Phase I Environmental Site Assessment

Vacant 59.6-Acre Parcel
Maui Lani Development Site
Kahului, Maui, Hawaii

Prepared for:

MAUI LANI 100, LLC

1100 Alakea Street
Suite 2200
Honolulu, Hawaii 96813

Clayton Project No. 85-05247.00
April 26, 2005

Prepared by:

Clayton Group Services, Inc.
970 N. Kalaheo Avenue
Suite C-316
Kailua, Hawaii 96734
808.531.6708

Petitioner's Exhibit 41

CONTENTS

CONTENTS
(Continued)

Figures

Photographs

Appendices

Executive Summary

Maui Lani 100, LLC retained Clayton Group Services, Inc. (Clayton) to conduct a Phase I Environmental Site Assessment of the vacant 59.6-acre parcel (Tax Map Key [TMK]: [2] 3-8-7: 1 [portion]) located at the Maui Lani Development in Kahului, Maui, Hawaii (the "subject property"). The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions, as defined by ASTM, associated with the subject property.

This assessment was performed under the conditions of, and in accordance with Clayton's Proposal Number PR-85ES05.507 dated February 22, 2005, and ASTM E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Any exceptions to, additions to, or deletions from the ASTM practice are described in the report. Details of the work performed, sources of information, and findings are presented in the report. Limitations of the assessment are described in Sections 1.2 and 1.3.

The subject property is a recently designated land parcel and has not been issued a Tax Map Key (TMK) number by the Maui Real Property Tax Office. However, the subject property is a 59.6-acre portion of a 376.97-acre parcel designated as TMK: (2) 3-8-7: 131 (Figures 1 and 2, *Figures* Tab). The subject property is located in a mixed-zoned area of undeveloped, heavily vegetated land, commercial/light industrial properties, and residential neighborhoods.

The subject property, which is currently owned by Maui Lani, consists mostly of undeveloped and heavily vegetated land with low-lying flora, tall grasses, and small trees (primarily Kiawe and Haole Koa trees). The westernmost portion, which includes approximately one-third of the total subject property land area, consists of former sand mining land. Several unpaved roads and jeep trails run throughout the subject property. In addition, barbed-wire cattle fences were observed along the southern boundary of the subject property.

No activities or improvements were observed on the subject property, except the storage of equipment associated with the current sand mining operation on the west adjacent property. The current sand mining operation and all associated equipment is owned and operated by Ameron, Inc.

The historical research presented in this report has established the use of the subject property since 1921-25. Topographic maps from 1921-25 through 1997 showed the subject property as undeveloped land. Aerial photographs from 1950 through 1992 showed the subject property as undeveloped land with moderate to heavy vegetation.

According to records at the City and County of Honolulu and Maui County Real Property Tax Assessment Offices, land that included the subject property was owned by Hawaiian Commercial and Sugar Company, Ltd. between 1944 and 1962. In addition, a lease that may

have included the subject property was issued to Orchards Hawaii Ltd. in 1980. Although these are agricultural companies, Clayton's review of aerial photographs and topographic maps showed no evidence that the subject property was used for agricultural purposes.

This assessment has revealed no evidence of *recognized environmental conditions*, as defined by ASTM, in connection with the subject property, except for the following:

- Clayton observed a 55-gallon drum in the vicinity of the former sand mining area. The damaged drum container was located below a disabled tractor, and the contents contained within the drum appeared to consist of a petroleum-based material. Evidence of an apparent release of the 55-gallon drum's contents to the surrounding was observed.

  This finding is considered a recognized environmental condition because there is evidence of a release. Clayton's original recommendations were to properly remove and dispose of the 55-gallon drum and its contents, as well as properly remove and dispose of the petroleum hydrocarbon impacted soil. Upon completion of soil removal activities, Clayton recommended confirmation soil samples be collected and analyzed for total petroleum hydrocarbons.

  After the initial site visit, the 55-gallon drum was removed from the subject property by the sand mine operator. The former location of the 55-gallon drum was covered with crushed coral and roped off. Maui Lani 100, LLC then retained Clayton to excavate test pits to assess the location of the release and sample the soil to assess the potential impacts of potentially contaminated soil to the site. Based on the results, Clayton recommended that the TPH-impacted soil be properly excavated and disposed of prior to development of the site. A detailed description of the release response activities and results are presented in a supplemental report entitled "Release Response Activities" by Clayton Group Services, dated April 22, 2005.

- Waikapu Landfill is located on the adjoining and upgradient property to the south-southwest of the subject property. The landfill was owned and operated by the County of Maui. The Waikapu Landfill did not receive waste after 1989 and was closed in 1991. The United States Environmental Protection Agency (USEPA) 40 Code of Federal Regulations (CFR) Part 258, Criteria for Municipal Solid Waste Landfills (MSWLFs), requires post-closure monitoring by owners or operators of MSWLFs. These regulations took effect in October 9, 1993. Therefore, because the Waikapu Landfill did not receive waste after 1989, it is exempt from these regulations. Limited information on closure activities was available for review.

  This finding is considered a recognized environmental condition because there is a potential for contamination from the adjacent property to impact the subject property. Clayton recommends that engineering controls be implemented to ensure that the Waikapu Landfill does not impact the planned development of the subject property. In addition, Clayton

recommends that monitoring be conducted during grading of the subject property to assess potential impacts from the landfill to the subject property.

The following environmental conditions, which are not considered to be *recognized environmental conditions*, as defined by ASTM, were also revealed during this assessment:

- A 1000-gallon AST used to store diesel was observed on the subject property. This AST was not observed within secondary containment. No evidence of leaks or significant staining was observed in the vicinity of the AST.

  This finding is not considered a recognized environmental condition because there is no significant evidence of releases, and the diesel AST was removed from the subject property after the site visit.

- The subject property is heavily vegetated with trees and tall grasses, which prevented a thorough inspection of the ground surface. The subject property may contain abandoned items, debris, and/or stained soils that were obscured from view during Clayton's site visit.

  This finding is not considered a recognized environmental condition because there is no evidence of hazardous substance releases at the subject property. However, the subject property should be carefully monitored during clearing and grubbing activities for the planned development.

1.0 INTRODUCTION

Maui Lani 100, LLC retained Clayton Group Services, Inc. (Clayton) to conduct a Phase I Environmental Site Assessment of the vacant 59.6-acre parcel (Tax Map Key [TMK]: [2] 3-8-7: 1 [portion]) located at the Maui Lani Development in Kahului, Maui, Hawaii (the "subject property"). This assessment was requested in association with the development of the subject property for residential purposes.

1.1 PURPOSE

The objective of this environmental site assessment is to provide an independent, professional opinion regarding *recognized environmental conditions*, as defined by ASTM, associated with the subject property. The term *recognized environmental conditions* (RECs) is defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public 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* are not RECs.

1.2 METHODOLOGY AND EXCEPTIONS

This assessment was performed under the conditions of, and in accordance with Clayton's Proposal Number PR-85ES05.507 dated February 22, 2005, using ASTM E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as a guideline.

The assessment included the following components:

- A site walkthrough inspection of the property for visual evidence of potential environmental concerns including existing or potential soil and groundwater contamination, as evidenced by soil or pavement staining or discoloration, stressed vegetation; indications of waste dumping or burial, pits, ponds, or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain polychlorinated biphenyls (PCBs), such as electrical transformers and hydraulic hoists; and underground and aboveground storage tanks.

- An investigation of historical use of the site by examining locally available aerial photographs (one source) and other readily available historical information such as fire insurance maps for evidence of prior land use that could have led to recognized environmental conditions.

- A review of information available on general geology and topography of the subject property, local groundwater conditions, sources of water, power, and sewer, and proximity to ecologically sensitive receptors, such as streams, that might be impacted by recognized environmental conditions and environmental issues.

- A review of environmental records available from the property owner or site contact including regulatory agency reports, permits, registrations, and consultants' reports for evidence of recognized environmental conditions.

- A site property line visual assessment of adjacent properties for evidence of potential offsite environmental conditions that may affect the subject property.

- A review of a commercial database summary of federal and state regulatory agency records pertinent to the subject property and offsite facilities located within ASTM-specified search distances from the subject property.

- Interviews with key site personnel, as available, regarding current and previous uses of the property, particularly activities involving hazardous substances and petroleum products.

- Evaluation of information gathered and development of this report.

Mr. Steven Cho and Ms. Mery Apple, Environmental Scientist from Clayton's Honolulu Regional Office, conducted the site walkthrough portion of the assessment on February 28, 2005. Resumes for environmental professionals involved in this assessment are included in Appendix A. Photographs taken at the time of the assessment are included behind the *Photographs* tab.

1.3 LIMITING CONDITIONS OF ASSESSMENT

Information for the assessment was obtained from sources listed in Appendix B. This information, to the extent it was relied on to form our opinion, is assumed to be correct and complete. Clayton is not responsible for the quality or content of information from these sources.

Clayton attempted to access the entire subject property during the site walkthrough; however, the heavy growth of trees and tall grasses prevented a thorough inspection of the ground surface. The subject property may contain abandoned items, debris, and/or stained soils that were obscured from view during Clayton's site visit. Such items may be discovered during clearing and grubbing activities for the planned development.

The information and opinions rendered in this report are exclusively for use by Maui Lani 100, LLC. Clayton will not distribute or publish this report without consent except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that

assignment. The services provided by Clayton in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The subject property is located in the southwest central portion of the Maui Lani Development area of Kahului, Maui, Hawaii. The Maui Lani Development currently includes The Dunes at Maui Lani Golf Course with numerous residential properties currently under development.

The subject property is further described as a portion of the parcel of land lying and being in the lot designated as Tax Map Key (TMK) Number: (2) 3-8-7: Parcel 131 (Figures 1 and 2, *Figures* Tab). According to the Maui County Planning and Zoning Department, the state land use, county zoning, and community plan designations for the parcel are agricultural.

No record of environmental liens was found in the property records reviewed (EDR, March 4, 2005).

2.2 CURRENT USE OF SUBJECT PROPERTY

The subject property, which is currently owned by Maui Lani, consists of undeveloped and heavily vegetated land with low-lying flora, tall grasses, and small trees (primarily Kiawe and Haole Koa trees). The westernmost portion, which includes approximately 1/3 of the total subject property land area, consists of former sand mining land. This portion of the subject property consists of level and exposed soil surfaces, which were relatively void of vegetation. Several unpaved roads and jeep trails run throughout the subject property. In addition, barbed-wire cattle fences were observed along the southern boundary of the subject property.

No activities or improvements were observed on the subject property, except the storage of equipment associated with the current sand mining operation on the west adjacent property. The current sand mining operation and all associated equipment is owned and operated by Ameron, Inc.

Currently, there are no utilities provided to the subject property. Based on the observed topography, storm water is expected to flow with the natural grade of the land. Due to the lack of an implemented drainage system on the subject property, naturally forming swales and crevices were formed throughout the cleared areas and unpaved roads. The stormwater is anticipated to flow in a northerly direction towards Waiale Reservoir.

2.3 CURRENT USES OF ADJOINING PROPERTIES

The adjoining properties consist mostly of undeveloped, heavily vegetated land and some commercial land uses. Adjoining properties were observed (from the subject property or from

public access areas) for signs of recognized environmental conditions and their potential to pose an environmental concern to the subject property (Figure 2, *Figures* Tab). The uses and features of adjoining properties are described below.

North: Heavily vegetated undeveloped land (preservation site), Waiale Reservoir, and residential apartment complexes. Properties to the northeast include a golf course and residential neighborhoods

East: Maui Lani future development and currently undeveloped land with some development in progress

South: Brewer housing project, Waikapu Landfill (closed), Wailuku Baseyard, and Hawaiian Sand Mining operations

West: Sand mining operations, beyond which is the Kihei Garden and Landscaping Plant Nursery

Adjoining properties do not appear to present an environmental concern to the subject property, based on visual observations and information obtained during the assessment except as noted below.

- Fugitive dumping of refuse materials, consisting of trash and miscellaneous paint containers, were observed to the north of the subject property, near a yard area adjoining a house site. The house is currently being used as a temporary storage site for historical artifact collection and preservation.

- Waikapu Landfill and Wailuku Baseyard were listed in the Hazard Evaluation and Emergency Response (HEER) database for soil contamination issues and the statuses for these sites remain currently open. However, based on Release Notifications provided by HEER Office, both of the releases were issued "no further action" determinations. Therefore, these releases are unlikely to impact the subject property.

2.4 PHYSICAL SETTING

The subject property is located on the western Maui isthmus at the foot of the West Maui Mountains, on the south side of Kahului town, Island and County of Maui, Hawaii. The general area is characterized by gently sloping land with moderate to heavy vegetation. Elevations at and around the subject property range from approximately 160 to 280 feet above mean sea level (USGS Wailuku Quadrangle, 1997).

Soil Conditions

The U.S. Department of Agriculture Soil Conservation Service identifies the soil within the area of the subject property as Puuone Series soils. The Puuone soil series consists of somewhat excessively drained soils that occur on the low uplands of Maui. These soils developed in material derived from coral and seashells.

The soil beneath the subject property is specifically identified as Puuone sand, 7 to 30 percent slopes (mapping unit *PZUE*). In a representative profile the surface layer is grayish-brown, calcareous sand approximately 20 inches thick. It is underlain by by grayish-brown, cemented sand. The soil is moderately in the surface layer. Permeability is rapid above the cemented layer. Runoff is slow, and the hazard of wind erosion is moderate to severe.

Groundwater Conditions

Clayton reviewed the Aquifer Identification and Classification Technical Report No. 185, published by the Water Resources Research Center at the University of Hawaii, for information on groundwater conditions below the subject property. The report describes the upper and lower aquifers below the subject property as part of the Kahului aquifer system in the Central sector.

The upper aquifer is an unconfined basal aquifer of the sedimentary type, with nonvolcanic lithology. It is an irreplaceable and currently used aquifer of ecological importance, with low salinity (250-1,000 milligrams per liter [mg/L] Chloride). This aquifer has a high vulnerability to contamination.

The lower aquifer is an unconfined basal aquifer of the flank type, occurring in horizontally extensive lavas. Like the upper aquifer, the lower aquifer is an irreplaceable and currently used aquifer of ecological importance, with low salinity. However, the lower aquifer has a moderate vulnerability to contamination.

The subject property lies below the designated underground injection control (UIC) line; therefore, the underlying groundwater typically would not be used as a drinking water source. However, the aquifer identification report describes the aquifers below the subject property as being currently used.

The regional groundwater flow direction is generally inferred to follow surface topography and flow in a northeastern direction toward the Pacific Ocean at Kahului Bay. Based on the U.S. Geological Survey, Wailuku, Hawaii, 7.5-minute topographic quadrangle map, the depth to groundwater is estimated to be approximately 140 to 260 feet below ground surface (bgs). However, the local gradient and flow direction under the property may be influenced naturally by zones of higher or lower permeability, tidal changes, or by nearby pumping or recharge, and may deviate from the regional trend.

3.0 HISTORICAL AND AGENCY REVIEW

3.1 AERIAL PHOTOGRAPHS

Clayton reviewed aerial photographs at the State Archives building in Honolulu and Clayton's collection of aerial photographs, to assess past land use at and adjacent to the subject property. Photographs reviewed are summarized as follows:

Date: 9-28-50 Aerial Photograph No. GSMF 4-88

- The subject property appeared as undeveloped land, covered with low-lying tropical vegetation and trees. A few unpaved access roads were observed in the general area. Waiale Reservoir was visible on adjacent lands to the north-northwest. Surrounding land appeared to consist of similar conditions, with the exception of southwestern adjacent properties, which were utilized for commercial agricultural purposes. Other developments in the general vicinity included the town of Wailuku, which was visible approximately five miles to the west and northwest. The town appeared to include residential neighborhoods and small commercial buildings.

Date: 1-4-65 Aerial Photograph No. EKN-1CC-29

- The subject and adjoining properties appeared similar to the 1950 aerial photograph, except the area of the subject property appeared more heavily vegetated.

Date: 1977 Aerial Photograph No. USGS Orthophotoquad, Wailuku Quadrangle

- The subject and adjoining properties appeared similar to the 1965 aerial photograph.

Date: 8-4-2004 Aerial Photograph No. N/A

- Apparent mining or quarry activity was visible along the southwestern portion of the subject property. Remaining portions of the subject property appeared similar to the conditions observed in the 1977 aerial photograph.

No readily apparent evidence of recognized environmental conditions at the subject or adjoining properties was noted on the aerial photographs reviewed.

3.2 USGS TOPOGRAPHIC MAPS

Historic topographic maps for the subject property and vicinity were obtained from Clayton's collection for the years 1921-25 through 1997. The maps depicted the following:

Department of the Interior, United States Geological Survey (USGS) Quadrangle: Paia, Hawaii

1921-25: The subject property and surrounding areas were indicated as undeveloped land, with a water pipeline depicted to the southwest. This pipeline originated at the Waiale Reservoir, which was located approximately ½-mile northwest of the subject property. The town of Kahului, located approximately 1¼-mile north of the subject property, appeared significantly less developed than the current conditions.

United States Geological Survey (USGS) Quadrangle: Wailuku, Hawaii

1955: This map appeared similar to the 1921-25 topographic map, except the area of the subject property was shaded green (to denote vegetation) and the town of Kahului appeared significantly larger on this map.

1983: This map appeared similar to the 1955 topographic map, except the town of Kahului appeared even larger and more developed on this map.

1997: This map appeared similar to the 1983 topographic map, except there were several unimproved roadways depicted in the general vicinity of the subject property. The area of the former sand mining operation on the subject property was labeled "Pit".

No readily apparent evidence of recognized environmental conditions at the subject or adjoining properties was noted on the topographic maps reviewed.

3.3 FIRE INSURANCE MAPS

Fire insurance maps typically depict either the locations of manufacturing and industrial facilities within the city limits or potential hazards existing within individual building structures. In many cases, evidence of environmental concern, such as locations of USTs, can be found by reviewing fire insurance maps.

Clayton reviewed Sanborn Fire Insurance Maps at the State Archives Library, located in Honolulu, Hawaii. Fire insurance maps covering the subject property and immediately surrounding areas were not available for review.

3.4 PRIOR OWNERSHIP

Readily available records at the City and County of Honolulu and the Maui County Real Property Tax Assessment Offices were reviewed to assess past ownership and use of the subject property. The subject property is a recently designated land parcel and has not been issued a Tax Map Key (TMK) number; however, it is a 59.6-acre portion of a 376.97-acre parcel designated as TMK: (2) 3-8-7: 131. Ownership and lease records for the subject property are summarized in the following table:

Parcel	Year	Property Transaction
TMK: (2) 3-8-7: Parcel 131	1995	This 376.97-acre parcel was created from TMK: (2) 3-8-7: Parcel 121 (see records below). The subject property consisted of a portion of the parcel that was owned by Maui Lani 100, LLC (the current owner).
TMK: (2) 3-8-7: Parcel 121	1990	This 905.176-acre parcel was created from TMK: (2) 3-8-7: parcel 2 (see records below), and was owned by Maui Lani 100, LLC.
	1994	HRT, Ltd. Listed as partial owner.
TMK: (2) 3-8-7: Parcel 2	1944	This 2,935.33-acre parcel was owned by Hawaiian Commercial & Sugar Company, Ltd.
	1962	Parcel deeded to Alexander & Baldwin, Ltd.
	1964	Lease issued to Pacific Hawaiian Products Company.
	1970	Lease issued to RJR Foods, Inc.
	1975-1980	Land area added to Parcel 2 from various parcels (TMK: [2] 3-8-7: Parcels 73, 74, 106, 110, 111, 112, 113, & 114), all of which were previously owned by Alexander & Baldwin, Ltd.
	1980	Lease issued to Orchards Hawaii Ltd.
	1981	0.561 acre deeded to Maui Memorial Park, Inc.

No readily apparent evidence of recognized environmental conditions at the subject property was noted in the ownership records reviewed, except the following:

- Land that includes the subject property was formerly owned by an agricultural company (Hawaiian Commercial & Sugar Company, Ltd.) and was leased to an agricultural company (Orchards Hawaii Ltd.). Agricultural use of land may be cause for environmental concern because of pesticides and herbicides commonly used in agriculture. However, historical research has not identified the subject property as a site of mixing or storage of chemicals.

  Agricultural chemicals formerly applied to crops on the subject property, when it was used as agricultural land, may have the potential to impact the subject property. However, there was no evidence of storage, mixing or excessive use of agricultural chemicals at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act." Therefore, the former application of agricultural chemicals is not considered a recognized environmental condition.

3.5 AGENCY CONTACTS

3.5.1 Planning and Permitting Department

The County of Maui Real Property Tax database was reviewed and the County of Maui Department of Planning and Permitting was contacted on March 4, 2004, to obtain historical use information for the subject property. Numerous permits were on file for the subject property's TMK number: (2) 3-8-7: Parcel 131. Permits included building, plumbing, grading, electrical, and landscape permits. Given the size of the parcel that contains the subject property, however, the identified permits associated with the subject property could not be determined.

3.5.2 Department of Health, Solid and Hazardous Waste Branch

The State of Hawaii, Department of Health (DOH), Solid and Hazardous Waste Branch, Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) databases were reviewed to obtain information regarding environmental concerns or violations at the subject property.

The subject or adjacent properties were not listed in the UST or LUST databases reviewed.

3.5.3 Department of Health, Hazard Evaluation and Emergency Response Office

The State of Hawaii, Department of Health, Hazard Evaluation and Emergency Response (HEER) Office databases were reviewed to obtain information regarding environmental concerns or violations at the subject property.

The subject property was not listed in the reviewed HEER database. However, Waikapu landfill and Wailuku baseyard, which are located on the adjoining and upgradient property to the south-southwest, were listed in the HEER database for soil contamination issues, and the status for these sites appeared to be currently open. However, based on Release Notifications provided by HEER Office, both of the releases were issued "no further action" determinations. Therefore, these releases are unlikely to impact the subject property.

3.5.4 Department of Land and Natural Resources

The Department of Land and Natural Resources (DLNR) *Groundwater Well Index Summary* (February 1991) was reviewed to obtain information regarding registered wells on the subject property.

There are no registered wells identified as located at the subject property.

3.6 PREVIOUS ENVIRONMENTAL REPORTS

According to the report entitled "Environmental Investigations at Maui Lani Development Site" by Clayton, dated March 25, 1994, Clayton reviewed records and conducted personal interviews at the: (1) County of Maui, Department of Public Works, Solid Waste Division, (2) DOH HEER Division, and (3) Dames & Moore Honolulu Office.

The DOH records within the report indicated Waikapu Landfill was a municipal solid waste landfill from 1970 to 1989. Reported waste streams disposed of at the landfill included residential refuse, bulky items (i.e. cars), dead animals and carcasses, and dewatered sewage sludge. The Waikapu Landfill was listed as a CERCLIS site (site I.D. No. HID050340843). Heavy and trace metals, organics, and inorganics are compounds of processed waste generated by the Koppers Company, Inc. (a forest product group), which were disposed of at this landfill.

The document states that according to Mr. David Wissmar, Chief of the County of Maui, Department of Public Works, Solid Waste Division, the Waikapu Landfill closed in 1989. According to the report, Mr. Wissmar stated that the landfill closed before U.S. Environmental Protection Agency (USEPA) regulations were implemented. The landfill was covered with a soil cap, and a chain-link fence was erected around the landfill perimeter. Two monitoring wells, extending approximately 280 feet below ground surface, were installed along the perimeter of the landfill.

A Revised Closure Plan, prepared by R. M. Towill Corporation, was submitted to Mr. Gary Siu of DOH Solid Waste Section in July 1991. This document was reviewed and recommendations were made by Mr. Siu on October 14, 1991. No further documentation was located regarding further changes to the closure report.

