR US Hist Auto Stat	Lower	889, 0.168, NNW
E17	TERRIBLE HERBST CHEV	1550 JAMBOREE RD	CA LUST, CA HAZNET	Lower	889, 0.168, NNW
E18	CHEVRON #9-3042	1550 JAMBOREE RD	CA UST, CA SWEEPS UST	Lower	889, 0.168, NNW
E19	93042	1550 JAMBOREE RD	CA HIST UST	Lower	889, 0.168, NNW
E20	CHEVRON STATION NO 9	1550 JAMBOREE RD	RCRA NonGen / NLR, FINDS, CA HAZNET	Lower	889, 0.168, NNW
C21	FOUR SEASONS HOTEL	690 NEWPORT CENTER	RCRA-SQG, FINDS, CA HIST CORTESE, CA LUST, CA FID...	Higher	931, 0.176, SE
F22	PACIFIC FINANCIAL PL	800 NEWPORT CENTER	CA HIST CORTESE, CA LUST	Higher	934, 0.177, South
F23	PACIFIC MUTUAL PLAZA	800 NEWPORT CENTER D	CA UST	Higher	934, 0.177, South
G24	FASHION ISLAND SERVI	1600 JAMBOREE RD	CA FID UST, CA SWEEPS UST	Lower	1238, 0.234, North
G25	SHELL OIL	1600 JAMBOREE	CA LUST	Lower	1238, 0.234, North
G26	TEXACO SERVICE STATI	1600 JAMBOREE	CA HIST CORTESE, CA LUST	Lower	1238, 0.234, North
G27	TEXACO	1600 JAMBOREE RD	CA UST	Lower	1238, 0.234, North
G28	SHELL SERVICE STATIO	1600 JAMBOREE ROAD	RCRA-SQG, FINDS	Lower	1238, 0.234, North
G29	R & M PACIFIC ORO IN	1600 JAMBOREE RD	CA UST	Lower	1238, 0.234, North
G30		1600 JAMBOREE RD	EDR US Hist Auto Stat	Lower	1238, 0.234, North
31	ASPHALTO WASTE WATER	840 NEWPORT CENTER D	CA HIST UST, CA WMUDS/SWAT	Lower	1309, 0.248, South
H32	BIG CANYON COUNTRY C	1850 JAMBOREE RD	CA HIST CORTESE, CA FID UST	Lower	2072, 0.392, North
H33	BIG CANYON COUNTRY C	1850 JAMBOREE RD	CA LUST, CA UST, CA SWEEPS UST	Lower	2072, 0.392, North
34	NEWPORT CENTER CLEAN	521 NEWPORT CENTER D	RCRA NonGen / NLR, FINDS, CA SLIC, CA Orange Co....	Higher	2540, 0.481, SE
I35	FORD AEROSPC CORP AE	1000 FORD RD	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-SQG, PADS,.	Higher	5076, 0.961, NNE
36	MR. BEST CLEANERS	2039 EAST COAST HIGH	CA VCP, CA ENVIROSTOR	Lower	5150, 0.975, South
I37	LORAL AEROSPACE CORP	1000 FORD RD	CA SLIC, CA EMI, CA ENVIROSTOR, CA HWP	Higher	5248, 0.994, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
ORANGE COUNTY MUSEUM 850 SAN CLEMENTE DR NEWPORT BEACH, CA 92660	CA HAZNET GEPaid: CAC000764504	N/A
ORANGE COUNTY MUSEUM 850 SAN CLEMENTE DR NEWPORT BEACH, CA 92660	CA HAZNET GEPaid: CAC001435028	N/A

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

EXECUTIVE SUMMARY

LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

CA RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

CA SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

CA AST..... Aboveground Petroleum Storage Tank Facilities

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

FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

CA BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

CA SWRCY..... Recycler Database

CA HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs

CA HIST Cal-Sites..... Historical Calsites Database

CA SCH..... School Property Evaluation Program

CA Toxic Pits..... Toxic Pits Cleanup Act Sites

CA CDL..... Clandestine Drug Labs

US HIST CDL..... National Clandestine Laboratory Register

EXECUTIVE SUMMARY

Local Land Records

LIENS 2..... CERCLA Lien Information
CA LIENS..... Environmental Liens Listing
CA DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CA LDS..... Land Disposal Sites Listing
CA MCS..... Military Cleanup Sites Listing
CA SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
CA BOND EXP. PLAN..... Bond Expenditure Plan
CA UIC..... UIC Listing
CA NPDES..... NPDES Permits Listing
CA Cortese..... "Cortese" Hazardous Waste & Substances Sites List
CA CUPA Listings..... CUPA Resources List
CA Notify 65..... Proposition 65 Records
CA WIP..... Well Investigation Program Case List
CA ENF..... Enforcement Action Listing
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
CA HWT..... Registered Hazardous Waste Transporter Database
CA MWMP..... Medical Waste Management Program Listing
CA MINES..... Mines Site Location Listing
CA PEST LIC..... Pesticide Regulation Licenses Listing
CA WASTEWATER PITS..... Oil Wastewater Pits Listing
CA Financial Assurance..... Financial Assurance Information Listing
CA PROC..... Certified Processors Database
CA WDS..... Waste Discharge System
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
EPA WATCH LIST..... EPA WATCH LIST

EXECUTIVE SUMMARY

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH DOE..... Steam-Electric Plant Operation Data
PRP..... Potentially Responsible Parties

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CA RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank
CA RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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

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

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/10/2015 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>FORD AEROSPC CORP AE</i>	<i>1000 FORD RD</i>	<i>NNE 1/2 - 1 (0.961 mi.)</i>	<i>I35</i>	<i>80</i>

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/10/2015 has revealed that there are 5 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC MUTUAL	700 NEWPORT CENTER D	SE 1/8 - 1/4 (0.161 mi.)	C11	22
PACIFIC MUTUAL	700 NEWPORT CENTER D	SE 1/8 - 1/4 (0.161 mi.)	C12	25
FOUR SEASONS HOTEL	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAND ROVER NEWPORT B	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
SHELL SERVICE STATIO	1600 JAMBOREE ROAD	N 1/8 - 1/4 (0.234 mi.)	G28	63

State- and tribal - equivalent CERCLIS

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

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 05/04/2015 has revealed that there are 2 CA ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LORAL AEROSPACE CORP Facility Id: 80001367 Facility Id: 30370015 Status: Refer: RWQCB Status: Refer: RCRA	1000 FORD RD	NNE 1/2 - 1 (0.994 mi.)	I37	101
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MR. BEST CLEANERS Facility Id: 60002126 Status: Active	2039 EAST COAST HIGH	S 1/2 - 1 (0.975 mi.)	36	99

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

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

A review of the CA LUST list, as provided by EDR, and dated 06/15/2015 has revealed that there are 10 CA LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC MUTUAL Status: Completed - Case Closed Facility Id: 90UT108 Global Id: T0605901159 Current Status: 9	700 NEWPORT CENTER	SE 1/8 - 1/4 (0.161 mi.)	C10	20
PACIFIC MUTUAL Facility Status: Case Closed Global ID: T0605901159	700 NEWPORT CENTER D	SE 1/8 - 1/4 (0.161 mi.)	C11	22
FOUR SEASONS HOTEL Status: Completed - Case Closed Facility Id: 97UT041 Facility Status: Remediation Plan Global Id: T0605902093 Current Status: 9 Global ID: T0605902093	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42
PACIFIC FINANCIAL PL Status: Completed - Case Closed Facility Id: 88UT160 Facility Status: Case Closed Global Id: T0605900873 Current Status: 9 Global ID: T0605900873	800 NEWPORT CENTER	S 1/8 - 1/4 (0.177 mi.)	F22	48
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NEWPORT BEACH POLICE Status: Completed - Case Closed Facility Id: 88UT150 Facility Id: 02UT019 Facility Status: Case Closed Facility Status: Preliminary site assessment underway Global Id: T0605900840 Global Id: T0605901955 Current Status: 9 Global ID: T0605900840 Global ID: T0605901955	870 SANTA BARBARA	WNW 0 - 1/8 (0.101 mi.)	B9	13
LAND ROVER NEWPORT B Status: Completed - Case Closed Facility Id: 98UT102 Facility Status: Case Closed Global Id: T0605902218 Current Status: 9 Global ID: T0605902218	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
TERRIBLE HERBST CHEV	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E17	33

EXECUTIVE SUMMARY

Status: Completed - Case Closed
 Facility Id: 85UT032
 Facility Status: Post remedial action monitoring
 Global Id: T0605900074
 Current Status: 9
 Global ID: T0605900074

SHELL OIL Facility Status: Case Closed Facility Status: Pollution Characterization Global ID: T0605901252 Global ID: T0605939328	1600 JAMBOREE	N 1/8 - 1/4 (0.234 mi.)	G25	55
--	---------------	-------------------------	-----	----

TEXACO SERVICE STATI Status: Completed - Case Closed Facility Id: 90UT219 Facility Id: 03UT021 Global Id: T0605939328 Global Id: T0605901252 Current Status: 9	1600 JAMBOREE	N 1/8 - 1/4 (0.234 mi.)	G26	57
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BIG CANYON COUNTRY C Status: Completed - Case Closed Facility Id: 86UT021 Facility Status: Case Closed Global Id: T0605900051 Current Status: 9 Global ID: T0605900051	1850 JAMBOREE RD	N 1/4 - 1/2 (0.392 mi.)	H33	73
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CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, and dated 06/15/2015 has revealed that there is 1 CA SLIC site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NEWPORT CENTER CLEAN Facility Status: Completed - Case Closed Global Id: SLT8R0803963	521 NEWPORT CENTER D	SE 1/4 - 1/2 (0.481 mi.)	34	76

State and tribal registered storage tank lists

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

A review of the CA UST list, as provided by EDR, and dated 06/15/2015 has revealed that there are 9 CA UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC MUTUAL Facility Id: 7771	700 NEWPORT CENTER D	SE 1/8 - 1/4 (0.161 mi.)	C11	22
FOUR SEASONS HOTEL	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42

EXECUTIVE SUMMARY

Facility Id: FA0024638 Facility Id: 4052				
PACIFIC MUTUAL PLAZA Facility Id: 6107	800 NEWPORT CENTER D	S 1/8 - 1/4 (0.177 mi.)	F23	51
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CITY OF NEWPORT BEAC Facility Id: FA0024708 Facility Id: 7023	868 SANTA BARBARA DR	WNW 0 - 1/8 (0.100 mi.)	B6	12
POLICE DEPARTMENT/NE Facility Id: 7008	870 SANTA BARBARA DR	WNW 0 - 1/8 (0.101 mi.)	B7	12
LAND ROVER NEWPORT B Facility Id: 17768	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
CHEVRON #9-3042 Facility Id: FA0049936 Facility Id: 2196	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E18	37
TEXACO Facility Id: 2191	1600 JAMBOREE RD	N 1/8 - 1/4 (0.234 mi.)	G27	62
R & M PACIFIC ORO IN Facility Id: FA0050043	1600 JAMBOREE RD	N 1/8 - 1/4 (0.234 mi.)	G29	65

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

CA WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the CA WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is 1 CA WMUDS/SWAT site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ASPHALTO WASTE WATER	840 NEWPORT CENTER D	S 1/8 - 1/4 (0.248 mi.)	31	65

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 5 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FOUR SEASONS HOTEL Facility Id: 30006786	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42

EXECUTIVE SUMMARY

Status: A

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CITY OF NEWPORT BEAC Facility Id: 30004762 Status: A	868 SANTA BARBARA DR	WNW 0 - 1/8 (0.100 mi.)	B4	9
LAND ROVER NEWPORT B Facility Id: 30017016 Status: A	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
CHEVRON #9-3042 Facility Id: 30000489 Status: A	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E15	32
FASHION ISLAND SERVI Facility Id: 30001074 Status: A	1600 JAMBOREE RD	N 1/8 - 1/4 (0.234 mi.)	G24	51

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 5 CA HIST UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NEWPORT CENTER FIRE Facility Id: 00000057039	868 SANTA BARBARA DR	WNW 0 - 1/8 (0.100 mi.)	B5	11
JAMBOREE ROAD POLICE Facility Id: 00000057038	870 SANTA BARBARA DR	WNW 0 - 1/8 (0.101 mi.)	B8	12
LAND ROVER NEWPORT B Facility Id: 00000064597	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
93042 Facility Id: 00000062368	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E19	38
ASPHALTO WASTE WATER Facility Id: 00000053922	840 NEWPORT CENTER D	S 1/8 - 1/4 (0.248 mi.)	31	65

CA SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 5 CA SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FOUR SEASONS HOTEL Status: A Tank Status: A Comp Number: 4052	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CITY OF NEWPORT BEAC	868 SANTA BARBARA DR	WNW 0 - 1/8 (0.100 mi.)	B4	9

EXECUTIVE SUMMARY

Status: A Tank Status: A Comp Number: 7023				
STERLING MOTORS LTD	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D13	26
Status: A Tank Status: A Comp Number: 1634				
CHEVRON #9-3042	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E18	37
Status: A Tank Status: A Comp Number: 2196				
FASHION ISLAND SERVI	1600 JAMBOREE RD	N 1/8 - 1/4 (0.234 mi.)	G24	51
Status: A Tank Status: A Comp Number: 2191				

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/10/2015 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON STATION NO 9	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E20	39

CA HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 8 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC MUTUAL Reg Id: 083001519T	700 NEWPORT CENTER	SE 1/8 - 1/4 (0.161 mi.)	C10	20
FOUR SEASONS HOTEL Reg Id: 083003073T	690 NEWPORT CENTER	SE 1/8 - 1/4 (0.176 mi.)	C21	42
PACIFIC FINANCIAL PL Reg Id: 083001105T	800 NEWPORT CENTER	S 1/8 - 1/4 (0.177 mi.)	F22	48
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NEWPORT BEACH POLICE	870 SANTA BARBARA	WNW 0 - 1/8 (0.101 mi.)	B9	13

EXECUTIVE SUMMARY

Reg Id: 083001065T				
LAND ROVER NEWPORT B	1540 JAMBOREE RD	NW 1/8 - 1/4 (0.162 mi.)	D14	26
Reg Id: 083003303T				
CHEVRON #9-3042	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E15	32
Reg Id: 083002288T				
Reg Id: 083000097T				
TEXACO SERVICE STATI	1600 JAMBOREE	N 1/8 - 1/4 (0.234 mi.)	G26	57
Reg Id: 083001663T				
BIG CANYON COUNTRY C	1850 JAMBOREE RD	N 1/4 - 1/2 (0.392 mi.)	H32	72
Reg Id: 083000064T				

CA HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the CA HWP list, as provided by EDR, and dated 05/26/2015 has revealed that there is 1 CA HWP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LORAL AEROSPACE CORP	1000 FORD RD	NNE 1/2 - 1 (0.994 mi.)	I37	101
EPA Id: CAD041330077				
Cleanup Status: CLOSED				

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

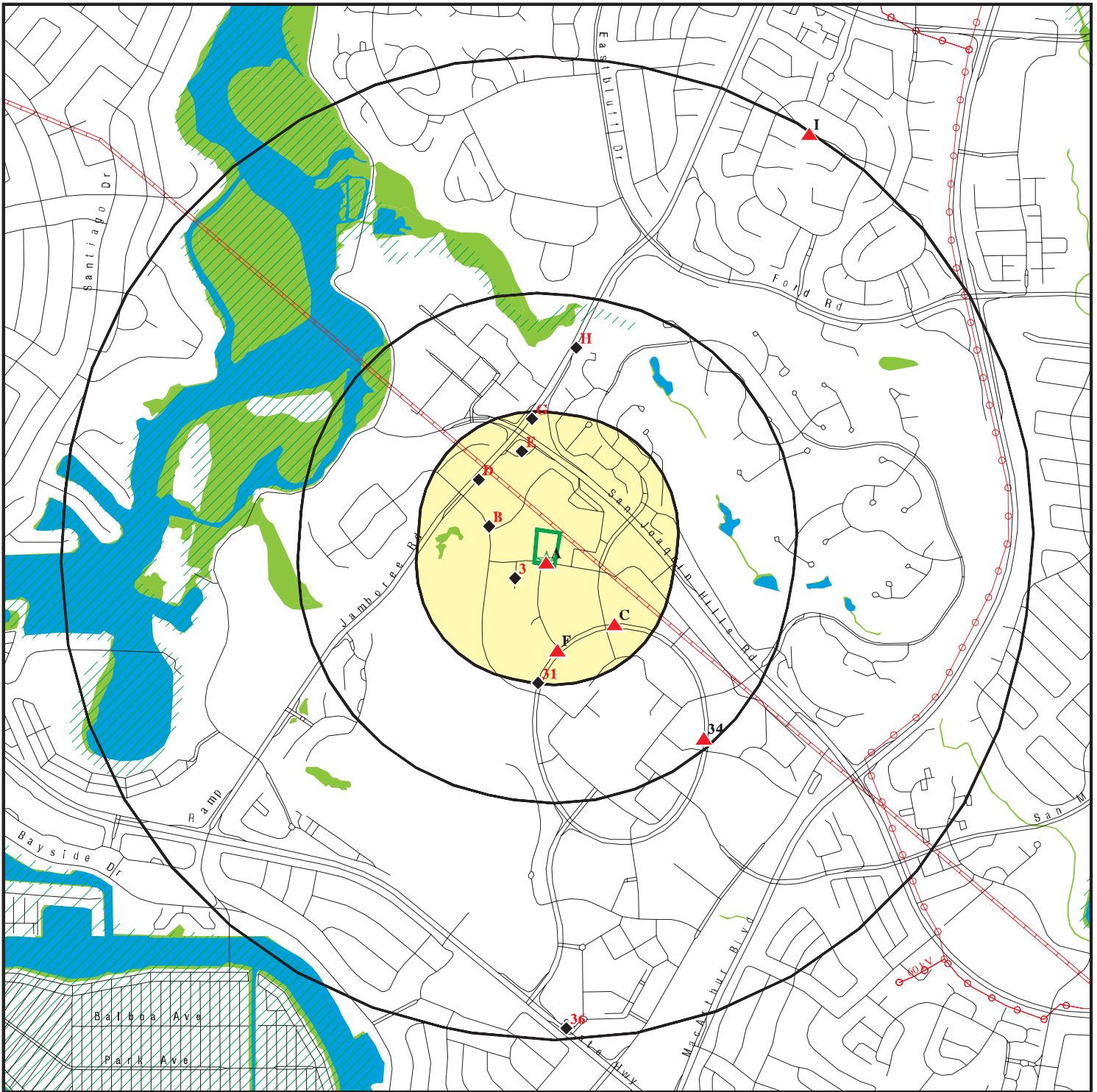
A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	3337 COLONY PLZ	WSW 0 - 1/8 (0.052 mi.)	3	9
Not reported	1550 JAMBOREE RD	NNW 1/8 - 1/4 (0.168 mi.)	E16	32
Not reported	1600 JAMBOREE RD	N 1/8 - 1/4 (0.234 mi.)	G30	65

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4385033.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

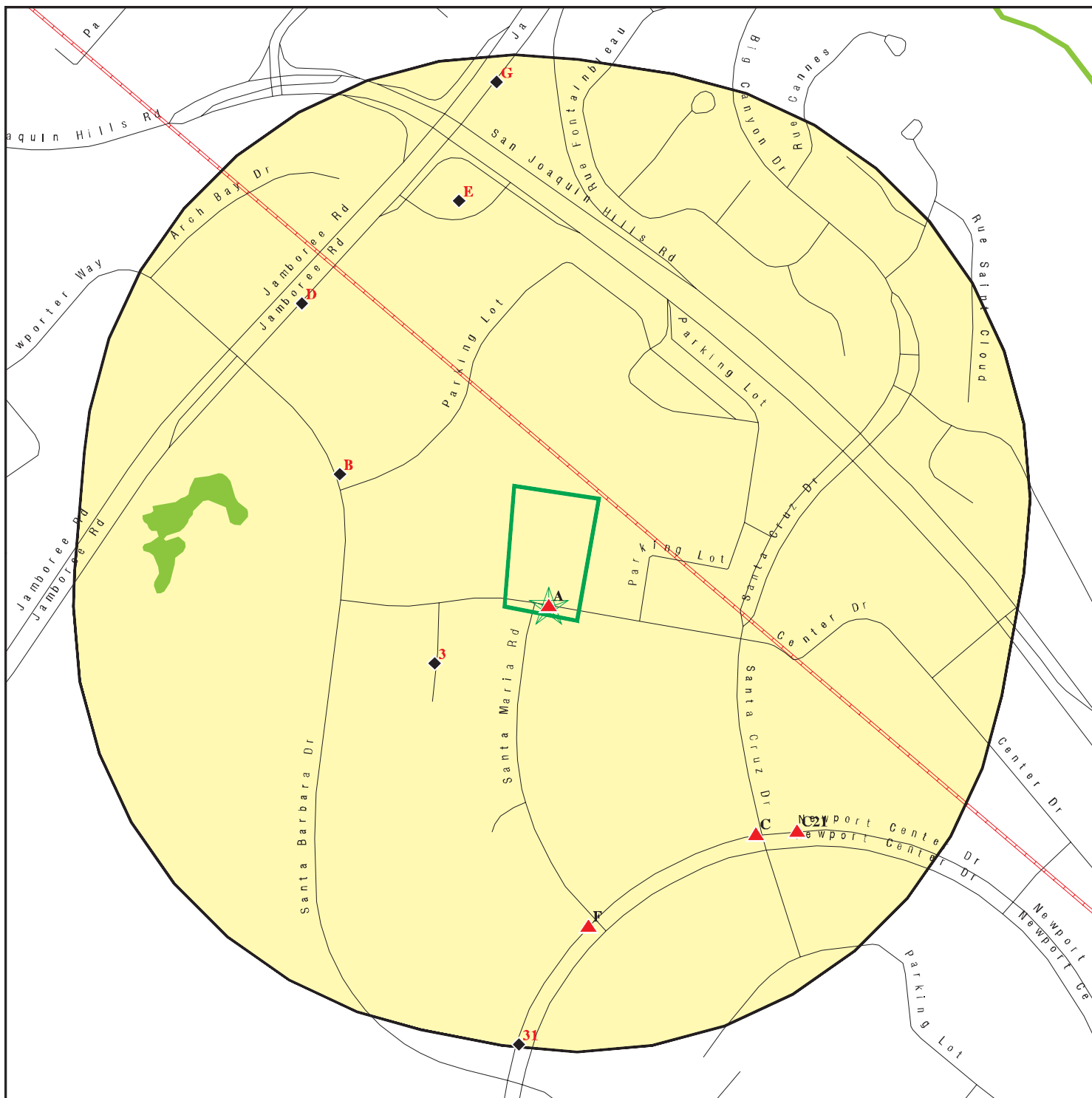









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.







SITE NAME: OCMA
 ADDRESS: 850 San Clemente Drive
 Newport Beach CA 92660
 LAT/LONG: 33.6212 / 117.8782

CLIENT: TRC
 CONTACT: Daniel Lachman
 H-53 INQUIRY #: 4385033.2s
 DATE: August 17, 2015 1:25 pm

DETAIL MAP - 4385033.2S



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

-  Indian Reservations BIA
-  Pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  Areas of Concern

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

SITE NAME: OCMA
 ADDRESS: 850 San Clemente Drive
 Newport Beach CA 92660
 LAT/LONG: 33.6212 / 117.8782

CLIENT: TRC
 CONTACT: Daniel Lachman
 H-54 INQUIRY #: 4385033.2s
 DATE: August 17, 2015 1:27 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	1	NR	1
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	5	NR	NR	NR	5
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
CA RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
CA ENVIROSTOR	1.000		0	0	0	2	NR	2
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
CA SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
CA LUST	0.500		1	8	1	NR	NR	10

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA SLIC	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
CA UST	0.250		2	7	NR	NR	NR	9
CA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
CA BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		0	0	0	NR	NR	0
CA HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
CA WMUDS/SWAT	0.500		0	1	0	NR	NR	1
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US CDL	TP		NR	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	0	NR	0
CA SCH	0.250		0	0	NR	NR	NR	0
CA Toxic Pits	1.000		0	0	0	0	NR	0
CA CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
CA FID UST	0.250		1	4	NR	NR	NR	5
CA HIST UST	0.250		2	3	NR	NR	NR	5
CA SWEEPS UST	0.250		1	4	NR	NR	NR	5
<i>Local Land Records</i>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
CA LIENS	TP		NR	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA CHMIRS	TP		NR	NR	NR	NR	NR	0
CA LDS	TP		NR	NR	NR	NR	NR	0
CA MCS	TP		NR	NR	NR	NR	NR	0
CA Orange Co. Industrial Site	TP		NR	NR	NR	NR	NR	0
CA SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CA UIC	TP		NR	NR	NR	NR	NR	0
CA NPDES	TP		NR	NR	NR	NR	NR	0
CA Cortese	0.500		0	0	0	NR	NR	0
CA HIST CORTESE	0.500		1	6	1	NR	NR	8
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
CA Notify 65	1.000		0	0	0	0	NR	0
CA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA WIP	0.250		0	0	NR	NR	NR	0
CA ENF	TP		NR	NR	NR	NR	NR	0
CA HAZNET	TP	2	NR	NR	NR	NR	NR	2
CA EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
CA HWT	0.250		0	0	NR	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA MINES	TP		NR	NR	NR	NR	NR	0
CA PEST LIC	TP		NR	NR	NR	NR	NR	0
CA WASTEWATER PITS	0.500		0	0	0	NR	NR	0
CA Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA PROC	0.500		0	0	0	NR	NR	0
CA HWP	1.000		0	0	0	1	NR	1
CA WDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
<u>EDR HIGH RISK HISTORICAL RECORDS</u>								
<i>EDR Exclusive Records</i>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	2	NR	NR	NR	3
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
CA RGA LUST	TP		NR	NR	NR	NR	NR	0
CA RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals --		2	9	41	3	4	0	59

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
Target
Property

ORANGE COUNTY MUSEUM OF ART
850 SAN CLEMENTE DR
NEWPORT BEACH, CA 92660

CA HAZNET **S112843688**
N/A

Site 1 of 2 in cluster A

Actual:
187 ft.

HAZNET:
envid: S112843688
Year: 1996
GEPaid: CAC000764504
Contact: ORANGE COUNTY MUSEUM OF ART,
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 850 SAN CLEMENTE DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: CAD009007626
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 8.8494
Facility County: Orange

A2
Target
Property

ORANGE COUNTY MUSEUM OF ART
850 SAN CLEMENTE DR
NEWPORT BEACH, CA 92660

CA HAZNET **S112891352**
N/A

Site 2 of 2 in cluster A

Actual:
187 ft.

HAZNET:
envid: S112891352
Year: 2000
GEPaid: CAC001435028
Contact: BRIAN GRAY
Telephone: 9497591122
Mailing Name: Not reported
Mailing Address: 850 SAN CLEMENTE DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: CAD050806850
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Transfer Station
Tons: 0.91
Facility County: Orange

envid: S112891352
Year: 2000
GEPaid: CAC001435028
Contact: BRIAN GRAY
Telephone: 9497591122
Mailing Name: Not reported
Mailing Address: 850 SAN CLEMENTE DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: CAD050806850
TSD County: Not reported
Waste Category: Laboratory waste chemicals
Disposal Method: Treatment, Tank
Tons: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ORANGE COUNTY MUSEUM OF ART (Continued)

S112891352

Facility County: Orange

envid: S112891352
Year: 2000
GEPAID: CAC001435028
Contact: BRIAN GRAY
Telephone: 9497591122
Mailing Name: Not reported
Mailing Address: 850 SAN CLEMENTE DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: CAD050806850
TSD County: Not reported
Waste Category: Laboratory waste chemicals
Disposal Method: Transfer Station
Tons: 0.39
Facility County: Orange

3
WSW
< 1/8
0.052 mi.
276 ft.

3337 COLONY PLZ
NEWPORT BEACH, CA 92660

EDR US Hist Auto Stat 1015433008
N/A

Relative:
Lower

EDR Historical Auto Stations:

Name: PANTERA AUTO DETAIL
Year: 2004
Address: 3337 COLONY PLZ

Name: PANTERA AUTO DETAIL
Year: 2005
Address: 3337 COLONY PLZ

Name: PANTERA AUTO DETAIL
Year: 2006
Address: 3337 COLONY PLZ

Name: PANTERA AUTO DETAIL
Year: 2007
Address: 3337 COLONY PLZ

Name: PANTERA AUTO DETAIL
Year: 2008
Address: 3337 COLONY PLZ

Actual:
178 ft.

B4
WNW
< 1/8
0.100 mi.
530 ft.

CITY OF NEWPORT BEACH FIRE STA
868 SANTA BARBARA DR
NEWPORT BEACH, CA 92660

CA FID UST S101631430
CA SWEEPS UST N/A

Site 1 of 6 in cluster B

Relative:
Lower

CA FID UST:
Facility ID: 30004762
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported

Actual:
131 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CITY OF NEWPORT BEACH FIRE STA (Continued)

S101631430

SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 3300 NEWPORT BLVD P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: NEWPORT BEACH 92660
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:

Status: Active
Comp Number: 7023
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-007023-000001
Tank Status: A
Capacity: 20000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Status: Active
Comp Number: 7023
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-007023-000002
Tank Status: A
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 7023
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CITY OF NEWPORT BEACH FIRE STA (Continued)

S101631430

SWRCB Tank Id: 30-000-007023-000003
Tank Status: A
Capacity: 550
Active Date: Not reported
Tank Use: PETROLEUM
STG: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 7023
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-007023-000004
Tank Status: A
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: OTHER
Number Of Tanks: Not reported

B5
WNW
< 1/8
0.100 mi.
530 ft.

NEWPORT CENTER FIRE STATION
868 SANTA BARBARA DR
NEWPORT BEACH, CA 92658

CA HIST UST **U001577423**
N/A

Site 2 of 6 in cluster B

Relative:
Lower

HIST UST:
Region: STATE
Facility ID: 00000057039
Facility Type: Other
Other Type: FIRE STATION
Contact Name: MEL KOEHN
Telephone: 7146443080
Owner Name: CITY OF NEWPORT BEACH
Owner Address: 3300 NEWPORT BLVD.
Owner City,St,Zip: NEWPORT BEACH, CA 926588915
Total Tanks: 0003

Actual:
131 ft.

Tank Num: 001
Container Num: 5
Year Installed: 1971
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: DIESEL
Container Construction Thickness: 3/16
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 6
Year Installed: 1971
Tank Capacity: 00001000
Tank Used for: PRODUCT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT CENTER FIRE STATION (Continued)

U001577423

Type of Fuel: UNLEADED
Container Construction Thickness: 3/16
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 7
Year Installed: 1971
Tank Capacity: 00000280
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: 12
Leak Detection: Visual

**B6
WNW
< 1/8
0.100 mi.
530 ft.**

**CITY OF NEWPORT BEACH FIRE STATION NO 3
868 SANTA BARBARA DR
NEWPORT BEACH, CA 92660**

**CA UST U003879432
N/A**

Site 3 of 6 in cluster B

**Relative:
Lower**

UST:
Facility ID: 7023
Permitting Agency: ORANGE COUNTY
Latitude: 33.6239299
Longitude: -117.8786967

**Actual:
131 ft.**

ORANGE CO. UST:
Facility ID: FA0024708

**B7
WNW
< 1/8
0.101 mi.
534 ft.**

**POLICE DEPARTMENT/NEWPORT BCH
870 SANTA BARBARA DR
NEWPORT BEACH, CA 92660**

**CA UST U003783928
N/A**

Site 4 of 6 in cluster B

**Relative:
Lower**

UST:
Facility ID: 7008
Permitting Agency: ORANGE COUNTY
Latitude: 33.62467
Longitude: -117.879059

**Actual:
130 ft.**

**B8
WNW
< 1/8
0.101 mi.
534 ft.**

**JAMBOREE ROAD POLICE FACILITY
870 SANTA BARBARA DR
NEWPORT BEACH, CA 92658**

**CA HIST UST U001577421
N/A**

Site 5 of 6 in cluster B

**Relative:
Lower**

HIST UST:
Region: STATE
Facility ID: 00000057038
Facility Type: Other
Other Type: POLICE STATION
Contact Name: MEL KOEHN
Telephone: 7146443080
Owner Name: CITY OF NEWPORT BEACH

**Actual:
130 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

JAMBOREE ROAD POLICE FACILITY (Continued)

U001577421

Owner Address: 3300 NEWPORT BLVD.
Owner City,St,Zip: NEWPORT BEACH, CA 926588915
Total Tanks: 0004

Tank Num: 001
Container Num: 1
Year Installed: 1975
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1973
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: 1973
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 4
Year Installed: 1973
Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: Visual

B9
WNW
< 1/8
0.101 mi.
534 ft.

NEWPORT BEACH POLICE DEPT
870 SANTA BARBARA
NEWPORT BEACH, CA 92660
Site 6 of 6 in cluster B

CA HIST CORTESE
CA LUST
CA CHMIRS
CA EMI

S100279962
N/A

Relative:
Lower

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001065T

Actual:
130 ft.

LUST:
Region: STATE
Global Id: T0605900840
Latitude: 33.623322
Longitude: -117.880391

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Case Type: Not reported
Status: Completed - Case Closed
Status Date: 08/30/1994
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083001065T
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605900840
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rscott@waterboards.ca.gov
Phone Number: 9513206375

Global Id: T0605900840
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605900840
Status: Completed - Case Closed
Status Date: 08/30/1994

Global Id: T0605900840
Status: Open - Case Begin Date
Status Date: 08/31/1988

Regulatory Activities:

Global Id: T0605900840
Action Type: Other
Date: 08/31/1988
Action: Leak Reported

Global Id: T0605900840
Action Type: Other
Date: 08/31/1988
Action: Leak Discovery

Region: STATE
Global Id: T0605901955

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Latitude: 33.6205066
Longitude: -117.8800141
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 10/28/2004
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083002849T
LOC Case Number: Not reported
File Location: Local Agency Warehouse
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605901955
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Global Id: T0605901955
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605901955
Status: Completed - Case Closed
Status Date: 10/28/2004

Global Id: T0605901955
Status: Open - Case Begin Date
Status Date: 06/17/2002

Global Id: T0605901955
Status: Open - Site Assessment
Status Date: 06/17/2002

Global Id: T0605901955
Status: Open - Site Assessment
Status Date: 09/01/2003

Regulatory Activities:

Global Id: T0605901955
Action Type: ENFORCEMENT
Date: 10/28/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Action: Closure/No Further Action Letter

Global Id: T0605901955
Action Type: Other
Date: 06/17/2002
Action: Leak Reported

Global Id: T0605901955
Action Type: ENFORCEMENT
Date: 09/22/2004
Action: LOP Case Closure Summary to RB

Global Id: T0605901955
Action Type: ENFORCEMENT
Date: 02/21/2003
Action: Staff Letter

Global Id: T0605901955
Action Type: Other
Date: 06/17/2002
Action: Leak Discovery

Global Id: T0605901955
Action Type: ENFORCEMENT
Date: 06/17/2002
Action: Notice of Responsibility

Global Id: T0605901955
Action Type: RESPONSE
Date: 03/23/2003
Action: Other Report / Document

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 88UT150
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 08/30/1994
Case Type: Other Ground Water
Record ID: RO0002502

Region: ORANGE
Facility Id: 02UT019
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 10/28/2004
Case Type: Other Ground Water
Record ID: RO0003177

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001065T

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Local Case Num:	88UT150
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900840
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/31/1988
Enforcement Date:	Not reported
Close Date:	8/30/1994
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6205066
Longitude:	-117.8800141
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	JK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Preliminary site assessment underway
Case Number:	083002849T

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Local Case Num:	02UT019
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901955
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	1/1/1965
Discover Date:	6/17/2002
Enforcement Date:	Not reported
Close Date:	10/28/2004
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	9/1/2003
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6205066
Longitude:	-117.8800141
MTBE Date:	12/29/2003
Max MTBE GW:	206
MTBE Concentration:	0
Max MTBE Soil:	398
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	TME
Staff Initials:	JK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MAR,NAV,REC-1,REC-2,SHELL,SPWN,WET,WILD
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CHMIRS:

OES Incident Number:	098016
OES notification:	Not reported
OES Date:	Not reported
OES Time:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Incident Date: 13-FEB-90
Date Completed: 13-FEB-90
Property Use: 500
Agency Id Number: 30055
Agency Incident Number: 002816
Time Notified: 903
Time Completed: 1500
Surrounding Area: 962
Estimated Temperature: Not reported
Property Management: C
More Than Two Substances Involved?: N
Resp Agncy Personel # Of Decontaminated: 0
Responding Agency Personel # Of Injuries: 0
Responding Agency Personel # Of Fatalities: 0
Others Number Of Decontaminated: 0
Others Number Of Injuries: 0
Others Number Of Fatalities: 0
Vehicle Make/year: Not reported
Vehicle License Number: Not reported
Vehicle State: Not reported
Vehicle Id Number: Not reported
CA DOT PUC/ICC Number: Not reported
Company Name: Not reported
Reporting Officer Name/ID: B/C A. WAGNER
Report Date: 11-MAY-90
Facility Telephone: 714 644-3103
Waterway Involved: Not reported
Waterway: Not reported
Spill Site: Not reported
Cleanup By: Not reported
Containment: Not reported
What Happened: Not reported
Type: Not reported
Measure: Not reported
Other: Not reported
Date/Time: Not reported
Year: 88-92
Agency: Not reported
Incident Date: Not reported
Admin Agency: Not reported
Amount: Not reported
Contained: Not reported
Site Type: Not reported
E Date: 26-JUN-91
Substance: Not reported
Unknown: Not reported
Substance #2: Not reported
Substance #3: Not reported
Evacuations: Not reported
Number of Injuries: Not reported
Number of Fatalities: Not reported
#1 Pipeline: Not reported
#2 Pipeline: Not reported
#3 Pipeline: Not reported
#1 Vessel >= 300 Tons: Not reported
#2 Vessel >= 300 Tons: Not reported
#3 Vessel >= 300 Tons: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NEWPORT BEACH POLICE DEPT (Continued)

S100279962

Evacs: Not reported
 Injuries: Not reported
 Fatales: Not reported
 Comments: Y
 Description: Not reported

EMI:

Year: 1990
 County Code: 30
 Air Basin: SC
 Facility ID: 67517
 Air District Name: SC
 SIC Code: 9199
 Air District Name: SOUTH COAST AQMD
 Community Health Air Pollution Info System: Not reported
 Consolidated Emission Reporting Rule: Not reported
 Total Organic Hydrocarbon Gases Tons/Yr: 0
 Reactive Organic Gases Tons/Yr: 0
 Carbon Monoxide Emissions Tons/Yr: 0
 NOX - Oxides of Nitrogen Tons/Yr: 0
 SOX - Oxides of Sulphur Tons/Yr: 0
 Particulate Matter Tons/Yr: 0
 Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

C10
SE
 1/8-1/4
 0.161 mi.
 851 ft.

PACIFIC MUTUAL
700 NEWPORT CENTER
NEWPORT BEACH, CA 92660

CA HIST CORTESE **S103980664**
CA LUST **N/A**

Site 1 of 4 in cluster C

Relative:
Higher

HIST CORTESE:
 Region: CORTESE
 Facility County Code: 30
 Reg By: LTNKA
 Reg Id: 083001519T

Actual:
206 ft.

LUST:

Region: STATE
 Global Id: T0605901159
 Latitude: 33.619676
 Longitude: -117.878215
 Case Type: Not reported
 Status: Completed - Case Closed
 Status Date: 07/30/1990
 Lead Agency: Not reported
 Case Worker: DB
 Local Agency: Not reported
 RB Case Number: 083001519T
 LOC Case Number: Not reported
 File Location: Local Agency
 Potential Media Affect: Soil
 Potential Contaminants of Concern: Diesel
 Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC MUTUAL (Continued)

S103980664

Global Id: T0605901159
Contact Type: Regional Board Caseworker
Contact Name: PATRICIA HANNON
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: phannon@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0605901159
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605901159
Status: Completed - Case Closed
Status Date: 07/30/1990

Global Id: T0605901159
Status: Open - Case Begin Date
Status Date: 04/05/1990

Regulatory Activities:

Global Id: T0605901159
Action Type: Other
Date: 04/05/1990
Action: Leak Reported

Global Id: T0605901159
Action Type: Other
Date: 04/05/1990
Action: Leak Discovery

Global Id: T0605901159
Action Type: REMEDIATION
Date: 04/05/1990
Action: Excavation

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 90UT108
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 07/30/1990
Case Type: Soil Only
Record ID: RO0001944

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

C11
SE
1/8-1/4
0.161 mi.
851 ft.

PACIFIC MUTUAL
700 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660

RCRA-SQG 1000250179
CA LUST CAD981974686
CA UST
CA EMI

Site 2 of 4 in cluster C

Relative:
Higher

RCRA-SQG:

Date form received by agency: 09/01/1996
 Facility name: PACIFIC MUTUAL
 Facility address: 700 NEWPORT CENTER DR
 NEWPORT BEACH, CA 92660

Actual:
206 ft.

EPA ID: CAD981974686
 Contact: Not reported
 Contact address: Not reported
 Contact country: US
 Contact telephone: Not reported
 Contact email: Not reported
 EPA Region: 09
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999
 Owner/operator country: Not reported
 Owner/operator telephone: (415) 555-1212
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: PACIFIC MUTUAL
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999
 Owner/operator country: Not reported
 Owner/operator telephone: (415) 555-1212
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC MUTUAL (Continued)

1000250179

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 05/04/1987
Site name: PACIFIC MUTUAL
Classification: Large Quantity Generator

Violation Status: No violations found

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001519T
Local Case Num: 90UT108
Case Type: Soil only
Substance: Diesel
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901159
How Stopped Date: 9/9/9999
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 4/5/1990
Enforcement Date: Not reported
Close Date: 7/30/1990
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.6193827
Longitude: -117.876385
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC MUTUAL (Continued)

1000250179

MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: PAH
Staff Initials: JK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

UST:

Facility ID: 7771
Permitting Agency: ORANGE COUNTY
Latitude: 33.6209772
Longitude: -117.8763467

EMI:

Year: 1990
County Code: 30
Air Basin: SC
Facility ID: 3550
Air District Name: SC
SIC Code: 6321
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1995
County Code: 30
Air Basin: SC
Facility ID: 3550
Air District Name: SC
SIC Code: 6321
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

C12
SE
1/8-1/4
0.161 mi.
851 ft.

PACIFIC MUTUAL
700 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660

RCRA-SQG **1000857484**
FINDS **CAD983669219**

Site 3 of 4 in cluster C

Relative:
Higher

RCRA-SQG:

Date form received by agency: 06/02/1993

Facility name: XEROX

Facility address: 700 NEWPORT CENTER DR

AT GROUND LEVEL

NEWPORT BEACH, CA 92660

EPA ID: CAD983669219

Mailing address: NEWPORT CENTER DR

AT GROUND LEVEL

NEWPORT BEACH, CA 92660

Contact: DELANA HOLLOWAY

Contact address: 700 NEWPORT CENTER DR AT GROUND LEVEL

NEWPORT BEACH, CA 92660

Contact country: US

Contact telephone: (714) 760-4472

Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: XEROX

Owner/operator address: 700 NEWPORT CENTER DR
 NEWPORT BEACH, CA 92660

Owner/operator country: Not reported

Owner/operator telephone: (714) 760-4472

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Furnace exemption: No

Used oil fuel burner: No

Used oil processor: No

User oil refiner: No

Used oil fuel marketer to burner: No

Used oil Specification marketer: No

Used oil transfer facility: No

Used oil transporter: No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PACIFIC MUTUAL (Continued)

1000857484

Violation Status: No violations found

FINDS:

Registry ID: 110002761510

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

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

**D13
 NW
 1/8-1/4
 0.162 mi.
 857 ft.**

**STERLING MOTORS LTD
 1540 JAMBOREE RD
 NEWPORT BEACH, CA 92660**

CA SWEEPS UST

**U003805033
 N/A**

Site 1 of 2 in cluster D

**Relative:
 Lower**

SWEEPS UST:

Status: Active
 Comp Number: 1634
 Number: 9
 Board Of Equalization: 44-015797
 Referral Date: 09-30-92
 Action Date: 09-15-92
 Created Date: 02-29-88
 Owner Tank Id: Not reported
 SWRCB Tank Id: 30-000-001634-000001
 Tank Status: A
 Capacity: 1000
 Active Date: Not reported
 Tank Use: PETROLEUM
 STG: P
 Content: Not reported
 Number Of Tanks: 1

**Actual:
 122 ft.**

**D14
 NW
 1/8-1/4
 0.162 mi.
 857 ft.**

**LAND ROVER NEWPORT BEACH
 1540 JAMBOREE RD
 NEWPORT BEACH, CA 92660**

**RCRA-SQG
 FINDS
 CA HIST CORTESE
 CA LUST
 CA FID UST
 CA UST
 CA HIST UST
 CA Orange Co. Industrial Site**

**1000364520
 CAD981967441**

Site 2 of 2 in cluster D

**Relative:
 Lower**

RCRA-SQG:

Date form received by agency: 06/30/2003
 Facility name: LAND ROVER NEWPORT BEACH
 Facility address: 1540 JAMBOREE RD

**Actual:
 122 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

EPA ID: NEWPORT BEACH, CA 92660
CAD981967441
Contact: MARTY ALBANESE
Contact address: 1540 JAMBOREE RD
NEWPORT BEACH, CA 92660
Contact country: US
Contact telephone: 949-640-6445
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: MARTY ALBANESE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 02/20/2003
Owner/Op end date: Not reported

Owner/operator name: PENDRAGON NORTH AMERICA
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 02/20/2003
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

Historical Generators:

Date form received by agency: 10/09/1996
Site name: NEWPORT ENTERPRISES DBA LAND ROVER
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: NEWPORT ENTERPRISES DBA LAND ROVER
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002758846

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

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

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083003303T

LUST:

Region: STATE
Global Id: T0605902218
Latitude: 33.6245625
Longitude: -117.8797471
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 06/18/2002
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083003303T
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating, * Solvents
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605902218

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov
Phone Number: 9517824495

Global Id: T0605902218
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:
Global Id: T0605902218
Status: Completed - Case Closed
Status Date: 06/18/2002

Global Id: T0605902218
Status: Open - Case Begin Date
Status Date: 11/19/1998

Regulatory Activities:
Global Id: T0605902218
Action Type: Other
Date: 11/19/1998
Action: Leak Reported

Global Id: T0605902218
Action Type: Other
Date: 11/19/1998
Action: Leak Discovery

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 98UT102
Current Status: Certification (Case Closed)
Released Substance: Waste oil/Used oil
Date Closed: 06/18/2002
Case Type: Other Ground Water
Record ID: RO0001202

Region: ORANGE
Facility Id: 98UT102
Current Status: Certification (Case Closed)
Released Substance: Solvents
Date Closed: 06/18/2002
Case Type: Other Ground Water
Record ID: RO0001202

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083003303T
Local Case Num: 98UT102
Case Type: Other ground water affected
Substance: 12035,13
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605902218
How Stopped Date: 9/9/9999
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 11/19/1998
Enforcement Date: Not reported
Close Date: 6/18/2002
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.6245625
Longitude: -117.8797471
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: CAB
Staff Initials: JK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MAR
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

CA FID UST:

Facility ID: 30017016
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146406444
Mail To: Not reported
Mailing Address: 604 PRODUCTION PL
Mailing Address 2: Not reported
Mailing City,St,Zip: NEWPORT BEACH 92660
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

UST:

Facility ID: 17768
Permitting Agency: ORANGE COUNTY
Latitude: 33.6253229
Longitude: -117.878343

HIST UST:

Region: STATE
Facility ID: 00000064597
Facility Type: Other
Other Type: AUTOMOTIVE DEALERSHI
Contact Name: ROBERT H. NOLAND
Telephone: 7146406444
Owner Name: STERLING MOTORS, INC.
Owner Address: 1540 JAMBOREE RD.
Owner City,St,Zip: NEWPORT BEACH, CA 92660
Total Tanks: 0002

Tank Num: 001
Container Num: 1
Year Installed: 1975
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: 1975
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAND ROVER NEWPORT BEACH (Continued)

1000364520

Orange Co. Industrial Site:

Case ID: 03IC016
Region: ORANGE
Record ID: RO0003203
Current Status: CLOSED 2/3/2009
Closure Type: Closure certification issued
Released Chemical: WASTE (OR SLOP) OIL

**E15
NNW
1/8-1/4
0.168 mi.
889 ft.**

**CHEVRON #9-3042
1550 JAMBOREE RD
NEWPORT BEACH, CA 92660**

**CA HIST CORTESE U001742677
CA FID UST N/A**

Site 1 of 6 in cluster E

**Relative:
Lower**

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083002288T

**Actual:
124 ft.**

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000097T

CA FID UST:

Facility ID: 30000489
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146447933
Mail To: Not reported
Mailing Address: P O BOX 2833 1300 S
Mailing Address 2: Not reported
Mailing City,St,Zip: NEWPORT BEACH 92660
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

**E16
NNW
1/8-1/4
0.168 mi.
889 ft.**

**1550 JAMBOREE RD
NEWPORT BEACH, CA 92660**

**EDR US Hist Auto Stat 1015246656
N/A**

Site 2 of 6 in cluster E

**Relative:
Lower**

EDR Historical Auto Stations:

Name: NEWPORT CENTER CHEVRON INCORPORATED
Year: 1999
Address: 1550 JAMBOREE RD

**Actual:
124 ft.**

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

(Continued)

1015246656

Name: CHEVRON STATIONS INC
 Year: 2003
 Address: 1550 JAMBOREE RD

Name: NEWPORT CENTER CHEVRON INC
 Year: 2005
 Address: 1550 JAMBOREE RD

Name: NEWPORT CENTER CHEVRON INC
 Year: 2007
 Address: 1550 JAMBOREE RD

Name: CHEVRON STATIONS
 Year: 2008
 Address: 1550 JAMBOREE RD

Name: CHEVRON STATIONS
 Year: 2009
 Address: 1550 JAMBOREE RD

E17
NNW
1/8-1/4
0.168 mi.
889 ft.

TERRIBLE HERBST CHEVRON
1550 JAMBOREE RD
NEWPORT BEACH, CA 92660

CA LUST S104575469
CA HAZNET N/A

Site 3 of 6 in cluster E

Relative:
Lower

LUST:

Actual:
124 ft.

Region: STATE
 Global Id: T0605900074
 Latitude: 33.6246665
 Longitude: -117.8796351
 Case Type: Not reported
 Status: Completed - Case Closed
 Status Date: 04/05/2005
 Lead Agency: Not reported
 Case Worker: DB
 Local Agency: Not reported
 RB Case Number: 083000097T
 LOC Case Number: Not reported
 File Location: Local Agency Warehouse
 Potential Media Affect: Other Groundwater (uses other than drinking water)
 Potential Contaminants of Concern: Gasoline
 Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605900074
 Contact Type: Regional Board Caseworker
 Contact Name: TOM E. MBEKE-EKANEM
 Organization Name: SANTA ANA RWQCB (REGION 8)
 Address: 3737 MAIN STREET, SUITE 500
 City: RIVERSIDE
 Email: tmbeke-ekanem@waterboards.ca.gov
 Phone Number: 9513202007

Global Id: T0605900074
 Contact Type: Local Agency Caseworker

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TERRIBLE HERBST CHEVRON (Continued)

S104575469

Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605900074
Status: Completed - Case Closed
Status Date: 04/05/2005

Global Id: T0605900074
Status: Open - Case Begin Date
Status Date: 03/08/1985

Global Id: T0605900074
Status: Open - Remediation
Status Date: 09/11/1992

Global Id: T0605900074
Status: Open - Verification Monitoring
Status Date: 07/18/2001

Regulatory Activities:

Global Id: T0605900074
Action Type: Other
Date: 03/08/1985
Action: Leak Reported

Global Id: T0605900074
Action Type: ENFORCEMENT
Date: 04/05/2005
Action: Closure/No Further Action Letter

Global Id: T0605900074
Action Type: ENFORCEMENT
Date: 03/08/1985
Action: Notice of Responsibility

Global Id: T0605900074
Action Type: Other
Date: 03/08/1985
Action: Leak Discovery

Global Id: T0605900074
Action Type: RESPONSE
Date: 06/08/1985
Action: Soil and Water Investigation Report

Global Id: T0605900074
Action Type: REMEDIATION
Date: 07/01/1988
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900074

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TERRIBLE HERBST CHEVRON (Continued)

S104575469

Action Type: REMEDIATION
Date: 11/01/1995
Action: Other (Use Description Field)

Global Id: T0605900074
Action Type: REMEDIATION
Date: 07/01/1993
Action: Free Product Removal

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 85UT032
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 04/05/2005
Case Type: Other Ground Water
Record ID: RO0001505

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Post remedial action monitoring
Case Number: 083000097T
Local Case Num: 85UT032
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: NOR
Funding: Not reported
How Discovered: Tank Test
How Stopped: New Tank
Leak Cause: Unknown
Leak Source: Tank
Global ID: T0605900074
How Stopped Date: 9/9/9999
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 3/8/1985
Enforcement Date: Not reported
Close Date: Not reported
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: 9/11/1992
Date Post Remedial Action Monitoring: 7/18/2001
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TERRIBLE HERBST CHEVRON (Continued)

S104575469

Oversite Program: LUST
Latitude: 33.6246665
Longitude: -117.8796351
MTBE Date: 7/28/2004
Max MTBE GW: 310
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: JK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: EST,MAR,NAV,RARE,REC-1,REC-2,SHELL,SPWN,WET,WILD
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HAZNET:

envid: S104575469
Year: 2013
GEPaid: CAL000346826
Contact: BOB LASZCIK-DIR ENVIR SVCS
Telephone: 7027986400
Mailing Name: Not reported
Mailing Address: 1550 JAMBOREE RD
Mailing City,St,Zip: NEWPORT BEACH, CA 926605912
Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,
Organics Recovery Ect
Tons: 0.4587
Facility County: Not reported

envid: S104575469
Year: 2009
GEPaid: CAL000346826
Contact: BOB LASZCIK
Telephone: 7028897692
Mailing Name: Not reported
Mailing Address: 5195 LAS VEGAS BLVD S
Mailing City,St,Zip: LAS VEGAS, NV 891193209
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Tank bottom waste
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,
Organics Recovery Ect
Tons: 2.2935
Facility County: Orange

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

E18 **CHEVRON #9-3042**
NNW **1550 JAMBOREE RD**
1/8-1/4 **NEWPORT BEACH, CA 92660**
0.168 mi.
889 ft. **Site 4 of 6 in cluster E**

CA UST **U003432864**
CA SWEEPS UST **N/A**

Relative: UST:
Lower Facility ID: 2196
 Permitting Agency: ORANGE COUNTY
Actual: Latitude: 33.625913
124 ft. Longitude: -117.877782

ORANGE CO. UST:
Facility ID: FA0049936

SWEEPS UST:
Status: Active
Comp Number: 2196
Number: 9
Board Of Equalization: 44-015929
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002196-000001
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: PETROLEUM
STG: P
Content: Not reported
Number Of Tanks: 5

Status: Active
Comp Number: 2196
Number: 9
Board Of Equalization: 44-015929
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002196-000006
Tank Status: A
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2196
Number: 9
Board Of Equalization: 44-015929
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEVRON #9-3042 (Continued)

U003432864

SWRCB Tank Id: 30-000-002196-000007
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2196
Number: 9
Board Of Equalization: 44-015929
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002196-000008
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 2196
Number: 9
Board Of Equalization: 44-015929
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002196-000009
Tank Status: A
Capacity: Not reported
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

E19 93042
NNW 1550 JAMBOREE RD
1/8-1/4 NEWPORT BEACH, CA 92660
0.168 mi.
889 ft. Site 5 of 6 in cluster E

CA HIST UST U001577426
N/A

Relative: HIST UST:
Lower Region: STATE
Facility ID: 00000062368
Actual: Facility Type: Gas Station
124 ft. Other Type: Not reported
Contact Name: SCHMIDT,ROGER J
Telephone: 7146447933
Owner Name: CHEVRON U.S.A. INC.
Owner Address: 575 MARKET

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

93042 (Continued)

U001577426

Owner City,St,Zip:	SAN FRANCISCO, CA 94105
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	1971
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	1971
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	1971
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	1971
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000130
Leak Detection:	Stock Inventor

E20
NNW
 1/8-1/4
 0.168 mi.
 889 ft.

CHEVRON STATION NO 93042
1550 JAMBOREE RD
NEWPORT BEACH, CA 92660
Site 6 of 6 in cluster E

RCRA NonGen / NLR 1005904331
FINDS CAR000121400
CA HAZNET

Relative:
Lower

RCRA NonGen / NLR:
 Date form received by agency: 03/13/2013
 Facility name: CHEVRON STATION NO 93042
 Facility address: 1550 JAMBOREE RD
 NEWPORT BEACH, CA 92660 5912
 EPA ID: CAR000121400
 Mailing address: 5195 LAS VEGAS BLVD S
 LAS VEGAS, NV 89119
 Contact: BOB LASZCIK
 Contact address: 5195 LAS VEGAS BLVD S
 LAS VEGAS, NV 89119
 Contact country: US
 Contact telephone: 702-327-0302

Actual:
124 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEVRON STATION NO 93042 (Continued)

1005904331

Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: CHEVRON USA
Owner/operator address: P O BOX 6004
SAN RAMON, CA 94583
Owner/operator country: US
Owner/operator telephone: 877-386-6044
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/15/1971
Owner/Op end date: Not reported

Owner/operator name: KATHY NORRIS SLUSHER
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 11/15/1971
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 05/16/2002
Site name: CHEVRON STATION NO 93042
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEVRON STATION NO 93042 (Continued)

1005904331

FINDS:

Registry ID: 110012543480

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

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

HAZNET:

envid: 1005904331
Year: 2006
GEPaid: CAR000121400
Contact: Kathy Norris
Telephone: 9258425931
Mailing Name: Not reported
Mailing Address: PO BOX 6004
Mailing City,St,Zip: San Ramon, CA 94583
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.02
Facility County: Orange

envid: 1005904331
Year: 2005
GEPaid: CAR000121400
Contact: Kathy Norris
Telephone: 9258425931
Mailing Name: Not reported
Mailing Address: PO BOX 6004
Mailing City,St,Zip: San Ramon, CA 94583
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Recycler
Tons: 0.22
Facility County: Orange

envid: 1005904331
Year: 2003
GEPaid: CAR000121400
Contact: Kathy Norris

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHEVRON STATION NO 93042 (Continued)

1005904331

Telephone: 9258425931
Mailing Name: Not reported
Mailing Address: PO BOX 6004
Mailing City,St,Zip: San Ramon, CA 94583
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Not reported
Tons: 0.41
Facility County: Orange

**C21
SE
1/8-1/4
0.176 mi.
931 ft.**

**FOUR SEASONS HOTEL
690 NEWPORT CENTER
NEWPORT BEACH, CA 92660**

Site 4 of 4 in cluster C

**RCRA-SQG 1000351769
FINDS CAD981635782
CA HIST CORTESE
CA LUST
CA FID UST
CA UST
CA SWEEPS UST**

**Relative:
Higher**

**Actual:
217 ft.**

RCRA-SQG:

Date form received by agency: 09/01/1996
Facility name: FOUR SEASONS HOTEL
Facility address: 690 NEWPORT CENTER
NEWPORT BEACH, CA 92660
EPA ID: CAD981635782
Mailing address: 690 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: FOUR SEASONS CORP
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FOUR SEASONS HOTEL (Continued)

1000351769

Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 12/15/1986
Site name: FOUR SEASONS HOTEL
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002417545

Environmental Interest/Information System

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

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083003073T

LUST:

Region: STATE
Global Id: T0605902093
Latitude: 33.6194517
Longitude: -117.875762

MAP FINDINGS

FOUR SEASONS HOTEL (Continued)

1000351769

Case Type: Not reported
 Status: Completed - Case Closed
 Status Date: 01/28/2015
 Lead Agency: Not reported
 Case Worker: DB
 Local Agency: Not reported
 RB Case Number: 083003073T
 LOC Case Number: Not reported
 File Location: Local Agency
 Potential Media Affect: Other Groundwater (uses other than drinking water)
 Potential Contaminants of Concern: Diesel
 Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605902093
 Contact Type: Regional Board Caseworker
 Contact Name: TOM E. MBEKE-EKANEM
 Organization Name: SANTA ANA RWQCB (REGION 8)
 Address: 3737 MAIN STREET, SUITE 500
 City: RIVERSIDE
 Email: tmbeke-ekanem@waterboards.ca.gov
 Phone Number: 9513202007

Global Id: T0605902093
 Contact Type: Local Agency Caseworker
 Contact Name: DENAMARIE BAKER
 Organization Name: ORANGE COUNTY LOP
 Address: 1241 E. DYER ROAD, STE. 120
 City: SANTA ANA
 Email: dbaker@ochca.com
 Phone Number: 7144336255

Status History:

Global Id: T0605902093
 Status: Completed - Case Closed
 Status Date: 01/28/2015

Global Id: T0605902093
 Status: Open - Case Begin Date
 Status Date: 09/19/1997

Global Id: T0605902093
 Status: Open - Eligible for Closure
 Status Date: 01/17/2013

Global Id: T0605902093
 Status: Open - Remediation
 Status Date: 02/26/2003

Regulatory Activities:

Global Id: T0605902093
 Action Type: ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FOUR SEASONS HOTEL (Continued)

1000351769

Date: 07/30/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 07/03/2009
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 01/07/2011
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 09/30/2014
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 01/17/2013
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 07/30/2014
Action: Notification - Public Participation Document

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 11/04/1997
Action: Notice of Responsibility

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 10/17/2003
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 09/16/2004
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 07/19/2005
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 05/09/2008
Action: Staff Letter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FOUR SEASONS HOTEL (Continued)

1000351769

Global Id: T0605902093
Action Type: Other
Date: 07/11/1997
Action: Leak Reported

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 01/28/2015
Action: Closure/No Further Action Letter

Global Id: T0605902093
Action Type: Other
Date: 07/10/1997
Action: Leak Discovery

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 07/21/2008
Action: Staff Letter

Global Id: T0605902093
Action Type: ENFORCEMENT
Date: 12/29/2009
Action: Staff Letter

Global Id: T0605902093
Action Type: RESPONSE
Date: 02/04/1998
Action: Preliminary Site Assessment Workplan

Global Id: T0605902093
Action Type: REMEDIATION
Date: 10/20/1998
Action: Free Product Removal

Global Id: T0605902093
Action Type: REMEDIATION
Date: 07/15/2008
Action: Other (Use Description Field)

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 97UT041
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 01/28/2015
Case Type: Other Ground Water
Record ID: RO0002035

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Remediation Plan
Case Number: 083003073T

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FOUR SEASONS HOTEL (Continued)

1000351769

Local Case Num: 97UT041
Case Type: Other ground water affected
Substance: Diesel
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: NOR
Funding: Not reported
How Discovered: LT
How Stopped: NPP
Leak Cause: Unknown
Leak Source: Piping
Global ID: T0605902093
How Stopped Date: 9/9/9999
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 9/19/1997
Enforcement Date: Not reported
Close Date: Not reported
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: 2/26/2003
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.6194517
Longitude: -117.875762
MTBE Date: 9/10/2004
Max MTBE GW: 270
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: JK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: EST,MAR,RARE,SHELL,SPWN,WET,WILD
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:

Facility ID: 30006786
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FOUR SEASONS HOTEL (Continued)

1000351769

SIC Code: Not reported
Facility Phone: 7147590808
Mail To: Not reported
Mailing Address: 690 NEWPORT CENTER DR
Mailing Address 2: Not reported
Mailing City, St, Zip: NEWPORT BEACH 92660
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

UST:

Facility ID: 4052
Permitting Agency: ORANGE COUNTY
Latitude: 33.6211143
Longitude: -117.8738808

ORANGE CO. UST:

Facility ID: FA0024638

SWEEPS UST:

Status: Active
Comp Number: 4052
Number: 9
Board Of Equalization: 44-016110
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-004052-000001
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 1

F22
South
1/8-1/4
0.177 mi.
934 ft.

PACIFIC FINANCIAL PLAZA
800 NEWPORT CENTER
NEWPORT BEACH, CA 92660

CA HIST CORTESE **S102434888**
CA LUST **N/A**

Site 1 of 2 in cluster F

Relative:
Higher

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001105T

Actual:
188 ft.

LUST:

Region: STATE
Global Id: T0605900873

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC FINANCIAL PLAZA (Continued)

S102434888

Latitude: 33.6172037
Longitude: -117.8787351
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 11/26/1990
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083001105T
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605900873
Contact Type: Regional Board Caseworker
Contact Name: PATRICIA HANNON
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: phannon@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0605900873
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605900873
Status: Completed - Case Closed
Status Date: 11/26/1990

Global Id: T0605900873
Status: Open - Case Begin Date
Status Date: 09/12/1988

Regulatory Activities:

Global Id: T0605900873
Action Type: Other
Date: 09/12/1988
Action: Leak Reported

Global Id: T0605900873
Action Type: Other
Date: 09/12/1988
Action: Leak Discovery

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC FINANCIAL PLAZA (Continued)

S102434888

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 88UT160
Current Status: Certification (Case Closed)
Released Substance: Unleaded gasoline
Date Closed: 11/26/1990
Case Type: Soil Only
Record ID: RO0002730

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001105T
Local Case Num: 88UT160
Case Type: Soil only
Substance: Unleaded Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900873
How Stopped Date: 9/9/9999
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 9/12/1988
Enforcement Date: Not reported
Close Date: 11/26/1990
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.6172037
Longitude: -117.8787351
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE. Includes Unknown and Not Analyzed.
MTBE Class: *

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PACIFIC FINANCIAL PLAZA (Continued)

S102434888

Staff: PAH
Staff Initials: JK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MAR
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

F23
South
1/8-1/4
0.177 mi.
934 ft.

PACIFIC MUTUAL PLAZA
800 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660

CA UST **U003783735**
N/A

Site 2 of 2 in cluster F

Relative:
Higher

UST:
Facility ID: 6107
Permitting Agency: ORANGE COUNTY
Latitude: 33.62017
Longitude: -117.8778392

Actual:
188 ft.

G24
North
1/8-1/4
0.234 mi.
1238 ft.

FASHION ISLAND SERVICES INC TE
1600 JAMBOREE RD
NEWPORT BEACH, CA 92660

CA FID UST **S101589039**
CA SWEEPS UST **N/A**

Site 1 of 7 in cluster G

Relative:
Lower

CA FID UST:
Facility ID: 30001074
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 8185052480
Mail To: Not reported
Mailing Address: 3631 HBR BLVD STE 225 PAU
Mailing Address 2: Not reported
Mailing City,St,Zip: NEWPORT BEACH 92660
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Actual:
114 ft.

SWEEPS UST:

Status: Not reported
Comp Number: 2191
Number: Not reported
Board Of Equalization: 44-015928
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FASHION ISLAND SERVICES INC TE (Continued)

S101589039

Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000001
Tank Status: Not reported
Capacity: 500
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: 5

Status: Not reported
Comp Number: 2191
Number: Not reported
Board Of Equalization: 44-015928
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000005
Tank Status: Not reported
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 2191
Number: Not reported
Board Of Equalization: 44-015928
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000006
Tank Status: Not reported
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 2191
Number: Not reported
Board Of Equalization: 44-015928
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000007
Tank Status: Not reported
Capacity: 8000
Active Date: Not reported
Tank Use: UNKNOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FASHION ISLAND SERVICES INC TE (Continued)

S101589039

STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 2191
Number: Not reported
Board Of Equalization: 44-015928
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000008
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 2191
Number: 9
Board Of Equalization: 44-015928
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000010
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 5

Status: Active
Comp Number: 2191
Number: 9
Board Of Equalization: 44-015928
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000011
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2191

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FASHION ISLAND SERVICES INC TE (Continued)

S101589039

Number: 9
Board Of Equalization: 44-015928
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000012
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 2191
Number: 9
Board Of Equalization: 44-015928
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000013
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 2191
Number: 9
Board Of Equalization: 44-015928
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002191-000014
Tank Status: A
Capacity: 550
Active Date: Not reported
Tank Use: PETROLEUM
STG: P
Content: Not reported
Number Of Tanks: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
 EPA ID Number

G25 **SHELL OIL**
North **1600 JAMBOREE**
1/8-1/4 **NEWPORT BEACH, CA 92660**
0.234 mi.
1238 ft. **Site 2 of 7 in cluster G**

CA LUST **S105850481**
N/A

Relative:
Lower

LUST REG 8:

Actual:
114 ft.

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001663T
Local Case Num:	90UT219
Case Type:	Other ground water affected
Substance:	12034,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901252
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	9/24/1990
Enforcement Date:	Not reported
Close Date:	6/17/1997
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6252544
Longitude:	-117.8791221
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	RS
Staff Initials:	JK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHELL OIL (Continued)

S105850481

Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	Not reported
Local Case Num:	03UT021
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	NOR
Funding:	Not reported
How Discovered:	UM
How Stopped:	NPP
Leak Cause:	Unknown
Leak Source:	D
Global ID:	T0605939328
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/15/2003
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	8/20/2003
Date Pollution Characterization Began:	12/22/2003
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	0
Longitude:	0
MTBE Date:	1/29/2004
Max MTBE GW:	1300
MTBE Concentration:	0
Max MTBE Soil:	980
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	CAB
Staff Initials:	JK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	BIOL,COMM,EST,MAR,NAV,REC-1,REC-2,WET

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHELL OIL (Continued)

S105850481

Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

G26
North
1/8-1/4
0.234 mi.
1238 ft.

TEXACO SERVICE STATION
1600 JAMBOREE
NEWPORT BEACH, CA 92660

CA HIST CORTESE **S103633685**
CA LUST **N/A**

Site 3 of 7 in cluster G

Relative:
Lower

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001663T

Actual:
114 ft.

LUST:

Region: STATE
Global Id: T0605939328
Latitude: 33.625353401
Longitude: -117.878505955
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 08/12/2014
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil, Surface water
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0605939328
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605939328
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO SERVICE STATION (Continued)

S103633685

Phone Number: 9517824495

Status History:

Global Id: T0605939328
Status: Completed - Case Closed
Status Date: 08/12/2014

Global Id: T0605939328
Status: Open - Case Begin Date
Status Date: 05/15/2003

Global Id: T0605939328
Status: Open - Eligible for Closure
Status Date: 03/12/2014

Global Id: T0605939328
Status: Open - Remediation
Status Date: 06/18/2012

Global Id: T0605939328
Status: Open - Site Assessment
Status Date: 08/20/2003

Global Id: T0605939328
Status: Open - Site Assessment
Status Date: 12/22/2003

Regulatory Activities:

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 03/15/2007
Action: Staff Letter

Global Id: T0605939328
Action Type: RESPONSE
Date: 08/20/2003
Action: Preliminary Site Assessment Workplan

Global Id: T0605939328
Action Type: REMEDIATION
Date: 06/03/2003
Action: Excavation

Global Id: T0605939328
Action Type: REMEDIATION
Date: 12/16/2010
Action: Excavation

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 06/18/2014
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 12/21/2011

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO SERVICE STATION (Continued)

S103633685

Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 09/12/2011
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 01/18/2012
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 01/11/2011
Action: File review

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 05/22/2003
Action: Notice of Responsibility

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 05/18/2004
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 04/28/2005
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 08/28/2007
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 01/18/2007
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 06/30/2009
Action: Staff Letter

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 04/18/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0605939328
Action Type: ENFORCEMENT
Date: 04/18/2014
Action: Notification - Public Participation Document

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO SERVICE STATION (Continued)

S103633685

Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	06/18/2012
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	Other
Date:	05/19/2003
Action:	Leak Reported
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	08/12/2014
Action:	Closure/No Further Action Letter
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	11/22/2013
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	01/11/2011
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	07/09/2010
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	Other
Date:	05/15/2003
Action:	Leak Discovery
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	11/25/2008
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	08/23/2010
Action:	File review
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	07/03/2009
Action:	Staff Letter
Global Id:	T0605939328
Action Type:	ENFORCEMENT
Date:	03/30/2011
Action:	File review
Region:	STATE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO SERVICE STATION (Continued)

S103633685

Global Id: T0605901252
Latitude: 33.625396
Longitude: -117.878384
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 06/17/1997
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083001663T
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Diesel, Gasoline
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0605901252
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rscott@waterboards.ca.gov
Phone Number: 9513206375

Global Id: T0605901252
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Status History:

Global Id: T0605901252
Status: Completed - Case Closed
Status Date: 06/17/1997

Global Id: T0605901252
Status: Open - Case Begin Date
Status Date: 09/24/1990

Regulatory Activities:

Global Id: T0605901252
Action Type: ENFORCEMENT
Date: 04/02/1997
Action: LOP Case Closure Summary to RB

Global Id: T0605901252
Action Type: Other
Date: 09/24/1990
Action: Leak Reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TEXACO SERVICE STATION (Continued)

S103633685

Global Id: T0605901252
Action Type: Other
Date: 09/24/1990
Action: Leak Discovery

Global Id: T0605901252
Action Type: REMEDIATION
Date: 06/25/1992
Action: Excavation

Global Id: T0605901252
Action Type: REMEDIATION
Date: 06/25/1992
Action: Other (Use Description Field)

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 90UT219
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 06/17/1997
Case Type: Other Ground Water
Record ID: RO0002213

Region: ORANGE
Facility Id: 03UT021
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 08/12/2014
Case Type: Soil Only
Record ID: RO0003200

Region: ORANGE
Facility Id: 90UT219
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/17/1997
Case Type: Other Ground Water
Record ID: RO0002213

G27 **TEXACO**
North **1600 JAMBOREE RD**
1/8-1/4 **NEWPORT BEACH, CA 92660**
0.234 mi.
1238 ft. **Site 4 of 7 in cluster G**

CA UST **U004061471**
N/A

Relative: UST:
Lower Facility ID: 2191
Permitting Agency: ORANGE COUNTY
Actual: Latitude: 33.6266637
114 ft. Longitude: -117.8770591

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G28
North
1/8-1/4
0.234 mi.
1238 ft.

SHELL SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CA 92660

Site 5 of 7 in cluster G

RCRA-SQG **1000820352**
FINDS **CAD983663865**

Relative:
Lower

RCRA-SQG:

Date form received by agency: 02/26/2004

Facility name: SHELL SERVICE STATION

Facility address: 1600 JAMBOREE

SAP #120718

NEWPORT BEACH, CA 92660

EPA ID: CAD983663865

Mailing address: SHELL OIL PRODUCTS US

12700 NORTHBOROUGH DR MFT240G

HOUSTON, TX 770672508

Contact: GARY V WING

Contact address: Not reported

Not reported

Contact country: US

Contact telephone: (714) 731-8337

Contact email: GVWING@SHELLOPUS.COM

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: SHELL OIL PRODUCTS US

Owner/operator address: Not reported

Not reported

Owner/operator country: US

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 08/01/1998

Owner/Op end date: Not reported

Owner/operator name: EQUILON ENTERPRISES LLC DBA SHELL OIL PR

Owner/operator address: PO BOX 2648

HOUSTON, TX 77252

Owner/operator country: US

Owner/operator telephone: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 08/01/1998

Owner/Op end date: Not reported

Owner/operator name: EQUILON ENTERPRISES L L C

Owner/operator address: P O BOX 2648

HOUSTON, TX 77252

Owner/operator country: Not reported

Owner/operator telephone: (713) 241-5036

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SHELL SERVICE STATION (Continued)

1000820352

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/26/2004
Site name: SHELL SERVICE STATION
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 09/13/2001
Site name: SHELL SERVICE STATION
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110002895984

Environmental Interest/Information System

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

HAZARDOUS WASTE BIENNIAL REPORTER

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

G29 North 1/8-1/4 0.234 mi. 1238 ft.	R & M PACIFIC ORO INC 1600 JAMBOREE RD NEWPORT BEACH, CA 92660 Site 6 of 7 in cluster G	CA UST	U004200593 N/A
---	---	---------------	--------------------------

Relative: ORANGE CO. UST:
 Lower Facility ID: FA0050043

Actual:
 114 ft.

G30 North 1/8-1/4 0.234 mi. 1238 ft.	1600 JAMBOREE RD NEWPORT BEACH, CA 92660 Site 7 of 7 in cluster G	EDR US Hist Auto Stat	1015252308 N/A
---	--	------------------------------	--------------------------

Relative: EDR Historical Auto Stations:
 Lower Name: TEXACO SERVICE STN DLRS NEWPORT BEACH
 Year: 1999

Actual: Address: 1600 JAMBOREE RD

Name: SHELL SERVICE STATION
 Year: 2002
 Address: 1600 JAMBOREE RD

Name: SHELL SERVICE STATION
 Year: 2003
 Address: 1600 JAMBOREE RD

31 South 1/8-1/4 0.248 mi. 1309 ft.	ASPHALTO WASTE WATER SUMP NO. 840 NEWPORT CENTER DRIVE, SUIT NEWPORT BEACH, CA 92660	CA HIST UST CA WMUDS/SWAT	U001577428 N/A
--	---	--	--------------------------

Relative: HIST UST:
 Lower Region: STATE
 Facility ID: 00000053922
 Facility Type: Other
 Other Type: OIL & GAS PRODUCTION
 Contact Name: L. DRISKILL
 Telephone: 8055895704
 Owner Name: BOB FERGUSON INDEPENDENT
 Owner Address: 840 NEWPORT CENTER DRIVE, SUIT
 Owner City,St,Zip: NEWPORT BEACH, CA 92660
 Total Tanks: 0019

Tank Num: 001
 Container Num: 3
 Year Installed: Not reported
 Tank Capacity: 00561000
 Tank Used for: WASTE
 Type of Fuel: Not reported
 Container Construction Thickness: Not reported
 Leak Detection: Visual, None

Tank Num: 002
 Container Num: 4
 Year Installed: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

Tank Capacity: 06732000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, None

Tank Num: 003
Container Num: 5
Year Installed: Not reported
Tank Capacity: 00079800
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, None

Tank Num: 004
Container Num: 6
Year Installed: Not reported
Tank Capacity: 02244000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, None

Tank Num: 005
Container Num: 11X
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 006
Container Num: 12
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 007
Container Num: 21
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 008
Container Num: 22
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 009
Container Num: 13
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 010
Container Num: 14X
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 011
Container Num: 24
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 012
Container Num: 55
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 013
Container Num: 55X
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 014
Container Num: 65
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

Tank Num: 015
Container Num: 65X
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 016
Container Num: 75
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 017
Container Num: 86
Year Installed: Not reported
Tank Capacity: 00001345
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 2
Leak Detection: Visual, None

Tank Num: 018
Container Num: 1
Year Installed: Not reported
Tank Capacity: 01496000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, None

Tank Num: 019
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00280000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, None

WMUDS/SWAT:

Edit Date: Not reported
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Primary Waste: DRIBRI
Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G.,

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

inorganic salts and heavy metals) are included in this category.

Secondary Waste: Not reported
 Secondary Waste Type: Not reported
 Base Meridian: Not reported
 NPID: Not reported
 Tonnage: 0
 Regional Board ID: Not reported
 Municipal Solid Waste: False
 Superorder: False
 Open To Public: False
 Waste List: False
 Agency Type: Private
 Agency Name: OCCIDENTAL OF ELK HILLS, INC
 Agency Department: Not reported
 Agency Address: PO BOX 1001
 Agency City,St,Zip: TUPMAN CA 932761001
 Agency Contact: DENNIS L NEWMAN
 Agency Telephone: 8057636063
 Land Owner Name: Not reported
 Land Owner Address: Not reported
 Land Owner City,St,Zip: Not reported
 Land Owner Contact: Not reported
 Land Owner Phone: Not reported
 Region: 5F
 Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.

Facility Description: Not reported
 Facility Telephone: Not reported
 SWAT Facility Name: Not reported
 Primary SIC: 1311
 Secondary SIC: Not reported
 Comments: Not reported
 Last Facility Editors: Not reported
 Waste Discharge System: True
 Solid Waste Assessment Test Program: False
 Toxic Pits Cleanup Act Program: False
 Resource Conservation Recovery Act: False
 Department of Defence: False
 Solid Waste Assessment Test Program: Not reported
 Threat to Water Quality: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Sub Chapter 15: True
 Regional Board Project Officer: SWG
 Number of WMUDS at Facility: 1
 Section Range: Not reported
 RCRA Facility: No
 Waste Discharge Requirements: A
 Self-Monitoring Rept. Frequency: No Reporting Requirements
 Waste Discharge System ID: 5D152001001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

Solid Waste Information ID: Not reported

Edit Date: Not reported

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Primary Waste: DRIBRI

Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.

Secondary Waste: Not reported

Secondary Waste Type: Not reported

Base Meridian: Not reported

NPID: Not reported

Tonnage: 0

Regional Board ID: Not reported

Municipal Solid Waste: False

Superorder: False

Open To Public: False

Waste List: False

Agency Type: Private

Agency Name: CATHER-HERLEY OIL COMPANY

Agency Department: Not reported

Agency Address: PO BOX 7397

Agency City,St,Zip: LONG BEACH CA 908070397

Agency Contact: C E CATHER

Agency Telephone: 3104241069

Land Owner Name: Not reported

Land Owner Address: Not reported

Land Owner City,St,Zip: Not reported

Land Owner Contact: Not reported

Land Owner Phone: Not reported

Region: 5F

Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.

Facility Description: Not reported

Facility Telephone: Not reported

SWAT Facility Name: Not reported

Primary SIC: 1311

Secondary SIC: Not reported

Comments: Not reported

Last Facility Editors: Not reported

Waste Discharge System: True

Solid Waste Assessment Test Program: False

Toxic Pits Cleanup Act Program: False

Resource Conservation Recovery Act: False

Department of Defence: False

Solid Waste Assessment Test Program: Not reported

Threat to Water Quality: Minor Threat to Water Quality. A violation of a regional board order

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Sub Chapter 15: True
Regional Board Project Officer: RLD
Number of WMUDS at Facility: 1
Section Range: Not reported
RCRA Facility: No
Waste Discharge Requirements: A
Self-Monitoring Rept. Frequency: No Reporting Requirements
Waste Discharge System ID: 5D153091002
Solid Waste Information ID: Not reported

Edit Date: Not reported
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Primary Waste: DRIBRI
Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.

Secondary Waste: Not reported
Secondary Waste Type: Not reported
Base Meridian: Not reported
NPID: Not reported
Tonnage: 0
Regional Board ID: Not reported
Municipal Solid Waste: False
Superorder: False
Open To Public: False
Waste List: False
Agency Type: Private
Agency Name: FERGUSON, BOB
Agency Department: Not reported
Agency Address: 23072 LAKE CENTER DR, STE 205
Agency City,St,Zip: EL TORO CA 92630
Agency Contact: BOB FURGUSON
Agency Telephone: 7144581061
Land Owner Name: Not reported
Land Owner Address: Not reported
Land Owner City,St,Zip: Not reported
Land Owner Contact: Not reported
Land Owner Phone: Not reported
Region: 5F

Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Description: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

ASPHALTO WASTE WATER SUMP NO. (Continued)

U001577428

Facility Telephone:	Not reported
SWAT Facility Name:	Not reported
Primary SIC:	1311
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	True
Solid Waste Assessment Test Program:	False
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	Not reported
Threat to Water Quality:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Sub Chapter 15:	True
Regional Board Project Officer:	RLD
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	No
Waste Discharge Requirements:	A
Self-Monitoring Rept. Frequency:	No Reporting Requirements
Waste Discharge System ID:	5D153093001
Solid Waste Information ID:	Not reported

H32
North
1/4-1/2
0.392 mi.
2072 ft.

BIG CANYON COUNTRY CLUB
1850 JAMBOREE RD
NEWPORT BEACH, CA 92660
Site 1 of 2 in cluster H

CA HIST CORTESE **1000106106**
CA FID UST **N/A**

Relative:
Lower

HIST CORTESE:
 Region: **CORTESE**
 Facility County Code: **30**
 Reg By: **LTNKA**
 Reg Id: **083000064T**

Actual:
73 ft.

CA FID UST:
 Facility ID: **30000419**
 Regulated By: **UTNKA**
 Regulated ID: **Not reported**
 Cortese Code: **Not reported**
 SIC Code: **Not reported**
 Facility Phone: **7146445404**
 Mail To: **Not reported**
 Mailing Address: **1 BIG CANYON DR**
 Mailing Address 2: **Not reported**
 Mailing City,St,Zip: **NEWPORT BEACH 92660**
 Contact: **Not reported**
 Contact Phone: **Not reported**
 DUNs Number: **Not reported**
 NPDES Number: **Not reported**
 EPA ID: **Not reported**
 Comments: **Not reported**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIG CANYON COUNTRY CLUB (Continued)

1000106106

Status: Active

H33
North
1/4-1/2
0.392 mi.
2072 ft.

BIG CANYON COUNTRY CLUB
1850 JAMBOREE RD
NEWPORT BEACH, CA 92660

CA LUST U003783915
CA UST N/A
CA SWEEPS UST

Site 2 of 2 in cluster H

Relative:
Lower

LUST:

Actual:
73 ft.

Region: STATE
Global Id: T0605900051
Latitude: 33.628436
Longitude: -117.8767259
Case Type: Not reported
Status: Completed - Case Closed
Status Date: 05/15/2001
Lead Agency: Not reported
Case Worker: DB
Local Agency: Not reported
RB Case Number: 083000064T
LOC Case Number: Not reported
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0605900051
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605900051
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Status History:

Global Id: T0605900051
Status: Completed - Case Closed
Status Date: 05/15/2001

Global Id: T0605900051
Status: Open - Case Begin Date
Status Date: 03/18/1986

Regulatory Activities:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIG CANYON COUNTRY CLUB (Continued)

U003783915

Global Id:	T0605900051
Action Type:	Other
Date:	03/18/1986
Action:	Leak Reported
Global Id:	T0605900051
Action Type:	ENFORCEMENT
Date:	05/15/2001
Action:	Closure/No Further Action Letter
Global Id:	T0605900051
Action Type:	Other
Date:	03/18/1986
Action:	Leak Discovery
Global Id:	T0605900051
Action Type:	REMEDIATION
Date:	09/06/1994
Action:	Excavation
Global Id:	T0605900051
Action Type:	REMEDIATION
Date:	09/06/1994
Action:	Excavation
Global Id:	T0605900051
Action Type:	REMEDIATION
Date:	09/06/1994
Action:	Pump & Treat (P&T) Groundwater

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	86UT021
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	05/15/2001
Case Type:	Other Ground Water
Record ID:	RO0001218

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000064T
Local Case Num:	86UT021
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIG CANYON COUNTRY CLUB (Continued)

U003783915

Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900051
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/18/1986
Enforcement Date:	Not reported
Close Date:	5/15/2001
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6284754
Longitude:	-117.87672
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	JK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

UST:

Facility ID:	6910
Permitting Agency:	ORANGE COUNTY
Latitude:	33.62734
Longitude:	-117.87741

SWEEPS UST:

Status:	Active
Comp Number:	6910
Number:	9
Board Of Equalization:	44-016545
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

BIG CANYON COUNTRY CLUB (Continued)

U003783915

Owner Tank Id: Not reported
 SWRCB Tank Id: 30-000-006910-000001
 Tank Status: A
 Capacity: 500
 Active Date: Not reported
 Tank Use: M.V. FUEL
 STG: P
 Content: DIESEL
 Number Of Tanks: 3

Status: Active
 Comp Number: 6910
 Number: 9
 Board Of Equalization: 44-016545
 Referral Date: 09-30-92
 Action Date: 09-15-92
 Created Date: 02-29-88
 Owner Tank Id: Not reported
 SWRCB Tank Id: 30-000-006910-000002
 Tank Status: A
 Capacity: 1000
 Active Date: Not reported
 Tank Use: M.V. FUEL
 STG: P
 Content: REG UNLEADED
 Number Of Tanks: Not reported

Status: Active
 Comp Number: 6910
 Number: 9
 Board Of Equalization: 44-016545
 Referral Date: 09-30-92
 Action Date: 09-15-92
 Created Date: 02-29-88
 Owner Tank Id: Not reported
 SWRCB Tank Id: 30-000-006910-000003
 Tank Status: A
 Capacity: 1000
 Active Date: Not reported
 Tank Use: M.V. FUEL
 STG: P
 Content: REG UNLEADED
 Number Of Tanks: Not reported

34
SE
 1/4-1/2
 0.481 mi.
 2540 ft.

NEWPORT CENTER CLEANERS
521 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660

RCRA NonGen / NLR **1000348926**
FINDS **CAD982051161**
CA SLIC
CA Orange Co. Industrial Site
CA DRYCLEANERS
CA HAZNET

Relative:
Higher

RCRA NonGen / NLR:
 Date form received by agency: 11/16/1993
 Facility name: NEWPORT CENTER CLEANERS
 Facility address: 521 NEWPORT CENTER DR
 NEWPORT BEACH, CA 92660
 EPA ID: CAD982051161
 Mailing address: 529 NEWPORT CENTER DR

Actual:
255 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT CENTER CLEANERS (Continued)

1000348926

Contact: NEWPORT BEACH, CA 92660
Contact address: HARUTYUN TOKATLIAN
529 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660
Contact country: US
Contact telephone: 949-644-2512
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: HARRY TOKATLI
Owner/operator address: 521 NEWPORT CENTER DR
NEWPORT BEACH, CA 92660
Owner/operator country: Not reported
Owner/operator telephone: (714) 644-2512
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002789288

Environmental Interest/Information System

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

SLIC:

Region: STATE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT CENTER CLEANERS (Continued)

1000348926

Facility Status: Completed - Case Closed
Status Date: 06/13/1997
Global Id: SLT8R0803963
Lead Agency: ORANGE COUNTY
Lead Agency Case Number: 97IC025
Latitude: 33.615445
Longitude: -117.871368
Case Type: Cleanup Program Site
Case Worker: LL
Local Agency: ORANGE COUNTY
RB Case Number: Not reported
File Location: Local Agency
Potential Media Affected: Not reported
Potential Contaminants of Concern: Tetrachloroethylene (PCE)
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

SLIC REG 8:

Type: Soil
Facility Status: 3
Staff: WDM
Substance: PCE
Lead Agency: Local Agency
Location Code: NB-5
Thomas Bros Code: 889-F7

Orange Co. Industrial Site:

Case ID: 97IC025
Region: ORANGE
Record ID: RO0000594
Current Status: CLOSED 6/13/1997
Closure Type: Closure certification issued
Released Chemical: PERCHLOROETHYLENE

DRYCLEANERS:

EPA Id: CAD982051161
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial
Create Date: 06/17/1988
Facility Active: No
Inactive Date: 06/30/2006
Facility Addr2: Not reported
Owner Name: TALAR N TAMAR CORP.
Owner Address: 529 NEWPORT CENTER DR
Owner Address 2: Not reported
Owner Telephone: 9496442512
Contact Name: HARRY TOKATLIAN OWNER
Contact Address: 529 NEWPORT CENTER DR
Contact Address 2: Not reported
Contact Telephone: 9496442512
Mailing Name: Not reported
Mailing Address 1: 529 NEWPORT CENTER DR
Mailing Address 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NEWPORT CENTER CLEANERS (Continued)

1000348926

Mailing City: NEWPORT BEACH
Mailing State: CA
Mailing Zip: 926600000
Owner Fax: Not reported
Region Code: Not reported

HAZNET:

envid: 1000348926
Year: 2005
GEPaid: CAD982051161
Contact: HARRY TOKATLIAN OWNER
Telephone: 9496442512
Mailing Name: Not reported
Mailing Address: 529 NEWPORT CENTER DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Not reported
Tons: Not reported
Facility County: Orange

envid: 1000348926
Year: 2005
GEPaid: CAD982051161
Contact: HARRY TOKATLIAN OWNER
Telephone: 9496442512
Mailing Name: Not reported
Mailing Address: 529 NEWPORT CENTER DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Not reported
Tons: Not reported
Facility County: Orange

envid: 1000348926
Year: 2005
GEPaid: CAD982051161
Contact: HARRY TOKATLIAN OWNER
Telephone: 9496442512
Mailing Name: Not reported
Mailing Address: 529 NEWPORT CENTER DR
Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: Not reported
Tons: 0.22
Facility County: Orange

envid: 1000348926

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NEWPORT CENTER CLEANERS (Continued)

1000348926

Year: 2004
 GEPAID: CAD982051161
 Contact: HARRY TOKATLIAN OWNER
 Telephone: 9496442512
 Mailing Name: Not reported
 Mailing Address: 529 NEWPORT CENTER DR
 Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
 Gen County: Not reported
 TSD EPA ID: CAD008302903
 TSD County: Not reported
 Waste Category: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
 Disposal Method: Recycler
 Tons: 0.12
 Facility County: Orange

envid: 1000348926
 Year: 2004
 GEPAID: CAD982051161
 Contact: HARRY TOKATLIAN OWNER
 Telephone: 9496442512
 Mailing Name: Not reported
 Mailing Address: 529 NEWPORT CENTER DR
 Mailing City,St,Zip: NEWPORT BEACH, CA 926600000
 Gen County: Not reported
 TSD EPA ID: NVR000076158
 TSD County: Not reported
 Waste Category: Aqueous solution with total organic residues less than 10 percent
 Disposal Method: Not reported
 Tons: Not reported
 Facility County: Orange

[Click this hyperlink](#) while viewing on your computer to access 23 additional CA_HAZNET: record(s) in the EDR Site Report.

I35
NNE
1/2-1
0.961 mi.
5076 ft.

FORD AEROSPC CORP AERONUTRONIC
1000 FORD RD
NEWPORT BEACH, CA 92658
Site 1 of 2 in cluster I

RCRA-TSDF 1000474495
CERC-NFRAP CAD041330077
CORRACTS
RCRA-SQG
PADS
NY MANIFEST
2020 COR ACTION
US FIN ASSUR

Relative:
Higher

Actual:
211 ft.

RCRA-TSDF:
 Date form received by agency: 09/01/1996
 Facility name: FORD MOTOR CO
 Facility address: 1000 FORD RD
 NEWPORT BEACH, CA 926588900
 EPA ID: CAD041330077
 Contact: Not reported
 Contact address: Not reported
 Not reported
 Contact country: US
 Contact telephone: Not reported
 Contact email: Not reported
 EPA Region: 09
 Land type: Private

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste

Owner/Operator Summary:

Owner/operator name: FORD AEROSPACE & COMMUNICATIONS CORP
Owner/operator address: 300 RENAISSANCE CENTER
CITY NOT REPORTED, MI 99999
Owner/operator country: Not reported
Owner/operator telephone: (313) 568-7660
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: FORD MOTOR CO
Owner/operator address: 15201 CENTURY DR STE 608
DEARBORN, MI 48120
Owner/operator country: Not reported
Owner/operator telephone: (313) 594-3061
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 09/01/1996
Site name: FORD MOTOR CO
Classification: Small Quantity Generator

Date form received by agency: 04/07/1994
Site name: FORD MOTOR CO
Classification: Not a generator, verified

Date form received by agency: 03/30/1994
Site name: LORAL AERONUTRONIC
Classification: Large Quantity Generator

Date form received by agency: 02/29/1992

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Site name: LORAL AERONUTRONIC
Classification: Large Quantity Generator

Date form received by agency: 04/02/1990

Site name: FORD AEROSPACE CORPORATION
Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 01/25/1991
Event: CA029WQ

Event date: 01/25/1991
Event: CA074HI

Event date: 01/25/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 01/25/1991
Event: RFA Completed, Assessment was a PA-Plus.

Event date: 01/25/1991
Event: CA049PA

Event date: 10/31/1991
Event: CA036WQ

Event date: 01/01/1992
Event: RFI Imposition

Event date: 02/17/1992
Event: RFI Workplan Approved

Event date: 01/01/1994
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 10/14/1994
Event: CA Prioritization, Facility or area was assigned a low corrective action priority.

Event date: 10/14/1994
Event: Stabilization Measures Evaluation, This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.

Event date: 04/01/1995
Event: RFI Approved

Event date: 02/01/1996
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Event date: 12/01/1996
Event: Stabilization Construction Completed

Event date: 12/03/1997
Event: CA Responsibility Referred To A Non-RCRA Federal Authority

Event date: 12/03/1997
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 12/03/1997
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 03/09/2001
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 03/09/2001
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 03/09/2001
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 03/09/2001
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Facility Has Received Notices of Violations:

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 06/04/1993
Date achieved compliance: 03/28/1994
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 02/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 2400

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Final penalty amount: 600
Paid penalty amount: 600

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 06/04/1993
Date achieved compliance: 03/28/1994
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 02/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 2400
Final penalty amount: 600
Paid penalty amount: 600

Regulation violated: FR - 268 ALL
Area of violation: LDR - General
Date violation determined: 04/04/1992
Date achieved compliance: 07/21/1992
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/24/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 2000
Final penalty amount: 2000
Paid penalty amount: 2000

Regulation violated: FR - 264.70-77.E
Area of violation: TSD - General
Date violation determined: 04/04/1992
Date achieved compliance: 07/21/1992
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/24/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 2000
Final penalty amount: 2000
Paid penalty amount: 2000

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 04/04/1992
Date achieved compliance: 07/21/1992
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/24/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 2000
Final penalty amount: 2000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Paid penalty amount: 2000

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 10/31/1991
Date achieved compliance: 02/19/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 10/31/1991
Date achieved compliance: 02/19/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 10/31/1991
Date achieved compliance: 02/19/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 10/31/1991
Date achieved compliance: 02/19/1992
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 10/03/1991
Date achieved compliance: 01/17/1992
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 10/03/1991
Date achieved compliance: 01/17/1992
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 10/03/1991
Date achieved compliance: 01/17/1992
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 10/03/1991
Date achieved compliance: 01/17/1992
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 268.7

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Area of violation: LDR - General
Date violation determined: 02/10/1989
Date achieved compliance: 12/07/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/26/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 10000
Final penalty amount: 10000
Paid penalty amount: 10000

Regulation violated: F - 268 ALL
Area of violation: LDR - General
Date violation determined: 02/10/1989
Date achieved compliance: 12/07/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/26/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 10000
Final penalty amount: 10000
Paid penalty amount: 10000

Regulation violated: F - 262.50-60
Area of violation: Generators - General
Date violation determined: 02/10/1989
Date achieved compliance: 12/07/1989
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/26/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 10000
Final penalty amount: 10000
Paid penalty amount: 10000

Regulation violated: F - 268 ALL
Area of violation: LDR - General
Date violation determined: 12/01/1987
Date achieved compliance: 12/07/1989
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 268.7
Area of violation: LDR - General

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Date violation determined: 12/01/1987
Date achieved compliance: 12/07/1989
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 10/07/1987
Date achieved compliance: 11/24/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/07/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 10/07/1987
Date achieved compliance: 11/24/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/23/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 10/07/1987
Date achieved compliance: 11/24/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/07/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 10/07/1987

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Date achieved compliance: 11/24/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/23/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/26/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/21/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/28/1994
Evaluation lead agency: State

Evaluation date: 04/21/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 03/28/1994
Evaluation lead agency: State

Evaluation date: 02/19/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 07/21/1992
Evaluation lead agency: State

Evaluation date: 02/19/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 07/21/1992
Evaluation lead agency: State

Evaluation date: 09/26/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 01/17/1992
Evaluation lead agency: EPA

Evaluation date: 09/26/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/17/1992
Evaluation lead agency: EPA

Evaluation date: 09/26/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Date achieved compliance: 02/19/1992
Evaluation lead agency: EPA

Evaluation date: 09/26/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/19/1992
Evaluation lead agency: EPA

Evaluation date: 02/10/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/07/1989
Evaluation lead agency: State

Evaluation date: 02/10/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 12/07/1989
Evaluation lead agency: State

Evaluation date: 02/08/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/01/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 12/07/1989
Evaluation lead agency: State

Evaluation date: 11/30/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/07/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/24/1987
Evaluation lead agency: State

CERC-NFRAP:

Site ID: 0903396
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13289166.00000
Person ID: 13003854.00000

Contact Sequence ID: 13294761.00000
Person ID: 13003858.00000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Contact Sequence ID: 13300619.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: FORD AEROSPACE & COMM AERONAUTICS
Alias Address: Not reported
CA

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: / /
Date Completed: 08/02/90
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 06/08/92
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 06/08/92
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 02/25/91
Priority Level: Deferred to RCRA (Subtitle C)

CORRACTS:

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19950401
Action: CA200 - RFI Approved
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19961201
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19960201
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment

NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19920101
Action: CA100 - RFI Imposition

NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19940101
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment

NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19971203
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination

NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19971203
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19971203
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20010309
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20010309
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing
Original schedule date: 20010309
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Area Name: ENTIRE FACILITY
Actual Date: 20010309
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: 20010309
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20010309
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19941014
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19941014
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19920217
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910125
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910125
Action: CA049PA
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910125
Action: CA050PA - RFA Completed, Assessment was a PA-Plus
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910125
Action: CA074HI
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910125
Action: CA029WQ
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD041330077
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19911031
Action: CA036WQ
NAICS Code(s): 332995 334413 334419 336414
Other Ordnance and Accessories Manufacturing
Semiconductor and Related Device Manufacturing
Other Electronic Component Manufacturing
Guided Missile and Space Vehicle Manufacturing

Original schedule date: Not reported
Schedule end date: Not reported

PADS:

EPAID: CAD041330077
Facility name: FORD AEROSPC CORP AERONUTRONIC
Facility Address: 1000 FORD RD
NEWPORT BEACH, CA 92658-8900
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: FORD AEROSPACE CORP
Contact title: Not reported
Contact name: SWENINGSSEN W B
Contact tel: (714)720-5887
Contact extension: Not reported
Mailing address: 1000 FORD RD
NEWPORT BEACH, CA 92658-8900

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

Mailing country: US
Cert. title: Not reported
Cert. name: Not reported
Cert. date: 04/04/1990
Date received: 05/17/1990

NY MANIFEST:

EPA ID: CAD041330077
Country: USA
Location Address 1: FORD ROAD
Location Address 2: Not reported
Location City: NEWPORT BEACH
Location State: CA
Location Zip Code: 92660
Location Zip Code 4: Not reported

Mailing Info:

Name: FORD AEROPSACE & COMMUNICATION CORP
Contact: FORD AEROPSACE & COMMUNICATION CORP
Address: FORD ROAD
City/State/Zip: NEWPORTBEACH, CA 92660
Country: USA
Phone: 714-720-6280

Manifest:

Document ID: NYA6107868
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 74492B-NY
Trans2 State ID: Not reported
Generator Ship Date: 03/28/1988
Trans1 Recv Date: 03/28/1988
Trans2 Recv Date: / /
TSD Site Recv Date: 04/08/1988
Part A Recv Date: 05/17/1988
Part B Recv Date: 04/18/1988
Generator EPA ID: CAD041330077
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: Not reported
TSDf ID: NYD000632372
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 00195
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 1988

Document ID: NYA5440932
Manifest Status: Completed copy
Trans1 State ID: 703837
Trans2 State ID: Not reported
Generator Ship Date: 04/28/1987
Trans1 Recv Date: 04/28/1987
Trans2 Recv Date: / /

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORD AEROSPC CORP AERONUTRONIC (Continued)

1000474495

TSD Site Recv Date: 05/11/1987
Part A Recv Date: 05/07/1987
Part B Recv Date: 05/15/1987
Generator EPA ID: CAD041330077
Trans1 EPA ID: CAD981465503
Trans2 EPA ID: Not reported
TSD ID: NYD000632372
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 03500
Units: P - Pounds
Number of Containers: 014
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00250
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00500
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00500
Units: P - Pounds
Number of Containers: 005
Container Type: CW - Wooden boxes
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 1987

2020 COR ACTION:

EPA ID: CAD041330077
Region: 9
Action: Not reported

US FIN ASSUR:

EPA ID: CAD041330077
Provider: DEUTSCHE BANK
EPA region: 9
County: ORANGE
Mechanism type: LETTER OF CREDIT
Mechanism ID: LOC ***0492
Cost estimate: 500000
Face value: 500000
Effective date: 8/5/2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

36
South
1/2-1
0.975 mi.
5150 ft.

MR. BEST CLEANERS
2039 EAST COAST HIGHWAY
CORONA DEL MAR, CA 92660

CA VCP S117534664
CA ENVIROSTOR N/A

Relative:
Lower

VCP:

Actual:
101 ft.

Facility ID: 60002126
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 0.5
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Joseph Cully
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Site Code: 401712
Assembly: 74
Senate: 37
Special Programs Code: Not reported
Status: Active
Status Date: 12/02/2014
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 33.60709 / -117.8781
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 401712
Alias Type: Project Code (Site Code)
Alias Name: 60002126
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/18/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 02/20/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/18/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MR. BEST CLEANERS (Continued)

S117534664

Completed Date: 03/18/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/18/2015
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:

Facility ID: 60002126
Status: Active
Status Date: 12/02/2014
Site Code: 401712
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Joseph Cully
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 74
Senate: 37
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 33.60709
Longitude: -117.8781
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 401712
Alias Type: Project Code (Site Code)
Alias Name: 60002126
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/18/2015
Comments: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MR. BEST CLEANERS (Continued)

S117534664

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Application
 Completed Date: 02/20/2015
 Comments: Not reported

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Technical Report
 Completed Date: 03/18/2015
 Comments: Not reported

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Technical Workplan
 Completed Date: 03/18/2015
 Comments: Not reported

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Technical Report
 Completed Date: 03/18/2015
 Comments: Not reported

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

I37
NNE
1/2-1
0.994 mi.
5248 ft.

LORAL AEROSPACE CORPORATION
1000 FORD RD
NEWPORT BEACH, CA 00000
Site 2 of 2 in cluster I

CA SLIC S100619625
CA EMI N/A
CA ENVIROSTOR
CA HWP

Relative:
Higher

SLIC:

Region: STATE
Facility Status: Open - Verification Monitoring
 Status Date: 02/24/2011
 Global Id: SL188023848
 Lead Agency: SANTA ANA RWQCB (REGION 8)
 Lead Agency Case Number: Not reported
 Latitude: 33.631157
 Longitude: -117.873434
 Case Type: Cleanup Program Site
 Case Worker: AK
 Local Agency: Not reported
 RB Case Number: SL188023848
 File Location: Regional Board
 Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
 Potential Contaminants of Concern: Not reported
 Site History: Not reported

Actual:
212 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

[Click here to access the California GeoTracker records for this facility:](#)

EMI:

Year: 1987
County Code: 30
Air Basin: SC
Facility ID: 942
Air District Name: SC
SIC Code: 3761
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 94
Reactive Organic Gases Tons/Yr: 23
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1990
County Code: 30
Air Basin: SC
Facility ID: 942
Air District Name: SC
SIC Code: 3761
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 35
Reactive Organic Gases Tons/Yr: 6
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 4
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1995
County Code: 30
Air Basin: SC
Facility ID: 83482
Air District Name: SC
SIC Code: 3761
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 19
Reactive Organic Gases Tons/Yr: 4
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 3
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

ENVIROSTOR:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

Facility ID: 80001367
Status: Refer: RWQCB
Status Date: 01/01/2008
Site Code: Not reported
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 0
NPL: NO
Regulatory Agencies: RWQCB
Lead Agency: WQC
Program Manager: Not reported
Supervisor: * Unknown
Division Branch: Cleanup Cypress
Assembly: 74
Senate: 37
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.62970
Longitude: -117.8698
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: FORD AEROSPACE & COMMUNICATIONS
Alias Type: Alternate Name
Alias Name: CAD041330077
Alias Type: EPA Identification Number
Alias Name: 30370015
Alias Type: Envirostor ID Number
Alias Name: 80001367
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 01/01/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 02/01/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RFI Workplan
Completed Date: 02/17/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Implementation Report
Completed Date: 12/01/1996

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RFI Report
Completed Date: 04/01/1995
Comments: RFI APPROVAL IS FOR SOILS ONLY. GW INVESTIGATION STILL UNDERWAY.
RSARACINO 19971203.17:02E

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 01/25/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Exposure Controlled
Completed Date: 03/09/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 03/09/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Workplan
Completed Date: 01/01/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 01/25/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Questionnaire
Completed Date: 10/14/1994
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Remedy Constructed
Schedule Due Date: 06/30/2015
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Groundwater Migration Controlled

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

Schedule Due Date: 06/30/2015
Schedule Revised Date: Not reported

Facility ID: 30370015
Status: Refer: RCRA
Status Date: 08/28/1995
Site Code: 400286
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Cypress
Assembly: Not reported
Senate: Not reported
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 0
Longitude: 0
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED

Alias Name: AERO-THERMACHEMICAL LAB
Alias Type: Alternate Name
Alias Name: LORAL AEROSPACE AERONUTRONIC
Alias Type: Alternate Name
Alias Name: LORAL AEROSPACE CORPORATION
Alias Type: Alternate Name
Alias Name: CAD041330077
Alias Type: EPA Identification Number
Alias Name: 400286
Alias Type: Project Code (Site Code)
Alias Name: 30370015
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/01/1981
Comments: FACILITY IDENTIFIED ID'D FROM PHONE BOOK

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

HWP:

EPA Id: CAD041330077
Cleanup Status: CLOSED
Latitude: 33.62970
Longitude: -117.8698
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Team: Not reported
Supervisor: Not reported
Site Code: Not reported
Assembly District: 74
Senate District: 37
Public Information Officer: Not reported

Activities:

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - FINAL PERMIT (EXPIRES)
Actual Date: 09/30/1988

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: Not reported
Event Description: Renewal - Historical - FINAL PERMIT RENEWAL - WITHDRAWAL REQUEST ACKNOWLEDGED
Actual Date: 08/13/1992

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - FINAL PERMIT (EFFECTIVE)
Actual Date: 09/30/1983

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - CALL-IN LETTER ISSUED
Actual Date: 03/03/1983

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: Not reported
Event Description: Renewal - Historical - FINAL PERMIT RENEWAL - WITHDRAWAL REQUEST RECEIVED
Actual Date: 10/05/1988

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - TECHNICAL COMPLETE LETTER
Actual Date: 08/30/1983

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - FINAL PERMIT
Actual Date: 09/30/1983

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LORAL AEROSPACE CORPORATION (Continued)

S100619625

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: Not reported
Event Description: Renewal - Historical - CALL-IN LETTER ISSUED
Actual Date: 09/22/1988

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/19/1980

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - APPLICATION PART B RECEIVED
Actual Date: 04/22/1983

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: New Operating Permit - PUBLIC COMMENT (BEGIN)
Actual Date: 07/25/1983

Closure:
EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: Closure Final - CLOSURE PLAN REQUESTED
Actual Date: 08/13/1993

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 02/01/1995

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, CONTAIN2
Event Description: Closure Final - CLOSURE PLAN APPROVED
Actual Date: 08/13/1993

Alias:
EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Alias Type: Alternate Name
Alias: FORD AEROSPACE & COMMUNICATIONS

EPA Id: CAD041330077
Facility Type: Historical - Non-Operating
Alias Type: Envirostor ID Number
Alias: 30370015

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

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

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

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

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

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

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

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

Date of Government Version: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Quarterly

Federal CERCLIS list

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

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

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 07/10/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

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

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

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

Date of Government Version: 03/16/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/17/2015	Telephone: 703-603-0695
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 06/01/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/14/2015
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

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

Date of Government Version: 03/16/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/17/2015	Telephone: 703-603-0695
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 06/01/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/14/2015
	Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

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

Date of Government Version: 03/30/2015	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 03/31/2015	Telephone: 202-267-2180
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 06/26/2015
Number of Days to Update: 63	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

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

Date of Government Version: 05/04/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/05/2015	Telephone: 916-323-3400
Date Made Active in Reports: 05/14/2015	Last EDR Contact: 08/04/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENVIROSTOR: EnviroStor Database

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

Date of Government Version: 05/04/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/05/2015	Telephone: 916-323-3400
Date Made Active in Reports: 05/14/2015	Last EDR Contact: 08/04/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

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

Date of Government Version: 05/18/2015	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 05/20/2015	Telephone: 916-341-6320
Date Made Active in Reports: 06/05/2015	Last EDR Contact: 05/20/2015
Number of Days to Update: 16	Next Scheduled EDR Contact: 08/31/2015
	Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

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

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

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

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

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

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

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

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

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

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

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

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/30/2015	Source: EPA, Region 5
Date Data Arrived at EDR: 05/29/2015	Telephone: 312-886-7439
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 24	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

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

Date of Government Version: 02/03/2015	Source: EPA Region 10
Date Data Arrived at EDR: 02/12/2015	Telephone: 206-553-2857
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/15/2015	Source: SWRCB
Date Data Arrived at EDR: 06/17/2015	Telephone: 916-341-5851
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 19	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-327-5092
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 07/13/2015
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/03/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 04/30/2015	Telephone: 617-918-1313
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 53	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014	Source: EPA Region 4
Date Data Arrived at EDR: 03/03/2015	Telephone: 404-562-9424
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/30/2015	Source: EPA Region 5
Date Data Arrived at EDR: 05/26/2015	Telephone: 312-886-6136
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 03/17/2015	Source: EPA Region 6
Date Data Arrived at EDR: 05/01/2015	Telephone: 214-665-7591
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6137
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 02/13/2015	Telephone: 415-972-3368
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/06/2015	Source: EPA Region 10
Date Data Arrived at EDR: 05/19/2015	Telephone: 206-553-2857
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 07/10/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: 617-918-1102
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 06/26/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

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

Date of Government Version: 05/04/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/05/2015	Telephone: 916-323-3400
Date Made Active in Reports: 05/14/2015	Last EDR Contact: 08/04/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/08/2015	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/09/2015	Telephone: 916-323-7905
Date Made Active in Reports: 07/10/2015	Last EDR Contact: 06/05/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/23/2015
Date Data Arrived at EDR: 03/24/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/24/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

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

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 47

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/28/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 8

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

WMUDS/SWAT: Waste Management Unit Database

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

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

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

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

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

Date of Government Version: 05/04/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 05/14/2015
Number of Days to Update: 9

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

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

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

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

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

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

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

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

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

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 07/22/2015
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/11/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/16/2015	Telephone: 916-323-3400
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/05/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Varies

DEED: Deed Restriction Listing

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

Date of Government Version: 06/08/2015	Source: DTSC and SWRCB
Date Data Arrived at EDR: 06/09/2015	Telephone: 916-323-3400
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/09/2015
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 03/30/2015	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/31/2015	Telephone: 202-366-4555
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 06/26/2015
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

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

Date of Government Version: 06/15/2015	Source: Office of Emergency Services
Date Data Arrived at EDR: 07/28/2015	Telephone: 916-845-8400
Date Made Active in Reports: 08/03/2015	Last EDR Contact: 07/28/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/15/2015	Source: State Water Quality Control Board
Date Data Arrived at EDR: 06/17/2015	Telephone: 866-480-1028
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/15/2015	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/17/2015	Telephone: 866-480-1028
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2015	Telephone: (415) 495-8895
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 06/26/2015
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 08/04/2015
Number of Days to Update: 42	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Varies

DOD: Department of Defense Sites

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

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

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/08/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

ROD: Records Of Decision

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

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

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

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

US MINES: Mines Master Index File

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

Date of Government Version: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

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

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

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

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

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

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

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

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

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

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/07/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

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

Date of Government Version: 01/18/2015	Source: EPA
Date Data Arrived at EDR: 02/27/2015	Telephone: (415) 947-8000
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 06/10/2015
Number of Days to Update: 26	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

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

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/13/2015	Telephone: 202-564-8600
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

BRS: Biennial Reporting System

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

Date of Government Version: 12/31/2011	Source: EPA/NTIS
Date Data Arrived at EDR: 02/26/2013	Telephone: 800-424-9346
Date Made Active in Reports: 04/19/2013	Last EDR Contact: 05/29/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/18/2015
Date Data Arrived at EDR: 05/20/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/19/2014
Date Data Arrived at EDR: 12/15/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 45

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/19/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 18

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/18/2015
Date Data Arrived at EDR: 02/20/2015
Date Made Active in Reports: 03/12/2015
Number of Days to Update: 20

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

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

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 05/13/2015
Number of Days to Update: 12

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/19/2014
Number of Days to Update: 35

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

EMI: Emissions Inventory Data

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

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 03/25/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 34

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

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

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/26/2014	Telephone: 703-603-8787
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 07/07/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/31/2015
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/07/2015	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 06/10/2015	Telephone: 916-445-4038
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/10/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/15/2015	Source: Department of Conservation
Date Data Arrived at EDR: 06/17/2015	Telephone: 916-322-1080
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board's review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 04/15/2015	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 04/17/2015	Telephone: 559-445-5577
Date Made Active in Reports: 06/23/2015	Last EDR Contact: 07/13/2015
Number of Days to Update: 67	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/14/2015
Number of Days to Update: 339	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/13/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/14/2015	Telephone: 916-440-7145
Date Made Active in Reports: 08/03/2015	Last EDR Contact: 07/14/2015
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/26/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/28/2015	Telephone: 916-323-3400
Date Made Active in Reports: 06/05/2015	Last EDR Contact: 05/28/2015
Number of Days to Update: 8	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014	Source: EPA
Date Data Arrived at EDR: 10/31/2014	Telephone: 202-564-2496
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 06/22/2015
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/16/2014	Source: EPA
Date Data Arrived at EDR: 10/31/2014	Telephone: 202-564-2496
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 06/22/2015
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/22/2015
	Data Release Frequency: Annually

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/10/2015	Telephone: 202-566-1917
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 15	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Quarterly

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/12/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/07/2015	Source: Department of Public Health
Date Data Arrived at EDR: 06/09/2015	Telephone: 916-558-1784
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/09/2015
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 07/13/2015
Number of Days to Update: 76	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/18/2015	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 05/22/2015	Telephone: 916-341-6066
Date Made Active in Reports: 06/05/2015	Last EDR Contact: 05/18/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 08/31/2015
	Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/30/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/01/2015	Telephone: 916-255-3628
Date Made Active in Reports: 05/13/2015	Last EDR Contact: 07/24/2015
Number of Days to Update: 12	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/15/2015	Source: Department of Conservation
Date Data Arrived at EDR: 06/17/2015	Telephone: 916-323-3836
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/21/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/05/2015
Number of Days to Update: 12

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/21/2015
Date Data Arrived at EDR: 07/22/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 12

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/05/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 31

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 11/20/2014
Date Data Arrived at EDR: 11/24/2014
Date Made Active in Reports: 01/07/2015
Number of Days to Update: 44

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 07/15/2015
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 17

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

COLUSA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

Cupa facility list.

Date of Government Version: 06/11/2014
Date Data Arrived at EDR: 06/13/2014
Date Made Active in Reports: 07/07/2014
Number of Days to Update: 24

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List

Cupa Facility list

Date of Government Version: 05/19/2015
Date Data Arrived at EDR: 05/22/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 14

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 7

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2015
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 20

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/06/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/11/2015
Date Data Arrived at EDR: 03/13/2015
Date Made Active in Reports: 03/24/2015
Number of Days to Update: 11

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/27/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 05/13/2015
Number of Days to Update: 15

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015
Date Data Arrived at EDR: 06/18/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 34

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/28/2015
Date Made Active in Reports: 06/15/2015
Number of Days to Update: 18

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

LAKE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

Cupa facility list

Date of Government Version: 05/05/2015
Date Data Arrived at EDR: 05/07/2015
Date Made Active in Reports: 05/20/2015
Number of Days to Update: 13

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 33

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 07/21/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 13

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/21/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2015
Date Data Arrived at EDR: 07/27/2015
Date Made Active in Reports: 08/10/2015
Number of Days to Update: 14

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 40

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/15/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 16

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/27/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/03/2015
Date Data Arrived at EDR: 06/04/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 32

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/15/2015
Number of Days to Update: 17

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014
Date Data Arrived at EDR: 10/22/2014
Date Made Active in Reports: 12/15/2014
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/06/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/22/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 10

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

CUPA Facility List

Date of Government Version: 06/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 33

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/30/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 07/16/2015
Number of Days to Update: 9

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 06/03/2015
Date Data Arrived at EDR: 06/04/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 48

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 05/12/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 24

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 05/12/2015
Date Made Active in Reports: 06/08/2015
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 05/12/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 30

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/11/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/01/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 08/05/2015
Number of Days to Update: 29

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/15/2015
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 17

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/15/2015
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 17

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/07/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 10

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/07/2015
Date Data Arrived at EDR: 07/27/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 7

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/30/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2014
Date Data Arrived at EDR: 11/21/2014
Date Made Active in Reports: 12/29/2014
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 06/15/2010	Telephone: 619-338-2371
Date Made Active in Reports: 07/09/2010	Last EDR Contact: 06/03/2015
Number of Days to Update: 24	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 08/06/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010	Source: Department of Public Health
Date Data Arrived at EDR: 03/10/2011	Telephone: 415-252-3920
Date Made Active in Reports: 03/15/2011	Last EDR Contact: 08/06/2015
Number of Days to Update: 5	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2015	Source: Environmental Health Department
Date Data Arrived at EDR: 06/26/2015	Telephone: N/A
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 10	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/22/2015	Source: San Luis Obispo County Public Health Department
Date Data Arrived at EDR: 05/26/2015	Telephone: 805-781-5596
Date Made Active in Reports: 06/10/2015	Last EDR Contact: 05/20/2015
Number of Days to Update: 15	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 07/22/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 12

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/15/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/10/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 06/10/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/07/2015
Date Data Arrived at EDR: 05/12/2015
Date Made Active in Reports: 06/08/2015
Number of Days to Update: 27

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/22/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/08/2015
Number of Days to Update: 13

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/12/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 24

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015
Date Data Arrived at EDR: 06/24/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015
Date Data Arrived at EDR: 06/30/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 7

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 18

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2015	Source: Department of Health Services
Date Data Arrived at EDR: 07/07/2015	Telephone: 707-565-6565
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/22/2015
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/05/2015	Source: Sutter County Department of Agriculture
Date Data Arrived at EDR: 06/09/2015	Telephone: 530-822-7500
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/05/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 07/13/2015	Source: Division of Environmental Health
Date Data Arrived at EDR: 07/28/2015	Telephone: 209-533-5633
Date Made Active in Reports: 08/03/2015	Last EDR Contact: 07/24/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2015	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 07/17/2015	Telephone: 805-654-2813
Date Made Active in Reports: 08/03/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 17	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 06/26/2015
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 08/12/2015
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 04/27/2015	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/29/2015	Telephone: 805-654-2813
Date Made Active in Reports: 05/13/2015	Last EDR Contact: 07/27/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/27/2015	Source: Environmental Health Division
Date Data Arrived at EDR: 06/17/2015	Telephone: 805-654-2813
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 19	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 07/08/2015	Source: Yolo County Department of Health
Date Data Arrived at EDR: 07/13/2015	Telephone: 530-666-8646
Date Made Active in Reports: 07/22/2015	Last EDR Contact: 07/06/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/18/2015	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 05/19/2015	Telephone: 530-749-7523
Date Made Active in Reports: 06/05/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 17	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 05/18/2015
Number of Days to Update: 45	Next Scheduled EDR Contact: 08/31/2015
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 05/06/2015
Date Made Active in Reports: 05/20/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/21/2014
Date Made Active in Reports: 08/25/2014
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation
Telephone: 281-546-1505

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: 800-823-6277

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

OCMA
850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CA 92660

TARGET PROPERTY COORDINATES

Latitude (North): 33.6212 - 33° 37' 16.32"
Longitude (West): 117.8782 - 117° 52' 41.52"
Universal Tranverse Mercator: Zone 11
UTM X (Meters): 418538.9
UTM Y (Meters): 3720309.2
Elevation: 187 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5640952 NEWPORT BEACH OE S, CA
Version Date: 2012

Northeast Map: 5640942 TUSTIN, CA
Version Date: 2012

Southeast Map: 5641300 LAGUNA BEACH, CA
Version Date: 2012

Northwest Map: 5640950 NEWPORT BEACH, CA
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

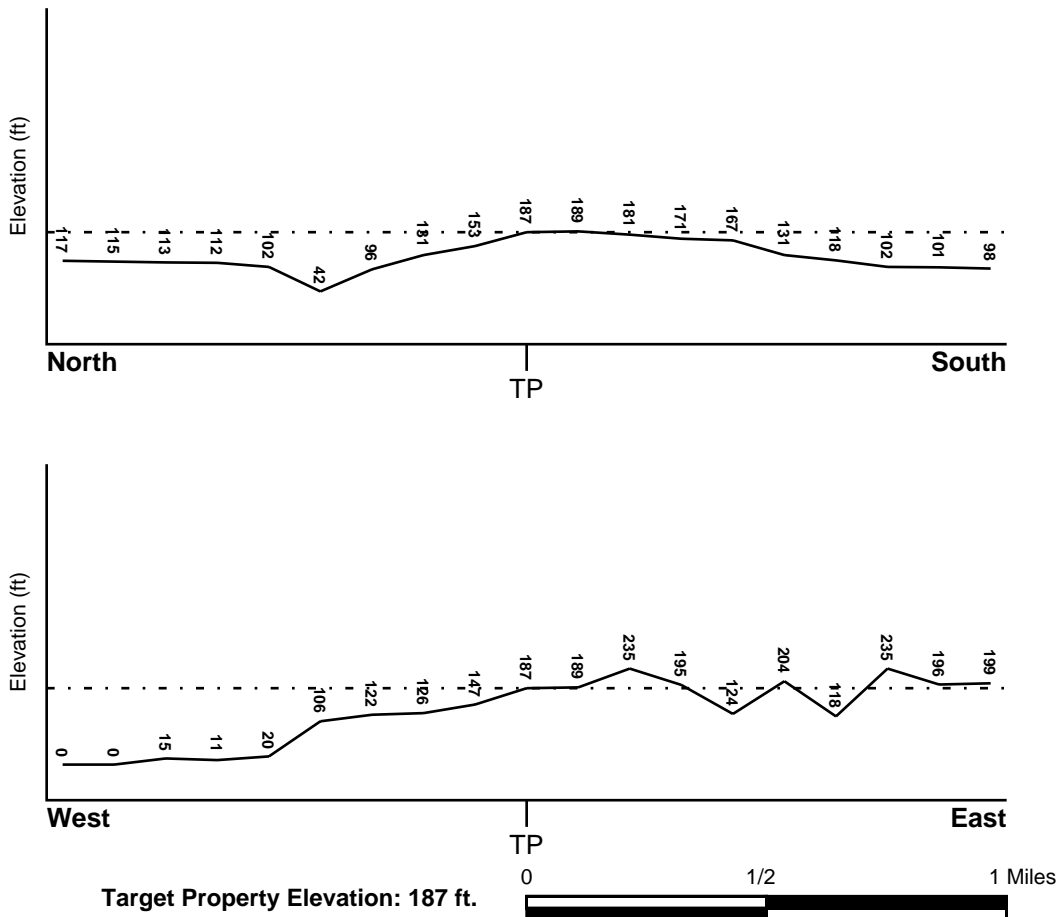
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Target Property County</u> ORANGE, CA	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
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Flood Plain Panel at Target Property: 06059C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u> NEWPORT BEACH	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map
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HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
1	1/8 - 1/4 Mile NW	NW
2	1/4 - 1/2 Mile NNW	NE
A3	1/2 - 1 Mile SW	Not Reported
A4	1/2 - 1 Mile SW	Not Reported
A5	1/2 - 1 Mile SW	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

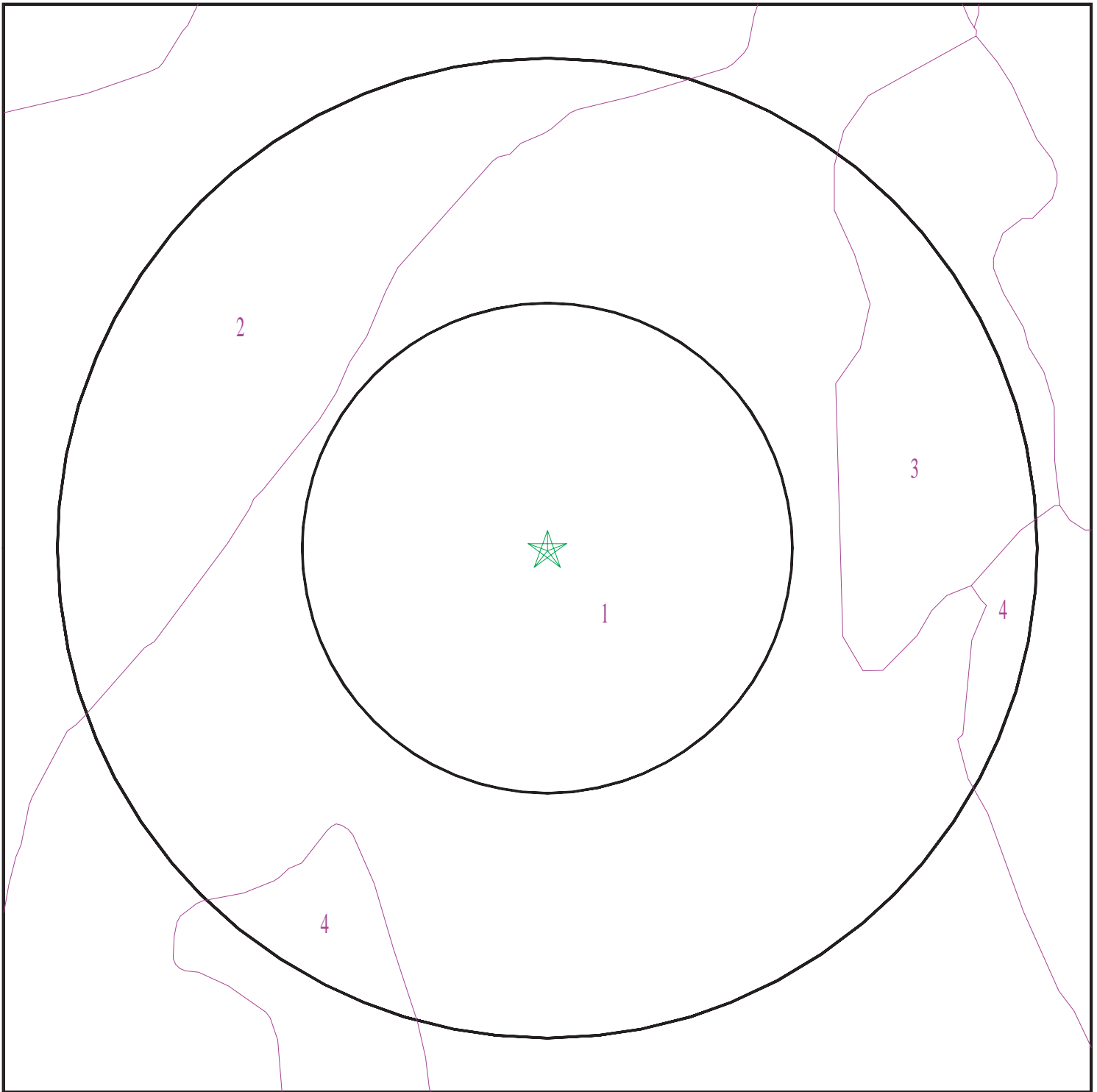
Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

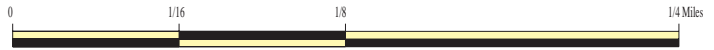
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4385033.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: OCMA
ADDRESS: 850 San Clemente Drive
Newport Beach CA 92660
LAT/LONG: 33.6212 / 117.8782

CLIENT: TRC
CONTACT: Daniel Lachman
INQUIRY #: 4385033.2s
DATE: August 17, 2015 1:28 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: MARINA

Soil Surface Texture: loamy sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	33 inches	loamy sand	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	33 inches	59 inches	sand	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.6
3	59 inches	79 inches	sand	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.6

Soil Map ID: 2

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	sandy loam	Not reported	Not reported	Max: 42 Min: 14	Max: 6 Min: 5.1
2	22 inches	27 inches	sandy clay	Not reported	Not reported	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
3	27 inches	38 inches	sandy clay loam	Not reported	Not reported	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
4	38 inches	70 inches	sandy clay loam	Not reported	Not reported	Max: 0.42 Min: 0.01	Max: 8.4 Min: 6.1
5	70 inches	79 inches	sandy loam	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Map ID: 3

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 6 Min: 5.1
2	11 inches	18 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
3	18 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
4	27 inches	70 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 6.1
5	70 inches	79 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Map ID: 4

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 6 Min: 5.1
2	11 inches	18 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
3	18 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 5.6
4	27 inches	70 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 6.1
5	70 inches	79 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CAOG11000217858	1/4 - 1/2 Mile NNW
2	CAOG11000218066	1/2 - 1 Mile NW
3	CAOG11000217700	1/2 - 1 Mile South
4	CAOG11000217947	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 4385033.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: OCMA
 ADDRESS: 850 San Clemente Drive
 Newport Beach CA 92660
 LAT/LONG: 33.6212 / 117.8782

CLIENT: TRC
 CONTACT: Daniel Lachman
 H-211 INQUIRY #: 4385033.2s
 DATE: August 17, 2015 1:28 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1 NW 1/8 - 1/4 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000097T NW Not Reported Not Reported 9.86 09/24/1998	AQUIFLOW	37878
--	---	--	-----------------	--------------

2 NNW 1/4 - 1/2 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001663T NE 4.66 9.34 Not Reported 06/1996	AQUIFLOW	66482
---	---	---	-----------------	--------------

A3 SW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000280T Not Reported 75 95 Not Reported 09/30/1998	AQUIFLOW	54859
---	---	--	-----------------	--------------

A4 SW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000280T Not Reported 75 95 Not Reported 09/30/1998	AQUIFLOW	54860
---	---	--	-----------------	--------------

A5 SW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083002129T Not Reported 5 10 Not Reported 12/04/1998	AQUIFLOW	65121
---	---	---	-----------------	--------------

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1

NNW

1/4 - 1/2 Mile

OIL_GAS

CAOG11000217858

District nun:	1	Api number:	05901075
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Morton and Sons		
County name:	Orange	Fieldname:	Any Field
Area name:	Any Area	Section:	25
Township:	06S	Range:	10W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Irvine	Wellnumber:	55-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000217858		

2

NW

1/2 - 1 Mile

OIL_GAS

CAOG11000218066

District nun:	1	Api number:	05901291
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	F. A. Winchester		
County name:	Orange	Fieldname:	Any Field
Area name:	Any Area	Section:	24
Township:	06S	Range:	10W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000218066		

3

South

1/2 - 1 Mile

OIL_GAS

CAOG11000217700

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

District nun:	1	Api number:	05900891
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Coalinga-Mohawk Oil Co.		
County name:	Orange	Fieldname:	Any Field
Area name:	Any Area	Section:	36
Township:	06S	Range:	10W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000217700		

**4
West
1/2 - 1 Mile**

OIL_GAS

CAOG11000217947

District nun:	1	Api number:	05901164
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Orange	Fieldname:	Any Field
Area name:	Any Area	Section:	26
Township:	06S	Range:	10W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Irvine Company	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000217947		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92660	57	0

Federal EPA Radon Zone for ORANGE County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

RADON

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.7S
August 28, 2015

The EDR Environmental LienSearch™



6 Armstrong Road,
Fourth Floor
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

OCMA
850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CA 92660

RESEARCH SOURCE

Source 1: Orange Assessor
Orange County, California

Source 2: Orange Recorder
Orange County, California

PROPERTY INFORMATION

Deed 1:

Type of Deed: Corporation Grant Deed
Title is vested in: Newport Harbor Art Museum, a non-profit corporation
Title received from: The Irvine Company
Deed Dated: 02/21/1977
Deed Recorded: 02/28/1977
Book: 12085
Page: 1561
Instrument: 35908

Legal Description: All that certain piece or parcel of land being Parcel 2 of Parcel Map filed in Book 81, Page 9 of Parcel Maps, situate and lying in the County of Orange, State of California.

Legal Current Owner: Newport Harbor Art Museum, a non-profit corporation

Property Identifiers: 442-261-05

EDR Environmental LienSearch™ Report

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found Not Found

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

EDR Environmental LienSearch™ Report

DEED EXHIBIT

Order No.
Escrow No.
Loan No.

35908

112085/1561

\$7.00
CB

RECORDING REQUESTED BY
FIRST AMERICAN TITLE INS. CO.
RECORDED IN OFFICIAL RECORDS
OF ORANGE COUNTY, CALIFORNIA
45 Min.
FEB 29 11 AM 1977
J. WYLSIE CARLILE, County Recorder

WHEN RECORDED MAIL TO:

NEWPORT HARBOR ART MUSEUM
2211 WEST BALBOA BLVD.
NEWPORT BEACH, CA. 92663

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

TAX EXEMPT

DOCUMENTARY TRANSFER TAX \$ No. consideration

Computed on the consideration or value of property conveyed. OR
Computed on the consideration or value less liens of encumbrances
remaining at time of sale.

The Irvine Company
Signature of Declarant or Agent determining tax Firm Name

AP 242-017-11

CORPORATION GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE IRVINE COMPANY

a corporation organized under the laws of the State of West Virginia

does hereby

GRANT to NEWPORT HARBOR ART MUSEUM, a non-profit corporation

the real property in the City of NEWPORT BEACH
County of ORANGE

State of California, described as

SEE ATTACHED EXHIBIT "A" CONSISTING OF FOUR (4) PAGES

Dated February 21, 1977

STATE OF CALIFORNIA
COUNTY OF

On February 21, 1977

before me, the undersigned, a Notary Public in and for said
State, personally appeared

known to me to be the President and

known to me to be the Secretary of
the corporation that executed the within instrument, and known
to me to be the persons who executed the within instrument on
behalf of the corporation therein named, and acknowledged to me
that such corporation executed the within instrument pursuant to
its by-laws or a resolution of its board of directors.

Witness my hand and official seal

Signature *Audrey E. Wiles*

THE IRVINE COMPANY
By *[Signature]* President
By *[Signature]* Secretary

OFFICIAL SEAL
AUDREY E. WILES
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
ORANGE COUNTY
My Commission Expires May 31, 1980

MAIL TAX STATEMENTS AS DIRECTED ABOVE

BEST COPY

120851562

EXHIBIT "A" TO GRANT DEED

NEWPORT HARBOR ART MUSEUM

That land situated in the State of California, County of Orange, described as follows:

PARCEL 2 OF PARCEL MAP FILED IN BOOK 81, PAGE 9 OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

RESERVING to Grantor, its successors and assigns, all oil, oil rights, gas, minerals, mineral rights, natural gas rights, and other hydrocarbon substances in and under said real property, and the right to grant and transfer the same, together with all necessary and convenient rights to explore for, develop, produce and extract and take the same, subject to the express limitation that any and all operations for the exploration, development, production, extraction and taking of any of said substances shall be carried on at levels below the depth of five hundred (500) feet from the surface of said land by means of wells, derrick and/or other equipment from surface locations on adjoining or neighboring land, and subject further to the express limitation that the foregoing reservation shall in no way be interpreted to include any right of entry in and upon the surface of the land hereinabove described. It is understood by the parties that the above stated reservation is expressly subject to all restrictions and regulations concerning the drilling for and production of oil, gas, minerals, petroleum and other hydrocarbon substances, which are contained in the City Charter or the municipal ordinances of the City of Newport Beach.

SUBJECT TO:

1. General and special taxes and assessments for the current fiscal tax year;
2. Covenants, conditions, restrictions, reservations, rights, rights of way and easements of record or apparent;
3. The covenants, conditions and restrictions (hereinafter referred to as "CC&R's") described below.

The CC&R's of this Grant Deed are hereby declared and agreed to be part of a general plan for the purpose of enhancing and protecting the value, desirability and attractiveness of all the land located in the Parcel Map recorded in Book 81, Page 9 of Parcel Maps, County of Orange, State of California, excepting therefrom Parcel 2 thereof (hereinafter referred to as the "Benefited Property") and shall run with the land and be binding upon Grantee, its successors and assigns, and shall be enforceable by Grantor, its successors and assigns, or any property owner in the Benefited Property against all parties having or acquiring any right, title or interest in the property conveyed herein (hereinafter referred to as the "Property"), or any part thereof, it being intended that the dominant tenement be all the Benefited Property and the servient tenement be the Property. The CC&R's shall apply to and bind Grantee, its successors and assigns and shall be enforceable by Grantor, its successors and assigns for the benefit of the Benefited Property and the successive owners thereof. As used hereinafter, Grantor shall mean Grantor, its successors and assigns, and Grantee shall mean Grantee, its successors and assigns. The CC&R's may be enforced by the Grantor pursuant to any one or more of the remedies set forth hereinbelow; provided, however, that such remedies are not exclusive but cumulative, and Grantor shall also be entitled to any other remedies to which it may be entitled under law and equity whether stated in this Grant Deed or not.

Grantor shall be entitled to specific performance to enforce compliance with the CC&R's or an injunction to enjoin the continuance of the breach or violation thereof. Grantor shall be entitled to damages for the breach of or noncompliance

with any of the CC&R's or declaratory relief to determine the enforceability of any of the CC&R's. In the event of a breach of or noncompliance with any of the CC&R's, if such breach or noncompliance is of such a nature that the same can reasonably be cured within thirty (30) days and if Grantee fails to cure such breach or noncompliance within thirty (30) days after written notice from Grantor of such breach or noncompliance, or if such breach or noncompliance is of such a nature that it cannot reasonably be cured within said thirty (30) day period and Grantee fails to commence to cure such breach or noncompliance within said thirty (30) day period or having so commenced thereafter fails to prosecute and complete with all due diligence or dispatch the curing of such breach or noncompliance, Grantor shall also have the right to re-enter and take possession of the Property and remove all persons therefrom at the sole cost and expense of Grantee; provided, however, that if Grantee in good faith disputes whether Grantee has breached or failed to comply with the CC&R's and within said thirty (30) day period commences an appropriate action to obtain a judicial determination of whether Grantee has so breached or failed to comply with the CC&R's, the applicable curative period set forth above shall be tolled so long as Grantee diligently and in good faith prosecutes said action, except that the period during which such curative period shall be tolled shall in no event exceed three (3) years. Said breach of or noncompliance with any of the CC&R's shall operate, at Grantor's option, as a condition subsequent to the conveyance evidenced by this Grant Deed, and in the event Grantor elects to have any such breach or noncompliance operate as a condition subsequent, said right to re-enter shall be effective and enforceable without further legal process.

Any one or more of the foregoing remedies may be employed at the sole option and discretion of Grantor. No waiver by Grantor of a breach of any of the CC&R's by Grantee shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other of the CC&R's. No waiver of any breach or default of Grantee hereunder shall be implied from any omission by Grantor to take any action on account of such breach or default if such breach or default persists or is repeated, and no express waiver shall affect a breach or default other than as specified in said waiver. The consent or approval by Grantor to or of any act by Grantee requiring Grantor's consent or approval shall not be deemed to waive or render unnecessary Grantor's consent or approval to or of any subsequent similar acts by Grantee.

In the event any action shall be instituted between Grantor and Grantee in connection with this Grant Deed, the party prevailing in such action shall be entitled to recover from the other party all of its costs, including reasonable attorneys' fees as fixed by the court therein.

Grantor agrees that upon written request, it shall subordinate its rights under subparagraphs (a) and (b) of this paragraph 3 to a mortgage or Deed of Trust securing a loan the proceeds of which are used exclusively for the construction of improvements upon the land conveyed hereby.

(a) The condition that for a period of twenty-five (25) years from the date hereof, Grantee shall not use the Property or any part thereof for any use other than for the construction, development and operation of an art museum, cultural, support and other uses reasonably associated therewith for the benefit, enjoyment and enrichment of the general public, or attempt to use the Property or any part thereof for any other purpose except with the prior written consent of Grantor. In the event the conditions contained herein are not satisfied or there is a breach of such conditions, and Grantee shall not have ceased and terminated any use which is not permitted hereunder within thirty (30) days of a written notice from Grantor to do so, Grantor may enforce such conditions pursuant to any one or more of the remedies set forth above in this paragraph 3.

(b) Grantor, for a period of twenty-five (25) years from the date of the Deed shall have the right to approve the exterior design of all improvements to be constructed upon the Property. Before Grantee commences construction of improvements, Grantee shall deliver to Grantor for its approval two (2) sets of schematic plans which shall include, but not be limited to, exterior elevations, floor plans, site

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plans, and material and color palette. Then after schematic approval, the Grantee shall deliver to Grantor for its approval three (3) sets of construction plans and specifications for the exterior of said improvements, prepared by a licensed architect or licensed engineer, including, but not limited to, building plans and elevations, roof plans, materials and color palette, grading and drainage plans and soils report, a plot plan showing the proposed location of said improvements, all utilities and service connections, all places of ingress and egress to public streets and roads, and plans for outdoor signs, lighting and landscaping. If approved, such approval shall be endorsed by Grantor upon said plans, specifications and plot plan within thirty (30) days from the receipt thereof, one (1) set of which shall be retained by it; provided that if Grantor has neither approved or disapproved said plans and specifications within said thirty (30) day period, the same shall be deemed approved. If Grantor disapproves such plans and specifications, Grantor shall within thirty (30) days from the receipt thereof notify Grantee of its reasons for not approving said plans and specifications. Grantee shall within thirty (30) days of such notice of disapproval submit to Grantor plans and specifications modified to comply with the reasons specified by Grantor for its disapproval. Approval of said plans and specifications shall not be unreasonably withheld. Upon completion of said improvements and within one hundred and eighty (180) days from the final inspection by the local municipality, all landscaping proposed with the approved construction plans must be completed.

(i) During said twenty-five (25) year period, no structure or other improvement, the plans, specifications and proposed location of which Grantor has not first approved in writing or has not been deemed to have approved pursuant to the terms of this paragraph 3 or which does not comply with such plans, specifications and locations, shall be constructed and maintained on the Property. No material addition to or alteration of any building or structure erected on the Property shall be commenced unless and until plans and specifications covering the exterior of the proposed addition or alteration shall have been first submitted to and approved by Grantor in the manner above provided. The approval by Grantor of any plans and specifications refers only to the conformity of such plans and specifications to the general architectural plan for the premises and the neighboring lands; Grantor by approving such plans and specifications assumes no liability or responsibility therefor or for any defect in any structure constructed from such plans and specifications.

(ii) Prior to commencement of any substantial work of construction of the improvements to be constructed on the Property, Grantee shall supply to Grantor verification by a licensed civil engineer or land surveyor that the work of improvements is on the correct parcel of land and is located on the Property in accordance with plans as previously approved by Grantor. Upon completion of the work of construction of the improvements on the Property, Grantee shall supply to Grantor certification by Grantee's architect that the work which was designed by the architect has been completed substantially in accordance with the plans and specifications previously approved by Grantor. Upon substantial completion of the landscaping upon the Property, Grantee shall supply to Grantor certification by Grantee's architect or landscape architect that the landscaping has been completed in accordance with plans and specifications previously approved by Grantor.

(d) All notices provided for herein shall be in writing and shall be deemed to have been duly given if and when sent by United States registered mail, return receipt requested, postage prepaid, to the following addresses:

GRANTOR

The Irvine Company
550 Newport Center Drive
Newport Beach, California 92663
Attention: Commercial Division

112085K1565

GRANTEE

Newport Harbor Art Museum
850 San Clemente
Newport Beach, California 92660

or at such other address as the Grantor or the Grantee may designate to the other
in writing.

126/2-14-77

**APPENDIX B:
USER QUESTIONNAIRE**

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE**

Pursuant to the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13), in order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the User must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The User should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

The "User" is defined in the ASTM E 1527-13 standard as *the party seeking to use Practice E 1527 to complete an environmental site assessment of the Site. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.*

Thank you for taking the time to complete this questionnaire. If you have any questions, please call Todd Stanford at (213) 213-9404 or e-mail TStanford@trcsolutions.com.

Date: 20 AUGUST 2015

User Name: ORANGE COUNTY MUSEUM OF ART

Company: ORANGE COUNTY MUSEUM OF ART

Address: 850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CA 92660

Telephone No.: 949-759-1122

E-mail Address: TSMITH@OCMA.NET

Signature: _____

Site Name & Address: OCMA

850 San Clemente Drive, Newport Beach, California

Purpose of ASTM Phase I (potential purchase, potential sale, re-finance, update the environmental condition of the Site, Lease termination or initiation, etc.)

(1) **Environmental cleanup liens that are filed or recorded against the Site (40 CFR 312.25)**

Did a search of recorded land title records (or judicial records where appropriate, see Note 1 below) identify any environmental liens filed or recorded against the Site under federal, tribal, state or local law?

Yes

No

NOTE 1 — In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that environmental liens and AULs be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

(2.) **Activity and land use limitations (AULs) that are in place on the Site or that have been filed or recorded against the Site (40 CFR 312.26(a)(1)(v) and (vi))**

Did a search of recorded land title records (or judicial records where appropriate, see Note 1 above) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the Site and/or have been filed or recorded against the Site under federal, tribal, state or local law?

Yes

No

(3.) **Specialized knowledge or experience of the person seeking to qualify for the *Landowner Liability Protection (LLP)* (40 CFR 312.28)**

Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Yes

No

(4.) **Relationship of the purchase price to the fair market value of the Site property (40 CFR 312.29)**

Does the purchase price being paid for the Site property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

Yes

No

(5.) ***Commonly known or reasonably ascertainable information regarding the Site property* (40 CFR 312.30)**

Are you aware of commonly known or reasonably ascertainable information about the Site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,

(a.) Can you provide any information regarding the past uses of the Site?

Yes

No

(b.) Can you provide any information regarding specific chemicals that are present or once were present at the Site?

(c.) Can you provide any information regarding spills or other chemical releases that have occurred at the Site?

(d.) Can you provide any information regarding any environmental cleanups that have occurred at the Site?

B. CHEMICALS PRESENT:

(6) **The degree of obviousness of the presence or likely presence of contamination at the Site, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**
 Based on your knowledge and experience related to the Site are there any obvious indicators that point to the presence or likely presence of releases at the Site? Yes No

(7) **Proceedings Involving the Site**
 Are you aware of: (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Site; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the Site; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the Site? Yes No

(8) **Questions Regarding Helpful Documents**
 Are you aware of the presence of any of the documents listed below and, if so, whether copies can and will be provided to TRC within reasonable time and cost constraints?