The United States Environmental Protection Agency (USEPA) 40 Code of Federal Regulations (CFR) Part 258, Criteria for Municipal Solid Waste Landfills (MSWLFs), requires post-closure monitoring by owners or operators of MSWLFs. These regulations took effect in October 9, 1993. Therefore, because the Waikapu Landfill did not receive waste after 1987, it is exempt from these regulations.

On July 23, 1993, Harding Lawson Associates issued a letter to Mr. Andy Hirose of the Maui County, Department of Public Works, Solid Waste Division, regarding groundwater monitoring data at the Waikapu Sanitary Landfill. The letter stated that one groundwater sample was collected from monitoring well MW-2, located near the boundary of the Maui Lani site. A groundwater sample was not collected from monitoring well MW-1 due to lack of recharge after purging. The groundwater sample collected from MW-2 was analyzed for: (1) volatile organic compounds (VOCs) using EPA Method 8240, and (2) total metals using appropriate EPA methods. The VOCs were not detected in this sample above the laboratory detection limits. Total metals were not detected above the detection limits and/or above the EPA Drinking Water Standards at the time of the report.

In 1997, County of Maui Public Works and Waste Management Highway Division began using the closed landfill as storage. A base course cover was put in and some areas of the landfill were covered with asphalt.

On April 12, 2005, Clayton reviewed DOH Solid and Hazardous Waste Branch (SHWB) files. The files presented incomplete information regarding the closure plan associated with the Waikapu Landfill. On April 18, 2005, Mr. Gary Siu of DOH-SHWB was interviewed. Mr. Siu stated that the files had been stripped after the three-year record requirement had passed. According to Mr. Siu, the site has not been regularly inspected and he recommends that the site be inspected. The last documented inspection was conducted on June 8, 1995. He stated that the site is still a regulated site and should undergo regular maintenance and annual inspections.

3.7 SUMMARY OF HISTORICAL REVIEW

The historical research presented in this section has established the use of the subject property since 1921-25. Topographic maps from 1921-25 through 1997 showed the subject property as undeveloped land. Aerial photographs from 1950 through 1992 showed the subject property as undeveloped land with moderate to heavy vegetation.

According to records at the City and County of Honolulu and Maui County Real Property Tax Assessment Offices, land that included the subject property was owned by Hawaiian Commercial and Sugar Company, Ltd. between 1944 and 1962. In addition, a lease that may

have included the subject property was issued to Orchards Hawaii Ltd. in 1980. Although these are agricultural companies, Clayton's review of aerial photographs and topographic maps showed no evidence that the subject property was used for agricultural purposes.

4.0 STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL, STATE, AND LOCAL

Available government database information prepared by Environmental Data Resources, Inc. (EDR) on March 4, 2005 was reviewed to evaluate both the subject property and any listed sites within ASTM-recommended search distances. Federal, state, and local databases reviewed are included in Appendix B.

The subject property was not listed in the databases reviewed, and no environmental cleanup liens appear to be on record.

The EDR report did not identify listed sites of environmental concern within the ASTM-recommended search distances from the subject property.

A total of 40 unmapped "orphan" sites were identified in the EDR report. Orphan sites cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be geocoded due to inaccurate or missing information in the environmental database record provided by its applicable agency. Cross-referencing addresses and site names, as well as a visual reconnaissance of surrounding properties, has been completed for the unmappable facility sites. The subject property was not identified on the unmapped sites listing in the environmental database report.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

5.1 METHODOLOGY AND LIMITATIONS

On February 28, 2005, the subject property was inspected on foot. Clayton attempted to access the entire subject property during the site walkthrough; however, the heavy growth of trees and tall grasses prevented a thorough inspection of the ground surface. The subject property may contain abandoned items and debris that were obscured from view during Clayton's site visit. Such items may be discovered during grubbing and grading activities for the planned development.

5.2 GENERAL OBSERVATIONS

At the time of the walkthrough, Clayton observed approximately two-thirds of the subject property was undeveloped and heavily overgrown with low-lying vegetation, tall grasses and trees (primarily Kiawe and Haole Koa trees). The remaining one-third of the subject property consisted of a former sand mining operation and included mostly flat land with exposed soil

surfaces. Several unpaved roads and jeep trails extend throughout the subject property. In addition, barbed-wire cattle fences were observed along the southern boundary of the subject property. Based on the observed topography, storm water is expected to either infiltrate directly into the exposed soil surface or flow along the general topography of the land. Due to the lack of an implemented drainage system on the subject property, naturally forming swales and crevices were formed throughout the cleared areas and unpaved roads.

On the portion of the subject property consisting of the former sand mining operation, two ASTs, a Matson trailer, a tractor, and one 55-gallon drum were observed. One AST, approximately 1,000 gallons, was labeled "Diesel" and appeared to be active and operational. The other AST, which was covered with rust and surrounded by tall grasses/vegetation, was estimated to have a capacity of 500 gallons and did not appear to be currently in use. According to Ms. Leiane Paci, a representative of Maui Lani 100, LLC, the inactive AST was utilized to store water. The Matson trailer was observable from the outside only and appeared abandoned.

A 55-gallon drum was observed lying on its side underneath the trailer and appeared to have a large puncture tear located along the topside. The drum contents included a petroleum-based substance and appeared partially full. The soil surrounding the drum appeared to be stained with the drum's contents, and olfactory confirmation of a petroleum spill was detected in the area.

After Clayton's initial site visit, the site was cleared of the two ASTs, the Matson trailer, the 55-gallon drum, and the abandoned tractor. The former location of the 55-gallon drum was covered with crushed coral and roped off. Clayton then excavated test pits to determine the location of the release and sampled the soil to assess the potential impacts of the contaminated soil to the site. Clayton recommended that the TPH contaminated soil be properly excavated and disposed of prior to development of the site. A detailed description of the release response activities and results are presented in a supplemental report entitled "Release Response Activities" by Clayton Group Services, dated April 26, 2005.

Summarized below is the site inspection and findings overview. All items that are, or are known to have been present at the subject property are noted in the table. The table also notes items that may present concerns to the subject property. Additional information about items noted can be found in the referenced section of this report.

Onsite Environmental Features	Currently/ Historically Present (Y/N)	Possible Environmental Condition (Y/N)	Report Section
Hazardous Substances or Petroleum Products	Y	Y	5.2
Underground Storage Tanks	N	N	
Aboveground Storage Tanks	Y	Y	5.2, 5.5.2

Onsite Environmental Features	Currently/ Historically Present (Y/N)	Possible Environmental Condition (Y/N)	Report Section
Odors	N	N	
Air Emissions (stacks, hoods, other point sources)	N	N	
Pools of Liquid	N	N	
Drums	Y	Y	5.2
Unidentified Substance Containers	Y	Y	5.2
Electrical Equipment/Possible PCBs	N	N	
Hydraulic Equipment/Possible PCBs	N	N	
Stains or Corrosion	N	N	
Drains	N	N	
Sumps	N	N	
Pits, Ponds, or Lagoons	N	N	
Stained Soil or Pavement	Y	Y	5.2
Stressed Vegetation	N	N	
Evidence of Spills or Releases	Y	Y	5.2
Artificially Filled Areas (Solid Waste Disposal)	N	N	
Waste Water	N	N	
Wells	N	N	
Septic Systems	N	N	
Dry Cleaning Operations	N	N	
Agricultural Use (Pesticides/herbicides)	Y	N	3.4
Oil/Gas Production or Exploration	N	N	
Railroad Spur	N	N	
Remedial Activities	N	N	

5.3 INTERVIEWS

Ms. Leiane Paci, a representative of Maui Lani 100, LLC (since 1997), was interviewed for information regarding the subject property. She stated that the Maui Lani project gained district approval in 1990, yet the first homes were built on other portions of the development in 1996. According to Ms. Paci, two structures that Clayton observed on the north adjacent property were formerly used as a nursery and are currently used to temporarily store archeological artifacts. She also stated that sand mining has been conducted on the property since approximately 1994. Ms. Paci stated that one of the ASTs observed on the subject property

was being used by Ameron for the sand mining activities, and the other AST was previously used for water. In addition, she stated that the torn 55-gallon drum contained kerosene, which was used by Ameron for cleaning parts.

Ms. Paci reported that no significant spills or releases have been reported at the subject property, and she was unaware of any environmental proceedings being served against the subject property. Ms. Paci was unaware of any fugitive dumping that may have occurred. According to Ms. Paci, there are no utilities such as water or electrical power currently on the subject property.

5.4 HAZARDOUS MATERIAL AND WASTE

The subject property was assessed for signs of storage, use, or disposal of hazardous materials. The assessment consisted of noting evidence (e.g., drums, unusual vegetation patterns, staining) indicating that hazardous materials are currently or were previously located on the subject property.

No evidence of hazardous material or waste was observed on the subject property, except as described in Section 5.2.

5.5 STORAGE TANKS

5.5.1 Underground Storage Tanks

The subject property was inspected for evidence of underground storage tanks (USTs) (e.g., vent piping, dispensing equipment, pavement variations).

Evidence of USTs was not observed during the assessment. In addition, no features were observed at the subject property that would have required USTs to have been present (such as standby generators or boilers), and there are no USTs registered with the State of Hawaii DOH.

However, the lack of visible evidence and owner/operator knowledge of USTs at the subject site does not preclude the possibility that USTs could be present. Visible evidence of USTs such as fill ports or vents may have been removed or obscured from view and an UST could have been used at the subject site without the knowledge of the current owner/operator.

5.5.2 Aboveground Storage Tanks

The subject property was inspected for indications of aboveground storage tanks (ASTs) (*e.g.*, concrete bolts, containers, reservoirs, generators).

Clayton observed two ASTs on the portion of the subject property which had been utilized for sand mining operations as noted in Section 5.2.

5.6 INDICATIONS OF SOLID WASTE DISPOSAL

The subject property was inspected for indication of solid waste disposal. Currently, solid waste is not generated on the premises of the subject property.

5.7 INDICATIONS OF POLYCHLORINATED BIPHENYLS (PCBS)

The subject property was inspected for the presence of liquid-cooled electrical units (transformers, light ballasts, and capacitors), and major sources of hydraulic fluid (elevators and lifts). Such units are notable because they may be potential PCB sources.

No evidence of potential PCB sources was observed at the subject property.

5.8 WELLS

Evidence of wells (supply, monitoring, or dry well) was not observed during the assessment. According to the State of Hawaii, Department of Land and Natural Resources, there are no records of active, inactive, destroyed wells, or dry wells at the subject property.

6.0 NON-ASTM ISSUES

6.1 SUSPECT ASBESTOS-CONTAINING MATERIALS

The subject property was inspected for the presence of suspect asbestos-containing materials (ACM), which are usually associated with buildings and similar structures. However, there are no buildings/structures on the subject property, and Clayton did not observe any evidence of suspect ACM during their onsite inspection.

6.2 RADON

Radon is a naturally occurring radioactive gas formed by the decay of uranium in bedrock and soil. The potential adverse health effects associated with radon gas depend on various factors, such as the concentration of the gas and duration of exposure. The concentration of radon gas in a building depends on subsurface soil conditions, the integrity of the building's foundation, and the building's ventilation system.

Due to the relatively young geological age of the Hawaiian Islands (approximately two million years old), radon gas does not occur at elevated levels in Hawaii. Therefore, no further investigation of radon is recommended for the subject property.

6.3 LEAD-BASED PAINT

The subject property was inspected for the presence of suspect lead-based paint (LBP). However, there are no painted buildings or structures on the subject property, and Clayton did not observed any other evidence of suspect LBP during their onsite inspection.

6.4 SENSITIVE ECOLOGICAL AREAS

The subject property was inspected for the presence of sensitive ecological areas by noting environmental indicators (e.g., wetlands vegetation, floodplains) located on or immediately adjoining the subject property.

No sensitive ecological areas were observed on the subject property. The USGS 7.5-Minute Topographic Map, Wailuku, Hawaii, 1997, which includes the subject and adjoining properties, does not depict creeks or delineated wetlands located on the subject or adjoining properties. A United States Fish and Wildlife Service (USFWS) National Wetland Map was not available for review.

The Federal Emergency Management Agency Flood Insurance Rate Map was reviewed to determine if the subject property was located in a flood hazard area. The subject and adjoining properties were shown in Flood Zone C, which denotes areas of minimal flooding (FEMA Panel #150003 0190D).

7.0 FINDINGS, OPINIONS, CONCLUSIONS, AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in conformance with the guidelines of ASTM Practice E-1527 of the vacant 59.6-acre parcel (Tax Map Key [TMK]: [2] 3-8-7: 1 [portion]) located at the Maui Lani Development in Kahului, Maui, Hawaii, the subject property. Any exceptions to or deletions from this practice are described in Sections 1.2 and 1.3.

This assessment has revealed no evidence of *recognized environmental conditions*, as defined by ASTM, in connection with the subject property, except for the following:

- Clayton observed a 55-gallon drum in the vicinity of the former sand mining area. The damaged drum container was located below a disabled tractor, and the contents contained within the drum appeared to consist of a petroleum-based material. Evidence of an apparent release of the 55-gallon drum's contents to the surrounding was observed.

  This finding is considered a recognized environmental condition because there is evidence of a release. Clayton's original recommendations were to properly remove and dispose of the 55-gallon drum and its contents, as well as properly remove and dispose of the petroleum hydrocarbon impacted soil. Upon completion of soil removal activities, Clayton

recommended confirmation soil samples be collected and analyzed for total petroleum hydrocarbons.

After the initial site visit, the 55-gallon drum was removed from the subject property by the sand mine operator. The former location of the 55-gallon drum was covered with crushed coral and roped off. Maui Lani 100, LLC then retained Clayton to excavate test pits to assess the location of the release and sample the soil to assess the potential impacts of potentially contaminated soil to the site. Based on the results, Clayton recommended that the TPH-impacted soil be properly excavated and disposed of prior to development of the site. A detailed description of the release response activities and results are presented in a supplemental report entitled "Release Response Activities" by Clayton Group Services, dated April 22, 2005.

- Waikapu Landfill is located on the adjoining and upgradient property to the south-southwest of the subject property. The landfill was owned and operated by the County of Maui. The Waikapu Landfill did not receive waste after 1989 and was closed in 1991. The United States Environmental Protection Agency (USEPA) 40 Code of Federal Regulations (CFR) Part 258, Criteria for Municipal Solid Waste Landfills (MSWLFs), requires post-closure monitoring by owners or operators of MSWLFs. These regulations took effect in October 9, 1993. Therefore, because the Waikapu Landfill did not receive waste after 1989, it is exempt from these regulations. Limited information on closure activities was available for review.

  This finding is considered a recognized environmental condition because there is a potential for contamination from the adjacent property to impact the subject property. Clayton recommends that engineering controls be implemented to ensure that the Waikapu Landfill does not impact the planned development of the subject property. In addition, Clayton recommends that monitoring be conducted during grading of the subject property to assess potential impacts from the landfill to the subject property.

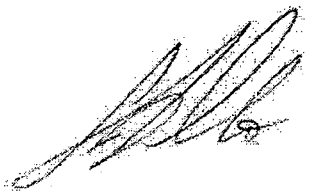
The following environmental conditions, which are not considered to be *recognized environmental conditions*, as defined by ASTM, were also revealed during this assessment:

- A 1000-gallon AST used to store diesel was observed on the subject property. This AST was not observed within secondary containment. No evidence of leaks or significant staining was observed in the vicinity of the AST.

  This finding is not considered a recognized environmental condition because there is no significant evidence of releases, and the diesel AST was removed from the subject property after the site visit.

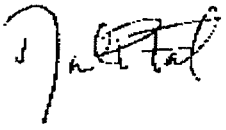
- The subject property is heavily vegetated with trees and tall grasses, which prevented a thorough inspection of the ground surface. The subject property may contain abandoned items, debris, and/or stained soils that were obscured from view during Clayton's site visit.

This finding is not considered a recognized environmental condition because there is no evidence of hazardous substance releases at the subject property. However, the subject property should be carefully monitored during clearing and grubbing activities for the planned development.



This report prepared by:

Steven Cho
Environmental Scientist
Honolulu Regional Office



This report reviewed by:

Daniel P. Ford, R.G.
Vice President
Honolulu Regional Office

April 26, 2005

Clayton
GROUP SERVICES

FIGURES

SCALE 1:24,000

1 0.5 0 1 Miles

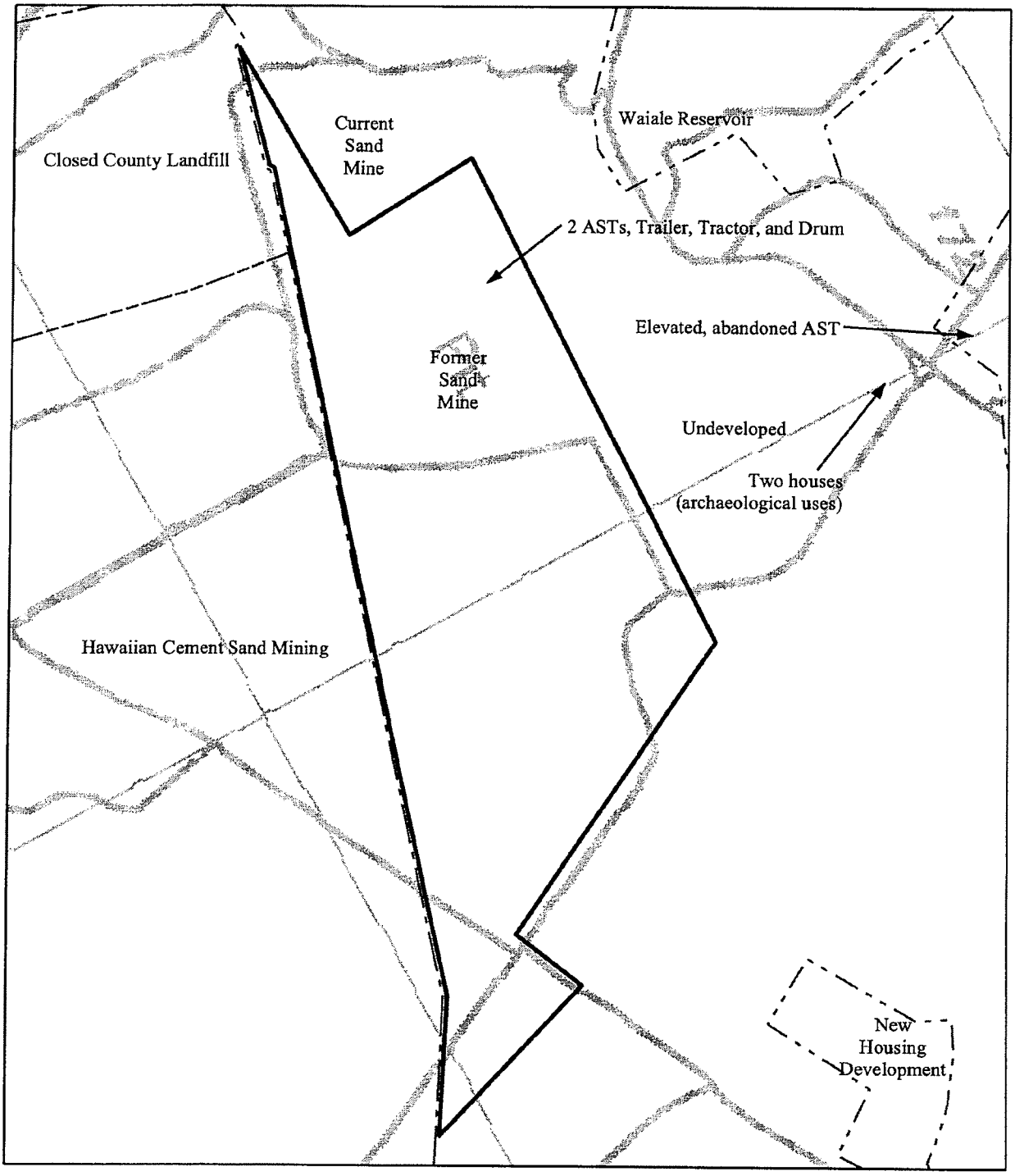
1,000 500 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 Feet

1 0.5 0 1 Kilometers

N

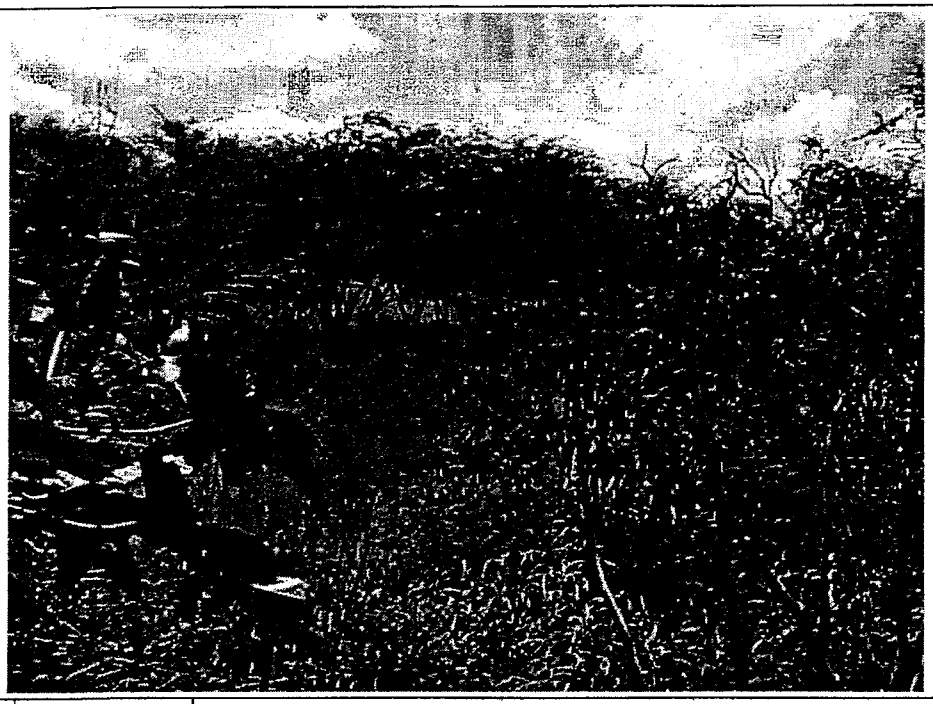
Portion of 7.5-minute Series (Topographic) Maps
United States Department of Interior
United States Geological Survey
Wailuku Quadrangle, Maui County, Hawaii
1997

Clayton GROUP SERVICES	Project No.: 85-05247.00	Title: Site Location Map	FIGURE 1
	Date: 03/22/2005	Location: 59.6-Acres at the Maui Land Development Site Kahului, Maui, Hawaii	
	Revised By: JT		
	Checked By: SC	Client: Maui Lani Partners	