	Yes	No
- Environment site assessment reports	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Environment compliance audit reports	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Environmental permits (e.g., solid waste disposal permits; hazardous waste disposal permits; wastewater permits; National Pollutant Discharge Elimination System [NPDES] permits; or underground injection permits)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Registrations for underground and aboveground storage tanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Registrations for underground injection systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Material Safety Data Sheets (MSDSs)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Community Right-To-Know plan(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Reports regarding hydrogeologic conditions at the Site and surrounding area	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Notices or other correspondence from any government agency regarding current or previous violations of environmental laws with respect to the Site or relating to environmental liens encumbering the Site property	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Hazardous waste generator notices or reports	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Geotechnical studies	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Risk assessments	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Recorded AULs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**APPENDIX C:
HISTORICAL RESEARCH DOCUMENTATION**



OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.3
August 17, 2015

Certified Sanborn® Map Report



6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

8/17/15

Site Name:

OCMA
850 San Clemente Drive
Newport Beach, CA 92660

Client Name:

TRC
707 Wilshire Blvd
Los Angeles, CA 90017-0000

EDR Inquiry # 4385033.3

Contact: Daniel Lachman



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by TRC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: OCMA
Address: 850 San Clemente Drive
City, State, Zip: Newport Beach, CA 92660
Cross Street:
P.O. # 241004
Project: OCMA
Certification # 29FE-47B9-8725



Sanborn® Library search results
Certification # 29FE-47B9-8725

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.6
August 17, 2015

The EDR Property Tax Map Report

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

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

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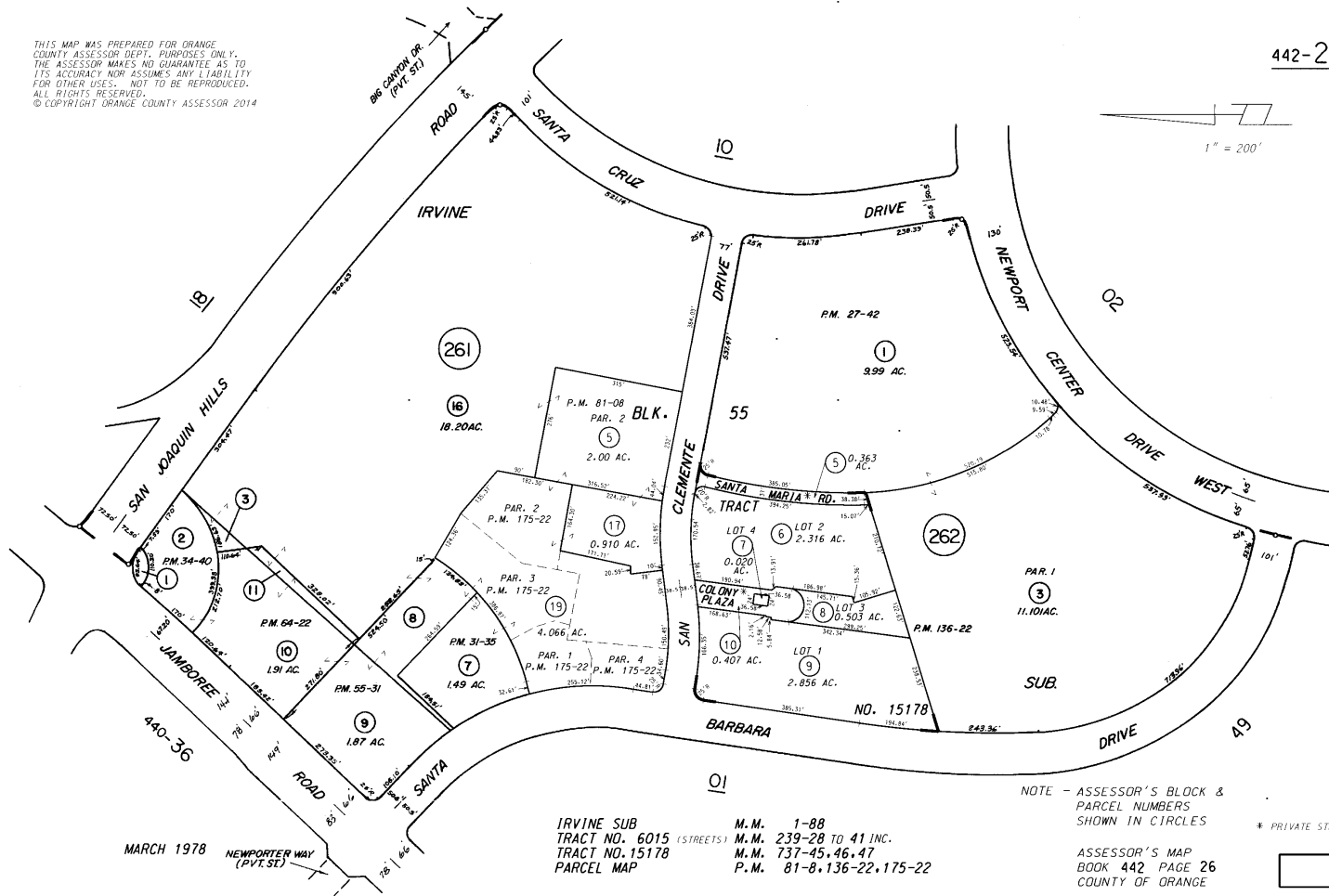
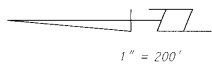
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442-26





OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.4
August 17, 2015

EDR Historical Topographic Map Report



6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

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

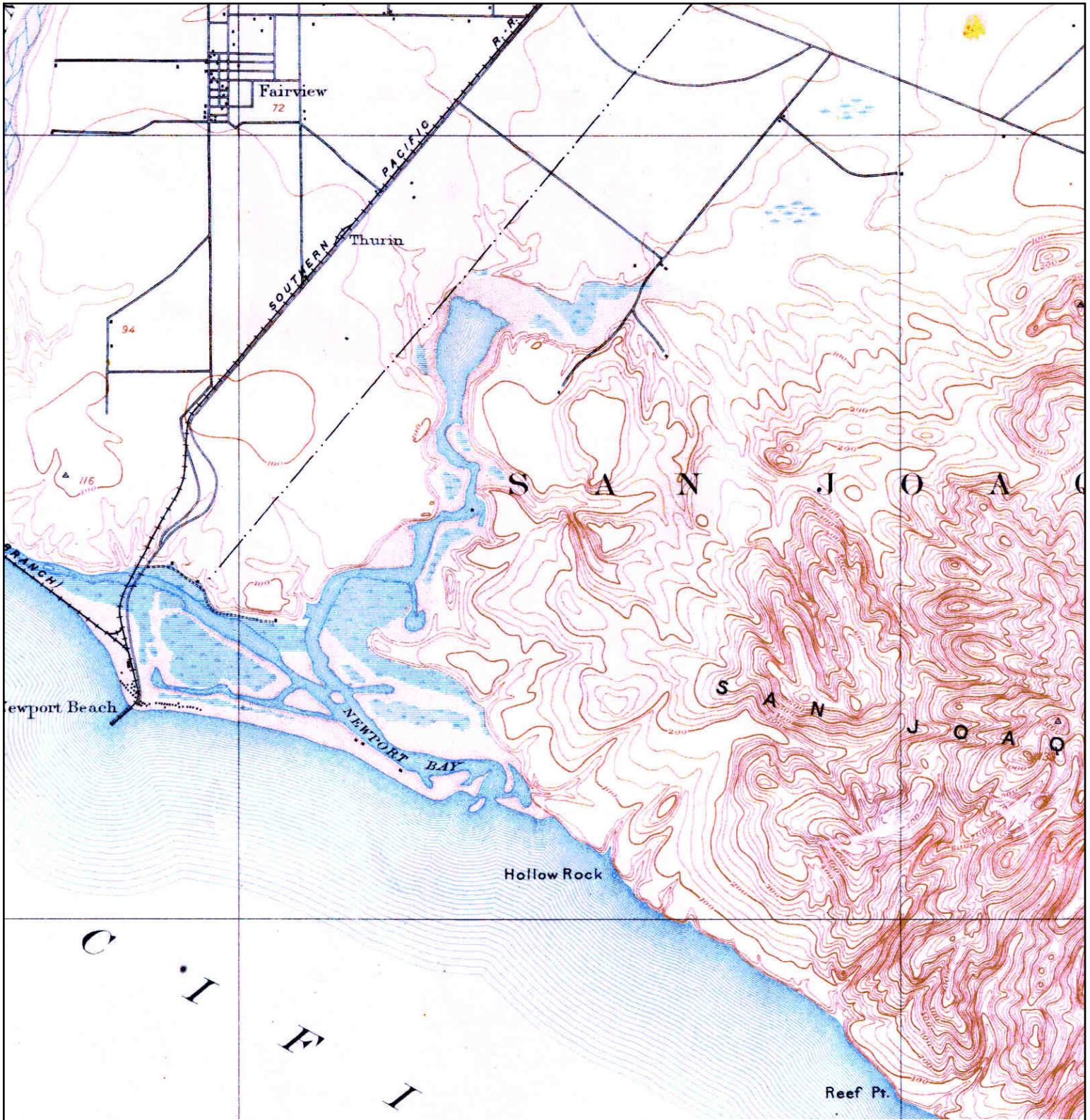
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Historical Topographic Map



	TARGET QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: SANTA ANA	ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660	CONTACT: Daniel Lachman
	MAP YEAR: 1901	LAT/LONG: 33.6212 / -117.8782	INQUIRY#: 4385033.4
	SERIES: 15		RESEARCH DATE: 08/17/2015
	SCALE: 1:62500		

Historical Topographic Map



<p>N ↑</p>	TARGET QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: SOUTHERN CA SHEET 1	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1901	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	SERIES: 60	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SCALE: 1:250000		

Historical Topographic Map



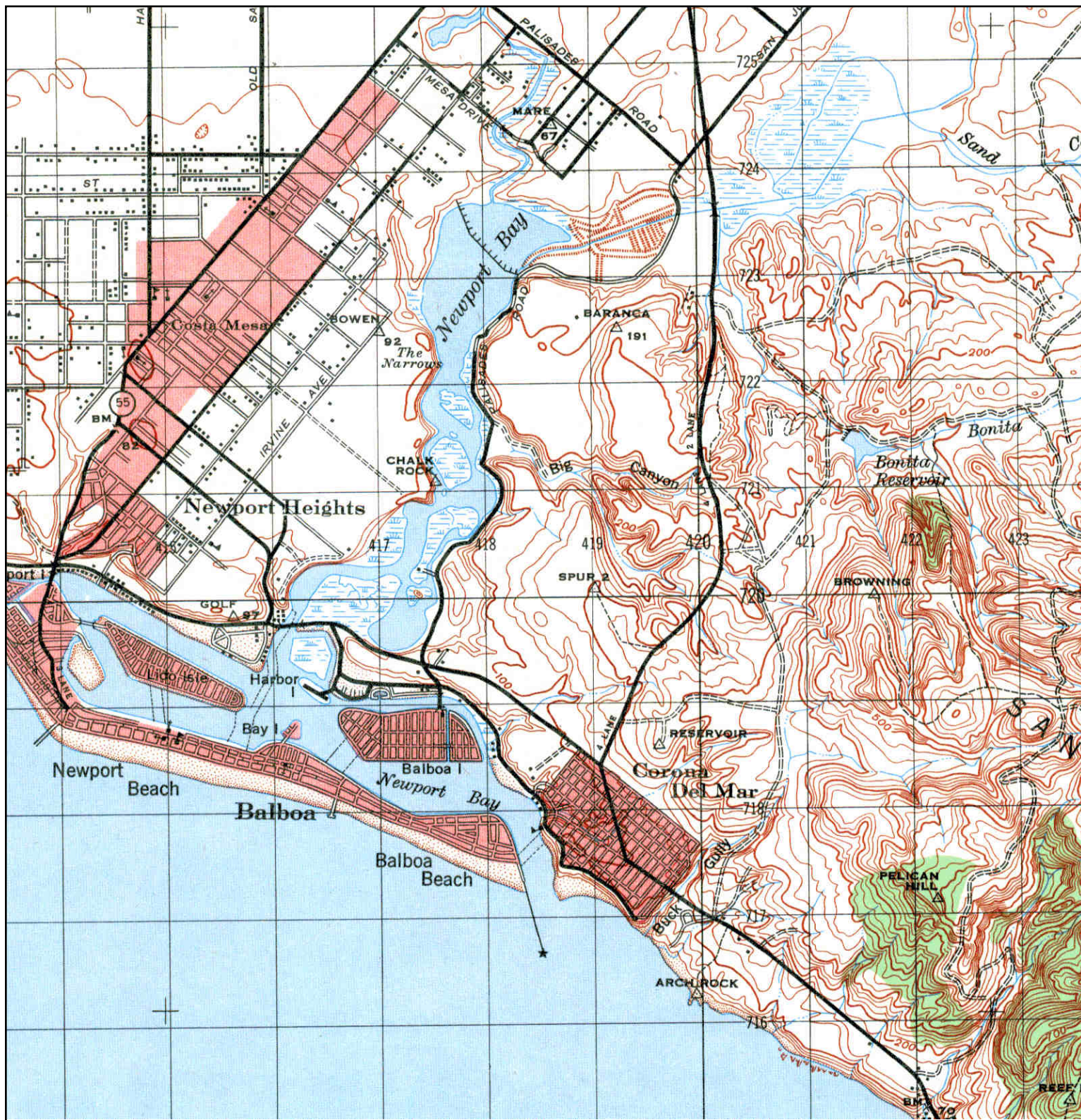
<p>N ↑</p>	<p>TARGET QUAD NAME: CORONA MAP YEAR: 1902</p>	<p>SITE NAME: OCMA ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660 LAT/LONG: 33.6212 / -117.8782</p>	<p>CLIENT: TRC CONTACT: Daniel Lachman INQUIRY#: 4385033.4 RESEARCH DATE: 08/17/2015</p>
	<p>SERIES: 30 SCALE: 1:125000</p>		

Historical Topographic Map



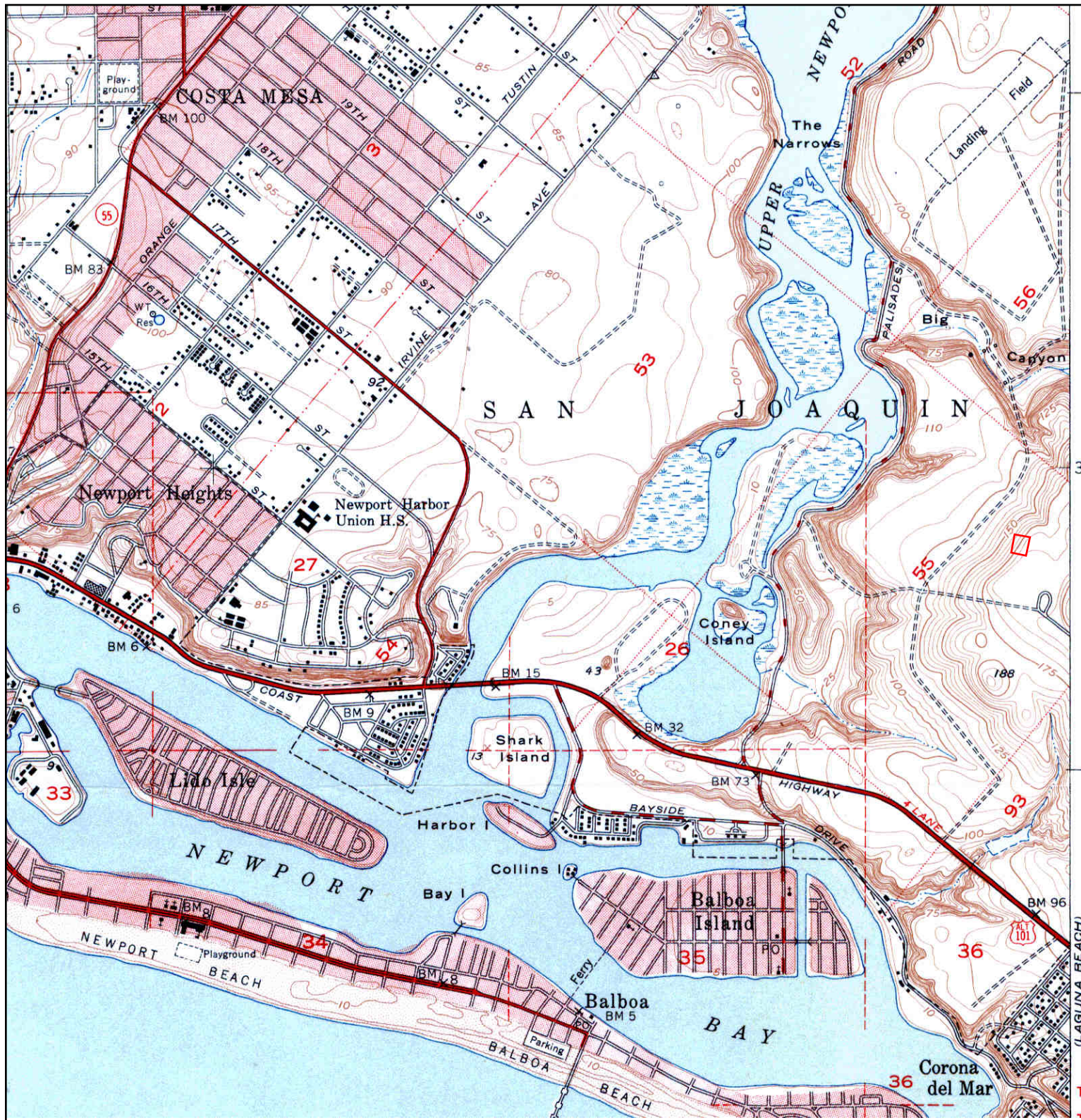
<p>N ↑</p>	<p>TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1935</p>	<p>SITE NAME: OCMA ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660 LAT/LONG: 33.6212 / -117.8782</p>	<p>CLIENT: TRC CONTACT: Daniel Lachman INQUIRY#: 4385033.4 RESEARCH DATE: 08/17/2015</p>
	<p>SERIES: 7.5 SCALE: 1:31680</p>		

Historical Topographic Map



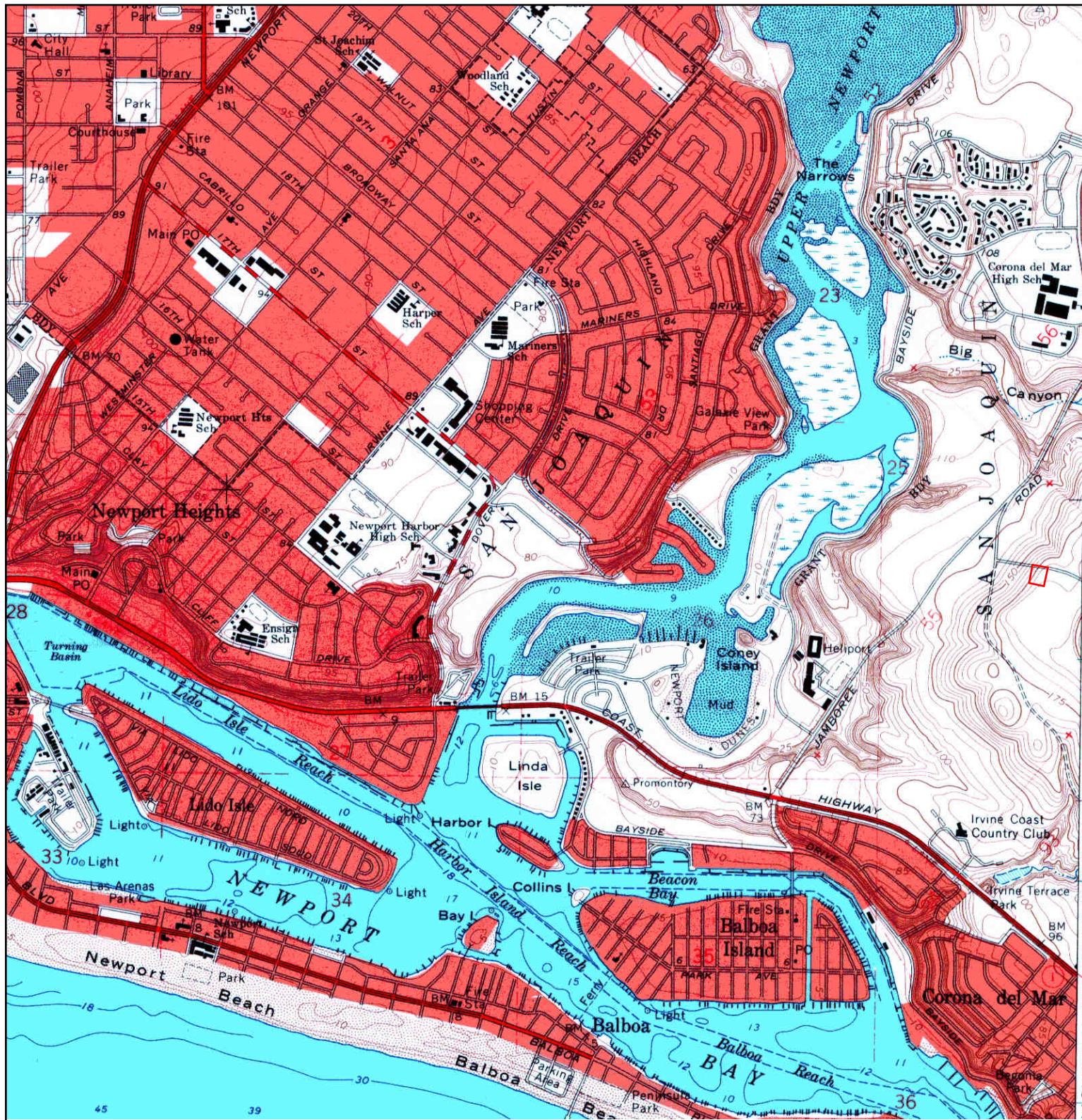
<p>N ↑</p>	<p>TARGET QUAD NAME: SANTA ANA MAP YEAR: 1942</p>	<p>SITE NAME: OCMA ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660 LAT/LONG: 33.6212 / -117.8782</p>	<p>CLIENT: TRC CONTACT: Daniel Lachman INQUIRY#: 4385033.4 RESEARCH DATE: 08/17/2015</p>
	<p>SERIES: 15 SCALE: 1:50000</p>		

Historical Topographic Map



<p>N ↑</p>	<p>TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1951</p>	<p>SITE NAME: OCMA ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660 LAT/LONG: 33.6212 / -117.8782</p>	<p>CLIENT: TRC CONTACT: Daniel Lachman INQUIRY#: 4385033.4 RESEARCH DATE: 08/17/2015</p>
	<p>SERIES: 7.5 SCALE: 1:24000</p>		

Historical Topographic Map



<p>N</p>	<p>TARGET QUAD</p> <p>NAME: NEWPORT BEACH</p> <p>MAP YEAR: 1965</p>	<p>SITE NAME: OCMA</p> <p>ADDRESS: 850 San Clemente Drive Newport Beach, CA 92660</p> <p>LAT/LONG: 33.6212 / -117.8782</p>	<p>CLIENT: TRC</p> <p>CONTACT: Daniel Lachman</p> <p>INQUIRY#: 4385033.4</p> <p>RESEARCH DATE: 08/17/2015</p>
	<p>SERIES: 7.5</p> <p>SCALE: 1:24000</p>		

Historical Topographic Map



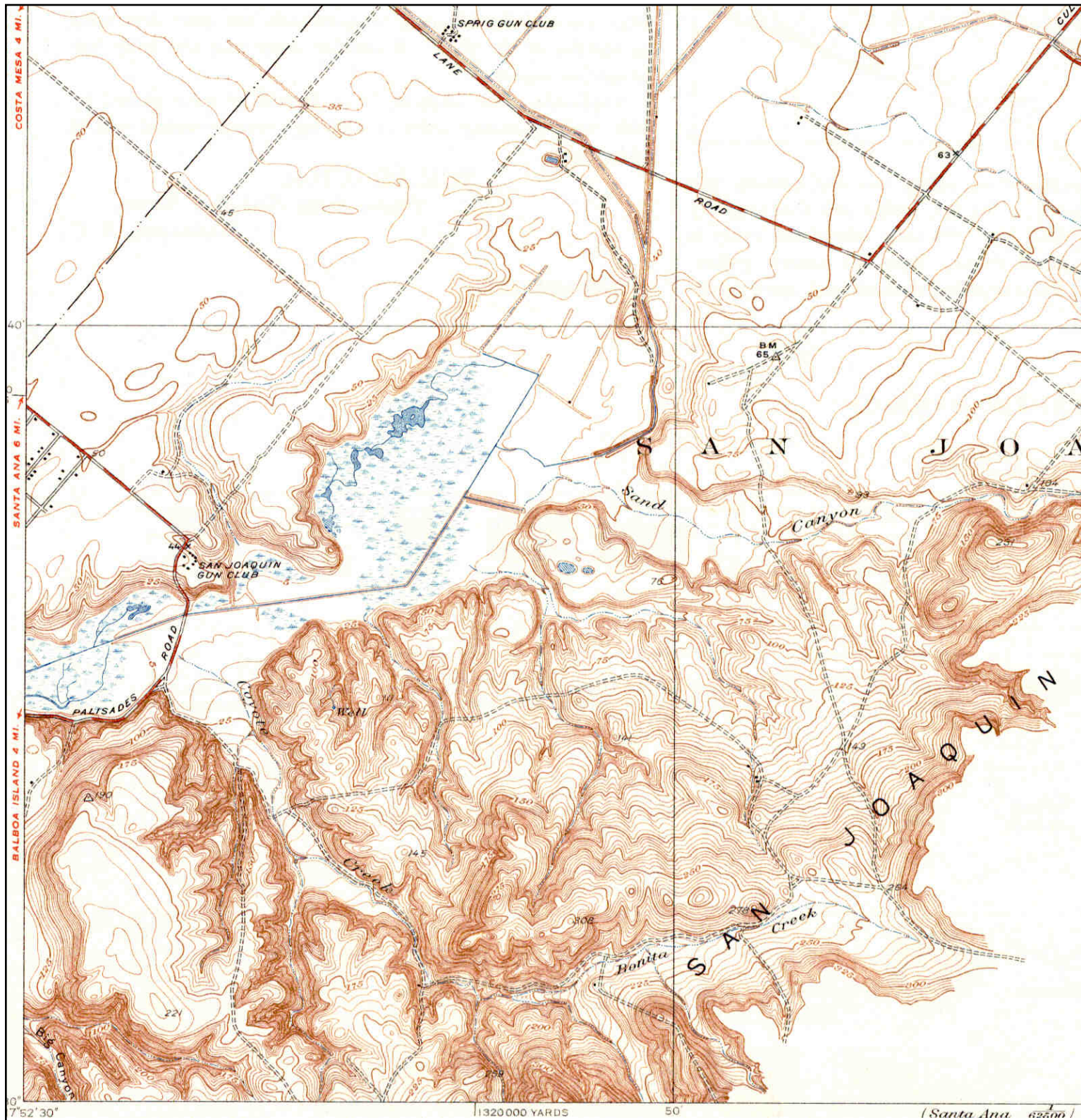
<p>N ↑</p>	TARGET QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: NEWPORT BEACH	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1972	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	PHOTOREVISED FROM :1965	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



<p>N ↑</p>	TARGET QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: NEWPORT BEACH	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1981	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	PHOTOREVISED FROM :1965	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SERIES: 7.5		
	SCALE: 1:24000		

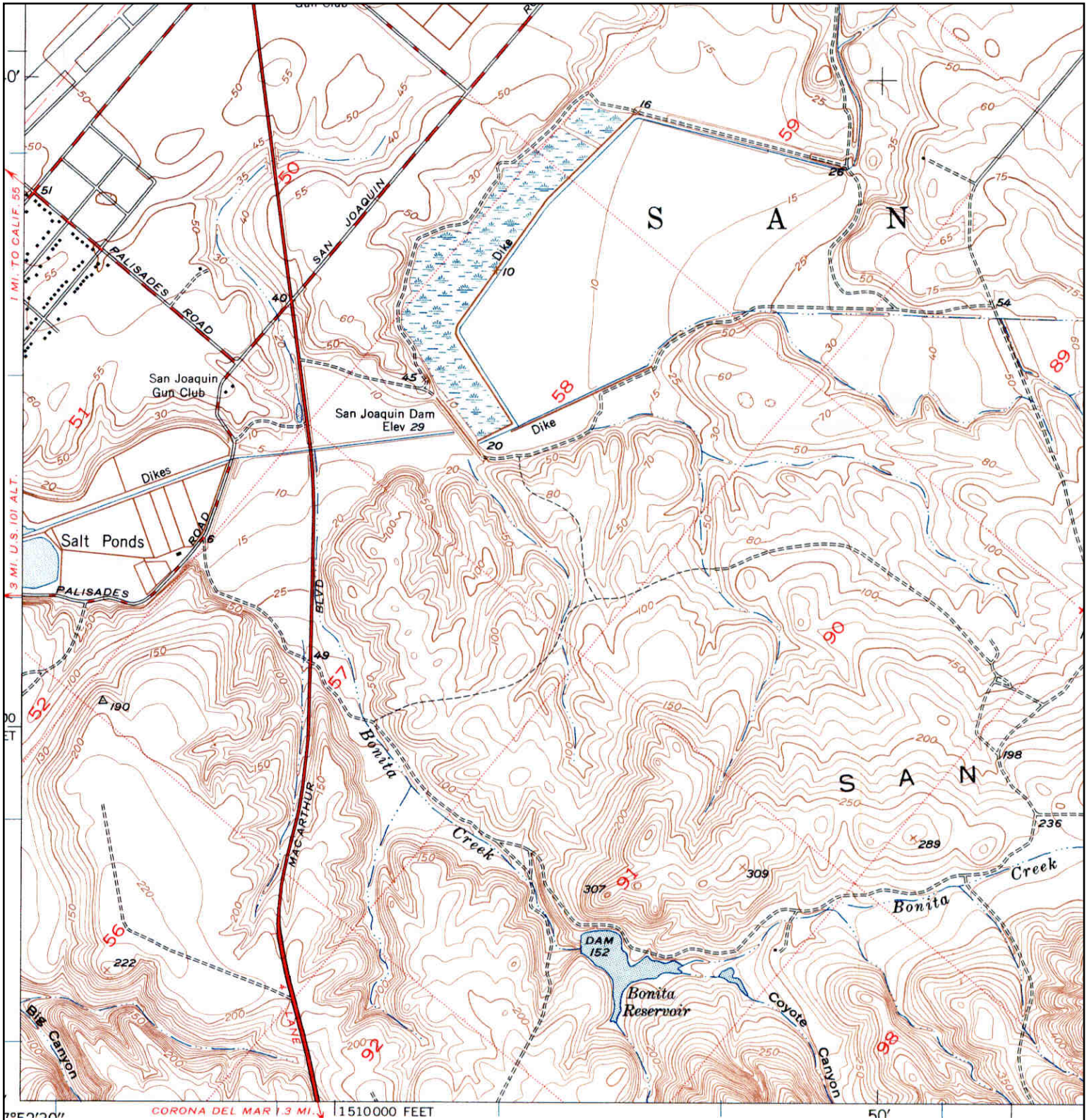
Historical Topographic Map




Unsurveyed Area on the Topographic Map

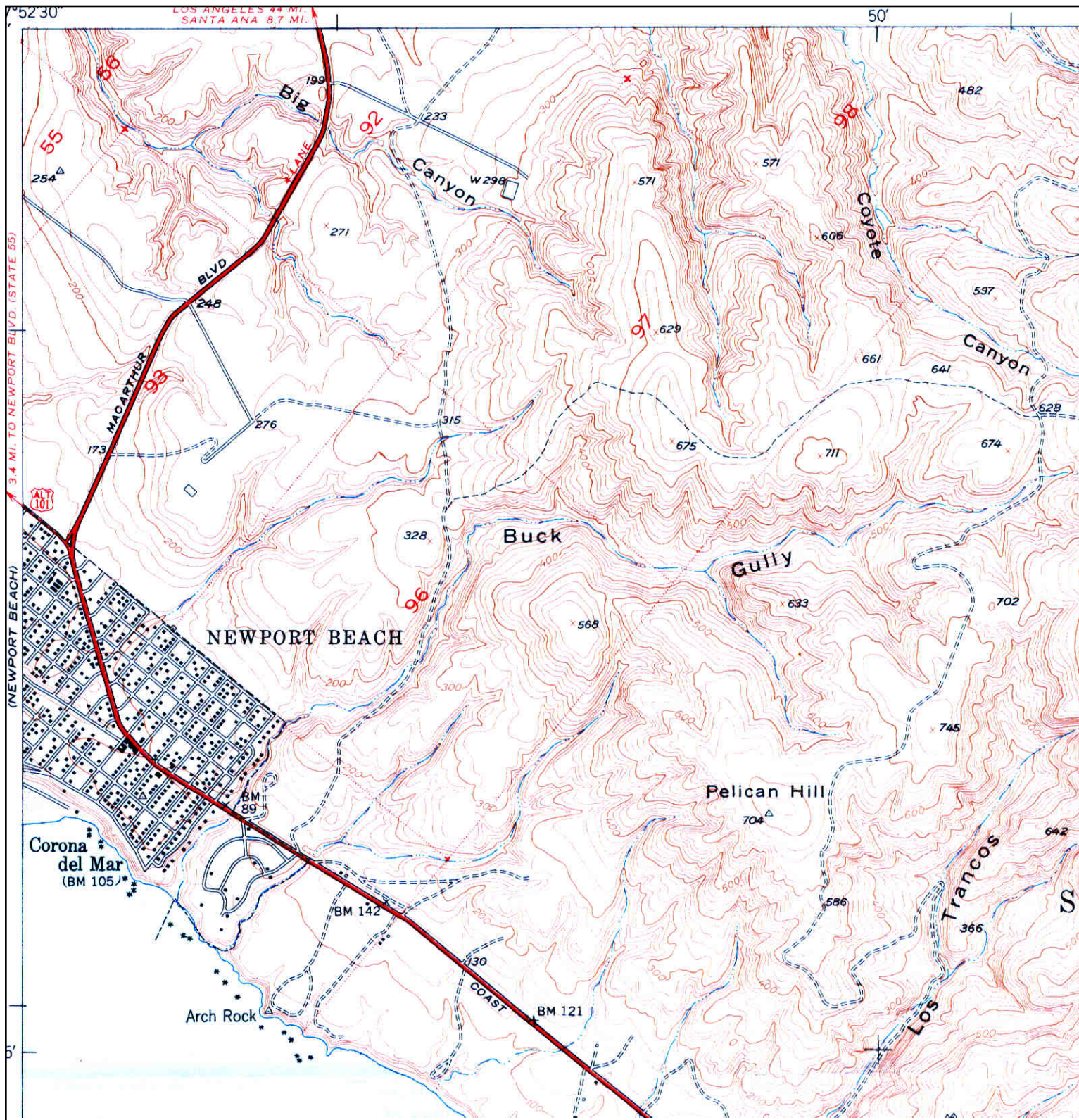
	ADJOINING QUAD	SITE NAME:	OCMA	CLIENT:	TRC
	NAME: TUSTIN	ADDRESS:	850 San Clemente Drive	CONTACT:	Daniel Lachman
	MAP YEAR: 1935	LAT/LONG:	33.6212 / -117.8782	INQUIRY#:	4385033.4
	SERIES: 7.5	RESEARCH DATE:	08/17/2015		
SCALE: 1:31680					


Historical Topographic Map



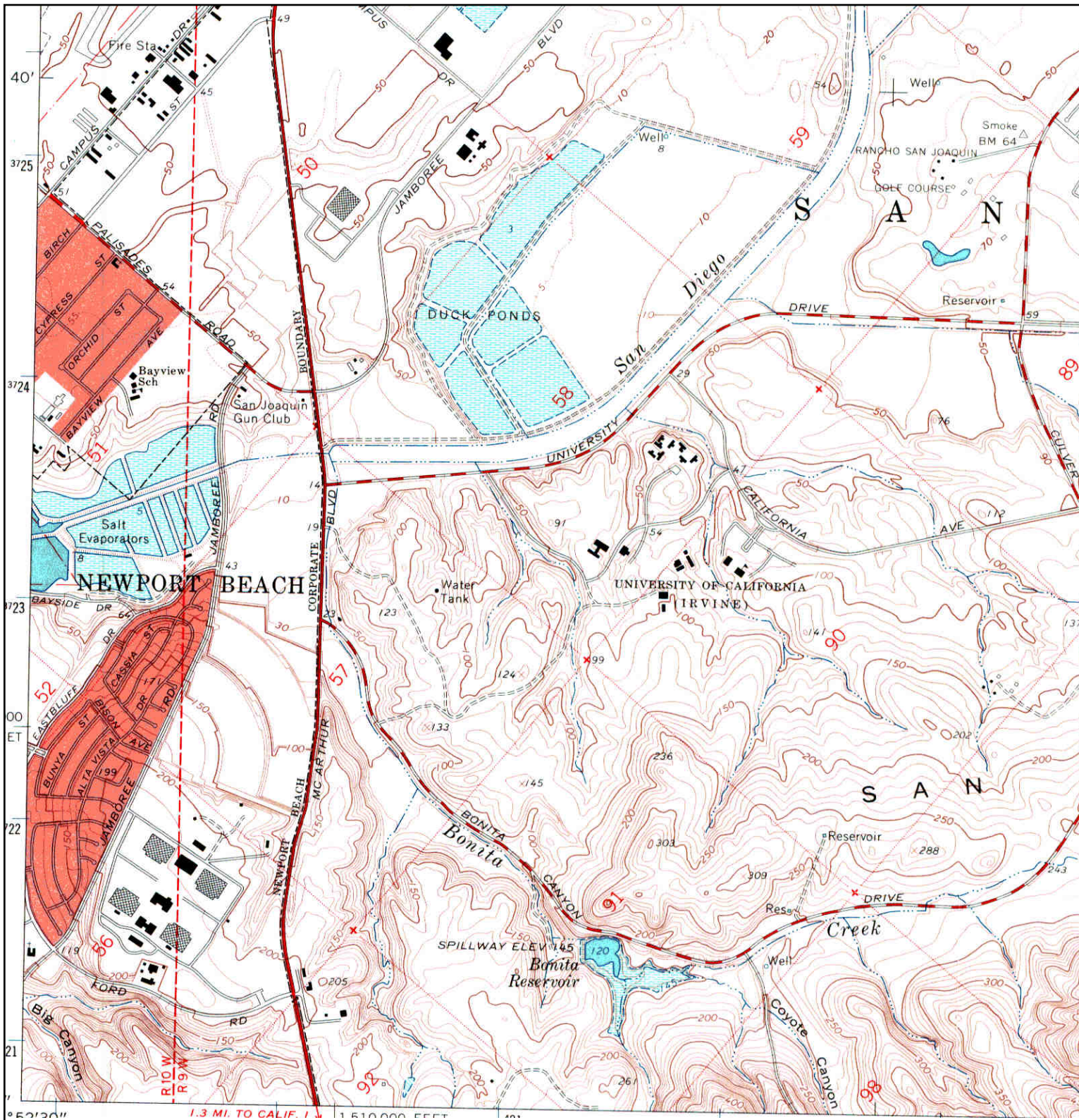
	ADJOINING QUAD	SITE NAME:	OCMA	CLIENT:	TRC
	NAME: TUSTIN	ADDRESS:	850 San Clemente Drive	CONTACT:	Daniel Lachman
	MAP YEAR: 1948	LAT/LONG:	33.6212 / -117.8782	INQUIRY#:	4385033.4
	SERIES: 7.5	RESEARCH DATE:	08/17/2015		
	SCALE: 1:24000				

Historical Topographic Map



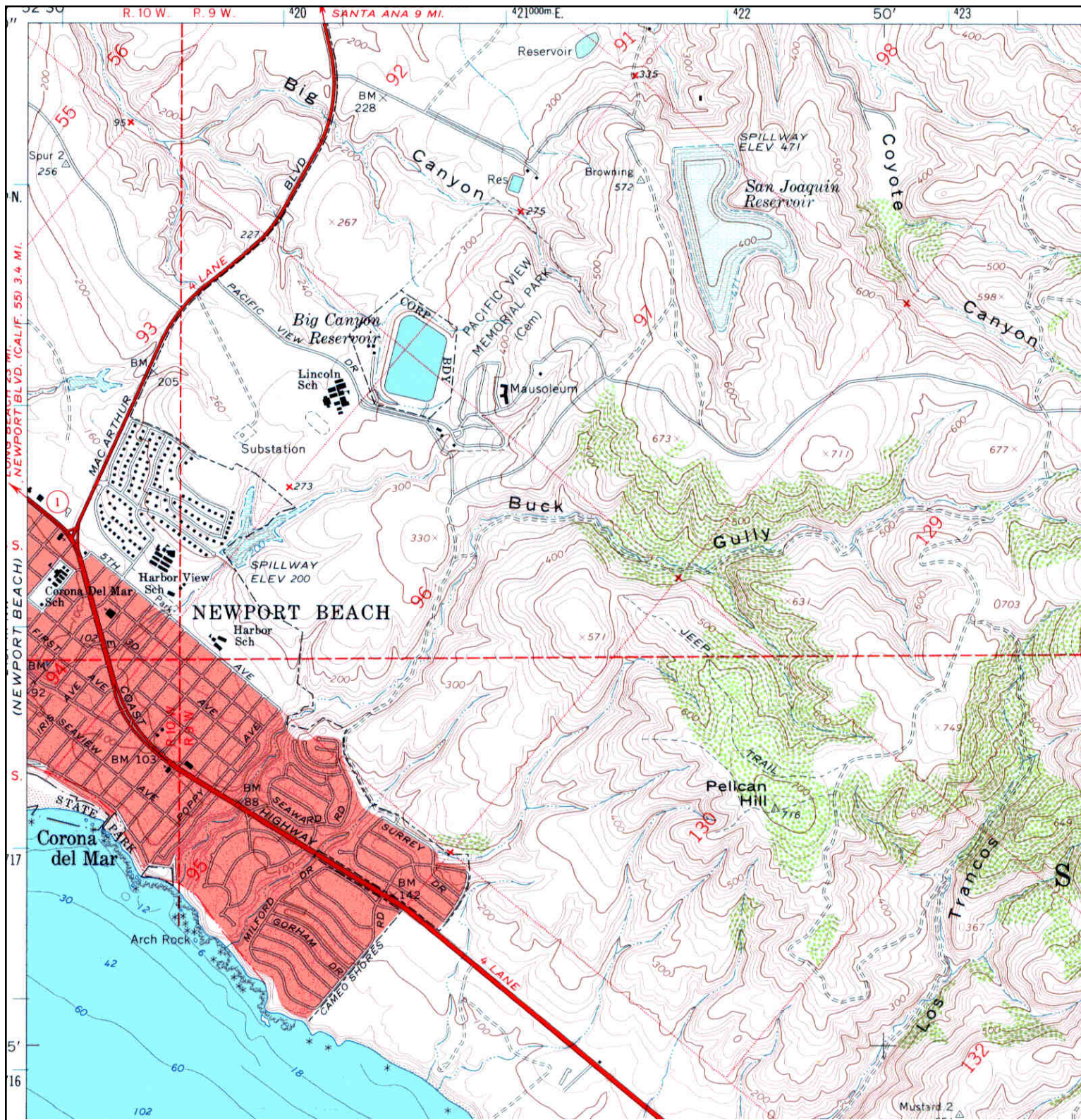
 N	ADJOINING QUAD	SITE NAME:	OCMA	CLIENT:	TRC
	NAME: LAGUNA BEACH	ADDRESS:	850 San Clemente Drive	CONTACT:	Daniel Lachman
	MAP YEAR: 1949	LAT/LONG:	33.6212 / -117.8782	INQUIRY#:	4385033.4
	SERIES: 7.5	RESEARCH DATE:	08/17/2015		
	SCALE: 1:24000				

Historical Topographic Map



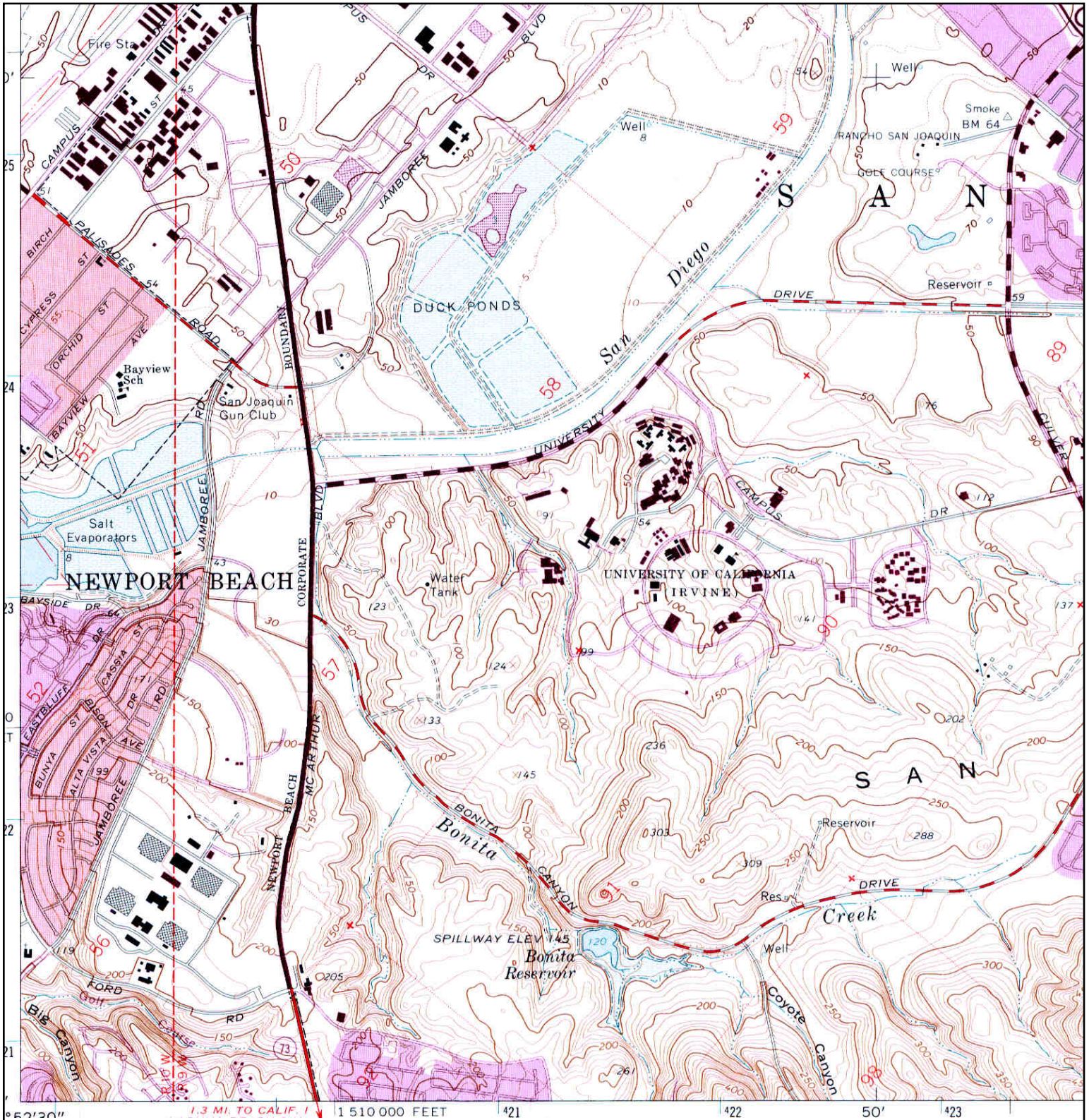
N 	ADJOINING QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: TUSTIN	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1965	NEWPORT BEACH, CA 92660	INQUIRY#: 4385033.4
	SERIES: 7.5	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SCALE: 1:24000		


Historical Topographic Map



	ADJOINING QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: LAGUNA BEACH	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1965	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	SERIES: 7.5	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SCALE: 1:24000		

Historical Topographic Map



	ADJOINING QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: TUSTIN	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1972	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	PHOTOREVISED FROM :1965	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SERIES: 7.5		
	SCALE: 1:24000		


Historical Topographic Map



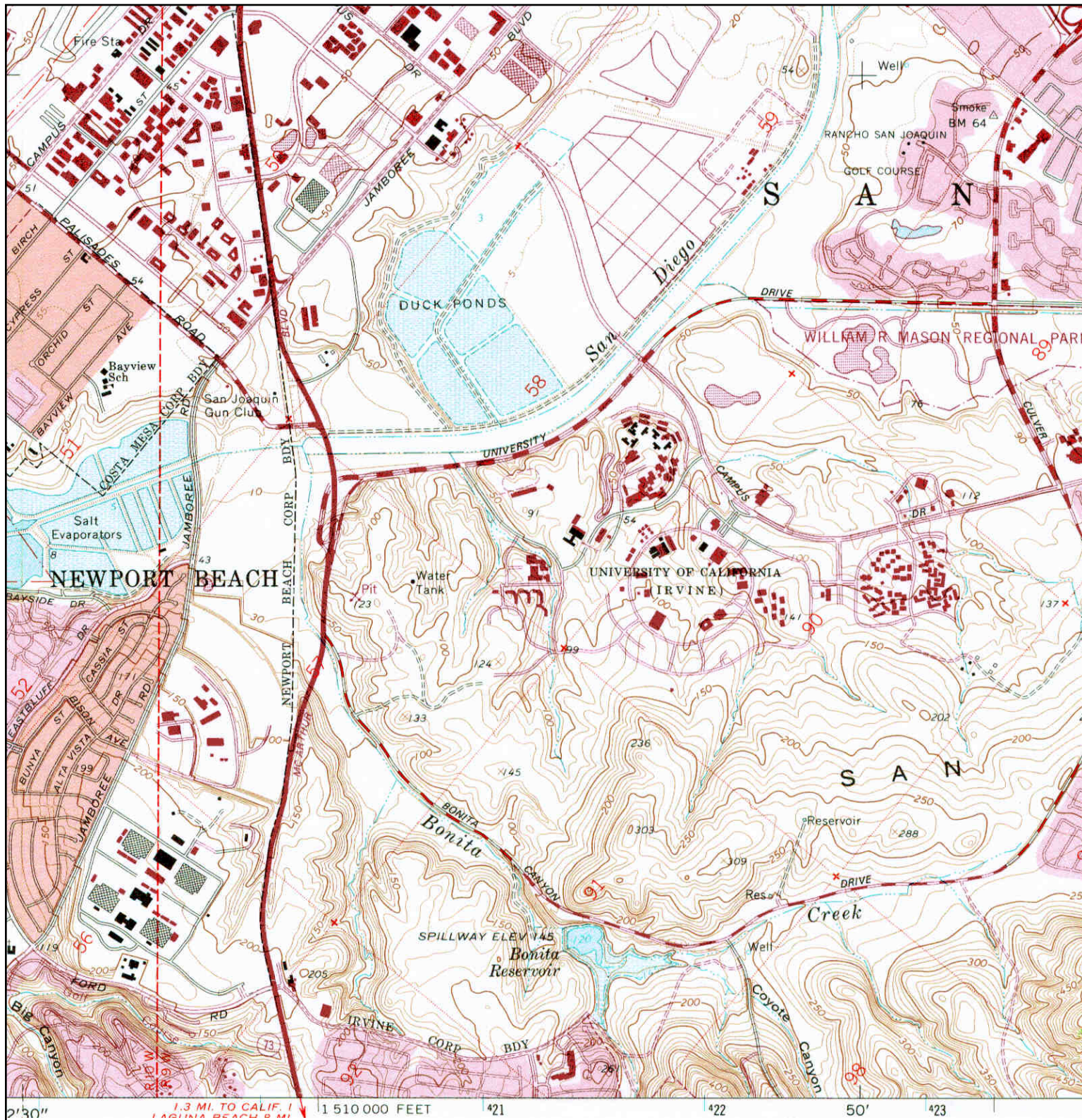
	ADJOINING QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: LAGUNA BEACH	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1972	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	PHOTOREVISED FROM :1965	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



<p>N</p> 	ADJOINING QUAD	SITE NAME: OCMA	CLIENT: TRC
	NAME: LAGUNA BEACH	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	MAP YEAR: 1981	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	PHOTOREVISED FROM :1965	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



<p>N ↑</p>	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: TUSTIN	OCMA	TRC
	MAP YEAR: 1981	ADDRESS: 850 San Clemente Drive	CONTACT: Daniel Lachman
	PHOTOREVISED FROM :1965	Newport Beach, CA 92660	INQUIRY#: 4385033.4
	SERIES: 7.5	LAT/LONG: 33.6212 / -117.8782	RESEARCH DATE: 08/17/2015
	SCALE: 1:24000		

OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.5
August 17, 2015

The EDR-City Directory Abstract

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SECTION

Executive Summary

Findings

City Directory Images

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

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2013	Cole Information Services	X	X	X	-
2008	Cole Information Services	X	X	X	-
2003	Cole Information Services	X	X	X	-
2002	Haines Company	X	X	X	-
2001	Pacific Telephone	-	-	-	-
1997	Pacific Bell	-	-	-	-
1995	Pacific Bell	X	X	X	-
1992	Pacific Bell	-	-	-	-
1991	Pacific Bell	X	X	X	-
1986	Pacific Bell	X	X	X	-
1980	Pacific Telephone	X	X	X	-
1975	Luskeys Brothers & Co.	-	-	-	-
1971	Luskey Brothers Co., Inc.	-	-	-	-
1970	General Telephone Co., of California	-	X	X	-
1966	Pacific Telephone	-	-	-	-
1965	Ross Publications, Inc.,	-	-	-	-
1961	Luskey Brothers & Co.,	-	-	-	-
1960	Unknown	-	-	-	-
1956	The Pacific Telephone and Telegraph Co.	-	-	-	-
1955	The Pacific Telephone and Telegraph Co.	-	-	-	-
1952	Luskeys Directory Service Co.	-	-	-	-
1950	West Directory Co.	-	-	-	-
1946	Southern California Telephone Co.	-	-	-	-
1945	Western Directory Co.	-	-	-	-
1941	Southern California Telephone Co.	-	-	-	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1936	Western Directory Co.	-	-	-	-
1930	Western Directory Co.	-	-	-	-
1926	Pacific Telephone	-	-	-	-
1925	Western Directory Co.	-	-	-	-
1922	Kaasen Directory Co.	-	-	-	-
1921	Western Directory Co.	-	-	-	-
1920	Santa Ana Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

850 San Clemente Drive
Newport Beach, CA 92660

FINDINGS DETAIL

Target Property research detail.

SAN CLEMENTE CIR

850 SAN CLEMENTE CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	N E W PORT HARBOR ART MUS E UM	Pacific Bell

SAN CLEMENTE DR

850 SAN CLEMENTE DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	ORANGE COUNTY MUSEUM OF ART	Cole Information Services
2008	ORANGE COUNTY MUSEUM OF ARTS	Cole Information Services
2003	ORANGE COUNTY MUSEUM OF ART	Cole Information Services
	PLEIN AIR CAFE	Cole Information Services
2002	ART MAIN MSM PLEIN AIR CAFE	Haines Company
	ORANGECOMSMOF	Haines Company
1995	NEWPORT HARBOR ART MUSEUM	Pacific Bell
1991	NEWPORT HARBOR ART MUSEUM	Pacific Bell
1980	Adult Workshop	Pacific Telephone
	From Santa Ana Telephones Call	Pacific Telephone
	Harbor Business Systems	Pacific Telephone
	Newport Harbor Builders	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CIVIC

3 CIVIC

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Delphi Investments Ltd	Pacific Bell

5 CIVIC

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Tomalas Roger Patty	Pacific Bell

CIVIC PLZ

1 CIVIC PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	U S Consolidated Foreclosure	Pacific Bell
	Vistar Marketing & Sales Solutions	Pacific Bell
	Every Bodi Fitness Consulting	Pacific Bell
	Independent Development Co	Pacific Bell
	Independent Development Co	Pacific Bell
	Morgan Hank Designer Inc	Pacific Bell
	TAYLOR WESLEY N CO REALTORS	Pacific Bell
	USL Capital Corp	Pacific Bell
1991	American Sign Systems Inc	Pacific Bell
	Ferentz Jeff Dennis atty	Pacific Bell
	Newport Center Office	Pacific Bell
	Day& Night Banking	Pacific Bell
	Kemet Electronics Corp	Pacific Bell
	Peliscan Inc	Pacific Bell
	Sign Biz Inc	Pacific Bell
	WESLEY N TAYLOR CO REALTORS	Pacific Bell
	Wesley Richard 4802 Colfs Ln @Yorba Linda@	Pacific Bell
	Greenbaum And Ferentz attys	Pacific Bell
	Greenbaum Martin B	Pacific Bell
	Greenbaum Patricia A	Pacific Bell

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	AME RICAN AS S OCIATION OF CRITICALCARE N URS E S	Pacific Bell
	Anglea Berneice atty	Pacific Bell
	Anglea & Burford	Pacific Bell
	Bell & Company	Pacific Bell
	Blame Arnold CPA	Pacific Bell
	Cohen Stanley	Pacific Bell
	Corbin & Wertz	Pacific Bell
	Diehi Evans Gifford & Co	Pacific Bell
	Executive Search & Placement Agency Inc	Pacific Bell
	Newport Center Office	Pacific Bell
	Gafford Don CPA	Pacific Bell
	Jackson C Bennett Jr a t	Pacific Bell
	Jackson & Suckling attys	Pacific Bell
	Kidder Russell W atty	Pacific Bell
	KIN G J A AN D AS S OCIATE S	Pacific Bell
	Kremer Company The	Pacific Bell
	Pollard Scott S atty	Pacific Bell
	Suckling John R atty	Pacific Bell
	Blen Donald Company	Pacific Bell

2 CIVIC PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	FREEDOM ESCROW	Cole Information Services
	NEWPORT COAST ARCHTCTRL OFC	Cole Information Services
1995	Freedom Escrow	Pacific Bell
	Lawson Grubbs Associates	Pacific Bell
	North American Bancorp	Pacific Bell
	Sunnyglen Corp	Pacific Bell
	Valentine Lynne Properties	Pacific Bell
	Valentine Properties	Pacific Bell
1991	HOLMES ORGANIZATION T@Huntington Beach@	Pacific Bell
	Holmes P @Laguna Beach@	Pacific Bell
	Related Capital Corp	Pacific Bell
	Sunnyglen Corp	Pacific Bell
	Sunnyhills Cleaners	Pacific Bell
	Leonard Steven C Atty At Law	Pacific Bell
	Nicole Industries	Pacific Bell

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Newport Beach	Pacific Bell
	Lanco Engineering	Pacific Bell
	Russell CorporationKnit Division	Pacific Bell
	Sunnyglen Corp	Pacific Bell
	Newport Beach Office	Pacific Bell
	E RVINTAFT	Pacific Bell
	Cal American Leasing	Pacific Bell

3 CIVIC PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	SYRIAN CONSULATE	Cole Information Services
	ASSI INC	Cole Information Services
	THE O'DONNELL GROUP INC	Cole Information Services
	RICHARD H GOLUBOW	Cole Information Services
	SWD COMMUNITIES	Cole Information Services
	WORLDWIDE EXEC SERVICES	Cole Information Services
	MICOR ENERGY LLC	Cole Information Services
	MERITOR CREDIT CORP	Cole Information Services
	PASCOE INVESTMENT & DVLPMNT	Cole Information Services
	WAYNE J AUSTERO	Cole Information Services
	O'CONNOR CO	Cole Information Services
	A PLUS TRANSMISSION SPCLST	Cole Information Services
	WASHINGTON PAPER & CHEMICAL	Cole Information Services
	GOOSSENS DORIT	Cole Information Services
	HOLLAND J MARK & ASSOCS	Cole Information Services
	HAFIF HERBERT LAW OFFICES	Cole Information Services
	O'CONNOR SWS SECURITIES	Cole Information Services
	OPERATION ROBERT ATTY	Cole Information Services
	SANTA FE SPRINGS II	Cole Information Services
	GOE & FORSYTHE LLP	Cole Information Services
1995	Arawak Air Corp	Pacific Bell
	Chilton & O'Connor Inc	Pacific Bell
	Consolidated Resort Enterprises Inc	Pacific Bell
	Delphi Investments	Pacific Bell
	Design Concepts & Classics	Pacific Bell
	Diversified Tax Service Co	Pacific Bell
	Dougherty & Dougherty	Pacific Bell
	EIP Microwave Inc	Pacific Bell
	Heinz Clifford S	Pacific Bell

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Paulson Investment Co Inc	Pacific Bell
	International Cargo Loss Prevention Inc	Pacific Bell
	Pascoe Investment & Development	Pacific Bell
	Tickner Todd E CPA	Pacific Bell
1991	Pulte Home Corp	Pacific Bell
	Dougherty & Dougherty	Pacific Bell
	Foreman Robert L & Associates	Pacific Bell
	From Santa Ana Telephones Call 6	Pacific Bell
	Paulson Investment Co Inc	Pacific Bell
	Paulson J	Pacific Bell
1986	Akins Development	Pacific Bell
	Allen Matkins Leck Gamble & Mallory attys	Pacific Bell
	Bell Cynthia A Atty At Law	Pacific Bell
	Bell & Militzok attys at law	Pacific Bell
	Dougherty & Dougherty	Pacific Bell
	Gamble John C Allen Matkins Leck Gamble & Mallory attys	Pacific Bell
	Guardian Title	Pacific Bell
	Lynne Valentine Properties	Pacific Bell
	Militzok Steven Atty At Law	Pacific Bell
	PS FS Credit Corporation	Pacific Bell
	Schoellerman Jack L Law Offices	Pacific Bell
	Seabreeze Realty Corp	Pacific Bell

4 CIVIC PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	FELDSOTT LEE & FEINBERG	Cole Information Services
	NEWPORT CTR ESCROW INC	Cole Information Services
	BURROW ESCROW	Cole Information Services
1995	Feldsott & Lee A Law Corp	Pacific Bell
	Coast Newport Properties	Pacific Bell
	K Line America Inc	Pacific Bell
	K Line America Inc	Pacific Bell
	Feldsott Lee & Feinberg	Pacific Bell
1991	K Line America Inc	Pacific Bell
	K Line America Inc	Pacific Bell
	K mart Discount Stores	Pacific Bell
1986	Newport Trust And Financial Services	Pacific Bell
	S TUDE N T LOAN DIVIS ION	Pacific Bell

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Forsythe Marcelli Johnson Advertising Inc	Pacific Bell

5 CIVIC PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	CARROLL BURDICK & MCDNGH ATTY	Cole Information Services
1995	Tomalas Roger Patty	Pacific Bell
	Applied Litigation Research	Pacific Bell
	California Pacific Homes Inc	Pacific Bell
	Dawson & Dawson attys	Pacific Bell
	Dempsey John atty	Pacific Bell
	Edwards Ray H atty S	Pacific Bell
	Gorelick & Bowman	Pacific Bell
	Harms Michael S Attorney At Law	Pacific Bell
	Rubel Jas L Jr atty	Pacific Bell
	Koontz Betty L atty	Pacific Bell
	De Vitto James Attorney At Law	Pacific Bell
1991	Wisey Financial Consultants Inc	Pacific Bell
	Edwards Rene	Pacific Bell
	Edwards Raymond @Huntington Beach@	Pacific Bell
	Edwards Ray H atty	Pacific Bell
	Corsaro Kimberly A atty	Pacific Bell
	Ticket Office	Pacific Bell
	Business Off Ice	Pacific Bell
	Bren Donald Company Corporate Office	Pacific Bell
	Bosche Thomas atty	Pacific Bell
	Bosche & Bosche Lawyers	Pacific Bell
	Bosche Kelly Batty	Pacific Bell
	Kiyo Systems Inc	Pacific Bell
	Tomalas Roger P atty	Pacific Bell
1986	Iren Donald Corporate Office	Pacific Bell
	Cochrane Chase Livingston & Co Inc	Pacific Bell

CIVIC PLZ N

3 CIVIC PLZ N

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Paulson Investment Co	Pacific Bell

FINDINGS

CIVIC PLZ NE

1 CIVIC PLZ NE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	D G W Budget Preparation	Pacific Bell

COLLINS AV LS

3251 COLLINS AV LS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Low Corinne	Pacific Telephone

COLONY DR

1812 COLONY DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Costa Jos L I	General Telephone Co., of California

1822 COLONY DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Goodwin Robt F	General Telephone Co., of California

COLONY PLZ

1214 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	KERRIN EXECUTIVE SERVICE LLC	Cole Information Services

2112 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	DEN TECHNOLOGIES LLC	Cole Information Services

2116 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	ARROWHEAD MUTUAL FUNDING	Cole Information Services

2202 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	MC NAIR SPORTS DEVELOPMENT	Cole Information Services

FINDINGS

2222 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	REBUILD USA	Cole Information Services
2003	TECHNIFX	Cole Information Services

2304 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	SHIRAIMATSU USA INC	Cole Information Services

3011 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	GOGO REAL ESTATE	Cole Information Services

3141 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	COAST INTERIORS	Cole Information Services

3203 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	WALTER KING	Cole Information Services
2003	GALLERIE OF INTERIORS	Cole Information Services

3233 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	QUALITY HEALTHCARE MNGMNT CNSL	Cole Information Services

3337 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	PANTERA AUTO DETAIL	Cole Information Services

3411 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	CAMEO PROPERTIES	Cole Information Services

4301 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	TRI DELTA LLC	Cole Information Services

5100 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	NEWPORT COLONY LEASING OFFICE	Cole Information Services
2008	LARRY L LIDSTER	Cole Information Services

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	WESTERN NATIONAL PROPERTIES	Cole Information Services
	THE COLONY AT FASHION ISLAND	Cole Information Services
	CALVERT JAY MD	Cole Information Services
2003	THE COLONY AT FASHION ISLAND	Cole Information Services

5101 COLONY PLZ

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	COLONY GUARD HOUSE	Cole Information Services

SAN CLEMENTE CIR

824 SAN CLEMENTE CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	BIBLE BOOK STORE Scripture House The	General Telephone Co., of California
	Bible Chas L	General Telephone Co., of California

SAN CLEMENTE DR

856 SAN CLEMENTE DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	OCMA GALLERIES	Cole Information Services
2002	XXXX	Haines Company
1980	Administrative Offices	Pacific Telephone
	Newport Center	Pacific Telephone
	Technical Services	Pacific Telephone
	Childrens Services	Pacific Telephone

888 SAN CLEMENTE DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	NAMASCO	Cole Information Services
	RITZCARLTON CLUB & RESIDENCES SOUTH	Cole Information Services
	UBS FINANCIAL SERVICES	Cole Information Services
	BUCHANAN STREET PARTNERS	Cole Information Services
2008	EAGLESTONE CAPITAL SERVICES INC	Cole Information Services
	MACSTEEL	Cole Information Services
	UBS FINANCIAL SERVICES INC	Cole Information Services
	TIMOTHY SAGEHORN	Cole Information Services
2003	ALLIANZ DRSDNR ASSET MNGMNT AM	Cole Information Services
	JP MORGAN CHASE	Cole Information Services

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	UBS PAINWEBBER	Cole Information Services
2002	XXXX	Haines Company

SAN CLEMENTE WAY

844 SAN CLEMENTE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Gordon JS	Pacific Bell

SANTA BARBARA AVE

861 SANTA BARBARA AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Lundy Arvid L S	General Telephone Co., of California

SANTA BARBARA DR

868 SANTA BARBARA DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	CITY OF NEWPORT BEACH	Cole Information Services
2003	NEWPORT BEACH CITY	Cole Information Services

870 SANTA BARBARA DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	BUILDING	Haines Company

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

850 San Clemente Drive

Address Not Identified in Research Source

2001, 1997, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched

1 CIVIC PLZ

Address Not Identified in Research Source

2013, 2008, 2003, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1 CIVIC PLZ NE

2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1214 COLONY PLZ

2013, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1812 COLONY DR

2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1822 COLONY DR

2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2 CIVIC PLZ

2013, 2008, 2003, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2 CIVIC PLZ

2013, 2008, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2112 COLONY PLZ

2013, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2116 COLONY PLZ

2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2202 COLONY PLZ

2013, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2222 COLONY PLZ

2008, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

FINDINGS

Address Researched

Address Not Identified in Research Source

5 CIVIC PLZ	2013, 2008, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
5100 COLONY PLZ	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
5101 COLONY PLZ	2013, 2008, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
824 SAN CLEMENTE CIR	2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
844 SAN CLEMENTE WAY	2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
856 SAN CLEMENTE DR	2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
856 SAN CLEMENTE DR	2013, 2008, 2003, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
861 SANTA BARBARA AVE	2013, 2008, 2003, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
868 SANTA BARBARA DR	2013, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
870 SANTA BARBARA DR	2013, 2008, 2003, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
888 SAN CLEMENTE DR	2013, 2008, 2003, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
888 SAN CLEMENTE DR	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.8
August 17, 2015

EDR Building Permit Report

Target Property and Adjoining Properties

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Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquiries (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of TRC on Aug 17, 2015.

TARGET PROPERTY

850 San Clemente Drive
Newport Beach, CA 92660

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Newport Beach

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>
2015	City of Newport Beach, Community Development Depa		X
2014	City of Newport Beach, Community Development Depa		X
	City of Newport Beach, Community Development Depa	X	
2013	City of Newport Beach, Community Development Depa		X
2012	City of Newport Beach, Community Development Depa		X
2011	City of Newport Beach, Community Development Depa		X
2010	City of Newport Beach, Community Development Depa		X
2009	City of Newport Beach, Community Development Depa		
2008	City of Newport Beach, Community Development Depa		X
2007	City of Newport Beach, Community Development Depa		X
2006	City of Newport Beach, Community Development Depa		X
2005	City of Newport Beach, Community Development Depa		X
2004	City of Newport Beach, Community Development Depa		X
	City of Newport Beach, Community Development Depa	X	
2003	City of Newport Beach, Community Development Depa		X

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Newport Beach
Years: 2003-2015
Source: City of Newport Beach, Community Development Department, NEWPORT BEACH, CA
Phone: (949) 718-1888

Name: Anaheim
Years: 2000-2015
Source: City of Anaheim, Planning & Building Department, Anaheim, CA
Phone: (714) 765-5153

Name: Irvine
Years: 1982-2015
Source: City of Irvine, Building and Safety, IRVINE, CA
Phone: (949) 724-6470

Name: Orange
Years: 1988-2015
Source: City of Orange, Community Development, SANTA ANA, CA
Phone: (714) 744-7200

Name: Orange County
Years: 1990-2015
Source: Orange County, Planning and Development Services, ANAHEIM, CA
Phone: (714) 834-5238

Name: San Bernardino County
Years: 2002-2015
Source: San Bernardino County, Land Use, Building & Safety, FONTANA, CA
Phone: (909) 387-8311

Name: Huntington Beach
Years: 1996-2015
Source: Huntington Beach, Dept. of Building and Safety, HUNTINGTON BEACH, CA
Phone: (714) 536-5241

Name: Tustin
Years: 2000-2012
Source: City of Tustin, Building Division, TUSTIN, CA
Phone: (714) 573-3131

Name: Costa Mesa
Years: 1998-2012
Source: City of Costa Mesa, Development Services, Building Safety Division, COSTA MESA, CA
Phone: (714) 754-5273

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

**850 San Clemente Drive
Newport Beach, CA 92660**

850 SAN CLEMENTE DR

Date: **12/19/2014**
Permit Type: **X**
Description: **COMM - GRADING FOR ADJ PROPERTY (PARKING STRUC) (DELTA 2)**
Permit Description: **Building Combo**
Work Class:
Proposed Use:
Permit Number: X2014-3661
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: A R B STRUCTURES INC

Date: **9/20/2004**
Permit Type:
Description: **ELEC/SUB PANEL**
Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-1972
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: WILEY ANNETTE/BAUER & WILEY

TARGET PROPERTY FINDINGS

Date: **9/9/2004**
Permit Type:
Description: **INSTL (3) FLAGPOLES**
Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-2368
Status:
Valuation: \$9,000.00
Contractor Company:
Contractor Name: WILEY ANNETTE

Date: **8/20/2004**
Permit Type:
Description: **RET WALL 2' HI X 75 LF INSIDE P/L**
Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-2967
Status:
Valuation: \$2,000.00
Contractor Company:
Contractor Name: SCARPINTO JIM

Date: **8/10/2004**
Permit Type:
Description: **(2) LIGHT STANDARDS**
Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-2807
Status:
Valuation: \$5,000.00
Contractor Company:
Contractor Name: WILEY ANNETTE/BAUER & WILEY

TARGET PROPERTY FINDINGS

Date: **8/10/2004**
Permit Type:
Description: **ELEC/(2) LIGHT STANDARDS**
Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-1704
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: WILEY ANNETTE/BAUER & WILEY

Date: **6/3/2004**
Permit Type:
Description: **COMM ALT & TENANT IMPROVEMENT**
Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-1027
Status:
Valuation: \$570,000.00
Contractor Company:
Contractor Name: BAUER & WILEY

Date: **6/3/2004**
Permit Type:
Description: **PROJECTION SCREEN**
Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-2011
Status:
Valuation: \$30,000.00
Contractor Company:
Contractor Name: BAUER & WILEY

TARGET PROPERTY FINDINGS

Date: **6/3/2004**
Permit Type:
Description: **ELECTRICAL/COMM ALT & TI**
Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-0705
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: BAUER & WILEY

Date: **6/3/2004**
Permit Type:
Description: **MECHANICAL/COMM ALT & TI**
Permit Description:
Work Class:
Proposed Use:
Permit Number: H2004-0468
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: BAUER & WILEY

Date: **6/3/2004**
Permit Type:
Description: **PLUMBING/COMM ALT & TI**
Permit Description:
Work Class:
Proposed Use:
Permit Number: P2004-0623
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: BAUER & WILEY

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CIVIC PLZ 1

3 CIVIC PLZ 1

Date: **3/29/2005**
Permit Type:
Description: **T I/STE 230 "SLAYMAN/**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2005-0561
Status:
Valuation: \$35,000.00
Contractor Company:
Contractor Name: MORFORD PAUL

Date: **3/29/2005**
Permit Type:
Description: **ELEC/T I STE 230 "SLAYMAN/MCWALTERS"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0297
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: MORFORD PAUL

ADJOINING PROPERTY FINDINGS

Date: **3/29/2005**
Permit Type:
Description: **MECH/T I STE 230 "SLAYMAN/MCWALTERS"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2005-0175
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: MORFORD PAUL

Date: **12/6/2004**
Permit Type:
Description: **TENANT IMPROVEMENT/630 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-3737
Status:
Valuation: \$17,880.00
Contractor Company:
Contractor Name: PAUL MORFORD/GENSLER

Date: **12/6/2004**
Permit Type:
Description: **ELEC/TI "SWD"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-2222
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PAUL MORFORD/GENSLER

ADJOINING PROPERTY FINDINGS

Date: **12/6/2004**
Permit Type:
Description: **MECH/TI "SWD"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2004-1398
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PAUL MORFORD/GENSLER

5 CIVIC PLZ 1

Date: **7/27/2004**
Permit Type:
Description: **TENANT IMPROVEMENT "PACIFIC LIFE"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-2446
Status:
Valuation: \$35,000.00
Contractor Company:
Contractor Name: GENSLER

Date: **7/27/2004**
Permit Type:
Description: **ELEC/TENANT IMPROVEMENT "PACIFIC LIFE"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-1494
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: GENSLER

ADJOINING PROPERTY FINDINGS

Date: **7/27/2004**
Permit Type:
Description: **MECH/TENANT IMPROVEMENT "PACIFIC LIFE"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2004-0936
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: GENSLER

COLONY PLZ

1100 COLONY PLZ

Date: **1/25/2008**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2008-0028
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APT COMMUNITIES LP

ADJOINING PROPERTY FINDINGS

2100 COLONY PLZ

Date: **1/25/2008**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: **E2008-0029**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **IRVINE APT COMMUNITIES LP**

3101 COLONY PLZ

Date: **1/25/2008**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: **E2008-0030**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **IRVINE APT COMMUNITIES LP**

ADJOINING PROPERTY FINDINGS

4101 COLONY PLZ

Date: **1/25/2008**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: **E2008-0031**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **IRVINE APT COMMUNITIES LP**

Date: **2/6/2004**
Permit Type:
Description: **CHANGE OUT WATER HEATER**

Permit Description:
Work Class:
Proposed Use:
Permit Number: **P2004-0269**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **P B PLUMBING INC**

ADJOINING PROPERTY FINDINGS

4301 COLONY PLZ

Date: **5/12/2004**
Permit Type:
Description: **PLUM / C/O WATER HEATER**

Permit Description:
Work Class:
Proposed Use:
Permit Number: **P2004-0905**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **P B PLUMBING**

5100 COLONY PLZ

Date: **5/1/2015**
Permit Type: **P**
Description: **PLUM/WATER HEATER C/O (UNITS 1112/1116/1124/1200/1206/1212/1214/1216/1224/1300/1302/1306/1312/1314/1316/1324/1400/1406/1412/1414/1416/1424)**

Permit Description: **Plumbing**
Work Class:
Proposed Use:
Permit Number: **P2015-0210**
Status:
Valuation: **\$0.00**
Contractor Company:
Contractor Name: **BOTTOM LINE UTIL SOL INC**

ADJOINING PROPERTY FINDINGS

Date: **5/1/2015**
Permit Type: **P**
Description: **PLUM/WATER HEATER C/O (UNITS 3107/3109/3113/3115/3125/3213/3215/3225/3313/3315/3325/3407/3411/3413/34 25)**

Permit Description: **Plumbing**
Work Class:
Proposed Use:
Permit Number: P2015-0211
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: BOTTOM LINE UTIL SOL INC

Date: **5/1/2015**
Permit Type: **P**
Description: **PLUM/WATER HEATER C/O (UNITS 4101/4105/4201/4205/4301/4401/4405)**

Permit Description: **Plumbing**
Work Class:
Proposed Use:
Permit Number: P2015-0212
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: BOTTOM LINE UTIL SOL INC

Date: **1/4/2008**
Permit Type:
Description: **ELECT/R/R EXTG EXTER. OUTLETS & FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0869
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: SCLAFANI TONY

ADJOINING PROPERTY FINDINGS

Date: **11/19/2007**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3309"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0815
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **11/19/2007**
Permit Type:
Description: **PLUMB/KITCHN & BATH ALT "UNIT 3211"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2007-0655
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **11/19/2007**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3303"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0816
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

ADJOINING PROPERTY FINDINGS

Date: **11/19/2007**
Permit Type:
Description: **PLUMB/KITCHN & BATH ALT "UNIT 3211"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2007-0654
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/20/2007**
Permit Type:
Description: **ELECT/KITCHN & BATH ALT "UNIT 3211"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0673
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/20/2007**
Permit Type:
Description: **PLUMB/KITCHN & BATH ALT "UNIT 3211"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2007-0500
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **3/21/2007**
Permit Type:
Description: **ELECT/KITCHN AND BATHRM "UNIT "3215"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0238
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **3/21/2007**
Permit Type:
Description: **ELECT/KITCHN AND BATHRM "UNIT "4309"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2007-0239
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **3/21/2007**
Permit Type:
Description: **PLUM/KITCHN AND BTHRMS "UNIT 3215"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2007-0192
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **3/21/2007**
Permit Type:
Description: **PLUM/KITCHN AND BTHRMS "UNIT 4309"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2007-0193
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **9/22/2006**
Permit Type:
Description: **ELEC/BATH ALT**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2006-1876
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

Date: **9/22/2006**
Permit Type:
Description: **PLUM/KIT/BATH ALT**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2006-1212
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

ADJOINING PROPERTY FINDINGS

Date: **5/9/2006**
Permit Type:
Description: **ELEC/KIT/BATH ALT "UNITS 1220,2110,2406,2424,3315,**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2006-0998
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

Date: **5/9/2006**
Permit Type:
Description: **PLUM/KIT/BATH ALT "UNITS 1220,2110,2406,2424,3315,**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2006-0622
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

Date: **11/2/2005**
Permit Type:
Description: **ELECT/KITCHN AND BATHRM "UNIT 3437"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-2205
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **11/2/2005**
Permit Type:
Description: **ELECT/KITCHN AND BATHRM "UNIT "2216"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-2208
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **11/2/2005**
Permit Type:
Description: **PLUM/KITCHN AND BTHRMS "UNIT 3437"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1685
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **11/2/2005**
Permit Type:
Description: **PLUM/KITCHN AND BTHRMS "UNIT 2216"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1686
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **9/30/2005**
Permit Type:
Description: **ELEC/(6) FIXTURES (UNITS 3123,3401,3431)**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1970
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

Date: **9/30/2005**
Permit Type:
Description: **PLUM/FIXTURES (UNITS 3123,3401,3431)**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1544
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VENTURA ROBERT

Date: **8/22/2005**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1665
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: ROBERT/IRVINE CO

ADJOINING PROPERTY FINDINGS

Date: **8/22/2005**
Permit Type:
Description: **PLUM/BATHRM, KIT**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1350
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: ROBERT/IRVINE CO

Date: **8/22/2005**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1666
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: ROBERT/IRVINE CO

Date: **8/22/2005**
Permit Type:
Description: **PLUM/BATHRM, KIT**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1351
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: ROBERT/IRVINE CO

ADJOINING PROPERTY FINDINGS

Date: **8/9/2005**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1558
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/9/2005**
Permit Type:
Description: **PLUM/WC,LAV,KIT SINK,DISPSL,ICE MKR,DSHWSHR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1255
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/9/2005**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1559
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **8/9/2005**
Permit Type:
Description: **PLUM/WC,LAV,KIT SINK,DISPSL,ICE MKR,DSHWSHR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1256
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/9/2005**
Permit Type:
Description: **ELEC/FIXTURES**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1560
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

Date: **8/9/2005**
Permit Type:
Description: **PLUM/WC,LAV,KIT SINK,DISPSL,ICE MKR,DSHWSHR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1257
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: OWNER/BLDR

ADJOINING PROPERTY FINDINGS

Date: **7/19/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1424"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1412
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **7/19/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1318"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1413
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **7/19/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1424"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1153
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **7/19/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1318"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1154
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **7/5/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4121"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1279
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **7/5/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3311"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1280
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

ADJOINING PROPERTY FINDINGS

Date: **7/5/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4121"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1086
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE CO

Date: **7/5/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3311"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1087
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE CO

Date: **6/9/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3517"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1081
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

ADJOINING PROPERTY FINDINGS

Date: **6/9/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3517"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0899
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **5/24/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2420"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0956
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **5/24/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2420"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0793
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **5/19/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3309"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0921
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: IRVINE APARTMENT COMMUNITIES

Date: **5/19/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3309"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0768
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2204"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0643
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4423"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0644
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1210"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0645
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1408"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0646
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2120"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0647
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2418"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0648
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1314"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0649
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3111"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0652
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4403"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0653
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4415"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0654
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4203"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0655
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3327"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0656
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3319"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0657
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3115"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0658
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3241"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0659
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4401"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0660
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2204"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0515
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4423"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0516
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1210"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0517
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1408"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0518
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2120"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0519
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2418"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0520
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1314"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0521
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3111"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0523
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4403"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0524
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4415"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0525
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4208"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0526
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3327"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0527
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3329"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0528
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3115"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0529
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3241"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0530
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **4/7/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4401"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0531
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1228"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0418
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1304"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0419
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1330**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0420
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1404**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0421
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2106**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0422
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2114**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0423
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2122**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0424
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2206**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0425
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT2314**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0426
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3127**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0427
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3131**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0428
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3139**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0429
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3219**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0430
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3335**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0431
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4213**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0432
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4409**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0433
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4417**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0434
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1228"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0340
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1304"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0341
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1330"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0342
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1404"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0343
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2106"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0344
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2114"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0345
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2122"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0346
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2206"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0347
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2314"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0348
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3127"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0349
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3131"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0350
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3139"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0351
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3219"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0352
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3335"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0353
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4213"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0354
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4409"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0355
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **3/15/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4417"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0356
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3205"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0032
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 3435"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0033
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1414"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0034
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1118"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0035
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4321"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0036
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2410"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0037
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2414"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0038
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1320"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0039
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3205"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0034
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 3435"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0035
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1414"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0036
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1118"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0037
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4321"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0038
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT " UNIT 2410"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0039
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2414"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0040
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/10/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1320"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0041
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/6/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1126"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0022
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 1412"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0023
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4319"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0024
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/6/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 2402"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0025
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **ELEC/KIT & BATH ALT "UNIT 4105"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-0026
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1126"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0019
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/6/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 1412"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0020
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4319"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0021
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **1/6/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 2402"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0022
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **1/6/2005**
Permit Type:
Description: **PLUM/KIT & BATH ALT "UNIT 4105"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0023
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **11/29/2004**
Permit Type:
Description: **KITCHEN & BATH ALTERATIONS #245**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-4048
Status:
Valuation: \$12,000.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **11/29/2004**
Permit Type:
Description: **ELEC/KIT & BATH ALT #245**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-2373
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

ADJOINING PROPERTY FINDINGS

Date: **11/29/2004**
Permit Type:
Description: **PLUM/KIT & BATH ALT #245**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2004-1998
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: PALMQUIST TIM

Date: **2/23/2004**
Permit Type:
Description: **REPL DRYWALL @ W/H ENCL "UNIT 4101"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-0629
Status:
Valuation: \$500.00
Contractor Company:
Contractor Name: J C S CONST

ADJOINING PROPERTY FINDINGS

SAN CLEMENTE DR

856 SAN CLEMENTE DR

Date: 9/28/2011
Permit Type:
Description: T/O BUR, REPL W/VERSICO TPO ROOFING CRRC #0738-0002 CLASS "A" 144 SQS

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2011-2401
Status:
Valuation: \$51,120.00
Contractor Company:
Contractor Name: LONG BEACH ROOFING INC

888 SAN CLEMENTE DR

Date: 8/27/2014
Permit Type: X
Description: COMM - TI "ROTH CAPITAL" 650 SF

Permit Description: Building Combo
Work Class:
Proposed Use:
Permit Number: X2014-0346
Status:
Valuation: \$28,600.00
Contractor Company:
Contractor Name: PARAGON CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/9/2014**
Permit Type: **X**
Description: **COMM TI "SAN MARTINEZ" 500 SF**

Permit Description: **Building Combo**
Work Class:
Proposed Use:
Permit Number: X2014-1519
Status:
Valuation: \$10,500.00
Contractor Company:
Contractor Name: PENA LUIS

Date: **11/25/2013**
Permit Type: **E**
Description: **ELEC - (16) OUTLETS "RPM MORTGAGE"**

Permit Description: **Electrical**
Work Class:
Proposed Use:
Permit Number: E2013-0507
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VOWELS-SOUTHER AMY

Date: **11/6/2013**
Permit Type: **E**
Description: **ELEC - 4 ELECTRIC VEHICLE CHARGING STATIONS**

Permit Description: **Electrical**
Work Class:
Proposed Use:
Permit Number: E2013-0478
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: CORDOVA ROBERT

ADJOINING PROPERTY FINDINGS

Date: **10/4/2013**
Permit Type: **F**
Description: **COMM FIRE SPRINKLER TI -11 HEADS (X2013-2336)**

Permit Description: **Fire**
Work Class:
Proposed Use:
Permit Number: F2013-0437
Status:
Valuation: \$2,100.00
Contractor Company:
Contractor Name: ANDERSON CODY

Date: **10/3/2013**
Permit Type: **F**
Description: **COMM FIRE ALARM (4) DEVICES (X2013-2336)**

Permit Description: **Fire**
Work Class:
Proposed Use:
Permit Number: F2013-0438
Status:
Valuation: \$2,500.00
Contractor Company:
Contractor Name: RICHARD TAYLOR

Date: **10/3/2013**
Permit Type: **X**
Description: **COMM TI " BAINBRIDGE" 809 SF**

Permit Description: **Building Combo**
Work Class:
Proposed Use:
Permit Number: X2013-2336
Status:
Valuation: \$35,650.00
Contractor Company:
Contractor Name: CASCO CONTRACTORS INC

ADJOINING PROPERTY FINDINGS

Date: **9/18/2013**
Permit Type: **F**
Description: **COMM FIRE ALARM (X2013-1537)**

Permit Description: **Fire**
Work Class:
Proposed Use:
Permit Number: F2013-0272
Status:
Valuation: \$7,746.00
Contractor Company:
Contractor Name: TAYLOR RICHARD

Date: **9/18/2013**
Permit Type: **X**
Description: **COMM TI "INTEGRAL COMMUNITIES" 9,973 SF**

Permit Description: **Building Combo**
Work Class:
Proposed Use:
Permit Number: X2013-1537
Status:
Valuation: \$391,601.00
Contractor Company:
Contractor Name: CASCO CONTRACTORS INC

Date: **1/31/2013**
Permit Type: **F**
Description: **COMM-FIRE ALARM (X2012-3224)**

Permit Description: **Fire**
Work Class:
Proposed Use:
Permit Number: F2013-0034
Status:
Valuation: \$1,716.00
Contractor Company:
Contractor Name: FERNANDEZ KRISTINA

ADJOINING PROPERTY FINDINGS

Date: **12/28/2012**
Permit Type:
Description: **COMM TI "BUCHANAN STREET PARTNERS" 286 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2012-3224
Status:
Valuation: \$39,827.00
Contractor Company:
Contractor Name: H HENDY ASSOCIATES

Date: **10/10/2012**
Permit Type:
Description: **COMM TI/ INSTL DEMISING WALL TO CREATE SUITE #200**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2012-2452
Status:
Valuation: \$2,500.00
Contractor Company:
Contractor Name: WILSON KERRY

Date: **9/26/2011**
Permit Type:
Description: **(1) NON-ILLUM REV PAN CHANNEL LETTER SIGN "ROTH CAPITAL PARTNERS, LLC"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2011-2375
Status:
Valuation: \$1,000.00
Contractor Company:
Contractor Name: NOEL/TFN ARCH SIGNAGE

ADJOINING PROPERTY FINDINGS

Date: **5/9/2011**
Permit Type:
Description: **TI "ROTH CAPITAL" 23,141 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2011-0743
Status:
Valuation: \$1,018,204.00
Contractor Company:
Contractor Name: YAM JUDY

Date: **5/6/2011**
Permit Type:
Description: **TI 4187 SF "ROTH CAPITAL"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2011-0527
Status:
Valuation: \$167,480.00
Contractor Company:
Contractor Name: YAM MARK/JUDY

Date: **4/19/2010**
Permit Type:
Description: **ELEC/(2) LOCATIONS,"FIELD VERIFY FOR CODE**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2010-0188
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VECTOR RESOURCES INC

ADJOINING PROPERTY FINDINGS

Date: **3/15/2010**
Permit Type:
Description: **TI "MACSTEEL" 6034 SF AFFECTED AREA**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2010-0142
Status:
Valuation: \$100,700.00
Contractor Company:
Contractor Name: WILSON KERRY

Date: **2/10/2010**
Permit Type:
Description: **TI "UBS FINANCIAL SERVICES" 22579 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2009-2284
Status:
Valuation: \$1,200,000.00
Contractor Company:
Contractor Name: LITTLEJOHN LANCE

Date: **11/5/2008**
Permit Type:
Description: **TI "SPEC SUITE" UNIT #120**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2008-1967
Status:
Valuation: \$83,074.00
Contractor Company:
Contractor Name: LITTLEJOHN LANCE/GENSLER

ADJOINING PROPERTY FINDINGS

Date: **10/22/2008**
Permit Type:
Description: **TI "RITZ CARLTON CLUB" 951 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2008-1682
Status:
Valuation: \$87,000.00
Contractor Company:
Contractor Name: LANCE/GENSLER

Date: **6/5/2008**
Permit Type:
Description: **TI/ 1832SF "SPEC SUITE"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2008-0994
Status:
Valuation: \$73,500.00
Contractor Company:
Contractor Name: VAN DRIEL KRISTEN

Date: **1/23/2008**
Permit Type:
Description: **TI/ "RITZ CARLTON CLUB" 4902 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: X2007-2541
Status:
Valuation: \$223,000.00
Contractor Company:
Contractor Name: (GENSLER) LITTLEJOHN LANCE

ADJOINING PROPERTY FINDINGS

Date: **7/21/2006**
Permit Type:
Description: **ELEC/TI STE 150**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2006-1493
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KRISTEN/GENSLER

Date: **6/29/2006**
Permit Type:
Description: **TENANT IMPROVEMENT/2355SF/STE 150**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2006-1392
Status:
Valuation: \$95,000.00
Contractor Company:
Contractor Name: KRISTEN/GENSLER

Date: **6/29/2006**
Permit Type:
Description: **ELEC/TI STE 150**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2006-1063
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KRISTEN/GENSLER

ADJOINING PROPERTY FINDINGS

Date: **6/29/2006**
Permit Type:
Description: **MECH/TI STE 150**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2006-0547
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KRISTEN/GENSLER

Date: **6/29/2006**
Permit Type:
Description: **PLUM/TI STE 150**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2006-0666
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KRISTEN/GENSLER

Date: **3/14/2006**
Permit Type:
Description: **ELEC/TI "FIRST Q CAPITAL" STE 180**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2006-0241
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KAREN/MORFORD PAUL

ADJOINING PROPERTY FINDINGS

Date: **3/14/2006**
Permit Type:
Description: **MECH/TI "FIRST Q CAPITAL" STE 180**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2006-0114
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: KAREN/MORFORD PAUL

Date: **3/13/2006**
Permit Type:
Description: **TI "FIRST Q CAPITAL" STE 180**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2006-0292
Status:
Valuation: \$75,000.00
Contractor Company:
Contractor Name: KAREN/MORFORD PAUL

Date: **12/23/2005**
Permit Type:
Description: **DET WARNINGS @ PATH OF TRAVEL/DOOR HARDWR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2005-2197
Status:
Valuation: \$2,000.00
Contractor Company:
Contractor Name: GLORIA/LPA

ADJOINING PROPERTY FINDINGS

Date: **12/19/2005**
Permit Type:
Description: **TI "MAX STEEL U.S.A."**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2005-3267
Status:
Valuation: \$203,000.00
Contractor Company:
Contractor Name: TWEDELL WAYNE

Date: **12/19/2005**
Permit Type:
Description: **ELEC/TI "MAX STEEL U.S.A."**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1902
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: TWEDELL WAYNE

Date: **12/19/2005**
Permit Type:
Description: **MECH/TI "MAX STEEL U.S.A."**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2005-1029
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: TWEDELL WAYNE

ADJOINING PROPERTY FINDINGS

Date: **12/19/2005**
Permit Type:
Description: **PLUMB/TI "MAX STEEL U.S.A."**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-1501
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: TWEDELL WAYNE

Date: **11/21/2005**
Permit Type:
Description: **NON-ILLUMINATED MONUMENT SIGN *MACSTEEL***

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2005-3620
Status:
Valuation: \$2,200.00
Contractor Company:
Contractor Name: MIKE ZEE (CONTRACTOR)

Date: **9/14/2005**
Permit Type:
Description: **ELEC/LOW VOLTAGE CABLING**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1832
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: HORIZON COMM TECH INC

ADJOINING PROPERTY FINDINGS

Date: **8/22/2005**
Permit Type:
Description: **TI/"FIRST Q CAPITAL" 4544 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2005-1988
Status:
Valuation: \$120,000.00
Contractor Company:
Contractor Name: GENSLER

Date: **8/22/2005**
Permit Type:
Description: **ELEC/"FIRST Q CAPITAL" 4544 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2005-1110
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: GENSLER

Date: **8/22/2005**
Permit Type:
Description: **MECH/"FIRST Q CAPITAL" 4544 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2005-0637
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: GENSLER

ADJOINING PROPERTY FINDINGS

Date: **8/22/2005**
Permit Type:
Description: **PLUM/TI/"FIRST Q CAPITAL" 4544 SF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2005-0926
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: GENSLER

Date: **9/22/2004**
Permit Type:
Description: **RECEPTION REM/ DEMO W/NEW BUILT-IN**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-3323
Status:
Valuation: \$10,000.00
Contractor Company:
Contractor Name: MILLER JULIE

Date: **9/22/2004**
Permit Type:
Description: **ELEC/RECEPTION REM**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-1987
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: MILLER JULIE

ADJOINING PROPERTY FINDINGS

Date: **6/22/2004**
Permit Type:
Description: **TENANT IMPROVEMENT / STE 100**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2004-1568
Status:
Valuation: \$1,500.00
Contractor Company:
Contractor Name: VOLK MICHAEL W

Date: **6/22/2004**
Permit Type:
Description: **ELEC/ TI STE 100**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2004-1022
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: VOLK MICHAEL W

Date: **7/25/2003**
Permit Type:
Description: **MOVE (2) EXIST ILLUM SIGN TO CENTER OF FACADE**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-2256
Status:
Valuation: \$750.00
Contractor Company:
Contractor Name: JOYCE SEHI/Q.P.C.

ADJOINING PROPERTY FINDINGS

Date: **7/25/2003**
Permit Type:
Description: **ELECTRICAL/MOVE (2) EXIST ILLUM SIGN**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-1185
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JOYCE SEHI/Q.P.C.

Date: **4/25/2003**
Permit Type:
Description: **INST FIRE RATED WALLS IN LOBBY**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-1233
Status:
Valuation: \$10,000.00
Contractor Company:
Contractor Name: CONSOLIDATED CONTRACTING SERVICES INC

Date: **4/25/2003**
Permit Type:
Description: **MECH/FIRE DAMPER**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0397
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: CONSOLIDATED CONTRACTING SERVICES INC

ADJOINING PROPERTY FINDINGS

Date: **3/24/2003**
Permit Type:
Description: **TENANT IMPROVEMENT/SUITE 200 PHASE II**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-0787
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/24/2003**
Permit Type:
Description: **TENANT IMPROVEMENT/SUITE 200 PH III**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-0788
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/24/2003**
Permit Type:
Description: **ELEC/T.I. SUITE 200 PHASE II (SEE E2003-0167 FOR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-0449
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

ADJOINING PROPERTY FINDINGS

Date: **3/24/2003**
Permit Type:
Description: **ELEC/T.I. SUITE 200 PHASAE III (SEE E2003-0167**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-0450
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/24/2003**
Permit Type:
Description: **MECH/T.I. SUITE 200 PHASE II (SEE H2003-0102 FO**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0268
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/24/2003**
Permit Type:
Description: **MECH/T.I. SUITE 200 PHASE III (SEE H2003-0102 F**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0269
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

ADJOINING PROPERTY FINDINGS

Date: **3/24/2003**
Permit Type:
Description: **PLUM/T.I. SUITE 200 PHASE II (SEE P2003-0208 FO**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2003-0431
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: CONSOLIDATED CONTRACTING SERVICES INC

Date: **3/24/2003**
Permit Type:
Description: **PLUM/T.I. SUITE 200 PHASE III (SEE P2003-0208 FO**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2003-0432
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: CONSOLIDATED CONTRACTING SERVICES INC

Date: **3/20/2003**
Permit Type:
Description: **PLUMBING/PHASE I/STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2003-0416
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

ADJOINING PROPERTY FINDINGS

Date: **3/12/2003**
Permit Type:
Description: **TENANT IMPROVEMENT/SUITE 200 PH 1**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-0383
Status:
Valuation: \$320,000.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/12/2003**
Permit Type:
Description: **ELECTRICAL/SUITE 200**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-0167
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

Date: **3/12/2003**
Permit Type:
Description: **MECHANICAL/SUITE 200**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0102
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM JODI

ADJOINING PROPERTY FINDINGS

Date: **3/12/2003**
Permit Type:
Description: **PLUMBING/SUITE 200**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2003-0208
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: CONSOLIDATED CONTRACTING SERVICES INC

Date: **3/7/2003**
Permit Type:
Description: **TENANT IMPROVEMENT/PHASE I /STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-0512
Status:
Valuation: \$126,000.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

Date: **3/7/2003**
Permit Type:
Description: **TENANT IMPROVEMENT/PHASE II/STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-0513
Status:
Valuation: \$349,000.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

ADJOINING PROPERTY FINDINGS

Date: **3/7/2003**
Permit Type:
Description: **ELECTRICAL/PHASE I /STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-0239
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

Date: **3/7/2003**
Permit Type:
Description: **ELECTRICAL/PHASE II /STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: E2003-0240
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

Date: **3/7/2003**
Permit Type:
Description: **MECHANICAL/PHASE I /STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0145
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

ADJOINING PROPERTY FINDINGS

Date: **3/7/2003**
Permit Type:
Description: **MECHANICAL/PHASE II/STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: H2003-0146
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

Date: **3/7/2003**
Permit Type:
Description: **PLUMBING/PHASE II/STE 210**

Permit Description:
Work Class:
Proposed Use:
Permit Number: P2003-0263
Status:
Valuation: \$0.00
Contractor Company:
Contractor Name: JCM/FPM/JODI REESE

ADJOINING PROPERTY FINDINGS

SANTA BARBARA DR

868 SANTA BARBARA DR

Date: 5/15/2003
Permit Type:
Description: **TEMPORARY BANNER "PUBLIC SAFETY DAY"**

Permit Description:
Work Class:
Proposed Use:
Permit Number: B2003-1484
Status:
Valuation: \$50.00
Contractor Company:
Contractor Name: ROB BEUCH/FIRE DEPT

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeyman:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: \$1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.



OCMA

850 San Clemente Drive
Newport Beach, CA 92660

Inquiry Number: 4385033.12
August 19, 2015

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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

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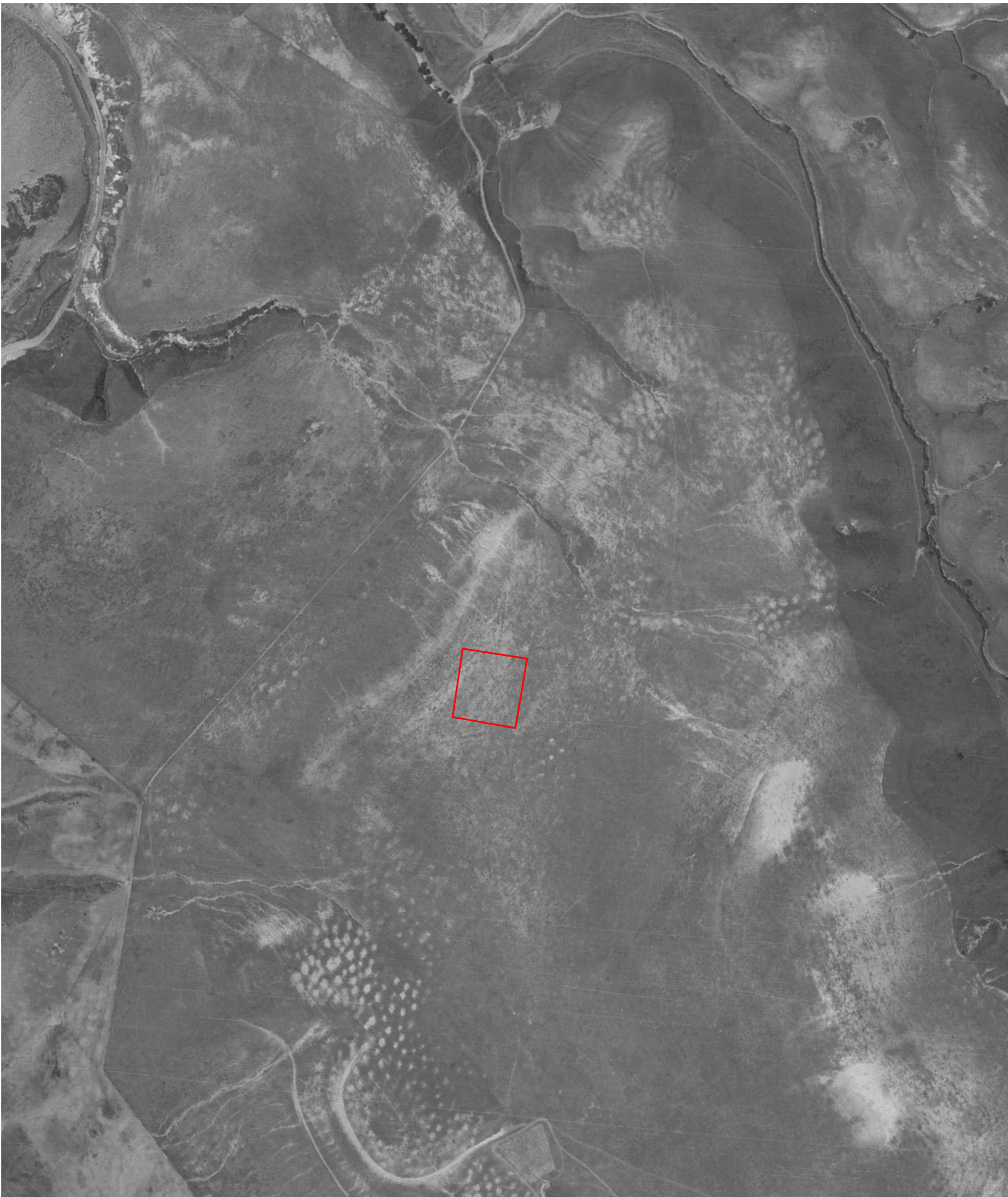
Date EDR Searched Historical Sources:

Aerial Photography August 19, 2015

Target Property:

850 San Clemente Drive
Newport Beach, CA 92660

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1938	Aerial Photograph. Scale: 1"=500'	Flight Year: 1938	USGS
1947	Aerial Photograph. Scale: 1"=500'	Flight Year: 1947	Fairchild
1952	Aerial Photograph. Scale: 1"=500'	Flight Year: 1952	USGS
1963	Aerial Photograph. Scale: 1"=500'	Flight Year: 1963	USGS
1972	Aerial Photograph. Scale: 1"=500'	Flight Year: 1972	USGS
1977	Aerial Photograph. Scale: 1"=500'	Flight Year: 1977	USGS
1985	Aerial Photograph. Scale: 1"=500'	Flight Year: 1985	USGS
1989	Aerial Photograph. Scale: 1"=500'	Flight Year: 1989	USGS
1990	Aerial Photograph. Scale: 1"=500'	Flight Year: 1990	USGS
1994	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1994	USGS/DOQQ
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	USDA/NAIP
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	USDA/NAIP
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	USDA/NAIP
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	USDA/NAIP



INQUIRY #: 4385033.12

YEAR: 1938

| = 500'



H-372



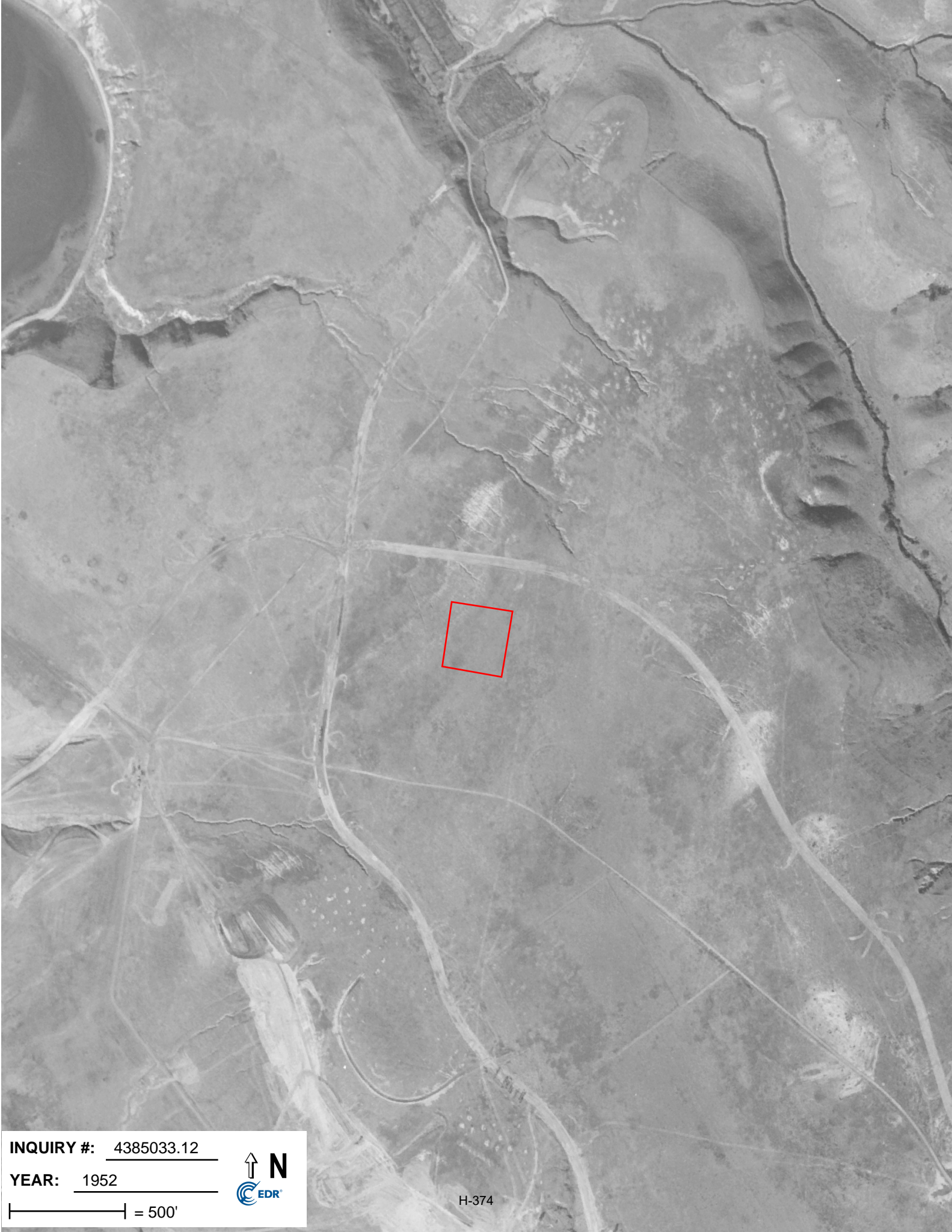
INQUIRY #: 4385033.12

YEAR: 1947

| = 500'



H-373



INQUIRY #: 4385033.12

YEAR: 1952

| = 500'



H-374



INQUIRY #: 4385033.12

YEAR: 1963

| = 500'



H-375



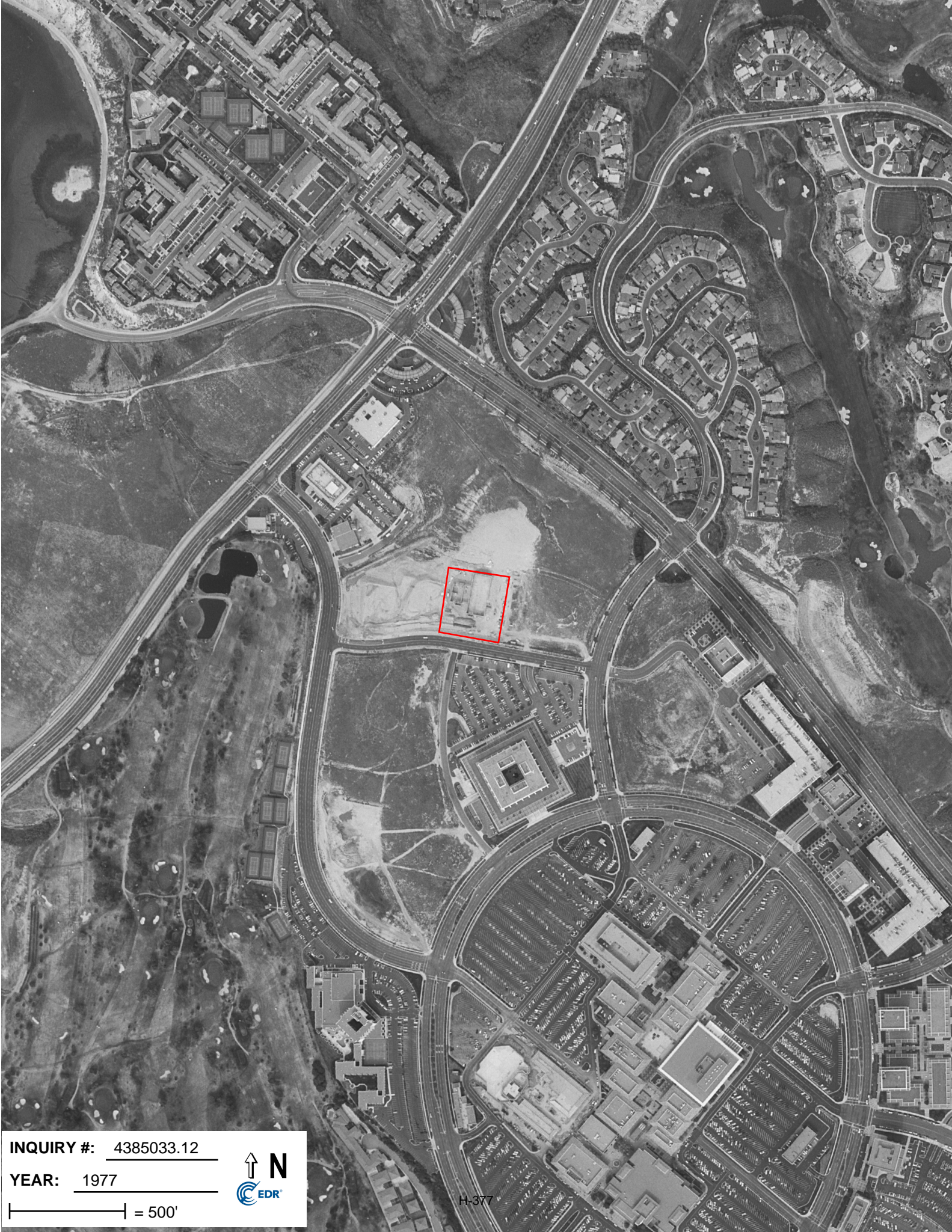
INQUIRY #: 4385033.12

YEAR: 1972

| = 500'



H-376



INQUIRY #: 4385033.12

YEAR: 1977

| = 500'



H-377



INQUIRY #: 4385033.12

YEAR: 1985

| = 500'



H-378



INQUIRY #: 4385033.12

YEAR: 1989

| = 500'



H-379



INQUIRY #: 4385033.12

YEAR: 1990

— = 500'



H-380



INQUIRY #: 4385033.12

YEAR: 1994

— = 500'



H-381



INQUIRY #: 4385033.12

YEAR: 2005

| = 500'



H-382



INQUIRY #: 4385033.12

YEAR: 2009

| = 500'



H-383



INQUIRY #: 4385033.12

YEAR: 2010

— = 500'



H-384



INQUIRY #: 4385033.12

YEAR: 2012

| = 500'



H-385

**APPENDIX D:
PHOTOGRAPH LOG**



Add-on ceiling.



Add-on glass wall and doors.



Art trailer with scrap wood.



Art gallery ceiling.



Roof top boiler.



Roof top HVAC system housing.



Add-on HVAC system on roof top.



HVAC system on roof top.



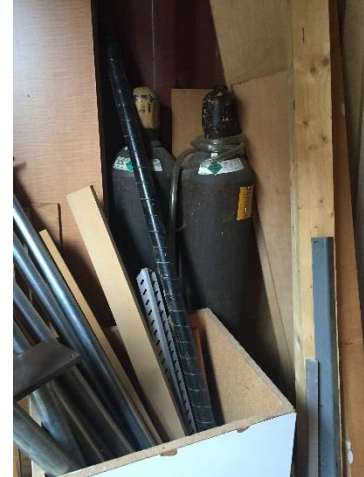
Site dumpster, emptied by Ware Disposal Co.



Dust collector on east side of building.



Dust collector area.



Helium cylinders in trailer.



Flammable locker in tool room.



Fluorescent light bulb storage in light closet.



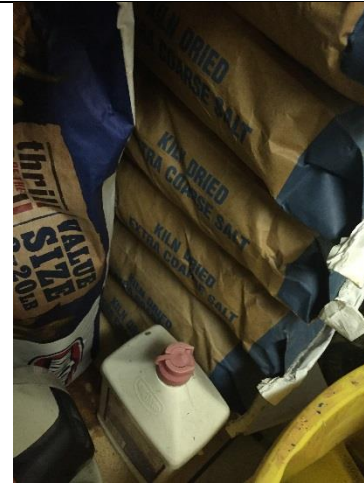
Site kitchen.



Material laydown area.



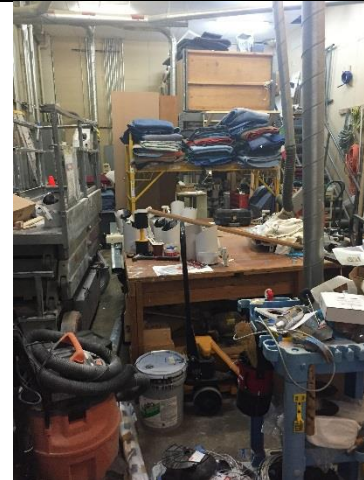
Site water heat in kitchen closet.



Water softener salt in kitchen closet.



Incoming site power source.



Tool shop entrance.



Tool shop dust collection on tools.



Water based acrylic paint storage in tool shop.



Additional water based paint storage in tool shop.



Acrylic water based paint, 5-gallon container of primer.



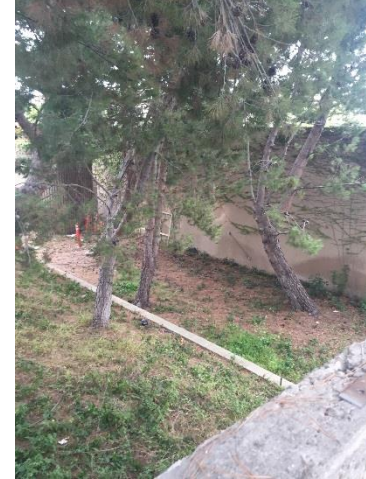
Eastern border of property.



Site's main entrance.



Northern border of property.



Western border of property.



Newport Beach Fire Department permits.



Eastern adjacent property.

**APPENDIX E:
REGULATORY FILE INFORMATION**

City of Newport Beach Building and Safety Department Files

- NEW BUILDING
 ADDITION OR ALTERATION
 CHANGE OF USE OR OCCUPANCY



This Certificate Must Be Displayed
 in A Conspicuous Location In The Building

CERTIFICATE OF OCCUPANCY

BUILDING LOCATION 850 San Clemente NO. OF STORIES _____
 LEGAL DESCRIPTION: LOT _____ BLOCK _____ SECTION _____ TRACT _____
 USE ZONE PC FIRE ZONE 2 OCCUPANCY GROUP F-2 TYPE CONST. II VALUATION \$ 816,000

MAXIMUM ALLOWABLE FLOOR AND OCCUPANT LOADING

	1	2	3	4	5	6	7	8	9	10
FLOOR LOADS (POUNDS PER SQ. FT.)										
OCCUPANT LOADS (NO. OF PERSONS)										

THE ABOVE BUILDING, DESCRIBED IN THE "APPLICATION FOR BUILDING PERMIT" NO. 14634, DATED 10-14-76
 HAS BEEN INSPECTED AND IS HEREBY CERTIFIED FOR USE AND OCCUPANCY AS Art Museum

SUBJECT TO THE FOLLOWING CONDITIONS:

AND TO PROVISIONS OF USE PERMIT NO. _____, DATED _____; VARIANCE NO. _____, DATED _____

ISSUANCE OF THIS CERTIFICATE VOIDS ALL PREVIOUS CERTIFICATIONS

— MAIL TO —

OWNER: Newport Harbor Art Museum
 ADDRESS: 2211 W. Balboa Blvd.
Newport Beach, Ca. 92660

BY: *Bob Lawrence*
 BUILDING & SAFETY DIRECTOR
 DATE 6-27-78

H-397

ALTERATIONS, ADDITIONS, OR OCCUPANCY CHANGES VOID THIS CERTIFICATE. IN SUCH CASES A NEW CERTIFICATE IS REQUIRED.

License Division
3300 Newport Blvd.
640-2131

CITY OF NEWPORT BEACH
FINANCE DEPARTMENT

Event Number 78-205

APPLICATION FOR PERMIT

() STREET CLOSURE

() SPECIAL EVENT

() MOTION PICTURE

ALL SPACES MUST BE FILLED IN. IF NOT APPLICABLE, PUT N/A OR DRAW A LINE IN THE SPACE.
USE REVERSE SIDE FOR ADDITIONAL SPACE.

SPONSORING ORGANIZATION: Newport Harbor Art Museum

PROMOTORS, COMPANIES, OR OTHER ORGANIZATIONS INVOLVED: Antique dealers from throughout the United States will take part. Bus. licenses are presently in their possession & they will be contacting the city of N. B. (no. v. available).

ADDRESS: 850 San Clemente Drive CITY: Newport Beach 92660

DESCRIBE NATURE OF INVOLVEMENT: Each dealer will be exhibiting & selling antiques & the Museum will share in the profits.

PERSON IN CHARGE OF EVENT: Mrs. Ernest Bryant III PHONE: 759-1122

ADDRESS: 850 San Clemente Drive CITY: N. B. 92660

EXACT LOCATION OF EVENT: Newport Harbor Art Museum / 850 San Clemente Drive Newport Beach

DATE(S) TO BE HELD: 9/7/78 1pm-9pm; 9/8/78 - 9/10/78 TOTAL DAYS: 1 evening / 3 days
TIME OF ACTIVITIES EACH DAY 9/7/78 9pm-9pm. 9/8/78 - 9/9/78 11 a.m. - 6 p.m.

DETAILED DESCRIPTION OF EVENT: This will be a 1 evening, 3 day event held inside the Newport Harbor Art Museum with a Preview Party on Thurs., Sept. 7 & open to the public Fri., Sat. & Sun from 11 a.m. - 6 p.m. on Fri & Sat. & 11 p.m. - 5 p.m. on Sunday.

ESTIMATED ATTENDANCE: 4,000 DESCRIBE PARKING ARRANGEMENTS: The Museum will utilize its own parking lot, as well as Pacific Mutual's on Sat. & Sun.

DONATIONS OR ADMISSION FEES: (X) YES () NO IF YES, EXPLAIN IN DETAIL:

\$3 for the General Public; \$1.50 for Museum Members

SOUND AMPLIFYING EQUIPMENT TO BE USED: () YES (X) NO

ALCOHOLIC BEVERAGES TO BE SERVED OR SOLD: (X) YES () NO

850

OVER →

Event Number 78-205

ANY COMMERCIAL ASPECTS (SALES, RIDES, GAMES, ETC.): () YES () NO
IF YES, EXPLAIN:

All Antiques will be for sale.

DESCRIBE ANY IN THE WATER OR BEACH ACTIVITIES AND MARINE EQUIPMENT TO BE USED

None.

DESCRIBE ALL LARGE VEHICLES OR EQUIPMENT THAT WILL BE PRESENT:

Some out of state dealers will park their trucks on the Museum property where delivery trucks park presently.

DESCRIBE IN DETAIL ANY SECURITY ARRANGEMENTS: We will have 24 hour

private Guard service.

ARE TENTS, BOOTHS, BLEACHERS, OR OTHER STRUCTURES TO BE ERECTED: () YES () NO
IF YES, DESCRIBE IN DETAIL AND SUBMIT WITH FOUR PLOT PLANS

STREETS, ALLEYS, OR SIDEWALKS TO BE CLOSED, BLOCKED, OR ENCROACHED UPON: () YES () NO
IF YES, INCLUDE A DETAILED DIAGRAM AND STREET CLOSURE PETITION.

LIABILITY INSURANCE: () YES () NO IF YES, LIST AMOUNT AND INSURANCE COMPANY:

Full Museum Insurance will be utilized

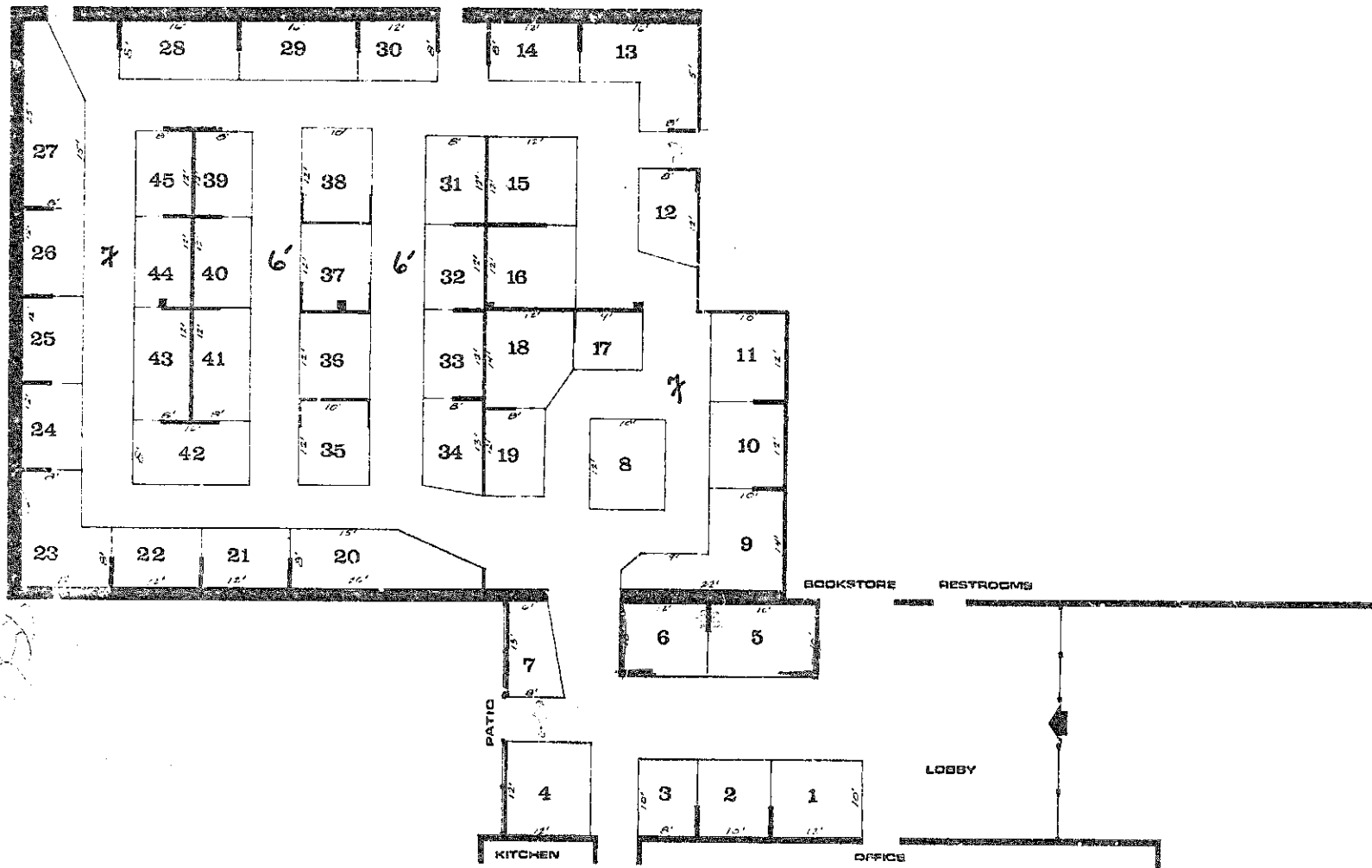
I HEREBY CERTIFY THE FOREGOING STATEMENTS ARE TRUE AND CORRECT AND THE PERMITTEE GUARANTEES TO INDEMNIFY AND HOLD THE CITY OF NEWPORT BEACH HARMLESS AGAINST ANY CLAIMS, LIABILITY, OR JUDGEMENTS FOR DAMAGES ARISING OUT OF THE PERMITTEE'S ACTIVITIES.

x Nora Lehman for Ho
Newport Harbor Art Museum.

DATE

8/50

78-205



NEWPORT BEACH FIRE DEPARTMENT
FIRE PREVENTION BUREAU

PERMIT

For Keeping, Storage, Use, Manufacture, Handling, Transportation, or other Disposition of Flammable, Combustible, or Explosive Materials as stated below:

No. 02-3

February 3, 1983
(Date)

TO WHOM IT MAY CONCERN:

By virtue of the provisions of the Fire Prevention Ordinance of the City of Newport Beach and the Office of the Fire Chief Museum Newport Harbor art No. 850 Street San Clemente Dr.
(Name of Concern)
City Newport Beach conducting a Party having made application in due form, and as the
(Business)

conditions, surroundings, and arrangements are, in my opinion, such that the intent of the Ordinance be observed, authority is hereby given and this PERMIT is GRANTED for: The installation of 5 canopies
(10 20'ft. x 20'ft, 10 10'ft x 10'ft, 10 20'ft x 30'ft, 10 30'ft x 30'ft and 10 30'ft
x 40'ft) to be enclosed by sidewalls. A 10'ft x 30'ft canopy only to connect main
exit with parking lot. All canopies and sidewalls to be flame proof or fire
retardant. See plan for additional requirements.
Tent Company Canvas Specialty- 7344 E. Bandini Blvd. Los Angeles.
213-722-1166

This PERMIT is issued and accepted on condition that all Ordinance provisions now adopted, or that may hereafter be adopted, shall be complied with.

THIS PERMIT IS VALID FOR February 13, 1983

This permit does not take the place of any License required by law and is not transferable. Any change in the use of occupancy of premises shall require a new permit.

H-401

By J. A. Topping
FIRE INSPECTOR

THIS PERMIT MUST AT ALL TIMES BE KEPT POSTED ON THE PREMISES MENTIONED ABOVE

APPLICATION FOR PERMIT
TO INSTALL TENTS

I, REGAL RENTS, am making application for a permit to
install a tent at 850 San Clemente Dr., Newport Beach on June 14, 1983
and will remove it by June 21, 1983. The purpose for the tent is
Le Grand Casino Party - Newport Harbor Art Museum
(Exhibit, Show, Party, Etc.)

I understand all the conditions to be met, as listed below, prior to a permit being issued.

CONDITIONS FOR TENT INSTALLATION:

1. A scale plot plan of the location with detail of seating, tables, stages, etc., shall be submitted to the Fire Prevention Bureau 10 days prior to installation. Plans will be reviewed for compliance with Uniform Fire Code.
2. No smoking or open flame devices shall be permitted within the tent.
3. No parking shall be permitted within 100 feet of the tent.
4. Tent shall be installed at least 30 feet from any other structures.
5. All sidewall, drops and top materials shall be flame-retardant and an affidavit presented with the following; date fabric last treated, name of chemical, person or firm treating and name and address of tent owner.
6. Fire extinguishers or other fire protection equipment shall be provided with size and quantity to be determined by the Fire Prevention Bureau.
7. Standby firemen shall be provided when, in the opinion of the Fire Chief, they are necessary to assure public safety. Compensation shall be paid to the City for any firemen provided. Costs are to be determined by the Finance Department.
8. Any standards required to maintain public safety in connection with the event shall be complied with as deemed necessary by the Fire Chief.
9. Additional permits may be required by other city departments.

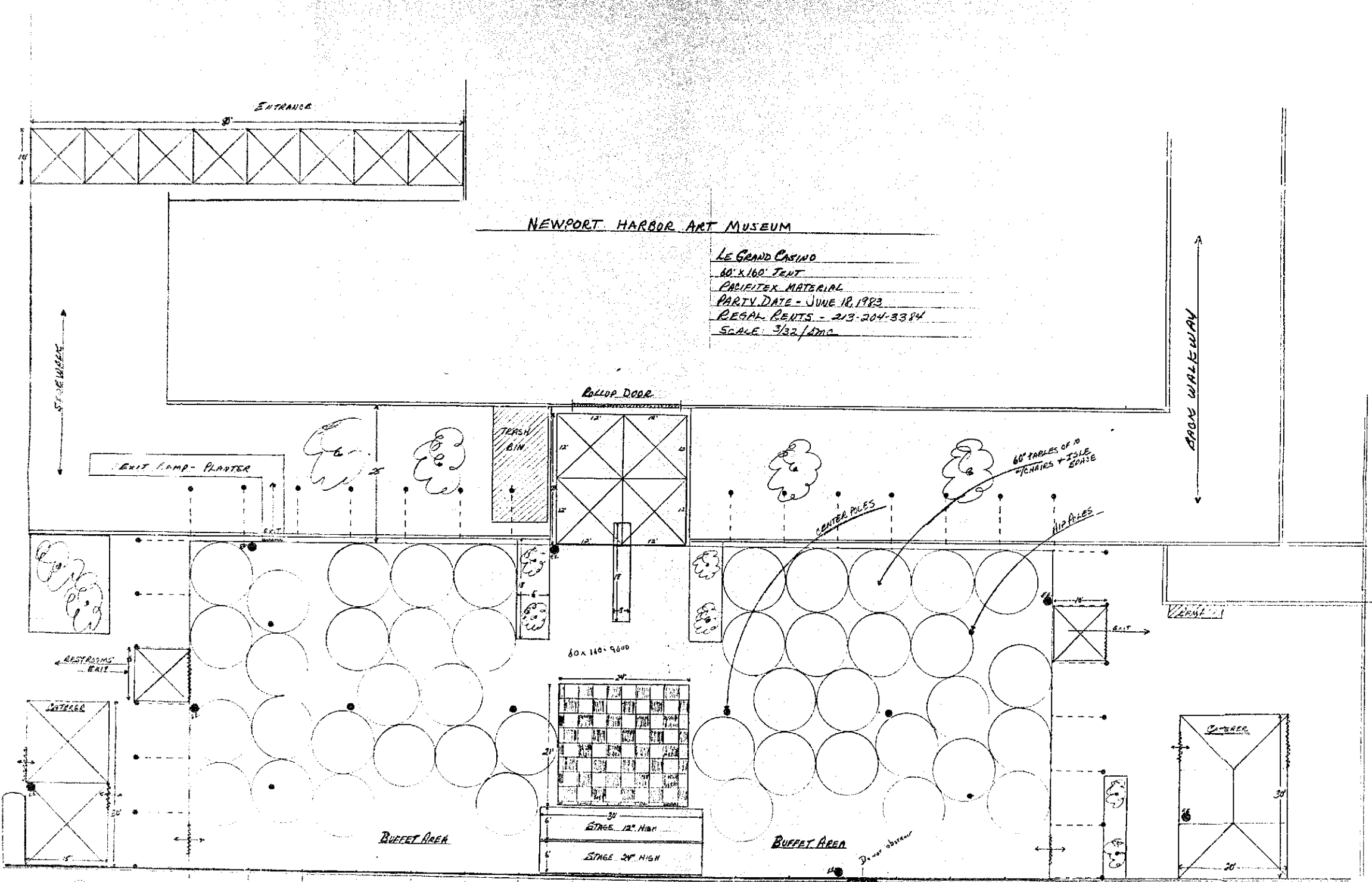
Sheilia Rice-Crabtree
Signed
Account Executive/Regal Rents

May 6, 1983
Date

IP FORM 24

850

850 Spaw (to street)
850 Spaw (to street)
TO STREET
TO STREET



LE GRAND CASINO
60' X 160' TENT
PACIFICEX MATERIAL
PARTY DATE - JUNE 18, 1983
RESAL. RENTS - 213-204-3344
SCALE: 3/32" = 1'-0"

850 1

City of Newport Beach
 Building Department
 P.O. Box 1768
 Newport Beach, CA 92658-8915
 Phone: (714) 644-3288

BUILDING PERMIT APPLICATION

SEC: 15756

PLAN CHECK NO. 143286

SAV CLEMETE

BUILDING ADDRESS: **850 NEWPORT CENTER DRIVE** LOCALITY (CROSS ST.):

LOT NO. BLOCK TRACT STATE AREA GRD. **M2** TYPE CONST. **S11** PROGRESS **0**

LOT SIZE USE OF STRUCTURE GRADING APPROVAL REQUIRED YES NO VACANT BLDG YES NO

OWNER: **THE IRVINE CO** TEL NO. **714 5693** USE ZONE **PC** PARKING SPACES

ADDRESS: **670 NEWPORT CENTER DRIVE** SPEC. COMDS.

CITY: **NEWPORT BEACH** ZIP: **92658**

CONTRACTOR

ADDRESS TEL NO.

CITY ZIP NEWPORT LIC NO.

LICENSE CLASS STATE LIC. NO. ARCHITECT OR ENGR **FOLLIS DESIGN** TEL NO. **213 735 1267** ZONING APPROVAL **Paris Johnson** FAIR SHARE \$

ADDRESS **2124 VENICE BLVD** ZIP **90006** FIRE APPROVAL EXCISE TAX \$

CITY **LOS ANGELES** LIC. NO. GRADING APPROVAL SAN. DIST. NO. \$

DESCRIPTION OF WORK PLAN CHK BY **Stephen** OTHER \$

NEW / ADD / ALTER / REPAIR / DEMOLISH APPROVAL TO ISSUE **Stephen** TOTAL \$

BUS STOP SIGN

SIGNATURE OF APPLICANT: **GIANT BUS**

LICENSED CONTRACTORS DECLARATION

I HEREBY AFFIRM THAT I AM LICENSED UNDER PROVISIONS OF CHAPTER 9 COMMENCING WITH SECTION 70001 OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE AND MY LICENSE IS IN FULL FORCE AND EFFECT.

MY LICENSE CLASS: _____ LIC. NO. _____

CONTRACTOR: _____ DATE: _____

OWNER-BUILDER DECLARATION

I HEREBY AFFIRM THAT I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAW FOR THE FOLLOWING REASON: SEC. 70015 BUSINESS AND PROFESSIONS CODE, ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT, ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PRIOR TO ITS ISSUANCE, ALSO REQUIRES THE APPLICANT FOR SUCH PERMIT TO FILE A SIGNED STATEMENT THAT HE IS LICENSED PURSUANT TO THE PROVISIONS OF THE CONTRACTOR'S LICENSE LAW (CHAPTER 9 COMMENCING WITH SECTION 70001 OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE) OR THAT HE IS EXEMPT THEREFROM AND THE BASIS FOR THE ALLEGED EXEMPTION. ANY VIOLATION OF SECTION 70015 BY ANY APPLICANT FOR A PERMIT SUBJECTS THE APPLICANT TO A CIVIL PENALTY OF NOT MORE THAN FIVE HUNDRED DOLLARS (\$500).

AS OWNER OF THE PROPERTY OR MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION, WILL DO THE WORK AND THE STRUCTURE IS NOT INTENDED OR DESIGNED FOR SALE. SEC. 7044 BUSINESS AND PROFESSIONS CODE, THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO DOES SUCH WORK HIMSELF OR THROUGH HIS EMPLOYEES PROVIDED THAT SUCH IMPROVEMENTS ARE NOT INTENDED OR DESIGNED FOR SALE. IF, HOWEVER, THE BUILDING OR IMPROVEMENT IS SOLD WITHIN ONE YEAR OF COMPLETION, THE OWNER-BUILDER WILL HAVE THE BURDEN OF PROVING THAT HE DID NOT BUILD OR IMPROVE FOR THE PURPOSE OF SALE.

AS OWNER OF THE PROPERTY, AM EXCLUSIVELY CONTRACTING WITH LICENSED CONTRACTORS TO CONSTRUCT THE PROJECT. SEC. 7044 BUSINESS AND PROFESSIONS CODE, THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO CONTRACTS FOR SUCH WORK WITH A CONTRACTOR LICENSED PURSUANT TO THE CONTRACTOR'S LICENSE LAW.

AM EXEMPT UNDER SEC. _____ B.P.C. FOR THIS REASON: _____

DATE: **4/23/86** OWNER: **Parade Johnson**

WORKERS' COMPENSATION DECLARATION

I HEREBY AFFIRM THAT I HAVE A CERTIFICATE OF CONSENT TO SELF-INSURE OR CERTIFICATE OF WORKERS' COMPENSATION INSURANCE, OR A CERTIFIED COPY THEREOF (SEC. 3600 LAB.C.).

POLICY NO. _____ COMPANY _____

CERTIFIED COPY IS HEREBY FURNISHED.

CERTIFIED COPY IS FILED WITH THE BUILDING DEPARTMENT.

DATE: _____ APPLICANT: _____

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

THIS SECTION NEED NOT BE COMPLETED IF THE PERMIT IS FOR ONE HUNDRED DOLLARS (\$100) OR LESS.

I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKERS' COMPENSATION LAWS OF CALIFORNIA.

DATE: _____ APPLICANT: _____

NOTICE TO APPLICANT: IF, AFTER MAKING THIS CERTIFICATE OF EXEMPTION, YOU SHOULD BECOME SUBJECT TO THE WORKERS' COMPENSATION PROVISIONS OF THE LABOR CODE, YOU MUST FORTHWITH COMPLY WITH SUCH PROVISIONS OR THIS PERMIT SHALL BE DEEMED REVOKED.

CONSTRUCTION LENDING AGENCY

I HEREBY AFFIRM THAT THERE IS A CONSTRUCTION LENDING AGENCY FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED (SEC. 3097 CIV.C.).

LENDER'S NAME: _____

LENDER'S ADDRESS: _____

I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE INFORMATION IS CORRECT. I AGREE TO COMPLY WITH ALL CITY AND COUNTY ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION AND HEREBY AUTHORIZE REPRESENTATIVES OF THIS COUNTY TO ENTER UPON THE ABOVE-MENTIONED PROPERTY FOR INSPECTION PURPOSES.

Parade Johnson 4/23/86

SIGNATURE OF PERMITTEE DATE

Est. Val.	\$ 250.00	Other Fees	\$ _____
P/C Fee	\$ 0	Permit Fee	\$ 10.00
Final Val.	\$ 250.00	Adj. P/C Fee	\$ _____
C&D	\$ 0	Total Fees	\$ 10.00

WORK MUST BE STARTED WITHIN A PERIOD OF 180 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

CASH VALIDATION PERMIT VALIDATION

CK M.O. CASH CK M.O. CASH

APPLICATION FOR BUILDING PERMIT

No. 17742 ASSESSOR'S PARCEL NO. DATE:

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

BUILDING ADDRESS **850 SAN CLEMENTE**

LOT NO. **2** BLOCK **—** TRACT **7603**

SIZE OF LOT **2 ACRES** NO. OF BLDGS. NOW ON LOT

USE OF STRUCTURE **SCULPTURE** ESTIM. VALUATION **\$14,000**

OWNER **NEWPORT HARBOR** TEL. NO. **759-1122**

ADDRESS **850 SAN CLEMENTE**

CITY **NEWPORT BEACH**

DESCRIPTION OF WORK

NEW	ADD	ALTER	REPAIR	DEMOLISH
50 FT BLDG. SIZE	2000	NO OF GARAGES	1	NO OF STORIES
WORK TO BE DONE				
AWNING AND WIND SCREEN				

ARCHITECT OR ENGINEER **PHIL ELDENSEN** TEL. NO. **726-0102**

ADDRESS **984 E. VISTA WAY, VISTACA**

CONTRACTOR **R.L. SHIRK**

ADDRESS **BOX 1013 CARLSBIDE** LICENSE NO. **352933**

CITY **NEWPORT BEACH** LICENSE CLASS **B-1**

TEL. NO. **(714) 729-4147** NEWPORT LIC. NO. **4459**

SIGNATURE OF APPLICANT *[Signature]*

PLAN CK. NUMBER **1654-76**

LOCALITY **Newport Beach**

NEAREST CROSS ST.

STAT. AREA GROUP TYPE **CONST. F.A.** PROCESSED BY *[Signature]*

STATISTICAL CLASSIFICATION VACANT SITE YES NO

CLASS NO. **9** DWELL UNITS **0** NO. PARKING SPACES

USE ZONE **PC** MAP NO. SPECIAL CONDITIONS

FIRE ZONE **2**

BLDG. SETBACK FROM FRONT PROP. LINE OF (STREET) =

Yards: Rear **—** R.S. **—** L.S. **—**

ZONING APPROVAL **Carb Cut**

FIRE APPROVAL **Excise Tax**

HEALTH DEPT. APPROVAL: **San. Dist. #5**

PLAN CHECKED BY **Jax 11/5/79** **Water Conn.**

CONST. LENDER ADDRESS

APPROVAL AND ISSUE

APPROVALS	DATE	INSPECTOR'S SIGNATURE
FOUNDATION: LOCATION FORMS, MATERIALS	3-7-79	<i>[Signature]</i>
	3-7-79	<i>[Signature]</i>

REINFORC. STEEL

SHEATHING

FRAMING

FINAL **10-31-79** **Orrips**

CERT. OF OCCUP.

P.C. FEE \$ 49.24	OTHER FEES \$	PMT. FEE \$ 45.75
--------------------------	---------------	--------------------------

I AM A CALIFORNIA STATE LICENSED CONTRACTOR.

I CLAIM EXEMPTION TO THE "CONTRACTOR" REQUIREMENT FOR THE FOLLOWING REASON (CALIFORNIA STATE LAW 7031.5).

I AM THE OWNER OF THE ABOVE PROPERTY AND INTEND TO PERFORM ALL WORK DESCRIBED BY SELF OR THROUGH MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION. I FURTHER STATE THAT THE PROPOSED STRUCTURES ARE NOT INTENDED TO BE OFFERED FOR SALE. (CALIFORNIA STATE LAW (87044). I WILL SUBMIT EVIDENCE OF WORKMAN'S COMPENSATION INSURANCE COVERING THESE EMPLOYEES.

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY AND CLAIM EXEMPTION UNDER SECTION 7846 (CALIF. STATE LAW) THAT ALL WORK, MATERIAL AND LABOR WILL BE LESS THAN \$10000 AND IS OF MINOR NATURE.

INITIAL APPLICABLE BLOCK

SIGNATURE OF PERMITTEE *[Signature]* DATE **8-27-79**

WORK MUST BE STARTED WITHIN A PERIOD OF 60 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

PLAN CHECK VALIDATION **921** CK. M.O. CASH **49.24** PERMIT VALIDATION **1073** CK. M.O. CASH **1073**

INSPECTOR COPY

325 79

APR 14

LEGAL OFFICE

TO: [illegible]
FROM: [illegible]
SUBJECT: [illegible]

Bottom line of the case...
up and shall not...
[illegible]

9-9-79 Feb 14

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

APPLICATION FOR BUILDING PERMIT

APPLICATION FOR BUILDING PERMIT

No. 22839 ASSESSOR'S PARCEL NO. **DATE: 11/21/78**

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

BUILDING ADDRESS **850 San Clemente**

LOT NO. BLOCK TRACT

SIZE OF LOT NO. OF BLDGS. NOW ON LOT

USE OF STRUCTURE ESTIM. VALUATION \$

OWNER **Newport Harbor Mt. No. Museum** TEL. NO. **850 San Clemente**

ADDRESS **850 San Clemente**

CITY **Newport Beach**

DESCRIPTION OF WORK

NEW ADD ALTER REPAIR DEMOLISH

NO. OF BLDG. STORES NO. OF FAMILIES

WORK TO BE DONE **Signs as per prints (2) wall signs**

ARCHITECT OR ENGINEER TEL. NO.

ADDRESS

CONTRACTOR **Heath & Co.** STATE LICENSE NO. **146892**

ADDRESS **3225 Lacy** LICENSE CLASS **C-45**

Los Angeles NEWPORT LIC # **1613 9694391**

SIGNATURE OF APPLICANT

PLAN CK. NUMBER **1541-78**

LOCALITY **Newport Ok.**

NEAREST CROSS ST.

STAT. AREA GROUP TYPE CONST. PROCESSED BY

STATISTICAL CLASSIFICATION VACANT SITE

CLASS NO. **9** DWELL UNITS **0** YES NO

USE ZONE MAP NO. NO. PARKING SPACES

FIRE ZONE SPECIAL CONDITIONS

BLDG. SETBACK FROM FRONT PROP. LINE OF (STREET) =

Yards: Rear R.S. L.S.

ZONING APPROVAL **[Signature]** Curb Cut

FIRE APPROVAL Excise Tax

HEALTH DEPT. APPROVAL: San. Dist. #5

PLAN CHECKED BY Sewer Conn.

Water Conn.

Total Due

CONST. LENDER

ADDRESS

APPROVAL TO ISSUE

FINAL VALUATION \$ **7500**

INSPECTOR'S SIGNATURE

FOUNDATION, LOCATION FORMS, MATERIALS

REINFORC. STEEL

SHEATHING

FRAMING

FINAL **3-579**

CERT. OF OCCUP.

P.C. FEE \$ OTHER FEES \$ PMT. FEE \$ **8.00**

I AM THE OWNER OF THE ABOVE PROPERTY AND INTEND TO PERFORM ALL WORK DESCRIBED MYSELF OR THROUGH MY EMPLOYERS WITH WAGES AS THEIR SOLE COMPENSATION. I FURTHER STATE THAT THE PROPOSED STRUCTURES ARE NOT INTENDED TO BE OFFERED FOR SALE. (CALIFORNIA STATE LAW #7744). I WILL SUBMIT EVIDENCE OF WORKMAN'S COMPENSATION INSURANCE COVERING THESE EMPLOYERS.

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY AND CLAIM EXEMPTION UNDER SECTION 7048 (CALIF. STATE LAW) THAT ALL WORK, MATERIALS AND LABOR WILL BE LESS THAN \$100.00 AND IS OF MINOR NATURE.

INITIAL APPLICABLE BLOCK

SIGNATURE OF SUBMITTER

DATE **11/21/78**

INSPECTOR COPY

I AM A CALIFORNIA STATE LICENSED CONTRACTOR.

I AM THE OWNER OF THE ABOVE PROPERTY AND INTEND TO PERFORM ALL WORK DESCRIBED MYSELF OR THROUGH MY EMPLOYERS WITH WAGES AS THEIR SOLE COMPENSATION. I FURTHER STATE THAT THE PROPOSED STRUCTURES ARE NOT INTENDED TO BE OFFERED FOR SALE. (CALIFORNIA STATE LAW #7744). I WILL SUBMIT EVIDENCE OF WORKMAN'S COMPENSATION INSURANCE COVERING THESE EMPLOYERS.

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY AND CLAIM EXEMPTION UNDER SECTION 7048 (CALIF. STATE LAW) THAT ALL WORK, MATERIALS AND LABOR WILL BE LESS THAN \$100.00 AND IS OF MINOR NATURE.

INITIAL APPLICABLE BLOCK

SIGNATURE OF SUBMITTER

DATE **11/21/78**

MUST BE STARTED WITHIN A PERIOD OF 60 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

PLAN CHECK VALIDATION CASH

NO22 78 059 PERMIT VALIDATION **8.00 T** CASH

APPLICATION FOR BUILDING PERMIT

No. _____

ASSESSOR'S PARCEL NO. _____

DATE: _____

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

BUILDING ADDRESS: **850 San Clemente Drive**

LOT NO. **2** BLOCK _____ TRACT **7603**

SIZE OF LOT **2 acres** NO. OF BLDGS. NOW ON LOT **1**

USE OF STRUCTURE **Museum** ESTIM. VALUATION \$ **15,000**

OWNER **Newport Art Museum** TEL. NO. **759-1122**

ADDRESS **850 San Clemente Drive**

CITY **Newport Beach**

DESCRIPTION OF WORK

NEW ADD ALTER REPAIR DEMOLISH

NO. OF BLDG. TO BE DONE **1** NO. OF GARAGE **21,208** NO. OF STORIES **1** NO. OF FAMILIES **0**

WORK TO BE DONE **construct kitchen, windscreen and metal fence**

ARCHITECT/ENGINEER **Langdon & Wilson** TEL. NO. **833-9193**

ADDRESS **3990 Westerly Place Newport Bch.**

CONTRACTOR **The Koll Company**

ADDRESS **1901 Dove Street** STATE LICENSE NO. **221-764**

CITY **Newport Beach** LICENSE CLASS **B-1**

TEL. NO. **833-3030** NEWPORT LIC. NO. **8121**

SIGNATURE OF APPLICANT: *Raymond...*

PLAN CK. NUMBER **980-77**

LOCALITY **Newport Bch**

NEAREST CROSS ST. _____

STAT. AREA _____ GROUP **F2** TYPE CONST. **2** PROCESSED BY *[Signature]*

STATISTICAL CLASSIFICATION _____ VACANT SITE YES NO

CLASS NO. **9** DWELL UNITS **0**

USE ZONE **PC** MAP NO. _____ NO. PARKING SPACES _____

FIRE ZONE _____ SPECIAL CONDITIONS **PC Study Session**

BLDG. SETBACK FROM FRONT PROP. LINE OF _____ (STREET) = _____

Yearly Rent _____ R.S. _____ L.S. _____

ZONING APPROVAL *[Signature]* Carb. Cut

FIRE APPROVAL *[Signature]* Exotic Tax

HEALTH DEPT. APPROVAL: _____ San. Dist. =5

PLAN CHECKED BY *[Signature]* Sewer Conn.

CONST. LENDER _____ Water Conn.

ADDRESS _____ Total Due

APPROVAL TO ISSUE **8-31-77** FINAL VALUATION \$ **15000**

APPROVALS	DATE	INSPECTOR'S SIGNATURE
FOUNDATION LOCATION FORMS, MATERIALS		
REINFORC. STEEL		
SHEATHING		
FRAMING		
INSULATION		
FINAL		

I AM A CALIFORNIA STATE LICENSED CONTRACTOR.

I AM EXEMPTED TO THE "CONTRACTOR" REQUIREMENT FOR THE FOLLOWING REASON (CALIFORNIA STATE LAW 27024):

I AM THE OWNER OF THE ABOVE PROPERTY AND INTEND TO PERFORM ALL WORK DESCRIBED MYSELF OR THROUGH MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION. I FURTHER STATE THAT THE PROPOSED STRUCTURES ARE NOT INTENDED TO BE OFFERED FOR SALE. (CALIFORNIA STATE LAW 27021). I WILL SUBMIT EVIDENCE OF WORKMAN'S COMPENSATION INSURANCE COVERING THESE EMPLOYEES.

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY AND CLAIM EXEMPTION UNDER SECTION 2049 (CALIF. STATE LAW) THAT ALL WORK, MATERIALS AND LABOR WILL BE LESS THAN \$1000 AND IS OF MINOR NATURE.

APPLICABLE BLOCK: _____

CERT. OF OCCUP.

P.C. FEE \$ **200** OTHER FEES \$ _____

PMT. FEE \$ **100**

No Fee The City Mgr

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY. ALL WORK WILL BE DONE BY CALIF. STATE LICENSED CONTRACTORS. I WILL SUBMIT A LIST OF ALL SUB-CONTRACTORS USED ON THIS PROJECT TO THE DEPT. OF COMMUNITY DEV. PRIOR TO AND AS A CONDITION OF FINAL INSPECTION.

DATE **8-31-77**

PERMIT MUST BE STARTED WITHIN A PERIOD OF 120 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES VOID.

PLAN CHECK VALIDATION _____ PERMIT VALIDATION _____

INSPECTOR COPY

1977-1978

1977-1978
1977-1978

1977-1978

1977-1978

1977-1978

1977-1978

1977-1978

1977-1978

APPLICATION FOR BUILDING PERMIT

No. 20052 ASSESSOR'S PARCEL NO. DATE:

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

BUILDING ADDRESS **850 San Clemente Dr. Rec'd 501**

LOT NO. **2** BLOCK **---** TRACT **7603**

SIZE OF LOT **2 acres** NO. OF BLDGS. NOW ON LOT **0**

USE OF STRUCTURE **MUSEUM** ESTIM. VALUATION **\$500,000**

OWNER **Newport Harbor Art Mus. 675-3866**

ADDRESS **2211 W. Balboa Blvd.**

CITY **Newport Beach, CA**

DESCRIPTION OF WORK

NEW ADD ALTER REPAIR DEMOLISH

SQ. FT. BLDG. **21,208** NO. OF STORIES **1** NO. OF FAMILIES **0**

WORK TO BE DONE **Construct new building (art museum)**

ARCHITECT OR ENGINEER **Langdon & Wilson** TEL. NO. **833-9193**

ADDRESS **3990 Westerly Place, Newport Beach**

CONTRACTOR **The Koll Company**

ADDRESS **901 Dove St.** STATE LICENSE NO. **221-764**

CITY **Newport Beach** LICENSE CLASS **B-1**

TEL. NO. **833-3030** NEWPORT LIC. # **18121**

SIGNATURE OF APPLICANT *John Allen*

PLAN CK. NUMBER **914-76**

LOCALITY **NEWPORT CENTER**

NEAREST CROSS ST.

STAT. AREA **F-2** GROUP **I** TYPE CONST. **I** PROCESSED BY **[Signature]**

STATISTICAL CLASSIFICATION **15 DWELL UNITS** VACANT SITE YES NO

USE ZONE **2** MAP NO. **15' height max.** NO. PARKING SPACES **15**

FIRE ZONE **2** SPECIAL CONDITIONS

BLOG. SETBACK FROM FRONT PROP. LINE OF (STREET) = **105'**

Yards: Rear **15' 8" R.S. 90** LS. **24' 8"**

ZONING APPROVAL **10-6-76** Sub Cut

FIRE APPROVAL **10-5-76** Excise Tax

HEALTH DEPT. APPROVAL: San. Dist. #5 **2730.00**

PLAN CHECKED BY **[Signature]** Water Conn. **2730.00**

Total Due **2730.00**

CONST. LENDER

ADDRESS **[Blank]** APPROVAL TO ISSUE **[Signature]** FINAL VALUATION \$ **816,000**

APPROVALS	DATE	INSPECTOR'S SIGNATURE
FOUNDATION: LOCATION FORMS, MATERIALS		
REINFORC. STEEL		
SHEATHING		
FRAMING		
FINAL		
CERT OF OCCUP.	6/27/78	[Signature]
P.C. FEE \$ 597	OTHER FEES \$ 2730.00	PMT. FEE \$ 1206.00

I AM THE OWNER OF THE ABOVE DESCRIBED PROPERTY. ALL WORK WILL BE DONE BY CALIF. STATE LICENSED CONTRACTORS. I WILL SUBMIT A LIST OF ALL SUB-CONTRACTORS USED ON THIS PROJECT TO THE DEPT. OF COMMUNITY DEV. PRIOR TO AND AS A CONDITION OF FINAL INSPECTION.

SIGNATURE OF PERMITTEE *John Allen* DATE **12-14-76**

INSPECTOR COPY

WORK MUST BE STARTED WITHIN A PERIOD OF 60 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

PLAN CHECK VALIDATION **11519** **11676** **59715** **475** **375**

ADD P.C. **186.75**

PERMIT VALIDATION

10-18-76

11-15-76 - A 8/41 P.R. 43-2001 / *[faint handwritten notes]*

[faint handwritten notes]

[faint handwritten notes]

[faint handwritten notes]

11-19-76 A 13-01-01

2-8-77 B-12-01-01 subject to B-1/6 & B-7

601130
S1000 J001A



[faint mirrored text, likely bleed-through from the reverse side]

APPLICATION FOR ELECTRICAL PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.				BUILDING ADDRESS 850 San Clemente Drive	
NEW CONSTRUCTION RESIDENTIAL		FEE		NEAREST CROSS ST.	BLDG. PERMIT #
SQ. FT. @ 36 PER SQ. FT. (RES.)				LOCALITY Newport Beach	
SQ. FT. @ 24 PER SQ. FT. (GARAGE)				OWNER Regal Rents-N.H. Art Museum	
SERVICE @ 5.00				MAIL ADDRESS 9925 Jefferson Blvd	
REGULAR FEES FOR OTHER THAN NEW RESIDENTIAL AND FOR ALL ALTERATIONS AND ADDITIONS.				CITY Culver City	TEL NO. 204-3382
PERMIT TOTAL OUTLETS		NO. EACH		ELECTRICIAN Gene C. Hubbard Electric	
LIGHT	FIRST 20		\$.40	ADDRESS P.O. Box 2000	
	ADD'L OVER 20		.30	CITY Corona Del Mar	TEL NO. 645-6974
SWITCH	FIRST 20		.40	NPT LIC. NO. 9675	STATE # 936 LICENSE TYPE 610
	ADD'L OVER 20		.30	GROUP	ZONE
LIGHTING FIXTURES		TOTAL		PROCESSED BY <i>CR</i>	
COOKING AND HOME APPLIANCES (Domestic Only)		2.50		INSPECTION RECORD	
MOTORS	OVER	NOT OVER	H.P.	<i>Temp. Test Lighting</i>	
	0	1	2.50	<i>6-16-93 BY CA PROVIDING DISCONNECT & GROUND DISTRIBUTION @ MAIN IN ACCORDANCE W/ART 205 N.E. CALIFORNIA</i>	
	1	10	5.00		
	10	50	10.00		
	50	100	20.00		
	OVER 100		30.00		
SIGNS	NO. TRANS NO. LAMPS			APPROVALS	DATE
SERVICE 0-600V. NOT OVER 200A			5.00	UNDERSLAB WORK	
SERVICE 0-600V. OVER 200A			10.00	ROUGH CONDUIT	
SERVICE OVER 600V			15.00	ROUGH WIRING	
OTHER SEE COMPLETE FEE SCHEDULE				TEMP. POWER	
Temp. Power Hook-up				FIXTURES	
Sub-Panel			5.00	UTILITY CO. NOTIFIED	
Feeder Lighting (100W)			5.00		
PERMIT ISSUING FEE			5.00		
TOTAL FEE			\$ 15.00	FINAL	6-16-93 NEVINS
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.				SIGNATURE OF PERMITTEE <i>Gene C. Hubbard</i>	
				ADDRESS P.O. Box 2000, C.D.M., Ca.	

VALIDATION
CK MO CASH

APPLICATION FOR ELECTRICAL PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY		BUILDING ADDRESS 850 SAN CLEMENTE DR	NEAREST CROSS ST. ST. BARBARA	BLDG. PERMIT #
NEW CONSTRUCTION RESIDENTIAL	FEE \$	LOCALITY	OWNER NEWPT. HARBOR ART MUSEUM	
SQ. FT. @ 2¢ PER SQ. FT. (RES.)		MAIL ADDRESS	SAME	
SQ. FT. @ 2¢ PER SQ. FT. (GARAGE)		CITY	NEWPT. BEACH 92660	
SERVICE @ 2.50		ELECTRICIAN	CANVAS SPECIALTY	
SEE CLAR FEES FOR OTHER THAN NEW RESIDENTIAL AND FOR ALL ALTERATIONS AND ADDITIONS		ADDRESS	7344 E. BANDINI BL	
TEMP. POWER ONLY		CITY	L.A. 90040	
PERMIT TOTAL OUTLETS	NO. EACH	NPT. LIC. NO.	STATE CONT. NO.	LICENSE TYPE
10	10	4141	60858	EL
FIRST 20	\$ 40	GROUP ZONE PROCESSED BY		
ADD'L OVER 20	30	B		
LIGHTING FIXTURES	FIRST 20 40	INSPECTION RECORD		
ADD'L OVER 20	30	12-2-81 Temp Power		
COOKING AND HOME APPLIANCES	2.50	APPROVALS	DATE	INSPECTOR'S
(Domestic Only)				
MOTORS OVER NOT OVER HP				
0 1 2.50				
1 2 3.50				
2 3 5.00				
3 15 6.25				
5 50 7.50				
50 100 10.00				
SIGNS NO TRANS NO TEMPS				
SERVICE 0-600V NOT OVER 200A (PER METER) 2	2.50	UNDERSLAB WORK		
SERVICE 0-600V OVER 200A	4.00	ROUGH CONDUIT		
SERVICE OVER 600V	7.00	ROUGH WIRING		
OTHER SEE COMPLETE FEE SCHEDULE		TEMP POWER		
		FIXTURES		
		UTILITY CO. NOTIFIED		
PERMIT ISSUING FEE	3.00	FINAL		
TOTAL FEE	\$ 7.00	SIGNATURE OF PERMITTEE	[Signature]	
		ADDRESS		

INSPECTION COPY

VALIDATION
CK MQ CASH

APPLICATION FOR ELECTRICAL PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.				BUILDING ADDRESS 850 SAN CLEMENTE	
NEW CONSTRUCTION RESIDENTIAL				NEAREST CROSS ST. SANTA ANNA	
SQ. FT. @ 24 PER SQ. FT. (RES.)				LOCALITY	
SQ. FT. @ 12 PER SQ. FT. (GARAGE)				OWNER NEWPORT HARBOR ART HOUSE	
SERVICE @ 2.00				MAIL ADDRESS 850 SAN CLEMENTE	
REGULAR FEES FOR OTHER THAN NEW RESIDENTIAL AND FOR ALL ALTERATIONS AND ADDITIONS.				CITY NB TEL NO	
RECEIPT				ELECTRICIAN HOOPS ELECT.	
TOTAL OUTLETS				ADDRESS 544 No CYPRESS	
LIGHT 3				CITY ORANGE TEL NO 977-1320	
SWITCH 15				NPT. LIC. NO. STATE COM. NO. 278723 LICENSE TYPE E10	
LIGHTING FIXTURES 3				GROUP ZONE PROCESSED BY	
COOKING AND HOME APPLIANCES (Domestic Only)				INSPECTION RECORD	
MOTORS				A. V. ...	
SIGNATURE				DEAD FILE	
SERVICE 0-600V NOT OVER 200A				APPROVALS	
SERVICE 0-600V OVER 200A				DATE	
SERVICE OVER 600V				INSPECTOR'S	
OTHER (SEE COMPLETE FEE SCHEDULE)				UNDERSLAB WORK	
TIME CLOCKS 2				ROUGH CONDUIT	
PERMIT ISSUING FEE				ROUGH WIRING	
TOTAL FEE				TEMP. POWER	
I hereby acknowledge that I have read this application, that the information given is correct, and that I am the owner, or the duly authorized agent of the owner, I agree to comply with city and state laws, regulating construction, and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.				FIXTURES	
VALIDATION				UTILITY CO. NOTIFIED	
CK MD CASH				FINAL	
SIGNATURE OF PERMITTEE				06-19-78 R.E.S.	
ADDRESS				544 No CYPRESS	

INSPECTOR COPY

APPLICATION FOR ELECTRICAL PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY				BUILDING ADDRESS <i>850 S. Cypress Ave</i>	
NEW CONSTRUCTION RESIDENTIAL				NEAREST CROSS ST <i>San Antonio</i>	
SQ. FT. @ 2¢ PER SQ. FT. (RES.)				LOCALITY	
SQ. FT. @ 1¢ PER SQ. FT. (GARAGE)				OWNER <i>Newport Harbor Homes</i>	
SERVICE @ 2.00				MAIL ADDRESS <i>1901 Dove St.</i>	
REGULAR FEE FOR OTHER THAN NEW RESIDENTIAL AND FOR ALL ALTERATIONS AND ADDITIONS				CITY <i>Newport Beach</i>	
				ELECTRICIAN <i>Hoops Electric</i>	
				ADDRESS <i>544 N. Cypress</i>	
				CITY <i>Orange</i>	
				TEL NO <i>971-1310</i>	
				NPT LIC. NO <i>3150</i>	
				STATE CONT. NO <i>27123</i>	
				LICENSE TYPE <i>018</i>	
				GROUP	
				ZONE	
				PROCESSED BY <i>EW</i>	
INSPECTION RECORD					
<i>A-17 Sub Panel 11/16/78</i>					
<i>A-17 N. Main Panel 12/18/78</i>					
<i>A-17 Sub Panel 12/18/78</i>					
<i>A-17 Sub Panel 12/18/78</i>					
<i>A-17 Floor To Wall Conduit 01/16/79</i>					
<i>A-17 1st to 2nd floor 12/18/78</i>					
<i>A-17 2nd floor 12/18/78</i>					
APPROVALS					
RATE					
INSPECTOR'S					
SERVICE 0-600V. NOT OVER 200A				UNDERSLAB WORK	
SERVICE 0-600V. OVER 200A				ROUGH CONDUIT	
SERVICE OVER 600V				ROUGH WIRING	
OTHER (SEE COMPLETE FEE SCHEDULE)				TEMP POWER	
				FIXTURES	
				UTILITY CO. NOTIFIED	
PERMIT ISSUING FEE				FINAL	
TOTAL FEE				SIGNATURE OF PERMITTEE <i>John Francis</i>	
				ADDRESS <i>544 N. Cypress Ave</i>	

I hereby acknowledge that I have read this application, that the information given is correct, and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regarding construction, and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.

VALIDATION
CK MC CASH

Bill Wells South Rd 3-21 7:15 PM
all

B-7 - Walls N $\frac{1}{2}$ 3-3-57 ER

E1 - 3-30-57 ER

B-7 - Ceiling South Room 5 12-17-57 ER

KITCHEN

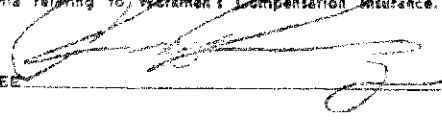
3300 Newport Blvd.

CITY OF NEWPORT BEACH
DEPARTMENT OF COMMUNITY DEVELOPMENT

PHONE 640-2161

APPLICATION FOR PLUMBING PERMIT

K-3153 APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY. WC 9-1-78

NO.	TYPE OF FIXTURE OR ITEM	EACH	FEE	BUILDING ADDRESS	NEAREST CROSS ST.	BLDG. PER. #	LOCALITY	OWNER	MAIL ADDRESS	CITY	STATE LICENSE NUMBER	CLASS NO.	CITY LICENSE NUMBER	GROUP	ZONE	PROCESSED BY	INSPECTION RECORD		
	WATER CLOSET (TOILET)	2.00		850 SAN CLEMENTE DR		14634	NEWPORT HARBOR - ART MUSEUM	NEWPORT HARBOR - ART MUSEUM	850 SAN CLEMENTE DR.	NEWPORT BEACH	142934	C-36	003103	F-2	PC				
	BATH TUB	2.00																	
	SHOWER STALL	2.00																	
1	LAVATORY (WASH BASIN)	2.00	2.00																
1	KITCHEN SINK - GARBAGE DISPOSAL	2.00	2.00																
1	LAUNDRY TRAY OR WASHING MACHINE TRAP	2.00																	
1	DISHWASHER	2.00	2.00																
	WATER SOFTENERS	2.00																	
1	WATER HEATER	2.00	2.00																
	GAS SYSTEM OUTLETS	2.00																	
	OUTLETS OVER 5 PER SYSTEM	.50																	
	RESIDENTIAL LAWN SPRINKLERS	2.50																	
	WATER PIPING	2.00																	
	ROOF DRAINS	2.00																	
1	SINK		2.00																
1	SERVILE SINK		2.00																
	HOUSE SEWER	5.50																	
	SEWER ADDITION, REPAIR ALTERATION, ABANDONMENT	3.50																	
PERMIT		\$	3.00																
TOTAL FEE			15.00																
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.				APPROVALS		DATE		INSPECTOR											
SIGNATURE OF PERMITTEE  ADDRESS				SOIL PIPE		GROUND													
				SEWER															
				WATER PIPE		GROUND													
				GAS PIPE		GROUND													
				PLUMBING		ROUGH		ON		ON 9-15-78									
				GAS PIPE		ROUGH													
				GAS SERVICE															
				GAS		FINAL		4-28-78											
				PLUMBING		FINAL		4-28-78											

INSPECTOR COPY

VALIDATION
CK. M. O. CASH

1 AP20 78 480 15.00 T

K-3153 APPLICATION FOR PLUMBING PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

NO.	TYPE OF FIXTURE OR ITEM	EACH	FEE	BUILDING ADDRESS	NEAREST CROSS ST.	BLDG. PER. #
	WATER CLOSET (TOILET)	2.00		850 SAN CLEMENTE DR.		
	BATH TUB	2.00				
	SHOWER STALL	2.00		LOCALITY NEWPORT HARBOUR ART MUSEUM		
	LAVATORY (WASH BASIN)	2.00		OWNER NEWPORT HARBOUR ART MUSEUM		
	KITCHEN SINK - GARBAGE DISPOSAL	2.00		MAIL ADDRESS 850 SAN CLEMENTE DR.		
	LAUNDRY TRAY OR WASHING MACHINE TRAP	2.00		CITY NEWPORT BEACH TEL. NO.		
	DISHWASHER	2.00		CONTRACTOR SAFEWAY P.L.B.C.		
	WATER SOFTENERS	2.00		ADDRESS 13600 E. IMPERIAL HWY.		
	WATER HEATER	2.00		CITY SANTA FE SPRINGS TEL. NO. 921-6031		
1	GAS SYSTEM OUTLETS	2.00	2.00	STATE LICENSE NUMBER 142934	CLASS NO. C-36	CITY LICENSE NUMBER
	OUTLETS OVER 5 PER SYSTEM	.50				
	RESIDENTIAL LAWN SPRINKLERS	2.50		GROUP FS	ZONE 1044	PROCESSED BY [Signature]
	WATER PIPING	2.00		INSPECTION RECORD		
	ROOF DRAINS	2.00				
	HOUSE SEWER	5.50				
	SEWER ADDITION, REPAIR ALTERATION, ABANDONMENT	3.50				
PERMIT \$ 3.00				APPROVALS	DATE	INSPECTOR
TOTAL FEE 5.00				SOIL PIPE GROUND		
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.				SEWER		
				WATER PIPE GROUND		
				GAS PIPE GROUND		
				PLUMBING ROUGH		
				GAS PIPE ROUGH		
SIGNATURE OF PERMITTEE [Signature]				GAS SERVICE		
ADDRESS				GAS FINAL	11-20-77	[Signature]
				PLUMBING FINAL		

INSPECTOR COPY

VALIDATION
M. O. CASH
5.00 - [Signature]

K-3153 APPLICATION FOR PLUMBING PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

NO.	TYPE OF FIXTURE OR ITEM	EACH	FEE	BUILDING ADDRESS	NEAREST CROSS ST.	LOCALITY	OWNER	MAIL ADDRESS	CITY	TEL. NO.	CONTRACTOR	ADDRESS	CITY	TEL. NO.	STATE LICENSE NUMBER	CLASS NO.	CITY LICENSE NUMBER	GROUP	ZONE	PROCESSED BY
4	WATER CLOSET (TOILET)	2.00	8.00	850 SAN CLEMENTE		Newport Beach	Don Koll Co.	1901 DUNE ST.	Newport Beach		SATEWAY PLY	P.O. BOX 526	Norwalk, 90650	921-6631	142934	C-36	003103	F2	PC	RW
	BATH TUB	2.00																		
	SHOWER STALL	2.00																		
3	LAVATORY (WASH BASIN)	2.00	6.00																	
1	KITCHEN SINK - GARBAGE DISPOSAL	2.00	2.00																	
	LAUNDRY TRAY OR WASHING MACHINE TRAP	2.00																		
1	DISHWASHER	2.00	2.00																	
	WATER SOFTENERS	2.00																		
	WATER HEATER	2.00																		
1	GAS SYSTEM OUTLETS	2.00	2.00																	
	OUTLETS OVER 5 PER SYSTEM	.50																		
	RESIDENTIAL LAWN SPRINKLERS	2.50																		
	WATER PIPING	2.00																		
	ROOF DRAINS	2.00																		
2	FLOOR DRAINS		4.00																	
2	SERVICE SINKS		4.00																	
2	FLOOR SINKS		4.00																	
1	BACK FLOOR																			
	HOUSE SEWER	5.50																		
	SEWER ADDITION, REPAIR ALTERATION, ABANDONMENT	3.50																		
PERMIT \$ 3.00																				
TOTAL FEE 35.00																				
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California, relating to Workmen's Compensation Insurance.				APPROVALS		DATE	INSPECTOR													
				SOIL PIPE	GROUND															
				SEWER																
				WATER PIPE	GROUND															
				GAS PIPE	GROUND															
				PLUMBING	ROUGH															
				GAS PIPE	ROUGH															
				GAS SERVICE																
GAS		FINAL																		
PLUMBING		FINAL																		

SIGNATURE OF PERMITTEE
ADDRESS

VALIDATION
M. O. CASH

INSPECTOR COPY

RW

APPLICATION FOR PLUMBING PERMIT

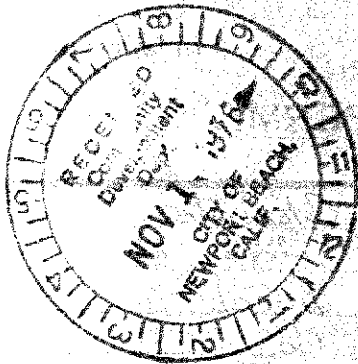
K-3153 APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.

NO.	TYPE OF FIXTURE OR ITEM	EACH	FEE	BUILDING ADDRESS	NEAREST CROSS ST.	BLDG. PER. #
2	WATER CLOSET (TOILET)	2.00	4 00	850 SAN CLEMENTE		14634
	BATH TUB	2.00				
	SHOWER STALL	2.00				
2	LAVATORY (WASH BASIN)	2.00	4 00			
3	KITCHEN SINK — GARBAGE DISPOSAL	2.00	6 00			
	LAUNDRY TRAY OR WASHING MACHINE TRAP	2.00				
	DISHWASHER	2.00				
	WATER SOFTENERS	2.00				
2	WATER HEATER	2.00	4 00			
	GAS SYSTEM OUTLETS	2.00				
	OUTLETS OVER 5 PER SYSTEM	.50				
	RESIDENTIAL, LAWN SPRINKLERS	2.50				
	WATER PIPING	2.00				
2	ROOF DRAINS	2.00	4 00			
1	DRINAL		2 00			
1	SERVICE SINK		2 00			
1	DRINKING FOUNTAIN		2 00			
1	FLOOR DRAIN		2 00			
	HOUSE SEWER	3.50				
	SEWER ADDITION, REPAIR ALTERATION, ABANDONMENT	3.50				
PERMIT \$ 3 00 TOTAL FEE 37 00				APPROVALS DATE INSPECTOR		
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner or the duly authorized agent of the owner. I agree to comply with city and state laws regarding construction; and in doing the work authorized hereby, my employees will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.				SOIL PIPE	GROUND	
				SEWER		
				WATER PIPE	GROUND	
				GAS PIPE	GROUND	
				PLUMBING	ROUGH	
				GAS PIPE	ROUGH	
				GAS SERVICE		
GAS	FINAL					
PLUMBING	FINAL					

VALIDATION

M. O. CASH

RW



5300 W. NEWPORT BLVD.

CITY OF NEWPORT BEACH, CALIFORNIA
DEPARTMENT OF COMMUNITY DEVELOPMENT

KITCHEN
PHONE 545-2121

APPLICATION FOR
HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING 40758-6

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY			BUILDING ADDRESS	BLDG. PER. #
NUMBER	ITEM - DESCRIBE BELOW	FEE	NEAREST CROSS ST.	LOCALITY
	HEATING		850 San Clemente Drive	Newport Beach
1	VENTILATION	3.00	850 San Clemente Dr; Newport beach	Newport Harbor Art Museum
	AIR CONDITIONING		Newport Beach	Southland Ht & Air Cond.
	REFRIGERATION		2800 Temple Avenue	Long Beach CA
	RESTAURANT RANGE HOOD		827-2722	NEWPORT LIC = 5749
	DUCT SYSTEM		114040	CLASS C-20
	GAS LINE FOOTAGE _____ FT.		GROUP F2	ZONE PC
	METAL FIREPLACE		PROCESSED BY RW	
1	fire damper	1.00	INSPECTION RECORD	
			9-12-77 B-5,6 OK BUT BRN	
			LOCATED R/D OR SEE REASON FOR	
			17-4400	
			2-14-78 FILL ALMOST COMPLETE	
			SHOULD CAP FINAL SOUTH SIDE	
			4-11-78 RW OPERATING W/O FINAL	
			INS 201 MAKE UP 5.6 500 W/INS	
			OVER	
	PERMIT ISSUING FEE	\$3.00	APPROVALS	DATE
	TOTAL FEE	7.00	HEATING	GROUND
<p>I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.</p> <p>SIGNATURE OF PERMITTEE <i>R. Stinson</i></p> <p>ADDRESS _____</p>			RANGE HOOD	ROUGH
			AIR COND. VENT.	ROUGH
			HEATING	ROUGH
			GAS	
			RANGE HOOD	FINAL
			AIR COND. VENT.	FINAL
HEATING	FINAL			

INSPECTOR C.D.

VALIDATION

M. O. CASH

25 189 100577

7.00

RW

CITY OF NEWPORT BEACH, CALIFORNIA
 3300 W. NEWPORT BLVD. DEPARTMENT OF COMMUNITY DEVELOPMENT

K. [unclear]
 PHONE 848-2141

APPLICATION FOR
 HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING 40758-6

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY.			BUILDING ADDRESS	NEAREST CROSS ST.	BLOG. PER. #																											
NUMBER	ITEM - DESCRIBE BELOW	FEE	850 San Clemente Drive																													
	HEATING																															
	VENTILATION																															
	AIR CONDITIONING																															
	REFRIGERATION																															
	RESTAURANT RANGE HOOD																															
	DUCT SYSTEM																															
	GAS LINE FOOTAGE _____ FT.																															
	METAL FIREPLACE 1200																															
1	Air Handler Cfm	300																														
1	Furnace	100																														
2	Registers @ \$25	50																														
	PERMIT ISSUING FEE	\$3 00																														
	TOTAL FEE	7 50																														
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.			<table border="1"> <thead> <tr> <th>GROUP</th> <th>ZONE</th> <th>PROCESSED BY</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>CH</td> <td>[Signature]</td> </tr> </tbody> </table>			GROUP	ZONE	PROCESSED BY	F	CH	[Signature]																					
GROUP	ZONE	PROCESSED BY																														
F	CH	[Signature]																														
SIGNATURE OF PERMITTEE <i>[Signature]</i>			<table border="1"> <thead> <tr> <th>APPROVALS</th> <th>DATE</th> <th>INSPECTOR</th> </tr> </thead> <tbody> <tr> <td>HEATING GROUND</td> <td></td> <td></td> </tr> <tr> <td>RANGE HOOD ROUGH</td> <td></td> <td></td> </tr> <tr> <td>AIR COND. VENT. ROUGH</td> <td>7-12-77</td> <td>[Signature]</td> </tr> <tr> <td>HEATING ROUGH</td> <td></td> <td></td> </tr> <tr> <td>GAS</td> <td></td> <td></td> </tr> <tr> <td>RANGE HOOD FINAL</td> <td></td> <td></td> </tr> <tr> <td>AIR COND. VENT. FINAL</td> <td>7-28-78</td> <td>[Signature]</td> </tr> <tr> <td>HEATING FINAL</td> <td></td> <td></td> </tr> </tbody> </table>			APPROVALS	DATE	INSPECTOR	HEATING GROUND			RANGE HOOD ROUGH			AIR COND. VENT. ROUGH	7-12-77	[Signature]	HEATING ROUGH			GAS			RANGE HOOD FINAL			AIR COND. VENT. FINAL	7-28-78	[Signature]	HEATING FINAL		
APPROVALS	DATE	INSPECTOR																														
HEATING GROUND																																
RANGE HOOD ROUGH																																
AIR COND. VENT. ROUGH	7-12-77	[Signature]																														
HEATING ROUGH																																
GAS																																
RANGE HOOD FINAL																																
AIR COND. VENT. FINAL	7-28-78	[Signature]																														
HEATING FINAL																																
ADDRESS _____																																

INSPECTOR COPY

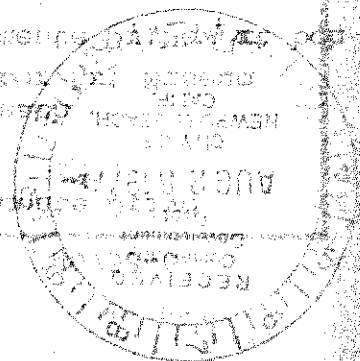
VALIDATION
 M. O. CASH

50870 13177 7.50 -
[Signature]

1 18 78 No PERMIT FOR GARBAGE HOOD
MAKE UP AIR NOT CONND.
NO COMB AIR FOR W/HTR. ALCE

4 20 78 MAKE UP AIR CONND. ALCE

4 24 78 F 3, 4 OK AS SOON AS HOOD PERMIT
RECEIVED ALCE



CITY OF NEWPORT BEACH, CALIFORNIA
 3300 W. NEWPORT BLVD. DEPARTMENT OF COMMUNITY DEVELOPMENT PHONE 678-2170
 APPLICATION FOR HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING 40758-6

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY			BUILDING ADDRESS	LOCALITY	BLOG. PER. #
NUMBER	ITEM - DESCRIBE RE. QTY	FEES	NEAREST CROSS ST.	OWNER	MAIL ADDRESS
1	HEATING boiler	6 00	850 San Clemente Drive	Newport Beach	146354
2	VENTILATION exhaust fans @ 5.00	10 00	250 San Clemente Drive	Newport Harbor Art Museum	
2	AIR CONDITIONING (30 HP) COMPRESSORS (75 HP)	42 00	Newport Beach	Southland Htg & Air Cond.	
	REFRIGERATION		2800 Temple Avenue	Long Beach	627-0813
	RESTAURANT RANGE HOOD		STATE LIC. = 114040	LIC. CLASS C-20	NEWPORT LIC. # 5749
	DUCT SYSTEM		GROUP	ZONE	PROCESSED BY
74	inlets & outlets @25	18 50			
	GAS LINE FOOTAGE				
	METAL FIREPLACE				
9	fire dampers @ 1.00	9 00			
2	1 @ \$6.00 & 1 @ \$1200 air handlers	18 00			
	PERMIT ISSUING FEE	\$3 00			
	TOTAL FEE	106 50			
I hereby acknowledge that I have read this application; that the information given is correct; and that I am the owner, or the duly authorized agent of the owner. I agree to comply with city and state laws regulating construction; and in doing the work authorized thereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.			INSPECTION RECORD 3-11-77 BATH ROOM SYSTEMS OK TO COVER THIS 5-24-77 DUCTS IN OPEN RAIS AIR 5-11-77 B.S.L. ROUGH DUCT FINAL AT WEST TEL BAL.		
SIGNATURE OF PERMITTEE			APPROVALS		
ADDRESS 2800 Temple Long Beach			DATE		
			INSPECTOR		
			HEATING GROUND		
			RANGE HOOD ROUGH		
			AIR COND. VENT. ROUGH		
			HEATING ROUGH		
			GAS		
			RANGE HOOD FINAL		
			AIR COND. VENT. FINAL		
			HEATING FINAL		

VALIDATION
 CK. M. O. CASH

10650 276 10650
 [Signature]

APPLICATION FOR GRADING PERMIT

APPLICANT TO FILL IN AREA WITHIN HEAVY LINES ONLY		PLAN CHECK = <u>996-76</u>
SITE ADDRESS <u>850 SAN CLEMENTE DRIVE</u>		LOCALITY <u>Newport Center</u>
LOT NUMBERS <u>2</u>	BLOCK	NEAREST CROSS ST.
TRACT NUMBER <u>7603</u>		CENSUS TRACT
OWNER <u>NEWPORT HARBOR ART MUSEUM</u>		VACANT SITE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
MAIL ADDRESS <u>2211 W BALBOA BLVD.</u>		PROCESSED BY <u>CR</u>
CITY <u>NEWPORT BEACH</u>	TEL. NO.	USE ZONE <u>PC</u>
PLANS BY ENGINEER <u>RBF</u>	STATE REG. NO. <u>12758</u>	MAP NO.
ADDRESS <u>1401 QUAIL ST.</u>	TEL. NO. <u>833-0070</u>	FIRE ZONE <u>2</u>
ENGINEER <u>ROBERT W DEIN</u>	STATE REG. NO. <u>12758</u>	SPECIAL CONDITIONS
ADDRESS	TEL. NO.	BLDG. SETBACK FROM FRONT PROP. LINE OF _____ (STREET) =
SUPV'G GRAD'G. ENGINEER	STATE REG. NO.	BLDG. SETBACK FROM SIDE PROP. LINE OF _____ (STREET) =
ADDRESS	TEL. NO.	YARDAGE APPROVED
GRADING CONTRACTOR	TEL. NO.	APPLICATION CHECKED
ADDRESS	STATE LICENSE NO.	PLANS CHECKED
CITY	LICENSE CLASS	CORRECTIONS VERIFIED
	NEWPORT LIC. #	PLANS APPROVED
DESCRIPTION OF WORK		APPLICATION APPROVED
		APPROVAL TO ISSUE
CHECK IF SUPERVISED GRADING <input checked="" type="checkbox"/>		OTHERS
SIGNATURE OF APPLICANT <u>Robert DeIn</u>		SOIL REPORT
NO. OF CUBIC YDS. HANDLED		GEOLOGICAL REPORT
CUT <u>12,000 ±</u>	P.C. FEE \$ <u>30.00</u>	COMPACTION REPORT
FILL <u>1,000 ±</u>	FEE \$ <u>224.00</u>	PLANS OF RETAINING WALLS
I hereby acknowledge that I have read this application, that the information given is correct, and that I am the owner, or the duly authorized agent of the owner, I agree to comply with city and state laws regarding grading, and in doing the work authorized hereby, no person will be employed in violation of the Labor Code of the State of California relating to Workmen's Compensation Insurance.		In consideration of the granting of this permit, it is further agreed by the applicant that the City of Newport Beach and any officer or employee thereof shall be saved harmless by the applicant from any liability or responsibility for any accident, loss or damage to persons or property, happening or occurring as the proximate result of any of the work undertaken under the terms of this application and the permit or permits which may be granted in response thereto, and that all said liabilities are hereby assumed by applicant.
SIGNATURE OF PERMITTEE <u>Robert DeIn</u>		WORK TO BE COMPLETED WITHIN _____ DAYS
ADDRESS		FINAL CONTOUR MAP FILED
PLAN CHECK VALIDATION CK. M.O. CASH		DATE
		INSPECTOR'S SIGNATURE
		FINAL CERTIF. OF ENG'R. REC'D.
		WORK COMPLETED
		SURETY BOND RELEASED

PLAN CHECK VALIDATION CK. M.O. CASH

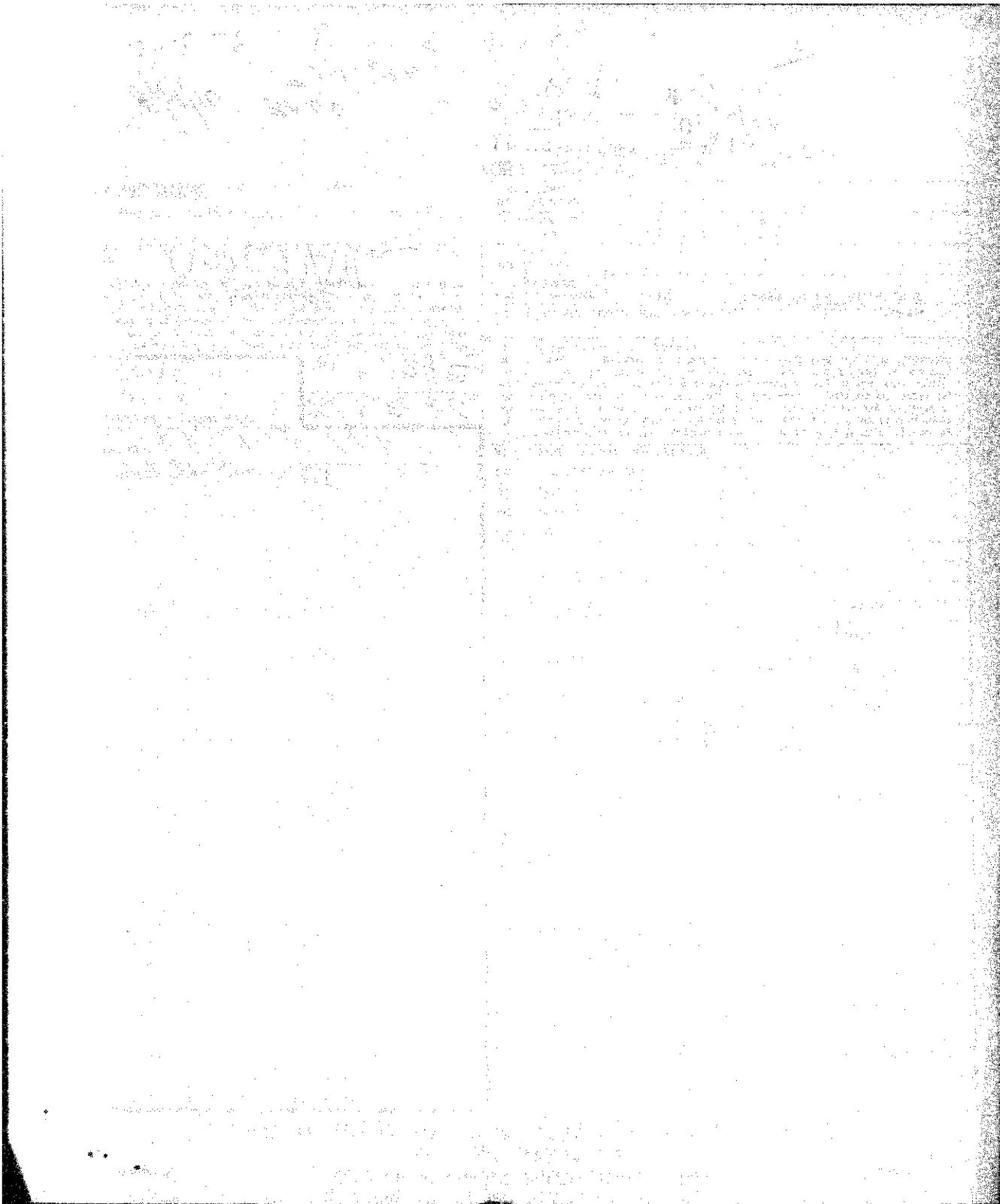
11923 8/19/76 30.00 #14633

PERMIT VALIDATION CK. M.O. CASH

IMPROVEMENTS \$16,500

4.5 PMT 5 \$54.00

P.C. 27.00



City of Newport Beach
 Building Department
 P.O. Box 1768
 Newport Beach, CA 92658-8915
 Phone: (714) 644-3288

BUILDING PERMIT APPLICATION

B- 4129

PLAN CHECK NO.

BUILDING ADDRESS 850 SAN CLEMENTE DR. N.B.		SAN CLEMENTE & SANTA BARBARA	
LOT NO	BLOCK	TRACT	STAT. AREA
LCT SIZE	USE OF STRUCT	GRADING APPROVAL REQUIRED	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
OWNER Newport Harbor Art Museum	USE ZONE PL	PARKING SPACES	VACANT SITE YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ADDRESS 850 San Clemente Dr.	CITY Newport Beach	ZIP 92660	SPEC. CONDS Sept 5, 6, 7 only
CONTRACTOR The Southern Iron Works	ADDRESS 4744 Ardmore Blvd	TEL NO 657-1233	subject to inspector's approval.
CITY Orange CA	ZIP 92668	YARDS REAR	RS
LICENSE CLASS	STATE LIC. NO.	NEWPORT LIC. NO.	FAIR SHARE
ARCHITECT OR ENGR	TEL NO.	FIRE APPROVAL	EXCISE TAX
ADDRESS	ZIP	GRADING APPROVAL	SAN DISTRICT NO. ZONE
CITY	LIC. NO.	PLAN CHY BY	SJHTC
DESCRIPTION OF WORK TEMP STAGE		OTHER	
NEW <input type="checkbox"/>	ADD <input type="checkbox"/>	ALTER <input type="checkbox"/>	REPAIR <input type="checkbox"/>
APPROVAL TO ISSUE [Signature]		TOTAL	\$
<p>WORKERS' COMPENSATION DECLARATION</p> <p>I HEREBY AFFIRM THAT I HAVE A CERTIFICATE OF CONSENT TO SELF-INSURE OR A CERTIFICATE OF WORKERS' COMPENSATION INSURANCE OR A CERTIFIED COPY THEREOF (SEC. 3800, LAB.C).</p> <p>POLICY NO. _____ COMPANY _____</p> <p><input type="checkbox"/> CERTIFIED COPY IS HEREBY FURNISHED</p> <p><input type="checkbox"/> CERTIFIED COPY IS FILED WITH THE BUILDING DEPARTMENT.</p> <p>DATE _____ APPLICANT _____</p>			
<p>LICENSED CONTRACTORS DECLARATION</p> <p>I HEREBY AFFIRM THAT I AM LICENSED UNDER PROVISIONS OF CHAPTER 9 (COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE, AND MY LICENSE IS IN FULL FORCE AND EFFECT.</p> <p>LICENSE CLASS _____ LIC. NO. _____</p> <p>CONTRACTOR _____ DATE _____</p>			
<p>OWNER-BUILDER DECLARATION</p> <p>I HEREBY AFFIRM THAT I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAW FOR THE FOLLOWING REASON (SEC. 7031.5, BUSINESS AND PROFESSIONS CODE): ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT, ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PRIOR TO ITS ISSUANCE, ALSO REQUIRES THE APPLICANT FOR SUCH PERMIT TO FILE A SIGNED STATEMENT THAT HE IS LICENSED PURSUANT TO THE PROVISIONS OF THE CONTRACTOR'S LICENSE LAW (CHAPTER 9 (COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE) OR THAT HE IS EXEMPT THEREFROM AND THE BASIS FOR THE ALLEGED EXEMPTION, ANY VIOLATION OF SECTION 7031.5 BY ANY APPLICANT FOR A PERMIT SUBJECTS THE APPLICANT TO A CIVIL PENALTY OF NOT MORE THAN FIVE HUNDRED DOLLARS (\$500):</p> <p><input type="checkbox"/> AS OWNER OF THE PROPERTY OR MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION, WILL DO THE WORK AND THE STRUCTURE IS NOT INTENDED OR OFFERED FOR SALE (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO DOES SUCH WORK HIMSELF OR THROUGH HIS OWN EMPLOYEES, PROVIDED THAT SUCH IMPROVEMENTS ARE NOT INTENDED OR OFFERED FOR SALE. IF HOWEVER THE BUILDING OR IMPROVEMENT IS SOLD WITHIN ONE YEAR OF COMPLETION THE OWNER-BUILDER WILL HAVE THE BURDEN OF PROVING THAT HE DID NOT BUILD OR IMPROVE FOR THE PURPOSE OF SALE.</p> <p><input checked="" type="checkbox"/> AS OWNER OF THE PROPERTY, AM EXCLUSIVELY CONTRACTING WITH LICENSED CONTRACTORS TO CONSTRUCT THE PROJECT (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO CONTRACTS FOR SUCH PROJECTS WITH A CONTRACTOR(S) LICENSED PURSUANT TO THE CONTRACTOR'S LICENSE LAW.</p> <p><input type="checkbox"/> I AM EXEMPT UNDER SEC. _____ SPEC. FOR THIS REASON _____</p> <p>DATE 9-3-87 OWNER [Signature]</p>			
<p>CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE</p> <p>(THIS SECTION NEED NOT BE COMPLETED IF THE PERMIT IS FOR ONE HUNDRED DOLLARS (\$100) OR LESS.)</p> <p>I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKERS' COMPENSATION LAWS OF CALIFORNIA.</p> <p>DATE _____ APPLICANT _____</p> <p>NOTICE TO APPLICANT: IF, AFTER MAKING THIS CERTIFICATE OF EXEMPTION, YOU SHOULD BECOME SUBJECT TO THE WORKERS' COMPENSATION PROVISIONS OF THE LABOR CODE, YOU MUST FORTHWITH COMPLY WITH SUCH PROVISIONS OR THIS PERMIT SHALL BE DEEMED REVOKED.</p>			
<p>CONSTRUCTION LENDING AGENCY</p> <p>I HEREBY AFFIRM THAT THERE IS A CONSTRUCTION LENDING AGENCY FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED (SEC. 3097, CIV.C).</p> <p>LENDER'S NAME _____</p> <p>LENDER'S ADDRESS _____</p> <p>I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE INFORMATION IS CORRECT. I AGREE TO COMPLY WITH ALL CITY AND COUNTY ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION, AND HEREBY AUTHORIZE REPRESENTATIVES OF THIS COUNTY TO ENTER UPON THE ABOVE-MENTIONED PROPERTY FOR INSPECTION PURPOSES.</p> <p>[Signature] 9-3-87</p>			
Est. Val.	\$ 1200	Other Fees	\$ _____
P/C Fee	\$ 1343	Permit Fee	\$ 20.50
Final Val.	\$ _____	Adj. P/C Fee	\$ _____
C&D	\$ 100.00	Total Fees	\$ 3393

INSPECTOR'S COPY

WORK MUST BE STARTED WITHIN A PERIOD OF 180 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

PLAN CHECK VALIDATION CK. M.O. CASH PERMIT VALIDATION CK. M.O. CASH



P.C # 0204-2002

CITY OF NEWPORT BEACH

P.O. BOX 1768, NEWPORT BEACH, CA 92658-8915

BUILDING DEPARTMENT

Project Address: **850 SAN CLEMENTE DR** Date: **2/23/01**

Plan Check No.: **DTC -2001** Plan Check Engineer: **Ali Naji** Phone: **(949) 644-3292**

Applicant to provide written responses to all corrections and red marks on plans.

No.	Correction	
1	PROVIDE MATERIAL SPECIFICATION AS PART OF PLANS.	
2	CLARIFY FC OF EXISTING CONCRETE ROOF.	
3	SPECIFY ON PLANS FOR ANCHOR BOLTS WHICH IS DESIGNED TO RESIST EARTHQUAKE LOADS. PLEASE SEE FINDINGS IN KBD REPORT.	
4	REVISE PLANS TO SPECIFY ATTACHMENT OF EQUIPMENT TO STRUCTURE TO MATCH STRUCTURAL CALCULATIONS.	
5	PLANS & CALCULATIONS SHALL BE STAMPED BY THE ENGINEER.	
6	SHOW PROPERTY LINES & NORTH ARROW ON PLANS	
7	PLANS SHALL SHOW HEIGHT OF EQUIPMENT.	
BUILDING DEPARTMENT CITY OF NEWPORT BEACH, CA		
APPROVAL OF THESE PLANS DOES NOT CONSTITUTE EXPRESS OR IMPLIED GUARANTEE OR WARRANTY OF ANY KIND, NOR DOES IT CONSTITUTE A GUARANTEE OF ACCURACY OR COMPLETION OF ANY WORK. THE CITY OF NEWPORT BEACH RESERVES THE RIGHT TO REQUIRE ANY PERMITEE TO REVISE THE BUILDING, STRUCTURE OR IMPROVEMENT AUTHORIZED BY THESE PLANS, BEFORE, DURING OR AFTER CONSTRUCTION, IF NECESSARY TO COMPLY WITH THE ORDINANCES, PLANS AND POLICIES OF THE CITY OF NEWPORT BEACH.		
APPLICANT'S ACKNOWLEDGEMENT: _____ (signature)		
DEPARTMENT	SIGNATURE	DATE
PUBLIC WORKS	_____	_____
TRAFFIC	_____	_____
FIRE	_____	_____
GRADING	_____	_____
PLANNING	_____	_____
APPROVAL TO ISSUE		
BY _____ DATE _____		



PROJECT	NEWPORT HARBOR ART MUSEUM	BY	DHIRU MALI	DATE	1-17-02		
JOB NO.	01-76	SHEET NO.	1	OF	CHKD.	DATE	

(562) 402-2930

PROJECT

NEWPORT HARBOR – ART MUSEUM
NEWPORT BEACH, CALIFORNIA

ANCHORAGE OF EQUIPMENT FOR APC AIR CONDITIONING



BASIC DATA

BUILDING CODE: UNIFORM BUILDING CODE –1997 ✓
WIND SPEED 70 MPH ✓
EXPOSURE 'C' ✓

SEISMIC ZONE 4 ✓
Ca = 0.44Na, Na = 1.0, ap = 1.0, R = 3.0
I = 1.0

MATERIAL SPECIFICATIONS

CONCRETE: F'c = 3,000 PSI FOR TOPPING SLAB AND 5,000 PSI FOR PRECAST DOUBLE TEES, MINIMUM ✓

LUMBER : DOUGLAS FIR GRADE II OR BETTER ✓

STRUCTURAL STEEL: A – 36; fy = 36,000 PSI

ANCHOR BOLTS: ASTM A 307 (LAG SCREWS IN WOOD)

EXPANSION ANCHORS: REDHEAD ANCHORS PER ICBO RESEARCH REPORT # 1372



PROJECT	NEWPORT HARBOR ART MUSEUM	BY	DHIRU MALI	DATE	1-17-02
JOB NO.	01-76	SHEET NO.	2	OF	CHKD. DATE

(562) 402-2930

WIND LOAD ANALYSIS (DOES NOT GOVERN, BY INSPECTION)

WIND SPEED 70 MPH

EXPOSURE 'C'

Ce := 1.06 0 TO 15 FT.

Ce := 1.13 15 TO 20 FT.

Ce := 1.19 20 TO 25 FT.

Ce := 1.23 25 TO 30 FT.

Cq := 1.40

qs := 12.6 PSF

I := 1.0

WIND LOAD Pw := Ce · Cq · qs · I

0 TO 15 FT. P15 := 18.70 PSF

15 TO 20 FT. P20 := 19.93 PSF

20 TO 25 FT. P25 := 20.99 PSF

25 TO 30 FT. P30 := 21.70 PSF

SEISMIC LOAD ANALYSIS

Na := 1.0 Ca := 0.44 · Na Ip := 1.0 Rp := 3.0

ap := 2.5 FOR EQUIPMENT ap := 1.0 FOR PLATFORM

$$F_p := \frac{a_p \cdot C_a \cdot I_p}{3 \cdot R_p} \left(1 + 3 \frac{h_x}{h_v} \right)$$



PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
JOB NO. 01-76 SHEET NO. 3 OF CHKD. DATE

(562) 402-2930

- ① Existing Boiler in on mezzaine above Restrooms - will be abandoned,
- ② New 652 Boiler will be installed close to over old Boiler - on roof (see drawing)

Roof Equipment - Approx weight

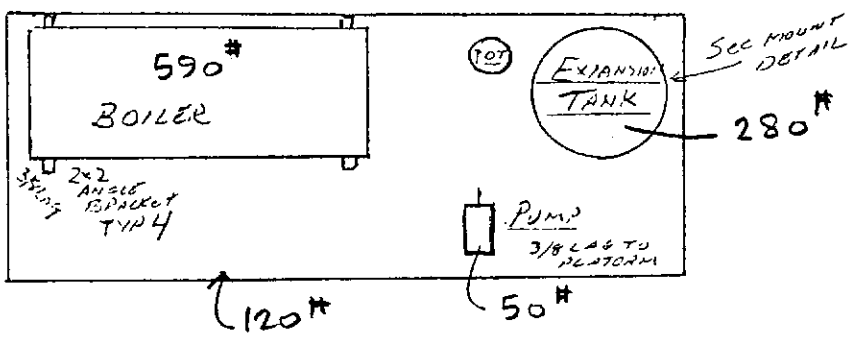
- 1 ① Boiler 590 LBS
- ✓ ② Expansion tank 280 LBS (includes water)
- 1 ③ Pump - 50 LBS
- 1 ④ Platform = 120 LBS



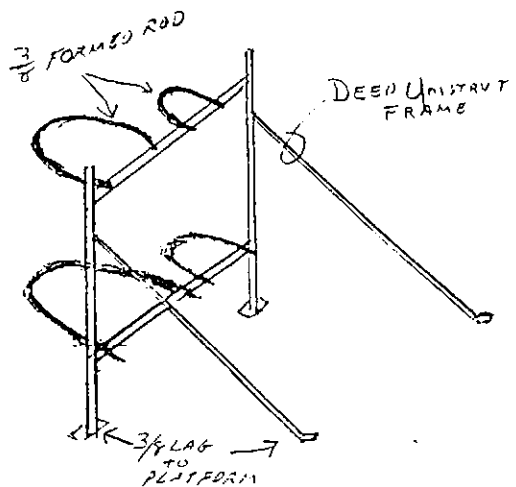
PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
 JOB NO. 01-76 SHEET NO. 4 OF CHKD. DATE

(562) 402-2930

EQUIPMENT PLATFORM
TOP VIEW



(1) C MUSEUM
(1) F
ART



EQUIPMENT SCHEDULE

①	BOILER - 552,000 INWT 870	510 LBS
②	EXPANSION TANK 30 GALS	220 LBS
③	FEED POT 2 GALS	20 LBS
④	PUMP 1 H.P.	47 LBS

$\frac{1}{2}'' = 1'0$

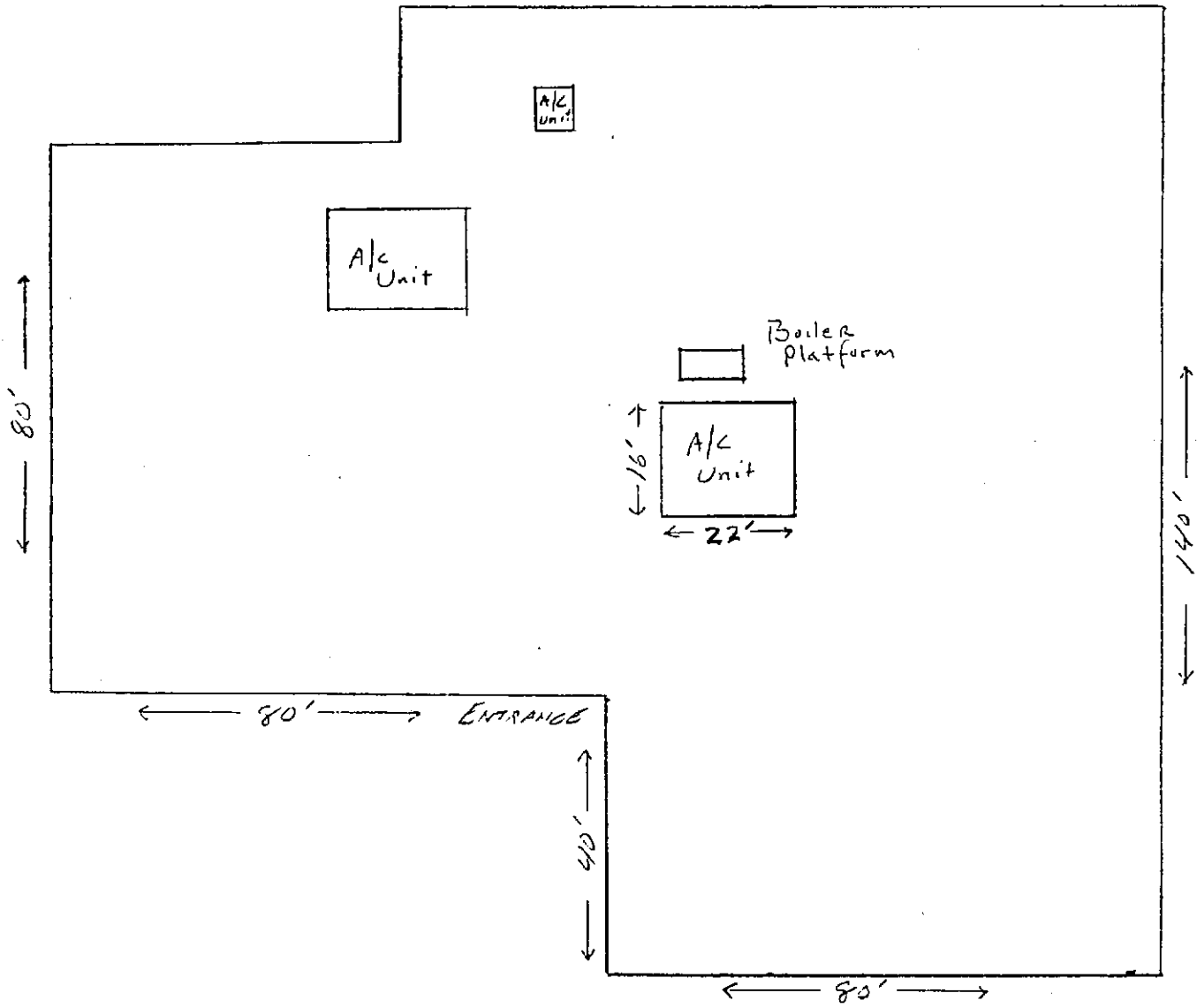
EXPANSION TANK MOUNT DETAIL W/ FEED POT



PROJECT NEWPORT HARBOR ART MUSEUM By DHIRU MALI DATE 1-17-02
JOB NO. 01-76 SHEET NO. 5 OF CHKD. DATE

(562) 402-2930

Roof PLAN



SAN Clemente DR.

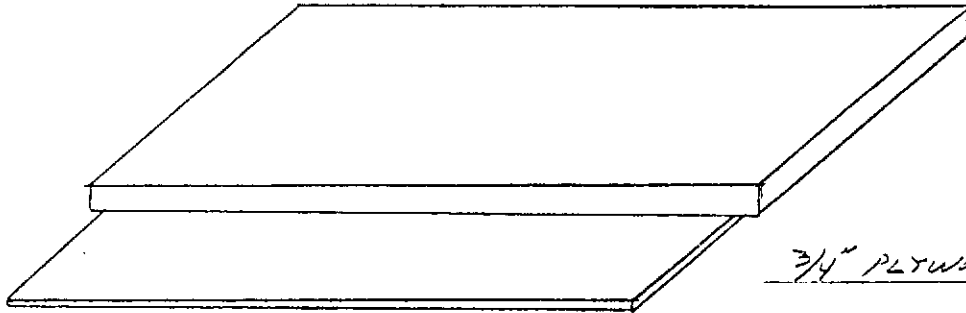
$\frac{1}{2}'' = 10'$



PROJECT	NEWPORT HARBOR ART MUSEUM	By	DHIRU MALI	DATE	1-17-02		
JOB NO.	01-76	SHEET NO.	6	OF	CHKD.	DATE	

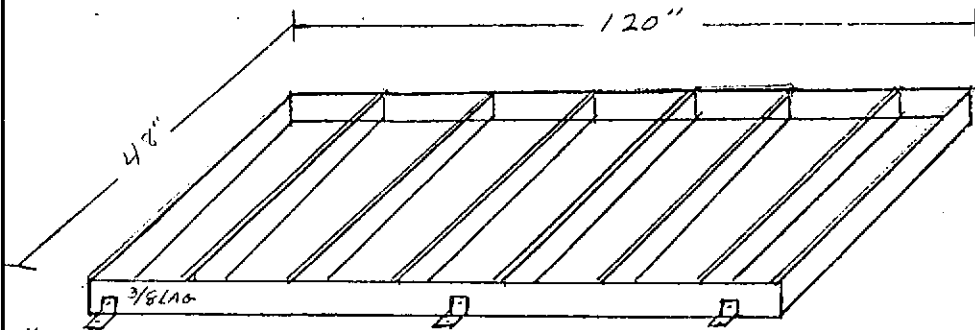
(562) 402-2930

PLATFORM DETAIL



SHEET METAL CAP

3/4" PLYWOOD



2x6 Pressure Treated Wood
FRAME & JOIST

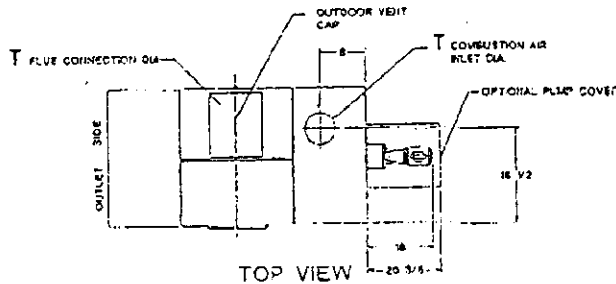
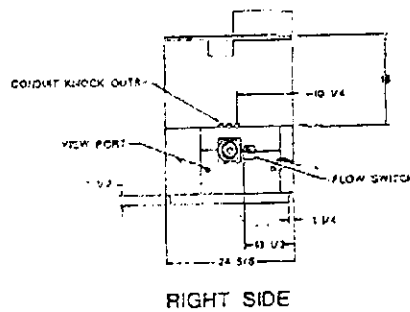
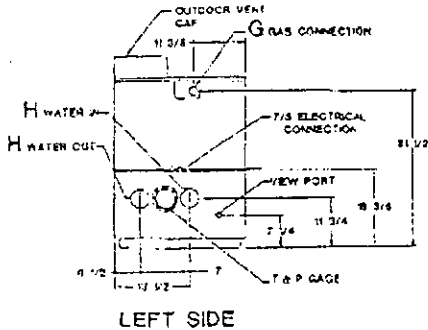
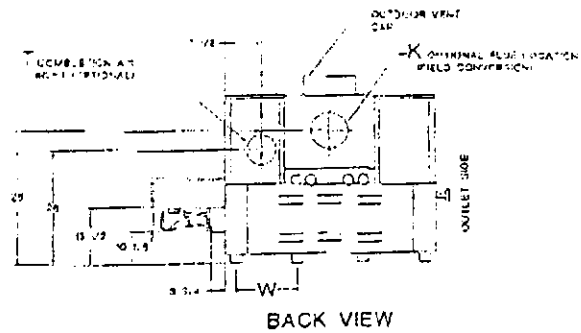
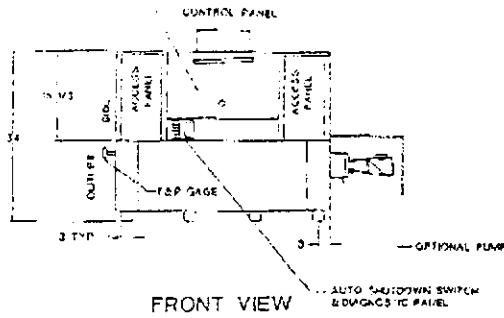
1/2
Angle
2x2
ANGLE
BRACKET
TRIP L

1" = 1'0

PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
 JOB NO. 01-76 SHEET NO. 7 OF CHKD. DATE _____

BOILER
Hi Delta - Type W
Models 302-902

Model _____



BOILER RECOVERY RATE

Model	Temperature Rise in °F									
	20°	30°	40°	50°	60°	70°	80°	90°	100°	
	Gallons per Hour									
302	1527	1018	764	611	509	436	382	339	305	
402	2030	1354	1015	812	677	580	508	451	405	
502	2545	1697	1273	1018	848	727	636	566	509	
652	3308	2206	1655	1324	1103	945	827	735	662	
752	3816	2545	1969	1527	1273	1091	955	843	764	
902	4582	3085	2291	1833	1527	1309	1145	1018	916	

MODELS 302 THRU 902

Model	MBTUH Input	MBTUH Output	A Width	G NPT	H NPT	K	T	Amp. Draw	Shipping Wt. Lbs. Approx.
302	300	252	35	3/4	2	5	4	6	380
402	388	335	43	1-1/4	2	6	4	6	445
502	500	420	50	1-1/4	2	6	4	6	545
652	650	546	60-1/2	1-1/4	2	8	6	6	590
752	750	630	67-1/2	1-1/4	2	8	6	6	675
902	900	758	78	1-1/4	2	8	6	7	740

Dimensions are in inches.
 Ratings shown for elevation up to 5,000 feet for natural or propane.
 For installation at elevations over 5,000 feet, please contact manufacturer.

BOILER RATE OF FLOW AND PRESSURE DROP

Model	20°F ΔT		30°F ΔT		Max. Flow		Min. Flow	
	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)
302	N/A	N/A	N/A	N/A	90	9.8	6	32
402	34	1.5	N/A	N/A	90	10.0	7	32
502	42	2.3	N/A	N/A	90	10.5	9	32
652	55	4.1	39	1.8	90	10.7	12	32
752	63	5.3	42	2.5	90	11.0	14	32
902	76	8.5	50	3.8	90	11.8	17	38

Rating based on natural gas or propane.
 Natural gas pressure recommended to be between 7 & 14" w.c.
 Propane gas pressure recommended to be between 11 & 14"



PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
 JOB NO. 01-76 SHEET NO. 8 OF CHKD. DATE

(562) 402-2930

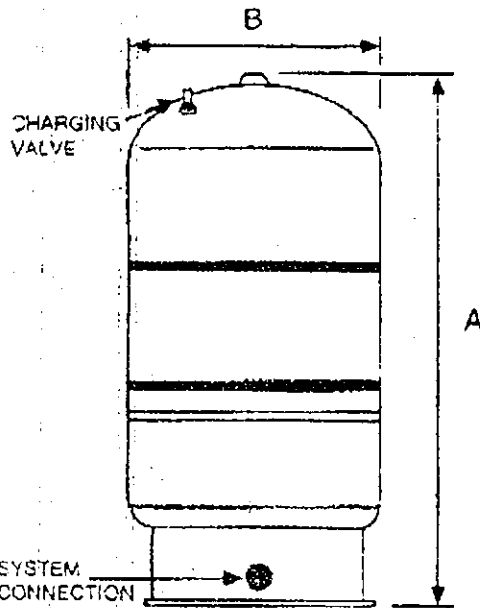


EXTROL® Expansion Tanks SX Series

Specifications and Dimensions

Model No.	Tank Volume		Acceptance Volume		A Height		B Diameter		C		D		System Conn. inches	Ship Wt.	
	Liters	Gallons	Liters	Gallons	mm	inches	mm	inches	mm	inches	mm	inches		kg	lbs.
SX-30V	53	14	43	11.3	605	23 ⁷ / ₈	391	15 ³ / ₈	132	5 ¹ / ₈	46	1 ⁷ / ₈	1	11.5	25
SX-40V	76	20	43	11.3	802	31 ³ / ₈	391	15 ³ / ₈	132	5 ¹ / ₈	46	1 ⁷ / ₈	1	18	33
SX-60V	121	32	43	11.3	1180	46 ¹ / ₂	391	15 ³ / ₈	132	5 ¹ / ₈	46	1 ⁷ / ₈	1	20	43
SX-90V	165	44	128.7	34	915	36	559	22	197	7 ⁷ / ₈	56	2 ¹ / ₈	1 ¹ / ₄	31	69
SX-110V	233	62	129.7	34	1188	46 ³ / ₄	559	22	197	7 ⁷ / ₈	56	2 ¹ / ₈	1 ¹ / ₄	41	92
SX-160V	326	86	174.1	46	1189	47 ¹ / ₄	660	26	197	7 ⁷ / ₈	56	2 ¹ / ₈	1 ¹ / ₄	56	123

System Connection: NPTF

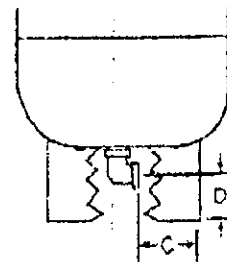


Maximum Operating Conditions

Operating Temperature	240°F (115°C)
Working Pressure	100 PSIG (7 kg/cm ²)

Specifications

Description	Standard Construction
Shell	Steel
Diaphragm	Heavy Duty Butyl
Factory Precharge	12 PSIG (.84 kg/cm ²)



All dimensions and weights are approximate.

Job Name _____

Contractor _____

Location _____

Contractor P.O. No. _____

Sales Representative _____

Model No. Ordered _____

H-442

Engineer _____

PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
 JOB NO. 01-76 SHEET NO. 9 OF CHKD. DATE

PUMP

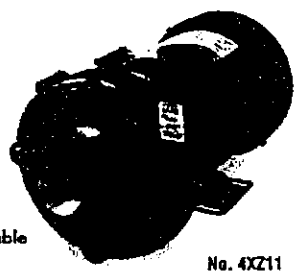
fast | easy | no minimums | See pages A2-A12 for details. **Pumps Centrifugal**

1/2 TO 3 HP HIGH HEAD STRAIGHT CENTRIFUGAL PUMPS

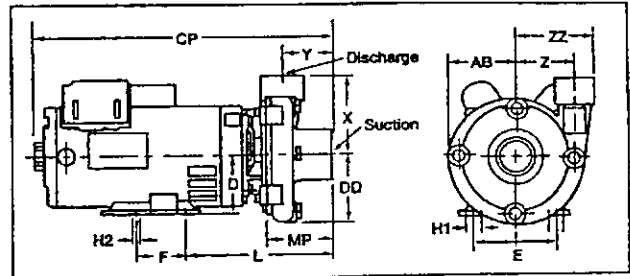


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No. 4X211



Available in either 316 stainless steel or bronze construction. For continuous-duty high-pressure applications, including chemical processing, liquid transfer, pressure boosting and circulation of heated and chilled water. For use with nonflammable liquids compatible with pump component materials. Stainless steel

impellers on all models provide increased corrosion resistance. Two piece design protects motor from liquid. Type 21 Viton mechanical and O-ring seals accommodate casing pressures to 150 psi and maximum temperature 200°F. Discharge ports rotate in 90° increments. Motors are 3450 RPM, NEMA 56J Frame.

PUMP SPECIFICATION DATA

HP	Phase	Type	Volts 50 Hz	Full Load Amps	Port Size (NPT)*		Dimensions (#)													Bronze Stock No.	Stainless Steel Stock No.
					Inlet (In.)	Outlet (In.)	All	CP†	DD	E	F	H1	H2	L	X	Y	Z	ZZ			
1/2	1	ODP	115/230	8.4/4.1	1/4	1	3.56	13.00	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX99	1V304	
1/2	3	ODP	230/460	1.8/0.9	1/4	1	3.56	13.50	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX98	1V306	
3/4	1	ODP	115/230	10.0/5.0	1/4	1	3.56	13.50	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX91	1V308	
3/4	3	ODP	230/460	2.6/1.3	1/4	1	3.56	13.75	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX92	1V310	
3/4	1	TEFC	115/230	8.8/4.4	1/4	1	2.83	16.31	3.50	4.88	3.00	3.72	4.79	7.36	4.79	2.15	3.35	3.54	—	4XX99	
3/4	3	TEFC	230/460	2.3/1.2	1/4	1	2.83	14.24	3.50	4.88	3.00	3.72	4.79	7.36	4.79	2.15	3.35	3.54	—	4X202	
3/4	1	TEFC	115/230	8.8/4.4	1/4	1	2.83	16.31	3.50	2.44	3.00	3.72	4.79	7.36	4.79	2.15	3.35	4.41	4XX98	—	
3/4	3	TEFC	230/460	2.3/1.2	1/4	1	2.83	14.24	3.50	2.44	3.00	3.72	4.79	7.36	4.79	2.15	3.35	4.41	4XX01	—	
1	1	ODP	115/230	14.4/7.2	1/4	1	3.56	15.75	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX07	1V308	
1	3	ODP	230/460	3.2/1.6	1/4	1	3.56	14.00	3.36	4.88	3.00	0.88	0.34	7.36	4.80	2.16	4.36	4.42	4XX88	1V302	
1 1/2	1	TEFC	115/230	16.2/8.1	1/4	1	3.94	15.25	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4XX94	4XX95	
1 1/2	3	TEFC	230/460	4.8/2.4	1/4	1	3.94	15.75	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4XX96	4XX97	
1 1/2	1	ODP	115/230	19.0/9.5	1/4	1/4	3.94	15.25	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X205	1V318	
1 1/2	3	ODP	230/460	4.8/2.4	1/4	1/4	3.94	15.75	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X206	1V320	
2	1	ODP	115/230	27.0/13.5	1/4	1/4	3.94	15.75	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X207	1V322	
2	3	ODP	230/460	5.4/2.7	1/4	1/4	3.94	15.75	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X208	1V324	
2	1	TEFC	115/230	8.8/4.4	1/4	1/4	4.01	17.14	3.50	4.88	3.00	4.04	4.94	8.88	4.94	3.00	3.49	3.93	—	4X215	
2	3	TEFC	230/460	2.3/1.2	1/4	1/4	4.01	16.01	3.50	4.88	3.00	4.04	4.94	8.88	4.94	3.00	3.49	3.93	—	4X217	
2	1	TEFC	115/230	8.8/4.4	1/4	1/4	4.01	17.14	3.50	2.44	3.00	4.04	4.94	8.88	4.94	3.00	3.49	4.76	4X214	—	
2	3	TEFC	230/460	2.3/1.2	1/4	1/4	4.01	16.01	3.50	2.44	3.00	4.04	4.94	8.88	4.94	3.00	3.49	4.76	4X216	—	
2	1	ODP	115/230	8.8/4.4	1/4	1/4	4.01	17.14	3.50	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X203	1V314	
2	3	ODP	230/460	2.3/1.2	1/4	1/4	4.01	16.01	3.50	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X204	1V316	
3	1	ODP	230	15.0	1/4	1/4	3.94	16.86	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X218	4X211	
3	3	ODP	230/460	7.8/3.9	1/4	1/4	3.94	16.63	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X219	4X211	
3	1	TEFC	230	12.3	1/4	1/4	3.94	16.86	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X212	4X213	
3	3	TEFC	230/460	7.6/3.6	1/4	1/4	3.94	16.86	4.05	4.88	3.00	0.88	0.34	8.88	4.94	3.00	4.36	4.77	4X212	4X213	

(†) All dimensions have a tolerance of ± 0.13 Frame size 56J.

PUMP PERFORMANCE AND ORDERING DATA

HP	Pump Performance GPM of Water at Total Feet of Head**													Max Head	Stock No.	Bronze			Stock No.	Stainless Steel		
	10	20	30	40	50	60	70	80	90	100	110	120	130			List	Each	Shpg. Wt.		List	Each	Shpg. Wt.
1/2	42	39	36	32	28	23	15	2	—	—	—	—	—	82	4XX99	\$508.00	\$366.80	44.0	1V304	\$627.00	\$427.50	43.0
1/2	42	39	36	32	28	23	15	2	—	—	—	—	—	82	4XX98	555.00	400.25	41.0	1V306	672.00	457.75	43.0
3/4	53	49	46	42	37	33	27	21	12	—	—	—	—	98	4XX91	535.00	385.50	45.0	1V308	653.00	444.75	44.0
3/4	42	39	36	32	28	23	15	2	—	—	—	—	—	82	—	—	—	—	4X202	711.00	488.25	44.0
3/4	42	39	36	32	28	23	15	2	—	—	—	—	—	82	—	—	—	—	4XX99	689.00	471.00	46.0
3/4	42	39	36	32	28	23	15	2	—	—	—	—	—	82	4X201	594.00	428.00	47.0	—	—	—	—
3/4	42	39	36	32	28	23	15	2	—	—	—	—	—	82	4XX98	570.00	410.75	49.0	—	—	—	—
3/4	42	39	36	32	28	23	15	2	—	—	—	—	—	98	4XX92	574.00	413.50	42.0	1V310	690.00	470.80	44.0
1	59	55	51	47	43	39	34	29	23	16	4	—	—	112	4XX87	556.00	409.75	48.0	1V302	673.00	458.75	47.0
1	59	55	51	47	43	39	34	29	23	16	4	—	—	112	4XX88	609.00	439.25	46.0	1V302	724.00	492.75	45.0
1 1/2	59	55	51	47	43	39	34	29	23	16	4	—	—	112	4XX94	609.00	439.25	58.0	4XX95	727.00	497.00	55.0
1 1/2	59	55	51	47	43	39	34	29	23	16	4	—	—	112	4XX96	647.00	466.75	56.0	4XX97	763.00	522.00	53.0
1 1/2	94	90	85	78	71	63	54	43	32	18	—	—	—	110	4X205	661.00	476.50	64.0	1V318	817.00	557.50	57.0
1 1/2	94	90	85	78	71	63	54	43	32	18	—	—	—	110	4X206	739.00	533.00	58.0	1V320	893.00	667.50	54.0
2	107	103	98	92	87	80	72	63	55	44	32	18	2	132	4X207	731.00	527.50	63.0	1V322	924.00	691.00	63.0
2	107	103	98	92	87	80	72	63	55	44	32	18	2	132	4X208	771.00	556.00	62.0	1V324	980.00	720.50	64.0
2	94	90	85	78	71	63	54	43	32	18	6	—	—	110	—	—	—	—	4X217	961.00	657.00	63.0
2	94	90	85	78	71	63	54	43	32	18	6	—	—	110	—	—	—	—	4X215	917.00	627.50	62.0
2	94	90	85	78	71	63	54	43	32	18	6	—	—	110	4X216	807.00	582.00	67.0	—	—	—	—
2	94	90	85	78	71	63	54	43	32	18	6	—	—	110	4X214	761.00	549.00	72.0	—	—	—	—
3	118	114	108	103	98	92	84	77	69	60	50	39	26	148	4X203	823.00	593.50	73.0	1V314	974.00	664.50	69.0
3	118	114	108	103	98	92	84	77	69	60	50	39	26	148	4X204	869.00	626.50	68.0	1V316	1018.00	693.50	64.0
3	107	103	98	92	87	80	72	63	55	44	32	18	2	132	4X210	862.00	621.50	78.0	4X211	1010.00	690.50	74.0
3	107	103	98	92	87	80	72	63	55	44	32	18	2	132	4X212	901.00	649.50	73.0	4X213	1054.00	720.50	69.0

(*) Standard NPT (female) pipe thread. (**) Convert to psi, divide by 2.31.



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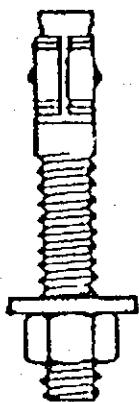
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TABLE 3—ITW RAMSET/RED HEAD TRUBOLT WEDGE ANCHOR ALLOWABLE SHEAR AND TENSION VALUES (pounds)^{1,2,4,5,6}

ANCHOR DIAMETER (inches)	INSTALLATION TORQUE (lb. ft)	EMBEDMENT DEPTH (inches)	$f'_c = 2,000$ psi						$f'_c = 4,000$ psi						$f'_c = 6,000$ psi					
			Tension			Tension			Tension			Tension			Tension			Tension		
			With Special Inspection ³	Without Special Inspection	Shear	With Special Inspection	Without Special Inspection	Shear	With Special Inspection	Without Special Inspection	Shear	With Special Inspection	Without Special Inspection	Shear	With Special Inspection	Without Special Inspection	Shear	With Special Inspection	Without Special Inspection	Shear
1/4	8	1 1/8 1 5/16 2 1/8	295 525 565	150 265 280	350 420	445 825 825	225 410 410	350 420	475 825 825	240 410 410	350 420	475 825 825	240 410 410	350 420	475 825 825	240 410 410	350 420			
3/8	25	1 1/2 3 4	420 870 1,200	210 435 600	580 1,000	560 1,485 1,485	280 740 740	655 1,035	710 1,530 1,530	355 765 765	790 1,125	710 1,530 1,530	355 765 765	790 1,125	710 1,530 1,530	355 765 765	790 1,125			
1/2	55	2 1/4 4 1/8 6	1,165 1,165 1,335	580 580 665	1,190 1,810	1,275 2,410 2,410	640 1,205 1,205	1,190 1,810	1,760 2,705 2,705	880 1,355 1,355	1,760 2,040	1,760 2,705 2,705	880 1,355 1,355	1,760 2,040	1,760 2,705 2,705	880 1,355 1,355	1,760 2,040			
5/8 444	90	2 3/4 5 1/8 7 1/2	1,645 1,645 1,765	820 820 880	1,780 2,400	1,795 3,730 3,755	900 1,865 1,880	1,780 2,975	2,430 4,095 4,095	1,215 2,045 2,045	2,405 3,130	2,430 4,095 4,095	1,215 2,045 2,045	2,405 3,130	2,430 4,095 4,095	1,215 2,045 2,045	2,405 3,130			
3/4	175	3 1/4 6 5/8 10	1,780 2,745 2,745	890 1,375 1,375	2,530 5,080	2,710 4,425 4,470	1,355 2,210 2,235	3,430 5,935	3,325 5,065 5,895	1,665 2,530 2,950	3,995 5,935	3,325 5,065 5,895	1,665 2,530 2,950	3,995 5,935	3,325 5,065 5,895	1,665 2,530 2,950	3,995 5,935			
7/8	250	3 3/4 6 1/4 8	2,380 3,665 3,665	1,190 1,835 1,835	3,290 5,220	3,685 5,235 5,580	1,840 2,620 2,790	4,145 7,200	4,355 6,090 6,090	2,180 3,045 3,045	4,790 7,200	4,355 6,090 6,090	2,180 3,045 3,045	4,790 7,200	4,355 6,090 6,090	2,180 3,045 3,045	4,790 7,200			
1	300	4 1/2 7 1/8 9 1/2	3,485 3,650 4,675	1,745 1,825 2,340	4,020 7,170	5,045 5,995 6,635	2,520 3,000 3,315	5,705 9,485	5,295 8,315 8,315	2,650 4,160 4,160	6,120 9,520	5,295 8,315 8,315	2,650 4,160 4,160	6,120 9,520	5,295 8,315 8,315	2,650 4,160 4,160	6,120 9,520			
1 1/4	500	5 1/2 8 10	4,535 6,835 9,035	2,270 3,413 4,515	5,820 8,770	6,595 10,825 11,385	3,300 5,410 5,695	7,365 11,065	8,410 11,385 14,075	4,205 5,695 7,040	8,445 17,640	8,410 11,385 14,075	4,205 5,695 7,040	8,445 17,640	8,410 11,385 14,075	4,205 5,695 7,040	8,445 17,640			

For SI: 1 inch = 25.4 mm, 1 psi = 6.89 kPa, 1 lbf · ft = 1.355 818 N · m, 1 lbf = 4.45 N.
 1 The tabulated shear and tensile values are for anchors installed in stone-aggregate concrete having the designated ultimate compressive strength at the time of installation.
 2 The holes are drilled with bits complying with ANSI B212.15-1994. The bit diameter equals the anchor diameter.
 3 These tension values are applicable only when the anchors are installed with special inspection as set forth in Section 2.5.
 4 The minimum concrete thickness is 1 1/2 times the embedment depth, or the embedment depth plus three times the anchor diameter, whichever is greater.
 5 Allowable static loads may be increased one-third for earthquake or wind resistance in accordance with Section 1612.3.3 of the code. No further increase is allowed.
 6 The anchors are illustrated as follows:





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CENTER OF GRAVITY CALCULATIONS								
NO.	DESCRIPTION	WEIGHTS W	x	z	y	Wx	Wz	Wy
		LBS.	INCHES	INCHES	INCHES	IN. LBS.	IN. LBS.	IN. LBS.
1	BOILER	590.00	34.50	33.50	23.00	20355.0	19765.0	13570.0
2	EXPANSION TANK	280.00	105.00	33.50	29.25	29400.0	9380.0	8190.0
3	PUMP	50.00	83.00	8.50	9.36	4150.0	425.0	468.0
4	PLATFORM	120.00	60.00	24.00	4.00	7200.0	2880.0	480.0
	TOTAL	1040.0				61105.0	32450.0	22708.0
	CENTER OF GRAVITY							
	IN x - AXIS FROM CL		58.75					
	IN z - AXIS FROM CL			31.20				
	IN y - AXIS FROM BOT OF FOOTING				21.83			



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ANCHORAGE OF BOILER

$$W := 590 \quad F_{ph1} := 1.0476 \quad F_{ph} := F_{ph1} \cdot W \quad F_{ph} = 618.084 \text{ LBS.}$$

$$F_{pv} := \frac{1}{3} \cdot F_{ph} \quad F_{pv} = 206.028 \text{ LBS.}$$

$$b1 := 60.5 - 6 \text{ IN.} \quad b2 := 24.63 - 5 \text{ IN.} \quad h := 17 \text{ IN.} \quad N1 := 8 \quad N2 := 4 \quad n := 1$$

$$e_x := 0 \text{ IN.} \quad e_y := 0 \text{ IN.}$$

TRY 3/8 " DIA. LAG SCREWS $T_{allow} := 450 \text{ LBS.}$ $V_{allow} := 140 \text{ LBS.}$

$$I_{xx} := \left[\frac{N1 \cdot (N1 + 2)}{3 \cdot (N1 - 2)} + (N2 - 4) \right] \cdot \frac{b1^2}{4} \quad I_{yy} := \left[\frac{N2 \cdot (N2 + 2)}{3 \cdot (N2 - 2)} + (N1 - 4) \right] \cdot \frac{b2^2}{4}$$

$$I_{xx} = 3.3 \cdot 10^3 \text{ IN.}^4 \quad I_{yy} = 770.674 \text{ IN.}^4$$

$$P_s := \frac{F_{ph}}{(N1 + N2 - 4)} \quad P_s = 77.261 \text{ LBS.}$$

$$\tan \Phi := \frac{I_{yy} \cdot b1}{(I_{xx} \cdot b2)} \quad \tan \Phi = 0.648 \quad \Phi := 19.799$$

$$\cos \Phi := 0.941 \quad \sin \Phi := 0.339$$

$$P_t := \frac{W - F_{pv}}{(N1 + N2 - 4)} - \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} - \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_t = -107.338 \text{ (MAXIMUM TENSION)}$$

$$P_c := \frac{W + F_{pv}}{(N1 + N2 - 4)} + \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} + \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_c = 254.838 \text{ (MAXIMUM COMPRESSION)}$$

$$T_{bolt} := \frac{-P_t}{n} \quad T_{bolt} = 107.338 \quad V_{bolt} := \frac{P_s}{n} \quad V_{bolt} = 77.261$$

$$K := \frac{T_{bolt}}{T_{allow}} + \frac{V_{bolt}}{V_{allow}} \quad K = 0.79 < 1.33$$

USE MINIMUM 8, 3/8" DIA. LAG SCREWS, MINIMUM 2" INTO WOOD JOISTS



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ANCHORAGE OF EXPANSION TANK

$$W := 280 \quad F_{ph1} := 1.0476 \quad F_{ph} := F_{ph1} \cdot W \quad F_{ph} = 293.328 \text{ LBS.}$$

$$F_{pv} := \frac{1}{3} \cdot F_{ph} \quad F_{pv} = 97.776 \text{ LBS.}$$

$$b1 := 10 \text{ IN.} \quad b2 := 10 \text{ IN.} \quad h := 23.25 \text{ IN.} \quad N1 := 4 \quad N2 := 4 \quad n := 1$$

$$ex := 0 \text{ IN.} \quad ey := 0 \text{ IN.}$$

TRY 3/8 " DIA. LAG SCREWS $T_{allow} := 675 \text{ LBS.} \quad V_{allow} := 140 \text{ LBS.}$

$$I_{xx} := \left[\frac{N1 \cdot (N1 + 2)}{3 \cdot (N1 - 2)} + (N2 - 4) \right] \cdot \frac{b1^2}{4} \quad I_{yy} := \left[\frac{N2 \cdot (N2 + 2)}{3 \cdot (N2 - 2)} + (N1 - 4) \right] \cdot \frac{b2^2}{4}$$

$$I_{xx} = 100 \text{ IN.}^4 \quad I_{yy} = 100 \text{ IN.}^4$$

$$P_s := \frac{F_{ph}}{(N1 + N2 - 4)} \quad P_s = 73.332 \text{ LBS.}$$

$$\tan \Phi := \frac{I_{yy} \cdot b1}{(I_{xx} \cdot b2)} \quad \tan \Phi = 1 \quad \Phi := 45$$

$$\cos \Phi := 0.707 \quad \sin \Phi := 0.707$$

$$P_t := \frac{W - F_{pv}}{(N1 + N2 - 4)} - \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot ex) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} - \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot ey) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_t = -436.609 \text{ (MAXIMUM TENSION)}$$

$$P_c := \frac{W + F_{pv}}{(N1 + N2 - 4)} + \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot ex) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} + \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot ey) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_c = 576.609 \text{ (MAXIMUM COMPRESSION)}$$

$$T_{bolt} := \frac{-P_t}{n} \quad T_{bolt} = 436.609 \quad V_{bolt} := \frac{P_s}{n} \quad V_{bolt} = 73.332$$

$$K := \frac{T_{bolt}}{T_{allow}} + \frac{V_{bolt}}{V_{allow}} \quad K = 1.171 < 1.33$$

USE MINIMUM 4, 3/8" DIA. LAG SCREWS, MINIMUM 3" INTO WOOD JOISTS.



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				DATE	

(562) 402-2930

ANCHORAGE OF PUMP

$$W := 48 \quad F_{ph1} := 1.0476 \quad F_{ph} := F_{ph1} \cdot W \quad F_{ph} = 50.285 \quad \text{LBS.}$$

$$F_{pv} := \frac{1}{3} \cdot F_{ph} \quad F_{pv} = 16.762 \quad \text{LBS.}$$

$$b1 := 4.88 \quad \text{IN.} \quad b2 := 4.88 \quad \text{IN.} \quad h := 3.36 \quad \text{IN.} \quad N1 := 4 \quad N2 := 4 \quad n := 1$$

$$e_x := 0 \quad \text{IN.} \quad e_y := 0 \quad \text{IN.}$$

TRY 3/8 " DIA. LAG SCREWS INTO PLYWOOD PLATFORM

$$T_{allow} := 110 \quad \text{LBS.} \quad V_{allow} := 140 \quad \text{LBS.}$$

$$I_{xx} := \left[\frac{N1 \cdot (N1 + 2)}{3 \cdot (N1 - 2)} + (N2 - 4) \right] \cdot \frac{b1^2}{4} \quad I_{yy} := \left[\frac{N2 \cdot (N2 + 2)}{3 \cdot (N2 - 2)} + (N1 - 4) \right] \cdot \frac{b2^2}{4}$$

$$I_{xx} = 23.814 \quad \text{IN.}^4 \quad I_{yy} = 23.814 \quad \text{IN.}^4$$

$$P_s := \frac{F_{ph}}{(N1 + N2 - 4)} \quad P_s = 12.571 \quad \text{LBS.}$$

$$\tan \Phi := \frac{I_{yy} \cdot b1}{(I_{xx} \cdot b2)} \quad \tan \Phi = 1 \quad \Phi := 45$$

$$\cos \Phi := 0.707 \quad \sin \Phi := 0.707$$

$$P_t := \frac{W - F_{pv}}{(N1 + N2 - 4)} - \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} - \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_t = -16.668 \quad (\text{MAXIMUM TENSION})$$

$$P_c := \frac{W + F_{pv}}{(N1 + N2 - 4)} + \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} + \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_c = 40.668 \quad (\text{MAXIMUM COMPRESSION})$$

$$T_{bolt} := \frac{-P_t}{n} \quad T_{bolt} = 16.668 \quad V_{bolt} := \frac{P_s}{n} \quad V_{bolt} = 12.571$$

$$K := \frac{T_{bolt}}{T_{allow}} + \frac{V_{bolt}}{V_{allow}} \quad K = 0.241 \quad < \quad 1.33$$

USE MINIMUM 4, 3/8" DIA. LAG SCREWS INTO PLYWOOD PLATFORM



PROJECT NEWPORT HARBOR ART MUSEUM BY DHIRU MALI DATE 1-17-02
JOB NO. 01-76 SHEET NO. 15 OF CHKD. DATE

(562) 402-2930

**ANCHORAGE OF PLATFORM INTO EXISTING CONCRETE ROOF
(PRECAST DOUBLE TEES WITH TOPPING)**

$$W := 1040 \quad F_{ph1} := 0.419 \quad F_{ph} := F_{ph1} \cdot W \quad F_{ph} = 435.76 \quad \text{LBS.}$$

$$F_{pv} := \frac{1}{3} \cdot F_{ph} \quad F_{pv} = 145.253 \quad \text{LBS.}$$

$$b1 := 120 - 6 \quad \text{IN.} \quad b2 := 48 \quad \text{IN.} \quad h := 21.83 \quad \text{IN.} \quad N1 := 6 \quad N2 := 4 \quad n := 1$$

$$e_x := 60 - 58.75 \quad \text{IN.} \quad e_y := 31.2 - 24 \quad \text{IN.}$$

TRY 3/8 " DIA. EXP. ANCHORS WITH MIN 3" EMBEDMENT INTO EXISTING ROOF CONCRETE (NO INSPECTION)

$$T_{allow} := 740 \quad \text{LBS.} \quad V_{allow} := 1035 \quad \text{LBS.}$$

$$I_{xx} := \left[\frac{N1 \cdot (N1 + 2)}{3 \cdot (N1 - 2)} + (N2 - 4) \right] \cdot \frac{b1^2}{4} \quad I_{yy} := \left[\frac{N2 \cdot (N2 + 2)}{3 \cdot (N2 - 2)} + (N1 - 4) \right] \cdot \frac{b2^2}{4}$$

$$I_{xx} = 1.3 \cdot 10^4 \quad \text{IN.}^4 \quad I_{yy} = 3.456 \cdot 10^3 \quad \text{IN.}^4$$

$$P_s := \frac{F_{ph}}{(N1 + N2 - 4)} \quad P_s = 72.627 \quad \text{LBS.}$$

$$\tan \Phi := \frac{I_{yy} \cdot b1}{(I_{xx} \cdot b2)} \quad \tan \Phi = 0.632 \quad \Phi := 32.291$$

$$\cos \Phi := 0.845 \quad \sin \Phi := 0.534$$

$$P_t := \frac{W - F_{pv}}{(N1 + N2 - 4)} - \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} - \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_t = 29.154 \quad (\text{NO TENSION})$$

$$P_c := \frac{W + F_{pv}}{(N1 + N2 - 4)} + \frac{(F_{ph} \cdot \cos \Phi \cdot h + W \cdot e_x) \cdot \left(\frac{b2}{2}\right)}{I_{yy}} + \frac{(F_{ph} \cdot \sin \Phi \cdot h + W \cdot e_y) \cdot \left(\frac{b1}{2}\right)}{I_{xx}}$$

$$P_c = 317.512 \quad (\text{MAXIMUM COMPRESSION})$$

$$T_{bolt} := \frac{P_t}{n} \quad T_{bolt} = 29.154 \quad V_{bolt} := \frac{P_s}{n} \quad V_{bolt} = 72.627$$

$$K := \left(\frac{T_{bolt}}{T_{allow}} \right)^{\frac{5}{3}} + \left(\frac{V_{bolt}}{V_{allow}} \right)^{\frac{5}{3}} \quad K = 0.016 \quad < 1.0$$

USE 3/8 " DIA. EXP. ANCHORS WITH MIN 3" EMBEDMENT INTO EXISTING CONCRETE IN ROOF (NO INSPECTION)



City of Newport Beach
 Building Department
 P.O. Box 1788
 Newport Beach, CA 92658-8915
 Permit Counter Phone No. (714) 644-3288/3289

BUILDING PERMIT

Permit No.

B9601547

Inspection Requests Phone No. (714) 644-3255

OWNER-BUILDER DECLARATION		JOB ADDRESS:	INSP AREA:	DESCRIPTION OF WORK:																																																																																
<p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT I AM EXEMPT FROM THE CONTRACTORS LICENSE LAW FOR THE FOLLOWING REASON (SEC. 7031.5, BUSINESS AND PROFESSIONS CODE): ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT, ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PRIOR TO ITS ISSUANCE, ALSO REQUIRES THE APPLICANT FOR SUCH PERMIT TO FILE A SIGNED STATEMENT THAT HE OR SHE IS LICENSED PURSUANT TO THE PROVISIONS OF THE CONTRACTORS LICENSE LAW (CHAPTER 9 (COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE) OR THAT HE OR SHE IS EXEMPT THEREFROM AND THE BASIS FOR THE ALLEGED EXEMPTION. ANY VIOLATION OF SECTION 7031.5 BY ANY APPLICANT FOR A PERMIT SUBJECTS THE APPLICANT TO A CIVIL PENALTY OF NOT MORE THAN FIVE HUNDRED DOLLARS (500). I, AS OWNER OF THE PROPERTY, OR MY EMPLOYEES WITH WRITES AS THEIR SOLE COMPENSATION, WILL DO THE WORK, AND THE STRUCTURE IS NOT INTENDED OR OFFERED FOR SALE (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTORS LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND DOES NOT APPLY TO AN OWNER OF PROPERTY WHO DOES SUCH WORK HIMSELF OR THROUGH HIS OR HER OWN EMPLOYEES, PROVIDED THAT SUCH IMPROVEMENTS ARE NOT INTENDED OR OFFERED FOR SALE. IF, HOWEVER, THE BUILDING OR IMPROVEMENT IS SOLD WITHIN ONE YEAR OF COMPLETION, THE OWNER/BUILDER WILL HAVE THE BURDEN OF PROVING THAT HE OR SHE DID NOT BUILD OR IMPROVE FOR THE PURPOSE OF SALE. I, AS OWNER OF THE PROPERTY, AM EXCLUSIVELY CONTRACTING WITH LICENSED CONTRACTORS TO CONSTRUCT THE PROJECT (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTORS LICENSE LAW DOES NOT APPLY TO AN OWNER OF A PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO CONTRACTS FOR SUCH PROJECTS WITH A CONTRACTOR(S) LICENSED PURSUANT TO THE CONTRACTORS LICENSE LAW.)</p> <p><input type="checkbox"/> I AM EXEMPT UNDER SEC. _____, B.&P.C. FOR THIS REASON</p>		850 SAN CLEMENTE DR	7	CONN ADD/REMODEL (916-96) ALT CONN ADD/REMODEL 1921 SP HPT HARBOR ART																																																																																
<p>DATE: _____ OWNER: _____</p>		PLDG: FLOOR: SUITE: OWNER: NEWPORT HARBOR ART MUSEUM ADDRESS: 850 SAN CLEMENTE NEWPORT BEACH CA 92660 PHONE: 714/759-1122 CONTRACTOR: CANCO PACIFIC CONSTRUCTION CO ADDRESS: 20250 ACACIA #100 NEWPORT BEACH CA 92660 PHONE: 714/250-3001 ARCHITECT: MCLARAND, VASQUEZ & PARTNERS ADDRESS: 695 TOWN CENTER DR., STE 300 COSTA MESA CA 92626 PHONE: 714/549-2207 LIC. NO.: _____ ENGINEER: _____ ADDRESS: _____ PHONE: _____ LIC. NO.: _____ APPLICANT: MICHAEL BOYBINK ADDRESS: 850 SAN CLEMENTE DR NEWPORT BEACH, CA 92660 PHONE: 714 759-1122 SIGNATURE OF APPLICANT: <i>[Signature]</i>	CONST.: TYPE OF CONSTRUCTION: ADDED / NEW SQ. FT. BLDG: 1907 NO. OF UNITS: REQD BLDG SETBACKS: FRONT REAR USE ZONE: RC/GRIP LEGAL DESCRIPTION: P BK 81 PG 8 PAR 2 SPECIAL CONDITIONS: 1921 SQ FT ADDN TO EXIST ART MUSEUM BLDG-OK < MAX ALLOWABLE. PROCESSED BY: <i>[Signature]</i> ZONING APPROVAL: <i>[Signature]</i> FIRE APPROVAL: <i>[Signature]</i> GRADING APPROVAL: <i>[Signature]</i>																																																																																	
<p>DATE: _____ OWNER: _____</p>		<p>ENGINEER: _____ ADDRESS: _____ PHONE: _____</p>		NO. OF STORIES: 1 ADDED / NEW SQ. FT. GAR: 13 PARKING SPACES: LEFT 89 RIGHT																																																																																
LICENSED CONTRACTORS DECLARATION		<p>APPROVAL TO ISSUE: <i>[Signature]</i></p>																																																																																		
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WORKERS' COMPENSATION DECLARATION		<p>APPROVAL TO ISSUE: <i>[Signature]</i></p>																																																																																		
<p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY ONE OF THE FOLLOWING DECLARATIONS: I HAVE AND WILL MAINTAIN A CERTIFICATE OF CONSENT TO SELF INSURE FOR WORKERS' COMPENSATION AS PROVIDED FOR BY SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED. I HAVE AND WILL MAINTAIN WORKERS' COMPENSATION INSURANCE, AS REQUIRED BY SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, MY WORKERS' COMPENSATION INSURANCE CARRIER AND POLICY NUMBER ARE: CARRIER: ULICO CASUALTY CO POLICY NUMBER: WD1040762-CO (THIS SECTION NEED NOT BE COMPLETED IF THE PERMIT IS FOR ONE HUNDRED DOLLARS (\$100) OR LESS.) I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKERS' COMPENSATION LAWS OF CALIFORNIA, AND AGREE THAT IF I SHOULD BECOME SUBJECT TO THE WORKERS' COMPENSATION PROVISIONS OF SECTION 3700 OF THE LABOR CODE, I SHALL FORTHWITH COMPLY WITH THOSE PROVISIONS.</p> <p>DATE: 10/14/96 APPLICANT: <i>[Signature]</i></p> <p>WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.</p>		<p>* CIP Building Permit Fees *</p> <table border="1"> <tr> <td>ENTER>> Final Project Valuation</td> <td>1051723</td> <td>Payments:</td> <td>3,092.98</td> </tr> <tr> <td>Regular PLAN CHECK FEES</td> <td>2,368.28</td> <td>Credit extended:</td> <td>0.00</td> </tr> <tr> <td>BUILDING PERMIT FEE</td> <td>3,643.50</td> <td>Total Credits:</td> <td>3,092.98</td> </tr> <tr> <td>Is a CLEAN-UP DEPOSIT required? (Y)</td> <td>0.00</td> <td>Balance</td> <td>25,284.46</td> </tr> <tr> <td>Is EXCISE TAX required? (Y)</td> <td>0.00</td> <td>Adjustments</td> <td>0.00</td> </tr> <tr> <td>ENTER SQ. FT. to compute excise tax</td> <td>21 1,921 403.61</td> <td>Balance due</td> <td>25,284.46</td> </tr> <tr> <td>Subtotal CIP BUILDING PERMIT FEES</td> <td>11,415.19</td> <td></td> <td></td> </tr> <tr> <td>SAN. DIST. FEE & Last J. Pos Acct Cd</td> <td>906.71</td> <td></td> <td></td> </tr> <tr> <td>Is MICROPIPING FEE required? (Y)</td> <td>210.34</td> <td></td> <td></td> </tr> <tr> <td>Is EMERGENCY COMPLIANCE FEE needed? (Y)</td> <td>200.00</td> <td></td> <td></td> </tr> <tr> <td>CALIFORNIA SEISMIC SAFETY FEE</td> <td>220.86</td> <td></td> <td></td> </tr> <tr> <td>Is DISABLED REVIEW FEE needed? (Y)</td> <td>200.00</td> <td></td> <td></td> </tr> <tr> <td>HAZARDOUS MAT. form processing? (Y)</td> <td>15.00</td> <td></td> <td></td> </tr> <tr> <td>Additional Fire Dept HMO review? (Y)</td> <td>40.00</td> <td></td> <td></td> </tr> <tr> <td>53H TRANSPORTATION CORRIDOR FEE</td> <td>5,974.31</td> <td></td> <td></td> </tr> <tr> <td>Is PAIR SHARE FEE required? (Y)</td> <td>0.00</td> <td></td> <td></td> </tr> <tr> <td>ENTER (No. units/ rooms/ area)</td> <td>4.03 1,921 7,741.63</td> <td></td> <td></td> </tr> <tr> <td>FIRE DEPT. PLAN REVIEW FEE ? (Y)</td> <td>473.66</td> <td></td> <td></td> </tr> <tr> <td>FIRE DEPT. INSPECTION FEE ? (Y)</td> <td>728.70</td> <td></td> <td></td> </tr> <tr> <td>PLANNING: ZONING PLAN CHECK FEE ? (Y)</td> <td>251.04</td> <td></td> <td></td> </tr> </table>			ENTER>> Final Project Valuation	1051723	Payments:	3,092.98	Regular PLAN CHECK FEES	2,368.28	Credit extended:	0.00	BUILDING PERMIT FEE	3,643.50	Total Credits:	3,092.98	Is a CLEAN-UP DEPOSIT required? (Y)	0.00	Balance	25,284.46	Is EXCISE TAX required? (Y)	0.00	Adjustments	0.00	ENTER SQ. FT. to compute excise tax	21 1,921 403.61	Balance due	25,284.46	Subtotal CIP BUILDING PERMIT FEES	11,415.19			SAN. DIST. FEE & Last J. Pos Acct Cd	906.71			Is MICROPIPING FEE required? (Y)	210.34			Is EMERGENCY COMPLIANCE FEE needed? (Y)	200.00			CALIFORNIA SEISMIC SAFETY FEE	220.86			Is DISABLED REVIEW FEE needed? (Y)	200.00			HAZARDOUS MAT. form processing? (Y)	15.00			Additional Fire Dept HMO review? (Y)	40.00			53H TRANSPORTATION CORRIDOR FEE	5,974.31			Is PAIR SHARE FEE required? (Y)	0.00			ENTER (No. units/ rooms/ area)	4.03 1,921 7,741.63			FIRE DEPT. PLAN REVIEW FEE ? (Y)	473.66			FIRE DEPT. INSPECTION FEE ? (Y)	728.70			PLANNING: ZONING PLAN CHECK FEE ? (Y)	251.04		
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<p>CONSTRUCTION LENDING AGENCY</p> <p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT THERE IS A CONSTRUCTION LENDING AGENCY FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED (SEC. 3007, CIV. C.)</p> <p>LENDER'S NAME: _____</p> <p>LENDER'S ADDRESS: _____</p> <p>I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE INFORMATION IS CORRECT. I AGREE TO COMPLY WITH ALL CITY AND COUNTY ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION, AND HEREBY AUTHORIZE REPRESENTATIVES OF THIS COUNTY TO ENTER UPON THE ABOVE-MENTIONED PROPERTY FOR INSPECTION PURPOSES.</p> <p>PERMITTEE NAME (PRINT): <i>[Signature]</i> SIGNATURE OF PERMITTEE: <i>[Signature]</i> DATE: 10/14/96</p>		<p>PAID OCT 04 1996 CITY OF NEWPORT BEACH</p>																																																																																		

WORK MUST BE STARTED WITHIN A PERIOD OF 180 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID. INSPECTOR'S COPY

R 110777

Right
ORA 0209

APPROVED DATE BY COMMENTS

10-10-96 - 3 PADS FOR MEZZANINE SUPPORT AND ADJACENT SLAB OK TO POUR
 10-15-96 - FOUR PIER FOOTINGS (C.9 @ 1.4 & 3.6 AND C.2 @ 1.4 & 3.6) (25)
 OK TO POUR WITH DEPUTY INSPECTION
 - FIVE PIER FOOTINGS ON @ LINE 9R TO FOUR
 - NYC RAMP FOOTING OK TO POUR
 - OK FOR DEPUTY INSPECTOR TO APPROVE POUR OF TWO 12" GRADE BEAMS & BRACKY BOWELS RELATED TO THIS MINOR POUR.

10-28-96 - OKAY TO POUR 12" X 12" COLUMN 4/S5
 - OKAY TO POUR NEW SLAB W/O "C" LINE
 - 10/S6 WALL ON @ LINE AND 3/S2 ON C.9 OK TO POUR (25)

11-8-96 - REVIEWED DEPUTY INSPECTOR JAY SERRANTINO'S REPORT RE: SLAB POUR B.5-C, 6-8 (25)
 - REVIEWED DEPUTY TOM CARCORAN'S REPORT RE: POUR OF ERECTION PADS 10/S.5 AND RAMP 14.2/C.1, HILTI C-NO EPOXY ON 6 LINE BETWEEN 5 & D (25)

11-14-96 - EAST HALF OF BUILDING WALL FRAMING OK TO COVER (25)
 OKAY TO COVER 1ST LEVEL OF DW AREA A-C 1-10 (25)
 11/27/96 CAMEO FRAME, NO ROOTS OK BY RAY B. NO APPROVAL TO COVER. AND

12/2/96 OK TO ONE SIDE ALL WALLS WITH DRYWALL. AND
 12/4/96 OK TO FRAME @ GALS FOR GALLERIES 12, 13, 14, 15 PENDING OUTCOME OF RECEIPTABLE REVISIONS. DRYWALL 1ST LAYER OK @ ONE SOLID AREA IN ABOVE LOCATIONS AND

12/6/96 SEE APPROVED PLANS FOR PAGE E-2.1 FOR HAND LID APPROVALS. AND
 12-6-96 - REVIEWED DEPUTY WELDING INSPECTOR GEOFFREY BOHNS' REPORT RE: T.S. COLUMN PER 7.2 S-3, EMBERS OF HILTI C10 EPOXY @ D.4. AUS MISC LOCATIONS. (25)

12-6-96 - ALSO REVIEWED FAVORABLE REPORT OF DEPUTY INSPECTOR RON LAMAR RE: CONCRETE TREATMENT FOR BREASTS S-1, S-3, 3/S-2, 11/S-5, etc. (25)
 12-6-96 - METAL FRAMING INCLUDING STRUCTURAL STEEL APPROVED IN AREA C-D, 1-4. VARIOUS 1 1/2" DIA. RIF. BEING INSTALLED AT 6" O.C. EACH STREET & BUTT JUNCTION @ 6" EACH OVERLAY. (25)

12-9-96 - Ceiling Insulation - Lines A-C 1-10 - Except Bathroom Area. RE: (25)

DECLARATION OF COMPLIANCE WITH
 CODE OF FEDERAL REGULATIONS
 PART 61 OF TITLE 40 AND AQMD
 RULE 1403.
 I SUBMITTED ASBESTOS
 NOTIFICATION TO:
 EPA
 AQMD
 ASBESTOS NOTIFICATION IS NOT
 APPLICABLE TO PROPOSED
 DEMOLITION.
 SIGNATURE: [Signature]

12-18-96 (25)

OK except bath room
 12-23-96 DS
 12-27-96 DS
 12-23-96 DS

12-20-96 (25)
 12-23-96 DS

2-9-97 (25)
 2/4/97 DS

5000
 2/14/97
 Orange Co. Museum of Art
 8500 San Clemente, CA
 NB 92660

OK - Strips Line C, 3-5
 Line 4, B-D
 OK - Deck Lines C-D, 1-4 RE: (25)
 12-10-96 - OK - Suspended Ceiling Guller US #14, #15, + Irvine (25)

Newport Harbor Art Museum
 Museum

12/2/96 DRYWALL ON GALLERIES 12, 13, 14, 15. AND

896 01547
850 SAN CLEMENTE

- 12.13.96. DRYWALL LIDS IN GALLERIES 14, 15 & IRVINE OK TO TAPE.
REVIEWED FAVORABLE DEPUTY REPORTS OF TOM CORCORAN #0057 RE:
EPOXIED BOLTS & MISC WELDING - (20) REVIEWED FAVORABLE FIREPROOFING OF
STRUCTURAL STEEL IN AREA OF MEZZANINE FROM APPROVED DEPUTY ED OVIEDA #0119 (20)
- 12.16.96 - GALLERY 12 FRAMING, THIRD LID & ALUMINUM CHAIRS OK TO ROCK (21) (20)
- 12.17.96. DRYWALL OF ADDED RESTROOM VESTIBULE OK TO TAPE ABOVE HARD LID. (21)
- 12.18.96. RESTROOM DRYWALL OK TO TAPE (20)
- 12.24.96. REVIEWED BALANCE OF FIREPROOFING REPORT FROM DEPUTY INSP ED OVIEDA #0119. (21)
- REVIEWED FAVORABLE DEPUTY REPORTS FROM TOM CORCORAN RE: 3000 PSI CONCRETE BET
B.5 & C AND 6 #7, WELDING BET 3 #4 AND C & C.8 (22)
- 12.30.96. REVIEWED FAVORABLE REPORT FROM DEPUTY WELDING INSPECTOR TOM CORCORAN RE: ROOF
WELDS BETWEEN 4 #6 AND 6.8 & 2.5, EPOXIED (MULTI C100) 3/4" BOLTS SAME AREA,
WELDING BETWEEN C & B AND 6 #7 (23)
- 1.13.97 - WALKED "PRE-FINAL" INSPECTION w/ SUPT. (24)
- 1.13.97 - REVIEWED ADD'L REPORT RE: WELDING FROM TOM CORCORAN RE: SINGLE PASS 4 #8
BETWEEN B & 2.5; A & C BETWEEN 2 #5; 7 BET B.4 & C. EPOXIED BOLTS 3/4" LINE 7, B.4 & C.
WELDS A BUT 3 #4, C BUT 3 #4. (25)
- 1.17.97. CALLED "FINAL" - NOT READY (26)
- 1.22.97 - OKAY FOR T.C.O.
- NEEDS ADDRESS ON BALD
- CONTINUING STRIPES ON 1/2 STAIR TREADS
- OBTAIN ELEC & FIRE DEPT FINAL APPROVAL (27)
- 2.4.97 - FIRE, RUSCH CHAZEX, SIGNED OFF 2/3/97 (28)

LEADER



City of Newport Beach
 Building Department
 P.O. Box 1768
 Newport Beach, CA 92658-8915
 Permit Counter Phone No. (714) 644-3288/3289

BUILDING PERMIT

Permit No.

B9602403

Inspection Requests Phone No. (714) 644-3255

OWNER-BUILDER DECLARATION		JOB ADDRESS:	INSP AREA:	DESCRIPTION OF WORK:																																			
<p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT I AM EXEMPT FROM THE CONTRACTORS LICENSE LAW FOR THE FOLLOWING REASON (SEC. 70315, BUSINESS AND PROFESSIONS CODE, ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT OR ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PRIOR TO ITS ISSUANCE, ALSO REQUIRES THE APPLICANT TO SIGN A SIGNED STATEMENT THAT HE OR SHE IS LICENSED PURSUANT TO THE PROVISIONS OF THE CONTRACTORS LICENSE LAW (CHAPTER 6 COMMENCING WITH SECTION 7030) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE) OR THAT HE OR SHE IS EXEMPT THEREFROM AND THE BASIS FOR THE ALLEGED EXEMPTION, ANY VIOLATION OF SECTION 70315 BY ANY APPLICANT FOR A PERMIT SUBJECTS THE APPLICANT TO A CIVIL PENALTY OF NOT MORE THAN FIVE HUNDRED DOLLARS (\$500). (1) AS OWNER OF THE PROPERTY, OR MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION, WILL DO THE WORK, AND THE STRUCTURE IS NOT INTENDED OR OFFERED FOR SALE (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTORS LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO DOES SUCH WORK HIMSELF OR THROUGH HIS OR HER OWN EMPLOYEES, PROVIDED THAT SUCH IMPROVEMENTS ARE NOT INTENDED OR OFFERED FOR SALE. IF, HOWEVER, THE BUILDING OR IMPROVEMENT IS SOLD WITHIN ONE YEAR OF COMPLETION, THE OWNER-BUILDER WILL HAVE THE BURDEN OF PROVING THAT HE OR SHE DID NOT BUILD OR IMPROVE FOR THE PURPOSE OF SALE. (2) OWNER OF THE PROPERTY, AM EXCLUSIVELY CONTRACTING WITH LICENSED CONTRACTOR. TO CONSTRUCT THE PROJECT (SEC. 7044, BUSINESS AND PROFESSIONS CODE). THE CONTRACTORS LICENSE LAW DOES NOT APPLY TO AN OWNER OF A PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO CONTRACTS FOR SUCH PROJECTS WITH A CONTRACTOR(S) LICENSED PURSUANT TO THE CONTRACTORS LICENSE LAW.)</p> <p><input type="checkbox"/> I AM EXEMPT UNDER SEC. _____ B.&P.C. FOR THIS REASON</p>		<p>91A 91J</p> <p>818 OCEANVIEW DR 818 OCEANVIEW DR</p>	1	<p>INTERIOR DEMO ONLY (11/90 BC) INTERIOR DEMO ONLY (11/90 BC)</p> <p>CONSTR: ALT INTERIOR DEMO ONLY HWPT HARBOR ART MUS</p> <p>TYPE OF CONSTRUCTION: OCC. GROUP: NO. OF STORES:</p> <p>ADDED / NEW SQ. FT. BLDG: ADDED / NEW SQ. FT. GAR:</p> <p>NO. OF UP/ITS: USE ZONE: PARKING SPACES: FRONT REAR LEFT RIGHT</p> <p>LEGAL DESCRIPTION: P. 86 61 PG 6 PAR 2</p> <p>SPECIAL CONDITIONS: Abstracts report to be given to inspector at inspection</p>																																			
<p>LICENSED CONTRACTORS DECLARATION</p> <p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT I AM LICENSED UNDER PROVISIONS OF CHAPTER 6, SECTION 7030 OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE, AND MY LICENSE IS IN FULL FORCE AND EFFECT.</p> <p>LICENSE CLASS: _____ LIC. NO.: 676205</p> <p>DATE: 8/30/96 CONTRACTOR: [Signature]</p>		<p>STATE LIC. NO.: 676205 CLASS: B NEWPORT BUS. LIC.: 600834</p> <p>ARCHITECT: MC LARAND CARL FRATZER BUS. LIC. LIST: Yes No</p> <p>ADDRESS: 675 TOWN CENTER DR, #300 PHONE: 714-549-2207</p> <p>LIC. NO.: 6004847</p> <p>ENGINEER: _____</p> <p>ADDRESS: _____ PHONE: _____</p>		<p>PROCESSED BY: [Signature]</p> <p>ZONING APPROVAL: [Signature]</p> <p>FIRE APPROVAL: _____</p> <p>GRADING APPROVAL: _____</p> <p>OTHER DEPARTMENT: _____</p> <p>PLAN CHECK BY: _____</p> <p>APPROVAL TO ISSUE: [Signature]</p>																																			
<p>WORKERS' COMPENSATION DECLARATION</p> <p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY ONE OF THE FOLLOWING DECLARATIONS: I HAVE AND WILL MAINTAIN A CERTIFICATE OR CONSENT TO SELF-INSURE FOR WORKERS' COMPENSATION, AS PROVIDED FOR IN SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED. I HAVE AND WILL MAINTAIN WORKERS' COMPENSATION INSURANCE, AS REQUIRED BY SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED. MY WORKERS' COMPENSATION INSURANCE CARRIER AND POLICY NUMBER ARE: CARRIER: UNITED CASUALTY CO. POLICY NUMBER: 4001040762-00 (THIS SECTION MUST NOT BE COMPLETED IF THE PERMIT IS FOR ONE HUNDRED DOLLARS (\$100) OR LESS.) I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKERS' COMPENSATION LAWS OF CALIFORNIA, AND AGREE THAT IF I SHOULD BECOME SUBJECT TO THE WORKERS' COMPENSATION PROVISIONS OF SECTION 3700 OF THE LABOR CODE, I SHALL FORTHWITH COMPLY WITH THOSE PROVISIONS. DATE: 8/30/96 APPLICANT: [Signature]</p> <p>WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION DAMAGES AS PROVIDED FOR IN SECTION 3708 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.</p>		<p>* CIP Building Permit fees *</p> <table border="1"> <tr> <td>ENTER >> Final Project Valuation</td> <td>23000</td> <td>Payments:</td> <td>0.00</td> </tr> <tr> <td>Regular PLAN CHECK FEES</td> <td>152.10</td> <td>Credit extended:</td> <td>3.00</td> </tr> <tr> <td>BUILDING PERMIT FEE</td> <td>236.00</td> <td>Total Credits:</td> <td>0.00</td> </tr> <tr> <td>Is a CLEAN-UP DEPOSIT required? (Y)</td> <td>400.00</td> <td></td> <td></td> </tr> <tr> <td>Subtotal CIP BUILDING PERMIT FEES</td> <td>786.10</td> <td>Balance</td> <td>800.53</td> </tr> <tr> <td>Is MICROFILMING FEE required? (Y)</td> <td>4.60</td> <td>Adjustments</td> <td>0.00</td> </tr> <tr> <td>CALIFORNIA SEISMIC SAFETY FEE</td> <td>4.83</td> <td>Balance due</td> <td>800.53</td> </tr> <tr> <td>PLANNING/COUNSER REVIEW FEE \$5 (Y)</td> <td>5.00</td> <td></td> <td></td> </tr> <tr> <td>TOTAL CIP BUILDING PERMIT FEES</td> <td>800.53</td> <td></td> <td></td> </tr> </table>		ENTER >> Final Project Valuation	23000	Payments:	0.00	Regular PLAN CHECK FEES	152.10	Credit extended:	3.00	BUILDING PERMIT FEE	236.00	Total Credits:	0.00	Is a CLEAN-UP DEPOSIT required? (Y)	400.00			Subtotal CIP BUILDING PERMIT FEES	786.10	Balance	800.53	Is MICROFILMING FEE required? (Y)	4.60	Adjustments	0.00	CALIFORNIA SEISMIC SAFETY FEE	4.83	Balance due	800.53	PLANNING/COUNSER REVIEW FEE \$5 (Y)	5.00			TOTAL CIP BUILDING PERMIT FEES	800.53		
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<p>CONSTRUCTION LENDING AGENCY</p> <p>I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT THERE IS A CONSTRUCTION LENDING AGENCY FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED (SEC. 5007, CIV. C.).</p> <p>LENDER'S NAME: _____</p> <p>LENDER'S ADDRESS: _____</p>		<p>I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE INFORMATION IS CORRECT. I AGREE TO COMPLY WITH ALL CITY AND COUNTY ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION, AND HEREBY AUTHORIZE REPRESENTATIVES OF THIS COUNTY TO ENTER UPON THE ABOVE-MENTIONED PROPERTY FOR INSPECTION PURPOSES.</p> <p>ROB KANTAKO, CANCO PACIFIC CORP. PERMITTEE NAME (PRINT)</p> <p>[Signature] 8/30/96 SIGNATURE OF PERMITTEE DATE</p>																																					

WORK MUST BE STARTED WITHIN A PERIOD OF 180 DAYS FROM THE DATE OF VALIDATION OF THIS PERMIT BECOMES NULL AND VOID. INSPECTOR'S COPY

PAID
AUG 30 1996
 CITY OF NEWPORT BEACH

P 117637



City of Newport Beach

Building Department

FIRE COMBO Permit No: **F2010-0226**

PO Box 1768 Newport Beach, California 92658-8915

Permit Counter Telephone (949)644-3288

Inspection Requests/Telephone (949)644-3255

Job Address: 850 SAN CLEMENTE DR NB

Description: UPGRADE UL-300 ANSUL SYSTEM "O'C MUSEUM OF ART"
1160-2010

Inspector Area: **FIRE**

Legal Description: P BK 81 PG 8 PAR 2

INSPECTOR

Owner: ORANGE COUNTY MUSEUM OF ART
Address: 850 SAN CLEMENTE DR
NEWPORT BEACH CA 92660

Contractor: PARACLETE FIRE & SAFETY INC
Address: 2950 SATURN UNIT I
BREA CA 92821
Phone: 714-577-5779

Architect:
Address:

Phone:

Con State Lic: 854489
Lic Expire: 10/31/2011
Bus Lic: BT30028344
Lic Exp Date: 06/30/2011

Phone: State Lic:

Applicant: NICKY/PARACLETE FIRE
Address: 2950 SATURN, UNIT I
BREA CA 92821
Phone: 714-577-5779

Engineer:
Address:

Phone: State Lic:

Code Edit : 2007
Type of Construction: II-B-SPR
Occupancy Group: A-3
Added /New sq.ft. Bldg: 0
Added /New sq. ft. Garage: 0
No of Stories: 1
No of Units : 0
Flood Zone:
Bldg Sprinklers: N

Worker's Compensation Insurance
Carrier: TOWER SELECT INS
Policy No: WD8331021009
Expire: 12/13/2010

Designer:
Address:

Phone: (714) 457-9993

Issued Date: 07/23/2010
Setback- Front:
Rear:
Left:
Right:

Special Conditions:

FEES

Construction Valuation:	\$4,500.00		
Building PC Fee :	\$0.00	Fire Residential Alarm PC Fee :	\$0.00
Building Overtime PC Fee:	\$0.00	Planning Counter Review :	\$0.00
Building Extention Fee :	\$0.00	Planning Zoning PC Fee :	\$0.00
Building Investigation Fee :	\$0.00		
Fire Commercial PC Fee:	\$35.23	Public Works PC Fee :	\$0.00
Fire Commercial Permit Fee :	\$97.85	Public Works Traffic Plan Check Fee;	\$0.00
Fire Residential Permit Fee :	\$0.00		
Fire Residential Alarm Fee :	\$0.00		
TOTAL FEE :	\$219.13	Plan Check Fee :	\$35.23
		Fee Due at Permit Issuance :	\$183.90
		Records Management :	\$86.05
			\$0.00
			\$0.00

PROCESSED BY:

ZONING APPROVAL:

FIRE APPROVAL :

OTHER DEPARTMENT:

PLAN CHECKED BY::

APPROVAL TO ISSUE:

PERMIT EXPIRES 180 DAYS AFTER ISSUANCE OR LAST VALID INSPECTION

B-17727

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the checkmark(s) I have placed next to the applicable item(s) (Section 7031.5, Business and Professions Code: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).

I, as owner of the property, or my employees with wages as their sole compensation, will do () all of or () portions of the work, and the structure is not intended or offered for sale (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale).

I, as owner of the property, am exclusively contracting with licensed Contractors to construct the project (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the projects with a licensed Contractor pursuant to the Contractors' State License Law).

I am exempt from licensure under the Contractors' State License Law for the following reason: _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: <http://www.leginfo.ca.gov/calaw.html>.

Signature of Property Owner or Authorized Agent _____ Date _____

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class _____ License No. _____
 Date 7/23/10 Contractor Signature _____

WORKERS' COMPENSATION DECLARATION

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
 Carrier _____ Policy Number _____ Expiration Date _____
 Name of Agent _____ Phone # _____

I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Signature of Applicant _____ Date 7/23/10

DECLARATION REGARDING CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

By my signature below, I certify to each of the following:

- I am the property owner or authorized to act on the property owner's behalf.
- I have read this application and the information I have provided is correct.
- I agree to comply with all applicable city and county ordinances and state laws relating to building construction.
- I authorize representatives of this city or county to enter the above-identified property for inspection purposes.

Signature of Property Owner or Authorized Agent _____ Date 7/23/10

Print Property Owner's or Authorized Agent's Name: Allen Stewart

ACTION	DATE:	BY:
PERMIT EXPIRED		
PERMIT CANCELLED		
PERMIT EXTENDED		
PERMIT FINAL	8/18/10	MOORE
CERTIFICATE OF OCCUPANCY ISSUED		

FOR OFFICE USE ONLY

January 6, 2005



Mr. Brian Boyer
Exhibition and Facilities Manager
Orange County Museum of Art
850 San Clemente Drive
Newport Beach, California 92600

Subject: **Geotechnical Testing Services
Proposed Improvement
Orange County Museum of Art
850 San Clemente Drive
Newport Beach, California
MACTEC Project No. 4954-04-3211**

Dear Mr. Boyer:

This letter provides the results of our testing of the compacted subgrade beneath the new concrete ramp at the subject site. The subgrade in the new ramp area was previously prepared without an observation and testing by a geotechnical engineer. However, we were requested to perform testing only on the subgrade to verify the degree of compaction achieved during the earthwork at the tested locations. Our testing service was performed on December 20, 2004. The scope of our services did not include the responsibility for either job safety or surveying. The earthwork was performed at the locations shown by the contractor.

As requested, we performed 2 sand-cone field density tests in general accordance with ASTM Designation D1556, and at the location indicated by the contractor. The tests were performed in an area where a 2-foot wide by about 8-foot long section of concrete flat work was saw-cut and the subgrade was exposed. The approximate locations of the tests are shown on the attached Plot Plan. The results of the field density tests are presented in the following table:

TEST RESULTS

Test Number	Depth below Existing Grade (Inches)	Moisture Content (% of Dry Wt.)	Dry Density (Lbs/Cu. Ft.)	Maximum Dry Density (Lbs/Cu. Ft.)	Percent Compaction
1	6"	CMB	114	126	90
2	18"	CMB	132	135	98

Note: CMB Indicates crushed miscellaneous base material; wet density values shown rather than dry density due to asphalt content.

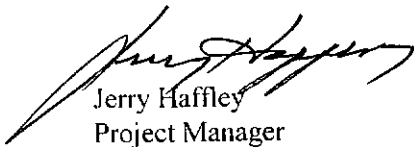
The subgrade material consisted of crushed miscellaneous base material, based on the above tests 90% and 98% relative degree of compaction were achieved, at the tested locations.

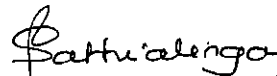


Although our testing of subgrade did not reveal obvious deficiencies, we do not guarantee the contractor's work, nor do the services performed by our firm relieve the contractor of responsibility in the event of subsequently discovered defects in his work.

Respectfully submitted,

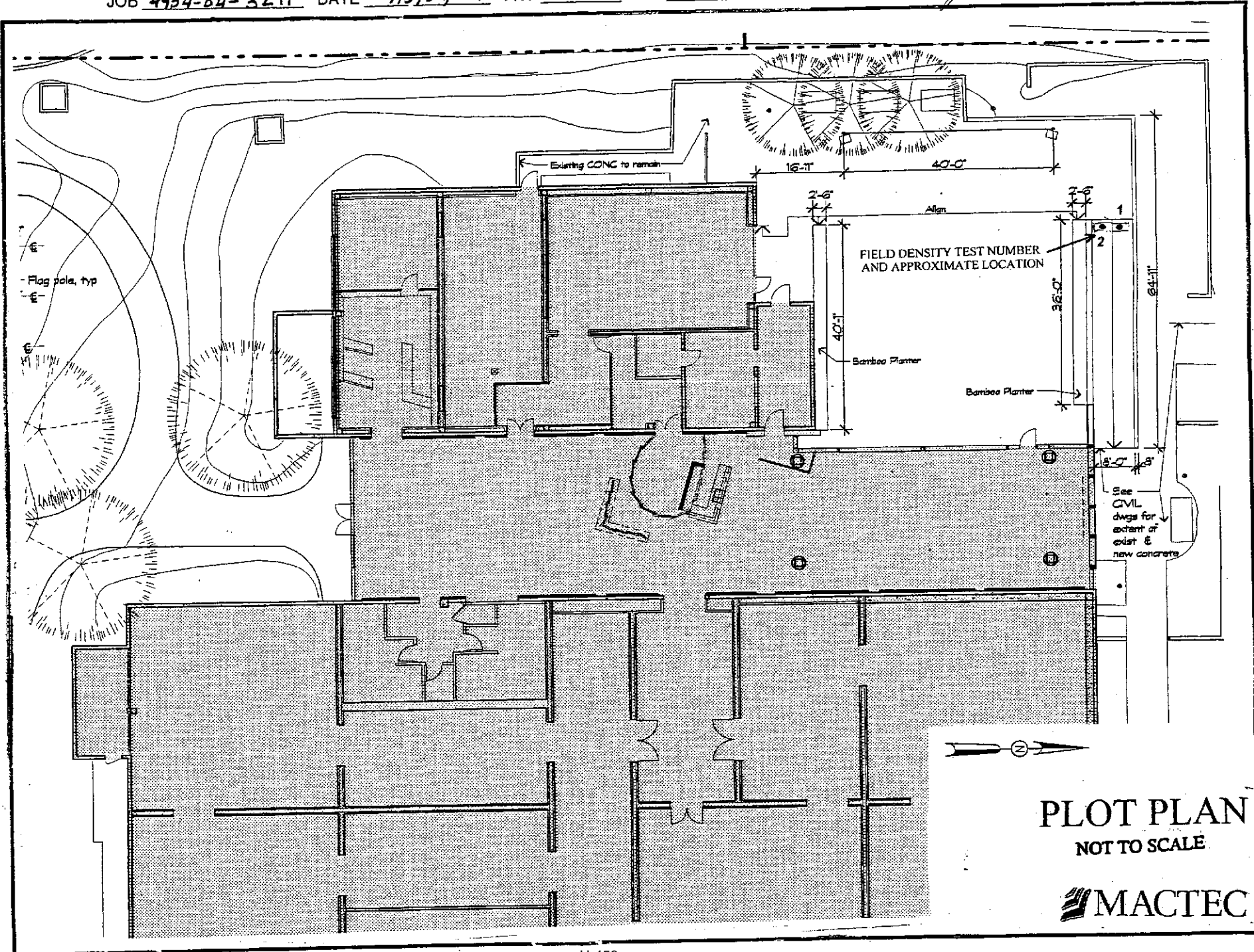
MACTEC Engineering and Consulting, Inc.


Jerry Haffley
Project Manager
Assistant Vice President


N. Sathi Sathialingam, Ph.D.
Principal Engineer



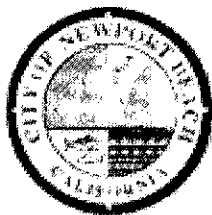
P:\70144-Inspection\2004-projects\4954-04-3211\4954-04-3211\lr GH/gh
Attachment
(4 copies submitted)



PLOT PLAN
NOT TO SCALE



CIVIL ENGINEER'S CERTIFICATION FORM



BUILDING DEPARTMENT

OCT 06 2004
CITY OF NEWPORT BEACH
CALIFORNIA

From: Toal Engineering, Inc.

139 Avenida Navarro

San Clemente CA 92672

Date: October 5, 2004

City of Newport Beach
3300 Newport Blvd.
P.O. Box 1768
Newport Beach, CA 92658-8915

Attention: Grading Engineer, Building Department

GPC No.: 0794-2004 Tract/ Subdivision/ Lot No.: _____ Rough _____ Final X

Project Name: OC Museum of Art

Project Address: 850 San Clemente Dr., Newport Beach

Owner/ Developer: Bauer and Wiley

Type of Project:

- Tract _____
- Commercial X
- Industrial _____
- Drainage _____
- Other _____

Yardage for Project:

- Cut 40 cy
- Fill 65 cy
- Borrow 0
- Export 25 cy

I hereby approve the grading for this project in accordance with my responsibilities under the City Grading Code. I have inspected the project and hereby certify that all areas exhibit positive surface flow to public ways or city approved drainage devices. The grading has been completed: X in conformance with, _____ with the following changes to, the approved grading plan.

Description of Changes:

none

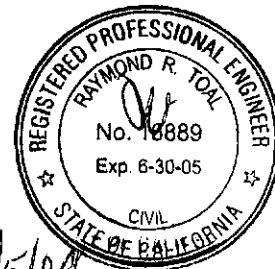
Company: Toal Engineering, Inc.

Name: Raymond R. Toal
(Print)

License No.: RCE 16889 (RCE/LS)

RRT:mct
fgcl1635

Raymond R. Toal
(Signature) 10/5/04





City of Newport Beach
 Building Department
 P.O. Box 1768
 Newport Beach, CA 92659-1768
 Permit Counter Phone No. (714) 644-3288/3289

GRADING PERMIT

Permit No.

G9600127

Inspection Requests Phone No. (714) 644-3255

OWNER-BUILDER DECLARATION

I HEREBY AFFIRM THAT I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAW FOR THE FOLLOWING REASON (SEC. 7031.5 BUSINESS AND PROFESSIONS CODE: ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT, ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PRIOR TO ITS ISSUANCE, ALSO REQUIRES THE APPLICANT FOR SUCH PERMIT TO FILE A SIGNED STATEMENT THAT HE IS LICENSED PURSUANT TO THE PROVISIONS OF THE CONTRACTOR'S LICENSE LAW (CHAPTER 9) COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE; OR THAT HE IS EXEMPT THEREFROM AND THE BASIS FOR THE ALLEGED EXEMPTION, ANY VIOLATION OF SECTION 7031.5 BY ANY APPLICANT FOR A PERMIT SUBJECTS THE APPLICANT TO A CIVIL PENALTY OF NOT MORE THAN FIVE HUNDRED DOLLARS (\$500.00).

I, AS OWNER OF THE PROPERTY, OR MY EMPLOYEES WITH WAGES AS THEIR SOLE COMPENSATION, WILL DO THE WORK, AND THE STRUCTURE IS NOT INTENDED OR OFFERED FOR SALE (SEC. 7044, BUSINESS AND PROFESSIONS CODE: THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO DOES SUCH WORK HIMSELF OR THROUGH HIS OWN EMPLOYEES, PROVIDED THAT SUCH IMPROVEMENTS ARE NOT INTENDED OR OFFERED FOR SALE. IF, HOWEVER, THE BUILDING OR IMPROVEMENT IS SOLD WITHIN ONE YEAR OF COMPLETION, THE OWNER-BUILDER WILL HAVE THE BURDEN OF PROVING THAT HE DID NOT BUILD OR IMPROVE FOR THE PURPOSE OF SALE.)

I, AS OWNER OF THE PROPERTY, AM EXCLUSIVELY CONTRACTING WITH LICENSED CONTRACTORS TO CONSTRUCT THE PROJECT (SEC. 7044, BUSINESS AND PROFESSIONS CODE: THE CONTRACTOR'S LICENSE LAW DOES NOT APPLY TO AN OWNER OF PROPERTY WHO BUILDS OR IMPROVES THEREON, AND WHO CONTRACTS FOR SUCH PROJECTS WITH A CONTRACTOR(S) LICENSED PURSUANT TO THE CONTRACTOR'S LICENSE LAW.)

I AM EXEMPT UNDER SEC. _____ B. & P.C. FOR THIS REASON, _____

DATE _____ OWNER _____

LICENSED CONTRACTORS DECLARATION

I HEREBY AFFIRM THAT I AM LICENSED UNDER PROVISIONS OF CHAPTER 9 (COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE, AND MY LICENSE IS IN FULL FORCE AND EFFECT.

LICENSE CLASS _____ LIC. NO. 676205

CONTRACTOR [Signature] DATE 10/4/96

WORKERS' COMPENSATION DECLARATION

I HEREBY AFFIRM THAT I HAVE A CERTIFICATE OF CONSENT TO SELF-INSURE, OR A CERTIFICATE OF WORKERS' COMPENSATION INSURANCE, OR A CERTIFIED COPY THEREOF (SEC. 3800, I.A.R.C.).

POLICY NO. WD1040762-00 COMPANY ULICO CASUALTY CO

CERTIFIED COPY IS HEREBY FURNISHED.

CERTIFIED COPY IS FILED WITH THE BUILDING DEPARTMENT.

DATE 10/4/96 APPLICANT [Signature]

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(THIS SECTION NEED NOT BE COMPLETED IF THE PERMIT IS FOR ONE HUNDRED DOLLARS (\$100) OR LESS.)

I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IN ANY MANNER SO AS TO BECOME SUBJECT TO THE WORKERS' COMPENSATION LAWS OF CALIFORNIA.

DATE _____ APPLICANT _____

NOTICE TO APPLICANT: IF, AFTER MAKING THIS CERTIFICATE OF EXEMPTION, YOU SHOULD BECOME SUBJECT TO THE WORKERS' COMPENSATION PROVISIONS OF THE LABOR CODE, YOU MUST FORTHWITH COMPLY WITH SUCH PROVISIONS OR THIS PERMIT SHALL BE DEEMED REVOKED.

CONSTRUCTION LENDING AGENCY

I HEREBY AFFIRM THAT THERE IS A CONSTRUCTION LENDING AGENCY FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED (SEC. 3097, CIV.C.).

LENDER'S NAME [Signature]

LENDER'S ADDRESS _____

I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE INFORMATION IS CORRECT. I AGREE TO COMPLY WITH ALL CITY AND COUNTY ORDINANCES AND STATE LAWS RELATING TO BUILDING CONSTRUCTION, AND HEREBY AUTHORIZE REPRESENTATIVES OF THIS COUNTY TO ENTER UPON THE ABOVE-MENTIONED PROPERTY FOR INSPECTION PURPOSES.

[Signature] DATE 10/4/96

JOB ADDRESS: 850 SAN CLEMENTE DR INSP. AREA: 7

OWNER: NEWPORT HARBOR ART MUSEUM

ADDRESS: 850 SAN CLEMENTE
NEWPORT BEACH, CA 92660 PHONE: 714/759-1122

CONTRACTOR: CANCO PACIFIC CONSTRUCTION CO

ADDRESS: 20250 ACACIA #200
NEWPORT BEACH, CA 92660 PHONE: 714/250-3001

STATE LIC. NO. 676205 CLASS: B NEWPORT BUS. LIC. 000834

ARCHITECT: MCLARAND VASQUEZ & PARTNERS

ADDRESS: 695 TOWN CENTER DR, #300
COSTA MESA, CA 92626 PHONE: 714/549-2207

LIC. NO.: DESIGNER

ENGINEER: _____

ADDRESS: _____

PHONE: _____

LIC. NO.: _____

GEOTECHNICAL CONSULTANT: _____

ADDRESS: _____

PHONE: _____

APPLICANT: MICHAEL BOTWINIK

ADDRESS: 850 SAN CLEMENTE DR
NEWPORT BEACH, CA 92660 PHONE: 714 759-1122

SIGNATURE OF APPLICANT [Signature]

DESCRIPTION OF WORK: GRADING/COMM ADD (R9601547)
GRADING/COMM ADD/REMODEL "HPT HARBOR ART"

TYPE OF PERMIT: Precise Grading Permit

VACANT SITE YES NO

NEAREST CROSS ST. P BK 01 PG 6 PAR 2

LEGAL DESCRIPTION: _____

YARDAGE FOR PROJECT: FILL: _____ CUT: _____

SPECIAL CONDITIONS: _____

REVIEW DEPARTMENTS

PROCESSED BY:	Name	Date
ZONING	<u>[Signature]</u>	<u>10-4-96</u>
TRAFFIC	<u>[Signature]</u>	
SUBDIVISION		
GRADING		
APPROVAL TO ISSUE	<u>Sa</u>	<u>10-3-96</u>

*** GRADING/DRAINAGE Permit Fees ***

Description	Amount	Payments
\$ Valuation of improvements ---->		204.61
GRADING - ** PLAN CHECK FEE *** (Y)	185.00 Y	Credit extended: 0.00
GRADING - ** PERMIT FEE ***** (Y)	370.00 Y	Total Credits: 204.61
PLANNING/ZONING PLAN CHECK FEE (Y)	19.64 Y	
CLEAN-UP DEPOSIT	300.00	Balance 677.40
MICROPILING FEE	7.40	Adjustments 0.00
TOTAL GRADING/DRAINAGE PERMIT FEES	882.01	Balance due 677.40

PAID
OCT 04 1996

CITY OF NEWPORT BEACH

R110776

PLAN CHECK VALIDATION CK. M.O. CASH PERMIT VALIDATION CK. M.O. CASH

WORK MUST BE STARTED WITHIN A PERIOD OF 180 DAYS FROM THE DATE OF VALIDATION OR THIS PERMIT BECOMES NULL AND VOID.

INSPECTOR'S COPY

River
02/02/97

INSPECTIONS	DATE	BY	COMMENTS
FINAL MEETING LOADING INSPECTION			
ROUGH GRADE APPROVAL PREPAVING MEETING CURB AND GUTTER			
PAVEMENT SURCHARGE AGGREGATE BANK			10-28-96 - GAVE DUPT "CIVIL ENG'S CERT FORM" TO HAVE COMPLETED AND RETURNED @ FINAL. <i>QR</i>
FLATWORK C/OVER DRAIN CATCH BASIN EROSION CONTROL OTHER			1-22-97 STILL NEED CERT <i>QR</i>
PRECISE GRADING INSPECTION INCLUSMENTS			
TITLE CERTIFICATE TYPE	2-4-97 <i>ST</i>		
	NAME OF ENGINEERING FIRM	RECEIVED BY	
	KPFF CONSULTING ENGINEERS BY THOMAS GOSWILL	<i>QR</i>	

300 DEPOSIT RELEASED
FOR REFUND ON 2/14/97
TO: *Camco Pacific Const*
20250 Acacia St #200
MB 92600

CIVIL ENGINEER'S CERTIFICATION FORM



From: KPEE Consulting Engineers
2401 Colorado Avenue, 315
Santa Monica, CA 90404

City of Newport Beach
3300 Newport Blvd
PO Box 1768
Newport Beach, CA 92658-8915

Date: January 24, 1997

Attention: Grading Engineer, Building Department

GPC No.: G9600127 Tract/Subdivision/Lot No.: P-BK-81-PG-8-PAR-2 Rough Final X

Project Names: Newport Harbor Art Museum

Project Address: 850 San Clemente

Owner/Developer: Newport Harbor Art Museum

Type of Project:

- Tract _____
- Commercial _____
- Industrial _____
- Drainage _____
- Other Museum Remodel & Addition

Yardage for Project:

- Cut 0
- Fill 0
- Borrow _____
- Export _____

I hereby approve the grading for this project in accordance with my responsibilities under the City Grading Code. I have inspected the project and hereby certify that all areas exhibit positive surface flow to public ways or City approved drainage devices. The grading has been completed: _____ in conformance with, _____ with the following changes to, the approved grading plan.

Description of Changes:

Note: Portions of the sculpture garden concrete paving were removed and reconstructed. No grading operations were conducted.

Company: KPEE Consulting Engineers

Name: Thomas Gsell
(print)

Thomas Gsell
(sign)

License No.: C34734 (RCE/LS)

7/0916-96



LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

**REPORT OF GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

June 18, 1996

Project 70131-6-0337-0601



LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC

June 18, 1996

Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California 92660-6399

Attention: Mr. Michael Botwinick

Subject: **Geotechnical Consultation**
Proposed Irvine Pavilion Addition
Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California
Law/Crandall Project 70131-6-0337-0001

Dear Mr. Botwinick:

We are pleased to submit this report presenting foundation design recommendations for the proposed Irvine Pavilion Addition at the subject site. Our investigation was performed in general accordance with our proposal dated February 26, 1996, as authorized by you on June 13, 1996.

It was a pleasure to be of professional service to you on this project. Please call if you have questions or need additional information.

Sincerely,

LAW/CRANDALL

Paul R. Schade
Senior Engineer

Barry J. Meyer
Principal Engineer

enggeo\96-proj\01371r01.doc\PS:bef
(3 copies submitted)

cc: (4) McLarand Vasquez Partners, Inc.
Attn: Mr. Bill Koster
(1) KPFF Consulting Engineers
Attn: Mr. Roger Young



200 CITADEL DRIVE • LOS ANGELES, CA 90040-1554
(213) 889-5500 • FAX (213) 721-6700

**REPORT OF GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

**850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA**

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

Law/Crandall

Los Angeles, California

June 18, 1996

Project 70131-6-0337-0001

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1.0 SCOPE

This report provides foundation design information for the proposed Irvine Pavilion Addition. We performed a geotechnical investigation for the museum and submitted the results in a report dated September 21, 1976 (our Job No. AE-76171). The recommendations for the currently planned project were developed using geotechnical information from our previous investigation. Additional fieldwork and laboratory testing was not performed.

This investigation was authorized to provide recommendations for foundation design, floor slab support, and grading for the addition. The scope of this investigation did not include geologic or seismic studies for the site. Accordingly, our conclusions and recommendations are for static loading conditions only; however, this does not imply that there is a geologic or seismic hazard affecting the site. Also, the assessment of general site environmental conditions for the presence of contaminants in the soils and groundwater of the site was beyond the scope of this investigation.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for Newport Harbor Art Museum and their design consultants to be used solely in the design of the proposed addition. The report has not been prepared for use by other parties, and may not contain sufficient information for purpose of other parties or other uses.

2.0 PROJECT DESCRIPTION

It is planned to construct an addition called the Irvine Pavilion at the northwest corner of the existing museum building. The open air pavilion will be supported on four corner posts. The finished floor elevation will be at about the existing grade. Only minor grading and site work are planned. The existing museum building is supported on spread footings and has one level below grade.

3.0 PREVIOUS EXPLORATIONS AND LABORATORY TESTS

The soil conditions beneath the site were previously explored by drilling three borings to depths of 14 to 25 feet below the existing grade using bucket-auger drilling equipment. The locations of the borings are shown on Plate 1, Plot Plan in our prior report. Laboratory tests were performed on selected samples obtained from the borings to aid in the classification of the soils and to determine the pertinent engineering properties of the foundation soils. Details of the exploration and laboratory testing programs and test results are presented in the Appendix of our prior report. The results of the prior borings and laboratory tests are applicable to the proposed pavilion addition foundation design.

4.0 SOIL CONDITIONS

Fill soils were not encountered in the prior borings drilled before the construction of the museum building. Some fill was placed during the development of the site; however, the pavilion addition is planned for an area that was in cut. The natural soils consist of silty sand, clayey sand, and sand and are medium dense to dense. Groundwater was not encountered within the 25-foot depth explored and is not anticipated to be shallower than 25 feet at the present time.

5.0 RECOMMENDATIONS

The natural soils at the site are generally firm and dense and are suitable for support of the planned addition. The structure can be supported on drilled cast-in-place concrete piles as planned. If the recommendations on grading are followed, the floor slab can be supported on grade.

5.1 FOUNDATIONS

Pile Capacity

The downward capacities of 18- and 24-inch-diameter drilled cast-in-place concrete piles are presented as a function of penetration below pile cap in the following table. Downward Drilled Pile Capacities. All piles should be at least 20 feet long.

DOWNWARD DRILLED PILE CAPACITIES (in kips)		
Penetration (feet)	18-inch-diameter Piles	24-inch-diameter Piles
20	28	38
25	42	56
30	58	78
35	77	103
40	99	132

The upward capacities may be taken as one-half of the downward capacities. A one-third increase in the pile capacities may be used for wind or seismic loads. Where the piles are adjacent to existing underground structures, the penetration depth of the piles above a 1:1 plane drawn upward from the adjacent bottoms of the structures should be ignored. Dead plus live load capacities are shown; a one-third increase may be used for wind or seismic loads. The capacities presented are based on the strength of the soils; the compressive and tensile strengths of the pile sections should be checked to verify the structural capacity of the piles.

Piles should be spaced at least 2½ diameters on centers. If the piles are so spaced, no reduction in the capacities of the piles due to group action need be considered in design.

Lateral Loads

The resistance of the piles and the passive resistance of the soils against the pile cap may be used to resist lateral loads. The soils adjacent to concrete piles that are 18 and 24 inches in diameter and at least 20 feet long can resist horizontal loads of 9 and 12 kips, respectively. These resistances

June 18, 1996

assume free-head piles with an allowable deflection of $\frac{1}{4}$ inch. The lateral resistance of other sizes of piles may be assumed to be proportional to the pile diameter.

Adjacent to the existing underground structures, the lateral capacities of the piles will apply for loads applied to the tops of the piles either away from or parallel to the walls of the underground structures. Where the clear distance from the piles to the walls of the underground structures is less than seven pile diameters, the lateral loads applied to the tops of the piles towards the walls should not exceed the capabilities of the walls to resist the loads.

The passive resistance of the natural soils or properly compacted fill against pile caps may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. The resistance of the piles and the passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

Installation

Some caving and raveling within the sand deposits may occur, and precautions, such as decreasing the drilling speed, are expected to be necessary during the installation of the piles to minimize caving and raveling. Piles spaced less than five diameters on centers should be drilled and filled alternately, with the concrete permitted to set at least eight hours before drilling any adjacent holes. All drilled pile excavations should be observed by personnel of our firm.

Pile excavations should be filled with concrete as soon after drilling and inspection as possible; the holes should not be left open overnight. The concrete should be placed with special equipment so that the concrete is not allowed to fall freely more than 5 feet and to prevent concrete from striking the walls of the excavations.

Settlement

The settlement of the proposed addition, supported on drilled piles in the manner recommended, will be less than $\frac{1}{4}$ inch.

5.2 FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended in the following section on grading, the building floor slab can be supported on grade. Construction activities and exposure to the environment can cause deterioration of the prepared subgrade. Therefore, we recommend our field representative observe the condition of the final subgrade soils immediately prior to slab-on-grade construction, and, if necessary, perform further density and moisture content tests to determine the suitability of the final prepared subgrade.

If vinyl or other moisture-sensitive floor covering is planned, we recommend that the floor slab in those areas be underlain by a capillary break consisting of an impermeable membrane over a 4-inch-thick layer of gravel. A 2-inch-thick layer of sand should be placed between the gravel and the membrane to decrease the possibility of damage to the membrane. A 2-inch-thick layer of sand should also be placed on top of the membrane to reduce slab curling. We suggest the following gradation for the gravel:

Sieve Size	Percent Passing
3/4"	90 - 100
No. 4	0 - 10
No. 100	0 - 3

A low-slump concrete should be used to minimize possible curling of the slab. Care should be taken during the placement of the concrete to maintain a relatively level sand surface and prevent displacement of the sand on top of the membrane. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

5.3 GRADING

The addition is planned for an area that was in cut during the prior site development and fill soils are not anticipated. Any existing fill soils encountered should be excavated and replaced as properly compacted fill within the building area. All required fill should be uniformly well

compacted and observed and tested during placement. The on-site soils can be used in any required fill.

Site Preparation

After the site is cleared and any existing fill soils are excavated as recommended, the exposed natural soils should be carefully observed for the removal of all unsuitable deposits. Next, the exposed soils should be scarified to a depth of 6 inches, brought to near-optimum moisture content, and rolled with heavy compaction equipment. At least the upper 6 inches of the exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction.

Excavations and Temporary Slopes

Where excavations are deeper than about 4 feet, the sides of the excavations should be sloped back at 1:1 or shored for safety. Unshored excavations should not extend below a plane drawn at 1½:1 (horizontal to vertical) extending downward from adjacent existing footings. We would be pleased to present data for design of shoring if required.

Excavations should be observed by personnel of our firm so that any necessary modifications based on variations in the soil conditions can be made. All applicable safety requirements and regulations, including OSHA regulations, should be met.

Compaction

Any required fill should be placed in loose lifts not more than 8 inches thick and compacted. The fill should be compacted to at least 90% of the maximum density obtainable by the ASTM Designation D1557-91 method of compaction. The moisture content of the on-site soils at the time of compaction should vary no more than 2% below or above optimum moisture content.

Backfill

All required backfill should be mechanically compacted in layers; flooding should not be permitted. Proper compaction of back-fill will be necessary to minimize settlement of the backfill and to minimize settlement of overlying slabs and paving. Backfill should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction. The exterior grades should be sloped to drain away from the foundations to prevent ponding of water.

Material for Fill

The on-site soils, less any debris or organic matter, can be used in required fills. Cobbles larger than 4 inches in diameter should not be used in the fill. Although not anticipated, any required import material should consist of relatively non-expansive soils with an expansion index of less than 35. The imported materials should contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. All proposed import materials should be approved by our personnel prior to being placed at the site.

5.4 GEOTECHNICAL OBSERVATION

The reworking of the upper soils and the compaction of all required fill should be observed and tested during placement by a representative of our firm. This representative should perform at least the following duties:

- Observe the clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade. The representative should also observe proofrolling and delineation of areas requiring overexcavation.
- Evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing where necessary.

- Test backfill for field density and compaction to determine the percentage of compaction achieved during backfill placement.
- Observe foundation materials to confirm that suitable bearing materials are present at the design foundation depths.

The governmental agencies having jurisdiction over the project should be notified prior to commencement of grading so that the necessary grading permits can be obtained and arrangements can be made for required inspection(s). The contractor should be familiar with the inspection requirements of the reviewing agencies.

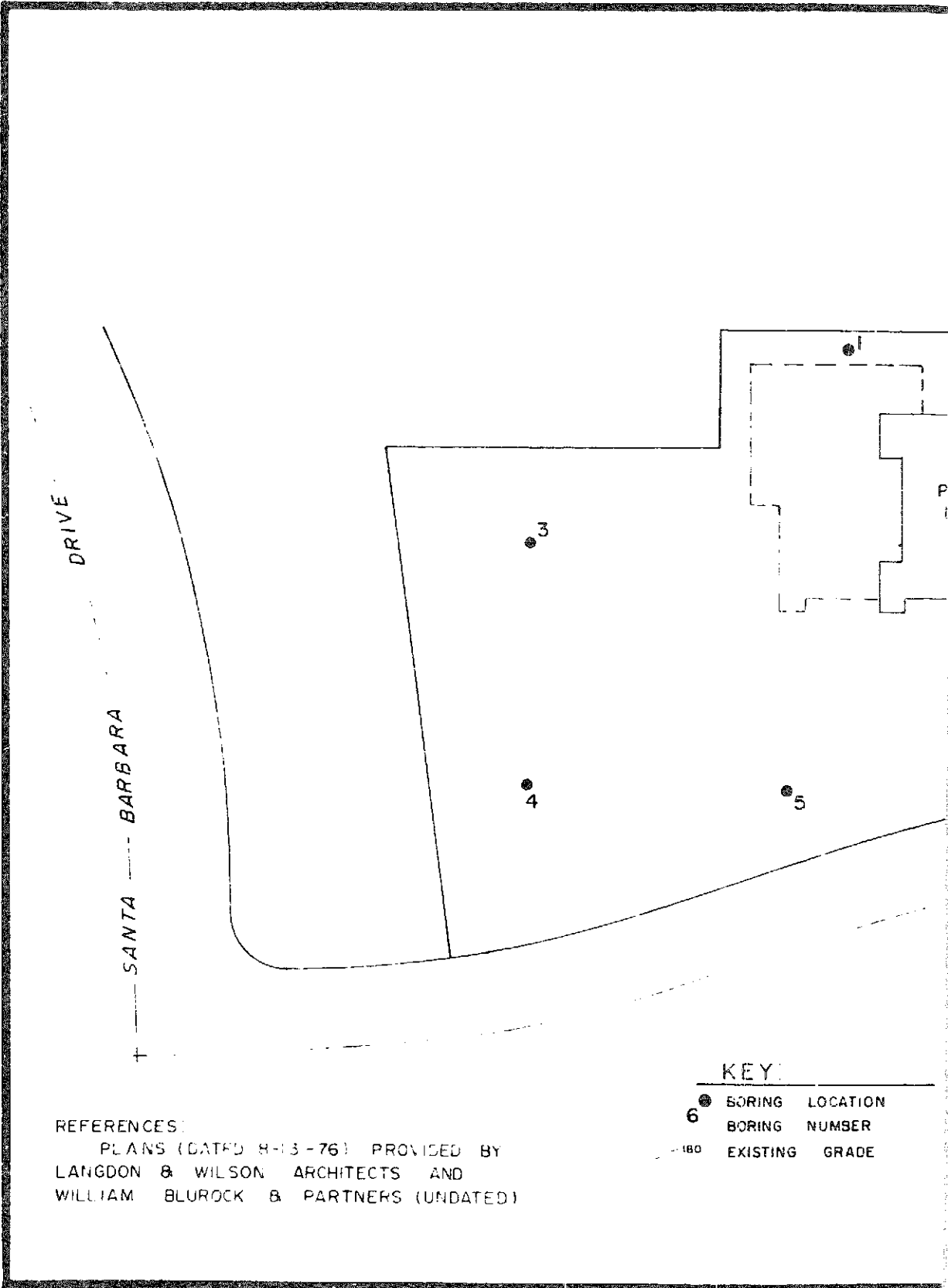
6.0 BASIS FOR RECOMMENDATIONS

The recommendations provided in this report are based upon our understanding of the described project information and on our interpretation of the data collected during our previous subsurface explorations. We have made our recommendations based upon experience with similar subsurface conditions under similar loading conditions. The recommendations apply to the specific project discussed in this report; therefore, any change in the structure configuration, loads, location, or the site grades should be provided to us so that we can review our conclusions and recommendations and make any necessary modifications.

The recommendations provided in this report are also based upon the assumption that the necessary geotechnical observations and testing during construction will be performed by representatives of our firm. The field observation services are considered a continuation of the geotechnical investigation and essential to verify that the actual soil conditions are as expected. This also provides for the procedure whereby the client can be advised of unexpected or changed conditions that would require modifications of our original recommendations. If another firm is retained for the geotechnical observation services, our professional responsibility and liability would be limited to the extent that we would not be the geotechnical engineer of record.

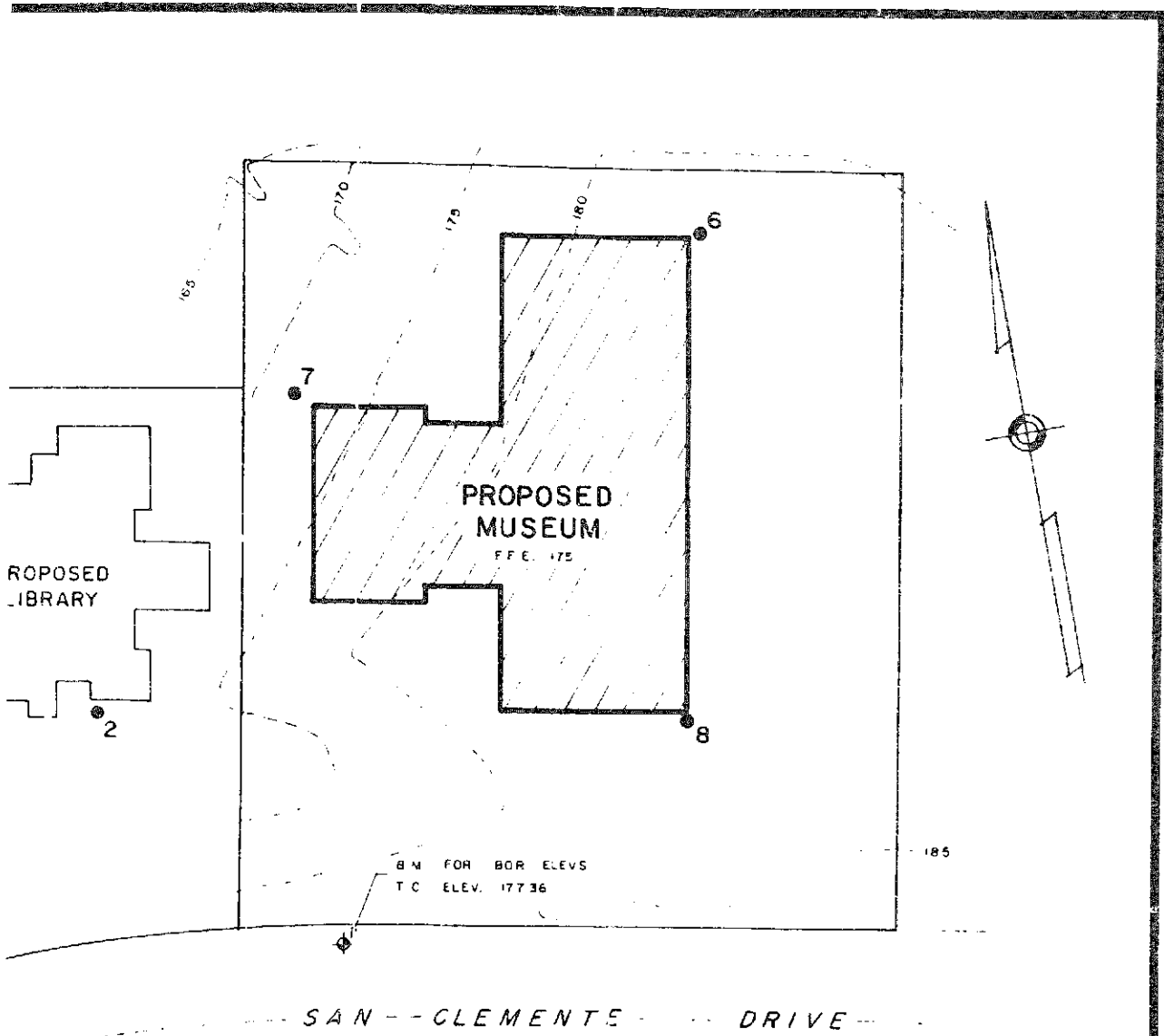


JOB A26171 DATE 8-27-76 DR. U.M. O.E. CHKD. NC



REFERENCES:
 PLANS (DATED 8-13-76) PROVIDED BY
 LANGDON & WILSON ARCHITECTS AND
 WILLIAM BLUROCK & PARTNERS (UNDATED)

KEY:
 ● BORING LOCATION
 6 BORING NUMBER
 - - - - - 180 EXISTING GRADE



P L O T P L A N

SCALE 1" = 60'

LEROY CRANDALL AND ASSOCIATES

PLATE I

ORIGINAL REPORT OF GEOTECHNICAL INVESTIGATION

FOR

PROPOSED MUSEUM BUILDING

850 SAN CLEMENTE DRIVE

NEWPORT BEACH, CALIFORNIA

FOR THE

NEWPORT HARBOR ART MUSEUM

(dated September 21, 1976)

REPORT OF GEOTECHNICAL INVESTIGATION

PROPOSED MUSEUM BUILDING

SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE

NEWPORT BEACH, CALIFORNIA

FOR THE

NEWPORT HARBOR ART MUSEUM

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SCOPE

This report presents the results of a geotechnical investigation, including geologic-seismic studies, performed for the subject project. The investigation was performed concurrently with similar studies for the adjacent Newport Center Branch Library. The locations of the proposed museum and library, and the locations of our exploration borings, are shown on Plate 1, Plot Plan. Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are included herein.

The investigation was authorized to determine the pertinent static characteristics of the soils beneath the site and to provide recommendations for foundation design and floor slab support for the proposed building. The geologic-seismic studies were performed to comply with the City of Newport Beach Seismic Safety Element. The scope of our studies did not include dynamic studies of ground motion and the development of site response spectra for the project. The results of the field explorations and laboratory tests, which form the basis of the foundation recommendations, are presented in Appendix A. The geologic and seismic data, which form the basis of the geologic conclusions, are presented in Appendix B.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers and geologists practicing in this or similar

localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for the Newport Harbor Art Museum and their design consultants to be used solely in the design of the proposed building. The report has not been prepared for use by other parties, and may not contain sufficient information for purposes of other parties or other uses.

STRUCTURAL CONSIDERATIONS

The proposed museum building, which is shown in plan on Plate 1, will be one story in height. The building will have reinforced concrete tilt-up walls. Exterior dead plus live pad loads will be on the order of 132 kips; interior dead plus live pad loads will be on the order of 117 kips.

The floor of the building will be established at Elevation 175. Based on the existing topography, excavation ranging up to 10 feet deep and compacted fill up to 2½ feet in thickness will be required within the building area. Compacted fill ranging up to about six feet deep will be required in the northwest corner of the site.

SITE CONDITIONS

The proposed museum will be located inland approximately 1.5 miles from the Pacific Ocean within the City of Newport Beach, California. The property is located on a dissected terrace 0.5 miles east of Upper Newport Bay. The west and southwestern portions of the property are situated on a

sloping face of the terrace. The average slope is approximately 10:1 (horizontal to vertical). The north and east sections of the property appear to be situated on a relatively even cut surface of the terrace. The ground surface elevation in the immediate area of the proposed building ranges from approximately 173 to 185 feet above mean sea level, U.S.G.S. datum. Contours describing the existing topography are shown on Plate 1. The site is vacant, with existing vegetation consisting of a light weed growth.

Field inspection of the property indicates that the sloping site is susceptible to drainage erosion. However, with proper landscaping, the potential for slope erosion would be greatly reduced, as indicated by adjacent property development.

SOIL CONDITIONS

Existing fill soils were not encountered in the borings drilled at the site of the proposed museum (Borings 6, 7, and 8). Local fill deposits could occur between boring locations.

The natural soils beneath the site consist of silty sand, clayey sand, and sand. The surface soils to a depth of approximately one foot are loose to only moderately firm at present moisture content and would become weaker when wet. Numerous rodent holes were encountered within these upper soils. The underlying natural soils are firm.

Water was not encountered within the depth explored.

GEOLOGIC CONCLUSIONS

GENERAL

We find no unusual geologic conditions present at the site which constitute a serious geologic hazard. The possibility of fault rupture through the site is extremely remote, as is the possibility of liquefaction. Although the site could be subject to violent ground shaking in the event of a major earthquake, this hazard is common to Southern California and the effects of the shaking can be minimized by proper structural design and proper construction. The geologic conditions are discussed in detail in Appendix B.

FAULT DISPLACEMENT

No known faults are present beneath the site. It is our opinion that there is little probability of surface rupture due to faulting occurring beneath the site. The nearest active fault is the north branch of the Newport-Inglewood fault system. This fault is located about two miles southwest of the site.

The closest known fault to the site appears to be the Pelican Hill fault located about one mile northeast of the site. This fault does not show any signs of activity within Recent or Upper Pleistocene time, and therefore is not classified as an active fault.

STABILITY

Subsidence due to fluid withdrawals has not been recognized in the site area. The property is not on or in the path of any existing or potential landslide.

GROUND FAILURE

The site is predominantly underlain by firm terrace deposits consisting primarily of sand, clayey sand and silty sand. Beneath the terrace deposits are firm to very firm tertiary age sediments. A field inspection of the site indicated that some portions of the property are underlain by fill material and softer natural deposits. However, it appears that the subject building area is underlain by firm terrace deposits. Some settlement was observed along San Clemente Drive where the street is apparently underlain by fill material.

The elevation of the ground water surface at the site appears to be close to sea level, at a depth of over 150 feet. The soils underlying the site are predominantly firm, dense Pleistocene age terrace deposits. Due to the firm, dense nature of the soils in conjunction with the great depth to ground water, it is our opinion that the potential for liquefaction to occur at the site is low.

SEISMICITY

The historic seismic record indicates that epicenters of earthquakes with magnitudes as great as 6.3 have occurred within five miles of

the site. The location of the property in relation to known faults indicates that the immediate area is not exposed to greater than normal seismic risk than other locations in the coastal areas of Orange County. However, in our opinion, Orange County is exposed to higher than normal seismic risk than some areas in California due to the presence of the Norwalk and Newport-Inglewood fault systems.

TSUNAMIS AND SEICHES

The site is located greater than $1\frac{1}{2}$ miles from the Pacific Ocean at an elevation of approximately 180 feet above sea level. Therefore, the property does not have any risk of damage from tsunamis (earthquake induced sea waves).

No large bodies of water are located such that they would adversely affect the site due to seiches (oscillations in a body of water due to earthquake shaking) or earthquake rupture.

RECOMMENDATIONS

FOUNDATIONS

General

The upper natural soils are generally only moderately firm, and would become weaker when wet. Below a depth of about one foot, the natural soils are firm. As a result of the planned excavation, the firm natural soils will be at or close to the planned final grade over most of the building area. The proposed building may be supported on spread footings

established in the firm natural soils. Compacted fill is planned in the northwest corner of the building, and footings at this location will have to be deeper to reach the firm natural soils.

Bearing Value

Spread footings carried at least one foot into the firm undisturbed natural soils may be designed to impose a dead plus live load pressure of 4,000 pounds per square foot. A one-third increase in the bearing value may be used for wind or seismic loads. Exterior footings should extend at least two feet below the adjacent final grade; interior footings should extend at least 1½ feet below the adjacent floor level. At the northwest corner of the building (and perhaps at other locations), footings will have to be somewhat deeper to extend one foot into the firm natural soils. The recommended bearing value is a net value, so that the weight of the concrete within the foundations may be taken as 50 pounds per cubic foot, and the weight of soil backfill may be neglected when computing the imposed downward foundation loadings.

The maximum ultimate settlement of the proposed building, supported on spread footings in the manner recommended, will be less than one-half inch.

Lateral Loads

Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.5 may be used

between footings and the floor slab and the supporting soils. The passive resistance of the natural soils or properly compacted backfill against footings may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. A one-third increase in the passive value may be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.

Inspection

The footing excavations should be inspected by personnel of our firm to verify that the footings are founded in firm natural soils. Footing inspection will be especially critical in the northwest corner of the building where deeper footings will be required to reach the firm natural soils. Footings should be deepened as necessary to extend into firm natural soils. Hard layers were encountered at various depths in the borings; jack-hammers may be required in some of the footing excavations. Any required footing backfill and all utility trench backfill should be mechanically compacted; flooding should not be permitted. The exterior grades should be such that surface water will drain away from the building.

GRADING

Excavation

Based on planned grades, excavation up to about ten feet deep will be required. It is our opinion that conventional earth-moving equipment

may be used; jack hammers may be required to facilitate excavation of any hard layers.

Permanent cut slopes may be constructed at 1:1. Drainage of the slopes should be carefully planned, and the completed slopes should be planted as soon as possible to reduce surface erosion.

The excavation should be inspected by our personnel so that any necessary modifications based on soil conditions encountered can be made. All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act of 1970, and the Construction Safety Act should be met.

Filling

Within the area to be filled and areas close to grade, the upper soils should be reworked, and all required fill should be properly compacted. Any existing fill and at least the upper one foot of natural soils within the building area should be excavated and replaced as properly compacted fill and all required additional fill should be properly compacted. Within areas to be paved, any existing fill or disturbed natural soils should be excavated, the upper natural soils should be reworked in place, and all required fill should be properly compacted.

After stripping existing vegetation, any existing fill and any disturbed natural soils within the building area and area to be paved should be excavated. Next, the natural soils within the building area and

at least five feet beyond in plan should be excavated to a depth of at least one foot below the existing grade (over-excavation of the natural soils should only be necessary in the northwest portion of the building area where the grade will be raised by placing compacted fill). The exposed soils should be carefully inspected to verify removal of any unsuitable deposits; the excavation should be deepened to remove any unsuitable materials including soils badly disturbed by rodent burrowing. Next, the exposed natural soils should be scarified to a depth of six inches, brought to approximately optimum moisture content, and rolled with heavy compaction equipment. The upper six inches of exposed natural soils in the building area (in both cut and fill areas) should be compacted to at least 95% of the maximum density obtainable by the ASTM Designation D1557-70 method of compaction modified to use three layers. Within non-building areas, the upper six inches of exposed natural soils should be compacted to at least 90%.

After compacting the natural subgrade, all required fill in the building area should be placed in loose lifts not more than eight inches in thickness, brought to about optimum moisture content, and compacted to at least 95%. All required fill in non-building areas should be similarly placed and compacted to at least 90%. It is recommended that the moisture content of the soils at the time of compaction vary no more than 2% above or below optimum moisture content.

Compacted fill slopes may be constructed at 2:1 (horizontal to vertical). To minimize future shallow sloughing, fill slopes should be overfilled and trimmed back to achieve a firm surface. Alternately, the fill slopes should be slope-rolled with a sheepsfoot roller, done at the completion of every two feet of fill. Permanent slopes should be planted as soon as possible to reduce erosion, and the drainage planned so that the water is not allowed to flow over the face of the sloped embankments.

The on-site natural soils may be used in required fills. Any required imported fill should consist of relatively non-expansive and predominantly granular soils, similar to the on-site soils.

The excavation and reworking of the upper soils and the compaction of all required fill should be observed and tested by personnel of our firm. Imported fill material should be approved by our firm prior to importing.

FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended, the building floor slab may be supported on grade. Drainage of surface water should be provided away from the building; ponding of water adjacent to the building should be prevented.

If a floor covering that would be critically affected by moisture, such as vinyl, is to be used, we suggest that the floor slab be supported on a four-inch-thick layer of gravel or on an impermeable membrane as a

capillary break. A suggested gradation for the gravel layer would be as follows:

<u>Sieve Size</u>	<u>Percent Passing</u>
3/4"	90 - 100
No. 4	0 - 10
No. 100	0 - 3

If the membrane is used, a low-slump concrete should be used to minimize possible curling of the slab. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

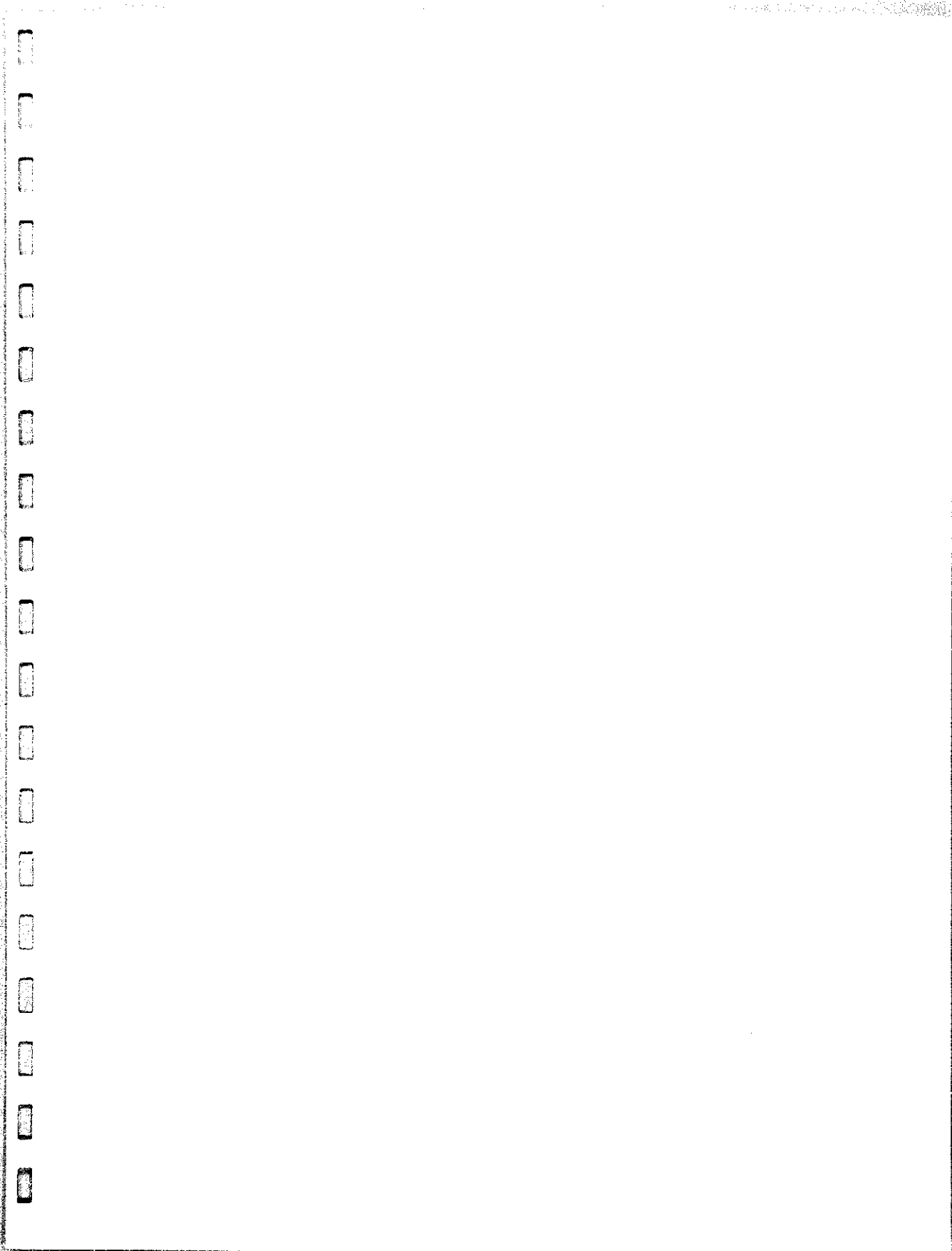
PAVING

To provide support for paving, the subgrade soils should be prepared as recommended in the previous section on grading. All existing fill and disturbed natural soils should be excavated, and all required fill beneath paving should be compacted to at least 90%. At least the upper six inches of paving subgrade should be compacted to at least 90%. Proper compaction of the pavement subgrade soils will be critical for the performance of the paving. Also, proper drainage of the paved areas should be provided since this will reduce moisture infiltration into the subgrade and increase the life of the paving.

To provide data for design of asphaltic paving, a California Bearing Ratio test was performed on a sample of the upper soils. The test results, which indicate a CBR value of 13 at 90% compaction, are presented in the attached Appendix A.

Assuming that the paving subgrade will consist of the on-site soils, or imported materials with a CBR value of at least 10, and compacted to at least 90% as recommended, parking areas subject to automobile traffic may be paved with two inches of asphaltic paving and four inches of base course placed on the compacted subgrade. Driveways and areas subject to truck traffic may be paved with three inches of asphaltic paving and six inches of base course placed on the compacted subgrade. Careful inspection is recommended to verify that the recommended thicknesses or greater are achieved, and that proper construction procedures are used.

The base course should meet the specifications for Class 2 Aggregate Base as defined in Section 26 of the State of California, Department of Transportation, Standard Specifications, dated January, 1975. The base course should be compacted to at least 92%. (This is the minimum compaction; the average compaction should be at least 95%.)



2

APPENDIX A

EXPLORATIONS

This investigation was performed concurrently with similar studies for the adjacent Newport Center Branch Library. A total of eight borings were drilled for the two projects; Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are discussed herein.

The borings were drilled to depths of 5 to 25 feet below the existing grade using 24-inch-diameter bucket-type drilling equipment. Caving of the boring walls did not occur during drilling, and casing or drilling mud was not used to extend the borings to the depths drilled.

The soils encountered were logged by our field technician, and undisturbed samples were obtained for laboratory inspection and testing. The logs of the borings are presented on Plates A-1 through A-8; the depths at which undisturbed samples were obtained are indicated to the left of the boring logs. The number of blows required to drive the sampler twelve inches, and the driving weight and stroke, are also indicated on the logs. The soils are classified in accordance with the Unified Soil Classification System described on Plate B.

LABORATORY TESTS

The field moisture content and dry density of the soils encountered were determined by performing tests on the undisturbed samples. The results of the tests are shown to the left of the boring logs.

Direct shear tests were performed on selected undisturbed samples to determine the strength of the natural soils. These tests were performed at field and increased moisture contents and at various surcharge pressures. Tests were also performed on remolded samples compacted to 95% at optimum moisture content; the remolded samples were tested at optimum and increased moisture contents. The yield-point values determined from the direct shear tests are presented on Plate C, Direct Shear Test Data.

Confined consolidation tests were performed on five undisturbed samples and on one remolded sample compacted to 95% to determine the compressibility of the soils. Water was added to two of the samples during the tests to illustrate the effect of moisture on the compressibility. The results of the consolidation tests are presented on Plates D-1 through D-4, Consolidation Test Data.

Expansion tests were performed on two undisturbed samples to determine the expansion characteristics of the soils. The samples were confined under a nominal surcharge pressure, soaked, and the resulting expansion measured. Next, the samples were allowed to air-dry, and the resulting shrinkage was measured. The results of the expansion tests are presented on Plate E, Expansion Test Data.

The optimum moisture content and maximum dry density of the upper soils were determined by performing compaction tests on samples from Borings 3 and 4. The tests were performed in accordance with the ASTM Designation D1557-70 method of compaction modified to use three layers. After completion of the compaction tests, a California Bearing Ratio test was performed on the sample from Boring 4 in accordance with the ASTM Designation D1883-73 method. The results of the compaction and California Bearing Ratio tests are presented on Plate F, Compaction and C.B.R. Test Data.

-oOo-

DATE _____ JOB _____ CHKD _____ OF _____

NOTE. THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS *	SAMPLE	DESCRIPTION
BORING I						
DATE DRILLED August 25, 1976						
EQUIPMENT USED 24"-Diameter Bucket						
ELEVATION 153.2**						
	0.4	104		2	SM	SILTY SAND - fine, rootlets, numerous rodent holes, light brown
150	1.8	99		6		
5	3.7	112		8	SP	SAND - fine, layers of Clayey Sand, light reddish-brown
145	1.9	104		11		
10	2.7	99		4		CLAYEY SAND - light reddish-brown
140	6.9	119		12	SC	
15						

NOTE: Water not encountered. No caving.

*Number of blows required to drive sampler 12":
 Driving Weight = 1600 lbs. Stroke 1'

**See Plate I for location and elevation of bench mark.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-1

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft.)	DEPTH (ft.)	MOISTURE (% of dry wt.)	DRY DENSITY (lbs / cu ft.)	BLOWS	SAMPLE	DESCRIPTION
BORING 2						
DATE DRILLED August 25, 1976						
EQUIPMENT USED 24"-Diameter Bucket						
ELEVATION 173.4						
170	3.6	104	6		SM	SILTY SAND - fine, layers of Clayey Sand, light brown
5	7.6	108	6			
165	8.5	101	5		SP	SAND - fine, layers of Clayey Sand, light reddish-brown
10	8.1	103	6			
160	6.1	96	6			
15	15.2	110	12		SC	CLAYEY SAND - fine, reddish-brown
155						
20	43.1	68	21		CL	SILTY CLAY (HIGHLY WEATHERED SHALE) - light brown

NOTE: Water not encountered. No caving.

LOG OF BORING

LERoy CRANDALL AND ASSOCIATES
PLATE A-2

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NOTE THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE	
BORING 3						
DATE DRILLED August 25, 1976						
EQUIPMENT USED 24"-Diameter Bucket						
ELEVATION 141.5						
140	0.8	94	2		SM	SILTY SAND - fine, rootlets, light brown
	2.8	107	19		SC	CLAYEY SAND - fine, brown
5	5.5	113	8			
135						
10						
130						
15						

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-3

JOB NO. 1000 DATE 8/25/76 CHKD BY [unclear]

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft.)		DEPTH (ft.)	MOISTURE (% of dry wt.)	DRY DENSITY (lbs/cu ft.)	BLOWS	SAMPLE	
ELEVATION 150.0		2.3	108	10		SM	SILTY SAND - slightly clayey, brown
		13.3	113	4		SC	CLAYEY SAND - fine, some Silty Clay, brown
145	5	7.7	119	6			
140	10						
135	15						

BORING 4
 DATE DRILLED August 25, 1976
 EQUIPMENT USED 24"-Diameter Bucket

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-4

SW
 CHKD
 OF
 DATE
 JOB

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE
180					SM SILTY SAND - fine, rodent holes, light brown
	5	2.1	106	11	
175					SC CLAYEY SAND - fine, layers of fine Sand, light reddish-brown
		3.5	101	14	
	10	7.8	112	16	
170					
		6.3	113	18	
	15	7.6	113	16	SP SAND - fine, layers of Clayey Sand, light reddish-brown
165					
	20	5.0	96	9	

NOTE: Water not encountered. No caving.

LOG OF BORING

LERoy CRANDALL AND ASSOCIATES
 PLATE A-6

JOB NO. _____ DATE _____ TIME _____ OF _____ CHKD. _____

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE	
						ELEVATION 173.1
	2.5	96	2		SM	SILTY SAND - fine, rootlets, light brown
170	7.3	111	17		SC	CLAYEY SAND - fine, thin layers of fine Sand, light reddish-brown
	5.7	110	9			
	6.1	112	14			
165	6.4	109	16			
					SP	SAND - fine, thin layers of Clayey Sand, light reddish-brown
160	6.3	98	8			
15						

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-7

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES		
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.		
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.		
		GRAVELS WITH FINES (Appreciable amt. of fines)	GM	Silty gravels, gravel-sand-silt mixtures		
			GC	Clayey gravels, gravel-sand-clay mixtures.		
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.		
			SP	Poorly graded sands or gravelly sands, little or no fines.		
		SANDS WITH FINES (Appreciable amt. of fines)	SM	Silty sands, sand-silt mixtures.		
			SC	Clayey sands, sand-clay mixtures.		
		FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
					CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
	OL			Organic silts and organic silty clays of low plasticity.		
SILTS AND CLAYS (Liquid limit GREATER than 50)				MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	
				CH	Inorganic clays of high plasticity, fat clays.	
				OH	Organic clays of medium to high plasticity, organic silts.	
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.		

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT OR CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		
	NO. 200	NO. 40	NO. 10	NO. 4	3/4 in.	3 in.	(12 in.)
	U. S. STANDARD SIEVE SIZE						

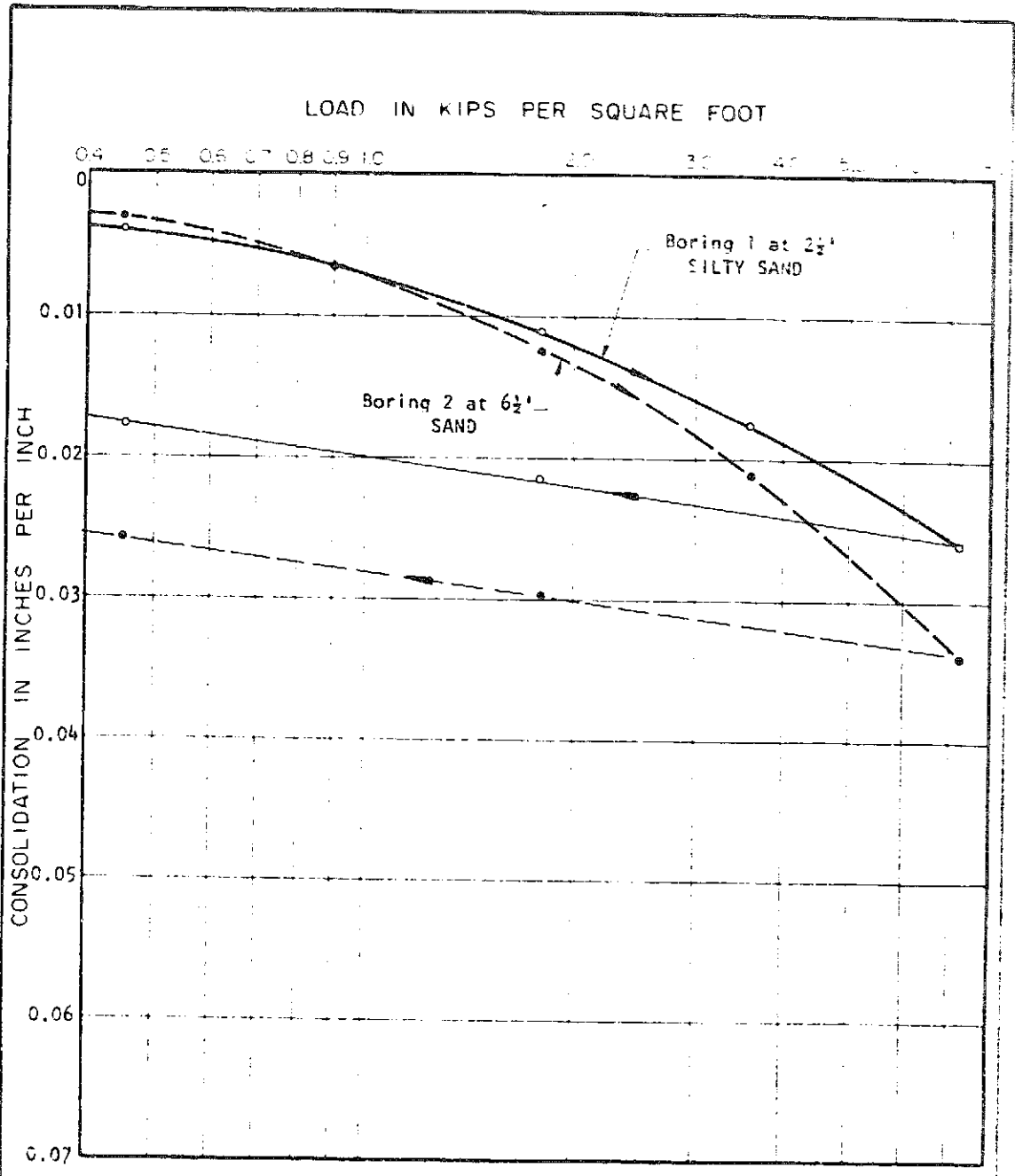
UNIFIED SOIL CLASSIFICATION SYSTEM

Reference:
The Unified Soil Classification System, Corps of Engineers, U. S. Army Technical Memorandum No 3-357, Vol. 1, March, 1953. (Revised April, 1960)

LEROY CRANDALL & ASSOCIATES

PLATE B

JOB _____
 DATE _____
 DR _____
 O.E. RC:SW _____
 CHKD _____



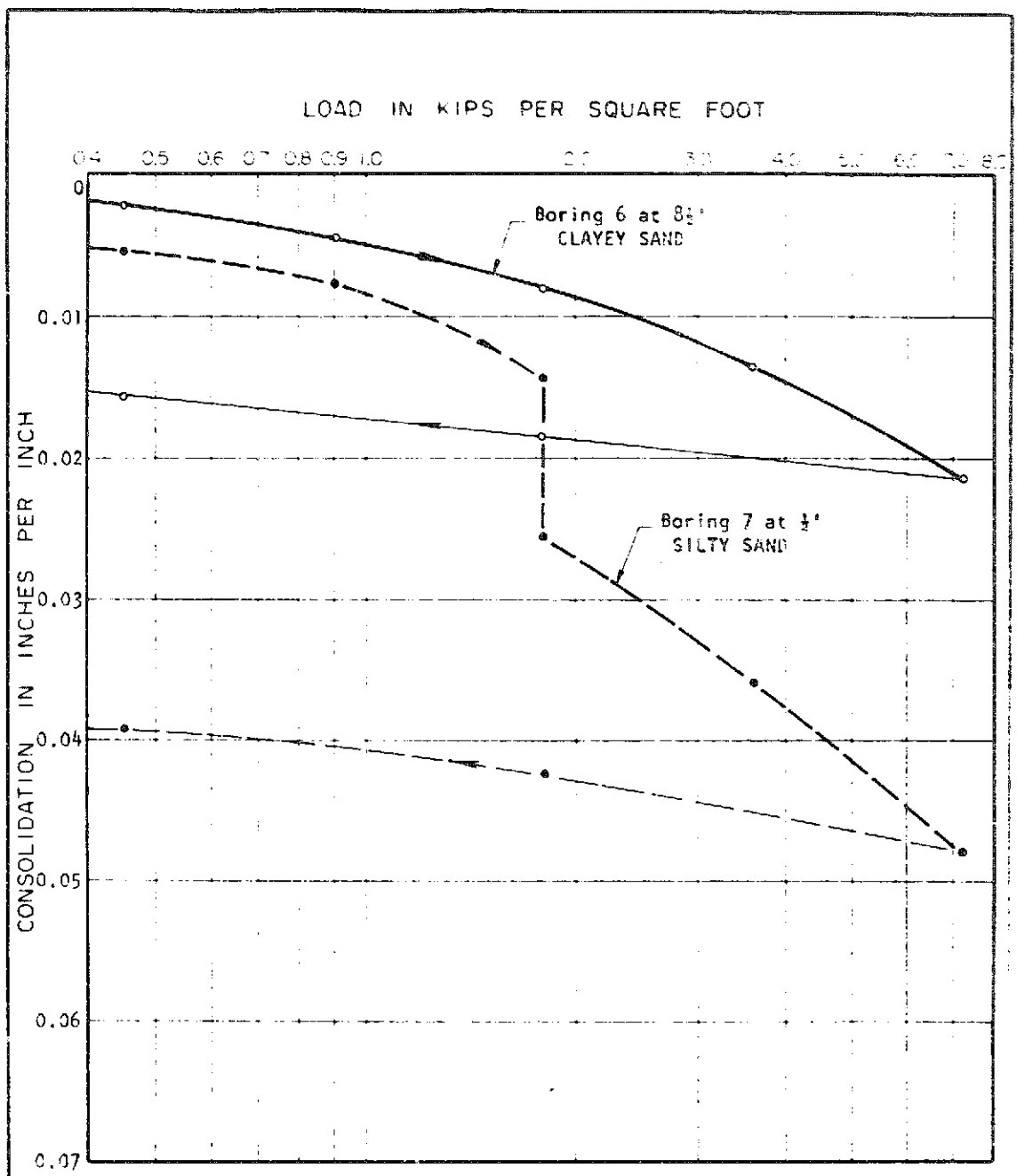
NOTE: Samples tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY GRANDALL & ASSOCIATES

PLATE D-1

JOB _____ DATE _____ DR. _____ O.E. RC:sw _____ CHKD / C _____



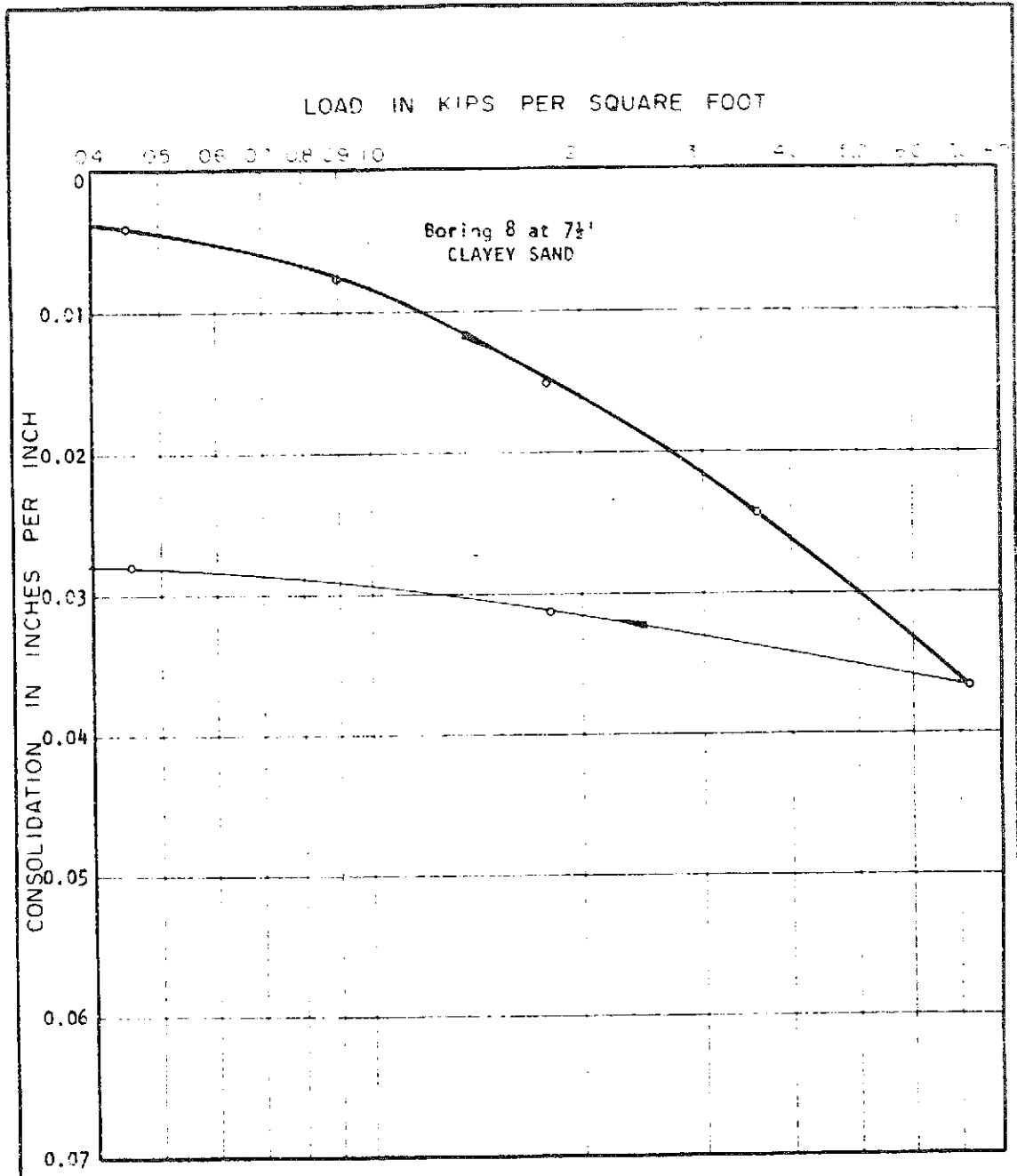
NOTE: Water added to sample from Boring 7 after consolidation under a load of 1.8 kips per square foot. The other sample tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANFALL & ASSOCIATES

PLATE D-2

JOB _____
 DATE _____
 DR _____
 O.E. _____
 K.L.:S.W. _____
 CHKD _____



NOTE: Sample tested at field moisture content.

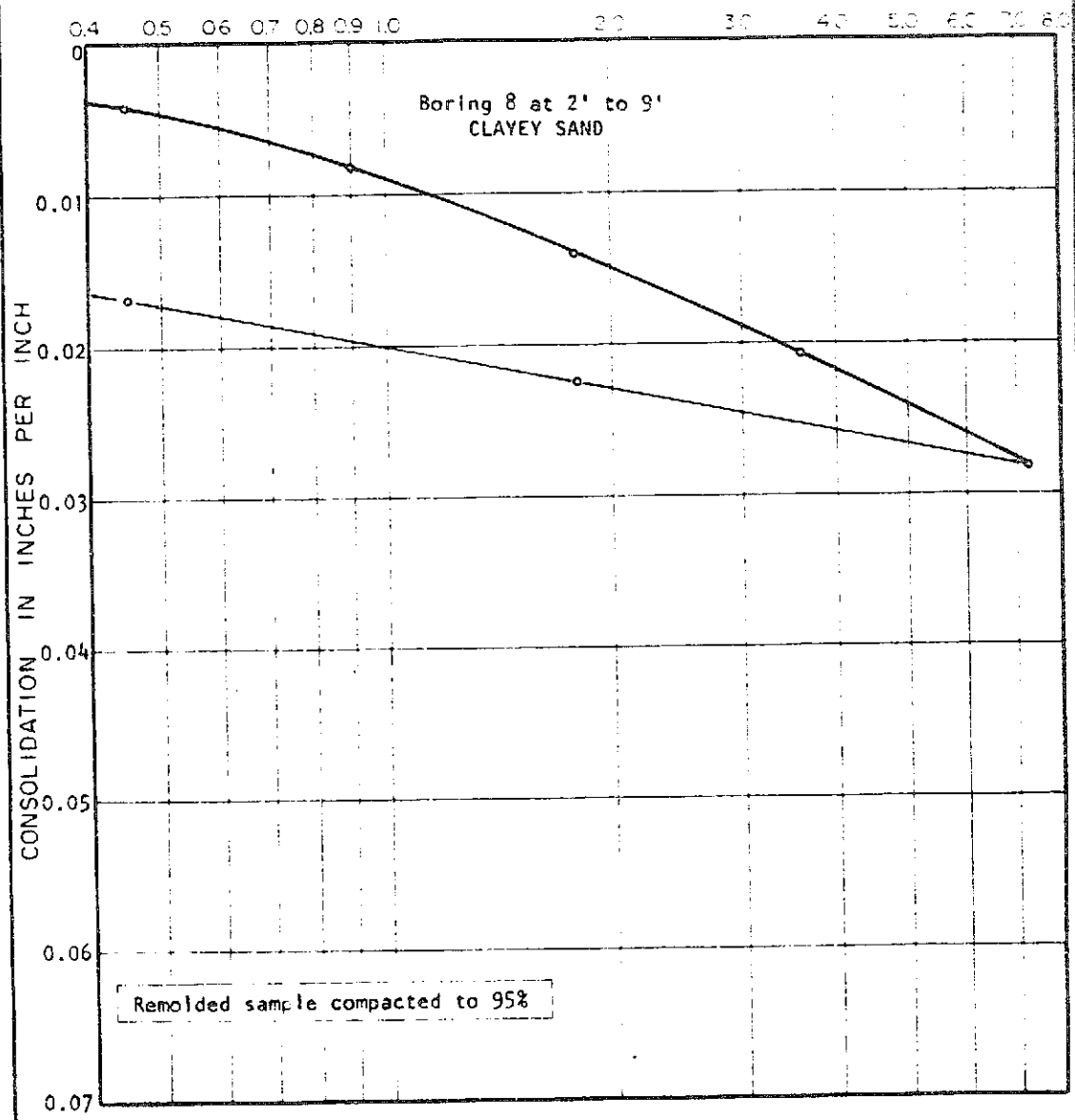
CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE D-3

JOB A-76161 DATE 9/14/76 DR OE

LOAD IN KIPS PER SQUARE FOOT



NOTE: Water added to sample after consolidation under a load of 1.8 kips per square foot.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE D-4

RC:SW

5/14/76

A-76171

BORING NUMBER AND SAMPLE DEPTH:	6 at 8½'	7 at 2½'
SOIL TYPE:	CLAYEY SAND	CLAYEY SAND
CONFINING PRESSURE: (Lbs./Sq. Ft.)	100	100
FIELD MOISTURE CONTENT: (%)	7.8	7.3
EXPANSION FROM FIELD TO SOAKED MOISTURE CONTENT: (%)	1.1	1.4
SOAKED MOISTURE CONTENT: (%)	15.3	15.2
SHRINKAGE FROM FIELD TO AIR-DRIED MOISTURE CONTENT: (%)	0.4	1.3
AIR-DRIED MOISTURE CONTENT: (%)	1.8	1.9
TOTAL VOLUME CHANGE: (%)	1.5	2.7

EXPANSION TEST DATA

1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

E

RC:SW

9/14/76

A-76175

BORING NUMBER AND SAMPLE DEPTH:	3 at 2' to 9'	4 at 0' to 2'
SOIL TYPE:	CLAYEY SAND	SILTY SAND
MAXIMUM DRY DENSITY*: (Lbs./Cu.Ft.)	125	120
OPTIMUM MOISTURE CONTENT*: (% of Dry Wt.)	10	9
EXPANSION (%): (From Optimum to Saturated Moisture Content)	-	0
C.B.R.** (% of Standard)	-	
At 90% Compaction:		13
At 95% Compaction:		33

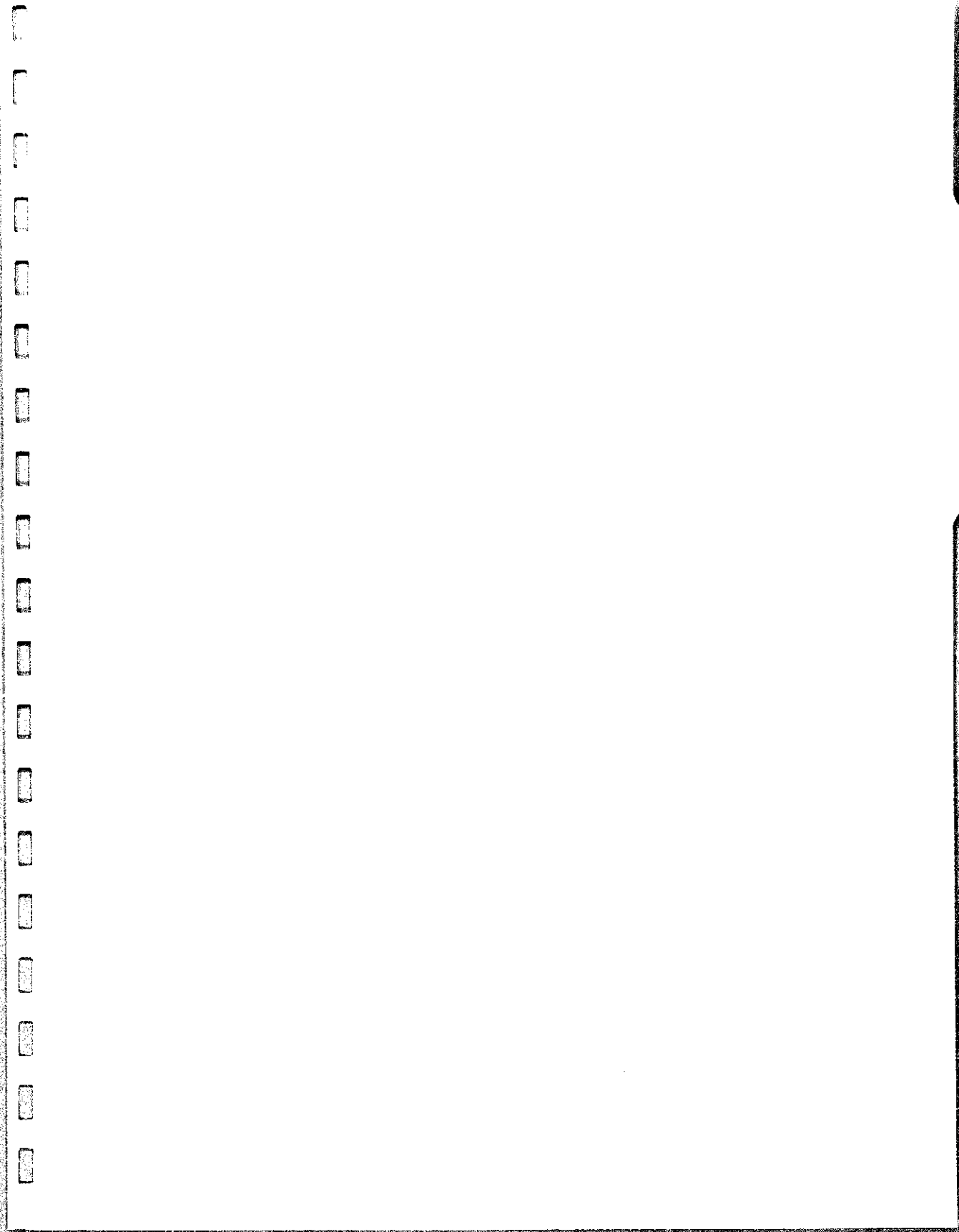
* TEST METHOD: ASTM Designation D1557-70 modified to use 3 layers.

** TEST METHOD: ASTM Designation D1883-73.

COMPACTION AND C.B.R. TEST DATA

BY PERMANENT AND ASSOCIATES

DATE



APPENDIX B
GEOLOGIC AND SEISMIC DATA

GENERAL

The geologic-seismic studies included a field reconnaissance on and adjacent to the site, as well as office analysis of published and unpublished literature pertinent to the study area. The Seismic Safety Element for the City of Newport Beach was included in our literature analysis.

GEOLOGIC CONDITIONS

GENERAL

The site is located on the northwestern portion of the San Joaquin Hills. The San Joaquin Hills form the southern boundary of the eastern portion of the Coastal Plain of Orange County. The terrace upon which the site is situated is separated from Newport Mesa by Upper Newport Bay.

The natural materials that directly underlie the site are composed of Upper Pleistocene terrace deposits. These terrace deposits have not been differentiated as to their origin, continental or marine (U.S.G.S. OM193 1973). It appears that these deposits directly overlie a thick sequence of tertiary sedimentary rocks.

The Newport-Inglewood fault zone is the most important structural feature in the site vicinity. The offshore projection of the North branch fault of the Newport-Inglewood system is located about two miles south of the site.

Plate G, Geologic Map, illustrates the site in relation to local geologic features including major fault zones.

GEOLOGIC MATERIALS

As disclosed by our exploration borings, the building area is underlain by terrace deposits. The upper 10 to 13 feet of terrace deposits encountered in the borings is composed of finer grained silty sand and clayey sand. The upper fine grained materials are underlain by sand extending to the 25-foot maximum depth explored. The upper Pleistocene terrace deposits are underlain by firm to very firm sandstone and siltstone of Tertiary age. These Tertiary sediments extend to a depth in excess of 9,400 feet as reported by the log of exploratory oil well, Morton and Sons "Irvine" 55-1 drilled in 1946.

GROUND WATER

Ground water data concerning the depth to the ground water surface are lacking in the immediate site area. However, several wells north and northwest of the site indicate that the ground water surface is approximately at sea level, U.S.G.S. datum, or at a depth of over 150 feet in the immediate site area. Ground water was not encountered in our exploration borings which were drilled to a maximum depth of 25 feet.

FAULTS

The numerous faults in Southern California include active, potentially active and inactive faults. The criteria for these major groups, as

established by the Association of Engineering Geologists (1973), are presented in Table 1. Table 2 presents a listing of active faults in Southern California with the distance in miles between the site and the nearest point on the fault. Table 3 provides a similar listing for potentially active faults. No faults or fault associated features were observed on or adjacent to the site during the field reconnaissance.

The closest faults that are considered to be active are those of the Newport-Inglewood fault system. This fault zone is the most important structural feature in the vicinity. The Newport-Inglewood fault system is divided into several branch faults which include the North, South, Bolsa-Fairview, Yorktown, Adams Avenue and Indianapolis faults in the Orange County area. These faults along with several branch faults in the Long Beach-Coastal Los Angeles area comprise the Newport-Inglewood fault zone.

Available information on the various local faults indicates that there has been no displacement of the alluvial deposits which are less than 10,000 years old in Santa Ana Gap. The North branch fault of the Newport-Inglewood system has displaced Upper Pleistocene (greater than 10,000 years) formations as much as 300 feet. Detailed studies by our firm in Bolsa Gap indicate that the Bolsa Aquifer (less than 10,000 years old) has been offset by the North branch fault.