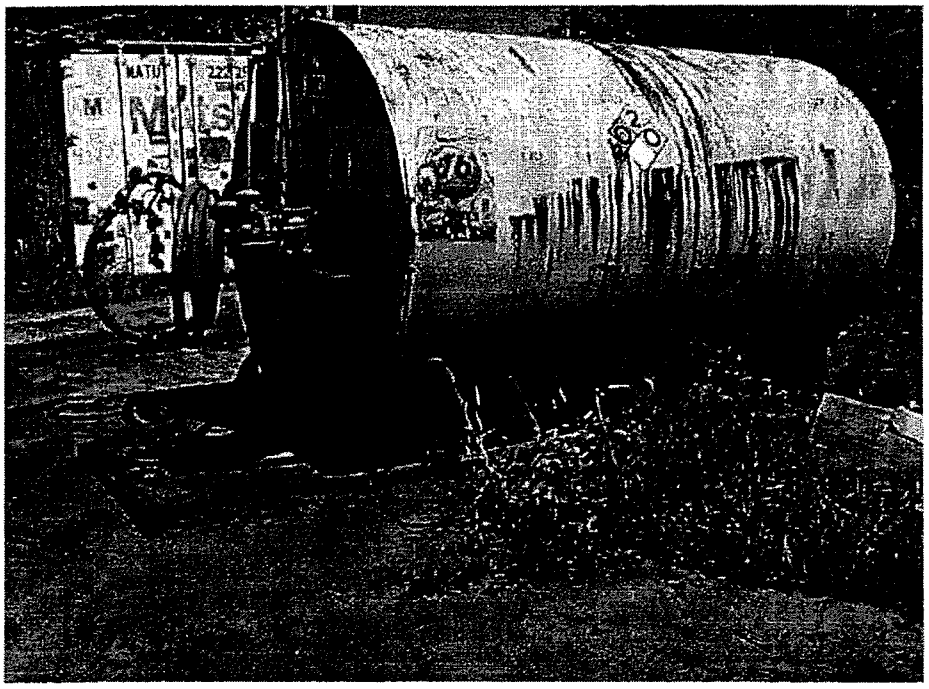


Clayton GROUP SERVICES	Project No.: 85-05247.00	Title: Site Vicinity Map	FIGURE 2
	Date: 03/22/2005	Location: 59.6-Acres at the Maui Lani Development Site Kahului, Maui, Hawaii	
	Revised By: JT		
	Checked By: SC	Client: Maui Lani Partners	

PHOTOGRAPHS

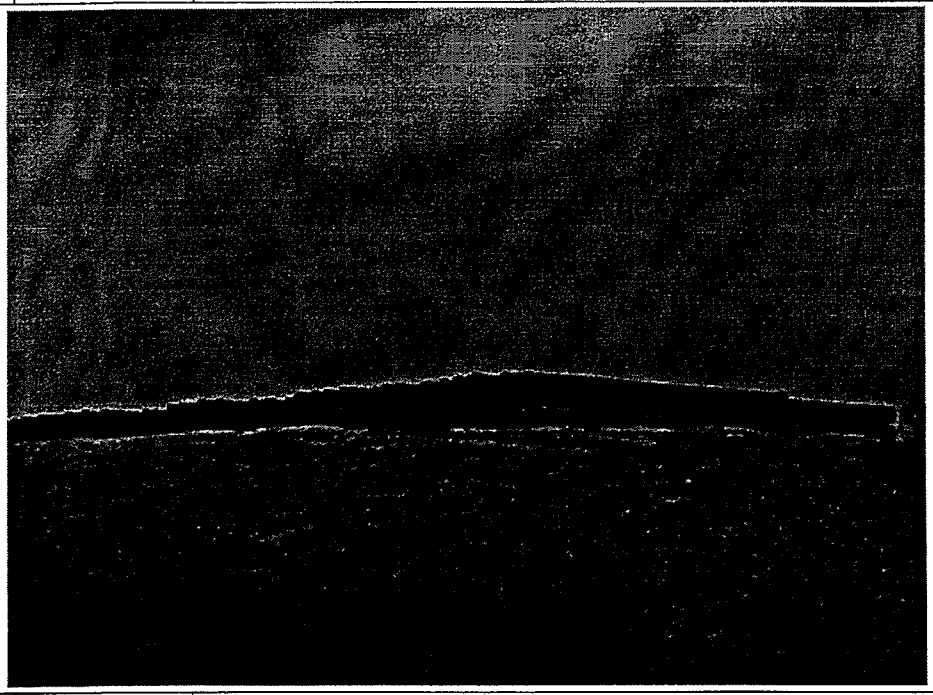


Clayton Project Number	Description	View of the subject property's eastern perimeter, looking west	Photo 1
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05

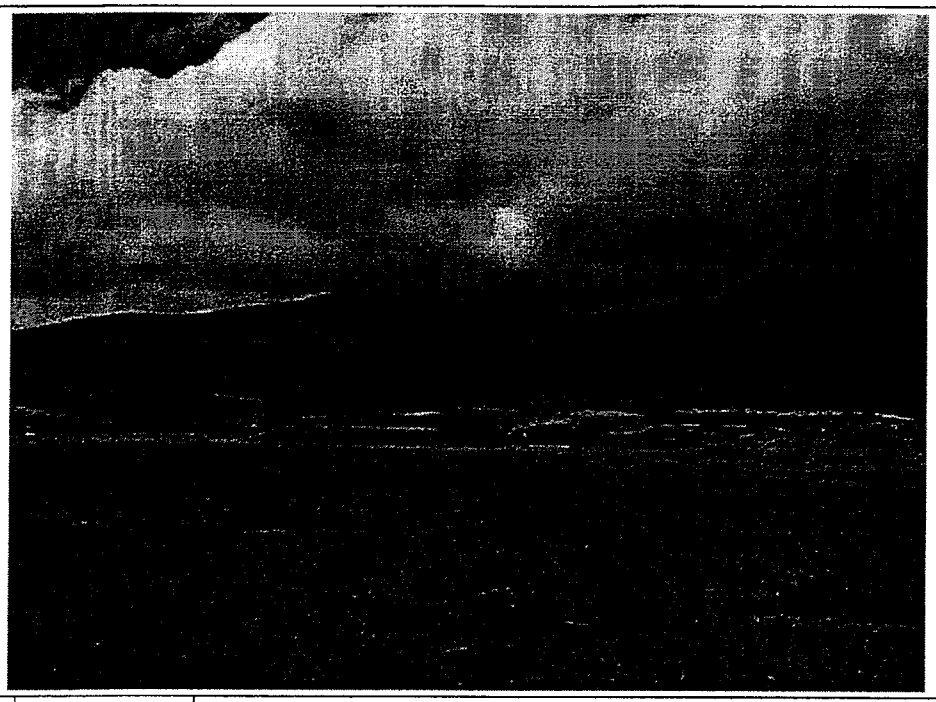


Clayton Project Number	Description	View of the diesel AST observed on the former sand mining area	Photo 2
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05

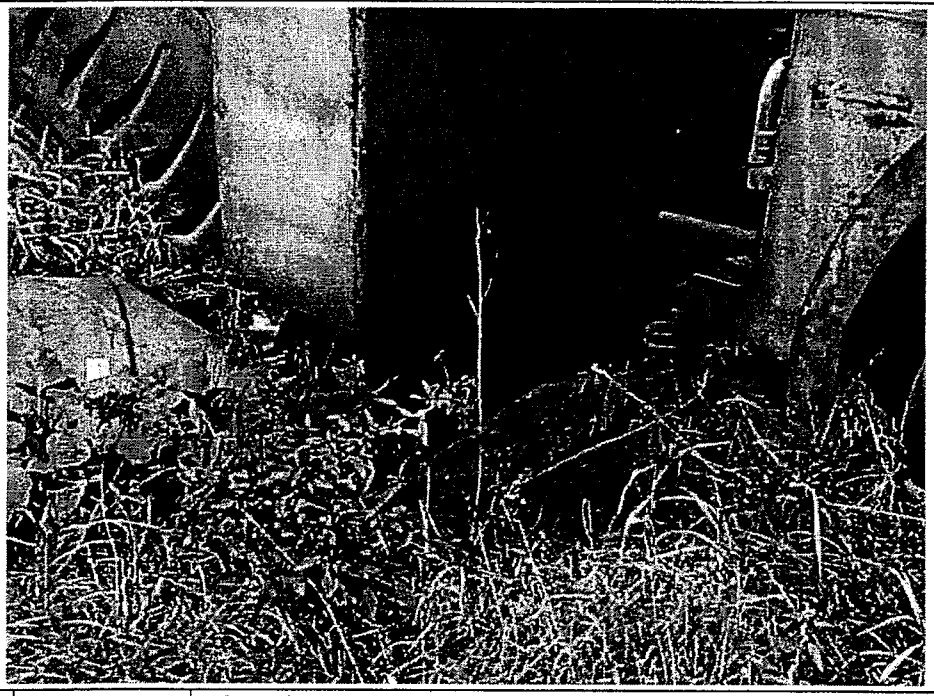
Clayton Project Number	Description	View of the abandoned AST reportedly used to store water	Photo 3
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05



Clayton Project Number	Description	View of the Waikapu landfill which is located upgradient and to the southwest of the subject property	Photo 4
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05

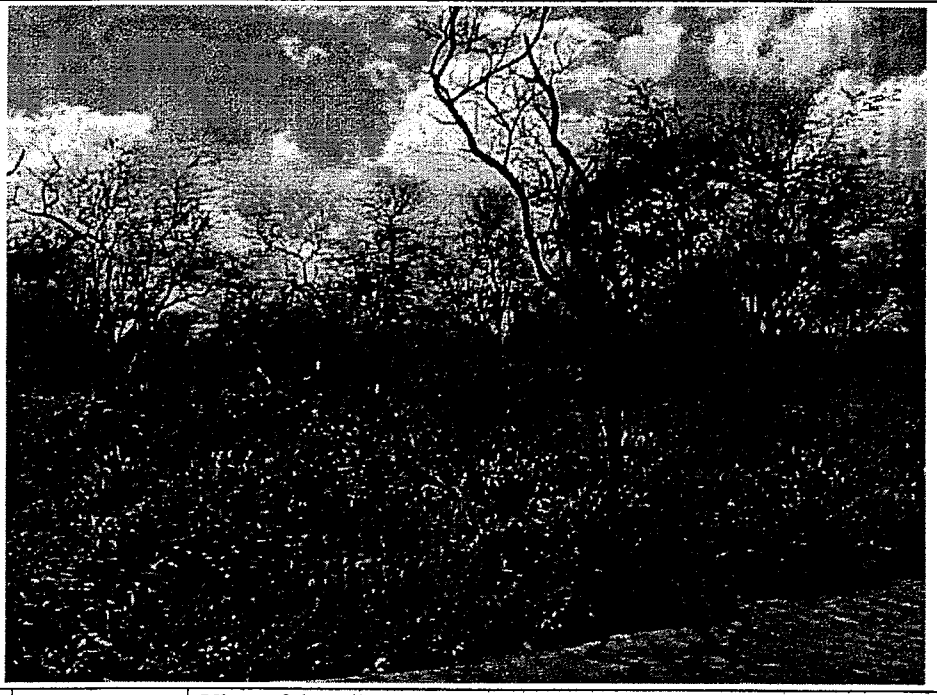


Clayton Project Number	Description	View of the former sand mining area located on the subject property	Photo 5
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05

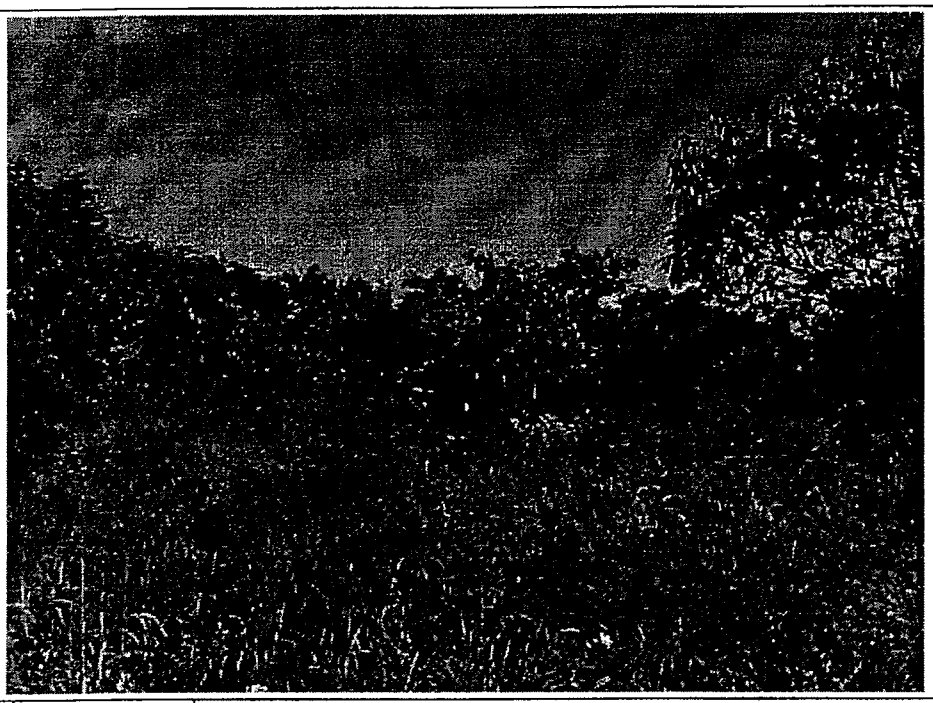


Clayton Project Number	Description	View of the disabled tractor, crushed 55-gallon drum, and stained soil	Photo 6
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05

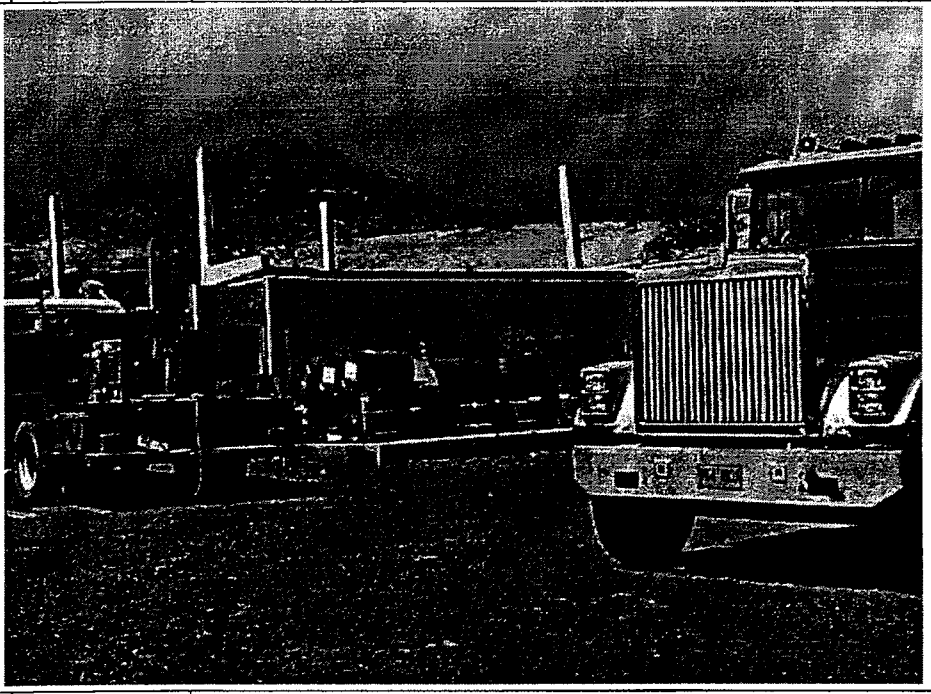
Clayton Project Number	Description	View of the 55-gallon drum and drum contents	Photo 7
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05



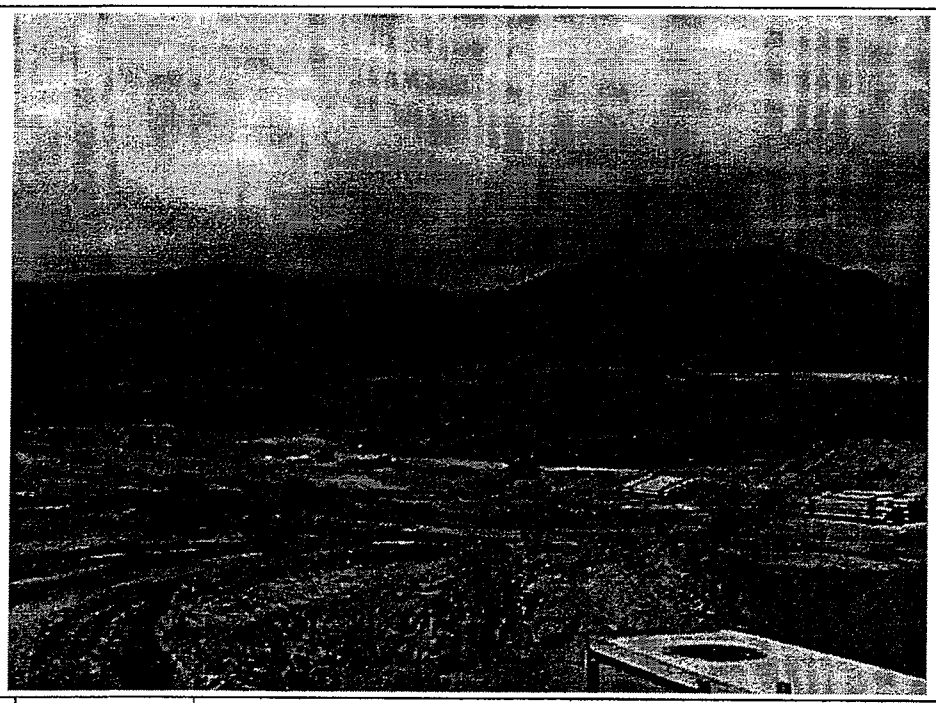
Clayton Project Number	Description	View of the adjacent property located to the north of the subject property, looking north	Photo 8
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05



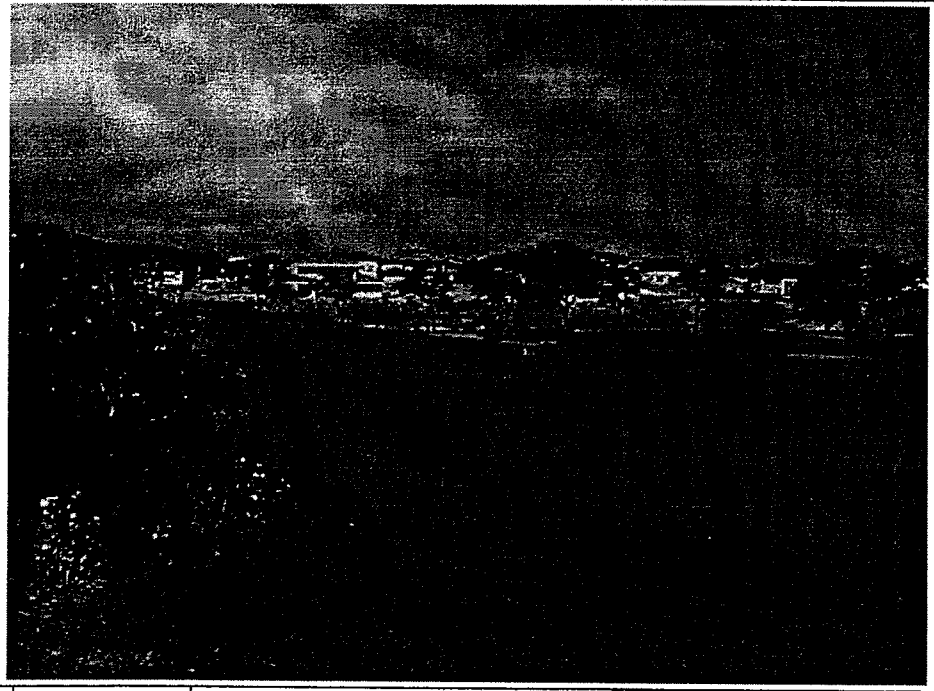
Clayton Project Number	Description	View of the central portions of the subject property, looking south	Photo 9
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05



Clayton Project Number	Description	View of the Wailuku baseyard, located to the south-southwest of the subject property	Photo 10
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
85-05247.00	Client	Maui Lani Partners	02/28/05



Clayton Project Number			
85-05247.00	**Description**	View of road development located to the east of the subject property	**Photo 11**
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	**Photo Date**
	Client	Maui Lani Partners	02/28/05



Clayton Project Number			
85-05247.00	**Description**	View of the adjacent Maui Lani golf course facility located to the north of the subject property	**Photo 12**
	Site Name	59.6 acres at Maui Lani Development, Kahului, Maui, Hawaii	Photo Date
	Client	Maui Lani Partners	02/28/05

APPENDIX A

RESUMES OF ENVIRONMENTAL PROFESSIONALS

Daniel P. Ford, RG

Vice President, Director, Environmental Services

M.B.A., With Distinction, 1999
Hawaii Pacific University, Honolulu, Hawaii

B.A., Geology, 1985
University of California, Berkeley, California

Registered Professional Geologist (R.G.), State of Kentucky, No. 0864, 1993

OSHA 8-Hour Refresher Training, Annual

OSHA 8-Hour Supervisor Training, 1991

OSHA 40-Hour Hazardous Waste Operations and Emergency Response Training, 1988

Dan Ford has over 20 years of environmental consulting experience. He has assisted clients on regulatory strategy and has interfaced with U.S. Environmental Protection Agency (EPA) and state agencies on hundreds of projects. He is experienced in preliminary environmental site assessments (ESAs), subsurface investigations for soil and groundwater contamination, hydrogeologic studies, site characterizations, hazardous waste management, remedial investigation and feasibility studies, and remediation management. Mr. Ford has managed complex projects for private landowners, financial institutions, governmental agencies, and industrial clients.

Mr. Ford is also responsible for Clayton's operations in Honolulu, Hawaii and the Pacific Region. He supervises technical and administrative staff, prepares budgets and proposals, manages projects, conducts technical reviews of project submittals, and provides regulatory liaison assistance to clients. Mr. Ford's project experience extends throughout the Hawaiian Islands and the Pacific Basin, Australia, the Philippines, Japan, Guam, Saipan, the U.S. Mainland, and Central America.

Clayton GROUP SERVICES

Project Experience

Investigation and Remediation, Voluntary Response Program
Financial Services Industry

Mr. Ford served as principal-in-charge of investigation and remediation of a former sugar mill property considered for redevelopment into a town center. Mr. Ford was responsible for coordination and oversight of the project team. The project involved technical review of previous environmental work, preparation of a preliminary assessment and site inspection (PA/SI), collection of over 1,000 soil samples, abatement of hazardous materials and demolition of existing structures, preparation of a remedial investigation report, remedial alternatives analysis, public participation plan and quantitative risk assessment. Advanced statistical methods were used in the risk assessment, which allowed a majority of the impacted soil to be managed in-place and thereby minimized the remediation costs for the project. Mr. Ford conducted presentations to the neighborhood board, community association and city vision teams.

Investigation and Remediation, Voluntary Response Program
Real Estate and Financial Services

Mr. Ford served as a principal-in-charge of investigation and remediation of a 35-acre industrial property on Oahu occupied by multiple commercial and industrial tenants. The project involved a technical review of previous environmental work and identification of data gaps, a remedial investigation, remedial alternatives analysis, and preparation of cost estimates for remediation. The documents and cost estimates were critical in facilitating the sale of the property within a specified schedule.

Investigation, Remediation and Cost Recovery
Wood Treatment Facility

Mr. Ford served as principal-in-charge of remedial investigation activities, remedial alternatives analysis and litigation support for a property formerly used as a wood treatment facility. The project involved soil and groundwater contaminated with arsenic, chromium, pentachlorophenol and dioxin. Mr. Ford provided overall coordination and supervision of the project team including engineers, geologists and toxicologists and reviewed all technical submittals. Mr. Ford assisted the client and legal team in preparation of various documents in support of litigation and cost recovery.

Mergers and Acquisitions Due Diligence
Automotive Industry – Japan

Mr. Ford conducted due diligence environmental audits for acquisition of an automotive manufacturer in Japan. Mr. Ford reviewed previous environmental audits, assessments, and environmental management programs; conducted comprehensive environmental audits; and assessed environmental liabilities and compliance issues at each of the facilities. These activities allowed the client to make strategic business decisions regarding the acquisition.

Investigation and Remedial Planning
Agricultural Industry

Mr. Ford served as a principal-in-charge of investigation and remedial planning of a former pesticide/herbicide mixing facility on the island of Maui. The project involved review of previous chemical storage and use at the facility, subsurface investigation, and analysis of remedial alternatives. The results of the subsurface investigation revealed that the underlying soils were impacted with DDT, DDE, pentachlorophenol and dioxin. Remedial alternatives and cost estimates were developed which allowed the client to make critical decisions regarding future development of the property.