TABLE 1

CRITERIA FOR CLASSIFICATION OF FAULTS WITH
REGARD TO SEISMIC ACTIVITY

(From Association of Engineering Geologists,
Geology and Earthquake Hazards, 1973)

A. Active Faults: (See Table 2)

These faults are those which have shown historical activity. This category includes such faults as the San Andreas, San Jacinto, and Newport-Inglewood.

B. Potentially Active Faults: (See Table 3)

These faults are those, based on available data, along which no known historical ground surface ruptures or earthquakes have occurred. These faults, however, show strong indications of geologically recent activity. Potentially active faults can be placed in two subgroups that are based on the boldness or sharpness of their topographic features and the estimates related to recency of activity. These subgroups are:

1. Subgroup One - High Potential

- a. Offsets affecting the Holocene deposits (age less than 10 - 11,000 years).
- b. A ground water barrier or anomaly occurring along the fault within the Holocene deposits.
- c. Earthquake epicenters (generally from small earthquakes occurring close to the fault).
- d. Strong geomorphic expression of fault origin features (e.g. faceted spurs, offset ridges or stream valleys or similar features, especially where Holocene topography appears to have been modified).

2. Subgroup Two - Low Potential

This subgroup is the same as 1-a, b, or d above, with the exception that the indications of fault movement can be only determined in Pleistocene deposits (less than 1,000,000 years ago).

C. Inactive Faults:

These faults are without recognized Holocene or Pleistocene offset or activity.

TABLE 2
 MAJOR NAMED FAULTS CONSIDERED TO BE ACTIVE (a)
 IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Date of Latest Major Activity	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Big Pine	1852	7.5 (c)	118	NW
Coyote Creek	1968	7.2 (d)	120	SE
Elsinore	1910	7.5 (c)	25	ENE
Garlock	(b)	7.75(c)	105	NW
Malibu Coast	1973	7.1 (d)	53	NW
Manix	1947	6.25(c)	125	NE
Newport-Inglewood	1933	7.0 (c)	2	SW
Norwalk	1929 (?)	6.9 (d)	16	N
San Andreas Zone	1857	8.25(c)	54	NNE
San Fernando Zone	1971	6.5 (c)	50	NW
San Jacinto Zone	1968	7.5 (c)	48	NE
Santa Susana	1971	6.5 (c)	61	NW
Superstition Hills	1951	7.0 (c)	125	SE
White Wolf	1952	7.75(c)	122	NW
Whittier	1929 (?)	7.1 (d)	21	N

- (a) Historic movement (1769 - present).
 (b) Intermittent creep.
 (c) Greensfelder, C.D.M.G. Map Sheet 23, 1974.
 (d) Housner (1970) Length-Magnitude relationship.

TABLE 3
 MAJOR NAMED FAULTS CONSIDERED TO BE POTENTIALLY ACTIVE (a)
 IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Calico-Newberry	7.25 (b)	106	NE
Charnock	6.6 (c)	28	NW
*Chino	6.8 (c)	23	NNE
Cucamonga	6.5 (b)	37	NNE
*Duarte	6.6 (c)	36	N
Helendale	7.5 (b)	80	NE
More Ranch	7.25 (b)	120	NW
Nacimiento (Rinconada)	7.5 (b)	130	NW
Northridge Hills	6.5 (b)	59	NW
Oakridge	7.5 (b)	70	NW
*Overland	6.2 (c)	40	NW
Palos Verdes	7.0 (b)	24	W
Pinto Mountain	7.5 (b)	90	NE
Raymond	6.8 (c)	38	NW
*San Gabriel	7.5 (c)	45	N
*San Jose	6.8 (c)	32	N
Santa Cruz Island	7.3 (c)	100	WNW
Santa Monica-Hollywood	6.8 (c)	44	NW
Santa Ynez	7.5 (b)	88	NW
Sierra Madre	7.5 (b)	38	N
Sierra Nevada	8.25 (b)	115	N
*Verdugo	6.6 (c)	42	NW

(a) Pleistocene deposits disrupted.

(b) Greensfelder, C.D.M.G. Map Sheet 23, 1974.

(c) Housner (1970) Length-Magnitude relationship.

* Low Potential per A.E.G. definition.

The North and South branch faults of the Newport-Inglewood fault system are located two to three miles to the southwest where they leave the land surface and continue offshore in a southeasterly direction.

The Pelican Hill fault lies about one mile northeast of the site at its nearest point. This fault, while having deformed Tertiary rocks, does not show any signs of activity within Recent or upper Pleistocene time.

Other active faults in the site vicinity include the Norwalk and Whittier faults at distances of 18 and 21 miles, respectively, from the site. The great San Andreas fault is located at a distance greater than 50 miles.

SEISMICITY

The seismicity of the region surrounding the site was determined from a computer search of a magnetic tape catalog of earthquakes. The catalog of earthquakes included those compiled by the California Institute of Technology for the period 1932 to 1974 and those larger earthquakes for the period 1812 to 1931 compiled by Richter and the U. S. National Oceanic and Atmospheric Administration (NOAA). Table 4 is a computer printout of the search (Table 4 is presented at the end of this Appendix). The search indicates that 235 earthquakes of Richter magnitude 4.0 and greater have occurred since 1932 and 5 earthquakes with magnitudes greater than 6.0 occurred in the 1812 to 1931 period within 100 kilometers of the site. The 1933 Long Beach earthquake, magnitude 6.3, was centered about 5 miles southwest of the site.

The information listed for each earthquake found in Table 4 includes date and time in Greenwich Civil Time (GCT), location of the epicenter in degrees, latitude and longitude, quality of epicentral determination (Q), depth in kilometers, and magnitude. Where a depth of 0.0 is given, the solution was based on an assumed 16-kilometer focal depth. The letter code for the quality factor is interpreted as follows:

A = specially investigated.

B = epicenter probably within 5 km, origin time to nearest second.

C = epicenter probably within 15 km, origin time to a few seconds.

D = epicenter not known within 15 km, rough location.

E = epicenter roughly located, accuracy less than "D".

P = preliminary.

The computer analysis was utilized to develop an earthquake recurrence curve which is presented on Plate H.

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TABLE 4
(Sheet 1 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 4.0 OR
GREATER WITHIN 100 KM OF THE SITE
(CAL TECH DATA 1932-1974)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1932	11	1	4	45	0	34.00 N	117.25 W	E	0.0	4.0
1933	3	11	1	54	8	33.62 N	117.97 W	A	0.0	6.3
1933	3	11	2	4	0	33.75 N	118.08 W	C	0.0	4.9
1933	3	11	2	5	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	9	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	2	10	0	33.75 N	118.05 W	C	0.0	4.6
1933	3	11	2	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	2	16	0	33.75 N	118.08 W	C	0.0	4.8
1933	3	11	2	17	0	33.60 N	118.00 W	E	0.0	4.5
1933	3	11	2	22	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	27	0	33.75 N	118.08 W	C	0.0	4.6
1933	4	11	2	30	0	33.75 N	118.08 W	C	0.0	5.1
1933	3	11	2	31	0	33.60 N	118.00 W	E	0.0	4.4
1933	3	11	2	52	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	57	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	2	58	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	59	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	3	5	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	3	9	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	3	11	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	3	23	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	3	36	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	39	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	47	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	4	36	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	4	39	0	33.75 N	118.08 W	C	0.0	4.9
1933	3	11	4	40	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	11	5	10	22	33.70 N	118.07 W	C	0.0	5.1
1933	3	11	5	13	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	11	5	15	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	5	18	4	33.57 N	117.93 W	C	0.0	5.2
1933	3	11	5	21	0	33.75 N	118.08 W	C	0.0	4.4
1933	4	11	5	24	0	33.75 N	118.08 W	C	0.0	4.2
1933	4	11	5	53	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	5	55	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	6	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	6	18	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	6	29	0	33.85 N	118.27 W	C	0.0	4.4
1933	3	11	6	35	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 2 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1933	3	11	6	58	3	33.68 N	118.05 W	C	0.0	5.5
1933	3	11	7	51	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	7	59	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	8	8	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	11	8	32	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	8	37	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	8	54	57	33.70 N	118.07 W	C	0.0	5.1
1933	3	11	9	10	0	33.75 N	118.06 W	C	0.0	5.1
1933	3	11	9	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	9	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	10	25	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	10	45	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	4	0	33.75 N	118.13 W	C	0.0	4.6
1933	3	11	11	29	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	38	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	41	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	11	47	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	12	50	0	33.68 N	118.05 W	C	0.0	4.4
1933	3	11	13	50	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	13	57	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	14	25	0	33.85 N	118.27 W	C	0.0	5.0
1933	3	11	14	47	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	14	57	0	33.88 N	118.32 W	C	0.0	4.9
1933	3	11	15	9	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	15	47	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	16	53	0	33.75 N	118.08 W	C	0.0	4.8
1933	3	11	14	44	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	19	56	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	22	0	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	31	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	22	40	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	23	5	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	0	27	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	12	0	34	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	4	43	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	5	46	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	12	6	1	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	6	16	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	12	7	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	8	35	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	15	2	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 3 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1933	3	12	16	51	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	17	38	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	12	18	25	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	21	28	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	23	54	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	13	3	43	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	4	32	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	13	6	17	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	13	13	18	28	33.75 N	118.08 W	C	0.0	5.3
1933	3	13	15	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	19	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	14	0	36	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	14	12	19	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	14	19	1	50	33.62 N	118.02 W	C	0.0	5.1
1933	3	14	22	42	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	2	8	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	4	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	5	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	15	11	13	32	33.62 N	118.02 W	C	0.0	4.9
1933	3	16	14	56	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	16	15	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	16	15	30	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	17	16	51	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	18	20	52	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	19	21	23	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	20	13	58	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	21	3	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	8	40	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	18	31	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	25	13	46	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	30	12	25	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	31	10	49	0	33.75 N	118.08 W	C	0.0	4.1
1933	4	1	6	42	0	33.75 N	118.08 W	C	0.0	4.2
1933	4	2	8	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	4	2	15	26	0	33.75 N	118.08 W	C	0.0	4.0
1933	5	16	20	58	55	33.75 N	118.17 W	C	0.0	4.0
1933	8	4	4	17	48	33.75 N	118.13 W	C	0.0	4.0
1933	10	2	9	10	18	33.78 N	118.13 W	A	0.0	5.4
1933	10	2	13	26	1	33.62 N	118.02 W	C	0.0	4.0
1933	10	25	7	0	46	33.95 N	118.13 W	C	0.0	4.3
1933	11	13	21	28	0	33.87 N	118.20 W	C	0.0	4.0
1933	11	20	10	32	0	33.78 N	118.13 W	B	0.0	4.0
1934	1	9	14	10	0	34.10 N	117.68 W	A	0.0	4.5
1934	1	18	2	14	0	34.10 N	117.68 W	A	0.0	4.0

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TABLE 4
(Sheet 4 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1934	1	20	21	17	0	33.62 N	118.12 W	B	0.0	4.5
1934	4	17	18	33	0	33.57 N	117.98 W	C	0.0	4.0
1934	10	17	9	38	0	33.53 N	118.40 W	B	0.0	4.0
1934	11	16	21	26	0	33.75 N	118.00 W	B	0.0	4.0
1935	6	7	16	33	0	33.27 N	117.02 W	B	0.0	4.0
1935	6	19	11	17	0	33.72 N	117.52 W	B	0.0	4.0
1935	7	13	10	54	17	34.20 N	117.90 W	A	0.0	4.7
1935	9	3	6	47	0	34.03 N	117.32 W	B	0.0	4.5
1935	11	4	3	55	0	33.50 N	118.92 W	B	0.0	4.5
1935	12	25	17	15	0	33.60 N	118.02 W	B	0.0	4.5
1936	2	23	22	20	43	34.13 N	117.34 W	A	10.0	4.5
1936	2	26	9	33	28	34.14 N	117.34 W	A	10.0	4.0
1936	7	29	14	22	53	33.45 N	118.90 W	C	10.0	4.0
1936	8	22	5	21	0	33.77 N	117.82 W	B	0.0	4.0
1937	1	15	18	35	47	33.56 N	118.06 W	H	10.0	4.0
1937	3	19	1	23	38	34.11 N	117.43 W	A	10.0	4.0
1937	7	7	11	12	0	33.57 N	117.98 W	B	0.0	4.0
1937	9	1	13	48	8	34.21 N	117.53 W	A	10.0	4.5
1937	9	1	16	35	34	34.18 N	117.55 W	A	10.0	4.5
1938	5	21	9	44	0	33.62 N	118.03 W	B	0.0	4.0
1938	5	31	6	34	55	33.70 N	117.51 W	B	10.0	5.5
1938	6	16	5	59	17	33.46 N	118.90 W	B	10.0	4.0
1938	7	5	18	6	56	33.68 N	117.55 W	A	10.0	4.5
1938	8	6	22	0	56	33.72 N	117.51 W	B	10.0	4.0
1938	8	31	3	18	14	33.76 N	118.25 W	A	10.0	4.5
1938	11	29	19	21	16	33.90 N	118.43 W	A	10.0	4.0
1938	12	7	3	38	0	34.00 N	118.42 W	B	0.0	4.0
1938	12	27	10	9	29	34.13 N	117.52 W	B	10.0	4.0
1939	4	3	2	50	45	34.04 N	117.23 W	A	10.0	4.0
1939	11	4	21	41	0	33.77 N	118.12 W	B	0.0	4.0
1939	11	7	18	52	8	34.00 N	117.23 W	A	0.0	4.7
1939	12	27	19	26	49	33.78 N	118.20 W	A	0.0	4.7
1940	1	13	7	49	7	33.78 N	118.13 W	B	0.0	4.0
1940	2	8	16	56	17	33.70 N	118.07 W	B	0.0	4.0
1940	2	11	19	24	10	33.98 N	118.30 W	B	0.0	4.0
1940	2	19	12	6	56	34.02 N	117.05 W	A	0.0	4.0
1940	4	18	16	43	44	34.03 N	117.35 W	A	0.0	4.4
1940	6	5	8	27	27	33.33 N	117.40 W	H	0.0	4.0
1940	7	20	4	1	13	33.70 N	118.07 W	B	0.0	4.0
1940	10	11	5	57	12	33.77 N	118.45 W	A	0.0	4.7
1940	10	12	0	24	0	33.78 N	118.42 W	B	0.0	4.0
1940	10	14	20	51	11	33.78 N	118.42 W	B	0.0	4.0
1940	11	1	7	25	3	33.78 N	118.42 W	B	0.0	4.0
1940	11	1	20	0	46	33.63 N	118.20 W	B	0.0	4.0

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TABLE 4
(Sheet 5 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1940	11	2	2	58	26	33.78 N	118.42 W	B	0.0	4.0
1941	1	30	1	34	47	33.97 N	118.05 W	A	0.0	4.1
1941	3	22	8	22	40	33.52 N	118.10 W	B	0.0	4.0
1941	3	25	23	43	41	34.22 N	117.47 W	B	0.0	4.0
1941	4	11	1	20	24	33.95 N	117.58 W	B	0.0	4.9
1941	10	22	6	57	19	33.82 N	118.22 W	A	0.0	5.4
1941	11	14	8	41	36	33.78 N	118.25 W	A	0.0	4.0
1942	1	24	21	41	48	32.80 N	118.83 W	B	0.0	4.0
1942	4	16	7	28	33	33.37 N	118.15 W	C	0.0	4.0
1943	2	23	9	21	12	32.85 N	117.48 W	C	0.0	4.0
1943	10	24	0	29	21	33.93 N	117.37 W	C	0.0	4.5
1944	6	19	0	3	33	33.87 N	118.22 W	B	0.0	4.4
1944	5	19	3	6	7	33.87 N	118.22 W	C	0.0	4.1
1946	2	24	6	12	52	34.40 N	117.80 W	C	0.0	4.7
1948	3	1	8	13	13	34.17 N	117.53 W	B	0.0	4.0
1948	10	3	2	40	28	34.18 N	117.58 W	A	0.4	4.1
1950	1	11	21	41	35	33.94 N	118.20 W	A	11.9	4.3
1951	9	22	8	22	39	34.12 N	117.34 W	A	0.0	5.9
1951	12	26	0	46	54	32.82 N	118.35 W	B	0.0	4.7
1952	2	13	15	13	37	32.87 N	118.25 W	C	0.0	4.5
1952	2	17	12	36	58	34.00 N	117.27 W	A	16.0	4.1
1954	10	26	16	22	26	33.73 N	117.47 W	B	0.0	4.0
1955	5	15	17	3	26	34.12 N	117.40 W	A	7.6	4.7
1956	1	3	0	25	49	33.72 N	117.50 W	B	13.7	4.0
1959	6	27	16	22	11	33.97 N	116.88 W	A	13.8	4.1
1960	6	24	20	0	48	34.12 N	117.47 W	A	12.0	4.1
1961	10	4	2	21	32	33.85 N	117.75 W	B	4.3	4.1
1961	10	20	19	49	51	33.85 N	117.99 W	B	4.6	4.3
1961	10	20	20	7	14	33.66 N	117.98 W	B	5.1	4.0
1961	10	20	21	42	41	33.67 N	117.98 W	B	7.2	4.0
1961	10	20	22	35	34	33.67 N	118.01 W	B	5.6	4.1
1961	11	20	8	53	35	33.68 N	117.99 W	B	4.4	4.0
1962	4	27	9	12	32	33.74 N	117.19 W	B	5.7	4.1
1963	9	14	3	51	16	33.54 N	118.34 W	B	2.2	4.2
1963	9	23	14	41	53	33.71 N	118.92 W	B	16.5	5.0
1964	8	30	22	57	37	34.27 N	118.44 W	B	15.4	4.0
1965	1	1	8	4	18	34.14 N	117.92 W	B	5.9	4.4
1965	4	15	20	8	33	34.13 N	117.43 W	B	5.5	4.5
1965	1	8	7	37	30	33.63 N	118.47 W	B	11.4	4.0
1967	1	8	7	38	5	33.65 N	118.41 W	C	17.7	4.0
1967	1	8	7	38	5	33.65 N	118.41 W	C	10.0	4.1
1967	6	15	4	53	6	34.00 N	117.97 W	B	8.8	4.4
1969	5	5	16	2	10	34.30 N	117.87 W	B	6.5	4.5
1969	10	27	13	16	2	33.55 N	117.81 W	B	8.0	4.1
1970	9	12	14	10	11	34.27 N	117.92 W	A	8.0	4.1

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TABLE 4
(Sheet 6 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1970	9	12	14	30	53	34.27 N	117.54 W	A	8.0	5.4
1970	9	13	4	47	49	34.28 N	117.55 W	A	8.0	4.4
1971	2	9	14	10	21	34.36 N	118.31 W	B	5.0	4.7
1971	2	9	14	16	13	34.34 N	118.33 W	C	11.1	4.1
1971	2	9	14	19	50	34.36 N	118.41 W	B	11.8	4.0
1971	2	9	14	39	18	34.39 N	118.35 W	C	-1.6	4.0
1971	2	9	14	43	47	34.31 N	118.45 W	B	5.2	5.2
1971	2	9	15	58	21	34.33 N	118.33 W	B	14.2	4.0
1971	2	10	3	12	12	34.37 N	118.30 W	B	0.8	4.0
1971	2	10	5	16	36	34.41 N	118.33 W	A	4.7	4.3
1971	2	10	17	38	55	34.40 N	118.37 W	A	6.2	4.2
1971	3	7	1	33	41	34.35 N	118.46 W	A	3.3	4.5
1971	3	25	22	54	10	34.36 N	118.47 W	A	4.6	4.2
1971	3	30	8	54	43	34.30 N	118.46 W	A	2.6	4.1
1971	3	31	14	52	23	34.29 N	118.51 W	A	2.1	4.6
1971	4	2	5	40	25	34.28 N	118.53 W	A	3.0	4.0
1971	4	15	11	14	32	34.26 N	118.58 W	B	4.2	4.2
1971	4	25	14	48	7	34.37 N	118.31 W	B	-2.0	4.0
1971	6	21	16	1	8	34.27 N	118.53 W	B	4.1	4.0
1971	6	22	10	41	19	33.75 N	117.43 W	B	8.0	4.2
1974	3	9	0	54	32	34.38 N	118.42 W	B	8.0	4.6
1974	9	21	10	37	0	33.92 N	117.05 W	P	0.0	4.2

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TABLE 4
(Sheet 7 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 1 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	4.0 - 8.5	
TEMPORAL LIMITS	1932 - 1974	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	43	
NUMBER OF EARTHQUAKES IN FILE	17795	
NUMBER OF EARTHQUAKES IN AREA	236	

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***** LEROY CRANDALL AND ASSOCIATES *****
LCS ANGELES

TABLE 4
(Sheet 8 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 6.0 OR
GREATER WITHIN 100 KM OF THE SITE
(RICHTER DATA 1906-1931)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1907	9	20	1	54	0	34.20 N	117.10 W	D	0.0	6.0
1910	5	15	15	47	0	33.70 N	117.40 W	D	0.0	6.0
1918	4	21	22	32	25	33.75 N	117.00 W	D	0.0	6.3
1923	7	23	7	30	26	34.00 N	117.25 W	D	0.0	6.3

TABLE 4
(Sheet 9 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 2 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N 117.87 W
DISTANCE PER DEGREE	110.9 KM-N 92.8 KM-W
MAGNITUDE LIMITS	6.0 - 8.5
TEMPORAL LIMITS	1906 - 1931
SEARCH RADIUS (KM)	100
NUMBER OF YEARS OF DATA	26
NUMBER OF EARTHQUAKES IN FILE	35
NUMBER OF EARTHQUAKES IN AREA	4

***** LEROY CRANDALL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 10 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 7.0 OR
GREATER WITHIN 100 KM OF THE SITE
(NOAA/CDMG DATA 1812-1905)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	O	DEPTH	MAGNITUDE
1890	2	9	4	6	0	34.00 N	117.50 W	D	0.0	7.0

TABLE 4
(Sheet 11 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 3 *****

SITE: SAN CLENENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	7.0 - 6.5	
TEMPORAL LIMITS	1812 - 1905	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	94	
NUMBER OF EARTHQUAKES IN FILE	9	
NUMBER OF EARTHQUAKES IN AREA	1	

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***** LEBOY CRANDALL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 12 of 14)

***** COMPUTATION OF RECURRENCE CURVE *****

LOG N = A - B M

BIN	MAGNITUDE	RANGE	NO/YR (N)
1	4.25	4.00 - 4.50	0.393E 01
2	4.75	4.50 - 5.00	0.112E 01
3	5.25	5.00 - 5.50	0.349E 00
4	5.75	5.50 - 6.00	0.698E-01
5	6.25	6.00 - 6.50	0.290E-01
6	6.75	6.50 - 7.00	0.145E-01
7	7.25	7.00 - 7.50	0.613E-02 NU
8	7.75	7.50 - 8.00	0.0
9	8.25	8.00 - 8.50	0.0

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A = 4.814 B = 1.0070 SIGMA = 0.123E 00

***** LEROY CRANDAL AND ASSOCIATES *****

L O S A N G E L E S

TABLE 4
(Sheet 13 of 14)

***** COMPUTATION OF DESIGN MAGNITUDE *****
CONSTANT AREA

TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN MAGNITUDE				
					DESIGN LIFE (YEARS)				
	25	50	75	100	25	50	75	100	
0.01 ..	2487	4974	7462	9949	7.93	8.13	8.23	8.26	
0.05 ..	487	974	1462	1949	7.33	7.60	7.75	7.85	
0.10 ..	237	474	711	949	7.04	7.32	7.48	7.59	
0.20 ..	112	224	336	448	6.72	7.01	7.18	7.30	
0.30 ..	70	140	210	280	6.52	6.82	6.99	7.11	
0.50 ..	36	72	108	144	6.24	6.53	6.71	6.83	
0.70 ..	20	41	62	83	6.00	6.30	6.47	6.59	
0.90 ..	10	21	32	43	5.72	6.02	6.19	6.32	
MU = 4.98				BETA = 2.319					

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***** LEROY CRANFALL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 14 of 14)

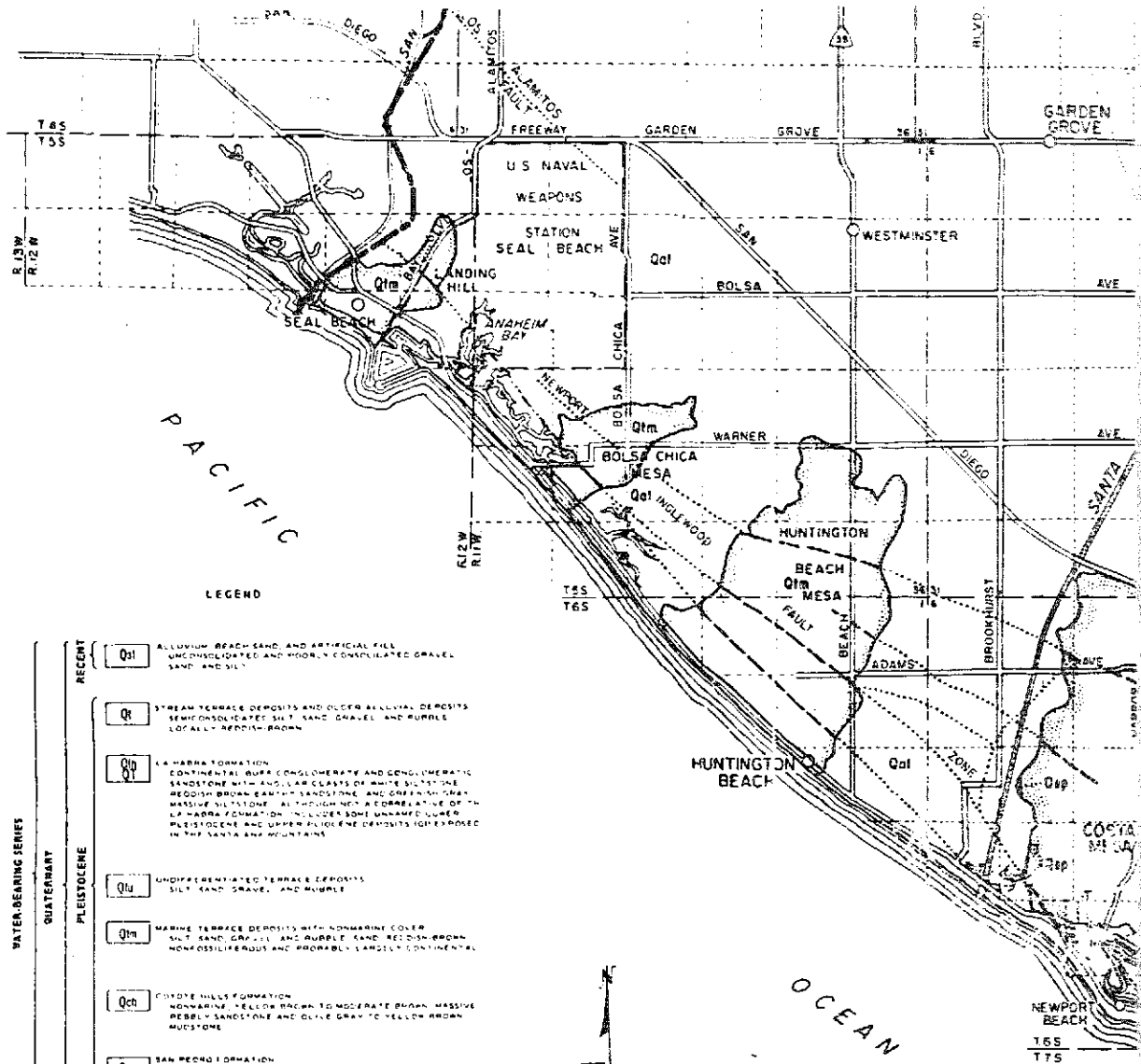
***** COMPUTATION OF DESIGN MAGNITUDE *****
FOR 0.1 G ROCK ACCELERATION

TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN MAGNITUDE				
	DESIGN LIFE (YEARS)				25	50	75	100	
	25	50	75	100					
0.01 ..	2487	4974	7462	9949	7.99	8.20	8.29	8.33	
0.05 ..	487	974	1462	1949	7.17	7.56	7.77	7.69	
0.10 ..	237	474	711	949	6.70	7.15	7.39	7.55	
0.20 ..	112	224	336	448	6.19	6.66	6.93	7.11	
0.30 ..	70	140	210	280	5.85	6.34	6.62	6.81	
0.50 ..	36	72	108	144	5.38	5.87	6.16	6.36	
0.70 ..	20	41	62	83	4.98	5.48	5.77	5.97	
0.90 ..	10	21	32	43	4.50	5.01	5.30	5.51	
MU = 0.18				BETA = 1.363					

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***** LEROY CRANDALL AND ASSOCIATES *****
LOS ANGELES



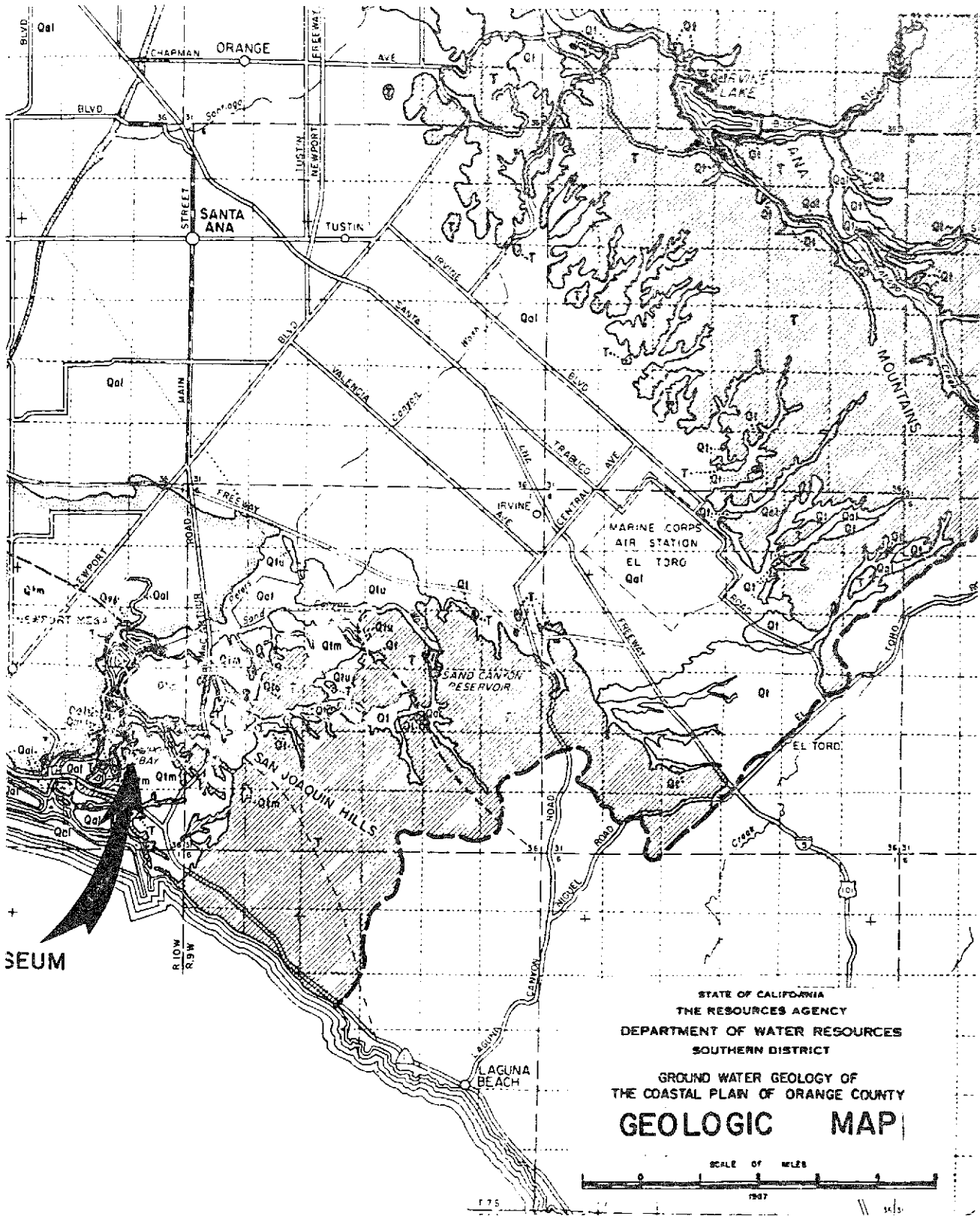
LEGEND

WATER-BEARING SERIES	QUATERNARY	PLEISTOCENE	Qal	ALLUVIUM (BEACH SAND AND ARTIFICIAL FILL UNCONSOLIDATED AND MODERN CONSOLIDATED GRAVEL SAND AND SILT)		
			Qt	STREAM TERRACE DEPOSITS AND OCEAN ALLUVIAL DEPOSITS SEMI-CONSOLIDATED SILT SAND GRAVEL AND MURBLE LOCALLY REDDISH-BROWN		
			Qp	LA HABRA FORMATION CONTINENTAL BUFF CONGLOMERATE AND CONGLOMERATIC SANDSTONE WITH ANGULAR CLASTS OF WHITE SILTSTONE REDDISH-BROWN CLAY SANDSTONE AND GREENISH GRAY MASSIVE SILTSTONE ALTHOUGH NOT A CORRELATIVE OF THE LA HABRA FORMATION IT INCLUDES SOME UNNAMED LOWER PLISTOCENE AND UPPER PLEISTOCENE DEPOSITS (EXPOSED IN THE SANTA ANA MOUNTAINS)		
			Qu	UNDIFFERENTIATED TERRACE DEPOSITS SILT SAND GRAVEL AND MURBLE		
			Qm	MARINE TERRACE DEPOSITS WITH NONMARINE COVER SILT SAND GRAVEL AND MURBLE SAND REDDISH-BROWN NONFOSSILIFEROUS AND PROBABLY LANDSIDE CONTINENTAL		
			Qch	CHRYSE HILLS FORMATION NONMARINE YELLOW BROWN TO MODERATE BROWN MASSIVE PERLITE SANDSTONE AND OLIVE GRAY TO YELLOW BROWN MUDSTONE		
	Qsd	SAN PEDRO FORMATION MARINE SAND GRAVEL SILT AND CLAY INCLUDES THIN POINT SILT AND LIMONITE WEATHERING AT RARE LOCAL MARINE MOLLUSKS AND CLAY TUBES BODIES OF SAND AND GRAVEL YIELD WATER RAPIDLY TO MANY WELLS				
	NONWATER-BEARING SERIES	PRE-TERTIARY	TERTIARY	PLIOCENE	Tlb	UPPER TERNATEO GROUP BUFF PERLITE CONGLOMERATE YELLOW CONGLOMERATIC SANDSTONE GREENISH GRAY MICACEOUS SILTSTONE INTERBEDDED WITH MURBLE CONGLOMERATE BEDS LOCALLY RICH IN MARINE MOLLUSKS
					(Hatched pattern)	CONSOLIDATED BEDDED STRATA ROCKS SANDSTONE SHALE AND SILTSTONE INCLUDES SOME VOLCANIC ROCKS AND RHYOLITE (PRE-TERTIARY)



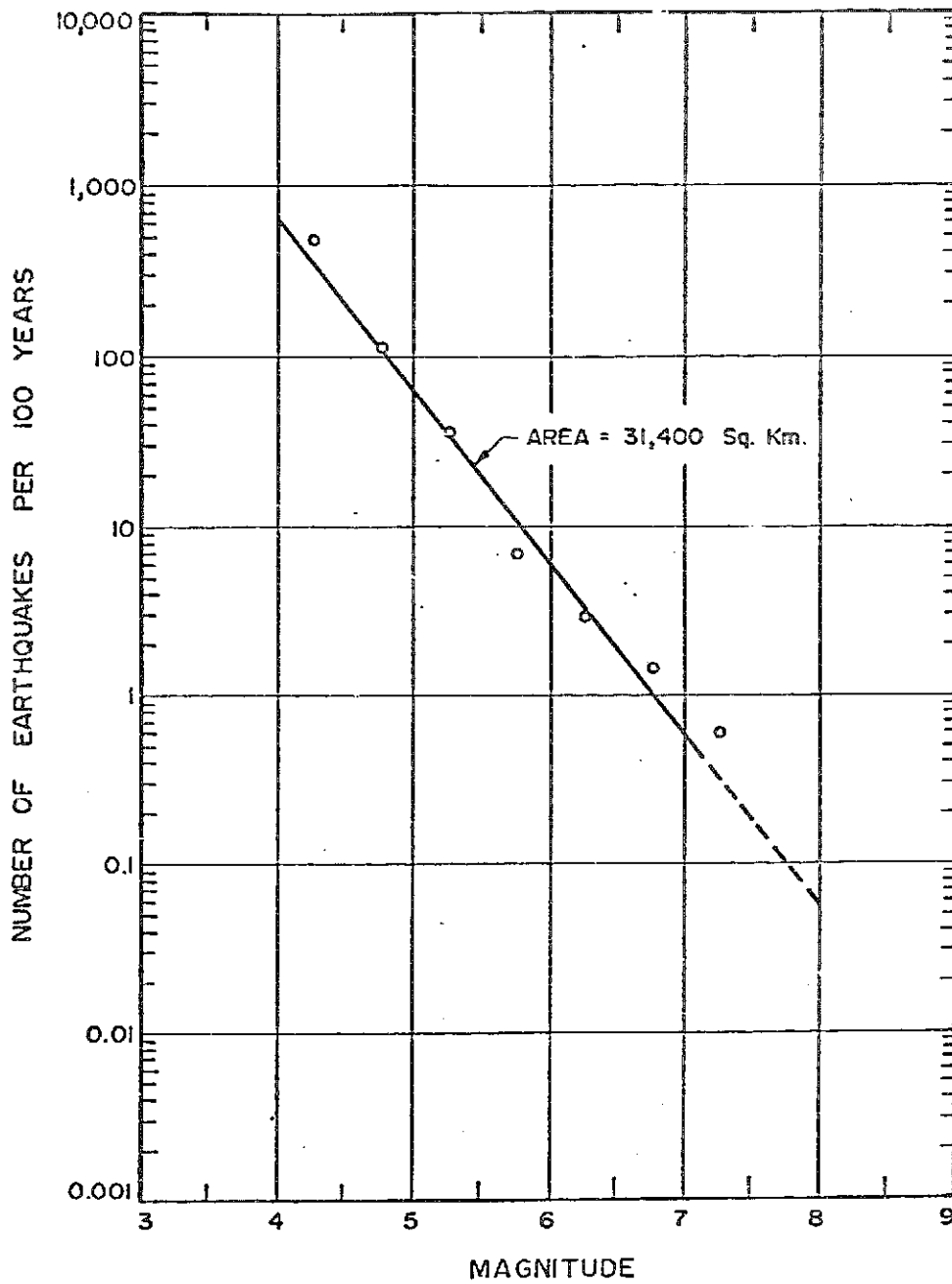
PROPOSED ART MUSEUM

- FAULT DASHED WHERE APPROXIMATELY LOCATED DOTTED WHERE CONTAINED OR INFERRED
- CONTACT DASHED WHERE UNCERTAIN AND QUESTIONABLE
- BOUNDARY OF STUDY AREA



JOB NO. AE-76171

LEROY CRANDALL AND ASSOCIATES
PLATE G



RECURRENCE CURVE
 1812 - 1974
 241 EVENTS $M \geq 4.0$
 100 Km SEARCH RADIUS

PLATE H



LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

**REVISED REPORT OF
GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

**850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA**

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

July 29, 1996

Project 70131-6-0337.0001



LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

July 29, 1996

Mr. Michael Botwinick
Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California 92660-6399

Subject: **Revised Geotechnical Consultation
Proposed Irvine Pavilion Addition
Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California
Law/Crandall Project 70131-6-0337.0001**

Dear Mr. Botwinick:

We are pleased to submit this revised report presenting foundation design recommendations for the proposed Irvine Pavilion Addition at the subject site. This report supersedes our report dated June 19, 1996. Our investigation was performed in general accordance with our proposal dated February 26, 1996, as authorized by you on June 13, 1996.

It was a pleasure to be of professional service to you on this project. Please call if you have questions or need additional information.

Sincerely,

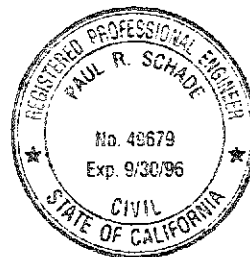
LAW/CRANDALL

Paul R. Schade
Senior Engineer

Barry J. Meyer
Principal Engineer

enggeo\96-proj\03371R02.DOC/PS:bef
(3 copies submitted)

cc: (1) McLarand Vasquez Partners, Inc.
Attn: Mr. Bill Koster
(4) KPFF Consulting Engineers
Attn: Mr. Mike Bertrando



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**REVISED REPORT OF GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

**850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA**

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

Law/Crandall

Los Angeles, California

July 29, 1996

Project 70131-6-0337.0001

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1.0 SCOPE

This revised report provides foundation design information for the proposed Irvine Pavilion Addition. This report supersedes our report dated June 19, 1996. We performed a geotechnical investigation for the museum and submitted the results in a report dated September 21, 1976 (our Job No. AE-76171). The recommendations for the currently planned project were developed using geotechnical information from our previous investigation. Additional fieldwork and laboratory testing was not performed.

This investigation was authorized to provide recommendations for foundation design, floor slab support, and grading for the addition. The scope of this investigation did not include geologic or seismic studies for the site. Accordingly, our conclusions and recommendations are for static loading conditions only; however, this does not imply that there is a geologic or seismic hazard affecting the site. Also, the assessment of general site environmental conditions for the presence of contaminants in the soils and groundwater of the site was beyond the scope of this investigation.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for Newport Harbor Art Museum and their design consultants to be used solely in the design of the proposed addition. The report has not been prepared for use by other parties, and may not contain sufficient information for purpose of other parties or other uses.

2.0 PROJECT DESCRIPTION

It is planned to construct an addition called the Irvine Pavilion at the northwest corner of the existing museum building. The open air pavilion will be supported on four corner posts. The finished floor elevation will be at about the existing grade. Only minor grading and site work are planned. The existing museum building is supported on spread footings and has one level below grade.

3.0 PREVIOUS EXPLORATIONS AND LABORATORY TESTS

The soil conditions beneath the site were previously explored by drilling three borings to depths of 14 to 25 feet below the existing grade using bucket-auger drilling equipment. The locations of the borings are shown in Plate 1, Plot Plan in our prior report. Laboratory tests were performed on selected samples obtained from the borings to aid in the classification of the soils and to determine the pertinent engineering properties of the foundation soils. Details of the exploration and laboratory testing programs and test results are presented in the Appendix of our prior report. The results of the prior borings and laboratory tests are applicable to the proposed pavilion addition foundation design.

4.0 SOIL CONDITIONS

Fill soils were not encountered in the prior borings drilled before the construction of the museum building. Some fill was placed during the development of the site; however, the pavilion addition is planned for an area that was in cut. The natural soils consist of silty sand, clayey sand, and sand and are medium dense to dense. Groundwater was not encountered within the 25-foot depth explored and is not anticipated to be shallower than 25 feet at the present time.

5.0 RECOMMENDATIONS

The natural soils at the site are generally firm and dense and are suitable for support of the planned addition. The structure can be supported on either drilled cast-in-place concrete piles or shallow spread footings as planned. If the recommendations on grading are followed, the floor slab can be supported on grade.

5.1 FOUNDATIONS

We understand it is planned to support the addition on drilled cast-in-place piles with an alternate foundation system of shallow spread footings. The recommendations for design of spread footings

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presented in our September 21, 1996 report for the museum building are applicable. For convenience, we have included the recommendations in this letter.

Spread Footings

Bearing Value

Spread footings carried at least 1 foot into the firm undisturbed natural soils can be designed to impose a net dead-plus-live load pressure of 4,000 pounds per square foot. A one-third increase can be used for wind or seismic loads. Footings should extend at least 2 feet below the adjacent final grade. The excavations should be deepened as necessary to extend into satisfactory soils. The recommended bearing value is a net value, and the weight of concrete in the footings can be taken as 50 pounds per cubic foot; the weight of soil backfill can be neglected when determining the downward loads.

Settlement

We estimate the settlement of the addition, supported on spread footings in the manner recommended, will be less than 1/2 inch. Differential settlement between adjacent columns is expected to be about 1/4 inch or less.

Lateral Resistance

Lateral loads can be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.5 can be used between the addition footings and the floor slab and the supporting soils. The passive resistance of natural soils or properly compacted fill soils can be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. A one-third increase in the passive value can be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils can be combined without reduction in determining the total lateral resistance.

Drilled Piles

Pile Capacity

The downward capacities of 24- and 39-inch-diameter drilled cast-in-place concrete piles are presented as a function of penetration below pile cap in the following table.

Downward Drilled Pile Capacities (in kips)		
Penetration (feet)	24-inch-diameter Piles	39-inch-diameter Piles
10	22	33
15	40	65
20	65	105
25	100	160
30	135	220

The upward capacities may be taken as one-half of the downward capacities. A one-third increase in the pile capacities may be used for wind or seismic loads. Where the piles are adjacent to existing underground structures, the penetration depth of the piles above a 1:1 plane drawn upward from the adjacent bottoms of the structures should be ignored. Dead plus live load capacities are shown; a one-third increase may be used for wind or seismic loads. The capacities presented are based on the strength of the soils; the compressive and tensile strengths of the pile sections should be checked to verify the structural capacity of the piles.

Piles should be spaced at least 2½ diameters on centers. If the piles are so spaced, no reduction in the capacities of the piles due to group action need be considered in design.

Lateral Loads

The resistance of the piles and the passive resistance of the soils against the pile cap may be used to resist lateral loads. The soils adjacent to concrete piles that are 24 and 39 inches in diameter and at least 10 feet long can resist horizontal loads of 12 and 19 kips, respectively. These resistances

July 29, 1996

assume free-head piles with an allowable deflection of 1/4 inch. The lateral resistance of other sizes of piles may be assumed to be proportional to the pile diameter.

Adjacent to the existing underground structures, the lateral capacities of the piles will apply for loads applied to the tops of the piles either away from or parallel to the walls of the underground structures. Where the clear distance from the piles to the walls of the underground structures is less than seven pile diameters, the lateral loads applied to the tops of the piles towards the walls should not exceed the capabilities of the walls to resist the loads.

The passive resistance of the natural soils or properly compacted fill against pile caps may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. The resistance of the piles and the passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

Installation

Some caving and raveling within the sand deposits may occur, and precautions, such as decreasing the drilling speed, are expected to be necessary during the installation of the piles to minimize caving and raveling. Piles spaced less than five diameters on centers should be drilled and filled alternately, with the concrete permitted to set at least eight hours before drilling any adjacent holes. All drilled pile excavations should be observed by personnel of our firm.

Care should be taken to achieve a relatively clean bottom of the pile excavation. The contractor should utilize a clean-out bucket after achieving the required excavation depth to remove any loose material. The bottom of the excavations should be visually observed by personnel from our firm prior to placing concrete; however, the bottom of the excavations do not have to be probed or hand cleaned.

Pile excavations should be filled with concrete as soon after drilling and inspection as possible; the holes should not be left open overnight. The concrete should be placed with special equipment so

that the concrete is not allowed to fall freely more than 5 feet and to prevent concrete from striking the walls of the excavations.

Settlement

The settlement of the proposed addition, supported on drilled piles in the manner recommended, will be less than ¼ inch.

5.2 FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended in the following section on grading, the building floor slab can be supported on grade. Construction activities and exposure to the environment can cause deterioration of the prepared subgrade. Therefore, we recommend our that our field representative observe the condition of the final subgrade soils immediately prior to slab-on-grade construction, and, if necessary, perform further density and moisture content tests to determine the suitability of the final prepared subgrade.

If vinyl or other moisture-sensitive floor covering is planned, we recommend that the floor slab in those areas be underlain by a capillary break consisting of a vapor-retarding membrane over a 4-inch-thick layer of gravel. A 2-inch-thick layer of sand should be placed between the gravel and the membrane to decrease the possibility of damage to the membrane. A 2-inch-thick layer of sand should also be placed on top of the membrane to reduce slab curling. We suggest the following gradation for the gravel:

Sieve Size	Percent Passing
¾"	90-100
No. 4	0-10
No. 100	0-3

A low-slump concrete should be used to minimize possible curling of the slab. Care should be taken during the placement of the concrete to maintain a relatively level sand surface and prevent

displacement of the sand on top of the membrane. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

5.3 GRADING

The addition is planned for an area that was in cut during the prior site development and fill soils are not anticipated. Any existing fill soils encountered should be excavated and replaced as properly compacted fill within the building area. All required fill should be uniformly well compacted and observed and tested during placement. The on-site soils can be used in any required fill.

Site Preparation

After the site is cleared and any existing fill soils are excavated as recommended, the exposed natural soils should be carefully observed for the removal of all unsuitable deposits. Next, the exposed soils should be scarified to a depth of 6 inches, brought to near-optimum moisture content, and rolled with heavy compaction equipment. At least the upper 6 inches of the exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction.

Excavations and Temporary Slopes

Where excavations are deeper than about 4 feet, the sides of the excavations should be sloped back at 1:1 or shored for safety. Unshored excavations should not extend below a plane drawn at 1½:1 (horizontal to vertical) extending downward from adjacent existing footings. We would be pleased to present data for design of shoring if required.

Excavations should be observed by personnel of our firm so that any necessary modifications based on variations in the soil conditions can be made. All applicable safety requirements and regulations, including OSHA regulations, should be met.

Compaction

Any required fill should be placed in loose lifts not more than 8 inches thick and compacted. The fill should be compacted to at least 90% of the maximum density obtainable by the ASTM Designation D1557-91 method of compaction. The moisture content of the on-site soils at the time of compaction should vary no more than 2% below or above optimum moisture content.

Backfill

All required backfill should be mechanically compacted in layers; flooding should not be permitted. Proper compaction of backfill will be necessary to minimize settlement of the backfill and to minimize settlement of overlying slabs and paving. Backfill should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction. The exterior grades should be sloped to drain away from the foundations to prevent ponding of water.

Material for Fill

The on-site soils, less any debris or organic matter, can be used in required fills. Cobbles larger than 4 inches in diameter should not be used in the fill. Although not anticipated, any required import material should consist of relatively non-expansive soils with an expansion index of less than 35. The imported materials should contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. All proposed import materials should be approved by our personnel prior to being placed at the site.

5.4 GEOTECHNICAL OBSERVATION

The reworking of the upper soils and the compaction of all required fill should be observed and tested during placement by a representative of our firm. This representative should perform at least the following duties:

- Observe the clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade. The representative should also observe proofrolling and delineation of areas requiring overexcavation.
- Evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing where necessary.
- Test backfill for field density and compaction to determine the percentage of compaction achieved during backfill placement.
- Observe foundation materials to confirm that suitable bearing materials are present at the design foundation depths.

The governmental agencies having jurisdiction over the project should be notified prior to commencement of grading so that the necessary grading permits can be obtained and arrangements can be made for required inspection(s). The contractor should be familiar with the inspection requirements of the reviewing agencies.

6.0 BASIS FOR RECOMMENDATIONS

The recommendations provided in this report are based upon our understanding of the described project information and on our interpretation of the data collected during our previous subsurface explorations. We have made our recommendations based upon experience with similar subsurface conditions under similar loading conditions. The recommendations apply to the specific project discussed in this report; therefore, any change in the structure configuration, loads, location, or the site grades should be provided to us so that we can review our conclusions and recommendations and make any necessary modifications.

The recommendations provided in this report are also based upon the assumption that the necessary geotechnical observations and testing during construction will be performed by representatives of our firm. The field observation services are considered a continuation of the geotechnical investigation and essential to verify that the actual soil conditions are as expected.

July 29, 1996

This also provides for the procedure whereby the client can be advised of unexpected or changed conditions that would require modifications of our original recommendations. If another firm is retained for the geotechnical observation services, our professional responsibility and liability would be limited to the extent that we would not be the geotechnical engineer of record.



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LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

**REPORT OF GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

June 18, 1996

Project 70131-6-0337-0001



LAW/CRANDALL
A DIVISION OF LAW ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

June 18, 1996

Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California 92660-6399

Attention: Mr. Michael Botwinick

Subject: **Geotechnical Consultation**
Proposed Irvine Pavilion Addition
Newport Harbor Art Museum
850 San Clemente Drive
Newport Beach, California
Law/Crandall Project 70131-6-0337-0001

Dear Mr. Botwinick:

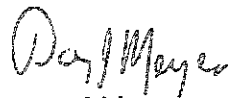
We are pleased to submit this report presenting foundation design recommendations for the proposed Irvine Pavilion Addition at the subject site. Our investigation was performed in general accordance with our proposal dated February 26, 1996, as authorized by you on June 13, 1996.

It was a pleasure to be of professional service to you on this project. Please call if you have questions or need additional information.

Sincerely,

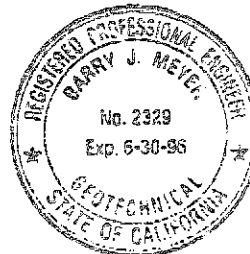
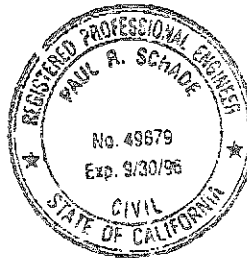
LAW/CRANDALL


Paul R. Schade
Senior Engineer


Barry J. Meyer
Principal Engineer

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(3 copies submitted)

cc: (4) McLarand Vasquez Partners, i.c.
Attn: Mr. Bill Koster
(1) KPFF Consulting Engineers
Attn: Mr. Roger Young



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(213) 692-5300 • FAX (213) 721-9700

**REPORT OF GEOTECHNICAL CONSULTATION
PROPOSED IRVINE PAVILION ADDITION**

**850 SAN CLEMENTE DRIVE
NEWPORT BEACH, CALIFORNIA**

Prepared for:

NEWPORT HARBOR ART MUSEUM

Newport Beach, California

Law/Crandall

Los Angeles, California

June 18, 1996

Project 70131-6-0337-0001

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1.0 SCOPE

This report provides foundation design information for the proposed Irvine Pavilion Addition. We performed a geotechnical investigation for the museum and submitted the results in a report dated September 21, 1976 (our Job No. AE-76171). The recommendations for the currently planned project were developed using geotechnical information from our previous investigation. Additional fieldwork and laboratory testing was not performed.

This investigation was authorized to provide recommendations for foundation design, floor slab support, and grading for the addition. The scope of this investigation did not include geologic or seismic studies for the site. Accordingly, our conclusions and recommendations are for static loading conditions only; however, this does not imply that there is a geologic or seismic hazard affecting the site. Also, the assessment of general site environmental conditions for the presence of contaminants in the soils and groundwater of the site was beyond the scope of this investigation.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for Newport Harbor Art Museum and their design consultants to be used solely in the design of the proposed addition. The report has not been prepared for use by other parties, and may not contain sufficient information for purpose of other parties or other uses.

2.0 PROJECT DESCRIPTION

It is planned to construct an addition called the Irvine Pavilion at the northwest corner of the existing museum building. The open air pavilion will be supported on four corner posts. The finished floor elevation will be at about the existing grade. Only minor grading and site work are planned. The existing museum building is supported on spread footings and has one level below grade.

3.0 PREVIOUS EXPLORATIONS AND LABORATORY TESTS

The soil conditions beneath the site were previously explored by drilling three borings to depths of 14 to 25 feet below the existing grade using bucket-auger drilling equipment. The locations of the borings are shown on Plate 1, Plot Plan in our prior report. Laboratory tests were performed on selected samples obtained from the borings to aid in the classification of the soils and to determine the pertinent engineering properties of the foundation soils. Details of the exploration and laboratory testing programs and test results are presented in the Appendix of our prior report. The results of the prior borings and laboratory tests are applicable to the proposed pavilion addition foundation design.

4.0 SOIL CONDITIONS

Fill soils were not encountered in the prior borings drilled before the construction of the museum building. Some fill was placed during the development of the site; however, the pavilion addition is planned for an area that was in cut. The natural soils consist of silty sand, clayey sand, and sand and are medium dense to dense. Groundwater was not encountered within the 25-foot depth explored and is not anticipated to be shallower than 25 feet at the present time.

5.0 RECOMMENDATIONS

The natural soils at the site are generally firm and dense and are suitable for support of the planned addition. The structure can be supported on drilled cast-in-place concrete piles as planned. If the recommendations on grading are followed, the floor slab can be supported on grade.

5.1 FOUNDATIONS

Pile Capacity

The downward capacities of 18- and 24-inch-diameter drilled cast-in-place concrete piles are presented as a function of penetration below pile cap in the following table, Downward Drilled Pile Capacities. All piles should be at least 20 feet long.

DOWNWARD DRILLED PILE CAPACITIES (in kips)		
Penetration (feet)	18-inch-diameter Piles	24-inch-diameter Piles
20	28	36
25	42	56
30	58	78
35	77	103
40	99	132

The upward capacities may be taken as one-half of the downward capacities. A one-third increase in the pile capacities may be used for wind or seismic loads. Where the piles are adjacent to existing underground structures, the penetration depth of the piles above a 1:1 plane drawn up and from the adjacent bottoms of the structures should be ignored. Dead plus live load capacities are shown; a one-third increase may be used for wind or seismic loads. The capacities presented are based on the strength of the soils; the compressive and tensile strengths of the pile sections should be checked to verify the structural capacity of the piles.

Piles should be spaced at least 2½ diameters on centers. If the piles are so spaced, no reduction in the capacities of the piles due to group action need be considered in design.

Lateral Loads

The resistance of the piles and the passive resistance of the soils against the pile cap may be used to resist lateral loads. The soils adjacent to concrete piles that are 18 and 24 inches in diameter and at least 20 feet long can resist horizontal loads of 9 and 12 kips, respectively. These resistances

assume free-head piles with an allowable deflection of $\frac{1}{4}$ inch. The lateral resistance of other sizes of piles may be assumed to be proportional to the pile diameter.

Adjacent to the existing underground structures, the lateral capacities of the piles will apply for loads applied to the tops of the piles either away from or parallel to the walls of the underground structures. Where the clear distance from the piles to the walls of the underground structures is less than seven pile diameters, the lateral loads applied to the tops of the piles towards the walls should not exceed the capabilities of the walls to resist the loads.

The passive resistance of the natural soils or properly compacted fill against pile caps may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. The resistance of the piles and the passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

Installation

Some caving and raveling within the sand deposits may occur, and precautions, such as decreasing the drilling speed, are expected to be necessary during the installation of the piles to minimize caving and raveling. Piles spaced less than five diameters on centers should be drilled and filled alternately, with the concrete permitted to set at least eight hours before drilling any adjacent holes. All drilled pile excavations should be observed by personnel of our firm.

Pile excavations should be filled with concrete as soon after drilling and inspection as possible; the holes should not be left open overnight. The concrete should be placed with special equipment so that the concrete is not allowed to fall freely more than 5 feet and to prevent concrete from striking the walls of the excavations.

Settlement

The settlement of the proposed addition, supported on drilled piles in the manner recommended, will be less than $\frac{1}{4}$ inch.

5.2 FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended in the following section on grading, the building floor slab can be supported on grade. Construction activities and exposure to the environment can cause deterioration of the prepared subgrade. Therefore, we recommend our field representative observe the condition of the final subgrade soils immediately prior to slab-on-grade construction, and, if necessary, perform further density and moisture content tests to determine the suitability of the final prepared subgrade.

If vinyl or other moisture-sensitive floor covering is planned, we recommend that the floor slab in those areas be underlain by a capillary break consisting of an impermeable membrane over a 4-inch-thick layer of gravel. A 2-inch-thick layer of sand should be placed between the gravel and the membrane to decrease the possibility of damage to the membrane. A 2-inch-thick layer of sand should also be placed on top of the membrane to reduce slab curling. We suggest the following gradation for the gravel:

Sieve Size	Percent Passing
3/4"	90 - 100
No. 4	0 - 10
No. 100	0 - 3

A low-slump concrete should be used to minimize possible curling of the slab. Care should be taken during the placement of the concrete to maintain a relatively level sand surface and prevent displacement of the sand on top of the membrane. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

5.3 GRADING

The addition is planned for an area that was in cut during the prior site development and fill soils are not anticipated. Any existing fill soils encountered should be excavated and replaced as properly compacted fill within the building area. All required fill should be uniformly well

compacted and observed and tested during placement. The on-site soils can be used in any required fill.

Site Preparation

After the site is cleared and any existing fill soils are excavated as recommended, the exposed natural soils should be carefully observed for the removal of all unsuitable deposits. Next, the exposed soils should be scarified to a depth of 6 inches, brought to near-optimum moisture content, and rolled with heavy compaction equipment. At least the upper 6 inches of the exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction.

Excavations and Temporary Slopes

Where excavations are deeper than about 4 feet, the sides of the excavations should be sloped back at 1:1 or shored for safety. Unshored excavations should not extend below a plane drawn at 1½:1 (horizontal to vertical) extending downward from adjacent existing footings. We would be pleased to present data for design of shoring if required.

Excavations should be observed by personnel of our firm so that any necessary modifications based on variations in the soil conditions can be made. All applicable safety requirements and regulations, including OSHA regulations, should be met.

Compaction

Any required fill should be placed in loose lifts not more than 8 inches thick and compacted. The fill should be compacted to at least 90% of the maximum density obtainable by the ASTM Designation D1557-91 method of compaction. The moisture content of the on-site soils at the time of compaction should vary no more than 2% below or above optimum moisture content.

Backfill

All required backfill should be mechanically compacted in layers; flooding should not be permitted. Proper compaction of backfill will be necessary to minimize settlement of the backfill and to minimize settlement of overlying slabs and paving. Backfill should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557-91 method of compaction. The exterior grades should be sloped to drain away from the foundations to prevent ponding of water.

Material for Fill

The on-site soils, less any debris or organic matter, can be used in required fills. Cobbles larger than 4 inches in diameter should not be used in the fill. Although not anticipated, any required import material should consist of relatively non-expansive soils with an expansion index of less than 35. The imported materials should contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. All proposed import materials should be approved by our personnel prior to being placed at the site.

5.4 GEOTECHNICAL OBSERVATION

The reworking of the upper soils and the compaction of all required fill should be observed and tested during placement by a representative of our firm. This representative should perform at least the following duties:

- Observe the clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade. The representative should also observe proofrolling and delineation of areas requiring overexcavation.
- Evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing where necessary.

June 18, 1996

- Test backfill for field density and compaction to determine the percentage of compaction achieved during backfill placement.
- Observe foundation materials to confirm that suitable bearing materials are present at the design foundation depths.

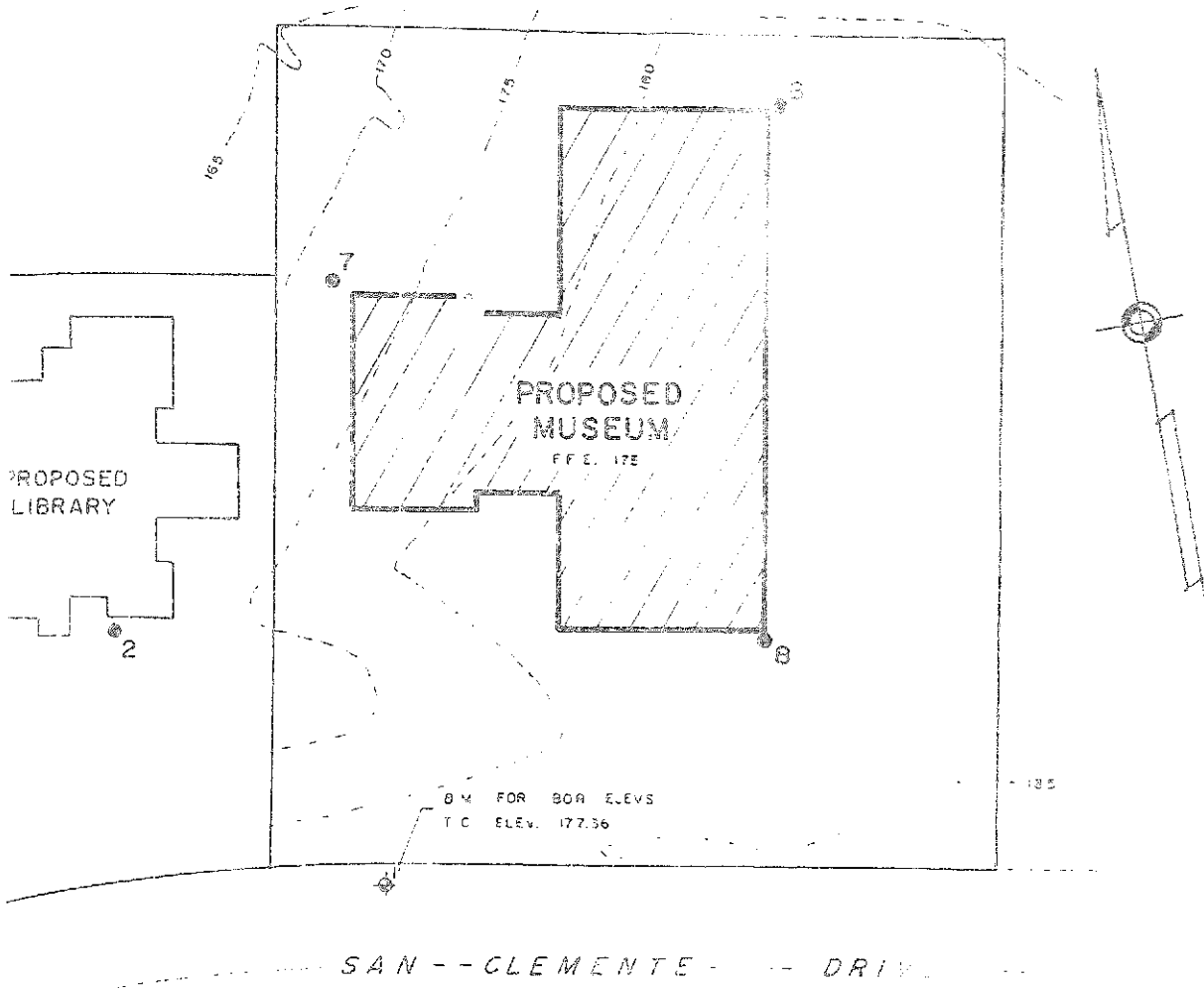
The governmental agencies having jurisdiction over the project should be notified prior to commencement of grading so that the necessary grading permits can be obtained and arrangements can be made for required inspection(s). The contractor should be familiar with the inspection requirements of the reviewing agencies.

6.0 BASIS FOR RECOMMENDATIONS

The recommendations provided in this report are based upon our understanding of the described project information and on our interpretation of the data collected during our previous subsurface explorations. We have made our recommendations based upon experience with similar subsurface conditions under similar loading conditions. The recommendations apply to the specific project discussed in this report; therefore, any change in the structure configuration, loads, location, or the site grades should be provided to us so that we can review our conclusions and recommendations and make any necessary modifications.

The recommendations provided in this report are also based upon the assumption that the necessary geotechnical observations and testing during construction will be performed by representatives of our firm. The field observation services are considered a continuation of the geotechnical investigation and essential to verify that the actual soil conditions are as expected. This also provides for the procedure whereby the client can be advised of unexpected or changed conditions that would require modifications of our original recommendations. If another firm is retained for the geotechnical observation services, our professional responsibility and liability would be limited to the extent that we would not be the geotechnical engineer of record.



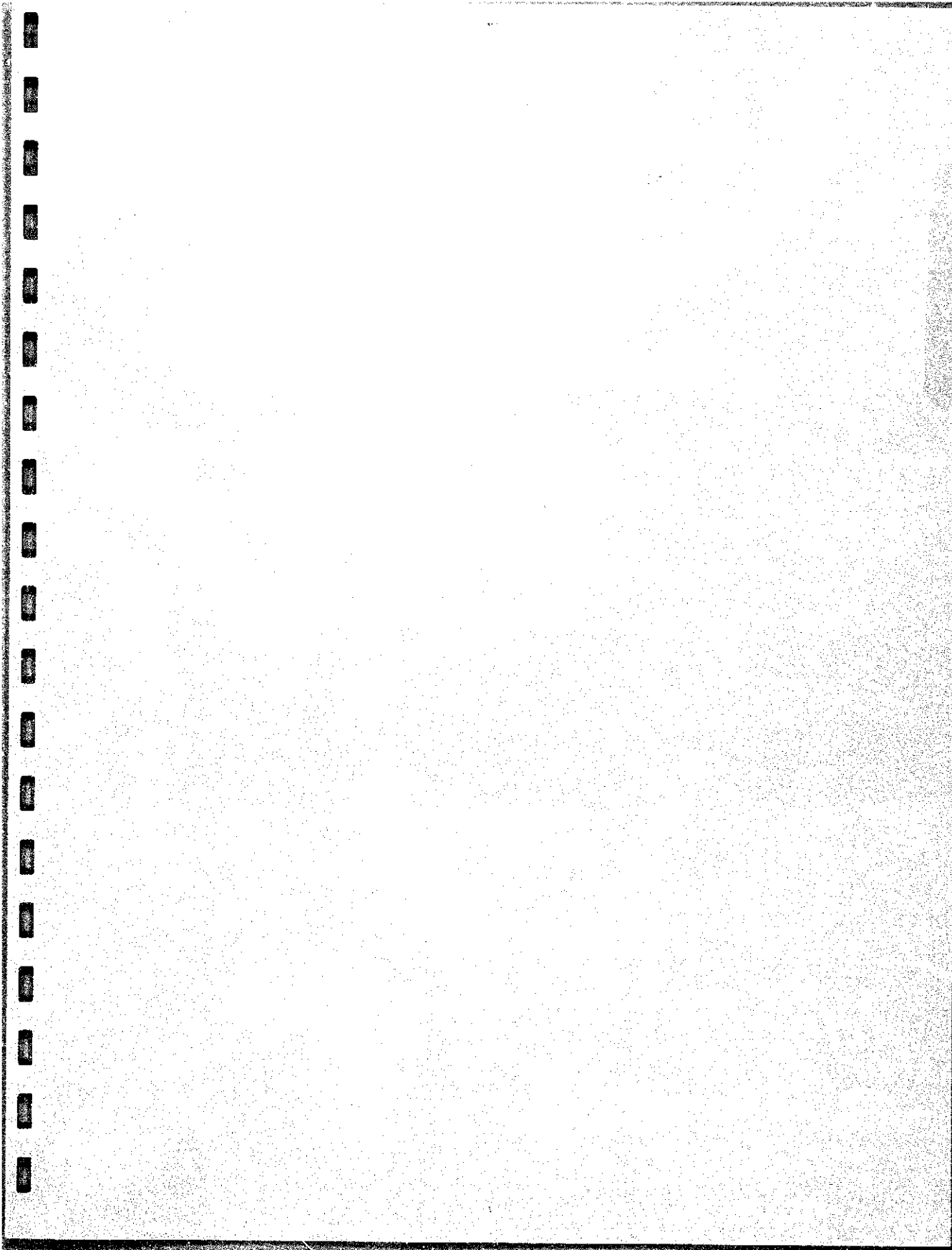


P L O T P L A N

SCALE 1" = 60'

LeROY CRANDALL & ASSOCIATES

PLATE I



ORIGINAL REPORT OF GEOTECHNICAL INVESTIGATION

FOR

PROPOSED MUSEUM BUILDING

850 SAN CLEMENTE DRIVE

NEWPORT BEACH, CALIFORNIA

FOR THE

NEWPORT HARBOR ART MUSEUM

(dated September 21, 1976)

REPORT OF GEOTECHNICAL INVESTIGATION
PROPOSED MUSEUM BUILDING
SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE
NEWPORT BEACH, CALIFORNIA
FOR THE
NEWPORT HARBOR ART MUSEUM

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SCOPE

This report presents the results of a geotechnical investigation, including geologic-seismic studies, performed for the subject project. The investigation was performed concurrently with similar studies for the adjacent Newport Center Branch Library. The locations of the proposed museum and library, and the locations of our exploration borings, are shown on Plate 1, Plot Plan. Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are included herein.

The investigation was authorized to determine the pertinent static characteristics of the soils beneath the site and to provide recommendations for foundation design and floor slab support for the proposed building. The geologic-seismic studies were performed to comply with the City of Newport Beach Seismic Safety Element. The scope of our studies did not include dynamic studies of ground motion and the development of site response spectra for the project. The results of the field explorations and laboratory tests, which form the basis of the foundation recommendations, are presented in Appendix A. The geologic and seismic data, which form the basis of the geologic conclusions, are presented in Appendix B.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers and geologists practicing in this or similar

localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for the Newport Harbor Art Museum and their design consultants to be used solely in the design of the proposed building. The report has not been prepared for use by other parties, and may not contain sufficient information for purposes of other parties or other uses.

STRUCTURAL CONSIDERATIONS

The proposed museum building, which is shown in plan on Plate 1, will be one story in height. The building will have reinforced concrete tilt-up walls. Exterior dead plus live pad loads will be on the order of 132 kips; interior dead plus live pad loads will be on the order of 117 kips.

The floor of the building will be established at Elevation 175. Based on the existing topography, excavation ranging up to 10 feet deep and compacted fill up to 2½ feet in thickness will be required within the building area. Compacted fill ranging up to about six feet deep will be required in the northwest corner of the site.

SITE CONDITIONS

The proposed museum will be located inland approximately 1.5 miles from the Pacific Ocean within the City of Newport Beach, California. The property is located on a dissected terrace 0.5 miles east of Upper Newport Bay. The west and southwestern portions of the property are situated on a

sloping face of the terrace. The average slope is approximately 10:1 (horizontal to vertical). The north and east sections of the property appear to be situated on a relatively even cut surface of the terrace. The ground surface elevation in the immediate area of the proposed building ranges from approximately 173 to 185 feet above mean sea level, U.S.G.S. datum. Contours describing the existing topography are shown on Plate I. The site is vacant, with existing vegetation consisting of a light weed growth.

Field inspection of the property indicates that the sloping site is susceptible to drainage erosion. However, with proper landscaping, the potential for slope erosion would be greatly reduced, as indicated by adjacent property development.

SOIL CONDITIONS

Existing fill soils were not encountered in the borings drilled at the site of the proposed museum (Borings 6, 7, and 8). Local fill deposits could occur between boring locations.

The natural soils beneath the site consist of silty sand, clayey sand, and sand. The surface soils to a depth of approximately one foot are loose to only moderately firm at present moisture content and would become weaker when wet. Numerous rodent holes were encountered within these upper soils. The underlying natural soils are firm.

Water was not encountered within the depth explored.

GEOLOGIC CONCLUSIONS

GENERAL

We find no unusual geologic conditions present at the site which constitute a serious geologic hazard. The possibility of fault rupture through the site is extremely remote, as is the possibility of liquefaction. Although the site could be subject to violent ground shaking in the event of a major earthquake, this hazard is common to Southern California and the effects of the shaking can be minimized by proper structural design and proper construction. The geologic conditions are discussed in detail in Appendix B.

FAULT DISPLACEMENT

No known faults are present beneath the site. It is our opinion that there is little probability of surface rupture due to faulting occurring beneath the site. The nearest active fault is the north branch of the Newport-Inglewood fault system. This fault is located about two miles southwest of the site.

The closest known fault to the site appears to be the Pelican Hill fault located about one mile northeast of the site. This fault does not show any signs of activity within Recent or Upper Pleistocene time, and therefore is not classified as an active fault.

STABILITY

Subsidence due to fluid withdrawals has not been recognized in the site area. The property is not on or in the path of any existing or potential landslide.

GROUND FAILURE

The site is predominantly underlain by firm terrace deposits consisting primarily of sand, clayey sand and silty sand. Beneath the terrace deposits are firm to very firm tertiary age sediments. A field inspection of the site indicated that some portions of the property are underlain by fill material and softer natural deposits. However, it appears that the subject building area is underlain by firm terrace deposits. Some settlement was observed along San Clemente Drive where the street is apparently underlain by fill material.

The elevation of the ground water surface at the site appears to be close to sea level, at a depth of over 150 feet. The soils underlying the site are predominantly firm, dense Pleistocene age terrace deposits. Due to the firm, dense nature of the soils in conjunction with the great depth to ground water, it is our opinion that the potential for liquefaction to occur at the site is low.

SEISMICITY

The historic seismic record indicates that epicenters of earthquakes with magnitudes as great as 6.3 have occurred within five miles of

the site. The location of the property in relation to known faults indicates that the immediate area is not exposed to greater than normal seismic risk than other locations in the coastal areas of Orange County. However, in our opinion, Orange County is exposed to higher than normal seismic risk than some areas in California due to the presence of the Norwalk and Newport-Inglewood fault systems.

TSUNAMIS AND SEICHES

The site is located greater than $1\frac{1}{2}$ miles from the Pacific Ocean at an elevation of approximately 180 feet above sea level. Therefore, the property does not have any risk of damage from tsunamis (earthquake induced sea waves).

No large bodies of water are located such that they would adversely affect the site due to seiches (oscillations in a body of water due to earthquake shaking) or earthquake rupture.

RECOMMENDATIONS

FOUNDATIONS

General

The upper natural soils are generally only moderately firm, and would become weaker when wet. Below a depth of about one foot, the natural soils are firm. As a result of the planned excavation, the firm natural soils will be at or close to the planned final grade over most of the building area. The proposed building may be supported on spread footings

established in the firm natural soils. Compacted fill is planned in the northwest corner of the building, and footings at this location will have to be deeper to reach the firm natural soils.

Bearing Value

Spread footings carried at least one foot into the firm undisturbed natural soils may be designed to impose a dead plus live load pressure of 4,000 pounds per square foot. A one-third increase in the bearing value may be used for wind or seismic loads. Exterior footings should extend at least two feet below the adjacent final grade; interior footings should extend at least $1\frac{1}{2}$ feet below the adjacent floor level. At the northwest corner of the building (and perhaps at other locations), footings will have to be somewhat deeper to extend one foot into the firm natural soils. The recommended bearing value is a net value, so that the weight of the concrete within the foundations may be taken as 50 pounds per cubic foot, and the weight of soil backfill may be neglected when computing the imposed downward foundation loadings.

The maximum ultimate settlement of the proposed building, supported on spread footings in the manner recommended, will be less than one-half inch.

Lateral Loads

Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.5 may be used

between footings and the floor slab and the supporting soils. The passive resistance of the natural soils or properly compacted backfill against footings may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. A one-third increase in the passive value may be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.

Inspection

The footing excavations should be inspected by personnel of our firm to verify that the footings are founded in firm natural soils. Footing inspection will be especially critical in the northwest corner of the building where deeper footings will be required to reach the firm natural soils. Footings should be deepened as necessary to extend into firm natural soils. Hard layers were encountered at various depths in the borings; jack-hammers may be required in some of the footing excavations. Any required footing backfill and all utility trench backfill should be mechanically compacted; flooding should not be permitted. The exterior grades should be such that surface water will drain away from the building.

GRADING

Excavation

Based on planned grades, excavation up to about ten feet deep will be required. It is our opinion that conventional earth-moving equipment

may be used; jack hammers may be required to facilitate excavation of any hard layers.

Permanent cut slopes may be constructed at 1:1. Drainage of the slopes should be carefully planned, and the completed slopes should be planted as soon as possible to reduce surface erosion.

The excavation should be inspected by our personnel so that any necessary modifications based on soil conditions encountered can be made. All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act of 1970, and the Construction Safety Act should be met.

Filling

Within the area to be filled and areas close to grade, the upper soils should be reworked, and all required fill should be properly compacted. Any existing fill and at least the upper one foot of natural soils within the building area should be excavated and replaced as properly compacted fill and all required additional fill should be properly compacted. Within areas to be paved, any existing fill or disturbed natural soils should be excavated, the upper natural soils should be reworked in place, and all required fill should be properly compacted.

After stripping existing vegetation, any existing fill and any disturbed natural soils within the building area and area to be paved should be excavated. Next, the natural soils within the building area and

at least five feet beyond in plan should be excavated to a depth of at least one foot below the existing grade (over-excavation of the natural soils should only be necessary in the northwest portion of the building area where the grade will be raised by placing compacted fill). The exposed soils should be carefully inspected to verify removal of any unsuitable deposits; the excavation should be deepened to remove any unsuitable materials including soils badly disturbed by rodent burrowing. Next, the exposed natural soils should be scarified to a depth of six inches, brought to approximately optimum moisture content, and rolled with heavy compaction equipment. The upper six inches of exposed natural soils in the building area (in both cut and fill areas) should be compacted to at least 95% of the maximum density obtainable by the ASTM Designation D1557-70 method of compaction modified to use three layers. Within non-building areas, the upper six inches of exposed natural soils should be compacted to at least 90%.

After compacting the natural subgrade, all required fill in the building area should be placed in loose lifts not more than eight inches in thickness, brought to about optimum moisture content, and compacted to at least 95%. All required fill in non-building areas should be similarly placed and compacted to at least 90%. It is recommended that the moisture content of the soils at the time of compaction vary no more than 2% above or below optimum moisture content.

Compacted fill slopes may be constructed at 2:1 (horizontal to vertical). To minimize future shallow sloughing, fill slopes should be overfilled and trimmed back to achieve a firm surface. Alternately, the fill slopes should be slope-rolled with a sheepsfoot roller, done at the completion of every two feet of fill. Permanent slopes should be planted as soon as possible to reduce erosion, and the drainage planned so that the water is not allowed to flow over the face of the sloped embankments.

The on-site natural soils may be used in required fills. Any required imported fill should consist of relatively non-expansive and predominantly granular soils, similar to the on-site soils.

The excavation and reworking of the upper soils and the compaction of all required fill should be observed and tested by personnel of our firm. Imported fill material should be approved by our firm prior to importing.

FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended, the building floor slab may be supported on grade. Drainage of surface water should be provided away from the building; ponding of water adjacent to the building should be prevented.

If a floor covering that would be critically affected by moisture, such as vinyl, is to be used, we suggest that the floor slab be supported on a four-inch-thick layer of gravel or on an impermeable membrane as a

capillary break. A suggested gradation for the gravel layer would be as follows:

<u>Sieve Size</u>	<u>Percent Passing</u>
3/4"	90 - 100
No. 4	0 - 10
No. 100	0 - 3

If the membrane is used, a low-slump concrete should be used to minimize possible curling of the slab. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

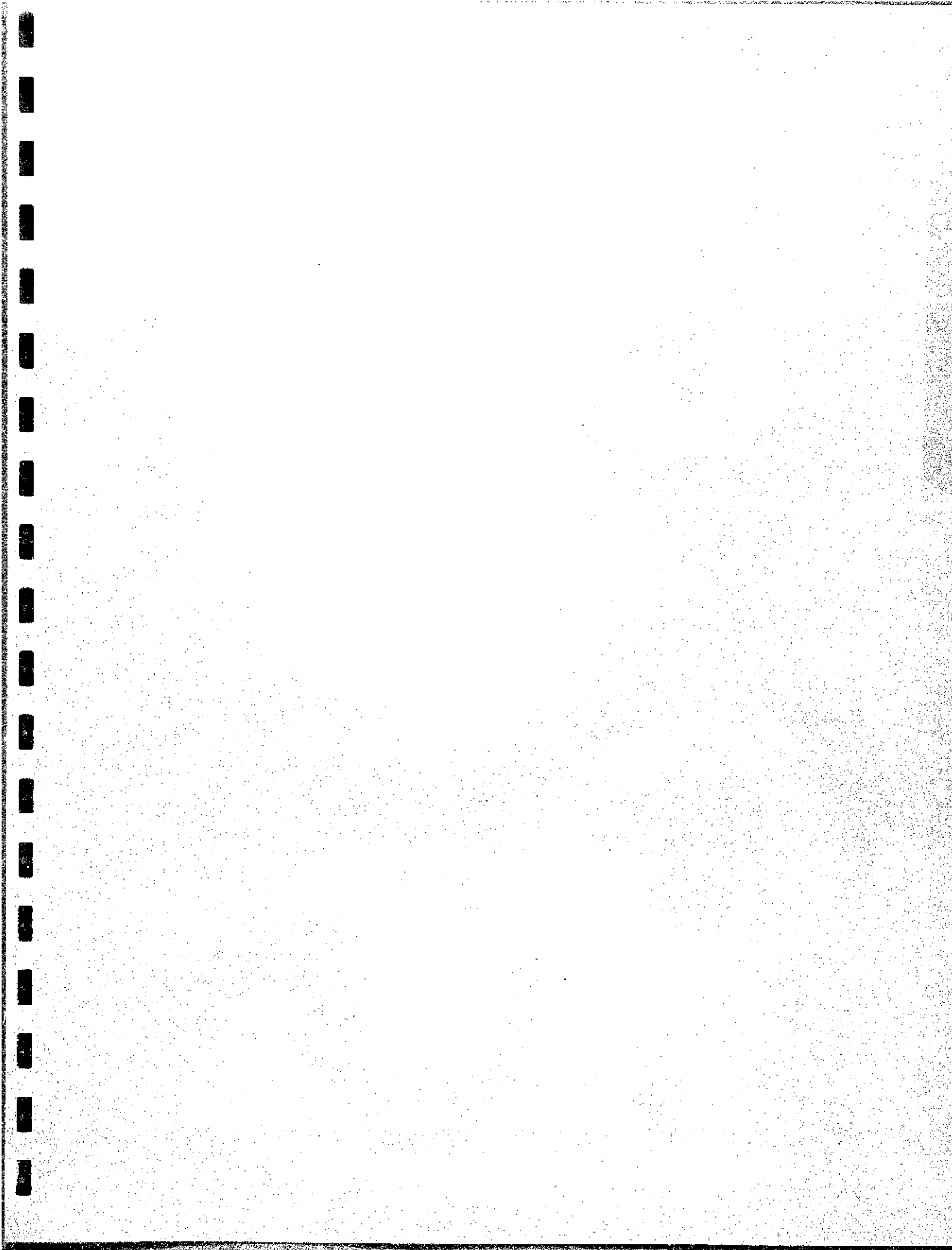
PAVING

To provide support for paving, the subgrade soils should be prepared as recommended in the previous section on grading. All existing fill and disturbed natural soils should be excavated, and all required fill beneath paving should be compacted to at least 90%. At least the upper six inches of paving subgrade should be compacted to at least 90%. Proper compaction of the pavement subgrade soils will be critical for the performance of the paving. Also, proper drainage of the paved areas should be provided since this will reduce moisture infiltration into the subgrade and increase the life of the paving.

To provide data for design of asphaltic paving, a California Bearing Ratio test was performed on a sample of the upper soils. The test results, which indicate a CBR value of 13 at 90% compaction, are presented in the attached Appendix A.

Assuming that the paving subgrade will consist of the on-site soils, or imported materials with a CBR value of at least 10, and compacted to at least 90% as recommended, parking areas subject to automobile traffic may be paved with two inches of asphaltic paving and four inches of base course placed on the compacted subgrade. Driveways and areas subject to truck traffic may be paved with three inches of asphaltic paving and six inches of base course placed on the compacted subgrade. Careful inspection is recommended to verify that the recommended thicknesses or greater are achieved, and that proper construction procedures are used.

The base course should meet the specifications for Class 2 Aggregate Base as defined in Section 26 of the State of California, Department of Transportation, Standard Specifications, dated January, 1975. The base course should be compacted to at least 92%. (This is the minimum compaction; the average compaction should be at least 95%.)



APPENDIX AEXPLORATIONS

This investigation was performed concurrently with similar studies for the adjacent Newport Center Branch Library. A total of eight borings were drilled for the two projects; Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are discussed herein.

The borings were drilled to depths of 5 to 25 feet below the existing grade using 24-inch-diameter bucket-type drilling equipment. Caving of the boring walls did not occur during drilling, and casing or drilling mud was not used to extend the borings to the depths drilled.

The soils encountered were logged by our field technician, and undisturbed samples were obtained for laboratory inspection and testing. The logs of the borings are presented on Plates A-1 through A-8; the depths at which undisturbed samples were obtained are indicated to the left of the boring logs. The number of blows required to drive the sampler twelve inches, and the driving weight and stroke, are also indicated on the logs. The soils are classified in accordance with the Unified Soil Classification System described on Plate B.

LABORATORY TESTS

The field moisture content and dry density of the soils encountered were determined by performing tests on the undisturbed samples. The results of the tests are shown to the left of the boring logs.

Direct shear tests were performed on selected undisturbed samples to determine the strength of the natural soils. These tests were performed at field and increased moisture contents and at various surcharge pressures. Tests were also performed on remolded samples compacted to 95% at optimum moisture content; the remolded samples were tested at optimum and increased moisture contents. The yield-point values determined from the direct shear tests are presented on Plate C, Direct Shear Test Data.

Confined consolidation tests were performed on five undisturbed samples and on one remolded sample compacted to 95% to determine the compressibility of the soils. Water was added to two of the samples during the tests to illustrate the effect of moisture on the compressibility. The results of the consolidation tests are presented on Plates D-1 through D-4, Consolidation Test Data.

Expansion tests were performed on two undisturbed samples to determine the expansion characteristics of the soils. The samples were confined under a nominal surcharge pressure, soaked, and the resulting expansion measured. Next, the samples were allowed to air-dry, and the resulting shrinkage was measured. The results of the expansion tests are presented on Plate E, Expansion Test Data.

The optimum moisture content and maximum dry density of the upper soils were determined by performing compaction tests on samples from Borings 3 and 4. The tests were performed in accordance with the ASTM Designation D1557-70 method of compaction modified to use three layers. After completion of the compaction tests, a California Bearing Ratio test was performed on the sample from Boring 4 in accordance with the ASTM Designation D1883-73 method. The results of the compaction and California Bearing Ratio tests are presented on Plate F, Compaction and C.B.R. Test Data.

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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs / cu ft)	BLOWS #	SAMPLE	DESCRIPTION
BORING 1						
DATE DRILLED August 25, 1976						
EQUIPMENT USED 24"-Diameter Bucket						
ELEVATION 153.2**						
150	0.4	104	2	2	SM	SILTY SAND - fine, rootlets, numerous rodent holes, light brown
150	1.8	99	6	6	SP	SAND - fine, layers of Clayey Sand, light reddish-brown
	3.7	112	8	8		
145	1.9	104	11	11	SC	CLAYEY SAND - light reddish-brown
	2.7	99	4	4		
140	6.9	119	12	12		

NOTE: Water not encountered. No caving.

*Number of blows required to drive sampler 12":
Driving Weight = 1600 lbs. Stroke 1'

**See Plate 1 for location and elevation of bench mark.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-1

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NOTE THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)
 DEPTH (ft)
 MOISTURE (% of dry wt)
 DRY DENSITY (lbs/cu ft)
 BLOWS
 SAMPLE

BORING 2
 DATE DRILLED August 25, 1976
 EQUIPMENT USED 24"-Diameter Bucket

		ELEVATION 173.4					
						SH	SILTY SAND - fine, layers of Clayey Sand, light brown
170	3.6	104	6				
5	7.6	108	6				
	8.5	101	5			SP	SAND - fine, layers of Clayey Sand, light reddish-brown
165	8.1	103	6				
10							
	6.1	96	6				
160							
15	15.2	110	12			SC	CLAYEY SAND - fine, reddish-brown
155						CL	SILTY CLAY (HIGHLY WEATHERED SHALE) - light brown
20	43.1	68	21				

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES
 PLATE A-2

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 JUL 1976
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 CHKD
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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)		DEPTH (ft)		MOISTURE (% of dry wt)		DRY DENSITY (lbs/cu ft)		BLOWS		SAMPLE	
BORING 4											
DATE DRILLED August 25, 1976											
EQUIPMENT USED 24"-Diameter Sucket											
ELEVATION 150.0											
		2.3	108	10				SM	SILTY SAND - slightly Clayey, brown		
		13.3	113	4				SC	CLAYEY SAND - fine, some Silty Clay, brown		
145	5	7.7	119	6							
140	10										
135	15										

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY GRANDALL AND ASSOCIATES

PLATE A-4

NOTE THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE
160	1.4			4	FILL - SILTY SAND and CLAYEY SAND - fine, light brown Pieces of wood Pieces of wire and wood
	11.4	77		1	
155					
150	60.7	57		4	SHALE - weathered, bedded, fractured, light grey and brown
15					

BORING 5

DATE DRILLED: August 23, 1976
 EQUIPMENT USED: 24"-Diameter Bucket

ELEVATION 161.5

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-5

JOB NO. DATE OF TEST LOCATION OF BORE

NOTE THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs./cu ft)	BLOWS	SAMPLE
180					SM SILTY SAND - fine, rodent holes, light brown
	2.1	106	11		
175	5				SC CLAYEY SAND - fine, layers of fine Sand, light reddish-brown
	3.5	101	14		
	7.8	112	16		
170	10				
	6.3	113	18		
165	15				SP SAND - fine, layers of Clayey Sand, light reddish-brown
	7.6	113	16		
160					
	5.0	96	9		

BORING 5
 DATE DRILLED August 24, 1976
 EQUIPMENT USED 24"-Diameter Bucket

ELEVATION 181.7

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES
 PLATE A-6

JOP
 DATE
 O.F.
 HKD

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (lbs / cu ft)	BLOWING	SAMPLE
BORING 7					
DATE DRILLED August 24, 1974					
EQUIPMENT USED 24"-Diameter Bucket					
ELEVATION 173.1					
170	2.5	96	2	SM	SILTY SAND - fine, rootlets, light brown
165	7.3	111	17	SC	CLAYEY SAND - fine, thin layers of fine sand, light reddish-brown
	5	5.7	110		
160	6.1	112	14	SP	SAND - fine, thin layers of clayey sand, light reddish-brown
	10	6.4	109		
15	6.3	98	8		

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES
 PLATE A-7

DATE _____ TIME _____ JOB _____ NO. _____

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)		DEPTH (ft)		MOISTURE (% of dry wt)		DRY DENSITY (lbs / cu ft)		BLOWS		SAMPLE	
BORING 2											
DATE DRILLED August 24, 1976											
EQUIPMENT USED 24" diameter Bucket											
ELEVATION 184.9											
										SM	SILTY SAND - fine some Clayey Sand, light brown
		3.1	118	17							
										SC	CLAYEY SAND - fine, thin layers of fine Sand, light reddish-brown
180	5	3.9	108	8							
		2.7	104	8							
175	10										Sandier
		6.2	110	20							
		6.3	110	15						SP	SAND - fine, thin layers of Clayey Sand, light reddish-brown
170	15										
		6.4	105	11							
165	20	4.8	98	9							
160	25	3.6	94	4							

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-8

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW Well graded gravels, gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amt. of fines)	GP Poorly graded gravels or gravel-sand mixtures, little or no fines. GM Silty gravels, gravel-sand-silt mixtures. GC Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	SW Well graded sands, gravelly sands, little or no fines.
			SP Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amt. of fines)	SM Silty sands, sand-silt mixtures.
			SC Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML Inorganic silts and very fine sands, rock flour, silt or clayey fine sands or clayey silts with slight plasticity.
			CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		OL Organic silts and organic silty clays of low plasticity.
			MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH Inorganic clays of high plasticity, fat clays.
		OH Organic clays of medium to high plasticity, organic silts.	
HIGHLY ORGANIC SOILS		PT Peat and other highly organic soils.	

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

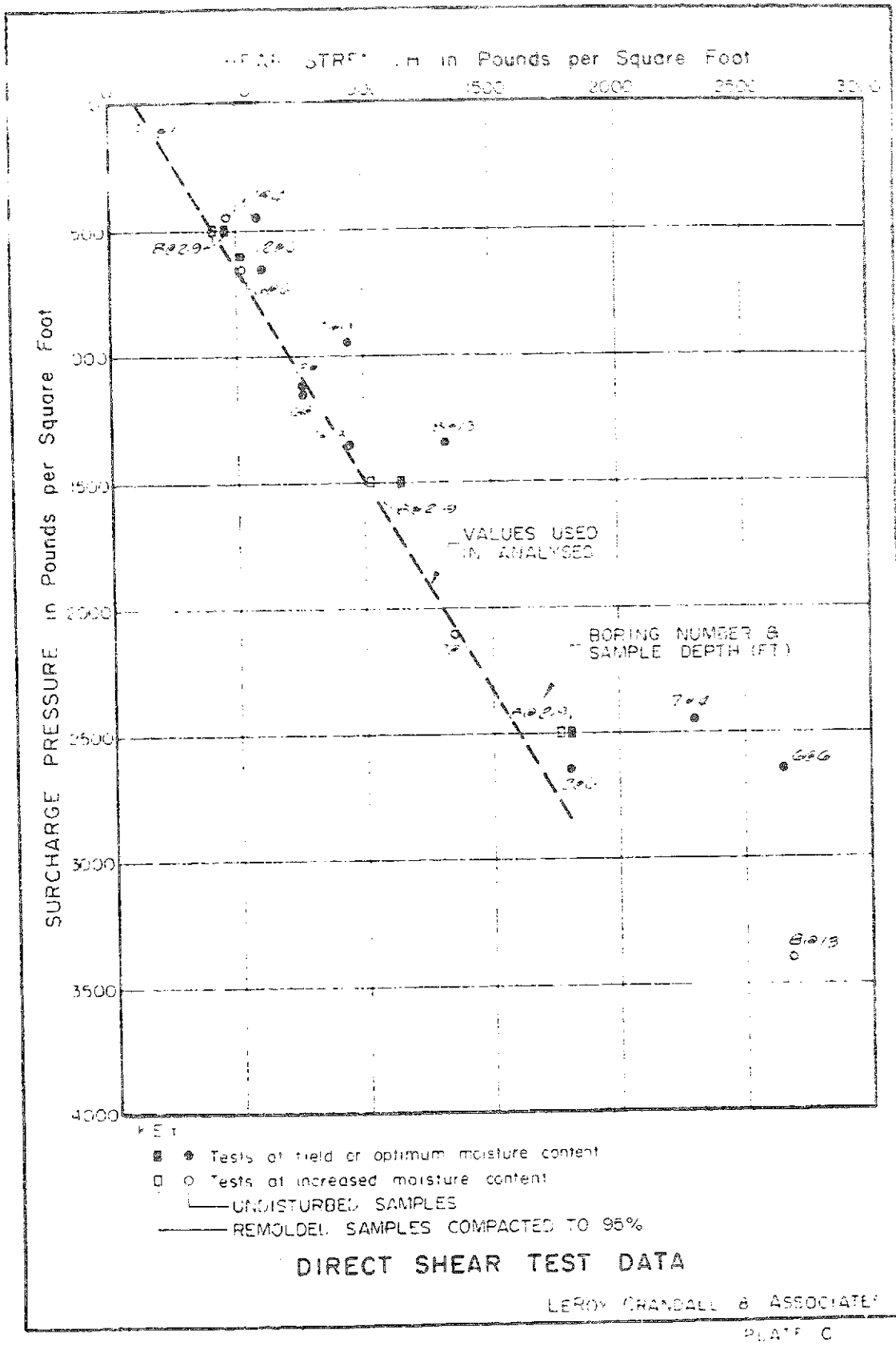
PARTICLE SIZE LIMITS

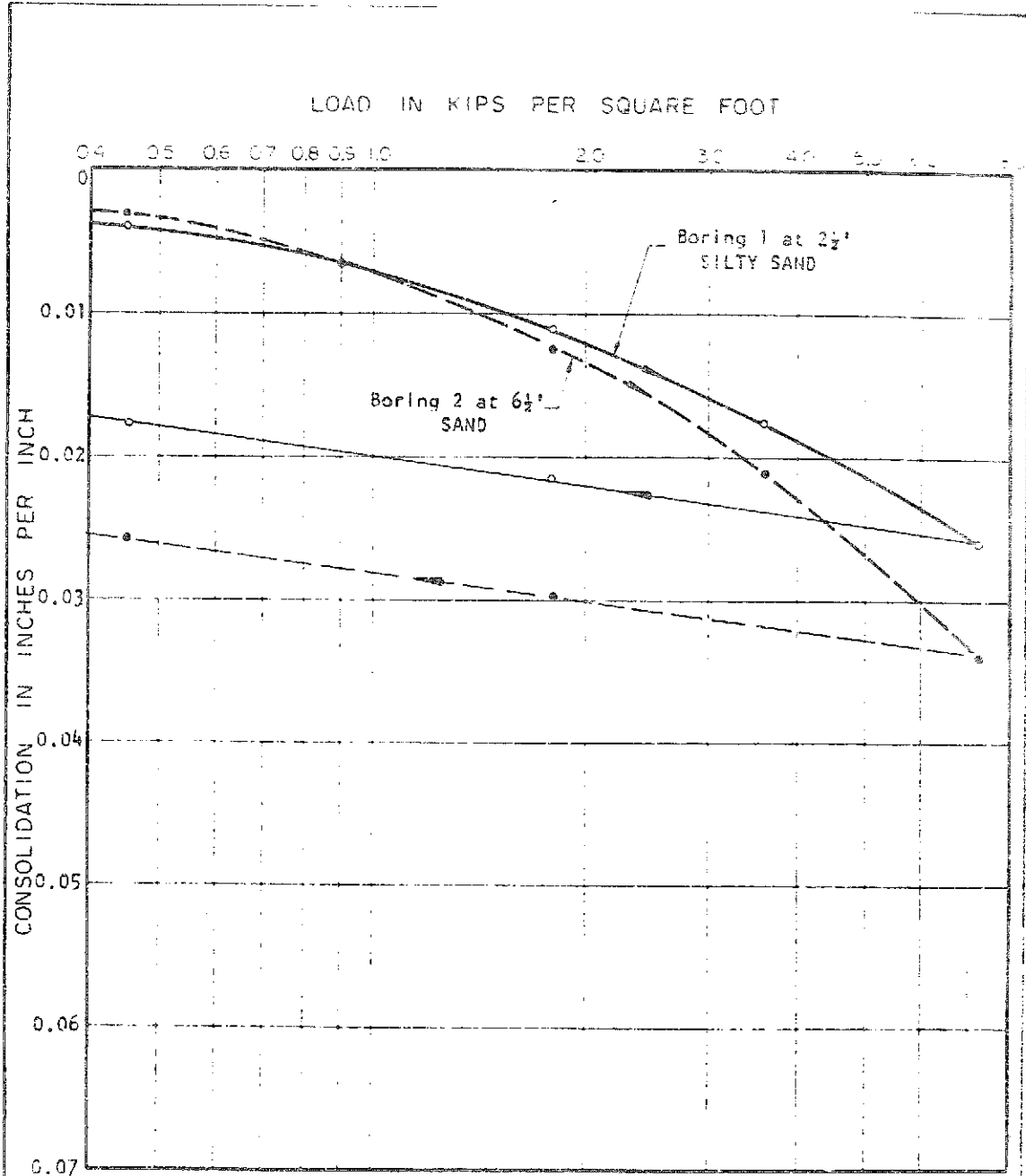
SILT OR CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		
	No. 200	No. 40	No. 10 No. 4	3/8 in.	3 in.	(2.0)	
	U. S. STANDARD SIEVE SIZE						

UNIFIED SOIL CLASSIFICATION SYSTEM

Reference:
The Unified Soil Classification System, Corps of Engineers, U. S. Army Technical Memorandum No 3-357, Vol. 1, March, 1953. (Revised April, 1960)

LEROY CRANDALL & ASSOCIATES



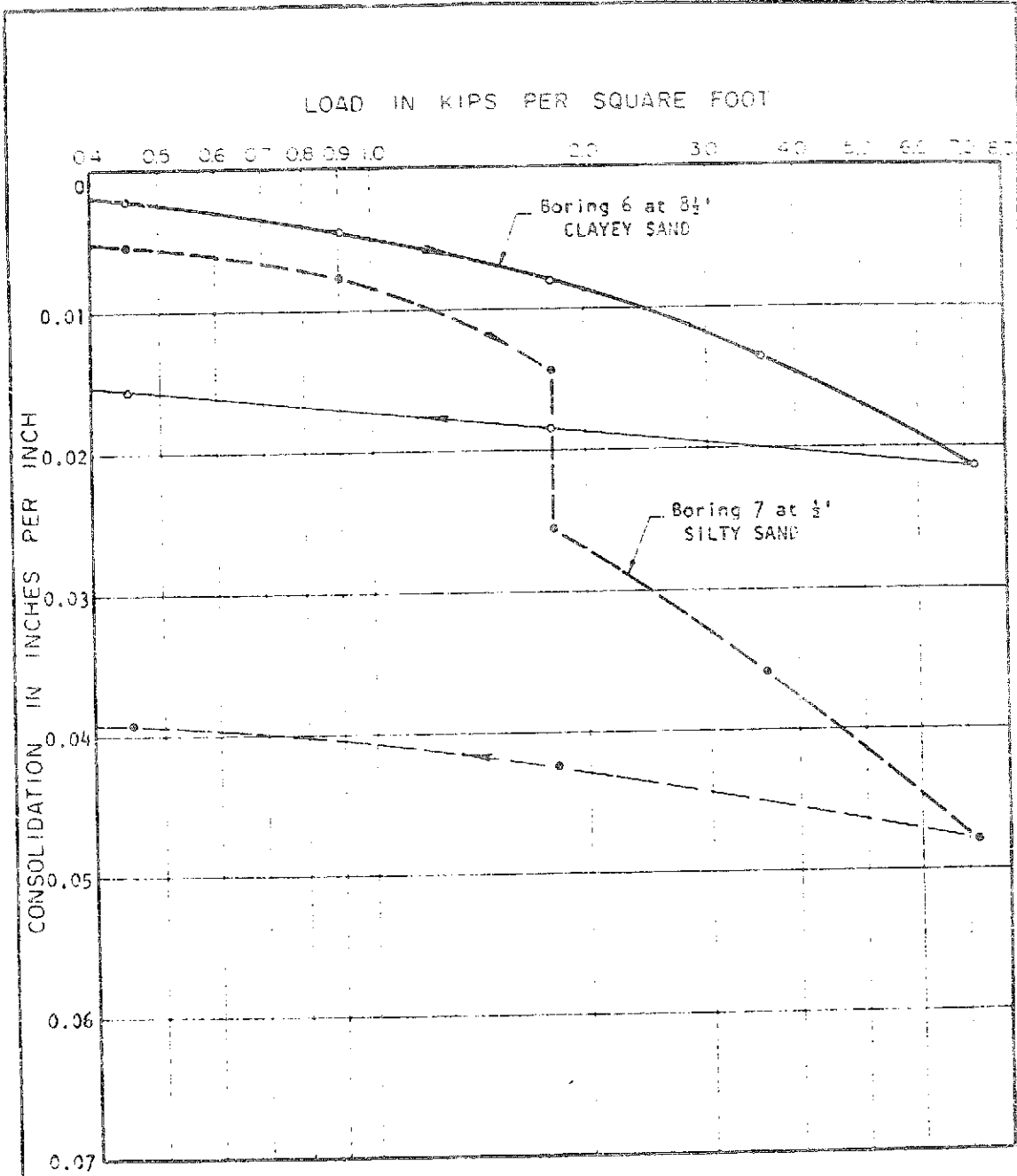


NOTE: Samples tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES
 PLATE D-1

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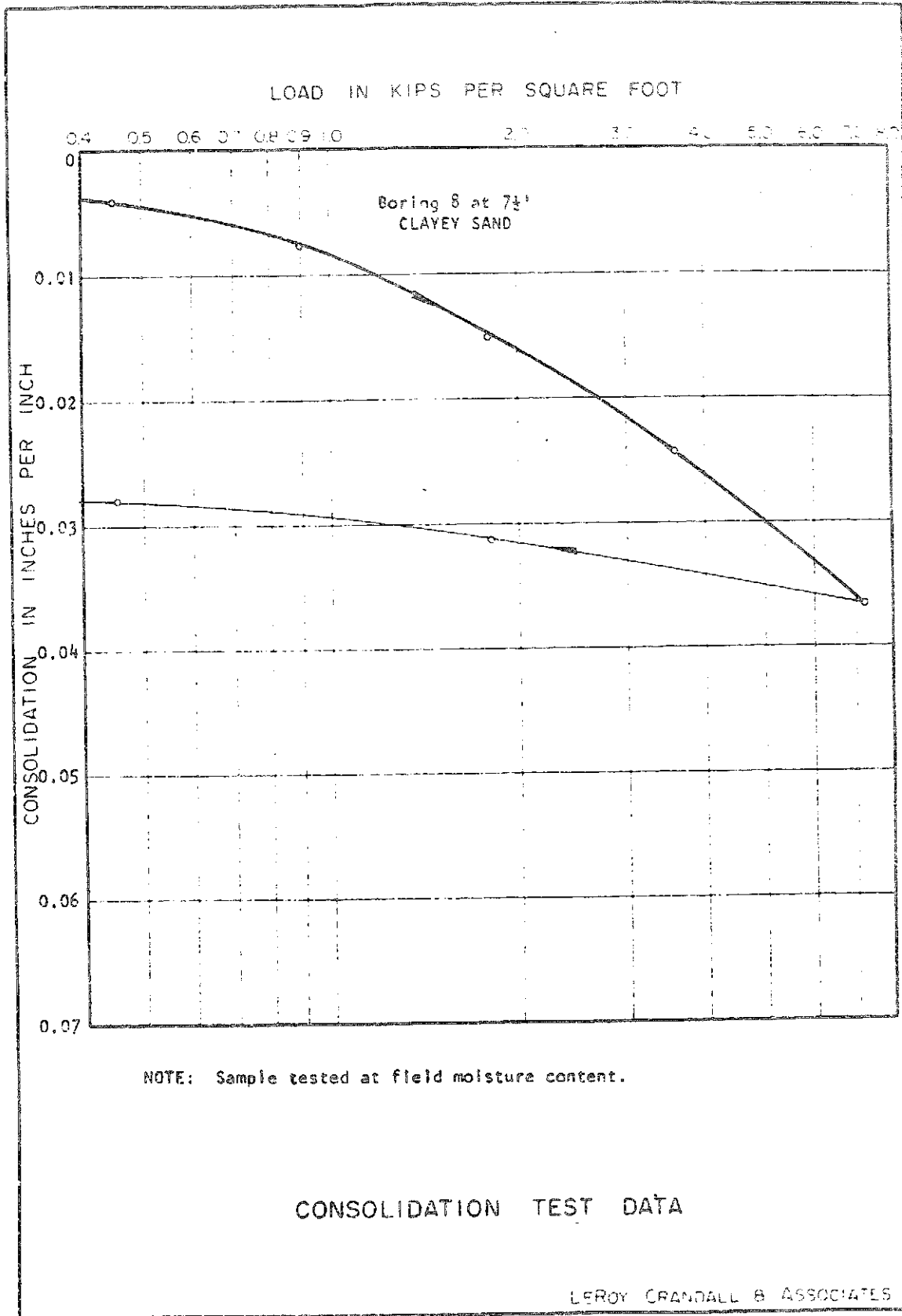


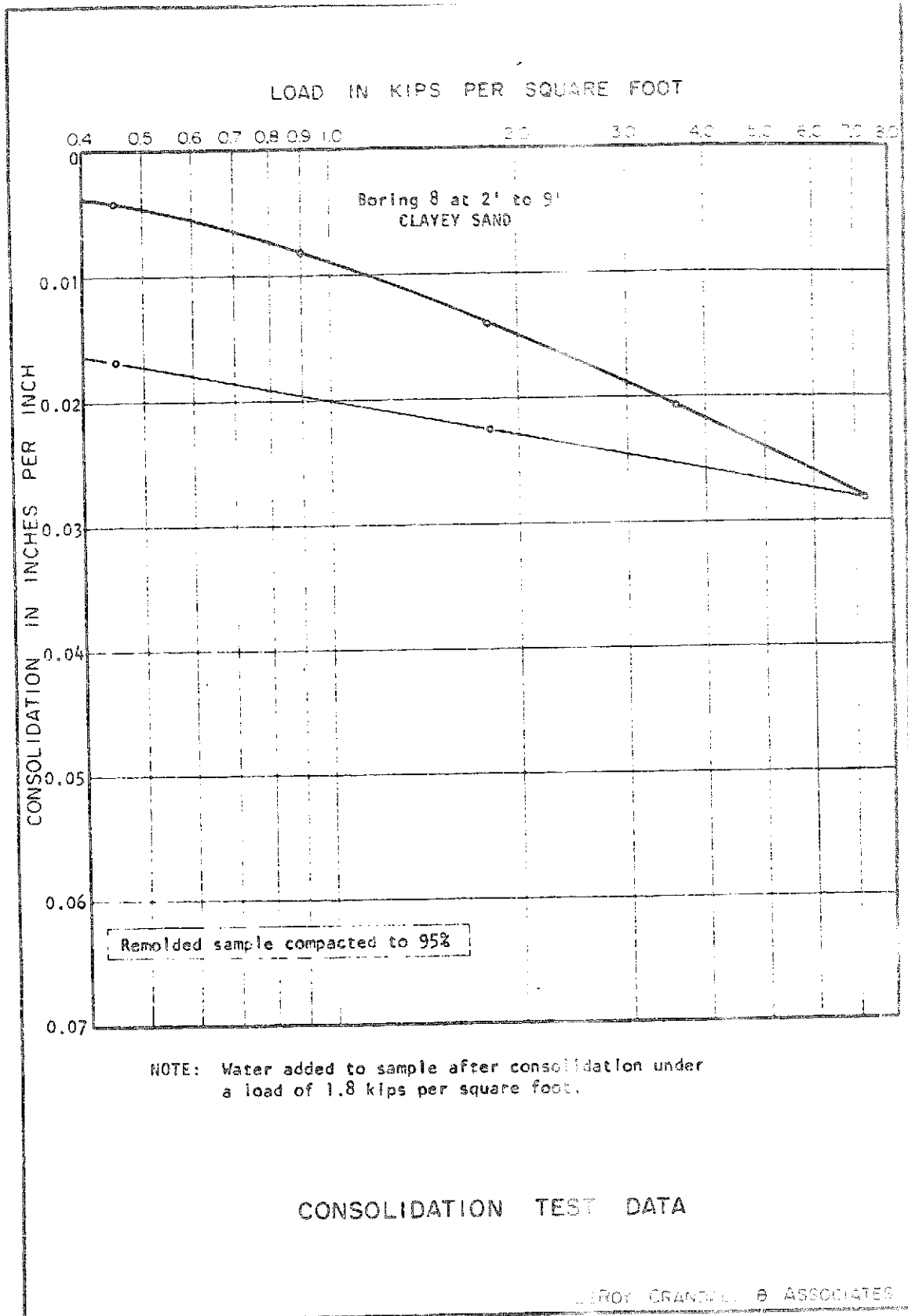
NOTE: Water added to sample from Boring 7 after consolidation under a load of 1.8 kips per square foot. The other sample tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE D-2





BORING NUMBER AND SAMPLE DEPTH:	6 at 8½'	7 at 2½'
SOIL TYPE:	CLAYEY SAND	CLAYEY SAND
CONFINING PRESSURE: (Lbs./Sq.Ft.)	100	100
FIELD MOISTURE CONTENT: (%)	7.8	7.3
EXPANSION FROM FIELD TO SOAKED MOISTURE CONTENT: (%)	1.1	1.4
SOAKED MOISTURE CONTENT: (%)	15.3	15.2
SHRINKAGE FROM FIELD TO AIR-DRIED MOISTURE CONTENT: (%)	0.4	1.3
AIR-DRIED MOISTURE CONTENT: (%)	1.8	1.9
TOTAL VOLUME CHANGE: (%)	1.5	2.7

EXPANSION TEST DATA

BY: GEORGE W. BROWN, JR. AND ASSOCIATES

E

BORING NUMBER AND SAMPLE DEPTH:	3 at 2' to 9'	4 at 0' to 2'
SOIL TYPE:	CLAYEY SAND	SILTY SAND
MAXIMUM DRY DENSITY*: (Lbs./Cu.Ft.)	125	120
OPTIMUM MOISTURE CONTENT*: (% of Dry Wt.)	10	9
EXPANSION (%): (From Optimum to Saturated Moisture Content)	-	0
C.B.R.** (% of Standard)	-	
At 90% Compaction:		13
At 95% Compaction:		33

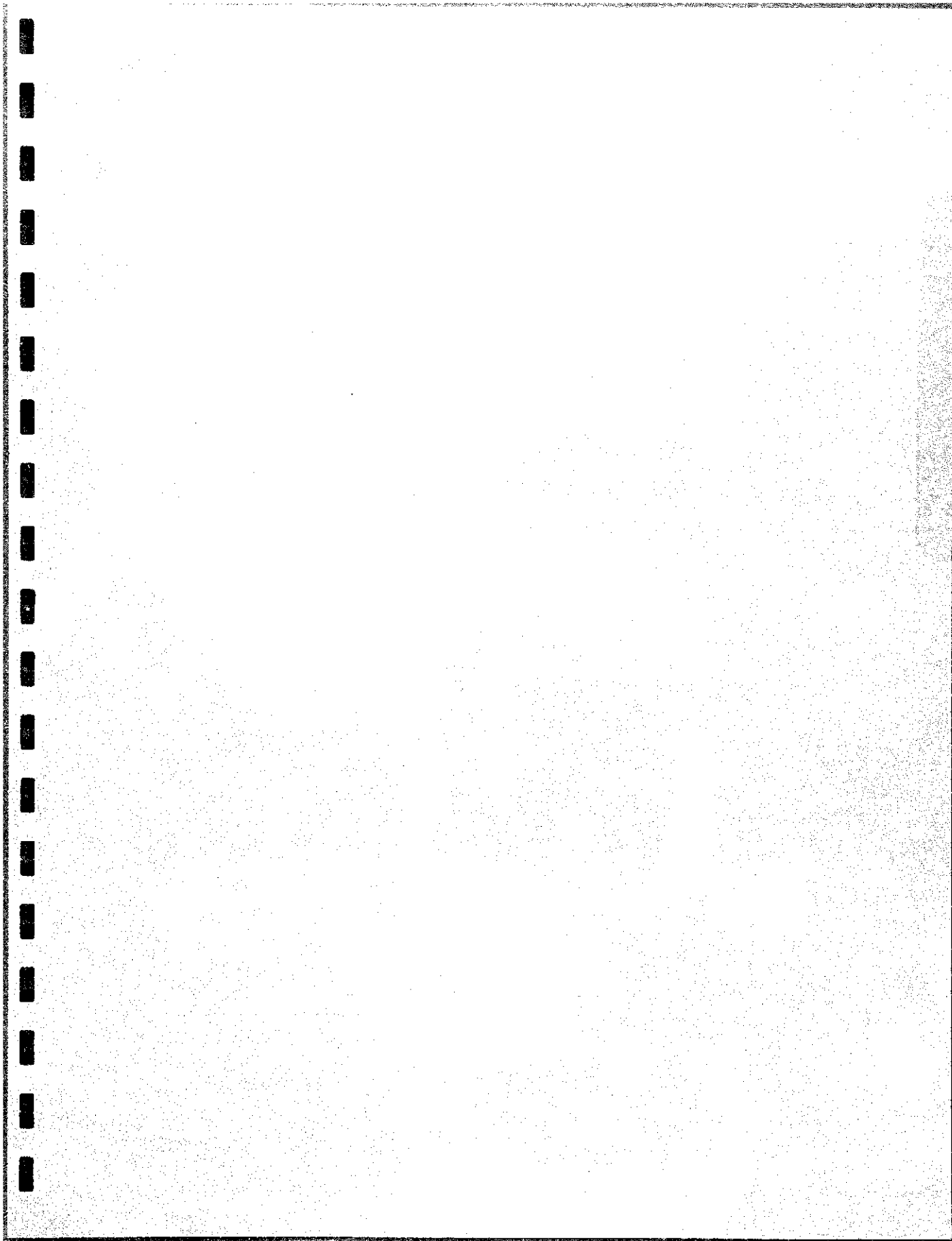
* TEST METHOD: ASTM Designation D1557-70 modified to use 3 layers.

** TEST METHOD: ASTM Designation D1883-73.

COMPACTION AND C.B.R. TEST DATA

LENNY CRANDALL AND ASSOCIATES

CHICAGO, ILL.



APPENDIX BGEOLOGIC AND SEISMIC DATAGENERAL

The geologic-seismic studies included a field reconnaissance on and adjacent to the site, as well as office analysis of published and unpublished literature pertinent to the study area. The Seismic Safety Element for the City of Newport Beach was included in our literature analysis.

GEOLOGIC CONDITIONSGENERAL

The site is located on the northwestern portion of the San Joaquin Hills. The San Joaquin Hills form the southern boundary of the eastern portion of the Coastal Plain of Orange County. The terrace upon which the site is situated is separated from Newport Mesa by Upper Newport Bay.

The natural materials that directly underlie the site are composed of Upper Pleistocene terrace deposits. These terrace deposits have not been differentiated as to their origin, continental or marine (U.S.G.S. OM193 1973). It appears that these deposits directly overlie a thick sequence of tertiary sedimentary rocks.

The Newport-Inglewood fault zone is the most important structural feature in the site vicinity. The offshore projection of the North branch fault of the Newport-Inglewood system is located about two miles south of the site.

Plate G, Geologic Map, illustrates the site in relation to local geologic features including major fault zones.

GEOLOGIC MATERIALS

As disclosed by our exploration borings, the building area is underlain by terrace deposits. The upper 10 to 13 feet of terrace deposits encountered in the borings is composed of finer grained silty sand and clayey sand. The upper fine grained materials are underlain by sand extending to the 25-foot maximum depth explored. The upper Pleistocene terrace deposits are underlain by firm to very firm sandstone and siltstone of Tertiary age. These Tertiary sediments extend to a depth in excess of 9,400 feet as reported by the log of exploratory oil well, Morton and Sons "Irvine" 55-1 drilled in 1946.

GROUND WATER

Ground water data concerning the depth to the ground water surface are lacking in the immediate site area. However, several wells north and northwest of the site indicate that the ground water surface is approximately at sea level, U.S.G.S. datum, or at a depth of over 150 feet in the immediate site area. Ground water was not encountered in our exploration borings which were drilled to a maximum depth of 25 feet.

FAULTS

The numerous faults in Southern California include active, potentially active and inactive faults. The criteria for these major groups, as

established by the Association of Engineering Geologists (1973), are presented in Table 1. Table 2 presents a listing of active faults in Southern California with the distance in miles between the site and the nearest point on the fault. Table 3 provides a similar listing for potentially active faults. No faults or fault associated features were observed on or adjacent to the site during the field reconnaissance.

The closest faults that are considered to be active are those of the Newport-Inglewood fault system. This fault zone is the most important

~~structural feature in the vicinity. The Newport-Inglewood fault system is~~

divided into several branch faults which include the North, South, Bolsa-Fairview, Yorktown, Adams Avenue and Indianapolis faults in the Orange County area. These faults along with several branch faults in the Long Beach-Coastal Los Angeles area comprise the Newport-Inglewood fault zone.

Available information on the various local faults indicates that there has been no displacement of the alluvial deposits which are less than 10,000 years old in Santa Ana Gap. The North branch fault of the Newport-Inglewood system has displaced Upper Pleistocene (greater than 10,000 years) formations as much as 300 feet. Detailed studies by our firm in Bolsa Gap indicate that the Bolsa Aquifer (less than 10,000 years old) has been offset by the North branch fault.

TABLE 1

CRITERIA FOR CLASSIFICATION OF FAULTS WITH
REGARD TO SEISMIC ACTIVITY

(From Association of Engineering Geologists,
Geology and Earthquake Hazards, 1973)

A. Active Faults: (See Table 2)

These faults are those which have shown historical activity. This category includes such faults as the San Andreas, San Jacinto, and Newport-Inglewood.

B. Potentially Active Faults: (See Table 3)

These faults are those, based on available data, along which no known historical ground surface ruptures or earthquakes have occurred. These faults, however, show strong indications of geologically recent activity. Potentially active faults can be placed in two subgroups that are based on the boldness or sharpness of their topographic features and the estimates related to recency of activity. These subgroups are:

1. Subgroup One - High Potential

- a. Offsets affecting the Holocene deposits (age less than 10 - 11,000 years).
- b. A ground water barrier or anomaly occurring along the fault within the Holocene deposits.
- c. Earthquake epicenters (generally from small earthquakes occurring close to the fault).
- d. Strong geomorphic expression of fault origin features (e.g. faceted spurs, offset ridges or stream valleys or similar features, especially where Holocene topography appears to have been modified).

2. Subgroup Two - Low Potential

This subgroup is the same as 1-a, b, or d above, with the exception that the indications of fault movement can be only determined in Pleistocene deposits (less than 1,000,000 years ago).

C. Inactive Faults:

These faults are without recognized Holocene or Pleistocene offset or activity.

TABLE 2

MAJOR NAMED FAULTS CONSIDERED TO BE ACTIVE (a)
IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Date of Latest Major Activity	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Big Pine	1852	7.5 (c)	118	NW
Coyote Creek	1968	7.2 (d)	120	SE
Elsinore	1910	7.5 (c)	25	ENE
Garlock	(b)	7.75(c)	105	NW
Malibu Coast	1973	7.1 (d)	53	NW
Manix	1947	6.25(c)	125	NE
Newport-Inglewood	1933	7.0 (c)	2	SW
Norwalk	1929 (?)	6.9 (d)	16	N
San Andreas Zone	1857	8.25(c)	54	NNE
San Fernando Zone	1971	6.5 (c)	50	NW
San Jacinto Zone	1968	7.5 (c)	48	NE
Santa Susana	1971	6.5 (c)	61	NW
Superstition Hills	1951	7.0 (c)	125	SE
White Wolf	1952	7.75(c)	122	NW
Whittier	1929 (?)	7.1 (d)	21	N

- (a) Historic movement (1769 - present).
 (b) Intermittent creep.
 (c) Greensfelder, C.D.M.G. Map Sheet 23, 1974.
 (d) Housner (1970) Length-Magnitude relationship.

TABLE 3
 MAJOR NAMED FAULTS CONSIDERED TO BE POTENTIALLY ACTIVE (a)
 IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Calico-Newberry	7.25 (b)	106	NE
Charnock	6.6 (c)	28	NW
*Chino	6.8 (c)	23	NNE
Cucamonga	6.5 (b)	37	NNE
*Duarte	6.6 (c)	36	N
Helendale	7.5 (b)	80	NE
More Ranch	7.25 (b)	120	NW
Nacimiento (Rinconada)	7.5 (b)	130	NW
Northridge Hills	6.5 (b)	59	NW
Oakridge	7.5 (b)	70	NW
*Overland	6.2 (c)	40	NW
Palos Verdes	7.0 (b)	24	W
Pinto Mountain	7.5 (b)	90	NE
Raymond	6.8 (c)	38	NW
*San Gabriel	7.5 (c)	45	N
*San Jose	6.8 (c)	32	N
Santa Cruz Island	7.3 (c)	100	WNW
Santa Monica-Hollywood	6.8 (c)	44	NW
Santa Ynez	7.5 (b)	88	NW
Sierra Madre	7.5 (b)	38	N
Sierra Nevada	8.25 (b)	115	N
*Verdugo	6.6 (c)	42	NW

(a) Pleistocene deposits disrupted.

(b) Greensfelder, C.D.M.G. Map Sheet 23, 1974.

(c) Housner (1970) Length-Magnitude relationship.

* Low Potential per A.E.G. definition.

The North and South branch faults of the Newport-Inglewood fault system are located two to three miles to the southwest where they leave the land surface and continue offshore in a southeasterly direction.

The Pelican Hill fault lies about one mile northeast of the site at its nearest point. This fault, while having deformed Tertiary rocks, does not show any signs of activity within Recent or upper Pleistocene time.

Other active faults in the site vicinity include the Norwalk and Whittier faults at distances of 18 and 21 miles, respectively, from the

site. ~~The great San Andreas fault is located at a distance greater than 50 miles.~~

SEISMICITY

The seismicity of the region surrounding the site was determined from a computer search of a magnetic tape catalog of earthquakes. The catalog of earthquakes included those compiled by the California Institute of Technology for the period 1932 to 1974 and those larger earthquakes for the period 1812 to 1931 compiled by Richter and the U. S. National Oceanic and Atmospheric Administration (NOAA). Table 4 is a computer printout of the search (Table 4 is presented at the end of this Appendix). The search indicates that 235 earthquakes of Richter magnitude 4.0 and greater have occurred since 1932 and 5 earthquakes with magnitudes greater than 6.0 occurred in the 1812 to 1931 period within 100 kilometers of the site. The 1933 Long Beach earthquake, magnitude 6.3, was centered about 5 miles southwest of the site.

The information listed for each earthquake found in Table 4 includes date and time in Greenwich Civil Time (GCT), location of the epicenter in degrees, latitude and longitude, quality of epicentral determination (Q), depth in kilometers, and magnitude. Where a depth of 2.0 is given, the solution was based on an assumed 16-kilometer focal depth. The letter code for the quality factor is interpreted as follows:

A = specially investigated.

B = epicenter probably within 5 km, origin time to nearest second.

~~C = epicenter probably within 15 km, origin time to a few seconds.~~

D = epicenter not known within 15 km, rough location.

E = epicenter roughly located, accuracy less than "D".

P = preliminary.

The computer analysis was utilized to develop an earthquake recurrence curve which is presented on Plate H.

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- Richter, List of Historic Earthquakes of Magnitude 6.0 or Greater within 100 km of the Site for the Period 1906-1931.
- U. S. Geologic Survey, "Geologic Map of the San Joaquin Hills-San Juan Capistrano Area, Orange County, California", Oil and Gas Investigations Map O.M. 193, by Vedder, Yerkes, and Schollhamer, 1957.
- Woodward-McNeill & Associates, "Geologic-Seismic Study for the City of Newport Beach General Plan", 1972.

TABLE 4
(Sheet 1 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 4.0 OR
GREATER WITHIN 100 KM OF THE SITE
(CAL TECH DATA 1932-1974)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1932	11	1	4	45	0	34.00 N	117.25 W	E	0.0	4.0
1933	3	11	1	54	8	33.62 N	117.97 W	A	0.0	6.3
1933	3	11	2	4	0	33.75 N	118.08 W	C	0.0	4.9
1933	3	11	2	5	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	9	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	2	10	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	2	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	2	16	0	33.75 N	118.08 W	C	0.0	4.8
1933	3	11	2	17	0	33.60 N	118.00 W	E	0.0	4.5
1933	3	11	2	22	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	27	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	2	30	0	33.75 N	118.08 W	C	0.0	5.1
1933	3	11	2	31	0	33.60 N	118.00 W	E	0.0	4.4
1933	3	11	2	52	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	57	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	2	58	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	59	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	3	5	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	3	9	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	3	11	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	3	23	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	3	36	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	39	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	47	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	4	36	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	11	4	39	0	33.75 N	118.08 W	C	0.0	4.9
1933	3	11	4	40	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	11	5	10	22	33.70 N	118.07 W	C	0.0	5.1
1933	3	11	5	13	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	11	5	15	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	5	18	4	33.57 N	117.93 W	C	0.0	5.2
1933	3	11	5	21	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	5	24	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	5	53	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	5	55	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	6	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	6	18	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	6	29	0	33.85 N	117.27 W	C	0.0	4.4
1933	3	11	6	35	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 2 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1933	3	11	6	58	3	33.68 N	118.05 W	C	0.0	5.5
1933	3	11	7	51	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	7	59	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	8	8	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	11	8	32	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	8	37	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	8	54	57	33.70 N	118.07 W	C	0.0	5.1
1933	3	11	9	10	0	33.75 N	118.08 W	C	0.0	5.1
1933	3	11	9	11	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	9	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	10	25	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	10	45	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	4	0	33.75 N	118.13 W	C	0.0	4.0
1933	3	11	11	29	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	38	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	41	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	11	47	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	12	50	0	33.68 N	118.05 W	C	0.0	4.4
1933	3	11	13	50	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	13	57	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	14	25	0	33.85 N	118.27 W	C	0.0	5.0
1933	3	11	14	47	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	14	57	0	33.88 N	118.32 W	C	0.0	4.9
1933	3	11	15	9	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	15	47	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	16	53	0	33.75 N	118.08 W	C	0.0	4.8
1933	3	11	19	44	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	19	56	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	22	0	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	31	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	22	40	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	23	5	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	0	27	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	12	0	34	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	4	49	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	5	46	0	33.75 N	118.03 W	C	0.0	4.4
1933	3	12	6	1	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	6	16	0	33.75 N	118.08 W	C	0.0	4.6
1933	3	12	7	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	8	35	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	15	2	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 3 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	O	DEPTH	MAGNITUDE
1933	3	12	16	51	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	17	38	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	12	18	25	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	21	28	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	23	54	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	13	3	43	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	4	32	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	13	6	17	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	13	13	18	28	33.75 N	118.08 W	C	0.0	5.3
1933	3	13	15	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	19	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	13	19	35	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	14	12	19	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	14	19	1	50	33.62 N	118.02 W	C	0.0	5.1
1933	3	14	22	42	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	2	8	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	4	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	5	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	15	11	13	32	33.62 N	118.02 W	C	0.0	4.9
1933	3	16	14	58	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	16	15	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	16	15	30	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	17	16	51	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	18	20	52	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	19	21	23	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	19	21	23	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	20	13	58	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	21	3	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	8	40	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	18	31	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	25	13	46	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	30	12	25	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	31	10	49	0	33.75 N	118.08 W	C	0.0	4.1
1933	4	1	6	42	0	33.75 N	118.08 W	C	0.0	4.2
1933	4	2	8	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	4	2	15	36	0	33.75 N	118.08 W	C	0.0	4.0
1933	4	2	15	36	0	33.75 N	118.08 W	C	0.0	4.0
1933	5	10	20	58	55	33.75 N	118.17 W	C	0.0	4.0
1933	8	4	4	17	48	33.75 N	118.18 W	C	0.0	4.0
1933	10	2	9	10	18	33.78 N	118.13 W	A	0.0	5.4
1933	10	2	13	26	1	33.62 N	118.02 W	C	0.0	4.0
1933	10	25	7	0	46	33.95 N	118.13 W	C	0.0	4.3
1933	11	13	21	28	0	33.87 N	118.20 W	B	0.0	4.0
1933	11	20	10	32	0	33.78 N	118.13 W	B	0.0	4.0
1934	1	9	14	10	0	34.10 N	117.68 W	A	0.0	4.5
1934	1	18	2	14	0	34.10 N	117.68 W	A	0.0	4.0

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TABLE 4
(Sheet 4 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1934	1	20	21	17	0	33.62 N	118.12 W	B	0.0	4.5
1934	4	17	18	33	0	33.57 N	117.98 W	C	0.0	4.0
1934	10	17	9	38	0	33.63 N	118.40 W	B	0.0	4.0
1934	11	10	21	36	0	33.75 N	118.00 W	B	0.0	4.0
1935	6	10	15	33	0	33.27 N	117.02 W	B	0.0	4.0
1935	6	10	11	17	0	33.72 N	117.52 W	B	0.0	4.0
1935	7	3	10	54	17	34.20 N	117.90 W	A	0.0	4.7
1935	9	3	6	47	0	34.03 N	117.32 W	U	0.0	4.5
1935	11	4	3	55	0	33.50 N	116.92 W	U	0.0	4.5
1935	12	25	17	15	0	33.60 N	118.02 W	B	0.0	4.5
1936	2	23	22	20	43	34.13 N	117.34 W	A	10.0	4.5
1936	2	26	9	31	28	34.14 N	117.34 W	A	10.0	4.0
1936	7	29	14	22	53	33.45 N	118.90 W	C	10.0	4.0
1936	8	22	5	21	0	33.77 N	117.82 W	B	0.0	4.0
1937	1	15	18	35	47	33.56 N	118.06 W	B	10.0	4.0
1937	3	19	1	23	38	34.11 N	117.43 W	A	10.0	4.0
1937	7	7	11	12	0	33.57 N	117.98 W	B	0.0	4.0
1937	9	1	13	48	8	34.21 N	117.53 W	A	10.0	4.5
1937	9	1	16	35	34	34.18 N	117.55 W	A	10.0	4.5
1938	5	21	9	44	0	33.62 N	118.03 W	B	0.0	4.0
1938	5	31	8	34	55	33.70 N	117.51 W	U	10.0	5.5
1938	6	16	5	59	17	33.46 N	116.90 W	B	10.0	4.0
1938	7	5	18	6	56	33.68 N	117.55 W	A	10.0	4.5
1938	8	6	22	0	56	33.72 N	117.51 W	B	10.0	4.0
1938	8	31	3	18	14	33.70 N	118.25 W	A	10.0	4.5
1938	11	29	19	21	16	33.90 N	118.43 W	A	10.0	4.0
1938	12	7	3	38	0	34.00 N	118.42 W	B	0.0	4.0
1938	12	27	10	9	29	34.13 N	117.52 W	B	10.0	4.0
1939	4	3	2	50	45	34.04 N	117.23 W	A	10.0	4.3
1939	11	4	21	41	0	33.77 N	118.12 W	B	0.0	4.0
1939	11	7	18	52	8	34.00 N	117.23 W	A	0.0	4.7
1939	12	27	19	26	49	33.78 N	118.20 W	A	0.0	4.7
1940	1	13	7	49	7	33.78 N	118.13 W	U	0.0	4.0
1940	2	8	16	56	17	33.70 N	118.07 W	B	0.0	4.0
1940	2	11	19	24	10	33.98 N	118.30 W	B	0.0	4.0
1940	2	19	12	6	56	34.02 N	117.05 W	A	0.0	4.0
1940	4	18	18	43	44	34.03 N	117.35 W	A	0.0	4.4
1940	6	5	8	27	27	33.83 N	117.40 W	H	0.0	4.0
1940	7	20	4	1	13	33.70 N	118.07 W	B	0.0	4.0
1940	10	11	5	57	12	33.77 N	118.45 W	A	0.0	4.7
1940	10	12	0	24	0	33.78 N	118.42 W	B	J.C.	4.0
1940	10	14	20	51	11	33.78 N	118.42 W	B	0.0	4.0
1940	11	1	7	25	3	33.78 N	118.42 W	B	0.0	4.0
1940	11	1	20	0	46	33.53 N	118.20 W	B	0.0	4.0

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TABLE 4
(Sheet 5 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1940	11	2	2	58	26	33.78 N	118.42 W	B	0.0	4.0
1941	1	30	1	34	47	33.97 N	118.05 W	A	0.0	4.1
1941	3	22	8	22	40	33.52 N	118.10 W	B	0.0	4.0
1941	3	25	23	43	41	34.22 N	117.47 W	B	0.0	4.0
1941	4	11	1	20	24	33.95 N	117.58 W	B	0.0	4.0
1941	10	22	6	57	19	33.82 N	118.22 W	A	0.0	4.9
1941	11	14	8	41	36	33.78 N	118.25 W	A	0.0	5.4
1942	1	24	21	41	48	32.80 N	117.83 W	B	0.0	4.0
1942	4	16	7	28	33	33.37 N	118.15 W	C	0.0	4.0
1943	2	23	9	21	12	32.85 N	117.48 W	C	0.0	4.0
1943	10	24	0	29	21	33.93 N	117.37 W	B	0.0	4.0
1944	6	19	0	3	33	33.87 N	118.22 W	B	0.0	4.0
1944	9	19	3	6	7	33.87 N	118.22 W	C	0.0	4.5
1946	2	24	6	7	52	34.40 N	117.80 W	C	0.0	4.4
1948	3	1	8	12	13	34.17 N	117.53 W	B	0.0	4.1
1948	10	3	2	40	28	34.18 N	117.58 W	A	0.0	4.7
1950	1	11	21	41	35	33.94 N	118.20 W	A	0.0	4.0
1951	9	22	8	22	39	34.12 N	117.34 W	A	0.4	4.1
1951	12	26	0	40	54	32.82 N	118.35 W	A	11.9	4.3
1952	2	13	15	13	37	32.87 N	118.25 W	C	0.0	5.9
1952	2	17	12	36	58	34.00 N	117.27 W	A	0.0	4.7
1954	10	26	16	22	26	33.73 N	117.47 W	B	16.0	4.5
1955	5	15	17	3	26	34.12 N	117.48 W	A	0.0	4.1
1956	1	3	0	25	49	33.72 N	117.48 W	A	7.6	4.0
1959	6	27	16	22	11	33.97 N	117.50 W	B	13.7	4.7
1960	6	28	20	0	48	33.97 N	116.88 W	A	13.8	4.0
1961	10	4	2	21	32	34.12 N	117.47 W	A	12.0	4.1
1961	10	20	19	49	51	33.85 N	117.75 W	B	4.3	4.1
1961	10	20	20	7	14	33.65 N	117.99 W	B	4.6	4.3
1961	10	20	21	42	41	33.67 N	117.98 W	B	6.1	4.0
1961	10	20	22	35	34	33.67 N	117.98 W	B	7.2	4.0
1961	11	20	8	53	35	33.68 N	117.99 W	B	5.6	4.1
1962	4	27	9	12	32	33.74 N	117.19 W	B	4.4	4.0
1963	9	14	3	51	16	33.54 N	118.34 W	B	5.7	4.1
1963	9	23	14	41	53	33.71 N	118.92 W	B	2.2	4.2
1964	8	30	22	57	37	34.27 N	118.44 W	B	16.5	5.0
1965	1	1	8	4	18	34.14 N	117.52 W	B	15.4	4.0
1965	4	15	20	8	33	34.13 N	117.52 W	B	5.9	4.4
1967	1	8	7	37	30	33.63 N	117.43 W	B	5.5	4.5
1967	1	8	7	38	5	33.63 N	118.47 W	B	11.4	4.0
1967	6	15	4	58	6	34.00 N	118.41 W	B	17.7	4.0
1969	5	5	16	2	10	34.00 N	117.97 W	C	10.0	4.1
1969	10	27	13	16	2	34.30 N	117.57 W	B	8.8	4.4
1969	10	27	13	16	2	34.53 N	117.81 W	B	6.5	4.4
1970	9	12	14	10	11	34.27 N	117.52 W	A	8.0	4.1

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TABLE 4
(Sheet 6 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1970	9	12	14	30	53	34.27 N	117.54 W	A	8.0	5.4
1970	9	13	4	47	49	34.28 N	117.55 W	A	8.0	4.4
1971	2	9	14	10	21	34.36 N	118.31 W	D	5.0	4.7
1971	2	9	14	16	13	34.34 N	118.33 W	C	11.1	4.1
1971	2	9	14	19	50	34.36 N	118.41 W	U	11.8	4.0
1971	2	9	14	39	18	34.37 N	118.36 W	C	-1.6	4.0
1971	2	9	14	43	47	34.31 N	118.45 W	B	6.2	5.2
1971	2	9	15	58	21	34.33 N	118.53 W	B	14.2	4.0
1971	2	10	3	12	12	34.37 N	118.30 W	B	0.8	4.0
1971	2	10	5	6	36	34.41 N	118.33 W	A	4.7	4.0
1971	2	10	17	38	55	34.40 N	118.37 W	A	6.2	4.2
1971	3	7	1	33	41	34.35 N	118.46 W	A	3.3	4.5
1971	3	25	22	54	10	34.36 N	118.47 W	A	4.0	4.2
1971	3	30	8	54	43	34.30 N	118.46 W	A	2.6	4.1
1971	3	31	14	52	23	34.29 N	118.51 W	A	2.1	4.6
1971	4	2	5	40	25	34.28 N	118.53 W	A	3.0	4.0
1971	4	15	11	14	32	34.26 N	118.58 W	B	4.2	4.2
1971	4	25	14	48	7	34.37 N	118.31 W	B	-2.0	4.0
1971	6	21	16	1	8	34.27 N	118.53 W	B	4.1	4.0
1971	6	22	10	41	19	33.75 N	117.48 W	B	8.0	4.2
1973	3	9	0	54	32	34.38 N	118.42 W	B	8.0	4.6
1974	9	21	10	37	0	33.92 N	117.05 W	P	0.0	4.2

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TABLE 4
(Sheet 7 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 1 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	4.0 - 8.5	
TEMPORAL LIMITS	1932 - 1974	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	43	
NUMBER OF EARTHQUAKES IN FILE	17795	
NUMBER OF EARTHQUAKES IN AREA	236	

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***** LEROY CRANDALL AND ASSOCIATES *****
LCS ANGELES

TABLE 4
(Sheet 8 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 6.0 OR
GREATER WITHIN 100 KM OF THE SITE
(RICHTER DATA 1906-1931)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1907	9	20	1	54	0	34.20 N	117.10 W	D	0.0	6.0
1910	5	15	15	47	0	33.70 N	117.40 W	D	0.0	5.0
1918	4	21	22	32	25	33.75 N	117.00 W	D	0.0	6.8
1923	7	23	7	30	26	34.00 N	117.25 W	D	0.0	6.3

02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

TABLE 4
(Sheet 9 of 14)

*** SEARCH OF EARTHQUAKE DATA FILE 2 ***

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N 117.87 W
DISTANCE PER DEGREE	110.9 KM-N 92.8 KM-W
MAGNITUDE LIMITS	6.0 - 8.5
TEMPORAL LIMITS	1906 - 1931
SEARCH RADIUS (KM)	100
NUMBER OF YEARS OF DATA	26
NUMBER OF EARTHQUAKES IN FILE	35
NUMBER OF EARTHQUAKES IN AREA	4

B-18

***** LEROY CRANDALL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 10 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 7.0 OR
GREATER WITHIN 100 KM OF THE SITE
(NOAA/CDMG DATA 1812-1905)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1890	2	9	4	6	0	34.00 N	117.50 W	D	0.0	7.0

61-8

TABLE 4
(Sheet 11 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 3 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	7.0 - 6.5	
TEMPORAL LIMITS	1812 - 1905	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	94	
NUMBER OF EARTHQUAKES IN FILE	9	
NUMBER OF EARTHQUAKES IN AREA	1	

B-20

***** LEROY CRANFAL - AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 12 of 14)

*** * COMPUTATION OF RECURRENCE CURVE * * * *
LOG N = A - B M

BIN	MAGNITUDE	RANGE	NU/YR (N)
1	4.25	4.00 - 4.50	0.393E 01
2	4.75	4.50 - 5.00	0.112E 01
3	5.25	5.00 - 5.50	0.349E 00
4	5.75	5.50 - 6.00	0.698E-01
5	6.25	6.00 - 6.50	0.290E-01
6	6.75	6.50 - 7.00	0.145E-01
7	7.25	7.00 - 7.50	0.613E-02 NU
8	7.75	7.50 - 8.00	0.0
9	8.25	8.00 - 8.50	0.0

B-21

A = 4.814 B = 1.0070 SIGMA = 0.123E 00

***** LEROY CRANDAL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 13 of 14)

***** COMPUTATION OF DESIGN MAGNITUDE *****
CONSTANT AREA

TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN MAGNITUDE			
	25	50	75	DESIGN LIFE (YEARS) 100	25	50	75	100
0.01 ..	2487	4974	7462	9949	7.93	8.13	8.23	8.28
0.05 ..	487	974	1462	1949	7.33	7.60	7.75	7.85
0.10 ..	237	474	711	949	7.04	7.32	7.48	7.59
0.20 ..	112	224	336	448	6.72	7.01	7.18	7.30
0.30 ..	70	140	210	280	6.52	6.82	6.99	7.11
0.50 ..	36	72	108	144	6.24	6.53	6.71	6.83
0.70 ..	20	41	62	83	6.00	6.30	6.47	6.59
0.90 ..	10	21	32	43	5.72	6.02	6.19	6.32
	MU = 4.98			BETA = 2.319				

B-22

***** LEROY CRANDAL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 14 of 14)

***** COMPUTATION OF DESIGN MAGNITUDE *****
FOR 0.1 G ROCK ACCELERATION

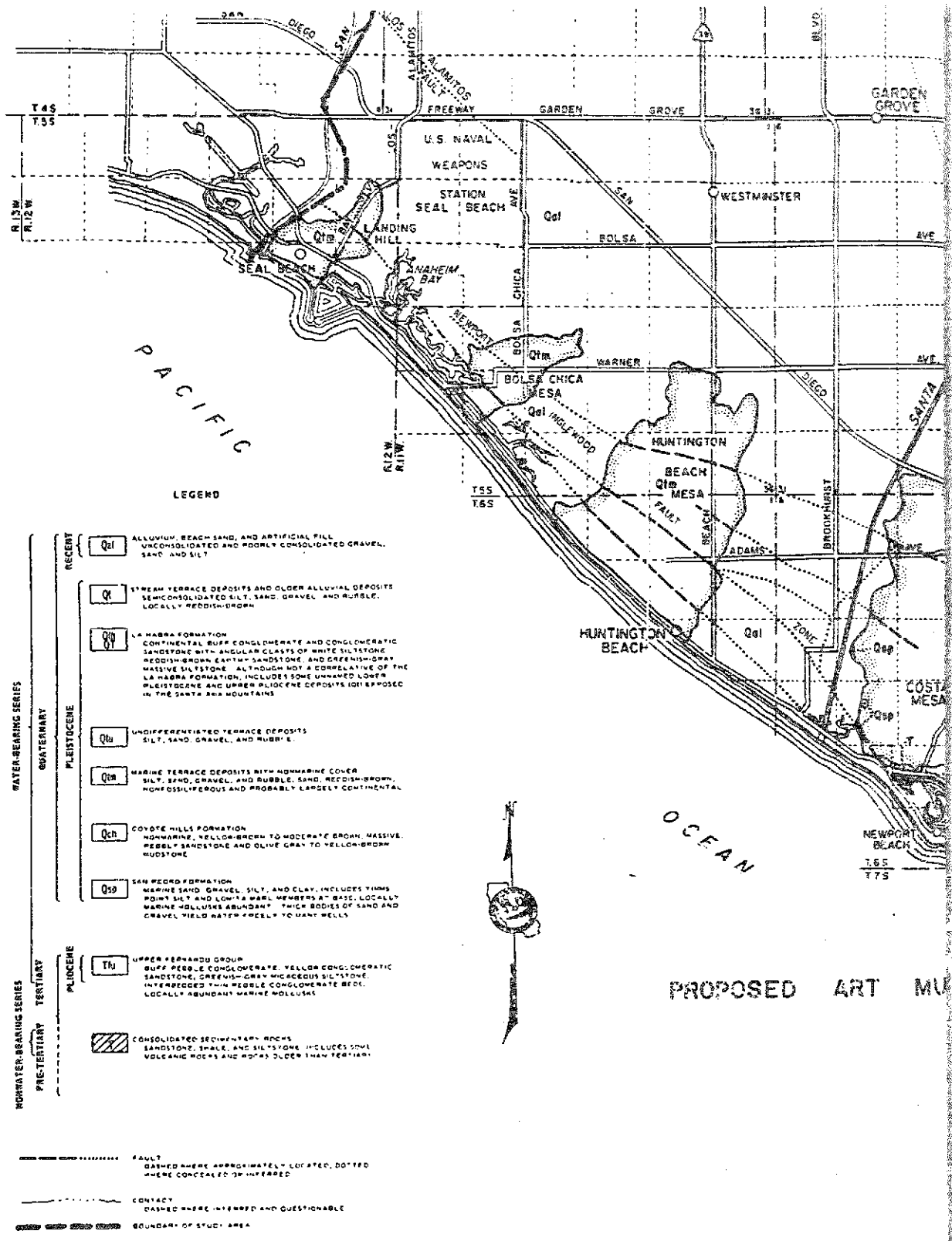
TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN MAGNITUDE			
	DESIGN LIFE (YEARS)							
	25	50	75	100	25	50	75	100
0.01 ..	2487	4974	7462	9949	7.99	8.20	8.29	8.33
0.05 ..	487	974	1462	1949	7.17	7.56	7.77	7.89
0.10 ..	237	474	711	949	6.70	7.15	7.39	7.55
0.20 ..	112	224	336	448	6.19	6.66	6.93	7.11
0.30 ..	70	140	210	280	5.85	6.34	6.62	6.81
0.50 ..	36	72	108	144	5.38	5.87	6.16	6.36
0.70 ..	20	41	62	83	4.98	5.48	5.77	5.97
0.90 ..	10	21	32	43	4.50	5.01	5.30	5.51

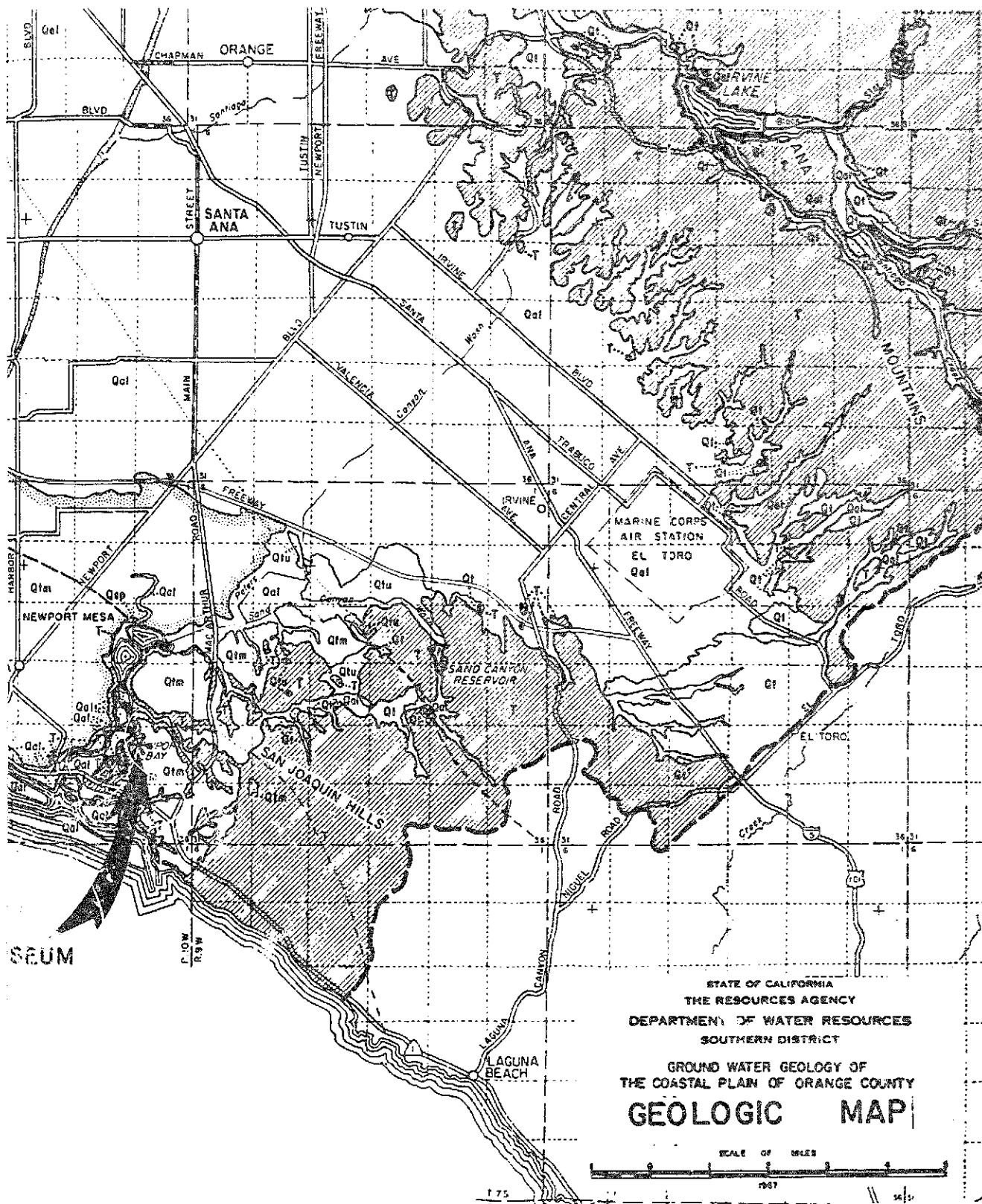
MU = 0.18 BETA = 1.363

***** LEROY CRANCALL AND ASSOCIATES *****
LOS ANGELES

B-23



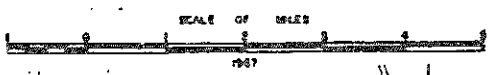
- LEGEND**
- WATER-BEARING SERIES**
- RECENT**
- Qal** ALLUVIUM, BEACH SAND, AND ARTIFICIAL FILL UNCONSOLIDATED AND MODERLY CONSOLIDATED GRAVEL, SAND AND SILT
 - Qt** Y-MEAN TERRACE DEPOSITS AND OLDER ALLUVIAL DEPOSITS SEMI-CONSOLIDATED SILT, SAND, GRAVEL, AND RUBBLE, LOCALLY REDDISH-BROWN
 - Qm** LA HABRA FORMATION CONTINENTAL BUFF CONGLOMERATE AND CONGLOMERATIC SANDSTONE WITH ANGULAR CLASTS OF WHITE SILTSTONE, REDDISH-BROWN, EARTHEN SANDSTONE, AND GREENISH-GRAY MASSIVE SILTSTONE. ALTHOUGH NOT A CORRELATIVE OF THE LA HABRA FORMATION, INCLUDES SOME UNNAMED LOWER PLISTOCENE AND UPPER PLIOCENE DEPOSITS (NOT EXPOSED IN THE SANTA ANA MOUNTAINS)
 - Qun** UNDIFFERENTIATED TERRACE DEPOSITS SILT, SAND, GRAVEL, AND RUBBLE
 - Qtn** MARINE TERRACE DEPOSITS WITH NONMARINE COVER SILT, SAND, GRAVEL, AND RUBBLE, SAND, REDDISH-BROWN, NONFOSSILIFEROUS AND PROBABLY LARGELY CONTINENTAL
 - Qch** COYOTE HILLS FORMATION NONMARINE, YELLOW-BROWN TO MODERATE BROWN, MASSIVE, PEBBLY SANDSTONE AND OLIVE GRAY TO YELLOW-BROWN MUDSTONE
 - Qsp** SAN PEDRO FORMATION MARINE SAND, GRAVEL, SILT, AND CLAY, INCLUDES THIN POINT SILT AND LOW-TA MARL MEMBERS AT BASE, LOCALLY MARINE MOLLUSCS ABUNDANT. THICK BODIES OF SAND AND GRAVEL YIELD WATER FREELY TO MANY WELLS
- QUATERNARY**
- PLEISTOCENE**
- QUATERNARY**
- PLIOCENE**
- Tlu** UPPER TERAMUND GROUP BUFF PEBBLE CONGLOMERATE, YELLOW CONGLOMERATIC SANDSTONE, GREENISH-GRAY MICACEOUS SILTSTONE, INTERBEDDED THIN PEBBLE CONGLOMERATE BEDS, LOCALLY ABUNDANT MARINE MOLLUSKS
- NONWATER-BEARING SERIES**
- PRE-TERTIARY**
- CONSOLIDATED SEDIMENTARY ROCKS SANDSTONE, SHALE, AND SILTSTONE, INCLUDES SOME VOLCANIC ROCKS AND MAFIC OLDER THAN TERTIARY
- FAULT**
DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED OR INFERRED
- CONTACT**
DASHED WHERE INFERRED AND QUESTIONABLE
- BOUNDARY OF STUDY AREA**



SEUM

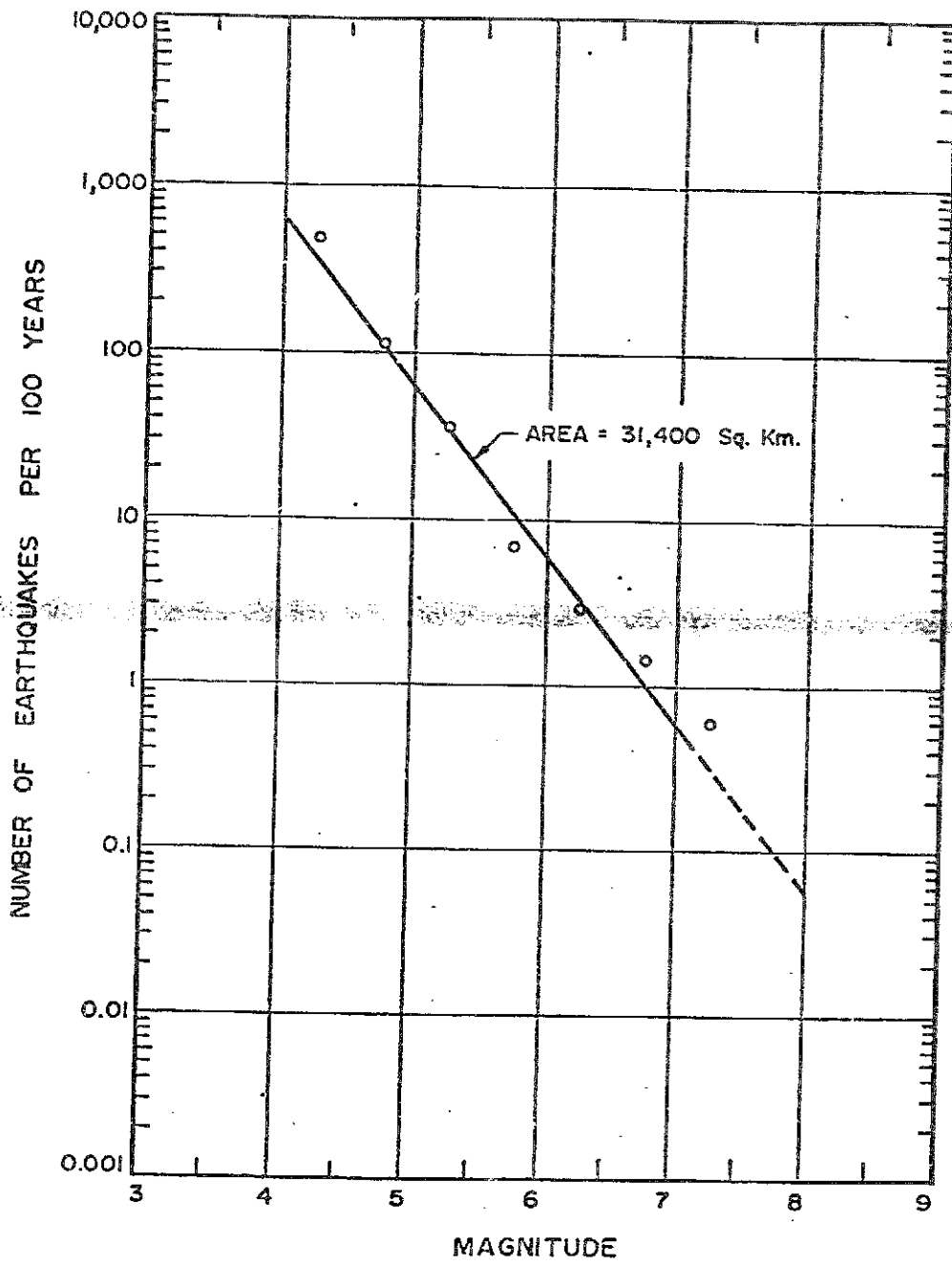
STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SOUTHERN DISTRICT

GROUND WATER GEOLOGY OF
 THE COASTAL PLAIN OF ORANGE COUNTY
GEOLOGIC MAP



JOB NO. AE-76171

LEROY CRANDALL AND ASSOCIATES
 PLATE G



RECURRENCE CURVE
1812 - 1974
 241 EVENTS $M \geq 4.0$
 100 Km SEARCH RADIUS

PLATE H

Robert Bein, William Frost & Associates

PROFESSIONAL ENVIRONMENTAL ENGINEERS & PLANNERS

April 19, 1977

City of Newport Beach
Department of Community Development
3300 Newport Boulevard
Newport Beach, California 92663

Attention: Mr. Jim Evans

Gentlemen:

In accordance with the requirements of the City of Newport Beach, either an engineer under my supervision, or myself, has field checked the subgrade on the Newport Harbor Art Museum Parking Lot within Parcel 2 as shown on a map filed in Book 81, Page 9 of Parcel Maps Records of Orange County within the City of Newport Beach, California.

I hereby acknowledge that the subgrade of the above-mentioned parking lot has been satisfactorily completed in conformance with the permit plans and specifications.

The subject project is located at 850 San Clemente Drive, Newport Beach, California and covered under Grading Permit No. 14633.

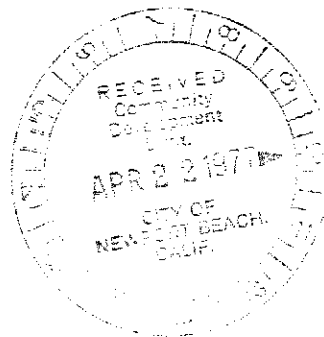
Sincerely,



Robert W. Bein
Civil Engineer #12758

RWB:aj

cc: Mr. R. L. Plageman - Don Koll Company



JAMES E. RUSSELL & SON, INC.

747 WEST KATELLA AVE. • SUITE 101 • ORANGE, CALIF. 92667

Phone (714) 997-1881

City of Newport Beach
Attn: Mr. Holland

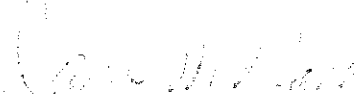
October 12, 1976

Gentlemen:

Enclosed for your approval is our proposed route to export approximately 3,000 cubic yards of dirt from Newport Center to Santa Ana.

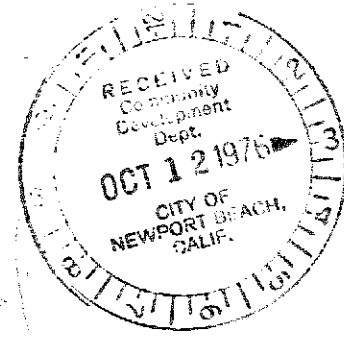
Please call if you have any questions.

Sincerely,



James M. Noel
Vice President

*Remove curb and gutter
install temp approach
Replace curb & gutter
as shown complete
Bill Russell*



*G.P.C. 925-76
SAN CLEMENTE*

10-12-76

*ENCROACHMENT PERMIT FOR
TEMP. APPROACH WILL BE REQUIRED
William B. Dye
10-12-76*

Newport Fly

Asphalt

Drain to (basement)

SAN

W

Diego Fly

↑
N

NOT TO SCALE

SAN DIEGO

San Diego
San Diego

PHILIP
ISLAND

San Felipe Island

CITY OF NEWPORT BEACH

DEPARTMENT OF COMMUNITY DEVELOPMENT

PRE-GRADING MEETING AGREEMENT

JOB ADDRESS: 1570 San Juan Ct

1. The grading permit number for this site is 14653, and will be referred to in all reports, certifications and correspondence.
2. Joe Zell will be the responsible person on the job and will be required to inform the owner, design engineer, soils engineer, geologist or contractor of any stop work notices or correction notices given to him by the Building Official. In the event the Building Official determines that a correction is serious enough to have the grading stopped, the notice will be given to the contractor if _____ cannot be located.
3. The undersigned agrees to comply with the Grading Code of the City of Newport Beach and all requirements of the approved grading plans.
4. An approved set of grading plans and a copy of the grading permit will be on the job at all times.
5. The permittee or his agent shall notify the Building Official when the grading operation is ready for each of the following inspections:
 - a) Initial Inspection. When the permittee is ready to begin work, but not less than two days before any grading or brushing is started.
 - b) Toe Inspection. After the natural ground or bedrock is exposed and prepared to receive fill, but before fill is placed.
 - c) Excavation Inspection. After the excavation is started, but before the vertical depth of the excavation exceeds ten feet.
 - d) Fill Inspection. After the fill placement is started, but before the vertical height of the fill exceeds ten feet.
 - e) Drainage Device Inspection. After forming of terrace drains, downdrains or after placement of pipe in subdrains, but before any concrete is placed or filter material.
 - f) Rough Grading. When all rough grading has been completed. This inspection may be called for at the completion of rough grading without the necessity of the Building Official having previously reviewed and approved the reports.
 - g) Final. When all work, including installation of all drainage structures and other protective devices has been completed and the as-graded plan, professional approvals and the required reports have been submitted.

6. The Building Official will give a rough grade release when the following has been approved:

- a) Design Civil Engineer's rough grade approval.
- b) Soil Engineer's final compaction report and approval.
- c) Geologist's report
- d) Grading Inspector's field inspection

7. The Building Official will give a final grade release when the following has been approved:

- a) Design Civil Engineer's final grade approval
- b) Soil Engineer's compaction report and approval of utility line backfill
- c) Grading Inspector's field inspection

The undersigned acknowledge a copy of the above and agree to comply with all the outlined requirements.

Date: _____

Owner: NEWPORT HARBOR ART MUSEUM
 by: J. LOU SEN
 Address: _____
 Telephone: _____

Design Civil Engr: ROBERT BEN
 by: Robert Ben
 Address: 1401 QUAIL ST. N.B.
 Telephone: 833-0070

Soil Engineer: LEROY CRANDALL & ASSOC.
 by: Kim M. Carter
 Address: 716 N. ALVARADO ST. CA, C90026
 Telephone: (213) 413-3550

Geologist: _____
 by: _____
 Address: _____
 Telephone: _____

Grading Contr: RUSSELL & SON INC.
 by: Jim Noon
 Address: 747 W. KATELINA DR
 Telephone: 997-1881

Coordinator: DOA KOLL CO.
 by: A. E. Mc Cool
 Address: 1901 AVENUE ST. N.B.
 Telephone: 714/833-3030

Robert Bein, William Frost & Associates

PROFESSIONAL ENVIRONMENTAL ENGINEERS & PLANNERS

November 11, 1976

City of Newport Beach
Department of Community Development
3300 Newport Boulevard
Newport Beach, California 92663

Attention: Dutch Hollan

Gentlemen:

In accordance with the requirements of the City of Newport Beach, either an engineer under my supervision, or myself, has field checked the rough grading on the Newport Harbor Art Museum building pad, Parcel 2 as shown on a map filed in Book 81, Page 9 of Parcel Maps Records of Orange County within the City of Newport Beach, California.

I hereby acknowledge that the rough grading of the above-mentioned pad has been satisfactorily completed in conformance with the permit plans and specifications.

The subject project is located at 850 San Clemente Drive, Newport Beach, California and covered under Grading Permit No. 14633.

Sincerely,



Robert W. Bein
President

RWB:RJ:pg
cc: Mr. Don McCool, Don Koll Company

LeROY CRANDALL AND ASSOCIATES
Consulting Foundation Engineers

INTERIM
REPORT OF COMPACTED FILL

Project: Proposed Newport Harbor Art Museum (Job No. B-76157)
850 San Clemente Drive
Newport Beach, California
for the Newport Harbor Art Museum

The compacted fill placed for ~~xxxxxxx~~ floor slab support of the proposed
Newport Harbor Art Museum building is approved as of November 12, 1976. The
grading was performed in accordance with the project specifications and the recommendations of our
foundation investigation report dated September 21, 1976, (our Job No. AE-76171).

Inspection and field density tests were made by our representative during the progress of
the job. The results and approximate locations of the tests are attached as a part of this report.

The fill was compacted to at least 95% of the maximum dry density obtainable by the
ASTM Designation D1557-70, modified Normal floor load pressures method of compaction. ~~xxxxxxx~~

~~xxxxxxx~~ may be imposed on the fill under the following conditions: The
foundations will be established in undisturbed natural soils.

This certification is limited to The building area as delineated on the
attached Plot Plan.

Upon completion of the grading, our final report will be submitted, giving the locations
and results of all tests and observations.

Comments: The compacted fill work was done during the period of November 5 through
November 10, 1976. All field density tests were made by the sand-cone method. The fill
slope on the northerly side of the building is not yet complete.

(2 copies submitted)
Attachments (2)

cc: (1) The Koll Company (Job Site)

LeRoy Crandall and Associates,
by Russell C. Weber
Russell C. Weber, R.C.E. 8954
Vice President

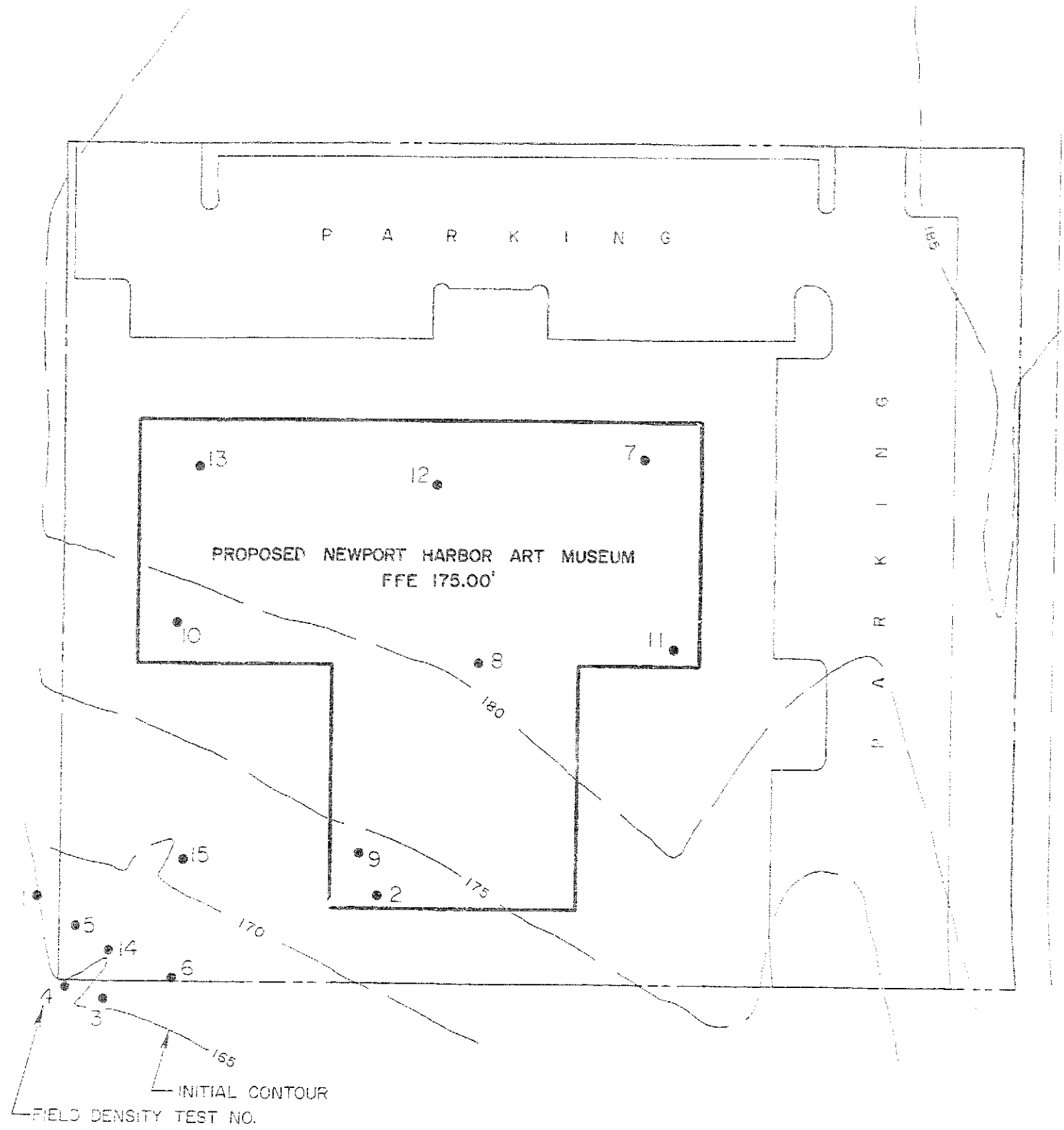
T A B L E O F T E S T R E S U L T S

TEST NO.	ELEVATION (FEET)	MOISTURE CONTENT (% OF DRY WT.)	DRY DENSITY (LBS./CU.FT.)	MAXIMUM DRY DENSITY (LBS./CU.FT.)	PERCENT COMPACTION	
					REQUIRED	OBTAINED
1	160	10.8	111	111	90	100
2	172	12.6	115	120	95	96
3	163	13.5	117	125	90	94
4	165½	13.7	111	120	90	93
5	168½	8.0	111	118	90	94
6	169½	9.7	109	118	90	92
7	174½	13.0	108	110	95	98
8	174½	9.5	106	110	95	96
9	174½	10.6	113	118	95	96
10	174½	11.6	114	118	95	97
11	174½	9.3	114	118	95	97
12	174½	11.5	116	118	95	98
13	174½	11.6	115	118	95	97
14	170	11.8	109	118	90	92
15	172	11.0	103	110	90	94

NOTE: Elevations refer to job datum.

B-76157 11-12-76 1b

DATE: 11-15-76
BY: J.L. CRANDALL



REFERENCE:
 GRADING PLAN (DATED 9-16-75) BY
 ROBERT BEIN, WILLIAM FROST & ASSOCIATES.

TO SANTA BARBARA ST. SAN CLEMENTE DRIVE

PLOT PLAN
 SCALE 1" = 40'

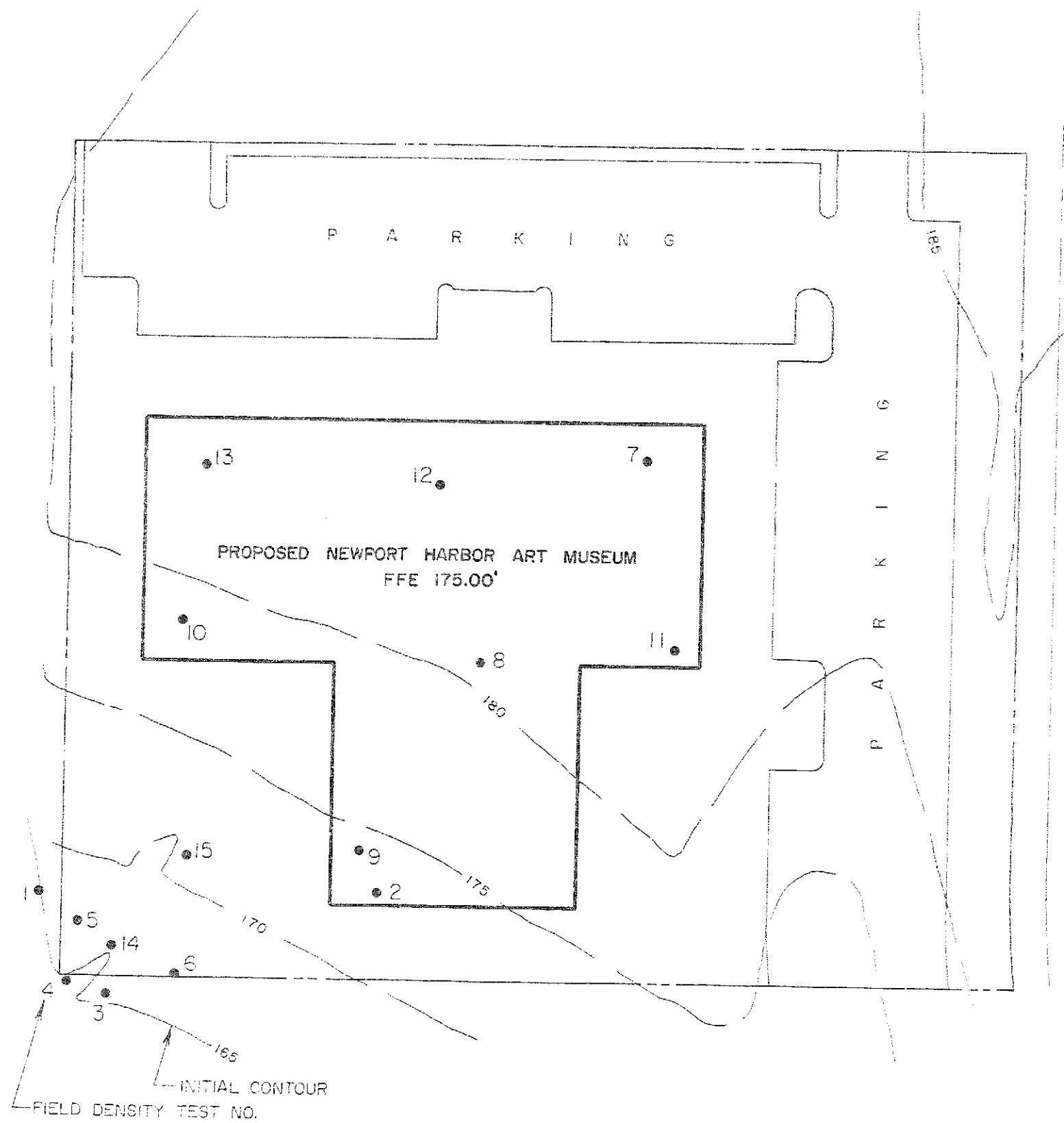
LeROY CRANDALL AND ASSOCIATES

T A B L E O F T E S T R E S U L T S

<u>TEST NO.</u>	<u>ELEVATION (FEET)</u>	<u>MOISTURE CONTENT (% OF DRY WT.)</u>	<u>DRY DENSITY (LBS./CU.FT.)</u>	<u>MAXIMUM DRY DENSITY (LBS./CU.FT.)</u>	<u>PERCENT COMPACTION</u>	
					<u>REQUIRED</u>	<u>OBTAINED</u>
1	160	10.8	111	111	90	100
2	172	12.6	115	120	95	96
3	163	13.5	117	125	90	94
4	165½	13.7	111	120	90	93
5	168½	8.0	111	118	90	94
6	169½	9.7	109	118	90	92
7	174½	13.0	108	110	95	98
8	174½	9.5	106	110	95	96
9	174½	10.6	113	118	95	96
10	174½	11.6	114	118	95	97
11	174½	9.3	114	118	95	97
12	174½	11.5	116	118	95	98
13	174½	11.6	115	118	95	97
14	170	11.8	109	118	90	92
15	172	11.0	103	110	90	94

NOTE: Elevations refer to job datum.

B-76157 11-12-76 1b - WAZ/PC-J



REFERENCE:
 GRADING PLAN (DATED 9-16-75) BY
 ROBERT BEIN, WILLIAM FROST & ASSOCIATES.

PLOT PLAN
 SCALE 1" = 40'

LEROY CRANDALL AND ASSOCIATES

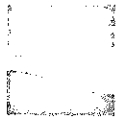
RECEIVED
SEP 29 1976
Bartlett Assoc

REPORT OF GEOTECHNICAL INVESTIGATION
PROPOSED NEWPORT CENTER BRANCH LIBRARY
SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE
NEWPORT BEACH, CALIFORNIA
FOR THE
CITY OF NEWPORT BEACH
(OUR JOB NO. AE-76175)

~~Library~~ ART & MUSEUM

536 SAN CLEMENTE

~~S. P. C.~~ ~~925-76~~
925-76



September 22, 1976

City of Newport Beach
3300 Newport Boulevard
Newport Beach, California 92660

P. O. No. 07743
(Our Job No. AN-76175)

Gentlemen:

Our "Report of Geotechnical Investigation, Proposed Newport Center Branch Library, San Clemente Drive near Santa Barbara Drive, Newport Beach, California, for the City of Newport Beach" is herewith submitted.

The scope of the investigation was planned in collaboration with Mr. Owen McCorkle of William Blureck & Partners. We were advised of the structural features of the proposed building by Mr. Tranbarger of Martin & Tranbarger, Structural Engineers, and the results of our investigation and preliminary recommendations were discussed with him.

Existing fill soils, approximately 10 feet in thickness, were encountered in one of the borings located in the parking area southwesterly of the proposed library; other fill deposits may occur on the site. The natural soils beneath the site consist of silty sand, clayey sand, and sand. The natural soils to a depth of about one foot are only moderately firm at present moisture content and would become weaker when wet. The underlying natural soils are firm. We recommend that the existing fill soils and the upper one foot of natural soils be excavated and replaced as properly compacted fill, and that the planned additional fill be properly compacted. If this is done, the proposed building may be supported on shallow spread footings established in either the compacted fill or the underlying natural soils.

No unusual geologic conditions appear to be present on or adjacent to the site that would constitute a geologic hazard to the proposed development. No faults are known to exist within the site; accordingly, the possibility of surface rupture at the site due to faulting is slight.

September 22, 1976
(Our Job No. AE-76175)

The soil and geologic conditions of the site are described in the report, and recommendations for foundation design, for grading, and for floor slab and paving support are presented.

Respectfully submitted,

LEROY CRANDALL AND ASSOCIATES

by *Robert Chieruzzi*
Robert Chieruzzi, R.C.E. 13001
Project Engineer

by *Glenn A. Brown*
Glenn A. Brown, C.E.G. 3
Director of Geological Services

by *J. D. Kirkgard*
J. D. Kirkgard, P.C.E. 10441
Executive Vice President

JK-RC-GB/pa
(3 copies submitted)

cc: (2) William Blurock & Partners
(1) Martin & Tranbarger

REPORT OF GEOTECHNICAL INVESTIGATION
PROPOSED NEWPORT CENTER BRANCH LIBRARY
SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE
NEWPORT BEACH, CALIFORNIA
FOR THE
CITY OF NEWPORT BEACH



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SCOPE

This report presents the results of a geotechnical investigation, including geologic-seismic studies, performed for the subject project. The investigation was performed concurrently with similar studies for the adjacent Newport Harbor Art Museum. The locations of the proposed library and museum, and the locations of our exploration borings, are shown on Plate 1, Plot Plan. Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are included herein.

The investigation was authorized to determine the pertinent static characteristics of the soils beneath the site and to provide recommendations for foundation design and floor slab support for the proposed building. The geologic-seismic studies were performed to comply with the City of Newport Beach Seismic Safety Element. The scope of our studies did not include dynamic studies of ground motion and the development of site response spectra for the project. The results of the field explorations and laboratory tests, which form the basis of the foundation recommendations, are presented in Appendix A. The geologic and seismic data, which form the basis of the geologic conclusions, are presented in Appendix B.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers and geologists practicing in this or similar



localities. No other warranty, expressed or implied, is made over the professional advice included in this report. This report has been prepared for the City of Newport Beach and their design consultants to be used solely in the design of the proposed building. The report has not been prepared for use by other parties, and may not contain sufficient information for purposes of other parties or other uses.

STRUCTURAL CONSIDERATIONS

The proposed library, which is shown in plan on Plate 1, will initially be one story in height; a two-story addition is planned for future construction. The building will have masonry walls. Column loads will range from 20 to 40 kips. Maximum wall loads will be on the order of 2.5 kips per lineal foot.

The floor of the building will be established at Elevation 170. Based on the existing topography, excavation ranging up to 3 feet deep and compacted fill ranging up to 13 feet in thickness will be required within the building area. Excavation ranging up to 8 feet deep and compacted fill up to 15 feet in thickness will be required elsewhere within the site.

SITE CONDITIONS

The proposed library will be located inland approximately 1.5 miles from the Pacific Ocean within the City of Newport Beach, California. The property is located on a dissected terrace 0.5 miles east of Upper Newport Bay. The proposed building site is situated on a sloping face of the



terrace. The average slope is approximately 10:1 (horizontal to vertical). The ground surface elevation in the area of the proposed building ranges from approximately 157 to 173 feet above mean sea level, U.S.G.S. datum. Contours describing the existing topography are shown on Plate 1. The site is vacant, with existing vegetation consisting of a light weed growth.

Field inspection of the property indicates that the sloping site is susceptible to drainage erosion. However, with proper landscaping, the potential for slope erosion would be greatly reduced, as indicated by adjacent property development.

SOIL CONDITIONS

Approximately 10 feet of existing fill was encountered in Boring 5, which is located in the parking area southwesterly of the library. Deeper fill may exist in this area through which a ravine may have traversed at one time. The fill, which consists primarily of silty and clayey sand, varies from loose to only moderately firm. Some debris consisting of wood and wire was encountered.

The natural soils beneath the site consist of silty sand, clayey sand, and sand. The surface soils to a depth of approximately one foot are loose to only moderately firm at present moisture content and would become weaker when wet. Numerous rodent holes were encountered within these upper soils. The underlying natural soils are firm.

Water was not encountered within the depth explored.



GEOLOGIC CONCLUSIONS

GENERAL

We find no unusual geologic conditions present at the site which constitute a serious geologic hazard. The possibility of fault rupture through the site is extremely remote, as is the possibility of liquefaction. Although the site could be subject to violent ground shaking in the event of a major earthquake, this hazard is common to Southern California and the effects of the shaking can be minimized by proper structural design and proper construction. The geologic conditions are discussed in detail in Appendix B.

FAULT DISPLACEMENT

No known faults are present beneath the site. It is our opinion that there is little probability of surface rupture due to faulting occurring beneath the site. The nearest active fault is the North branch fault of the Newport-Inglewood fault system. This fault is located about two miles southwest of the site.

The closest known fault to the site appears to be the Pelican Hill fault located about one mile northeast of the site. This fault does not show any signs of activity within Recent or Upper Pleistocene time, and therefore is not classified as an active fault.



STABILITY

Subsidence due to fluid withdrawals has not been recognized in the site area. The property is not on or in the path of any existing or potential landslide.

GROUND FAILURE

The site is predominantly underlain by firm terrace deposits consisting primarily of sand, clayey sand and silty sand. Beneath the terrace deposits are firm to very firm Tertiary age sediments. A field inspection of the site indicated that some portions of the property are underlain by fill material and softer natural deposits. However, it appears that the subject building area is underlain by firm terrace deposits. Some settlement was observed along San Clemente Drive where the street is apparently underlain by fill material.

The elevation of the ground water surface at the site appears to be close to sea level, at a depth of over 150 feet. The soils underlying the site are predominantly firm, dense Pleistocene age terrace deposits. Due to the firm, dense nature of the soils in conjunction with the great depth to ground water, it is our opinion that the potential for liquefaction to occur at the site is low.

SEISMICITY

The historic seismic record indicates that epicenters of earthquakes with magnitudes as great as 6.3 have occurred within five miles of



the site. The location of the property in relation to known faults indicates that the immediate area is not exposed to greater than normal seismic risk than other locations in the coastal areas of Orange County. However, in our opinion, Orange County is exposed to higher than normal seismic risk than some areas in California due to the presence of the Norwalk and Newport Inglewood fault systems.

TSUNAMIS AND SEICHES

The site is located greater than 1½ miles from the Pacific Ocean at an elevation of approximately 180 feet above sea level. Therefore, the property does not have any risk of damage from tsunamis (earthquake induced sea waves).

No large bodies of water are located such that they would adversely affect the site due to seiches (oscillations in a body of water due to earthquake shaking) or earthquake rupture.

RECOMMENDATIONS

FOUNDATIONS

General

The upper natural soils are generally only moderately firm, and would become weaker when wet. Below a depth of about one foot, the natural soils are firm. Both excavation and the placing of compacted fill will be required to achieve the desired floor grade. We recommend that the existing fill soils and upper one foot of natural soils within the building area



be excavated and replaced as properly compacted fill, and that the planned additional fill be properly compacted. If this is done, the proposed library may be supported on spread footings established in either the compacted fill or the undisturbed natural soils. Recommendations for grading are presented in a following section. The reworking of the upper soils and the compaction of all required fill should be inspected and tested by our firm. Proper compaction of the fill will be critical because of the depth and variation in depth of fill beneath the building.

Bearing Value

Spread footings established in properly compacted fill or undisturbed natural soils may be designed to impose a dead plus live load pressure of 2,000 pounds per square foot. A one-third increase in the bearing value may be used for wind or seismic loads. Exterior footings should extend at least two feet below the adjacent final grade; interior footings should extend at least two feet below the adjacent floor level. The recommended bearing value is a net value, so that the weight of the concrete within the foundations may be taken as 50 pounds per cubic foot, and the weight of soil backfill may be neglected when computing the imposed downward foundation loadings.

While the actual bearing value of the fill will depend on the material used and the compaction methods employed, the quoted bearing value will be applicable if the on-site or other acceptable soils are used and



are compacted as recommended. The bearing value of the fill should be confirmed after completion of the grading.

The maximum ultimate settlement of the proposed building, supported on spread footings in the manner recommended, will be less than one-half inch.

Lateral Loads

Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.4 may be used between footings and the floor slab and the supporting soils. The passive resistance of the natural soils or properly compacted fill against footings may be assumed to be equal to the pressure developed by a fluid with a density of 250 pounds per cubic foot. A one-third increase in the passive value may be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.

Inspection

The footing excavations should be inspected by personnel of our firm to verify that the footings are founded in satisfactory supporting soils. Footings should be deepened as necessary to extend into satisfactory soils. Any required footing backfill and all utility trench backfill should be mechanically compacted; flooding should not be permitted. The exterior grades should be such that surface water will drain away from the building.



GRADING

Excavation

Based on planned grades, excavation up to about three feet deep will be required within the building area. Conventional earth-moving equipment may be used.

Permanent cut slopes may be constructed at 1:1. The soils are susceptible to erosion. Accordingly, drainage of the slopes should be carefully planned, and the completed slopes should be planted as soon as possible to reduce surface erosion.

Filling

Within the area to be filled and areas close to grade, the upper soils should be reworked, and all required fill should be properly compacted. Any existing fill and at least the upper one foot of natural soils within the building area should be excavated and replaced as properly compacted fill and all required additional fill should be properly compacted. Within areas to be paved, the existing fill and any disturbed natural soils should be excavated, the upper natural soils should be reworked in place, and all required fill should be properly compacted.

After stripping existing vegetation, any existing fill and any disturbed natural soils within the building area and area to be paved should be excavated. Next, the natural soils within the building area and at least five feet beyond in plan should be excavated to a depth of at



least one foot below the existing grade. The exposed soils should be carefully inspected to verify removal of any unsuitable deposits; the excavation should be deepened to remove any unsuitable materials including soils badly disturbed by rodent burrowing. Next, the exposed natural soils should be scarified to a depth of six inches, brought to approximately optimum moisture content, and rolled with heavy compaction equipment. The upper six inches of exposed natural soils in the building area (in both cut and fill areas) should be compacted to at least 95% of the maximum density obtainable by the ASTM Designation D1557-70 method of compaction modified to use three layers. Within non-building areas, the upper six inches of exposed natural soils should be compacted to at least 90%.

After compacting the natural subgrade, all required fill in the building area should be placed in loose lifts not more than eight inches in thickness, brought to about optimum moisture content, and compacted to at least 95%. All required fill in non-building areas should be similarly placed and compacted to at least 90%. It is recommended that the moisture content of the soils at the time of compaction vary no more than 2% above or below optimum moisture content.

Compacted fill slopes may be constructed at 2:1 (horizontal to vertical). To minimize future shallow sloughing, fill slopes should be overfilled and trimmed back to achieve a firm surface. Alternately, the fill slopes should be slope-rolled with a sheepsfoot roller, done at the



completion of every two feet of fill. Permanent slopes should be planted as soon as possible to reduce erosion, and the drainage planned so that the water is not allowed to flow over the face of the sloped embankments.

The on-site natural soils may be used in required fills. Any required imported fill should consist of relatively non-expansive and predominantly granular soils, similar to the on-site soils.

The excavation and reworking of the upper soils and the compaction of all required fill should be observed and tested by personnel of our firm. Imported fill material should be approved by our firm prior to importing.

FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended, the building floor slab may be supported on grade. Drainage of surface water should be provided away from the building; ponding of water adjacent to the building should be prevented.

If a floor covering that would be critically affected by moisture, such as vinyl, is to be used, we suggest that the floor slab be supported on a four-inch-thick layer of gravel or on an impermeable membrane as a capillary break. A suggested gradation for the gravel layer would be as follows:



<u>Sieve Size</u>	<u>Percent Passing</u>
3/4"	90 - 100
No. 4	0 - 10
No. 100	0 - 3

If the membrane is used, a low-slump concrete should be used to minimize possible curling of the slab. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

PAVING

To provide support for paving, the subgrade soils should be prepared as recommended in the previous section on grading. All existing fill and disturbed natural soils should be excavated, and all required fill beneath paving should be compacted to at least 90%. At least the upper six inches of paving subgrade should be compacted to at least 90%. Proper compaction of the pavement subgrade soils will be critical for the performance of the paving. Also, proper drainage of the paved areas should be provided since this will reduce moisture infiltration into the subgrade and increase the life of the paving.

To provide data for design of asphaltic paving, a California Bearing Ratio test was performed on a sample of the upper soils. The test results, which indicate a CBR value of 13 at 90% compaction, are presented in the attached Appendix A.

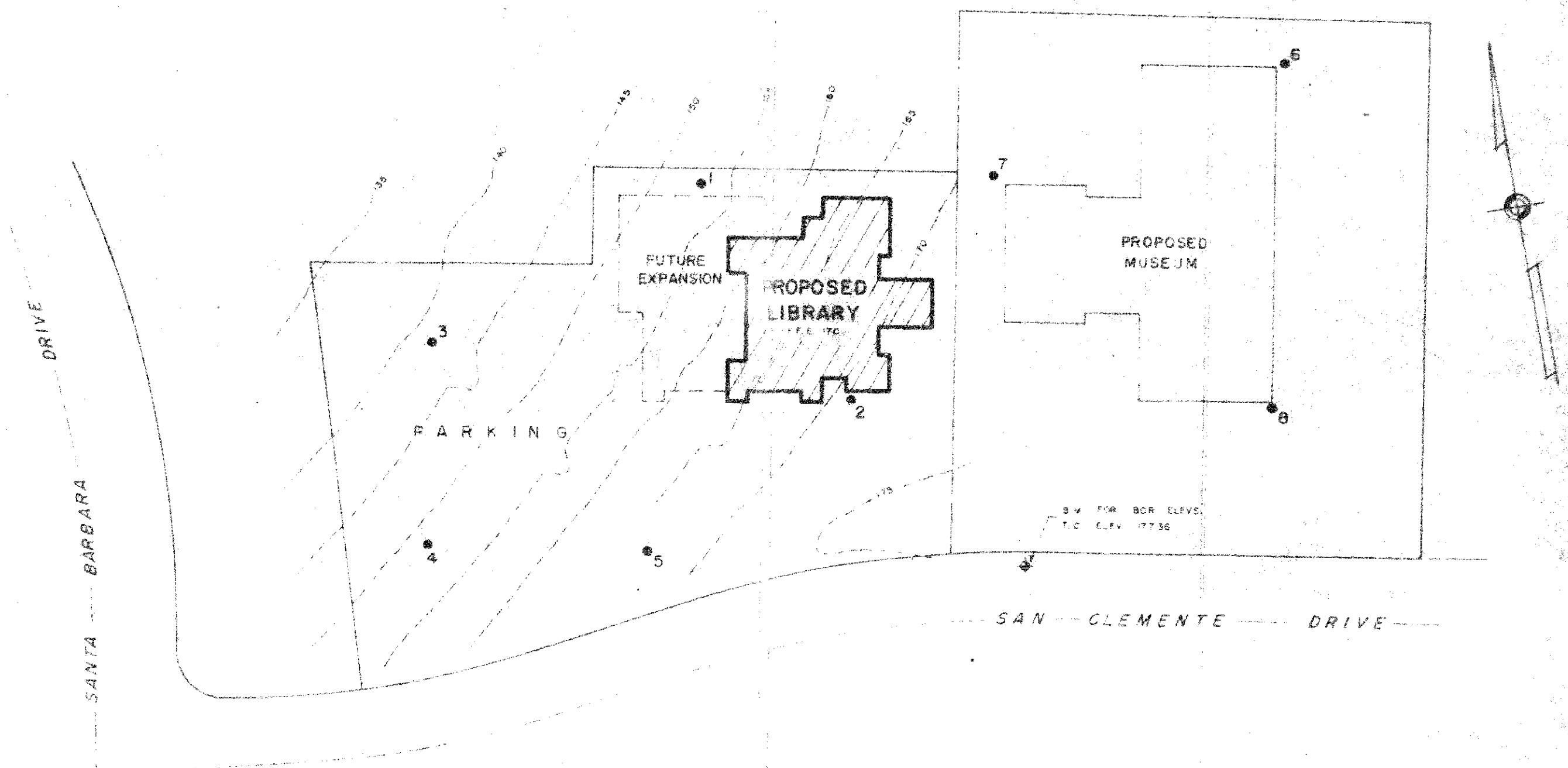


Assuming that the paving subgrade will consist of the on-site soils, or imported materials with a CBR value of at least 10, and compacted to at least 90% as recommended, parking areas subject to automobile traffic may be paved with two inches of asphaltic paving and four inches of base course placed on the compacted subgrade. Driveways and areas subject to truck traffic may be paved with three inches of asphaltic paving and six inches of base course placed on the compacted subgrade. Careful inspection is recommended to verify that the recommended thicknesses or greater are achieved, and that proper construction procedures are used.

The base course should meet the specifications for Class 2 Aggregate Base as defined in Section 26 of the State of California, Department of Transportation, Standard Specifications, dated January, 1975. The base course should be compacted to at least 90%. (This is the minimum compaction; the average compaction should be at least 95%.)



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REFERENCES:
 PLANS PROVIDED BY
 WILLIAM BLUROCK & PARTNERS (UNDATED)
 AND LANGDON & WILSON ARCHITECTS (DATED 8-13-76)

KEY:
 ● BORING LOCATION
 5 BORING NUMBER
 --- EXISTING GRADE

PLOT PLAN
 SCALE 1" = 60'

LEROY CRANDALL AND ASSOCIATES
 PLATE 1

APPENDIX A

APPENDIX A

APPENDIX A
EXPLORATIONS

This investigation was performed concurrently with similar studies for the adjacent Newport Harbor Art Museum. A total of eight borings were drilled for the two projects; Borings 1 through 5 were drilled at the proposed library site; Borings 6, 7, and 8 were drilled at the proposed museum site. All boring and laboratory test data are applicable to both sites, and are discussed herein.

The borings were drilled to depths of 5 to 25 feet below the existing grade using 24-inch-diameter bucket-type drilling equipment. Caving of the boring walls did not occur during drilling, and casing or drilling mud was not used to extend the borings to the depths drilled.

The soils encountered were logged by our field technician, and undisturbed samples were obtained for laboratory inspection and testing. The logs of the borings are presented on Plates A-1 through A-8; the depths at which undisturbed samples were obtained are indicated to the left of the boring logs. The number of blows required to drive the sampler twelve inches, and the driving weight and stroke, are also indicated on the logs. The soils are classified in accordance with the Unified Soil Classification System described on Plate B.



LABORATORY TESTS

The field moisture content and dry density of the soils encountered were determined by performing tests on the undisturbed samples. The results of the tests are shown to the left of the boring logs.

Direct shear tests were performed on selected undisturbed samples to determine the strength of the natural soils. These tests were performed at field and increased moisture contents and at various surcharge pressures. Tests were also performed on remolded samples compacted to 95% at optimum moisture content; the remolded samples were tested at optimum and increased moisture contents. The yield-point values determined from the direct shear tests are presented on Plate C, Direct Shear Test Data.

Confined consolidation tests were performed on five undisturbed samples and on one remolded sample compacted to 95% to determine the compressibility of the soils. Water was added to two of the samples during the tests to illustrate the effect of moisture on the compressibility. The results of the consolidation tests are presented on Plates D-1 through D-4, Consolidation Test Data.

Expansion tests were performed on two undisturbed samples to determine the expansion characteristics of the soils. The samples were confined under a nominal surcharge pressure, soaked, and the resulting expansion measured. Next, the samples were allowed to air-dry, and the resulting shrinkage was measured. The results of the expansion tests are presented on Plate E, Expansion Test Data.



The optimum moisture content and maximum dry density of the upper soils were determined by performing compaction tests on samples from Borings 3 and 4. The tests were performed in accordance with the ASTM Designation D1557-70 method of compaction modified to use three layers. After completion of the compaction tests, a California Bearing Ratio test was performed on the sample from Boring 4 in accordance with the ASTM Designation D1883-73 method. The results of the compaction and California Bearing Ratio tests are presented on Plate F, Compaction and C.B.R. Test Data.

-oOo-



NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft.)	DEPTH (ft.)	MOISTURE (% of dry wt)	DRY DENSITY (lbs./cu ft.)	BLOWS *	SAMPLE
		0.4	104	2	SM
150	1.8	99	6		SILTY SAND - fine, rootlets, numerous rodent holes, light brown
5	3.7	112	8	SP	
145	1.9	104	11		SAND - fine, layers of Clayey Sand, light reddish-brown
10	2.7	99	4		
140	6.9	119	12		SC
15					CLAYEY SAND - light reddish-brown

BORING 1
 DATE DRILLED: August 25, 1976
 EQUIPMENT USED: 24"-Diameter Bucket

ELEVATION 153.2**

NOTE: Water not encountered. No caving.

*Number of blows required to drive sampler 12":
 Driving Weight = 1600 lbs. Stroke 1'

**See Plate 1 for location and elevation of bench mark.

LOG OF BORING

LEROY CRANFALL AND ASSOCIATES
 PLATE A-1

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (lbs /cu ft.)	BLOWS	SAMPLE	DESCRIPTION
BORING 2						
DATE DRILLED: August 25, 1976						
EQUIPMENT USED: 24"-Diameter bucket						
ELEVATION 173.4						
170	3.6	104	6		SM	SILTY SAND - fine, layers of Clayey Sand, light brown
165	5	7.6	108	6	SP	SAND - fine, layers of Clayey Sand, light reddish-brown
	8.5	101	5			
160	10	8.1	103	6	SC	CLAYEY SAND - fine, reddish-brown
	15	6.1	96	6		
155	20	15.2	110	12	CL	SILTY CLAY (HIGHLY WEATHERED SHALE) - light brown
		43.1	68	21		

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-2

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE	
						ELEVATION 141.5
140	0.8	94	2		SM	SILTY SAND - fine, rootlets, light brown
	2.8	107	19		SC	CLAYEY SAND - fine, brown
5	5.5	113	8			
135						
10						
130						
15						

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-3

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

		ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs / cu ft)	BLOWS	SAMPLE	
		ELEVATION 150.0						
			2.3	108	10		SM	SILTY SAND - slightly clayey, brown
			13.3	113	4		SC	CLAYEY SAND - fine, some silty clay, brown
145	5		7.7	119	6			
140	10							
135	15							

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-4

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs/cu ft)	BLOWS	SAMPLE
160	1.4		4		
	11.4	77	1		
155	5				
	10				
150	60.7	57	4		
15					

BORING 5

DATE DRILLED: August 25, 1976
 EQUIPMENT USED: 24"-Diameter Bucket

ELEVATION 161.5

FILL - SILTY SAND and CLAYEY SAND - fine, light brown

Pieces of wood

Pieces of wire and wood

SHALE - weathered, bedded, fractured, light grey and brown

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES
 PLATE A-5

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt)	DRY DENSITY (lbs./cu ft)	BLOWS	SAMPLE
180					SM SILTY SAND - fine, rodent holes, light brown
	5	2.1	106	11	
175		3.5	101	14	SC CLAYEY SAND - fine, layers of fine Sand, light reddish-brown
		7.8	112	16	
170	10	6.3	113	18	
		7.6	113	16	SP SAND - fine, layers of Clayey Sand, light reddish-brown
165	15				
		5.0	96	9	
20					

BORING 6
 DATE DRILLED: August 24, 1976
 EQUIPMENT USED: 24"-Diameter Bucket

ELEVATION 181.7

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES
 PLATE A-6

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft.)	DEPTH (ft.)	MOISTURE (% of dry wt.)	DRY DENSITY (lbs / cu ft)	BLOWS	SAMPLE	DESCRIPTION
173.1						
170	2.5	96	2		SM	SILTY SAND - fine, rootlets, light brown
165	7.3	111	17		SC	CLAYEY SAND - fine, thin layers of fine Sand, light reddish-brown
	5	5.7	110	9		
160	6.1	112	14		SP	SAND - fine, thin layers of Clayey Sand, light reddish-brown
	10	6.4	109	16		
15	6.3	98	8			

BORING 7
 DATE DRILLED: August 24, 1976
 EQUIPMENT USED: 24"-Diameter Bucket

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-7

BORING 8

DATE DRILLED: August 24, 1976
EQUIPMENT USED: 24"-Diameter Bucket

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

ELEVATION (ft.)		DEPTH (ft.)	MOISTURE (% of dry wt)	DRY DENSITY (lbs./cu ft.)	BLOWS	SAMPLE
ELEVATION 184.9						
		3.1	118	17		SM SILTY SAND - fine some Clayey Sand, light brown
180	5	3.9	108	8		SC CLAYEY SAND - fine, thin layers of fine Sand, light reddish-brown
		2.7	104	8		
175	10					Sandier
		6.2	110	20		
170	15	6.3	110	15		SP SAND - fine, thin layers of Clayey Sand, light reddish-brown
		6.4	105	11		
165	20	4.8	98	9		
160	25	3.6	94	4		

NOTE: Water not encountered. No caving.

LOG OF BORING

LEROY CRANDALL AND ASSOCIATES

PLATE A-8

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amt. of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amt. of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

P A R T I C L E S I Z E L I M I T S							
SILT OR CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		
	NO. 200	NO. 40	NO. 10 NO. 4	3/4 in.	3 in.	(12 in.)	
	U. S. STANDARD SIEVE SIZE						

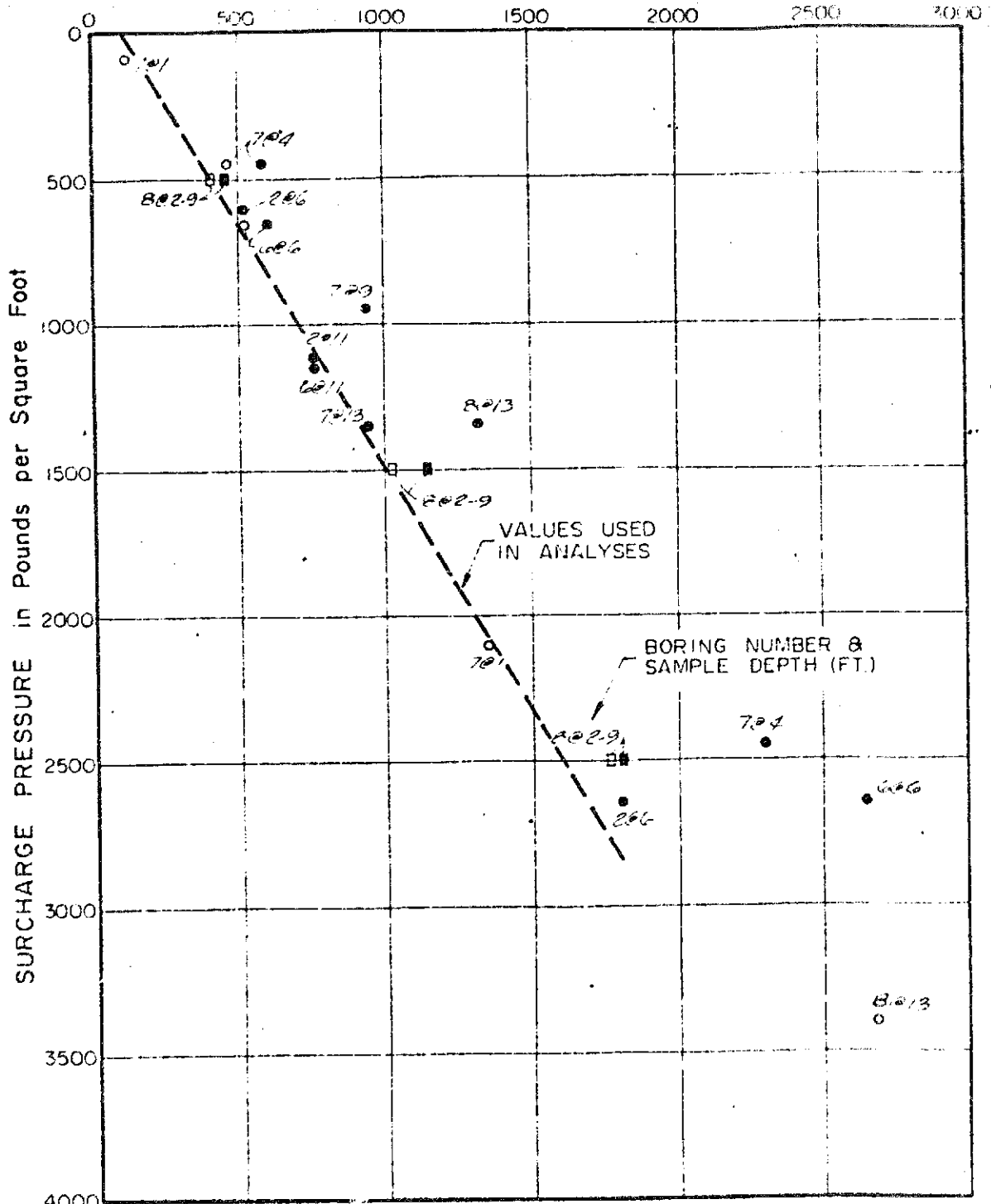
UNIFIED SOIL CLASSIFICATION SYSTEM

Reference:
 The Unified Soil Classification System, Corps of Engineers, U. S. Army Technical Memorandum No. 3-357, Vol. 1, March, 1953. (Revised April, 1960)

LEROY CRANDALL & ASSOCIATES

PLATE B

SHEAR STRENGTH in Pounds per Square Foot



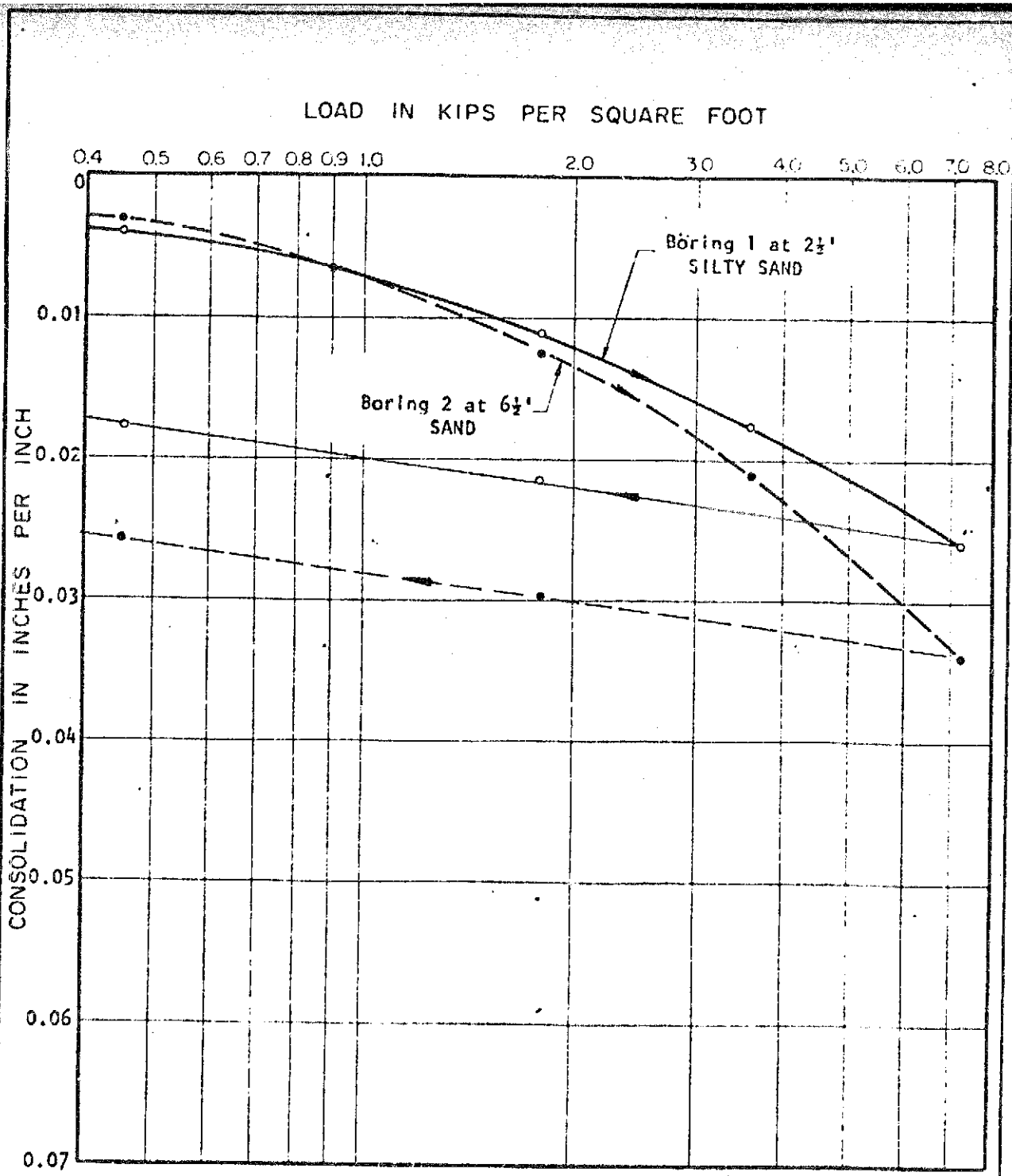
KEY

- ● Tests at field or optimum moisture content
- ○ Tests at increased moisture content
- ┌───┐ UNDISTURBED SAMPLES
- └───┘ REMOLDED SAMPLES COMPACTED TO 95%

DIRECT SHEAR TEST DATA

LEROY CRANDALL & ASSOCIATE

PLATE C

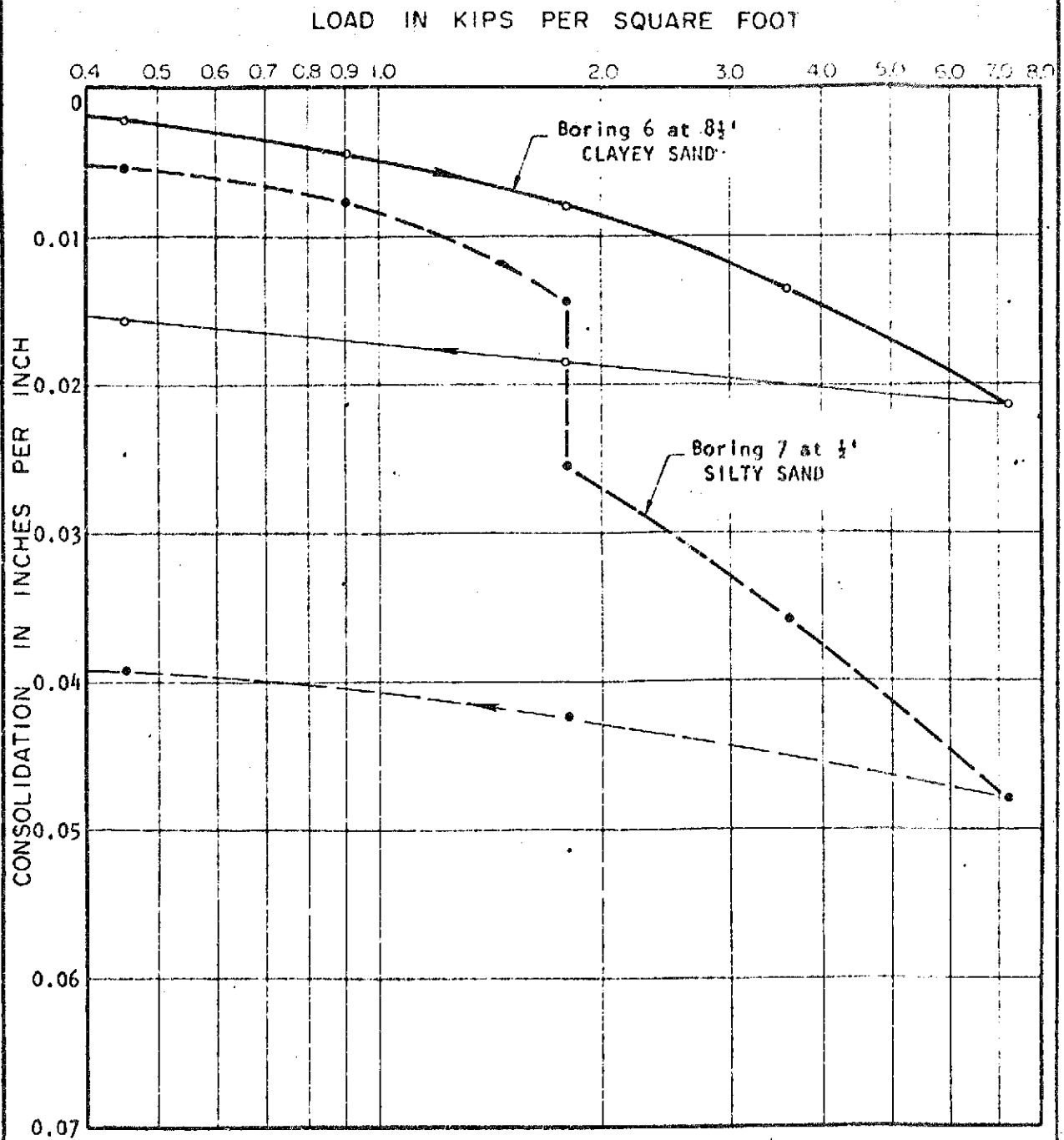


NOTE: Samples tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE No. 1



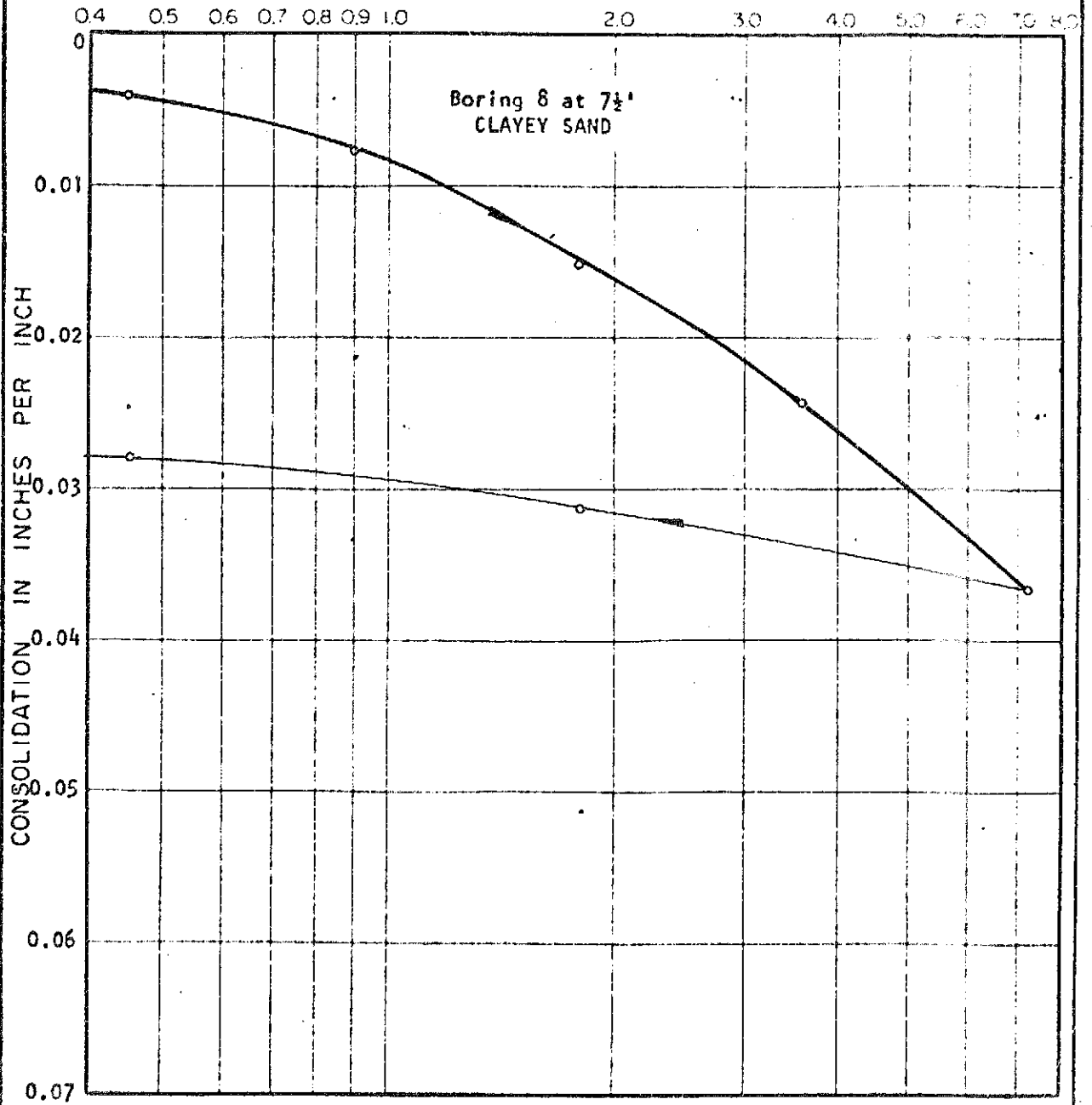
NOTE: Water added to sample from Boring 7 after consolidation under a load of 1.8 kips per square foot. The other sample tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE D-2

LOAD IN KIPS PER SQUARE FOOT

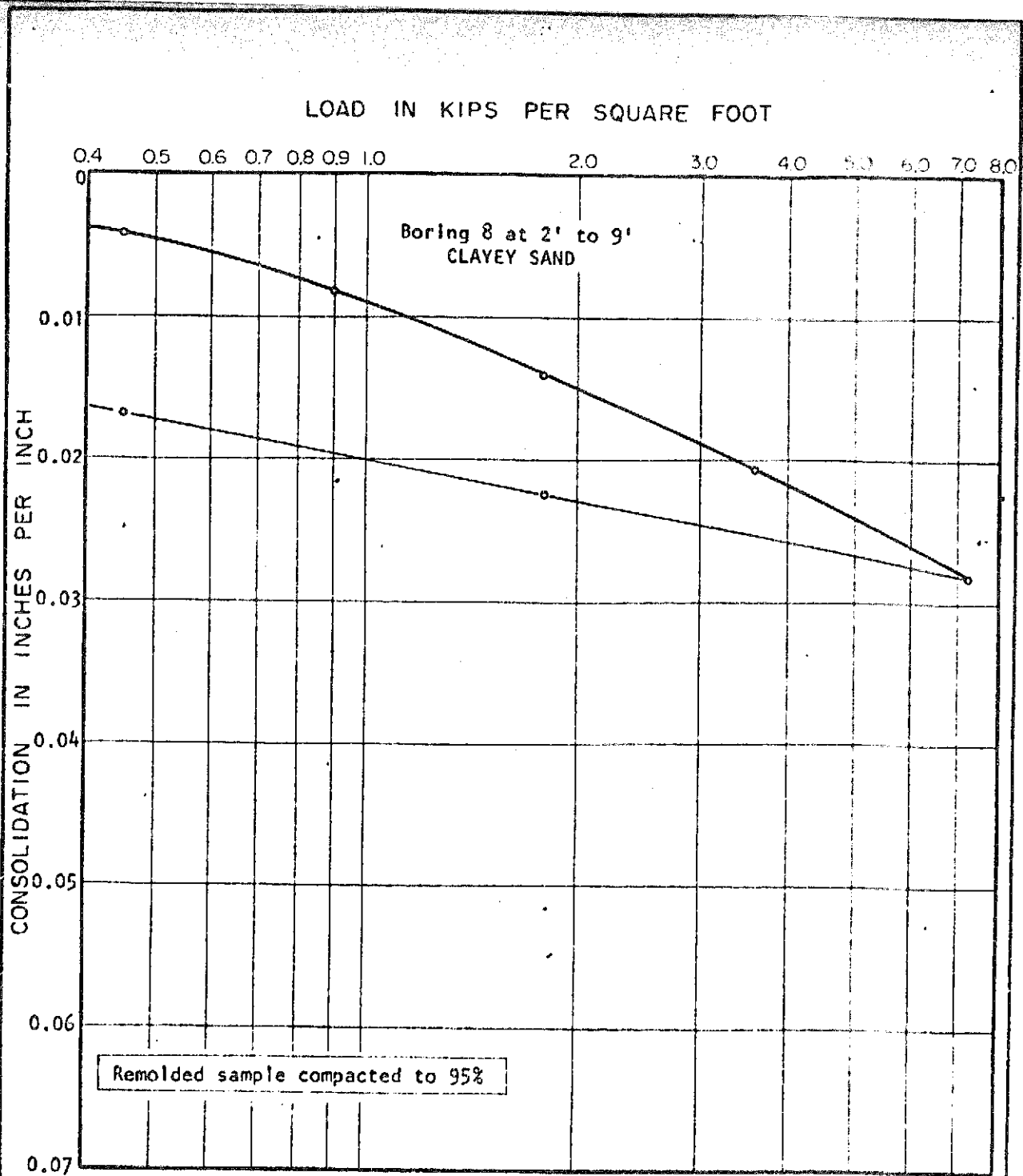


NOTE: Sample tested at field moisture content.

CONSOLIDATION TEST DATA

LEROY CRANDALL & ASSOCIATES

PLATE D-3



NOTE: Water added to sample after consolidation under a load of 1.8 kips per square foot.

CONSOLIDATION TEST DATA

LEROY CRANFALL & ASSOCIATES

PLATE D-4

BORING NUMBER AND SAMPLE DEPTH:	6 at 8½'	7 at 2½'
SOIL TYPE:	CLAYEY SAND	CLAYEY SAND
CONFINING PRESSURE: (Lbs./Sq. Ft.)	100	100
FIELD MOISTURE CONTENT: (%)	7.8	7.3
EXPANSION FROM FIELD TO SOAKED MOISTURE CONTENT: (%)	1.1	1.4
SOAKED MOISTURE CONTENT: (%)	15.3	15.2
SHRINKAGE FROM FIELD TO AIR-DRIED MOISTURE CONTENT: (%)	0.4	1.3
AIR-DRIED MOISTURE CONTENT: (%)	1.8	1.9
TOTAL VOLUME CHANGE: (%)	1.5	2.7

EXPANSION TEST DATA

LEROY CRANDALL AND ASSOCIATES

TABLE E

BORING NUMBER AND SAMPLE DEPTH:	3 at 2' to 9'	4 at 0' to 2'
SOIL TYPE:	CLAYEY SAND	SILTY SAND
MAXIMUM DRY DENSITY*: (Lbs./Cu.Ft.)	125	120
OPTIMUM MOISTURE CONTENT*: (% of Dry Wt.)	10	9
EXPANSION (%): (From Optimum to Saturated Moisture Content)	-	0
C.B.R.** (% of Standard)	-	
At 90% Compaction:		13
At 95% Compaction:		33

* TEST METHOD: ASTM Designation D1557-70 modified to use 3 layers.

** TEST METHOD: ASTM Designation D1883-73.

COMPACTION AND C.B.R. TEST DATA

LEROY CRANDALL AND ASSOCIATES

PLATE F

APPENDIX B

APPENDIX BGEOLOGIC AND SEISMIC DATAGENERAL

The geologic-seismic studies included a field reconnaissance on and adjacent to the site, as well as office analysis of published and unpublished literature pertinent to the study area. The Seismic Safety Element for the City of Newport Beach was included in our literature analysis.

GEOLOGIC CONDITIONSGENERAL

The site is located on the northwestern portion of the San Joaquin Hills. The San Joaquin Hills form the southern boundary of the eastern portion of the Coastal Plain of Orange County. The terrace upon which the site is situated is separated from Newport Mesa by Upper Newport Bay.

The natural materials that directly underlie the site are composed of Upper Pleistocene terrace deposits. These terrace deposits have not been differentiated as to their origin, continental or marine (U.S.G.S. OM193 1973). It appears that these deposits directly overlie a thick sequence of Tertiary sedimentary rocks.

The Newport-Inglewood fault zone is the most important structural feature in the site vicinity. The offshore projection of the North branch fault of the Newport-Inglewood system is located about two miles south of the site.



Plate G, Geologic Map, illustrates the site in relation to local geologic features including major fault zones.

GEOLOGIC MATERIALS

As disclosed by our exploration borings, the building area is underlain by terrace deposits. The upper 10 to 13 feet of terrace deposits encountered in the borings is composed of finer grained silty sand and clayey sand. The upper fine grained materials are underlain by sand extending to the 25-foot maximum depth explored. The upper Pleistocene terrace deposits are underlain by firm to very firm sandstone and siltstone of Tertiary age. These Tertiary sediments extend to a depth in excess of 9,400 feet as reported by the log of exploratory oil well, Morton and Sons "Irvine" 55-1 drilled in 1946.

GROUND WATER

Ground water data concerning the depth to the ground water surface are lacking in the immediate site area. However, several wells north and northwest of the site indicate that the ground water surface is approximately at sea level, U.S.G.S. datum, or at a depth of over 150 feet in the immediate site area. Ground water was not encountered in our exploration borings which were drilled to a maximum depth of 25 feet.

FAULTS

The numerous faults in Southern California include active, potentially active and inactive faults. The criteria for these major groups, as



established by the Association of Engineering Geologists (1973), are presented in Table 1. Table 2 presents a listing of active faults in Southern California with the distance in miles between the site and the nearest point on the fault. Table 3 provides a similar listing for potentially active faults. No faults or fault associated features were observed on or adjacent to the site during the field reconnaissance.

The closest faults that are considered to be active are those of the Newport-Inglewood fault system. This fault zone is the most important structural feature in the vicinity. The Newport-Inglewood fault system is divided into several branch faults which include the North, South, Bolsa-Fairview, Yorktown, Adams Avenue and Indianapolis faults in the Orange County area. These faults along with several branch faults in the Long Beach-Coastal Los Angeles area comprise the Newport-Inglewood fault zone.

Available information on the various local faults indicates that there has been no displacement of the alluvial deposits which are less than 10,000 years old in Santa Ana Gap. The North branch fault of the Newport-Inglewood system has displaced Upper Pleistocene (greater than 10,000 years) formations as much as 300 feet. Detailed studies by our firm in Bolsa Gap indicate that the Bolsa Aquifer (less than 10,000 years old) has been offset by the North branch fault.



TABLE 1

CRITERIA FOR CLASSIFICATION OF FAULTS WITH
REGARD TO SEISMIC ACTIVITY

(From Association of Engineering Geologists,
Geology and Earthquake Hazards, 1973)

A. Active Faults: (See Table 2)

These faults are those which have shown historical activity. This category includes such faults as the San Andreas, San Jacinto, and Newport-Inglewood.

B. Potentially Active Faults: (See Table 3)

These faults are those, based on available data, along which no known historical ground surface ruptures or earthquakes have occurred. These faults, however, show strong indications of geologically recent activity. Potentially active faults can be placed in two subgroups that are based on the boldness or sharpness of their topographic features and the estimates related to recency of activity. These subgroups are:

1. Subgroup One - High Potential

- a. Offsets affecting the Holocene deposits (age less than 10 - 11,000 years).
- b. A ground water barrier or anomaly occurring along the fault within the Holocene deposits.
- c. Earthquake epicenters (generally from small earthquakes occurring close to the fault).
- d. Strong geomorphic expression of fault origin features (e.g. faceted spurs, offset ridges or stream valleys or similar features, especially where Holocene topography appears to have been modified).

2. Subgroup Two - Low Potential

This subgroup is the same as 1-a, b, or d above, with the exception that the indications of fault movement can be only determined in Pleistocene deposits (less than 1,000,000 years ago).

C. Inactive Faults:

These faults are without recognized Holocene or Pleistocene offset or activity.



TABLE 2

MAJOR NAMED FAULTS CONSIDERED TO BE ACTIVE (a)
IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Date of Latest Major Activity	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Big Pine	1852	7.5 (c)	118	NW
Coyote Creek	1968	7.2 (d)	120	SE
Elsinore	1910	7.5 (c)	25	ENE
Garlock	(b)	7.75(c)	105	NW
Malibu Coast	1973	7.1 (d)	53	NW
Manix	1947	6.25(c)	125	NE
Newport-Inglewood	1933	7.0 (c)	2	SW
Norwalk	1929 (?)	6.9 (d)	16	N
San Andreas Zone	1857	8.25(c)	54	NNE
San Fernando Zone	1971	6.5 (c)	50	NW
San Jacinto Zone	1968	7.5 (c)	48	NE
Santa Susana	1971	6.5 (c)	61	NW
Superstition Hills	1951	7.0 (c)	125	SE
White Wolf	1952	7.75(c)	122	NW
Whittier	1929 (?)	7.1 (d)	21	N

(a) Historic movement (1769 - present).

(b) Intermittent creep.

(c) Greensfelder, C.D.M.G. Map Sheet 23, 1974.

(d) Housner (1970) Length-Magnitude relationship.



TABLE 3
 MAJOR NAMED FAULTS CONSIDERED TO BE POTENTIALLY ACTIVE (a)
 IN SOUTHERN CALIFORNIA

Fault (in alphabetical order)	Maximum Credible Earthquake	Distance From Site (miles)	Direction From Site
Calico-Newberry	7.25 (b)	106	NE
Charnock	6.6 (c)	28	NW
*Chino	6.8 (c)	23	NNE
Cucamonga	6.5 (b)	37	NNE
*Duarte	6.6 (c)	36	N
Helendale	7.5 (b)	80	NE
More Ranch	7.25 (b)	120	NW
Nacimiento (Rinconada)	7.5 (b)	130	NW
Northridge Hills	6.5 (b)	59	NW
Oakridge	7.5 (b)	70	NW
*Overland	6.2 (c)	40	NW
Palos Verdes	7.0 (b)	24	W
Pinto Mountain	7.5 (b)	90	NE
Raymond	6.8 (c)	38	NW
*San Gabriel	7.5 (c)	45	N
*San Jose	6.8 (c)	32	N
Santa Cruz Island	7.3 (c)	100	WNW
Santa Monica-Hollywood	6.8 (c)	44	NW
Santa Ynez	7.5 (b)	88	NW
Sierra Madre	7.5 (b)	38	N
Sierra Nevada	8.25 (b)	115	N
*Verdugo	6.6 (c)	42	NW

- (a) Pleistocene deposits disrupted.
 (b) Greensfelder, C.D.M.G. Map Sheet 23, 1974.
 (c) Housner (1970) Length-Magnitude relationship.
 * Low Potential per A.E.G. definition.



The North and South branch faults of the Newport-Inglewood fault system are located two to three miles to the southwest where they leave the land surface and continue offshore in a southeasterly direction.

The Pelican Hill fault lies about one mile northeast of the site at its nearest point. This fault, while having deformed Tertiary rocks, does not show any signs of activity within Recent or upper Pleistocene time.

Other active faults in the site vicinity include the Norwalk and Whittier faults at distances of 18 and 21 miles, respectively, from the site. The great San Andreas fault is located at a distance greater than 50 miles.

SEISMICITY

The seismicity of the region surrounding the site was determined from a computer search of a magnetic tape catalog of earthquakes. The catalog of earthquakes included those compiled by the California Institute of Technology for the period 1932 to 1974 and those larger earthquakes for the period 1812 to 1931 compiled by Richter and the U. S. National Oceanic and Atmospheric Administration (NOAA). Table 4 is a computer printout of the search (Table 4 is presented at the end of this Appendix). The search indicates that 235 earthquakes of Richter magnitude 4.0 and greater have occurred since 1932 and 5 earthquakes with magnitudes greater than 6.0 occurred in the 1812 to 1931 period within 100 kilometers of the site. The 1933 Long Beach earthquake, magnitude 6.3, was centered about 5 miles southwest of the site.



The information listed for each earthquake found in Table 4 includes date and time in Greenwich Civil Time (GCT), location of the epicenter in degrees, latitude and longitude, quality of epicentral determination (Q), depth in kilometers, and magnitude. Where a depth of 0.0 is given, the solution was based on an assumed 16-kilometer focal depth. The letter code for the quality factor is interpreted as follows:

- A = specially investigated.
- B = epicenter probably within 5 km, origin time to nearest second.
- C = epicenter probably within 15 km, origin time to a few seconds.
- D = epicenter not known within 15 km, rough location.
- E = epicenter roughly located, accuracy less than "D".
- P = preliminary.

The computer analysis was utilized to develop an earthquake recurrence curve which is presented on Plate H.

-o0o-



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- U. S. Geologic Survey, "Geologic Map of the San Joaquin Hills-San Juan Capistrano Area, Orange County, California", Oil and Gas Investigations Map O.M. 193, by Vedder, Yerkes, and Schollhamer, 1957.
- Woodward-McNeill & Associates, "Geologic-Seismic Study for the City of Newport Beach General Plan", 1972.



TABLE 4
(Sheet 1 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 4.0 OR
GREATER WITHIN 100 KM OF THE SITE
(CAL TECH DATA 1932-1974)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1932	11	1	4	45	0	34.00 N	117.25 W	E	0.0	
1933	3	11	1	54	8	33.62 N	117.97 W	A	0.0	4.0
1933	3	11	2	0	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	5	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	9	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	10	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	2	11	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	16	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	17	0	33.60 N	118.00 W	E	0.0	4.3
1933	3	11	2	22	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	11	2	27	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	30	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	31	0	33.60 N	118.00 W	E	0.0	5.1
1933	3	11	2	52	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	2	57	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	2	58	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	2	59	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	5	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	9	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	3	11	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	3	23	0	33.75 N	118.08 W	C	0.0	4.3
1933	3	11	3	36	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	3	39	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	3	47	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	4	36	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	4	39	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	11	4	40	0	33.75 N	118.08 W	C	0.0	4.9
1933	3	11	5	10	22	33.70 N	118.07 W	E	0.0	4.7
1933	3	11	5	13	0	33.75 N	118.08 W	C	0.0	5.1
1933	3	11	5	15	0	33.75 N	119.03 W	C	0.0	4.7
1933	3	11	5	18	4	33.57 N	117.93 W	C	0.0	4.0
1933	3	11	5	21	0	33.75 N	118.08 W	C	0.0	5.2
1933	3	11	5	24	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	5	53	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	5	55	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	5	55	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	6	11	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	6	18	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	6	29	0	33.05 N	118.27 W	C	0.0	4.2
1933	3	11	6	35	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	6	35	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 2 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1933	3	11	6	58	3	33.68 N	118.05 W	C	0.0	5.5
1933	3	11	7	51	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	7	59	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	8	8	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	11	8	32	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	8	37	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	8	54	57	33.70 N	118.07 W	C	0.0	5.1
1933	3	11	9	10	0	33.75 N	118.05 W	C	0.0	5.1
1933	3	11	9	11	0	33.75 N	118.03 W	C	0.0	4.4
1933	3	11	9	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	10	25	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	10	45	0	33.75 N	118.08 W	C	0.0	5.0
1933	3	11	11	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	4	0	33.75 N	118.13 W	C	0.0	4.0
1933	3	11	11	29	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	38	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	11	41	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	11	47	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	12	50	0	33.68 N	118.05 W	C	0.0	4.4
1933	3	11	13	50	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	13	57	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	14	25	0	33.85 N	118.27 W	C	0.0	5.0
1933	3	11	14	47	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	14	57	0	33.88 N	118.32 W	C	0.0	4.9
1933	3	11	15	9	0	33.73 N	118.10 W	C	0.0	4.4
1933	3	11	15	47	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	16	53	0	33.75 N	118.08 W	C	0.0	4.8
1933	3	11	19	44	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	11	19	56	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	11	22	0	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	31	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	22	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	11	22	40	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	11	23	5	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	0	27	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	12	0	34	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	4	48	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	5	46	0	33.75 N	118.03 W	C	0.0	4.4
1933	3	12	6	1	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	6	16	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	7	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	12	8	35	0	33.75 N	118.03 W	C	0.0	4.2
1933	3	12	15	2	0	33.75 N	118.08 W	C	0.0	4.2

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TABLE 4
(Sheet 3 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1933	3	12	16	51	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	12	17	38	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	12	18	25	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	21	28	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	12	23	54	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	13	3	43	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	4	32	0	33.75 N	118.08 W	C	0.0	4.7
1933	3	13	6	17	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	13	13	18	28	33.75 N	118.08 W	C	0.0	5.3
1933	3	13	15	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	13	19	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	14	0	36	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	14	12	19	0	33.75 N	118.08 W	C	0.0	4.5
1933	3	14	19	1	50	33.62 N	118.02 W	C	0.0	5.1
1933	3	14	22	42	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	2	8	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	4	32	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	15	5	40	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	15	11	13	32	33.62 N	118.02 W	C	0.0	4.9
1933	3	16	14	56	0	33.75 N	118.08 W	C	0.0	4.0
1933	3	16	15	29	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	16	15	30	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	17	16	51	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	18	20	52	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	19	21	23	0	33.75 N	118.08 W	C	0.0	4.2
1933	3	20	13	58	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	21	3	26	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	8	40	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	23	18	31	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	26	13	46	0	33.75 N	118.08 W	C	0.0	4.1
1933	3	30	12	25	0	33.75 N	118.08 W	C	0.0	4.4
1933	3	31	10	49	0	33.75 N	118.08 W	C	0.0	4.1
1933	4	1	6	42	0	33.75 N	118.08 W	C	0.0	4.2
1933	4	2	8	0	0	33.75 N	118.08 W	C	0.0	4.0
1933	4	2	15	36	0	33.75 N	118.08 W	C	0.0	4.0
1933	5	16	20	58	55	33.75 N	118.17 W	C	0.0	4.0
1933	6	4	4	17	48	33.75 N	118.13 W	C	0.0	4.0
1933	10	2	9	10	18	33.78 N	118.13 W	A	0.0	5.4
1933	10	2	13	26	1	33.62 N	118.02 W	C	0.0	4.0
1933	10	25	7	0	46	33.95 N	118.13 W	C	0.0	4.3
1933	11	13	21	28	0	33.87 N	118.20 W	C	0.0	4.0
1933	11	20	10	32	0	33.78 N	118.13 W	U	0.0	4.0
1934	1	9	14	10	0	34.10 N	117.63 W	A	0.0	4.5
1934	1	18	2	14	0	34.10 N	117.63 W	A	0.0	4.0

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TABLE 4
(Sheet 4 of 14)

YEAR	MONTH	DAY	HR	NIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1934	1	20	21	17	0	33.62 N	118.12 W	B	0.0	4.5
1934	4	17	18	33	0	33.57 N	117.98 W	C	0.0	4.5
1934	10	17	9	38	0	33.63 N	118.40 W	B	0.0	4.5
1934	11	16	21	26	0	33.75 N	118.00 W	B	0.0	4.5
1935	6	7	16	33	0	33.27 N	117.02 W	B	0.0	4.5
1935	6	19	11	17	0	33.72 N	117.52 W	B	0.0	4.5
1935	7	13	10	54	17	34.20 N	117.90 W	A	0.0	4.5
1935	9	3	6	47	0	34.03 N	117.32 W	U	0.0	4.7
1935	11	4	3	55	0	33.50 N	118.92 W	U	0.0	4.5
1935	12	25	17	15	0	33.60 N	118.02 W	B	0.0	4.5
1936	2	23	22	20	43	34.13 N	117.34 W	B	0.0	4.5
1936	2	26	9	33	28	34.14 N	117.34 W	A	10.0	4.5
1936	7	29	14	22	53	33.45 N	116.90 W	C	10.0	4.5
1936	8	22	5	21	0	33.77 N	117.82 W	B	0.0	4.5
1937	1	15	18	35	47	33.56 N	118.06 W	B	0.0	4.5
1937	3	19	1	23	38	34.11 N	117.43 W	A	10.0	4.5
1937	7	7	11	12	0	33.57 N	117.98 W	B	0.0	4.5
1937	9	1	13	48	8	34.21 N	117.53 W	A	10.0	4.5
1937	9	1	16	35	34	34.18 N	117.55 W	A	10.0	4.5
1938	5	21	44	0	0	33.62 N	118.03 W	B	0.0	4.5
1938	5	31	8	34	55	33.70 N	117.51 W	U	10.0	4.5
1938	6	16	5	59	17	33.46 N	116.90 W	B	10.0	4.5
1938	7	5	18	6	56	33.68 N	117.55 W	A	10.0	4.5
1938	8	6	22	0	56	33.72 N	117.51 W	B	10.0	4.5
1938	8	31	3	18	14	33.70 N	118.25 W	A	10.0	4.5
1938	11	29	19	21	16	33.90 N	118.43 W	A	10.0	4.5
1938	12	7	3	38	0	34.00 N	118.42 W	B	0.0	4.5
1938	12	27	10	9	29	34.13 N	117.52 W	B	10.0	4.5
1939	4	3	2	50	45	34.04 N	117.23 W	A	10.0	4.5
1939	11	4	21	41	0	33.77 N	118.12 W	B	0.0	4.5
1939	11	7	18	52	8	34.00 N	117.23 W	A	0.0	4.7
1939	12	27	19	28	49	33.78 N	118.20 W	A	0.0	4.7
1940	1	13	7	49	7	33.78 N	118.13 W	U	0.0	4.5
1940	2	8	16	56	17	33.70 N	118.07 W	B	0.0	4.5
1940	2	11	19	24	10	33.98 N	118.30 W	B	0.0	4.5
1940	2	19	12	6	56	34.02 N	117.05 W	A	0.0	4.5
1940	4	18	18	43	44	34.03 N	117.35 W	A	0.0	4.4
1940	6	5	8	27	27	33.33 N	117.40 W	B	0.0	4.5
1940	7	20	4	1	13	33.70 N	118.07 W	B	0.0	4.5
1940	10	11	5	57	12	33.77 N	118.45 W	A	0.0	4.7
1940	10	12	0	24	0	33.78 N	118.42 W	B	0.0	4.5
1940	10	14	20	51	11	33.78 N	118.42 W	B	0.0	4.5
1940	11	1	7	25	3	33.78 N	118.42 W	B	0.0	4.5
1940	11	1	20	0	46	33.53 N	118.20 W	B	0.0	4.5

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TABLE 4
(Sheet 5 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1940	11	2	2	58	26	33.78 N	118.42 W	B	0.0	4.0
1941	1	30	1	34	47	33.97 N	118.05 W	A	0.0	4.1
1941	3	22	8	22	40	33.52 N	118.10 W	B	0.0	4.0
1941	3	25	23	43	41	34.22 N	117.47 W	B	0.0	4.0
1941	4	11	1	20	24	33.95 N	117.58 W	B	0.0	4.0
1941	10	22	6	57	19	33.82 N	118.22 W	A	0.0	4.9
1941	11	14	8	41	36	33.78 N	118.25 W	A	0.0	5.4
1942	1	24	21	41	48	32.80 N	117.83 W	B	0.0	4.0
1942	4	16	7	28	33	33.37 N	118.15 W	C	0.0	4.0
1943	2	23	9	21	12	32.85 N	117.48 W	C	0.0	4.0
1943	10	24	0	29	21	33.93 N	117.37 W	C	0.0	4.0
1944	6	19	0	3	33	33.87 N	118.22 W	B	0.0	4.5
1944	9	19	3	6	7	33.87 N	118.22 W	C	0.0	4.4
1945	2	24	6	7	52	34.40 N	117.80 W	C	0.0	4.1
1943	3	1	8	12	13	34.17 N	117.53 W	B	0.0	4.7
1948	10	3	2	46	28	34.18 N	117.58 W	A	0.0	4.0
1950	1	11	21	41	35	33.94 N	118.20 W	A	0.4	4.1
1951	9	22	8	22	39	34.12 N	117.34 W	A	11.9	4.5
1951	12	26	0	46	54	32.82 N	118.35 W	B	0.0	5.0
1952	2	13	15	13	37	32.87 N	118.25 W	C	0.0	4.7
1952	2	17	12	36	58	34.00 N	117.27 W	A	16.0	4.5
1954	10	26	16	22	26	33.73 N	117.47 W	B	0.0	4.1
1955	5	15	17	3	26	34.12 N	117.48 W	A	7.6	4.0
1956	1	3	0	25	49	33.72 N	117.50 W	B	13.7	4.7
1959	6	27	16	22	11	33.97 N	116.88 W	A	13.8	4.0
1950	6	23	20	0	48	34.12 N	117.47 W	A	12.0	4.1
1961	10	4	2	21	32	33.85 N	117.75 W	B	4.3	4.1
1961	10	20	19	49	51	33.55 N	117.99 W	B	4.6	4.3
1961	10	20	20	7	14	33.66 N	117.98 W	B	6.1	4.0
1961	10	20	21	42	41	33.67 N	117.98 W	B	7.2	4.0
1961	10	20	22	35	34	33.67 N	118.01 W	B	5.6	4.1
1961	11	20	8	53	35	33.68 N	117.99 W	B	4.4	4.0
1962	4	27	9	12	32	33.74 N	117.19 W	B	5.7	4.1
1963	9	14	3	51	16	33.54 N	118.34 W	B	2.2	4.2
1963	9	23	14	41	53	33.71 N	116.92 W	B	16.5	5.0
1964	8	30	22	57	37	34.27 N	118.44 W	B	15.4	4.0
1965	1	1	8	4	18	34.14 N	117.52 W	B	5.9	4.4
1965	4	15	20	8	33	34.13 N	117.43 W	B	5.5	4.5
1967	1	8	7	37	30	33.63 N	118.47 W	B	11.4	4.0
1967	1	8	7	38	5	33.65 N	118.41 W	C	17.7	4.0
1967	6	15	4	53	6	34.00 N	117.97 W	B	10.0	4.1
1969	5	5	16	2	10	34.30 N	117.57 W	B	8.8	4.4
1969	10	27	13	16	2	33.55 N	117.61 W	B	6.5	4.5
1970	9	12	14	10	11	34.27 N	117.52 W	A	8.0	4.1

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TABLE 4
(Sheet 6 of 14)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1970	9	12	14	30	53	34.27 N	117.54 W	A	8.0	5.4
1970	9	13	4	47	49	34.28 N	117.55 W	A	8.0	4.4
1971	2	9	14	10	21	34.36 N	118.31 W	B	5.0	4.7
1971	2	9	14	16	13	34.34 N	118.33 W	C	11.1	4.1
1971	2	9	14	19	50	34.36 N	118.4 W	U	11.8	4.0
1971	2	9	14	39	18	34.39 N	118.56 W	C	-1.6	4.0
1971	2	9	14	43	47	34.31 N	118.45 W	B	5.2	5.2
1971	2	9	15	58	21	34.33 N	118.33 W	B	14.2	4.8
1971	2	10	3	12	12	34.37 N	118.30 W	B	0.8	4.0
1971	2	10	5	6	36	34.41 N	118.33 W	A	4.7	4.3
1971	2	10	17	38	55	34.40 N	118.37 W	A	6.2	4.3
1971	3	7	1	33	41	34.35 N	118.46 W	A	3.3	4.5
1971	3	25	22	54	10	34.36 N	118.47 W	A	4.6	4.2
1971	3	30	8	54	43	34.30 N	118.46 W	A	2.6	4.1
1971	3	31	14	52	23	34.29 N	118.51 W	A	2.1	4.6
1971	4	2	5	40	25	34.28 N	118.53 W	A	3.0	4.0
1971	4	15	11	14	32	34.26 N	118.58 W	B	4.2	4.2
1971	4	25	14	48	7	34.37 N	118.31 W	B	-2.0	4.0
1971	6	21	16	1	8	34.27 N	118.53 W	B	4.1	4.0
1971	6	22	10	41	19	33.75 N	117.49 W	B	8.0	4.2
1973	3	9	0	54	32	34.38 N	118.42 W	B	8.0	4.6
1974	9	21	10	37	0	33.92 N	117.05 W	P	0.0	4.2

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TABLE 4
(Sheet 7 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 1 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	4.0 - 8.5	
TEMPORAL LIMITS	1932 - 1974	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	43	
NUMBER OF EARTHQUAKES IN FILE	17795	
NUMBER OF EARTHQUAKES IN AREA	236	

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***** LEROY CRANDALL AND ASSOCIATES *****
L.C.S. ANGELES

TABLE 4
(Sheet 8 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 6.0 OR
GREATER WITHIN 100 KM OF THE SITE
(RICHTER DATA 1906-1931)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1907	9	20	1	54	0	34.20 N	117.10 W	D	0.0	6.0
1910	5	15	15	47	0	33.70 N	117.40 W	D	0.0	5.0
1918	4	21	22	32	25	33.75 N	117.00 W	D	0.0	6.8
1923	7	23	7	30	26	34.00 N	117.25 W	D	0.0	6.3

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TABLE 4
(Sheet 9 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 2 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA

COORDINATES OF SITE	33.62 N	117.87 W
DISTANCE PER DEGREE	110.9 KM-N	92.8 KM-W
MAGNITUDE LIMITS	6.0 - 8.5	
TEMPORAL LIMITS	1906 - 1931	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	26	
NUMBER OF EARTHQUAKES IN FILE	35	
NUMBER OF EARTHQUAKES IN AREA	4	

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***** LEROY GRANDALL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 10 of 14)

LIST OF HISTORIC EARTHQUAKES OF MAGNITUDE 7.0 OR
GREATER WITHIN 100 KM OF THE SITE
(NOAA/COMG DATA 1812-1905)

YEAR	MONTH	DAY	HR	MIN	SEC	LATITUDE	LONGITUDE	Q	DEPTH	MAGNITUDE
1890	2	9	4	6	0	34.00 N	117.50 W	D	0.0	7.0

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TABLE 4
(Sheet 11 of 14)

***** SEARCH OF EARTHQUAKE DATA FILE 3 *****

SITE: SAN CLEMENTE DRIVE NEAR SANTA BARBARA DRIVE, NEWPORT BEACH, CALIFORNIA.

COORDINATES OF SITE	33.62 N 117.87 W
DISTANCE PER DEGREE	110.9 KM-N 92.8 KM-W
MAGNITUDE LIMITS	7.0 - 6.5
TEMPORAL LIMITS	1812 - 1905
SEARCH RADIUS (KM)	100
NUMBER OF YEARS OF DATA	94
NUMBER OF EARTHQUAKES IN FILE	9
NUMBER OF EARTHQUAKES IN AREA	1

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***** LEROY CRANDAL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 12 of 14)

*** * COMPUTATION OF RECURRENCE CURVE * * * *
LOG N = A - B M

BIN	MAGNITUDE	RANGE	NO/YR (N)
1	4.25	4.00 - 4.50	0.393E 01
2	4.75	4.50 - 5.00	0.112E 01
3	5.25	5.00 - 5.50	0.349E 00
4	5.75	5.50 - 6.00	0.698E-01
5	6.25	6.00 - 6.50	0.290E-01
6	6.75	6.50 - 7.00	0.145E-01
7	7.25	7.00 - 7.50	0.613E-02 NU
8	7.75	7.50 - 8.00	0.0
9	8.25	8.00 - 8.50	0.0

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A = 4.814 B = 1.0070 SIGMA = 0.123E 00

***** LEROY CRANDAL AND ASSOCIATES *****
LOS ANGELES

TABLE 4
(Sheet 13 of 14)

***** COMPUTATION OF DESIGN MAGNITUDE *****
CONSTANT AREA

TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN LIFE (YEARS)				DESIGN MAGNITUDE
	25	50	75	100	25	50	75	100	
	0.01 ..	2487	4974	7462	9949	7.93	8.13	8.23	
0.05 ..	487	974	1462	1949	7.33	7.60	7.75	7.85	
0.10 ..	237	474	711	949	7.04	7.32	7.48	7.59	
0.20 ..	112	224	336	448	6.72	7.01	7.18	7.30	
0.30 ..	70	140	210	280	6.52	6.82	6.99	7.11	
0.50 ..	36	72	108	144	6.24	6.53	6.71	6.83	
0.70 ..	20	41	62	83	6.00	6.30	6.47	6.59	
0.90 ..	10	21	32	43	5.72	6.02	6.19	6.32	

MU = 4.98 BETA = 2.319

***** LEROY CRANDALL AND ASSOCIATES *****
LOS ANGELES

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TABLE 4
(Sheet 14 of 14)

***** COMPUTATION OF DESIGN MAGNITUDE *****
FOR 0.1 G ROCK ACCELERATION

TABLE OF DESIGN MAGNITUDES

RISK	RETURN PERIOD (YEARS)				DESIGN MAGNITUDE			
	25	50	75	DESIGN LIFE (YEARS) 100	25	50	75	100
0.01 ..	2487	4974	7462	9949	7.99	8.20	8.29	8.33
0.05 ..	487	974	1462	1949	7.17	7.56	7.77	7.89
0.10 ..	237	474	711	949	6.70	7.15	7.39	7.55
0.20 ..	112	224	336	448	6.19	6.66	6.93	7.11
0.30 ..	70	140	210	280	5.85	6.34	6.62	6.81
0.50 ..	36	72	108	144	5.38	5.87	6.16	6.36
0.70 ..	20	41	62	83	4.98	5.48	5.77	5.97
0.90 ..	10	21	32	43	4.50	5.01	5.30	5.51

MU = 0.18 BETA = 1.363

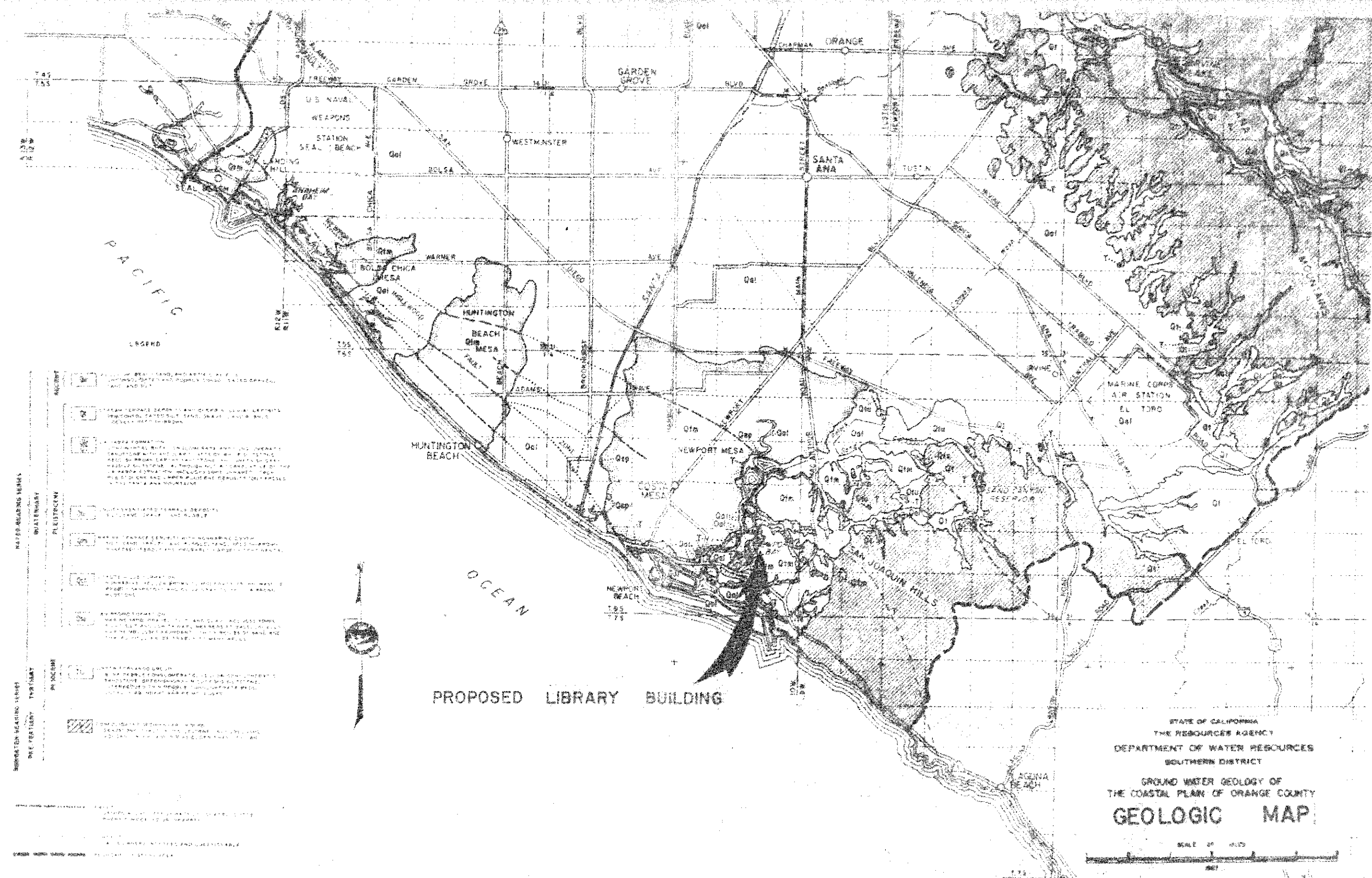
***** LEROY CRANDALL AND ASSOCIATES *****
LOS ANGELES

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**FOLLOWING
DOCUMENT (S)**

**POOR
CONTRAST**

CONSOLIDATED REPROGRAPHICS
MICROFILM DIVISION



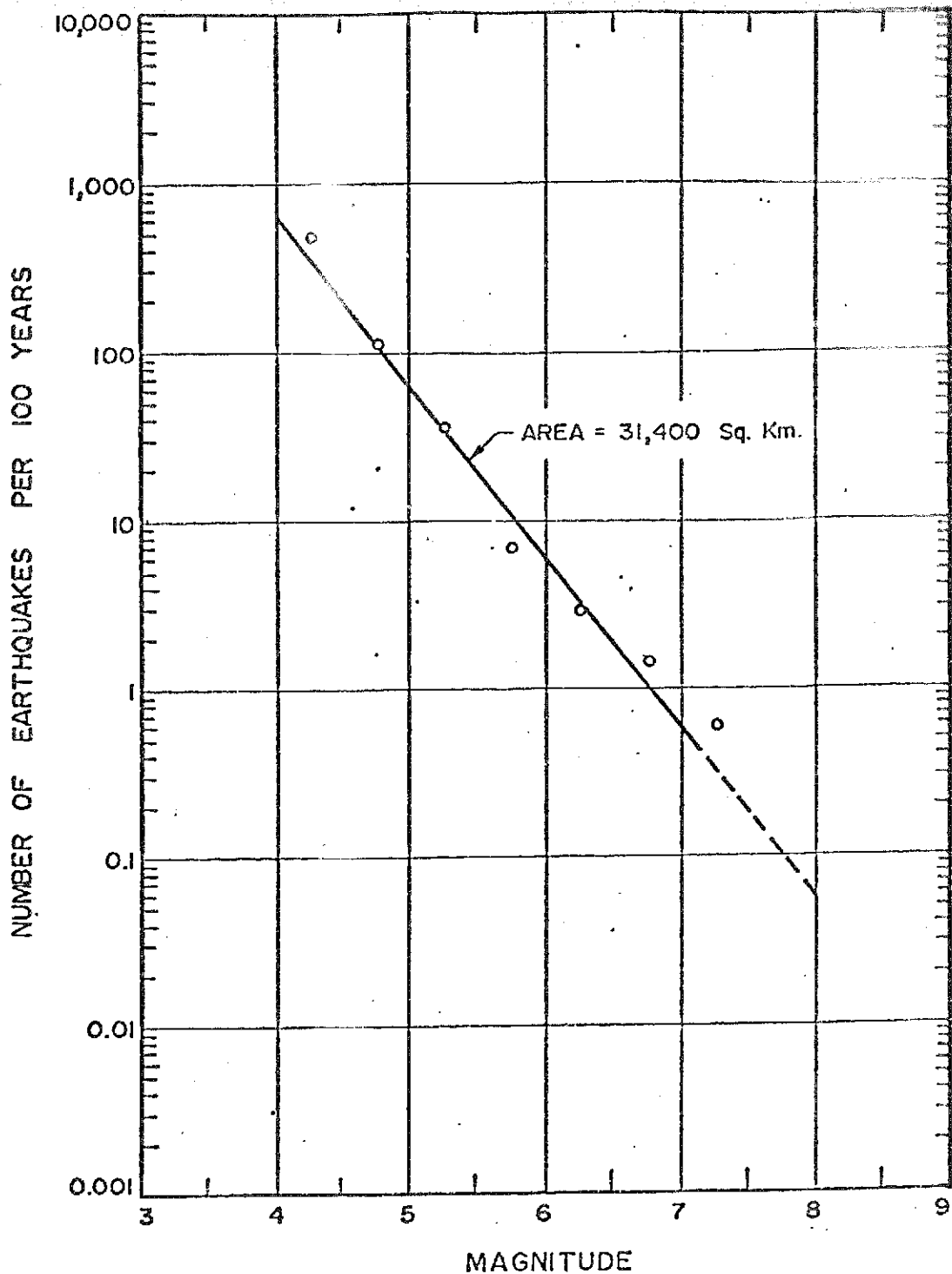
- LEGEND**
- WATER-BEARING SERIES**
- QUATERNARY**
 - Qal: ALLUVIUM (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qfm: FILL (GRAVEL, SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qm: MARINE TERRACE DEPOSITS (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qp: PLEISTOCENE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qs: SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qst: SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qtr: TUFFACEOUS SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qv: VOLCANIC (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - Qw: WASH (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - PLIOCENE**
 - Qc: SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
 - QUATERNARY**
 - Qd: SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES
- NON-WATER-BEARING SERIES**
- Qe: SANDSTONE (SAND, SILT AND CLAY) WITH GRAVEL AND COBBLES

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 SOUTHERN DISTRICT
 GROUND WATER GEOLOGY OF
 THE COASTAL PLAIN OF ORANGE COUNTY
GEOLOGIC MAP
 SCALE OF 1:25,000

JOB NO. AE-76175

LEROY CRANDALL AND ASSOCIATES
 PLATE 6



RECURRENCE CURVE
 1812 - 1974
 241 EVENTS $M \geq 4.0$
 100 Km SEARCH RADIUS

PLATE H

DTSC Envirostor File Information

ENVIROSTOR

- CLEANUP SITES**
- Federal Superfund
- State Response
- Voluntary Cleanup
- School Cleanup
- Evaluation
- School Investigation
- Military Evaluation
- Tiered Permit
- Corrective Action
- PERMITTED SITES**
- Operating
- Post-Closure
- Non-Operating
- OTHER SITES**
- GeoTracker LUFT
- GeoTracker SLIC

SHOW SITES WITHIN 1000 FEET OF THE FOLLOWING ADDRESS: 850 san clemente drive, newport beach, ca

SITES FOUND IN SEARCH RADIUS

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
0 SITES LISTED				

[EXPORT THIS LIST TO EXCEL](#)

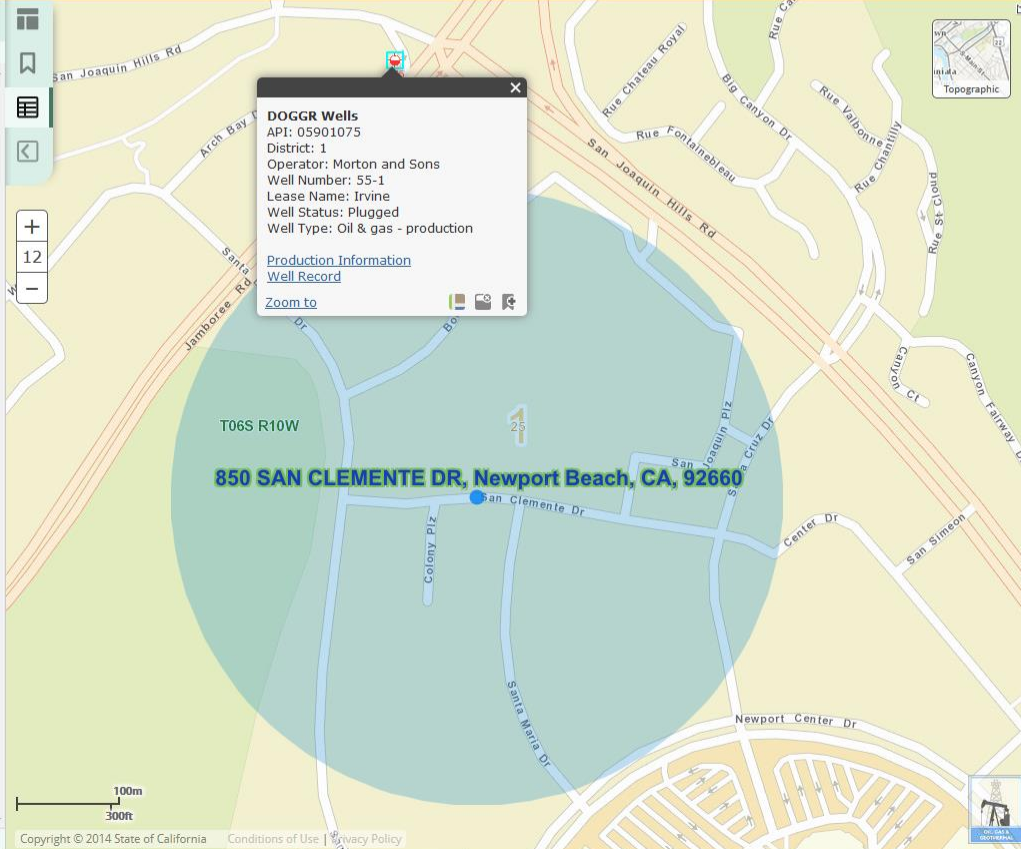
**California Department of Conservation, Division of Oil, Gas,
and Geothermal Resources Records**



Division of Oil, Gas & Geothermal Resources Well Finder

Data Grid:

API #	Operator
05901075	Morton and Sons



[Remove / Select All](#)

Online WellRecord Query for State of California, Department of Conservation, Division of Oil, Gas, and Geothermal Resources.

[DOGGR Home Page](#)

[Online Production/Injection](#)

[How to Print Logs](#)

[Back](#)
















[Well Details](#)

[Get Well Map](#)

Well Details

API: Well Status: District:
 Operator: Operator Code: Operator Status:
 Lease: Well Number: County:
 Field: Field Code: Area: Area Code:
 Section: Township: Range: BaseMeridian: Latitude: NAD83
 Spud Date: Abandonment Date: Longitude: NAD83

Well Records: (Click File Name to view the document.)

File Type	File Name	File Size	File Created On	File Modified On
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	05901075_2013-01-23_LOG_002.pdf	726.37 KB	07/03/13 01:48 AM	05/22/13 03:48 PM
	05901075_DATA_09-27-2012.PDF	643.48 KB	07/03/13 01:48 AM	05/23/13 10:00 PM
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	05901075_2013-01-23_LOG_002.tif	13.24 MB	07/03/13 01:48 AM	01/23/13 12:14 PM
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	05901075_DATA_09-27-2012_004.TIF	23.14 KB	07/03/13 01:48 AM	05/03/13 09:49 AM
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	05901075_DATA_09-27-2012_013.TIF	34.35 KB	07/03/13 01:48 AM	05/03/13 09:49 AM

Last edited on March 29, 2011

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MAR 28 1953

INDEPENDENT OILFIELD

MORTON & SONS

Irvine 55-1

Corona Del Mar Area
Orange County, California

25-65-LOW

PALEONTOLOGICAL SUMMARY

- 610- 770' (ditch) Monterey shale lithology; Inisian or Relizian forams.
- 810- 830' (ditch) Monterey shale lithology; definite Relizian forams. Probably correlates with surface samples collected by Ray Pearson and numbered "T-45".
- 1100' (ditch) to 2300'± Monterey shale lithology; definite Relizian forams.
- 2300'± Top of siltstone lithology reported by Morton.
- 2300'±-3800' (ditch) Siltstone lithology; Relizian forams.
- 3800'-4940' (ditch) Siltstone, with scattered schist fragments; Relizian forams. (Note: Junk basket sample with siltstone and questionable 63° dip @ 4831').
- 4940'-5260' (ditch) San Onofre breccia lithology in abundance, w/ fresh schist fragments, talc, chlorite, quartzite, mica, and many others (San Onofre Breccia, proper).
- 5100'-6160' (ditch) San Onofre lithology, with Relizian forams.
- 6600'± Top of red bed lithology reported by Morton.
- 8100'-8220' (ditch) Red bed lithology, as below.
(Abundant) sandstone, gray, red and green variegated, massive, hard, arkosic, quartzitic, w/
(Common) siltstone, gray, hard, fine grained, w/
(Rare) claystone, red, argillaceous, silty.
- 8620'-8660' (ditch) Siltstone lithology; barren.

Morton & Sons . - Irvine 55-1

8720'-8840' (ditch)

Possible non-marine green sandstone lithology in ditch @ 8780-8800', with Relizian forams thruout--presumably entering the mud circulation from above.

9176' (junk basket sample)

Siltstone lithology. Definite Relizian forams and questionable fish scales--probably caved from above.

Tom Rothwell

1015 West Olympic Blvd.,
Los Angeles 15, California.
August 13, 1947.

Mr. Warren A. Morton,
2056 Ocean Boulevard,
Balboa, California.

Agent for Morton and Sons.

Dear Sir:

Your report of abandonment of well No. "Irvine" 55-1,
Sec. 25, T. 6 S., R. 10 W., S. B. B. & M., Orange County, dated
July 26, 1947, and submitted to this division on our form No. 103,
has been examined in conjunction with records filed in this office.

A review of the reports and records shows that the
requirements of this division, which are based on all information
filed with it, have been fulfilled.

Yours truly,

R. D. BUSH,
State Oil and Gas Supervisor.

By *E. H. [Signature]*
Deputy Supervisor. *an*

BY

cc - Mr. R. D. Bush
- Company
- Long Beach

MAP	MAP BOOK	CARDS	BOND	FORMS	
<i>PM 72-B W.C.</i>	<i>8-14-47</i>		<i>1506 8-13-47</i>	114	121
<i>P.W.B.</i>					<i>[Signature]</i>

DIVISION OF OIL AND GAS
RECEIVED

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

AUG 11 1947

DIVISION OF OIL AND GAS

LOS ANGELES, CALIFORNIA

Special Report on Operations Witnessed

No. T _____

Calif. _____ 19 _____

Mr. _____

Calif.

Agent for Mertou and Sons

DEAR SIR:

Operations at your well No. "Irvine" 55-1 Sec. 25, T. 6S, R. 10W, S.B.B. & M.,

~~XXX~~ Field, in Orange County, were witnessed by

A. Platt - Inspector

, representative of the supervisor,

on August 6, 1947. There was also present _____

Casing Record

Junk

Memo.

The operations were performed for the purpose of _____

The inspector arrived at the well at _____ and Mr. _____ reported:

1. The 13 3/8" casing is plugged with cement at the surface.
2. There is no evidence of oil or gas escaping at the surface.

R. D. BUSH

State Oil and Gas Supervisor

By _____ Deputy

DIVISION OF OIL AND GAS JUL 28 1947

WELL SUMMARY REPORT LOS ANGELES, CALIFORNIA

Operator Morton and Sons Field XXX Orange County
Well No. Irvine 55-1 Sec. 25, T. 6S, R. 10W, S. B. B. & M.
Location 990'N & 1650'E of C. Blk. 55, Irvine Survey Elevation of 190 above sea level 190 feet.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 26 July 1947 Signed W.A. Morton
W.A. Morton (Engineer or Geologist) D. Johnson (Superintendent) Title Agent (President, Secretary or Agent)

Commenced drilling 18 Dec. 1946 Completed drilling 25 June 1947 Drilling tools Cable Rotary

Total depth 9427' Plugged depth 174'
Junk None

GEOLOGICAL MARKERS
See Electro Log

Commenced producing Never Produced (date) Flowing/gas lift/pumping (cross out unnecessary words)

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure

Initial production

Production after 30 days

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
<u>13 3/8"</u>	<u>505'</u>	<u>Surface</u>	<u>48#</u>	<u>New</u>	<u>Smless</u>	<u>H-40</u>	<u>17 1/2"</u>	<u>330 SX</u>	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
	ft.	ft.				
	ft.	ft.		MAP	MAP BOOK	CARDS
	ft.	ft.				BOND
	ft.	ft.				FORMS
	ft.	ft.				114 121
	ft.	ft.				ES

Electrical Log Depths 7768', 9292' (Attach Copy of Log)

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 28 1947

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR Morton and Sons FIELD XXX Orange County

Well No. Irvine 55-1, Sec. 25, T. 6S, R. 10W, S.B. B. & M.

Signed W.A. Morton

Date 26 July 1947 Title Agent
(President, Secretary or Agent)

Use this form in reporting all important operations at the well, together with the dates thereof, in the order of their performance. Such operations include drilling, redrilling, deepening, plugging, or altering casing as by perforating, shooting, or pulling. Include in your report size of hole drilled, redrilled, or deepened; size, weight and length of casing landed, cemented, or removed, amount and location of perforations; number of sacks of cement used in cementing or plugging operations, number of feet of cement drilled out of casing, location of top and bottom of cement plugs. If the well was dynamited, give date, dimensions and weight of all shots. If tests were made give interval tested and results of tests, such as, amount and nature of fluids recovered.

Date	Description
18 Dec. 1946	Spud In. Drill 12 1/4" hole to 505'. Open up to 17 1/2". Run 505' of 13 3/8", 48# H-40, seamless casing, cementing same @ 505' with 330 sax of Construction cement. After 5 hours, added 10 sax of cement around top to bring cement to surface.
19 Dec.	
20 Dec.	Rig B.O.P.E.
21 Dec.	Drill out of 13 3/8". Drill 12 1/4" hole to 1308'. Drill 11" hole to 3955'.
5 Feb. 1947	Ream 11" hole to 12 1/4" hole to T.D. of 2330'. Drill and core 11" hole to 7768'.
15 May	Run Electrical log to 7768'. Drill 11" hole to 9292'.
20 June	Run Elec. Log to 9292'. Drill 11" hole to 9350'.
22 June	Run Magnetic survey to 9350. Side wall sample @ 3395', 2430, 2403, 2374, 1674, 1907', 1717, 1592, 1524'. Drill 11" hole to T.D. 9427'.
25 Jun	Total Depth 9427'. With 4 1/2" D.P. @ 700' mixed and displaced 25 sax con. cement. Plug approx. 700-665'.
26 June	With 4 1/2" D.P. @ 526' mixed and displace 225 sax con. cement. Plug approx. 526'-220'.
21 July	Found top of plug @ 174'. Location and hardness of plug approved by Division of Oil and Gas.
22 July	Welded steel cap to top of 13 3/8" casing at surface and abandoned in accordance with D.O.G.

All measurements from K.B. 11.5' above ground.
W.A.M.

MAP	MAP BOOK	CARDS	BOND	FORMS
				121
				EO

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS RECEIVED

JUL 28 1947

LOG AND CORE RECORD OF OIL OR GAS WELL

LOS ANGELES, CALIFORNIA

Operator Morton and Sons

Field XXX

Orange County

Well No. Irvine 55-1

Sec. 25

T. 6S

R. 10W

S.B. 1

B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
Surface	505'	505'	Drill		Clay and sand with boulders
505	7150		Drill		See Elec. log
7150	7158	8'	Core	3'	2' Very hd, fine grain, cemented green sand 1' Massive black shale
7158	7162	4'	Core	2'	2' Hd! green sand as above
7162	7164	2'	Core	0'	
7164	9292		Drill		See Electrical Log
9292	9427		Drill		Hd. white sand, cemented, and hard brown shale

MAP	MAP BOOK	CARDS	BOND	FORMS
				121

Es

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-46971

Los Angeles 15, Calif. July 29, 19 47

Mr. Warren A. Morton
Balboa, Calif.
Agent for MORTON AND SONS

DEAR SIR:

Operations at your well No. "Irvine" 55-1 Sec. 25, T. 6 S., R. 10 W., S. B. B. & M.,
~~XXXX~~ Field, in Orange County, were witnessed by
A. Pfeil, Inspector, representative of the supervisor,
on July 21, 1947. There was also present W. Morton, Operator;
W. Rowley, Driller.

9427*

Casing Record <u>13-3/8" cem. 505'; T. D. 9427'; plugged</u>	Junk <u>None</u>
<u>with cement 700'-864', 526'-174'.</u>	

The operations were performed for the purpose of testing the location and hardness of a cement plug placed from 526' to 174' in the process of abandonment.

The inspector arrived at the well at 12:30 p.m. and Mr. Morton reported:

1. A 12-1/4" rotary hole was drilled from 505' to 2330'; an 11" rotary hole from 2330' to 9427'.
2. No productive oil or gas sands were encountered.
3. On June 25, 1947, 25 sacks of cement was pumped in the hole through drill pipe hanging at 700'.
4. On June 26, 1947, 225 sacks of cement was pumped in the hole through drill pipe hanging at 526'.

THE INSPECTOR NOTED THAT the bailer could not be spudded below 174' and brought up a sample of set cement.

The test was completed at 1:30 p.m.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 174' ARE APPROVED.

AP:OH

cc- Morton & Sons
Long Beach

R. D. BUSH

State Oil and Gas Supervisor

By [Signature] Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P. 1-43565

Los Angeles 15, Calif.

July 1, 1947

Mr. Warren A. Morton

Balboa Calif.

Agent for MORTON AND SONS

DEAR SIR:

Your proposal to abandon Well No. "Irvine" 55-1,
Section 25, T. 6 S., R. 10 W., S. B. B. & M., (Newport Bay Area) ~~Area~~, Orange County,
dated June 24, 1947, received June 27, 1947, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS: The condition of the well is as stated in the notice.

THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.
 - 1) Drill 17 1/2" hole from surface to 505'.
 - 2) Cemented 505' of 13 3/8" casing, 48#, H-40 w 330 sack of cement.
 - 3) 12 1/4" hole, 505'-2330'; 11" hole, 2330-9427' T. D.
 - 4) No commercial oil or gas bearing sands were encountered.
2. Last produced. Never produced."

PROPOSAL:

"The proposed work is as follows:

- 1) Fill hole with extra heavy mud.
- 2) Place cement plug from 700' to 660'.
- 3) Place cement plug from 525' to 340'.
(Location and hardness of plug to be approved by D. O. G.)
- 4) Weld steel cap to 13 3/8" casing at the surface and abandon."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT THIS DIVISION SHALL BE NOTIFIED AS FOLLOWS:

1. To witness the location and hardness of cement plug at 340'.
2. To inspect the completed surface cap or plug.

SHR:OH

cc- Company
Long Beach *B. T*

R. D. BUSH
State Oil and Gas Supervisor

By *E. A. Murrin* Deputy

DIVISION OF OIL AND GAS
RECEIVED
JUN 27 1947

DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

LOS ANGELES, CALIFORNIA

This notice must be given at least five days before work is to begin

Long Beach Calif. 24 June 1947

DIVISION OF OIL AND GAS
Los Angeles

Calif.

In compliance with Secs. 3228, 3229, 3230, 3231 and 3232, Ch. 93, Stat. 1939, notice is hereby given

Irvine 55-1

that it is our intention to abandon well No.

25 6S 10W S.B. XXXX
Sec. _____, T. _____, R. _____, B. & M. _____ Field,

Orange

17th

County, commencing work on the _____ day

December

46

of _____ 19 _____

The present condition of the well is as follows:

1. Complete casing record.

- 1) Drill 17 1/2" hole from surface to 505'.
- 2) Cemented 505' of 13 3/8" casing, 48#, H-40 w 330 sack of cement.
- 3) 12 1/4" hole, 505'-2330'; 11" hole, 2330-9427' T.D.
- 4) No commercial oil or gas bearing sands were encountered. @

2. Last produced. Never Produced

Date

Net oil

Gravity

Cut

The proposed work is as follows:

- 1) Fill hole with extra heavy mud.
- 2) Place cement plug from 700' to 660'.
- 3) Place cement plug from 525' to 340'.
(Location and hardness of plug to be approved by D.O.G.)
- 4) Weld steel cap to 13 3/8" casing at the surface and abandon.

MAP	MAP BOOK	CARDS	BOND	FORMS	
		and 8Y	144575	114	121
				end	end

Morton and Sons

(Name of Operator)

By W.A. Morton *W.A. Morton*

@ at request of Operator. *S.M.R.*

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL REBOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-46225

Los Angeles 14, Calif. January 10, 1947

Mr. Warren A. Morton
Balboa,
MORTON AND SONS Calif.
Agent for.....

DEAR SIR:

Operations at your well No. "Irvine" 55-1 Sec. 25, T. 6 S., R. 10 W., S.B. B. & M.,
(Newport Bay Area) PERM, in Orange County, were witnessed by
John M. Carls, Inspector, representative of the supervisor,
on December 27, 1946 There was also present Coleman Morton, Operator
F. L. Thomas, Drilling Foreman
Casing Record 13-3/8" cem. 505'. T.D. 1500' Junk None

The operations were performed for the purpose of inspecting blowout prevention equipment and installation

The inspector arrived at the well at 10:00 a.m. and Mr. Thomas reported:

1. A 17-1/2" rotary hole was drilled from surface to 505'.
2. On December 19, 1946, 13-3/8" 48 lb. casing was cemented at 505' with 350 sacks of cement.
3. A 12-1/4" rotary hole was drilled from 505' to 1200'; an 11" rotary hole from 1200' to 1500'.

THE INSPECTOR NOTED that the well was equipped with the following blowout prevention equipment:

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole and for closing around the 4-1/2" drill pipe.
2. A Hydril gate for closing around the 4-1/2" drill pipe.
3. The controls for the above equipment were located outside the derrick.
4. A 2" mud fill-up line, with a 2" high pressure gate valve, into the 13-3/8" casing, below the above equipment.

The inspection was completed at 11:00 a.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

cc - Morton and Sons
Long Beach

JMC:ES

ma
W

R. D. BUSH
State Oil and Gas Supervisor

By *[Signature]* Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P1-42812

Los Angeles 14, Calif. December 9, 1946

Mr. Warren A. Morton

Balboa, Calif.

Agent for MORTON AND SONS

DEAR SIR:

Your proposal to drill Well No. "Irvine" 55-1, Section 25, T. 6 S., R. 10 W., S.B. B. & M., (Newport Bay Area) Orange County, dated Dec. 3, 1946, received Dec. 5, 1946, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES:

"The well is 990 feet N. and 1650 feet E. from center of Block 55, Irvine Sur. The elevation of ground above sea level 190 feet. All measurements taken from top of Kelly Bushing, which is 12.5 feet above ground. We estimate that the first productive oil or gas sand should be encountered at a depth of about 2500 feet."

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated: Size of Casing Weight Grade and Type Depth Landed or Cemented
13 3/8" 48# H-40 Seamless 500' in shale Cemented

Additional Casing program to be determined from results of drilling.

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION:

This division does not have sufficient data available upon which to base an estimate of the depth at which oil- or gas-bearing formations should be encountered in this vicinity, nor the depth at which a water shut-off should be effected.

THE PROPOSED DRILLING PROGRAM IS APPROVED, HOWEVER, PROVIDED THAT

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time, shall be installed.
3. At least 500' of surface casing shall be cemented in the hole for the purpose of protecting surface or domestic water supplies.
4. Any hole to be sidetracked in any oil or gas zone shall be filled with cement, if possible.
5. A supplementary proposal shall be filed with this division prior to running any additional casing into the hole.
6. THIS DIVISION MUST BE NOTIFIED AS FOLLOWS:
 - (a) To inspect the installed blowout prevention equipment before drilling below 1500'.
 - (b) To examine cores and/or electrical log before running any casing. Other requirements may be specified at that time.

SHR:OH *ma*

cc- Morton and Sons
Long Beach

R. D. BUSH
State Oil and Gas Supervisor

By *EH Mason* Deputy

Bond No. SY 144575

059-01075

DIVISION OF OIL AND GAS RECEIVED DEC 5 1946 LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

This notice must be given and surety bond filed before drilling begins

Morton And Son

Long Beach Calif. 3 Dec. 1946

DIVISION OF OIL AND GAS

Los Angeles Calif.

"IRVINE" 55-1

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of drilling well No. "Irvine" 55-1 (in Block 55 of Irvine Subdivision as shown in a map recorded in Book 1, page 88 of Misc. Maps of Orange County.) R.D. W., S.B. B. & M., Field, Orange County.

1750 S. 2450 E. From NW. Cor. Sec.

Lease consists of Blocks 55 and 93, Irvine Subdivision

The well is 990 feet N. of S. and 1650 feet E. of W. from center of Block 55, Irvine Sur. (Give location in distance from section corners or other corners of legal subdivision)

Elevation of ground above sea level 190 feet.

All depth measurements taken from top of Kelly Bushing, which is 12.5 feet above ground.

We estimate that the first productive oil or gas sand should be encountered at a depth of about 25.00 feet.

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Table with 5 columns: Size of Casing, Inches; Weight, Lb. Per Foot; Grade and Type; Depth; Landed or Cemented. Row 1: 13 3/8", 48#, H-40 Seamless, 500± in shale, Cemented. Row 2: Additional Casing program to be determined from results of drilling.

Well is to be drilled with rotary tools.

Summary table with columns: MAP, MAP BOOK, CARDS, BOND, FORMS (114, 121). Values: MAP (60 JLW), MAP BOOK (JLW), CARDS (Emb), BOND (RY 144575), FORMS (Emb, Emb).

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

Address 1241 E. Burnett St.

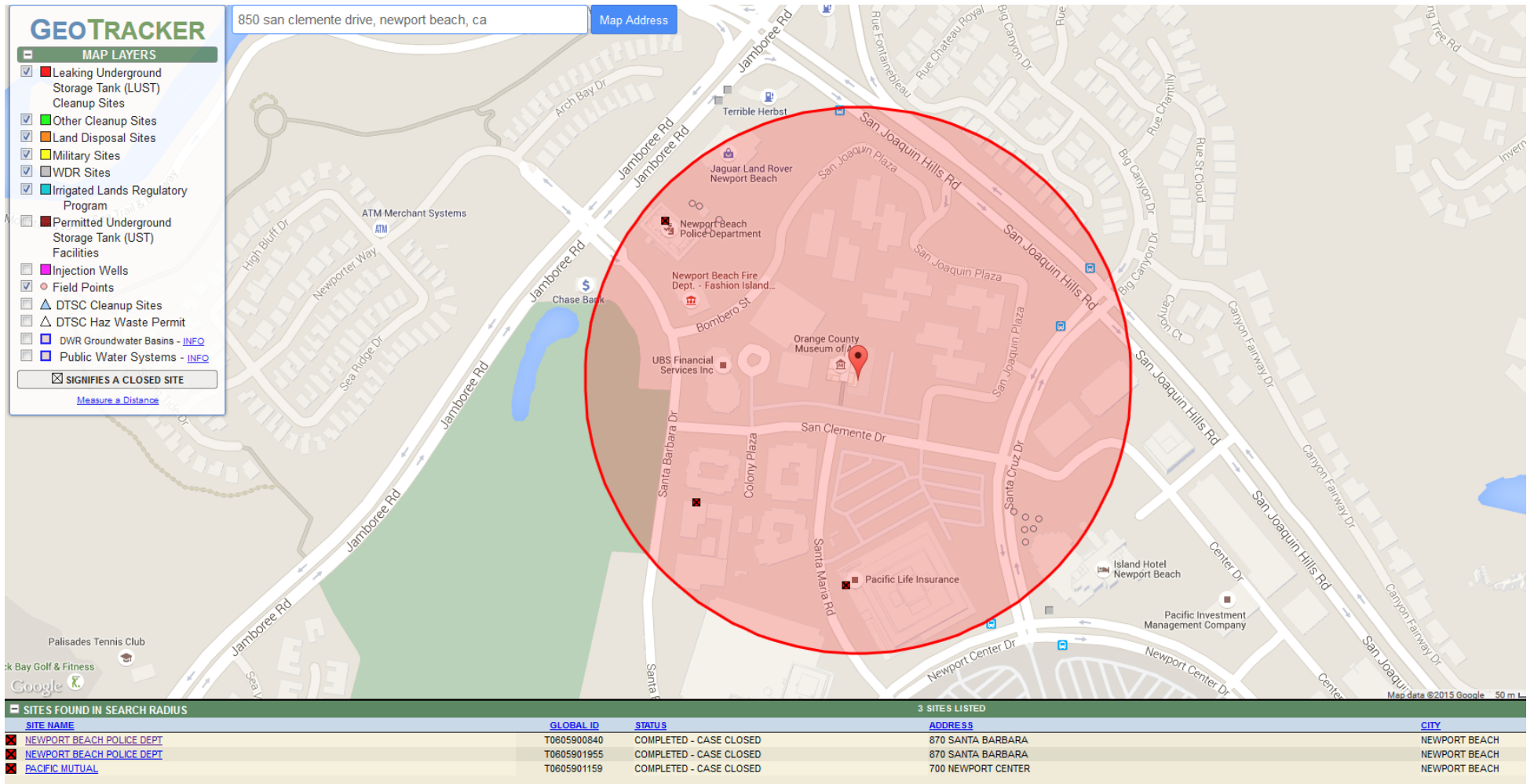
Morton and Sons (Name of Operator)

Telephone number L.B. 48 509

By W.A. Morton

SWRCB Geotracker File Information for Adjacent Properties

Four Seasons - 690 Newport Center Drive



NEWPORT BEACH POLICE DEPT (T0605900840) - [\(MAP\)](#)

[SIGN UP FOR EMAIL ALERTS](#)

870 SANTA BARBARA
NEWPORT BEACH, CA 92660
ORANGE COUNTY
LUST CLEANUP SITE

[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
ORANGE COUNTY LOP ([LEAD](#)) - CASE #: 88UT150
CASEWORKER: [DENAMARIE BAKER](#)
SANTA ANA RWQCB (REGION 8) - CASE #: 083001065T
CASEWORKER: [ROSE SCOTT](#)
CUF Claim #:
CUF Priority Assigned:
CUF Amount Paid:

4387

D

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ES\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

Regulatory Profile

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 8/30/1994 - [CLEANUP STATUS HISTORY](#)

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

FILE LOCATION
LOCAL AGENCY

DWR GROUNDWATER SUB-BASIN NAME

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY

RB WATERSHED NAME
Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)

Site History
No site history available

NEWPORT BEACH POLICE DEPT (T0605901955) - [\(MAP\)](#)

[SIGN UP FOR EMAIL ALERTS](#)

870 SANTA BARBARA
NEWPORT BEACH, CA 92660
ORANGE COUNTY
LUST CLEANUP SITE

[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
ORANGE COUNTY LOP ([LEAD](#)) - CASE #: 02UT019
CASEWORKER: [DENAMARIE BAKER](#)
SANTA ANA RWQCB (REGION 8) - CASE #: 083002849T
CASEWORKER: [TOM E. MBEKE-EKANEM](#)

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ES\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

Regulatory Profile

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 10/28/2004 - [CLEANUP STATUS HISTORY](#)

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

FILE LOCATION
LOCAL AGENCY WAREHOUSE

DWR GROUNDWATER SUB-BASIN NAME

POTENTIAL MEDIA AFFECTED
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

BENEFICIAL USE
SW - MARINE HABITAT, SW - NAVIGATION, SW - NON-CONTACT WATER RECREATION, SW - SHELLFISH HARVESTING, SW - SPAWNING, REPRODUCTION, AND/OR EARLY DEVELOPMENT, SW - WATER CONTACT RECREATION, SW - WETLAND HABITAT, SW - WILDLIFE HABITAT

RB WATERSHED NAME
Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)

Site History
No site history available

NEWPORT BEACH POLICE DEPT (T0605901955) - (MAP)

[SIGN UP FOR EMAIL ALERTS](#)

870 SANTA BARBARA
 NEWPORT BEACH, CA 92660
 ORANGE COUNTY
 LUST CLEANUP SITE
[PRINTABLE CASE SUMMARY / GSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
 ORANGE COUNTY LOP (LEAD) - CASE #: 02UT019
 CASEWORKER: [DEVAMARIE EAKER](#)
 SANTA ANA RWQCB (REGION 8) - CASE #: 083002849T
 CASEWORKER: [TOM E. MERCE-ERKANEM](#)

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ESI\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

Regulatory Activities				* Indicates a revised due date
ACTION TYPE	ACTION	ACTION DATE	RECEIVED / ISSUE DATE	
[VIEW DOCS] OTHER REGULATORY ACTIONS	Closure/No Further Action Letter	10/28/2004	10/28/2004	
[VIEW DOCS] OTHER REGULATORY ACTIONS	LOP Case Closure Summary to RB	9/22/2004	9/22/2004	
RESPONSE REQUESTED - OTHER	Other Report / Document	3/23/2003	3/21/2003	
ENFORCEMENT/ORDERS	Staff Letter	2/21/2003	2/21/2003	
NOTICES	Notice of Responsibility	6/17/2002	6/17/2002	
LEAK ACTION	Leak Discovery	6/17/2002		
LEAK ACTION	Leak Reported	6/17/2002		

NEWPORT BEACH POLICE DEPT (T0605901955) - (MAP)

[SIGN UP FOR EMAIL ALERTS](#)

870 SANTA BARBARA
 NEWPORT BEACH, CA 92660
 ORANGE COUNTY
LUST CLEANUP SITE
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
 ORANGE COUNTY LOP ([LEAD](#)) - CASE #: 02U7019
 CASEWORKER: [DENAMORE_BAKER](#)
 SANTA ANA RWQCB (REGION 8) - CASE #: 0830028497
 CASEWORKER: [TOM_E_MERKLE-EKANEM](#)

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ESI\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

FIELD POINT NAME	FIELD POINT CLASS	MIN DEPTH TO WATER	MAX DEPTH TO WATER	DEPTH - TOP OF CASING TO WELL SCREEN	LENGTH OF WELL SCREEN	FIELD POINT DESCRIPTION
D1-2	Borehole					
D2-3	Borehole					
MW-1	Remediation/Groundwater Monitoring Well	10.55	11.53			
MW-2	Remediation/Groundwater Monitoring Well	11.78	13.08			
MW-3	Remediation/Groundwater Monitoring Well	10.65	11.62			
MW-4	Remediation/Groundwater Monitoring Well	10.87	11.91			
P-1	Stockpile Sample					
B-1	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-2	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-3	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-4	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-5	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-6	Transient Subsurface Sampling Point (i.e. geoprobe)					
B-7	Transient Subsurface Sampling Point (i.e. geoprobe)					

Laboratory Analytical Reports (EDF) [EXPORT ALL EDF DATA FOR THIS CASE TO EXCEL](#)

TITLE	QUARTER	SUBMITTED BY	SUBMIT DATE
GWM REPORT	Q4 2002	ERIC FLOYD	7/12/2004
GWM REPORT	Q3 2003	ERIC FLOYD	7/12/2004
GWM REPORT	Q4 2003	ERIC FLOYD	7/12/2004
GWM REPORT	Q1 2004	ERIC FLOYD	7/12/2004
GWM REPORT	Q2 2004	ERIC FLOYD	7/12/2004

Well Latitude / Longitude Data (GEO_XY) [EXPORT ALL GEO_XY DATA FOR THIS CASE TO EXCEL](#)

TITLE	SUBMITTED BY	SUBMIT DATE
GEO_XY NBPD	ERIC FLOYD	7/13/2004

Well Survey Data (GEO_Z) [EXPORT ALL GEO_Z DATA FOR THIS CASE TO EXCEL](#)

TITLE	SUBMITTED BY	SUBMIT DATE
GEO_Z NBPD	ERIC FLOYD	7/13/2004

Well Depth to Water Data (GEO_WELL) [EXPORT ALL GEO_WELL DATA FOR THIS CASE TO EXCEL](#)

TITLE	SUBMITTED BY	SUBMIT DATE
NBPD GEOWELL SUBMISSION	ERIC FLOYD	7/6/2004

NEWPORT BEACH POLICE DEPT (T0605901955) - [\(MAP\)](#)

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870 SANTA BARBARA
 NEWPORT BEACH, CA 92660
 ORANGE COUNTY
 LUST CLEANUP SITE
[PRINTABLE CASE SUMMARY / CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
 ORANGE COUNTY LOP ([LEAD](#)) - CASE #: 02UT019
 CASEWORKER: [DENAMARIE BAKER](#)
 SANTA ANA RWQCB (REGION 8) - CASE #: 083002849T
 CASEWORKER: [TOM E. MEEKE-EKANEM](#)

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ESI\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

* DENOTES A SUBMITTAL WAS AUTO-RECEIVED

Site Maps and Boring Logs (GEO_MAP and GEO_BORE)				
TITLE	SUBMITTED BY	SUBMITTED	SIZE	
GEO_MAP	ERIC FLOYD (AUTH_RP)	7/6/2004	74 KB	
GEO_MAP	ERIC FLOYD (AUTH_RP)	7/6/2004	70 KB	
GEO_MAP	ERIC FLOYD (AUTH_RP)	7/6/2004	69 KB	

Site Documents				
TITLE	TYPE	SUBMITTED BY	DOCUMENT DATE	SIZE
CASE CLOSURE SUMMARY		(REGULATOR)	12/21/2004	2,484 KB
REMEDIAL ACTION COMPLETION CERTIFICATION		(REGULATOR)	12/21/2004	178 KB
UNKNOWN	CLOSURE/NO FURTHER ACTION LETTER	PAMELA YBARRA (REGULATOR)	10/28/2004	
UNKNOWN	LOP CASE CLOSURE SUMMARY TO RB	PAMELA YBARRA (REGULATOR)	9/22/2004	

Monitoring Reports
NO MONITORING REPORT SUBMITTALS FOUND FOR THIS FACILITY.

PACIFIC MUTUAL (T0605901159) - [\(MAP\)](#)

[SIGN UP FOR EMAIL ALERTS](#)

700 NEWPORT CENTER
 NEWPORT BEACH, CA 92660
 ORANGE COUNTY
 LUST CLEANUP SITE
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
 ORANGE COUNTY LOP [\(LEAD\)](#) - CASE #: 90U7108
 CASEWORKER: [BENJAMINE PAKER](#)
 SANTA ANA RWQCB (REGION 8) - CASE #: 083001519T
 CASEWORKER: [PATRICIA HANNON](#)

- [Summary](#)
- [Cleanup Action Report](#)
- [Regulatory Activities](#)
- [Environmental Data \(ES\)](#)
- [Site Maps / Documents](#)
- [Community Involvement](#)
- [Related Cases](#)

Regulatory Profile

[CLEANUP STATUS](#) - [DEFINITIONS](#)

COMPLETED - CASE CLOSED AS OF 7/30/1990 - [CLEANUP STATUS HISTORY](#)

<p>POTENTIAL CONTAMINANTS OF CONCERN</p> <p>DIESEL</p> <p>FILE LOCATION</p> <p>LOCAL AGENCY</p> <p>DWR GROUNDWATER SUB-BASIN NAME</p>	<p>POTENTIAL MEDIA AFFECTED</p> <p>SOIL</p> <p>BENEFICIAL USE</p> <p>GW - MUNICIPAL AND DOMESTIC SUPPLY</p> <p>RB WATERSHED NAME</p> <p>Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)</p>
--	--

Site History

No site history available



**PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH**

MARK A. REFOWITZ
DIRECTOR

RICHARD SANCHEZ
ASSISTANT DIRECTOR

DAVID M. SOULELES, MPH
DEPUTY AGENCY DIRECTOR

DENISE FENNESSY, REHS
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
1241 E. DYER ROAD, SUITE 120
SANTA ANA, CA 92705
TELEPHONE: (714) 433-8471
FAX: (714) 754-1732
E-MAIL: ehealth@ochca.com

January 28, 2015

Jeff Stroth
The Island Hotel
690 Newport Center Drive
Newport Beach, CA 92660

Subject: Remedial Action Completion Certification

**Re: Underground Storage Tank (UST) Case
Four Seasons Hotel
690 Newport Center Drive
Newport Beach, CA 92660
OCHCA Case #97UT041**

Dear Mr. Stroth:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required. This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

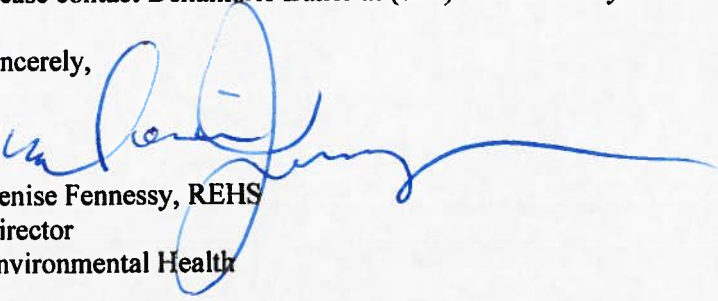
Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or,
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

Jeff Stroth
January 28, 2015
Page 2 of 2

Please contact Denamarie Baker at (714) 433-6255 if you have any questions regarding this matter.

Sincerely,



Denise Fennessy, REHS
Director
Environmental Health

Attachment: Case Closure Summary

cc: Tom Mbeke-Ekanem, Santa Ana Regional Water Quality Control Board (electronic copy)
Dan Yokoyama, Water Quality Section, Orange County Environmental Health (electronic copy)
Larry Brenner, Water Quality Section, Orange County Environmental Health (electronic copy)
UST Cleanup Fund Manager, State Water Resources Control Board (electronic copy)
Nadine Morris, Newport Beach Fire Department (electronic copy)
Michael Marelo, Environmental Support Technologies, Inc. (electronic copy)

Case Closure Summary
Leaking Underground Fuel Tank Program

I. Agency Information

Date: July 25, 2014

Agency Name: Orange County Health Care Agency	Address: 1241 E. Dyer Road, Suite 120
City/State/Zip: Santa Ana, CA 92705	Phone: (714) 433-6255
Responsible staff person: Denamarie Baker	Title: Hazardous Waste Specialist

II. Case Information

Site Facility Name: Four Seasons Hotel-				
Site Facility Address: 690 Newport Center Drive, Newport Beach, CA 92660				
RWQCB Case No.: 083003073T		Local Case No.: 97UT041		RO No.: RO0002035
URF Filing Date: July 11, 1997		GeoTracker Global ID No.: T0605902093		
Responsible Party:		Address		Phone No.:
Jeff Stroth The Island Hotel		690 Newport Center Drive Newport Beach, CA 92660		949-760-4940
Tank No.	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	1,000	Diesel	Active	NA

III. Release and Site Characterization Information

Cause and type of release: Underground Storage Tank system release				
Site characterization complete? Yes			Date approved by oversight agency: January 17, 2014	
Monitoring wells installed? Yes	Number: 6		Proper screened interval? Yes	
Minimum Depth to GW: 22.91' bgs	Maximum Depth to GW: 35.32' bgs		Flow direction: west to northwest	
Most sensitive current use: Designated as municipal and domestic supply				
Are drinking water wells affected? No			Aquifer name:	
Is surface water affected? No			Nearest/affected SW name: Big Canyon Wash	
Off-site beneficial use impacts (addresses/locations):				
Report(s) on file? Yes		Where is report(s) filed? OCHCA office and GeoTracker		
Treatment and Disposal of Affected Material				
Material	Amount (include Units)	Action (treatment or disposal/destination)		Date
Groundwater	3995.8 gallons	Demunno Kerdoon, Compton, CA		July 20, 1998 – February 21, 2012
FP	32.7 gallons	Demunno Kerdoon, Compton, CA		July 20, 1998 – February 21, 2012

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: July 25, 2014

Case#: 97UT041

III. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup									
Contaminant	Soil (mg/kg)		Water (µg/L)		Contaminant	Soil (mg/kg)		Water (µg/L)	
	Before	After	Before	After		Before	After	Before	After
TPHg	NA	NA	FP	NA	MTBE	0.139	<5	FP	12
TPHd	7,860	<1	FP	340,000	TBA	NA	<0.25	FP	<10
Benzene	0.174	<0.5	FP	<2	DIPE	NA	<0.01	FP	<5
Toluene	1.082	<0.5	FP	<2	TAME	NA	<0.01	FP	1
Ethylbenzene	1.722	<0.5	FP	<2	Naphthalene	NA	<0.005	FP	<5
Xylenes	5.147	<0.6	FP	<2					

NA – Not Analyzed; FP – Free Product; J – Estimated value, below laboratory detection limit

Note: "After" groundwater contaminant concentrations from the most recent groundwater sampling event (February 2013).

Site Background:

The site is located near the intersection of Newport Center and Santa Cruz Drives in the city of Newport Beach. The location is currently occupied by the Island Hotel which maintains a diesel UST for use with the site's emergency generator. In October 1997, Orange County Health Care Agency (OCHCA) Case # 97UT041 was opened after soil contamination was detected in samples collected from the vicinity of the diesel UST at the site.

Site Assessment:

- Six hand-augered borings (B-1 through B-6) were drilled to a maximum depth of 15 feet bgs in September 1997. Only one of the 15 samples had a detectable concentration of TPHd. The sample (B-5-10') was also analyzed for BTEX and MTBE. Low concentrations of BTEX were reported in the sample, MTBE was not detected. Three additional borings (B-5, B-7, and B-8) were drilled near the former B-5 location to approximately 30 feet bgs in November 1997.
- Results of assessment activities indicated that the release location was beneath product piping in a sloped landscaped area south of the UST. Maximum concentrations, reported in the "before" column in the above table, were reported in samples collected at depths ranging from 15 to 35 feet bgs. The UST was upgraded, re-piped, and placed back in service during 1997.
- Between April 1998 and March 2004 groundwater monitoring wells MW-1 through MW-6 were installed.

Remediation:

Free product recovery, by manual bailing, mechanical skimming, and vacuum extraction was conducted from July 1998 to February 2012. Note, the environmental consultant used the terms dual-phase extraction, groundwater extraction, and vacuum extraction interchangeably. No soil vapor extraction was conducted at this site.

Groundwater Monitoring:

Quarterly groundwater monitoring was initiated at the site in April 1998 and was most recently conducted on February 14, 2013. Free product was observed in site wells MW-1, MW-3, MW-4, and MW-5 from July 1998 to July 2012 with a maximum thickness of 0.90 feet reported in well MW-1 in January 1999. Offsite well MW-6, located directly downgradient of the site, has only shown detections of TPHd on two occasions with a maximum concentration detected at 290 µg/L.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: July 25, 2014

Case#: 97UT041

Sensitive Receptors:

There are no active groundwater production well(s) located within one mile of the site. There nearest surface water body is Big Canyon Wash, located approximately 1,500 feet northeast of the site.

State Water Resources Control Board UST Low-Threat Closure Policy:

In the State Water Resources Control Board Resolution No. 2012-0016, the Board adopted a Low-Threat Closure Policy (LTCP) that became effective on August 17, 2012. The policy outlines eight general and three media-specific criteria to assess whether open leaking UST cases are candidates for low-threat closure. This policy applies to all petroleum UST sites subject to Chapter 6.7 of Division 20 of the Health and Safety Code and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations.

In the absence of unique attributes of a case or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria described in this policy pose a low threat to human health, safety, or the environment and are appropriate for closure pursuant to Health and Safety Code section 25296.10.

Based on the LTCP evaluation, the OCHCA concludes that this case meets the following requirements for case closure:

General Criteria

- a. The unauthorized release is located within the service area of a public water system;
- b. The unauthorized release consists only of petroleum;
- c. The unauthorized ("primary") release from the UST system has been stopped;
- d. Free product has been removed to the maximum extent practicable;
- e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed;
- f. Secondary source has been removed to the extent practicable;
- g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code section 25296.15; and
- h. Nuisance as defined by Water Code section 13050 does not exist at the site.

Media-Specific Criteria

1. Groundwater - 1.1 - The contaminant plume that exceeds water quality objectives is <100 feet in length. There is no free product. The nearest existing water supply well or surface water body is >250 feet from the defined plume boundary.
2. Vapor Intrusion to Indoor Air - 2a.1 - Scenario 3: Dissolved Phase Benzene Concentrations Only in Groundwater. Bioattenuation zone with oxygen \geq 4% and benzene concentrations are <1,000 $\mu\text{g/L}$. The bioattenuation zone is a continuous zone that provides a separation of at least 5 feet vertically between the dissolved phase benzene and the foundation of existing or potential building and contains TPH <100 mg/kg throughout the entire depth of the bioattenuation zone.
3. Direct Contact and Outdoor Air Exposure - EXEMPTION - 3.1 - Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 of the UST LTCP (see below) for the specified depth below ground surface.

Note: All environmental documents, including the Orange County Health Care Agency Local Oversight Program case file and technical reports uploaded to the State Water Board GeoTracker database, should be reviewed in their entirety to obtain further details regarding site cleanup.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: July 25, 2014

Case#: 97UT041

IV. Closure

Does completed corrective action protect <i>existing</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect <i>potential</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site management requirements: If petroleum hydrocarbons are encountered during future site development activities, soil should be handled in accordance with health and safety regulations.		
Should corrective action be reviewed if land use changes? Yes		
Monitoring wells decommissioned: No	Number decommissioned: 0	Number Retained: 6
List enforcement actions taken: None		
List enforcement actions rescinded: None		

V. Local Agency Representative Data

Name: Osman Taban, PG #5986	Title: Geologist
Signature: <i>Osman Taban</i>	Date: 7/29/2014
Name: Genece Higgins	Title: Supervising Hazardous Waste Specialist
Signature: <i>[Signature]</i>	Date: 7/29/14
Name: Anthony Martinez	Title: Program Manager
Signature: <i>[Signature]</i>	Date: 7-29-14

VI. RWQCB Notification

Date Submitted to RB:	RB Response: <i>Concurs w/ Closure</i>
Name: Kenneth R. Williams	Title: Chief, Pollutant Investigation Section
Signature: <i>Kenneth R. Williams</i>	Date: 8/27/2014

December 9, 2014

Mr. Jeff Stroth
Island Hotel
690 Newport Center Drive
Newport Beach, California 92660

RE: Monitoring Well Destructions
Island Hotel (Former Four Seasons)
690 Newport Center Drive
Newport Beach, California

Dear Mr. Stroth:

Advanced Environmental Concepts, Inc. (AEC) is pleased to present this summary letter regarding the destruction of six groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6) associated with the former Orange County Health Care Agency (OCHCA) leaking underground storage tank (LUST) Case No. 97UT041 at the Island Hotel (former Four Seasons), Newport Beach, California. The six monitoring wells are being destroyed as part of the pre-closure requirements for the above referenced LUST case.

Following approval of the well destruction permit (#14-11-05) and subsequent 48 hour advance notification given by AEC to the OCHCA on November 13, 2014 of the intended start date for well destruction; the monitoring wells were destroyed on November 18, 2014 in conformance with OCHCA and State of California regulations for destruction of groundwater monitoring wells. Although advance notice was given, a representative of the OCHCA did not conduct a site inspection during the well destruction process. A copy of the permit is included in Appendix B.

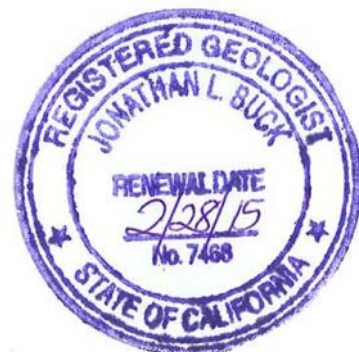
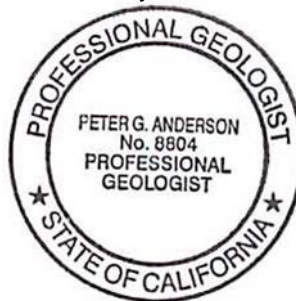
J&H Drilling, Inc., a licensed (C-57) drilling company, performed the destruction in the following manner: Following removal of the flush-mounted well boxes, the existing monitoring wells were pressure grouted with bentonite grout for 15 minutes at 25 psi. The top 5-feet of casing was removed, capped and patched to match existing surfaces. Debris generated during onsite well destruction was placed in a drum, sealed and disposed of at an offsite location as general construction waste by the drilling contractor.

Advanced Environmental Concepts, Inc. appreciates the opportunity to be of service to The Island Hotel on this project. If there should be any questions or additional information required regarding this report, please do not hesitate to contact our office at (661) 395-1646.


This Groundwater Monitoring Well Destruction Summary Letter has been prepared by:

Advanced Environmental Concepts, Inc.


Peter G. Anderson
Senior Geologist

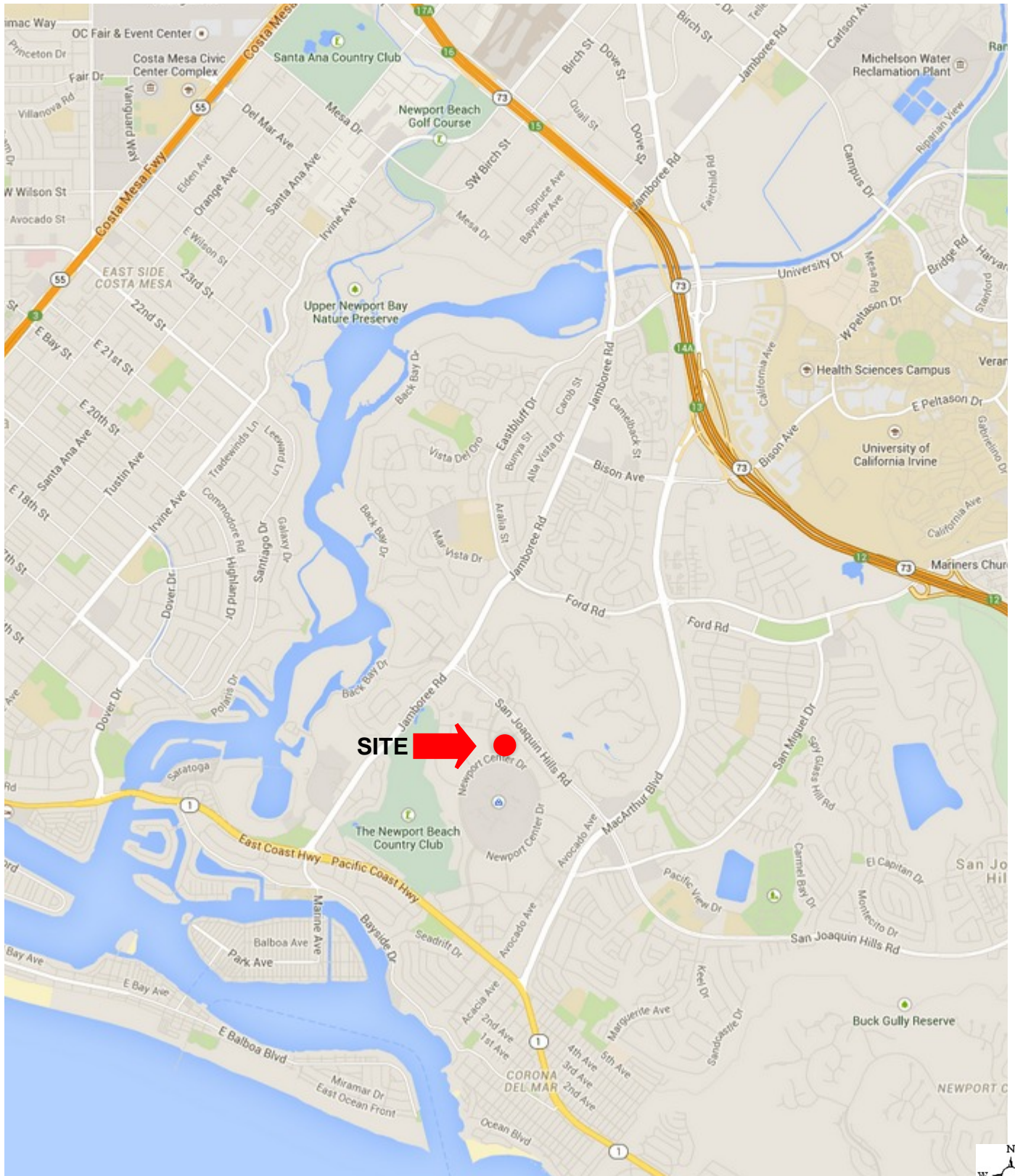


This report has been reviewed by:


Jonathan L. Buck
Principal Geologist

Appendix A

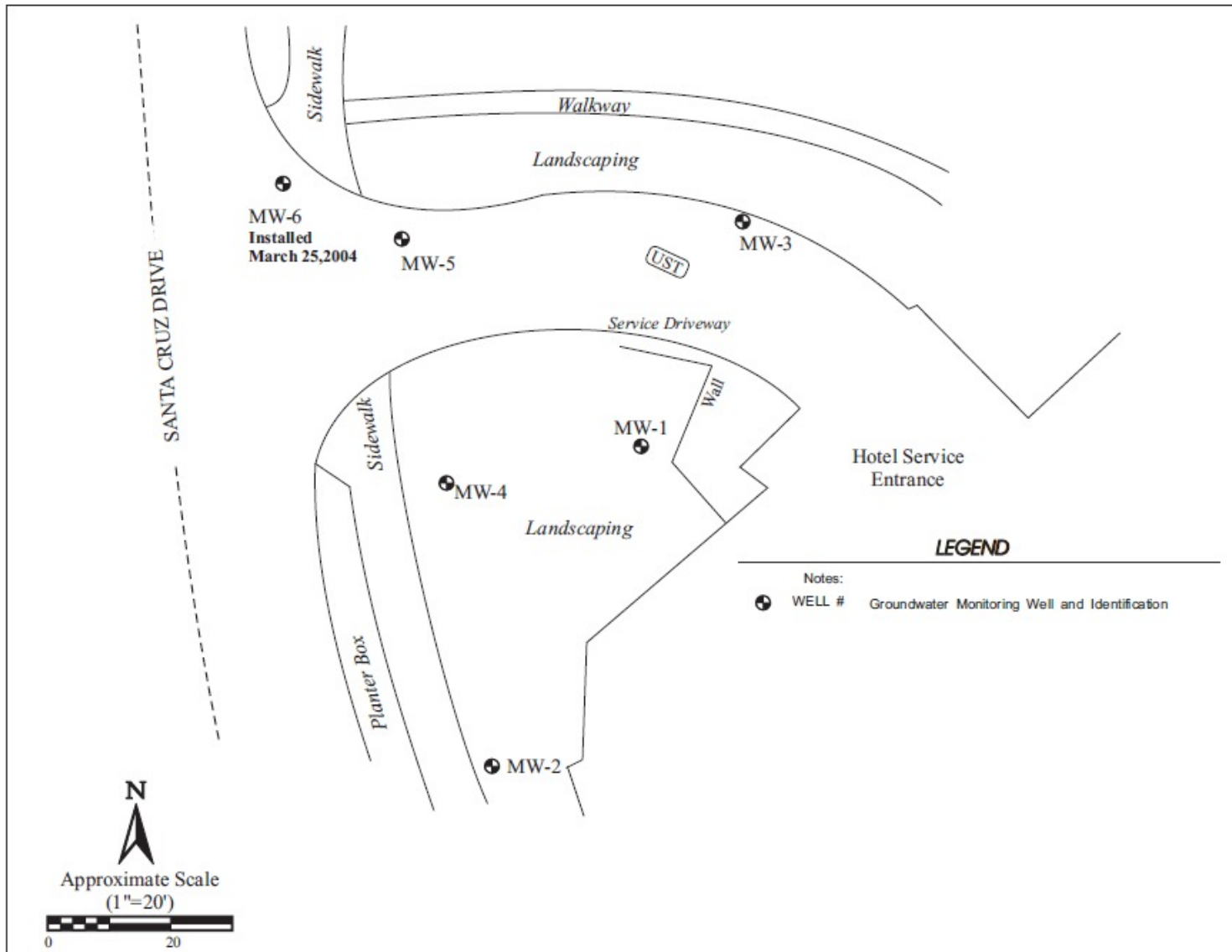
PROJECT MAPS/FIGURES



AEC
 -ADVANCED ENVIRONMENTAL CONCEPTS INC-
 220 East Truxtun Avenue
 Bakersfield, California 93305
 (661) 395-1646

Site Location Map
Island Hotel
690 Newport Center Drive
Newport Beach, California

FIGURE
1



AEC
 -ADVANCED ENVIRONMENTAL CONCEPTS INC -
 220 East Truxtun Avenue
 Bakersfield, California 93305
 (661) 395-1646

Site Map
Island Hotel
690 Newport Center Drive
County of Orange • Newport Beach, California

FIGURE

2

Appendix B

OCHCA WELL DESTRUCTION PERMIT

APPLICATION FOR WELL DESTRUCTION PERMIT

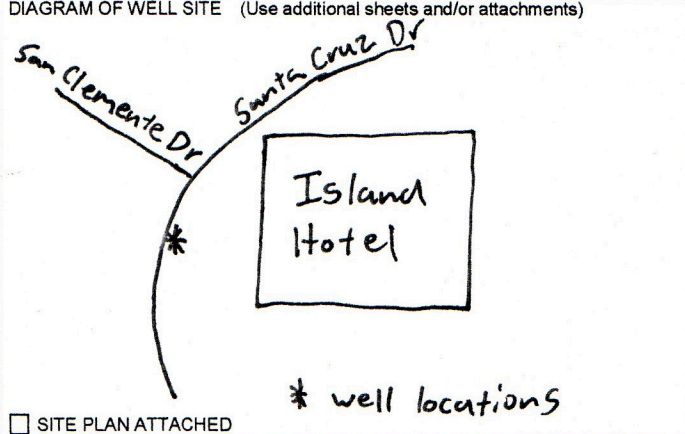
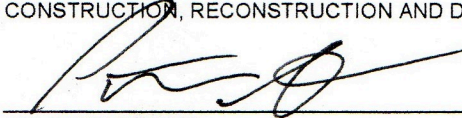
ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION

1241 E. DYER ROAD, SUITE 120
SANTA ANA, CA 92705-5611

(714) 433-6000
FAX: (714) 433-6481

WELL PERMIT NUMBER

14-11-05

CITY Newport Beach		DATE 11-13-14
WELL LOCATION (ADDRESS IF AVAILABLE) 690 Newport Center Drive		
NAME OF WELL OWNER Island Hotel c/o Jeff Stroth		NAME OF CONSULTING FIRM AEC
ADDRESS 690 Newport Center Drive		BUSINESS ADDRESS 220 E. Truxtun Ave
CITY Newport Beach	ZIP 92660	TELEPHONE 949-766-4940
CITY Bakersfield	ZIP CA	TELEPHONE 661-395-1646
NAME OF DRILLING CO. J&H Drilling Co Inc.	C-57 LICENSE NUMBER 740854	WELL DEPTH 40-45 Feet
CITY Buena Park	ZIP 90620	TELEPHONE 714-994-0402
SEALING MATERIAL / ESTIMATE AMOUNT OF SEALING MATERIAL NEEDED Bentonite Grout / 10-gal per well		PROPOSED START DATE Nov 18
METHOD OF DESTRUCTION Airknife six (40-45' deep) 2" PVC well locations to 6' bgs. Pressure grout w/ bentonite grout mix. Remove upper 5' of well casing and well vault. Back fill w/ clean sand and patch at surface		
DIAGRAM OF WELL SITE (Use additional sheets and/or attachments) 		I HEREBY AGREE TO COMPLY IN EVERY RESPECT WITH ALL REQUIREMENTS OF THE HEALTH CARE AGENCY AND WITH ALL ORDINANCES AND LAWS OF THE COUNTY OF ORANGE AND OF THE STATE OF CALIFORNIA PERTAINING TO WELL CONSTRUCTION, RECONSTRUCTION AND DESTRUCTION.  11-13-14 APPLICANT'S SIGNATURE DATE
<input type="checkbox"/> SITE PLAN ATTACHED		APPLICANT'S SIGNATURE Peter Anderson PRINT NAME 949-371-3690 PHONE NUMBER
FOR ACCOUNTING USE ONLY: HSD NO. 36049 CHECK NO. _____ DATE 11-13-14 AMOUNT 756 INTL. At		DISPOSITION OF PERMIT (DO NOT FILL IN): <input checked="" type="checkbox"/> APPROVED SUBJECT TO THE FOLLOWING CONDITIONS: A. <input checked="" type="checkbox"/> NOTIFY THIS AGENCY AT LEAST 48 HOURS PRIOR TO START. CALL IF START DATE CHANGES. B. <input type="checkbox"/> SUBMIT TO THE AGENCY A WELL DESTRUCTION REPORT. PLEASE REFERENCE PERMIT NUMBER. C. <input checked="" type="checkbox"/> OTHER PRE-CLOSURE LETTER RECEIVED DATED 9/30/14 BY <input type="checkbox"/> DENIED LOP INSPECTOR AGNA MARIE BAKER. O.K. NOTIFY THIS AGENCY WHEN ALL DESTRUCTION WORK HAS BEEN COMPLETED. Den Yokoyama 11/13/2014 PERMIT ISSUED BY DATE DAN YOKOYAMA (714) 433-6288 PRINT NAME PHONE NUMBER
APPROVAL BY OTHER AGENCIES: JURISDICTION _____ REMARKS _____ PAID		WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.

Appendix C

WELL COMPLETION REPORTS

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page 1 of 1

Owner's Well No. MWV-6

No. **e0237815**

Date Work Began 11/18/2014, Ended 11/18/2014

Local Permit Agency Orange County DHS

Permit No. 14-11-05 Permit Date 11/13/2014

DWR USE ONLY -- DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)

DRILLING METHOD **H.S. AUGER** FLUID _____

DEPTH FROM SURFACE
Ft. to Ft.

DESCRIPTION

Describe material, grain, size, color, etc.

This well was tremmie pressure grouted by use of an Air Knife rig and pump. The well was tremmie filled with bentonite grout to be full then a pressure head was attached and additional grout was pumped in to either reach 25 P.S.I. on the interior or until 40% more grout than casing volume was reached. Appx. 10 gallons of grout were pumped. The well vault was removed and the location was patched to match the existing surroundings.

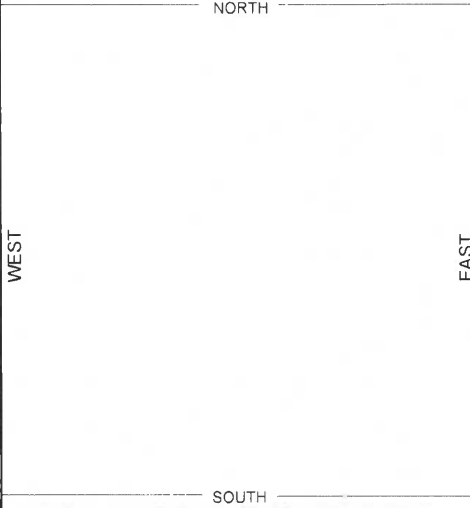
WELL OWNER

Name **Island Hotel**
Mailing Address **690 Newport Center Dr.**
Newport Beach CA **92660**
CITY STATE ZIP

WELL LOCATION

Address **690 Newport Center Dr.**
City **Newport Beach, Ca CA 92660**
County **Orange**
APN Book _____ Page _____ Parcel _____
Township _____ Range _____ Section _____
Latitude _____

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

- NEW WELL
- MODIFICATION/REPAIR
 - Deepen
 - Other (Specify) _____
- DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
- PLANNED USES (✓)**
 - WATER SUPPLY
 - Domestic Public
 - Irrigation Industrial
 - MONITORING
 - TEST WELL
 - CATHODIC PROTECTION
 - HEAT EXCHANGE
 - DIRECT PUSH
 - INJECTION
 - VAPOR EXTRACTION
 - SPARGING
 - REMEDIATION
 - OTHER (SPECIFY) _____

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER **30** (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____
ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____
TEST LENGTH _____ (Hrs) TOTAL DRAWDOWN _____ (Ft.)
May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **40** (Feet)
TOTAL DEPTH OF COMPLETED WELL **40** (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓)				CASING (S)			
		BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 to 24	8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PVC	2	Sch 40	
25 to 40	8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PVC	2	Sch 40	.020

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 40	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other **Site Map**

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **J. & H. Drilling Co., Inc.**
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS **7431 Walnut Ave.** **Buena Park** CA **90620**
CITY STATE ZIP
Signed _____ DATE SIGNED **11/21/14** **740854**
WELL DRILLER AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Owner's Well No. MW-5

No. **e0237814**

Date Work Began 11/18/2014, Ended 11/18/2014

Local Permit Agency Orange County DHS

Permit No. 14-11-05 Permit Date 11/13/2014

DWR USE ONLY --- DO NOT FILL IN									
STATE WELL NO. / STATION NO.									
LATITUDE					LONGITUDE				
APN/TRS/OTHER									

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)
 DRILLING METHOD **H.S. AUGER** FLUID _____

DEPTH FROM SURFACE _____
 Ft. to Ft.

DESCRIPTION

Describe material, grain, size, color, etc.

This well was tremmie pressure grouted by use of an Air Knife rig and pump. The well was tremmie filled with bentonite grout to be full then a pressure head was attached and additional grout was pumped in to either reach 25 P.S.I. on the interior or until 40% more grout than casing volume was reached. Appx. 10 gallons of grout were pumped. The well vault was removed and the location was patched to match the existing surroundings.

Name **Island Hotel**

Mailing Address **690 Newport Center Dr.**

Newport Beach

CA

92660

CITY

STATE

ZIP

WELL LOCATION

Address **690 Newport Center Dr.**

City **Newport Beach, Ca CA 92660**

County **Orange**

APN Book _____

Page _____

Parcel _____

Township _____

Range _____

Section _____

Latitude _____

DEG. MIN. SEC.

DEG. MIN. SEC.

LOCATION SKETCH

NORTH

WEST

EAST

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER **30** (Ft.) BELOW SURFACE

DEPTH OF STATIC

WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **40** (Feet)

TOTAL DEPTH OF COMPLETED WELL **40** (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓)				CASING (S)			
		BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 to 24	8	✓				PVC	2	Sch 40	
25 to 40	8		✓			PVC	2	Sch 40	.020

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL			
	TYPE			
	CE- MENT (✓)	BEN- TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 40				

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other **Site Map**

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **J. & H. Drilling Co., Inc.**

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7431 Walnut Ave.

ADDRESS

Buena Park

CITY

CA

STATE

90620

ZIP

Signed _____

WELL DRILLER/AUTHORIZED REPRESENTATIVE

11/21/14

DATE SIGNED

740854

C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Owner's Well No. MW-4

No. **e0237813**

Date Work Began 11/18/2014, Ended 11/18/2014

Local Permit Agency Orange County DHS

Permit No. 14-11-05 Permit Date 11/13/2014

DWR USE ONLY --- DO NOT FILL IN			
STATE WELL NO / STATION NO			
LATITUDE		LONGITUDE	
APN/TRS/OTHER			

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE (SPECIFY)

Name Island Hotel

Mailing Address 690 Newport Center Dr.
Newport Beach CA 92660

CITY

STATE ZIP

DEPTH FROM SURFACE
Ft. to Ft.

DRILLING METHOD H.S. AUGER FLUID

DESCRIPTION

Describe material, grain, size, color, etc.

This well was tremmie pressure grouted by use of an Air Knife rig and pump. The well was tremmie filled with bentonite grout to be full then a pressure head was attached and additional grout was pumped in to either reach 25 P.S.I. on the interior or until 40% more grout than casing volume was reached. Appx. 10 gallons of grout were pumped. The well vault was removed and the location was patched to match the existing surroundings.

WELL LOCATION

Address 690 Newport Center Dr.
City Newport Beach, Ca CA 92660
County Orange

APN Book Page Parcel

Township Range Section

Latitude

DEG. MIN. SEC.

DEG. MIN. SEC.

LOCATION SKETCH

NORTH

WEST

EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc and attach a map Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

NEW WELL
 MODIFICATION/REPAIR
 Deepen
 Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
 Domestic Public
 Irrigation Industrial

MONITORING
TEST WELL
CATHODIC PROTECTION
HEAT EXCHANGE
DIRECT PUSH
INJECTION
VAPOR EXTRACTION
SPARGING
REMEDICATION
OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 30 (Ft.) BELOW SURFACE

DEPTH OF STATIC

WATER LEVEL (Ft.) & DATE MEASURED

ESTIMATED YIELD * (GPM) & TEST TYPE

TEST LENGTH (Hrs) TOTAL DRAWDOWN (Ft.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING 40 (Feet)

TOTAL DEPTH OF COMPLETED WELL 40 (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓)				CASING (S)			
		BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 to 24	8	✓				PVC	2	Sch 40	
25 to 40	8		✓			PVC	2	Sch 40	.020

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
	CE- MENT (✓)	BEN- TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 40		✓		

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other Site Map

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

NAME J. & H. Drilling Co., Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7431 Walnut Ave.
ADDRESS

Buena Park
CITY

CA 90620
STATE ZIP

Signed [Signature]
WELL DRILLER AUTHORIZED REPRESENTATIVE

11/21/14
DATE SIGNED

740854
C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

Page 1 of 1

Owner's Well No. MW-3

No. **e0237812**

Date Work Began 11/18/2014 Ended 11/18/2014

Local Permit Agency Orange County DHS

Permit No. 14-11-05 Permit Date 11/13/2014

DWR USE ONLY DO NOT FILL IN

STATE WELL NO / STATION NO

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE _____ (SPECIFY)

DRILLING METHOD **H.S. AUGER** FLUID _____

DEPTH FROM SURFACE _____

Ft. to Ft. _____

DESCRIPTION

Describe material, grain, size, color, etc.

This well was tremmie pressure grouted by use of an Air Knife rig and pump. The well was tremmie filled with bentonite grout to be full then a pressure head was attached and additional grout was pumped in to either reach 25 P.S.I. on the interior or until 40% more grout than casing volume was reached. Appx. 10 gallons of grout were pumped. The well vault was removed and the location was patched to match the existing surroundings.

WELL OWNER

Name **Island Hotel**

Mailing Address **690 Newport Center Dr.**

Newport Beach CA **92660**

CITY STATE ZIP

WELL LOCATION

Address **690 Newport Center Dr.**

City **Newport Beach, Ca CA 92660**

County **Orange**

APN Book _____ Page _____ Parcel _____

Township _____ Range _____ Section _____

Latitude _____

DEG MIN SEC DEG MIN SEC

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDICATION

OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER **29** (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **40** (Feet)

TOTAL DEPTH OF COMPLETED WELL **40** (Feet)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
		BLANK	SCREEN	CON-DUCTOR	FILL PIPE				
0 to 24	8	✓				PVC	2	Sch 40	
25 to 40	8	✓				PVC	2	Sch 40	.020

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE			
	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 40				

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other **Site Map**

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

NAME **J. & H. Drilling Co., Inc.**

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS **7431 Walnut Ave** Buena Park CA **90620**

Signed _____ CITY STATE ZIP

WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED **11/21/14** **740854**

C-57 LICENSE NUMBER

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Owner's Well No. MW-1

No. **e0237810**

Date Work Began 11/18/2014, Ended 11/18/2014

Local Permit Agency Orange County DHS

Permit No. 14-11-05 Permit Date 11/13/2014

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO / STATION NO

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) VERTICAL HORIZONTAL ANGLE (SPECIFY)

DRILLING METHOD **H.S. AUGER** FLUID

DEPTH FROM SURFACE

Ft. to Ft.

DESCRIPTION

Describe material, grain, size, color, etc.

This well was tremmie pressure grouted by use of an Air Knife rig and pump. The well was tremmie filled with bentonite grout to be full then a pressure head was attached and additional grout was pumped in to either reach 25 P.S.I. on the interior of until 40% more grout than casing volume was reached. Appx. 10 gallons of grout were pumped. The well vault was removed and the location was patched to match the existing surroundings.

WELL OWNER

Name **Island Hotel**

Mailing Address **690 Newport Center Dr.** CA **92660**

City **Newport Beach** STATE ZIP

WELL LOCATION

Address **690 Newport Center Dr.**

City **Newport Beach, Ca CA 92660**

County **Orange**

APN Book Page Parcel

Township Range Section

Latitude

LOCATION SKETCH

DEG. MIN. SEC. NORTH

WEST EAST SOUTH

ACTIVITY (✓)

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic Public

Irrigation Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc and attach a map Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER **39** (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL (Ft.) & DATE MEASURED

ESTIMATED YIELD * (GPM) & TEST TYPE

TEST LENGTH (Hrs) TOTAL DRAWDOWN (Ft.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **45** (Feet)

TOTAL DEPTH OF COMPLETED WELL **45** (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	TYPE (✓)				CASING (S)			
		BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 to 30	8	✓				PVC	2	Sch 40	
30 to 45	8		✓			PVC	2	Sch 40	.020

DEPTH FROM SURFACE	ANNULAR MATERIAL			
	TYPE			
Ft. to Ft.	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 45				

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other **Site Map**

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

NAME **J. & H. Drilling Co., Inc.**

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7431 Walnut Ave. Buena Park CA **90620**

ADDRESS CITY STATE ZIP

Signed *[Signature]* DATE SIGNED **11/21/14** WELL DRILLER/AUTHORIZED REPRESENTATIVE **740854** C-57 LICENSE NUMBER

June 12, 2013

Ms. Denamarie Baker
Orange County Health Care Agency
Environmental Health
1241 East Dyer Road, Suite 120
Santa Ana, CA 92705-5611

Subject: Revised First Half 2013 Semi-Annual Ground Water Monitoring Report

SITE: The Island Hotel
(Former Four Season Hotel)
690 Newport Center Drive
Newport Beach, CA 92660
OCHCA Case #97UT041

Dear Ms. Baker:

Environmental Management Strategies, Inc., (EMS) has revised the original semi-annual groundwater monitoring report dated March 1, 2013 for the above-referenced site to comply with OCHCA requests. Revisions are as follows:

1. PCE concentration for well MW-5 in Table 2 has been corrected from 0.53 ug/L to 0.63 ug/L.

This report and associated EDD/EDF data have been up-loaded into the Geotracker database. As requested in your January 17, 2013 letter, groundwater monitoring will continue at this site according the existing schedule during the SWRCB Resolution No. 2012-0016 low-threat closure review period.