Due Diligence for Acquisition
Palmyra Atoll

Mr. Ford performed technical services related to the acquisition of Palmyra Atoll, an uninhabited island located 960 miles south of Honolulu. The U.S. Navy, Coast Guard, and Civil Aeronautics Administration occupied it in the 1940s. Environmental issues of concern included a former refuse dump, abandoned dumpsites, bulk fuel storage terminals, lagoon dumpsites, PCB transformers and unexploded ordnance. Mr. Ford identified data gaps in previous environmental work, developed recommendations for further investigation, and estimated costs for remediation and risk management activities.

Phase I ESA – Due Diligence
Molokai Ranch

Mr. Ford served as principal-in-charge of a Phase I Environmental Assessment of 52,352 acres of land on the island of Molokai, Hawaii. The properties included agricultural, industrial, commercial, residential, and conservation areas. Recognized environmental conditions included four landfills/dump sites, three large pesticide herbicide storage/mixing areas, and multiple fuel tank leak sites. Mr. Ford prepared and reviewed reports and documents that were presented as disclosure documents to potential investors.

Phase I ESAs Multiple Property Portfolio, Oahu and Lanai
Financial Services

Mr. Ford served as principal-in-charge of environmental assessments of sixteen large agricultural properties including the entire island of Lanai. The purpose of the assessments was to assess environmental risk of the properties for financing activities. Project activities involved report/document reviews, site inspections and summaries of major environmental issues. Mr. Ford developed cost estimates for likely and worst-case remediation scenarios. Mr. Ford ensured that the needs of the client were met by dedicating multiple technical staff to the project to meet project timelines.

Comprehensive Environmental Services
Private Landowner

Mr. Ford provided third-party technical services for a major Hawaii landowner for five years, remediating a large agricultural property under a lease-surrender agreement. Mr. Ford's services included closing two landfills, removal actions and risk assessment of soil impacted with pesticides, remediating groundwater impacted with petroleum hydrocarbons, conducting asbestos surveys and abatement, and restoring wetlands. As a result of these services, the landowner was able to minimize environmental liability and allocate cleanup costs to previous tenants.

Comprehensive Environmental Services
Petroleum Industry

Mr. Ford has completed more than 200 projects for various oil companies that involves the following services: regulatory compliance audits, ESAs for the purchase of new facilities, tank removals and installations, work plan development, soil and groundwater investigations, remedial action planning involving treatment and disposal of contaminated soil and groundwater, quarterly sampling reports, and risk assessment. The projects have included refineries, terminals, pipelines, and service stations. Mr. Ford has been instrumental in securing No Further Action status from the regulatory agencies on many of these projects.

Comprehensive Environmental Services
Real Estate and Financial Services Industry

Mr. Ford was principal-in-charge for a commercial property on the island of Guam. The project included: (1) a Phase I environmental site assessment (ESA); (2) asbestos and radon surveys; (3) coordination of inventory, characterization, and disposal of various hazardous materials and wastes; (4) UST compliance including removal and closure; (5) subsurface site characterization for soil impacted with diesel fuel; (6) design and construction of a bioremediation treatment facility; and (7) negotiation of site closure with the Guam Environmental Protection Agency (GEPA). These activities occurred over a one-year period and allowed the client to secure financing for redevelopment of the site.

Remedial Action
Federal Government – United States Army Corps of Engineers (USACE)

Mr. Ford served as principal investigator and project manager for various remedial action projects for the USACE Pacific Ocean Division for twelve years. He was responsible for characterizing and remediating soil and groundwater impacted with pesticides, polychlorinated biphenyls (PCBs), dioxins, metals, and various petroleum hydrocarbons. Mr. Ford planned and designed remedial action systems, managed construction, and prepared and reviewed work plans, chemical data acquisition plans, quality assurance project plans, and final closure reports. Mr. Ford was instrumental in securing No Further Action status from regulatory agencies on many of these projects.

Investigation and Remediation
Real Estate Industry – Development

Mr. Ford acted as principal-in-charge of a 10-acre redevelopment project involving 50 buildings within two city blocks including a wood treatment facility, chemical manufacturers, dry cleaners, gas stations, and auto repair facilities. His investigation and remediation activities involved removing 23 underground storage tanks, installing 49 groundwater monitoring wells, designing the remediation program, and managing construction. As a result of these activities, No Further Action letters were negotiated and issued to the client from the regulatory agency.

Investigation and Remedial Action
Real Estate and Financial Services Industry

Mr. Ford served as principal-in-charge of environmental services for a 970-acre Hawaii property that included two landfills, a scrapmetal yard, and various agricultural businesses. His responsibilities on this four-month project included: (1) technical review of previous work performed, (2) soil and groundwater sampling and analyses, (3) final report, (4) remedial action work plan, and (5) cost estimates for site remediation. Mr. Ford's services allowed the client to transfer the property within the specified due diligence period.

Subsurface Investigation, Facility Inspections, and Surveys
Federal Government – U.S. Navy

Mr. Ford provided technical environmental support to the U.S. Navy for the design and construction of a high-rise building within a federal National Priorities List (NPL) Superfund area at Pearl Harbor. The building was constructed at the location of a former fuel tank farm. Mr. Ford conducted detailed subsurface site characterization for use in the design of the building footings to minimize contact with the underlying contaminated soil and groundwater. In addition, he inspected facilities and conducted asbestos and lead-based paint surveys for existing buildings before demolition. By minimizing excavation and disposal of contaminated soil and by treating contaminated groundwater, Mr. Ford was able to reduce project costs.

Site Characterization and Remediation
Federal Government – USACE

As principal investigator on more than 100 delivery orders for USACE, Pacific Ocean Division in Hawaii and various Pacific locations, Mr. Ford has prepared technical proposals, work plans, and reports; coordinated subcontractor teams; estimated budgets; and negotiated with government officials for overall contract and individual delivery orders. Projects have included removal of USTs, PCB transformers, and buried wastes; subsurface site characterizations; hazardous waste characterization and disposal; remediation management; and quantitative risk assessments. Mr. Ford was able to secure No Further Action status from regulatory agencies on many of these delivery orders.

Groundwater Monitoring Programs
Waste Disposal Industry – Landfills

At various privately owned and city and county government landfills in Hawaii, Mr. Ford selected sites for groundwater monitoring wells, developed sampling protocols and analyses programs, prepared quarterly sampling and final reports, and served as regulatory liaison. The monitoring programs were instigated to comply with regulations, which were met on time and within budget.

Phase I ESAs and Technical Reviews
Real Estate and Financial Services Industries

Mr. Ford's services for major lending institutions, landowners, law firms, and real estate companies have included more than 500 agricultural, industrial, and commercial properties throughout Hawaii, the Pacific Basin, and the Far East. The site assessments have allowed property transfers, financing, lease-surrenders, acquisitions, and due diligence activities to move forward within tightly planned schedules.

Phase I ESA
Financial Services Industry – International Bank, Japan

For a $50 million agricultural property in Yokohama, Japan, Mr. Ford inspected the site, reviewed Japan's regulatory requirements, conducted subsurface sampling and analyses, and reviewed historical use for a property acquisition. The information obtained by Mr. Ford allowed this property transfer to be completed within the due diligence time frame.

Facility Audits and Subsurface Investigations
Chemical Industry – Central America

As part of a multinational corporation's environmental compliance program, Mr. Ford conducted facility audits and subsurface investigations for soil and groundwater contamination at chemical production facilities throughout Central America. These audits and investigations allowed the client to move forward with its divestiture and acquisition of chemical plants.

Mergers and Acquisitions Due Diligence
Consumer Products Industry – Cosmetics, Australia

Mr. Ford conducted due diligence environmental audits for acquisition of a cosmetics manufacturer in Australia. He reviewed previous environmental audits, assessments, and the facilities' environmental management programs; conducted comprehensive environmental audits; and assessed the environmental liabilities at each of the facilities. These activities allowed the client to prepare a disclosure package for divestiture of the facilities.

Mergers and Acquisitions Due Diligence
Utility Industry

Mr. Ford managed and coordinated due diligence environmental services for acquisition of a major utility company in Hawaii. His responsibilities included: (1) reviewing previous environmental work performed on multiple properties or facilities, (2) conducting comprehensive environmental audits of each of the facilities, (3) assessing environmental liability at each property or facility, and (4) preparing cost estimates for use in negotiations. These activities allowed the client to make strategic business decisions regarding the acquisition.

Litigation Support
Law Firms

Mr. Ford's litigation support services for various law firms have included technical reviews, cost estimates, technical support, and expert witness testimony. These services have allowed the law firms to obtain awards for property damages and recover costs for their clients.

Daniel P. Ford, RG

Employment History

Clayton Group Services, Inc. – Honolulu, Hawaii
Vice President, Environmental Services
2002 to Present

Clayton Group Services, Inc. – Honolulu, Hawaii
Director, Environmental Services
1990 to 2002

Unitek Environmental Consultants, Inc. – Honolulu, Hawaii
Project Geologist
1989 to 1990

Geolabs-Hawaii – Honolulu, Hawaii
Project Geologist
1986 to 1989

Berkeley Geochronology Center – Berkeley, California
Researcher
1984 to 1986

Professional Affiliations

Hawaii Chamber of Commerce

National Association of Industrial and Office Properties (NAIOP)

National Ground Water Association

Steven H. Cho

Environmental Scientist

B.S, Environmental Science 1993
University of California, Santa Barbara, California

Occupational Safety and Health Administration (OSHA) 40-Hour Hazardous Waste

Operations and Emergency Response Training

Asbestos Hazard Emergency Response Act (AHERA) Building Inspector, 2001

Steven Cho has more than four years of technical experience in conducting and managing environmental projects. His background includes consulting services related to Phase I and Phase II site investigations, and development and implementation of storm water pollution prevention plans (SWPPP), and spill prevention countermeasure and control (SPCC) plans. Mr. Cho also participates in underground storage tank closures projects, conducts environmental compliance audits of industrial facilities, and provides industrial hygiene services and analyses, and he has had experience in assessing, developing, and implementing asbestos and lead-based paint operations and maintenance (O&M) plans for various commercial property portfolios. He has experience with ISO 14000 implementation and compliance, and litigation support. Mr. Cho has conducted numerous projects for landowners, financial institutions, law firms, insurance organizations, and commercial and manufacturing organizations. His project experience extends throughout the U.S., Japan, Australia, and Europe.

Clayton GROUP SERVICES

Project Experience

Phase I Environmental Site Assessments (ESA)
Property Owners/Banking/Real Estate

Mr. Cho has performed well over 300 Phase I ESAs at residential, industrial, and commercial properties, many with asbestos, lead-based paint, mold, and radon. He performed site assessment for the presence of hazardous materials and wastes, underground storage tanks (USTs), Aboveground Storage Tanks (ASTs), polychlorinated biphenyls (PCBs), and asbestos at various commercial properties throughout the contiguous United States as well as internationally in Japan, Australia, and Europe.

Phase II Subsurface Investigations
Various Clients

Mr. Cho has performed several Phase II investigations, including assessing vertical and horizontal extent of contamination in soil and groundwater, supervising installation of soil borings and groundwater wells, and soil and groundwater sampling and analysis.

Environmental Compliance Audits
Various Clients

Mr. Cho has had experience conducting due diligence environmental audits for several industrial operations throughout California. He reviewed previous environmental audits, assessments, and environmental management programs; conducted comprehensive environmental audits; and assessed environmental liabilities and compliance issues at each facility.

UST/LUST Closures
Various Clients

Mr. Cho provided oversight for UST/LUST removals and closures in California. He conducted soil and groundwater sampling and analyses, and prepared closure reports.

Stormwater Pollution Prevention Plans (SWPPP)
M-I Drilling

Mr. Cho managed and developed SWPP plans for a portfolio of M-I Drilling material warehouse facilities throughout the southwest United States. The plans were developed based upon Mr. Cho's observations and physical inspection of each facility's materials management program, warehousing practices, and site specific approximation of stormwater movement and accumulation.

Spill Prevention, Control, and Countermeasures (SPCC)
Jiffy Lube Inc. – United States

Mr. Cho managed and developed SPCC plans for a portfolio of Jiffy Lube oil exchange facilities throughout the United States. Facilities inspected were determined to have handled fuels, lubricating fluids (oil), anti-freeze, and solvents on a cumulative annual basis of over 100,000-gallons per facility.

ISO 14001 Audits – Legal and Other Requirements
Nortel Corporation, Sunnyvale, California

Mr. Cho served as Nortel's onsite contact and was responsible for developing aspects of the Sunnyvale facility's ISO 14000 environmental management program. He also performed monthly audits at the facility per ISO 14001 and prepared reports summarizing the findings of those audits. The audits focused on all environmental aspects with legal implications, and included federal and state requirements, industry standards, or organizational standards.

Litigation Support
Law Firm

Mr. Cho's provided litigation support in connection with a successful lawsuit. His services included technical reviews, cost estimates, technical support, and document analysis.

Employment History

Clayton Group Services, Inc. – Honolulu, Hawaii
Project Manager
2003 to Present

EMG Corporation – Oakland, California
Project Manager
2002 to 2003

ENSR Corporation – San Francisco, California
Project Engineer
1996 to 1999

APPENDIX B

LIST OF SOURCES/REFERENCES

LIST OF SOURCES/REFERENCES

Agency and division/source:	Maui Lani Development
Name/title of representative:	Ms. Leiane Paci, Partner
Location of Agency:	Maui Lani Development Field Office, Kahului, Maui, Hawaii
Agency Telephone Number:	(808) 877-2736
Date Information was received:	February 28, 2005
Information obtained:	Past and current subject property information

Agency and division/source:	Maui Lani Development
Name/title of representative:	Mr. Gary Kawano, Operations Manager
Location of Agency:	Maui Lani Development Field Office, Kahului, Maui, Hawaii
Agency Telephone Number:	(808) 877-2736
Date Information was received:	February 28, 2005
Information obtained:	Past and current subject property information

Name of publication:	Topographic Map, Paia, Hawaii Quadrangle
Author of publication:	Department of the Interior, United States Geological Survey (USGS)
Date of publication:	1921-25
Page number(s):	N/A
Information obtained:	Geography

Name of publication:	7.5 Minute Topographic Map, Wailuku, Hawaii Quadrangle
Author of publication:	State of Hawaii, Department of Health, Underground Injection Control Program
Date of publication:	1983
Page number(s):	N/A
Information obtained:	Geography

Name of publication:	7.5 Minute Topographic Map, Wailuku, Hawaii Quadrangle
Author of publication:	United States Geological Survey (USGS)
Date of publication:	1955, 1983 & 1997
Page number(s):	N/A
Information obtained:	Geography

Clayton GROUP SERVICES

LIST OF SOURCES/REFERENCES
(continued)

Name of publication:	Aerial Photographs
Author of publication:	State of Hawaii, Archives
Date of publication:	Various
Page number(s):	N/A
Information obtained:	Historical use
Name of publication:	Aquifer Identification and Classification for Maui: Groundwater Protection Strategy for Hawaii. Technical Report No. 185
Author of publication:	Mink, J.F. and L.S. Lau
Date of publication:	February, 1990
Page number(s):	N/A
Information obtained:	Groundwater data
Name of publication:	Ownership records and Tax Map Key maps
Author of publication:	City and County of Honolulu and Maui County Real Property Assessment Division.
Date of publication:	N/A
Page number(s):	N/A
Information obtained:	Ownership records
Name of publication:	Rules for Controlling PCBs under the Toxic Substances Control Act. Code of Federal Regulations, Title 40, Part 761.
Author of publication:	U.S. Environmental Protection Agency
Date of publication:	December 14, 1990
Page number(s):	N/A
Information obtained:	PCB regulations
Name of publication:	The EDR Radius Map Report
Author of publication:	Environmental Data Resources, Inc.
Date of publication:	March 4, 2005
Page number(s):	N/A
Information obtained:	Regulatory database records

Clayton GROUP SERVICES

LIST OF SOURCES/REFERENCES
(continued)

Name of publication:	Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.
Author of publication:	Foote, Donald E. et al. US Department of Agriculture, Soil Conservation Service, in cooperation with the University of Hawaii Agricultural Experiment Station.
Date of publication:	August, 1972
Page number(s):	N/A
Information obtained:	Soil classifications
Name of publication:	Underground Storage Tank Database and Leaking Underground Storage Tank Database
Author of publication:	State of Hawaii, Department of Health, Solid and Hazardous Waste Branch.
Date of publication:	2004
Page number(s):	N/A
Information obtained:	Underground storage tank information
Name of publication:	Flood Insurance Rate Map for Maui County, Hawaii (Community-Panel Number 150003 0190D)
Author of publication:	Federal Emergence Management Agency/National Flood Insurance Program
Date of publication:	Revised: March 16, 1995
Page number(s):	N/A
Information obtained:	Flood hazard information
Name of publication:	Hazard Evaluation & Emergency Response (HEER) Office Database
Author of publication:	State of Hawaii, Department of Health, HEER Office
Date of publication:	2004
Page number(s):	N/A
Information obtained:	Environmental concerns or violations

APPENDIX C

REGULATORY DATABASE REPORT

The EDR Radius Map™ Report

Maui Lani 59.6 Acres
Wailuku/Kahului
Kahului, HI 96732

Inquiry Number: 01372223.1r

March 04, 2005

EDR™ Environmental
Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-MER

TABLE OF CONTENTS

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

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

WAILUKU/KAHULUI
KAHULUI, HI 96732

COORDINATES

Latitude (North):	20.867200 - 20° 52' 1.9"
Longitude (West):	156.497000 - 156° 29' 49.2"
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	760429.5
UTM Y (Meters):	2309341.2
Elevation:	279 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	20156-G4 WAILUKU, HI
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information
RCRA-LQG	Resource Conservation and Recovery Act Information
RCRA-SQG	Resource Conservation and Recovery Act Information
ERNS	Emergency Response Notification System

STATE ASTM STANDARD

SHWS	Sites List

EXECUTIVE SUMMARY

SWF/LF..... Permitted Landfills in the State of Hawaii
LUST..... Leaking Underground Storage Tank Database
VCP..... Voluntary Response Program Sites

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
ODI..... Open Dump Inventory
UMTRA..... Uranium Mill Tailings Sites
FUDS..... Formerly Used Defense Sites
INDIAN RESERV..... Indian Reservations
DOD..... Department of Defense Sites
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS INSP..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

SPILLS..... Release Notifications

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites
BROWNFIELDS..... Brownfields Sites
INST CONTROL..... Sites with Institutional Controls
VCP..... Voluntary Response Program Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

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

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

EXECUTIVE SUMMARY

STATE ASTM STANDARD

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 Department of Health's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 05/01/2004 has revealed that there is 1 UST site within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MAUI MEMORIAL PARK, INC.	485 WAIALE DR	1/8 - 1/4 W	1	6

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

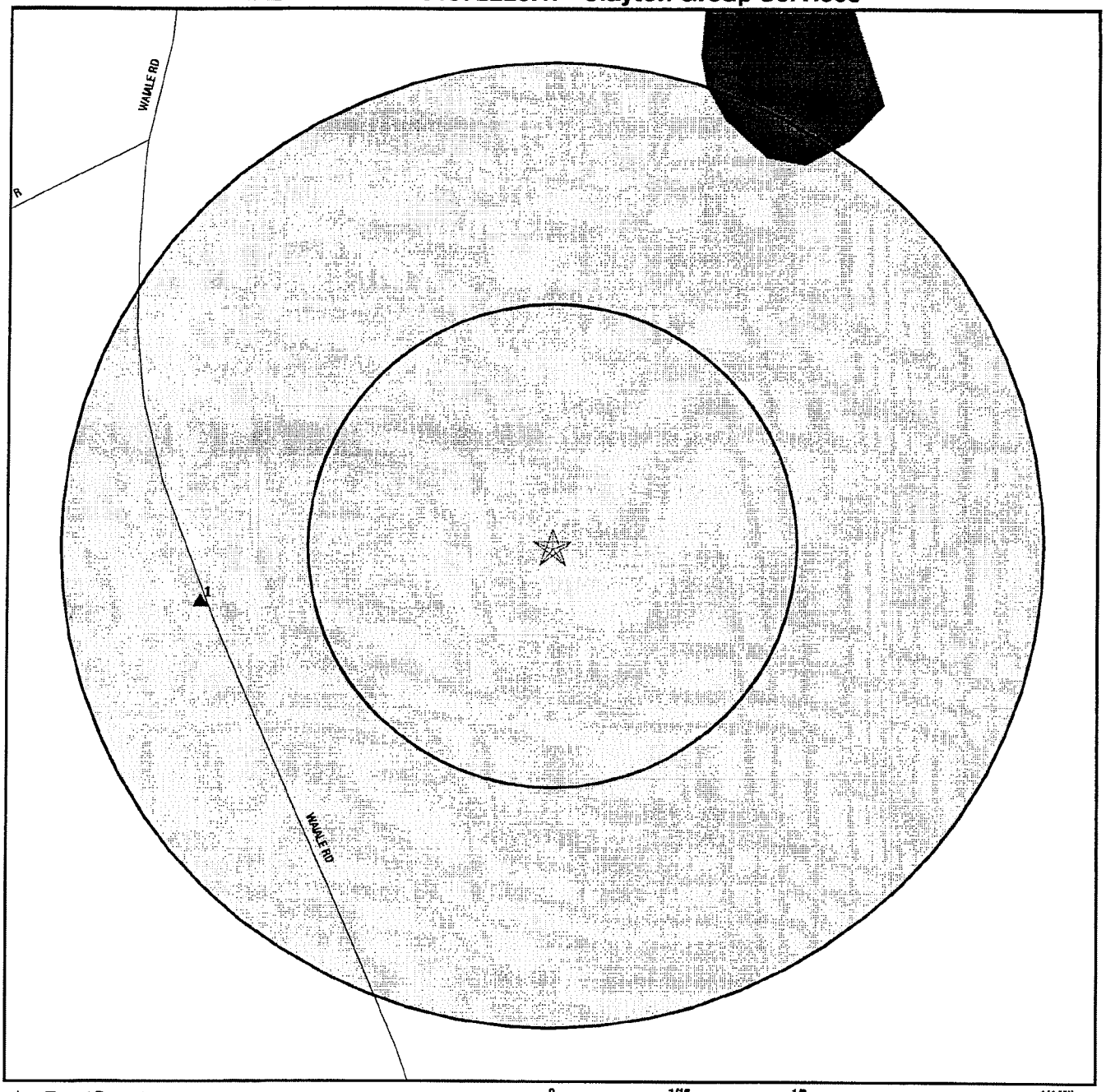
Site Name	Database(s)
MAUI ELECTRIC CO	FTTS INSP
MAUI HS	FINDS, FTTS INSP
MONTESSORI SCHOOL OF MAUI	FINDS, FTTS INSP
E & E BLACK CONTRACTORS	SHWS
SMILE'S AUTO SPECIALISTS	SHWS
RAINBOW HAULING	SHWS
KANAHA POND EAST	SHWS, CERC-NFRAP
HOBRON AVENUE AREA	SHWS, SPILLS
MAUI PALMS HOTEL UST	SHWS
ALEXANDER AND BALDWIN DUMP SITE	SHWS
MAUI MEAT FACILITY-FORMER	SHWS
KALAMAULA LANDFILL	SHWS
MAALAEA POWER PLANT	SHWS
SELLAND CONSTRUCTION, INC., KIHEI B	SHWS
KAHOOLAWE ISLAND	SHWS
BEN FRANKLIN STORES PROPERTY	SHWS
OLOWALU TRANSFER STATION	SHWS
PICRIC ACID AT MAUI COMMUNITY COLLE	SHWS
PICRIC ACID AT MAUI MEMORIAL HOSPIT	SHWS
WAIALE ASH PILE	SHWS
WAIKAPU DUMP-MAUI COUNTY DUMP	CERC-NFRAP
MAKANI LDFL	CERC-NFRAP
HANA LANDFILL	SWF/LF
CENTRAL MAUI LANDFILL	SWF/LF
DAVID PICO CESSPOOL DIGGING	LUST, UST
PAIA SEWER PUMP STATION	UST
MAUI SVC LTD	RCRA-SQG, FINDS
MAUI DISTRICT OFFICE DOE	RCRA-SQG
DEPARTMENT OF HEALTH VECTOR CONTROL MAUI	FINDS
MAUI PETROLEUM HOBRON AVENUE	FINDS
MAUI PALMS HOTEL UST	FINDS
MAUI MEAT COMPANY FACILITY (FORMER)UST CLOSURE	FINDS
MAUI PINEAPPLE CO. LTD.	MLTS, TRIS
MAUI BUSINESS PARK OIL CONTAMINATIO	SPILLS
MAUI PINEAPPLE TRUCK HYDRAULIC SPIL	SPILLS
DDT DMAT BUNKER ON MAUI	SPILLS
MAUI ELECTRIC NON-PCB TRANSFORMER O	SPILLS
MAUI ELECTRIC COMPANY	SPILLS
MAUI RADIOLOGY CONSULTANTS, LLP	MLTS
MAUI ELECTIRC COMPANY OFFICE COMPLEX	HAZNET