If you have any questions or comments, please contact the undersigned (949) 679-9500, or by e-mail at mmarello@est-inc.com.

Sincerely,

Environmental Management Strategies, Inc.



Michael Mareello, PG, CHG
Senior Hydrogeologist/Project Manager

**FIRST HALF 2013 SEMI-ANNUAL GROUNDWATER MONITORING
THE ISLAND HOTEL
(FORMERLY THE FOUR SEASONS HOTEL)
690 NEWPORT CENTER DRIVE
NEWPORT BEACH, CALIFORNIA
(OCHCA Case #97UT41)**

Prepared for:

**THE ISLAND HOTEL
Attn: Mr. Jeffrey Stroth
690 Newport Center Drive
Newport Beach, California 92660**

Prepared by:

**ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
16510 Aston Street
Irvine, California 92606
Telephone: (949) 679-9500
Fax: (949) 679-9500**

Project No. EST2526

March 1, 2013 (Revised June 12, 2013)

LIMITATIONS AND WARRANTIES

Environmental Management Strategies, Inc., (EMS) prepared this report for the exclusive use of **The Island Hotel** and assigned interested parties only. This report has been prepared in accordance with generally accepted environmental assessment practices. No other warranty, expressed or implied, is made.

The information provided in this report is based on measurements performed in specific areas during a specific limited period of time. In the event that any changes occur in waste management practices, site conditions, or uses of the property, the conclusions and recommendations contained in this report should be reviewed and modified or verified in writing by EMS.

No investigation is thorough enough to absolutely exclude the presence of hazardous material at a site. Therefore, if none are identified as part of a limited investigation, such a conclusion should not be construed as a guaranteed absence of such materials, but merely the results of an investigation. EMS, despite the use of reasonable care and a commitment to professional excellence, may not identify the presence of hazardous materials and hazardous compound concentrations in soil, soil gas, or groundwater. EMS assumes no responsibility for conditions not investigated or for conditions not generally recognized as environmentally unacceptable, at the time of the investigation.



Michael Mareello, PG, CHG, REA
Project Manager/Senior Hydrogeologist

March 1, 2013

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3.0 REMEDIAL ACTION SUMMARY	2
4.0 INVESTIGATION DERIVED WASTE.....	2
5.0 GROUNDWATER MONITORING RESULTS	3
6.0 GROUNDWATER MONITORING SCHEDULE.....	4

TABLES

Table 1: Summary of Groundwater Elevation Data

Table 2: Summary of Laboratory Analytical Data for Groundwater

FIGURES

Figure 1: Site Location Map

Figure 2: Estimated Groundwater Elevation Contours

Figure 3: Concentrations of TPH-D and Fuel Oxygenates Detected in Groundwater

Figure 4: Estimated TPH-D Groundwater Isoconcentration Lines

Figure 5: Estimated MTBE Groundwater Isoconcentration Lines

APPENDICES

Appendix A: OCHCA Correspondence

Appendix B: Summary of Historical Analytical Data for Groundwater

Appendix C: Monitoring Well Purge Parameters

Appendix D: Laboratory Analytical Report for Groundwater

Appendix E: Summary of Floating Product Recovery Volumes and Monitoring

Appendix F: Groundwater Elevation Hydrographs

1.0 INTRODUCTION

Environmental Management Strategies, Inc., (EMS) has prepared this report on behalf of The Island Hotel for submittal to the Orange County Health Care Agency (OCHCA) Local Oversight Program (LOP) and the Santa Ana Regional Water Quality Control Board (SARWQCB). This report summarizes the first-half 2013 semi-annual groundwater monitoring event performed at The Island Hotel (the Site) located at 690 Newport Center Drive in Newport Beach, California (**Figure 1**). Environmental corrective action is being performed at this site under the direction of the OCHCA LOP in response to a past pipeline leak and release of emergency generator diesel fuel associated with a 1,000-gallon underground storage tank (UST). The leaking pipeline was replaced during 1997. Active groundwater remediation (monthly groundwater vacuum extraction) was completed during July 2012.

This Site is currently being considered by the OCHCA for low-threat closure based on the State Water Resources Control (SWRCB) Resolution No. 2012-0016 (Resolution). In accordance with the Resolution, the OCHCA will be reviewing the site for closure within 365 days from the Resolution effective date of August 17, 2012. The OCHCA requires that groundwater sampling events be continued according to the existing schedule during this period (**Appendix A**).

2.0 GROUNDWATER MONITORING PROCEDURES

A total of six groundwater monitoring wells were installed by others at this Site (MW-1 through MW-6). The approximate locations of the six groundwater monitoring wells are shown on **Figure 2**.

The following scope of work was performed by EMS for the first-half 2013 semi-annual groundwater monitoring event.

- Collection of groundwater depth measurements from the six groundwater monitoring wells at the Site on February 14, 2013 (**Table 1**). Checking monitoring well for floating diesel product and measurement of product thickness.
- Purging a minimum of three well-casings volumes of groundwater from each of six wells sampled.
- Monitoring of pH, temperature and conductivity for each well during purging. Well purge parameter measurements are provided in **Appendix C**.
- Collection of groundwater samples from each well on February 14, 2013 using new disposable bailers. The groundwater samples were placed in one liter glass bottles and 40 ml. VOA vials containing HCl as a preservative. The containers were labeled, logged on a chain-of-custody form and placed in an ice chest for temporary storage.

- Chemical analysis of the groundwater samples for extractable fuel hydrocarbons with quantification of diesel-range organics (C13 to C23) and oil-range organics (C24 to C44) by EPA Method 3510C/8015B, and for volatile organic compounds (VOCs) by EPA method 8260B (**Table 2** and **Appendix D**).

3.0 REMEDIAL ACTION SUMMARY

Prior to July 2008, an estimated total of approximately 31.77 gallons of floating diesel product had been recovered at this Site by a single vacuum extraction event on June 6, 2007, and a combination of monthly hand bailing and a mechanical product skimming from July 1998 to April 2008. During July 2008, a more aggressive floating product recover program was initiated at the Site at the request of the OCHCA which consisted of monthly DPE from well MW-1. This program was performed for three monthly vacuum extraction events during July, August and October 2008. A historical summary of floating product recovery volumes for the Site is provided in **Appendix E**.

Semi-annual groundwater monitoring was performed at the Site from July 2008 to February 2012. Monthly groundwater vacuum extraction was reinitiated at this Site in response to the appearance of small amounts of highly weathered floating diesel product discovered during February 2012 in monitoring well MW-4. Monthly vacuum extraction for recovery of floating diesel product was performed in wells MW-1, MW-4 and MW-5 for a four (4) month period (April, May, June and July 2012). EMS estimates that approximately 935 gallons of groundwater containing approximately 0.31 gallons of diesel fuel were recovered during the this project. The completed product recovery project was followed by monthly floating product monitoring for an additional four month period (August through November 2012). Measurable amounts of floating diesel product (greater than 0.05-inches) did not reappear in any of the wells at the Site during the four month monitoring period. A summary of the 2012 floating product recovery and monitoring data for the Site is provided in **Appendix E**.

4.0 INVESTIGATION DERIVED WASTE

Investigation derived waste (IDW) generated during groundwater monitoring events consists of equipment decontamination water and well purge water. Equipment decontamination water and well purge water generated during each monitoring event is contained in a steel 55-gallon drum. The drum is labeled and stored at a secure location on-site. Drums containing IDW are transported as non-hazardous liquid waste by Belshire Environmental Services for recycling at Demmeno-Kerdoon, Inc. IDW transportation manifest are submitted to the OCHCA LOP upon availability.

5.0 GROUNDWATER MONITORING RESULTS

Provided below is a summary of the results for the February 2013 semi-annual groundwater monitoring event performed by EMS at The Island Hotel site:

- The depth to groundwater in wells MW-1 through MW-6 on February 14, 2013 ranged from 30.54 to 35.32 feet below the top of casing elevation. The groundwater surface elevations in the wells MW-1, MW-2, MW-3, MW-5 and MW-6 decreased by an average of 1.33 feet since the previous monitoring event. The groundwater surface elevation in well MW-4 increased by 1.32 feet since the previous monitoring event. A summary of groundwater elevation data is provided in **Table 1**. Groundwater elevation hydrographs for each monitoring well are provided in **Appendix F**.
- The apparent groundwater flow direction based on February 14, 2014 groundwater depth measurements was west-northwest at an average gradient of 0.012 ft/ft (**Figure 2**). The average direction of groundwater flow has remained generally consistent (west-northwest). However, groundwater elevation contour patterns appear to have significant seasonally variability.
- Measurable amounts of floating petroleum product or visible product sheens were not present on groundwater in any of the wells at the Site on February 14, 2013.
- Diesel range organics (C13 to C23) were detected in the groundwater samples collected from wells MW-1, MW-3, MW-4 and MW-5-at concentration of 340 milligrams per liter (mg/L), 4.8 mg/L, 5.1 mg/L and 100 mg/L (**Figure 3** and **Table 2**). Oil-range organics (C23 to C44) were detected in the samples from wells MW-1, MW-3, MW-4, MW-5 and MW-6 at concentrations of 14 mg/L, 0.59 mg/L, 0.46 mg/L, 4.9 mg/L and 0.36 mg/L, respectively. Estimated diesel-range organics isoconcentration lines for groundwater are provided in **Figure 4**.
- MTBE and TAME were detected in the groundwater sample from well MW-1 at concentrations of 12 micrograms per liter ($\mu\text{g/L}$), and 1.0 $\mu\text{g/L}$, respectively (**Figure 3** and **Table 2**). MTBE was also detected in the groundwater samples from wells MW-4 and MW-5 at 2.8 $\mu\text{g/L}$ and 0.93 $\mu\text{g/L}$, respectively. Estimated MTBE isoconcentration lines for groundwater are provided in **Figure 5**. No other fuel-related VOC were detected in the February 14, 2013 groundwater samples.
- The concentrations of VOCs detected in the February 14, 2013 groundwater samples by EPA Method 8260B at this site do not exceed California Maximum Contaminant Levels (MCLs) for Drinking Water.

6.0 GROUNDWATER MONITORING SCHEDULE

The following groundwater monitoring schedule is currently proposed for the Island Hotel site. The semi-annual monitoring schedule may not be performed if low-threat site closure is attained for this site on or before August 17, 2013 Resolution No. 2012-0016 review deadline date.

Event

Proposed Date

Semi-Annual Groundwater Monitoring/Sampling

August 2013

TABLES

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
THE ISLAND HOTEL
690 NEWPORT CENTER DRIVE, NEWPORT BEACH, CALIFORNIA

02/20/12

EST2526

Well Gauging Date	Monitoring Well	Total Well Depth (feet BTOC)	Casing Diameter (inches)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)	Elevation Change (feet)	Floating Product (feet)	Notes
06/06/07	MW-1	45.5	2	30.5-45.5	199.55	33.32	166.23	-1.41	0.00	
10/04/07					199.55	32.12	167.43	1.20	0.00	
01/21/08					199.55	32.57	166.98	-0.45	0.00	
04/01/08					199.55	31.68	167.87	0.89	0.00	
07/23/08					199.55	32.24	167.31	-0.56	0.00	
02/27/09					199.55	31.14	168.41	1.10	0.00	Sheen
08/20/09					199.55	31.10	168.45	0.04	0.00	Sheen
02/24/10					199.55	32.42	167.13	-1.32	0.00	Heavy Sheen
08/18/10					199.55	33.48	166.10	-1.03	0.042	GW elevation corrected for floating product thickness
02/01/11					199.55	31.50	168.07	1.96	0.021	GW elevation corrected for floating product thickness
08/03/11					199.55	33.78	165.84	-2.23	0.083	GW elevation corrected for floating product thickness
02/20/12					199.55	32.12	167.43	1.59	0.00	Sheen
02/14/13					199.55	35.32	164.23	-3.20	0.00	No Sheen
06/06/07	MW-2	41.5	2	26.5-41.5	197.11	29.70	167.41	-0.79	0.00	
10/04/07					197.11	29.12	167.99	0.58	0.00	
01/21/08					197.11	29.52	167.59	-0.40	0.00	
04/01/08					197.11	28.55	168.56	0.97	0.00	
07/23/08					197.11	28.08	169.03	0.47	0.00	
02/27/09					197.11	28.08	169.03	0.00	0.00	
08/20/09					197.11	27.92	169.19	0.16	0.00	
02/24/10					197.11	29.16	167.95	-1.24	0.00	
08/18/10					197.11	30.42	166.69	-1.26	0.00	
02/01/11					197.11	28.34	168.77	2.08	0.00	
08/03/11					197.11	29.82	167.29	-1.48	0.00	
02/20/12					197.11	31.24	165.87	-1.42	0.00	Plant roots in well
02/14/13					197.11	32.56	164.55	-1.32	0.00	No Sheen

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
THE ISLAND HOTEL
690 NEWPORT CENTER DRIVE, NEWPORT BEACH, CALIFORNIA

02/20/12

EST2526

Well Gauging Date	Monitoring Well	Total Well Depth (feet BTOC)	Casing Diameter (inches)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)	Elevation Change (feet)	Floating Product (feet)	Notes
06/06/07	MW-3	40.0	2	25.0-40.0	194.99	NM		NM	0.00	Well covered by dumpster
10/04/07					194.99	27.26	167.73	-0.13	0.00	
01/21/08					194.99	27.72	167.27	-0.46	0.00	
04/01/08					194.99	NM		NM	0.00	Well covered by dumpster
07/23/08					194.99	27.54	167.45	0.18	0.00	
02/27/09					194.99	NM		NM	0.00	Well covered by dumpster
08/20/09					194.99	26.18	168.81	1.36	0.00	
02/24/10					194.99	27.28	167.71	-1.10	0.00	
08/18/10					194.99	28.58	166.41	-1.30	0.00	
02/01/11					194.99	26.44	168.55	2.14	0.00	
08/03/11					194.99	28.24	166.75	-1.80	0.00	
02/20/12					194.99	29.88	165.11	-1.64	0.00	
02/14/13					194.99	30.54	164.45	-0.66	0.00	No Sheen
06/06/07	MW-4	40.3	2	25.3-40.3	196.86	31.72	165.14	-2.31	0.00	
10/04/07					196.86	29.60	167.26	2.12	0.00	
01/21/08					196.86	30.03	166.83	-0.43	0.00	
04/01/08					196.86	29.19	167.67	0.84	0.00	
07/23/08					196.86	30.31	166.55	-1.12	0.00	
02/27/09					196.86	28.64	168.22	1.67	0.00	
08/20/09					196.86	28.55	168.31	0.09	0.00	
02/24/10					196.86	29.66	167.20	-1.11	0.00	
08/18/10					196.86	30.78	166.08	-1.12	0.00	
02/01/11					196.86	28.88	167.98	1.90	0.00	
08/03/11					196.86	30.30	166.56	-1.42	0.00	
02/20/12					196.86	34.32	162.68	-3.88	0.17	GW elevation corrected for floating product thickness
02/14/13					196.86	32.86	164.00	1.32	0.00	No Sheen

**TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATION DATA
THE ISLAND HOTEL
690 NEWPORT CENTER DRIVE, NEWPORT BEACH, CALIFORNIA**

02/20/12

EST2526

Well Gauging Date	Monitoring Well	Total Well Depth (feet BTOC)	Casing Diameter (inches)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)	Elevation Change (feet)	Floating Product (feet)	Notes
06/06/07	MW-5	40.5	2	25.5-40.5	194.92	29.02	165.90	-1.47	0.00	
10/04/07					194.92	27.78	167.14	1.24	0.00	
01/21/08					194.92	28.19	166.73	-0.41	0.00	
04/01/08					194.92	27.35	167.57	0.84	0.00	
07/23/08					194.92	28.21	166.71	-0.86	0.00	
02/27/09					194.92	26.86	168.06	1.35	0.00	
08/20/09					194.92	26.78	168.14	0.08	0.00	
02/24/10					194.92	27.76	167.16	-0.98	0.00	
08/18/10					194.92	28.94	165.98	-1.18	0.00	
02/01/11					194.92	27.04	167.88	1.90	0.00	
08/03/11					194.92	28.42	166.5	-1.38	0.00	
02/20/12					194.92	30.28	164.64	-1.86	0.00	Heavy Sheen
02/14/13					194.92	30.88	164.04	-0.60	0.00	No Sheen
06/06/07	MW-6	41.0	2	26.0-41.0	194.09	29.18	164.91	-0.67	0.00	
10/04/07					194.09	28.7	165.39	0.48	0.00	
01/21/08					194.09	29.12	164.97	-0.42	0.00	
04/01/08					194.09	28.49	165.60	0.63	0.00	
07/23/08					194.09	28.07	166.02	0.42	0.00	
02/27/09					194.09	27.98	166.11	0.09	0.00	
08/20/09					194.09	27.85	166.24	0.13	0.00	
02/24/10					194.09	28.74	165.35	-0.89	0.00	
08/18/10					194.09	29.72	164.37	-0.98	0.00	
02/01/11					194.09	28.22	165.87	1.50	0.00	
08/03/11					194.09	29.14	164.95	-0.92	0.00	
02/20/12					194.09	30.72	163.37	-1.58	0.00	
02/14/13					194.09	31.60	162.49	-0.88	0.00	No Sheen

AMSL = above mean sea level
 TOC = top of well casing
 feet BTOC = feet below top of well casing
 NM = not measured (large dumpster positioned over well).

TABLE 2
Summary of Groundwater Analytical Data
The Island Hotel (Former Four Seasons Hotel)
690 Newport Center Drive
Newport Beach, California

Monitoring Well	Date Sampled	DRO (mg/L)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	E.Benzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	s-BB (µg/L)	n-BB (µg/L)	IPB (µg/L)	p-IPT (µg/L)	Naphthalene (µg/L)	n-PB (µg/L)	Chloroform (µg/L)	Styrene (µg/L)	PCE (µg/L)	
MW-1	07/23/08	58	6.2	ND<1	ND<1	3.5	ND<1	180	NA	NA	NA	NA	3.9	ND<1	3.0	1.1	7.7	5.1	1.3	ND<1	ND<1	
	02/27/09	470	NA	ND<5	ND<5	7.9	ND<5	210	ND<100	ND<5	ND<5	ND<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/20/09	230	NA	ND<5	ND<5	ND<5	ND<5	250	ND<100	ND<5	ND<5	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/24/10	1,300	NA	ND<5	ND<5	ND<5	ND<5	400	ND<100	ND<5	ND<5	71	35	87	11	ND<5	ND<5	21	ND<5	ND<5	ND<5	
	08/18/10	6,600	NA	ND<5	ND<5	11	ND<5	410	ND<100	ND<5	ND<5	64	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/01/11	3,600	NA	ND<2	ND<2	ND<2	ND<2	32	ND<40	ND<2	ND<2	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/03/11	290	NA	ND<1	ND<1	ND<1	ND<1	55	ND<20	ND<1	ND<1	7.8	5.1	12	1.9	ND<1	ND<1	3.4	1.9	ND<1	ND<1	
	02/20/12	2.5	NA	ND<1	ND<1	ND<1	ND<1	6.1	ND<20	ND<1	ND<1	1.2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
	02/14/13	340	NA	ND<2	ND<2	ND<2	ND<2	12	ND<10	ND<5	ND<5	1 J	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	2.2	ND<2	ND<2	
MW-2	07/23/08	0.15	ND<0.05	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	NA	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	2.3	ND<1	5.3	
	02/27/09	0.21	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/20/09	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/24/10	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	4.0	ND<1	7.8	
	08/18/10	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/01/11	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/03/11	ND<0.48	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	3.3	ND<1	4.0	
	02/20/12	ND<0.47	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	4.1	ND<1	4.3	
	02/14/13	ND<0.49	NA	ND<2	ND<2	ND<2	ND<2	ND<1	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	3.6	ND<2	2.8	
MW-3	07/23/08	0.88	ND<0.05	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
Not Sampled - Well Inaccessible			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/20/09	3.4	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/24/10	1.3	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
	08/18/10	0.86	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/01/11	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/03/11	1.3	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
	02/20/12	0.64	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
	02/14/13	4.8	NA	ND<2	ND<2	ND<2	ND<2	ND<1	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	ND<2	ND<2	ND<2	
MW-4	07/23/08	0.85	ND<0.05	ND<1	ND<1	ND<1	ND<1	3.7	NA	NA	NA	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.9	ND<1	ND<1	
	02/27/09	4.2	NA	ND<1	ND<1	ND<1	ND<1	2.0	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/20/09	1.7	NA	ND<1	ND<1	ND<1	ND<1	2.7	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/24/10	0.98	NA	ND<1	ND<1	ND<1	ND<1	2.1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.2	ND<1	
	08/18/10	1.5	NA	ND<1	ND<1	ND<1	ND<1	2.9	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/01/11	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	1.9	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/03/11	2.0	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.7	ND<1	ND<1	
	2/20/2012 ¹	29,000	NA	ND<200	ND<200	ND<200	ND<200	600	ND<4,000	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	
	02/14/13	5.1	NA	ND<2	ND<2	ND<2	ND<2	2.8	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	1.6 J	ND<2	0.55 J	
MW-5	07/23/08	6.7	0.097	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	NA	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	
	02/27/09	10	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/20/09	8.6	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/24/10	1.5	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	1.1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	2.4	
	08/18/10	4.9	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/01/11	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	08/03/11	74	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.0	
	02/20/12	75	NA	ND<2	ND<2	ND<2	ND<2	ND<2	ND<40	ND<2	ND<2	ND<2	9.1	ND<2	ND<2	ND<2	ND<2	ND<2	ND<2	ND<2	ND<2	
	02/14/13	100	NA	ND<2	ND<2	ND<2	ND<2	0.67 J	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	0.5 J	ND<2	0.63 J	

Monitoring Well	Date Sampled	DRO (mg/L)	GRO (mg/L)	Benzene (µg/L)	Toluene (µg/L)	E.Benzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	s-BB (µg/L)	n-BB (µg/L)	IPB (µg/L)	p-IPT (µg/L)	Naphthalene (µg/L)	n-PB (µg/L)	Chloroform (µg/L)	Styrene (µg/L)	PCE (µg/L)	
MW-6	07/23/08	ND<0.05	ND<0.05	ND<1	ND<1	ND<1	ND<1	2.5	NA	NA	NA	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
	02/27/09	0.29	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/20/09	0.071	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/24/10	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
	08/18/10	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/01/11	ND<0.05	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/03/11	ND<0.5	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
	02/20/12	ND<0.47	NA	ND<1	ND<1	ND<1	ND<1	ND<1	ND<20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
	02/14/13	ND<0.48	NA	ND<2	ND<2	ND<2	ND<2	0.93 J	ND<10	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	ND<5	ND<2	ND<2	ND<2	ND<2	ND<2
MCL		NA	NA	1	150	300	1,750	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5

Explanation
DRO = diesel-range organics (C13-C22) TBA = tert-butyl alcohol IBP = isopropylbenzene µg/L = micrograms per liter
GRO = gasoline-range organics (C4-C12) ETBE = ethyl tert-butyl ether p-IPT = p-Isopropyltoluene mg/L = milligrams per liter
MTBE = methyl tert-butyl ether TAME = tert-amyl methyl ether n-PB = n-Propylbenzene ND = not detected at specified reporting limit
E. Benzene = ethylbenzene s-BB = sec-butylbenzene PCE = tetrachloroethene NA = not analyzed or not available
DIPE = diisopropyl ether n-BB = n-butylbenzene MCL = California maximum contaminant level for drinking water (CCR Title 22)

Notes:
¹ = high dilution factor for VOCs in 2-20-12 sample from MW-4 due to interference by petroleum hydrocarbons in sample.
J = Result is less the RL but greater or equal to the MDL and the concentration is an approximate value (J Flag).

FIGURES

\\Estserver\projects\EST2500 To EST2599\EST2526\FIGURES\GW Monitoring\Pop\Fig 1. SITE LOCATION MAP - 08/23/2010

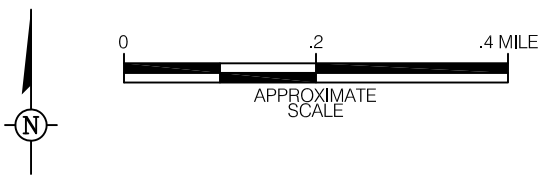
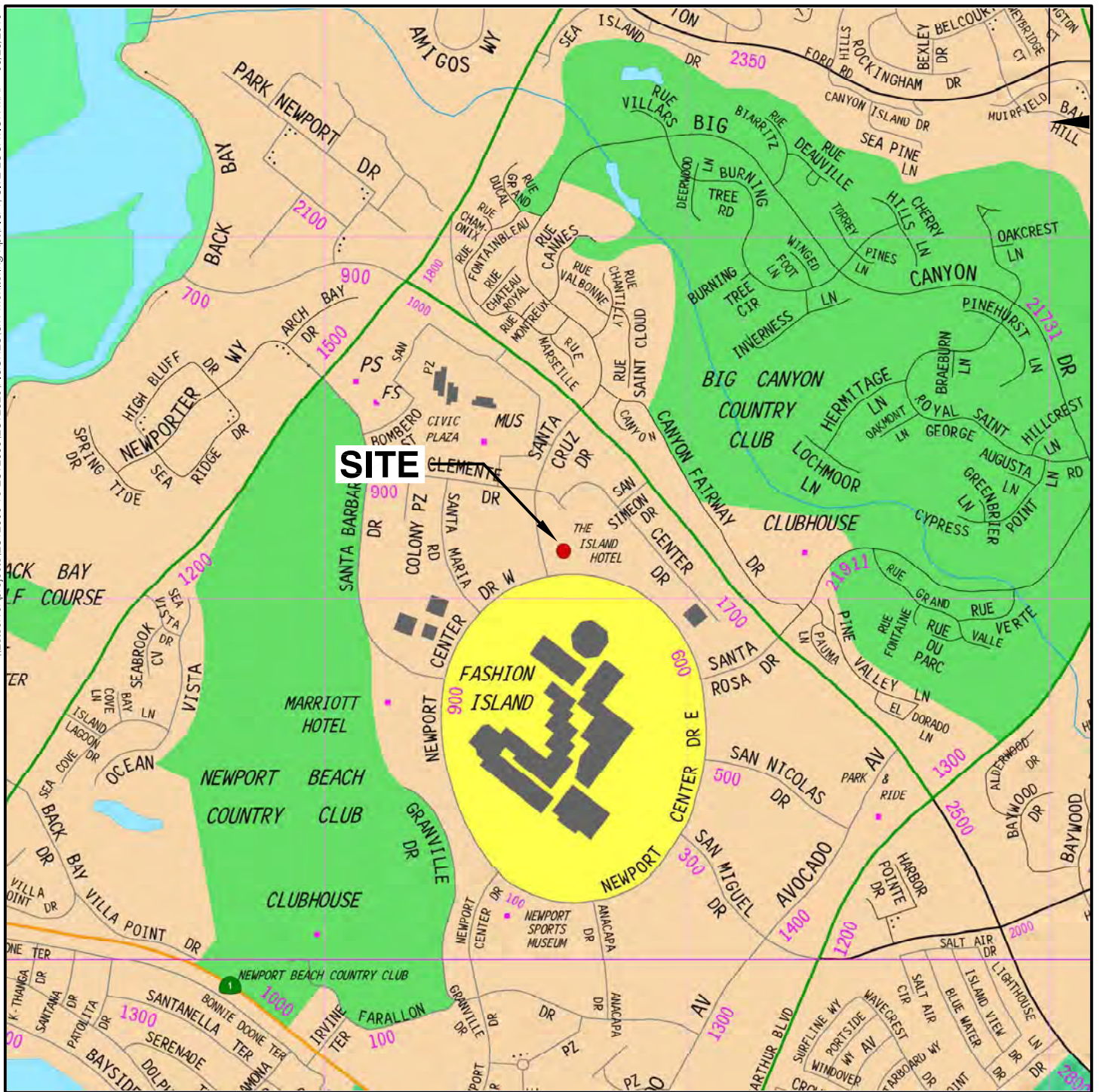


FIGURE 1
SITE LOCATION MAP

THE ISLAND HOTEL
690 NEWPORT CENTER DRIVE
NEWPORT BEACH, CALIFORNIA

EST 2526
GROUNDWATER
MONITORING REPORT

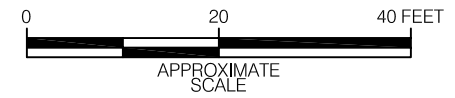
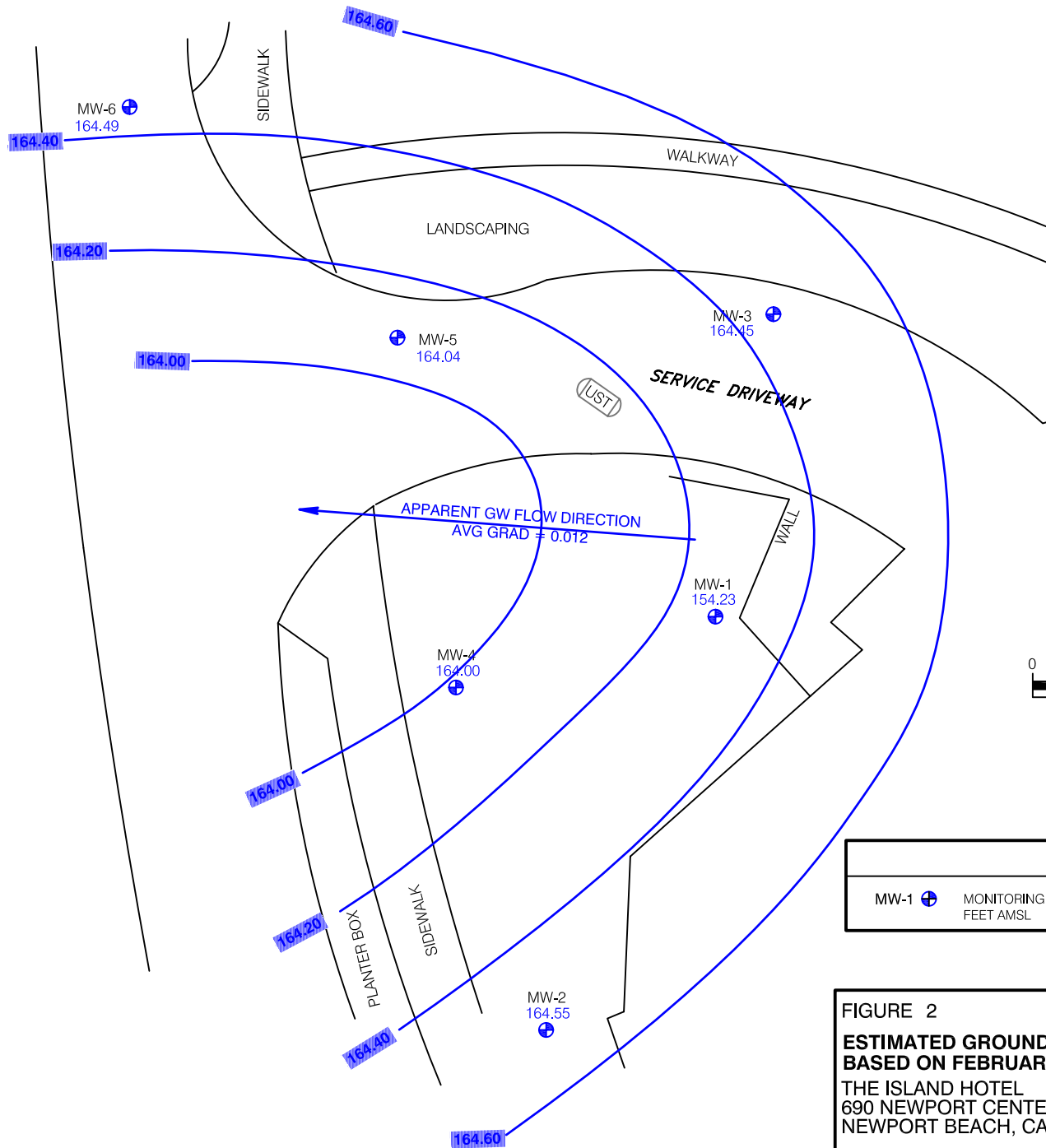
Source: Thomas Bros. Maps, Los Angeles and Orange Counties, 2008

DRAWN BY:CM

SCALE: AS SHOWN

DATE: 10/08/2007

SANTA CRUZ DRIVE



EXPLANATION	
MW-1	MONITORING WELL LOCATION SHOWING GROUNDWATER ELEVATION IN FEET AMSL

FIGURE 2
ESTIMATED GROUNDWATER ELEVATION CONTOURS
BASED ON FEBRUARY 14, 2013 WATER LEVELS
 THE ISLAND HOTEL
 690 NEWPORT CENTER DRIVE
 NEWPORT BEACH, CALIFORNIA
 EST. 2526
 GROUNDWATER
 MONITORING REPORT
 DRAWN BY: MM SCALE: AS SHOWN DATE: 02/14/2013

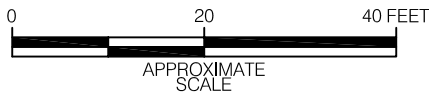
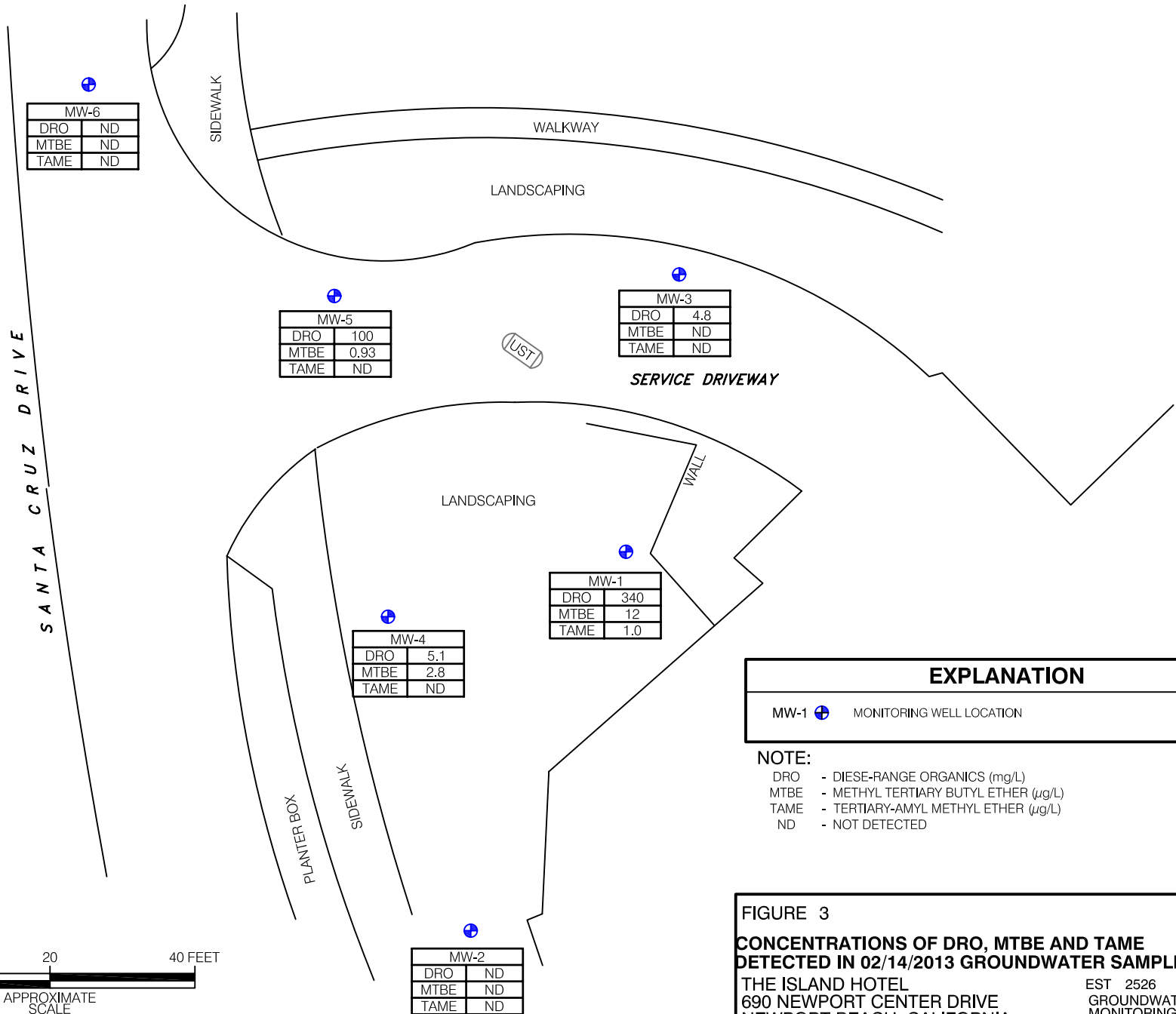
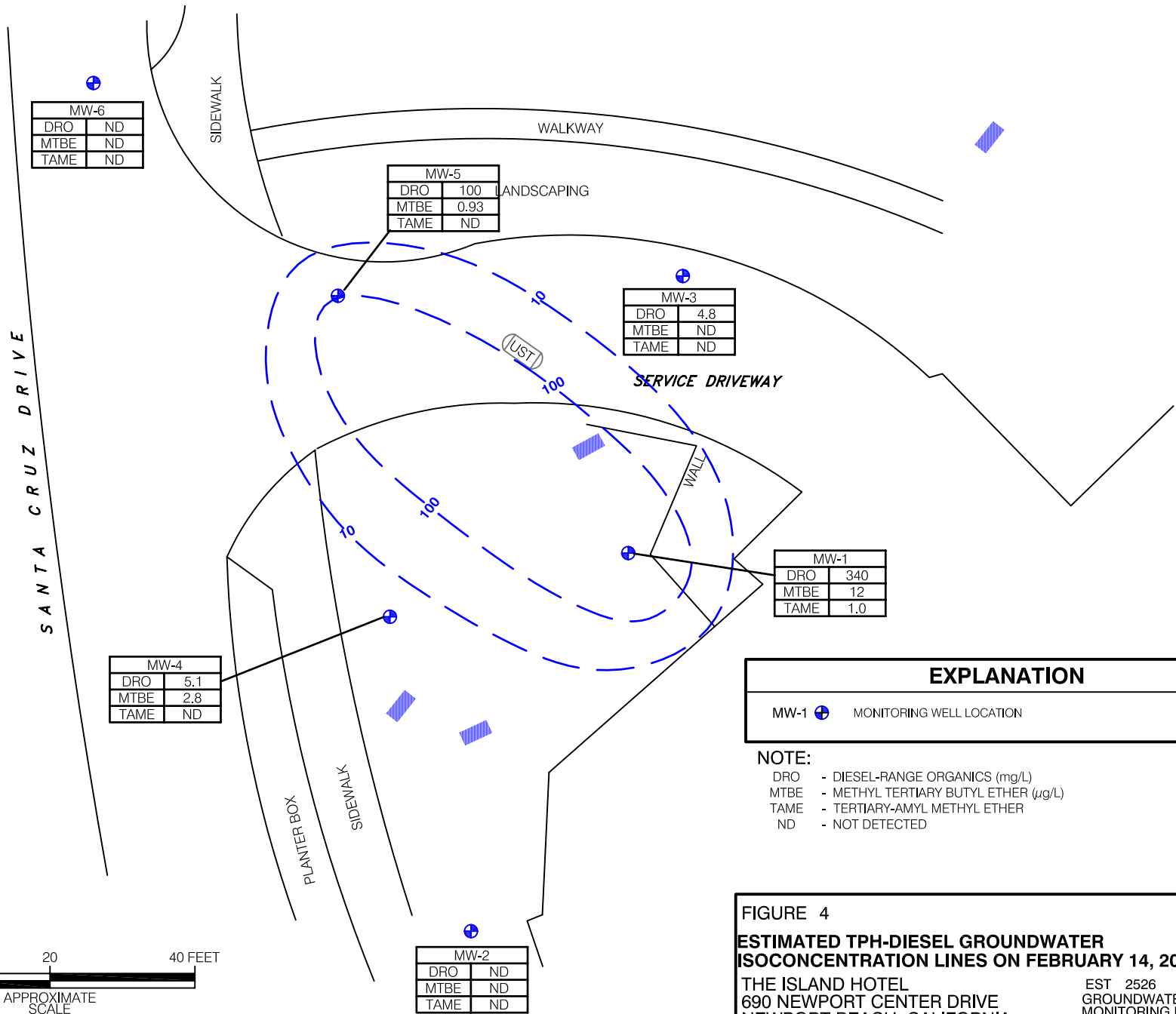


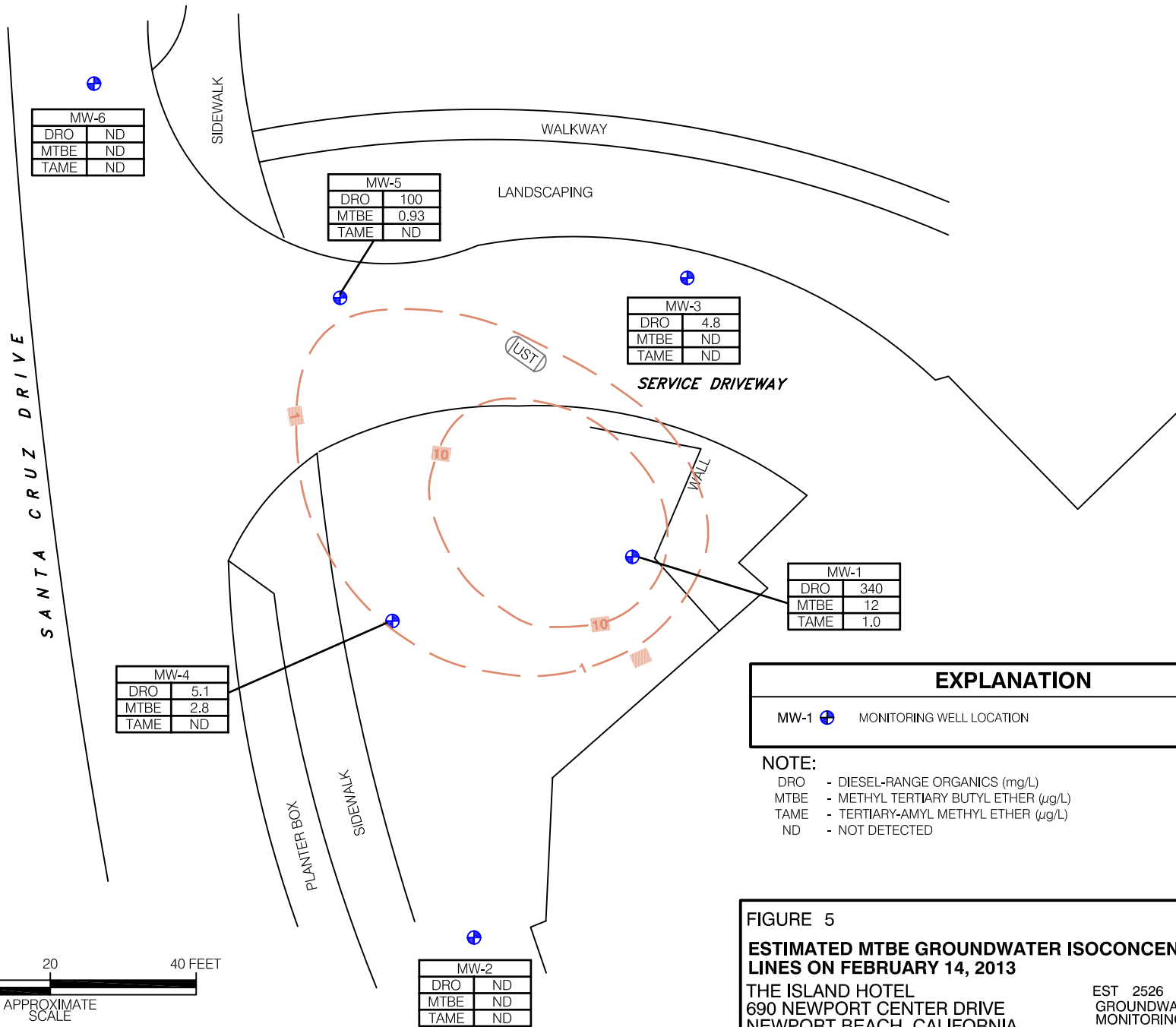
FIGURE 3
CONCENTRATIONS OF DRO, MTBE AND TAME
DETECTED IN 02/14/2013 GROUNDWATER SAMPLES
 THE ISLAND HOTEL
 690 NEWPORT CENTER DRIVE
 NEWPORT BEACH, CALIFORNIA
 EST 2526
 GROUNDWATER
 MONITORING REPORT
 DRAWN BY: MM SCALE: AS SHOWN DATE: 02/28/2013



EXPLANATION	
MW-1	MONITORING WELL LOCATION

NOTE:
 DRO - DIESEL-RANGE ORGANICS (mg/L)
 MTBE - METHYL TERTIARY BUTYL ETHER ($\mu\text{g/L}$)
 TAME - TERTIARY-AMYL METHYL ETHER
 ND - NOT DETECTED

FIGURE 4
ESTIMATED TPH-DIESEL GROUNDWATER
ISOCENTRATION LINES ON FEBRUARY 14, 2013
 THE ISLAND HOTEL
 690 NEWPORT CENTER DRIVE
 NEWPORT BEACH, CALIFORNIA
 EST 2526
 GROUNDWATER
 MONITORING REPORT
 DRAWN BY: MM SCALE: AS SHOWN DATE: 03/01/2013



MW-6	
DRO	ND
MTBE	ND
TAME	ND

MW-5	
DRO	100
MTBE	0.93
TAME	ND

MW-3	
DRO	4.8
MTBE	ND
TAME	ND

MW-1	
DRO	340
MTBE	12
TAME	1.0

MW-4	
DRO	5.1
MTBE	2.8
TAME	ND

MW-2	
DRO	ND
MTBE	ND
TAME	ND

EXPLANATION	
MW-1	MONITORING WELL LOCATION

NOTE:
 DRO - DIESEL-RANGE ORGANICS (mg/L)
 MTBE - METHYL TERTIARY BUTYL ETHER (µg/L)
 TAME - TERTIARY-AMYL METHYL ETHER (µg/L)
 ND - NOT DETECTED

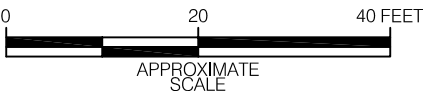


FIGURE 5
ESTIMATED MTBE GROUNDWATER ISOCONCENTRATION LINES ON FEBRUARY 14, 2013
 THE ISLAND HOTEL
 690 NEWPORT CENTER DRIVE
 NEWPORT BEACH, CALIFORNIA
 EST 2526
 GROUNDWATER
 MONITORING REPORT
 DRAWN BY: MM SCALE: AS SHOWN DATE: 03/01/2013

APPENDICES

Appendix A
OCHCA CORRESPONDENCE

January 17, 2013

Jeff Stroth
The Island Hotel
690 Newport Center Drive
Newport Beach, CA 92660

Subject: Remedial Action Closure Report dated November 21, 2012

Re: Former Four Seasons Hotel
690 Newport Center Drive
Newport Beach, CA 92660
OCHCA Case #97UT041

Dear Mr. Stroth:

The Orange County Local Oversight Program (OCLOP) is in receipt of the above referenced document in which you or your consultant requested that the subject site be evaluated for low threat closure under State Water Resources Control Board (SWRCB) Resolution No. 2012-0016 (Resolution). In accordance with the Resolution, the OCLOP will be reviewing this site within 365 days from the Resolution effective date of August 17, 2012. Please note groundwater sampling events must continue per the existing schedule for the site until this office issues a letter authorizing a decreased monitoring schedule or well abandonment.

If you have any questions, please contact me at (714) 433-6255.

Sincerely,

Original signed by

Denamarie Baker
Hazardous Waste Specialist
Hazardous Materials Mitigation Section
Environmental Health

cc: Tom Mbeke-Ekanem, Santa Ana Regional Water Quality Control Board (electronic copy)
Nadine Morris, Newport Beach Fire Department (electronic copy)
Michael Marelllo, Environmental Support Technologies, Inc. (electronic copy)

Appendix B

SUMMARY OF HISTORICAL ANALYTICAL DATA FOR GROUNDWATER

Summary of Historical Groundwater Chemical Analysis Data Collected by Gaston and Associates
The Island Hotel (Former Four Seasons Hotel)
690 Newport Center Drive
Newport Beach, California

Well ID	Well Depth (ft. BGS)	Screen Interval (ft. BGS)	Date	GW Depth (ft. BGS)	Fl. Prod. Thickness (ft.)	TPH-D (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Chloroform (µg/L)	Tetrachloroethene (µg/L)	Acenaphthene (µg/L)	Flourene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
MW-1	45.5	30.5-45.5	4/15/98	NA	0	3.6	77	1.6	ND<0.3	0.56	9.5	NA	NA	0.23	2.9	2.6	0.99	0.023
MW-1			7/20/98	NA	0.1	160	79	13	51	160	570	NA	NA	NA	NA	NA	NA	NA
MW-1			10/20/98	NA	0.12	15	140	14	1.5	8.2	21	NA	NA	8.1	40	26	14	ND<5
MW-1			1/7/99	NA	0.90	340	ND<2500	810	1,100	25,000	40,000	NA	NA	41	310	160	140	20
MW-1			8/12/99	NA	0.55	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			12/23/99	NA	0.29	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			4/4/00	NA	0.15	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			6/26/00	NA	0.05	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			10/17/00	NA	Sheen	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			12/14/00	NA	0.015	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			3/19/01	31.46	Sheen	72,000	29	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-1			9/24/01	31.62	Sheen	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			1/2/02	32.91	Sheen	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			4/19/02	33.71	Sheen	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			9/12/02	32.45	0	5200	49	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-1			12/16/02	32.51	0.04	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			3/31/03	30.91	0	520	660	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-1			6/30/03	31.28	Sheen	11	380	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	2.7	NA	NA
M W-1			9/17/03	31.25	0.025	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			12/11/03	32.10	0.26	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			3/25/04	NA	0.10	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-1			6/30/04	NA	0.24	600	110	ND<0.5	ND<0.5	10	6.3	ND<1	ND<1	NA	NA	130	NA	NA
MW-1			9/10/04	NA	0.004	4800	270	ND<0.5	ND<0.5	17	50.4	ND<1	ND<1	NA	NA	900	NA	NA
MW-1			12/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	41.5	26.5-41.5	8/12/99	27.90	0	ND<1	ND<2	ND<0.3	ND<0.3	ND<0.3	ND<0.6	NA	NA	NA	NA	NA	NA	NA
MW-2			12/23/99	28.98	0	ND<500	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-2			4/4/00	29.59	0	ND<500	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-2			6/26/00	29.04	0	ND<0.5	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	3.9	11	NA	NA	ND<1	NA	NA
MW-2			10/17/00	28.84	0	ND<0.5	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	4.0	14	NA	NA	ND<1	NA	NA
MW-2			12/14/00	29.29	0	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2			3/19/01	28.34	0	ND<1	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-2			9/19/01	28.63	0	ND<1	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-2			1/2/02	29.85	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3	10.1	NA	NA	NA	NA	NA
MW-2			4/19/02	30.74	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3	9.6	NA	NA	NA	NA	NA
MW-2			9/12/02	29.46	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-2			12/16/02	29.41	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-2			3/31/03	27.58	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	5.6	NA	NA	ND<1	NA	NA
MW-2			6/30/03	28.27	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	9.7	NA	NA	ND<1	NA	NA
MW-2			9/17/03	28.06	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA

Well ID	Well Depth (ft. BGS)	Screen Interval (ft. BGS)	Date	GW Depth (ft. BGS)	Fl. Prod. Thickness (ft.)	TPH-D (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Chloroform (µg/L)	Tetrachloroethene (µg/L)	Acenaphthene (µg/L)	Flourene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
MW-2			12/11/03	28.72	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-2			3/25/04	29.89	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-2			6/30/04	30.23	0	ND<1	5.2	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	8.5	NA	NA	ND<1	NA	NA
MW-2			9/10/04	29.35	0	1.2	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	6.1	NA	NA	ND<1	NA	NA
MW-2			12/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	40.0	25.0-40.0	8/12/99	26.20	0	ND<1	ND<2	ND<0.3	ND<0.3	ND<0.3	ND<0.6	NA	NA	NA	NA	NA	NA	NA
MW-3			12/23/99	27.13	0.31	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-3			4/4/00	28.09	0	9334	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-3 Duplicate			4/4/00	NA	0	1582	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-3			6/26/00	27.34	0	55,000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	1.2	ND<1	NA	NA	ND<1	NA	NA
MW-3			10/17/00	27.13	0	41,000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	NA	NA	NA	ND<1	NA	NA
MW-3			12/14/00	27.58	0	42,000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			3/19/01	26.63	0	2100	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-3			9/19/01	26.84	0	200	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-3			1/2/02	28.15	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	NA	NA	NA	NA	NA
MW-3			4/19/02	28.98	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	NA	NA	NA	NA	NA
MW-3			9/12/02	27.72	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			12/16/02	27.08	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			3/31/03	25.63	0	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	FP	FP	ND<1	FP	FP
MW-3			6/30/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3			9/17/03	26.27	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			12/11/03	26.85	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			3/25/04	28.14	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			6/30/04	28.45	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-3			9/10/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3			12/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	40.3	25.3-40.3	8/12/99	28.42	0	ND<1	44	0.8	ND<0.3	ND<0.3	ND<0.6	NA	NA	NA	NA	NA	NA	NA
MW-4			12/23/99	29.41	0	ND<500	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-4			4/4/00	30.02	0	ND<500	ND<10	ND<0.3	ND<0.3	ND<0.3	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-4			6/26/00	29.48	0	ND<0.5	17	ND<0.5	ND<0.5	ND<0.5	ND<0.6	2.6	ND<1	NA	NA	ND<1	NA	NA
MW-4			10/17/00	29.26	0	ND<0.5	8.9	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			12/14/00	29.73	0	ND<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4			3/19/01	28.85	0	23,000	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<1	NA	NA	NA	NA	NA	NA	NA
MW-4			4/4/01	29.10	0	ND<500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4			9/19/01	30.25	0	12	12	ND<1	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-4			1/2/02	31.13	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2	ND<0.5	NA	NA	NA	NA	NA
MW-4			4/19/02	29.91	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	NA	NA	NA	NA	NA
MW-4			9/12/02	29.91	0	ND<1000	23	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			12/16/02	27.91	0	ND<1000	43	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			3/31/03	28.72	0	ND<1000	16	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			6/30/03	28.59	0	ND<1000	7.5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			9/17/03	29.13	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			12/11/03	30.35	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			3/25/04	30.98	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			6/30/04	29.81	0	13	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			9/10/04	28.21	0	31	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-4			12/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Well ID	Well Depth (ft. BGS)	Screen Interval (ft. BGS)	Date	GW Depth (ft. BGS)	Fl. Prod. Thickness (ft.)	TPH-D (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Chloroform (µg/L)	Tetrachloroethene (µg/L)	Acenaphthene (µg/L)	Flourene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
MW-5	40.5	25.5-40.5	9/19/01	27.31	0	ND<500	ND<2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA	NA	NA
MW-5			1/2/02	NA	0.24	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-5			4/19/02	29.37	0.22	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-5			9/12/02	28.11	Sheen	ND<1000	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-5			12/16/02	28.09	0	ND<1000	9	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-5			3/31/03	26.16	0	ND<1000	9	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	6.4	NA	NA	ND<1	NA	NA
MW-5			6/30/03	26.93	Sheen	ND<1000	6.2	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	9.2	NA	NA	ND<1	NA	NA
MW-5			9/17/03	26.81	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-5			12/11/03	27.33	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-5			4/7/04	28.64	0	ND<1	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-5			6/30/04	28.84	0	4.6	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	3.8	NA	NA	ND<1	NA	NA
MW-5			9/10/04	27.98	0	23	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.6	ND<1	3.3	NA	NA	6.7	NA	NA
MW-5			12/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	41.0	36.0-41.0	3/25/04	29.37	0	ND<1	21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-6			6/30/04	29.39	0	ND<1	42	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-6			9/10/04	28.96	0	ND<1	33	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<1	NA	NA	ND<1	NA	NA
MW-6			12/16/04	27.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

NA = Not Analyzed or Not Available

NS = Not Sampled

FP = Not sampled due to the presence of floating product

TPH-D = Total Petroleum Hydrocarbons, as diesel (Modified EPA 8015)

Benzene, Toluene, Ethylbenzene, and Total Xylenes (EPA 8020 and/or 8260)

MTBE = Methyl Tertiary Butyl Ether (EPA 8020 and or 8260)

ND = Not detected at or above method detection limit (see official laboratory reports in Appendix C)

ug/L = micrograms per liter

NOTE: The chemical analysis data in this table was taken from Appendix C of Gaston & Associates, Inc., April 2006 Report for First Quarter Monitoring at the Island Hotel EMS cannot independently verify the accuracy of this data.

Appendix C

MONITORING WELL PURGE PARAMETERS

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel

Address: 690 Newport Center Drive

Date: 2/14/13

EST Project No: EST2526

Well Identification: MW-1

Well Diameter: 2-inches

Well Head Condition: OK

Well Box Condition: OK

Total Depth (Feet): 45.5

Depth-to-Water (Feet): 35.32

Floating Product (Inches): Yes () No (X)

Floating Product Thickness (Inches): — None

1 Casing Volume (Gallons) 1.6

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 4.8

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
10:50	Commence pumping () or bailing () groundwater.					Strong odor.
10:56	1	63.1	6.76	3822	NA	
10:59	3	62.8	6.74	3819	NA	
11:04	5	62.6	6.74	3806	NA	
					NA	
					NA	
11:15 Collect Sample	(2)	1 L Amber				
	(3)	40 ml VOA / HCL				

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel

Address: 690 Newport Center Drive

Date: 2/14/13

EST Project No: EST2526

Well Identification: MW-2

Well Diameter (Inches): 2

Well Head Condition: OK

Well Box Condition: OK

Total Well Depth (Feet): 41.5

Depth-to-Water BTOC (Feet): 32.56

Floating Product: Yes () No

Floating Product Thickness (Inches): _____

1 Casing Volume (Gallons) 1.4

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 4.2

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
8:00	Commence pumping () or bailing () groundwater.					
8:04	1	62.4	6.42	3868	NA	
8:07	3	63.6	6.56	3857	NA	
8:11	5	63.4	6.61	3841	NA	
					NA	
					NA	
8:20		(2) 40ml VOA/HAL(3)			1 L Amber.	Collect Sample

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel

Address: 690 Newport Center Drive

Date: _____

EST Project No: EST2526

Well Identification: ~~MW-6~~ MW-3

Well Diameter (Inches): 2

Well Head Condition: OK

Well Box Condition: OK.

Total Well Depth (Feet): 41

Depth-to-Water BTOC (Feet): 30.54

Floating Product: Yes () No (X)

Floating Product Thickness (Inches): _____

1 Casing Volume (Gallons) 1.7

Minimum Purge (Gallons): 5.1

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
9:05	Commence pumping () or bailing () groundwater.					
9:08	1	61.8	6.54	3896	NA	
9:12	3	62.4	6.52	3844	NA	
9:16	5	62.8	6.52	3827	NA	
					NA	
					NA	
9:25	Collect Sample	(2) 1 L Amber				
		(3) 40 ml VOA's / HCL				

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel

Address: 690 Newport Center Drive

Date: 2/14/13

EST Project No: EST2526

Well Identification: MW-4

Well Diameter (Inches): 2

Well Head Condition: OK

Well Box Condition: OK

Total Well Depth (Feet): 40.3

Depth-to-Water BTOC (Feet): 32.86

Floating Product: Yes () No (X)

Floating Product Thickness (Inches): -

1 Casing Volume (Gallons) 1.2

Minimum Purge (Gallons): 3.6

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
10:15	Commence pumping () or bailing () groundwater.					Slight odor.
10:19	1	61.7	6.36	3752	NA	
10:23	3	62.3	6.32	3712	NA	
10:27	5	62.8	6.30	3707	NA	
					NA	
					NA	
10:35		(2)	1L Amber			
		(3)	40 ml VOA / TCL			

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel

Address: 690 Newport Center Drive

Date: _____

EST Project No: EST2526

Well Identification: MW-5

Well Diameter (Inches): 2

Well Head Condition: OK

Well Box Condition: OK

Total Well Depth (Feet): 40.5

Depth-to-Water BTOC (Feet): 30.88

Floating Product: Yes () No

Floating Product Thickness (Inches): _____

1 Casing Volume (Gallons) 1.5

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 4.5

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
9:45	Commence pumping () or bailing () groundwater.					Slight odor
9:49	1	63.3	6.45	1819	NA	
9:53	3	62.7	6.41	1807	NA	
9:57	5	62.8	6.41	1791	NA	
					NA	
					NA	
10:05	Collect Sample	(2) 1L	Amber			
		(3) 40 ml	WVA / HCL			

PURGED GROUNDWATER FIELD PARAMETERS

Site: The Island Hotel
 Address: 690 Newport Center Drive
 Date: 2/14/13
 EST Project No: EST2526

Well Identification: ~~MW-6~~ MW-6
 Well Diameter (Inches): 2
 Well Head Condition: OK
 Well Box Condition: OK
 Total Well Depth (Feet): 40
 Depth-to-Water BTOC (Feet): 31.60
 Floating Product: Yes () No
 Floating Product Thickness (Inches): -

1 Casing Volume (Gallons) 1.35 Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)
 Minimum Purge (Gallons): 4.05 2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees F)	Water pH	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
8:35	Commence pumping () or bailing () groundwater.					
8:38	1	62.9	6.50	3239	NA	
8:41	3	63.7	6.48	3178	NA	
8:45	5	63.9	6.48	3166	NA	
					NA	
					NA	
8:55	Collect Sample	(2)	14	Amber		
		(3)	40 ml	Vials / HCL		

Appendix D

LABORATORY ANALYTICAL REPORTS FOR GROUNDWATER

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-38281-1

Client Project/Site: Island Hotel


For:

Environmental Management Strategies

360 Goddard

Irvine, California 92618

Attn: Mr. Michael Marelo



Authorized for release by:

2/28/2013 4:05:19 PM

Heather Clark

Project Manager I

heather.clark@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

H-799

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Sample Summary

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-38281-1	MW-1	Water	02/14/13 11:15	02/14/13 13:25
440-38281-2	MW-2	Water	02/14/13 08:20	02/14/13 13:25
440-38281-3	MW-3	Water	02/14/13 09:25	02/14/13 13:25
440-38281-4	MW-4	Water	02/14/13 10:35	02/14/13 13:25
440-38281-5	MW-5	Water	02/14/13 10:05	02/14/13 13:25
440-38281-6	MW-6	Water	02/14/13 08:55	02/14/13 13:25

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Case Narrative

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Job ID: 440-38281-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-38281-1

Comments

No additional comments.

Receipt

The samples were received on 2/14/2013 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 10.5° C and 11.2° C.

GC/MS VOA

Method(s) 8260B: Due to the high concentration of ethylbenzene, the matrix spike / matrix spike duplicate (MS/MSD) for batch 87460 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: MW-1 (440-38281-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: MW-1 (440-38281-1), MW-5 (440-38281-5). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No other analytical or quality issues were noted.

Organic Prep

Method(s) 3510C: The following sample(s) was diluted due to the nature of the sample matrix: MW-1 (440-38281-1), MW-2 (440-38281-2), MW-3 (440-38281-3), MW-4 (440-38281-4), MW-5 (440-38281-5), MW-6 (440-38281-6). Elevated reporting limits (RLs) are provided. batch# 86452 method# 3510C

No other analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: Environmental Management Strategies
 Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-1

Lab Sample ID: 440-38281-1

Date Collected: 02/14/13 11:15

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 18:09	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 18:09	1
1,1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 18:09	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 18:09	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 18:09	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 18:09	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 18:09	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 18:09	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 18:09	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 18:09	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 18:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 18:09	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 18:09	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 18:09	1
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 18:09	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 18:09	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 18:09	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 18:09	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 18:09	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 18:09	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 18:09	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 18:09	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 18:09	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 18:09	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 18:09	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 18:09	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 18:09	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 18:09	1
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 18:09	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 18:09	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 18:09	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 18:09	1
Chloroform	2.2		2.0	0.33	ug/L			02/24/13 18:09	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 18:09	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 18:09	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 18:09	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 18:09	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 18:09	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 18:09	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 18:09	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 18:09	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 18:09	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 18:09	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 18:09	1
Methyl-t-Butyl Ether (MTBE)	12		1.0	0.32	ug/L			02/24/13 18:09	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 18:09	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 18:09	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 18:09	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 18:09	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-1

Lab Sample ID: 440-38281-1

Date Collected: 02/14/13 11:15

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 18:09	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 18:09	1
Tert-amyl-methyl ether (TAME)	1.0	J	5.0	0.33	ug/L			02/24/13 18:09	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 18:09	1
Tetrachloroethene	ND		2.0	0.32	ug/L			02/24/13 18:09	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 18:09	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 18:09	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 18:09	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 18:09	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 18:09	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 18:09	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 18:09	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 18:09	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 18:09	1
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 18:09	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		02/24/13 18:09	1
4-Bromofluorobenzene (Surr)	121	X	80 - 120		02/24/13 18:09	1
Dibromofluoromethane (Surr)	104		80 - 120		02/24/13 18:09	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	340		24	4.7	mg/L		02/20/13 07:04	02/23/13 15:41	50
C23-C40	14	J	24	4.7	mg/L		02/20/13 07:04	02/23/13 15:41	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	10	X	45 - 120	02/20/13 07:04	02/23/13 15:41	50

Client Sample ID: MW-2

Lab Sample ID: 440-38281-2

Date Collected: 02/14/13 08:20

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 18:38	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 18:38	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 18:38	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 18:38	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 18:38	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 18:38	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 18:38	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 18:38	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 18:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 18:38	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 18:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 18:38	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 18:38	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 18:38	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-2

Lab Sample ID: 440-38281-2

Date Collected: 02/14/13 08:20

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 18:38	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 18:38	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 18:38	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 18:38	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 18:38	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 18:38	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 18:38	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 18:38	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 18:38	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 18:38	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 18:38	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 18:38	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 18:38	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 18:38	1
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 18:38	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 18:38	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 18:38	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 18:38	1
Chloroform	3.6		2.0	0.33	ug/L			02/24/13 18:38	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 18:38	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 18:38	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 18:38	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 18:38	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 18:38	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 18:38	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 18:38	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 18:38	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 18:38	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 18:38	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 18:38	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			02/24/13 18:38	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 18:38	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 18:38	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 18:38	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 18:38	1
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 18:38	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 18:38	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 18:38	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 18:38	1
Tetrachloroethene	2.8		2.0	0.32	ug/L			02/24/13 18:38	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 18:38	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 18:38	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 18:38	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 18:38	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 18:38	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 18:38	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 18:38	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 18:38	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 18:38	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-2

Lab Sample ID: 440-38281-2

Date Collected: 02/14/13 08:20

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 18:38	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		80 - 120					02/24/13 18:38	1
4-Bromofluorobenzene (Surr)	101		80 - 120					02/24/13 18:38	1
Dibromofluoromethane (Surr)	100		80 - 120					02/24/13 18:38	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.49	0.097	mg/L		02/20/13 07:04	02/20/13 20:11	1
C23-C40	ND		0.49	0.097	mg/L		02/20/13 07:04	02/20/13 20:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	89		45 - 120				02/20/13 07:04	02/20/13 20:11	1

Client Sample ID: MW-3

Lab Sample ID: 440-38281-3

Date Collected: 02/14/13 09:25

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 19:07	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 19:07	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 19:07	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 19:07	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 19:07	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 19:07	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 19:07	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 19:07	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 19:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 19:07	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 19:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 19:07	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 19:07	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 19:07	1
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 19:07	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 19:07	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 19:07	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 19:07	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 19:07	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 19:07	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 19:07	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 19:07	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 19:07	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 19:07	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 19:07	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 19:07	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 19:07	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 19:07	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-3

Lab Sample ID: 440-38281-3

Date Collected: 02/14/13 09:25

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 19:07	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 19:07	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 19:07	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 19:07	1
Chloroform	ND		2.0	0.33	ug/L			02/24/13 19:07	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 19:07	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 19:07	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 19:07	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 19:07	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 19:07	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 19:07	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 19:07	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 19:07	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 19:07	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 19:07	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 19:07	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			02/24/13 19:07	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 19:07	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 19:07	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 19:07	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 19:07	1
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 19:07	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 19:07	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 19:07	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 19:07	1
Tetrachloroethene	ND		2.0	0.32	ug/L			02/24/13 19:07	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 19:07	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 19:07	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 19:07	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 19:07	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 19:07	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 19:07	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 19:07	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 19:07	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 19:07	1
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 19:07	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		80 - 120		02/24/13 19:07	1
4-Bromofluorobenzene (Surr)	101		80 - 120		02/24/13 19:07	1
Dibromofluoromethane (Surr)	100		80 - 120		02/24/13 19:07	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	4.8		0.48	0.096	mg/L		02/20/13 07:04	02/20/13 20:32	1
C23-C40	0.59		0.48	0.096	mg/L		02/20/13 07:04	02/20/13 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	81		45 - 120	02/20/13 07:04	02/20/13 20:32	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-4

Lab Sample ID: 440-38281-4

Date Collected: 02/14/13 10:35

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 19:36	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 19:36	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 19:36	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 19:36	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 19:36	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 19:36	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 19:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 19:36	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 19:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 19:36	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 19:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 19:36	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 19:36	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 19:36	1
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 19:36	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 19:36	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 19:36	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 19:36	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 19:36	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 19:36	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 19:36	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 19:36	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 19:36	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 19:36	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 19:36	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 19:36	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 19:36	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 19:36	1
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 19:36	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 19:36	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 19:36	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 19:36	1
Chloroform	1.6	J	2.0	0.33	ug/L			02/24/13 19:36	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 19:36	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 19:36	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 19:36	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 19:36	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 19:36	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 19:36	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 19:36	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 19:36	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 19:36	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 19:36	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 19:36	1
Methyl-t-Butyl Ether (MTBE)	2.8		1.0	0.32	ug/L			02/24/13 19:36	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 19:36	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 19:36	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 19:36	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 19:36	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-4

Lab Sample ID: 440-38281-4

Date Collected: 02/14/13 10:35

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 19:36	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 19:36	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 19:36	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 19:36	1
Tetrachloroethene	0.55	J	2.0	0.32	ug/L			02/24/13 19:36	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 19:36	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 19:36	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 19:36	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 19:36	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 19:36	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 19:36	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 19:36	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 19:36	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 19:36	1
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 19:36	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		80 - 120		02/24/13 19:36	1
4-Bromofluorobenzene (Surr)	102		80 - 120		02/24/13 19:36	1
Dibromofluoromethane (Surr)	104		80 - 120		02/24/13 19:36	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	5.1		0.48	0.095	mg/L		02/20/13 07:04	02/20/13 20:52	1
C23-C40	0.46	J	0.48	0.095	mg/L		02/20/13 07:04	02/20/13 20:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	80		45 - 120	02/20/13 07:04	02/20/13 20:52	1

Client Sample ID: MW-5

Lab Sample ID: 440-38281-5

Date Collected: 02/14/13 10:05

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 20:05	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 20:05	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 20:05	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 20:05	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 20:05	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 20:05	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 20:05	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 20:05	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 20:05	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 20:05	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 20:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 20:05	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 20:05	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 20:05	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-5

Lab Sample ID: 440-38281-5

Date Collected: 02/14/13 10:05

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 20:05	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 20:05	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 20:05	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 20:05	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 20:05	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 20:05	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 20:05	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 20:05	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 20:05	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 20:05	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 20:05	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 20:05	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 20:05	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 20:05	1
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 20:05	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 20:05	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 20:05	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 20:05	1
Chloroform	0.50	J	2.0	0.33	ug/L			02/24/13 20:05	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 20:05	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 20:05	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 20:05	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 20:05	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 20:05	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 20:05	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 20:05	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 20:05	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 20:05	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 20:05	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 20:05	1
Methyl-t-Butyl Ether (MTBE)	0.67	J	1.0	0.32	ug/L			02/24/13 20:05	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 20:05	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 20:05	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 20:05	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 20:05	1
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 20:05	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 20:05	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 20:05	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 20:05	1
Tetrachloroethene	0.63	J	2.0	0.32	ug/L			02/24/13 20:05	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 20:05	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 20:05	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 20:05	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 20:05	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 20:05	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 20:05	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 20:05	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 20:05	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 20:05	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-5

Lab Sample ID: 440-38281-5

Date Collected: 02/14/13 10:05

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 20:05	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		80 - 120					02/24/13 20:05	1
4-Bromofluorobenzene (Surr)	115		80 - 120					02/24/13 20:05	1
Dibromofluoromethane (Surr)	100		80 - 120					02/24/13 20:05	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	100		24	4.8	mg/L		02/20/13 07:04	02/23/13 16:04	50
C23-C40	4.9	J	24	4.8	mg/L		02/20/13 07:04	02/23/13 16:04	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	3	X	45 - 120				02/20/13 07:04	02/23/13 16:04	50

Client Sample ID: MW-6

Lab Sample ID: 440-38281-6

Date Collected: 02/14/13 08:55

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 20:35	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 20:35	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 20:35	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 20:35	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 20:35	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 20:35	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 20:35	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 20:35	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 20:35	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 20:35	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 20:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 20:35	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 20:35	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 20:35	1
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 20:35	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 20:35	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 20:35	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 20:35	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 20:35	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 20:35	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 20:35	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 20:35	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 20:35	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 20:35	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 20:35	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 20:35	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 20:35	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 20:35	1

TestAmerica Irvine

Client Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-6

Lab Sample ID: 440-38281-6

Date Collected: 02/14/13 08:55

Matrix: Water

Date Received: 02/14/13 13:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 20:35	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 20:35	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 20:35	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 20:35	1
Chloroform	ND		2.0	0.33	ug/L			02/24/13 20:35	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 20:35	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 20:35	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 20:35	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 20:35	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 20:35	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 20:35	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 20:35	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 20:35	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 20:35	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 20:35	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 20:35	1
Methyl-t-Butyl Ether (MTBE)	0.93	J	1.0	0.32	ug/L			02/24/13 20:35	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 20:35	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 20:35	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 20:35	1
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 20:35	1
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 20:35	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 20:35	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 20:35	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 20:35	1
Tetrachloroethene	ND		2.0	0.32	ug/L			02/24/13 20:35	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 20:35	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 20:35	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 20:35	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 20:35	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 20:35	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 20:35	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 20:35	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 20:35	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 20:35	1
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 20:35	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		80 - 120		02/24/13 20:35	1
4-Bromofluorobenzene (Surr)	104		80 - 120		02/24/13 20:35	1
Dibromofluoromethane (Surr)	98		80 - 120		02/24/13 20:35	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.48	0.096	mg/L		02/20/13 07:04	02/20/13 21:33	1
C23-C40	0.36	J	0.48	0.096	mg/L		02/20/13 07:04	02/20/13 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	60		45 - 120	02/20/13 07:04	02/20/13 21:33	1

TestAmerica Irvine

Lab Chronicle

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-1

Date Collected: 02/14/13 11:15

Date Received: 02/14/13 13:25

Lab Sample ID: 440-38281-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 18:09	JP	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		50			87338	02/23/13 15:41	JR	TAL IRV

Client Sample ID: MW-2

Date Collected: 02/14/13 08:20

Date Received: 02/14/13 13:25

Lab Sample ID: 440-38281-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 18:38	JP	TAL IRV
Total/NA	Prep	3510C			1030 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		1			86526	02/20/13 20:11	NK	TAL IRV

Client Sample ID: MW-3

Date Collected: 02/14/13 09:25

Date Received: 02/14/13 13:25

Lab Sample ID: 440-38281-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 19:07	JP	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		1			86526	02/20/13 20:32	NK	TAL IRV

Client Sample ID: MW-4

Date Collected: 02/14/13 10:35

Date Received: 02/14/13 13:25

Lab Sample ID: 440-38281-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 19:36	JP	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		1			86526	02/20/13 20:52	NK	TAL IRV

Client Sample ID: MW-5

Date Collected: 02/14/13 10:05

Date Received: 02/14/13 13:25

Lab Sample ID: 440-38281-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 20:05	JP	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		50			87338	02/23/13 16:04	JR	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Client Sample ID: MW-6

Lab Sample ID: 440-38281-6

Date Collected: 02/14/13 08:55

Matrix: Water

Date Received: 02/14/13 13:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	87460	02/24/13 20:35	JP	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	86452	02/20/13 07:04	KW	TAL IRV
Total/NA	Analysis	8015B		1			86526	02/20/13 21:33	NK	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-87460/5

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.27	ug/L			02/24/13 12:17	1
1,1,1-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 12:17	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.30	ug/L			02/24/13 12:17	1
1,1,2-Trichloroethane	ND		2.0	0.30	ug/L			02/24/13 12:17	1
1,1-Dichloroethane	ND		2.0	0.40	ug/L			02/24/13 12:17	1
1,1-Dichloroethene	ND		5.0	0.42	ug/L			02/24/13 12:17	1
1,1-Dichloropropene	ND		2.0	0.28	ug/L			02/24/13 12:17	1
1,2,3-Trichlorobenzene	ND		5.0	0.30	ug/L			02/24/13 12:17	1
1,2,3-Trichloropropane	ND		10	0.40	ug/L			02/24/13 12:17	1
1,2,4-Trichlorobenzene	ND		5.0	0.48	ug/L			02/24/13 12:17	1
1,2,4-Trimethylbenzene	ND		2.0	0.23	ug/L			02/24/13 12:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			02/24/13 12:17	1
1,2-Dibromoethane (EDB)	ND		2.0	0.40	ug/L			02/24/13 12:17	1
1,2-Dichlorobenzene	ND		2.0	0.32	ug/L			02/24/13 12:17	1
1,2-Dichloroethane	ND		2.0	0.28	ug/L			02/24/13 12:17	1
1,2-Dichloropropane	ND		2.0	0.35	ug/L			02/24/13 12:17	1
1,3,5-Trimethylbenzene	ND		2.0	0.26	ug/L			02/24/13 12:17	1
1,3-Dichlorobenzene	ND		2.0	0.35	ug/L			02/24/13 12:17	1
1,3-Dichloropropane	ND		2.0	0.32	ug/L			02/24/13 12:17	1
1,4-Dichlorobenzene	ND		2.0	0.37	ug/L			02/24/13 12:17	1
2,2-Dichloropropane	ND		2.0	0.34	ug/L			02/24/13 12:17	1
2-Chlorotoluene	ND		5.0	0.28	ug/L			02/24/13 12:17	1
4-Chlorotoluene	ND		5.0	0.29	ug/L			02/24/13 12:17	1
Benzene	ND		2.0	0.28	ug/L			02/24/13 12:17	1
Bromobenzene	ND		5.0	0.27	ug/L			02/24/13 12:17	1
Bromochloromethane	ND		5.0	0.40	ug/L			02/24/13 12:17	1
Bromodichloromethane	ND		2.0	0.30	ug/L			02/24/13 12:17	1
Bromoform	ND		5.0	0.40	ug/L			02/24/13 12:17	1
Bromomethane	ND		5.0	0.42	ug/L			02/24/13 12:17	1
Carbon tetrachloride	ND		5.0	0.28	ug/L			02/24/13 12:17	1
Chlorobenzene	ND		2.0	0.36	ug/L			02/24/13 12:17	1
Chloroethane	ND		5.0	0.40	ug/L			02/24/13 12:17	1
Chloroform	ND		2.0	0.33	ug/L			02/24/13 12:17	1
Chloromethane	ND		5.0	0.40	ug/L			02/24/13 12:17	1
cis-1,2-Dichloroethene	ND		2.0	0.32	ug/L			02/24/13 12:17	1
cis-1,3-Dichloropropene	ND		2.0	0.22	ug/L			02/24/13 12:17	1
Dibromochloromethane	ND		2.0	0.40	ug/L			02/24/13 12:17	1
Dibromomethane	ND		2.0	0.36	ug/L			02/24/13 12:17	1
Dichlorodifluoromethane	ND		5.0	0.26	ug/L			02/24/13 12:17	1
Ethylbenzene	ND		2.0	0.25	ug/L			02/24/13 12:17	1
Hexachlorobutadiene	ND		5.0	0.38	ug/L			02/24/13 12:17	1
Isopropylbenzene	ND		2.0	0.25	ug/L			02/24/13 12:17	1
m,p-Xylene	ND		2.0	0.60	ug/L			02/24/13 12:17	1
Methylene Chloride	ND		5.0	0.95	ug/L			02/24/13 12:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			02/24/13 12:17	1
Naphthalene	ND		5.0	0.41	ug/L			02/24/13 12:17	1
n-Butylbenzene	ND		5.0	0.37	ug/L			02/24/13 12:17	1
N-Propylbenzene	ND		2.0	0.27	ug/L			02/24/13 12:17	1

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-87460/5

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
o-Xylene	ND		2.0	0.30	ug/L			02/24/13 12:17	1
sec-Butylbenzene	ND		5.0	0.25	ug/L			02/24/13 12:17	1
Styrene	ND		2.0	0.20	ug/L			02/24/13 12:17	1
Tert-amyl-methyl ether (TAME)	ND		5.0	0.33	ug/L			02/24/13 12:17	1
tert-Butylbenzene	ND		5.0	0.22	ug/L			02/24/13 12:17	1
Tetrachloroethene	ND		2.0	0.32	ug/L			02/24/13 12:17	1
Toluene	ND		2.0	0.36	ug/L			02/24/13 12:17	1
trans-1,2-Dichloroethene	ND		2.0	0.30	ug/L			02/24/13 12:17	1
trans-1,3-Dichloropropene	ND		2.0	0.32	ug/L			02/24/13 12:17	1
Trichloroethene	ND		2.0	0.26	ug/L			02/24/13 12:17	1
Trichlorofluoromethane	ND		5.0	0.34	ug/L			02/24/13 12:17	1
Vinyl chloride	ND		5.0	0.40	ug/L			02/24/13 12:17	1
Xylenes, Total	ND		2.0	0.90	ug/L			02/24/13 12:17	1
Isopropyl Ether (DIPE)	ND		5.0	0.25	ug/L			02/24/13 12:17	1
Ethyl-t-butyl ether (ETBE)	ND		5.0	0.28	ug/L			02/24/13 12:17	1
tert-Butyl alcohol (TBA)	ND		10	6.5	ug/L			02/24/13 12:17	1
p-Isopropyltoluene	ND		2.0	0.28	ug/L			02/24/13 12:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	103		80 - 120		02/24/13 12:17	1
4-Bromofluorobenzene (Surr)	99		80 - 120		02/24/13 12:17	1
Dibromofluoromethane (Surr)	106		80 - 120		02/24/13 12:17	1

Lab Sample ID: LCS 440-87460/6

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.3		ug/L		105	65 - 135
1,1,2,2-Tetrachloroethane	25.0	29.2		ug/L		117	55 - 130
1,1,2-Trichloroethane	25.0	26.1		ug/L		104	70 - 125
1,1-Dichloroethane	25.0	24.1		ug/L		97	70 - 125
1,1-Dichloroethene	25.0	25.7		ug/L		103	70 - 125
1,1-Dichloropropene	25.0	20.5		ug/L		82	75 - 130
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	65 - 125
1,2,3-Trichloropropane	25.0	26.0		ug/L		104	60 - 130
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	70 - 135
1,2,4-Trimethylbenzene	25.0	25.5		ug/L		102	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	31.5		ug/L		126	50 - 135
1,2-Dibromoethane (EDB)	25.0	27.9		ug/L		112	75 - 125
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	75 - 120
1,2-Dichloroethane	25.0	25.5		ug/L		102	60 - 140
1,2-Dichloropropane	25.0	22.9		ug/L		92	70 - 125
1,3,5-Trimethylbenzene	25.0	25.1		ug/L		100	75 - 125
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	75 - 120
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	75 - 120

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-87460/6

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	25.0	27.6		ug/L		111	65 - 140
2-Chlorotoluene	25.0	24.4		ug/L		97	70 - 125
4-Chlorotoluene	25.0	24.6		ug/L		99	75 - 125
Benzene	25.0	22.5		ug/L		90	70 - 120
Bromobenzene	25.0	23.8		ug/L		95	75 - 120
Bromochloromethane	25.0	25.6		ug/L		102	70 - 130
Bromodichloromethane	25.0	26.9		ug/L		107	70 - 135
Bromoform	25.0	30.2		ug/L		121	55 - 130
Bromomethane	25.0	26.1		ug/L		104	65 - 140
Carbon tetrachloride	25.0	25.7		ug/L		103	65 - 140
Chlorobenzene	25.0	23.2		ug/L		93	75 - 120
Chloroethane	25.0	26.0		ug/L		104	60 - 140
Chloroform	25.0	25.4		ug/L		102	70 - 130
Chloromethane	25.0	23.4		ug/L		94	50 - 140
cis-1,2-Dichloroethene	25.0	27.0		ug/L		108	70 - 125
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	75 - 125
Dibromochloromethane	25.0	29.3		ug/L		117	70 - 140
Dibromomethane	25.0	25.7		ug/L		103	70 - 125
Dichlorodifluoromethane	25.0	29.3		ug/L		117	35 - 155
Ethylbenzene	25.0	24.0		ug/L		96	75 - 125
Hexachlorobutadiene	25.0	20.3		ug/L		81	65 - 135
Isopropylbenzene	25.0	24.1		ug/L		97	75 - 130
m,p-Xylene	50.0	51.5		ug/L		103	75 - 125
Methylene Chloride	25.0	25.1		ug/L		100	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.1		ug/L		92	60 - 135
Naphthalene	25.0	26.6		ug/L		106	55 - 135
n-Butylbenzene	25.0	24.3		ug/L		97	70 - 130
N-Propylbenzene	25.0	23.1		ug/L		93	75 - 130
o-Xylene	25.0	26.7		ug/L		107	75 - 125
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 125
Styrene	25.0	27.7		ug/L		111	75 - 130
Tert-amyl-methyl ether (TAME)	25.0	19.2		ug/L		77	60 - 135
tert-Butylbenzene	25.0	23.7		ug/L		95	70 - 125
Tetrachloroethene	25.0	23.7		ug/L		95	70 - 125
Toluene	25.0	23.7		ug/L		95	70 - 120
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 125
trans-1,3-Dichloropropene	25.0	29.3		ug/L		117	70 - 125
Trichloroethene	25.0	22.3		ug/L		89	70 - 125
Trichlorofluoromethane	25.0	28.6		ug/L		114	65 - 145
Vinyl chloride	25.0	28.0		ug/L		112	55 - 135
Isopropyl Ether (DIPE)	25.0	26.4		ug/L		106	60 - 135
Ethyl-t-butyl ether (ETBE)	25.0	19.0		ug/L		76	65 - 135
tert-Butyl alcohol (TBA)	125	140		ug/L		112	70 - 135
p-Isopropyltoluene	25.0	24.1		ug/L		96	75 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	111		80 - 120

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-87460/6

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	111		80 - 120

Lab Sample ID: 440-38636-E-4 MS

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1,1,2-Tetrachloroethane	ND		50.0	52.3		ug/L		105	65 - 140
1,1,1-Trichloroethane	ND		50.0	45.1		ug/L		90	65 - 140
1,1,2,2-Tetrachloroethane	ND		50.0	62.1		ug/L		124	55 - 135
1,1,2-Trichloroethane	ND		50.0	55.6		ug/L		111	65 - 130
1,1-Dichloroethane	ND		50.0	46.1		ug/L		92	65 - 130
1,1-Dichloroethene	ND		50.0	46.7		ug/L		93	60 - 130
1,1-Dichloropropene	ND		50.0	41.8		ug/L		84	70 - 135
1,2,3-Trichlorobenzene	ND		50.0	50.2		ug/L		100	60 - 135
1,2,3-Trichloropropane	ND		50.0	54.5		ug/L		109	55 - 135
1,2,4-Trichlorobenzene	ND		50.0	47.3		ug/L		95	65 - 135
1,2,4-Trimethylbenzene	170		50.0	223		ug/L		98	55 - 135
1,2-Dibromo-3-Chloropropane	ND		50.0	68.3		ug/L		137	45 - 145
1,2-Dibromoethane (EDB)	ND		50.0	55.5		ug/L		111	70 - 130
1,2-Dichlorobenzene	ND		50.0	50.6		ug/L		101	75 - 125
1,2-Dichloroethane	2.2	J	50.0	48.9		ug/L		93	60 - 140
1,2-Dichloropropane	ND		50.0	49.6		ug/L		99	65 - 130
1,3,5-Trimethylbenzene	58		50.0	108		ug/L		100	70 - 130
1,3-Dichlorobenzene	ND		50.0	50.0		ug/L		100	75 - 125
1,3-Dichloropropane	ND		50.0	51.9		ug/L		104	65 - 135
1,4-Dichlorobenzene	ND		50.0	49.5		ug/L		99	75 - 125
2,2-Dichloropropane	ND		50.0	50.7		ug/L		101	60 - 145
2-Chlorotoluene	ND		50.0	50.4		ug/L		101	65 - 135
4-Chlorotoluene	ND		50.0	63.9		ug/L		128	70 - 135
Benzene	97		50.0	144		ug/L		94	65 - 125
Bromobenzene	ND		50.0	50.6		ug/L		101	70 - 125
Bromochloromethane	ND		50.0	47.8		ug/L		96	65 - 135
Bromodichloromethane	ND		50.0	52.2		ug/L		104	70 - 135
Bromoform	ND		50.0	54.8		ug/L		110	55 - 135
Bromomethane	ND		50.0	39.8		ug/L		80	55 - 145
Carbon tetrachloride	ND		50.0	44.7		ug/L		89	65 - 140
Chlorobenzene	ND		50.0	46.2		ug/L		92	75 - 125
Chloroethane	ND		50.0	47.9		ug/L		96	55 - 140
Chloroform	ND		50.0	46.8		ug/L		94	65 - 135
Chloromethane	ND		50.0	35.2		ug/L		70	45 - 145
cis-1,2-Dichloroethene	ND		50.0	51.8		ug/L		104	65 - 130
cis-1,3-Dichloropropene	ND		50.0	60.0		ug/L		120	70 - 130
Dibromochloromethane	ND		50.0	55.6		ug/L		111	65 - 140
Dibromomethane	ND		50.0	48.1		ug/L		96	65 - 135
Dichlorodifluoromethane	ND		50.0	36.6		ug/L		73	25 - 155
Ethylbenzene	430	E	50.0	437	E 4	ug/L		16	65 - 130
Hexachlorobutadiene	ND		50.0	31.1		ug/L		62	60 - 135

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-38636-E-4 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 87460

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Isopropylbenzene	34		50.0	88.0		ug/L		107	70 - 135
m,p-Xylene	240		100	338		ug/L		94	65 - 130
Methylene Chloride	ND		50.0	46.1		ug/L		92	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		50.0	49.4		ug/L		99	55 - 145
Naphthalene	140		50.0	217	F	ug/L		147	50 - 140
n-Butylbenzene	28		50.0	74.9		ug/L		95	65 - 135
N-Propylbenzene	130		50.0	174		ug/L		96	70 - 135
o-Xylene	19		50.0	71.6		ug/L		105	65 - 125
sec-Butylbenzene	10		50.0	56.8		ug/L		93	70 - 125
Styrene	ND		50.0	55.9		ug/L		112	50 - 145
Tert-amyl-methyl ether (TAME)	ND		50.0	42.1		ug/L		84	60 - 140
tert-Butylbenzene	ND		50.0	46.5		ug/L		93	65 - 130
Tetrachloroethene	ND		50.0	45.7		ug/L		91	65 - 130
Toluene	48		50.0	95.6		ug/L		96	70 - 125
trans-1,2-Dichloroethene	ND		50.0	47.1		ug/L		94	65 - 130
trans-1,3-Dichloropropene	ND		50.0	62.6		ug/L		125	65 - 135
Trichloroethene	ND		50.0	43.8		ug/L		88	65 - 125
Trichlorofluoromethane	ND		50.0	47.3		ug/L		95	60 - 145
Vinyl chloride	ND		50.0	44.9		ug/L		90	45 - 140
Isopropyl Ether (DIPE)	ND		50.0	53.4		ug/L		107	60 - 140
Ethyl-t-butyl ether (ETBE)	ND		50.0	40.0		ug/L		80	60 - 135
tert-Butyl alcohol (TBA)	ND		250	197		ug/L		79	65 - 140
p-Isopropyltoluene	3.1	J	50.0	45.9		ug/L		86	65 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120

Lab Sample ID: 440-38636-E-4 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 87460

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		50.0	49.4		ug/L		99	65 - 140	6	20
1,1,1-Trichloroethane	ND		50.0	45.5		ug/L		91	65 - 140	1	20
1,1,1,2-Tetrachloroethane	ND		50.0	62.7		ug/L		125	55 - 135	1	30
1,1,2-Trichloroethane	ND		50.0	56.9		ug/L		114	65 - 130	2	25
1,1-Dichloroethane	ND		50.0	46.4		ug/L		93	65 - 130	1	20
1,1-Dichloroethene	ND		50.0	48.7		ug/L		97	60 - 130	4	20
1,1-Dichloropropene	ND		50.0	40.5		ug/L		81	70 - 135	3	20
1,2,3-Trichlorobenzene	ND		50.0	49.4		ug/L		99	60 - 135	2	20
1,2,3-Trichloropropane	ND		50.0	56.0		ug/L		112	55 - 135	3	30
1,2,4-Trichlorobenzene	ND		50.0	45.8		ug/L		92	65 - 135	3	20
1,2,4-Trimethylbenzene	170		50.0	216		ug/L		84	55 - 135	3	25
1,2-Dibromo-3-Chloropropane	ND		50.0	67.8		ug/L		136	45 - 145	1	30
1,2-Dibromoethane (EDB)	ND		50.0	52.3		ug/L		105	70 - 130	6	25
1,2-Dichlorobenzene	ND		50.0	50.4		ug/L		101	75 - 125	0	20

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-38636-E-4 MSD

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,2-Dichloroethane	2.2	J	50.0	48.3		ug/L		92	60 - 140	1	20
1,2-Dichloropropane	ND		50.0	49.1		ug/L		98	65 - 130	1	20
1,3,5-Trimethylbenzene	58		50.0	106		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	ND		50.0	49.8		ug/L		100	75 - 125	0	20
1,3-Dichloropropane	ND		50.0	50.0		ug/L		100	65 - 135	4	25
1,4-Dichlorobenzene	ND		50.0	48.8		ug/L		98	75 - 125	1	20
2,2-Dichloropropane	ND		50.0	50.6		ug/L		101	60 - 145	0	25
2-Chlorotoluene	ND		50.0	50.5		ug/L		101	65 - 135	0	20
4-Chlorotoluene	ND		50.0	63.1		ug/L		126	70 - 135	1	20
Benzene	97		50.0	141		ug/L		88	65 - 125	2	20
Bromobenzene	ND		50.0	51.1		ug/L		102	70 - 125	1	20
Bromochloromethane	ND		50.0	51.5		ug/L		103	65 - 135	8	25
Bromodichloromethane	ND		50.0	50.4		ug/L		101	70 - 135	3	20
Bromoform	ND		50.0	53.4		ug/L		107	55 - 135	3	25
Bromomethane	ND		50.0	41.6		ug/L		83	55 - 145	4	25
Carbon tetrachloride	ND		50.0	42.1		ug/L		84	65 - 140	6	25
Chlorobenzene	ND		50.0	43.7		ug/L		87	75 - 125	6	20
Chloroethane	ND		50.0	47.8		ug/L		96	55 - 140	0	25
Chloroform	ND		50.0	48.1		ug/L		96	65 - 135	3	20
Chloromethane	ND		50.0	36.7		ug/L		73	45 - 145	4	25
cis-1,2-Dichloroethene	ND		50.0	52.9		ug/L		106	65 - 130	2	20
cis-1,3-Dichloropropene	ND		50.0	60.1		ug/L		120	70 - 130	0	20
Dibromochloromethane	ND		50.0	53.2		ug/L		106	65 - 140	4	25
Dibromomethane	ND		50.0	50.4		ug/L		101	65 - 135	5	25
Dichlorodifluoromethane	ND		50.0	36.3		ug/L		73	25 - 155	1	30
Ethylbenzene	430	E	50.0	404	E 4	ug/L		-49	65 - 130	8	20
Hexachlorobutadiene	ND		50.0	30.0		ug/L		60	60 - 135	4	20
Isopropylbenzene	34		50.0	86.2		ug/L		104	70 - 135	2	20
m,p-Xylene	240		100	313		ug/L		69	65 - 130	8	25
Methylene Chloride	ND		50.0	49.8		ug/L		100	50 - 135	8	20
Methyl-t-Butyl Ether (MTBE)	ND		50.0	50.4		ug/L		101	55 - 145	2	25
Naphthalene	140		50.0	210		ug/L		133	50 - 140	3	30
n-Butylbenzene	28		50.0	71.2		ug/L		87	65 - 135	5	20
N-Propylbenzene	130		50.0	167		ug/L		84	70 - 135	4	20
o-Xylene	19		50.0	67.8		ug/L		98	65 - 125	5	20
sec-Butylbenzene	10		50.0	56.6		ug/L		93	70 - 125	0	20
Styrene	ND		50.0	52.9		ug/L		106	50 - 145	5	30
Tert-amyl-methyl ether (TAME)	ND		50.0	44.6		ug/L		89	60 - 140	6	30
tert-Butylbenzene	ND		50.0	47.4		ug/L		95	65 - 130	2	20
Tetrachloroethene	ND		50.0	43.2		ug/L		86	65 - 130	5	20
Toluene	48		50.0	94.4		ug/L		94	70 - 125	1	20
trans-1,2-Dichloroethene	ND		50.0	48.3		ug/L		97	65 - 130	2	20
trans-1,3-Dichloropropene	ND		50.0	61.8		ug/L		124	65 - 135	1	25
Trichloroethene	ND		50.0	42.9		ug/L		86	65 - 125	2	20
Trichlorofluoromethane	ND		50.0	45.8		ug/L		92	60 - 145	3	25
Vinyl chloride	ND		50.0	46.5		ug/L		93	45 - 140	3	30
Isopropyl Ether (DIPE)	ND		50.0	55.7		ug/L		111	60 - 140	4	25
Ethyl-t-butyl ether (ETBE)	ND		50.0	42.4		ug/L		85	60 - 135	6	25

TestAmerica Irvine

QC Sample Results

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-38636-E-4 MSD

Matrix: Water

Analysis Batch: 87460

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	ND		250	219		ug/L		88	65 - 140	11	25
p-Isopropyltoluene	3.1	J	50.0	45.8		ug/L		85	65 - 130	0	20
Surrogate	%Recovery	MSD Qualifier	Limits								
Toluene-d8 (Surr)	107		80 - 120								
4-Bromofluorobenzene (Surr)	98		80 - 120								
Dibromofluoromethane (Surr)	103		80 - 120								

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-86452/1-A

Matrix: Water

Analysis Batch: 86527

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 86452

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C13-C22	ND		0.50	0.10	mg/L		02/20/13 07:04	02/20/13 17:08	1
C23-C40	ND		0.50	0.10	mg/L		02/20/13 07:04	02/20/13 17:08	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	95		45 - 120				02/20/13 07:04	02/20/13 17:08	1

Lab Sample ID: LCS 440-86452/2-A

Matrix: Water

Analysis Batch: 86527

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 86452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	1.00	0.876		mg/L		88	40 - 115		
Surrogate	%Recovery	LCS Qualifier	Limits						
n-Octacosane	96		45 - 120						

Lab Sample ID: LCSD 440-86452/3-A

Matrix: Water

Analysis Batch: 86527

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 86452

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	1.00	0.851		mg/L		85	40 - 115	3	25
Surrogate	%Recovery	LCSD Qualifier	Limits						
n-Octacosane	91		45 - 120						

TestAmerica Irvine

QC Association Summary

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

GC/MS VOA

Analysis Batch: 87460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38281-1	MW-1	Total/NA	Water	8260B	
440-38281-2	MW-2	Total/NA	Water	8260B	
440-38281-3	MW-3	Total/NA	Water	8260B	
440-38281-4	MW-4	Total/NA	Water	8260B	
440-38281-5	MW-5	Total/NA	Water	8260B	
440-38281-6	MW-6	Total/NA	Water	8260B	
440-38636-E-4 MS	Matrix Spike	Total/NA	Water	8260B	
440-38636-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-87460/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-87460/5	Method Blank	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 86452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38281-1	MW-1	Total/NA	Water	3510C	
440-38281-2	MW-2	Total/NA	Water	3510C	
440-38281-3	MW-3	Total/NA	Water	3510C	
440-38281-4	MW-4	Total/NA	Water	3510C	
440-38281-5	MW-5	Total/NA	Water	3510C	
440-38281-6	MW-6	Total/NA	Water	3510C	
LCS 440-86452/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-86452/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-86452/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 86526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38281-2	MW-2	Total/NA	Water	8015B	86452
440-38281-3	MW-3	Total/NA	Water	8015B	86452
440-38281-4	MW-4	Total/NA	Water	8015B	86452
440-38281-6	MW-6	Total/NA	Water	8015B	86452

Analysis Batch: 86527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-86452/2-A	Lab Control Sample	Total/NA	Water	8015B	86452
LCSD 440-86452/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	86452
MB 440-86452/1-A	Method Blank	Total/NA	Water	8015B	86452

Analysis Batch: 87338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38281-1	MW-1	Total/NA	Water	8015B	86452
440-38281-5	MW-5	Total/NA	Water	8015B	86452

Definitions/Glossary

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F	MS or MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Environmental Management Strategies
Project/Site: Island Hotel

TestAmerica Job ID: 440-38281-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	02-28-13
Hawaii	State Program	9	N/A	02-28-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	02-28-13
Northern Mariana Islands	State Program	9	MP0002	02-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Login Sample Receipt Checklist

Client: Environmental Management Strategies

Job Number: 440-38281-1

Login Number: 38281

List Number: 1

Creator: Escalante, Maria

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Appendix E

**SUMMARY OF FLOATING PRODUCT RECOVER VOLUMES
AND MONITORING DATA**

**Summary of 2012 Floating Diesel Product Recovery and Product Thickness Monitoring Data
The Island Hotel, Newport Beach, California**

Well Number	Date m/d/y	DTW (Ft. BTOC)	DTP (Ft. BTOC)	Product Thickness (Feet)	GW Extracted (Gallons)	Product Recovered (Est. Gallons)
MW-1	5/3/12	34.82	34.60	0.22	125	0.2
MW-1	6/7/12	34.89	34.85	0.04	115	0.04
MW-1	7/5/12	35.12	35.12	0.00	122	0.01
MW-1	8/3/12	35.31	35.31	0.00	0	0
MW-1	9/7/12	35.48	35.48	0.00	0	0
MW-1	10/5/12	35.24	35.24	0.00	0	0
MW-1	11/7/12	35.25	35.25	0.00	0	0
MW-4	4/5/12	33.45	33.20	0.25	250	0.23
MW-4	5/3/12	33.21	33.21	0.00	150	0.01
MW-4	6/7/12	32.41	32.41	0.00	100	0.01
MW-4	7/5/12	32.66	32.66	0.00	85	0.01
MW-4	8/3/12	32.86	32.86	0.00	0	0
MW-4	9/7/12	33.00	33.00	0.00	0	0
MW-4	10/5/12	32.80	32.80	0.00	0	0
MW-4	11/7/12	32.76	32.76	0.00	0	0
MW-5	4/5/12	29.20	29.20	0.00	55	0.01
MW-5	5/3/12	30.47	30.47	0.00	0	0
MW-5	6/7/12	30.54	30.51	0.03	130	0.03
MW-5	7/5/12	30.78	30.78	0.00	165	0.01
MW-5	8/3/12	30.94	30.94	0.00	0	0
MW-5	9/7/12	31.11	31.11	0.00	0	0
MW-5	10/5/12	30.88	30.88	0.00	0	0
MW-5	11/7/12	30.80	30.80	0.00	0	0
Total Estimated Volume of Groundwater Extracted					935	
Total Estimated Volume of Product Recovered						0.31

DTW = Depth to groundwater

DTP = Depth to floating product

GW = Groundwater

Ft. BTOC = Feet below top of casing

Product recovered is estimated based on calculation of volume of product present in well. Product volume is not able to measured in vacuum truck tank due to small volume and emulsification.

Groundwater vacuum extraction completed on July 7, 2012.

Cumulative Summary of Floating Product Recovery
The Island Hotel, Newport Beach, California

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	7/20/98	0.10	8.0	0.5
MW-1	7/23/98	0.11	16.0	0.5
MW-1	8/11/98	0.09	5.0	0.3
MW-1	8/13/98	0.12	5.0	0.3
MW-1	8/18/98	0.35	3.0	0.3
MW-1	8/20/98	0.15	4.0	0.3
MW-1	8/25/98	0.34	4.0	0.3
MW-1	8/27/98	0.25	5.0	0.3
MW-1	9/1/98	0.22	5.0	0.3
MW-1	9/2/98	0.25	5.0	0.3
MW-1	9/3/98	0.05	5.0	0.3
MW-1	9/8/98	0.06	4.3	0.3
MW-1	9/10/98	0.09	4.3	0.3
MW-1	9/15/98	0.11	4.3	0.3
MW-1	9/17/98	0.15	4.3	0.3
MW-1	9/22/98	0.12	4.3	0.3
MW-1	9/24/98	0.12	3.3	0.3
MW-1	11/5/98	0.15	4.0	0.3
MW-1	1/7/99	0.90	4.0	1.0
MW-1	1/26/99	1.55	3.0	1.3
MW-1	3/2/99	0.10	5.0	0.5
MW-1	3/9/99	0.25	4.0	0.3
MW-1	3/11/99	0.20	4.0	0.3
MW-1	3/16/99	0.15	5.0	0.5
MW-1	3/18/99	0.43	5.0	0.5
MW-1	3/23/99	0.08	4.0	0.3
MW-1	3/25/99	0.10	4.0	0.3
MW-1	5/7/99	0.80	4.0	0.5
MW-1	5/14/99	0.60	4.0	0.5
MW-1	5/21/99	0.60	5.0	0.5
MW-1	5/28/99	0.37	4.0	0.3
MW-1	6/10/99	1.15	4.0	0.5
MW-1	6/17/99	0.50	2.8	0.3

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	6/24/99	0.45	2.8	0.3
MW-1	7/8/99	0.55	2.8	0.3
MW-1	7/15/99	0.50	2.8	0.3
MW-1	7/22/99	0.55	3.0	0.3
MW-1	7/29/99	0.65	5.0	0.3
MW-1	8/10/99	0.65	5.0	0.3
MW-1	8/12/99	0.55	5.0	0.3
MW-1	8/17/99	0.50	5.0	0.3
MW-1	8/19/99	0.55	3.0	0.3
MW-1	8/24/99	0.46	3.0	0.3
MW-1	9/2/99	0.40	3.0	0.3
MW-1	9/10/99	0.50	3.0	0.3
MW-1	9/15/99	0.50	3.0	0.3
MW-1	9/20/99	0.55	3.0	0.3
MW-1	9/30/99	0.53	5.0	0.3
MW-1	10/7/99	0.39	5.0	0.3
MW-1	10/15/99	0.43	5.0	0.3
MW-1	10/21/99	0.31	5.0	0.3
MW-1	10/29/99	0.29	5.0	0.3
MW-1	11/4/99	0.35	5.0	0.3
MW-1	11/19/99	0.49	5.0	0.3
MW-1	11/24/99	0.27	5.0	0.3
MW-1	11/30/99	0.40	5.0	0.3
MW-1	12/3/99	0.29	5.0	0.3
MW-1	12/11/99	0.43	5.0	0.3
MW-1	12/17/99	0.20	5.0	0.3
MW-1	12/23/99	0.29	5.0	0.3
MW-1	1/13/00	0.60	3.0	0.3
MW-1	1/21/00	0.52	3.0	0.3
MW-1	2/11/00	0.93	2.5	0.5
MW-1	2/18/00	0.58	2.0	0.3
MW-1	2/24/00	0.65	2.0	0.3
MW-1	3/3/00	0.29	3.0	0.3
MW-1	3/9/00	0.21	3.0	0.3
MW-1	3/23/00	0.22	3.0	0.3
MW-1	3/31/00	0.18	3.0	0.3

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	4/4/00	0.15	3.0	0.3
MW-1	4/13/00	0.1	3.0	0.3
MW-1	4/20/00	0.14	3.0	0.3
MW-1	4/28/00	0.26	3.0	0.2
MW-1	5/5/00	0.10	3.0	0.1
MW-1	5/19/00	0.15	3.0	0.1
MW-1	6/2/00	0.07	3.0	0.1
MW-1	6/9/00	0.05	5.0	0.1
MW-1	6/16/00	0.04	5.0	0.1
MW-1	6/23/00	0.04	5.0	0.1
MW-1	6/26/00	0.05	4.0	0.1
MW-1	7/6/00	0.05	5.0	0.0
MW-1	7/11/00	0.02	5.0	0.0
MW-1	7/20/00	0.03	5.0	0.0
MW-1	7/28/00	0.02	5.0	0.0
MW-1	8/3/00	0.04	5.0	0.0
MW-1	8/10/00	0.04	5.0	0.0
MW-1	8/21/00	Sheen	5.0	0.0
MW-1	8/25/00	Sheen	5.0	0.0
MW-1	9/7/00	Sheen	5.0	0.0
MW-1	9/17/00	Sheen	3.0	0.0
MW-1	9/21/00	Sheen	4.0	0.0
MW-1	9/29/00	Sheen	4.0	0.0
MW-1	10/5/00	Sheen	5.0	0.0
MW-1	10/17/00	Sheen	5.0	0.0
MW-1	10/27/00	Sheen	5.0	0.1
MW-1	11/2/00	Sheen	5.0	0.0
MW-1	11/10/00	Sheen	5.0	0.0
MW-1	11/18/00	Sheen	3.0	0.0
MW-1	11/27/00	Sheen	4.0	0.1
MW-1	12/4/00	Sheen	5.0	0.0
MW-1	12/12/00	0.0	5.0	0.0
MW-1	12/22/00	Sheen	5.0	0.0
MW-1	12/29/00	0.01	5.0	0.0
MW-1	1/5/01	Sheen	5.0	0.0
MW-1	1/15/01	Sheen	5.0	0.0

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	1/23/01	Sheen	5.0	0.0
MW-1	1/29/01	Sheen	5.0	0.0
MW-1	2/6/01	Sheen	5.0	0.0
MW-1	2/15/01	Sheen	5.0	0.0
MW-1	2/24/01	Sheen	5.0	0.0
MW-1	3/2/01	Sheen	5.0	0.0
MW-1	3/15/01	Sheen	5.0	0.0
MW-1	3/19/01	Sheen	5.0	0.0
MW-1	3/27/01	Sheen	5.0	0.0
MW-1	4/4/01	0.0	5.0	0.0
MW-1	4/12/01	Sheen	5.0	0.0
MW-1	4/21/01	0.01	5.0	0.0
MW-1	4/26/01	Sheen	5.0	0.0
MW-1	5/10/01	0.01	5.0	0.1
MW-1	5/18/01	0.01	5.0	0.1
MW-1	5/25/01	0.01	5.0	0.0
MW-1	5/31/01	0.04	5.0	0.0
MW-1	6/7/01	0.02	5.0	0.0
MW-1	6/14/01	0.0	5.0	0.0
MW-1	6/18/01	0.01	3.0	0.0
MW-1	6/25/01	0.01	5.0	0.0
MW-1	7/6/01	0.04	5.0	0.0
MW-1	7/11/01	0.03	5.0	0.1
MW-1	7/17/01	0.01	5.0	0.0
MW-1	7/27/01	0.0	5.0	0.0
MW-1	8/1/01	0.0	5.0	0.0
MW-1	8/6/01	0.0	5.0	0.0
MW-1	8/15/01	0.0	5.0	0.1
MW-1	8/20/01	0.0	5.0	0.0
MW-1	8/29/01	0.0	5.0	0.1
MW-1	9/4/01	Sheen	5.0	0.0
MW-1	9/12/01	Sheen	5.0	0.0
MW-1	9/27/01	Sheen	5.0	0.2
MW-1	10/5/01	Sheen	5.0	0.1
MW-1	10/11/01	Sheen	5.0	0.0
MW-1	10/18/01	Sheen	5.0	0.0

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	10/26/01	Sheen	5.0	0.2
MW-1	11/1/01	Sheen	5.0	0.2
MW-1	11/9/01	0.01	5.0	0.1
MW-1	11/15/01	Sheen	5.0	0.1
MW-1	11/21/01	Sheen	5.0	0.0
MW-1	11/30/01	0.0	5.0	0.0
MW-1	12/7/01	0.3	5.0	0.0
MW-1	12/13/01	Sheen	5.0	0.3
MW-1	12/28/01	Sheen	5.0	0.0
MW-1	1/4/02	0.0	5.0	0.3
MW-1	1/11/02	0.0	5.0	0.0
MW-1	1/18/02	0.0	5.0	0.0
MW-1	1/25/02	0.0	5.0	0.0
MW-1	2/1/02	0.0	5.0	0.0
MW-1	2/11/02	0.5	5.0	0.2
MW-1	2/15/02	0.02	5.0	0.0
MW-1	2/25/02	0	5.0	0.0
MW-1	3/4/02	0.02	5.0	0.0
MW-1	3/12/02	0.0	5.0	0.0
MW-1	3/20/02	0.05	5.0	0.0
MW-1	3/27/02	0.05	5.0	0.0
MW-1	4/2/02	0.0	5.0	0.0
MW-1	4/11/02	0.5	5.0	0.5
MW-1	4/18/02	0.0	5.0	0.0
MW-1	4/26/02	0.0	5.0	0.0
MW-1	5/2/02	0.0	5.0	0.0
MW-1	5/9/02	0.0	5.0	0.0
MW-1	5/15/02	0.0	5.0	0.0
MW-1	5/22/02	0.0	5.0	0.0
MW-1	5/31/02	0.1	5.0	0.1
MW-1	6/6/02	0.05	5.0	0.1
MW-1	6/13/02	0.05	5.0	0.1
MW-1	6/20/02	0.05	5.0	0.1
MW-1	6/27/02	0.0	5.0	0.0
MW-1	7/5/02	0.05	5.0	0.1
MW-1	7/12/02	0.08	5.0	0.1

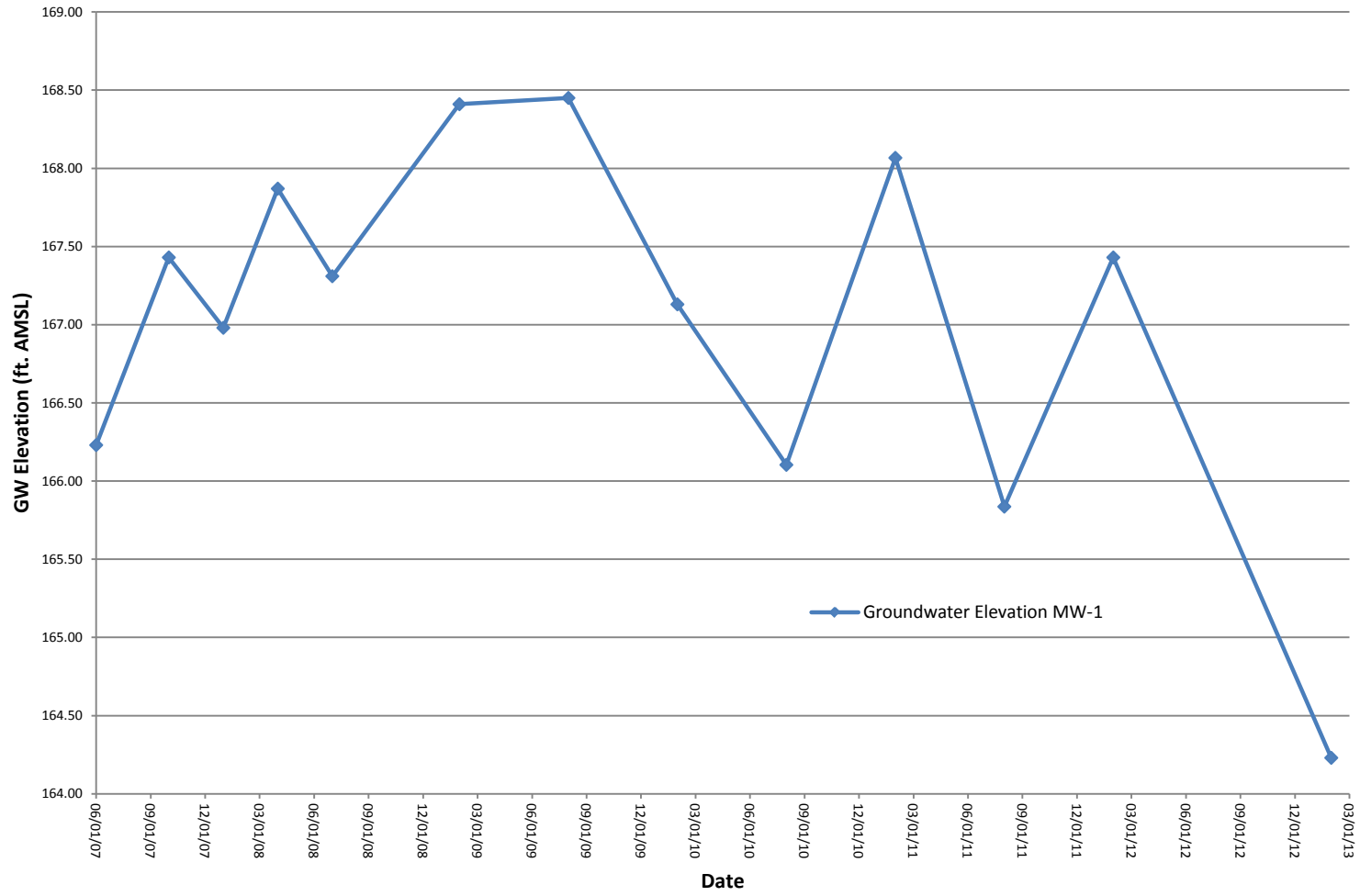
Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-1	7/18/02	0.03	5.0	0.1
MW-1	7/23/02	0.3	5.0	0.1
MW-1	9/16/02	0.04	6.0	0.1
MW-1	12/11/03	0.26	5.0	0.2
MW-1	3/25/04	0.10	2.1	0.1
MW-1	6/30/04	0.24	4.0	0.1
MW-1	9/10/04	0.0	5.0	0.0
MW-1	12/16/04	NA	0.0	0.1
MW-1	6/30/05	NA	0.0	0.0
MW-1	9/14/05	NA	0.0	0.0
MW-1	12/15/05	0.21	5.1	0.1
MW-1	3/31/06	0.58	4.0	0.5
MW-1	6/7/06	0.01	0.0	0.0
MW-1	10/09/06	0.01	1	0.02
MW-1	12/15/06	0.08	1	0.04
MW-1	04/12/07	0.17	3	0.16
MW-1	06/06/07	0.17	450	2.0
MW-1	10/04/07	0.01	0.25	0.03
MW-1	01/21/08	Sheen	0.10	0.1
MW-1	04/01/08	0.04	0.34	0.04
MW-1	07/23/08	0.17	280	0.16
MW-1	08/27/08	0.17	531	0.16
MW-1	10/02/08	0.03	500	0.03
MW-1	05/03/12	0.22	125	0.2
MW-1	06/07/12	0.04	115	0.04
MW-1	07/05/12	0.00	122	0.01
Total Volumes Recovered from MW-1			2,979.8	31.1
MW-3	12/23/99	0.31	5.0	0.3
MW-3	1/6/00	0.09	4.0	0.1
MW-3	1/13/00	0.15	2.5	0.1
MW-3	1/21/00	0.07	3.0	0.1
MW-3	2/11/00	0.16	2.5	0.1
MW-3	2/18/00	0.04	4.0	0.1
MW-3	2/24/00	0.07	2.5	0.1
MW-3	3/3/00	0.08	2.5	0.1
MW-3	3/9/00	0.03	2.5	0.1

Well No.	Date	Floating Product Thickness (Feet)	Total Fluid Volume Recovered (Gallons)	Estimated Product Volume Recovered (Gallons)
MW-3	3/23/00	0.02	2.5	0.1
MW-3	4/4/00	0.0	0.0	0.0
Total Volumes Recovered from MW-3			31.0	0.8
MW-4	4/5/2012	0.25	250	0.23
MW-4	5/3/2012	0.00	150	0.01
MW-4	6/7/2012	0.00	100	0.01
MW-4	7/5/2012	0.00	85	0.01
Total Volumes Recovered from MW-3			585.0	0.3
MW-5	3/12/02	NA	5.0	0.1
MW-5	3/20/02	NA	5.0	0.1
MW-5	3/27/02	NA	5.0	0.2
MW-5	5/2/02	NA	5.0	0.1
MW-5	5/31/02	NA	5.0	0.0
MW-5	6/6/02	NA	5.0	0.0
MW-5	7/5/02	NA	5.0	0.0
MW-5	7/12/02	NA	5.0	0.0
MW-5	7/18/02	NA	5.0	0.0
MW-5	7/23/02	NA	5.0	0.0
MW-5	4/5/12	0.00	55	0.01
MW-5	6/7/12	0.03	130	0.03
MW-5	7/5/12	0.00	165	0.01
Total Volumes Recovered from MW-5			400.0	0.6
TOTAL VOLUMES RECOVERED FROM ALL WELLS			3,995.8	32.7

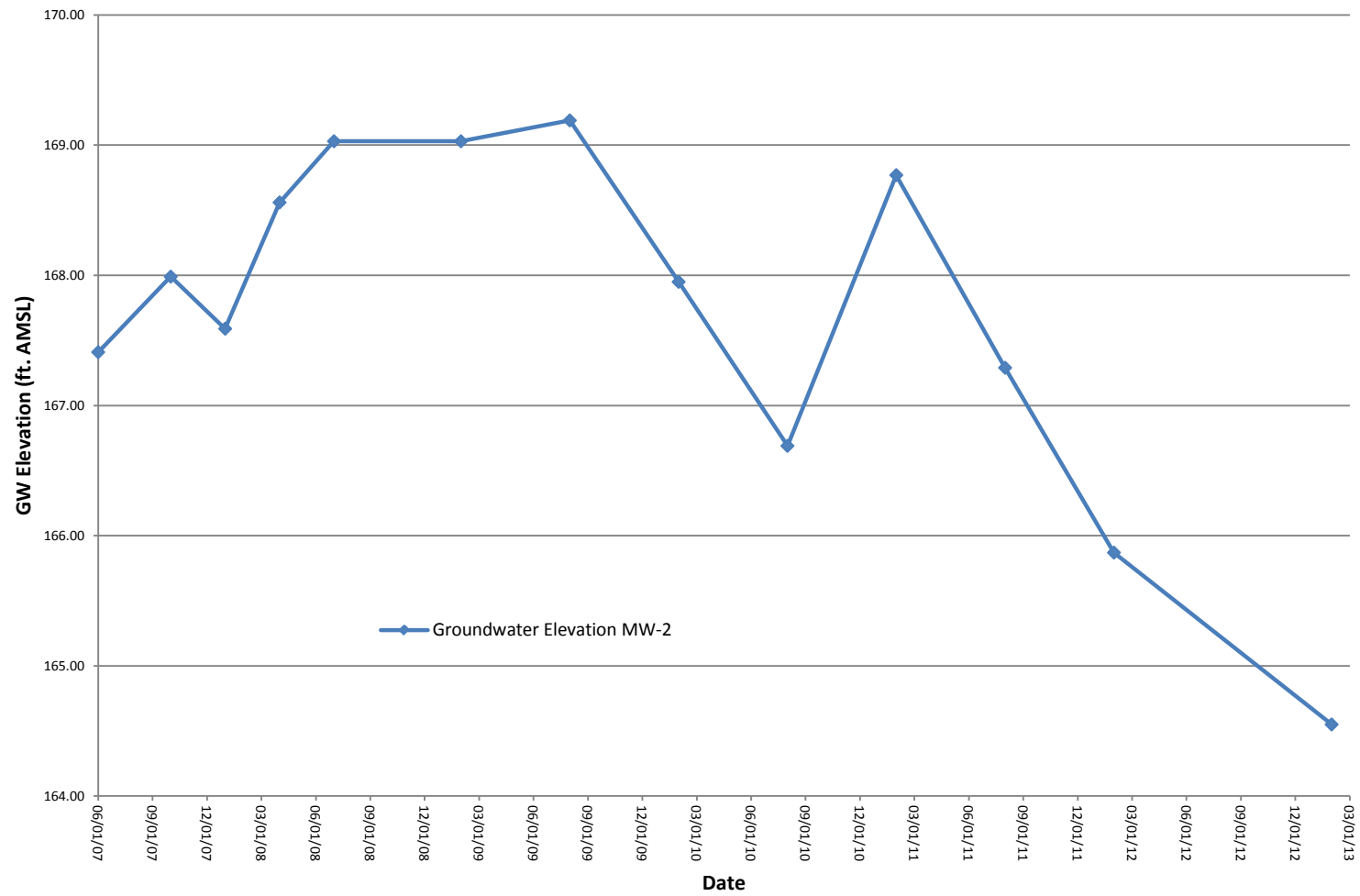
Notes:
NA = Not available

Appendix F
GROUNDWATER ELEVATION HYDROGRAPHS

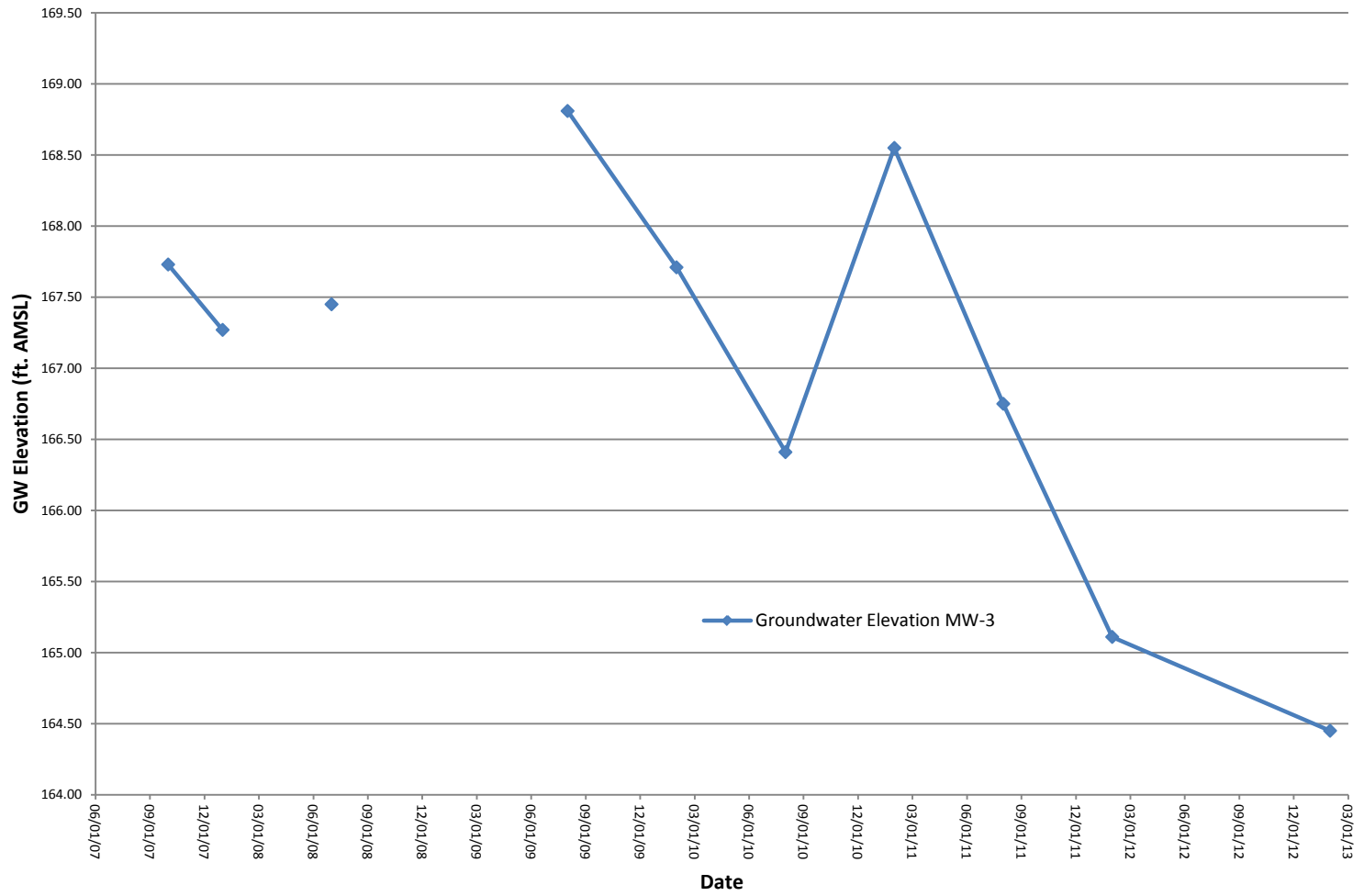
Groundwater Elevation MW-1



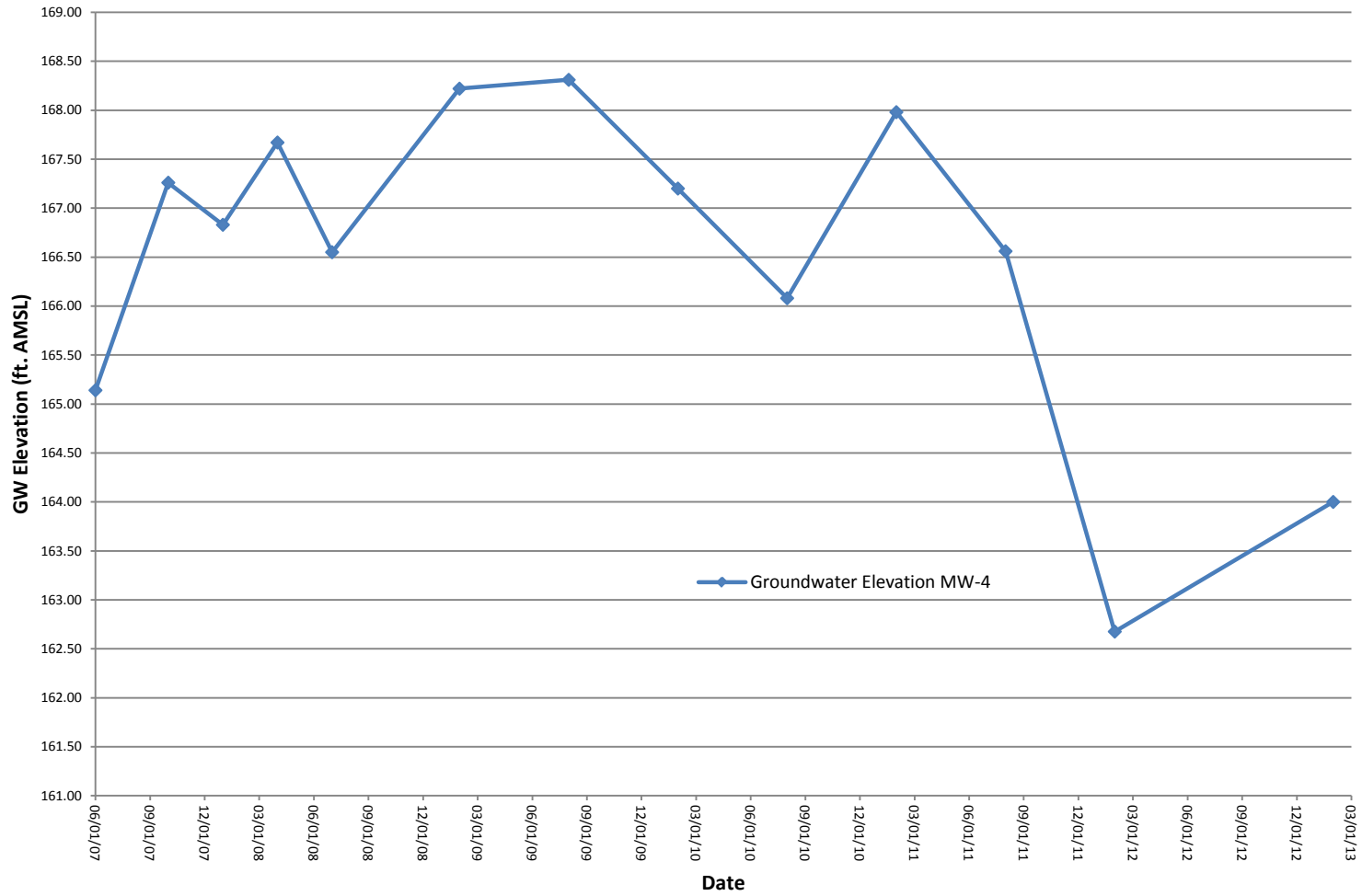
Groundwater Elevation MW-2



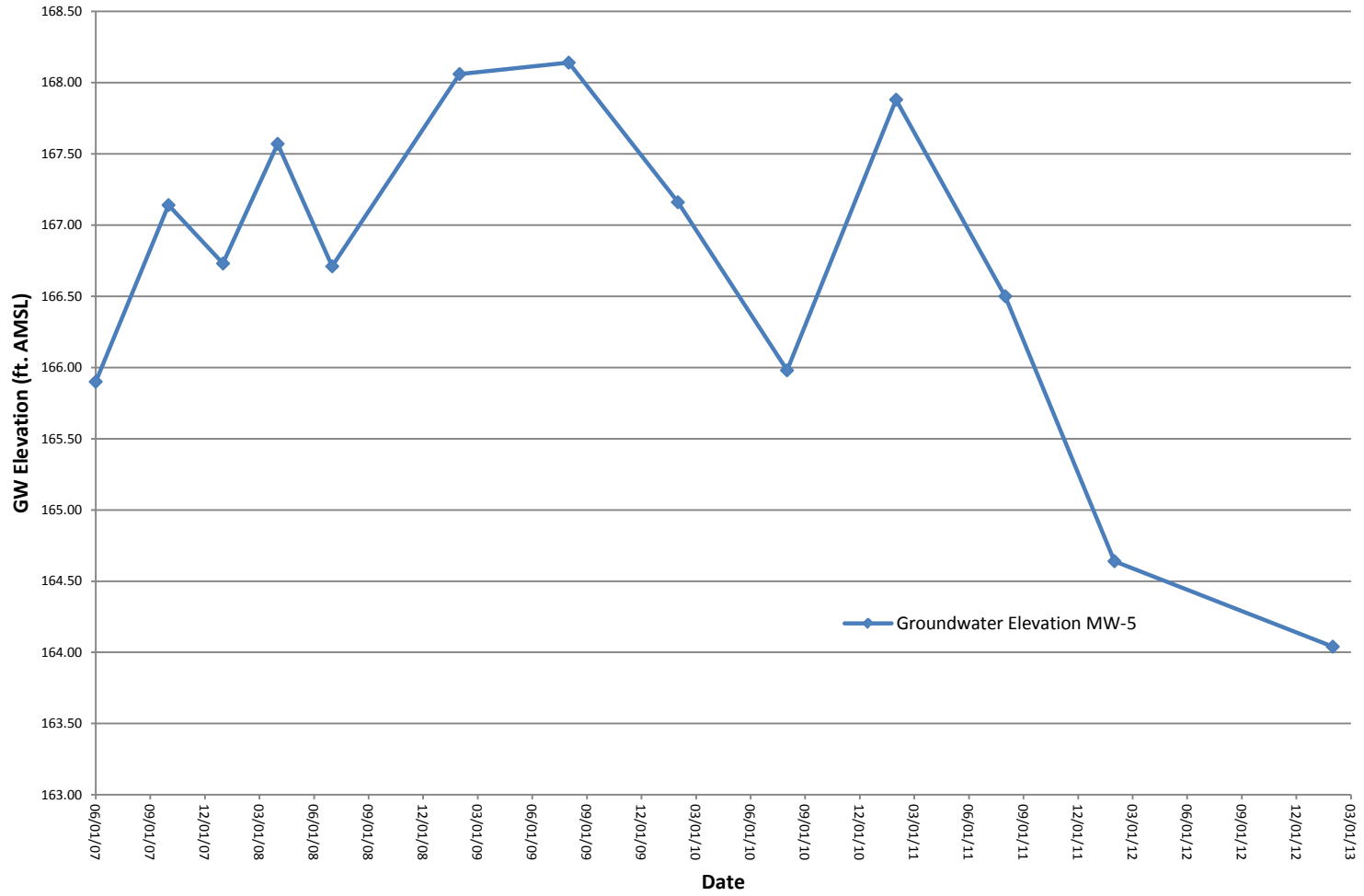
Groundwater Elevation MW-3



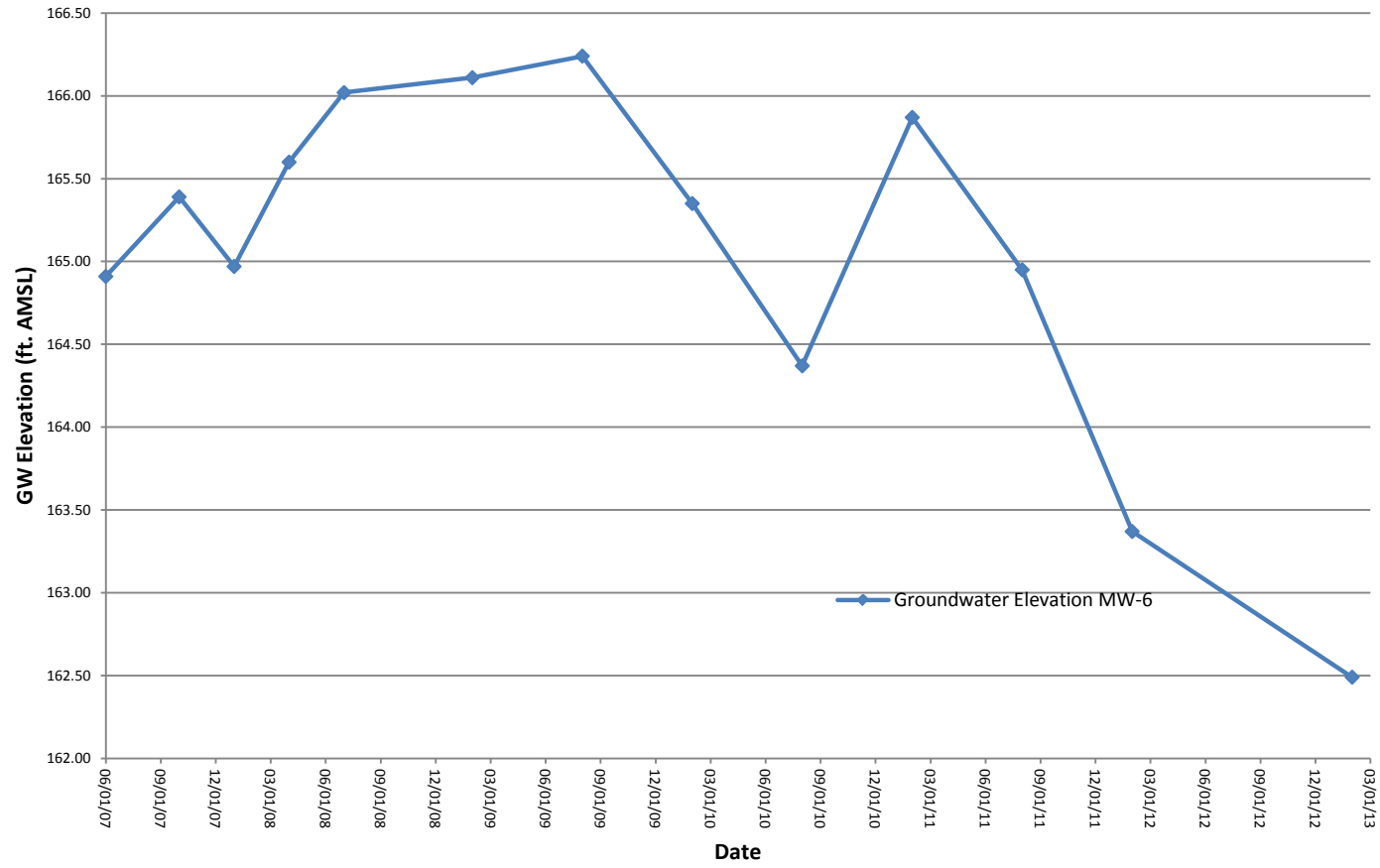
Groundwater Elevation MW-4



Groundwater Elevation MW-5



Groundwater Elevation MW-6



SWRCB Geotracker File Information for Adjacent Properties

Shell Oil – 1600 Jamboree Boulevard



**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH**

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DIRECTOR

RICHARD SANCHEZ, MPH
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E-MAIL: EHEALTH@ochca.com



August 12, 2014

Deborah Pryor
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

Subject: Remedial Action Completion Certification

Re: Underground Storage Tank (UST) Case
Shell Oil
1600 Jamboree Road
Newport Beach, CA 92660
OCHCA Case #03UT021

Dear Ms. Pryor:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required. This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

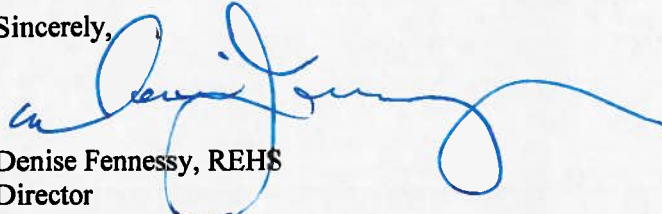
Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or,
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

Deborah Pryor
August 12, 2014
Page 2

Please contact Denamarie Baker at (714) 433-6255 if you have any questions regarding this matter.

Sincerely,



Denise Fennessy, REHS
Director
Environmental Health

Attachment: Case Closure Summary

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board (electronic copy)
Dan Yokoyama, Water Quality Section, Orange County Environmental Health (electronic copy)
Larry Brennler, Water Quality Section, Orange County Environmental Health (electronic copy)
UST Cleanup Fund Manager, State Water Resources Control Board (electronic copy)
Angela Ribeiro, Conestoga-Rovers & Associates (electronic copy)

Case Closure Summary
Leaking Underground Fuel Tank Program

I. Agency Information

Date: May 30, 2014

Agency Name: Orange County Health Care Agency	Address: 1241 E. Dyer Road, Suite 120
City/State/Zip: Santa Ana, CA 92705	Phone: (714) 433-6255
Responsible staff person: Denamarie Baker	Title: Hazardous Waste Specialist

II. Case Information

Site Facility Name: Mobil Station #18-J9X				
Site Facility Address: 8991 Orangethorpe Avenue, Buena Park, CA 90621				
RWQCB Case No.: 083000281T		Local Case No.: 87UT047		RO No.: RO0001945
URF Filing Date: March 6, 1987		GeoTracker Global ID No.: T0605900218		
Responsible Party:		Address		Phone No.:
Greg Grover Circle K Stores, Inc.		255 East Rincon, Suite 100 Corona, CA 92879		951-270-5108
Tank No.	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	1,000	Groundwater	Removed	June 25, 1991
2	8,000	Gasoline	Active	NA
3	10,000	Gasoline	Active	NA
4	12,000	Gasoline	Active	NA
5	8,000	Diesel	Active	NA

III. Release and Site Characterization Information

Cause and type of release: Underground Storage Tank system release				
Site characterization complete? Yes			Date approved by oversight agency: January 27, 2011	
Monitoring wells installed? Yes		Number: 42	Proper screened interval? Yes	
Minimum Depth to GW: 20.85' bgs (shallow zone); 17.80' bgs (deep zone)		Maximum Depth to GW: 26.88' bgs (shallow zone); 42.30' bgs (deep zone)	Flow direction: Northwest (shallow zone); Southwest to northeast (deep zone)	
Most sensitive current use: Designated as municipal and domestic supply				
Are drinking water wells affected? No			Aquifer name:	
Is surface water affected? No			Nearest/affected SW name: Houston Street Channel	
Off-site beneficial use impacts (addresses/locations):				
Report(s) on file? Yes		Where is report(s) filed? OCHCA office and GeoTracker		

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **May 30, 2014**

Case#: **87UT047**

Treatment and Disposal of Affected Material			
Material	Amount (include Units)	Action (treatment or disposal/destination)	Date
Tanks	1 tank	American Metal Recycling, Ontario, CA	June 25, 1991
Soil	15 cubic yards	Class III landfill, Orange County, CA (name of landfill not specified)	June 25, 1991
Rinsate	100 gallons	Demenco Kerdoon, Compton, CA	June 25, 1991
Groundwater	5,542 gallons	Recycled at Mobil Oil Corporation Terminal, Vernon, CA	April 4, 1983 – September 7, 1988
Free Product	1,154 gallons	Recycled at Mobil Oil Corporation Terminal, Vernon, CA	April 4, 1983 – September 7, 1988
Groundwater	2,186,472 gallons	Discharged to storm drain under NPDES Permit No. 8000150	October 1991 – December 1995
Vapor	40,734 pounds	Treated by vapor extraction	July 1991 – December 1995
Groundwater	5,800 gallons	Crosby & Overton, Long Beach, CA	February 1998 – November 1999
Vapor	1.09 pounds	Treated by vapor extraction	February 1998 – November 1999
Groundwater	1,200 gallons	Crosby & Overton, Long Beach, CA	October 11, 2005
Groundwater	27,864 gallons	Crosby & Overton, Long Beach, CA	February 2007 - September 2010

II. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup									
Contaminant	Soil (mg/kg)		Water (µg/L)		Contaminant	Soil (mg/kg)		Water (µg/L)	
	Before	After	Before	After		Before	After	Before	After
TPHg	26,000	113	FP	14,000	MTBE	650	7.35	FP	46
TPHd	15,000	NA	FP	NA	TBA	5.0	0.711	FP	840
Benzene	59	0.0095	FP	160	DIPE	0.69	<0.500	FP	4.7
Toluene	500	0.0095	FP	4.2	TAME	430	<0.100	FP	6.2
Ethylbenzene	170	0.186	FP	140	Naphthalene	NA	0.073	FP	260
Xylenes	1,070	1.60	FP	59					

NA - Not Analyzed FP - Free Product

Note: "After" groundwater contaminant concentrations represent data collected over the last two years of groundwater monitoring (March 2012 – March 2014).

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **May 30, 2014**

Case#: **87UT047**

Site Background:

The site is located at the northwest corner of Orangethorpe and Magnolia Avenues in the City of Buena Park. The location is currently occupied by a retail gasoline station. In 1987, Orange County Health Care Agency (OCHCA) Case # 87UT047 was opened after ExxonMobil reported a potential loss of up to 10,000 gallons of gasoline from the UST system. Four USTs were installed in November 1984, and have not been replaced. The site is located in the Pressure zone of the Orange County Groundwater Basin.

Site Assessment:

- Between 1983 and 1991, 40 groundwater monitoring wells, 2 soil vapor extraction, and 2 dual-phase extraction wells were installed.
- In 1983, a 1,000-gallon UST was installed as a holding tank for use with the groundwater extraction system. On June 25, 1991, this tank was removed and transported to American Metal Recycling in Ontario, CA. One soil sample was collected beneath the tank and one sample was collected from the stockpile. Although both samples contained no detectable TPHg or BTEX concentrations, approximately 15 cubic yards of soil was transported to an Orange County Class III landfill.
- Between 1987 and 1997, 20 site monitoring wells were abandoned based on historical non-detectable concentrations or unknown construction details.
- Product piping and dispenser upgrades were conducted in November 2000. Soil samples collected below the dispensers indicated the presence of soil contamination below the easternmost dispenser island.
- Three groundwater monitoring wells (MWA2, RW18, and RW25) and one soil vapor extraction (SVE) well (RW23) were abandoned on January 31, 2014 in preparation for the installation of a car wash on the site.

Remediation:

- From 1991 to 1995, soil vapor extraction (SVE) and groundwater extraction (GWE) systems operated at the site. Approximately 2,186,472 gallons of groundwater and 40,734 pounds of hydrocarbons were removed from the subsurface.
- Periodic high vacuum, dual-phase extraction (DPE) events were conducted from February 1998 to November 1999. Approximately 1.09 pounds of hydrocarbon vapor and 5,800 gallons of groundwater was extracted during the DPE events.
- On October 11, 2005, approximately 1,200 gallons of groundwater was extracted during overpurgings conducted using groundwater monitoring wells RW22B and RW29B.
- Additional DPE events, of varied durations, were conducted between February 2007 and September 2010. Two additional DPE wells were installed in April 2008 to augment remediation efforts.
- Monitored natural attenuation was instituted in January 2011.

Confirmation Borings:

- Six confirmation borings (B-35 through B-40) were drilled in November 2002. Based on elevated concentrations of TPHg (113 mg/kg in the 25-foot sample of B-39) and MTBE (7.35 mg/kg in the 15-foot sample from B-36), the borings were subsequently backfilled with an oxygen releasing compound (ORC) and sand slurry. Subsequent sampling was not conducted in these areas.
- An additional confirmation boring (CB1) was drilled on April 22 and 23, 2008 to further evaluate soil conditions in the vicinity of the easternmost dispenser island. The maximum TPHg, toluene, ethylbenzene, total xylenes, and naphthalene concentrations detected were 91 mg/kg in the 35-foot sample, and 0.0026J mg/kg, 0.0031mg/kg, 0.18 mg/kg, and 0.073 mg/kg in the soil sample collected from CB1 at 25 feet bgs. Benzene, MTBE, TBA, DIPE and TAME were not detected above reporting limits in any of the soil samples collected.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **May 30, 2014**

Case#: **87UT047**

Groundwater Monitoring:

Quarterly groundwater monitoring has been conducted at the site since January 1987 and was most recently conducted during the first quarter 2014 on March 26, 2014. Maximum detections during the March 2014 sampling event were as follows: 9,100 µg/L TPHg, 18 µg/L benzene, 3.2 µg/L toluene, 62 µg/L ethylbenzene, 22 µg/L total xylenes, 6.6 µg/L MTBE, 240 µg/L TBA, and 4.4 µg/L DIPE. Free product was observed at the site from March 1986 to September 1993, with a maximum thickness of 3.85 feet, and one recurrence from March 1997 to March 1998 and last encountered in April 2000.

Sensitive Receptors:

There are no active groundwater production wells located within 1,000 feet of the site. The nearest surface water body (Houston Street Channel) is located approximately 350 feet south of the site.

Residual contaminant concentrations in soil and groundwater do not appear to result in a risk from vapor intrusion to the adjacent commercial properties based on dissolved-phase concentrations.

State Water Resources Control Board UST Low-Threat Closure Policy:

In the State Water Resources Control Board Resolution No. 2012-0016, the Board adopted a Low-Threat Closure Policy (LTCP) that became effective on August 17, 2012. The policy outlines eight general and three media-specific criteria to assess whether open leaking UST cases are candidates for low-threat closure. This policy applies to all petroleum UST sites subject to Chapter 6.7 of Division 20 of the Health and Safety Code and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations.

In the absence of unique attributes of a case or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria described in this policy pose a low threat to human health, safety, or the environment and are appropriate for closure pursuant to Health and Safety Code section 25296.10.

Based on the LTCP evaluation, the OCHCA concludes that this case meets the following requirements for case closure:

General Criteria

- a. The unauthorized release is located within the service area of a public water system;
- b. The unauthorized release consists only of petroleum;
- c. The unauthorized ("primary") release from the UST system has been stopped;
- d. Free product has been removed to the maximum extent practicable;
- e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed;
- f. Secondary source has been removed to the extent practicable;
- g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code section 25296.15; and
- h. Nuisance as defined by Water Code section 13050 does not exist at the site.

Media-Specific Criteria

This case satisfies all three of these media-specific criteria as described below: *(Input qualifying class for each criteria.)*

1. Groundwater: 1.1 - The contaminant plume that exceeds water quality objectives is <100 feet in length. There is no free product. The nearest existing water supply well or surface water body is >250 feet from the defined plume boundary.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **May 30, 2014**

Case#: **87UT047**

2. Vapor Intrusion to Indoor Air: EXEMPTION – Media-specific criteria for petroleum vapor intrusion is not required for an active commercial petroleum fueling facility.



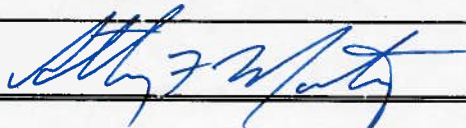
3. Direct Contact and Outdoor Air Exposure: 3.1 - Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 of the UST LTCP (see below) for the specified depth below ground surface.

Note: All environmental documents, including the Orange County Health Care Agency Local Oversight Program case file and technical reports uploaded to the State Water Board GeoTracker database, should be reviewed in their entirety to obtain further details regarding site cleanup.

IV. Closure

Does completed corrective action protect <i>existing</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect <i>potential</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site management requirements: If petroleum hydrocarbons are encountered during future site development activities, soil should be handled in accordance with health and safety regulations.		
Should corrective action be reviewed if land use changes? Yes		
Monitoring wells decommissioned: Yes	Number decommissioned: 23	Number Retained: 19
List enforcement actions taken: None		
List enforcement actions rescinded: None		

V. Local Agency Representative Data

Name: Osman Taban, PG #5986		Title: Geologist
Signature: 		Date: 6/16/14
Name: Geniece Higgins		Title: Supervising Hazardous Waste Specialist
Signature: 		Date: 6/17/14
Name: Anthony Martinez		Title: Program Manager
Signature: 		Date: 6-16-14

VI. RWQCB Notification

Date Submitted to RB:	RB Response:
Name: Kenneth R. Williams	Title: Chief, Pollutant Investigation Section
Signature:	Date:

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **May 30, 2014**

Case#: **87UT047**

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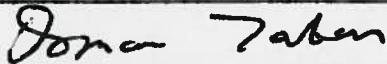

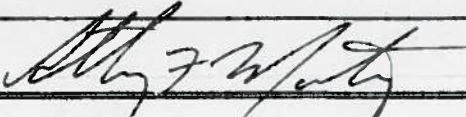
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Signature: 		Date: 6/17/14
Name: Anthony Martinez		Title: Program Manager
Signature: 		Date: 6-16-14

VI. RWQCB Notification

Date Submitted to RB:	RB Response: Concurs w/ Closure
Name: Kenneth R. Williams	Title: Chief, Pollutant Investigation Section
Signature: 	Date: 6/18/2014



**CONESTOGA-ROVERS
& ASSOCIATES**

175 Technology, Suite 200
Irvine, California 92618
Telephone: (949) 648-5200 Fax: (949) 648-5299
www.CRAworld.com

TRANSMITTAL

DATE: February 4, 2014 REFERENCE NO.: 060707

Shell-branded Service Station
1600 Jamboree Road

PROJECT NAME: Newport Beach, California

To: Denamarie Baker
Orange County Health Care Agency/ Environmental
Health Division

1241 Dyer Road., Suite 120
Santa Ana, California 92705

Please find enclosed: Draft Final
 Originals Other
 Prints

Sent via: Mail Same Day Courier
 Overnight Courier Other GeoTracker


QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report – Fourth Quarter 2013

As Requested For Review and Comment
 For Your Use

COMMENTS:

If you have any questions regarding the contents of this document, please call the CRA project manager Angela Ribeiro at (949) 648-5211 or the Shell program manager Deborah Pryor at (323) 291-9595.

Copy to: Deborah Pryor, Shell Oil Products, US, (Livelihood)
Erickson Industries Inc. c/o Dr. Harvinder Sahota – Property Owner, 9810 Park Street, Bellflower, CA 90706
R&M Pacific ORO, Inc. – Dealer, 7002 Moody Street, Suite 210, La Palma, CA 90623

Completed by: Angela Ribeiro Signed: 
[Please Print]

Filing: Correspondence File



GROUNDWATER MONITORING REPORT- FOURTH QUARTER 2013

**SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

**SAP CODE 120718
INCIDENT NO. 97481664
CASE NO. 03UT021**

**FEBRUARY 4, 2014
REF. NO. 060707 (17)**

This report is printed on recycled paper.

**Prepared by:
Conestoga-Rovers
& Associates**

175 Technology Drive, Suite 200
Irvine, California
U.S.A. 92618

Office: (949) 648-5200
Fax: (949) 648-5299

web: <http://www.CRAworld.com>

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- APPENDIX B TESTAMERICA - LABORATORY ANALYTICAL REPORT

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises, LLC, dba Shell Oil Products US (Shell).

1.1 SITE INFORMATION

Site Address	1600 Jamboree Road, Newport Beach
Site Use	Shell-branded Service Station
Shell Project Manager	Deborah Pryor
CRA Project Manager	Angela Ribeiro
Lead Agency	Orange County Health Care Agency (OCHCA)
Lead Agency Contact	Denamarie Baker
Agency Case No.	03UT021
Shell SAP Code	120718
Shell Incident No.	97481664

The most recent correspondence from the OCHCA was a letter dated November 22, 2013 stating that the case had been reviewed under the State Water Resources Control Board (SWRCB) Low Threat Closure Policy (LTCP) and meets the criteria for low threat case closure. The groundwater monitoring and sampling frequency was reduced to annually. The OCHCA also requested property owner and adjacent parcel information in order to process the 60-Day Notification letter.

1.2 SITE BACKGROUND

The Site is a Shell-branded Service Station located on the eastern corner of the intersection of 1600 Jamboree Road and San Joaquin Hills Road in Newport Beach, California. Current station facilities include four 10,000-gallon underground storage tanks (USTs), six fuel dispenser islands with associated product piping, a garage with three service bays, and a food-mart. Surrounding properties are a mix of commercial and residential.

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT QUARTER'S ACTIVITIES

Groundwater Monitoring Activities

Blaine Tech Services Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this Site. After gauging the wells, Blaine attempted to purge 3 casing volumes of water from each well. Blaine collected groundwater temperature, pH, conductivity, and turbidity parameters after 1 casing volume of groundwater had been purged, and repeated the measurements at each subsequent casing volume purged to ensure that groundwater parameters had stabilized prior to sampling. If the groundwater parameters did not stabilize, Blaine continued to purge the well until the groundwater parameters stabilized. After parameters had stabilized, Blaine allowed the groundwater in the well to recover to a depth of 80 percent of the groundwater level prior to purging. Blaine then collected a sample for analysis.

For wells that dewatered prior to purging 3 casing volumes, Blaine confirmed that a minimum of 1 casing volume had been removed, waited for recharge, then collected a sample for analysis. Samples were collected from each well and decanted into sterile laboratory-supplied sample containers. Samples were stored in an ice-filled cooler and transported under chain-of-custody procedures to TestAmerica Laboratories for chemical analysis.

TestAmerica Laboratories analyzed all groundwater samples for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPHg), and Volatile Organic Compounds (VOCs) full scan using Environmental Protection Agency (EPA) Method 8260B including benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and di-isopropyl ether (DIPE)
- Total petroleum hydrocarbons as diesel (TPHd) using EPA Method 8015M.
- Sulfate and Nitrate using EPA Method 300.0
- Methane using RSK-175
- General chemistry parameters (i.e. alkalinity and ferrous iron) by SM2320B and SM3500

Appendix A contains Blaine's field notes documenting the sampling protocol for each well and a waste disposal manifest for purge water. Appendix B includes the TestAmerica Laboratories analytical report.

CRA prepared a Vicinity Map (Figure 1), a Site Plan (Figure 2), a Groundwater Contour and Chemical Concentration Map (Figure 3), and groundwater isoconcentration maps for TPHg, TPHd, benzene, MTBE, and TBA (Figures 4 through 8). CRA also prepared Table 1 presenting well construction details, Table 2-1 presenting current data from each well, Table 2-2 presenting additional VOC data, and Table 3 presenting historical data from each well. Graphs 1 through 20 were also prepared for TPHg, benzene, MTBE and TBA concentrations, and depths to groundwater versus time.

2.2 CURRENT QUARTER'S FINDINGS

Groundwater Flow Direction	North-northeast
Hydraulic Gradient	0.04 foot/foot
Depth to Water	6.69 to 11.30 feet below top of well casing

The maximum concentrations detected in groundwater during fourth quarter 2013 include:

- 51,000 micrograms per liter ($\mu\text{g}/\text{L}$) TPHg in MW-2R
- 3,500 $\mu\text{g}/\text{L}$ TPHd in MW-2R
- 12,000 $\mu\text{g}/\text{L}$ benzene in MW-2R
- 43 $\mu\text{g}/\text{L}$ MTBE in MW-4R; note the detection limit of MW-2R was 100 $\mu\text{g}/\text{L}$
- 510 $\mu\text{g}/\text{L}$ TBA in MW-4R; note the detection limit of MW-2R was 2,000 $\mu\text{g}/\text{L}$

Additional Activities

CRA is implementing the CAP as directed by the OCHCA. Groundwater samples were analyzed for MNA parameters; analytical results are presented in Table 4.

On January 10, 2014 CRA provided the OCHCA with property owner and adjacent parcel information as requested in their November 22, 2013 letter.

CRA notified Blaine to reduce the groundwater monitoring and sampling schedule from quarterly to annually.

2.3 DISCUSSION

The groundwater flow direction and gradient are consistent with historical trends at the Site. Petroleum hydrocarbon and oxygenate concentrations detected in the groundwater this quarter are generally consistent with previous quarter's results and show a generally stable or decreasing trend.

Monitored Natural Attenuation Progress

Groundwater samples were analyzed for MNA parameters to confirm ongoing natural attenuation. The parameters listed in Table 4 indicate that natural attenuation is occurring. Historical dissolved oxygen (DO) and oxidation reduction potential (ORP) data show conditions at the Site are anaerobic in the vicinity of the source area (MW-3R and MW-4R) and conditions became more aerobic in the cross-gradient and down-gradient wells away from the source area. Nitrate concentrations are generally near or below detection limits across the site so this analyte is not a reliable indicator. Sulfate concentrations within the source area (i.e. MW-2R and MW-4R) are low relative to the outlying areas indicating anaerobic biodegradation of the dissolved petroleum hydrocarbons in the plume core. Methane concentrations are highest within the plume core, also indicating anaerobic biodegradation.

2.4 PROPOSED ACTIVITIES

Groundwater Monitoring Activities

Blaine will gauge and sample the well field according to the established monitoring program for the Site. This Site is monitored annually during the fourth quarter. CRA will issue an annual groundwater monitoring report following the sampling event.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES



Angela Ribeiro



William F. Girolamo, P.G. 5723

FIGURES

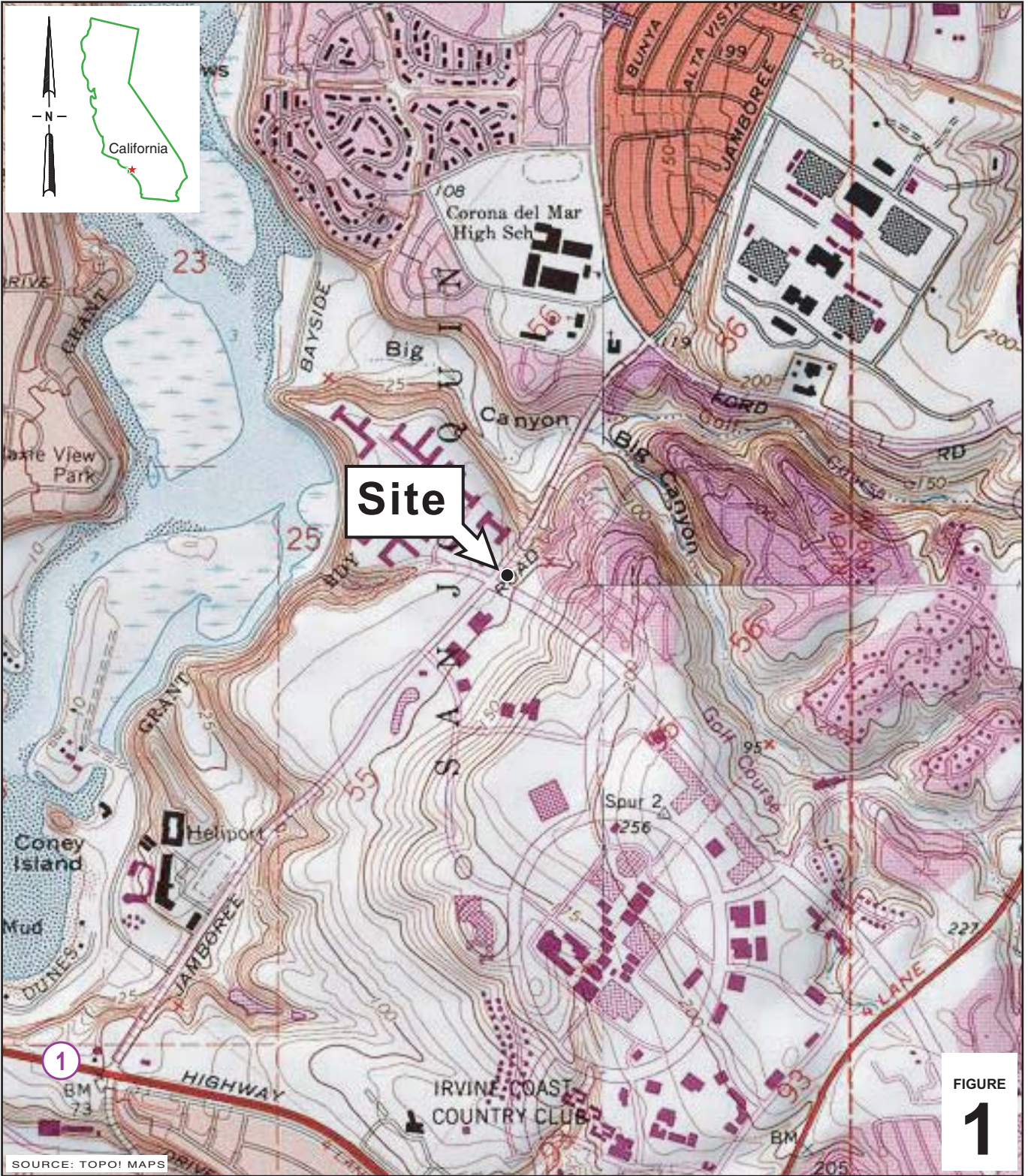


FIGURE
1

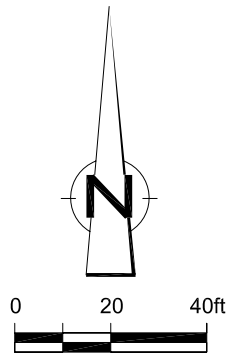
I:\6-chars\06-10607-10607060707-FIGURES\060707 VICINITY (F1).AI

Shell-branded Service Station
1600 Jamboree Road
Newport Beach, California



**CONESTOGA-ROVERS
& ASSOCIATES**

Vicinity Map



EXPLANATION	
MW-1R	● Monitoring well location
MW-1	⊗ Destroyed well location
B-1	⊙ Soil boring location
D-1	• Soil sample location
- - - - -	Electrical line (E)
- - - - -	Telecommunication line (T)
- - - - -	Water line (W)

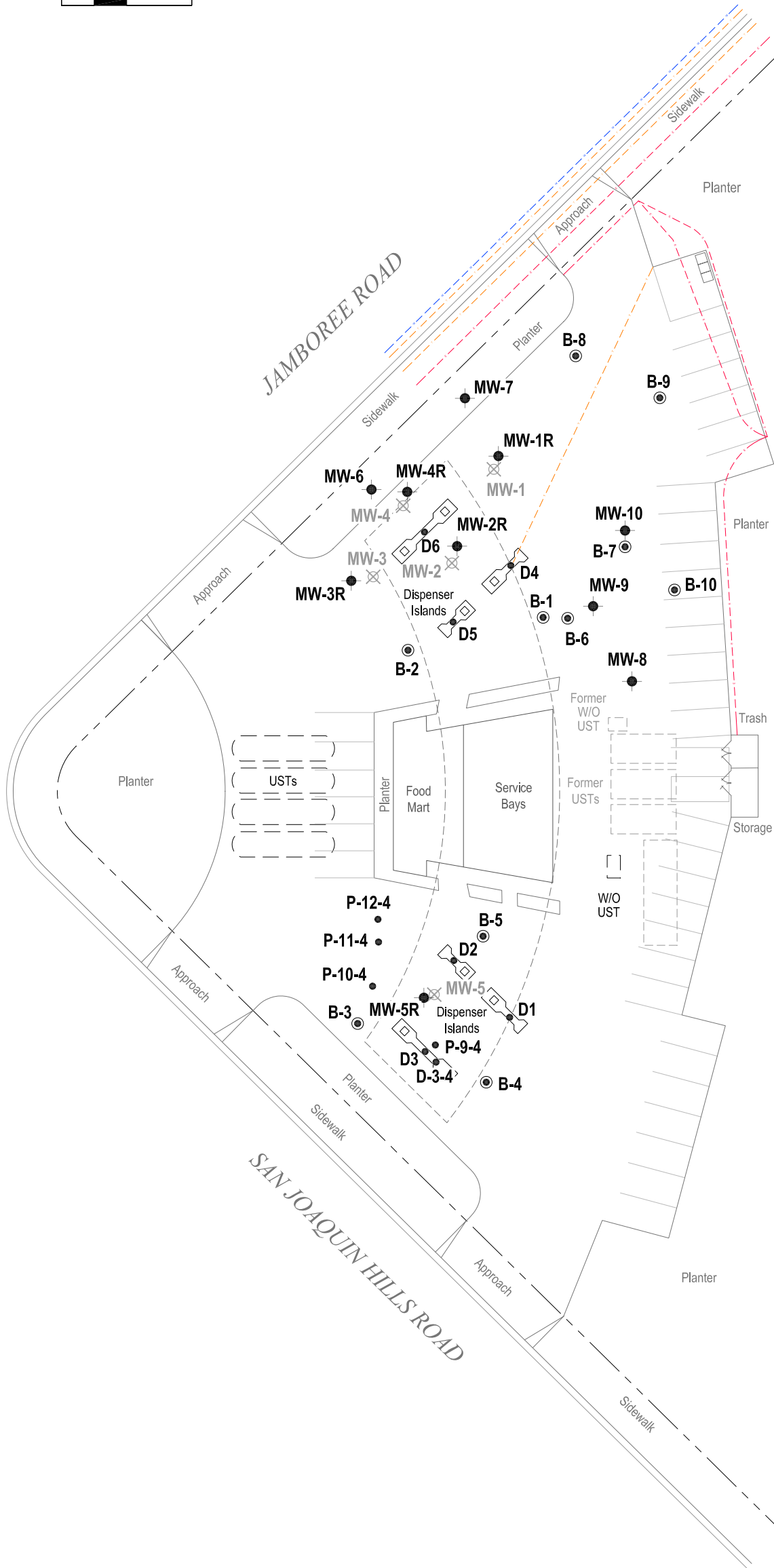
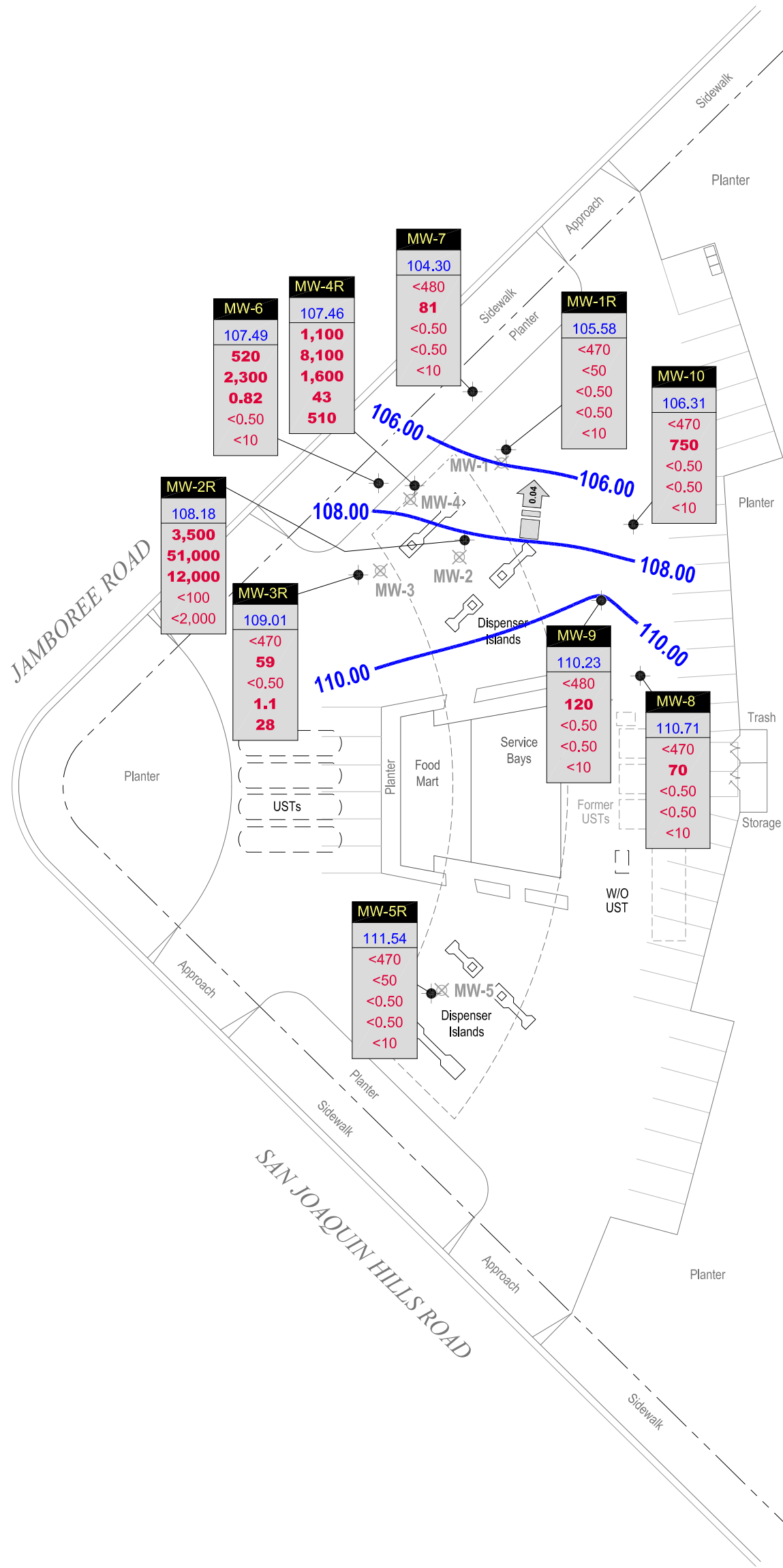
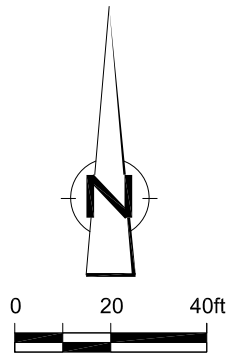


Figure 2
 Site Plan
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

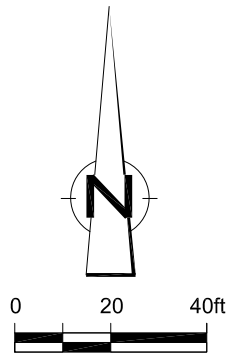
- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- ▭→ x.xx Groundwater flow direction and gradient
- xx.xx Groundwater elevation contour, in feet above mean sea level (ft MSL)

Well	ELEV.	TPHd	TPHg	Benzene	MTBE	TBA
Well designation						
Groundwater elevation, in ft MSL						
TPHd, TPHg, benzene, MTBE, and TBA concentrations are in micrograms per liter						

Notes:
 <X = Not detected at reporting limit X

Figure 3
 Groundwater Contour and
 Chemical Concentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- 500 TPHd isoconcentration contour, in micrograms per liter (µg/L), dashed where inferred
- Well Well designation
- TPHd TPHd concentrations are in µg/L

Notes:
 <X = Not detected at reporting limit X

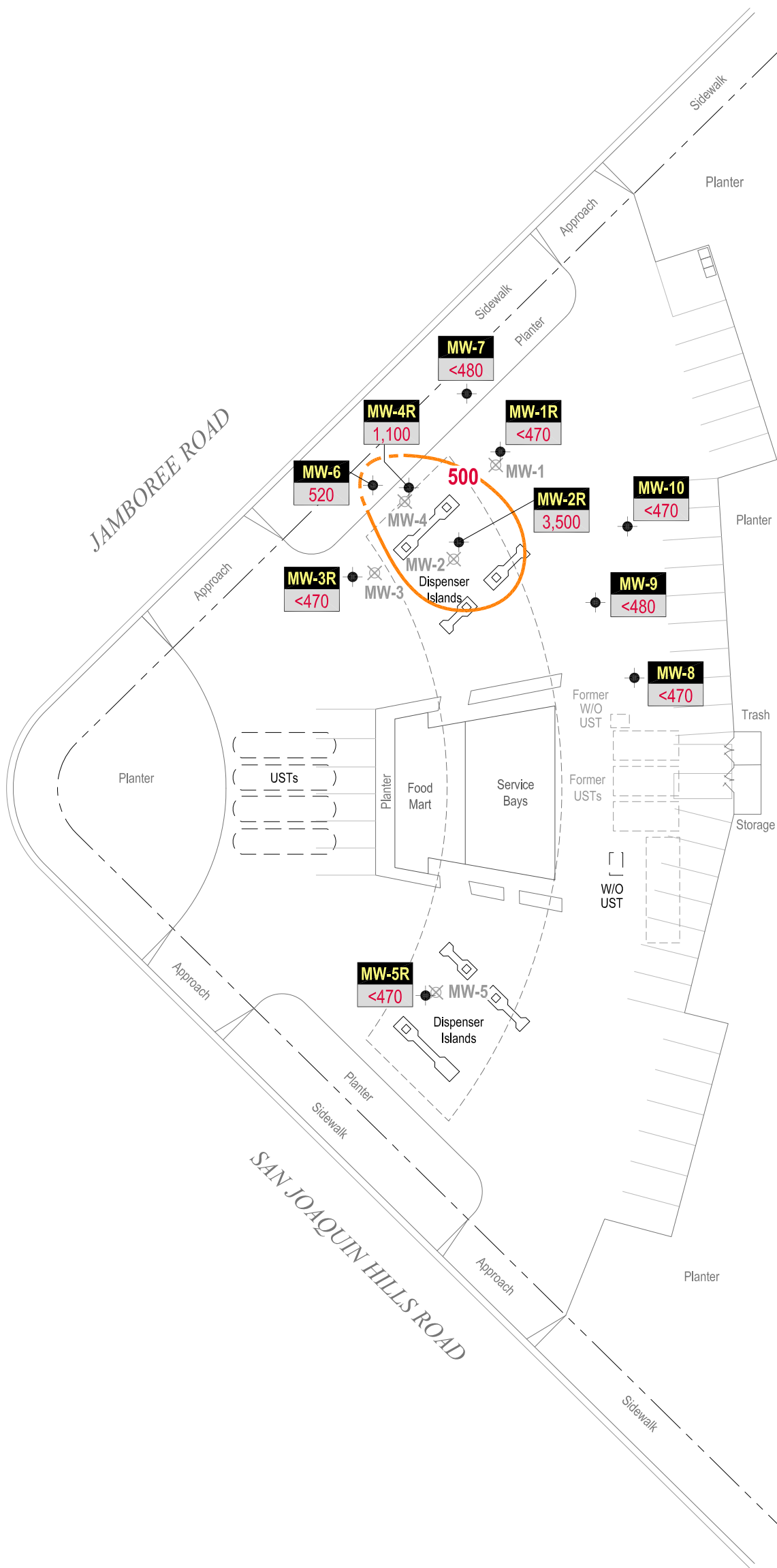
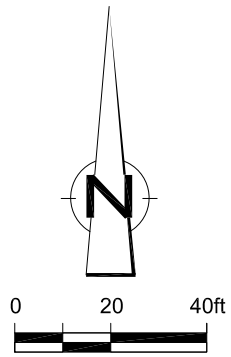


Figure 4
 TPHd in Groundwater
 Isoconcentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- 500 TPHg isoconcentration contour, in micrograms per liter (µg/L), dashed where inferred
- Well Well designation
- TPHg TPHg concentrations are in µg/L

Notes:
 <X = Not detected at reporting limit X

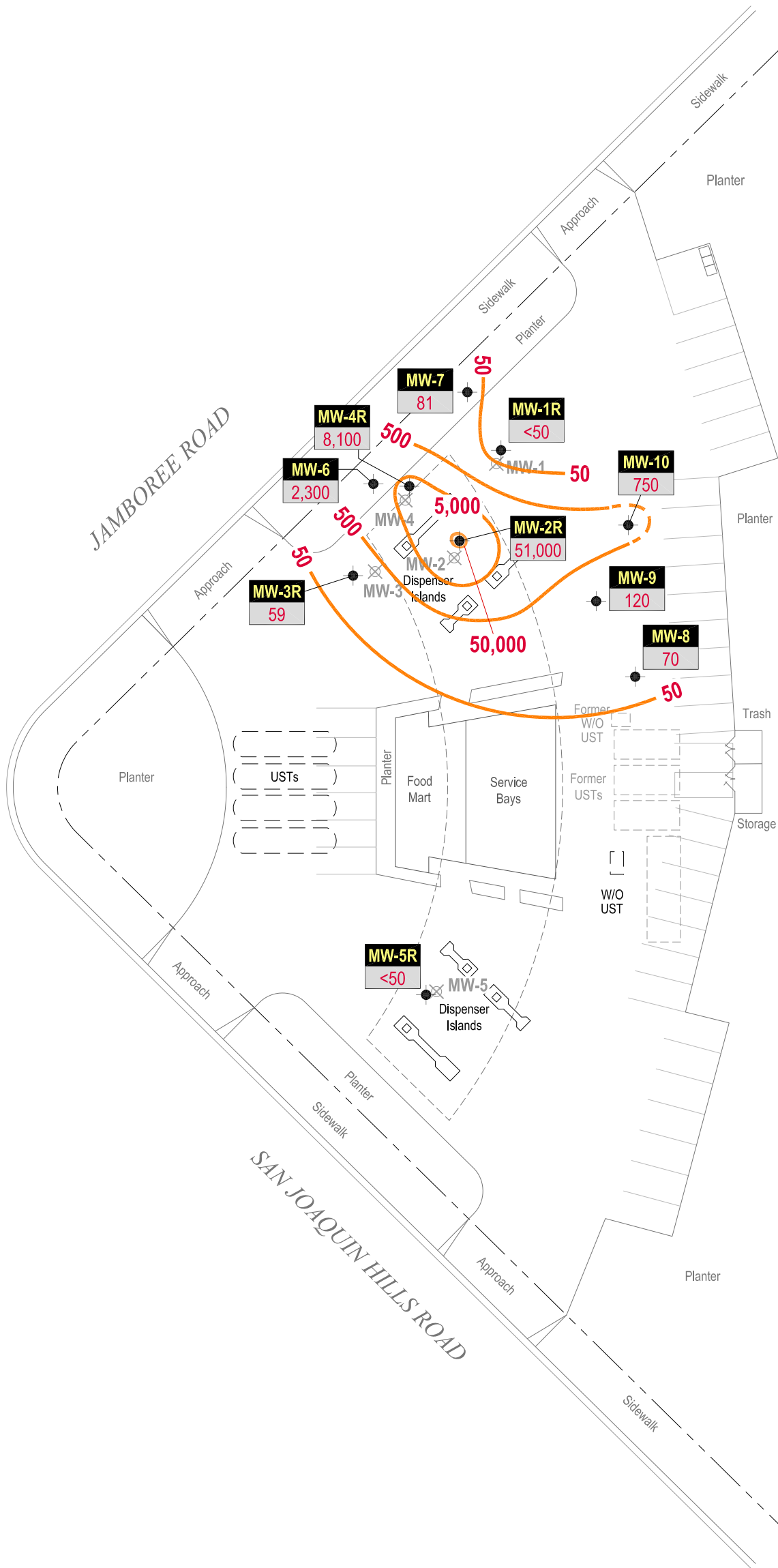
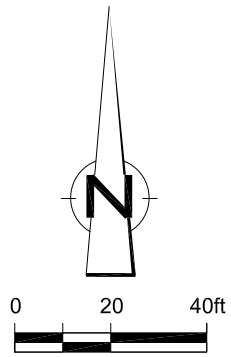


Figure 5
 TPHg in Groundwater
 Isoconcentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- 1.0 Benzene isoconcentration contour, in micrograms per liter (µg/L), dashed where inferred
- Well Well designation
- Benz. Benzene concentrations are in µg/L

Notes:
 <X = Not detected at reporting limit X

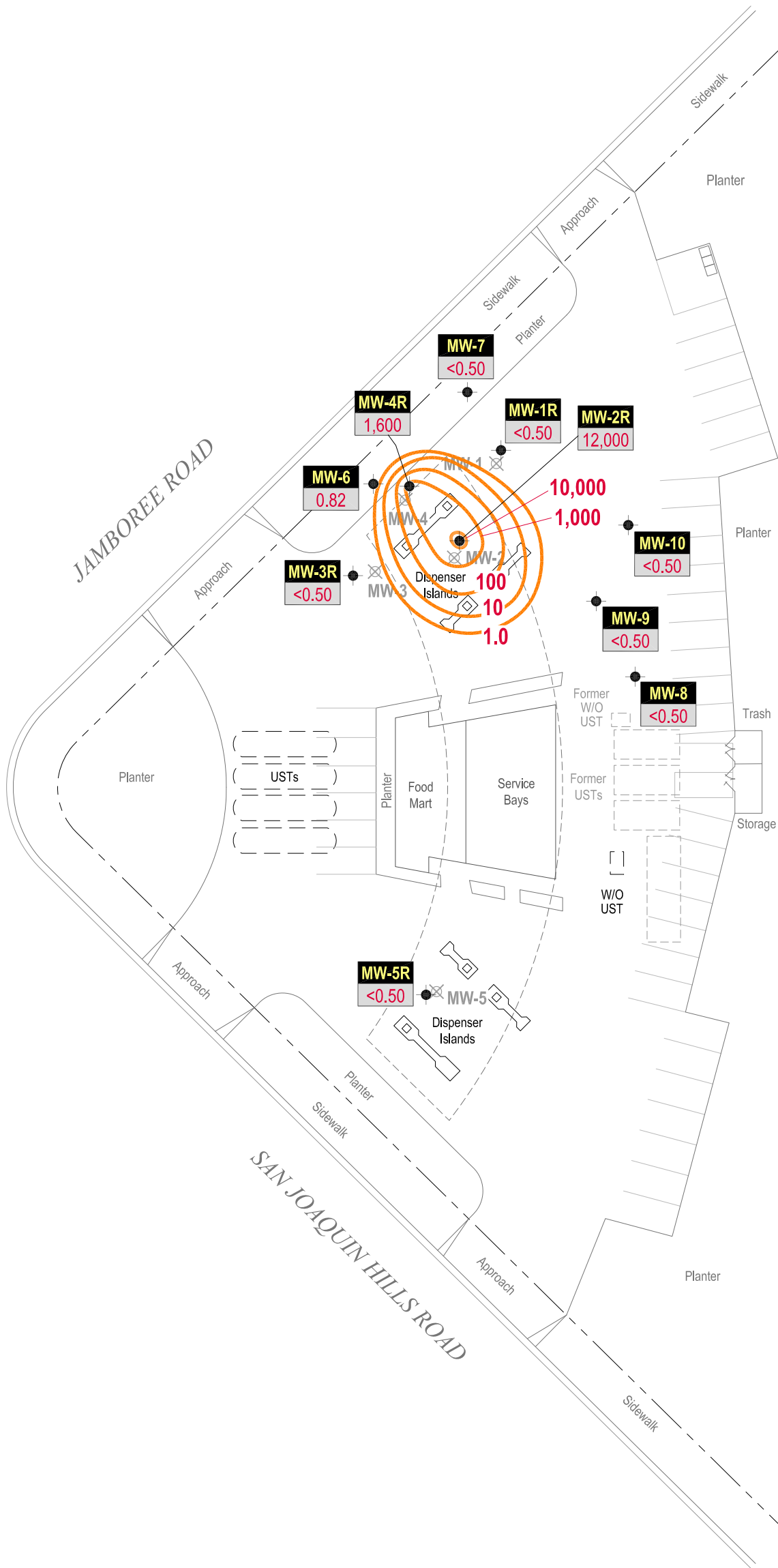
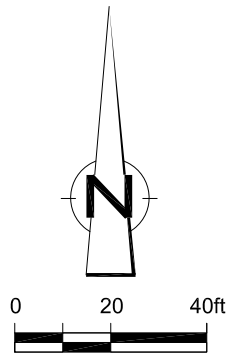


Figure 6
 Benzene in Groundwater
 Isoconcentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- 1.0 MTBE isoconcentration contour, in micrograms per liter (µg/L), dashed where inferred
- Well Well designation
- MTBE MTBE concentrations are in µg/L

Notes:
 <X = Not detected at reporting limit X

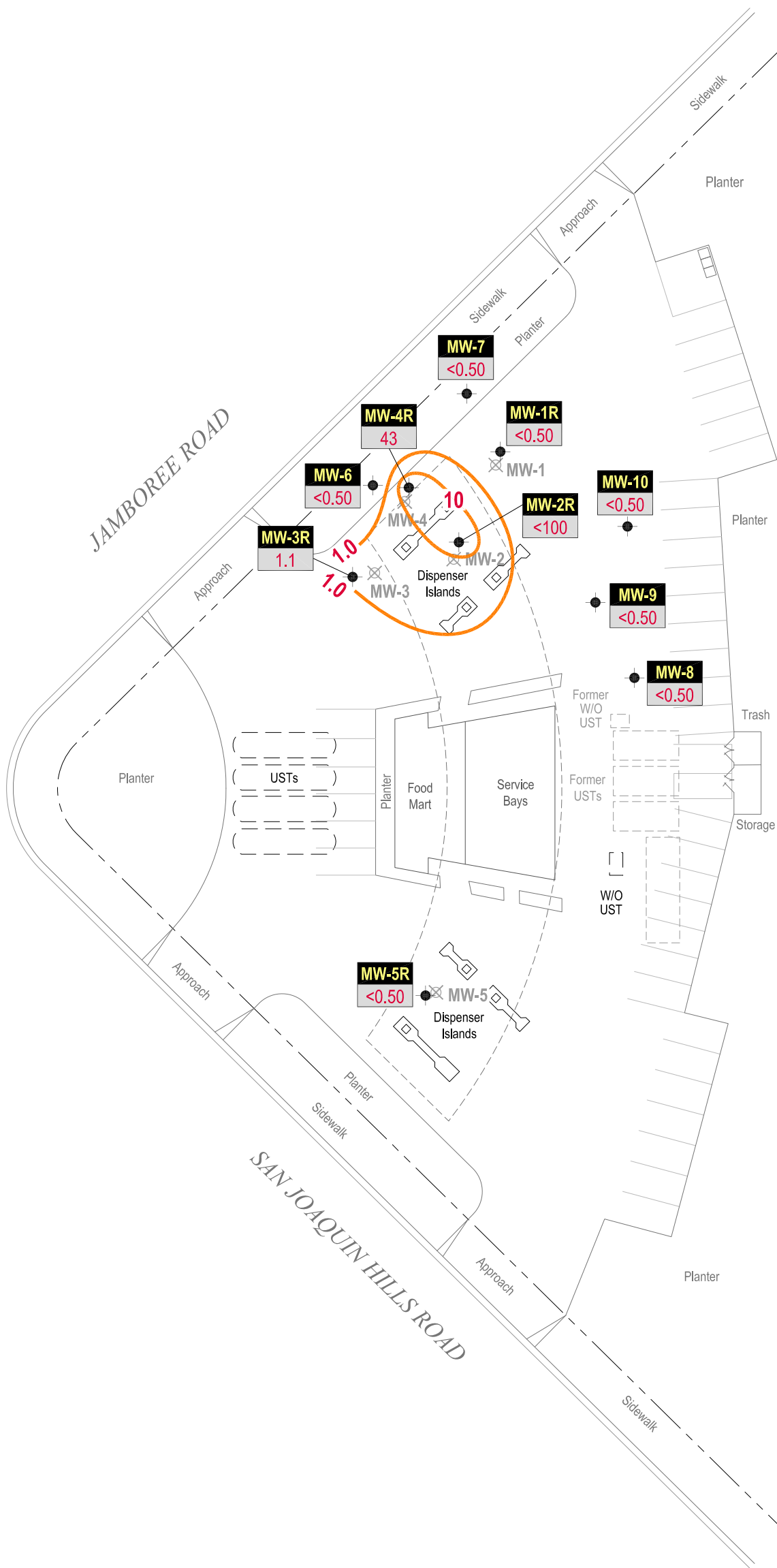
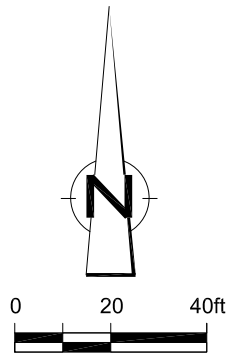


Figure 7
 MTBE in Groundwater
 Isoconcentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California





EXPLANATION

- MW-1R ● Monitoring well location
- MW-1 ☒ Destroyed well location
- 10 TBA isoconcentration contour, in micrograms per liter (µg/L), dashed where inferred
- Well Well designation
- TBA TBA concentrations are in µg/L

Notes:
 <X = Not detected at reporting limit X

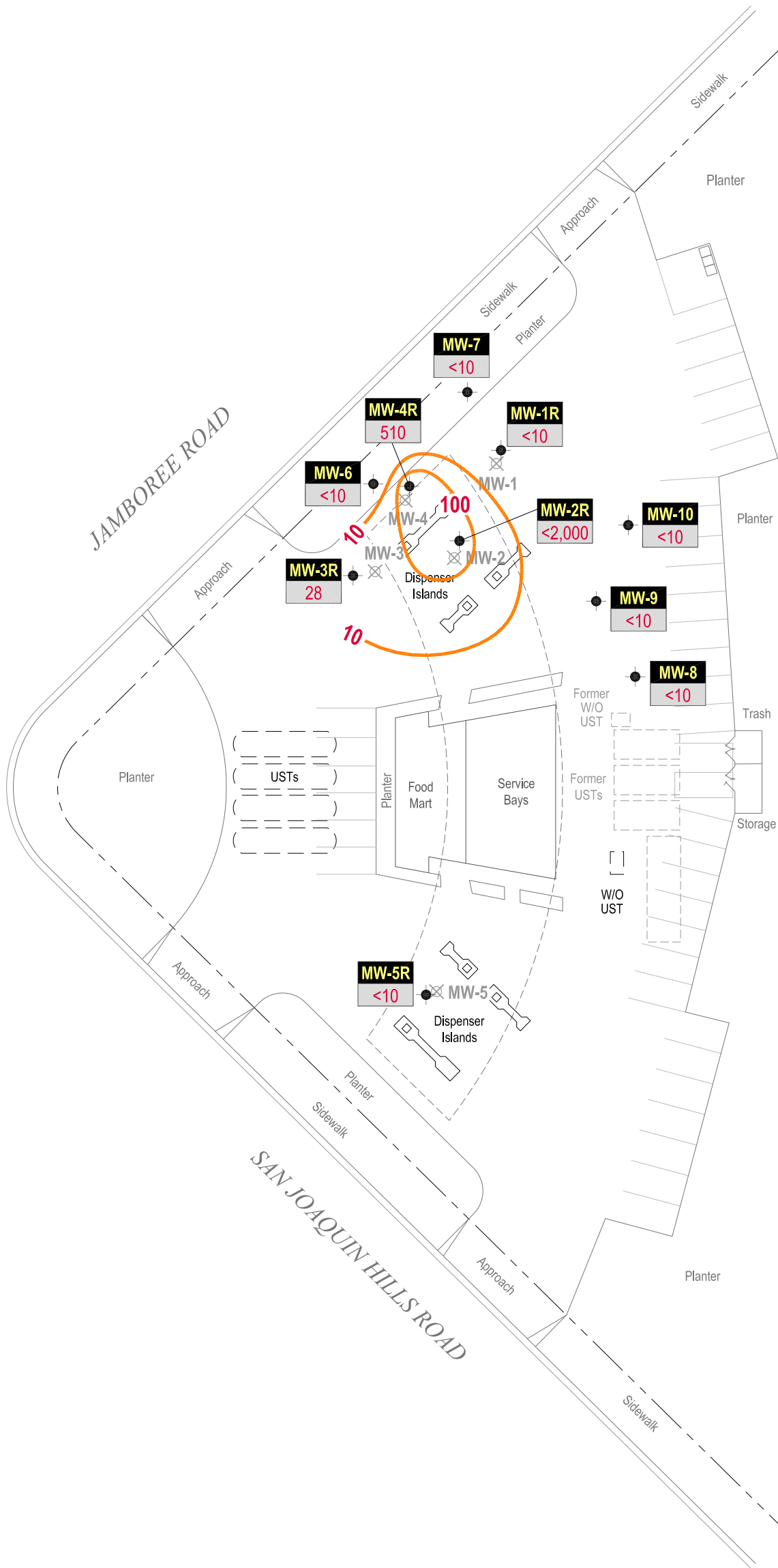


Figure 8
 TBA in Groundwater
 Isoconcentration Map
 December 23, 2013
 Shell-branded Service Station
 1600 Jamboree Road
 Newport Beach, California



TABLES

**WELL CONSTRUCTION DETAILS
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date Installed</i>	<i>Type</i>	<i>Top of Casing (ft MSL)</i>	<i>Well Casing Diameter (inches)</i>	<i>Depth of Well (fbg)</i>	<i>Screen Interval (fbg)</i>	
						<i>Top</i>	<i>Bottom</i>
MW-1	12/23/03	Monitoring Well	116.56	4	35	10	35
MW-2	12/24/03	Monitoring Well	118.05	4	30.4	10.4	30.4
MW-3	12/22/03	Monitoring Well	117.99	4	36	10	36
MW-4	12/22/03	Monitoring Well	117.82	4	35	10	35
MW-5	12/24/03	Monitoring Well	120.72	4	29.9	9.9	29.9
MW-6	10/5/06	Monitoring Well	117.54	4	20	5	20
MW-7	10/5/06	Monitoring Well	115.60	4	20	5	20
MW-8	10/6/06	Monitoring Well	117.40	4	20	5	20
MW-9	8/31/09	Monitoring Well	117.53	2	20	5	20
MW-10	8/31/09	Monitoring Well	115.59	2	20	5	20
MW-1R	9/1/09	Monitoring Well	116.42	2	20	5	20
MW-2R	9/2/09	Monitoring Well	117.96	2	20	5	20
MW-3R	9/1/09	Monitoring Well	117.54	2	20	5	20
MW-4R	9/1/09	Monitoring Well	117.75	2	20	5	20
MW-5R	9/2/09	Monitoring Well	120.76	2	20	5	20

Abbreviations and Notes:

ft MSL = Feet above mean sea level

fbg = Feet below grade

**CURRENT GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>
MW-1R	12/23/2013	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	116.20	10.62	105.58
MW-2R	12/23/2013	3,500	51,000	12,000	4,600	2,900	7,600	<100	<2,000	<100	<100	<100	117.65	9.47	108.18
MW-3R	12/23/2013	<470	59	<0.50	<0.50	<0.50	<1.0	1.1	28	<0.50	<0.50	<0.50	117.15	8.14	109.01
MW-4R	12/23/2013	1,100	8,100	1,600	110	620	730	43	510	<13	<13	<13	117.45	9.99	107.46
MW-5R	12/23/2013	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	120.46	8.92	111.54
MW-6	12/23/2013	520	2,300	0.82	<0.50	64	100	<0.50	<10	0.85	<0.50	<0.50	117.54	10.05	107.49
MW-7	12/23/2013	<480	81	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	115.60	11.30	104.30
MW-8	12/23/2013	<470	70	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	117.40	6.69	110.71
MW-9	12/23/2013	<480	120	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	117.38	7.15	110.23
MW-10	12/23/2013	<470	750	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	115.31	9.00	106.31

Abbreviations:

TPHd = total petroleum hydrocarbons as diesel, analyzed by EPA 8015.

TPHg = total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8260B.

BTEX = benzene, toluene, ethylbenzene, and total xylenes, analyzed by EPA Method 8260B.

MTBE = methyl tertiary butyl ether, analyzed by EPA Method 8260B.

TBA = tertiary butyl alcohol, analyzed by EPA Method 8260B.

DIPE = di-isopropyl ether, analyzed by EPA Method 8260B.

ETBE = ethyl tertiary butyl ether, analyzed by EPA Method 8260B.

TAME = tertiary amyl methyl ether, analyzed by EPA Method 8260B.

TOC = top of casing elevation.

DTW = depth to water.

GWE = groundwater elevation, in feet relative to mean sea level.

µg/L = micrograms per liter.

ft MSL = feet above mean sea level.

ft TOC = feet below TOC.

**CURRENT - ADDITIONAL VOC'S
GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well</i>	<i>Date</i>	<i>n- Butylbenzene (µg/L)</i>	<i>sec- Butylbenzene (µg/L)</i>	<i>tert- Butylbenzene (µg/L)</i>	<i>1,2- Dichlorethane (µg/L)</i>	<i>Isopropylbenzene (µg/L)</i>	<i>p- Isopropyltoluene (µg/L)</i>	<i>Naphthalene (µg/L)</i>	<i>n- Propylbenzene (µg/L)</i>	<i>1,2,4- Trimethylbenzene (µg/L)</i>	<i>1,3,5- Trimethylbenzene (µg/L)</i>
MW-1R	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-2R	12/23/2013	<200	<100	<100	<100	120	<100	300	300	2,200	430
MW-3R	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-4R	12/23/2013	<25	<13	<13	<13	42	<13	45	110	370	28
MW-5R	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-6	12/23/2013	6.2	3.2	0.86	4.9	7.6	1.7	8.7	24	140	6.6
MW-7	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-8	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-9	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
MW-10	12/23/2013	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50

Abbreviations & Notes:

VOCs = Volatile organic compounds

GW = Groundwater

<n = Below detection limit n

µg/L = Micrograms per liter

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-1	01/29/2004	<1000	650	6.3	<1.0	17	3.2	<1.0	<10	<2.0	<2.0	<2.0	--	1.0	--	116.27	10.51	105.76	
MW-1	04/22/2004	<500	320	10	<1.0	4.1	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	1.62	--	116.27	9.50	106.77	
MW-1	07/21/2004	520	220	<0.50	<1.0	2.4	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	1.69	--	116.27	10.05	106.22	
MW-1	10/20/2004	<500	190	0.82	<1.0	3	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	2.14	--	116.27	9.61	106.66	
MW-1	01/27/2005	<500	210	7.1	<1.0	8.1	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	2.57	--	116.27	6.50	109.77	
MW-1	04/15/2005	<500	120	5.0	2.4	4.6	2.9	<1.0	<10	<2.0	<2.0	<2.0	--	1.99	--	116.27	6.37	109.90	
MW-1	07/29/2005	<500	190	1.4	<1.0	3.8	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.79	--	116.27	6.77	109.50	
MW-1	11/04/2005	<940	60	1.3	<1.0	7.3	<1.0	<2.0	<10	<2.0	<2.0	<2.0	--	1.91	--	116.27	6.46	109.81	
MW-1	01/12/2006	<470	100	10	<0.50	14	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.21	--	116.27	7.29	108.98	
MW-1	04/10/2006	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.20	--	116.27	7.44	108.83	
MW-1	07/17/2006	<470	82	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.19	--	116.27	9.05	107.22	
MW-1	10/27/2006	<470	61	<0.50	<0.50	1.6	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	1.52	--	116.27	9.20	107.07	
MW-1	01/22/2007	<490	79	<0.50	<0.50	1.2	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	2.00	--	116.27	9.92	106.35	
MW-1	04/20/2007	<140	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	1.76	--	116.27	9.90	106.37	
MW-1	07/06/2007	<470	<50	<0.50	<0.50	1.6	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	1.56	--	116.27	9.91	106.36	
MW-1	12/07/2007	<470	72	4.0	<0.50	14	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.67	--	116.27	10.16	106.11	
MW-1	03/28/2008	<50	<50	2.0	<1.0	3.9	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.58	--	116.27	9.03	107.24	
MW-1	06/17/2008	<50	<50	0.70	<1.0	1.3	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	1.59	--	116.27	9.33	106.94	
MW-1	09/23/2008	<50	<50	<0.50	<1.0	1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	5.85	--	116.27	10.16	106.11	
MW-1	12/15/2008	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.68	--	116.27	9.96	106.31	
MW-1	03/25/2009	<50	<50	<0.50	<1.0	1.2	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.24	--	116.27	9.92	106.35	
MW-1	06/23/2009	<50	<50	<0.50	<1.0	3.8	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	2.80	--	116.27	10.62	105.65	
MW-1R	09/21/2009	<50	58	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.74	--	116.20	10.46	105.74	
MW-1R	12/22/2009	91	52	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.70	--	116.20	10.69	105.51	
MW-1R	03/18/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.29	--	116.20	9.38	106.82	
MW-1R	06/23/2010	<50	93	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	116.20	11.41	104.79	
MW-1R	09/15/2010	<50	100	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	116.20	11.13	105.07	
MW-1R	12/29/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	116.20	7.69	108.51	
MW-1R	03/18/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.90	--	116.20	9.32	106.88	
MW-1R	06/29/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	116.20	9.90	106.30	
MW-1R	09/30/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	116.20	11.12	105.08	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-1R	12/28/2011	<480	64	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	116.2	11.9	104.3	
MW-1R	03/12/2012	<470	72	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	116.20	11.40	104.80	
MW-1R	06/26/2012	<480	86	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.41	62	116.20	10.55	105.65	
MW-1R	09/24/2012	<500	71	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.76	9	116.20	10.70	105.50	
MW-1R	12/12/2012	<480	110	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.62	-73	116.20	10.99	105.21	
MW-1R	03/20/2013	<480	99	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	116.20	11.32	104.88	
MW-1R	06/26/2013	<470	120	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	2.69	1	116.20	10.98	105.22	
MW-1R	09/26/2013	<490	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	2.40	-72	116.20	10.03	106.17	
MW-1R	12/23/2013	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	116.20	10.62	105.58	
MW-2	01/29/2004	36000	100000	16000	21000	2400	13600	<1.0	890	3.6	<2.0	<2.0	--	--	--	117.63	9.58	108.05	
MW-2	04/22/2004	49000	87000	14000	15000	2100	9600	<200	<2000	<400	<400	<400	--	--	--	117.63	8.82	108.81	
MW-2	07/21/2004	45000	63000	12000	12000	2000	8300	<200	<2000	<400	<400	<400	--	--	--	117.63	9.26	108.37	
MW-2	10/20/2004	61000	68000	14000	15000	2300	9800	110	<1000	<200	<200	<200	--	--	--	117.63	8.45	109.18	
MW-2	01/27/2005	<500	76000	15000	18000	2300	10300	110	<1000	<200	<200	<200	--	--	--	117.63	6.81	110.82	
MW-2	04/15/2005	60000	84000	16000	19000	3000	13000	120	<1000	<200	<200	<200	--	--	--	117.63	8.67	108.96	
MW-2	07/29/2005	33000	85000	14000	16000	2900	11800	<100	<1000	<200	<200	<200	--	--	--	117.63	8.58	109.05	
MW-2	11/04/2005	<940	58000	15000	15000	3200	13000	<500	<2500	<500	<500	<500	--	--	--	117.63	7.75	109.88	
MW-2	01/12/2006	1600	89000	14000	13000	2900	11000	<200	<2000	<200	<200	<200	--	--	--	117.63	8.62	109.01	
MW-2	04/10/2006	<470	76000	14000	13000	3100	13000	<500	<5000	<500	<500	<500	--	--	--	117.63	6.87	110.76	
MW-2	07/17/2006	<470	75000	12000	11000	2900	11000	<400	<4000	<400	<400	<400	--	--	--	117.63	8.36	109.27	
MW-2	10/27/2006	<470	55000	12000	8400	2900	10000	<100	<1000	<100	<100	<100	--	0.71	--	117.63	8.18	109.45	
MW-2	01/22/2007	<490	51000	8900	6600	2300	8300	<100	<1000	<100	<100	<100	--	1.20	--	117.63	9.35	108.28	
MW-2	04/20/2007	260	51000	15000	10000	2800	10000	<500	<5000	<500	<500	<500	--	0.81	--	117.63	9.50	108.13	
MW-2	07/06/2007	300 J	45000	9000	6300	2400	8500	50 J	<1000	<100	<100	<100	--	0.55	--	117.63	9.67	107.96	
MW-2	12/07/2007	<470	47000	13000	7600	2500	8300	<200	<2000	<200	<200	<200	--	0.56	--	117.63	8.92	108.71	
MW-2	03/28/2008	880	91000	13000	9000	2500	9600	<5.0	470	<10	<10	<10	--	0.41	--	117.63	8.00	109.63	
MW-2	06/17/2008	3400	870	120	79	25	96	<1.0	<10	<2.0	<2.0	<2.0	--	0.46	--	117.63	8.20	109.43	
MW-2	09/23/2008	2600	64000	8200	5400	2100	7800	<25	480	<50	<50	<50	--	0.14	--	117.63	8.83	108.80	
MW-2	12/15/2008	440	59000	9800	5300	2000	7000	51	520	<100	<100	<100	<5000	0.59	--	117.63	9.10	108.53	
MW-2	03/25/2009	3600	61000	9100	5500	2200	8500	<50	580	<100	<100	<100	<5000	0.37	--	117.63	8.90	108.73	
MW-2	06/23/2009	3600	62000	8600	4500	2200	7300	<50	590	<100	<100	<100	<5000	0.45	--	117.63	9.49	108.14	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-2R	09/21/2009	3100	79000	13000	15000	1100	8500	220	<2000	<400	<400	<400	<20000	0.85	--	117.65	9.75	107.90	
MW-2R	12/22/2009	6000	86000	17000	11000	1900	8400	<200	<2000	<400	<400	<400	<20000	1.02	--	117.65	9.77	107.88	
MW-2R	03/18/2010	2600	64000	16000	11000	1800	8400	140	1000	<200	<200	<200	<10000	0.36	--	117.65	9.15	108.50	
MW-2R	06/23/2010	4900	67000	15000	7900	2100	8600	170	1100	<200	<200	<200	<10000	--	--	117.65	10.68	106.97	
MW-2R	09/15/2010	2200	96000	17000	11000	2300	8700	140	1400	<200	<200	<200	<10000	--	--	117.65	10.09	107.56	
MW-2R	10/12/2010	4000	67000	16000	14000	2300	8000	130	1100	<200	<200	<200	<10000	--	--	117.65	9.80	107.85	
MW-2R	12/29/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	117.65	--	--	Inaccessible
MW-2R	03/18/2011	2300	63000	16000	14000	2500	7700	<250	<2500	<250	<250	<250	--	0.43	--	117.65	8.88	108.77	
MW-2R	06/29/2011	3900	58000	17000	14000	2900	9900	<200	<2000	<200	<200	<200	--	--	--	117.65	9.41	108.24	
MW-2R	09/30/2011	3600 a	54000	14000	9900	2300	6400	<200	<2000	<200	<200	<200	---	---	--	117.65	10.23	107.42	
MW-2R	12/28/2011	4,400	74,000	13,000	11,000	2,600	9,000	<200	<2,000	<200	<200	<200	---	---	--	117.65	10.38	107.27	
MW-2R	03/12/2012	5,600	60,000	13,000	11,000	2,700	9,400	120	<2,000	<100	<100	<100	---	---	---	117.65	10.20	107.45	
MW-2R	06/26/2012	5,600	88,000	15,000	13,000	3,100	11,000	140	<2,000	<100	<100	<100	---	0.56	-46	117.65	9.48	108.17	
MW-2R	09/24/2012	<9,500	71,000	11,000	10,000	2,900	10,000	110	<1,000	<50	<50	<50	---	0.29	-6	117.65	10.04	107.61	
MW-2R	12/12/2012	4,400	71,000	15,000	11,000	2,900	9,400	100	<2,000	<100	<100	<100	---	0.30	-15	117.65	9.65	108.00	
MW-2R	03/20/2013	5,100	65,000	12,000	10,000	2,800	9,800	<100	<2,000	<100	<100	<100	---	---	---	117.65	10.13	107.52	
MW-2R	06/26/2013	4,400	80,000	14,000	11,000	3,400	12,000	<100	<2,000	<100	<100	<100	---	1.48	-97	117.65	9.55	108.10	
MW-2R	09/26/2013	2,500	58,000	13,000	6,100	2,600	8,500	<100	<2,000	<100	<100	<100	---	1.55	-88	117.65	8.84	108.81	
MW-2R	12/23/2013	3,500	51,000	12,000	4,600	2,900	7,600	<100	<2,000	<100	<100	<100	---	---	---	117.65	9.47	108.18	
MW-3	01/29/2004	<1000	83	0.74	1.3	<1.0	<1.0	65	13	<2.0	<2.0	<2.0	--	0.90	--	117.61	9.52	108.09	
MW-3	04/22/2004	<500	94	<0.50	<1.0	<1.0	<1.0	37	190	<2.0	<2.0	<2.0	--	1.96	--	117.61	9.15	108.46	
MW-3	07/21/2004	<500	93	<0.50	<1.0	<1.0	<1.0	15	250	<2.0	<2.0	<2.0	--	1.38	--	117.61	9.19	108.42	
MW-3	10/20/2004	<500	60	1.2	<1.0	<1.0	<1.0	16	240	<2.0	<2.0	<2.0	--	1.53	--	117.61	8.23	109.38	
MW-3	01/27/2005	58000	64	1.8	<1.0	<1.0	<1.0	11	170	<2.0	<2.0	<2.0	--	1.59	--	117.61	6.24	111.37	
MW-3	04/15/2005	2500	<50	0.58	<1.0	<1.0	<1.0	7.6	110	<2.0	<2.0	<2.0	--	1.98	--	117.61	7.34	110.27	
MW-3	07/29/2005	<500	<50	<0.50	<1.0	<1.0	<1.0	7.8	91	<2.0	<2.0	<2.0	--	0.17	--	117.61	6.73	110.88	
MW-3	11/04/2005	<940	<50	<0.50	<1.0	<1.0	<1.0	6.3	35	<2.0	<2.0	<2.0	--	0.46	--	117.61	6.45	111.16	
MW-3	01/12/2006	<470	<50	<0.50	<0.50	<0.50	<1.0	5.6	24	<1.0	<1.0	<1.0	--	0.22	--	117.61	7.18	110.43	
MW-3	04/10/2006	<470	91	3.5	2.2	2.7	3.9	4.0	38	<1.0	<1.0	<1.0	--	0.88	--	117.61	7.30	110.31	
MW-3	07/17/2006	<470	<50	<0.50	<0.50	<0.50	<1.0	3.4	29	<1.0	<1.0	<1.0	--	0.36	--	117.61	8.46	109.15	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-3	10/27/2006	<470	<50	<0.50	<0.50	<0.50	<1.0	3.7	32	<1.0	<1.0	<1.0	--	1.05	--	117.61	8.24	109.37	
MW-3	01/22/2007	<490	240	40	31	10	37	2.5	10	<1.0	<1.0	<1.0	--	1.90	--	117.61	9.05	108.56	
MW-3	04/20/2007	<140	<50	<0.50	<0.50	<0.50	<1.0	2.9	13	<1.0	<1.0	<1.0	--	1.44	--	117.61	9.15	108.46	
MW-3	07/06/2007	<470	<50	<0.50	<0.50	<0.50	<1.0	1.9	7.8 J	0.29 J	<1.0	<1.0	--	1.55	--	117.61	8.74	108.87	
MW-3	12/07/2007	<480	<50	<0.50	<0.50	<0.50	<1.0	2.7	11	<1.0	<1.0	<1.0	--	0.13	--	117.61	8.58	109.03	
MW-3	03/28/2008	<50	<50	<0.50	<1.0	<1.0	<1.0	2.0	22	<2.0	<2.0	<2.0	--	0.21	--	117.61	8.01	109.60	
MW-3	06/17/2008	<50	<50	<0.50	<1.0	<1.0	<1.0	1.7	19	<2.0	<2.0	<2.0	--	1.76	--	117.61	8.48	109.13	
MW-3	09/23/2008	<50	<50	<0.50	<1.0	<1.0	<1.0	2.1	10	<2.0	<2.0	<2.0	--	0.28	--	117.61	8.78	108.83	
MW-3	12/15/2008	<50	<50	<0.50	<1.0	<1.0	<1.0	1.9	<10	<2.0	<2.0	<2.0	<100	0.26	--	117.61	8.75	108.86	
MW-3	03/25/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	1.4	24	<2.0	<2.0	<2.0	<100	0.19	--	117.61	8.98	108.63	
MW-3	06/23/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	1.5	22	<2.0	<2.0	<2.0	<100	1.09	--	117.61	9.41	108.20	
MW-3R	09/21/2009	70	60	<0.50	<1.0	<1.0	<1.0	6.2	44	<2.0	<2.0	<2.0	<100	0.93	--	117.15	8.36	108.79	
MW-3R	12/22/2009	190	160	<0.50	<1.0	1.0	<1.0	3.2	89	<2.0	<2.0	<2.0	<100	0.81	--	117.15	8.50	108.65	
MW-3R	03/18/2010	110	130	<0.50	<1.0	<1.0	<1.0	2.6	86	<2.0	<2.0	<2.0	<100	0.26	--	117.15	8.08	109.07	
MW-3R	06/23/2010	110	150	<0.50	<1.0	<1.0	<1.0	3.3	110	<2.0	<2.0	<2.0	<100	--	--	117.15	9.21	107.94	
MW-3R	09/15/2010	96	140	<0.50	<1.0	<1.0	<1.0	1.5	140	<2.0	<2.0	<2.0	150	--	--	117.15	8.57	108.58	
MW-3R	10/12/2010	<50	95	<0.50	<1.0	<1.0	<1.0	1.6	39	<2.0	<2.0	<2.0	<100	--	--	117.15	8.51	108.64	
MW-3R	12/29/2010	120	67	<0.50	<1.0	<1.0	<1.0	1.4	39	<2.0	<2.0	<2.0	<100	--	--	117.15	6.31	110.84	
MW-3R	03/18/2011	<470	81	<0.50	<0.50	<0.50	<1.0	2.4	65	<1.0	<1.0	<1.0	--	0.35	--	117.15	7.93	109.22	
MW-3R	06/29/2011	<480	78	<0.50	<0.50	<0.50	<1.0	1.9	82	<1.0	<1.0	<1.0	--	--	--	117.15	8.06	109.09	
MW-3R	09/30/2011	<470	100	<0.50	<0.50	<0.50	<1.0	1.0	140	<1.0	<1.0	<1.0	---	---	--	117.15	8.74	108.41	
MW-3R	12/28/2011	<470	140	<0.50	<0.50	<0.50	<1.0	1	88	<1.0	<1.0	<1.0	---	---	--	117.15	9.47	107.68	
MW-3R	03/12/2012	<470	120	<0.50	<0.50	<0.50	<1.0	1.9	51	<0.50	<0.50	<0.50	---	---	---	117.15	8.71	108.44	
MW-3R	06/26/2012	<490	98	<0.50	<0.50	<0.50	<1.0	1.8	30	<0.50	<0.50	<0.50	---	0.65	80	117.15	8.29	108.86	
MW-3R	09/24/2012	<480	130	<0.50	<0.50	<0.50	<1.0	0.79	52	<0.50	<0.50	<0.50	---	0.50	59	117.15	8.25	108.90	
MW-3R	12/12/2012	<480	100	<0.50	<0.50	<0.50	<1.0	0.88	46	<0.50	<0.50	<0.50	---	0.50	42	117.15	7.86	109.29	
MW-3R	03/20/2013	<480	78	<0.50	<0.50	<0.50	<1.0	0.91	38	<0.50	<0.50	<0.50	---	---	---	117.15	8.70	108.45	
MW-3R	06/26/2013	<470	98	<0.50	<0.50	<0.50	<1.0	1.4	24	<0.50	<0.50	<0.50	---	2.58	30	117.15	8.11	109.04	
MW-3R	09/26/2013	<470	65	<0.50	<0.50	<0.50	<1.0	1.4	27	<0.50	<0.50	<0.50	---	2.08	11	117.15	7.45	109.70	
MW-3R	12/23/2013	<470	59	<0.50	<0.50	<0.50	<1.0	1.1	28	<0.50	<0.50	<0.50	---	---	---	117.15	8.14	109.01	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-4	01/29/2004	8600	27000	2300	530	830	3650	1300	820	<2.0	<2.0	<2.0	--	1.10	--	117.33	10.38	106.95	
MW-4	04/22/2004	19000	29000	2900	860	850	3000	830	650	<400	<400	<400	--	1.40	--	117.33	9.71	107.62	
MW-4	07/21/2004	13000	23000	1700	360	660	2250	790	1200	<50	<50	<50	--	0.89	--	117.33	10.02	107.31	
MW-4	10/20/2004	12000	20000	1500	330	650	2250	380	1300	<20	<20	<20	--	1.83	--	117.33	9.21	108.12	
MW-4	01/27/2005	<500	17000	500	76	220	690	450	2600	<20	<20	<20	--	2.37	--	117.33	7.61	109.72	
MW-4	04/15/2005	8400	9600	600	85	250	710	470	2800	<10	<10	<10	--	1.87	--	117.33	7.03	110.30	
MW-4	07/29/2005	12000	16000	710	110	410	1160	190	2700	<10	<10	<10	--	1.08	--	117.33	8.21	109.12	
MW-4	11/04/2005	<940	9200	250	41	160	420	79	2300	<5.0	<5.0	<5.0	--	1.23	--	117.33	7.23	110.10	
MW-4	01/12/2006	<480	18000	790	110	420	1000	130	1100	<4.0	<4.0	<4.0	--	0.23	--	117.33	8.51	108.82	
MW-4	04/10/2006	<470	12000	800	110	410	1100	92	1100	<10	<10	<10	--	0.58	--	117.33	8.48	108.85	
MW-4	07/17/2006	<470	21000	1500	210	600	1500	130	750	<20	<20	<20	--	0.38	--	117.33	9.21	108.12	
MW-4	10/27/2006	<470	21000	1400	150	620	1500	85	870	<20	<20	<20	--	0.80	--	117.33	9.12	108.21	
MW-4	01/22/2007	<500	18000	1700	230	660	1400	160	950	<10	<10	<10	--	1.10	--	117.33	9.88	107.45	
MW-4	04/20/2007	200	17000	3000	380	1000	2000	130	<1000	<100	<100	<100	--	1.33	--	117.33	9.47	107.86	
MW-4	07/06/2007	230 J	12000	1500	200	620	1270	88	600	<20	<20	<20	--	0.87	--	117.33	9.60	107.73	
MW-4	12/07/2007	<470	8000	1000	160	350	710	51	610	<40	<40	<40	--	0.23	--	117.33	9.77	107.56	
MW-4	03/28/2008	1500	14000	1100	110	340	680	<5.0	540	<10	<10	<10	--	0.66	--	117.33	9.08	108.25	
MW-4	06/17/2008	4900	17000	1200	130	390	780	<10	530	<20	<20	<20	--	1.09	--	117.33	9.22	108.11	
MW-4	09/23/2008	2100	16000	930	100	350	520	37	460	<2.0	<2.0	<2.0	--	3.95	--	117.33	9.85	107.48	
MW-4	12/15/2008	2200	14000	1500	140	440	740	60	480	<20	<20	<20	<1000	0.61	--	117.33	9.60	107.73	
MW-4	03/25/2009	1700	11000	980	110	330	570	<10	500	<20	<20	<20	<1000	0.19	--	117.33	9.87	107.46	
MW-4	06/23/2009	2800	17000	1400	170	530	950	45	510	<20	<20	<20	<1000	0.58	--	117.33	10.43	106.90	
MW-4R	09/21/2009	740	7700	1300	200	270	850	41	230	<20	<20	<20	<1000	0.70	--	117.45	10.20	107.25	
MW-4R	12/22/2009	1500	15000	2400	390	560	1300	63	250	<20	<20	<20	<1000	0.57	--	117.45	10.25	107.20	
MW-4R	03/18/2010	570	5800	1500	220	350	690	40	300	<20	<20	<20	<1000	0.22	--	117.45	9.75	107.70	
MW-4R	06/23/2010	1100	14000	3200	280	760	1200	110	410	<20	<20	<20	<1000	--	--	117.45	11.10	106.35	
MW-4R	09/15/2010	1600	23000	4500	330	920	1200	100	590	<50	<50	<50	<2500	--	--	117.45	10.71	106.74	
MW-4R	10/12/2010	1500	15000	3700	300	740	1200	100	490	<50	<50	<50	<2500	--	--	117.45	10.43	107.02	
MW-4R	12/29/2010	<50	280	5.6	<1.0	3.0	6.6	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.45	7.48	109.97	
MW-4R	03/18/2011	570	3800	840	110	230	450	30	350	<10	<10	<10	--	0.51	--	117.45	9.41	108.04	
MW-4R	06/29/2011	1100	12000	3000	310	890	1800	68	450	<10	<10	<10	--	--	--	117.45	10.00	107.45	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-4R	09/30/2011	<1400 b	11000	2600	280	800	1200	66	<500	<50	<50	<50	---	---	--	117.45	10.62	106.83	
MW-4R	12/28/2011	1,100	8,200	2,000	110	450	450	72	<500	<50	<50	<50	---	---	--	117.45	11.39	106.06	
MW-4R	03/12/2012	1,700	13,000	2,800	290	860	1,700	71	440	<13	<13	<13	---	---	---	117.45	10.70	106.75	
MW-4R	06/26/2012	1,400	16,000	3,200	250	940	1,400	74	<500	<25	<25	<25	---	0.17	-91	117.45	10.24	107.21	
MW-4R	09/24/2012	1,400	14,000	2,700	280	780	1,400	77	510	<5.0	<5.0	<5.0	---	0.29	-96	117.45	10.34	107.11	
MW-4R	12/12/2012	1,100	12,000	2,700	230	780	1,300	80	510	<13	<13	<13	---	0.36	-124	117.45	10.31	107.14	
MW-4R	03/20/2013	1,300	9,300	2,100	140	620	790	56	<500	<25	<25	<25	---	---	---	117.45	10.58	106.87	
MW-4R	06/26/2013	1,000	8,100	1,900	85	540	500	63	<500	<25	<25	<25	---	0.72	-121	117.45	10.31	107.14	
MW-4R	09/26/2013	540	9,500	1,600	160	640	1,100	27	460	<13	<13	<13	---	1.02	-116	117.45	9.48	107.97	
MW-4R	12/23/2013	1,100	8,100	1,600	110	620	730	43	510	<13	<13	<13	---	---	---	117.45	9.99	107.46	
MW-5	01/29/2004	<1000	430	4.9	3.0	5.5	19.6	150	95	<2.0	<2.0	<2.0	--	0.5	--	120.31	9.31	111.00	
MW-5	04/22/2004	<500	130	3.1	1.1	5.1	4.1	80	80	<2.0	<2.0	<2.0	--	0.47	--	120.31	9.18	111.13	
MW-5	07/21/2004	<500	130	1.8	1.4	2.7	3.5	56	35	<2.0	<2.0	<2.0	--	0.68	--	120.31	8.34	111.97	
MW-5	10/20/2004	<500	89	1.9	<1.0	6.1	2.9	100	160	<2.0	<2.0	<2.0	--	0.34	--	120.31	7.97	112.34	
MW-5	01/27/2005	10000	620	8.7	3.9	50.0	15.7	380	440	<2.0	<2.0	<2.0	--	0.76	--	120.31	6.21	114.10	
MW-5	04/15/2005	<500	480	8.4	4.4	47.0	23.5	260	230	<4.0	<4.0	<4.0	--	0.71	--	120.31	6.81	113.50	
MW-5	07/29/2005	510	820	14	4.3	32.0	27.5	380	600	<4.0	<4.0	<4.0	--	0.16	--	120.31	6.37	113.94	
MW-5	11/04/2005	<940	610	10	<4.0	18.0	11	300	540	<8.0	<8.0	<8.0	--	0.33	--	120.31	5.98	114.33	
MW-5	01/12/2006	<470	790	4.7	<1.0	13.0	9.8	160	310	<2.0	<2.0	<2.0	--	0.21	--	120.31	7.83	112.48	
MW-5	04/10/2006	<470	580	8.4	3.0	21	27	170	340	<2.0	<2.0	<2.0	--	0.15	--	120.31	7.30	113.01	
MW-5	07/17/2006	<470	320	2.3	1.1	14	13	20	270	<1.0	<1.0	<1.0	--	0.17	--	120.31	8.53	111.78	
MW-5	10/27/2006	<470	560	1.7	0.55	24	27	11	250	<1.0	<1.0	<1.0	--	0.18	--	120.31	8.30	112.01	
MW-5	01/22/2007	<500	300	0.83	<0.50	6.5	2.6	4.0	130	<1.0	<1.0	<1.0	--	0.60	--	120.31	9.03	111.28	
MW-5	04/20/2007	<140	59	0.58	<0.50	4.1	2.6	2.9	62	<1.0	<1.0	<1.0	--	1.23	--	120.31	9.07	111.24	
MW-5	07/06/2007	<470	120	0.56	<0.50	6.3	4.51 J	1.5	46	<1.0	<1.0	<1.0	--	0.39	--	120.31	8.63	111.68	
MW-5	12/07/2007	<470	<50	<0.50	<0.50	0.96	<1.0	1.0	42	<1.0	<1.0	<1.0	--	0.17	--	120.31	8.35	111.96	
MW-5	03/28/2008	88	190	0.77	<1.0	4.2	2.0	<1.0	190	<2.0	<2.0	<2.0	--	0.45	--	120.31	7.81	112.50	
MW-5	06/17/2008	130	150	0.79	<1.0	5.3	2.9	<1.0	150	<2.0	<2.0	<2.0	--	0.12	--	120.31	8.04	112.27	
MW-5	09/23/2008	<50	58	<0.50	<1.0	<1.0	<1.0	<1.0	35	<2.0	<2.0	<2.0	--	0.20	--	120.31	8.40	111.91	
MW-5	12/15/2008	<50	61	0.52	<1.0	2.6	<1.0	1.6	33	<2.0	<2.0	<2.0	<100	0.24	--	120.31	8.46	111.85	
MW-5	03/25/2009	<50	68	<0.50	<1.0	2.0	<1.0	2.0	210	<2.0	<2.0	<2.0	<100	0.29	--	120.31	8.76	111.55	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-5	06/23/2009	51	<50	<0.50	<1.0	<1.0	<1.0	1.2	59	<2.0	<2.0	<2.0	<100	0.15	--	120.31	9.28	111.03	
MW-5R	09/21/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.41	--	120.46	9.11	111.35	
MW-5R	12/22/2009	61	78	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.37	--	120.46	9.46	111.00	
MW-5R	03/18/2010	<50	77	<0.50	<1.0	<1.0	<1.0	<1.0	11	<2.0	<2.0	<2.0	<100	0.26	--	120.46	8.95	111.51	
MW-5R	06/23/2010	<50	91	0.64	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	120.46	10.10	110.36	
MW-5R	09/15/2010	<50	58	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	120.46	9.11	111.35	
MW-5R	12/29/2010	<50	79	<0.50	<1.0	<1.0	<1.0	<1.0	12	<2.0	<2.0	<2.0	<100	--	--	120.46	7.34	113.12	
MW-5R	03/18/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.46	--	120.46	8.84	111.62	
MW-5R	06/29/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	120.46	8.67	111.79	
MW-5R	09/30/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	120.46	9.12	111.34	
MW-5R	12/28/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	120.46	9.43	111.03	
MW-5R	03/12/2012	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	120.46	9.46	111.00	
MW-5R	06/26/2012	<520	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.21	103	120.46	8.79	111.67	
MW-5R	09/24/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	120.46	8.71	111.75	
MW-5R	12/12/2012	<480	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.39	115	120.46	8.72	111.74	
MW-5R	03/20/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	120.46	8.47	111.99	
MW-5R	06/26/2013	<510	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	1.55	186	120.46	8.57	111.89	
MW-5R	09/26/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	120.46	7.75	112.71	
MW-5R	12/23/2013	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	120.46	8.92	111.54	
MW-6	10/20/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	117.54	9.75	107.79	
MW-6	10/27/2006	<470	7200	51	36	120	770	8.9	120	3.1	<1.0	<1.0	--	0.92	--	117.54	9.50	108.04	
MW-6	01/22/2007	<480	9700	59	42	200	1500	6.8	<50	<5.0	<5.0	<5.0	--	1.30	--	117.54	10.18	107.36	
MW-6	04/20/2007	160	5500	86	31	170	1200	<10	<100	<10	<10	<10	--	0.55	--	117.54	9.90	107.64	
MW-6	07/06/2007	120 J	3200	5.0	8.3	76	332	7.5	23	3.3	<1.0	<1.0	--	1.24	--	117.54	9.84	107.70	
MW-6	12/07/2007	<470	6800	15	7.2	100	730	<10	<100	<10	<10	<10	--	0.76	--	117.54	9.89	107.65	
MW-6	03/28/2008	1700	8800	20	14	90	990	<1.0	<10	2.2	<2.0	<2.0	--	0.83	--	117.54	9.15	108.39	
MW-6	06/17/2008	950	3600	21	<5.0	39	324	<5.0	66	<10	<10	<10	--	0.31	--	117.54	9.35	108.19	
MW-6	09/23/2008	910	4800	11	2.3	38	313	2.2	21	<2.0	<2.0	<2.0	--	0.71	--	117.54	10.07	107.47	
MW-6	12/15/2008	1300	3300	1.6	3.2	31	272	3.2	<20	<4.0	<4.0	<4.0	<200	0.10	--	117.54	9.90	107.64	
MW-6	03/25/2009	300	2900	18	5.5	26	200	<1.0	29	<2.0	<2.0	<2.0	<100	0.31	--	117.54	10.13	107.41	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-6	06/23/2009	450	2800	2.3	2.1	24	210	3.9	17	<2.0	<2.0	<2.0	<100	0.67	--	117.54	10.49	107.05	
MW-6	09/21/2009	1000	5000	3.9	<5.0	44	400	<5.0	<50	<10	<10	<10	<500	0.57	--	117.54	10.28	107.26	
MW-6	12/22/2009	820	4000	6.4	<2.0	31	170	<2.0	<20	<4.0	<4.0	<4.0	<200	0.69	--	117.54	10.27	107.27	
MW-6	03/18/2010	450	2300	7.1	1.2	14	84	<1.0	24	<2.0	<2.0	<2.0	<100	0.23	--	117.54	9.71	107.83	
MW-6	06/23/2010	610	2400	<0.50	<1.0	9.6	93	<1.0	52	<2.0	<2.0	<2.0	<100	--	--	117.54	11.03	106.51	
MW-6	09/15/2010	320	3000	<0.50	<1.0	7.1	70	<1.0	32	<2.0	<2.0	<2.0	<100	--	--	117.54	10.49	107.05	
MW-6	12/29/2010	380	730	2.7	<1.0	17	48	<1.0	16	<2.0	<2.0	<2.0	<100	--	--	117.54	8.52	109.02	
MW-6	03/18/2011	1200	2600	11	<2.0	73	150	<4.0	<40	<4.0	<4.0	<4.0	--	0.41	--	117.54	9.53	108.01	
MW-6	06/29/2011	1200	7600	3.4	3.0	96	560	<2.5	36	<2.5	<2.5	<2.5	--	--	--	117.54	10.06	107.48	
MW-6	09/30/2011	680	2500	<5.0	<5.0	44	97	<10	<100	<10	<10	<10	---	---	--	117.54	10.65	106.89	
MW-6	12/28/2011	1,600	4,500	<2.5	<2.5	39	210	<5.0	<50	<5.0	<5.0	<5.0	---	---	--	117.54	11.49	106.05	
MW-6	03/12/2012	620	1,800	0.72	0.90	17	62	1.7	<10	1.1	<0.50	<0.50	---	---	---	117.54	10.22	107.32	
MW-6	06/26/2012	<480	1,300	<2.5	<2.5	15	35	<2.5	<50	<2.5	<2.5	<2.5	---	0.42	8	117.54	10.27	107.27	
MW-6	09/24/2012	1,900	3,900	<2.5	<2.5	40	140	<2.5	<50	<2.5	<2.5	<2.5	---	0.38	-18	117.54	10.29	107.25	
MW-6	12/12/2012	500	1,300	<2.0	<2.0	11	17	<2.0	<40	<2.0	<2.0	<2.0	---	0.73	-95	117.54	10.30	107.24	
MW-6	03/20/2013	7,300	18,000	7.6	6.2	260	990	<2.5	<50	<2.5	<2.5	<2.5	---	---	---	117.54	10.62	106.92	
MW-6	06/26/2013	1,100	4,400	<1.0	<1.0	9.7	19	<1.0	<20	1.3	<1.0	<1.0	---	2.01	-31	117.54	10.23	107.31	
MW-6	09/26/2013	<470	3,400	1.1	0.65	66	110	<0.50	<10	0.74	<0.50	<0.50	---	1.68	-90	117.54	9.53	108.01	
MW-6	12/23/2013	520	2,300	0.82	<0.50	64	100	<0.50	<10	0.85	<0.50	<0.50	---	---	---	117.54	10.05	107.49	
MW-7	10/20/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	115.60	9.72	105.88	
MW-7	10/27/2006	<470	170	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.51	--	115.60	10.04	105.56	
MW-7	01/22/2007	<490	260	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	1.80	--	115.60	10.63	104.97	
MW-7	04/20/2007	<140	130	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	2.48	--	115.60	10.30	105.30	
MW-7	07/06/2007	<470	140	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.26	--	115.60	10.54	105.06	
MW-7	12/07/2007	<470	110	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.17	--	115.60	10.78	104.82	
MW-7	03/28/2008	<50	120	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.78	--	115.60	9.87	105.73	
MW-7	06/17/2008	<50	150	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.52	--	115.60	10.41	105.19	
MW-7	09/23/2008	<50	190	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	1.59	--	115.60	10.83	104.77	
MW-7	12/15/2008	<50	110	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.48	--	115.60	10.65	104.95	
MW-7	03/25/2009	<50	120	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	1.81	--	115.60	10.67	104.93	
MW-7	06/23/2009	<50	140	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	2.67	--	115.60	11.33	104.27	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-7	09/21/2009	<50	100	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	2.41	--	115.60	11.00	104.60	
MW-7	12/22/2009	65	65	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	1.67	--	115.60	11.18	104.42	
MW-7	03/18/2010	<50	92	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	2.47	--	115.60	9.87	105.73	
MW-7	06/23/2010	<50	150	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.60	11.76	103.84	
MW-7	09/15/2010	<50	130	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.60	11.52	104.08	
MW-7	12/29/2010	<50	59	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.60	8.09	107.51	
MW-7	03/18/2011	<470	78	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	2.42	--	115.60	9.85	105.75	
MW-7	06/29/2011	<480	66	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	115.60	10.41	105.19	
MW-7	09/30/2011	<470	72	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	115.60	11.26	104.34	
MW-7	12/28/2011	<470	69	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	115.6	12.35	103.25	
MW-7	03/12/2012	<470	130	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.60	11.77	103.83	
MW-7	06/26/2012	<500	90	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.47	18	115.60	11.13	104.47	
MW-7	09/24/2012	<480	91	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.67	-5	115.60	11.06	104.54	
MW-7	12/12/2012	<470	68	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	1.74	-32	115.60	11.47	104.13	
MW-7	03/20/2013	<470	83	1.4	<0.50	0.71	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.60	11.76	103.84	
MW-7	06/26/2013	<470	120	1.9	2.1	0.65	2.4	<0.50	<10	<0.50	<0.50	<0.50	---	1.02	70	115.60	11.91	103.69	
MW-7	09/26/2013	<470	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	1.07	-54	115.60	10.66	104.94	
MW-7	12/23/2013	<480	81	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.60	11.30	104.30	
MW-8	10/20/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	117.40	5.37	112.03	
MW-8	10/27/2006	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.60	--	117.40	5.65	111.75	
MW-8	01/22/2007	<490	69	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	2.10	--	117.40	6.48	110.92	
MW-8	04/20/2007	<140	110	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.83	--	117.40	6.47	110.93	
MW-8	07/06/2007	<470	56	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.32	--	117.40	6.44	110.96	
MW-8	12/07/2007	<470	70	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.57	--	117.40	6.50	110.90	
MW-8	03/28/2008	<50	110	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.70	--	117.40	5.68	111.72	
MW-8	06/17/2008	<50	260	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.48	--	117.40	6.00	111.40	
MW-8	09/23/2008	<50	550	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	--	0.60	--	117.40	6.53	110.87	
MW-8	12/15/2008	<50	270	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.24	--	117.40	6.38	111.02	
MW-8	03/25/2009	<50	160	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	1.29	--	117.40	6.69	110.71	
MW-8	06/23/2009	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.71	--	117.40	7.16	110.24	
MW-8	09/21/2009	<50	73	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.52	--	117.40	6.84	110.56	

TABLE 3

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
MW-8	12/22/2009	64	85	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.66	--	117.40	7.16	110.24	
MW-8	03/18/2010	<50	76	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	0.31	--	117.40	6.50	110.90	
MW-8	06/23/2010	<50	110	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.40	7.74	109.66	
MW-8	09/15/2010	<50	170	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.40	7.25	110.15	
MW-8	12/29/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	117.40	--	--	Inaccessible
MW-8	03/18/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.70	--	117.40	6.34	111.06	
MW-8	06/29/2011	<470	100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	117.40	6.46	110.94	
MW-8	09/30/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	117.40	7.12	110.28	
MW-8	12/28/2011	<480	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	117.4	7.24	110.16	
MW-8	03/12/2012	<470	170	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	117.40	7.33	110.07	
MW-8	06/26/2012	<480	51	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.26	113	117.40	6.65	110.75	
MW-8	09/24/2012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	117.40	6.50	110.90	
MW-8	12/12/2012	<470	120	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.45	126	117.40	6.71	110.69	
MW-8	03/20/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	117.40	7.71	109.69	
MW-8	06/26/2013	<490	180	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	1.03	133	117.40	6.67	110.73	
MW-8	09/26/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	117.40	5.97	111.43	
MW-8	12/23/2013	<470	70	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	117.40	6.69	110.71	
MW-9	09/21/2009	2000	20000	720	2300	260	2900	<10	<100	<20	<20	<20	<1000	0.92	--	117.38	7.50	109.88	
MW-9	12/22/2009	1000	5900	190	120	210	220	1.5	<10	<2.0	<2.0	<2.0	<100	1.17	--	117.38	7.82	109.56	
MW-9	03/18/2010	270	1900	190	110	140	120	<1.0	<10	<2.0	<2.0	<2.0	<100	0.36	--	117.38	7.04	110.34	
MW-9	06/23/2010	210	1300	90	4.4	51	8.4	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.38	8.32	109.06	
MW-9	09/15/2010	<50	590	90	<1.0	4.2	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.38	7.73	109.65	
MW-9	12/29/2010	57	240	76	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	117.38	5.54	111.84	
MW-9	03/18/2011	<470	230	29	<0.50	0.62	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.36	--	117.38	6.91	110.47	
MW-9	06/29/2011	<480	450	2.0	<0.50	2.2	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	117.38	7.02	110.36	
MW-9	09/30/2011	<470	120	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	117.38	7.82	109.56	
MW-9	12/28/2011	<470	760	2.8	<0.50	1.7	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	117.38	7.85	109.53	
MW-9	03/12/2012	<470	240	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	117.38	7.93	109.45	
MW-9	06/26/2012	<520	250	<0.50	<0.50	<0.50	<1.0	0.56	<10	<0.50	<0.50	<0.50	---	0.49	5	117.38	7.47	109.91	
MW-9	09/24/2012	<500	150	<0.50	<0.50	<0.50	<1.0	0.55	<10	<0.50	<0.50	<0.50	---	0.40	83	117.38	7.20	110.18	
MW-9	12/12/2012	<500	230	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.69	-10	117.38	6.81	110.57	

**HISTORICAL GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>	
MW-9	03/20/2013	<490	240	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	---	---	---	117.38	7.80	109.58	
MW-9	06/26/2013	<490	180	<0.50	<0.50	<0.50	<1.0	0.50	<10	<0.50	<0.50	<0.50	<0.50	---	3.25	-75	117.38	7.31	110.07	
MW-9	09/26/2013	<470	180	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	---	2.30	41	117.38	6.59	110.79	
MW-9	12/23/2013	<480	120	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	---	---	---	117.38	7.15	110.23	
MW-10	09/21/2009	11000	49000	<1200	<25	1300	3100	<25	<250	<50	<50	<50	<2500	0.46	--	115.31	8.80	106.51		
MW-10	12/22/2009	1300	4600	<1.0	<2.0	25	110	<2.0	<20	<4.0	<4.0	<4.0	<200	0.33	--	115.31	9.02	106.29		
MW-10	03/18/2010	840	8700	<2.5	<5.0	88	120	<5.0	<50	<10	<10	<10	<500	0.28	--	115.31	7.78	107.53		
MW-10	06/23/2010	830	6300	<0.50	<1.0	74	85	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.31	9.76	105.55		
MW-10	09/15/2010	330	520	<0.50	<1.0	1.4	1.5	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.31	9.92	105.39		
MW-10	12/29/2010	110	560	<0.50	<1.0	2.7	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<100	--	--	115.31	6.08	109.23		
MW-10	03/18/2011	<470	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	0.46	--	115.31	7.45	107.86		
MW-10	06/29/2011	<480	770	<0.50	<0.50	1.2	<1.0	<1.0	<10	<1.0	<1.0	<1.0	--	--	--	115.31	7.98	107.33		
MW-10	09/30/2011	<470	1100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	115.31	9.38	105.93		
MW-10	12/28/2011	<470	2,200	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	---	---	--	115.31	9.58	105.73		
MW-10	03/12/2012	<470	390	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.31	9.72	105.59		
MW-10	06/26/2012	<490	91	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.50	51	115.31	8.70	106.61		
MW-10	09/24/2012	<480	520	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	0.90	29	115.31	8.58	106.73		
MW-10	12/12/2012	<480	66	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	1.21	10	115.31	9.29	106.02		
MW-10	03/20/2013	<470	460	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.31	9.69	105.62		
MW-10	06/26/2013	<500	540	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	2.81	29	115.31	9.27	106.04		
MW-10	09/26/2013	<470	420	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	2.80	83	115.31	8.32	106.99		
MW-10	12/23/2013	<470	750	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	---	---	---	115.31	9.00	106.31		

Abbreviations:

TPHd = total petroleum hydrocarbons as diesel, analyzed by EPA 8015.

TPHg = total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8260B; prior to 2008, analyzed by EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, and total xylenes, analyzed by EPA Method 8260B.

MTBE = methyl tertiary butyl ether, analyzed by EPA Method 8260B.

TBA = tertiary butyl alcohol, analyzed by EPA Method 8260B.

DIPE = di-isopropyl ether, analyzed by EPA Method 8260B.

ETBE = ethyl tertiary butyl ether, analyzed by EPA Method 8260B.

HISTORICAL GROUNDWATER DATA
 SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>ETH (µg/L)</i>	<i>DO (ppm)</i>	<i>ORP (mV)</i>	<i>TOC (ft MSL)</i>	<i>DTW (ft TOC)</i>	<i>GWE (ft MSL)</i>	<i>Comments</i>
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TAME = tertiary amyl methyl ether, analyzed by EPA Method 8260B.

ETH = ethanol analyzed by EPA Method 8260B.

DO = dissolved oxygen.

ORP = oxygen reduction potential.

TOC = top of casing elevation.

DTW = depth to water.

GWE = groundwater elevation, in feet relative to mean sea level.

µg/L = micrograms per liter.

ppm = parts per million.

mV = millivolts.

ft MSL = feet above mean sea level.

ft TOC = feet below TOC.

--- = not applicable.

Notes:

J = analyte detected at a level less than the reporting limit (RL) and greater than or equal to the method detection limit (MDL).

a = Z3: The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

b = RL5: Reporting limit raised due to high single peak analyte.

MNA PARAMETERS
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA

WELL ID	Date	Methane (µg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Ferrous Iron Fe ²⁺ (mg/L)	DO (mg/L)	ORP (mV)
MW-1R	06/26/12	<0.99	<1.1	1,800	0.0 ^F	0.41	62
MW-1R	09/24/12	<0.99	1.2	1,800	NS	0.76	9
MW-1R	12/12/12	<0.99	<1.1	1,700	<0.1 ^L	0.62	-73
MW-1R	03/20/13	<0.99	<1.1	1,800	<0.1 ^L	2.87	2
MW-1R	06/26/13	<0.99	1.1	1,700	<0.1 ^L	2.69	1
MW-1R	09/26/13	<0.99	1.2	1,600	<0.1 ^L	2.40	72
MW-1R	12/23/13	<0.99	<1.1	1,800	<0.1^L	2.85	9
MW-2R	06/26/12	370	<1.1	12	0.0 ^F	0.56	-46
MW-2R	09/24/12	280	<1.1	29	NS	0.29	-6
MW-2R	12/12/12	450	<1.1	6.5	1.0 ^L	0.30	-15
MW-2R	03/20/13	310	<1.1	10	20.0 ^L	1.34	-74
MW-2R	06/26/13	380	<1.1	9.5	14.0 ^L	1.48	-97
MW-2R	09/26/13	720	<1.1	20	0.6 ^L	1.55	-88
MW-2R	12/23/13	1,000	<1.1	<5.0	10^L	1.51	-101
MW-3R	06/26/12	38	<0.55	490	0.8 ^F	0.65	80
MW-3R	09/24/12	35	<0.55	520	NS	0.50	59
MW-3R	12/12/12	35	<0.55	560	<0.1 ^L	0.50	42
MW-3R	03/20/13	18	<0.55	590	<0.1 ^L	2.79	28
MW-3R	06/26/13	18	<0.55	560	<0.1 ^L	2.58	30
MW-3R	09/26/13	35	<0.55	580	<0.1 ^L	2.08	11
MW-3R	12/23/13	4.9	<0.55	620	<0.1^L	1.37	132
MW-4R	06/26/12	1,200	<1.1	16	2.0 ^F	0.17	-91
MW-4R	09/24/12	750	<1.1	12	NS	0.29	-96
MW-4R	12/12/12	1,600	<1.1	9.4	7.0 ^L	0.36	-124
MW-4R	03/20/13	1,300	<1.1	21	15.0 ^L	1.82	-32
MW-4R	06/26/13	1,400	<1.1	16	16.0 ^L	0.72	-121
MW-4R	09/26/13	2,200	<1.1	20	2.0 ^L	1.02	-116
MW-4R	12/23/13	1,500	<1.1	10	10^L	1.48	-124
MW-5R	06/26/12	<0.99	1.5	1,100	0.0 ^F	0.21	103
MW-5R	09/24/12	NS	NS	NS	NS	NS	NS
MW-5R	12/12/12	<0.99	<1.1	1,400	<0.1 ^L	0.39	115
MW-5R	03/20/13	NS	NS	NS	NS	NS	NS
MW-5R	06/26/13	<0.99	0.87	1,100	<0.1 ^L	1.55	186
MW-5R	12/23/13	<0.99	<1.1	1,400	<0.1^L	1.36	185
MW-6	06/26/12	420	<1.1	520	1.8 ^F	0.42	8

**MNA PARAMETERS
SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA**

WELL ID	Date	Methane (µg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Ferrous Iron Fe²⁺ (mg/L)	DO (mg/L)	ORP (mV)
MW-6	09/24/12	980	<1.1	720	NS	0.38	-18
MW-6	12/12/12	800	<1.1	700	<0.1 ^L	0.73	-95
MW-6	03/20/13	700	<1.1	700	1.0 ^L	1.81	-24
MW-6	06/26/13	500	<1.1	780	8.0 ^L	2.01	-31
MW-6	09/26/13	740	<1.1	740	0.6 ^L	1.68	-90
MW-6	12/23/13	910	<1.1	780	5.0^L	1.73	-69
MW-7	06/26/12	<0.99	1.8	1,600	0.0 ^F	0.47	18
MW-7	09/24/12	<0.99	<1.1	1,700	NS	0.67	-5
MW-7	12/12/12	<0.99	<2.2	1,600	<0.1 ^L	1.74	-32
MW-7	03/20/13	7.1	<1.1	1,700	2.0 ^L	3.30	-42
MW-7	06/26/13	<0.99	<1.1	1,600	3.0 ^L	1.02	70
MW-7	09/26/13	<0.99	<1.1	1,500	<0.1 ^L	1.07	-54
MW-7	12/23/13	<0.99	<1.1	1,600	0.2^L	2.10	-65
MW-8	06/26/12	<0.99	2.9	1,600	0.0 ^F	0.26	113
MW-8	09/24/12	NS	NS	NS	NS	NS	NS
MW-8	12/12/12	<0.99	1.4	1,600	<0.1 ^L	0.45	126
MW-8	03/20/13	NS	NS	NS	NS	NS	NS
MW-8	06/26/13	<0.99	2.5	1,700	<0.1 ^L	1.03	133
MW-8	12/23/13	<0.99	2	1,700	<0.1^L	1.56	52
MW-9	06/26/12	9.8	<1.1	1,500	2.4 ^F	0.49	5
MW-9	09/24/12	26	<1.1	1,700	NS	0.40	83
MW-9	12/12/12	17	<1.1	1,600	<0.1 ^L	0.69	-10
MW-9	03/20/13	4.9	<1.1	1,700	<0.1 ^L	0.83	-15
MW-9	06/26/13	19	<1.1	1,600	0.6 ^L	3.25	-75
MW-9	09/26/13	15	<1.1	1,600	<0.1 ^L	2.30	41
MW-9	12/23/13	16	<1.1	1,600	0.1^L	2.07	14
MW-10	06/26/12	<0.99	2.4	1,700	1.4 ^F	0.50	51
MW-10	09/24/12	<0.99	2.7	1,800	NS	0.90	29
MW-10	12/12/12	<0.99	<2.2	1,600	<0.1 ^L	1.21	10
MW-10	03/20/13	<0.99	1.7	1,800	<0.1 ^L	1.78	1
MW-10	06/26/13	<0.99	2.1	1,700	<0.1 ^L	2.81	29
MW-10	09/26/13	<0.99	2.2	1,600	<0.1 ^L	2.80	83
MW-10	12/23/13	<0.99	2	1,700	<0.1^L	2.24	35

Notes:

Sulfate and Nitrate analyzed using EPA Method 300.0

MNA PARAMETERS
 SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA

<i>WELL</i>		<i>Methane</i>	<i>Nitrate</i>	<i>Sulfate</i>	<i>Ferrous Iron</i>	<i>DO</i>	<i>ORP</i>
<i>ID</i>	<i>Date</i>	<i>(µg/L)</i>	<i>as N</i>	<i>(mg/L)</i>	<i>Fe²⁺</i>	<i>(mg/L)</i>	<i>(mV)</i>
			<i>(mg/L)</i>	<i>(mg/L)</i>	<i>(mg/L)</i>	<i>(mg/L)</i>	

Methane analyzed using RSK-175

Ferrous Iron = Measured in the field (F) or lab (L) as noted

DO = Dissolved Oxygen

ORP = Oxygen Reduction Potential

µg/L = Micrograms per liter

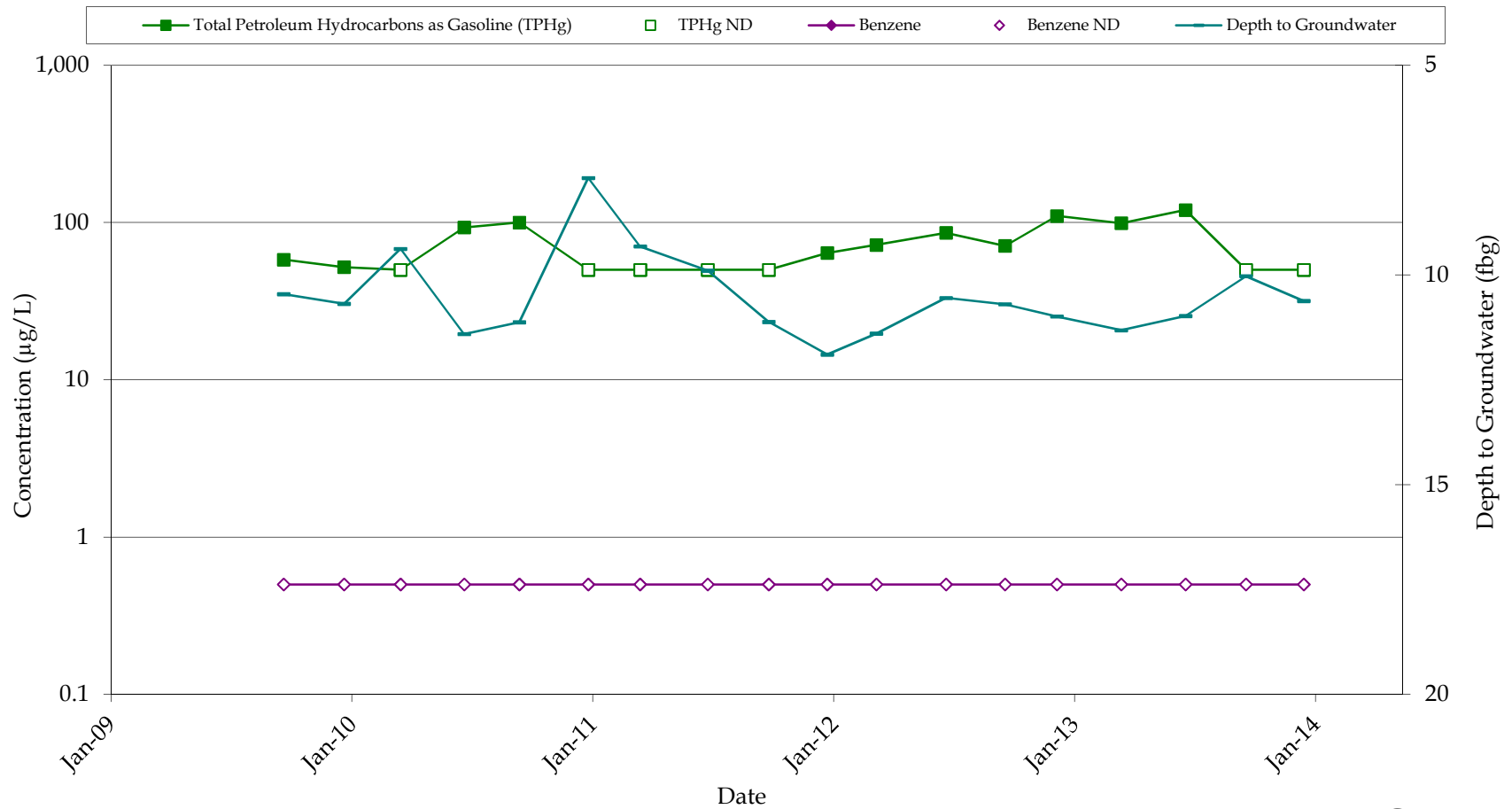
mg/L = Milligrams per liter

mV = millivolts

<n = Below detection limit "n"

NS = Not sampled this quarter

GRAPHS



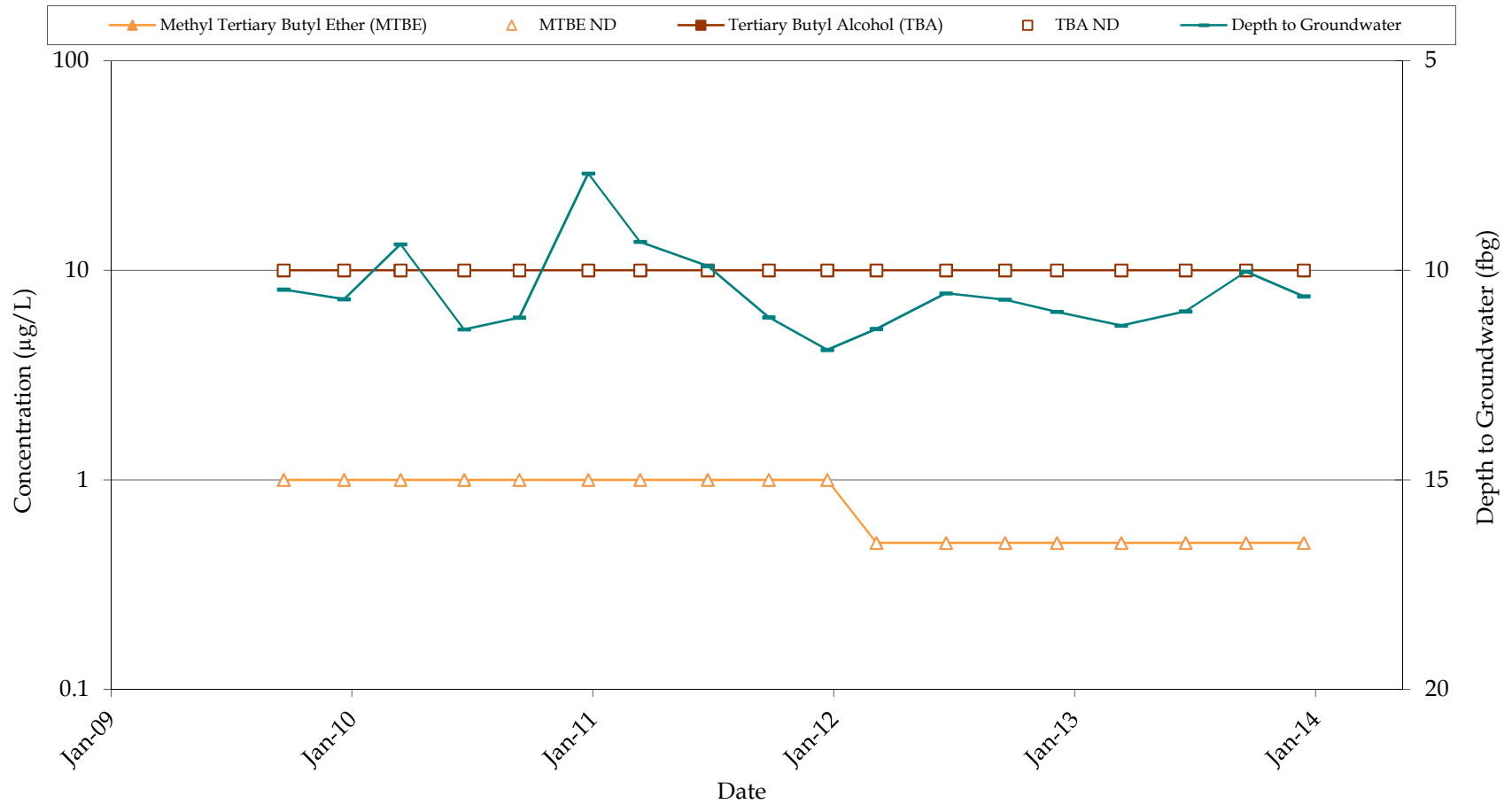
**GRAPH
1**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-1R: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



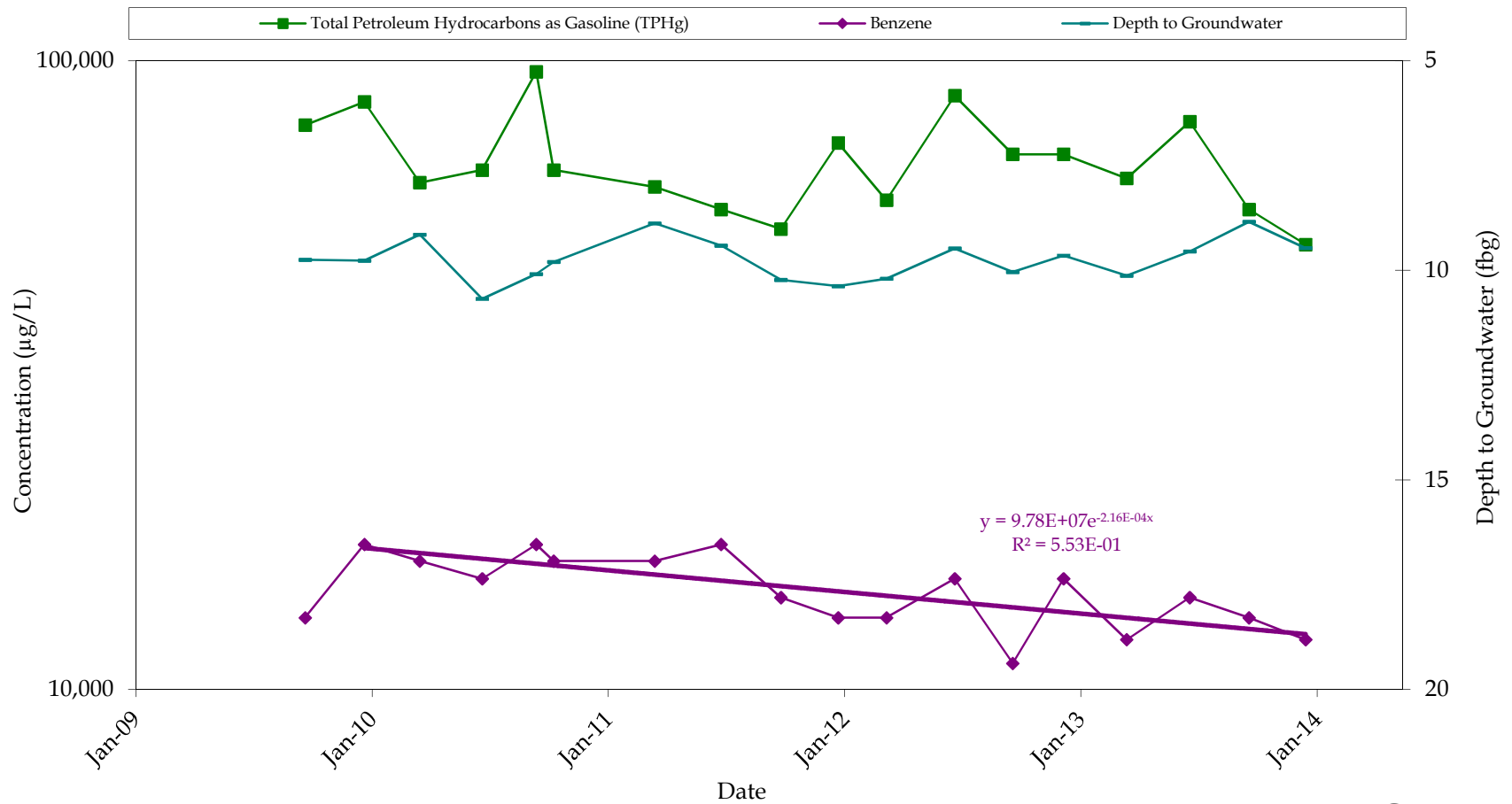
**GRAPH
2**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-1R: MTBE AND TBA CONCENTRATIONS AND DEPTH
TO GROUNDWATER VS TIME



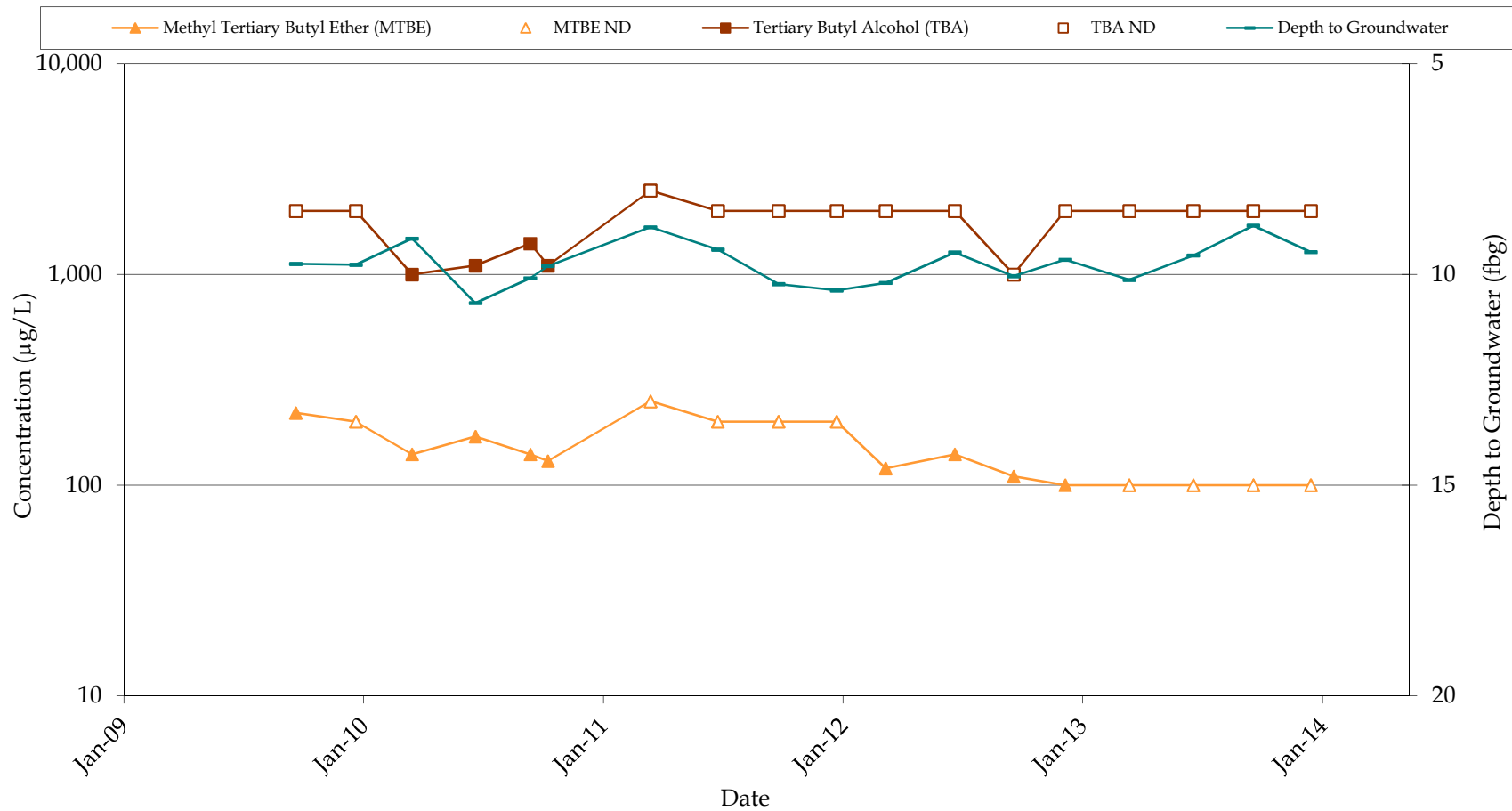
**GRAPH
3**

Trendline(s) begin at peak concentration

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-2R: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



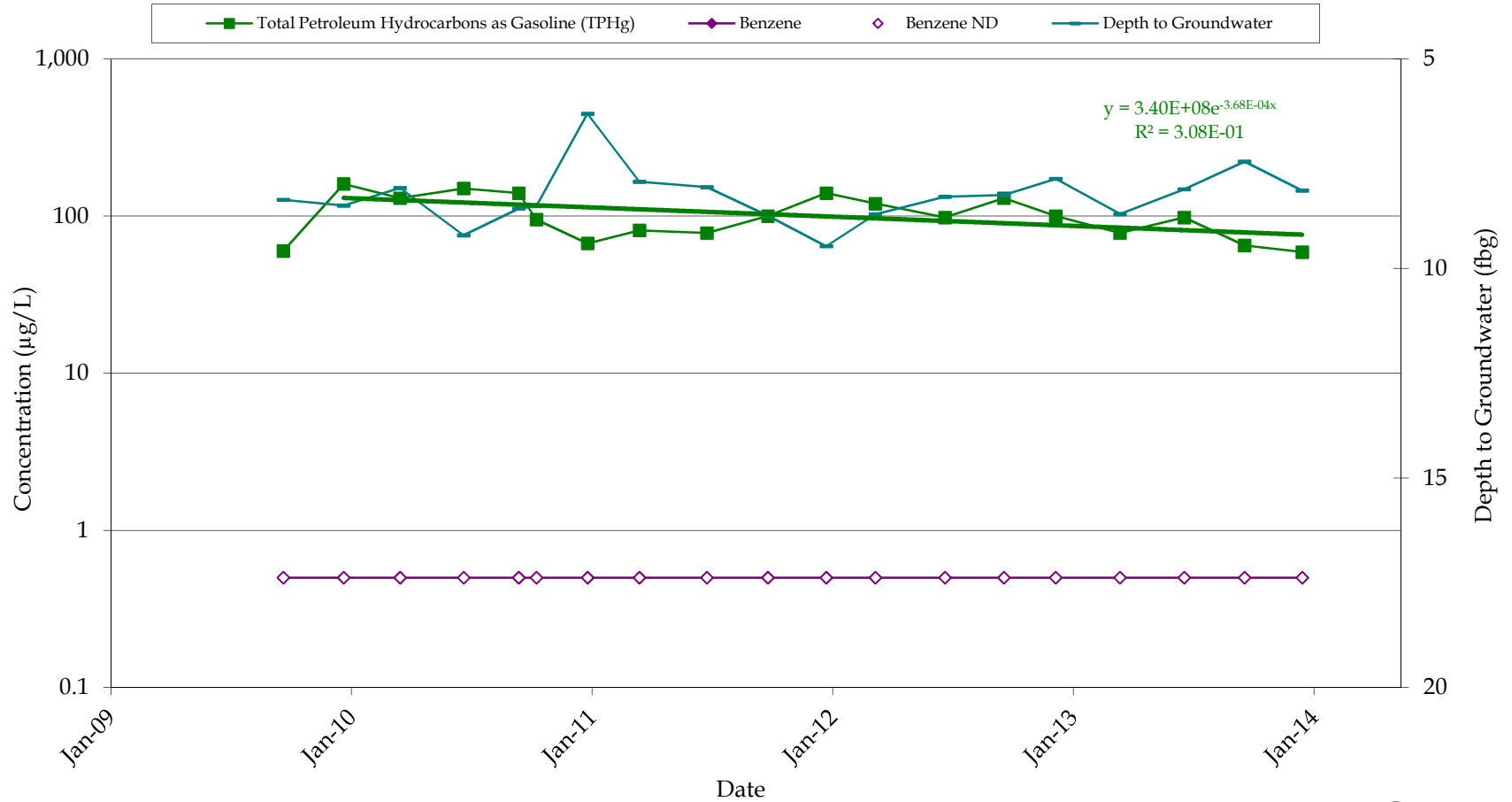
**GRAPH
4**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-2R: MTBE AND TBA CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



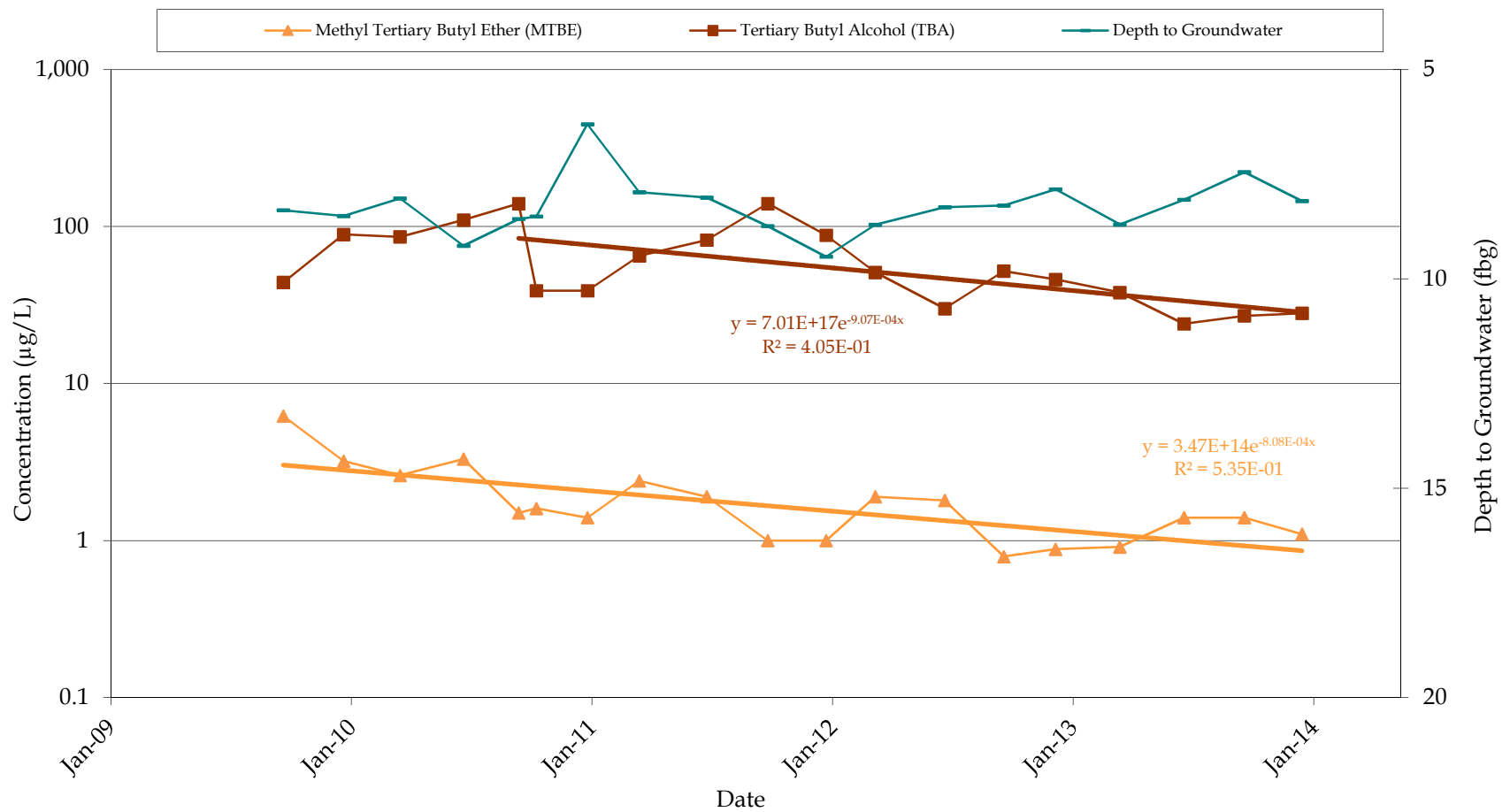
GRAPH 5

ND = not detected at or above laboratory reporting limit
 Trendline(s) begin at peak concentration

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-3R: TPHg AND BENZENE CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



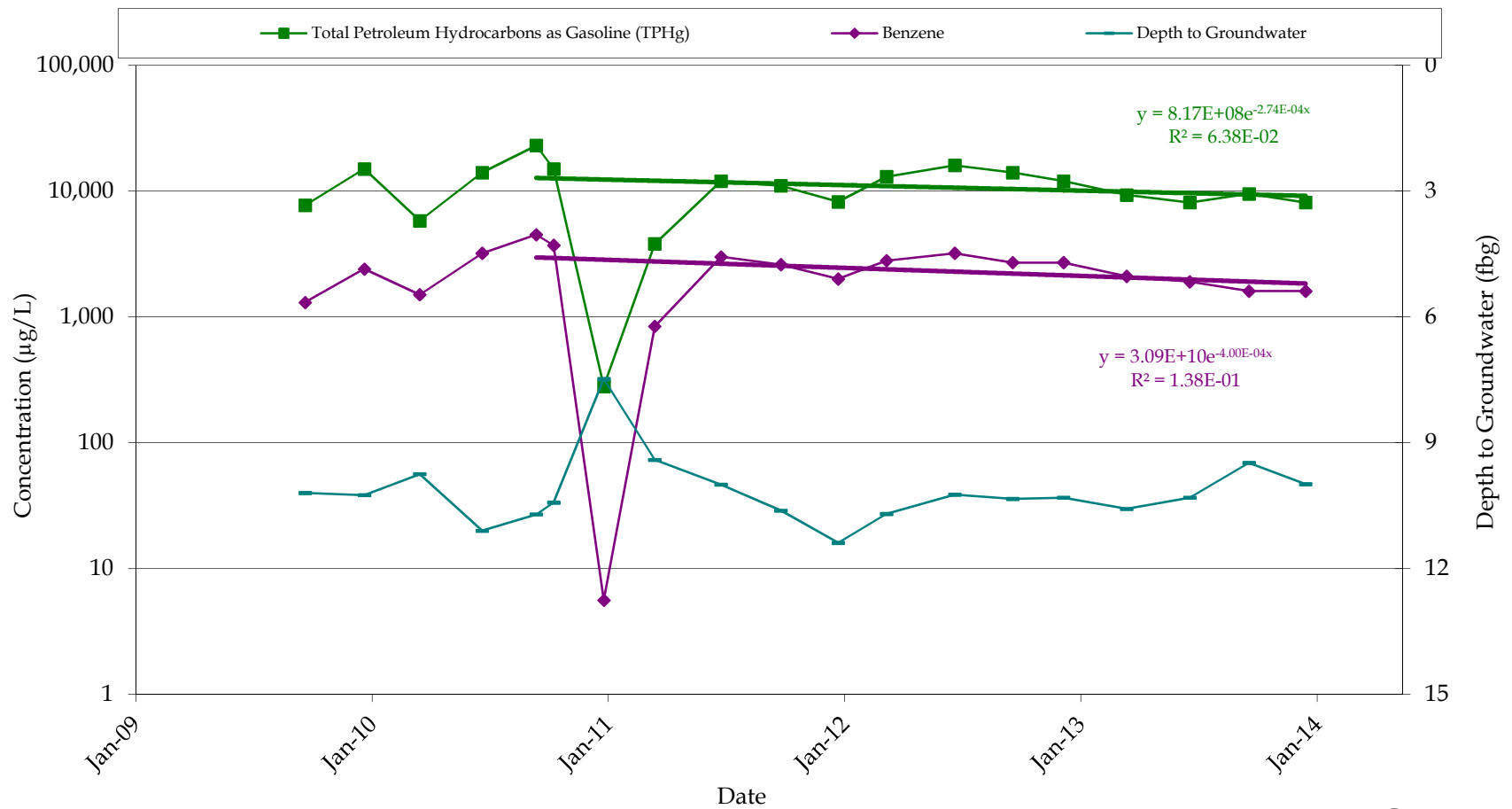
Trendline(s) begin at peak concentration

GRAPH 6

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-3R: MTBE AND TBA CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



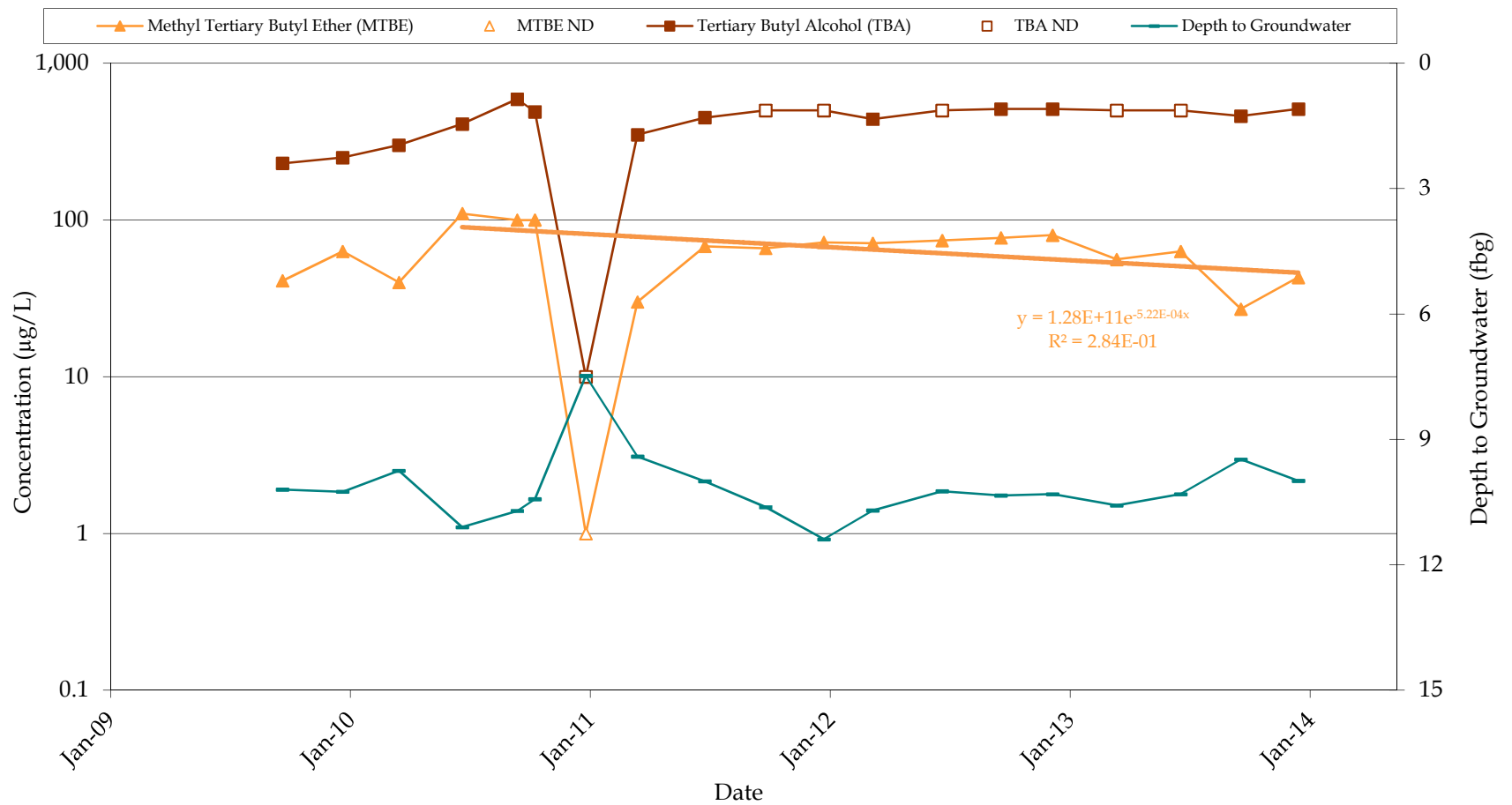
GRAPH 7

Trendline(s) begin at peak concentration and excludes anomalous data

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-4R: TPHg AND BENZENE CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



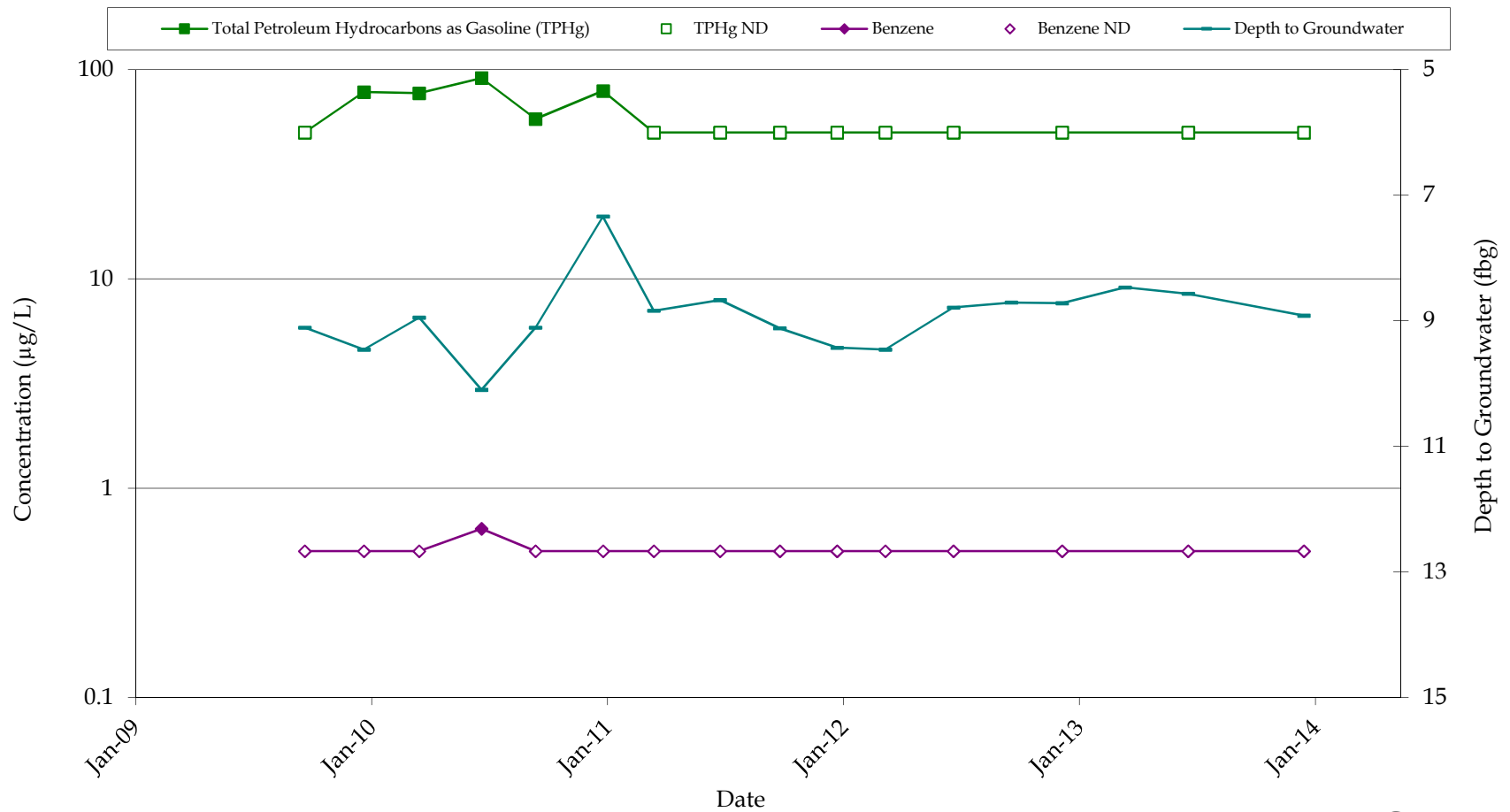
GRAPH 8

Trendline(s) begin at peak concentration and excludes anomalous data

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-4R: MTBE AND TBA CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



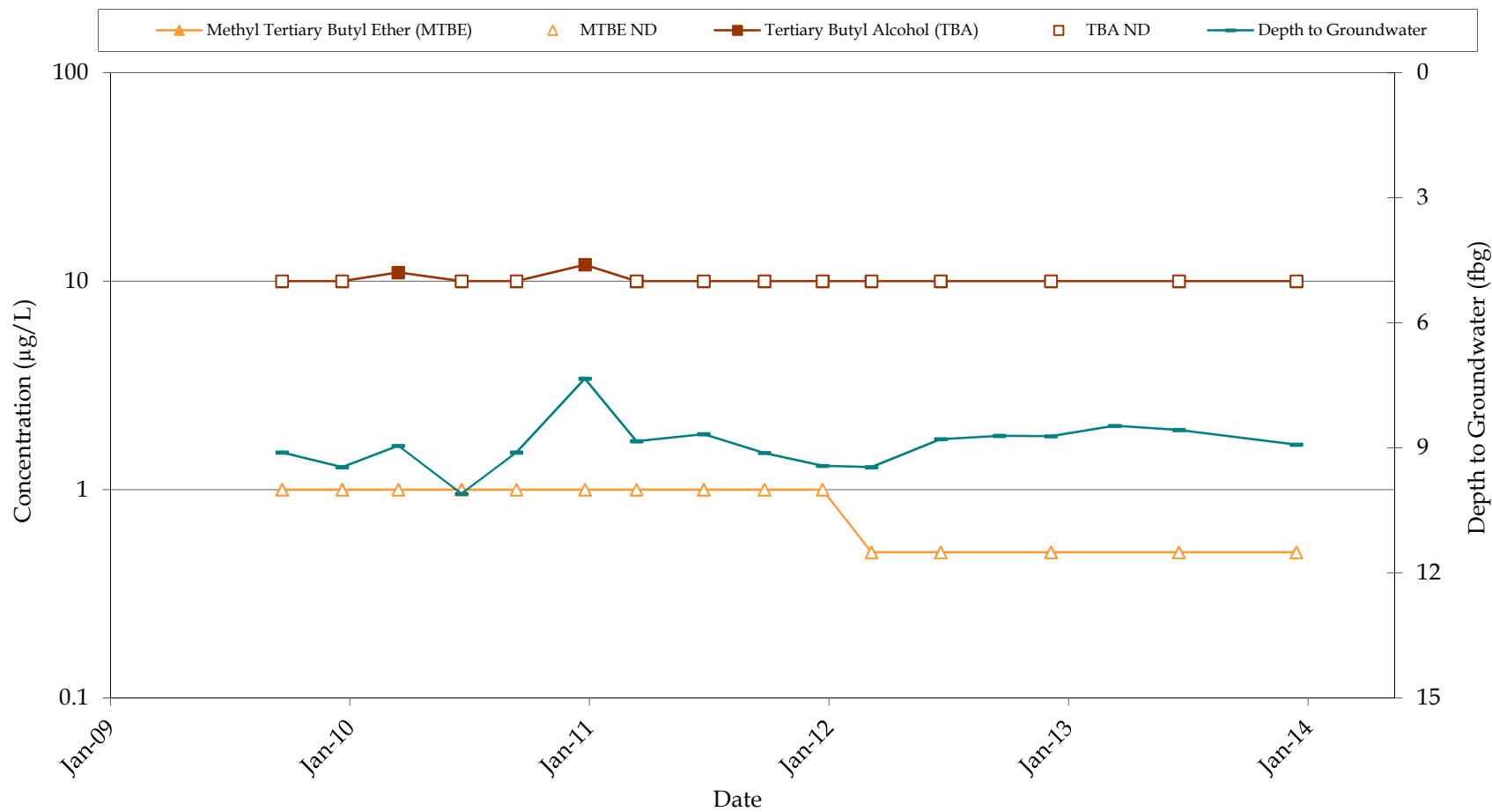
**GRAPH
9**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-5R: TPHg AND BENZENE CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



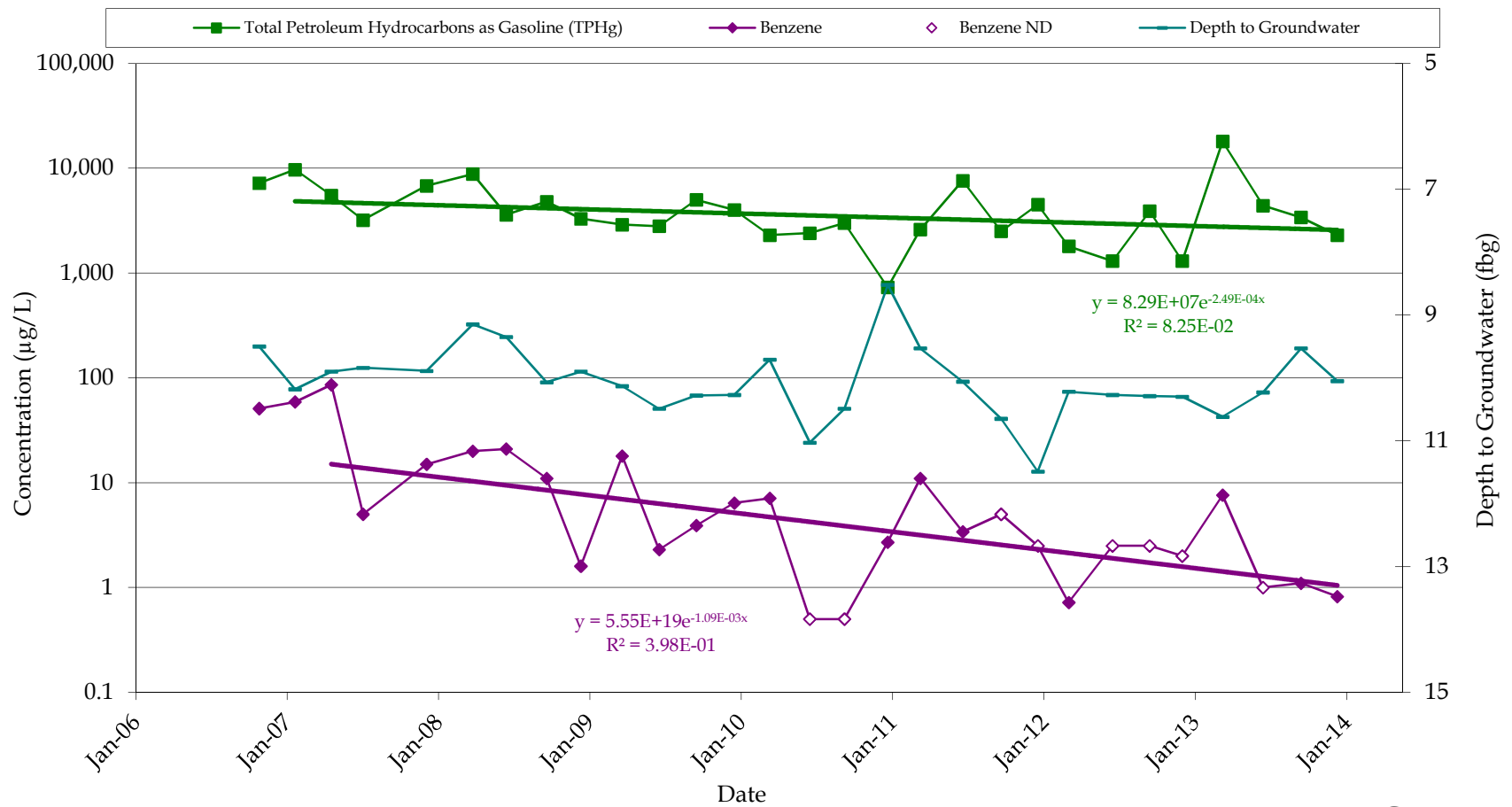
**GRAPH
10**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-5R: MTBE AND TBA CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



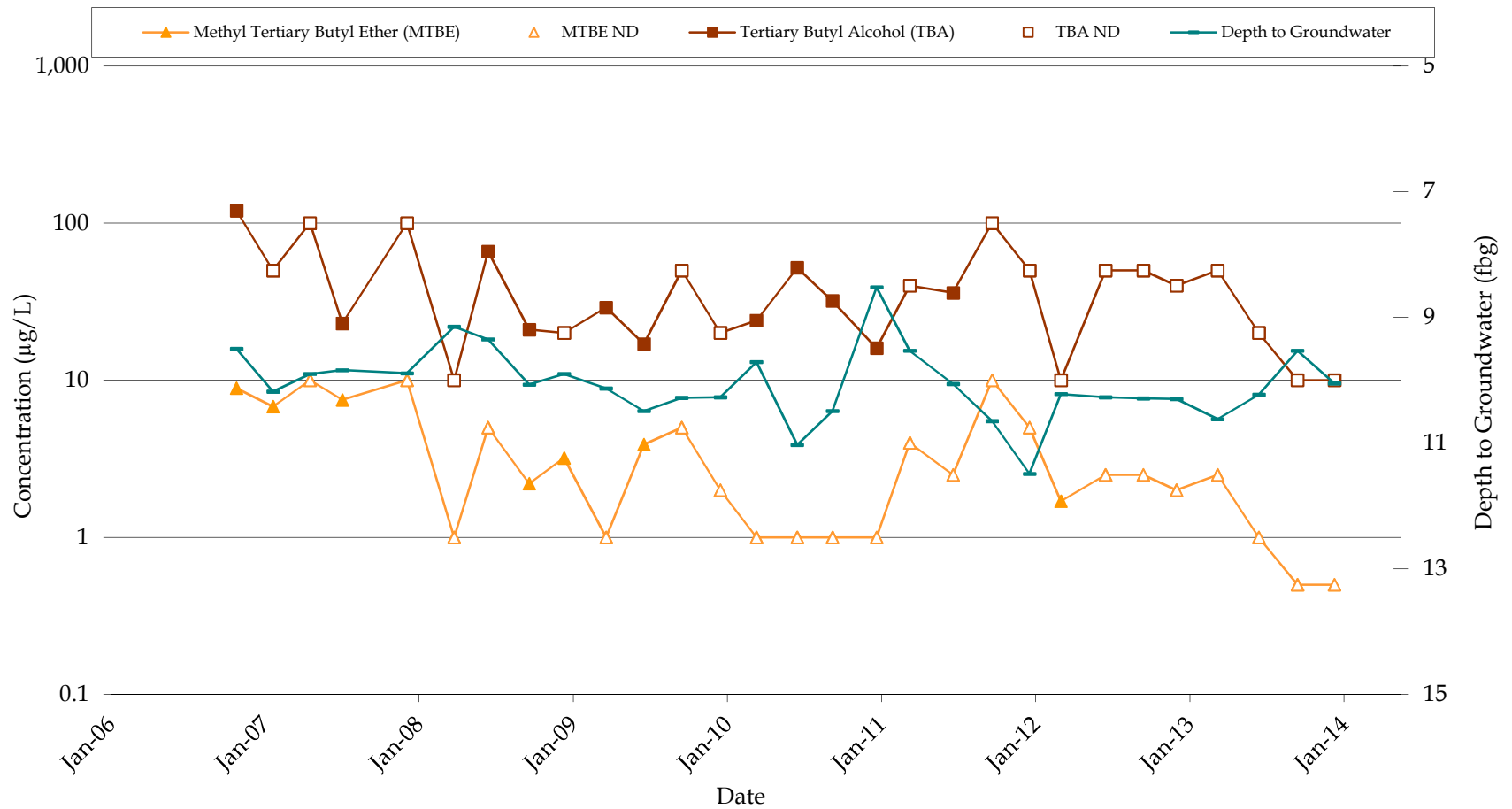
ND = not detected at or above laboratory reporting limit
Trendline(s) begin at peak concentration

**GRAPH
11**

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-6: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



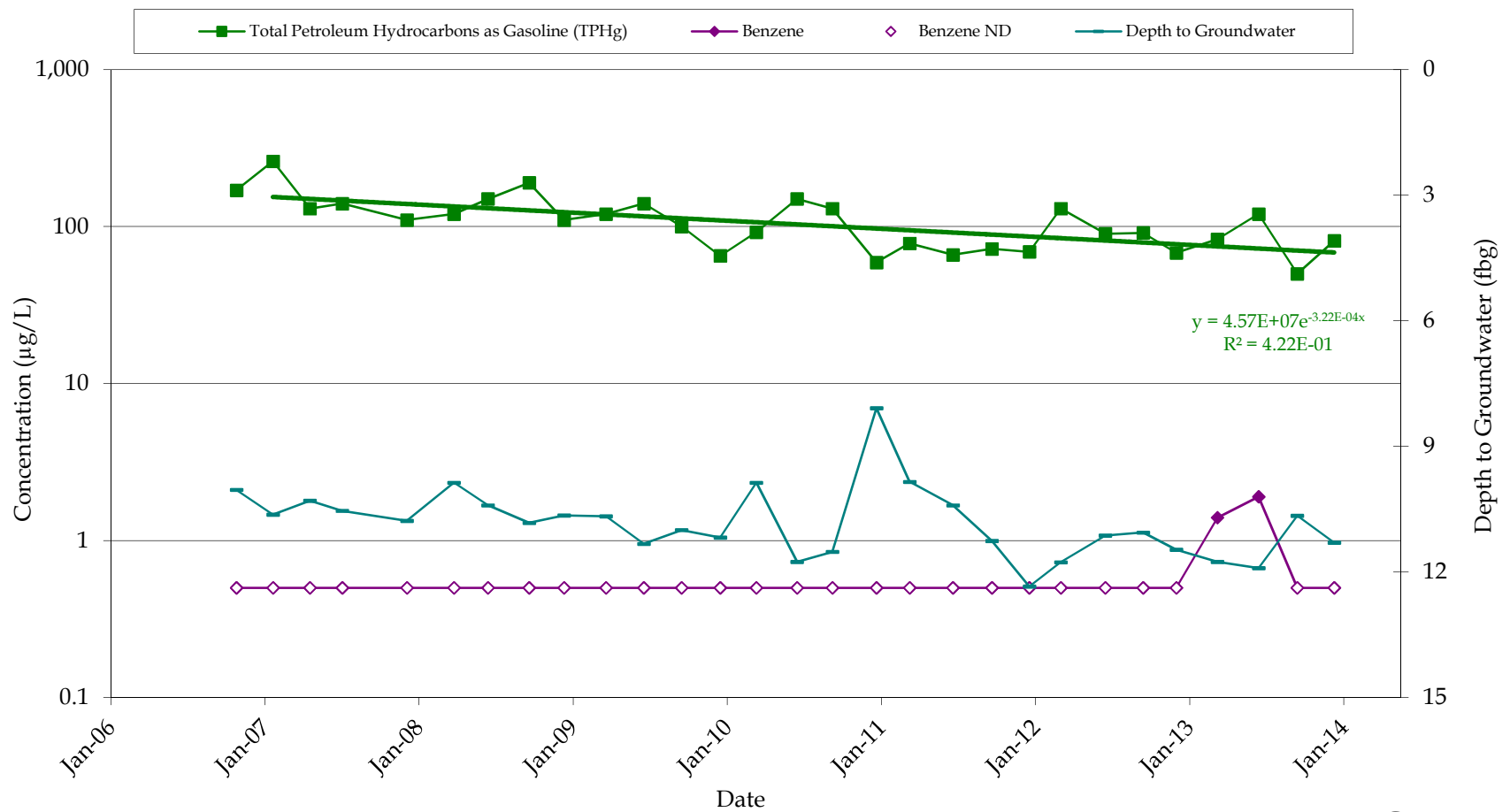
GRAPH 12

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-6: MTBE AND TBA CONCENTRATIONS AND DEPTH TO GROUNDWATER VS TIME



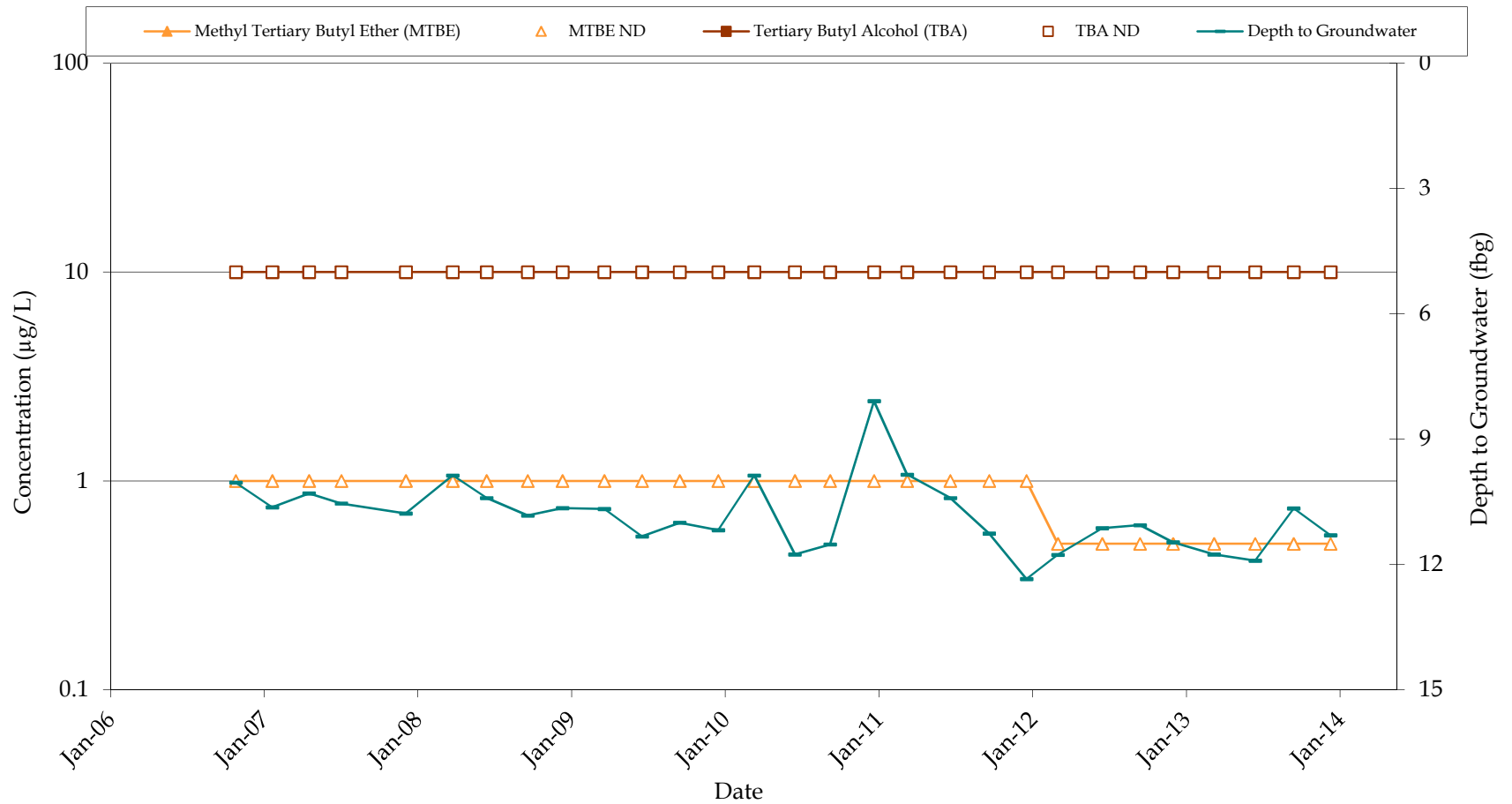
**GRAPH
13**

ND = not detected at or above laboratory reporting limit
Trendline(s) begin at peak concentration

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-7: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



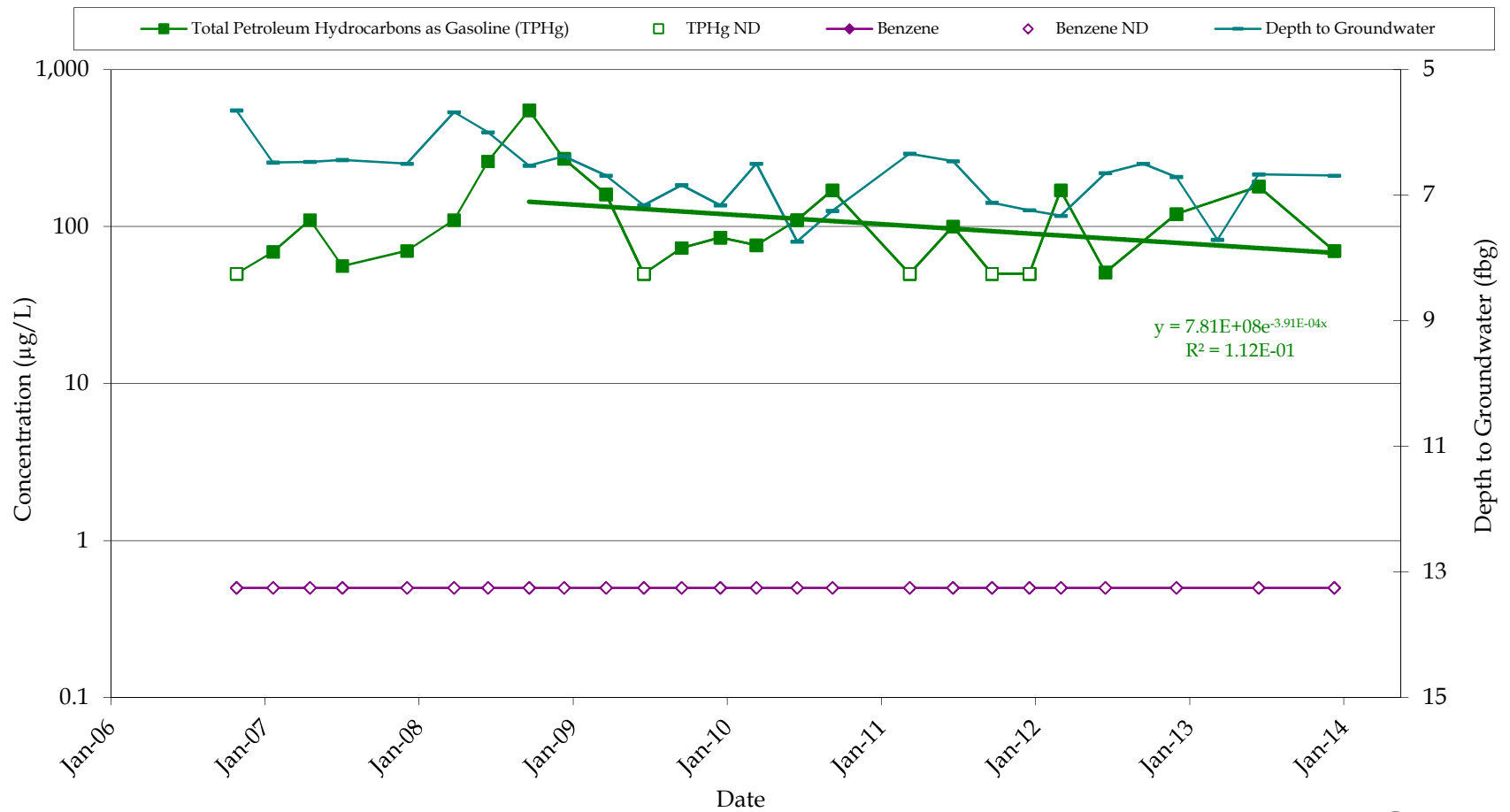
ND = not detected at or above laboratory reporting limit

**GRAPH
14**

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-7: MTBE AND TBA CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



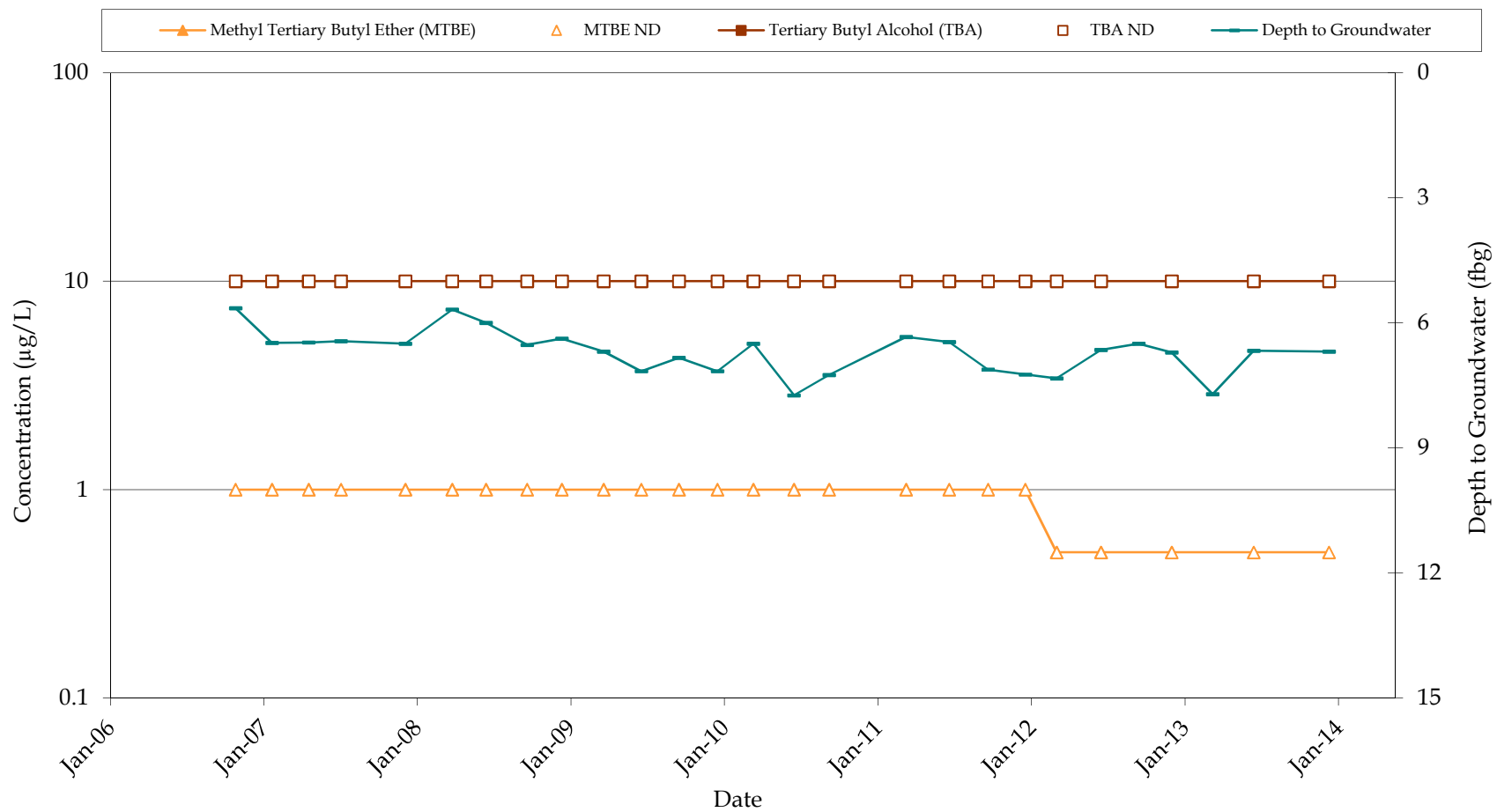
GRAPH 15

ND = not detected at or above laboratory reporting limit
Trendline(s) begin at peak concentration

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-8: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



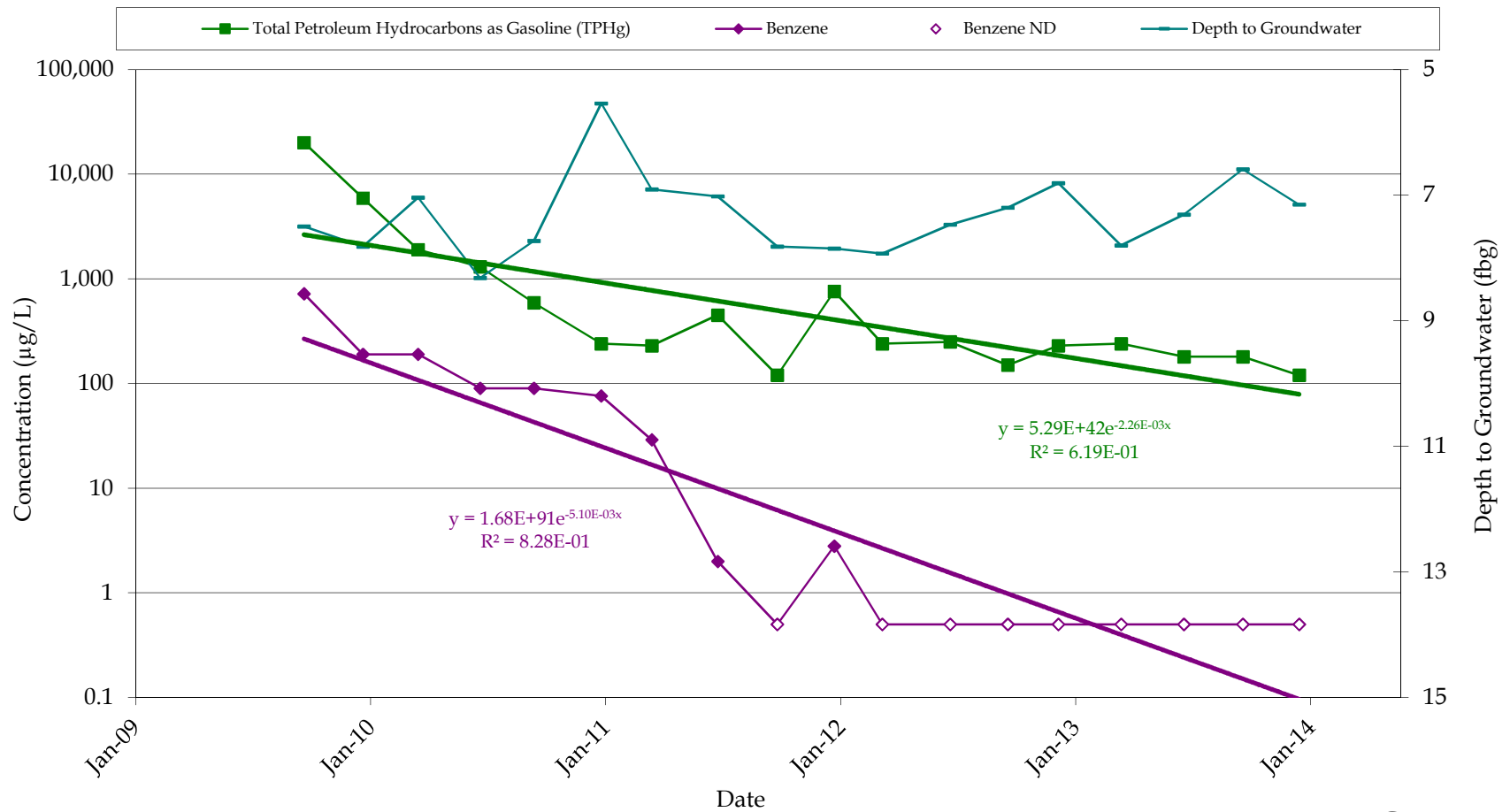
**GRAPH
16**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-8: MTBE AND TBA CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



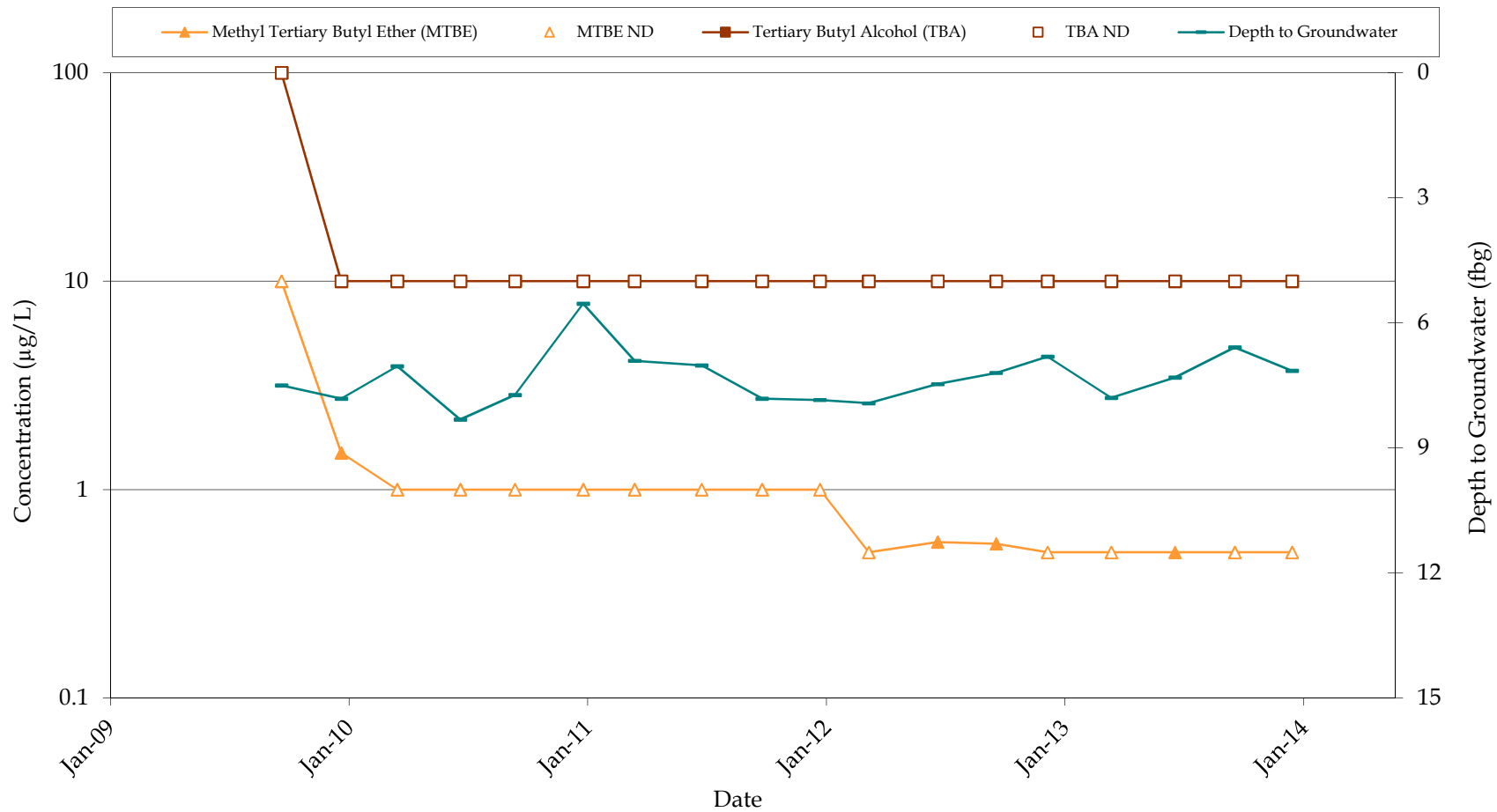
**GRAPH
17**

ND = not detected at or above laboratory reporting limit

SHELL-BRANDED SERVICE STATION
1600 JAMBOREE ROAD
NEWPORT BEACH, CALIFORNIA



MW-9: TPHg AND BENZENE CONCENTRATIONS AND
DEPTH TO GROUNDWATER VS TIME



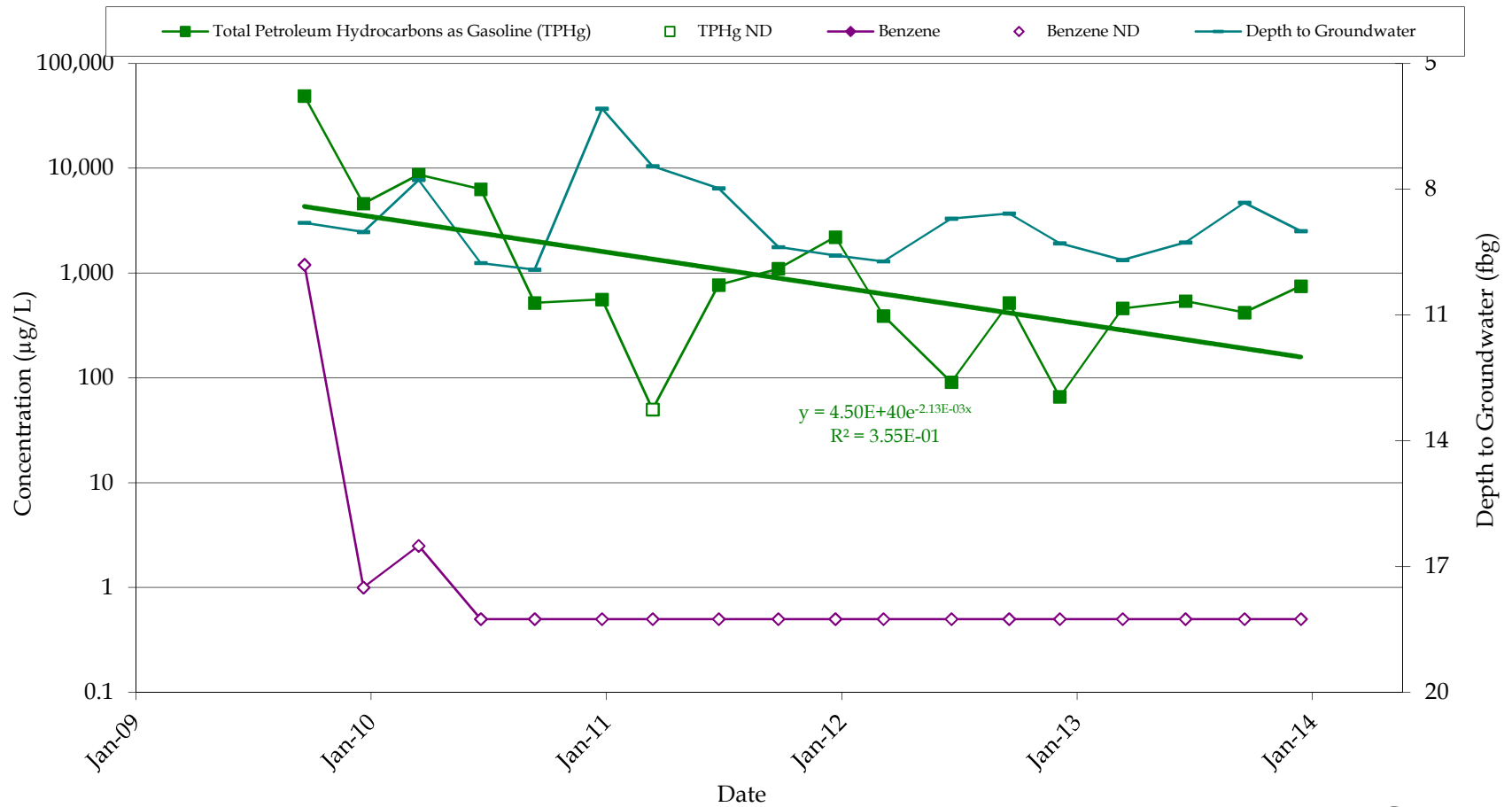
ND = not detected at or above laboratory reporting limit

GRAPH 18

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-9: MTBE AND TBA CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



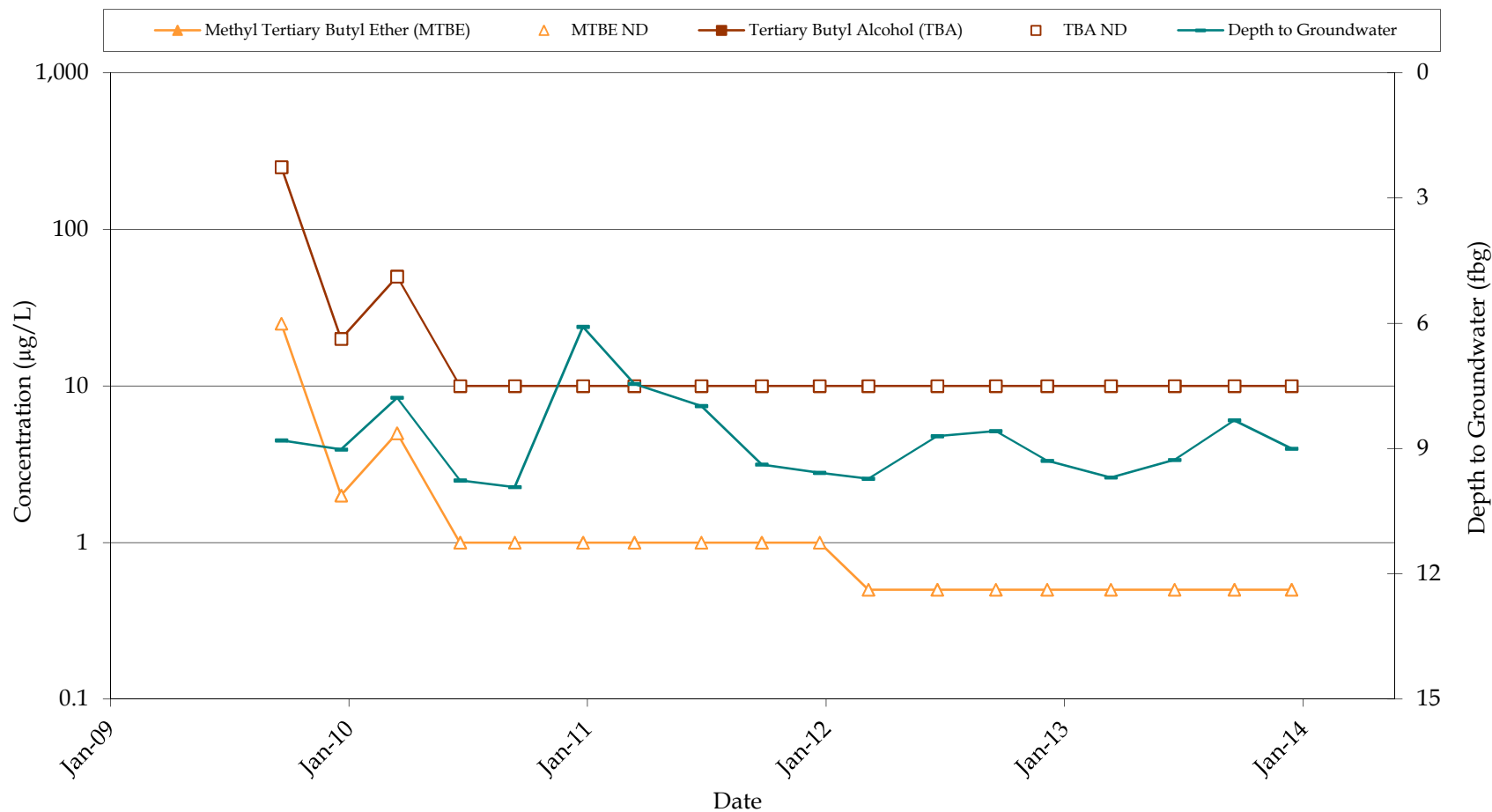
ND = not detected at or above laboratory reporting limit

GRAPH 19

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-10: TPHg AND BENZENE CONCENTRATIONS AND
 DEPTH TO GROUNDWATER VS TIME



ND = not detected at or above laboratory reporting limit

GRAPH 20

SHELL-BRANDED SERVICE STATION
 1600 JAMBOREE ROAD
 NEWPORT BEACH, CALIFORNIA



MW-10: MTBE AND TBA CONCENTRATIONS AND DEPTH TO GROUNDWATER VS TIME

APPENDIX A

BLAINE TECH SERVICES, INC. -
FIELD NOTES

WELL GAUGING DATA

Project # B123-221 Date 12/23/13 Client 8Well-CRA

Site 1600 Jamboree Rd. Newport Beach, CA
92451664

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1R	0645	2					10.62	18.21	↓	
MW-2R	0720	2	odor				9.47	19.65		odor
MW-3R	0635	2					8.14	19.62		
MW-4R	0715	2					9.99	19.54		
MW-5R	0630	2					8.92	19.40		
MW-6	0710	4					10.05	20.40		
MW-7	0642	4					11.30	20.21		
MW-8	0700	4					6.69	19.30		
MW-9	0652	2					7.15	19.85		
MW-10	0705	2					9.00	19.62		↓

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BE1	Site: 97481664
Sampler: BE	Date: 12/23/13
Well I.D.: MW-1R	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 18.21	Depth to Water (DTW): 10.62
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.14	

Purge Method: (Bailer) Waterra Sampling Method: (Bailer)

Disposable Bailer Peristaltic Disposable Bailer

Positive Air Displacement Extraction Pump Extraction Port

Electric Submersible Other _____ Dedicated Tubing

Other: _____

Pump Depth: hand bail

1.2 (Gals.) X	3	= 3.6 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
0927	69.7	6.92	5880	71000	1.25	
0930	72.1	6.78	6001	71000	2.50	
0933	69.9	6.76	5777	71000	3.75	
						Fe 2+ = 0.6 mg/L

Did well dewater? Yes No Gallons actually evacuated: 3.75 0.6

Sampling Date: 12/23/13 Sampling Time: 0935 Depth to Water: 11.83

Sample I.D.: MW-1R Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See cor

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	285 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	9 mV

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SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 121223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: MW-2R	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.65	Depth to Water (DTW): 9.47
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.51	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: hand bail

1.6 (Gals.) X 3 Specified Volumes = 4.8 Gals. Calculated Volume

10.18

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1300	68.9	6.51	7140	151	1.75	odor
1303	69.3	6.39	7196	223	3.82	
1306	69.4	6.36	7082	112	5.00	
						Fe ²⁺ : 3.4 μg/L

Did well dewater? Yes No Gallons actually evacuated: 5.00

Sampling Date: 12/23/13 Sampling Time: 1310 Depth to Water: 10.84

Sample I.D.: MW-2R Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see CoC

EB I.D. (if applicable): @ _____ Time _____ Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.51	mg/L
R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-101	mV

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: MW-3R	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.62	Depth to Water (DTW): 8.14
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.44	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: hand bail

1.8 (Gals.) X	3	= 5.4 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
0825	69.5	7.15	4150	184	2.0	
0828	71.7	7.07	4178	288	4.0	
0831	68.0	7.34	4163	485	6.0	

Did well dewater? Yes No Gallons actually evacuated: 6.0

Sampling Date: 12/23/13 Sampling Time: 0835 Depth to Water: _____

Sample I.D.: MW-3R Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See CAC

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	4.37 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	132 mV

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SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: MW-4R	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 19.54	Depth to Water (DTW): 9.99
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.90	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: hand bail Other: _____

$1.5 \text{ (Gals.)} \times 3 = 4.5 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65 2" 0.16 6" 1.47 3" 0.37 Other radius ² * 0.163
--	--

Time	Temp (°F)	pH	Cond (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1146	68.9	6.64	4150	255	1.5	odor
1149	70.2	6.60	4567	186	3.0	
1152	69.6	6.56	5112	164	4.5	
						Fe ²⁺ = 1.8 mg/l

Did well dewater? Yes No Gallons actually evacuated: 4.5

Sampling Date: 12/23/13 Sampling Time: 1155 Depth to Water: 10.90

Sample I.D.: MW-4R Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See CAC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.48 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-124 mV

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SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: mw-SR	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.40	Depth to Water (DTW): 8.92
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.02	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: hand bail
 1.7 (Gals.) X 3 = 5.1 Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0743	60.3	7.36	3595	180	1.75	
0747	63.3	6.94	3632	700	3.50	
0751	46.5	6.19	5501	266	5.25	
						Fe ²⁺ : 0.0 mg/L

Did well dewater? Yes No Gallons actually evacuated: 5.25

Sampling Date: 12/23/13 Sampling Time: 0755 Depth to Water: 10.35

Sample I.D.: mw-SR Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	1.36 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	185 mV

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: MW-6	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 20.40	Depth to Water (DTW): 10.05
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.12	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: 15'

$6.7 \text{ (Gals.)} \times 3 = 20.1 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	Other: 10.35 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
0914	68.1	6.33	3902	68	17.0	odor
— Pump lowered to 20'						
— well dewatered @ 10 gal						
1238	68.0	6.92	5203	40	grab	Fe ²⁺ = 1.2 mg/L

Did well dewater? Yes No Gallons actually evacuated: 10

Sampling Date: 12/23/13 Sampling Time: 1240 Depth to Water: 10.09

Sample I.D.: MW-6 Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.73 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-69 mV

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: mw-7	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 20.21	Depth to Water (DTW): 11.30
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.08	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

8.91 Other: _____

Pump Depth: 17'

5.8 (Gals.) X 3 = 17.4 Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
0901	70.2	6.68	7110	189	6.0	
— lowered pump to 20' —						
— well dewatered @ 10 gal —						
1214	72.3	7.31	7436	71000	grab	Fe ²⁺ = 1.4 mg/L

Did well dewater? Yes No Gallons actually evacuated: 10

Sampling Date: 12/23/13 Sampling Time: 1215 Depth to Water: 11.39

Sample I.D.: mw-7 Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See coc

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: 2.10 mg/L

O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: -65 mV

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: <u>131223-BC1</u>	Site: <u>97481664</u>
Sampler: <u>BC</u>	Date: <u>12/23/13</u>
Well I.D.: <u>mw-9</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u> </u>
Total Well Depth (TD): <u>19.85</u>	Depth to Water (DTW): <u>7.15</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.69</u>	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: hand bail

2.0 (Gals.) X 3 = 6.0 Gals.
 1 Case Volume Specified Volumes Calculated Volume

12.7

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1011	68.3	7.32	4947	450	2.0	
1014	70.3	6.81	5118	349	4.0	
1017	68.2	6.78	5011	320	6.0	
						Fe ²⁺ : 1.2 mg/L

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Date: 12/23/13 Sampling Time: 1020 Depth to Water: 8.17

Sample I.D.: mw-9 Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See CAC

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.07 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	14 mV

SHELL ORANGE COUNTY WELL MONITORING DATA SHEET

BTS #: 131223-BC1	Site: 97481664
Sampler: BC	Date: 12/23/13
Well I.D.: MW-10	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 19.62	Depth to Water (DTW): 9.00
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.12	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Pump Depth: 14

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

1 Case Volume 1.7 (Gals.) X 3 Specified Volumes = 5.1 Gals. Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1111	71.5	7.23	6982	600	1.75	
1114	72.5	6.89	7009	269	3.5	
1117	71.7	6.80	6997	317	5.25	
						Fe ²⁺ : 0.5 mg/L

Did well dewater? Yes No Gallons actually evacuated: 5.25

Sampling Date: 12/23/13 Sampling Time: 1120 Depth to Water: 10.75

Sample I.D.: MW-10 Laboratory: Test America CalScience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.24 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	35 mV

LAB (LOCATION)

- CALSCIENCE (_____)
- SPL (_____)
- XENCO (_____)
- TEST AMERICA (IRVINE)
- OTHER (_____)



Shell Oil Products Chain Of Custody Record

Please Check Appropriate Box:			Print Bill To Contact Name:			INCIDENT # (ENV SERVICES):			<input type="checkbox"/> CHECK IF NO INCIDENT # APPLIES		
<input type="checkbox"/> ENV. SERVICES	<input type="checkbox"/> MOTIVA RETAIL	<input type="checkbox"/> SHELL RETAIL	Angela Ribeiro - 060707			9 7 4 8 1 6 6 4			DATE: 12/23/13		
<input type="checkbox"/> MOTIVA SD&CM	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES	PO #			SAP #			PAGE: 1 of 1		
<input type="checkbox"/> SHELL PIPELINE	<input type="checkbox"/> OTHER										

SAMPLING COMPANY: Blaine Tech Services		LOG CODE: BTST	SITE ADDRESS: Street and City 1600 Jamboree Rd, Newport Beach		State CA	GLOBAL ID NO.: T0605939328
ADDRESS: 20735 Belshaw Ave., Carson, CA 90746		EDF DELIVERABLE TO (Name, Company, Office Location): Lynee Le Voie, CRA, Irvine		PHONE NO.: 949-648-5215	E-MAIL: socalledt@craworld.com	CONSULTANT PROJECT NO.: 131223-13C1
PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King		SAMPLER NAME(S) (Print): Brett Bova		LAB USE ONLY		
TELEPHONE: 310-885-4455	FAX: 310-637-5802	E-MAIL: lking@blainetech.com				

TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (14 DAY)
 5 DAYS
 3 DAYS
 2 DAYS
 24 HOURS
 RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT
 UST AGENCY: OCHCA

SPECIAL INSTRUCTIONS OR NOTES :
 Email invoice and copy of final report to Shell.Lab.Billing@craworld.com

SHELL CONTRACT RATE APPLIES
 STATE REIMBURSEMENT RATE APPLIES
 EDD NOT NEEDED
 RECEIPT VERIFICATION REQUESTED

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	TPH - GRO, Purgeable (8260B)	TPH - DRO, Extractable (8015M)	BTEX + 5 OXYS (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Alkalinity (SM2320B)	Sulfate (EPA 300.0)	Nitrate (EPA 300.0)	Methane (RSK-175)	Ferrous Iron (SM 3500)	TEMPERATURE ON RECEIPT °C	Container PID Readings or Laboratory Notes
		DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER												
	MW-1R	12/23/13	0435	GW	6			4	10	X	X										
	MW-2R		1310		6			4	10	X	X										
	MW-3R		0835		6			4	10	X	X										
	MW-4R		1155		6			4	10	X	X										
	MW-5R		0755		6			4	10	X	X										
	MW-6		1240		6			4	10	X	X										
	MW-7		1215		6			4	10	X	X										
	MW-8		1050		6			4	10	X	X										
	MW-9		1020		6			4	10	X	X										
	MW-10		1120		6			4	10	X	X										

Relinquished by: (Signature) 	Received by: (Signature) Nicole	Date: 12/23/13	Time: 1530
Relinquished by: (Signature) Nicole	Received by: (Signature) George Geworkan	Date: 12/23/13	Time: 4:50PM
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # 97481664

Page 1 of 1

DATE: 12/23/13

ADDRESS 1600 Jamboree Rd. Newport Beach, CA
 CITY & STATE Newport Beach, CA

Well ID	Observations Upon Arrival														Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials			
	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition								
MW-1R	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-2R	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P	1 bolt stripped	Y	N				
MW-3R	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-5R	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-6	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-7	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-8	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-9	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-10	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P		Y	N				
MW-4R	Standpipe	Flush	G	P	Size (inch) 12	Y	N	G	R	G	R	NL	G	P	1 bolt stripped	Y	N				
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N				
TOTAL # CAPS REPLACED =										0	TOTAL # OF LOCKS REPLACED										0
Condition of Soil Boring Patches or Abandoned Monitoring Wells:		G	P	N/A	If POOR, Borings/Well IDs or Location Description:														Y	N	
Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted				Photos of Condition		Repair Date and PM Initials	
NA																					
Building																					
Building w/ Fence Comp.		G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A					Y	N		
Fenced Compound																					
Trailer																					
Number of Drums On-site	Does the Label Reveal the Source of the Contents	Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved				Photos of Drum Condition		Date Drums Removed from Site and PM Initials		
	Y N N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A					Y	N			

G = Good (Acceptable) R = Replaced
 P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.
 Version 2.4, March 2008

H-925

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Brett Bava / Blaine Tech Services
 Print or type Name of Field Personnel & Consultant Company

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

Not Required

2. Page 1 of

3. Emergency Response Phone

800-424-9300

4. Waste Tracking Number

0405693

5. Generator's Name and Mailing Address

Shell Oil Products US c/o CRA
6520 Corporate Drive
Indianapolis, IN 46278

Generator's Phone: 317-291-7041

Generator's Site Address (if different than mailing address)

1600 Jamboree Rd,
Newport Beach, CA 92660

6. Transporter 1 Company Name

Blaine Tech Services, Inc.