OVERVIEW MAP - 01372223.1r - Clayton Group Services

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Federal Wetlands

TARGET PROPERTY:	Maui Lani 59.6 Acres	CUSTOMER:	Clayton Group Services
ADDRESS:	Wailuku/Kahului	CONTACT:	Steve Cho
CITY/STATE/ZIP:	Kahului HI 96732	INQUIRY #:	01372223.1r
LAT/LONG:	20.8672 / 156.4970	DATE:	March 04, 2005 1:05 pm

DETAIL MAP - 01372223.1r - Clayton Group Services



0 1/16 1/8 1/4 Miles

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone

TARGET PROPERTY:	Maui Lani 59.6 Acres	CUSTOMER:	Clayton Group Services
ADDRESS:	Wailuku/Kahului	CONTACT:	Steve Cho
CITY/STATE/ZIP:	Kahului HI 96732	INQUIRY #:	01372223.1r
LAT/LONG:	20.8672 / 156.4970	DATE:	March 04, 2005 1:05 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.125	0	0	0	0	0	0
Proposed NPL		1.125	0	0	0	0	0	0
CERCLIS		0.625	0	0	0	0	NR	0
CERC-NFRAP		0.375	0	0	0	NR	NR	0
CORRACTS		1.125	0	0	0	0	0	0
RCRA TSD		0.625	0	0	0	0	NR	0
RCRA Lg. Quan. Gen.		0.375	0	0	0	NR	NR	0
RCRA Sm. Quan. Gen.		0.375	0	0	0	NR	NR	0
ERNS		0.125	0	NR	NR	NR	NR	0
STATE ASTM STANDARD								
SHWS		1.125	0	0	0	0	0	0
State Landfill		0.625	0	0	0	0	NR	0
LUST		0.625	0	0	0	0	NR	0
UST		0.375	0	1	0	NR	NR	1
VCP		0.625	0	0	0	0	NR	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.125	0	0	0	0	0	0
ROD		1.125	0	0	0	0	0	0
Delisted NPL		1.125	0	0	0	0	0	0
FINDS		0.125	0	NR	NR	NR	NR	0
HMIRS		0.125	0	NR	NR	NR	NR	0
MLTS		0.125	0	NR	NR	NR	NR	0
MINES		0.375	0	0	0	NR	NR	0
NPL Liens		0.125	0	NR	NR	NR	NR	0
PADS		0.125	0	NR	NR	NR	NR	0
ODI		0.625	0	0	0	0	NR	0
UMTRA		0.625	0	0	0	0	NR	0
FUDS		1.125	0	0	0	0	0	0
INDIAN RESERV		1.125	0	0	0	0	0	0
DOD		1.125	0	0	0	0	0	0
RAATS		0.125	0	NR	NR	NR	NR	0
TRIS		0.125	0	NR	NR	NR	NR	0
TSCA		0.125	0	NR	NR	NR	NR	0
SSTS		0.125	0	NR	NR	NR	NR	0
FTTS		0.125	0	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
SPILLS		0.125	0	NR	NR	NR	NR	0
EDR PROPRIETARY HISTORICAL DATABASES								
Coal Gas		1.125	0	0	0	0	0	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
BROWNFIELDS DATABASES								
US BROWNFIELDS		0.625	0	0	0	0	NR	0
BROWNFIELDS		0.625	0	0	0	0	NR	0
INST CONTROL		0.625	0	0	0	0	NR	0
VCP		0.625	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

1
West
1/8-1/4
957 ft.

MAUI MEMORIAL PARK, INC.
485 WAIALE DR
WAILUKU, HI 96793

UST U003222231
N/A

Relative:
Higher

Actual:
314 ft.

UST:

Facility ID:	9-501570	Tank ID:	R-1
Tank Status:	Permanently Out of Use		
Tank Capacity:	Not reported	Installed:	Not reported
Date Closed:	7/12/1991	Substance:	Gasoline
Owner:	MAUI FUNERAL TRUST P. O. BOX 1440 Wailuku, HI 96793		

Facility ID:	9-501570	Tank ID:	R-2
Tank Status:	Permanently Out of Use		
Tank Capacity:	Not reported	Installed:	Not reported
Date Closed:	7/12/1991	Substance:	Gasoline
Owner:	MAUI FUNERAL TRUST P. O. BOX 1440 Wailuku, HI 96793		

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HANA, MAUI	S106401332	HANA LANDFILL	HANA MAUI	96793	SWF/LF
KAHULUI	1000816952	E & E BLACK CONTRACTORS	AMALA PL	96732	SHWS
KAHULUI	1000816953	SMILE'S AUTO SPECIALISTS	AMALA PLACE	96732	SHWS
KAHULUI	1000655952	RAINBOW HAULING	AMALA PL	96732	SHWS
KAHULUI	1001475719	KANAHA POND EAST	AMALA PLACE	96732	SHWS, CERC-NFRAP
KAHULUI	1003879111	WAIKAPU DUMP-MAUI COUNTY DUMP	CENTRAL MAUI	96732	CERC-NFRAP
KAHULUI	S105263379	MAUI BUSINESS PARK OIL CONTAMINATIO	DAIRY RD AND HANA HWY		SPILLS
KAHULUI	S105263572	MAUI PINEAPPLE TRUCK HYDRAULIC SPIL	DAIRY RD AT KUIHELANI HIGHWAY, 1 MI	96732	SPILLS
KAHULUI	S105264329	DDT DMAT BUNKER ON MAUI	EENA (?) ST., NEXT TO AIRPORT RESCU	96732	SPILLS
KAHULUI	1006820267	DEPARTMENT OF HEALTH VECTOR CONTROL MAUI	54 HIGH ST 641 MUA ST, KAHALE DR AND PALAPALA ST	96732	FINDS
KAHULUI	1006818919	MAUI PETROLEUM HOBRON AVENUE	HOBRON AVE	96732	FINDS
KAHULUI	S104534206	HOBRON AVENUE AREA	HOBRON AVE	96732	SHWS, SPILLS
KAHULUI	S104534290	MAUI PALMS HOTEL UST	150 KAAHUMANU AVE	96732	SHWS
KAHULUI	1006818920	MAUI PALMS HOTEL UST	150 KAAHUMANU AVENUE	96732	FINDS
KAHULUI	S105726624	MAUI ELECTIRC COMPANY OFFICE COMPLEX	210 KAMEHAMEHA AVE	96732	HAZNET
KAHULUI	S105264341	MAUI ELECTRIC NON-PCB TRANSFORMER O	10 KAMEHAMEHA AVE	96732	SPILLS
KAHULUI	1007285675	MAUI ELECTRIC CO	210 KAMEHAMEHA AVE	96732	FTTS INSP
KAHULUI	1001201065	MAUI PINEAPPLE CO. LTD.	120 KANE ST.	96732	MLTS, TRIS
KAHULUI	S105263637	MAUI ELECTRIC COMPANY	231 LALO PL (BETWEEN THERE / 251 LALO	96732	SPILLS
KAHULUI	1004464715	MAUI HS	660 S LANE AV	96732	FINDS, FTTS INSP
KAHULUI	1004464651	MONTESSORI SCHOOL OF MAUI	LONO KEMEHANEHA AVE	96732	FINDS, FTTS INSP
KAHULUI	U001236769	DAVID PICO CESSPOOL DIGGING	OLD HALEAKALA HWY	96732	LUST, UST
KAHULUI	1001032388	ALEXANDER AND BALDWIN DUMP SITE	W PAPA AVE	96732	SHWS
KAHULUI	U003222223	PAIA SEWER PUMP STATION	PUNA RD/HANA HWY	96732	UST
KAHULUI	1004807684	MAUI RADIOLOGY CONSULTANTS, LLP	53 PUUNENE AVENUE	96732	MLTS
KAHULUI	S104534289	MAUI MEAT FACILITY-FORMER	601 2ND ST	96732	SHWS
KAHULUI	1006818966	MAUI MEAT COMPANY FACILITY (FORMER)UST CLOSURE	601 2ND STREET	96732	FINDS
KAHULUI	1000245047	MAUI SVC LTD	TMK 3 7 11 17	96732	RCRA-SQG, FINDS
KALAMAULA	S104534228	KALAMAULA LANDFILL	SOUTH MOLOKAI, KALAMAULA	96793	SHWS
KIHEI	S104534280	MAALAEA POWER PLANT	N KIHEI ROAD	96753	SHWS
KIHEI	S104657509	SELLAND CONSTRUCTION, INC., KIHEI B	OHUKAI ROAD BASE YARD	96753	SHWS
MAKANI	1003879124	MAKANI LDFL	MAUI	96793	CERC-NFRAP
MAUI COUNTY	S104534222	KAHOOLAWE ISLAND	KAHOOLAWE ISLAND	96732	SHWS
MAUI COUNTY	S104534094	BEN FRANKLIN STORES PROPERTY	KAUNAKAKAI, MOLOKAI		SHWS
OLOWALU	1000435092	OLOWALU TRANSFER STATION	OLOWALU	96793	SHWS
PUUNENE, MAUI	S103763652	CENTRAL MAUI LANDFILL	PUNENE, MAUI	96793	SWF/LF
WAILUKU	1000244831	MAUI DISTRICT OFFICE DOE	54 HIGH ST	96793	RCRA-SQG
WAILUKU	S104657498	PICRIC ACID AT MAUI COMMUNITY COLLE	310 KAAHUMANU AVE	96793	SHWS
WAILUKU	S104657499	PICRIC ACID AT MAUI MEMORIAL HOSPIT	MAUI	96793	SHWS
WAILUKU	S104657531	WAIALE ASH PILE	WAIALE STREET	96793	SHWS

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.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
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: 12/14/04
Date Made Active at EDR: 02/03/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 02/01/05
Elapsed ASTM days: 2
Date of Last EDR Contact: 02/01/05

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 8
Telephone: 303-312-6774

EPA Region 4
Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 12/14/04
Date Made Active at EDR: 02/03/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 02/01/05
Elapsed ASTM days: 2
Date of Last EDR Contact: 02/01/05

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
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: 12/14/04
Date Made Active at EDR: 02/08/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/21/04
Elapsed ASTM days: 49
Date of Last EDR Contact: 12/21/04

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 12/14/04
Date Made Active at EDR: 02/08/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/21/04
Elapsed ASTM days: 49
Date of Last EDR Contact: 12/21/04

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/15/04
Date Made Active at EDR: 02/25/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 01/07/05
Elapsed ASTM days: 49
Date of Last EDR Contact: 12/07/04

RCRA: Resource Conservation and Recovery Act Information
Source: EPA
Telephone: 800-424-9346
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/23/04
Date Made Active at EDR: 01/18/05
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 11/24/04
Elapsed ASTM days: 55
Date of Last EDR Contact: 11/24/04

ERNS: Emergency Response Notification System
Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/03
Date Made Active at EDR: 03/12/04
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/26/04
Elapsed ASTM days: 46
Date of Last EDR Contact: 01/27/05

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
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: 12/01/01
Database Release Frequency: Biennially

Date of Last EDR Contact: 12/13/04
Date of Next Scheduled EDR Contact: 03/14/05

CONSENT: Superfund (CERCLA) Consent Decrees
Source: Department of Justice, Consent Decree Library
Telephone: Varies
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: 03/05/04
Database Release Frequency: Varies

Date of Last EDR Contact: 10/25/04
Date of Next Scheduled EDR Contact: 01/24/05

ROD: Records Of Decision
Source: EPA
Telephone: 703-416-0223
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: 09/09/04
Database Release Frequency: Annually

Date of Last EDR Contact: 01/05/05
Date of Next Scheduled EDR Contact: 04/04/05

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
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: 12/14/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/01/05
Date of Next Scheduled EDR Contact: 05/02/05

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
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: 09/09/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 04/04/05

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/08/04
Database Release Frequency: Annually

Date of Last EDR Contact: 01/19/05
Date of Next Scheduled EDR Contact: 04/18/05

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
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: 11/30/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 04/04/05

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 09/13/04
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/28/04
Date of Next Scheduled EDR Contact: 03/28/05

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 202-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (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 receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 02/22/05
Date of Next Scheduled EDR Contact: 05/23/05

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-564-3887
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: 09/30/04
Database Release Frequency: Annually

Date of Last EDR Contact: 02/23/05
Date of Next Scheduled EDR Contact: 05/09/05

DOD: Department of Defense Sites
Source: USGS
Telephone: 703-692-8801
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 10/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/08/05
Date of Next Scheduled EDR Contact: 05/09/05

UMTRA: Uranium Mill Tailings Sites
Source: Department of Energy
Telephone: 505-845-0011
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. In 1978, 24 inactive uranium mill tailings sites in Oregon, Idaho, Wyoming, Utah, Colorado, New Mexico, Texas, North Dakota, South Dakota, Pennsylvania, and on Navajo and Hopi tribal lands, were targeted for cleanup by the Department of Energy.

Date of Government Version: 04/22/04
Database Release Frequency: Varies

Date of Last EDR Contact: 12/21/04
Date of Next Scheduled EDR Contact: 03/21/05

ODI: Open Dump Inventory
Source: Environmental Protection Agency
Telephone: 800-424-9346
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: 06/30/85
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 05/23/95
Date of Next Scheduled EDR Contact: N/A

FUDS: Formerly Used Defense Sites
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/03
Database Release Frequency: Varies

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 04/04/05

INDIAN RESERV: Indian Reservations
Source: USGS
Telephone: 202-208-3710
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: 10/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/08/05
Date of Next Scheduled EDR Contact: 05/09/05

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
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: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/06/04
Date of Next Scheduled EDR Contact: 03/07/05

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-566-0250
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/02
Database Release Frequency: Annually

Date of Last EDR Contact: 12/20/04
Date of Next Scheduled EDR Contact: 03/21/05

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-5521
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: 12/31/02
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 12/06/04
Date of Next Scheduled EDR Contact: 03/07/05

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 04/13/04
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/01/04
Date of Next Scheduled EDR Contact: 03/21/05

SSTS: Section 7 Tracking Systems
Source: EPA
Telephone: 202-564-5008
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: 12/31/03
Database Release Frequency: Annually

Date of Last EDR Contact: 11/29/04
Date of Next Scheduled EDR Contact: 04/18/05

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
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: 09/13/04
Database Release Frequency: Quarterly
Date of Last EDR Contact: 12/01/04
Date of Next Scheduled EDR Contact: 03/21/05

STATE OF HAWAII ASTM STANDARD RECORDS

SHWS: Sites List
Source: Department of Health
Telephone: 808-586-4249
Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 07/12/01
Date Made Active at EDR: 10/16/01
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 09/24/01
Elapsed ASTM days: 22
Date of Last EDR Contact: 12/22/04

SWF/LF: Permitted Landfills in the State of Hawaii
Source: Department of Health
Telephone: 808-586-4245
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/19/04
Date Made Active at EDR: 06/22/04
Database Release Frequency: Varies
Date of Data Arrival at EDR: 05/20/04
Elapsed ASTM days: 33
Date of Last EDR Contact: 02/23/05

LUST: Leaking Underground Storage Tank Database
Source: Department of Health
Telephone: 808-586-4228
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 05/01/04
Data Made Active at EDR: 07/29/04
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 06/30/04
Elapsed ASTM days: 29
Date of Last EDR Contact: 12/07/04

UST: Underground Storage Tank Database
Source: Department of Health
Telephone: 808-586-4228
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/01/04
Date Made Active at EDR: 07/29/04
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 06/30/04
Elapsed ASTM days: 29
Date of Last EDR Contact: 12/27/04

VCP: Voluntary Response Program Sites
Source: Department of Health
Telephone: 808-586-4249

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/05/05
Date Made Active at EDR: 02/08/05
Database Release Frequency: Varies

Date of Data Arrival at EDR: 01/06/05
Elapsed ASTM days: 33
Date of Last EDR Contact: 01/03/05

STATE OF HAWAII ASTM SUPPLEMENTAL RECORDS

SPILLS: Release Notifications
Source: Department of Health
Telephone: 808-586-4249
Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 09/01/00
Database Release Frequency: Varies

Date of Last EDR Contact: 12/22/04
Date of Next Scheduled EDR Contact: 03/21/05

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

BROWNFIELDS DATABASES

BROWNFIELDS: Brownfields Sites
Source: Department of Health
Telephone: 808-586-4249

Date of Government Version: 01/05/05
Database Release Frequency: Varies

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 03/21/05

VCP: Voluntary Response Program Sites
Source: Department of Health
Telephone: 808-586-4249

Date of Government Version: 01/05/05
Database Release Frequency: Varies

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 03/21/05

US BROWNFIELDS: A Listing of Brownfields Sites
Source: Environmental Protection Agency
Telephone: 202-566-2777
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities—especially those without EPA Brownfields Assessment Demonstration Pilots—minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

INST CONTROL: Sites with Institutional Controls
Source: Department of Health
Telephone: 808-586-4249
Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 01/05/05
Database Release Frequency: Varies

Date of Last EDR Contact: 01/03/05
Date of Next Scheduled EDR Contact: 03/21/05

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.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

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.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

Release Response Activities

Maui Lani Development
Kahului, Maui, Hawaii

Prepared for:

MAUI LANI 100, LLC

1100 Alakea Street
Suite 2200
Honolulu, Hawaii 96813

Clayton Project No. 85-05246.00
April 26, 2005

Prepared by:

Clayton Group Services, Inc.
970 N. Kalaheo Avenue
Suite C-316
Kailua, Hawaii 96734
808.531.6708

CONTENTS

Executive Summary

Maui Lani 100, LLC retained Clayton Group Services, Inc. (Clayton) to conduct release response activities at the Maui Lani Development property located on the vacant parcel (Tax Map Key: [2] 3-8-7: Parcel 131 [portion]) in Kahului, Maui, Hawaii. The purpose of this project was to sample and analyze the soil at the site for chemical impacts resulting from the release associated with a damaged 55-gallon drum.

On April 5, 2005, Clayton supervised Maui Lani personnel during the excavation of four test pits in the suspected area of the release. Two soil samples (SS1-1.0 and SS1-2.0) were collected from test pit four (TP-4) at depths of 1- and 2-foot below ground surface (bgs).

The soil samples were analyzed for total petroleum hydrocarbons (TPH) using EPA Method 8015-modified, benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8021, polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270 SIM, and total lead using current EPA Methods of 6020.

Concentrations of TPH-Gasoline Range Organics (GRO), BTEX, PAHs and lead, in the soil were not detected above the laboratory method reporting limit (MRL). One of the BTEX analytes and two of the PAH analytes were detected above the MRL in the soil samples, yet they were not detected above the applicable action levels.

The State of Hawaii Department of Health (DOH) Proposed Environmental Action Level (EAL) for TPH has two Action Levels; the first Action Level is for nuisance concerns and is recommended for soils exposed or potentially exposed at the ground surface (minimum ten feet bgs for residential sites with private yards and three feet bgs for other land use scenarios). The second Action Level is based on potential leaching concerns.

Laboratory analysis of soil sample SS1-1.0 indicated a concentration of TPH-Diesel Range Organics (DRO) above DOH-EAL for nuisance concerns; and laboratory analysis of soil sample SS1-2.0 indicated a concentration of TPH-Heavy Range Organics (HRO) above the EAL for nuisance concerns. In addition, laboratory analysis of SS1-2.0 indicated a concentration of TPH-DRO above both the DOH-Tier 1 Action Levels and EALs for leaching potential and nuisance concerns.

Clayton recommends that the TPH contaminated soil be properly excavated and disposed of prior to development of the land.

1.0 INTRODUCTION

Maui Lani 100, LLC retained Clayton Group Services, Inc. (Clayton) to conduct release response activities at the Maui Lani Development property located on the vacant parcel (Tax Map Key: [2] 3-8-7: Parcel 131 [portion]) on Kahului, Maui, Hawaii (Refer to Figure 1 behind the *Figures* Tab), hereafter the "site."

1.1 SITE BACKGROUND

The site, which is currently owned by Maui Lani 100, LLC, consists of undeveloped and heavily vegetated land with low-lying flora, tall grasses, and small trees (primarily Kiawe and Haole Koa trees). Approximately one-third of the site consisted of a former and current sand mining operation. This portion of the subject property consists of level and exposed soil surfaces, which were relatively void of vegetation. Several unpaved roads and jeep trails run throughout the subject property. In addition, barbed-wire cattle fences were observed along the southern boundary of the site. Figure 2 shows the site map of the site.

During the site visit for the Phase I Environmental Site Assessment (ESA), no activities or improvements were observed on the subject property, except a current sand mining operation. The current sand mining operation and all associated equipment is owned and operated by Ameron, Inc.

The equipment observed by Clayton included two aboveground storage tanks (ASTs), a Matson trailer, a tractor, and one 55-gallon drum in the area of the former sand mine. One AST, approximately 1,000-gallons in capacity, was labeled to contain diesel fuel and appeared to be active and operational. This AST was not provided with secondary containment. The second AST, which was covered with rust and surrounded by tall grasses/vegetation, was estimated to have a capacity of approximately 500 gallons and appeared abandoned. The Matson trailer was observable from the outside only and appeared abandoned. According to Ms. Leiane Paci, representative of Maui Lani 100, LLC, Ameron Inc. currently utilizes the diesel AST for heavy machinery and equipment fueling needs. Ms. Paci stated that the abandoned 500-gallon AST was formerly utilized to store water.

A 55-gallon drum was observed lying on its side underneath a disabled tractor and appeared to have a large puncture tear located along the topside. The drum contents included a petroleum-based substance and appeared partially full. The soil surrounding the drum appeared to be impacted with the drum's contents. According to Ms. Paci, the substance was kerosene that Ameron Inc. had used to clean their equipment.

This finding is considered a recognized environmental condition because there is evidence of a release and the finding was presented to Ms. Paci. Clayton recommended proper removal and disposal of the 55-gallon drum and its contents, as well as, proper removal and disposal of the impacted soil.

Prior to the commencement of the release response activities, Maui Lani 100, LLC notified Clayton that the area of the release was cleared and covered with crushed coral. Clayton then recommended excavation of test pits to identify the location of the release and sampling the soil to assess the potential impacts of the contaminated soil to the site.

1.2 PURPOSE

The purpose of this project was to sample and analyze the soil at the site for chemical impacts resulting from the release associated with a damaged 55-gallon drum.

1.3 SCOPE OF WORK

Clayton performed the following scope of work, as outlined in Change Order 1 for Clayton's Proposal Number PR85ES05.506 (Rev.), dated January 22, 2005:

- Excavated four test pits at the release site to assess potential impacts to the soil.
- Collected two soil samples and analyzed them for total petroleum hydrocarbons using EPA Method 8015-modified, benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8021, polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270 SIM, and total lead using EPA Method 6020.
- Compared laboratory analytical results to State of Hawaii Department of Health (DOH) Action Levels and Environmental Protection Agency (EPA) Preliminary Remediation Goals (PRGs), and documented sampling activities using appropriate quality control/quality assurance procedures to substantiate field activities.
- Prepared a report presenting the results of the activities, including laboratory analytical results, photographic documentation, and conclusions and recommendations.

2.0 PHYSICAL SETTING

The subject property is located on the western Maui isthmus at the foot of the West Maui Mountains, on the south side of Kahului town, Island and County of Maui, Hawaii. The general area is characterized by gently sloping land with moderate to heavy vegetation. Elevations at and around the subject property range from approximately 120 to 320 feet above mean sea level (msl) (USGS Wailuku Quadrangle, 1997).

2.1 SOIL CONDITIONS

The U.S. Department of Agriculture Soil Conservation Service identifies the soil within the area of the subject property as Puuone Series soils. The Puuone soil series consists of somewhat excessively drained soils that occur on the low uplands of Maui. These soils developed in material derived from coral and seashells.

The soil beneath the subject property is specifically identified as Puuone sand, 7 to 30 percent slopes (mapping unit *PZUE*). In a representative profile the surface layer is grayish-brown, calcareous sand approximately 20 inches thick. It is underlain by grayish-brown, cemented sand. The soil is moderately alkaline in the surface layer. Permeability is rapid above the cemented layer. Runoff is slow, and the hazard of wind erosion is moderate to severe.

2.2 GROUNDWATER CONDITIONS

Clayton reviewed the Aquifer Identification and Classification Technical Report No. 185, published by the Water Resources Research Center at the University of Hawaii, for information on groundwater conditions below the site. The report describes the upper and lower aquifers below the site as part of the Kahului aquifer system in the Central sector.

The upper aquifer is an unconfined basal aquifer of the sedimentary type, with nonvolcanic lithology. It is an irreplaceable and currently used aquifer of ecological importance, with low salinity (250-1,000 milligrams per liter [mg/L] Chloride). This aquifer has a high vulnerability to contamination. The lower aquifer is an unconfined basal aquifer of the flank type, occurring in horizontally extensive lavas. Like the upper aquifer, the lower aquifer is an irreplaceable and currently used aquifer of ecological importance, with low salinity. However, the lower aquifer has a moderate vulnerability to contamination.

The sites lies below the designated underground injection control (UIC) line; therefore, the underlying groundwater typically would not be used as a drinking water source. However, the aquifer identification report describes the aquifers below the subject property as being currently used.

The regional groundwater flow direction is generally inferred to follow surface topography and flow in a northeastern direction toward the Pacific Ocean at Kahului Bay. Based on the U.S. Geological Survey, Wailuku, Hawaii, 7.5-minute topographic quadrangle map, the depth to groundwater is estimated to be approximately 250 feet below ground surface (bgs). However, the local gradient and flow direction under the property may be influenced naturally by zones of higher or lower permeability, tidal changes, or by nearby pumping or recharge, and may deviate from the regional trend.

2.3 SURFACE WATER

The closest surface water to the site is the Waiale Reservoirs, located approximately 200 feet to the north (USGS, 1998).

3.0 APPLICABLE AND RELEVANT REMEDIATION GOALS

Although the site lies below the DOH designated UIC line, the underlying groundwater is considered to be a drinking water source. In addition, the site receives less than 200 centimeters of rain per year. Therefore, the DOH Tier 1 Action Levels applicable to this

site are those for sites with less than or equal to 200 centimeters of rainfall per year and where a drinking water source is threatened (DOH, 2000).

Other relevant remediation goals for the soil at this site are the Region 9 EPA preliminary remediation goals (PRGs). The PRGs for soil in residential areas are applicable to the site. However, the DOH Tier 1 Action Levels for soil (SAL) take precedence over the EPA residential PRGs.

Additionally, the analytical results were compared to the proposed DOH Environmental Action Levels (EALs). The EALs have been proposed by the DOH as screening levels; the EALs are not to be promulgated as "clean up standards," however, sites with chemicals in exceedance of the EALs may require additional evaluation. The EALs for soil less than 150 meters to surface water body and where the groundwater is a current or potential source of drinking water are applicable to the site.

4.0 FIELD ACTIVITIES

On April 5, 2005, Clayton supervised Maui Lani personnel the excavation of four test pits in the suspected area of the release. Each test pit was approximately 2 feet wide, 3 feet long and 2 feet deep. A backhoe was used to excavate the test pits. A site plan showing the test pits location is presented as Figure 2, located behind the *Figures* tab.

The first test pit, TP-1, was positioned in the center of the suspected area of the release. The soil was first loosened with the backhoe, and a soil sample was collected from approximately 6 inches below ground surface (bgs). The soil sample was placed in a self-sealing plastic bag and allowed to volatilize for at least 10 minutes until it had attained ambient temperature. The soil was then subjected to field headspace analysis using a photo-ionization detector (PID) following DOH guidelines. The PID measurement indicated the concentration of volatiles in the sample headspace was 44 parts per million (ppm). Next, TP-1 was excavated to approximately 1-foot bgs, and another sample was collected and analyzed for volatiles using a PID meter. The PID measurement did not indicate a concentration of volatiles in the sample headspace. TP-1 was then excavated to approximately 2 feet bgs and another sample was collected and analyzed for volatiles using a PID meter. The PID measurement did not indicate a concentration of volatiles in the sample headspace.

The second test pit, TP-2 was positioned approximately three feet to the east of TP-1. TP-2 was excavated to a total depth of 2 feet. Samples were taken at 1-foot increments and analyzed for volatiles using a PID meter. The PID measurement did not indicate a concentration of volatiles in the sample headspace.

The third test pit, TP-3 was positioned approximately three feet to the west of TP-1. TP-3 was excavated to a total depth of 2 feet. Samples were taken at 1-foot increments and analyzed for volatiles using a PID meter. The PID measurement did not indicate a concentration of volatiles in the sample headspace.

The fourth test pit, TP-4 was position directly adjacent to TP-1, to the north. TP-4 was excavated to a total depth of 2 feet. Two soil samples were collected, one at 1 foot bgs (SS1-1.0) and one at 2 feet bgs (SS1-2.0).

The soil samples collected for BTEX analysis were collected with Encore™ samplers. The Encore™ samples were collected immediately upon excavation, labeled, and immediately placed on dry and gel ice.

One 8-ounce glass jar at each depth was collected for the TPH, PAH, and lead analysis. The samples were placed into a cooler with dry and gel ice. The samples were transported to Columbia Analytical Services, Inc. under standard chain-of-custody protocols.

4.1 LABORATORY ANALYTICAL METHODS

The soil samples were submitted to Columbia Analytical Services in Canoga Park, California, for laboratory analysis. The laboratory methods are listed in the table below. The laboratory followed the procedures outlined in the EPA publication SW-846. The acceptable ranges for precision, accuracy, repetitiveness, completeness, and comparability parameters for the analytical data were those specified in SW-846 and Oceanic Analytical Laboratory's internal quality assurance/quality control (QA/QC) procedures. The laboratory analytical results are summarized in the table located behind the *Table* tab. The laboratory reports and chain of custody records are presented in Appendix B.

Laboratory Analytical Methods

Parameter	Method
TPH-scan	EPA Method 8015M
PAH	EPA Method 8270 SIM
BTEX	EPA Method 8021B
Total Lead	EPA Method 6020

5.0 ANALYTICAL RESULTS

On April 5, 2005, Clayton collected a total of two soil samples (SS1-1.0 and SS1-2.0) from test pit, TP-4. The table, presented behind the *Table* Tab, provides a summary of laboratory analytical results for the soil samples collected during this investigation.

The soil samples were collected at depths of 1 foot bgs and 2 feet bgs. The soil samples were submitted for laboratory analyses for TPH-scan, BTEX, PAHs, and total lead.

TPH (Gasoline Range Organics [GRO], Diesel Range Organics [DRO], and Heavy Range Organics [HRO]) were detected in both the soil samples. The concentration of TPH-GRO was 54 mg/kg and 8 mg/kg in soil samples SS1-1.0 and SS1-2.0, respectively. These concentrations were below the DOH-SAL, and EAL for TPH-GRO. There was no standard for TPH-GRO under the PRGs at the time of this report.

The concentration of TPH-DRO was 730 mg/kg and 110 mg/kg in soil samples SS1-1.0 and SS1-2.0, respectively. These concentrations were below the DOH-SAL for TPH-DRO. There was no standard for TPH-DRO under the PRGs at the time of this report. The DOH-EAL for TPH has two Action levels; the first Action Level is for nuisance concerns and is recommended for soils exposed or potentially exposed at the ground surface (minimum ten feet bgs for residential sites with private yards and three feet bgs for other land use scenarios). The second Action Level is based on potential leaching concerns. Soil sample SS1-1.0 exceeds the DOH-SAL for nuisance concerns of 500 mg/kg.

The concentration of TPH-HRO was 12,000 mg/kg and 2,000 mg/kg in soil samples SS1-1.0 and SS1-2.0, respectively. Soil sample SS1-1.0 exceeds both the DOH-SAL and the EAL of 5,000 mg/kg. Soil sample SS1-2.0 was below the DOH-SAL of 5,000 mg/kg, yet above the EAL for nuisance concerns of 500 mg/kg. There is no standard for TPH-GRO under the PRGs at the time of this report.

Lead was detected in both of the soil samples. The lead concentration was 2.4 mg/kg and 2.1 mg/kg in soil sample SS1-1.0 and SS1-2.0, respectively. These concentrations were below the DOH-SAL, EALs, and PRG-Rs for lead.

One of the VOC analytes analyzed was detected above laboratory Method Reporting Limit (MRL) in the soil samples. Toluene was detected in SS1-1.0 at a concentration of 0.00038 mg/kg. However, this concentration was below the DOH-SAL, EAL, and PRG-R for toluene.

Two of the PAH analytes analyzed were detected above laboratory MRL in the soil samples. Dibenzofuran was detected in SS1-1.0 and SS1-2.0 at a concentration of 0.240 mg/kg and 0.013 mg/kg, respectively; and phenanthrene was detected in SS1-1.0 at a concentration of 0.0067 mg/kg. These concentrations were below the DOH-SALs, EALs, and PRG-Rs for the PAH analytes listed above.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Maui Lani 100, LLC retained Clayton Group Services, Inc. (Clayton) to conduct release response activities at the Maui Lani Development property located on the vacant parcel (Tax Map Key: [2] 3-8-7: Parcel 131 [portion]) in Kahului, Maui, Hawaii. The purpose of this project was to sample and analyze the soil at the site for chemical impacts resulting from the release associated with a damaged 55-gallon drum.

On April 5, 2005, a total of four test pits were excavated at the release site. Concentrations of TPH-GRO, BTEX, PAHs, and lead, in the soil were not detected above the laboratory MRL. One of the BTEX analytes and two of the PAH analytes were detected above the MRL in the soil samples, yet they were not detected above the applicable action levels.

The EALs for TPH has two Action Levels; the first Action Level is for nuisance concerns and is recommended for soils exposed or potentially exposed at the ground surface (minimum ten feet bgs for residential sites with private yards and three feet bgs for other land use scenarios). The second Action Level is based on potential leaching concerns.

Laboratory analysis of soil sample SS1-1.0 indicated a concentration of TPH-DRO above the EAL for nuisance concerns; and laboratory analysis of soil sample SS1-2.0 indicated a concentration of TPH-HRO above the EAL for nuisance concerns. In addition, laboratory analysis of SS1-2.0 indicated a concentration of TPH-DRO above both the DOH-SAL and EAL for leaching potential and nuisance concerns.

Clayton recommends that the TPH contaminated soil be properly excavated and disposed of prior to development of the land.

7.0 LIMITATIONS

This report is for the exclusive use of Maui Lani 100, LLC and no other party shall have any right to rely on any service provided by Clayton without prior written consent. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Clayton in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made. Clayton will not distribute or publish this report without consent except as required by law or court order.

This report prepared by:

Mery Apple
Environmental Consultant
Honolulu Regional Office

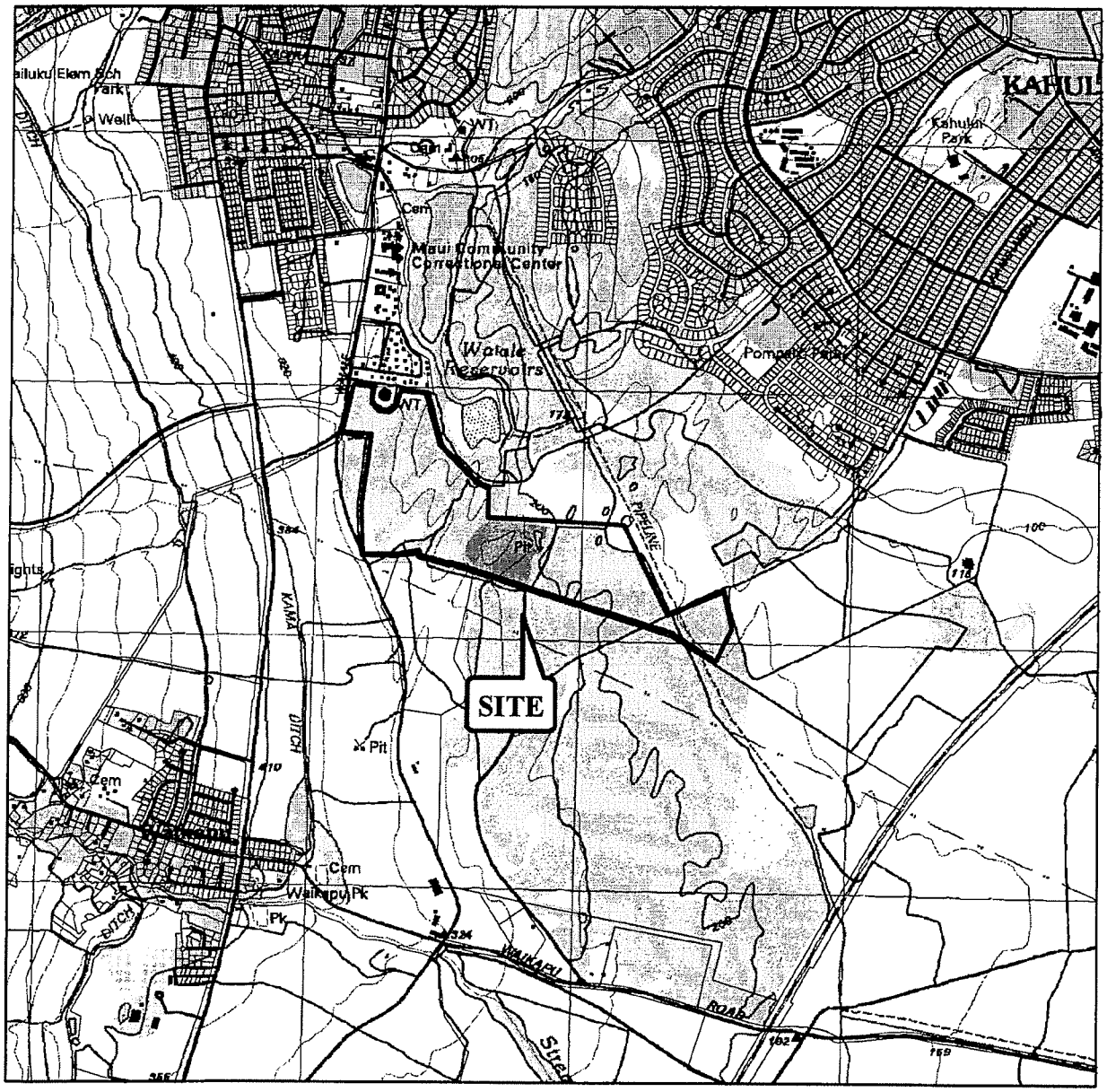
This report reviewed by:

Daniel P. Ford, R.G.
Vice President
Honolulu Regional Office

April 26, 2005

Clayton
GROUP SERVICES

FIGURES



SCALE 1:24,000

1 0.5 0 1 Miles

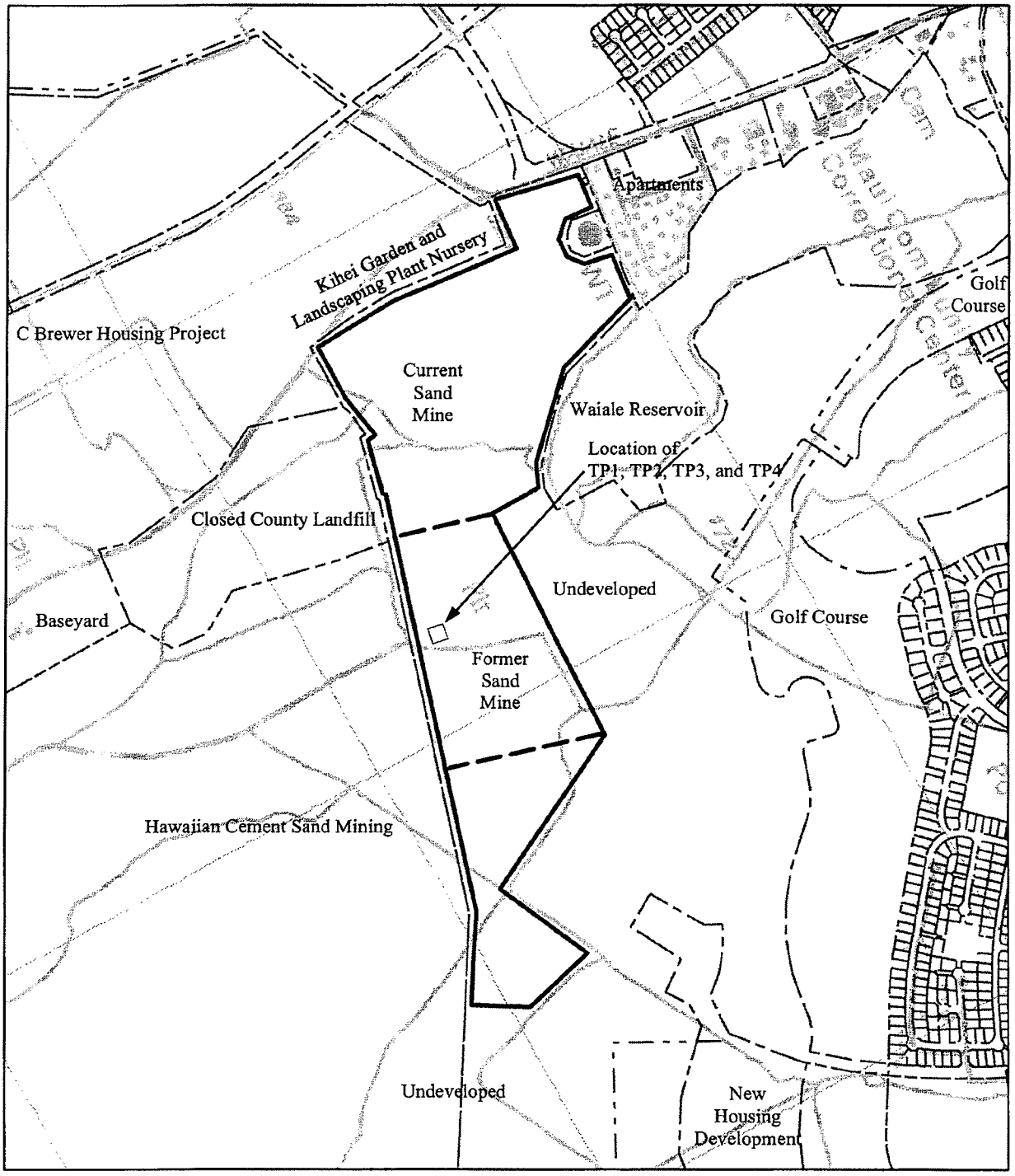
1,000 500 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 Feet

1 0.5 0 1 Kilometers

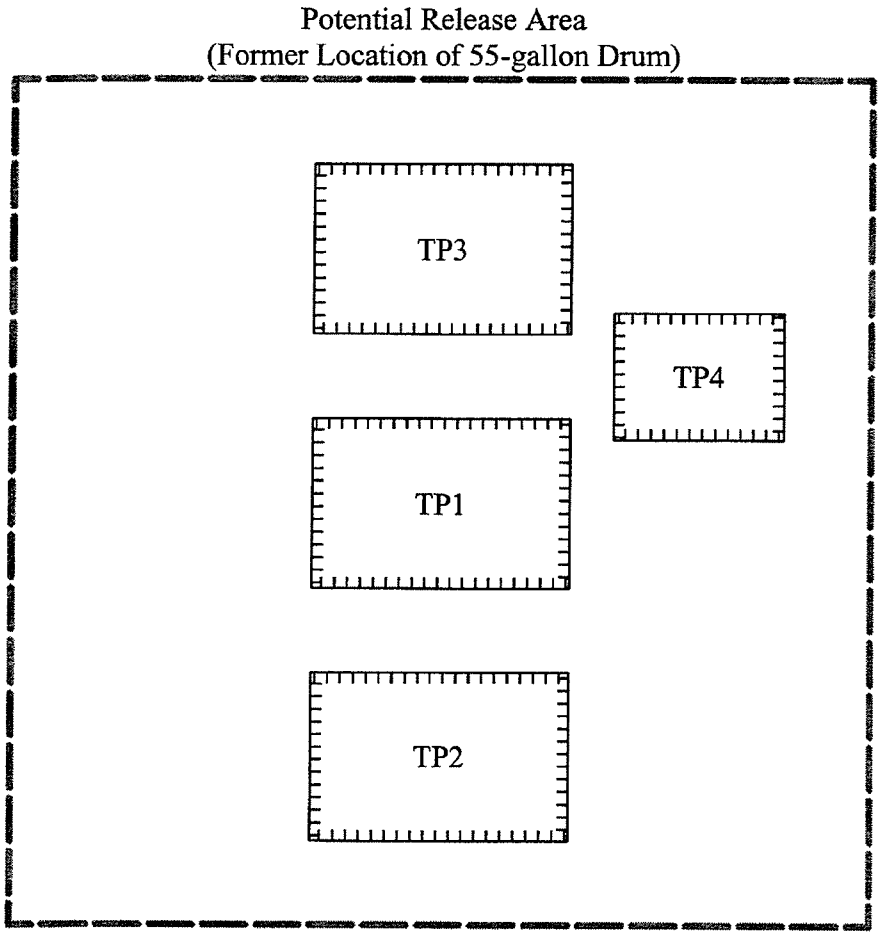
N

Portion of 7.5-minute Series (Topographic) Maps
United States Department of Interior
United States Geological Survey
Wailuku Quadrangle, Maui County, Hawaii
1997

Clayton GROUP SERVICES	Project No.: 85-05246.00	Title: Site Location Map	FIGURE 1
	Date: 04/13/2005	Location: Release Response for Maui Lani Development Site Kahului, Maui, Hawaii	
	Revised By: JT		
	Checked By: MA	Client: Maui Lani Partners	



Clayton GROUP SERVICES	Project No.: 85-05246.00	Title: Site Vicinity Map	FIGURE 2
	Date: 04/13/2005	Location: Release Response for Maui Lani Development Site Kahului, Maui, Hawaii	
	Revised By: JT		
	Checked By: MA	Client: Maui Lani Partners	