U.S. EPA ID Number

7. Transporter 2 Company Name

American Integrated Services, Inc.

U.S. EPA ID Number

CAR000148338

8. Designated Facility Name and Site Address

Crosby & Overton, Inc.
1630 W. 17th Street
Long Beach, CA 90813

Facility's Phone: 562-432-5445

U.S. EPA ID Number

CAD028409019

9. Waste Shipping Name and Description

1. Non-Hazardous Waste Liquid (Purge Water)

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt./Vol.

1

TT

80

G

13. Special Handling Instructions and Additional Information

Wear appropriate PPE while handling. Weights or volumes are approximate.

Job# 33010-1-1

RIFR# 100735

SAP# 120718

Incident#

97481664

L22862
D92116
Profile# 27578

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name

Signature

Month Day Year

Brett Bova

[Signature]

12 25 13

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Brett Bova

[Signature]

12 23 13

Transporter 2 Printed/Typed Name

Signature

Month Day Year

IRVIN DUNCAN

[Signature]

12 27 13

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Signature

Month Day Year

A135
[Signature]

[Signature]

12 27 13

Job Clearance Form															
CONTRACTOR INSTRUCTIONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign at the bottom of this form. 2. Inform employer, manager or site representative of the job to be performed and potential safety concerns and obtain signature.															
Station # 07481664		Station Address: 1600 Tamboree Rd.			Work Order Number: 131223-BC1		Date: 12/23/13								
Contractor Company Name: Blake Tech Service		Contractor person in charge (print name): Brett Bora		Number of Workers: 1	JSA Reference Number: (if required)	Start Time: 0630	End Time: 1130	Labor:	Travel Time:						
Problem/Work Description: Ground water sampling							Return Call:	yes / no							
							Damage Claim:	yes / no							
PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE)															
<input checked="" type="checkbox"/> SAFETY VEST	<input checked="" type="checkbox"/> HARD HAT	<input checked="" type="checkbox"/> SHOES & BOOTS	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> RESPIRATOR											
<input checked="" type="checkbox"/> PROTECTIVE CLOTHING	<input checked="" type="checkbox"/> GLOVES	<input checked="" type="checkbox"/> SAFETY GLASSES/GOGGLES	<input type="checkbox"/> WELDING PPE	<input type="checkbox"/> OTHER _____											
Contractor to complete this section below. (Hazardous materials or other conditions that require a permit are not described in this form.)															
TASK STEP		Hazards not covered by JSA			How to reduce or eliminate risk - include PPE to be worn										
gauge purge sample		N/A													
Work documentation requirements: <u>Lower Risk</u> - no JSA required <u>Medium Risk / Higher Risk tasks</u> - JSA required <u>Higher Risk</u> - JSA required & appropriate check list completed (see below)															
Examples of Higher / Medium tasks: <table style="width:100%; font-size: x-small;"> <tr> <td><input type="checkbox"/> Works at heights in all cases on open sites - on closed sites if no JSA present</td> <td><input type="checkbox"/> Work in confined spaces (e.g. tank, interceptor or deep manhole entry)</td> </tr> <tr> <td><input type="checkbox"/> Trenching or excavation related to underground tank / product lines</td> <td><input type="checkbox"/> Hot work with risk of product or vapor ignition</td> </tr> <tr> <td><input type="checkbox"/> Heavy lifting</td> <td><input type="checkbox"/> LPG system degassing, installation or maintenance</td> </tr> </table>										<input type="checkbox"/> Works at heights in all cases on open sites - on closed sites if no JSA present	<input type="checkbox"/> Work in confined spaces (e.g. tank, interceptor or deep manhole entry)	<input type="checkbox"/> Trenching or excavation related to underground tank / product lines	<input type="checkbox"/> Hot work with risk of product or vapor ignition	<input type="checkbox"/> Heavy lifting	<input type="checkbox"/> LPG system degassing, installation or maintenance
<input type="checkbox"/> Works at heights in all cases on open sites - on closed sites if no JSA present	<input type="checkbox"/> Work in confined spaces (e.g. tank, interceptor or deep manhole entry)														
<input type="checkbox"/> Trenching or excavation related to underground tank / product lines	<input type="checkbox"/> Hot work with risk of product or vapor ignition														
<input type="checkbox"/> Heavy lifting	<input type="checkbox"/> LPG system degassing, installation or maintenance														
This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified.															
SIGN IN		Contractor representative name			Signature			SIGN OUT		Contractor signature					
Operating sites: to be signed by the Site Representative		Brett Bora													
Non-operating sites: to be signed by Contractor Representative only															
GENERAL SAFETY CHECKS		Site representative name	Signature	GENERAL SAFETY CHECKS			Site representative name	Signature							
<ul style="list-style-type: none"> • Have all site personnel been informed? • Has fuel delivery service been informed? • Is a fuel delivery due? • Have isolation procedures been agreed - lock out/tag out? • Are work areas cordoned off to protect workers, site staff & public? • Other 		I have discussed job clearance form with contractor		<ul style="list-style-type: none"> • Has the work area been left tidy and safe? • Are site personnel aware of status of work including remaining isolation? • Are changes to equipment documented and communicated? • All incidents, near incidents, unsafe situations reported? • Other 			I have discussed job clearance form with contractor	EDWIN A. ISLARS							
PARTS - Ordered, Replaced and/or Disposed Of (include model and serial #s as appropriate)															

The contractor through its authorized representative shall sign, issue and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.
 This form covers important reminders and is not intended to relieve the contractor from safely performing the work in compliance with all applicable laws and regulations.
 The Site Representative may require the contractor to stop work if it appears that the contractor or any of its workers are failing to comply with the requirements in the applicable items of this form or other applicable safety requirements.

Site Address: <i>1600 Fairbree Rd. Newport Beach, CA</i>		Date: <i>12/23/13</i>
Check-In with site representative completed?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
Is fuel delivery scheduled for today?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Emergency pump cut-off switch located?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
First aid kit located and confirmed ready-to-use?		<input checked="" type="checkbox"/> Yes
Fire extinguisher located and confirmed ready-to-use?		<input checked="" type="checkbox"/> Yes
Eye wash located and confirmed ready-to-use?		<input checked="" type="checkbox"/> Yes
HASP	Emergency Services information located & reviewed?	<input checked="" type="checkbox"/> Yes
	Hospital map & route located and reviewed?	<input checked="" type="checkbox"/> Yes
	Special Hazard Notice section reviewed?	<input checked="" type="checkbox"/> Yes
	Site Status confirmed or amended, dated and initialed?	<input checked="" type="checkbox"/> Yes
	Emergency Response procedures reviewed with all work crew members?	<input checked="" type="checkbox"/> Yes
	Compliance Roster signed by all work crew members?	<input checked="" type="checkbox"/> Yes
Site walk has been performed to locate wells and identify additional hazards?		<input checked="" type="checkbox"/> Yes
Job Safety Analysis (JSA) for each task located & reviewed by all work crew members?		<input checked="" type="checkbox"/> Yes
Work Area Plans reviewed for suitability and effectiveness given current site conditions?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
Traffic Control Plans reviewed for suitability given current road, traffic & weather conditions?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
Stop Work Authority reviewed and understood by all work crew members?		<input checked="" type="checkbox"/> Yes

- In the space below, note unaddressed hazards and conditions that might compromise compliance with Approved Procedures and/or JSA's or impede the safe and proper execution of the Work Plan, Work Area Plan(s) and/or Traffic Control Plan(s).
- Report unaddressed hazards and adverse conditions to the Project Manager during Pre-Start Call-In **and** as hazards are identified or conditions change throughout the workday.
- DO NOT COMMENCE OR RESTART WORK until PM has been notified and mitigation measures approved.

Time	Hazard or Adverse Condition	PM Initials	Hazard Control Measure

Site representative briefed on planned work activities and Work Area Plans?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
Job Clearance Form completed?		<input checked="" type="checkbox"/> Yes
Pre-Start Call-In completed and approval to start work received from Project Manager?		<input checked="" type="checkbox"/> Yes
Printed Name <i>Brett Bova</i>	Signature <i>[Signature]</i>	Time <i>0700</i>

APPENDIX B

TESTAMERICA -
LABORATORY ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-65970-1

Client Project/Site: 1600 Jamboree Rd., Newport Beach

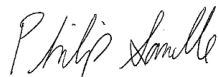
For:

Conestoga-Rovers & Associates, Inc.

175 Technology Dr. Suite 200

Irvine, California 92618

Attn: Ms. Angela Ribeiro



Authorized for release by:

1/6/2014 5:00:59 PM

Philip Sanelle, Project Manager I

(949)261-1022

philip.sanelle@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.
H-930

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Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-65970-1	MW-1R	Ground Water	12/23/13 09:35	12/23/13 18:00
440-65970-2	MW-2R	Ground Water	12/23/13 13:10	12/23/13 18:00
440-65970-3	MW-3R	Ground Water	12/23/13 08:35	12/23/13 18:00
440-65970-4	MW-4R	Ground Water	12/23/13 11:55	12/23/13 18:00
440-65970-5	MW-5R	Ground Water	12/23/13 07:55	12/23/13 18:00
440-65970-6	MW-6	Ground Water	12/23/13 12:40	12/23/13 18:00
440-65970-7	MW-7	Ground Water	12/23/13 12:15	12/23/13 18:00
440-65970-8	MW-8	Ground Water	12/23/13 10:50	12/23/13 18:00
440-65970-9	MW-9	Ground Water	12/23/13 10:20	12/23/13 18:00
440-65970-10	MW-10	Ground Water	12/23/13 11:20	12/23/13 18:00



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Job ID: 440-65970-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative 440-65970-1

Comments

No additional comments.

Receipt

The samples were received on 12/23/2013 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

GC/MS VOA

No analytical or quality issues were noted.

HPLC

Method(s) 300.0: The following sample(s) was diluted for sulfate due to the nature of the sample matrix: MW-2R (440-65970-2). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample(s) was diluted for nitrate due to the nature of the sample matrix: MW-1R (440-65970-1), MW-2R (440-65970-2), MW-3R (440-65970-3), MW-4R (440-65970-4), MW-5R (440-65970-5), MW-6 (440-65970-6), MW-7 (440-65970-7), MW-9 (440-65970-9). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for nitrate in batch 152270 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No other analytical or quality issues were noted.

GC VOA

No analytical or quality issues were noted.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 153357 and 153353. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-153357/2-A)

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: MW-2R (440-65970-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No other analytical or quality issues were noted.

General Chemistry

Method(s) SM 2320B: The method blank for batch154314 contained alkalinity above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.MW-2R (440-65970-2), MW-4R (440-65970-4)

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-1R
Date Collected: 12/23/13 09:35
Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-1
Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/01/14 11:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96		76 - 132					01/01/14 11:11	1
4-Bromofluorobenzene (Surr)	110		80 - 120					01/01/14 11:11	1
Toluene-d8 (Surr)	108		80 - 128					01/01/14 11:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 11:11	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 11:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 11:11	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 11:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 11:11	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 11:11	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 11:11	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 11:11	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 11:11	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 11:11	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 11:11	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 11:11	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 11:11	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 11:11	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 11:11	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 11:11	1
Benzene	ND		0.50		ug/L			01/01/14 11:11	1
Bromobenzene	ND		0.50		ug/L			01/01/14 11:11	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 11:11	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 11:11	1
Bromoform	ND		1.0		ug/L			01/01/14 11:11	1
Bromomethane	ND		0.50		ug/L			01/01/14 11:11	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 11:11	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 11:11	1
Chloroethane	ND		0.50		ug/L			01/01/14 11:11	1
2-Hexanone	ND		5.0		ug/L			01/01/14 11:11	1
Chloroform	ND		0.50		ug/L			01/01/14 11:11	1
Chloromethane	ND		0.50		ug/L			01/01/14 11:11	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 11:11	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 11:11	1
Acetone	ND		10		ug/L			01/01/14 11:11	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 11:11	1
Dibromomethane	ND		0.50		ug/L			01/01/14 11:11	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 11:11	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 11:11	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-1R

Lab Sample ID: 440-65970-1

Date Collected: 12/23/13 09:35

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 11:11	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 11:11	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 11:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 11:11	1
Naphthalene	ND		1.0		ug/L			01/01/14 11:11	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 11:11	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 11:11	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
Styrene	ND		0.50		ug/L			01/01/14 11:11	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 11:11	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 11:11	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 11:11	1
Toluene	ND		0.50		ug/L			01/01/14 11:11	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 11:11	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 11:11	1
Trichloroethene	ND		0.50		ug/L			01/01/14 11:11	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 11:11	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 11:11	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 11:11	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 11:11	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 11:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 11:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120		01/01/14 11:11	1
Dibromofluoromethane (Surr)	96		76 - 132		01/01/14 11:11	1
Toluene-d8 (Surr)	108		80 - 128		01/01/14 11:11	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.99		ug/L			01/02/14 14:06	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		470		ug/L		12/30/13 10:57	12/30/13 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	83		45 - 120	12/30/13 10:57	12/30/13 19:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 00:16	10
Sulfate	1800000		100000		ug/L			12/24/13 13:54	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	540000		4000		ug/L			12/30/13 04:49	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-1R

Date Collected: 12/23/13 09:35

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-1

Matrix: Ground Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-2R

Date Collected: 12/23/13 13:10

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-2

Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	51000		10000		ug/L			01/01/14 12:43	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		76 - 132		01/01/14 12:43	200
4-Bromofluorobenzene (Surr)	106		80 - 120		01/01/14 12:43	200
Toluene-d8 (Surr)	109		80 - 128		01/01/14 12:43	200

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			01/01/14 12:43	200
1,1,1-Trichloroethane	ND		100		ug/L			01/01/14 12:43	200
1,1,2,2-Tetrachloroethane	ND		100		ug/L			01/01/14 12:43	200
1,1,2-Trichloroethane	ND		100		ug/L			01/01/14 12:43	200
1,1-Dichloroethane	ND		100		ug/L			01/01/14 12:43	200
1,1-Dichloroethene	ND		100		ug/L			01/01/14 12:43	200
1,1-Dichloropropene	ND		100		ug/L			01/01/14 12:43	200
1,2,3-Trichlorobenzene	ND		200		ug/L			01/01/14 12:43	200
1,2,3-Trichloropropane	ND		100		ug/L			01/01/14 12:43	200
1,2,4-Trichlorobenzene	ND		200		ug/L			01/01/14 12:43	200
1,2,4-Trimethylbenzene	2200		100		ug/L			01/01/14 12:43	200
1,2-Dibromo-3-Chloropropane	ND		200		ug/L			01/01/14 12:43	200
1,2-Dibromoethane (EDB)	ND		100		ug/L			01/01/14 12:43	200
1,2-Dichlorobenzene	ND		100		ug/L			01/01/14 12:43	200
1,2-Dichloroethane	ND		100		ug/L			01/01/14 12:43	200
1,2-Dichloropropane	ND		100		ug/L			01/01/14 12:43	200
1,3-Dichlorobenzene	ND		100		ug/L			01/01/14 12:43	200
1,3-Dichloropropane	ND		100		ug/L			01/01/14 12:43	200
1,4-Dichlorobenzene	ND		100		ug/L			01/01/14 12:43	200
2,2-Dichloropropane	ND		200		ug/L			01/01/14 12:43	200
2-Chlorotoluene	ND		100		ug/L			01/01/14 12:43	200
4-Chlorotoluene	ND		100		ug/L			01/01/14 12:43	200
Benzene	12000		100		ug/L			01/01/14 12:43	200
Bromobenzene	ND		100		ug/L			01/01/14 12:43	200
Bromochloromethane	ND		100		ug/L			01/01/14 12:43	200
Bromodichloromethane	ND		100		ug/L			01/01/14 12:43	200
Bromoform	ND		200		ug/L			01/01/14 12:43	200
Bromomethane	ND		100		ug/L			01/01/14 12:43	200
Carbon tetrachloride	ND		100		ug/L			01/01/14 12:43	200
Chlorobenzene	ND		100		ug/L			01/01/14 12:43	200
Chloroethane	ND		100		ug/L			01/01/14 12:43	200
2-Hexanone	ND		1000		ug/L			01/01/14 12:43	200

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-2R

Lab Sample ID: 440-65970-2

Date Collected: 12/23/13 13:10

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		100		ug/L			01/01/14 12:43	200
Chloromethane	ND		100		ug/L			01/01/14 12:43	200
cis-1,2-Dichloroethene	ND		100		ug/L			01/01/14 12:43	200
cis-1,3-Dichloropropene	ND		100		ug/L			01/01/14 12:43	200
Acetone	ND		2000		ug/L			01/01/14 12:43	200
Dibromochloromethane	ND		100		ug/L			01/01/14 12:43	200
Dibromomethane	ND		100		ug/L			01/01/14 12:43	200
Dichlorodifluoromethane	ND		100		ug/L			01/01/14 12:43	200
Di-isopropyl ether (DIPE)	ND		100		ug/L			01/01/14 12:43	200
Ethyl-t-butyl ether (ETBE)	ND		100		ug/L			01/01/14 12:43	200
Hexachlorobutadiene	ND		100		ug/L			01/01/14 12:43	200
Isopropylbenzene	120		100		ug/L			01/01/14 12:43	200
Methylene Chloride	ND		400		ug/L			01/01/14 12:43	200
Methyl-t-Butyl Ether (MTBE)	ND		100		ug/L			01/01/14 12:43	200
Naphthalene	300		200		ug/L			01/01/14 12:43	200
n-Butylbenzene	ND		200		ug/L			01/01/14 12:43	200
N-Propylbenzene	300		100		ug/L			01/01/14 12:43	200
4-Isopropyltoluene	ND		100		ug/L			01/01/14 12:43	200
sec-Butylbenzene	ND		100		ug/L			01/01/14 12:43	200
Styrene	ND		100		ug/L			01/01/14 12:43	200
Tert-amyl-methyl ether (TAME)	ND		100		ug/L			01/01/14 12:43	200
tert-Butyl alcohol (TBA)	ND		2000		ug/L			01/01/14 12:43	200
tert-Butylbenzene	ND		100		ug/L			01/01/14 12:43	200
Tetrachloroethene	ND		100		ug/L			01/01/14 12:43	200
Toluene	4600		100		ug/L			01/01/14 12:43	200
trans-1,2-Dichloroethene	ND		100		ug/L			01/01/14 12:43	200
trans-1,3-Dichloropropene	ND		100		ug/L			01/01/14 12:43	200
Trichloroethene	ND		100		ug/L			01/01/14 12:43	200
Trichlorofluoromethane	ND		100		ug/L			01/01/14 12:43	200
Vinyl chloride	ND		100		ug/L			01/01/14 12:43	200
Xylenes, Total	7600		200		ug/L			01/01/14 12:43	200
1,3,5-Trimethylbenzene	430		100		ug/L			01/01/14 12:43	200
Ethylbenzene	2900		100		ug/L			01/01/14 12:43	200
2-Butanone (MEK)	ND		1000		ug/L			01/01/14 12:43	200
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			01/01/14 12:43	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120					01/01/14 12:43	200
Dibromofluoromethane (Surr)	97		76 - 132					01/01/14 12:43	200
Toluene-d8 (Surr)	109		80 - 128					01/01/14 12:43	200

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	1000		2.0		ug/L			01/02/14 19:31	2

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	3500		2400		ug/L		12/30/13 10:57	12/31/13 08:58	5

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-2R

Date Collected: 12/23/13 13:10

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-2

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane	78		45 - 120	12/30/13 10:57	12/31/13 08:58	5

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 00:50	10
Sulfate	ND		5000		ug/L			12/24/13 14:09	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	1300000	B	4000		ug/L			01/06/14 14:42	1
Ferrous Iron	10000	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-3R

Date Collected: 12/23/13 08:35

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-3

Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	59		50		ug/L			01/01/14 13:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane (Surr)</i>	105		76 - 132		01/01/14 13:14	1
<i>4-Bromofluorobenzene (Surr)</i>	110		80 - 120		01/01/14 13:14	1
<i>Toluene-d8 (Surr)</i>	110		80 - 128		01/01/14 13:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 13:14	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 13:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 13:14	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 13:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 13:14	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 13:14	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 13:14	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 13:14	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 13:14	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 13:14	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 13:14	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 13:14	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 13:14	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 13:14	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 13:14	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 13:14	1
Benzene	ND		0.50		ug/L			01/01/14 13:14	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-3R

Lab Sample ID: 440-65970-3

Date Collected: 12/23/13 08:35

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50		ug/L			01/01/14 13:14	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 13:14	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 13:14	1
Bromoform	ND		1.0		ug/L			01/01/14 13:14	1
Bromomethane	ND		0.50		ug/L			01/01/14 13:14	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 13:14	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 13:14	1
Chloroethane	ND		0.50		ug/L			01/01/14 13:14	1
2-Hexanone	ND		5.0		ug/L			01/01/14 13:14	1
Chloroform	ND		0.50		ug/L			01/01/14 13:14	1
Chloromethane	ND		0.50		ug/L			01/01/14 13:14	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 13:14	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 13:14	1
Acetone	ND		10		ug/L			01/01/14 13:14	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 13:14	1
Dibromomethane	ND		0.50		ug/L			01/01/14 13:14	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 13:14	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 13:14	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 13:14	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 13:14	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 13:14	1
Methyl-t-Butyl Ether (MTBE)	1.1		0.50		ug/L			01/01/14 13:14	1
Naphthalene	ND		1.0		ug/L			01/01/14 13:14	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 13:14	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 13:14	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
Styrene	ND		0.50		ug/L			01/01/14 13:14	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 13:14	1
tert-Butyl alcohol (TBA)	28		10		ug/L			01/01/14 13:14	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 13:14	1
Toluene	ND		0.50		ug/L			01/01/14 13:14	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 13:14	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 13:14	1
Trichloroethene	ND		0.50		ug/L			01/01/14 13:14	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 13:14	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 13:14	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 13:14	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 13:14	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 13:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120		01/01/14 13:14	1
Dibromofluoromethane (Surr)	105		76 - 132		01/01/14 13:14	1
Toluene-d8 (Surr)	110		80 - 128		01/01/14 13:14	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-3R

Lab Sample ID: 440-65970-3

Date Collected: 12/23/13 08:35

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	4.9		0.99		ug/L			01/02/14 15:07	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		470		ug/L		12/30/13 10:57	12/30/13 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	79		45 - 120	12/30/13 10:57	12/30/13 19:44	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		550		ug/L			12/24/13 01:24	5

Sulfate	620000		100000		ug/L			12/24/13 14:24	200
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General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	760000		4000		ug/L			12/30/13 05:15	1

Ferrous Iron	ND	HF	100		ug/L			12/24/13 07:29	1
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Client Sample ID: MW-4R

Lab Sample ID: 440-65970-4

Date Collected: 12/23/13 11:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	8100		1300		ug/L			01/01/14 13:44	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	104		76 - 132		01/01/14 13:44	25
4-Bromofluorobenzene (Surr)	109		80 - 120		01/01/14 13:44	25
Toluene-d8 (Surr)	108		80 - 128		01/01/14 13:44	25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		13		ug/L			01/01/14 13:44	25
1,1,1-Trichloroethane	ND		13		ug/L			01/01/14 13:44	25
1,1,2,2-Tetrachloroethane	ND		13		ug/L			01/01/14 13:44	25
1,1,2-Trichloroethane	ND		13		ug/L			01/01/14 13:44	25
1,1-Dichloroethane	ND		13		ug/L			01/01/14 13:44	25
1,1-Dichloroethene	ND		13		ug/L			01/01/14 13:44	25
1,1-Dichloropropene	ND		13		ug/L			01/01/14 13:44	25
1,2,3-Trichlorobenzene	ND		25		ug/L			01/01/14 13:44	25
1,2,3-Trichloropropane	ND		13		ug/L			01/01/14 13:44	25
1,2,4-Trichlorobenzene	ND		25		ug/L			01/01/14 13:44	25
1,2,4-Trimethylbenzene	370		13		ug/L			01/01/14 13:44	25
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			01/01/14 13:44	25
1,2-Dibromoethane (EDB)	ND		13		ug/L			01/01/14 13:44	25
1,2-Dichlorobenzene	ND		13		ug/L			01/01/14 13:44	25
1,2-Dichloroethane	ND		13		ug/L			01/01/14 13:44	25
1,2-Dichloropropane	ND		13		ug/L			01/01/14 13:44	25

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-4R

Lab Sample ID: 440-65970-4

Date Collected: 12/23/13 11:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		13		ug/L			01/01/14 13:44	25
1,3-Dichloropropane	ND		13		ug/L			01/01/14 13:44	25
1,4-Dichlorobenzene	ND		13		ug/L			01/01/14 13:44	25
2,2-Dichloropropane	ND		25		ug/L			01/01/14 13:44	25
2-Chlorotoluene	ND		13		ug/L			01/01/14 13:44	25
4-Chlorotoluene	ND		13		ug/L			01/01/14 13:44	25
Benzene	1600		13		ug/L			01/01/14 13:44	25
Bromobenzene	ND		13		ug/L			01/01/14 13:44	25
Bromochloromethane	ND		13		ug/L			01/01/14 13:44	25
Bromodichloromethane	ND		13		ug/L			01/01/14 13:44	25
Bromoform	ND		25		ug/L			01/01/14 13:44	25
Bromomethane	ND		13		ug/L			01/01/14 13:44	25
Carbon tetrachloride	ND		13		ug/L			01/01/14 13:44	25
Chlorobenzene	ND		13		ug/L			01/01/14 13:44	25
Chloroethane	ND		13		ug/L			01/01/14 13:44	25
2-Hexanone	ND		130		ug/L			01/01/14 13:44	25
Chloroform	ND		13		ug/L			01/01/14 13:44	25
Chloromethane	ND		13		ug/L			01/01/14 13:44	25
cis-1,2-Dichloroethene	ND		13		ug/L			01/01/14 13:44	25
cis-1,3-Dichloropropene	ND		13		ug/L			01/01/14 13:44	25
Acetone	ND		250		ug/L			01/01/14 13:44	25
Dibromochloromethane	ND		13		ug/L			01/01/14 13:44	25
Dibromomethane	ND		13		ug/L			01/01/14 13:44	25
Dichlorodifluoromethane	ND		13		ug/L			01/01/14 13:44	25
Di-isopropyl ether (DIPE)	ND		13		ug/L			01/01/14 13:44	25
Ethyl-t-butyl ether (ETBE)	ND		13		ug/L			01/01/14 13:44	25
Hexachlorobutadiene	ND		13		ug/L			01/01/14 13:44	25
Isopropylbenzene	42		13		ug/L			01/01/14 13:44	25
Methylene Chloride	ND		50		ug/L			01/01/14 13:44	25
Methyl-t-Butyl Ether (MTBE)	43		13		ug/L			01/01/14 13:44	25
Naphthalene	45		25		ug/L			01/01/14 13:44	25
n-Butylbenzene	ND		25		ug/L			01/01/14 13:44	25
N-Propylbenzene	110		13		ug/L			01/01/14 13:44	25
4-Isopropyltoluene	ND		13		ug/L			01/01/14 13:44	25
sec-Butylbenzene	ND		13		ug/L			01/01/14 13:44	25
Styrene	ND		13		ug/L			01/01/14 13:44	25
Tert-amyl-methyl ether (TAME)	ND		13		ug/L			01/01/14 13:44	25
tert-Butyl alcohol (TBA)	510		250		ug/L			01/01/14 13:44	25
tert-Butylbenzene	ND		13		ug/L			01/01/14 13:44	25
Tetrachloroethene	ND		13		ug/L			01/01/14 13:44	25
Toluene	110		13		ug/L			01/01/14 13:44	25
trans-1,2-Dichloroethene	ND		13		ug/L			01/01/14 13:44	25
trans-1,3-Dichloropropene	ND		13		ug/L			01/01/14 13:44	25
Trichloroethene	ND		13		ug/L			01/01/14 13:44	25
Trichlorofluoromethane	ND		13		ug/L			01/01/14 13:44	25
Vinyl chloride	ND		13		ug/L			01/01/14 13:44	25
Xylenes, Total	730		25		ug/L			01/01/14 13:44	25
1,3,5-Trimethylbenzene	28		13		ug/L			01/01/14 13:44	25
Ethylbenzene	620		13		ug/L			01/01/14 13:44	25

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-4R

Lab Sample ID: 440-65970-4

Date Collected: 12/23/13 11:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		130		ug/L			01/01/14 13:44	25
4-Methyl-2-pentanone (MIBK)	ND		130		ug/L			01/01/14 13:44	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120					01/01/14 13:44	25
Dibromofluoromethane (Surr)	104		76 - 132					01/01/14 13:44	25
Toluene-d8 (Surr)	108		80 - 128					01/01/14 13:44	25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (TCD)	1500		1000		ug/L			01/02/14 15:25	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	1100		480		ug/L		12/30/13 10:57	12/30/13 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	78		45 - 120				12/30/13 10:57	12/30/13 20:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 01:58	10
Sulfate	10000		5000		ug/L			12/24/13 14:39	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	1300000	B	4000		ug/L			01/06/14 14:42	1
Ferrous Iron	10000	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-5R

Lab Sample ID: 440-65970-5

Date Collected: 12/23/13 07:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/01/14 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		76 - 132					01/01/14 14:15	1
4-Bromofluorobenzene (Surr)	107		80 - 120					01/01/14 14:15	1
Toluene-d8 (Surr)	108		80 - 128					01/01/14 14:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 14:15	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 14:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 14:15	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-5R

Lab Sample ID: 440-65970-5

Date Collected: 12/23/13 07:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 14:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 14:15	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 14:15	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 14:15	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:15	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 14:15	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 14:15	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:15	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 14:15	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:15	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 14:15	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 14:15	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 14:15	1
Benzene	ND		0.50		ug/L			01/01/14 14:15	1
Bromobenzene	ND		0.50		ug/L			01/01/14 14:15	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 14:15	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 14:15	1
Bromoform	ND		1.0		ug/L			01/01/14 14:15	1
Bromomethane	ND		0.50		ug/L			01/01/14 14:15	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 14:15	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 14:15	1
Chloroethane	ND		0.50		ug/L			01/01/14 14:15	1
2-Hexanone	ND		5.0		ug/L			01/01/14 14:15	1
Chloroform	ND		0.50		ug/L			01/01/14 14:15	1
Chloromethane	ND		0.50		ug/L			01/01/14 14:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 14:15	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 14:15	1
Acetone	ND		10		ug/L			01/01/14 14:15	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 14:15	1
Dibromomethane	ND		0.50		ug/L			01/01/14 14:15	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 14:15	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 14:15	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 14:15	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 14:15	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 14:15	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 14:15	1
Naphthalene	ND		1.0		ug/L			01/01/14 14:15	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 14:15	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 14:15	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
Styrene	ND		0.50		ug/L			01/01/14 14:15	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 14:15	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 14:15	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 14:15	1
Toluene	ND		0.50		ug/L			01/01/14 14:15	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-5R

Lab Sample ID: 440-65970-5

Date Collected: 12/23/13 07:55

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 14:15	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 14:15	1
Trichloroethene	ND		0.50		ug/L			01/01/14 14:15	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 14:15	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 14:15	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 14:15	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 14:15	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		01/01/14 14:15	1
Dibromofluoromethane (Surr)	98		76 - 132		01/01/14 14:15	1
Toluene-d8 (Surr)	108		80 - 128		01/01/14 14:15	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.99		ug/L			01/02/14 15:41	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		470		ug/L		12/30/13 10:57	12/30/13 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	76		45 - 120	12/30/13 10:57	12/30/13 20:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 02:32	10
Sulfate	1400000		100000		ug/L			12/24/13 14:54	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	390000		4000		ug/L			12/30/13 05:36	1
Ferrous Iron	ND	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-6

Lab Sample ID: 440-65970-6

Date Collected: 12/23/13 12:40

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	2300		50		ug/L			01/01/14 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96		76 - 132		01/01/14 14:46	1
4-Bromofluorobenzene (Surr)	110		80 - 120		01/01/14 14:46	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 14:46	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-6

Lab Sample ID: 440-65970-6

Date Collected: 12/23/13 12:40

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 14:46	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 14:46	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 14:46	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 14:46	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 14:46	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 14:46	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 14:46	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 14:46	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 14:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 14:46	1
1,2,4-Trimethylbenzene	140		0.50		ug/L			01/01/14 14:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 14:46	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 14:46	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:46	1
1,2-Dichloroethane	4.9		0.50		ug/L			01/01/14 14:46	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 14:46	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:46	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 14:46	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 14:46	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 14:46	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 14:46	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 14:46	1
Benzene	0.82		0.50		ug/L			01/01/14 14:46	1
Bromobenzene	ND		0.50		ug/L			01/01/14 14:46	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 14:46	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 14:46	1
Bromoform	ND		1.0		ug/L			01/01/14 14:46	1
Bromomethane	ND		0.50		ug/L			01/01/14 14:46	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 14:46	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 14:46	1
Chloroethane	ND		0.50		ug/L			01/01/14 14:46	1
2-Hexanone	ND		5.0		ug/L			01/01/14 14:46	1
Chloroform	ND		0.50		ug/L			01/01/14 14:46	1
Chloromethane	ND		0.50		ug/L			01/01/14 14:46	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 14:46	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 14:46	1
Acetone	ND		10		ug/L			01/01/14 14:46	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 14:46	1
Dibromomethane	ND		0.50		ug/L			01/01/14 14:46	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 14:46	1
Di-isopropyl ether (DIPE)	0.85		0.50		ug/L			01/01/14 14:46	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 14:46	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 14:46	1
Isopropylbenzene	7.6		0.50		ug/L			01/01/14 14:46	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 14:46	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 14:46	1
Naphthalene	8.7		1.0		ug/L			01/01/14 14:46	1
n-Butylbenzene	6.2		1.0		ug/L			01/01/14 14:46	1
N-Propylbenzene	24		0.50		ug/L			01/01/14 14:46	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-6

Lab Sample ID: 440-65970-6

Date Collected: 12/23/13 12:40

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	1.7		0.50		ug/L			01/01/14 14:46	1
sec-Butylbenzene	3.2		0.50		ug/L			01/01/14 14:46	1
Styrene	ND		0.50		ug/L			01/01/14 14:46	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 14:46	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 14:46	1
tert-Butylbenzene	0.86		0.50		ug/L			01/01/14 14:46	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 14:46	1
Toluene	ND		0.50		ug/L			01/01/14 14:46	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 14:46	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 14:46	1
Trichloroethene	ND		0.50		ug/L			01/01/14 14:46	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 14:46	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 14:46	1
Xylenes, Total	100		1.0		ug/L			01/01/14 14:46	1
1,3,5-Trimethylbenzene	6.6		0.50		ug/L			01/01/14 14:46	1
Ethylbenzene	64		0.50		ug/L			01/01/14 14:46	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 14:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		80 - 120		01/01/14 14:46	1
Dibromofluoromethane (Surr)	96		76 - 132		01/01/14 14:46	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 14:46	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	910		2.0		ug/L			01/02/14 19:50	2

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	520		480		ug/L		12/30/13 10:57	12/30/13 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	70		45 - 120	12/30/13 10:57	12/30/13 20:44	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 03:39	10
Sulfate	780000		100000		ug/L			12/24/13 03:56	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	780000		4000		ug/L			12/30/13 05:46	1
Ferrous Iron	5000	HF	100		ug/L			12/24/13 07:29	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-7

Lab Sample ID: 440-65970-7

Date Collected: 12/23/13 12:15

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	81		50		ug/L			01/01/14 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane (Surr)</i>	102		76 - 132					01/01/14 15:17	1
<i>4-Bromofluorobenzene (Surr)</i>	109		80 - 120					01/01/14 15:17	1
<i>Toluene-d8 (Surr)</i>	108		80 - 128					01/01/14 15:17	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 15:17	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 15:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 15:17	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 15:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 15:17	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 15:17	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 15:17	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:17	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 15:17	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 15:17	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:17	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 15:17	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:17	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 15:17	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 15:17	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 15:17	1
Benzene	ND		0.50		ug/L			01/01/14 15:17	1
Bromobenzene	ND		0.50		ug/L			01/01/14 15:17	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 15:17	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 15:17	1
Bromoform	ND		1.0		ug/L			01/01/14 15:17	1
Bromomethane	ND		0.50		ug/L			01/01/14 15:17	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 15:17	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 15:17	1
Chloroethane	ND		0.50		ug/L			01/01/14 15:17	1
2-Hexanone	ND		5.0		ug/L			01/01/14 15:17	1
Chloroform	ND		0.50		ug/L			01/01/14 15:17	1
Chloromethane	ND		0.50		ug/L			01/01/14 15:17	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 15:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 15:17	1
Acetone	ND		10		ug/L			01/01/14 15:17	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 15:17	1
Dibromomethane	ND		0.50		ug/L			01/01/14 15:17	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 15:17	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-7

Lab Sample ID: 440-65970-7

Date Collected: 12/23/13 12:15

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 15:17	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 15:17	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 15:17	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 15:17	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 15:17	1
Naphthalene	ND		1.0		ug/L			01/01/14 15:17	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 15:17	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 15:17	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
Styrene	ND		0.50		ug/L			01/01/14 15:17	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 15:17	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 15:17	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 15:17	1
Toluene	ND		0.50		ug/L			01/01/14 15:17	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 15:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 15:17	1
Trichloroethene	ND		0.50		ug/L			01/01/14 15:17	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 15:17	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 15:17	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 15:17	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 15:17	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120		01/01/14 15:17	1
Dibromofluoromethane (Surr)	102		76 - 132		01/01/14 15:17	1
Toluene-d8 (Surr)	108		80 - 128		01/01/14 15:17	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.99		ug/L			01/02/14 16:18	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		480		ug/L		12/30/13 10:57	12/30/13 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	80		45 - 120	12/30/13 10:57	12/30/13 19:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 04:13	10
Sulfate	1600000		100000		ug/L			12/24/13 04:30	200

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-7

Date Collected: 12/23/13 12:15

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-7

Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	560000		4000		ug/L			12/30/13 05:54	1
Ferrous Iron	200	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-8

Date Collected: 12/23/13 10:50

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-8

Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	70		50		ug/L			01/01/14 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		76 - 132		01/01/14 15:48	1
4-Bromofluorobenzene (Surr)	108		80 - 120		01/01/14 15:48	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 15:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 15:48	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 15:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 15:48	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 15:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 15:48	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 15:48	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 15:48	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:48	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 15:48	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 15:48	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:48	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 15:48	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 15:48	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 15:48	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 15:48	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 15:48	1
Benzene	ND		0.50		ug/L			01/01/14 15:48	1
Bromobenzene	ND		0.50		ug/L			01/01/14 15:48	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 15:48	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 15:48	1
Bromoform	ND		1.0		ug/L			01/01/14 15:48	1
Bromomethane	ND		0.50		ug/L			01/01/14 15:48	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 15:48	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 15:48	1
Chloroethane	ND		0.50		ug/L			01/01/14 15:48	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-8

Lab Sample ID: 440-65970-8

Date Collected: 12/23/13 10:50

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		5.0		ug/L			01/01/14 15:48	1
Chloroform	ND		0.50		ug/L			01/01/14 15:48	1
Chloromethane	ND		0.50		ug/L			01/01/14 15:48	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 15:48	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 15:48	1
Acetone	ND		10		ug/L			01/01/14 15:48	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 15:48	1
Dibromomethane	ND		0.50		ug/L			01/01/14 15:48	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 15:48	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 15:48	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 15:48	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 15:48	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 15:48	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 15:48	1
Naphthalene	ND		1.0		ug/L			01/01/14 15:48	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 15:48	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 15:48	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
Styrene	ND		0.50		ug/L			01/01/14 15:48	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 15:48	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 15:48	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 15:48	1
Toluene	ND		0.50		ug/L			01/01/14 15:48	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 15:48	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 15:48	1
Trichloroethene	ND		0.50		ug/L			01/01/14 15:48	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 15:48	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 15:48	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 15:48	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 15:48	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		01/01/14 15:48	1
Dibromofluoromethane (Surr)	97		76 - 132		01/01/14 15:48	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 15:48	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.99		ug/L			01/02/14 16:36	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		470		ug/L		12/30/13 10:57	12/30/13 18:44	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-8

Date Collected: 12/23/13 10:50

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-8

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane	80		45 - 120	12/30/13 10:57	12/30/13 18:44	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2000		1100		ug/L			12/24/13 05:21	10
Sulfate	1700000		100000		ug/L			12/24/13 05:37	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	490000		4000		ug/L			12/30/13 06:03	1
Ferrous Iron	ND	HF	100		ug/L			12/24/13 07:29	1

Client Sample ID: MW-9

Date Collected: 12/23/13 10:20

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-9

Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	120		50		ug/L			01/01/14 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane (Surr)</i>	98		76 - 132		01/01/14 16:18	1
<i>4-Bromofluorobenzene (Surr)</i>	106		80 - 120		01/01/14 16:18	1
<i>Toluene-d8 (Surr)</i>	111		80 - 128		01/01/14 16:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 16:18	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 16:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 16:18	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 16:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 16:18	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 16:18	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 16:18	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:18	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 16:18	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 16:18	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:18	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 16:18	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:18	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 16:18	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 16:18	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 16:18	1
Benzene	ND		0.50		ug/L			01/01/14 16:18	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-9

Lab Sample ID: 440-65970-9

Date Collected: 12/23/13 10:20

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.50		ug/L			01/01/14 16:18	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 16:18	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 16:18	1
Bromoform	ND		1.0		ug/L			01/01/14 16:18	1
Bromomethane	ND		0.50		ug/L			01/01/14 16:18	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 16:18	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 16:18	1
Chloroethane	ND		0.50		ug/L			01/01/14 16:18	1
2-Hexanone	ND		5.0		ug/L			01/01/14 16:18	1
Chloroform	ND		0.50		ug/L			01/01/14 16:18	1
Chloromethane	ND		0.50		ug/L			01/01/14 16:18	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 16:18	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 16:18	1
Acetone	ND		10		ug/L			01/01/14 16:18	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 16:18	1
Dibromomethane	ND		0.50		ug/L			01/01/14 16:18	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 16:18	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 16:18	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 16:18	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 16:18	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 16:18	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 16:18	1
Naphthalene	ND		1.0		ug/L			01/01/14 16:18	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 16:18	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 16:18	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
Styrene	ND		0.50		ug/L			01/01/14 16:18	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 16:18	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 16:18	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 16:18	1
Toluene	ND		0.50		ug/L			01/01/14 16:18	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 16:18	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 16:18	1
Trichloroethene	ND		0.50		ug/L			01/01/14 16:18	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 16:18	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 16:18	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 16:18	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 16:18	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 16:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		01/01/14 16:18	1
Dibromofluoromethane (Surr)	98		76 - 132		01/01/14 16:18	1
Toluene-d8 (Surr)	111		80 - 128		01/01/14 16:18	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-9

Date Collected: 12/23/13 10:20

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-9

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	16		0.99		ug/L			01/02/14 16:58	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		480		ug/L		12/30/13 10:57	12/30/13 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	76		45 - 120	12/30/13 10:57	12/30/13 19:44	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		1100		ug/L			12/24/13 05:54	10

Sulfate	1600000		100000		ug/L			12/24/13 06:11	200
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General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	530000		4000		ug/L			12/30/13 06:11	1

Ferrous Iron	100	HF	100		ug/L			12/24/13 07:29	1
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Client Sample ID: MW-10

Date Collected: 12/23/13 11:20

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-10

Matrix: Ground Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	750		50		ug/L			01/01/14 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		76 - 132		01/01/14 16:49	1
4-Bromofluorobenzene (Surr)	109		80 - 120		01/01/14 16:49	1
Toluene-d8 (Surr)	111		80 - 128		01/01/14 16:49	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 16:49	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 16:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 16:49	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 16:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 16:49	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 16:49	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 16:49	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:49	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 16:49	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 16:49	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-10

Lab Sample ID: 440-65970-10

Date Collected: 12/23/13 11:20

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:49	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 16:49	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 16:49	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 16:49	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 16:49	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 16:49	1
Benzene	ND		0.50		ug/L			01/01/14 16:49	1
Bromobenzene	ND		0.50		ug/L			01/01/14 16:49	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 16:49	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 16:49	1
Bromoform	ND		1.0		ug/L			01/01/14 16:49	1
Bromomethane	ND		0.50		ug/L			01/01/14 16:49	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 16:49	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 16:49	1
Chloroethane	ND		0.50		ug/L			01/01/14 16:49	1
2-Hexanone	ND		5.0		ug/L			01/01/14 16:49	1
Chloroform	ND		0.50		ug/L			01/01/14 16:49	1
Chloromethane	ND		0.50		ug/L			01/01/14 16:49	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 16:49	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 16:49	1
Acetone	ND		10		ug/L			01/01/14 16:49	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 16:49	1
Dibromomethane	ND		0.50		ug/L			01/01/14 16:49	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 16:49	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 16:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 16:49	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 16:49	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 16:49	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 16:49	1
Naphthalene	ND		1.0		ug/L			01/01/14 16:49	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 16:49	1
N-Propylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 16:49	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
Styrene	ND		0.50		ug/L			01/01/14 16:49	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 16:49	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 16:49	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 16:49	1
Toluene	ND		0.50		ug/L			01/01/14 16:49	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 16:49	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 16:49	1
Trichloroethene	ND		0.50		ug/L			01/01/14 16:49	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 16:49	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 16:49	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 16:49	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 16:49	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 16:49	1

TestAmerica Irvine

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-10

Lab Sample ID: 440-65970-10

Date Collected: 12/23/13 11:20

Matrix: Ground Water

Date Received: 12/23/13 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120					01/01/14 16:49	1
Dibromofluoromethane (Surr)	101		76 - 132					01/01/14 16:49	1
Toluene-d8 (Surr)	111		80 - 128					01/01/14 16:49	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.99		ug/L			01/02/14 17:23	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		470		ug/L		12/30/13 10:57	12/30/13 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane	77		45 - 120				12/30/13 10:57	12/30/13 20:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2000		1100		ug/L			12/24/13 07:02	10
Sulfate	1700000		100000		ug/L			12/24/13 07:19	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	540000		4000		ug/L			12/30/13 06:19	1
Ferrous Iron	ND	HF	100		ug/L			12/24/13 07:29	1

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTM S	Volatile Organic Compounds by GC/MS	SW846	TAL IRV
RSK-175	Dissolved Gases (GC)	RSK	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 3500 FE D	Iron, Ferrous	SM	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-1R
Date Collected: 12/23/13 09:35
Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 11:11	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 11:11	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 14:06	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1055 mL	1 mL	153350	12/30/13 19:04	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 00:16	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152594	12/24/13 13:54	NN	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 04:49	YZ	TAL IRV

Client Sample ID: MW-2R
Date Collected: 12/23/13 13:10
Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	10 mL	10 mL	153685	01/01/14 12:43	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		200	10 mL	10 mL	153686	01/01/14 12:43	YK	TAL IRV
Total/NA	Analysis	RSK-175		2	300 uL	300 uL	153790	01/02/14 19:31	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		5	1055 mL	1 mL	153350	12/31/13 08:58	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 00:50	CC	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152594	12/24/13 14:09	NN	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1	25 mL	25 mL	154314	01/06/14 14:42	DC	TAL IRV

Client Sample ID: MW-3R
Date Collected: 12/23/13 08:35
Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 13:14	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 13:14	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 15:07	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1055 mL	1 mL	153350	12/30/13 19:44	KW	TAL IRV
Total/NA	Analysis	300.0		5	5 mL		152270	12/24/13 01:24	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152594	12/24/13 14:24	NN	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 05:15	YZ	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-4R

Date Collected: 12/23/13 11:55

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	10 mL	10 mL	153685	01/01/14 13:44	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		25	10 mL	10 mL	153686	01/01/14 13:44	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 15:25	EI	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1050 mL	1 mL	153350	12/30/13 20:04	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 01:58	CC	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152594	12/24/13 14:39	NN	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1	25 mL	25 mL	154314	01/06/14 14:42	DC	TAL IRV

Client Sample ID: MW-5R

Date Collected: 12/23/13 07:55

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 14:15	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 14:15	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 15:41	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1055 mL	1 mL	153350	12/30/13 20:24	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 02:32	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152594	12/24/13 14:54	NN	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 05:36	YZ	TAL IRV

Client Sample ID: MW-6

Date Collected: 12/23/13 12:40

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 14:46	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 14:46	YK	TAL IRV
Total/NA	Analysis	RSK-175		2	300 uL	300 uL	153790	01/02/14 19:50	EI	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1050 mL	1 mL	153350	12/30/13 20:44	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 03:39	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152271	12/24/13 03:56	CC	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 05:46	YZ	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-7

Date Collected: 12/23/13 12:15

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 15:17	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 15:17	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 16:18	EI	TAL IRV
Total/NA	Prep	3510C			1045 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1045 mL	1 mL	153351	12/30/13 19:24	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 04:13	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152271	12/24/13 04:30	CC	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 05:54	YZ	TAL IRV

Client Sample ID: MW-8

Date Collected: 12/23/13 10:50

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 15:48	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 15:48	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 16:36	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1055 mL	1 mL	153351	12/30/13 18:44	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 05:21	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152271	12/24/13 05:37	CC	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 06:03	YZ	TAL IRV

Client Sample ID: MW-9

Date Collected: 12/23/13 10:20

Date Received: 12/23/13 18:00

Lab Sample ID: 440-65970-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 16:18	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 16:18	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 16:58	EI	TAL IRV
Total/NA	Prep	3510C			1050 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1050 mL	1 mL	153351	12/30/13 19:44	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 05:54	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152271	12/24/13 06:11	CC	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 06:11	YZ	TAL IRV

TestAmerica Irvine

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Client Sample ID: MW-10

Lab Sample ID: 440-65970-10

Date Collected: 12/23/13 11:20

Matrix: Ground Water

Date Received: 12/23/13 18:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	153685	01/01/14 16:49	YK	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	153686	01/01/14 16:49	YK	TAL IRV
Total/NA	Analysis	RSK-175		1	300 uL	300 uL	153790	01/02/14 17:23	EI	TAL IRV
Total/NA	Prep	3510C			1055 mL	1 mL	153357	12/30/13 10:57	LBP	TAL IRV
Total/NA	Analysis	8015B		1	1055 mL	1 mL	153351	12/30/13 20:04	KW	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		152270	12/24/13 07:02	CC	TAL IRV
Total/NA	Analysis	300.0		200	5 mL		152271	12/24/13 07:19	CC	TAL IRV
Total/NA	Analysis	SM 3500 FE D		1	25 mL	25 mL	152524	12/24/13 07:29	NT	TAL IRV
Total/NA	Analysis	SM 2320B		1			153287	12/30/13 06:19	YZ	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022



QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-153685/4

Matrix: Water

Analysis Batch: 153685

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,1,1-Trichloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,1,2-Trichloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,1-Dichloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,1-Dichloroethene	ND		0.50		ug/L			01/01/14 09:39	1
1,1-Dichloropropene	ND		0.50		ug/L			01/01/14 09:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/01/14 09:39	1
1,2,3-Trichloropropane	ND		0.50		ug/L			01/01/14 09:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/01/14 09:39	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/01/14 09:39	1
1,2-Dibromoethane (EDB)	ND		0.50		ug/L			01/01/14 09:39	1
1,2-Dichlorobenzene	ND		0.50		ug/L			01/01/14 09:39	1
1,2-Dichloroethane	ND		0.50		ug/L			01/01/14 09:39	1
1,2-Dichloropropane	ND		0.50		ug/L			01/01/14 09:39	1
1,3-Dichlorobenzene	ND		0.50		ug/L			01/01/14 09:39	1
1,3-Dichloropropane	ND		0.50		ug/L			01/01/14 09:39	1
1,4-Dichlorobenzene	ND		0.50		ug/L			01/01/14 09:39	1
2,2-Dichloropropane	ND		1.0		ug/L			01/01/14 09:39	1
2-Chlorotoluene	ND		0.50		ug/L			01/01/14 09:39	1
4-Chlorotoluene	ND		0.50		ug/L			01/01/14 09:39	1
Benzene	ND		0.50		ug/L			01/01/14 09:39	1
Bromobenzene	ND		0.50		ug/L			01/01/14 09:39	1
Bromochloromethane	ND		0.50		ug/L			01/01/14 09:39	1
Bromodichloromethane	ND		0.50		ug/L			01/01/14 09:39	1
Bromoform	ND		1.0		ug/L			01/01/14 09:39	1
Bromomethane	ND		0.50		ug/L			01/01/14 09:39	1
Carbon tetrachloride	ND		0.50		ug/L			01/01/14 09:39	1
Chlorobenzene	ND		0.50		ug/L			01/01/14 09:39	1
Chloroethane	ND		0.50		ug/L			01/01/14 09:39	1
2-Hexanone	ND		5.0		ug/L			01/01/14 09:39	1
Chloroform	ND		0.50		ug/L			01/01/14 09:39	1
Chloromethane	ND		0.50		ug/L			01/01/14 09:39	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 09:39	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 09:39	1
Acetone	ND		10		ug/L			01/01/14 09:39	1
Dibromochloromethane	ND		0.50		ug/L			01/01/14 09:39	1
Dibromomethane	ND		0.50		ug/L			01/01/14 09:39	1
Dichlorodifluoromethane	ND		0.50		ug/L			01/01/14 09:39	1
Di-isopropyl ether (DIPE)	ND		0.50		ug/L			01/01/14 09:39	1
Ethyl-t-butyl ether (ETBE)	ND		0.50		ug/L			01/01/14 09:39	1
Hexachlorobutadiene	ND		0.50		ug/L			01/01/14 09:39	1
Isopropylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
Methylene Chloride	ND		2.0		ug/L			01/01/14 09:39	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			01/01/14 09:39	1
Naphthalene	ND		1.0		ug/L			01/01/14 09:39	1
n-Butylbenzene	ND		1.0		ug/L			01/01/14 09:39	1

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-153685/4

Matrix: Water

Analysis Batch: 153685

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
4-Isopropyltoluene	ND		0.50		ug/L			01/01/14 09:39	1
sec-Butylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
Styrene	ND		0.50		ug/L			01/01/14 09:39	1
Tert-amyl-methyl ether (TAME)	ND		0.50		ug/L			01/01/14 09:39	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			01/01/14 09:39	1
tert-Butylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
Tetrachloroethene	ND		0.50		ug/L			01/01/14 09:39	1
Toluene	ND		0.50		ug/L			01/01/14 09:39	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			01/01/14 09:39	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/01/14 09:39	1
Trichloroethene	ND		0.50		ug/L			01/01/14 09:39	1
Trichlorofluoromethane	ND		0.50		ug/L			01/01/14 09:39	1
Vinyl chloride	ND		0.50		ug/L			01/01/14 09:39	1
Xylenes, Total	ND		1.0		ug/L			01/01/14 09:39	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
Ethylbenzene	ND		0.50		ug/L			01/01/14 09:39	1
2-Butanone (MEK)	ND		5.0		ug/L			01/01/14 09:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/01/14 09:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		01/01/14 09:39	1
Dibromofluoromethane (Surr)	95		76 - 132		01/01/14 09:39	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 09:39	1

Lab Sample ID: LCS 440-153685/5

Matrix: Water

Analysis Batch: 153685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	29.3		ug/L		117	60 - 141
1,1,1-Trichloroethane	25.0	28.3		ug/L		113	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.6		ug/L		107	63 - 130
1,1,2-Trichloroethane	25.0	26.6		ug/L		107	70 - 130
1,1-Dichloroethane	25.0	23.9		ug/L		96	64 - 130
1,1-Dichloroethene	25.0	27.4		ug/L		110	70 - 130
1,1-Dichloropropene	25.0	27.1		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	60 - 140
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	63 - 130
1,2,4-Trichlorobenzene	25.0	27.3		ug/L		109	60 - 140
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	70 - 135
1,2-Dibromo-3-Chloropropane	25.0	26.1		ug/L		104	52 - 140
1,2-Dibromoethane (EDB)	25.0	26.6		ug/L		106	70 - 130
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	70 - 130
1,2-Dichloroethane	25.0	28.1		ug/L		112	57 - 138
1,2-Dichloropropane	25.0	26.2		ug/L		105	67 - 130
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	70 - 130
1,3-Dichloropropane	25.0	25.3		ug/L		101	70 - 130

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-153685/5

Matrix: Water

Analysis Batch: 153685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
2,2-Dichloropropane	25.0	29.4		ug/L		118	68 - 141
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130
4-Chlorotoluene	25.0	27.4		ug/L		110	70 - 130
Benzene	25.0	24.2		ug/L		97	68 - 130
Bromobenzene	25.0	26.6		ug/L		106	70 - 130
Bromochloromethane	25.0	25.8		ug/L		103	70 - 130
Bromodichloromethane	25.0	28.1		ug/L		112	70 - 132
Bromoform	25.0	29.8		ug/L		119	60 - 148
Bromomethane	25.0	27.6		ug/L		110	64 - 139
Carbon tetrachloride	25.0	31.6		ug/L		126	60 - 150
Chlorobenzene	25.0	25.1		ug/L		100	70 - 130
Chloroethane	25.0	27.1		ug/L		109	64 - 135
2-Hexanone	25.0	29.0		ug/L		116	10 - 150
Chloroform	25.0	25.1		ug/L		100	70 - 130
Chloromethane	25.0	25.6		ug/L		102	47 - 140
cis-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 133
cis-1,3-Dichloropropene	25.0	28.5		ug/L		114	70 - 133
Acetone	25.0	32.3		ug/L		129	10 - 150
Dibromochloromethane	25.0	28.2		ug/L		113	69 - 145
Dibromomethane	25.0	27.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	30.0		ug/L		120	29 - 150
Di-isopropyl ether (DIPE)	25.0	25.6		ug/L		102	58 - 139
Ethyl-t-butyl ether (ETBE)	25.0	26.0		ug/L		104	60 - 136
Hexachlorobutadiene	25.0	28.6		ug/L		114	10 - 150
Isopropylbenzene	25.0	27.4		ug/L		110	70 - 136
m,p-Xylene	50.0	51.1		ug/L		102	70 - 130
Methylene Chloride	25.0	20.1		ug/L		80	52 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.1		ug/L		104	63 - 131
Naphthalene	25.0	25.3		ug/L		101	60 - 140
n-Butylbenzene	25.0	28.2		ug/L		113	65 - 150
N-Propylbenzene	25.0	26.8		ug/L		107	67 - 139
o-Xylene	25.0	24.7		ug/L		99	70 - 130
4-Isopropyltoluene	25.0	27.2		ug/L		109	70 - 132
sec-Butylbenzene	25.0	27.5		ug/L		110	70 - 138
Styrene	25.0	26.8		ug/L		107	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	25.4		ug/L		102	57 - 139
tert-Butyl alcohol (TBA)	125	128		ug/L		102	70 - 130
tert-Butylbenzene	25.0	27.4		ug/L		109	70 - 130
Tetrachloroethene	25.0	26.5		ug/L		106	70 - 130
Toluene	25.0	23.8		ug/L		95	70 - 130
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	29.2		ug/L		117	70 - 132
Trichloroethene	25.0	26.3		ug/L		105	70 - 130
Trichlorofluoromethane	25.0	32.2		ug/L		129	60 - 150
Vinyl chloride	25.0	28.9		ug/L		115	59 - 133
1,3,5-Trimethylbenzene	25.0	27.8		ug/L		111	70 - 136
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-153685/5

Matrix: Water

Analysis Batch: 153685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	25.0	23.4		ug/L		94	44 - 150
4-Methyl-2-pentanone (MIBK)	25.0	26.7		ug/L		107	59 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	100		76 - 132
Toluene-d8 (Surr)	107		80 - 128

Lab Sample ID: 440-65970-1 MS

Matrix: Ground Water

Analysis Batch: 153685

Client Sample ID: MW-1R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	28.8		ug/L		115	60 - 149
1,1,1-Trichloroethane	ND		25.0	28.1		ug/L		112	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	63 - 130
1,1,2-Trichloroethane	ND		25.0	27.2		ug/L		109	70 - 130
1,1-Dichloroethane	ND		25.0	23.7		ug/L		95	65 - 130
1,1-Dichloroethene	ND		25.0	26.7		ug/L		107	70 - 130
1,1-Dichloropropene	ND		25.0	27.3		ug/L		109	64 - 130
1,2,3-Trichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140
1,2,3-Trichloropropane	ND		25.0	26.0		ug/L		104	60 - 130
1,2,4-Trichlorobenzene	ND		25.0	27.7		ug/L		111	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	27.4		ug/L		110	70 - 130
1,2-Dibromo-3-Chloropropane	ND		25.0	26.4		ug/L		106	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	27.1		ug/L		108	70 - 131
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	70 - 130
1,2-Dichloroethane	ND		25.0	28.5		ug/L		114	56 - 146
1,2-Dichloropropane	ND		25.0	27.0		ug/L		108	69 - 130
1,3-Dichlorobenzene	ND		25.0	26.5		ug/L		106	70 - 130
1,3-Dichloropropane	ND		25.0	26.8		ug/L		107	70 - 130
1,4-Dichlorobenzene	ND		25.0	26.5		ug/L		106	70 - 130
2,2-Dichloropropane	ND		25.0	29.4		ug/L		117	69 - 138
2-Chlorotoluene	ND		25.0	25.6		ug/L		102	70 - 130
4-Chlorotoluene	ND		25.0	27.3		ug/L		109	70 - 130
Benzene	ND		25.0	24.8		ug/L		99	66 - 130
Bromobenzene	ND		25.0	26.7		ug/L		107	70 - 130
Bromochloromethane	ND		25.0	24.8		ug/L		99	70 - 130
Bromodichloromethane	ND		25.0	28.8		ug/L		115	70 - 138
Bromoform	ND		25.0	30.2		ug/L		121	59 - 150
Bromomethane	ND		25.0	28.0		ug/L		112	62 - 131
Carbon tetrachloride	ND		25.0	31.9		ug/L		128	60 - 150
Chlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130
Chloroethane	ND		25.0	23.4		ug/L		94	68 - 130
2-Hexanone	ND		25.0	25.0		ug/L		100	10 - 150
Chloroform	ND		25.0	24.8		ug/L		99	70 - 130
Chloromethane	ND		25.0	27.6		ug/L		110	39 - 144
cis-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	70 - 130

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-65970-1 MS

Matrix: Ground Water

Analysis Batch: 153685

Client Sample ID: MW-1R

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
cis-1,3-Dichloropropene	ND		25.0	28.9		ug/L		116	70 - 133
Acetone	ND		25.0	19.1		ug/L		77	10 - 150
Dibromochloromethane	ND		25.0	28.8		ug/L		115	70 - 148
Dibromomethane	ND		25.0	27.1		ug/L		108	70 - 130
Dichlorodifluoromethane	ND		25.0	29.1		ug/L		116	25 - 142
Di-isopropyl ether (DIPE)	ND		25.0	25.5		ug/L		102	64 - 138
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.6		ug/L		107	70 - 130
Hexachlorobutadiene	ND		25.0	28.1		ug/L		112	10 - 150
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 132
m,p-Xylene	ND		50.0	50.8		ug/L		102	70 - 133
Methylene Chloride	ND		25.0	19.9		ug/L		80	52 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.9		ug/L		108	70 - 130
Naphthalene	ND		25.0	24.8		ug/L		99	60 - 140
n-Butylbenzene	ND		25.0	28.0		ug/L		112	61 - 149
N-Propylbenzene	ND		25.0	26.6		ug/L		106	66 - 135
o-Xylene	ND		25.0	25.5		ug/L		102	70 - 133
4-Isopropyltoluene	ND		25.0	27.3		ug/L		109	70 - 130
sec-Butylbenzene	ND		25.0	27.4		ug/L		110	67 - 134
Styrene	ND		25.0	26.6		ug/L		106	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	25.0		ug/L		100	68 - 133
tert-Butyl alcohol (TBA)	ND		125	126		ug/L		101	70 - 130
tert-Butylbenzene	ND		25.0	26.9		ug/L		108	70 - 130
Tetrachloroethene	ND		25.0	26.1		ug/L		104	70 - 137
Toluene	ND		25.0	24.8		ug/L		99	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.7		ug/L		103	70 - 130
trans-1,3-Dichloropropene	ND		25.0	30.0		ug/L		120	70 - 138
Trichloroethene	ND		25.0	26.9		ug/L		107	70 - 130
Trichlorofluoromethane	ND		25.0	32.0		ug/L		128	60 - 150
Vinyl chloride	ND		25.0	29.0		ug/L		116	50 - 137
1,3,5-Trimethylbenzene	ND		25.0	27.5		ug/L		110	70 - 130
Ethylbenzene	ND		25.0	25.7		ug/L		103	70 - 130
2-Butanone (MEK)	ND		25.0	20.1		ug/L		80	48 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	25.9		ug/L		103	52 - 150

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	101		76 - 132
Toluene-d8 (Surr)	112		80 - 128

Lab Sample ID: 440-65970-1 MSD

Matrix: Ground Water

Analysis Batch: 153685

Client Sample ID: MW-1R

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		25.0	29.8		ug/L		119	60 - 149	3	20
1,1,1-Trichloroethane	ND		25.0	28.0		ug/L		112	70 - 130	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	28.4		ug/L		114	63 - 130	3	30
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	70 - 130	1	25

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-65970-1 MSD

Matrix: Ground Water

Analysis Batch: 153685

Client Sample ID: MW-1R

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1-Dichloroethane	ND		25.0	24.1		ug/L		96	65 - 130	1	20
1,1-Dichloroethene	ND		25.0	27.5		ug/L		110	70 - 130	3	20
1,1-Dichloropropene	ND		25.0	26.9		ug/L		107	64 - 130	2	20
1,2,3-Trichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140	3	20
1,2,3-Trichloropropane	ND		25.0	27.7		ug/L		111	60 - 130	7	30
1,2,4-Trichlorobenzene	ND		25.0	28.5		ug/L		114	60 - 140	3	20
1,2,4-Trimethylbenzene	ND		25.0	27.8		ug/L		111	70 - 130	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	27.2		ug/L		109	48 - 140	3	30
1,2-Dibromoethane (EDB)	ND		25.0	28.3		ug/L		113	70 - 131	4	25
1,2-Dichlorobenzene	ND		25.0	27.4		ug/L		109	70 - 130	2	20
1,2-Dichloroethane	ND		25.0	29.2		ug/L		117	56 - 146	2	20
1,2-Dichloropropane	ND		25.0	26.9		ug/L		107	69 - 130	0	20
1,3-Dichlorobenzene	ND		25.0	27.0		ug/L		108	70 - 130	2	20
1,3-Dichloropropane	ND		25.0	27.4		ug/L		110	70 - 130	2	25
1,4-Dichlorobenzene	ND		25.0	26.9		ug/L		107	70 - 130	2	20
2,2-Dichloropropane	ND		25.0	28.2		ug/L		113	69 - 138	4	25
2-Chlorotoluene	ND		25.0	25.6		ug/L		102	70 - 130	0	20
4-Chlorotoluene	ND		25.0	27.4		ug/L		110	70 - 130	0	20
Benzene	ND		25.0	24.5		ug/L		98	66 - 130	1	20
Bromobenzene	ND		25.0	27.0		ug/L		108	70 - 130	1	20
Bromochloromethane	ND		25.0	25.9		ug/L		104	70 - 130	5	25
Bromodichloromethane	ND		25.0	28.3		ug/L		113	70 - 138	2	20
Bromoform	ND		25.0	30.8		ug/L		123	59 - 150	2	25
Bromomethane	ND		25.0	28.5		ug/L		114	62 - 131	2	25
Carbon tetrachloride	ND		25.0	31.5		ug/L		126	60 - 150	1	25
Chlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130	2	20
Chloroethane	ND		25.0	24.9		ug/L		100	68 - 130	6	25
2-Hexanone	ND		25.0	26.7		ug/L		107	10 - 150	6	35
Chloroform	ND		25.0	25.1		ug/L		100	70 - 130	1	20
Chloromethane	ND		25.0	26.4		ug/L		105	39 - 144	5	25
cis-1,2-Dichloroethene	ND		25.0	26.7		ug/L		107	70 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	70 - 133	1	20
Acetone	ND		25.0	21.5		ug/L		86	10 - 150	12	35
Dibromochloromethane	ND		25.0	28.7		ug/L		115	70 - 148	0	25
Dibromomethane	ND		25.0	28.8		ug/L		115	70 - 130	6	25
Dichlorodifluoromethane	ND		25.0	28.4		ug/L		114	25 - 142	2	30
Di-isopropyl ether (DIPE)	ND		25.0	26.2		ug/L		105	64 - 138	3	25
Ethyl-t-butyl ether (ETBE)	ND		25.0	27.5		ug/L		110	70 - 130	3	25
Hexachlorobutadiene	ND		25.0	26.9		ug/L		108	10 - 150	4	20
Isopropylbenzene	ND		25.0	27.5		ug/L		110	70 - 132	1	20
m,p-Xylene	ND		50.0	50.8		ug/L		102	70 - 133	0	25
Methylene Chloride	ND		25.0	20.7		ug/L		83	52 - 130	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.2		ug/L		113	70 - 130	5	25
Naphthalene	ND		25.0	26.4		ug/L		106	60 - 140	6	30
n-Butylbenzene	ND		25.0	28.0		ug/L		112	61 - 149	0	20
N-Propylbenzene	ND		25.0	26.6		ug/L		106	66 - 135	0	20
o-Xylene	ND		25.0	25.6		ug/L		102	70 - 133	0	20
4-Isopropyltoluene	ND		25.0	27.1		ug/L		108	70 - 130	1	20

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-65970-1 MSD
Matrix: Ground Water
Analysis Batch: 153685

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
sec-Butylbenzene	ND		25.0	27.0		ug/L		108	67 - 134	2	20
Styrene	ND		25.0	27.6		ug/L		110	29 - 150	4	35
Tert-amyl-methyl ether (TAME)	ND		25.0	28.0		ug/L		112	68 - 133	12	30
tert-Butyl alcohol (TBA)	ND		125	131		ug/L		105	70 - 130	4	25
tert-Butylbenzene	ND		25.0	27.3		ug/L		109	70 - 130	1	20
Tetrachloroethene	ND		25.0	26.2		ug/L		105	70 - 137	1	20
Toluene	ND		25.0	24.4		ug/L		97	70 - 130	2	20
trans-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	70 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	29.7		ug/L		119	70 - 138	1	25
Trichloroethene	ND		25.0	26.7		ug/L		107	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	31.7		ug/L		127	60 - 150	1	25
Vinyl chloride	ND		25.0	29.1		ug/L		117	50 - 137	0	30
1,3,5-Trimethylbenzene	ND		25.0	27.8		ug/L		111	70 - 130	1	20
Ethylbenzene	ND		25.0	25.8		ug/L		103	70 - 130	1	20
2-Butanone (MEK)	ND		25.0	20.9		ug/L		84	48 - 140	4	40
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.7		ug/L		111	52 - 150	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	102		76 - 132
Toluene-d8 (Surr)	109		80 - 128

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-153686/4
Matrix: Water
Analysis Batch: 153686

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			01/01/14 09:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		76 - 132		01/01/14 09:39	1
4-Bromofluorobenzene (Surr)	106		80 - 120		01/01/14 09:39	1
Toluene-d8 (Surr)	107		80 - 128		01/01/14 09:39	1

Lab Sample ID: LCS 440-153686/6
Matrix: Water
Analysis Batch: 153686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	500	370		ug/L		74	55 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	104		76 - 132
4-Bromofluorobenzene (Surr)	113		80 - 120

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 440-153686/6
Matrix: Water
Analysis Batch: 153686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	110		80 - 128

Lab Sample ID: 440-65970-1 MS
Matrix: Ground Water
Analysis Batch: 153686

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1400		ug/L		79	50 - 145
Surrogate	MS	MS							
Dibromofluoromethane (Surr)	101		76 - 132						
4-Bromofluorobenzene (Surr)	107		80 - 120						
Toluene-d8 (Surr)	112		80 - 128						

Lab Sample ID: 440-65970-1 MSD
Matrix: Ground Water
Analysis Batch: 153686

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
				Result	Qualifier						
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1420		ug/L		80	50 - 145	1	20
Surrogate	MSD	MSD									
Dibromofluoromethane (Surr)	102		76 - 132								
4-Bromofluorobenzene (Surr)	106		80 - 120								
Toluene-d8 (Surr)	109		80 - 128								

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 440-153790/8
Matrix: Water
Analysis Batch: 153790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane (FID)	ND		0.99		ug/L			01/02/14 13:19	1
Methane (TCD)	ND		1000		ug/L			01/02/14 13:19	1

Lab Sample ID: LCS 440-153790/4
Matrix: Water
Analysis Batch: 153790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Methane (TCD)	4190	3970		ug/L		95	80 - 120

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCS 440-153790/6

Matrix: Water

Analysis Batch: 153790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (FID)	83.9	93.2		ug/L		111	80 - 120

Lab Sample ID: LCSD 440-153790/5

Matrix: Water

Analysis Batch: 153790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	4190	4050		ug/L		97	80 - 120	2	20

Lab Sample ID: LCSD 440-153790/7

Matrix: Water

Analysis Batch: 153790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (FID)	83.9	90.0		ug/L		107	80 - 120	4	20

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-153357/1-A

Matrix: Water

Analysis Batch: 153350

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 153357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		500		ug/L		12/30/13 10:57	12/30/13 18:04	1

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	80		45 - 120	12/30/13 10:57	12/30/13 18:04	1

Lab Sample ID: LCS 440-153357/2-A

Matrix: Water

Analysis Batch: 153350

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 153357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	1000	812		ug/L		81	40 - 115

Surrogate	%Recovery	LCS Qualifier	Limits
n-Octacosane	85		45 - 120

Lab Sample ID: LCSD 440-153357/3-A

Matrix: Water

Analysis Batch: 153350

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 153357

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	1000	777		ug/L		78	40 - 115	4	25

Surrogate	%Recovery	LCSD Qualifier	Limits
n-Octacosane	80		45 - 120

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-152270/21

Matrix: Water

Analysis Batch: 152270

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		110		ug/L			12/23/13 19:55	1

Lab Sample ID: LCS 440-152270/20

Matrix: Water

Analysis Batch: 152270

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1130	1150		ug/L		102	90 - 110

Lab Sample ID: 440-65971-A-1 MS

Matrix: Water

Analysis Batch: 152270

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		22600	22000		ug/L		97	80 - 120

Lab Sample ID: 440-65971-A-1 MSD

Matrix: Water

Analysis Batch: 152270

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		22600	22300		ug/L		99	80 - 120	1	20

Lab Sample ID: MB 440-152271/21

Matrix: Water

Analysis Batch: 152271

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		500		ug/L			12/23/13 19:55	1

Lab Sample ID: LCS 440-152271/20

Matrix: Water

Analysis Batch: 152271

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5000	5160		ug/L		103	90 - 110

Lab Sample ID: 440-65970-7 MS

Matrix: Ground Water

Analysis Batch: 152271

Client Sample ID: MW-7

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1600000		150000	1500000	4	ug/L		-87	80 - 120

Lab Sample ID: 440-65970-7 MSD

Matrix: Ground Water

Analysis Batch: 152271

Client Sample ID: MW-7

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1600000		150000	1500000	4	ug/L		-88	80 - 120	0	20

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Lab Sample ID: MB 440-152594/4
Matrix: Water
Analysis Batch: 152594

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		500		ug/L			12/24/13 12:03	1

Lab Sample ID: LCS 440-152594/2
Matrix: Water
Analysis Batch: 152594

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5000	4820		ug/L		96	90 - 110

Lab Sample ID: 440-66001-B-1 MS
Matrix: Water
Analysis Batch: 152594

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	8600		5000	14000		ug/L		108	80 - 120

Lab Sample ID: 440-66001-B-1 MSD
Matrix: Water
Analysis Batch: 152594

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	8600		5000	13900		ug/L		105	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-65970-7 MS
Matrix: Ground Water
Analysis Batch: 152270

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N - DL	ND		33900	41000	F	ug/L		121	80 - 120

Lab Sample ID: 440-65970-7 MSD
Matrix: Ground Water
Analysis Batch: 152270

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N - DL	ND		33900	41300	F	ug/L		122	80 - 120	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-153287/3
Matrix: Water
Analysis Batch: 153287

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		4000		ug/L			12/30/13 04:00	1

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 440-153287/2

Matrix: Water

Analysis Batch: 153287

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	86300	82900		ug/L		96	90 - 110

Lab Sample ID: 440-66262-B-1 DU

Matrix: Water

Analysis Batch: 153287

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	140000		140000		ug/L		0.3	20

Lab Sample ID: MB 440-154314/2

Matrix: Water

Analysis Batch: 154314

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10000		4000		ug/L			01/06/14 14:42	1

Lab Sample ID: LCS 440-154314/1

Matrix: Water

Analysis Batch: 154314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	86300	90000		ug/L		104	90 - 110

Lab Sample ID: 440-65970-2 DU

Matrix: Ground Water

Analysis Batch: 154314

Client Sample ID: MW-2R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	1300000	B	1290000		ug/L		0.8	20

Method: SM 3500 FE D - Iron, Ferrous

Lab Sample ID: MB 440-152524/1

Matrix: Water

Analysis Batch: 152524

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		100		ug/L			12/24/13 07:29	1

Lab Sample ID: LCS 440-152524/2

Matrix: Water

Analysis Batch: 152524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	5000	4000		ug/L		80	80 - 120

TestAmerica Irvine

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Method: SM 3500 FE D - Iron, Ferrous (Continued)

Lab Sample ID: 440-65970-1 DU
Matrix: Ground Water
Analysis Batch: 152524

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ferrous Iron	ND	HF	ND		ug/L		NC	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

GC/MS VOA

Analysis Batch: 153685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	8260B	
440-65970-1 MS	MW-1R	Total/NA	Ground Water	8260B	
440-65970-1 MSD	MW-1R	Total/NA	Ground Water	8260B	
440-65970-2	MW-2R	Total/NA	Ground Water	8260B	
440-65970-3	MW-3R	Total/NA	Ground Water	8260B	
440-65970-4	MW-4R	Total/NA	Ground Water	8260B	
440-65970-5	MW-5R	Total/NA	Ground Water	8260B	
440-65970-6	MW-6	Total/NA	Ground Water	8260B	
440-65970-7	MW-7	Total/NA	Ground Water	8260B	
440-65970-8	MW-8	Total/NA	Ground Water	8260B	
440-65970-9	MW-9	Total/NA	Ground Water	8260B	
440-65970-10	MW-10	Total/NA	Ground Water	8260B	
LCS 440-153685/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-153685/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 153686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-1 MS	MW-1R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-1 MSD	MW-1R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-2	MW-2R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-3	MW-3R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-4	MW-4R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-5	MW-5R	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-6	MW-6	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-7	MW-7	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-8	MW-8	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-9	MW-9	Total/NA	Ground Water	8260B/CA_LUFT MS	
440-65970-10	MW-10	Total/NA	Ground Water	8260B/CA_LUFT MS	
LCS 440-153686/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-153686/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC VOA

Analysis Batch: 153790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	RSK-175	
440-65970-2	MW-2R	Total/NA	Ground Water	RSK-175	
440-65970-3	MW-3R	Total/NA	Ground Water	RSK-175	
440-65970-4	MW-4R	Total/NA	Ground Water	RSK-175	

TestAmerica Irvine

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

GC VOA (Continued)

Analysis Batch: 153790 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-5	MW-5R	Total/NA	Ground Water	RSK-175	
440-65970-6	MW-6	Total/NA	Ground Water	RSK-175	
440-65970-7	MW-7	Total/NA	Ground Water	RSK-175	
440-65970-8	MW-8	Total/NA	Ground Water	RSK-175	
440-65970-9	MW-9	Total/NA	Ground Water	RSK-175	
440-65970-10	MW-10	Total/NA	Ground Water	RSK-175	
LCS 440-153790/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 440-153790/6	Lab Control Sample	Total/NA	Water	RSK-175	
LCS D 440-153790/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCS D 440-153790/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 440-153790/8	Method Blank	Total/NA	Water	RSK-175	

GC Semi VOA

Analysis Batch: 153350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	8015B	153357
440-65970-2	MW-2R	Total/NA	Ground Water	8015B	153357
440-65970-3	MW-3R	Total/NA	Ground Water	8015B	153357
440-65970-4	MW-4R	Total/NA	Ground Water	8015B	153357
440-65970-5	MW-5R	Total/NA	Ground Water	8015B	153357
440-65970-6	MW-6	Total/NA	Ground Water	8015B	153357
LCS 440-153357/2-A	Lab Control Sample	Total/NA	Water	8015B	153357
LCS D 440-153357/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	153357
MB 440-153357/1-A	Method Blank	Total/NA	Water	8015B	153357

Analysis Batch: 153351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-7	MW-7	Total/NA	Ground Water	8015B	153357
440-65970-8	MW-8	Total/NA	Ground Water	8015B	153357
440-65970-9	MW-9	Total/NA	Ground Water	8015B	153357
440-65970-10	MW-10	Total/NA	Ground Water	8015B	153357

Prep Batch: 153357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	3510C	
440-65970-2	MW-2R	Total/NA	Ground Water	3510C	
440-65970-3	MW-3R	Total/NA	Ground Water	3510C	
440-65970-4	MW-4R	Total/NA	Ground Water	3510C	
440-65970-5	MW-5R	Total/NA	Ground Water	3510C	
440-65970-6	MW-6	Total/NA	Ground Water	3510C	
440-65970-7	MW-7	Total/NA	Ground Water	3510C	
440-65970-8	MW-8	Total/NA	Ground Water	3510C	
440-65970-9	MW-9	Total/NA	Ground Water	3510C	
440-65970-10	MW-10	Total/NA	Ground Water	3510C	
LCS 440-153357/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS D 440-153357/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-153357/1-A	Method Blank	Total/NA	Water	3510C	

TestAmerica Irvine

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
 Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

HPLC/IC

Analysis Batch: 152270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	300.0	
440-65970-2	MW-2R	Total/NA	Ground Water	300.0	
440-65970-3	MW-3R	Total/NA	Ground Water	300.0	
440-65970-4	MW-4R	Total/NA	Ground Water	300.0	
440-65970-5	MW-5R	Total/NA	Ground Water	300.0	
440-65970-6	MW-6	Total/NA	Ground Water	300.0	
440-65970-7	MW-7	Total/NA	Ground Water	300.0	
440-65970-7 MS - DL	MW-7	Total/NA	Ground Water	300.0	
440-65970-7 MSD - DL	MW-7	Total/NA	Ground Water	300.0	
440-65970-8	MW-8	Total/NA	Ground Water	300.0	
440-65970-9	MW-9	Total/NA	Ground Water	300.0	
440-65970-10	MW-10	Total/NA	Ground Water	300.0	
440-65971-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-65971-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 440-152270/20	Lab Control Sample	Total/NA	Water	300.0	
MB 440-152270/21	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 152271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-6	MW-6	Total/NA	Ground Water	300.0	
440-65970-7	MW-7	Total/NA	Ground Water	300.0	
440-65970-7 MS	MW-7	Total/NA	Ground Water	300.0	
440-65970-7 MSD	MW-7	Total/NA	Ground Water	300.0	
440-65970-8	MW-8	Total/NA	Ground Water	300.0	
440-65970-9	MW-9	Total/NA	Ground Water	300.0	
440-65970-10	MW-10	Total/NA	Ground Water	300.0	
LCS 440-152271/20	Lab Control Sample	Total/NA	Water	300.0	
MB 440-152271/21	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 152594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	300.0	
440-65970-2	MW-2R	Total/NA	Ground Water	300.0	
440-65970-3	MW-3R	Total/NA	Ground Water	300.0	
440-65970-4	MW-4R	Total/NA	Ground Water	300.0	
440-65970-5	MW-5R	Total/NA	Ground Water	300.0	
440-66001-B-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-66001-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 440-152594/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-152594/4	Method Blank	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 152524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	SM 3500 FE D	
440-65970-1 DU	MW-1R	Total/NA	Ground Water	SM 3500 FE D	
440-65970-2	MW-2R	Total/NA	Ground Water	SM 3500 FE D	
440-65970-3	MW-3R	Total/NA	Ground Water	SM 3500 FE D	
440-65970-4	MW-4R	Total/NA	Ground Water	SM 3500 FE D	

TestAmerica Irvine

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

General Chemistry (Continued)

Analysis Batch: 152524 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-5	MW-5R	Total/NA	Ground Water	SM 3500 FE D	
440-65970-6	MW-6	Total/NA	Ground Water	SM 3500 FE D	
440-65970-7	MW-7	Total/NA	Ground Water	SM 3500 FE D	
440-65970-8	MW-8	Total/NA	Ground Water	SM 3500 FE D	
440-65970-9	MW-9	Total/NA	Ground Water	SM 3500 FE D	
440-65970-10	MW-10	Total/NA	Ground Water	SM 3500 FE D	
LCS 440-152524/2	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 440-152524/1	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 153287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-1	MW-1R	Total/NA	Ground Water	SM 2320B	
440-65970-3	MW-3R	Total/NA	Ground Water	SM 2320B	
440-65970-5	MW-5R	Total/NA	Ground Water	SM 2320B	
440-65970-6	MW-6	Total/NA	Ground Water	SM 2320B	
440-65970-7	MW-7	Total/NA	Ground Water	SM 2320B	
440-65970-8	MW-8	Total/NA	Ground Water	SM 2320B	
440-65970-9	MW-9	Total/NA	Ground Water	SM 2320B	
440-65970-10	MW-10	Total/NA	Ground Water	SM 2320B	
440-66262-B-1 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 440-153287/2	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 440-153287/3	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 154314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65970-2	MW-2R	Total/NA	Ground Water	SM 2320B	
440-65970-2 DU	MW-2R	Total/NA	Ground Water	SM 2320B	
440-65970-4	MW-4R	Total/NA	Ground Water	SM 2320B	
LCS 440-154314/1	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 440-154314/2	Method Blank	Total/NA	Water	SM 2320B	

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 1600 Jamboree Rd., Newport Beach

TestAmerica Job ID: 440-65970-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-15
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Irvine

LAB (LOCATION)

- CALSCIENCE ()
- SPL ()
- XENCO ()
- TEST AMERICA (IRVINE)
- OTHER ()



Shell Oil Products Chain Of Custody Record

Please Check Appropriate Box:

<input type="checkbox"/> ENV. SERVICES	<input type="checkbox"/> MOTIVA RETAIL	<input type="checkbox"/> SHELL RETAIL
<input type="checkbox"/> MOTIVA SDR&M	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> SHELL PIPELINE	<input type="checkbox"/> OTHER _____	

Print Bill To Contact Name: Angela Ribeiro - 060707

INCIDENT # (ENV SERVICES): 9 7 4 8 1 6 6 4

PO #: _____ **SAP #:** _____

CHECK IF NO INCIDENT # APPLIES

DATE: 12/23/13 **PAGE:** 1 of 1

SAMPLING COMPANY: Blaine Tech Services **LOG CODE:** BTST

ADDRESS: 20735 Belshaw Ave., Carson, CA 90746

PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King

TELEPHONE: 310-885-4455 **FAX:** 310-637-5802 **EMAIL:** lking@blainetech.com

STATE ADDRESS: Street and City: 1600 Jamboree Rd, Newport Beach **State:** CA **GLOBAL ID NO.:** T0605939328

EDP DELIVERABLE TO (Name, Company, Office Location): Lynee Le Vole, CRA, Irvine **PHONE NO.:** 949-648-5215 **E-MAIL:** socaledf@craworld.com **CONSULTANT PROJECT NO.:** 131223-BC1

SAMPLER NAME(S) (Print): Brett Beva **LAB USE ONLY:** _____

TURNAROUND TIME (CALENDAR DAYS): STANDARD (14 DAY) 5 DAYS 3 DAYS 2 DAYS 24 HOURS RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT UST AGENCY, OCHCA

SPECIAL INSTRUCTIONS OR NOTES: Email Invoice and copy of final report to Shell.Lab.Billing@craworld.com

SHELL CONTRACT RATE APPLIES STATE REIMBURSEMENT RATE APPLIES EDD NOT NEEDED RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS:

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	TPH - GRO, Purgeable (8260B)	TPH - DRO, Extractable (6015M)	BTEX + 5 OXYS (MTBE, TBA, DIPA, TAME, ETBE) 8260B	Full VOC list (8260B)	Alkalinity (SM 2320 B)	Sulfate (EPA 300.0)	Nitrate (EPA 300.0)	Methane (RSK-175)	Ferrous Iron (SM 3500)	TEMPERATURE ON RECEIPT °C	Container PID Readings or Laboratory Notes
		DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER												
	MW-1R	12/21	04:35	GW	6			4		10	X	X			X	X	X	X	X		
	MW-2R		0316		6			4		10	X	X			X	X	X	X	X		
	MW-3R		0535		6			4		10	X	X			X	X	X	X	X		
	MW-4R		1155		6			4		10	X	X			X	X	X	X	X		
	MW-5R		0755		6			4		10	X	X			X	X	X	X	X		
	MW-6		1240		6			4		10	X	X			X	X	X	X	X		
	MW-7		1215		6			4		10	X	X			X	X	X	X	X		
	MW-8		1050		6			4		10	X	X			X	X	X	X	X		
	MW-9		1020		6			4		10	X	X			X	X	X	X	X		
	MW-10		1120		6			4		10	X	X			X	X	X	X	X		

Relinquished by (Signature):	Received by (Signature): Nicole	Date: 12/23/13	Time: 15:30
Relinquished by (Signature): Nicole	Received by (Signature): George Gevorgian	Date: 12/23/13	Time: 4:50 PM
Relinquished by (Signature): George Gevorgian (12/23/13 6:00pm)	Received by (Signature):	Date: 12/23/13	Time: 18:00



440-65970-10920 Chain of Custody

05/2008 Revision
 us. 12/23/13
 1063 5-8/4.7 5-8/4.7
 4.1/27 us 12/23/13



Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-65970-1

Login Number: 65970

List Number: 1

Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



SWRCB Geotracker File Information for Adjacent Properties
Newport Beach Police Department – 870 Santa Barbara Drive



*Excellence
Integrity
Service*

**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH**

John

**JULIETTE A. POULSON, RN, MN
DIRECTOR**

**DAVID L. RILEY
ASSISTANT DIRECTOR**

**MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES**

**STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH**

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 887-3600
FAX: (714) 972-0749
E-MAIL: ehealth@ochca.com

October 28, 2004

Mike Pisani
City of Newport Beach
3300 Newport Blvd.
P.O. Box 1768
Newport Beach, CA 92658-8915

Subject: Remedial Action Completion Certification

**Re: Underground Storage Tank (UST) Case
Newport Beach Police Department
870 Santa Barbara Dr., Newport Beach, CA 92660
OCHCA Case #02UT19**

Dear Mr. Pisani:

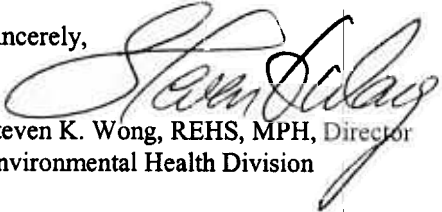
This letter confirms the completion of site investigation and corrective action for the underground storage tanks' piping formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank piping are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Please contact Joyce Krall of our office at (714) 667-3714 if you have any questions regarding this matter.

Sincerely,


Steven K. Wong, REHS, MPH, Director
Environmental Health Division

SKW:jlk

Attachment: Case Closure Summary

cc: Ken Williams, Santa Ana Regional Water Quality Control Board
SB 562 Database, State Water Resources Control Board
Cleanup Fund Manager, State Water Resources Control Board
Larry Honeybourne, Environmental Health

Case Closure Summary

Leaking Underground Fuel Tank Program

I. Agency Information

Date: **September 22, 2004**

Agency Name: Orange County Health Care Agency	Address: 2009 East Edinger Avenue
City/State/Zip: Santa Ana, CA 92705	Phone: (714) 667-3700
Responsible staff person: Joyce Krall	Title: Hazardous Waste Specialist

II. Case Information

Site Facility Name: City of Newport Beach Police Department				
Site Facility Address: 870 Santa Barbara Ave., Newport Beach CA				
RB LUSTIS Case No.:		Local Case No.:		LOP Case No.: 02UT019
URF Filing Date:		SWEEPS No.:		
Responsible Party: City of Newport Beach Contact: Mike Pisani		Address: 3300 Newport Blvd. P.O. Box 1768 Newport Beach, CA 92658-8915		Phone Number 949-644-3059
Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	10,000 gallon	Gasoline	Dispenser removal and replacement ----- Piping removal and replacement	5-28-2002 ----- 2-28-2003

III. Release and Site Characterization Information

Cause and type of release: Unauthorized release from UST system				
Site characterization complete? Yes		Date approved by oversight agency: September 22, 2004		
Monitoring wells installed? Yes		Number; 4		Proper-screened interval? Yes
Highest GW depth: 10.73 ft. bgs		Lowest depth 15.68 ft. bgs		Flow direction: Northwest
Most sensitive current use: The site is located approximately at a ¼ mile of Upper Newport Bay. Beneficial uses of Newport Bay include water contact recreation; water non-contact recreation; commercial and sports fishing; biological habitats of special significance; wildlife habitat; rare, threatened or endangered species; spawning, reproduction, and development; shellfish harvesting; marine and estuarine habitat				
Are drinking water wells affected? No		Aquifer name:		
Is surface water affected? No		Nearest/affected SW name:		
Off-site beneficial use impacts (addresses/locations): None				
Report(s) on file? Yes		Where is report(s) filed? 2009 E. Edinger Ave., Santa Ana, CA		
Treatment and Disposal of Affected Material				
Material	Amount (include Units)	Action (treatment or disposal/destination)		Date
Soil	NA			
Groundwater	NA			

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Case#: 02UT019

III. Release and Site Characterization Information (Continued)

Date: September 22, 2004

Maximum Documented Contaminant Concentrations - - Before and After Cleanup									
Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gasoline)	110.7	110.7	48.509 **	0.1294	Oxygenates: MTBE	8.183	8.183	0.206	0.074
Benzene	0.229	0.229	<0.001	<0.001	TBA	-	-	<0.010	<0.010
Toluene	2.759	2.759	0.0068	<0.001	ETBE	-	-	<0.002	<0.002
Xylene	4.415	4.415	0.0148	<0.001	TAME	-	-	<0.002	<0.002
Ethylbenzene	0.846	0.846	0.0237	<0.001	DIPE	-	-	<0.002	

NOTE: The laboratory analysis of the groundwater samples included EPA laboratory method 8260B full scan. All analyzed additional compounds were non-detect.

** Direct push location B-7 - atypical in comparison to all additional TPH-g analytical results, which were <0.508 ppm.

Comments (Depth of Remediation, etc.): During the replacement of the site's gasoline UST system dispensers, soil samples were collected from the area beneath the dispensers for laboratory analysis to determine whether an unauthorized release of gasoline had occurred. Contamination was detected.

To assess the contamination, seven direct push-boring locations surrounding the dispenser island location were then drilled and sampled. The borings extended to 35 ft. bgs. Soil and groundwater samples were collected.

The assessment showed the contamination to be limited to the immediate area of the dispenser island. The most significant concentrations detected by the laboratory analysis of the assessment's soil samples were at the locations of the western perimeter borings B-2 and B-5. MTBE concentrations ranging from 0.189 ppm to 0.378 ppm were detected in the 15, 20 and 25 ft. bgs soil samples.

The laboratory analysis of the three collected direct push groundwater samples detected MTBE at 13, 90 and 117 ppb. Laboratory analysis also detected insignificant concentrations of toluene, ethyl benzene and xylenes in the groundwater. All other fuel oxygenates and benzene were non-detect.

Four groundwater-monitoring wells were present on this site from a previous UST leak assessment.

A one-year quarterly groundwater-monitoring program using these wells has been completed. All wells were gauged quarterly. Wells MW2 and MW4 were gauged and sampled quarterly. Wells MW-2 and MW-4 are located hydraulically downgradient of the former leak source. These wells are located between the site's former leak source and Newport Bay, which is located at a distance of approximately ¼ mile from this site. Groundwater monitoring of these wells has shown all gasoline constituents to be non-detect in the groundwater except for TPH-g, MTBE and ethyl benzene. Please reference the table above for the maximum and the final detected concentration levels. The detected concentrations have been stable and low.

The contamination that is present at this site is limited to the soil and groundwater in the immediate vicinity of the former UST piping system. The assessed plume of contamination does not pose a risk to human health and the environment. The site is to remain a UST fuel dispensing station for the police department. Considering the assessed contamination levels and the distance to Newport Bay, the contamination present does not pose a risk to the beneficial uses of Newport Bay. With time, the processes of natural attenuation will reduce the remaining contamination levels.

No further active corrective action is deemed necessary. Project closure is recommended.

IV. Closure

Does completed corrective action protect <i>existing</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect <i>potential</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site management requirements: Excavation in the area of the UST system may encounter degrading gasoline contamination. Should future site upgrades or development disturb the location where contamination was left in place, this soil and/or water should be handled per the current regulatory requirements.		
Should corrective action be reviewed if land use changes? No		
Monitoring wells decommissioned:	Number decommissioned:	Number Retained:
List enforcement actions taken: NA		
List enforcement actions rescinded:		

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

V. Local Agency Representative Data

Case#: 02UT019

Date: September 22, 2004

Name: Joyce Krall	Title: Hazardous Waste Specialist
Signature: <i>[Handwritten Signature]</i>	Date: 9-29-04

VI. RWQCB Notification

Date Submitted to RB:	RB Response: concurrs w/ closure
RWQCB Staff Name: Ken Williams	Title: Chief, UST section
	Date: 10-20-04

signature page attached

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Case#: 02UT019

Date: September 22, 2004

V. Local Agency Representative Data

Name: Joyce Krall	Title: Hazardous Waste Specialist
Signature: <i>[Handwritten Signature]</i>	Date: 9-29-04

VI. RWQCB Notification

Date Submitted to RB:	RB Response: <i>Concur w/ Closure</i>
RWQCB Staff Name: <i>Kenneth Little</i>	Title: <i>Chief, UST Section</i>
	Date: <i>10/20/04</i>

SWRCB Geotracker File Information for Adjacent Properties

Chevron Service Station – 1550 Jamboree Road



*Excellence
Integrity
Service*

**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH**

JULIETTE A. POULSON, RN, MN
DIRECTOR

DAVID L. RILEY
ASSISTANT DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
1241 EAST DYER ROAD, SUITE 120
SANTA ANA, CA 92705-5611

TELEPHONE: (714) 433-6000
FAX: (714) 754-1732
E-MAIL: ehealth@ochca.com

April 5, 2005

Lisa Thompson
Chevron Products Company
145 S. State College Blvd.
P.O. Box 2292
Brea, CA 92822-2292

Subject: Remedial Action Completion Certification

**Re: Underground Storage Tank (UST) Case
Chevron Service Station #3042
1550 Jamboree Rd., Newport Beach CA
OCHCA Case # 85UT032**

Dear Ms. Thompson:

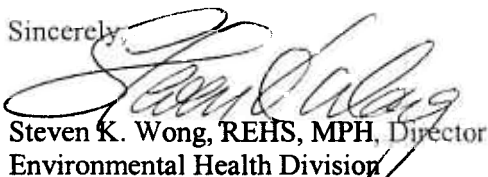
This letter confirms the completion of site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum releases at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Please contact Joyce Krall of our office at (714) 433-6252 if you have any questions regarding this matter.

Sincerely,


Steven K. Wong, REHS, MPH, Director
Environmental Health Division

SKW:jlj

Attachment: Case Closure Summary

cc: Tom Mbeke-Ekanem, Santa Ana Regional Water Quality Control Board
SB 562 Database, State Water Resources Control Board
Cleanup Fund Manager, State Water Resources Control Board
Nadine Morris, Newport Beach Fire Department
Larry Honeybourne, Environmental Health H-989

Case Closure Summary

Leaking Underground Fuel Tank Program

I. Agency Information

Date: **December 21, 2004**

Agency Name: Orange County Health Care Agency	Address: 2009 East Edinger Avenue
City/State/Zip: Santa Ana, CA 92705	Phone: (714) 667-3700
Responsible staff person: Joyce Krall	Title: Hazardous Waste Specialist

II. Case Information

Site Facility Name: Chevron Service Station No. 9-3042				
Site Facility Address: 1550 Jamboree Rd., Newport Beach CA				
RB LUSTIS Case No.:		Local Case No.:	LOP Case No.: 85UT032	
URF Filing Date:		SWEEPS No.		
Responsible Party: Chevron Environmental Management Co. Contact: Lisa Thompson		Address: P.O. Box 2292 Brea, CA 92822-2292		Phone Number 714-671-3371
Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	10,000 gallon	Gasoline	Removed	1-4-89 (1-26&27-89 / associated piping removal)
2	10,000 gallon	Gasoline	Removed	1-4-89 (")
3	5,000 gallon	Gasoline	Removed	1-4-89 (")
4	1,000 gallon	Waste oil	Removed	1-4-89 (")
5	10,000 gallon	Diesel	Removed	1-11-95

III. Release and Site Characterization Information

Cause and type of release: Unauthorized release from UST system				
Site characterization complete? Yes		Date approved by oversight agency: October 18, 2004		
Monitoring wells installed? Yes		Number; 19 (at present)	Proper-screened interval? Yes	
Highest GW depth: 6.16 ft. bgs		Lowest depth 16.30 ft. bgs	Flow direction: west	
Most sensitive current use: The site is located at an approximate ¼ mile of Upper Newport Bay. Beneficial uses of Newport Bay include water contact recreation; water non-contact recreation; commercial and sports fishing; biological habitats of special significance; wildlife habitat; rare, threatened or endangered species; spawning, reproduction, and development; shellfish harvesting; marine and estuarine habitat				
Are drinking water wells affected? No		Aquifer name:		
Is surface water affected? No		Nearest/affected SW name:		
Off-site beneficial use impacts (addresses/locations): None				
Report(s) on file? Yes		Where is report(s) filed? 2009 E. Edinger Ave., Santa Ana, CA		
Treatment and Disposal of Affected Material				
Material	Amount (include Units)	Action (treatment or disposal/destination)	Date	
Free Product	Not Documented	Recovered manually for offsite recycling	1985 through 2000	
Soil	750 cu yds	Accepted by Petroleum Waste Inc., Buttonwillow CA for recycling / disposal	1-24 thru 2-2-89	
Soil	246.17 tons	Accepted by TPS, Adelanto, CA for recycling	1-26-95	
HC vapor	128.67 lbs	72 hour dual-phase extraction test	8-2 thru 8-5-00	
Groundwater	1,802 gallons	72 hour dual-phase extraction test	8-2 thru 8-5-00	

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Case#: 85UT32

III. Release and Site Characterization Information (Continued)

Date: December 21, 2004

Maximum Documented Contaminant Concentrations - - Before and After Cleanup									
Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TRPH (waste oil)	1,700	<5	-	-					
TPH (gasoline)	2,700	2,700	Free product	11	Oxygenates: MTBE	1.8	1.8	4.7	0.310
TPH (diesel)	2,050	2,050	13	5.3	TBA	-	-	0.330	0.330
	8.3	8.3	15	0.110	ETBE	-	-	<0.040	<0.040
Toluene	81	81	28	0.018	TAME	-	-	0.045	<0.040
Xylene	406	406	34	0.670	DIPE	-	-	<0.040	<0.040
Ethylbenzene	50	50	6.2	2.6					

NOTE: The laboratory analysis of the groundwater samples included EPA laboratory method 8260B full scan. Additional compounds were detected. 1,3,5 trimethylbenzene and 1,2,4 trimethylbenzene were detected at a maximum of 190 and 380 ppb respectively. Chloroform, PCE, and methylene chloride were detected at maximums of 0.33, 0.93 and 0.59 ppb respectively.

Comments (Depth of Remediation, etc.): In 1985, Chevron installed observation groundwater monitoring wells in the vicinity of this station's operating USTs. The monitoring of these wells detected gasoline contamination. Chevron reported their findings to this Agency. This Agency responded by opening case #85UT032 to oversee Chevron's corrective action to address the contamination.

Over the years, Chevron's assessment included the drilling of soil borings, the collection and analysis of soil samples and the installation and monitoring of groundwater monitoring wells both on and offsite. The contamination plume was defined. The contamination was found to be present on-site in the area of the site's UST systems and to extend offsite and beneath the adjacent roadway. Free phase product was detected on the groundwater by several of the on-site wells.

In 1989, the site's gasoline and waste oil UST systems were replaced. In 1995, the site's diesel UST was replaced. A limited amount of contaminated soil was excavated and removed for offsite treatment during each UST replacement project.

Active remedial efforts over the years have consisted of soil excavation and removal, DPVE testing and free product recovery and disposal.

In 2000, a Site Conceptual Model was provided to support of the initiation of a natural attenuation groundwater monitoring program. The contaminated groundwater plume was stable and its dissolved phase contaminant concentrations were reducing. However, thin layers of free phase product were still intermittently detected by onsite well MW-9. Manual free phase product recovery efforts continued.

Quarterly gauging and annual sampling of all wells continued for the next four years. Since April 2001, quarterly gauging has not detected the presence of free phase product. More than 14 years of groundwater monitoring has been completed. Please reference the table above for the maximum final concentrations detected in the groundwater beneath this site.

A VOC vapor survey of the subsurface utility enclosures in the area of this station has also been performed. The survey was to evaluate the possibility of gasoline vapor hazards. The only vapor concentration detected was 23 ppmv within a shallow 13" deep signal light enclosure. This detection does not present a human safety risk. This detection is far less than the flammable limit for gasoline in air (LEL: 1.2%).

Newport Bay, which is located at a distance of approximately ¼ mile from this site, is the closest receiving water body. The site's groundwater monitoring program has shown the site's contamination plume to be stable and reducing. Thus, the site's contamination does not present a risk to the Bay. There are also no production water wells within 1 mile of this site.

The significant contaminant concentrations that remain are limited to the soil and groundwater onsite in the vicinity of the former UST systems. Free phase product is no longer detected on the water table. Monitoring has shown the contaminated groundwater plume to be stable and reducing. The present level of contamination at this site does not pose a risk to the beneficial uses of Newport Bay. With time, the processes of natural attenuation will further reduce the current contamination levels.

No further active corrective action is deemed necessary. Project closure is recommended.

Case Closure Summary Leaking Underground Fuel Storage Tank Program

Case#: 85UT32

Date: December 21, 2004

IV. Closure

Does completed corrective action protect <i>existing</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect <i>potential</i> beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site management requirements: Excavation in the area of the UST system may encounter degrading gasoline and diesel contamination. Should future site upgrades or development disturb the location where contamination was left in place, this soil and/or water should be handled per the current regulatory requirements.		
Should corrective action be reviewed if land use changes? Yes		
Monitoring wells decommissioned:	Number decommissioned:	Number Retained:
List enforcement actions taken: Notice of Violation 4-14-97		
List enforcement actions rescinded:		

V. Local Agency Representative Data

Name: Joyce Krall	Title: Hazardous Waste Specialist
Signature: 	Date: 12-21-04
Date Submitted to RB: 12-8-05	
RWQCB Staff Name: Kenneth Walker	

VI. RWQCB Notification

Date Submitted to RB: 3-10-05	RB Response: Concurs w/ Closure
RWQCB Staff Name: Kenneth Walker	Title: Chief, UST Section
Date: 3/24/05	

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file. Revised: 4/14/94
Page 3 of 3

August 18, 2005

Mr. Dana Thurman
Chevron Environmental Management Company
PO Box 6012, K2236
San Ramon, CA 94583

**Subject : Well Destruction Report
Chevron Service Station No. 9-3042
1550 Jamboree Road, Newport Beach, California
OCHCA Case No. 85UT32**



Dear Mr. Thurman,

The above subject site was granted environmental case closure by the Orange County Health Care Agency (OCHCA) in the form of a *Remedial Action Completion Certification*, sent to Lisa Thompson of Chevron Products Company on April 5, 2005. A copy of this document is attached.

In response to the case closure, Cambria implemented well abandonment as a final step in discontinuing environmental action at the site. Well abandonment included the following:

- Updating the Traffic Control Plan per City of Newport Beach requirements;
- Obtaining an encroachment permit from the City of Newport Beach for abandoning the wells on Jamboree Road and San Joaquin Hills Road (attached);
- Posting a Performance Bond for the asphalt repairs in the city right of way;
- Obtaining a permit for well destruction from the OCHCA (attached);
- Notifying the OCHCA prior to abandonment;
- Updating the Site Specific Safety and Health Plan;
- Marking the Site and contacting Underground Service Alert;
- Pressure grouting each of the 18 monitoring and/or recovery wells and removal of the upper five feet of well casing using an air-knife or drill rig per the OCHCA permit; and
- Removal of surface well vaults and repair of the surface with a similar material (i.e. concrete, asphalt, or soil).

**Cambria
Environmental
Technology, Inc.**

18 Technology Drive
Suite 167
Irvine, CA 92618
Tel (949) 589-6640
Fax (949) 589-6774

C A M B R I A

Well abandonment commenced on July 26, 2005 and was completed on July 28, 2005. A Site plan with the well locations is included as Figure 1. All work was conducted according to Chevron's LPS safety program.

Waste generated during the abandonment process has been placed in drums at the Site pending characterization. Once the waste is characterized, Cambria will schedule a waste hauling firm to properly dispose of the waste and drums.

Cambria appreciates the opportunity to complete this project. If you have questions or comments, please contact David Banchemo at 949-428-8993 or Bruce Eppler at 916-630-1855.

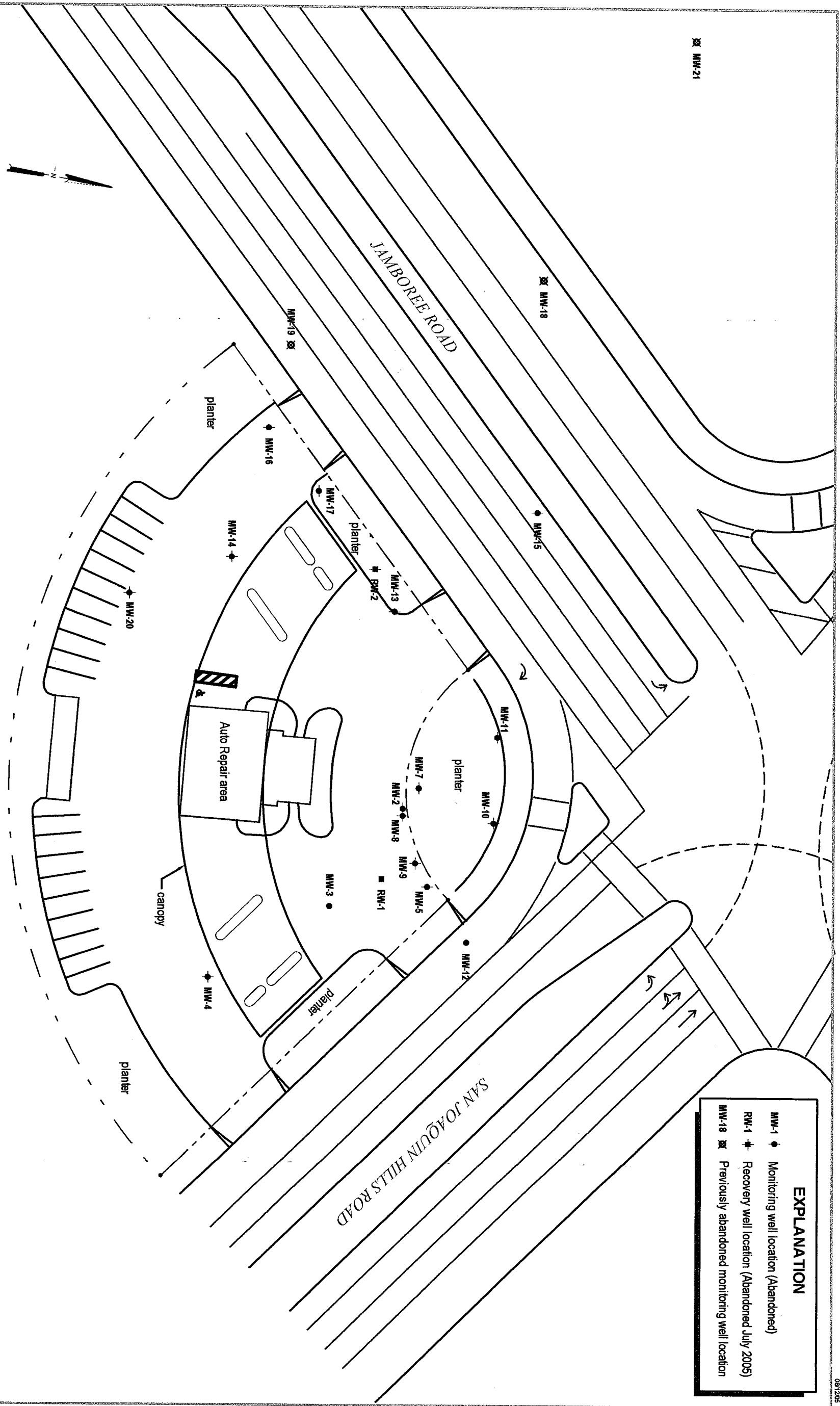


Sincerely,

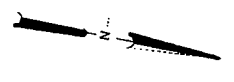
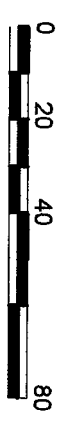
R. Scott Edwards, P.G.
Senior Project Geologist

Figures: 1 – Site Plan

Attachments: Remedial Action Completion Certification
Encroachment Permit – City of Newport Beach
Well Destruction Permit (#05-05-27)



EXPLANATION	
MW-1	Monitoring well location (Abandoned)
RW-1	Recovery well location (Abandoned July 2005)
MW-18	Previously abandoned monitoring well location



Basemap modified from drawing provided by SAC

MW-21

MW-18

JAMBOREE ROAD

SAN JOAQUIN HILLS ROAD

Auto Repair area

planter

planter

planter

planter

planter

canopy

EXPLANATION

MW-1

RW-1

MW-18

FIGURE





**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH**

*Excellence
Integrity
Service*

**JULIETTE A. POULSON, RN, MN
DIRECTOR**

**DAVID L. RILEY
ASSISTANT DIRECTOR**

**MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES**

**STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH**

MAILING ADDRESS:
1241 EAST DYER ROAD, SUITE 120
SANTA ANA, CA 92705-5611

TELEPHONE: (714) 433-8000
FAX: (714) 754-1732
E-MAIL: ehealth@ochca.com



April 5, 2005

Lisa Thompson
Chevron Products Company
145 S. State College Blvd.
P.O. Box 2292
Brea, CA 92822-2292

Subject: Remedial Action Completion Certification

**Re: Underground Storage Tank (UST) Case
Chevron Service Station #3042
1550 Jamboree Rd., Newport Beach CA
OCHCA Case # 85UT032**

Dear Ms. Thompson:

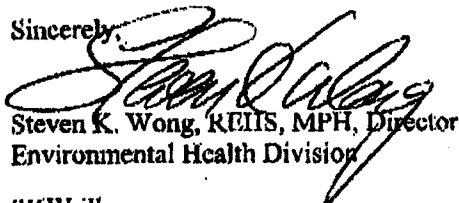
This letter confirms the completion of site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tanks site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum releases at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Please contact Joyce Krull of our office at (714) 433-6252 if you have any questions regarding this matter.

Sincerely,


Steven K. Wong, REHS, MPH, Director
Environmental Health Division

SKW:jlk

Attachment: Case Closure Summary

cc: Tom Mbeke-Ekanem, Santa Ana Regional Water Quality Control Board
SB 562 Database, State Water Resources Control Board
Cleanup Fund Manager, State Water Resources Control Board
Nadine Morris, Newport Beach Fire Department
Larry Honeybourne, Environmental Health H-996



City of Newport Beach

Public Works Department

Permit No: **N2005-0287**

3300 Newport Blvd, Newport Beach, CA 92663

Public Works & Inspection Requests (949) 644-3311

Utilities Inspection Requests (949) 644-3011

Job Address: **1550 JAMBOREE RD NB**

Thomas Guide: **889D6**

Description: **ABANDON 2 PVC GROUNDWATER MONITORING WELLS (4" I.D. DIAMETER) SEE N2000-0014.**

Parcel #: **442-261-02**
Legal Desc: **IRVINE SUB LOT BLK 55 POR OF BLK**

Owner: **CHEVRON USA**
Phone: **0**
Address: **PO BOX 1392
BAKERSFIELD CA 93302**

Applicant: **CASCADE DRILLING INC. CALIFORNIA**
Phone: **562-929-8176**
Address: **11250 EAST FIRESTONE BLVD
NORWALK CA**

Contractor:
Phone:
Address:

CASCADE DRILLING, INC - CALIFORNIA
562-929-8176
11250 EAST FIRESTONE BLVD
NORWALK CA

Contractor State Lic. License Expire: Class Code:

717510
01/31/2006
C-97

Business License: Business Expire:

BT 010423LA
7/1/08

Special Cond.: **NEED LETTER OF AUTHORIZATION FROM STATE AND NEED UPDATED CMB BUSINESS LICENSE**
Deposit to be made for 6 permits
After work completed to give payment.

Dave Banchero
(949) 428-8993
cell 949 355-6489

Workers' Compensation Insurance Carrier: Policy No: W. C. Expire:

BUSH, COTTON & SCOTT
02EWB30531
05/01/2003

Permit Processing Fee: **\$221.00**
Agreement Fee: **\$0.00**
Street/Alley/Walk/Closure: **\$6.80**
Public Works Field Insp.: **\$245.50**
Utilities Field Insp.: **\$0.00**
Refundable Deposit: **3,000.00**

Paid: **\$3,503.30**
Balance: **\$0.00**

Receipt No: **RO2-97260**

Processed By: **SK** Date: **7/6/05**
Utilities Approval: **SK** Date: **7/6/05**
Traffic Approval: **SK** Date: **7/26/05**
General Services Approval: _____ Date: _____

Other Department: _____
Permit Denied: _____
Issued Permit: _____

(Signature)

Date: **7/26/05**



WCR

APPLICATION FOR WELL DESTRUCTION PERMIT

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION

1241 E. DYER ROAD, SUITE 120 (714) 433-6000
SANTA ANA, CA 92705-4720 FAX: (714) 433-6481



CITY <u>Newport Beach</u>		DATE <u>May 9, 2005</u>
WELL LOCATION (ADDRESS IF AVAILABLE) <u>1515 Jamboree Road, Newport Beach</u>		
NAME OF WELL OWNER <u>CHEVRON</u>		NAME OF CONSULTING FIRM <u>Cambria Environmental Technology</u>
ADDRESS <u>6001 Bollinger Canyon Road</u>		BUSINESS ADDRESS <u>18 Technology Suite 107, Irvine, CA</u>
CITY <u>San Ramon CA</u> ZIP <u>94583</u> TELEPHONE <u>(916) 350-1855</u>	CITY <u>Irvine, CA</u> ZIP _____ TELEPHONE <u>(949) 428-8990</u>	
NAME OF DRILLING CO. <u>Cascade Drilling</u>	C-57 LICENSE NUMBER <u>717510</u>	WELL DEPTH _____ Feet
CITY <u>Norwalk</u> ZIP <u>90650</u> TELEPHONE <u>562-929-8176</u>	DIAMETER _____ Inches	TYPE OF WELL/TOTAL NUMBER <u>19</u> <input type="checkbox"/> WATER <input type="checkbox"/> CATHODIC <input checked="" type="checkbox"/> MONITORING <input type="checkbox"/> OTHER
SEALING MATERIAL / ESTIMATE AMOUNT OF SEALING MATERIAL NEEDED <u>Portland/bentonite mix</u>	PROPOSED START DATE <u>To be determined - Cambria will notify via email</u>	
METHOD OF DESTRUCTION <u>Pressure grout casing using tremmie pipe and seal. overdrill upper 5' of casing and backfill hole with bentonite. Remove well box and skirt. patch surface.</u>		
DIAGRAM OF WELL SITE (Use additional sheets and/or attachments) <u>See attached</u>	I HEREBY AGREE TO COMPLY IN EVERY RESPECT WITH ALL REQUIREMENTS OF THE HEALTH CARE AGENCY AND WITH ALL ORDINANCES AND LAWS OF THE COUNTY OF ORANGE AND OF THE STATE OF CALIFORNIA PERTAINING TO WELL CONSTRUCTION, RECONSTRUCTION AND DESTRUCTION.	
	APPLICANT'S SIGNATURE <u>R. Scott Edwards, R.G.</u>	DATE <u>5/9/05</u>
	PRINT NAME <u>(949) 355-6427</u>	PHONE NUMBER <u>(949) 428-8995</u>
<input checked="" type="checkbox"/> SITE PLAN ATTACHED		FAX NUMBER
FOR ACCOUNTING USE ONLY: HSO NO. <u>189767</u> CHECK NO. <u>25111</u> DATE <u>5/13/05</u> AMOUNT <u>\$2033.00</u> INTL. <u>ES 5/17/05</u>		DISPOSITION OF PERMIT (DO NOT FILL IN): <input checked="" type="checkbox"/> APPROVED SUBJECT TO THE FOLLOWING CONDITIONS: A. <input checked="" type="checkbox"/> NOTIFY THIS AGENCY AT LEAST 48 HOURS PRIOR TO START. B. <input type="checkbox"/> SUBMIT TO THE AGENCY A WELL DESTRUCTION REPORT. PLEASE REFERENCE PERMIT NUMBER. C. <input type="checkbox"/> OTHER _____ <input type="checkbox"/> DENIED _____
APPROVAL BY OTHER AGENCIES: JURISDICTION _____ REMARKS _____		PERMIT ISSUED BY <u>DAN MATSUI</u> DATE <u>5-18-05</u> PRINT NAME PHONE NUMBER <u>714 433-6287</u>
AUTHORIZED SIGNATURE _____	DATE _____	

WELL PERMIT NUMBER
05-05-27

WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.



CITY OF NEWPORT BEACH
ADMINISTRATIVE SERVICES
 3300 NEWPORT BLVD..
 P.O. BOX 1768, NEWPORT BEACH, CA 92658-8915

CASH RECEIPT

RECEIPT NUMBER: 02000097260

RECEIVED BY: PERRY2
 TODAY'S DATE: 07/06/05

PAYOR: CAMBRIA ENVIRON TEC
 REGISTER DATE: 07/06/05 TIME: 11:58:11

52005016 ENCROACHMENT PERMIT FE	N2005-0287	\$221.00
52004626 STREET CLOSURE PERMIT		\$36.80
51005014 ENGINEERING SVC FEES		\$245.50
0102202 CUSTOMER DEPOSIT-MISC		\$3,000.00

TOTAL DUE: \$3,503.30

CASH PAID	CHECK PAID	CHECK NO	TENDERED	CHANGE
\$.00	\$3,503.30	25136	\$3,503.30	\$.00

SWRCB Geotracker File Information for Adjacent Properties

Former Ford Aeronutronic Property – One Ford Road

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4
245 West Broadway, Suite 425
Long Beach, CA 90802-4444



February 1, 1995

Mr. Jerome S. Amber, P.E.
Manager, Wastes and Hazardous Substances
Environmental Quality Office
Ford Motor Company
15201 Century Drive, Suite 608
Dearborn, Michigan 48120

Dear Mr. Amber:

ACCEPTANCE OF CLOSURE CERTIFICATION: FORD MOTOR COMPANY
(FORMER FORD AERONUTRONIC/LORAL AERONUTRONIC), 1000 FORD ROAD,
NEWPORT BEACH, CALIFORNIA (EPA ID NO. CAD041330077)

The Department of Toxic Substances Control (Department), has reviewed the Closure Certification Report dated June 1, 1994, including a Health Risk Assessment Report dated March 31, 1994, for the Ford Motor Company (former Ford Aeronutronic/Loral Aeronutronic), facility. The report certifies that you have closed a Container Storage facility, including an adjacent Lab Pack unit in accordance with the Department approved Closure Plan dated November 8, 1991. The Department hereby accepts the Closure Certification and considers your Container Storage facility including the Lab Pack unit at the Ford Motor Company facility closed. Upon acceptance of this Closure Certification, the facility may operate as a hazardous waste generator in accordance with the California Code of Regulations, Title 22, Division 4.5, Chapter 12.

The Department's acceptance does not certify that the subject facility will not pose an environmental or public health threat. Neither does this acceptance release you from any liabilities associated with past hazardous waste management practices which occurred at your facility. Pursuant to the Health and Safety Code, Section 25817, the Department may issue an order specifying corrective action if the Department determines that there has been a release of hazardous waste or constituents into the environment from any solid waste management units at your facility. Solid waste management units are any units or areas at a hazardous waste facility from which hazardous constituents might migrate, irrespective of whether the units or areas were intended for the management of wastes.

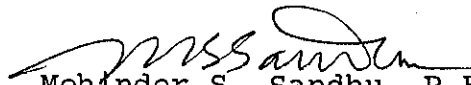
Mr. Jerome S. Amber, P.E.
February 1, 1995
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The Department is aware that the California Regional Water Quality Control Board (CRWQCB), Santa Ana Region, is overseeing the ongoing site assessment and remediation activities at the former Ford Aeronutronic/Loral facility as per the letter from the CRWQCB dated August 24, 1994 to the City of Newport Beach. Also, CRWQCB will continue to oversee the activities until its concerns regarding protection of the quality of the waters of the State are fully addressed. Therefore, the Department's acceptance of the Closure Certification does not include ground water issues.

Pursuant to the California Code of Regulations, Title 22, Section [66264.143(j)(1) or 66265.143(j)(1)], you are no longer required to maintain financial assurance and liability coverage for the Container Storage facility, including the Lab Pack. You may submit your request for releasing your financial documents to Ms. Joyce Haire, Financial Responsibility Coordinator, Statewide Compliance Branch, at the letterhead address. Ms. Haire may be reached at (310) 590-5930, if you need to contact her.

If you have any questions, please contact Mr. Edaurdo Vallesteros of my staff at (310) 590-4876.

Sincerely,


Mohinder S. Sandhu, P.E., Chief
Facility Permitting Branch

cc: Ms. Paula Bisson
Permits Section (H-3-1)
Hazardous Waste Management Division
U.S.E.P.A., Region IX
75 Hawthorne Street
San Francisco, California 94105

Ms. Jo Nelson
Fees Unit (HQ-2)
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Mr. Jerome S. Amber, P.E.

February 1, 1995

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cc: Ms. Joyce Haire
Statewide Compliance Program
Department of Toxic Substances Control
Region 4
245 West Broadway, Suite 425
Long Beach, California 90802

Mr. Frank Johns, P.E.
Geraghty and Miller, Inc.
100 North Barranca Avenue, Suite 500
West Covina, California 91791-1600

Mr. Brian Bussa
Environmental Quality Office
Ford Motor Company
15201 Century Drive
Dearborn, Michigan 48120

Branch Chief
Statewide Compliance Division
Department of Toxic Substances Control
245 West Broadway, Suite 425
Long Beach, California 90802

Regional Water Quality Control Board
Santa Ana Region (8)
2010 Iowa Avenue, Suite 100
Riverside, California 92507

Mr. Robert Merryman, Director
Environmental Health
Orange County Health Care Agency
P.O. Box 355
Santa Ana, California 92702

Certified Mail
P 392 227 963
Returned Receipt Requested

**APPENDIX F:
TRC STAFF AND ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS/RESUMES**



During Mr. Stanford's career, his project management experience has been applied to capital construction projects, underground storage tank facilities, chemical production and bulk storage facilities, manufactured gas plant sites, power generation and distribution facilities, and State and Federal Superfund sites. His program and technical management experience spans the following services:

- *Environmental Due Diligence Assessments*
- *Health, Safety, and Environmental Compliance and Auditing*
- *Underground Storage Tank Management*
- *Remedial Investigation and Characterization*
- *Human and Ecological Risk Assessment*
- *Risk Management Planning*
- *Contaminant Fate and Transport Modeling*
- *Soil and Groundwater Remediation*
- *Solid Waste Management*

Mr. Stanford has more than 27 years of experience in site assessment, soil and groundwater remediation, pharmacology, risk assessment, occupational health and safety, and air toxics. His qualifications include extensive experience planning, directing, and completing environmental site assessments, designing remedial projects for soil and groundwater, performing human and ecological risk assessments, evaluating the fate and transport of chemicals in soil, groundwater, and air. His experience also includes performing multi-media environmental, health, and safety compliance audits, risk management planning and solid waste management. Mr. Stanford served on the Scientific Advisory Board for California AB 2588 and the Private Site Management Advisory Committee for AB 1876.

CREDENTIALS

PROFESSIONAL REGISTRATIONS / LICENSES

- Registered Environmental Health Specialist, California (#6183), 1991
- Certified Environmental Manager, Nevada (#1814), 2002

EDUCATION

- MS, Environmental Health, California State University, Northridge
- BS, Environmental & Occupational Health, California State University, Northridge

EXPERIENCE

PROFESSIONAL SUMMARY – Environmental Program Management

Los Angeles County Metropolitan Transportation Authority (Metro), Environmental Engineering Services (Contracts EN073 and EN076) – Multiple Locations, Los Angeles County, CA (Project Director: 2005 – Present)

Mr. Stanford is the Project Director for a multi-task environmental engineering contract with Metro. This contract covers environmental engineering, energy efficiency, and sustainability services for a variety of facilities including bus and rail maintenance divisions, existing and planned dedicated bus and Light Rail alignments, and various capital programs and projects. Environmental engineering services provided to Metro include geotechnical evaluation of new facilities and proposed facility improvements, underground storage tank compliance and inspection programs for 22 operating bus and rail facilities, Stormwater Management Program development and implementation at 30 industrial facilities and ongoing construction-related activities, environmental due diligence associated with the acquisition of properties for expansion bus and light rail services, environmental assessment of soil and groundwater impacts, pilot testing of soil vapor and groundwater extraction systems, development of Remedial Action Plans, engineering design and specifications development for remedial actions, engineering design of methane gas and rockfall mitigation systems, regulatory communications and negotiations for assessment and remediation programs, evaluation of human and ecological risks associated with soil, groundwater, and air, and participation in Joint Development projects of properties with historical environmental impacts.

PROFESSIONAL SUMMARY (cont.)

Precision Specialty Metals, Environmental Compliance Support – Los Angeles, CA (Environmental Compliance Manager: 2000 – Present)

Mr. Stanford developed a comprehensive, multi-media environmental compliance program involving hazardous waste profiling, manifesting, and tracking; industrial wastewater treatment system monitoring and reporting; air permitting and related compliance activities (including Title V and RECLAIM programs); EPCRA reporting; RMPP compliance; and Stormwater Pollution Prevention Planning, implementation, and reporting. In support of facility compliance activities, he also interfaces with various regulatory agencies including the State Board of Equalization, Air Pollution Control Districts, Sanitation and Industrial Wastewater Discharge agencies, US Environmental Protection Agency, and Regional Water Quality Control Boards. Mr. Stanford provides ongoing technical support including identification of hazardous waste source reduction alternatives and general facility compliance with community right-to-know regulations.

Various Public Agencies, On-Call Environmental Services – Southern CA (Project Manager: 1997 – Present)

Mr. Stanford administers on-call environmental contracts with a variety of public agencies in Southern California. Since 1997, these agencies have included the Cities of Anaheim, Ontario, Riverside, Brea, and Burbank; the County Sanitation Districts of Los Angeles County, the Los Angeles County Department of Public Works, Los Angeles County CEO Office, and the Los Angeles Community Design Center. Representative project activities include environmental due diligence associated with the acquisition of real property and rights-of-way, environmental site assessment of soil and groundwater, asbestos and lead-based paint evaluations, hazardous waste characterization and disposal, and development of remedial alternatives and project development cost analyses.

Honolulu Harbor Working Group, Iwilei District Participating Parties – Honolulu, HI (Risk Assessment Manager: 1999 – 2008)

Mr. Stanford served as the Project Manager for a multi-party PRP group for a 0.5 square mile area that is impacted by petroleum hydrocarbons in soil and groundwater and methane gas in the subsurface. He developed a conceptual site model of fate, transport, and human and ecological exposure pathways, calculated health-based screening levels for chemicals of potential concern, and developed a comprehensive database and GIS application that is used to provide focus to ongoing assessment and interim remedial activities. Mr. Stanford also interfaced with State of Hawaii and USEPA regulators and developed vapor migration and vapor intrusion screening algorithms to evaluate potential impacts to indoor and outdoor air and establish generic specifications for the design and construction of passive and active mitigation systems for control of methane gas and volatile organic compounds during redevelopment within the project area.

Environmental Due Diligence

Union Bank, Environmental Due Diligence – Multiple Locations (Project Director: 1997 – Present)

Mr. Stanford manages Union Bank's environmental risk management and environmental due diligence activities related to secured loans and real estate used as collateral for loan securitization. Over the past seventeen years, he has completed more than 200 Phase 1 Environmental Site Assessments and Transaction Screen Reports for Union Bank of California for locations throughout the continental United States. Mr. Stanford has also completed environmental site assessments, removed underground storage tanks, developed remedial action plans, and installed and operated soil and groundwater remediation systems at a variety of industrial, commercial, and retail properties.

Combined Properties, Incorporated, Environmental Due Diligence, Assessment and Remediation – Multiple Locations, Southern CA (Project Director: 2001 –Present)

Mr. Stanford directs environmental due diligence activities for acquisition and divestment of commercial properties. He is responsible for all aspects of pre-acquisition environmental due diligence activities including preparing Phase 1 Environmental Site Assessment documents, characterizing subsurface soil and groundwater conditions for petroleum hydrocarbons and hazardous substances, conducting geotechnical evaluations, completing asbestos and lead-based paint evaluations, designing, installing and operating remedial systems, and providing assistance on mitigation of subsurface and building hazards.

Related Companies of California, Environmental Due Diligence, Assessment and Remediation – Multiple Locations, Southern CA (Project Director: 2005 –Present)

Mr. Stanford directs environmental due diligence activities for acquisition and divestment of residential and mixed-use properties. He is responsible for all aspects of pre-acquisition environmental due diligence activities including preparing Phase 1 Environmental Site Assessment documents, characterizing subsurface soil and groundwater conditions for petroleum hydrocarbons and hazardous substances, conducting geotechnical evaluations, completing asbestos and lead-based paint evaluations, designing, and providing assistance on mitigation of subsurface and building hazards.

First Republic Bank, Environmental Due Diligence – Multiple Locations (Project Director: 2005 - Present)

Mr. Stanford manages First Republic Bank's environmental risk management and environmental due diligence activities related to secured loans and real estate used as collateral for loan securitization. Over the past nine years, he has completed more a dozen Phase 1 Environmental Site Assessments and Transaction Screen Reports at various locations throughout Southern California.

Human and Ecological Risk Assessment

Confidential Clients, Proposition 65 Exposure Assessment (1988 - 2015)

Mr. Stanford served as the Project Manager for the evaluation of one hundred consumer products and over twenty chemicals listed by the State of California as carcinogens, developmental or reproductive toxicants. Listed chemicals evaluated included acrylamide, volatile organic compounds, dioxins/furans, polynuclear aromatic hydrocarbons, metals, and phthalates. The evaluations were performed for a wide range of consumer products including paper products, toiletries, and durable goods. The evaluations ranged from quantitative exposure assessments utilizing default exposure parameters for typical use scenarios to detailed exposure assessment sampling and analysis to establishing exposure point concentration estimates based on gravimetric, bulk, and wipe sampling protocols. The evaluations included a three phase review process which included identification of listed chemicals in the supply or manufacturing chain, a qualitative evaluation of exposure potential based on the finished product composition, and a final quantitative assessment of exposure under typical product use conditions. The results of the analysis were utilized to inform the manufacturer or supplier on potential Proposition 65 notification requirements, to assist in the identification or alternative product formulations that would not result in Proposition 65 notifications, and to establish protocols for further refinement of exposure parameters that contribute most-significantly to potential consumer exposures and risks.

Confidential School Districts, School Site Risk Assessment and Remedial Action Planning, Southern California (1998 – 2015)

Mr. Stanford served as the Risk Assessment Manager of the Human Health Risk Assessment (HHRA) component of the Preliminary Endangerment Assessment process for multiple proposed and existing school sites for several school districts in Southern California. Chemicals of potential concern evaluated included volatile organic compounds, heavy metals, PCBs, chlorinated herbicides and pesticides, petroleum hydrocarbons, and semi-volatile organic compounds in soil, groundwater, and soil vapor. The results of the HHRA were used to support the future site development activities and to identify specific risk management measures that would be used to reduce potential exposures and risks to future students and staff at the school sites.

Molycorp Minerals, Mountain Pass Mine – Mountain Pass, CA (2013 – 2014)

Mr. Stanford served as the manager of the Human Health Risk Assessment (HHRA) component of the Corrective Action and Closure Plan for the Mountain Pass Mine and Mill Site located in San Bernardino County, California. The HHRA included quantitative evaluation of potential human health risks and qualitative evaluation of potential ecological risks associated with current site conditions for lanthanides, actinides, and radionuclides (e.g., radium, thorium, and uranium decay series). Health-based cleanup goals for soil were also derived for lanthanides and actinides. For radionuclides, cleanup goals were developed based on surface radiation exposure rates for specific areas. The HHRA and cleanup goals were used to identify additional geographic areas that warrant

additional investigation and/or mitigation and established the basis for determining that post-remediation concentrations met the site risk management objectives.

Riverside Agricultural Park, Riverside, CA (2014)

Mr. Stanford managed the post-remediation Human Health Risk Assessment (HHRA) pursuant to the California Land Reuse and Revitalization Act Agreement. The Site encompasses approximately 62 acres of undeveloped land that was first developed as a sewage treatment plant in 1942. The sewage treatment plant was decommissioned in 1965. However, environmental assessment activities identified the presence of polychlorinated biphenyls (PCBs), semi-volatile organic compounds, volatile organic compounds, pesticides, herbicides, dioxins/furans, and metals in soil. TRC implemented a remedial action plan which included the excavation and off-site disposal of approximately 174,000 tons of impacted soil. The HHRA was conducted in order to assess the potential human health risks associated with the future residential development and use of the property and to confirm the adequacy of the remedial actions. DTSC subsequently approved the remedial action completion report and HHRA and issued a certificate of completion in 2014.

Carroll Hall Shelby Trust, Gardena, CA (2011 - 2014)

Mr. Stanford managed the Human Health Risk Assessment (HHRA) in order to further refine the chemicals of potential concern, establish health-based soil and groundwater remediation objectives, and to evaluate vapor intrusion conditions resulting from remedial activities implemented during pilot testing. Potential exposures considered in the HHRA included direct contact with soil and vapor intrusion to existing or future site structures. Supplemental monitoring of soil gas and indoor air was performed during the pilot remediation testing period to confirm that mitigation measures were adequate to protect current building occupants from exposures to chlorinated VOCs emanating from the subsurface.

Los Angeles County Department of Public Works, Oxford Basin, Marina Del Rey, CA (2013)

Mr. Stanford managed the Human Health Risk Assessment (HHRA) in support of proposed improvements to a storm retention basin. Previous environmental investigations identified the presence of heavy metals, PCBs, chlorinated herbicides and pesticides, petroleum hydrocarbons, and semi-volatile organic compounds in basin sediments and surrounding soil. Proposed site enhancement activities include construction of new features to increase its storage capacity and improve the general appearance and recreational use of this feature. The results of the HHRA were used to support the future site development activities and to identify specific risk management measures that would be used to reduce potential exposures and risks to future site workers and recreational users.

Various Industrial Companies, Vapor Intrusion and Health Risk Assessment Services – Western United States (1991 – Present)

Mr. Stanford is the technical lead for human health risk assessments performed in the West Region. During his tenure with TRC, Mr. Stanford has completed human health risk

assessments for a variety of petroleum, chlorinated solvent, heavy metal, dioxin/furan, and radionuclide impacted sites and facilities throughout the continental United States. Risk assessment clients include, among others, ConocoPhillips, ExxonMobil, Chevron, Unocal, Simpson Paper Company, Lockheed Martin Corporation, Coastal Corporation, Rohr Industries, Signet Armorlite, BP Arco, Gatron Industries, Home Depot, BNSF Railroad, Kinder-Morgan Energy Partners, State of Hawaii Department of Transportation, Montrose Chemical Company, Weyerhaeuser, Kimberly Clark, and Jorgensen Steel. The health risk assessments have ranged in complexity from single exposure pathway analyses to complex multi-media exposure pathways involving multiple chemicals. The risk assessment results have been used in internal risk-management decision making and prioritization, litigation support, and as regulatory compliance tools. Mr. Stanford has been involved in the assessment and refinement of vapor intrusion evaluation methodologies and in the integration of risk management measures for more than twenty years. Risk assessments prepared in the West Region have been approved by agencies including the California Department of Toxic Substances Control, California Air Resources Board, Hawaii Department of Health, Nevada Department of Environmental Protection, Arizona Department of Environmental Quality, and the United States Environmental Protection Agency. In addition to conducting human and ecological risk assessments, Mr. Stanford also participates in the communication of risk to the public.

Pacific Gas and Electric Company, Hunters Point Power Plant Dismantlement Contract - San Francisco, CA (2007- 2009)

Mr. Stanford served as the manager of the Human Health Risk Assessment (HHRA) component of the Remedial Investigation/Feasibility Study (RI/FS) activities. Activities performed in support of the RI/FS activities involved development of general data quality objectives for soil, groundwater, sediment and soil vapor to facilitate the application of field data in human health and screening ecological risk assessments. In addition, Mr. Stanford developed a Conceptual Site Risk model for the site based on the anticipated future unrestricted use of the property. Specific elements of the HHRA completed as a component of this project include statistical data evaluation for determining background concentrations of metals and asbestos in soil, identification of chemicals of potential concern for inclusion in the quantitative HHRA, quantification of plausible human exposure pathways involving soil, soil vapor (vapor intrusion), and groundwater, identification of Chemicals of Concern (COCs) that influence the site-wide risk estimates, and determination of health-based screening levels for COCs in soil, groundwater, and soil vapor. The health-based screening levels were used in conjunction with the statistically-derived background concentrations to establish the remediation goals that served as the basis for evaluation potential response, mitigation, and engineering control alternatives.

Pacific Gas and Electric Company, Humboldt Bay Generating Station (HBGS) Demolition and Abatement Project (2008 -2009)

As the Principal Scientist for human health risk assessment, Mr. Stanford completed a screening level risk assessment for potential construction-related exposures associated with the fast-track demolition and abatement project. The results of the human health

risk assessment demonstrated that residual chemicals in soil do not pose a significant threat to construction workers or future site workers and that no additional risk management measures or remediation is warranted.

Honolulu Harbor Working Group, Iwilei District Participating Parties – Honolulu, HI (1999 – 2008)

Mr. Stanford served as the Project Manager for a multi-party PRP group for a 0.5 square mile area that is impacted by petroleum hydrocarbons in soil and groundwater and methane gas in the subsurface. He developed a conceptual site model of fate, transport, and human and ecological exposure pathways, calculated health-based screening levels for chemicals of potential concern, and developed a comprehensive database and GIS application that is used to provide focus to ongoing assessment and interim remedial activities. Mr. Stanford also interfaced with State of Hawaii and USEPA regulators and developed vapor migration and vapor intrusion screening algorithms to evaluate potential impacts to indoor and outdoor air.

Former Railroad Facility, Health Risk Evaluation and Remedial Action Planning – San Jose, CA (2005)

Mr. Stanford managed all aspects of a human health risk assessment for an approximately 13 acre former rail facility impacted by surficial and subsurface metals, polynuclear aromatic hydrocarbons (PAHs), pesticides/herbicides, and volatile organic compounds. The health risk assessment considered the redevelopment of the property for residential use. Consequently, he performed an evaluation of potential risks under a proposed future residential land-use scenario under baseline (i.e., pre-remediation) conditions for direct exposure and vapor diffusion exposure pathways. The health risk assessment also included an evaluation of the potential migration of methane gas and volatile organic compounds in soil vapor from two adjacent landfills. TRC developed health-based remediation goals for metals, PAHs, and pesticides/herbicides in soil to protect future site residents from direct contact with these constituents. The results of the vapor diffusion analysis were used to establish engineering controls to prevent the migration of methane gas and VOCs from the adjacent landfills to the subject property and from the subsurface to indoor air within the residences. Following approval of the health-risk assessment and regulatory concurrence with the remediation goals, the remedy was implemented and a no further action determination was obtained.

Lockheed Martin Corporation, Former Industrial Light Metals Facility – Torrance, CA (2001 – 2011)

Mr. Stanford provided risk assessment services for chlorinated and aromatic hydrocarbons in soil and groundwater at a former aerospace facility. His risk assessment services included evaluation of vapor intrusion into indoor air under current and anticipated future site conditions and hypothetical future groundwater use scenarios. In addition, Mr. Stanford analyzed the fate and transport of chlorinated solvents in soil to determine whether residual soil impacts represent a potential source of impact to groundwater. The results of the risk assessment have been used to support site development and use during remedial testing and remedy implementation. The results

of the fate and transport analyses were used to justify closure of several solid waste management units associated with the facility.

Confidential Clients, Multiple Locations, California and Nevada. *Risk Assessment and Risk Management Planning.* Prepared documentation related to potential releases of anhydrous and aqueous ammonia and hydrofluoric acid from onsite storage and NOx control (Selective Catalytic Reduction) systems for several proposed and existing power generation facilities and manufacturing facilities. Lead process hazard reviews and identified potential mitigation measures for deployment at facilities in conjunction with site selection and preliminary engineering design of facilities. Performed offsite consequence analyses for facilities based on mitigated and unmitigated alternatives in accordance with Federal RMP and CalARP requirements.

City of Monterey, Monterey Swim Gym Facility – Monterey, CA (1989 – 1990)

As the Project Manager for the human health risk assessment portion of the Monterey Swim Gym Facility, Mr. Stanford assisted in comprehensive site assessment and remedial design for a former manufactured gas plant site located in Monterey, California. His specific project responsibilities included identifying potential constituents of concern related to former facility operations, designing a statistical sampling plan, completing a human health risks assessment involving current and potential future exposures related to property development, and establishing remedial design objectives. The remedial design objectives were used to establish the geographic limits of the remedial response in consideration of the intended site development and to support the beneficial reuse of impacted soil.

Ramco, Mace Ranch Development – Davis, CA (1989 – 1991)

Mr. Stanford was the Project Manager for a former pesticide and fertilizer bulk facility located in an agricultural area of Central California. Historical dumping of bulk pesticides including ethylene dibromide (EDB), dichloropropane (DCP), and dibromochloropropane (DBCP) into an unlined wash basin created a plume of pesticides in soil and perched groundwater that threatened a nearby municipal water well. Remedial investigations focused on establishing health based remedial goals for soil and groundwater that are protective of the underlying utilized aquifer and allow for residential development of the adjacent property. The selected remedial alternative included both limited remedial excavation of impacted soil and groundwater plume control.

Confidential Client, Risk Characterization and Management – Chubut Province, Argentina (2003 – 2004)

Mr. Stanford served as the Risk Assessment Manager for a proposed mine site located in the Andes Mountain range of Chubut Province, Argentina. As the Risk Assessment Manager, he evaluated potential risks to human health of mine site workers and nearby residents resulting from mine site operation and potential catastrophic event scenarios. Activities evaluated as a component of this project included transport of hazardous substances during mine operation, plant operations and process-related activities, impoundment and sterile rock pile facilities, and onsite use of hazardous substances.

Mr. Stanford also identified risk management measures for the activities associated with the greatest risk probability and consequence.

Former Cannery, Remedial Investigation and Mitigation – Honolulu, HI (1997 – 1999)

In conjunction with the first Voluntary Cleanup Agreement completed in the State of Hawaii, Mr. Stanford performed a comprehensive evaluation of the presence and distribution of multiple chemicals in soil and groundwater beneath a former cannery. Chemicals evaluated include substituted benzene compounds and polynuclear aromatic hydrocarbons. As a component of this evaluation, he conducted an analysis of the potential fate and transport potential of chemicals in groundwater and evaluated potential onsite and offsite health risks associated with direct contact and inhalation of chemicals during and after site development. The results of the health-risk assessment were used to establish vapor control criteria for volatile compounds and methane gas and to secure approval for site redevelopment for commercial use.

Unocal Corporation, Santa Maria, California (1999 to 2001). *Emissions Inventory Planning, Reporting, Fugitive Emissions Monitoring, and Health Risk Assessments:* Conducted emissions quantifications for pressure distillates, crude towers, coker wet gas, overhead gas, tail gas treatment, straight run naphtha, crude heaters, crude and recovered oil storage tanks, and coker naphtha for emissions of benzene, ammonia, toluene, hydrogen sulfide, chlorine, zinc, xylenes, and C8 aromatics. Conducted source testing of sump vapor recovery units and obtained permits to operate facility equipment at various pump stations. Developed source testing and emissions quantifications methodologies and completed AB2588 health risk assessments for facility emissions.

City of Burbank Redevelopment Agency, B-1 Remediation Oversight – Burbank, CA (1997 – 1999)

Mr. Stanford served as the Project Director for the City of Burbank in association with the operation of the Lockheed B-1 Facility Vapor Extraction System. As a component of this project, Mr. Stanford assisted the City of Burbank in determining whether the Vapor Extraction System was operating in compliance with the Conditional Use Permit issued by the City. Activities performed include collection and analysis of verification samples of system air emissions, evaluate calibration of in-line VOC detectors and programmable logic controllers, and completion of weekly and quarterly health risk assessments based on facility emissions. TRC also developed and maintained a webpage for the City of Burbank containing the results of verification samples, health risk evaluations, and vapor extraction system operational data.

UNOCAL CORPORATION, San Luis Obispo Tank Farm, Avila Beach Terminal, Orcutt Field.

Site Assessment, Fate and Transport Modeling, Health Risk Evaluation, Emissions Quantification and Reporting: Conducted environmental site assessment and establishment of remedial action goals for former tank farms, production fields, and crude distribution lines. Coordinated acquisition of sampling data regimen and laboratory analyses for petroleum hydrocarbons including polynuclear aromatic hydrocarbons in divested and active properties for future site development activities. Established land use-

specific remedial objectives in support of ongoing litigation and assisted in establishing alternative land use designations for impacted properties.

Multi-Media Compliance Auditing and EHS Compliance

California Institute of Technology/Jet Propulsion Laboratories, Multi-Media Compliance Auditing, Pasadena, California (Lead Auditor: 2012 – 2014)

Mr. Stanford served as the Project Director for a series of multi-media assessments and audits of educational and research oriented facilities. TRC provided environmental compliance auditing services as related to hazardous waste management, above-ground and underground storage tank management, business emergency planning, air emissions and Title V permit compliance, asbestos, lead-based paint, and PCBs management, CalARP Risk Management Planning, Greenhouse Gas emissions reporting and verification, and related environmental compliance programs.

Precision Specialty Metals, Environmental Compliance Support – Los Angeles, CA (Environmental Compliance Manager: 2000 – Present)

Mr. Stanford developed a comprehensive, multi-media environmental compliance program involving hazardous waste profiling, manifesting, and tracking; industrial wastewater treatment system monitoring and reporting; air permitting and related compliance activities (including Title V and RECLAIM programs); EPCRA reporting; RMPP compliance; and Stormwater Pollution Prevention Planning, implementation, and reporting. In support of facility compliance activities, he also interfaces with various regulatory agencies including the State Board of Equalization, Air Pollution Control Districts, Sanitation and Industrial Wastewater Discharge agencies, US Environmental Protection Agency, and Regional Water Quality Control Boards. Mr. Stanford provides ongoing technical support including identification of hazardous waste source reduction alternatives and general facility compliance with community right-to-know regulations.

Danaher Corporation, Multiple Locations, California and Arizona (Lead Auditor: 2010 – 2011).

Mr. Stanford performed multi-media environmental health and safety compliance audits of four aerospace and manufacturing facilities in support of corporate auditing practices for two different operating divisions within Danaher. Auditing services included focus on hazardous and solid waste management, water and wastewater discharges, chemical management, air emissions and permitting, underground storage tanks, spill prevention and control, Permit by Rule/Tiered Permitting, SARA Title III and EPCRA, OSHA, DOT, and TSCA. Mr. Stanford also provided supplemental consulting services and assisted in the development of inventory management and reporting tools and in the preparation of electronic report filings under EPCRA.

Project Cardinal, EH&S Compliance Auditing, Western and Central US (Lead Auditor: 2009 - 2011)

Mr. Stanford managed multi-media environmental health and safety compliance audits of aerospace and industrial manufacturing facilities located in California, Arizona, Nevada, and Florida. The compliance evaluations were performed subsequent to

various acquisitions by a confidential parent company. TRC provided environmental compliance auditing services as related to hazardous and solid waste management, water and wastewater discharges, chemical management, air emissions and permitting, underground storage tanks, spill prevention and control, SARA Title III and EPCRA, OSHA, DOT, and TSCA. Observed deficiencies were recorded and reported to USEPA under provisions of the EPA's Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations Policy, 65 Fed. Reg 19618.

Confidential Client, Los Angeles, California (Lead Auditor 2004)

Mr. Stanford managed several comprehensive multi-media compliance audit of a company that is engaged in maintenance and leasing of corporate aircraft as a component of pre-merger due diligence. TRC provided environmental compliance auditing services as related to hazardous and solid waste management, water and wastewater discharges, chemical management, air emissions and permitting, underground storage tanks, spill prevention and control, SARA Title III and EPCRA, OSHA, DOT, and TSCA.

Kirkland & Ellis, M&A Environmental Auditing – Various Locations, Western and Central US (Project Manager: 2002)

As the Project Manager for proposed merger and acquisition, Mr. Stanford performed limited environmental compliance audits of several food production and distribution facilities located in California and Texas. The environmental compliance evaluations were performed as a component of pre-acquisition due diligence. TRC provided environmental compliance auditing services as related to air emissions and permitting, underground storage tanks, spill prevention and control, ozone depleting substances, Risk Management Planning, SARA Title III and EPCRA, and Process Safety Management.

Nixon Peabody, M&A Environmental Auditing – Various Locations, Western US (Project Manager: 2002)

Mr. Stanford managed several comprehensive multi-media compliance audits of industrial manufacturing facilities located in the Western US. Compliance evaluations were performed subsequent to various acquisitions by a confidential parent company. TRC provided environmental compliance auditing services as related to hazardous and solid waste management, water and wastewater discharges, chemical management, air emissions and permitting, underground storage tanks, spill prevention and control, SARA Title III and EPCRA, OSHA, DOT, and TSCA.

Metal Finishing Companies, Environmental Health and Safety Consulting – Various Locations, CA (Project Manager: 1995 – 1998)

Mr. Stanford managed environmental and health & safety compliance issues for a number of metal finishing companies operating in Southern California. His typical consulting services included evaluating exposures to personnel working near open process tanks containing phosphoric, nitric, and sulfuric acids, nickel, tin, copper, and hexavalent chromium; general and specific requirements for air emissions from degreasing solvents and air emissions from anodizing and etching, and electro and electro-less plating of nickel, chromium, copper, tin, silver, and gold. Mr. Stanford also

reviewed source testing results, established emissions estimates based on normalized facility-specific indices, conducted screening level risk evaluations, assisted in optimizing wastewater treatment system efficiency, identified source reduction alternatives, and provided training to facility personnel in the areas of environmental compliance and worker and community right to know regulations. Additionally, he developed occupational safety and training programs for eye and face protection, hearing conservation, confined space identification and permitting, lockout/tagout, foot protection, respiratory protection, and operation of industrial trucks.

SPECIALIZED TRAINING

- Project Manager Training, 1990-1991
- Total Quality Management Training, 1993-1994
- Forty-Hour OSHA Health and Safety Training, 1989
- Supervisory OSHA Health and Safety Training, January 1993
- CPR and First Aid Training

PROFESSIONAL AFFILIATIONS

- Society for Risk Analysis
- National Environmental Health Association

SELECTED PUBLICATIONS AND PRESENTATIONS

Stanford, J.T. and R.E. Stultz, "Multiple Site Management via Risk Based Prioritization," *International Petroleum Environmental Conference*, Albuquerque, New Mexico, October, 1998.

Stanford, J.T. and G. McCue. "Risk Based Corrective Action and Inhalation of Vapors from Subsurface Contamination: Theory versus Reality," *Seventh Annual Conference on Contaminated Soils & Groundwater*, Oxnard, California. March 1997.

Baker, J., J.J. Clark, and J.T. Stanford, "Ex Situ Remediation of Diesel-Contaminated Railroad Sand by Soil Washing," *Principles and Practices for Diesel Contaminated Soils*, Lewis Publishers, Volume II. 1994.

Stanford, J.T., "Risk Management for Metals in Soil," Proceedings of *HAZMACON '94*, San Jose, California, March 1994.

Stanford, J.T., "Applications of Risk Assessment and Risk Management for UST Sites," Proceedings of the 1994 *California Water Resources Control Board Underground Storage Tank Conference*, San Diego, California, March, 1994.

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Stanford, J.T. and M.J. Sullivan, 1991, "Determination of Allowable Risk for Occupational Exposures: A Comparison of TLV's and Standard 'De Minimis' Risk Levels," *Society for Risk Analysis Annual Convention*, Baltimore, MD, December, 1991.

Stanford, J.T. and M.J. Sullivan, "Evaluation of Exposure Pathways, Risks and Remedial Alternatives Associated with Soil Contamination at a Metal Scrap Yard: A Case Study," *Society for Risk Analysis Annual Convention*, Baltimore, MD, December, 1991.

Stanford, J.T. and M.J. Sullivan, "Calculation of Incidental Ingestion of Soil: A Methodology Based on Transfer Events," *Society for Risk Analysis Annual Convention*, Baltimore, MD, December, 1991.

Stanford, J.T., M.J. Sullivan, and A.C. Kopf, "Practical Results of Risk Assessments," *Industrial Environmental Association Environmental Compliance Conference*, San Diego, California, 1991.

Sullivan M.J., A.C. Kopf, S.R. Custance, and J.T. Stanford, "Toxicity Assessment of the Chemical Mixtures: JP-5, Crude Oil, Mineral Spirits and Diesel Fuel," *Society for Risk Analysis Annual Convention*, Baltimore, MD, December, 1991.

Sullivan, M.J. and J.T. Stanford, 1991, "Using Risk Assessment to Select Subsurface Remedial Action Plans," *Industrial Environmental Association Environmental Compliance Conference*, San Diego, California, 1991.

Wright, C., J.T. Stanford, and D. Vensel, "Air Toxics Risk Assessment - Human Health Risk Assessment and Air Dispersion Modeling," *North Carolina Air Toxics Conference*, February, 1991.

Stanford, J.T., M.J. Sullivan, C.J. Miller, and P.A. McCaw, "Setting Initial Safe Concentrations in an Unused Perched Zone to Protect a Drinking Water Aquifer," *Society for Risk Analysis Annual Convention*, New Orleans, LA, October 1990.

Stanford, J.T., M.J. Sullivan, and J.R. Hatherill, "Human Health Risk Assessment Under AB 2588 for Air Emissions of Acetone, Freon 113 and Methylene Chloride," *Ensol '90*, Santa Clara, California, September, 1990.

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Sullivan, M.J. and J.T. Stanford, 1990, "Risk Associated with Potential Exposure to Dioxin through Consumption of Tea Brewed Using Tea Bags Containing Bleached Pulp," *Chemosphere*, Pergamon Press, England, Volume 20, 1990.

TEACHING AND ADVISORY POSITIONS

California State University, Northridge, Lecturer, Environmental Health Risk Assessment and Risk Communication graduate courses, 1994-Present.

LITIGATION SUPPORT AND EXPERT WITNESS EXPERIENCE

HENDIFAR V. UNION OIL COMPANY. *Expert Witness Testimony. Orange County Superior Court.* Served as an expert witness on behalf of defendant in regard to lawsuit filed by an adjacent property owner. Services provided included trial testimony pertaining to alleged discharges and migration of hazardous wastes from a former service station property to an adjacent property.

UNDISCLOSED V. MOBIL OIL CORPORATION. *Expert Witness Testimony. Tracy, California.* Served as an expert witness on behalf of Mobil Oil Corporation for a toxic tort case involving the diffusion of volatile organic compounds from soil and groundwater into a proposed commercial building. Completed two days of deposition on issues related to the fate and transport of residual petroleum hydrocarbons in subsurface soil and groundwater, vapor diffusion modeling methodologies, and potential human exposures to petroleum hydrocarbons in soil, groundwater and air. The lawsuit was subsequently settled before trial.

UNDISCLOSED V. UNION OIL COMPANY. *Expert Witness Testimony. San Diego, California.* Served as an expert witness on behalf of Union Oil Company in a lawsuit pertaining to site development of a former bulk storage facility and wood treatment facility. Expert witness services related to differentiation of the types and origins petroleum hydrocarbons and creosote compounds in soil and groundwater and potential health and safety and construction-related management of excavation-derived wastes. The lawsuit was subsequently settled before trial.



Daniel Lachman
Senior Scientist

Mr. Lachman is a hands-on environmental professional who is eager to face and overcome client's challenges. He has the proven ability to build rapport with facility staff, resolve compliance issues timely, and implement EH&S programs to achieve corporate goals and objectives.

Daniel Lachman is senior scientist with over 8 years of progressively responsible and diverse experience in the disciplines of environmental compliance, due diligence and safety. His experience includes assisting with the planning, implementation, and reporting requirements associated with facility EH&S programs. He has prepared several Phase I ESA reports and Risk Management Plans, and supported EH&S compliance audits. He is also experienced in emergency response and spill cleanup in accordance with FEMA's Incident Command System. Dan is a versatile scientist with experience serving both public and private sector clients.

CREDENTIALS

Education

- B.S., Marine Environmental Sciences, Regiment of Cadets, SUNY Maritime College, Bronx, New York

AREAS OF EXPERTISE

- Air Emission Source Permitting, Registration and Reporting
- Greenhouse Gas Inventories and Verifications
- Risk Management Plans (RMPs)
- Phase I Environmental Site Assessments (ASTM E1527)
- Storm water/Waste Water Permits, SWPPPs
- AST Compliance, SPCC Plans
- Hazardous Material Management, EPCRA Reporting
- Hazardous/Universal Waste Management
- Environmental Management Systems (EMSs)
- Environmental and Health/Safety Compliance Audits
- Safety Program Development and Implementation

SPECIALIZED TRAINING

- ASTM E1527 Environmental Assessment for Commercial Real Estate (Phase 1) – 2015
- What's New with ISO 14001, EUCI Course – 2015
- Confined Space Awareness – 2014
- FEMA ICS-100 and ICS-200 – 2014
- RCRA/DOT Training – 2014
- First Aid/CPR – 2014
- United States Coast Guard Tanker-PIC License Holder – 2012
- United States Coast Guard Facility Security Officer – 2009
- OSHA 40 Hour HAZWOPER – 2009

PROFESSIONAL AFFILIATIONS

- National Safety Council

PROJECT EXPERIENCE

DTE Stockton, EH&S Program Implementation Support – Stockton, CA

Mr. Lachman served as the on-site EH&S Coordinator for several months at the DTE Stockton Biomass Power Plant. As the EH&S Coordinator, he was responsible for the implementation of the EH&S program at the facility to ensure compliance with numerous environmental and safety requirements imposed by multiple California regulatory agencies. EH&S program activities included the following:

- Compliance with Title V Major Source Air Permit conditions,
- CA ARB and US EPA GHG Emissions calculations and reporting,
- CalARP Risk Management Plan implementation,
- NPDES Industrial Storm Water Permit and SWPPP implementation,
- Wastewater Discharge Permit sampling and reporting,
- AST and SPCC Plan required inspections and reporting,
- Preparation and submittal of annual hazardous materials business plan,
- Management of solid waste, hazardous waste, universal waste and used oil,
- Assist with maintaining compliance with the existing Process Safety Management Plan, lock-out/tag-out, confined space, HAZCOM and other applicable safety programs,
- EH&S training, and Management and reporting of EHS tasks using ENVIANCE web-based system.

Los Angeles County Sativa Water District, Hazardous Materials Business Plans (HMBP) and CalARP Risk Management Plans – Los Angeles, CA

Mr. Lachman performed a site reconnaissance to identify and quantify all hazardous materials and hazardous wastes stored at three facilities. He developed site facility and area maps, and submitted an updated HMBP to the LACFD CUPA via CERS. He developed a CalARP Program Level 2 Risk Management Plan for the three sites based on their chlorine gas storage and use. This included analyzing and reporting the worst-case and alternate-case scenarios, reviewing 5-year accident history, ensuring that response actions have been coordinated with local emergency responders, and conducting an onsite hazard assessment.

Beacon Capital, Compliance Assessment – Glendale, CA

Mr. Lachman performed an onsite compliance assessment, for recently acquired property that included two commercial structures housing multiple entities, to ensure compliance with Federal, State, and Local regulations. He reviewed permits and surveyed the sites and tenant areas to determine location and volume of aboveground storage tanks, underground storage tanks, storage drums, and various chemicals. Based on permits, locations, volumes, and quantities, he prepared a technical memorandum describing observations, findings, conclusions, and recommendations to maintain compliance.

CalPeak Power, CalARP Risk Management Plans (RMPs) – Vacaville and Firebaugh, CA

Mr. Lachman conducted an onsite RMP audit and aqueous ammonia hazard review for three CalARP Program Level 2 facilities. He performed an offsite consequence analysis (OCA) update for each sites' worst case and alternate case scenarios with the USEPA's ALOHA and MARPLOT programs. Utilizing these programs, he developed threat zones and areas of impact that were used to evaluate potential population and sensitive receptors that could be affected in the event of a release. Based on the outcome of the audit and hazard review, in conjunction with the OCAs, he revised the RMPs and provided recommended actions to help improve the sites.

DTE Woodland, CalARP Risk Management Plan/Process Safety Management (RMP/PSM) – Woodland, CA

Mr. Lachman supported an onsite RMP/PSM audit and an anhydrous ammonia Process Hazard Analysis (PHA) revalidation for this CalARP Program Level 3 facility. The audit and PHA included a full review of the RMP/PSM, regulated substances and processes, accident history, prevention program, process safety information, operating

procedures, training, mechanical integrity, management of change, pre-startup review, employee participation, and hot work permits. He provided an audit report detailing site observations, audit methodology, findings, required actions, and opportunities for improvement based on the audit findings.

Lehigh Hanson, Spill Prevention Control and Countermeasure (SPCC) Plan Update – Fresno, CA

Mr. Lachman conducted a site visit in order to review and modify the plants' existing SPCC Plan to include the adjacent recycling plant operation. The site visit included employee interviews and a review of all oil containing equipment, oil storage, containment areas, and spill response equipment. He identified additional inventory locations that were required to be listed in the plan and made recommendations for proper storage and handling. To ensure the plan was properly updated, he performed an in-depth review of the plan and researched applicable Federal and State regulations.

Orange County Museum of Art, Phase I Environmental Site Assessment – Newport Beach, CA

Mr. Lachman performed site reconnaissance to identify potential recognized environmental conditions (RECs) as per ASTM's standard E1527 (Standard Practice for Environmental Site Assessments), which included an extensive and thorough site visit. Due to the site location and previous release history at adjacent and surrounding properties, scrupulous detail was required when performing the database reviews. This Phase I also took into account non-ASTM findings, including asbestos, lead-based paint, and polychlorinated biphenyls.

P.T. Hutchins Company, Phase I Environmental Site Assessment and Material Compliance Review – City of Industry, CA

Mr. Lachman performed site reconnaissance to perform a material compliance review and identify potential recognized environmental conditions (RECs) as per ASTM's standard E1527 (Standard Practice for Environmental Site Assessments). Due to the site being located within the San Gabriel Valley Superfund Site, which comprised of more than 30 square miles of groundwater that may have been contaminated with volatile organic compounds, additional and extensive research through the USEPA was required to complete this Phase I. The material compliance review consisted of reviewing onsite: plans, procedures, and policies; hazardous substances; solid and liquid waste; chemical storage and containment; EPCRA and CERCLA applicability; storage tanks; waste water and storm water; air emissions; and, safety issues.

Southern Power Company, Phase I Environmental Site Assessments – Nipton and Lost Hills, CA

Mr. Lachman performed site reconnaissance at these two separate solar facility sites to identify potential recognized environmental conditions (RECs) as per ASTM's standard E1527 (Standard Practice for Environmental Site Assessments), this included an extensive site visit and an aerial flyover at one of the sites. He researched agency databases for history on previous REC's on and around the site, and reviewed EDR's and history reports, and provided a report to the user according to ASTM standards.

Los Angeles County Metropolitan Transit Authority (Metro), Environmental Management System Implementation Support – Los Angeles, CA

Mr. Lachman served as an EMS Team Lead assisting Metro with the implementation of their EMS. The Metro EMS represents a coordinated internal effort that is intended to raise awareness of environmental impacts, implement consistent procedures for managing those impacts, and create a documentation system that reflects the progress of the EMS. The Metro EMS has been fully implemented at all bus and rail maintenance facilities.

USPOWERGEN, EH&S Program Management Support – New York, NY

Mr. Lachman served as the environmental engineer for three power generation sites located in Brooklyn and Queens, New York for a period of seven years. Two sites consisted of 48 simple-cycle combustion turbines mounted on stationary barges, these barges were fuel by diesel provided by floating fuel barges and a natural gas line. The two

sites had a combined output of 834MW. The third site was a steam powered generation site capable of producing 1,335 MW. His primary duties included the following:

- Worked closely with the Safety Department with the development and review of Health and Safety Plans, and Job Hazard Analysis,
- Conducted PPE, HazCom, opacity awareness, Security (MTSA/TWIC), confined space, emergency response, asbestos, and lead-based paint training,
- Conducted EHS audits, incident investigations, and daily site and contractor EHS compliance walks,
- Supported the site Incident Command System and large and small scale emergency response management.
- Conducted routine SPCC required AST inspections, and
- Developed and launched a compliance schedule matrix that was successfully used to track compliance deadlines for all three sites.

**APPENDIX G:
ENVIRONMENTAL PROFESSIONAL STATEMENT**

**DEFINITION OF ENVIRONMENTAL PROFESSIONAL AND RELEVANT EXPERIENCE
THERETO PURSUANT TO 40 CFR 312**

(1) a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases (see §312.1(c)) on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f).

(2) Such a person must: (i) hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or (ii) be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in §312.21 and have the equivalent of three (3) years of full-time relevant experience; or (iii) have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or (iv) have the equivalent of ten (10) years of full-time relevant experience.

(3) An environmental professional should remain current in his or her field through participation in continuing education or other activities.

(4) The definition of environmental professional provided above does not preempt state professional licensing or registration requirements such as those for a professional geologist, engineer, or site remediation professional. Before commencing work, a person should determine the applicability of state professional licensing or registration laws to the activities to be undertaken as part of the inquiry identified in §312.21(b).

(5) A person who does not qualify as an environmental professional under the foregoing definition may assist in the conduct of all appropriate inquiries in accordance with this part if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional provided above when conducting such activities.

Relevant experience, as used in the definition of environmental professional in this section, means: participation in the performance of all appropriate inquiries investigations, environmental site assessments, or other site investigations that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases (see §312.1(c)) to the Site. TRC personnel resume(s) are included in **Appendix F**.

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 the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature of
Environmental
Professional:



Date: 11/10/2015