N

Scale 1" = 2'

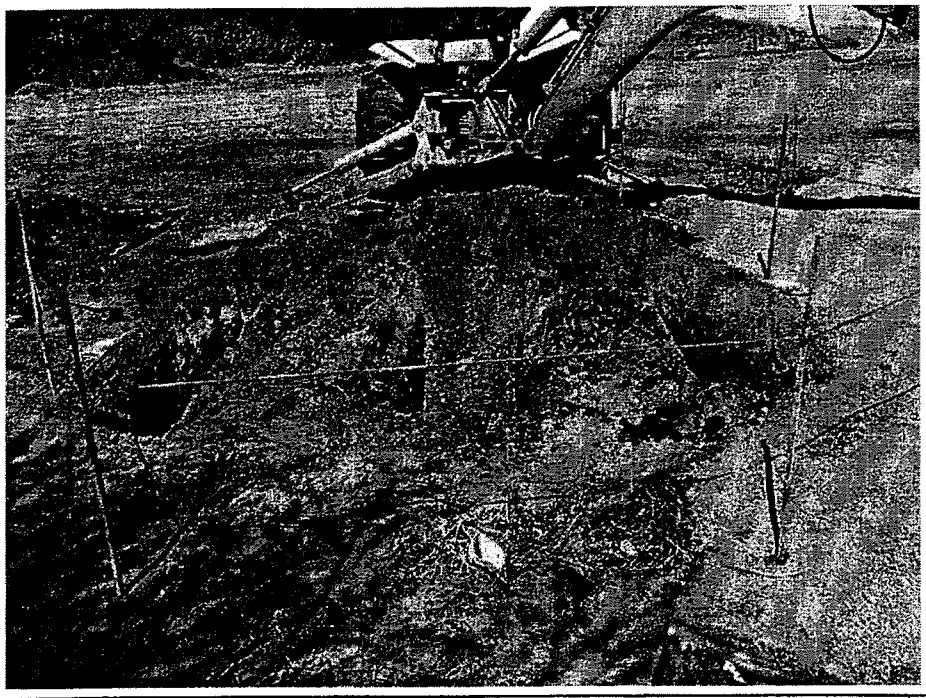
Clayton GROUP SERVICES	Project No.: 85-05246.00 Date: 04/19/2005 Revised by: JT Checked by: MA	Title: Test Pit Locations Location: 130-Acres at the Maui Lani Development Site Kahului, Maui, Hawaii Client: Maui Lani Partners	FIGURE 3

Clayton
GROUP SERVICES

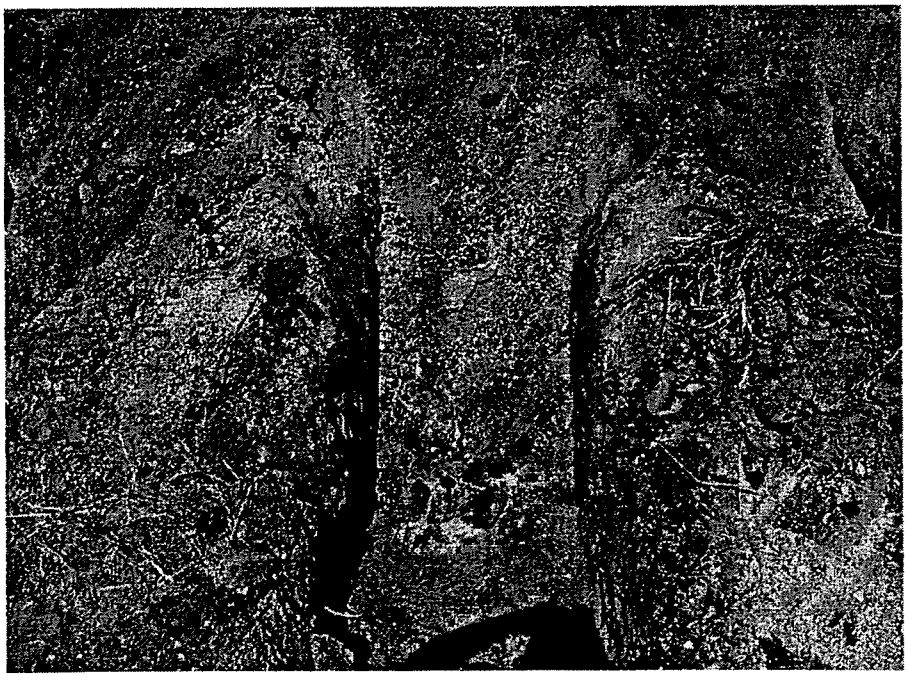
PHOTOGRAPHS

Clayton Project No.	Description	Release location prior to excavation	Photo 1
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05

Clayton Project No.	Description	Equipment used to excavate	Photo 2
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05



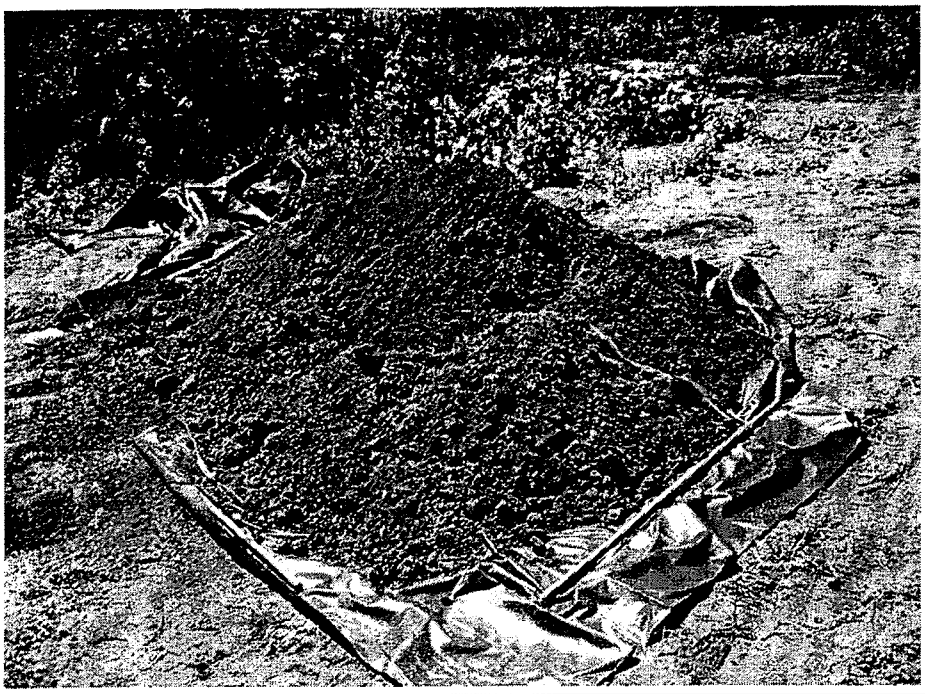
Clayton Project No.	Description	Overview of excavated tests pits	Photo 3
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05



Clayton Project No.	Description	Test pit 1	Photo 4
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05

Clayton Project No.	Description	Test pit 2	Photo 5
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05

Clayton Project No.	Description	Test pit 3	Photo 6
85-05246.00	Site Name	Release Response for Maui Lani Development Site	Photo Date
	Client	Maui Lani Partners	04/05/05



Clayton Project No.			
85-05246.00	**Description**	Stockpile of soil excavated from test pits	**Photo 7**
	Site Name	Release Response for Maui Lani Development Site	**Photo Date**
	Client	Maui Lani Partners	04/05/05

Clayton Project No.			
85-05246.00	**Description**	Release site after backfilling test pits	**Photo 8**
	Site Name	Release Response for Maui Lani Development Site	**Photo Date**
	Client	Maui Lani Partners	04/05/05

Clayton
GROUP SERVICES

TABLE

Clayton GROUP SERVICES

Table
Summary of Laboratory Analytical Results for Soil
Maui Lani Development
Kahului, Maui, Hawaii

Clayton Project No. 85-05246.00

Analyte	SS1-1.0 depth 1 ft (mg/kg)	SS1-2.0 depth 2 ft (mg/kg)	DOH SAL (mg/kg)	EPA PRG-R (mg/kg)	DOH EAL (mg/kg)
Total Petroleum Hydrocarbon (TPH) / EPA Method 8015M					
TPH - Gasoline Range Organics	54	8	2,000	NS	100/2,000
TPH - Diesel Range Organics	**730**	110	5,000	NS	500/5,000
TPH - Heavy Range Organics	**12,000**	**2000**	5,000	NS	500/5,000
Metals/ EPA Methods 1311/6010B/7470					
Lead-6010B	2.4	2.1	400	400	200
Volatile Organic Compounds (VOCs) / EPA Method 8260B					
Benzene	ND<0.0044	ND<0.0044	0.05	0.64	0.22
Toluene	0.00038	ND<0.0034	16	520	2.9
Ethylbenzene	ND<0.0027	ND<0.0027	0.5	200	3.3
Xylenes (total)	ND<0.0087	ND<0.0087	23	270	2.3
Polynuclear Aromatic Hydrocarbons (PAHs)/ EPA Method 8310					
Naphthalene	ND<0.0080	ND<0.0080	41	56	23
2-Methylnaphthalene	ND<0.0050	ND<0.0050	NS	NS	0.25
Acenaphthylene	ND<0.012	ND<0.012	NS	NS	13
Acenaphthene	NS<0.0084	NS<0.0084	18	3,700	16
Dibenzofuran	0.240	0.013	NS	NS	NS
Fluorene	NS<0.0043	NS<0.0043	NS	2,700	8.9
Phenanthrene	0.0067	ND<0.0041	NS	NS	11
Anthracene	NS<0.0060	NS<0.0060	NS	22,000	2.8
Fluoranthene	NS<0.0044	NS<0.0044	11	2,300	40
Pyrene	NS<0.0044	NS<0.0044	NS	2,300	85
Benz(a)anthracene	NS<0.0052	NS<0.0052	NS	0.62	6.2
Chrysene	NS<0.0031	NS<0.0031	NS	62	23
Benzo(b)fluoranthene	NS<0.0040	NS<0.0040	NS	0.62	6.2
Benzo(k)fluoranthene	NS<0.0067	NS<0.0067	NS	6.2	37
Benzo(a)pyrene	NS<0.0070	NS<0.0070	1	0.062	0.62
Indeno(1,2,-cd)pyrene	NS<0.0029	NS<0.0029	NS	0.62	6.2
dibenz(a,h)anthracene	NS<0.025	NS<0.025	NS	0.062	0.62
Benzo(g,h,I)perylene	NS<0.0036	NS<0.0036	NS	NS	27

NOTES

mg/Kg	milligrams per kilogram (parts per million)
DOH SAL	Hawaii DOH Tier 1 Soil Action Level (SAL) for sites where drinking water is threatened and annual rainfall is <200 cm. per year
<	Value after the "less than" symbol is the Method Reporting Limit (MRL)
MRL	Method Reporting Limit
NS	No regulatory standard established
ND	Not Detected at or above the MRL
PRG-R	The Environmental Protection Agency (EPA) Preliminary Remediation Goal (PRG) for residential soil
- -	Not Analyzed
DOH EAL	Hawaii DOH - DRAFT Environmental Action Levels for groundwater that is considered a current or potential source of drinking water and the distance to a surface water body is greater than 150 meters

TPH Action Levels must be used in conjunction with related chemicals (e.g. BTEX, PAHs, oxidizers, etc.) TPH Soil Action Levels: First Action level based on potential nuisance concerns. Second Action Level based on potential leaching concerns. Action Levels for nuisance concerns recommended for soils exposed or potentially exposed at the ground surface (minimum ten feet below ground surface for residential sites with private yards and three feet below ground surface for other land use scenarios).

APPENDIX A

LIST OF SOURCES/REFERENCES

REFERENCES

United States Geological Survey (USGS). 1998. *7.5 Minute Topographic Map,* Wailuku, *Hawaii Quadrangle.*

State of Hawaii Department of Land and Natural Resources. 2001. *Ground Water Index and Summary.*

State of Hawaii Department of Health Solid and Hazardous Waste Branch, 2000. *Technical Guidance Manual for Underground Storage Tank Closure and Release Response, Second Edition.* Hawaii Administrative Rules Title 11 Department of Health Chapter 281 Underground Storage Tanks. March 2000.

State of Hawaii Department of Health Hazard Evaluation and Emergency Response Office. 1997. *Hazard Evaluation and Response (HEER) Office Technical Guidance Manual.* State of Hawaii Superfund Program Chapter 128D and Title 451. March 1997.

Mink, J.F. and L.S. Lau. 1990. *Aquifer Identification and Classification for Maui: Groundwater Protection Strategy for Hawaii. Technical Report No. 185.* Honolulu: Water Resources Research Center, University of Hawaii.

U.S. Department of Agriculture Soil Conservation Service (USDA-SCS) in cooperation with the University of Hawaii Agricultural Experiment Station. 1972. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.*

APPENDIX B

LABORATORY ANALYTICAL REPORTS, QA/QC DATA, AND CHAIN OF CUSTODY RECORDS

Columbia Analytical Services, Inc.

Acronyms

8015M	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
COD	Chemical Oxygen Demand
CRDL	Contract Required Detection Limit
D	Detected; result must be greater than zero.
DL	Detected; result must be greater than the detection limit.
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl-*tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

Qualifiers

U	Undetected at or above MDL/MRL (PQL).
J	Estimated concentration. Analyte detected above MDL but below MRL (PQL).
B	Hit above MRL (PQL) also found in Method Blank.
E	Analyte concentration above high point of ICAL.
D	Result from dilution.
X	See case narrative.

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00

Service Request: L0500586

Cover Page - Organic Analysis Data Package
BTEX by 8021B

Sample Name	Lab Code	Date Collected	Date Received
SS1 -1.0	L0500586-001	04/05/2005	04/06/2005
SS1 -2.0	L0500586-002	04/05/2005	04/06/2005

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sue Anderson
Name: Sue Anderson
Date: 4/8/05
Title: Project Chemist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/06/2005

BTEX by 8021B

Sample Name:	SS1 -1.0	**Units:**	ug/Kg
Lab Code:	L0500586-001	**Basis:**	Wet
Extraction Method:	EPA 5035	**Level:**	Low
Analysis Method:	8021B		

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	4.9	0.44	1	04/07/05	04/07/05	LWG0501324	
Toluene	**0.38**	J	4.9	0.34	1	04/07/05	04/07/05	LWG0501324	
Ethylbenzene	ND	U	4.9	0.27	1	04/07/05	04/07/05	LWG0501324	
Xylenes, Total	ND	U	15	0.87	1	04/07/05	04/07/05	LWG0501324	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	59	51-118	04/07/05	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/06/2005

BTEX by 8021B

Sample Name:	SS1 -2.0	**Units:**	ug/Kg
Lab Code:	L0500586-002	**Basis:**	Wet
Extraction Method:	EPA 5035	**Level:**	Low
Analysis Method:	8021B		

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	5.0	0.44	1	04/07/05	04/07/05	LWG0501324	
Toluene	ND	U	5.0	0.34	1	04/07/05	04/07/05	LWG0501324	
Ethylbenzene	ND	U	5.0	0.27	1	04/07/05	04/07/05	LWG0501324	
Xylenes, Total	ND	U	15	0.87	1	04/07/05	04/07/05	LWG0501324	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	72	51-118	04/07/05	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586
Date Collected: NA
Date Received: NA

BTEX by 8021B

Sample Name: Method Blank
Lab Code: LWG0501324-3

Extraction Method: EPA 5035
Analysis Method: 8021B

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	5.0	0.44	1	04/07/05	04/07/05	LWG0501324	
Toluene	ND	U	5.0	0.34	1	04/07/05	04/07/05	LWG0501324	
Ethylbenzene	ND	U	5.0	0.27	1	04/07/05	04/07/05	LWG0501324	
Xylenes, Total	ND	U	15	0.87	1	04/07/05	04/07/05	LWG0501324	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	90	51-118	04/07/05	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586

Surrogate Recovery Summary
BTEX by 8021B

Extraction Method: EPA 5035
Analysis Method: 8021B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
SS1 -1.0	L0500586-001	59
SS1 -2.0	L0500586-002	72
Method Blank	LWG0501324-3	90
Lab Control Sample	LWG0501324-1	94
Duplicate Lab Control Sample	LWG0501324-2	93

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromofluorobenzene	51-118

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Extracted:**	04/07/2005
Sample Matrix:	Soil	**Date Analyzed:**	04/07/2005

Lab Control Spike/Duplicate Lab Control Spike Summary
BTEX by 8021B

Extraction Method:	EPA 5035	**Units:**	ug/Kg
Analysis Method:	8021B	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	LWG0501324

	Lab Control Sample LWG0501324-1 Lab Control Spike			Duplicate Lab Control Sample LWG0501324-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Benzene	21.9	25.0	87	22.6	25.0	90	82-115	3	30
Toluene	22.6	25.0	90	23.2	25.0	93	76-110	3	30
Ethylbenzene	22.8	25.0	91	23.6	25.0	95	78-112	4	30
Xylenes, Total	68.9	75.0	92	71.4	75.0	95	79-113	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Columbia Analytical Services, Inc.
An Employee-Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

Project Name: Maui Lani	Project Number: 85-05246.00
Project Manager: DAN FORD	Report CC:
Company/Address: Clayton Group Services 970 N. Kalaheo Ave C-316 Kailua, HI 96734	
Phone #: (808) 531-6708	FAX#: (808) 537-4084
Sampler's Signature:	Sampler's Printed Name: MERY APPLE

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

NUMBER OF CONTAINERS

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	TPH Gas 8015m (purgeable)	TPH Diesel 8015m (extractable) ☐ Fuel Char. ☒	BTEX ☒ MTBE ☐ 8021 / 602	Halogenated Volatiles 8260	VOA by GCMS ☐ Oxygenates ☐ 8260 / 624	SemiVOA by GCMS 8270 / 625	Pesticides ☐ PCBs ☐ 8081 / 8082 / 608	CCR Metals (17) 6010/6020/7000/200.7/200.8	TOTAL LEAD (6020 or 7420)	PAHs (8310)	
SS1 - 1.0	1	4/5/05	1040	Soil			X	X					X	X	
SS2 - 2.0	2	4/5/05	1100	Soil			X	X					X	X	

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

H250061

TURNAROUND REQUIREMENTS
X RUSH (SURCHARGES APPLY)
PLEASE CIRCLE WORK DAYS
(1) 2 3 4
_____ STANDARD
REQUESTED FAX DATE ASAP
REQUESTED REPORT DATE ASAP

REPORT REQUIREMENTS
_____ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
MRL ___Yes ___No
PQL/MDUJ ___Yes ___No
Edata ___Yes ___No

INVOICE INFORMATION
PO#
BILL TO:

Lab No: L0500586

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: MERY APPLE	Printed Name: EMIL DACAYANAN	Printed Name: EMIL DACAYANAN	Printed Name: Tracie Sober	Printed Name: Tracie Sober	Printed Name: Lorraine Kukita
Firm: Clayton Group Services	Firm: CAS/TGN	Firm: CAS/TGN	Firm: CAS	Firm: CAS	Firm: CAS
Date/Time: 4/6/05 0830	Date/Time: 4/6/05 0830	Date/Time: 4/6/05 0915	Date/Time: 4/6/05 0915	Date/Time: 4/6/05 1159	Date/Time: 4/7/05 0840

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0603-15

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Clayton Group Services, Incorporated

Service Request: L0500586

Project No.: 85-05246.00

Project Name: Maui Lani

Sample No.	Lab Sample ID.
SS1 -1.0	L0500586-001
SS1 -1.0S	L0500586-001S
SS1 -1.0SD	L0500586-001SD
SS1 -2.0	L0500586-002

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Joe Anderson Date: 4/11/05

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Clayton Group Services, Incorporated	Service Request:	L0500586
Project No.:	85-05246.00	Date Collected:	
Project Name:	Maui Lani	Date Received:	
Matrix:	SOIL	Units:	mg/Kg
		Basis:	WET

Sample Name: SS1 -1.0 Lab Code: L0500586-001

Analyte		Analysis Method	PQL	MDL	Dil.	Date Digested	Date Analyzed	Result	Q
Lead	Total	6020	0.40	0.050	1	04/08/05	4/8/05	2.4	

% Solids: 100.0

Comments:

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Clayton Group Services, Incorporated	Service Request:	L0500586
Project No.:	85-05246.00	Date Collected:	04/05/05
Project Name:	Maui Lani	Date Received:	04/06/05
Matrix:	SOIL	Units:	mg/Kg
		Basis:	WET

Sample Name: SS1 -2.0 Lab Code: L0500586-002

Analyte		Analysis Method	PQL	MDL	Dil.	Date Digested	Date Analyzed	Result	Q
Lead	Total	6020	0.40	0.050	1	04/08/05	4/8/05	2.1	

% Solids: 100.0

Comments:

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Clayton Group Services, Incorporated	Service Request:	L0500586
Project No.:	85-05246.00	Date Collected:	N/A
Project Name:	Maui Lani	Date Received:	N/A
Matrix:	SOIL	Units:	mg/Kg
		Basis:	N/A

Sample Name: Method Blank Lab Code: MB050408S-1

Analyte		Analysis Method	PQL	MDL	Dil.	Date Digested	Date Analyzed	Result	Q
Lead	Total	6020	0.40	0.05	1	04/08/05	4/8/05	ND	

% Solids: 100.0

Comments:

Columbia Analytical Services

Analytical Report

MATRIX SPIKE/DUPLICATE MATRIX SPIKE SUMMARY

Client:	Clayton Group Services, Incorporated	Service Request:	L0500586
Project No.:	85-05246.00	Units:	mg/Kg
Project Name:	Maui Lani	Basis:	WET
Matrix:	SOIL	% Solids:	100.0

Sample Name: SS1 -1.0SD Lab Code: L0500586-001SD

Analyte	Prep Method	Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	% Rec Acceptance Limits	Result Notes
Lead	EPA 3050	6020	0.40	100.0	100.0	2.36	88.99	90.77	87	88	49 - 135	

- 6 -
DUPLICATES

Client:	Clayton Group Services, Incorporated	Service Request:	L0500586
Project No.:	85-05246.00	Units:	mg/Kg
Project Name:	Maui Lani	Basis:	WET
Matrix:	SOIL	% Solids:	100.0

Sample Name: SS1 -1.0SD Lab Code: L0500586-001SD

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	0-20	88.99		90.77		2.0		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

LABORATORY CONTROL SAMPLE

Client: Clayton Group Services, Incorporated

Service Request: L0500586

Project No.: 85-05246.00

Project Name: Maui Lani

Analyte	Units	True Value	Result	C	% Recovery	Qual	Acceptance Limits	Date	Analytical Time	Method
Sample ID:	LCS050408S-1									
Lead	mg/Kg	100	93.5		94		81.0 - 105.0	04/08/05	16:33	6020

6925 Canoga Avenue Canoga Park, California 91303 (818) 587-5550 ph (818) 587-5555 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 14, 2005

Dan Ford
Clayton Group Services, Incorporated
970 North Kalaheo Avenue, Suite C-316
Kailua, HI 96734

RE: Maui Lani/Project #85-05246.00

Dear Dan:

Enclosed are the results of the samples submitted to our laboratory on April 6, 2005. For your reference, these analyses have been assigned our service request number L0500586.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 31 pages.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 1296A); NELAP (certificate number: 02115CA); Los Angeles County Laboratory ID (No. 10151); and Arizona Department of Health Services (License number: AZ0136 and AZ0544).

If you have any questions, please call me at (818) 587-5550, extension 309.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Chemist

SA

Columbia Analytical Services, Inc.

Acronyms

8015M	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
COD	Chemical Oxygen Demand
CRDL	Contract Required Detection Limit
D	Detected; result must be greater than zero.
DL	Detected; result must be greater than the detection limit.
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl-*tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater* 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

Qualifiers

U	Undetected at or above MDL/MRL (PQL).
J	Estimated concentration. Analyte detected above MDL but below MRL (PQL).
B	Hit above MRL (PQL) also found in Method Blank.
E	Analyte concentration above high point of ICAL.
D	Result from dilution.
X	See case narrative.

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Clayton Group Services, Incorporated	**Service Request No.:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Received:**	4/6/05
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS) and Laboratory/Duplicate Laboratory Control Sample (LCS/DLCS).

Sample Receipt

The samples were received for analysis at Columbia Analytical Services on April 6, 2005. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C/frozen at –20°C upon receipt at the laboratory.

BTEX by EPA Method 8021B

Due to the nature of the matrices the Laboratory Control Sample was analyzed in duplicate for QC purposes.

PAHs by Selective Ion Monitoring (SIM) by EPA Method 8270C-SIM

Samples SS1-1.0 (L0500586-001) and SS1-2.0 (L0500586-002) required dilution due to the viscous nature of the sample extract. The reporting limits have been adjusted to reflect the dilution.

The internal standard recoveries of Chrysene-d12 and Perylene-d12 in samples SS1-1.0 (L0500586-001) and SS1-2.0 (L0500586-002) were outside control criteria because of suspected matrix interference. The samples were reanalyzed to confirm the original results. The results quantified using this internal standard have been flagged "X" to indicate the discrepancy.

The control criteria were exceeded for all surrogates in sample SS1-1.0 (L0500586-001) due to suspected matrix interferences. The dark yellow, viscous nature of the sample extract was suspected of adversely affecting the recovery. No further corrective action was appropriate.

Approved by _____ **Date** 4/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Clayton Group Services, Incorporated	**Service Request No.:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Received:**	4/6/05
Sample Matrix:	Soil		

Due to the nature of the matrices the Laboratory Control Sample was analyzed in duplicate for QC purposes.

Hydrocarbon Scan/Fuel Characterization by EPA Method 8015M

All anomalies have been footnoted on the Analytical Report pages.

Total Lead by EPA Method 6020

No anomalies were encountered.

Approved by _____ **Date** 4/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00

Service Request: L0500586

Cover Page - Organic Analysis Data Package
PAHs by Selective Ion Monitoring (SIM)

Sample Name	Lab Code	Date Collected	Date Received
SS1 -1.0	L0500586-001	04/05/2005	04/06/2005
SS1 -2.0	L0500586-002	04/05/2005	04/06/2005

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sue Anderson
Name: Sue Anderson
Date: 4/14/05
Title: Project Chemist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/06/2005

PAHs by Selective Ion Monitoring (SIM)

Sample Name:	SS1 -1.0	**Units:**	ug/Kg
Lab Code:	L0500586-001	**Basis:**	Wet
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	SIM-PAH		

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	100	8.0	10	04/08/05	04/12/05	LWG0501370	
2-Methylnaphthalene	ND	U	100	5.0	10	04/08/05	04/12/05	LWG0501370	
Acenaphthylene	ND	U	100	12	10	04/08/05	04/12/05	LWG0501370	
Acenaphthene	ND	U	100	8.4	10	04/08/05	04/12/05	LWG0501370	
Dibenzofuran	240	D	100	3.1	10	04/08/05	04/12/05	LWG0501370	
Fluorene	ND	U	100	4.3	10	04/08/05	04/12/05	LWG0501370	
Phenanthrene	6.7	JD	100	4.1	10	04/08/05	04/12/05	LWG0501370	
Anthracene	ND	U	100	6.0	10	04/08/05	04/12/05	LWG0501370	
Fluoranthene	ND	U	100	4.4	10	04/08/05	04/12/05	LWG0501370	
Pyrene	ND	UX	100	4.4	10	04/08/05	04/12/05	LWG0501370	
Benz(a)anthracene	ND	UX	100	5.2	10	04/08/05	04/12/05	LWG0501370	
Chrysene	ND	UX	100	3.1	10	04/08/05	04/12/05	LWG0501370	
Benzo(b)fluoranthene	ND	UX	100	4.0	10	04/08/05	04/12/05	LWG0501370	
Benzo(k)fluoranthene	ND	UX	100	6.7	10	04/08/05	04/12/05	LWG0501370	
Benzo(a)pyrene	ND	UX	100	7.0	10	04/08/05	04/12/05	LWG0501370	
Indeno(1,2,3-cd)pyrene	ND	UX	100	2.9	10	04/08/05	04/12/05	LWG0501370	
Dibenz(a,h)anthracene	ND	UX	100	25	10	04/08/05	04/12/05	LWG0501370	
Benzo(g,h,i)perylene	ND	UX	100	3.6	10	04/08/05	04/12/05	LWG0501370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Nitrobenzene-d5	180	34-127	04/12/05	Outside Control Limits
2-Fluorobiphenyl	135	39-111	04/12/05	Outside Control Limits
Terphenyl-d14	160	50-149	04/12/05	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/06/2005

PAHs by Selective Ion Monitoring (SIM)

Sample Name:	SS1 -2.0	**Units:**	ug/Kg
Lab Code:	L0500586-002	**Basis:**	Wet
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	SIM-PAH		

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	100	8.0	10	04/08/05	04/12/05	LWG0501370	
2-Methylnaphthalene	ND	U	100	5.0	10	04/08/05	04/12/05	LWG0501370	
Acenaphthylene	ND	U	100	12	10	04/08/05	04/12/05	LWG0501370	
Acenaphthene	ND	U	100	8.4	10	04/08/05	04/12/05	LWG0501370	
Dibenzofuran	13	JD	100	3.1	10	04/08/05	04/12/05	LWG0501370	
Fluorene	ND	U	100	4.3	10	04/08/05	04/12/05	LWG0501370	
Phenanthrene	ND	U	100	4.1	10	04/08/05	04/12/05	LWG0501370	
Anthracene	ND	U	100	6.0	10	04/08/05	04/12/05	LWG0501370	
Fluoranthene	ND	U	100	4.4	10	04/08/05	04/12/05	LWG0501370	
Pyrene	ND	U	100	4.4	10	04/08/05	04/12/05	LWG0501370	
Benz(a)anthracene	ND	U	100	5.2	10	04/08/05	04/12/05	LWG0501370	
Chrysene	ND	U	100	3.1	10	04/08/05	04/12/05	LWG0501370	
Benzo(b)fluoranthene	ND	UX	100	4.0	10	04/08/05	04/12/05	LWG0501370	
Benzo(k)fluoranthene	ND	UX	100	6.7	10	04/08/05	04/12/05	LWG0501370	
Benzo(a)pyrene	ND	UX	100	7.0	10	04/08/05	04/12/05	LWG0501370	
Indeno(1,2,3-cd)pyrene	ND	UX	100	2.9	10	04/08/05	04/12/05	LWG0501370	
Dibenz(a,h)anthracene	ND	UX	100	25	10	04/08/05	04/12/05	LWG0501370	
Benzo(g,h,i)perylene	ND	UX	100	3.6	10	04/08/05	04/12/05	LWG0501370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Nitrobenzene-d5	85	34-127	04/12/05	Acceptable
2-Fluorobiphenyl	80	39-111	04/12/05	Acceptable
Terphenyl-d14	110	50-149	04/12/05	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586
Date Collected: NA
Date Received: NA

PAHs by Selective Ion Monitoring (SIM)

Sample Name: Method Blank
Lab Code: LWG0501370-3

Extraction Method: EPA 3550
Analysis Method: SIM-PAH

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	Result	Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	10	0.80	1	04/08/05	04/12/05	LWG0501370	
2-Methylnaphthalene	ND	U	10	0.50	1	04/08/05	04/12/05	LWG0501370	
Acenaphthylene	ND	U	10	1.2	1	04/08/05	04/12/05	LWG0501370	
Acenaphthene	ND	U	10	0.84	1	04/08/05	04/12/05	LWG0501370	
Dibenzofuran	ND	U	10	0.31	1	04/08/05	04/12/05	LWG0501370	
Fluorene	ND	U	10	0.43	1	04/08/05	04/12/05	LWG0501370	
Phenanthrene	ND	U	10	0.41	1	04/08/05	04/12/05	LWG0501370	
Anthracene	ND	U	10	0.60	1	04/08/05	04/12/05	LWG0501370	
Fluoranthene	ND	U	10	0.44	1	04/08/05	04/12/05	LWG0501370	
Pyrene	ND	U	10	0.44	1	04/08/05	04/12/05	LWG0501370	
Benz(a)anthracene	ND	U	10	0.52	1	04/08/05	04/12/05	LWG0501370	
Chrysene	ND	U	10	0.31	1	04/08/05	04/12/05	LWG0501370	
Benzo(b)fluoranthene	ND	U	10	0.40	1	04/08/05	04/12/05	LWG0501370	
Benzo(k)fluoranthene	ND	U	10	0.67	1	04/08/05	04/12/05	LWG0501370	
Benzo(a)pyrene	ND	U	10	0.70	1	04/08/05	04/12/05	LWG0501370	
Indeno(1,2,3-cd)pyrene	**1.0**	J	10	0.29	1	04/08/05	04/12/05	LWG0501370	
Dibenz(a,h)anthracene	ND	U	10	2.5	1	04/08/05	04/12/05	LWG0501370	
Benzo(g,h,i)perylene	ND	U	10	0.36	1	04/08/05	04/12/05	LWG0501370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Nitrobenzene-d5	86	34-127	04/12/05	Acceptable
2-Fluorobiphenyl	84	39-111	04/12/05	Acceptable
Terphenyl-d14	88	50-149	04/12/05	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586

Surrogate Recovery Summary
PAHs by Selective Ion Monitoring (SIM)

Extraction Method: EPA 3550
Analysis Method: SIM-PAH

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
SS1 -1.0	L0500586-001	180 D *	135 D *	160 D *
SS1 -2.0	L0500586-002	85 D	80 D	110 D
Method Blank	LWG0501370-3	86	84	88
Lab Control Sample	LWG0501370-1	90	80	86
Duplicate Lab Control Sample	LWG0501370-2	91	84	85

Surrogate Recovery Control Limits (%)

Sur1 = Nitrobenzene-d5	34-127
Sur2 = 2-Fluorobiphenyl	39-111
Sur3 = Terphenyl-d14	50-149

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Extracted:**	04/08/2005
Sample Matrix:	Soil	**Date Analyzed:**	04/12/2005

Lab Control Spike/Duplicate Lab Control Spike Summary
PAHs by Selective Ion Monitoring (SIM)

Extraction Method:	EPA 3550	**Units:**	ug/Kg
Analysis Method:	SIM-PAH	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	LWG0501370

	Lab Control Sample LWG0501370-1 Lab Control Spike			Duplicate Lab Control Sample LWG0501370-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	25.3	33.3	76	26.0	33.3	78	59-97	3	30
2-Methylnaphthalene	25.3	33.3	76	25.7	33.3	77	60-140	1	30
Acenaphthylene	24.3	33.3	73	27.3	33.3	82	60-140	12	30
Acenaphthene	25.0	33.3	75	25.0	33.3	75	63-96	0	30
Dibenzofuran	25.7	33.3	77	28.0	33.3	84	60-140	9	30
Fluorene	27.3	33.3	82	29.3	33.3	88	60-140	7	30
Phenanthrene	26.3	33.3	79	27.3	33.3	82	60-140	4	30
Anthracene	25.0	33.3	75	25.7	33.3	77	60-140	3	30
Fluoranthene	25.7	33.3	77	26.7	33.3	80	60-120	4	30
Pyrene	24.7	33.3	74	25.0	33.3	75	60-140	1	30
Benz(a)anthracene	25.0	33.3	75	25.3	33.3	76	60-140	1	30
Chrysene	24.7	33.3	74	25.3	33.3	76	60-140	3	30
Benzo(b)fluoranthene	25.0	33.3	75	25.3	33.3	76	60-140	1	30
Benzo(k)fluoranthene	27.3	33.3	82	27.0	33.3	81	60-140	1	30
Benzo(a)pyrene	25.3	33.3	76	26.0	33.3	78	59-119	3	30
Indeno(1,2,3-cd)pyrene	28.0	33.3	84	29.0	33.3	87	60-140	4	30
Dibenz(a,h)anthracene	28.3	33.3	85	29.3	33.3	88	60-140	3	30
Benzo(g,h,i)perylene	27.7	33.3	83	29.0	33.3	87	60-140	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 04/14/2005 13:32:34

P:\STEALTH\CRYSTAL.RPT\Form3DLC.rpt

SuperSet Reference: RR9322

Columbia Analytical Services, Inc.
An Employee-Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

Project Name: Maui Lani	Project Number: 85-05246.00
Project Manager: DAN FORD	Report CC:
Company/Address: Clayton Group Services 970 N. Kalaheo Ave E-316 Kailua, HI 96734	
Phone #: (808) 531-6788	FAX#: (808) 537-4084
Sampler's Signature: Mery Apple	Sampler's Printed Name: MERY APPLE

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

NUMBER OF CONTAINERS

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	TPH Gas 8015m (purgeable)	TPH Diesel ☐ Fuel Char. ☒ 8015m (extractable)	BTEX ☒ MTBE ☐ 8021 / 602	Halogenated Volatiles 8260	VOA by GCMS ☐ Oxygenates ☐ 8260 / 624	SemiVOA by GCMS 8270 / 625	Pesticides ☐ PCBs ☐ 8081 / 8082 / 608	CCR Metals (17) 6010 / 6020 / 7000 / 200.7 / 200.8	TOTAL LEAD (6020 or 7421)	PAHs (8310)					
SS1-1.0	1	4/5/05	1040	Soil			X	X						X	X				
SS2-2.0	2	4/5/05	1100	Soil			X	X						X	X				

30

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

H250061

TURNAROUND REQUIREMENTS

X RUSH (SURCHARGES APPLY)

PLEASE CIRCLE WORK DAYS

(1) 2 3 4

_____ STANDARD

REQUESTED FAX DATE ASAP

REQUESTED REPORT DATE ASAP

REPORT REQUIREMENTS

___ I. Results Only

X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)

___ III. Results + QC and Calibration Summaries

___ IV. Data Validation Report with Raw Data

MRL ___Yes ___No

PQL/MDL/J ___Yes ___No

Edata ___Yes ___No

INVOICE INFORMATION

PO#

BILL TO:

Lab No: L0500586

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Mery Apple	Signature: Emil Dacayanan	Signature: Emil Dacayanan	Signature: Tracie Sober	Signature: Tracie Sober	Signature: Lonnie Kuketa
Printed Name: MERY APPLE	Printed Name: CLAYTON	Printed Name: CLAYTON	Printed Name: Tracie Sober	Printed Name: Tracie Sober	Printed Name: CAS
Firm: Clayton Group Services	Firm: CLAYTON	Firm: CLAYTON	Firm:	Firm:	Firm:
Date/Time: 4/6/05 0830	Date/Time: 4/6/05 0830	Date/Time: 4/6/05 0915	Date/Time: 4/6/05 0915	Date/Time: 4/6/05 1159	Date/Time: 4/7/05 0840

SCOC-0603-15

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SAMPLE RECEIPT FORM

Service Request No: L0500586 Client: CLAYTON

Sample(s) delivered by: Client ____ CAS Emp ____ After Hours ____ DHL ____

Golden State Overnight ____ Fed X ✓ UPS ____ Other Courier ____

Chain of Custody filled out accurately? Yes ✓ No ____(See Comments)

Appropriate sample volume and containers? Yes ✓ No ____(See Comments)

Sufficient labeling on container(s) ? Yes ✓ No ____(See Comments)

Container(s) supplied by CAS? Yes ✓ No ____(See Comments)

Custody seal(s) intact? N/A____ Yes ✓ No ____(See Comments)

Trip Blank(s) received Yes ____ No ✓

If Trip Blank was supplied by CAS, record serial # _____-TB-_____

Temperature of sample(s)/cooler 2 +* °C Temp Blank? Y or (N) (Circle One)

Voa's Marked Preserved? Yes ____ No ____ Filled Properly? Yes ____ No ____ (See Comments)

Preserved Bottles Requiring pH check(s)? Yes ____ Appropriate Preservation? Yes____ No____

RUSH Turn around time? Yes ✓ Notified MM, IK, RW, KR Date & Time 4/7/05 1256

Short Hold-Time Analysis (check all that apply)

ASAP	Res Cl____	D.O____	Flash____	Diss S2-____	Ferrous Fe____
24HR	pH____	Odor____	Cr+6____		
48HR	BOD____	Color____	MBAS____	Nitrate____	
	Nitrite____	O-PO4____	Sett Sol____	Turbidity____	
72HR	Vapors____				

Notified _____ Date & Time_____

Container(s) received and their preservative(s):

-1 & -2 = 1-8oz jar
3 -encores
1-4oz jar *

Comments Rush. *Encores received on dry ice
Heat treat samples before disposal.
*SPLIT IN Lab for SVOA.

Initials, Date, Time LK 4/7/05 1256 r:\sr_forms\cooler.doc Rev. 8/25/02

4/7/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	4/5/05
Sample Matrix:	Soil	**Date Received:**	4/6/05

Hydrocarbon Scan / Fuel Characterization

Sample Name:	SS1 -1.0	Units:	mg/Kg (ppm)
Lab Code:	L0500586-001	Basis:	Wet
Test Notes:	D2 / F2B		

Analyte	Prep Method	Analysis Method	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3550M	8015M	100	50	10	4/7/05	4/8/05	54	*/J
C13 - C22 DRO	EPA 3550M	8015M	100	47	10	4/7/05	4/8/05	730	
C23 - C32 HRO	EPA 3550M	8015M	500	130	10	4/7/05	4/8/05	12000	
Total Petroleum Hydrocarbons	EPA 3550M	8015M	700	230	10	4/7/05	4/8/05	13000	
Fuel Characterization	EPA 3550M	8015M							I2

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
D2	Quantified as Diesel.
*	GRO MDL based on lowest calibration standard.
F2B	The PQL is elevated because of matrix interferences and because the sample required diluting.
J	Estimated concentration. The result is less than the PQL but greater than the MDL.
I2	Chromatogram fingerprint is indicative of Motor Oil and other hydrocarbons eluting within the stated carbon ranges.

Approved By: _____ Date: 4/11/05

1S22/020597p

feelts.xlt

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	4/5/05
Sample Matrix:	Soil	**Date Received:**	4/6/05

Hydrocarbon Scan / Fuel Characterization

Sample Name:	SS1 -2.0	Units:	mg/Kg (ppm)
Lab Code:	L0500586-002	Basis:	Wet
Test Notes:	D2		

Analyte	Prep Method	Analysis Method	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3550M	8015M	10	5.0	1	4/7/05	4/8/05	8	*/J
C13 - C22 DRO	EPA 3550M	8015M	10	4.7	1	4/7/05	4/8/05	110	
C23 - C32 HRO	EPA 3550M	8015M	50	13	1	4/7/05	4/8/05	2000	
Total Petroleum Hydrocarbons	EPA 3550M	8015M	70	23	1	4/7/05	4/8/05	2100	
Fuel Characterization	EPA 3550M	8015M							I2

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
D2	Quantified as Diesel.
*	GRO MDL based on lowest calibration standard.
J	Estimated concentration. The result is less than the PQL but greater than the MDL.
I2	Chromatogram fingerprint is indicative of Motor Oil and other hydrocarbons eluting within the stated carbon ranges.

Approved By: _____ Date: 4/11/05

1S22/020597p

fcclts.xlt

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Clayton Group Services, Incorporated	**Service Request:**	L0500586
Project:	Maui Lani/85-05246.00	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Hydrocarbon Scan / Fuel Characterization

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	L050407-MB	Basis:	Wet
Test Notes:	D2		

Analyte	Prep Method	Analysis Method	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C12 GRO	EPA 3550M	8015M	10	5.0	1	4/7/05	4/8/05	ND	*
C13 - C22 DRO	EPA 3550M	8015M	10	4.7	1	4/7/05	4/8/05	ND	
C23 - C32 HRO	EPA 3550M	8015M	50	13	1	4/7/05	4/8/05	ND	
Total Petroleum Hydrocarbons	EPA 3550M	8015M	70	23	1	4/7/05	4/8/05	ND	
Fuel Characterization	EPA 3550M	8015M						NA	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
D2	Quantified as Diesel.
*	GRO MDL based on lowest calibration standard.

Approved By: _____ Date: 4/11/05

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Hydrocarbon Scan / Fuel Characterization

Prep Method: EPA 3550M
Analysis Method: 8015M

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *p*-Terphenyl
SS1 -1.0	L0500586-001		101
SS1 -2.0	L0500586-002		122
Method Blank	L050407-MB		102
SS1 -1.0	L0500586-001MS		99
SS1 -1.0	L0500586-001DMS		101
Lab Control Sample	L050407-LCS		100

CAS Acceptance Limits: 75-142

Approved By: _____ Date: 4/11/05

SUR1/061197p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
Sample Matrix: Soil

Service Request: L0500586
Date Collected: 4/5/05
Date Received: 4/6/05
Date Extracted: 4/7/05
Date Analyzed: 4/8/05

Matrix Spike/Duplicate Matrix Spike Summary
Hydrocarbon Scan / Fuel Characterization

Sample Name: SS1 -1.0
Lab Code: L0500586-001MS L0500586-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Diesel	EPA 3550M	8015M	100	200	200	734	809	878	38	72	56-139	8	M3

M3 Outside of acceptance limits due to high level of analyte in sample. The LCS was acceptable; therefore, data was approved.

Approved By: _____ Date: 4/11/05

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Clayton Group Services, Incorporated
Project: Maui Lani/85-05246.00
LCS Matrix: Soil

Service Request: L0500586
Date Collected: NA
Date Received: NA
Date Extracted: 4/7/05
Date Analyzed: 4/8/05

Laboratory Control Sample Summary
Hydrocarbon Scan / Fuel Characterization

Sample Name: Lab Control Sample
Lab Code: L050407-LCS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Diesel	EPA 3550M	8015M	200	170	85	77-114	

Approved By: Joe Anderson Date: 4/11/05

LCS/020597p

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Petition of MAUI LANI 100, LLC To Amend the Land Use District Boundary Of Certain Lands Situated at Wailuku, Island of Maui, State of Hawaii, Consisting Of 59.6 Acres from the Agriculture District to the Urban District, Tax Map Key No. 3-8-007:131 (portion).	DOCKET NO. A04-754 CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I hereby certify that due service of a copy of the within document was made by depositing the same with the U. S. mail, postage prepaid, or by hand delivery, on April 29, 2005, addressed to:

LAUREN H. THIELEN
Director
Office of Planning
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

BY MAIL

ABE MITSUDA
Planning Program Administrator
Office of Planning , Land Use Division
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

BY MAIL

MICHAEL W. FOLEY
Director, Planning Department
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

BY HAND DELIVERY

PLANNING COMMISSION
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

BY HAND DELIVERY

BRIAN T. MOTO
Corporation Counsel
Office of the Corporation Counsel
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

BY HAND DELIVERY

MAUI ELECTRIC COMPANY, LIMITED
Attention: Neal Shinyama
P. O. Box 398
Kahului, Maui, Hawaii 96733-6898

BY MAIL

VERIZON HAWAII INC.
P. O. Box 2200
Honolulu, Hawaii 96816

BY MAIL

A & B PROPERTIES, INC.
822 Bishop Street
Honolulu, Hawaii 96813

BY MAIL

ALEXANDER & BALDWIN, INC.
822 Bishop Street
Honolulu, Hawaii 96813

BY MAIL

DATED: Wailuku, Hawaii, April 29, 2005.

Blaine J. Kobayashi

BLAINE J. KOBAYASHI
Attorney for Petitioner
MAUI LANI 100, LLC

4814-8628-1984.1.032444-00005